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# City of North Plains Economic Opportunities Analysis

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Prepared for:  
City of North Plains

## CONSOLIDATED REPORT

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# Summary

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This report presents an economic opportunities analysis (EOA) consistent with the requirements of statewide planning Goal 9 and the Goal 9 administrative rule (OAR 660-009). Goal 9 describes the EOA as “an analysis of the community’s economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends” and states that “a principal determinant in planning for major industrial and commercial developments should be the competitive advantage of the region within which the developments would be located.”

The primary goals of the EOA are to (1) project the amount of land needed to accommodate the future employment growth within the North Plains Urban Growth Boundary (UGB) between 2017 and 2038, (2) evaluate the existing employment land supply within the North Plains UGB to determine if it is adequate to meet that need, (3) provide a factual base to update North Plains’ Economic Development policies in the City’s Comprehensive Plan, and (3) to fulfill state planning requirements for a twenty-year supply of employment land.

## How much buildable employment land does North Plains currently have?

Table 1 shows unconstrained buildable land by plan designation. The results show that North Plains has about 47 unconstrained buildable acres in commercial and industrial plan designations. Of this, 30% (14 acres) is in the Commercial designations and 70% (33 acres) is in Industrial.

**Table 1. Unconstrained buildable acres by plan designation, North Plains UGB, 2016.**

	Total Acres	Built Acres	Constrained Acres	Buildable Acres
<b>Commercial</b>	<b>41</b>	<b>22</b>	<b>5</b>	<b>14</b>
Community Commercial (C-1)	9	8	-	1
General Commercial (C-2)	32	14	5.2	13
<b>Industrial</b>	<b>145</b>	<b>86</b>	<b>26</b>	<b>33</b>
Light Industrial (M-1)	18	8	10.5	-
General Industrial (M-2)	126	79	15.3	33
<b>Total</b>	<b>186</b>	<b>108</b>	<b>31</b>	<b>47</b>

Source: Washington County BLI

## How much growth is North Plains planning for?

Goal 9 requires that cities provide for an adequate supply of commercial and industrial sites consistent with plan policies. To meet this requirement, North Plains needs an estimate of the amount of commercial and industrial land that will be needed over the 2018-2038 planning period. Table 2 presents the forecast of employment growth by land use type in North Plains' UGB from 2018 to 2038. North Plains' employment base was 953 employees in 2017. The forecast shows that by 2038, North Plains will have 2,612 employees, an increase of 1,645 jobs over the planning period.

**Table 2. Forecast of employment growth by land use type, North Plains UGB, 2018–2038**

Land Use Type	2018		2038		20-Year Change
	Employment	% of Total	Employment	% of Total	
Industrial	647	67%	1,567	60%	920
Commercial (Retail & Office/Services)	<u>319</u>	<u>33%</u>	<u>1,044</u>	<u>40%</u>	<u>725</u>
<b>Total</b>	<b>966</b>	<b>100%</b>	<b>2,612</b>	<b>100%</b>	<b>1,645</b>

Source: PNW Economics, LLC

## How much land will be required for employment?

The forecast of growth of 1,645 new employees will result in the following demand for vacant (and partially vacant) employment land: 115 gross acres of industrial land and 94 gross acres of commercial and retail land.

## Does North Plains have enough land to accommodate employment growth?

North Plains does not have enough land to accommodate employment growth over the next 20 years. Table 3 shows that North Plains has an 82-acre deficit of industrial land and an 80-acre deficit of commercial land.

**Table 3. Comparison of the Capacity of Unconstrained Vacant and Partially Vacant Land with Employment Land Demand by Plan Designation, North Plains UGB, 2018–2038**

City of North Plains	Land Supply (Suitable Gross Acres)	Land Demand (Gross Acres)	Land Sufficiency (Deficit)
Land Use Type			
Industrial	33	115	(82)
Commercial	14	94	(80)
Retail Commercial		67	
Office & Commercial Services		27	
Lodging Commercial		1	
Employment Land Totals	47	209	(162)

Source: PNW Economics, LLC

## What types of business does North Plains want to attract?

The characteristics of North Plains will affect the types of businesses most likely to locate in the city. North Plains' attributes that may attract firms are: North Plains' location along Highway 26 and proximity to Hillsboro; the existing employment base; relatively low land prices (compared with Hillsboro and Beaverton); surrounding agricultural areas; access to workers from across the Portland Region; and high quality of life.

The target industries identified as having potential for growth in North Plains are:

- **Medium-scale to small-scale manufacturing.** North Plains' attributes, especially its location along Highway 26, relatively low land prices, and proximity to Hillsboro and Beaverton, may attract manufacturing firms. Manufacturing firms are likely medium-sized to relatively small, from startups with 10 or fewer employees to more sizeable manufacturers with 200 or more employees. Examples of manufacturing industries that may grow or locate in North Plains include:
  - Electronics and computer manufacturing, such as businesses that provide components to larger manufacturers in the Portland region
  - Machinery manufacturing, such as agricultural or industrial machinery
  - Fabricated metal manufacturing
  - Specialty food and beverage manufacturing, such as wineries, beer brewing, fruit or vegetable products, or other products
  - Renewable and alternative energy products
- **Medium-scale to small-scale warehouse, distribution, and wholesale.** North Plains' location along Highway 26, relatively low land prices, and decreasing inventory of small to medium-sized sites within the Portland metro area UGB will likely make the city attractive to a variety of distribution and wholesaling firms, especially of goods produced in Washington County.
- **Professional services.** North Plains' high quality of life, lower commercial land costs, relatively affordable housing, and proximity to Hillsboro and Beaverton may attract professional and business services that prefer to locate in a smaller city like North Plains, such as software development, research or environmental services, or other services. Professional services may also include independent contractors, such as sole proprietors and others not covered by unemployment insurance.

- **Services for residents.** Population growth will drive development of retail, such as a grocery store, other retail, restaurants, and government services, especially primary education and child care in North Plains.
- **Services for seniors.** The growing population of those near or in retirement in Washington County and the Portland region may attract or create demand for services for seniors, such as assisted living facilities, retirement centers, and related medical services.
- **Services for visitors:** Growth in tourism will drive demand for services for visitors such as restaurants or a hotel.

## What are the recommendations to support economic development in North Plains?

The following are recommendations to support economic development in North Plains based on the economic opportunities analysis:

- **Update the Economy Element of the Comprehensive Plan.** We recommend that the Planning Commission and City Council review the revised policies in the North Plains Economic Development Strategy and, after making additional necessary revisions to the objectives and policies, adopt the revised objectives and policies into the Economy Element.  
  
In addition, we generally recommend that cities adopt the economic opportunities analysis as an appendix to their Comprehensive Plan so that when the analysis is next updated, it is easier to replace the outdated economic opportunities analysis with the newer one.
- **Study potential and best options for expansion of the North Plains Urban Growth Boundary to accommodate the estimated insufficiency of employment land need over the next twenty years.** We recommend discussions with Washington County and the Oregon Department of Land Conservation & Development (DLCD) to understand process and legal procedures for studying potential areas for UGB expansion and City annexation to best meet the employment land needs quantities and qualities documented in this EOA, specifically Table 23 and Table 24 in **Section 5 Land Sufficiency and Conclusions**.
- **The City should identify its role in bringing a grocery store to North Plains.** At a minimum, we recommend that the City work with property owners to select a site for a grocery store and build relationships with grocery store site selectors. The City may want to support development of a grocery store through use of tools such as: City systems development charge waiver or deferrals; pre-development study grants; City purchase site and give land write-downs through a public private partnership; develop supportive infrastructure (e.g., traffic signals or streetscape); and



a Business Improvement District that would help to market and maintain a core business district.

- **Align the City's goals for economic development with planning for infrastructure development.** Aside from ensuring that there is sufficient land to support employment growth, one of the most important ways that the City can support economic development is through planning for and developing infrastructure (e.g., roads, water, sanitary sewer, and storm water systems). We recommend that the City align its goals for economic development with infrastructure development through updates to the City's Capital Improvements Plan and through partnering with agencies such as Clean Water Services and Portland General Electric.

The City should consider making investments in downtown, such as infrastructure or place making improvements, such as streetscape, sidewalk, storefront or façade, wayfinding improvements, or revise the downtown revitalization plan. The City should consider using Urban Renewal funds to support these improvements.

- **Form an economic development committee tasked with ensuring on-going economic development efforts.** A key step in supporting economic development is having a forum for discussion of economic development in North Plains. We recommend that the City work with partners and interested stakeholders to develop an economic development committee that the City participates in as a leader. The Economic Development Committee may be able to assist the City in reaching out the businesses to identify issues and barriers to economic development.

The revisions to the Comprehensive Plan presented in the North Plains Economic Development Strategy focus on land-based policies and actions. The city also needs a broader strategy for economic development that focuses on issues such as economic development marketing of North Plains' businesses and business opportunities, completing a market readiness analysis for branding and marketing North Plains for tourism, building business and other partnerships, and coordinating economic development efforts with local and regional economic development organizations, including the North Plains Chamber of Commerce, the Westside Economic Alliance and Business Oregon.

This strategy could be developed by the economic development committee. The strategy should identify a focused list of actions that the commission wants to achieve over a limited time period (e.g., 5 years), with specific assignments to partners and identification of funding sources to implement the actions.

- **Review the Zoning Code and development process to identify opportunities to streamline and reduce development costs.** These opportunities may include: a code review that identifies opportunities to

streamline the zoning code or entitlement process, single-point of contact for developers to provide assistance with the entitlement process by coordinating with outside governmental agencies, and developing a web site that provides information that businesses considering expanding or locating in North Plains would need.

- **Support redevelopment of underutilized commercial sites.** North Plains has a number of commercial sites with opportunities for infill or redevelopment. These sites are located along Glencoe Road and have non-commercial uses on them currently, mostly housing, and may be ripe for redevelopment over the 20-year planning period. To the extent that the City wants to encourage redevelopment of these sites, the City should work with property owners to facilitate redevelopment.

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# 1. Introduction

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This report presents an Economic Opportunities Analysis (EOA) for the City of North Plains. The purpose of an EOA is to develop information as a basis for policies that capitalize on North Plains' opportunities and help address the city's challenges. The EOA includes technical analysis to address a range of questions that North Plains faces in managing its commercial and industrial land. For example, the EOA includes an employment forecast that describe how much growth North Plains should plan for over the 2018 to 2038 period, and forecasts the amount and type of employment land necessary to accommodate growth in North Plains over that period. The EOA also includes an inventory of commercial and industrial land within North Plains' urban growth boundary (UGB) to provide information about the amount of land available to accommodate employment growth.

This EOA complies with the requirements of statewide planning Goal 9, the Goal 9 administrative rules (OAR 660 Division 9), and the court decisions that have interpreted them. Goal 9 requires cities to state objectives for economic development (OAR 660-009-0020(1)(a)) and to identify the characteristics of sites needed to accommodate industrial and other employment uses (OAR 660-009-0025(1)) over the 20-year planning period. This approach could be characterized as a *site-based* approach that projects land need based on the forecast for employment growth, the City's economic development objectives, and the specific needs of target industries.

The City of North Plains completed the North Plains 2035 Vision and Goals and is in the process of updating the City's Comprehensive Plan. North Plains' Comprehensive Plan has not been completely updated since its approval in YEAR. An important part of the Comprehensive Plan is the Economy Element. The purpose of this report is to provide a factual basis that describes North Plains' economic opportunities, presents a forecast of growth, and makes recommendations for updates to the City's Economy Element.

In recent years, the North Plains had an increase in development pressure, consistent with the broader economic recovery in Oregon and Washington County. Community members want to ensure that future development is consistent with the character of North Plains and that it enhances the livability in North Plains. In response to development pressure, the City embarked on a process to update the City's Comprehensive Plan and implementing ordinances.

In addition, North Plains is facing increasing residential development pressure, with development or proposals for development of more than 900 new dwelling units since 2015. Growth in population will increase demand for retail services in North Plains, such as need for a grocery store and increased need for restaurants. As the population grows, the City wants to ensure there are opportunities for other commercial and industrial growth as well, to provide opportunities for people to live and work in North Plains. This report considers opportunities for retail development, especially of a grocery store, to meet the needs of North Plains' growing population, as well as other employment growth opportunities.

## Framework for an Economic Opportunities Analysis

The content of this report is designed to meet the requirements of Oregon Statewide Planning Goal 9 and the administrative rule that implements Goal 9 (OAR 660-009). The analysis in this report is designed to conform to the requirements for an Economic Opportunities Analysis in OAR 660-009 as amended.

1. *Economic Opportunities Analysis (OAR 660-009-0015)*. The Economic Opportunities Analysis (EOA) requires communities to identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area based on information about national, state, regional, county or local trends; identify the number of sites by type reasonably expected to be needed to accommodate projected employment growth based on the site characteristics typical of expected uses; include an inventory of vacant and developed lands within the planning area designated for industrial or other employment use; and estimate the types and amounts of industrial and other employment uses likely to occur in the planning area. Local governments are also encouraged to assess community economic development potential through a visioning or some other public input-based process in conjunction with state agencies.
2. *Industrial and commercial development policies (OAR 660-009-0020)*. Cities with a population over 2,500 are required to develop commercial and industrial development policies based on the EOA. Local comprehensive plans must state the overall objectives for economic development in the planning area and identify categories or particular types of industrial and other employment uses desired by the community. Local comprehensive plans must also include policies that commit the city or county to designate an adequate number of employment sites of suitable sizes, types and locations. The plan must also include policies to provide necessary public facilities and transportation facilities for the planning area.
3. *Designation of lands for industrial and commercial uses (OAR 660-009-0025)*. Cities and counties must adopt measures to implement policies adopted pursuant to OAR 660-009-0020. Appropriate implementation measures include amendments to plan and zone map designations, land use regulations, public facility plans, and transportation system plans. More specifically, plans must identify the approximate number, acreage and characteristics of sites needed to accommodate industrial and other employment uses to implement plan policies, and must designate serviceable land suitable to meet identified site needs.

## Organization of this Report

This report is organized as follows:

- **Chapter 2. Buildable Lands Inventory** presents a summary of the inventory of employment lands.
- **Chapter 3. Factors Affecting Future Economic Growth** summarizes historic economic trends that affect current and future economic conditions in North Plains, as well as North Plains' competitive advantages for economic development.
- **Chapter 4. Employment Growth and Site Needs** presents a forecast for employment growth in North Plains and describes the City's target industries as well as site needs for potential growth in industries.
- **Chapter 5. Land Sufficiency and Conclusions** compares the supply of and demand for buildable lands and presents key concluding recommendations for North Plains.

## 2. Buildable Lands Inventory

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This chapter summarizes the commercial and industrial buildable lands inventory (BLI) for the North Plains UGB. Washington County staff conducted the BLI on behalf of the City of North Plains. It complies with statewide planning Goal 9 policies that govern planning for employment uses.

### Methods, Definitions, and Assumptions

#### Overview of the Methodology

Washington County staff completed the BLI according to Metro's BLI methodology. The BLI is built from a Washington County tax lot database to estimate buildable land by plan designation. The tax lot data was current as of January 2016.

First, the analysis established the commercial and industrial land base (parcels or portion of parcels with appropriate zoning). Then, these parcels were classified by development status. Next, environmental constraints were identified and deducted. Lastly, Washington County staff summarized total buildable area by plan designation.

#### Definitions

A key step in the buildable lands analysis is to classify each tax lot into a set of mutually exclusive categories based on development status. For the purpose of this study, all commercial and industrial tax lots in the UGB are classified into one of the following categories:

- *Vacant land.* Tax lots that have no development (based on examination of aerial imagery) or where development covers only a small portion of the tax lot. For this inventory, employment lands where the developed portion covered less than 5% of the total taxlot area were considered vacant.
- *Partially vacant and potentially redevelopable land.* Partially vacant tax lots are those occupied by a use, but which contain enough land to be further subdivided without need of rezoning. Partially vacant commercial and industrial land was identified through review of aerial photography and consultation with City of North Plains staff and members of the North Plains Planning Commission. Potentially redevelopable taxlots are those that are currently developed but may be candidates for redevelopment in the future. These taxlots were identified through visual inspection by City of North Plains staff.
- *Undevelopable land.* Undevelopable tax lots are vacant but cannot be developed due to zoning, access, or policy constraints. Undevelopable lands include tax lots under the minimum lot size for the underlying zoning district, tax lots that have no access or potential access, and tax lots that are already committed to other uses by policy.

- *Public or exempt land.* Lands in public ownership are considered unavailable for commercial or industrial development. This includes lands in Federal, State, County, or City ownership, as well as lands owned by churches, utilities, and other semi-public organizations, such as hospitals. Public lands were identified using property assessor tax exemption codes and property owners' name and refined through consultation with City of North Plains staff and the North Plains Planning Commission.
- *Developed land.* Land that is developed at densities consistent with zoning with improvements that make it unlikely to redevelop during the analysis period. Lands not classified in any of the above categories are considered developed.

## Development Constraints

Consistent with state guidance on buildable lands inventories, Washington County deducted the following constraints from the buildable lands inventory and classified those portions of tax lots that fall within the following areas as constrained, unbuildable land.

- *Land within natural resource protection areas.* Washington County consulted with City of North Plains staff and the North Plains Planning Commission to identify wetlands. These areas were deducted from the buildable lands inventory.
- *Land with slopes over 25%.* Lands with slopes over 25% are considered unsuitable for commercial and industrial development.
- *Lands within floodplains.* Lands falling within the FEMA 100-year flood plain were deducted from the buildable lands inventory.

## Results of the Buildable Lands Inventory

### Land Base

Table 4 shows North Plains' employment land base by comprehensive plan designation. The North Plains UGB has about 186 total acres in tax lots with commercial and industrial plan designations.



**Table 4. Employment Land Base, North Plains UGB, 2016**

	<b>Tax Lots</b>	<b>Total Acres</b>
<b>Commercial</b>	<b>82</b>	<b>41</b>
Community Commercial (C-1)	37	9
General Commercial (C-2)	45	32
<b>Industrial</b>	<b>66</b>	<b>145</b>
Light Industrial (M-1)	10	18
General Industrial (M-2)	56	126
<b>Total</b>	<b>148</b>	<b>186</b>

Washington County BLI

Table 5 shows commercial and industrial land in the North Plains UGB by classification (development status). Of North Plains' 186 total employment acres, about 138 acres (74%) are in classifications with no development capacity, and the remaining 48 acres (26%) may have development capacity.

**Table 5. Employment acres by classification and plan designation, North Plains UGB, 2016**

	<i>Development Capacity</i>		<i>No Development Capacity</i>			<b>Total Acres</b>
	<b>Vacant</b>	<b>Partially Vacant / Potentially Redevelopable</b>	<b>Developed</b>	<b>Public or Exempt</b>	<b>Undevelop- able</b>	
<b>Commercial</b>	<b>8</b>	<b>8</b>	<b>23</b>	<b>3</b>	<b>-</b>	<b>41</b>
Community Commercial (C-1)	1	0.3	8	0.2	-	9
General Commercial (C-2)	7	7	15	3	-	32
<b>Industrial</b>	<b>33</b>	<b>-</b>	<b>95</b>	<b>3</b>	<b>14</b>	<b>145</b>
Light Industrial (M-1)	-	-	9	-	9	18
General Industrial (M-2)	33	-	86	3	5	126
<b>Total</b>	<b>40</b>	<b>8</b>	<b>118</b>	<b>6</b>	<b>14</b>	<b>186</b>

Washington County BLI

## Vacant Buildable Land

Table 6 shows unconstrained buildable land, after constrained land has been removed. The results show that North Plains has about 47 unconstrained buildable acres in commercial and industrial plan designations. Of this, 30% (14 acres) is in the Commercial designations and 70% (33 acres) is in Industrial.

**Table 6. Unconstrained buildable acres by plan designation, North Plains UGB, 2016.**

	<b>Total Acres</b>	<b>Built Acres</b>	<b>Constrained Acres</b>	<b>Buildable Acres</b>
<b>Commercial</b>	<b>41</b>	<b>22</b>	<b>5</b>	<b>14</b>
Community Commercial (C-1)	9	8	-	1
General Commercial (C-2)	32	14	5.2	13
<b>Industrial</b>	<b>145</b>	<b>86</b>	<b>26</b>	<b>33</b>
Light Industrial (M-1)	18	8	10.5	-
General Industrial (M-2)	126	79	15.3	33
<b>Total</b>	<b>186</b>	<b>108</b>	<b>31</b>	<b>47</b>

Washington County BLI

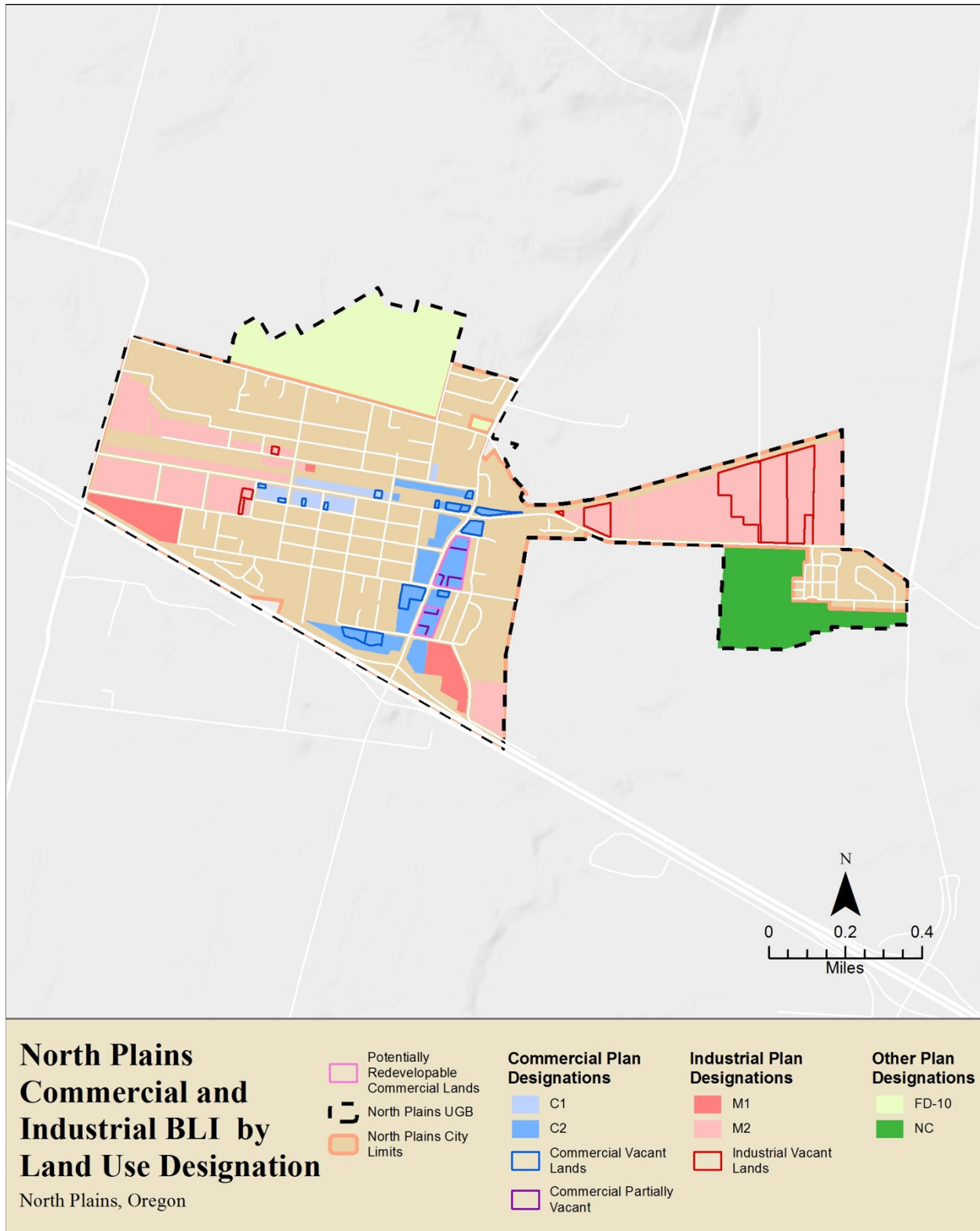
**Table 7. Lot size by plan designation, suitable acres, North Plains UGB, 2016.**

	<b><i>Suitable Acres in Tax Lots</i></b>				
	<b>&lt;1</b>	<b>1-1.99</b>	<b>2-4.99</b>	<b>5-9.99</b>	<b>10 +</b>
<b>ACRES</b>					
<b>Commercial</b>	6	4	3	-	-
Community Commercial (C-1)	1	-	-	-	-
General Commercial (C-2)	6	4	3	-	-
<b>Industrial</b>	1	-	3	29	-
Light Industrial (M-1)	-	-	-	-	-
General Industrial (M-2)	1	-	3	29	-
<b>Total Acres</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>29</b>	<b>-</b>
<b>TAX LOTS</b>					
<b>Commercial</b>	20	3	1	-	-
Community Commercial (C-1)	7	-	-	-	-
General Commercial (C-2)	13	3	1	-	-
<b>Industrial</b>	6	-	1	3	-
Light Industrial (M-1)	-	-	-	-	-
General Industrial (M-2)	6	-	1	3	-
<b>Total Acres</b>	<b>26</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>-</b>

Washington County BLI

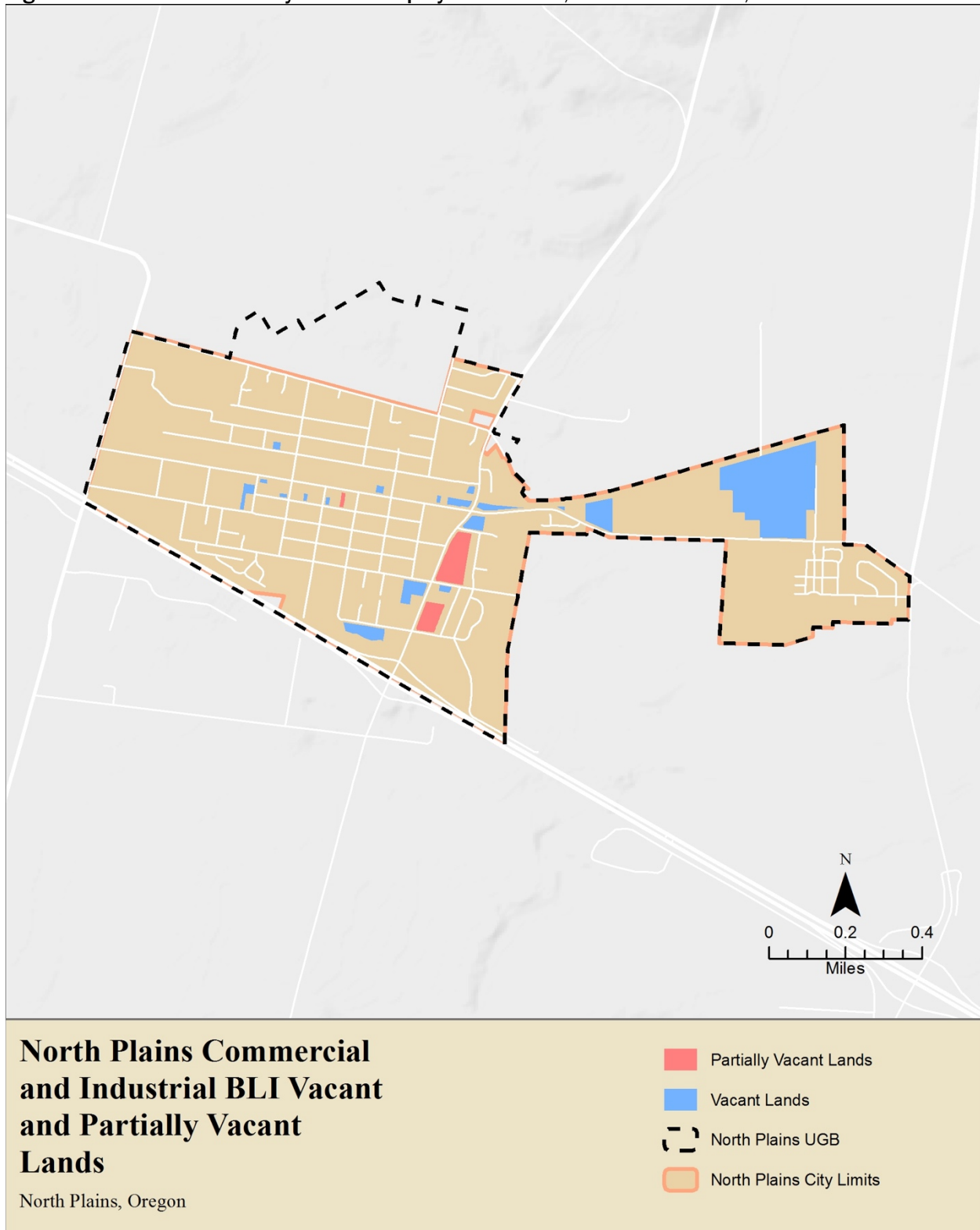
Figure 1 shows North Plains' employment land by land use designation and classification. Figure 2 shows vacant and partially vacant employment land.

**Figure 1. Vacant and Partially Vacant Land by Comprehensive Plan Designation, North Plains UGB, 2016**



Source: Washington County

**Figure 2. Vacant and Partially Vacant Employment Lands, North Plains UGB, 2016**



Source: Washington County

### 3. Factors Affecting Economic Growth

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North Plains exists as part of the larger economy of western Washington County and the greater Portland region and is strongly influenced by regional economic conditions. For many factors, such as income, North Plains does not differ significantly from the broader region. For other factors, such as education, it does. Thus, North Plains benefits from being a part of the larger regional economy and plays a specific role in it.

This chapter describes the factors affecting economic growth in North Plains, including national and regional economic trends. The analysis presents North Plains' competitive advantages for growing and attracting businesses, which forms the basis for identifying potential growth industries in North Plains.

#### Factors that Affect Economic Development<sup>1</sup>

The fundamental purpose of Goal 9 is to make sure that a local government plans for economic development. The planning literature provides many definitions of economic development, both broad and narrow. Broadly,

“Economic development is the process of improving a community's well-being through job creation, business growth, and income growth (factors that are typical and reasonable focus of economic development policy), as well as through improvements to the wider social and natural environment that strengthen the economy.”<sup>2</sup>

That definition acknowledges that a community's wellbeing depends in part on narrower measures of economic wellbeing (e.g., jobs and income) and on other aspects of quality of life (e.g., the social and natural environment). In practice, cities and regions trying to prepare an economic development strategy typically use a narrower definition of economic development: they take it to mean business development, job growth, and job opportunity. The assumptions are that:

- Business and job growth are contributors to and consistent with economic development, increased income, and increased economic welfare. From the municipal point of view, investment and resulting increases in property tax are important outcomes of economic development.
- The evaluation of tradeoffs and balancing of policies to decide whether such growth is likely to lead to overall gains in wellbeing (on average and across all citizens and

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<sup>1</sup> The information in this section is based on previous Goal 9 studies conducted by ECONorthwest and the following publication: *An Economic Development Toolbox: Strategies and Methods*, Terry Moore, Stuart Meck, and James Ebenhoh, American Planning Association, Planning Advisory Service Report Number 541, October 2006.

<sup>2</sup> *An Economic Development Toolbox: Strategies and Methods*, Terry Moore, Stuart Meck, and James Ebenhoh, American Planning Association, Planning Advisory Service Report Number 541, October 2006.

businesses in a jurisdiction, and all aspects of wellbeing) is something that decision makers do after an economic strategy has been presented to them for consideration.

That logic is consistent with the tenet of the Oregon land-use planning program: that all goals matter, no goal dominates, and the challenge is to find a balance of conservation and development that is acceptable to a local government and state. Goal 9 does not dominate, but it legitimizes and requires that a local government focus on the narrower view of economic development: the one that focuses on economic variables.

In that context, a major part of local economic development policy is about local support for business development and job growth; that growth comes from the creation of new firms, the expansion of existing firms, and the relocation or retention of existing firms. Thus, a key question for economic development policy is, *What are the factors that influence business and job growth, and what is the relative importance of each?* This document addresses that question in depth.

## What Factors Matter?

Why do firms locate where they do? There is no single answer—different firms choose their locations for different reasons. Key determinates of a location decision are a firm's *factors of production*. For example, a firm that spends a large portion of total costs on unskilled labor will be drawn to locations where labor is relatively inexpensive. A firm with large energy demands will give more weight to locations where energy is relatively inexpensive. In general, firms choose locations they believe will allow them to maximize net revenues: if demand for goods and services are held roughly constant, then revenue maximization is approximated by cost minimization.

The typical categories that economists use to describe a firm's production function are:

- **Labor.** Labor is often the most important factor of production. Other things equal, firms look at productivity—labor output per dollar. Productivity can decrease if certain types of labor are in short supply, which increases the costs by requiring either more pay to acquire the labor that is available, the recruiting of labor from other areas, or the use of the less productive labor that is available locally.
- **Land.** Demand for land depends on the type of firm. Manufacturing firms need more space and tend to prefer suburban locations where land is relatively less expensive and less difficult to develop. Warehousing and distribution firms need to locate close to interstate highways.
- **Local infrastructure.** An important role of government is to increase economic capacity by improving quality and efficiency of infrastructure and facilities, such as roads, bridges, water and sewer systems, airport and cargo facilities, energy systems, and telecommunications.
- **Access to markets.** Though part of infrastructure, transportation merits special attention. Firms need to move their product, either goods or services, to the market, and they rely on access to different modes of transportation to do this.

- **Materials.** Firms producing goods, and even firms producing services, need various materials to develop products that they can sell. Some firms need natural resources (i.e., raw lumber) and others may need intermediate materials (i.e., dimensioned lumber).
- **Entrepreneurship.** This input to production may be thought of as good management, or even more broadly as a spirit of innovation, optimism, and ambition that distinguishes one firm from another even though most of their other factor inputs may be quite similar.

The supply, cost, and quality of any of these factors obviously depend on market factors: on conditions of supply and demand locally, nationally, and even globally. But they also depend on public policy. In general, public policy can affect these factors of production through:

- **Regulation.** Regulations protect the health and safety of a community and help maintain the quality of life. Overly burdensome regulations, however, can be disincentives for businesses to locate in a community. Simplified bureaucracies and straightforward regulations can reduce the burden on businesses and help them react quickly in a competitive marketplace.
- **Taxes.** Firms tend to seek locations where they can optimize their after-tax profits. Tax rates are not a primary location factor—they matter only after businesses have made decisions based on labor, transportation, raw materials, and capital costs. The costs of these production factors are usually similar within a region. Therefore, differences in tax levels across communities within a region are more important in the location decision than are differences in tax levels between regions.
- **Financial incentives.** Governments can offer firms incentives to encourage growth. Most types of financial incentives have had little significant effect on firm location between regions. For manufacturing industries with significant equipment costs, however, property or investment tax credit or abatement incentives can play a significant role in location decisions. Incentives are more effective at redirecting growth within a region than they are at providing a competitive advantage between regions.

This discussion may make it appear that a location decision is based entirely on a straightforward accounting of costs, with the best location being the one with the lowest level of overall costs. Studies of economic development, however, have shown that location decisions depend on a variety of other factors that indirectly affect costs of production. These indirect factors include agglomerative economies (also known as industry clusters), quality of life, and innovative capacity.

- **Industry clusters.** Firms with similar business activities can realize operational savings when they congregate in a single location or region. Clustering can reduce costs by creating economies of scale for suppliers. For this reason, firms tend to locate in areas where there is already a presence of other firms engaged in similar or related activities.
- **Quality of life.** A community that features many quality amenities, such as access to recreational opportunities, culture, low crime, good schools, affordable housing, and a clean environment can attract people simply because it is a nice place to be. A region's quality of life can attract skilled workers, and if the amenities lure enough potential



workers to the region, the excess labor supply pushes their wages down so that firms in the region can find skilled labor for a relatively low cost. The characteristics of local communities can affect the distribution of economic development within a region, with different communities appealing to different types of workers and business owners. Sometimes location decisions by business owners are based on an emotional or historical attachment to a place or set of amenities, without much regard for the cost of other factors of production.

- **Innovative capacity.** Increasing evidence suggests that a culture promoting innovation, creativity, flexibility, and adaptability is essential to keeping U.S. cities economically vital and internationally competitive. Innovation is particularly important in industries that require an educated workforce. High-tech companies need to have access to new ideas typically associated with a university or research institute. Innovation affects both the overall level and type of economic development in a region. Government can be a key part of a community's innovative culture, through the provision of services and regulation of development and business activities that are responsive to the changing needs of business.

## How Important Are These Factors?

To understand how changes in public policies affect local job growth, economists have attempted to identify the importance for firms of different locational factors. They have used statistical models, surveys, and case studies to examine detailed data on the key factors that enter the business location decision.

Economic theory says that firms locate where they can reduce the costs of their factors of production (assuming demand for products and any other factors are held constant). Firms locate in regions where they have access to inputs that meet their quality standards, at a relatively low cost. Because firms are different, the relative importance of different factors of production varies both across industries and, even more importantly, across firms.

No empirical analysis can completely quantify firm location factors because numerous methodological problems make any analysis difficult. For example, some would argue simplistically that firms would prefer locating in a region with a low tax rate to reduce tax expenses. However, the real issue is the value provided by the community for the taxes collected. Because taxes fund public infrastructure that firms need, such as roads, water, and sewer systems, regions with low tax rates may end up with poor infrastructure, making it less attractive to firms. When competing jurisdictions have roughly comparable public services (type, cost, and quality) and quality of life, then tax rates (and tax breaks) can make a difference.

Further complicating any analysis is the fact that many researchers have used public expenditures as a proxy for infrastructure quality. But large expenditures on roads do not necessarily equal a quality road system. It is possible that the money has been spent ineffectively and the road system is in poor condition.



An important aspect of this discussion is that the business function at a location matters more than a firm's industry. A single company may have offices spread across cities, with headquarters located in a cosmopolitan metropolitan area, the research and development divisions located near a concentration of universities, the back office in a suburban location, and manufacturing and distribution located in areas with cheap land and good interstate access.

The location decisions of businesses are primarily based on the availability and cost of labor, transportation, raw materials, and capital. The availability and cost of these production factors are usually similar within a region. Most economic development strategies available to local governments, however, only indirectly affect the cost of these primary location factors. Local governments can most easily affect tax rates, public services, and regulatory policies. Economists generally agree that these factors do affect economic development, but the effects on economic development are modest. Thus, most of the strategies available to local governments have only a modest effect on the level and type of economic development in the community.

Local governments in Oregon also play a central role in the provision of buildable land through inclusion of lands in the Urban Growth Boundary, as well as through determination of plan designations and zoning, and through provision of public services. Obviously, businesses need buildable land to locate or expand in a community. Providing buildable land alone is not sufficient to guarantee economic development in a community—market conditions must create demand for this land, and local factors of production must be favorable for business activity. In the context of expected economic growth and the perception of a constrained land supply in Washington County, the provision of buildable land has the potential to strongly influence the level and type of economic development in North Plains. The provision of buildable land is one of the most direct ways that the City of North Plains can affect the level and type of economic development in the community.

### Fiscal implications of different development types<sup>3</sup>

One of the factors that cities may consider in planning their land uses is the fiscal impacts of different development types. Any new development will have fiscal impacts on the local government, potentially on expenditures for infrastructure or services and on revenues from local taxes. Local government expenditures include the costs of providing infrastructure (such as roads, water, or wastewater facilities) or services (such as public safety, schools, libraries, or parks). Local government revenues are collected through local taxes (such as property taxes) or fees (such as land use development fees or wastewater fees). Any new development can be said to have positive fiscal impacts (if the development pays more in revenues than the costs for infrastructure and services to serve the new development) or negative fiscal impacts (if the development pays less in revenues than the costs for infrastructure and services).

Different development types have different fiscal impacts, depending on what type of development occurs. The fiscal impact of different development types depends on both the revenue generated by the land use and the expenditures for infrastructure and services. Employment related development, such as office parks or industrial development have a positive fiscal impact for cities, where these employment uses pay more in taxes than they require in expenditures. Residential development, especially lower-density residential development like single-family homes, townhouses, or small apartment buildings, generally have a negative fiscal impact on cities because the taxes they pay are less than the costs of providing services to them. Some residential development, such as high-rise apartments or age restricted housing, produce more revenues than the costs of services to support the development

The reason that residential development like single-family homes, townhouses, or small apartment buildings have higher costs than revenues is because families with children are more likely to live in these housing types and the costs for schools is comparatively high. Figure 3 shows a range of land uses and typical fiscal impacts.

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<sup>3</sup> The information in this section is based the following articles:

:Burchell and Listokin, "Fiscal Impact Procedures and State of the Art: The subset Question of Costa and Revenues of Open Space and Agricultural Land," Lincoln Institute of Land Policy, 1993.

"Fiscal Impacts of Different Land Uses: The Pennsylvania Experience in 2006," Penn State College of Agricultural Sciences.

Figure 3. Hierarchy of land uses and typical fiscal impacts for cities across the U.S.

Land use	FISCAL IMPACT ON:	
	Municipality	School district
Research office parks	+	+
Office parks	+	+
Industrial development	+	+
High-rise/garden apartments (studio/1 bedroom)	+	+
Age-restricted housing	+	+
Garden condos (1–2 bedrooms)	+	+
Open space lands	+	+
Retail facilities	–	+
Townhouses (2–3 bedrooms)	–	+
Expensive single-family homes (3–4 bedrooms)	–	+
Townhouses (3–4 bedrooms)	–	–
Inexpensive single-family homes (3–4 bedrooms)	–	–
Garden apartments (3+ bedrooms)	–	–
Mobile homes	–	–

Source: Burchell and Listokin. "Fiscal Impact Procedures and State of the Art: The subset Question of Costs and Revenues of Open Space and Agricultural Land," Lincoln Institute of Land Policy, 1993

## Summary of the Effect of National, State and Regional Trends on Economic Development in North Plains

This section presents a summary and the implications of national, state, and regional economic trends on economic growth in North Plains.

National, State, and Regional Economic Trends	Implications for Economic Growth in North Plains
<p><b>Moderate growth rates and recovery from the national recession</b></p> <p>After the end of the recession in 2009, economic growth returned to the U.S. economy, with persistent increases in GDP, (3.5% in the third quarter of 2016) steady job growth (averaging about 183,000 per month over 2016), and decline in the unemployment rate (currently at about 4.7% compared to the recessionary peak of 10%).<sup>4</sup></p> <p>Unemployment at the national level has gradually declined since the height of the recession. Unemployment is expected to remain below 5% through 2020.<sup>5</sup> Unemployment rates in Oregon are typically higher than those of the nation as a whole.</p> <p>The federal government's economic forecast predicts a moderate pace of economic growth, with gradual increases in employment and real GDP (roughly 3% through the end of 2016).</p> <p>IHS Economic projects that Oregon's economy will be the fourth-fastest growing among all states in the U.S., averaging annual growth of about 3.0% through 2020. Though the Oregon Office of Economic Analysis expects a slightly slower rate, it still expects Oregon to exceed the national average.<sup>6</sup></p>	<p>The Oregon Office of Economic Analysis forecasts that employment in Multnomah and Washington Counties will grow by about 15% between 2014 and 2024, at an average annual growth rate of 1.4%. Professional and Business Services, Private Educational and Health Services, Leisure and Hospitality, and Trade, Transportation, and Utilities, will make up the majority of the Region's growth.</p> <p>The rate of employment growth in North Plains will depend, in part, on the rate of employment growth in the Portland Region. The types of businesses most likely to grow in North Plains include Professional and Business Services, local services (e.g., retail and education), and businesses that are part of the supply chain of larger businesses in Beaverton and Hillsboro.</p>

<sup>4</sup> "Job Growth Steady in July, Possibly Easing Path for Fed Action," *The New York Times*, August 7, 2015; "US Economy at a Glance," US Bureau of Economic Analysis, accessed January 15, 2017; "Employment Situation Summary," Economic News Release, Bureau of Labor Statistics, January 6, 2017.

<sup>5</sup> "Congressional Budget Office. An Update to the Budget and Economic Outlook: 2016-202. August 2016. <https://www.cbo.gov/publication/51908>

<sup>6</sup> IHS Economics in "Oregon Economic and Revenue Forecast," Oregon Office of Economic Analysis, Sept 2015. <http://www.oregon.gov/DAS/OEA/docs/economic/forecast0916.pdf>

National, State, and Regional Economic Trends	Implications for Economic Growth in North Plains
<p><b>Growth of service-oriented sectors</b></p> <p>Increased worker productivity and the international outsourcing of routine tasks led to declines in employment in the major goods-producing industries. Projections from the Bureau of Labor Statistics indicate that U.S. employment growth will continue to be strongest in healthcare and social assistance, professional and business services, and other service industries. Construction employment will grow with the economy, but manufacturing employment will decline. These trends are also expected to affect the composition of Oregon's economy, although manufacturing in Oregon will grow.</p>	<p>The changes in employment in Washington County have followed similar trends as changes in national and state employment, with the fastest growth in service industries.</p> <p>The Oregon Employment Department forecasts that the sectors likely to have the most employment growth in Multnomah and Washington Counties over the 2014 to 2024 period are: Professional and Business Services, Private Educational and Health Services, Leisure and Hospitality, and Trade, Transportation, and Utilities. These sectors represent employment opportunities for North Plains.</p>
<p><b>Importance of small businesses in Oregon's economy</b></p> <p>Small business, with 100 or fewer employees, account for 41% of private-sector employment in Oregon. Workers of small businesses typically have had lower wages than the state average.</p> <p>About one-third of the U.S. workforce was either self-employed or worked for a self-employed business owner in 2014. The number of entrepreneurial businesses continues to grow nationally.</p>	<p>The average size for a private business in North Plains is 7.5 employees per business, compared to the Washington County average of 14.3 and the State average of 11 employees per private business.</p> <p>Businesses with 20 or fewer employees account for roughly 66% of private employment in North Plains, and businesses with 10 or fewer employees account for 27% of private employment.</p> <p>Growth of small businesses and entrepreneurs presents opportunities for economic growth in North Plains.</p>
<p><b>Availability of trained and skilled labor</b></p> <p>Businesses in Oregon are generally able to fill jobs, either from available workers living within the State, or by attracting skilled workers from outside of the State.</p> <p>Availability of labor depends, in part, on population growth and in-migration. Oregon added more than 1,120,000 new residents and about 465,000 new jobs between 1990 and 2014. The population-employment ratio for the State was about 2.2 residents per job over the 24-year period.</p> <p>Availability of labor also depends on workers' willingness to commute. Workers in Oregon typically have a commute that is 30 minutes or shorter.</p> <p>Availability of skilled workers depends, in part, on educational attainment. About 30% of Oregon's workers have a Bachelor's degree or higher.</p>	<p>Employment in Washington County grew at about 1.3% annually over the 2001 to 2015 period, while population grew at about 1.6% over the same period.</p> <p>About 97% of workers in North Plains commuted into the City from elsewhere, including from Hillsboro (17% of North Plains workers), Portland (8%), and Beaverton (6%). About 63% of workers at businesses located in North Plains lived in Washington County.</p> <p>North Plains residents were more likely to have completed a Bachelor's, Graduate, or Professional degree (30%) than the State average (20%).</p> <p>While businesses in North Plains are able to find workers from across the Portland region, the majority of people working at businesses in North Plains do not live in North Plains.</p>

National, State, and Regional Economic Trends	Implications for Economic Growth in North Plains
<p><b>Aging of the population</b></p> <p>The number of Oregonians aged 65 and older will nearly double between 2015 and 2050, while the number of people under age 65 will grow by only about 29%. The economic effects of this demographic change include a slowing of the growth of the labor force, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.</p> <p>Furthermore, people are retiring later than previous generations and continuing to work past 65 years old. This trend is seen both at the national and State levels. Even given this trend, the need for workers to replace retiring Baby Boomers will outpace job growth. Management occupations and teachers will have the greatest need for replacement workers because these occupations have older-than-average workforces.</p>	<p>Washington County has a smaller share of people over 60 than Oregon, but consistent with State trends more than 40% population growth will be among people 60 and older through 2035. The State projects that the share of the population over the age of 60 in Washington County will increase from 18% to 24% between 2015 and 2035.</p> <p>Firms in North Plains will need to replace workers as they retire. Given the CBO's forecast of relatively low unemployment rates (about 5.5% through 2025), businesses in North Plains (and throughout the State) may have difficulties finding replacement workers.</p>
<p><b>Increases in energy prices</b></p> <p>Although energy prices are currently low by historical standards, over the long-term, energy prices are forecast to return to relatively high levels, as the economy and the population grow.</p> <p>As energy prices increase over the planning period, energy consumption for transportation may decrease. Increasing energy prices may decrease willingness to commute long distances. However, the impact on transportation costs from energy prices may be partly offset by increased energy efficiency of vehicles and stricter emissions standards.</p>	<p>In 2016, lower energy prices have decreased the costs of commuting compared with costs between 2011 and 2014. Over the long-term, if energy prices increase, these higher prices will likely affect the mode of commuting before affecting workers' willingness to commute. For example, commuters may choose to purchase a more energy-efficient car, use the bus, or carpool.</p> <p>Very large increases in energy prices may affect workers' willingness to commute, especially workers living the furthest from North Plains or workers with lower paying jobs. These increases in energy prices could affect business' ability to find employees.</p> <p>In addition, very large increases in energy prices may make shipping freight long distances less economically feasible, resulting in a slow-down or reversal of off-shore manufacturing, especially of large, bulky goods.</p>

National, State, and Regional Economic Trends	Implications for Economic Growth in North Plains
<p><b>Comparatively low wages</b></p> <p>The income of a region affects the workforce and the types of businesses attracted to the region. Average income affects workers and businesses in different ways. Workers may be attracted to a region with higher average wage or high wage jobs. Businesses, however, may prefer to locate in regions with lower wages, where the cost of doing business may be lower.</p> <p>Since the early 1980's, Oregon's per capita personal income has been consistently lower than the U.S. average. In 2014, Oregon's per capita wage was 91% of the national average. From 2000 to 2014 nominal wages in the nation grew by 46% from \$35,300 to \$51,400, while wages in Oregon increased by only 42% from \$32,800 to \$46,500.</p> <p>There are three basic reasons that wages are lower in Oregon than in the U.S.: (1) wages for similar jobs are lower; (2) the occupational mix of employment is weighted towards lower paying occupations; (3) a large proportion of Oregon's population is retired.</p> <p>In addition, wages in Oregon tend to be more volatile than the national average. The major reason for this volatility is that the relative lack of diversity in the State economy</p>	<p>Although income in Oregon has historically been below national averages, Washington County's per capita personal income has been above that of the State. The County's average wages were also higher than the State and U.S. in both 2000 and 2015. In 2015, Washington County's average wage was about \$65,600 compared to the State (\$48,300).</p> <p>Reasons why wages are higher in Washington County than in Oregon include: (1) the presence of large traded-sector employers in high paying industries (e.g, Intel, Nike); (2) wages for similar jobs are higher than elsewhere in the State; (3) the occupational mix of employment includes a larger share of higher paying occupations; and (4) Washington County has a smaller share of people who are retired.</p> <p>Average wages in North Plains are below regional and state averages, at about \$37,800 in 2014. Wages are lower in North Plains because of the composition in employment in North Plains. About 20% of employment in North Plains is in Food Services and Retail, with an average wage around \$12,400. In addition, Professional Services and Health Care, sectors that typically have higher wages, have wages around \$32,000.</p>



National, State, and Regional Economic Trends	Implications for Economic Growth in North Plains
<p><b>Education as a determinant of wages</b></p> <p>The majority of the fastest growing occupations will require an academic degree, and on average they will yield higher incomes than occupations that do not require an academic degree.</p> <p>The fastest growing occupations requiring an academic degree will be: industrial-organizational psychologists, interpreters and translators, diagnostic medical sonographers, occupational therapy assistants, genetic counselors, physical therapist assistants, and physician assistants. Occupations that do not require an academic degree (e.g., retail sales person, food preparation workers, and home care aides) will grow, accounting for almost two-thirds of all new jobs by 2022. These occupations typically have lower pay than occupations requiring an academic degree.</p> <p>The national median income for people over the age of 25 in 2014 was about \$43,628. Workers without a high school diploma earned \$18,252 less than the median income, and workers with a high school diploma earned \$8,892 less than median income. Workers with some college earned \$5,096 less than median income, and workers with a bachelor's degree earned \$13,624 more than median. Workers in Oregon experience the same patterns as the nation, but pay is generally lower in Oregon than the national average.</p> <p>Another factor impacting the importance of education is growth in use of automation. Lower paying jobs (i.e., jobs paying less than \$20 per hour) are more likely to be automated in the future, compared with higher-paying, more complex jobs. This trend will emphasize the importance of training and education for workers in the future.</p>	<p>North Plains' residents were more likely to have completed a Bachelor's, graduate, or professional degree compared to Oregon residents as a whole (30% versus 20%). North Plains residents were also more likely to have some college or an Associate's degree (37% versus 35%).</p> <p>Average household income in North Plains are relatively high. For example, the median household income in North Plains in the 2010-14 period was about \$75,000, compared to \$51,300 in the State. This difference may be attributable to the fact that 30% of North Plains' residents work in Hillsboro and 20% work in Beaverton. Some of whom may work at the higher paying jobs in these cities.</p> <p>This difference may also be attributable to the higher workforce participation of North Plains residents and lower percentage of employment in services. On average, wages for service-based jobs are lower in comparison to more technical jobs such as manufacturing. For example, manufacturing average pay in North Plains is \$50,600, compared with \$32,600 for Professional Services or \$12,000 for Food Services. North Plains has a higher than average percentage of employment in manufacturing and other industrial sectors.</p> <p>Businesses that want to locate in North Plains can draw from the labor pool of the Portland region and from residents of North Plains.</p>
<p><b>Importance of high quality natural resources</b></p> <p>The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. Increases in the population and in households' incomes, plus changes in tastes and preferences, have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a region's quality of life and play an important role in attracting both households and firms.</p>	<p>North Plains' scenic location in rural Washington County may present economic growth opportunities for North Plains, ranging from specialty food and beverage products to amenities that attract visitors and contribute to the region's high quality of life.</p>



## National Trends

Economic development in North Plains over the next 20 years will occur in the context of long-run national trends. The most important of these trends include:

- **Economic growth will continue at a moderate pace.** Analysis from the Congressional Budget Office (CBO) predicts moderate growth: 2.4% in 2017, and 2.0% in 2018-2019. Increases in consumer spending, business investment, and residential investment are expected to drive this growth.

The unemployment rate is expected to decrease to 4.5% by the fourth quarter of 2017, and remain relatively steady at 4.9% in later years. Growth in hourly compensation will increase labor force participation, slowing its longer-term decline.

Beyond 2019, CBO projects that output will increase by 2.0% per year, higher than 2008-2014 growth, but lower than the growth in the 1980's, 1990's, and early 2000's, mainly due to slower labor force growth. Unemployment is expected to be 4.9% from 2021-2026.<sup>7</sup>

- **The aging of the baby boomer generation, accompanied by increases in life expectancy.** As the baby boomer generation continues to retire, the number of Social Security recipients is expected to increase from 60 million in 2016 to nearly 100 million in 2040, a 67% increase. However, due to lower-birth rate replacement generations, the number of people aged 20 to 64 is only expected to increase 10% over the same time period. Thus, the number of workers per Social Security beneficiaries will decline. The ratio of covered workers per beneficiary is expected to decline from 3 to 1 in 2015, to 2 to 1 in 2040. This will increase the percent of the federal budget dedicated to Social Security and Medicare or require changes to program eligibility.<sup>8</sup>

Baby boomers are expecting to work longer than previous generations. An increasing proportion of people in their early to mid-50s expect to work full-time after age 65. In 2004, about 40% of these workers expect to work full-time after age 65, compared with about 30% in 1992.<sup>9</sup> This trend can be seen in Oregon, where the share of workers 65 years and older grew from 2.9% of the workforce in 2000 to 4.1% of the workforce in 2010, an increase of 41%. Over the same ten-year period, workers 45 to 64 years increased by 15%.<sup>10</sup>

- **Need for replacement workers.** The need for workers to replace retiring baby boomers will outpace job growth. According to the Bureau of Labor Statistics, there will be 46.5

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<sup>7</sup> Congressional Budget Office. An Update to the Budget and Economic Outlook: 2016-2026. August 2016. <https://www.cbo.gov/publication/51908>

<sup>8</sup> Congressional Budget Office. Social Security Policy Option, 2015. December 2015. <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51011-SocSecOptions-2.pdf>

<sup>9</sup> "The Health and Retirement Study," 2007, National Institute of Aging, National Institutes of Health, U.S. Department of Health and Human Services.

<sup>10</sup> Analysis of 2000 Decennial Census data and 2010 U.S. Census American Community Survey, 1-Year Estimates for the table Sex by Age by Employment Status for the Population 16 Years and Over

million total job openings over the 2014-2024 period, more than three-quarters of which are from replacement needs. Almost two thirds of job openings are in occupations that do not require postsecondary education.<sup>11</sup>

- **The importance of education as a determinant of wages and household income.**

According to the Bureau of Labor Statistics, a majority of the fastest growing occupations will require an academic degree, and on average, they will yield higher incomes than occupations that do not require an academic degree. The fastest growing occupations requiring an academic degree will be: industrial-organizational psychologists, interpreters and translators, diagnostic medical sonographers, occupational therapy assistants, genetic counselors, physical therapists, nurse practitioners, statisticians, and physician assistants. Occupations that do not require an academic degree (e.g., retail sales person, food preparation workers, and home care aides) will grow, accounting for slightly more than two-thirds of all new jobs by 2024. These occupations typically have lower pay than occupations requiring an academic degree.<sup>12</sup>

The national median income for people over the age of 25 in 2014 was about \$43,628. Workers without a high school diploma earned \$18,252 less than the median income, and workers with a high school diploma earned \$8,892 less than median income. Workers with some college earned \$5,096 less than median income, and workers with a bachelor's degree earned \$13,624 more than median. Workers in Oregon experience the same patterns as the nation, but pay is generally lower in Oregon than the national average.<sup>13</sup>

- **Increases in labor productivity.** Productivity, as measured by output per hour of labor input, increased in most sectors over between 2000 and 2010, peaking in 2000 and 2007. However, productivity increases were interrupted by the recession. After productivity decreases from 2009 to 2009, many industries saw large productivity increases from 2009 to 2010. Industries with the fastest productivity growth were Information Technology-related industries. These include wireless telecommunications carriers, computer and peripheral equipment manufacturing, electronics and appliance stores, and commercial equipment manufacturing wholesalers.<sup>14</sup>
- **Impacts of increasing automation on the labor force.** Automation of work using robots and other forms of automation has been affecting the U.S. labor force for decades. The types of work accomplished through automation has diversified with advances in technology. Automation may increase productivity of U.S. manufactures and other businesses but may result in changes to the labor market and types of skills needed in the labor force. The occupations that are easiest to automate are those with

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<sup>11</sup> "Occupational Employment Projections to 2014-2024," Bureau of Labor Statistics, December 2015.

<sup>12</sup> "Occupational Employment Projections to 2014-2024," Bureau of Labor Statistics, December 2015.

<sup>13</sup> Bureau of Labor Statistics, Employment Projections, April 2015. [http://www.bls.gov/emp/ep\\_chart\\_001.htm](http://www.bls.gov/emp/ep_chart_001.htm)

<sup>14</sup> Brill, Michael R. and Samuel T. Rowe, "Industry Labor Productivity Trends from 2000 to 2010." Bureau of Labor Statistics, *Spotlight on Statistics*, March 2013.

lower wages, such as jobs paying under \$20 per hour (in 2010 dollars). The probability of automation of a job paying less than \$20 per hour is about 80%, compared to 4% for a job paying more than \$40 per hour. If the pace of automation continues, the types of skills needed by businesses will continue to focus on technological skills, emphasizing the need for labor force training and education.<sup>15</sup>

- **Growth of entrepreneurship.** The number of sole proprietors and entrepreneurs is growing in as a part of the national economy. In 1989, 3.4 million people were self-employed, accounting for 2.9% of total employment. By 2009, 5.5 million people were self-employed, accounting for 3.9% of total employment.<sup>16</sup>

A different study considers entrepreneurs and their employees. It finds that in 2014, entrepreneurs and their employees accounted for employ about 55 million jobs or 30% of workers in the U.S. The industries with the highest rates of employment in entrepreneurial businesses were agriculture, construction, and professional and business services. On average, Whites are more likely to be self-employed than Hispanic, African American, or Asians. However, immigrants are more likely to be self-employed than U.S. born workers. Men are more likely to be self-employed than women.<sup>17</sup>

- **The importance of high-quality natural resources.** The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. High-quality natural resources continue to be important in some states, especially in the Western U.S. Increases in the population and in household incomes, plus changes in tastes and preferences, have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a region's quality of life and play an important role in attracting both households and firms.<sup>18</sup>
- **Continued increase in demand for energy.** Energy prices are forecasted to increase over the planning period. While energy use per capita is expected to decrease to 2040, total energy consumption will increase with rising population. Energy consumption is expected to grow primarily from industrial and (to a lesser extent) commercial users, and slightly decrease in the residential sector. Energy consumption for transportation is expected to decrease, due to increased federal standards and increased technology for energy efficiency in vehicles.

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<sup>15</sup> "Economic Report of the President, Together with the Annual Report of the Council of Economic Advisers," February 2016

<sup>16</sup> Self-employment in the United States, Steven F. Hipple, "Monthly Labor Review," September 2010

<sup>17</sup> PewResearchCenter: Social & Demographic Trends, "Three-in-Ten U.S. Jobs Are Held by the Self-Employed and the Workers They Hire," October 2015.

<sup>18</sup> For a more thorough discussion of relevant research, see, for example, Power, T.M. and R.N. Barrett. 2001. *Post-Cowboy Economics: Pay and Prosperity in the New American West*. Island Press, and Kim, K.-K., D.W. Marcouiller, and S.C. Deller. 2005. "Natural Amenities and Rural Development: Understanding Spatial and Distributional Attributes." *Growth and Change* 36 (2): 273-297.

Energy consumption by type of fuel is expected to change over the planning period. By 2040, the U.S. will consume a little less oil and coal and more natural gas and renewables. Despite increases in energy efficiency and decreases in demand for energy by some industries, demand for energy is expected to increase over the 2013 to 2040 period because of increases in population and economic activity.<sup>19</sup>

- **Impact of rising energy prices on commuting patterns.** As energy prices increase over the planning period, transportation energy consumption will decrease. Increasing energy prices may decrease willingness to commute long distances.<sup>20</sup> The increases in energy prices, may impact willingness to commute long distances, but may be partly offset by increased energy efficiency of vehicles and stricter emissions standards. Vehicle miles traveled (VMT) are expected to increase through 2040.
- **Possible effect of rising transportation and fuel prices on globalization.** Increases in globalization are related to the cost of transportation: When transportation is less expensive, companies move production to areas with lower labor costs. Oregon has benefited from this trend, with domestic outsourcing of call centers and other back office functions. In other cases, businesses in Oregon (and the nation) have “off-shored” employment to other countries, most frequently manufacturing jobs.

Increases in either transportation or labor costs may impact globalization. When the wage gap between two areas is larger than the additional costs of transporting goods, companies are likely to shift operations to an area with lower labor costs. Conversely, when transportation costs increase, companies may have incentive to relocate to be closer to suppliers or consumers.

This effect occurs incrementally over time, and it is difficult to measure the impact in the short-term. If fuel prices and transportation costs decrease over the planning period, businesses may not make the decision to relocate (based on transportation costs) because the benefits of being closer to suppliers and markets may not exceed the costs of relocation.

- **Potential impacts of global climate change.** There is a consensus among the scientific community that global climate change is occurring and will have important ecological, social, and economic consequences over the coming decades and beyond.<sup>21</sup> Extensive research shows that Oregon and other western states already have experienced noticeable changes in climate and predicts that more change will occur in the future.<sup>22</sup>

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<sup>19</sup> Energy Information Administration, 2015, *Annual Energy Outlook 2015 with Projections to 2040*, U.S. Department of Energy, April 2015.

<sup>20</sup> Energy Information Administration, 2015, *Annual Energy Outlook 2015 with Projections to 2040 Early Release Overview*, U.S. Department of Energy, April 2015.

<sup>21</sup> Karl, T.R., J.M. Melillo, and T.C. Peterson, eds. 2009. *Global Climate Change Impacts in the United States*. U.S. Global Change Research Program. June. Retrieved June 16, 2009, from [www.globalchange.gov/usimpacts](http://www.globalchange.gov/usimpacts); and Pachauri, R.K. and A. Reisinger, eds. 2007. *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II, and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*.

<sup>22</sup> Doppelt, B., R. Hamilton, C. Deacon Williams, et al. 2009. *Preparing for Climate Change in the Upper Willamette River Basin of Western Oregon*. Climate Leadership Initiative, Institute for a Sustainable Environment, University of Oregon.

In the Pacific Northwest, climate change is likely to (1) increase average annual temperatures, (2) increase the number and duration of heat waves, (3) increase the amount of precipitation falling as rain during the year, (4) increase the intensity of rainfall events, and (5) increase sea level. These changes are also likely to reduce winter snowpack and shift the timing of spring runoff earlier in the year.<sup>23</sup>

These anticipated changes point toward some of the ways that climate change is likely to impact ecological systems and the goods and services they provide. There is considerable uncertainty about how long it would take for some of the impacts to materialize and the magnitude of the associated economic consequences. As the process of climate change continues, changes in the climate will affect businesses across the Pacific Northwest and the world.

Short-term national trends will also affect economic growth in the region, but these trends are difficult to predict. At times, these trends may run counter to the long-term trends described above. A recent example is the downturn in economic activity in 2008 and 2009 following declines in the housing market and the mortgage banking crisis. The result of the economic downturn was a decrease in employment related to the housing market, such as construction and real estate. As these industries recover, they will continue to play a significant role in the national, state, and local economy over the long run. This report takes a long-run perspective on economic conditions (as the Goal 9 requirements intend) and does not attempt to predict the impacts of short-run national business cycles on employment or economic activity.

## State Trends

### Short-Term Trends

Oregon is on its way to recovery from the recent recession, although according to the Oregon Office of Economic Analysis (OEA), the “full throttle growth” seen in 2013-2014 has begun to decelerate. Average wages are increasing at 3-4% per year, outpacing inflation, although wages are still lower than in many other state. Over the past year, Oregon added more than 50,000 jobs, a 2.8% growth rate. The professional and business services, health services, and leisure and hospitality industries have accounted for more than half of total growth in the State. Oregon continues to have an advantage in jobs compared to other states, due to its industrial sector and in-migration flows. However, Oregon has not completely healed from the recession, highlighted

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March. and Doppelt, B., R. Hamilton, C. Deacon Williams, et al. 2009. *Preparing for Climate Change in the Rogue River Basin of Southwest Oregon*. Climate Leadership Initiative, Institute for a Sustainable Environment, University of Oregon. March.

<sup>23</sup> Mote, P., E. Salathe, V. Duliere, and E. Jump. 2008. *Scenarios of Future Climate for the Pacific Northwest*. Climate Impacts Group, University of Washington. March.; Littell, J.S., M. McGuire Elsner, L.C. Whitely Binder, and A.K. Snover (eds). 2009. “The Washington Climate Change Impacts Assessment: Evaluating Washington’s Future in a Changing Climate - Executive Summary.” In *The Washington Climate Change Impacts Assessment: Evaluating Washington’s Future in a Changing Climate*, Climate Impacts Group, University of Washington.; Madsen, T. and E. Figdor. 2007. *When it Rains, it Pours: Global Warming and the Rising Frequency of Extreme Precipitation in the United States*. Environment America Research & Policy Center and Frontier Group.; and Mote, P.W. 2006. “Climate-driven variability and trends in mountain snowpack in western North America.” *Journal of Climate* 19(23): 6209-6220.



by the fact that a majority of Oregon households have lower income today (adjusted for inflation) than before the Great Recession. Although the State is at or near full employment, the labor force participation rate remains lower than expected.<sup>24</sup> Economic growth in Oregon is continue at healthy rates, but to continue to slow as the baby boomers retire.<sup>25</sup>

The housing market is continuing to recover. Oregon is seeing high household formation rates, which is good for the housing market. However, supply (both rental and ownership) of housing has not kept pace with housing demand, causing home prices and rents to rise. If construction cannot keep pace with household growth, housing affordability will become a greater issue. The OEA expects construction to increase over the next three years, relieving some of this pressure.<sup>26</sup>

The Oregon Index of Leading Indicators show “no real sustained movement in either direction.” The leading indicators showing improvement are: housing permits, historically low initial claims for unemployment, withholdings out of wages and salaries, and various manufacturing indicators. However, negative indicators include falling consumer sentiment, lower numbers of help wanted ads, falling rates of Oregon incorporations, and low capital goods orders.<sup>27</sup>

Oregon’s economic health is dependent on the export market. The value of Oregon exports in 2015 was \$20 billion. The countries that Oregon has the most exports to are China (24% of total Oregon exports), Canada (13%), Malaysia (12%), Japan (7%), South Korea (5%), and Taiwan (4%).<sup>28</sup> With the stabilization of Oregon’s dollar, Oregon’s exports have rebounded.<sup>29</sup> The economic slowdown across many parts of Asia will continue to affect the Oregon economy. However, the Trans-Pacific Partnership, a bill that would reduce trade barriers if approved, is expected to increase Oregon exports to participating countries (such as Malaysia, Japan, and Canada).

## Long-Term Trends

State trends will also affect economic development in North Plains over the next 20 years. The most important of these trends include: continued in-migration from other states change in the types of industries in Oregon, and the importance of small businesses to economic growth in Oregon.

- **Continued in-migration from other states.** Oregon will continue to experience in-migration (more people moving *to* Oregon than *from* Oregon) from other states, especially California and Washington. From 1990 to 2015, Oregon’s population

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<sup>24</sup> Office of Economic Analysis. Oregon Economic and Revenue Forecast, November 2016. Vol. XXXVI, No. 4. , page 4 <http://www.oregon.gov/DAS/OEA/docs/economic/forecast0915.pdf>

<sup>25</sup> Office of Economic Analysis. Oregon Economic and Revenue Forecast, November 2016. Vol. XXXVI, No. 4, page 13.

<sup>26</sup> Office of Economic Analysis. Oregon Economic and Revenue Forecast, September 2015. Vol. XXXV, No. 3, page 18.

<sup>27</sup> Office of Economic Analysis. Oregon Economic and Revenue Forecast, November 2016. Vol. XXXVI, No. 4, page 10.

<sup>28</sup> United States Census. State Exports from Oregon, 2012-2015. <https://www.census.gov/foreign-trade/statistics/state/data/or.html>

<sup>29</sup> Office of Economic Analysis. Oregon Economic and Revenue Forecast, December 2016. Vol. XXXVI, No. 4, page 3

increased by almost 1.2 million, 65% of which was from people moving into Oregon (net migration). The average annual increase in population from net migration over the same time period was just over 29,000. During the early- to mid-1990s, Oregon's net migration was highest, reaching over 60,000 in 1991, with another smaller peak in the mid 2000s. Net migration has increased dramatically since the Great Recession; in 2015, more than 40,000 migrated to Oregon. Oregon hasn't seen negative net migration since a period of negative net migration in the early- to mid-1980s.<sup>30</sup>

- **Forecast of job growth.** Total nonfarm employment is expected to increase from 1.8 million in 2015 to just under 2 million in 2020, an increase of 182,000 jobs. The industries with the largest growth will be Professional and Business Services, Leisure and Hospitality, Health Services, and Retail Trade, accounting for 61% of the forecasted growth.<sup>31</sup>
- **Continued importance of manufacturing to Oregon's economy.** Oregon's exports totaled \$19.4 billion in 2008, nearly doubling since 2000, and reached \$21 billion in 2014. In 2015, exports are on track to meet 2014's exports. The majority of Oregon exports go to countries along the Pacific Rim, with Canada, China, Japan, Korea, and Malaysia as top destinations. Oregon's largest exports are tied to high-tech and mining, as well as agricultural products.<sup>32</sup>
- **Shift in manufacturing from natural resource-based to high-tech and other manufacturing industries.** Since 1970, Oregon started to transition away from reliance on traditional resource-extraction industries. A significant indicator of this transition is the shift within Oregon's manufacturing sector, with a decline in the level of employment in the Lumber & Wood Products industry and concurrent growth of employment in other manufacturing industries, such as high-technology manufacturing (Industrial Machinery, Electronic Equipment, and Instruments), Transportation Equipment manufacturing, and Printing and Publishing.<sup>33</sup>
- **Income.** Oregon's income and wages are below that of a typical state. In 2014, Oregon per capita personal income was 90% of U.S. personal income, up from 88% in 2011-2012. In 2014, average annual wage was \$46,515, and median household income was \$51,075.<sup>34</sup> Total personal income (all classes of income, minus Social Security contributions, adjusted for inflation) in Oregon is expected to increase by 75%, from \$165 billion in 2014 to be \$289 billion in 2025. Per capita income is expected to increase

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<sup>30</sup> Portland State University Population Research Center. 2015 Annual Population Report. April 2016. <https://www.pdx.edu/prc/population-reports-estimates>

<sup>31</sup> Office of Economic Analysis. Oregon Economic and Revenue Forecast, September 2015. Vol. XXXV, No. 3, page 48.

<sup>32</sup> Oregon Office of Economic Analysis. Oregon Exports 2015: Destination Countries. August 2015. <http://oregoneconomicanalysis.com/2015/08/13/oregon-exports-2015-destination-countries/>

<sup>33</sup> Although Oregon's economy has diversified since the 1970's, natural resource-based manufacturing accounts for nearly 40% of employment in manufacturing in Oregon in 2014, with the most employment in Wood Product and Food manufacturing (QCEW).

<sup>34</sup> Oregon Quarterly Census of Employment and Wages, 2014. <https://www.qualityinfo.org>; US Census American Community Survey 1-Year Estimates, 2014, Table B19013.

by 47% over the same time period, from \$41,700 in 2014 to \$63,400 in 2025 (in nominal dollars).<sup>35</sup>

- **Small businesses continue to account for a large share of employment in Oregon.**

While small firms played a large part in Oregon's expansion between 2003 and 2007, they also suffered disproportionately in the recession and its aftermath (64% of the net jobs lost between 2008 and 2010 were from small businesses).

In 2014, small businesses (those with 100 or fewer employees) accounted for 95% of all businesses and 41% of all private-sector employment in Oregon. Said differently, most businesses in Oregon are small (in fact, 76% of all businesses have fewer than 10 employees), but the largest share of Oregon's workers work for large businesses.

The average annualized payroll per employee at small businesses was \$35,750 in 2014, which is considerably less than that at large businesses (\$45,140) and the statewide average for all businesses (\$45,507).<sup>36</sup>

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<sup>35</sup> Office of Economic Analysis. Oregon Economic and Revenue Forecast, November 2016. Vol. XXXVI, No. 4, page 37.

<sup>36</sup> U.S. Census Bureau, 2014 Statistics of U.S. Businesses, Annual Data, Enterprise Employment Size, U.S. and States. <http://www.census.gov/data/tables/2014/econ/susb/2014-susb-annual.html>



## Regional and Local Trends

### Availability of Labor

The availability of trained workers in North Plains will impact development of its economy over the planning period. A skilled and educated populace can attract well-paying businesses and employers and spur the benefits that follow from a growing economy. Key trends that will affect the workforce in North Plains over the next 20 years include its growth in its overall population, growth in the senior population, and commuting trends.

### Growing Population

Population growth in Oregon tends to follow economic cycles. Historically, Oregon's economy is more cyclical than the nation's, growing faster than the national economy during expansions, and contracting more rapidly than the nation during recessions. Oregon grew more rapidly than the U.S. in the 1990s (which was generally an expansionary period) but lagged behind the U.S. in the 1980s. Oregon's slow growth in the 1980s was primarily due to the nationwide recession early in the decade. As the nation's economic growth slowed during 2007, Oregon's population growth began to slow.

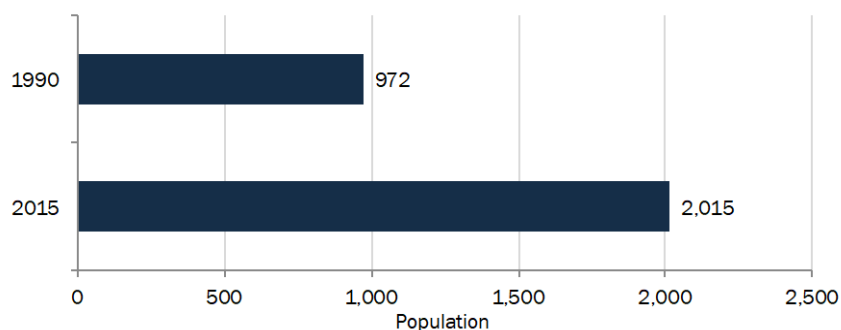
Oregon's population grew from 2.8 million people in 1990 to 4.0 million people in 2015, an increase of over 1,100,000 people at an average annual rate of 1.39%. Oregon's growth rate slowed to 1.05% annual growth between 2000 and 2015.

Figure 4 shows that North Plains' population increased by 107% over the 1990 to 2015 period, from 972 people up to 2,015 people. Over this same period, Figure 5 shows that North Plains grew at a faster rate than Washington County. Due to its small size, North Plains accounted for just 0.5% of Washington County's total population growth over the 1990 to 2015 period. North Plains' annual average population growth rate of 3.0% was faster than Washington County's (2.5%) and more than double Oregon's rate (1.4%).

**From 1990 to 2015,  
North Plains' population  
increased by 1,043  
people or 107%.**

**Figure 4. Population, North Plains, 1990 - 2015**

Source: PSU Population Research Center, US Decennial Census



**From 1990 to 2015, North Plains' population grew by 1,043 people, accounting for 0.5% of population growth in Washington County.**

**Figure 5. Population Growth, 1990 - 2015**

Source: PSU Population Research Center Certified Population Estimates, 1990 and 2015

<b>107%</b> North Plains	<b>83%</b> Washington County	<b>41%</b> Oregon
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**North Plains' population grew faster than both the County and the State.**

**Figure 6. Population Growth, 1990 - 2015**

Source: PSU Population Research Center Certified Population Estimates, 1990 and 2015

<b>3.0%</b> North Plains	<b>2.5%</b> Washington County	<b>1.4%</b> Oregon
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## Age Distribution

The number of people aged 65 and older in the U.S. is expected to double by 2050, while the number of people under age 65 will only grow by 12%. The economic effects of this demographic change include a slowing of the growth of the labor force, need for workers to replace retirees, aging of the workforce for seniors that continue working after age 65, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.<sup>37</sup>

The median age of North Plains residents is increasing, consistent with trends in Washington County and Oregon. Figure 8 shows the change in age distribution between 2010 and 2014. All age groups gained population, with the exception of people aged under 18. The age group that experienced the largest growth in population was people aged 45 to 64, gaining 208 people or 69% over the fourteen-year period.

**North Plains' median age is comparable to the state average.**

North Plains' residents are older, on average, than Washington County residents but comparable to state averages.

**Figure 7. Median Age, 2000 to 2010-14**

Source: US Census Bureau, 2000 Decennial Census Table P013, 2010-14 ACS Table B01002.

<b>2000</b>	<b>34.0</b> North Plains	<b>33.0</b> Washington County	<b>36.3</b> Oregon
<b>2010-14</b>	<b>38.6</b> North Plains	<b>35.9</b> Washington County	<b>38.9</b> Oregon

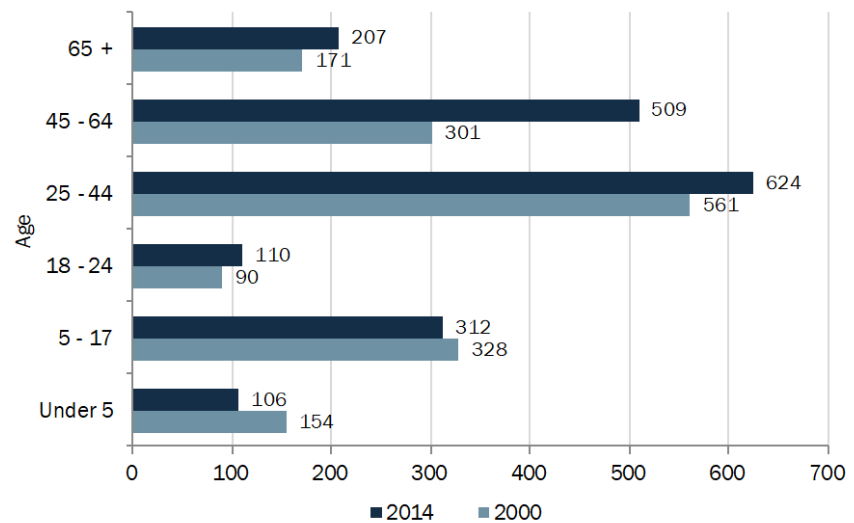
<sup>37</sup> The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2008, *The 2008 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, April 10, 2008. *The Budget and Economic Outlook: Fiscal Years 2007 to 2016*, January; and Congressional Budget Office, 2005, *The Long-Term Budget Outlook*, December.

**From 2000 to 2014, North Plains' largest population increase was for the population aged 45 to 64 years old.**

Growth in the number of people aged 45 to 64 accounted for nearly 80% of North Plains' population growth between 2000 and 2014.

**Figure 8. North Plains population change by age, 2000-2014**

Source: U.S. Census 2000 Summary File, American Community Survey 2014 5-year estimate Table B01001

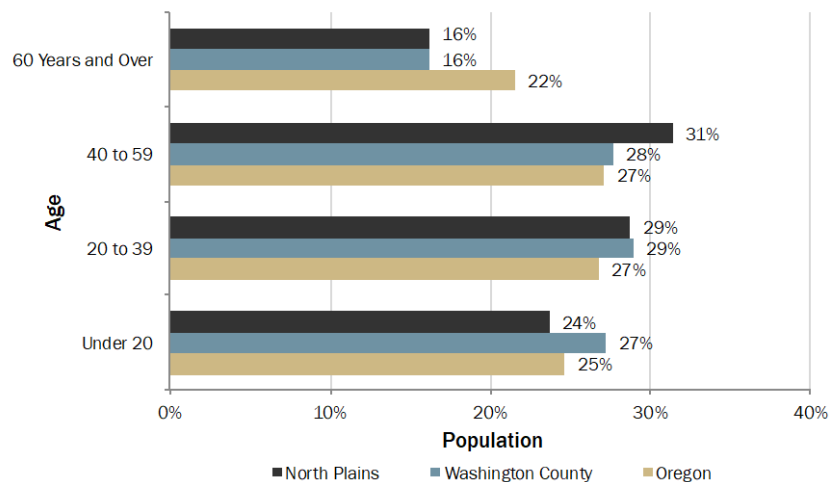


**In 2014, 60% of North Plains' residents were between 20 and 59 years old.**

North Plains has a smaller share of residents under the age of 20 than Washington County and the State. Like Washington County, North Plains has fewer residents aged 60 and over than the State average.

**Figure 9. Population distribution by age, North Plains, Washington County, and Oregon, 2010-2014**

Source: American Community Survey, 2014 5-year estimate

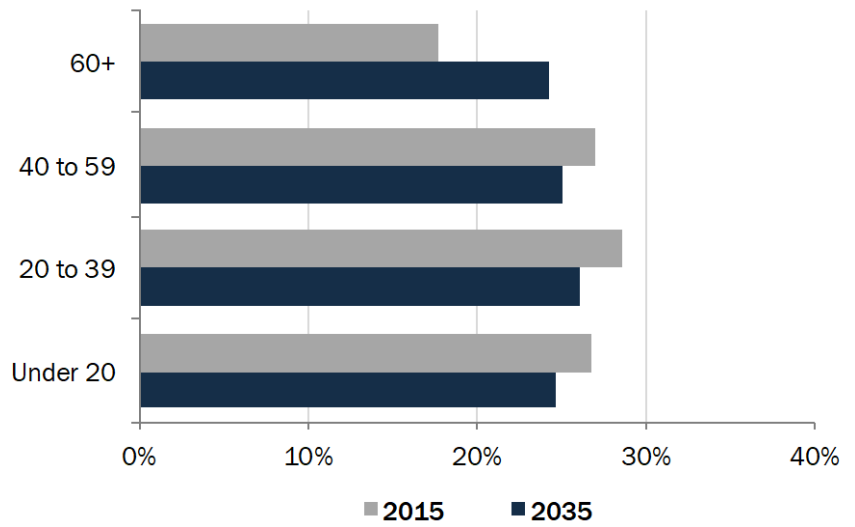


**By 2035, Washington County will have a larger share of residents older than sixty than it does today.**

The share of residents aged 60 years and older will account for 24% of Washington County's population, compared to 18% in 2015.

**Figure 10. Population Growth by Age Group, Washington County, 2015 - 2035**

Source: Oregon Office of Economic Analysis, Long-term County Forecast, 2013 Release



## Income

Income and wages affect business decisions for locating in a city. Areas with higher wages may be less attractive for industries that rely on low-wage workers.

Per capita income<sup>38</sup> grew most years during the 34-year period, with the exception of a decrease during the 2007 and 2009 recession. Between 1980 and 2015, Oregon's per capita personal income was consistently lower than the U.S. average. In 1980, Oregon's per capita personal income equaled the national average and was 90% of the national average by 2013. Oregon's relatively low wages make the state attractive to businesses seeking to locate in areas with lower-than-average wages.

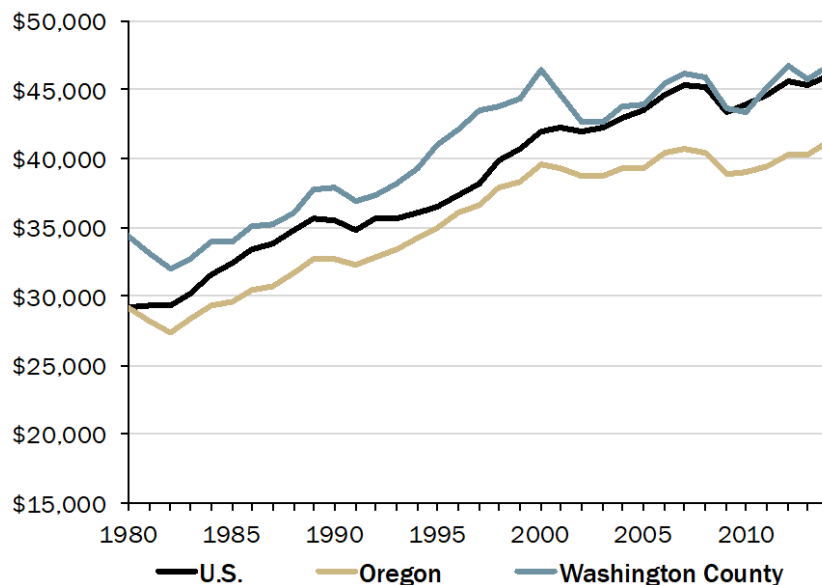
Washington County's per capita income remained consistently above the State average, though it followed similar growth trends as State personal income. Between 2000 and 2014, per capita personal income increased nationally by 10% and remained relatively flat in Oregon (4% increase) and Washington County (0.5% increase). However, the 14-year average masks large fluctuations in Washington County. Washington County was hit strongly by the 2001 recession, with per capita income decreasing by 9% between 2000 and 2002. Since 2002, Washington County's personal income has closely tracked the national average. In 2014, per capita income in Washington County was about 13% higher than the statewide average.

### Per capita income (adjusted for inflation) in the nation, Oregon, and Washington County has grown since 1980.

Per capita income in Washington County grew 7% in the post-recession period between 2009 and 2014, larger than Oregon's 6% growth over the same period. Washington County's per capita income was 113% of Oregon's average in 2014.

**Figure 11. Per Capita Personal Income, US, Oregon, and Washington County, 1980 to 2014, Inflation-adjusted 2014 Dollars**

Source: Bureau of Economic Analysis, Per Capita Personal Income, Table CA-1



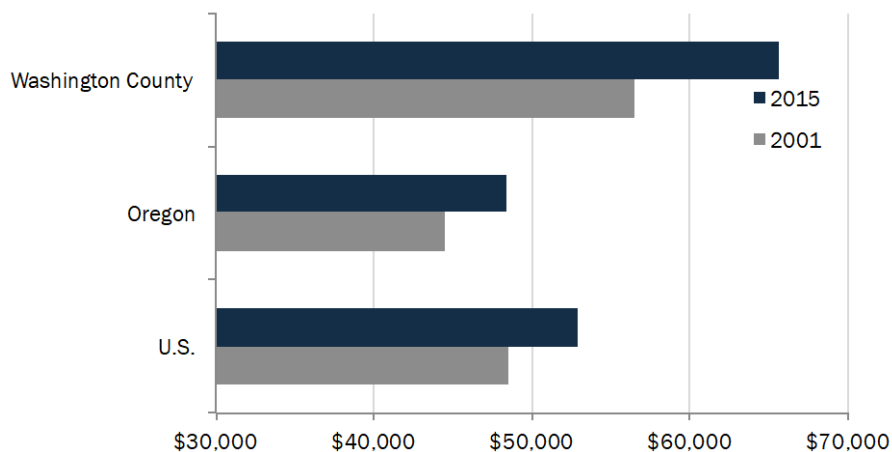
<sup>38</sup> Personal income includes wages, dividends and interest from investments, rent from investments, pension plan payments and transfer payments (e.g., social security payments). Per capita personal income is the personal income of the area divided by the total number of people in the area.

Between 2001 and 2015, Washington County's average wages increased faster than average wages in Oregon and the U.S. The increase in average wages in Washington County has many causes, but two causes are the change in mix of jobs in Washington County since 2001 and recovery from the 2001 recession.

**From 2000 to 2015, average annual wages rose in Washington County, Oregon, and the nation.**

In 2015, average annual wages were about \$65,610 in Washington County, \$48,312 in Oregon, and \$52,937 in the nation. Washington County's average wage increased by 16%, compared with 9% for Oregon and the U.S.

**Figure 12. Average Annual Wage, Covered Employment, US, Oregon, and Washington County, 2001 to 2015, Inflation-adjusted 2015 Dollars**  
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages



**Jobs located in North Plains pay less than the County and State average.**

In 2014, the average wage for jobs in North Plains was 60% of the county average.

**Figure 13. Average Annual Wage, Covered Employment, 2014**

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

<b>\$37,847</b>	<b>\$ 62,682</b>	<b>\$46,515</b>
North Plains	Washington County	Oregon

**In the 2010-14 period, North Plains' median household income was above that of the County and the State.**

Although wages for jobs in North Plains are lower than the county average, households that live in North Plains make more than average. This is because many North Plains residents work in other cities.

**Figure 14. Median Household Income, 2010-14**

Source: US Census Bureau, 2014 ACS Table B19013

<b>\$73,750</b>	<b>\$65,272</b>	<b>\$50,521</b>
North Plains	Washington County	Oregon

**In the 2010-14 period, North Plains' median family income was above that of the County and the State.**

**Figure 15. Median Family Income, 2010-14**

Source: US Census Bureau, 2014 ACS Table B19113

**\$78,542**

North Plains

**\$77,235**

Washington County

**\$61,890**

Oregon

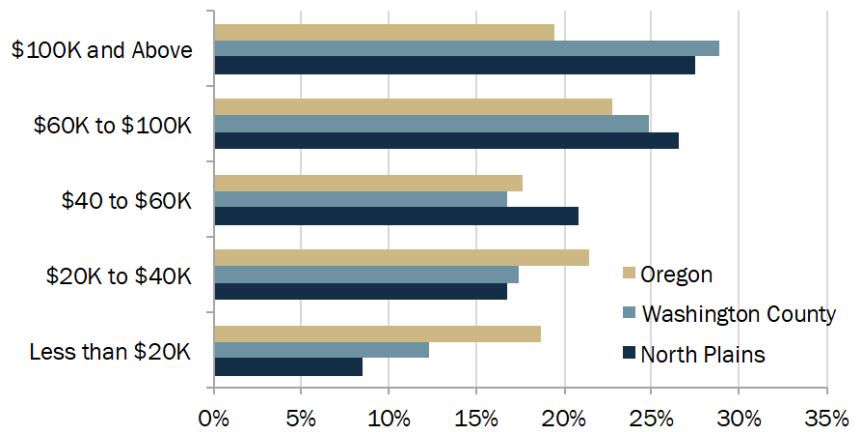
Figure 16 shows the distribution of household income in Oregon, Washington County, and North Plains in 2014.

**In the 2010-14 period, 8% of North Plains households had less than \$20,000 in income.**

46% of North Plains households had an income of less than \$60,000 compared to 58% statewide.

**Figure 16. Household Income by Income Group, Oregon, Washington County, and North Plains, 2010-14, Inflation-adjusted 2014 Dollars**

Source: US Census Bureau, 2014 ACS Table B19001



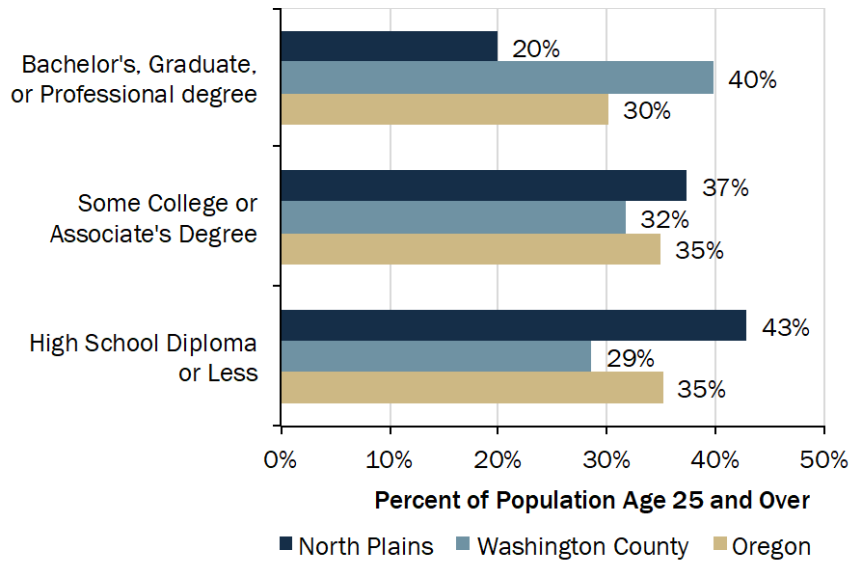
## Educational Attainment

The availability of trained, educated workers affects the quality of labor in a community. Educational attainment is an important labor force factor because firms need to be able to find educated workers.

**North Plains has a larger share of residents with Some College or an Associate's Degree (37%) than Washington County (32%) and Oregon (35%).**

**Figure 17. Educational Attainment for the Population 25 Years and Over, 2010-14**

Source: US Census Bureau, 2014 ACS Table B15003





## Labor Force Participation and Unemployment

The current labor force participation rate is an important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. Children, retirees, students, and people who are not actively seeking work are not considered part of the labor force. According to the 2010-2014 American Community Survey, North Plains has more than 1,489 people in its labor force.

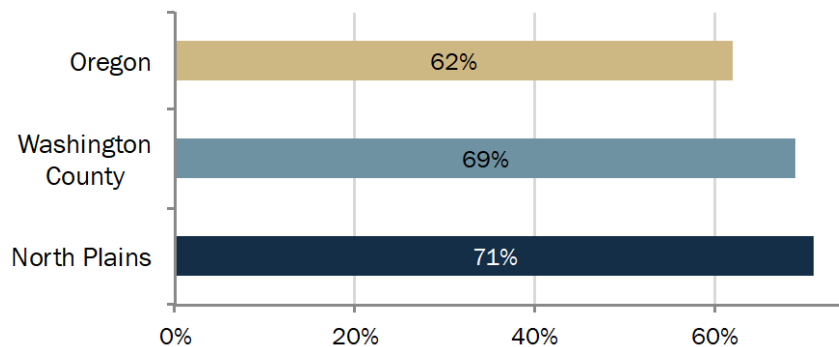
In 2015, the Oregon Office of Economic Analysis observed that about 32% of all job vacancies in the state were attributable to a lack of qualified applicants—people who don't have the education, certification, or experience to fill the job posting. This indicates a mismatch between the types of jobs that employers are demanding and the skills that potential employees can provide.

**North Plains has a higher labor force participation rate (71%) than Washington County (69%) and Oregon (62%).**

The likely reason for the higher labor force participation rate is North Plains' smaller share of people over 60 years old and people under 20 years old.

**Figure 18. Labor Force Participation, North Plains, Washington County, Oregon, 2010-14**

Source: US Census Bureau, 2010-14 ACS Table B23001

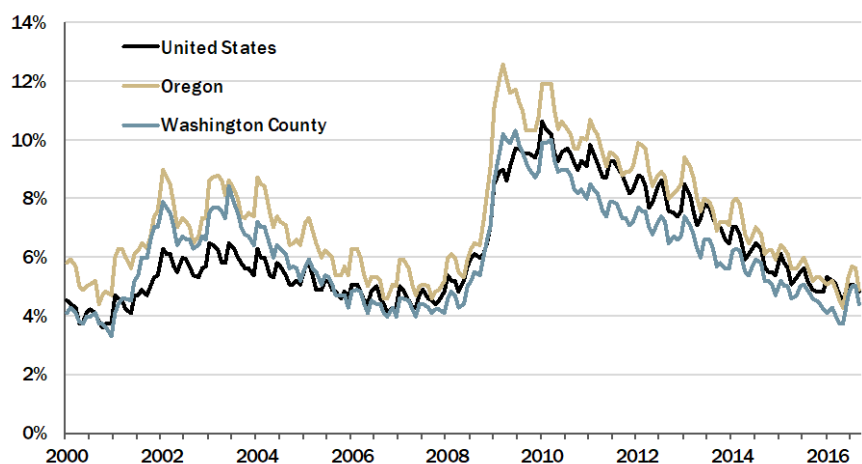


**The unemployment rate in Washington County has been below the state and national averages since 2010.**

By 2016 third quarter, the unemployment rate in Washington County was about 4.8%, comparable with the state and national unemployment rates.

**Figure 19. Unemployment Rate, US, Oregon, Washington County, 2000-2016**

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics and Labor Force Statistics



## Commuting Patterns

Commuting plays an important role in North Plains' economy because employers in North Plains are able to access workers from people living in the city, as well as from across the Portland Metro Region.

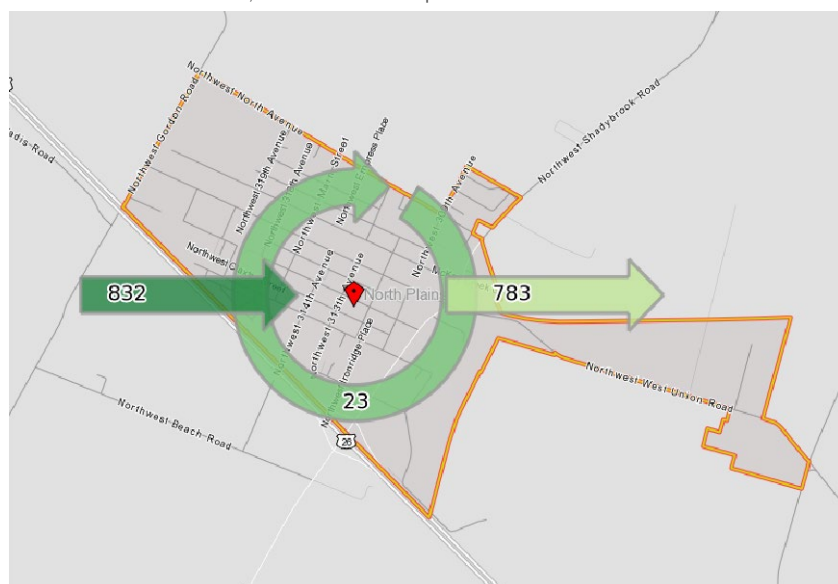
North Plains' businesses attract workers from across the Portland Metro region. Figure 21 shows 17% of people who work in North Plains commute from Hillsboro, 8% from Portland, and 6% from Beaverton, and 5% from Forest Grove. The remaining workers commute from elsewhere in Washington County and the Portland Metro region.

### North Plains is part of an interconnected regional economy.

Fewer people both live and work in North Plains than commute into or out of the city.

**Figure 20. Commuting Flows, North Plains, 2014**

Source: US Census Bureau, Census On the Map



### About 2.7% of all people who work in North Plains also live in North Plains.

Many people who work in North Plains commute from Hillsboro, Portland, or elsewhere in Washington County.

**Figure 21. Places Where North Plains Workers Lived, 2014**

Source: US Census Bureau, Census On the Map



### About 2.9% of residents who live in North Plains also work in North Plains.

More than thirty percent of North Plains residents commute to Hillsboro.

**Figure 22. Places Where North Plains Residents were Employed, 2014**

Source: US Census Bureau, Census On the Map



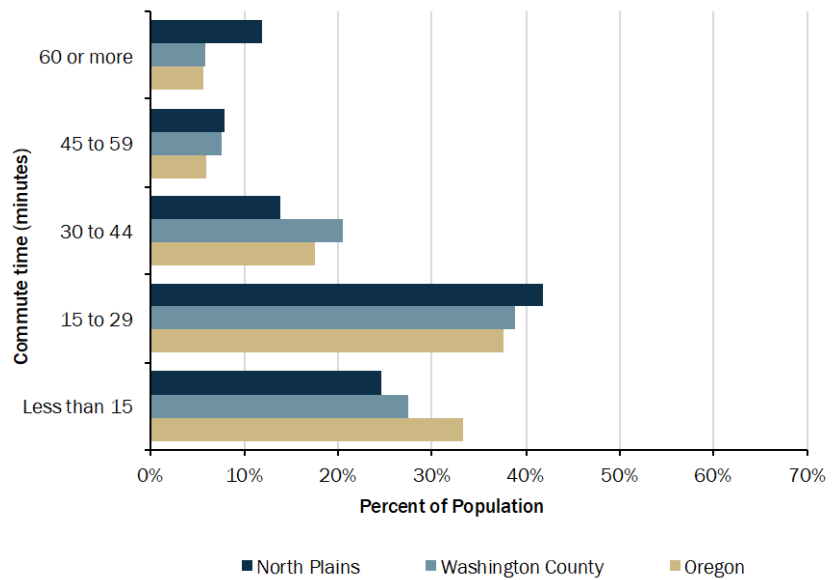
In the 2010-2014 period, about 25% percent of North Plains' residents had a commute of less than 15 minutes, compared to 27% of Washington County residents and 33% of Oregon residents.

**Most North Plains residents have a commute time of less than 30 minutes.**

About 66% of North Plains residents have commute times less than 30 minutes, and only 12% commute for longer than one hour.

**Figure 23. Commute Time by Place of Residence, 2010-14**

Source: US Census Bureau, 2010-14 ACS Table B08303



## Changes in Employment in Washington County and North Plains

The economy of the nation changed substantially between 1980 and 2015. These changes affected the composition of Oregon's economy, including Washington County and North Plains economy. At the national level, the most striking change was the shift from manufacturing employment to service-sector employment. The most important shift in Oregon during this period has been the shift from a timber-based economy to a more diverse economy, with the greatest employment in services.

### Employment Trends in Washington County

Over the past few decades, employment in the U.S. has shifted from manufacturing and resource-intensive industries to service-oriented sectors of the economy. Increased worker productivity and the international outsourcing of routine tasks have led to declines in employment in the major goods-producing industries.

The changes in sectors and industries are shown in two tables: (1) between 1980 and 2000 and (2) between 2001 and 2015. The analysis is divided this way because of changes in industry and sector classification that made it difficult to compare information about employment collected after 2001 with information collected prior to 2000.

Employment data in this section is summarized by *sector*, each of which includes several individual *industries*. For example, the Retail Trade sector includes General Merchandise Stores, Motor Vehicle and Parts Dealers, Food and Beverage Stores, and other retail industries.

Table 8 shows changes in Washington County between 1980 and 2000. Over the total period, total employment in Washington County increased by 139% from about 93,815 to 224,032 employees. Between 1980 and 2000, employment in services as a share of total employment rose from 15% to 27%.

**Table 8. Covered Employment by SIC Industries, Washington County, 1980-2000**

Sector	1980	1990	2000	Change 1980 to 2000		
				Difference	Percent	AAGR
Agriculture, Forestry & Fishing	2,344	4,545	5,573	3,229	138%	4.4%
Mining	0	182	251	251	NA	NA
Construction	5,025	7,805	12,202	7,177	143%	4.5%
Manufacturing	32,990	33,636	50,020	17,030	52%	2.1%
Trans., Comm., & Utilities	2,445	4,624	8,173	5,728	234%	6.2%
Wholesale Trade	6,282	12,262	18,675	12,393	197%	5.6%
Retail Trade	18,087	27,480	39,253	21,166	117%	4.0%
Finance, Insurance, & Real Estate	4,025	6,877	12,528	8,503	211%	5.8%
Services	13,805	30,430	61,163	47,358	343%	7.7%
Non Classifiable	NA	NA	101	NA	NA	NA
Government	8,812	11,294	16,093	7,281	83%	3.1%
<b>Total</b>	<b>93,815</b>	<b>139,135</b>	<b>224,032</b>	<b>130,217</b>	<b>139%</b>	<b>4.4%</b>

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 1980-2000.

Note: "ND" stands for "Not disclosed" and indicates that the data has been suppressed by the BLS due to confidentiality constraints. In most years, the non-disclosure is negligible.

Table 9 shows employment in NAICS-categorized industries in Washington County for 2001 and 2015. Employment increased by 46,419 jobs, or 20%, during this period. The private sectors

with the largest increases in numbers of employees were Professional and Business Services, Education and Health Services, and Leisure and Hospitality. Employment in manufacturing and information, both of which are high-wage industries, decreased by approximately 3,700 and 1,290 jobs respectively over the 2001 to 2015 time period.

**Table 9. Covered Employment by Industry, Washington County, 2001-2015**

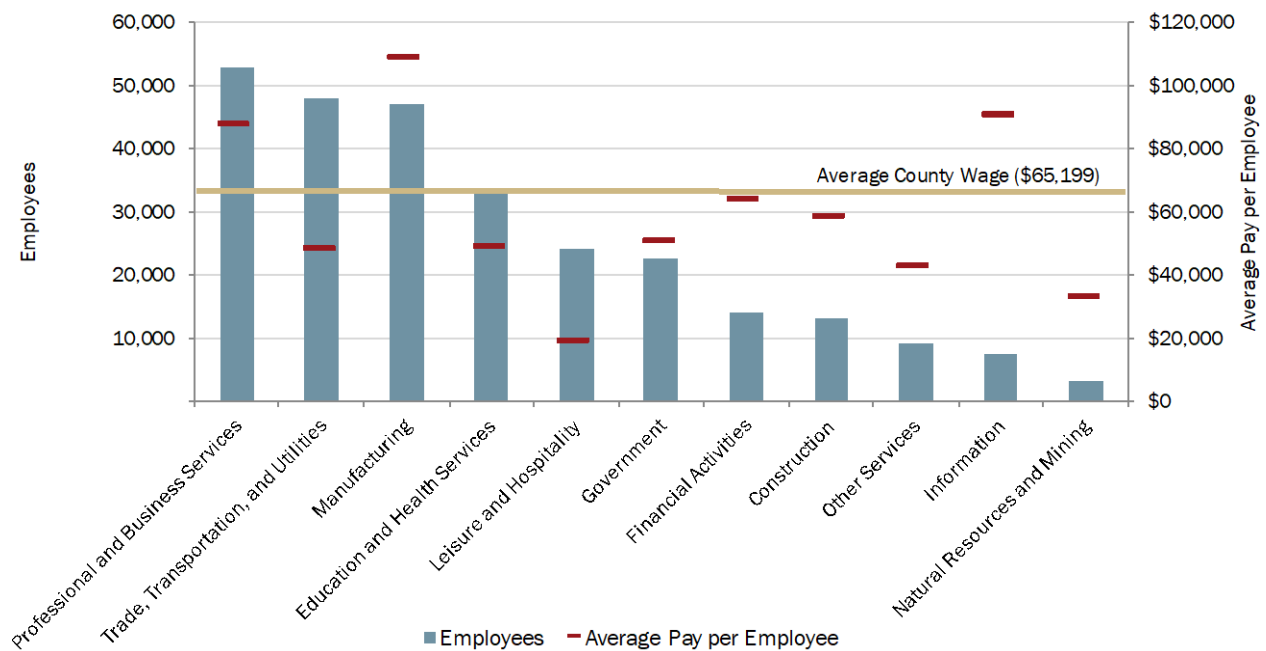
Sector	2001	2015	Change 2001 to 2015		
			Difference	Percent	AAGR
Natural Resources and Mining	3,607	3,152	-455	-13%	-1.0%
Construction	12,591	13,160	569	5%	0.3%
Manufacturing	50,872	47,181	-3,691	-7%	-0.5%
Trade, Transportation, and Utilities	45,842	48,110	2,268	5%	0.3%
Information	8,687	7,399	-1,288	-15%	-1.1%
Financial Activities	13,139	14,013	874	7%	0.5%
Professional and Business Services	34,295	52,907	18,612	54%	3.1%
Education and Health Services	19,084	33,063	13,979	73%	4.0%
Leisure and Hospitality	16,607	23,999	7,392	45%	2.7%
Other Services	7,188	9,308	2,120	29%	1.9%
Unclassified	75	31	NA	NA	NA
Government	16,516	22,599	6,083	37%	2.3%
<b>Total</b>	<b>228,503</b>	<b>274,922</b>	<b>46,419</b>	<b>20%</b>	<b>1.3%</b>

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2001-2015

Note: "ND" stands for "Not Disclosed" and indicates that the data has been suppressed by the BLS due to confidentiality constraints. The total amount of not-disclosed employment is shown in the table.

Figure 24 shows covered employment and average wage for the 10 largest industries in Washington County. Jobs in Professional and Business Services, which account for about 19% of the County's covered employment, pay more per year than the county average (\$87,349 compared to \$65,199). Jobs in Manufacturing and Information also pay more than the County average. Financial Activities and Construction pay about the county average, while those in Trade, Transportation, and Utilities, Education and Health Services, Leisure and Hospitality, Government, Natural Resources and Mining, and Other Services pay less than the average.

**Figure 24. Covered Employment and Average Pay by Industry, 10 Largest Industries Washington County, 2015**



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2015.

## Employment Trends in North Plains

Table 10 shows a summary of confidential employment data for the city of North Plains in 2014. The sectors with the greatest number of employees were: Manufacturing (25%), Construction and Agriculture (20%), and Food Services (16%). These sectors accounted for 497 jobs or 60% of North Plains' employment. Manufacturing accounts for a larger share of employment in North Plains compared with Washington County's average (17% in 2015).

The average size for a private business in North Plains is 7.5 employees per business, compared to the State average of 11 employees per private business. Businesses with 20 or fewer employees account for roughly 66% of private employment in North Plains. Businesses with 9 or fewer employees account for 27% of private employment, and businesses with 4 or fewer employees account for 11% of private employment.

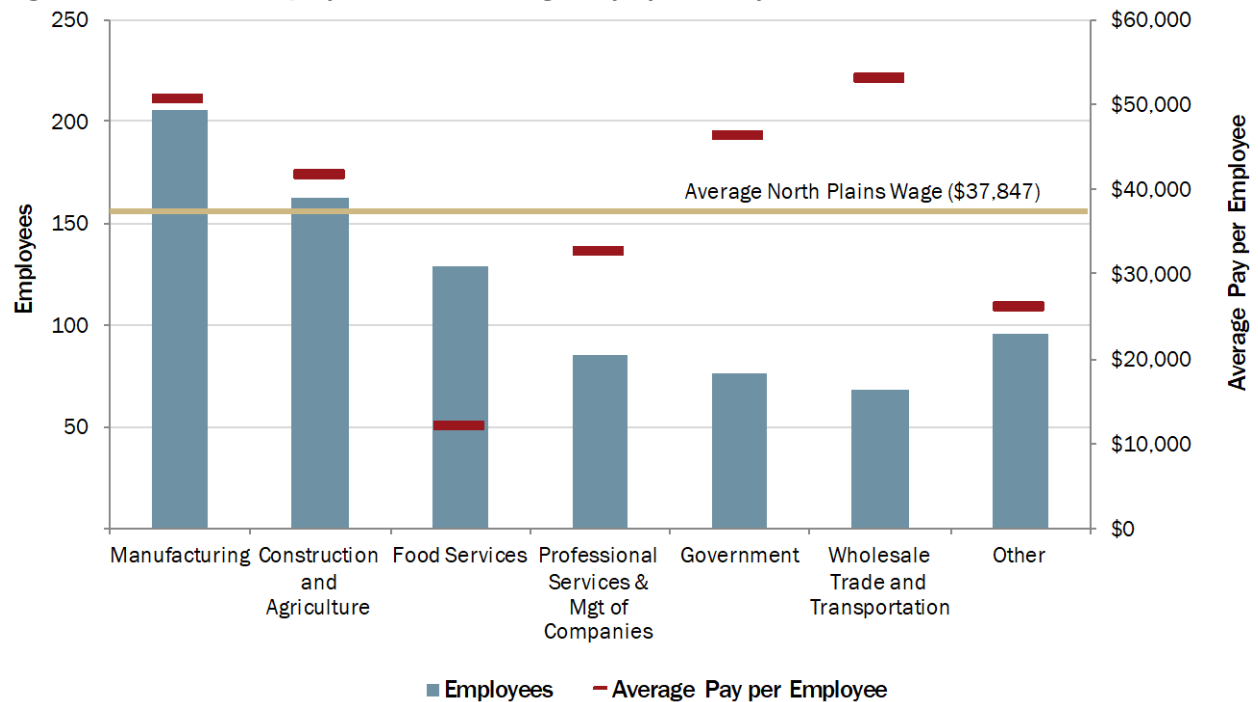
**Table 10. Covered Employment and Average Pay by Industry, North Plains UGB, 2014**

Sector/Industry	Establish-ments	Employees	Payroll	Average Pay / Employee
Construction and Agriculture	25	162	\$6,739,300	\$41,601
Manufacturing	14	206	\$10,427,437	\$50,619
Wholesale Trade and Transportation	10	68	\$3,606,093	\$53,031
Retail Trade	3	32	\$443,159	\$13,849
Finance, Insurance, Real Estate, and Information	9	25	\$904,089	\$36,164
Professional Services & Mgt of Companies	9	86	\$2,807,985	\$32,651
Health Care and Social Assistance	10	25	\$750,540	\$30,022
Food Services	9	129	\$1,548,195	\$12,002
Other Services	10	14	\$407,564	\$29,112
Government	4	76	\$3,513,469	\$46,230
<b>Total</b>	<b>103</b>	<b>823</b>	<b>\$31,147,831</b>	<b>\$37,847</b>

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2014.

Figure 25 shows the employment and average pay per employee for selected industrial sectors in North Plains. Average pay for all employees (\$37,847) is shown as a light brown line across the graph and average pay for individual sectors as short red lines. The figure shows that Manufacturing, Government, and Wholesale Trade and Transportation have above average wages. The lowest wages are in Food Services.

**Figure 25. Covered Employment and Average Pay by Industry, North Plains UGB, 2014**



Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2014.



## Tourism in the Portland Region and Washington County

Longwoods International provides regional statistics on travel. The following information is from Longwoods International's Oregon 2013 Regional Visitor Report for the greater Portland region.<sup>39</sup> Broadly, travelers to the Portland region account for:

- 9.5 million overnight trips annually; 31% of Oregon overnight trips
- Primary market area for travelers is Oregon, Washington, and California: 33% of Greater Portland visitors are from Oregon; 29% are from Washington; and 14% are from California
- 75% stayed 2 or fewer nights; 24% stayed 3-6 days; and 2% stayed 7 or more days
- Average per person expenditures on overnight trips was \$142 per night.
- Visitors are affluent and well-educated: over half have college degrees; 23% between \$50 and \$75k; 15% between \$75 and \$100k; and 24% over \$100k

As of 2016, North Plains does not have any hotels or motels.

### Washington County's direct travel spending increased 67% from 2000 to 2015.

The Portland Metro Region's direct travel spending increased by 74% over the same period.

**Figure 26. Direct Travel Spending (\$ millions), 2000 and 2015**

Source: Dean Runyan Associates, Oregon Travel Impacts, 1991-2015p.

<b>2000</b>	<b>\$2,698</b> Portland Metro Region	<b>\$410</b> Washington County
<b>2015</b>	<b>\$4,686</b> Portland Metro Region	<b>\$685</b> Washington County

### Washington County's lodging tax receipts increased by 155% over 2005 to 2015.

North Plains has no hotels and does not collect any lodging tax.

**Figure 27. Lodging Tax Receipts, 2005 and 2015**

Source: Dean Runyan Associates, Oregon Travel Impacts, 1991-2015p.

<b>2005</b>	<b>\$3,941</b> Washington County
<b>2015</b>	<b>\$10,069</b> Washington County

### Washington County's largest visitor spending for purchased commodities are food services.

**Figure 28. Largest Visitor Spending Categories (\$ millions), Washington County, 2015**

Source: Oregon Travel Impacts

<b>\$186.5</b> Food Service	<b>\$118.7</b> Accommodations	<b>\$93.8</b> Retail
--------------------------------	----------------------------------	-------------------------

<sup>39</sup> "Oregon 2013 Regional Visitor Report, Greater Portland," Longwoods International, November 2014

**Washington County's largest employment generated by travel spending is in the accommodations and food service industry.**

**Figure 29. Largest Industry Employment Generated by Travel Spending, Washington County, 2015**

Source: Oregon Travel Impacts

<b>5,060 jobs</b>	<b>1,020 jobs</b>	<b>610 jobs</b>
Accommodations & Food Service	Arts, Entertainment. & Recreation	Retail

## Regional Business Clusters

One way to assess the types of businesses that are likely to have future growth in an area is to examine relative concentration and employment growth of existing businesses. This method of analysis can help determine relationships and linkages within industries, also called industrial clusters. Sectors that are highly concentrated (meaning there are more than the “average” number of businesses in a sector in a given area) and have had high employment growth are likely to be successful industrial clusters. Sectors with either high concentration of businesses or high employment groups may be part of an emerging cluster, with potential for future growth.

The U.S. Cluster Mapper is a database created by the Harvard Business School and the U.S. Economic Development Administration. It provides a snapshot of the business clusters in Washington County. The traded sector business clusters it identified were:

- **Business Services.** This cluster includes corporate headquarters, consulting services, employment placement services, engineers, architects, and others. In Washington County, this cluster employed 32,411 people in 2014.
- **Information Technology and Analytical Instruments.** This cluster includes firms that make computer software and hardware, semiconductors, and medical and laboratory devices. In Washington County, this cluster employed 20,789 people in 2014.
- **Distribution and Electronic Commerce.** This cluster consists of firms providing wholesale of electronic goods, sporting and recreational goods, and professional equipment supplies, among other services. In Washington County, this cluster employed 13,684 people in 2014.
- **Education and Knowledge Creation.** This cluster includes research organizations, colleges and universities, and training services. In Washington County, this cluster employed 10,630 people in 2014.

Most of the businesses in these clusters are located in cities within the Portland urban growth boundary, especially in cities like Hillsboro or Beaverton. Some businesses in these clusters or businesses that provide goods or services to these clusters may consider locating in North Plains, which is close to Hillsboro and Beaverton. As discussed later in the report, North Plains has relatively low land prices (compared with Hillsboro and Beaverton) and has the benefits of a small town.

## Outlook for growth in Washington County

Table 11 shows the Oregon Employment Department's forecast for employment growth by industry for Multnomah County and Washington County over the 2014 to 2024 period. Table 11 shows employment in these counties is forecast to grow at an average annual growth rate of 1.4%.

The sectors that will lead employment in the region for the 10-year period are Professional and Business Services (adding 30,600 jobs), Private Education and Health Services (19,800), Trade, Transportation, and Utilities (17,400), and Leisure and Hospitality (14,400). In sum, these sectors are expected to add 82,200 new jobs or about 70% of employment growth in Multnomah and Washington Counties.

**Table 11. Regional Employment Projections, 2014-2024, Multnomah and Washington Counties**

Industry Sector	2014	2024	Change 2014-2024		
			Number	Percent	AAGR
Total private	645,500	751,000	105,500	16%	1.5%
Natural resources and mining	5,200	5,800	600	12%	1.1%
Construction	33,400	41,200	7,800	23%	2.1%
Manufacturing	79,200	85,200	6,000	8%	0.7%
Durable goods	60,300	64,600	4,300	7%	0.7%
Nondurable goods	18,900	20,600	1,700	9%	0.9%
Trade, transportation, and utilities	132,400	149,800	17,400	13%	1.2%
Wholesale trade	34,600	39,100	4,500	13%	1.2%
Retail trade	71,900	82,100	10,200	14%	1.3%
Transportation, warehousing, and utilities	25,900	28,600	2,700	10%	1.0%
Information	18,100	20,400	2,300	13%	1.2%
Financial activities	46,600	49,600	3,000	6%	0.6%
Professional and business services	124,100	154,700	30,600	25%	2.2%
Professional and technical services	48,600	61,900	13,300	27%	2.4%
Management of companies and enterprises	29,600	37,900	8,300	28%	2.5%
Administrative and waste services	45,900	54,800	8,900	19%	1.8%
Private educational and health services	102,900	122,700	19,800	19%	1.8%
Private educational services	20,200	23,500	3,300	16%	1.5%
Health care and social assistance	82,700	99,200	16,500	20%	1.8%
Leisure and hospitality	75,300	89,700	14,400	19%	1.8%
Other services and private households	28,300	31,900	3,600	13%	1.2%
Government	97,000	102,600	5,600	6%	0.6%
Federal government	13,000	12,500	-500	-4%	-0.4%
State government	16,600	17,400	800	5%	0.5%
Local government	67,400	72,700	5,300	8%	0.8%
<b>Total payroll employment</b>	<b>785,700</b>	<b>903,300</b>	<b>117,600</b>	<b>15%</b>	<b>1.4%</b>

Source: Oregon Employment Department. Employment Projections by Industry 2014-2024.

# Opportunities for Development of a Grocery Store in North Plains

One of the key economic development questions for North Plains is about opportunities for development of a grocery store in the community. As part of the EOA, the City asked ECONorthwest to provide an analysis of existing retail conditions for grocery stores and develop a strategy for attracting a grocery store in the future, given anticipated population growth within the next five years. This analysis focuses on the following specific questions:

- Can the City of North Plains attract and support a grocery store? If so, what kind?
- How can the City of North Plains assist the private development community in attracting a grocery store or another concept that can support increased access to food?

This section presents key findings from the analysis. Appendix A presents the full Grocery Store Market Analysis.

## Key Findings of the Market Analysis

With current population and spending patterns in North Plains, we found that the City likely has sufficient demand to attract a small grocery store of up to 10,000 square feet, ideally as part of a larger retail center development with complementary retail outlets. Despite its relatively small size, North Plains could be an attractive location for a small grocery store since it is poised to see an addition of 946 housing units over the next three to five years.

At the same time, the City faces a number of challenges to grocery store investment, including a lack of suitable sites along main roads with good visibility. The City's role will be to lay the groundwork for future investment, including identifying suitable sites, conducting surveys of the community to identify unmet needs, and reaching out to site selectors and grocery stores with information on the City and population base. Additional challenges include the increasing costs of developing and operating grocery stores and competition among similarly sized communities in the Portland area for the same small set of willing partners.

Our research found four key factors that affect grocery store investment and the implications that these have for North Plains:

### Factor 1: Households and incomes

Grocery store site selectors look for concentrations of households at specific income levels that are not currently well-served by existing grocery stores.

**Implication:** North Plains has just over 1,200 households living within three miles of town. Growth in the next three to five years should bring this total to close to 2,200 households. Given its demographics and population size, North Plains is most likely to capture a small-scale grocery store of around 10,000 square feet. The presence of major discount stores and warehouse stores within five miles of North Plains means that existing chains are unlikely to locate a store in the area.

## Factor 2: Finding the right concept

There are several alternatives to a traditional grocery store concept, including the fresh format (Whole Foods, New Season's), small grocer (Green Zebra), and limited assortment grocer (Aldi, Grocery Outlet).

**Implication:** A North Plains grocery store is unlikely to capture all grocery spending for North Plains residents. Instead, its advantage will be in providing convenience products. Given the few restaurants in North Plains, the store could focus on providing prepared foods with a seating area.

## Factor 3: Suitable sites with good visibility and easy access

Grocery stores seek out sites that are easy to see from major arterials and have convenient access for customers.

**Implication:** North Plains should identify sites that can provide good access and visibility for a potential retail center that includes a grocery store. A retail center with an attractive array of offerings can supplement its local business with business from westbound travelers on U.S. 26.

## Factor 4: Future growth

Some fresh format and small-scale grocery stores target their grocery store investments in areas where the share of overall households, including the college-educated population, has increased.

**Implication:** Since 2015, 200 homes have been built and the City anticipates close to 950 additional homes in the next three to five years. Many of these homes will house college-educated householders who work in high-tech companies such as Intel and Gen-Tech in neighboring cities. These households will be attractive to grocery store investors.

## Recruitment Strategy for North Plains

Given the challenging environment for grocery store investment, potential partners will be looking for up-to-date information on available properties as well as possible incentives.

## Identify Potential Sites

Community advocates and municipal officials are well positioned to identify and assemble parcels that are appropriate for grocery store development. Each retailer and developer will have their own site requirements depending on the type of store and whether other retail will be included in the project. While we do not expect that North Plains would attract a medium-size, traditional grocery store, there may be some models that combine different uses that would require a 30,000 SF building. Table 12 shows potential site considerations for a small (10,000 SF) and medium format store (30,000 SF). This table only considers a stand-alone grocery store.

**Table 12. Small vs. Medium Format Site Considerations**

	Smallest Format	Medium Format
Building size	10,000 SF	30,000 SF
Parking required	50,000 SF (50 spaces at a 5 spaces per 1,000 SF)	150,000 SF (150 spaces at 5 spaces per 1,000 SF)
Off-street unloading required	500 SF (two 12x20 foot loading spaces)	1,200 SF (five 12x20 foot loading spaces)
Necessary site size	At least 60,500 SF / 1.4 acres	At least 192,000 SF / 4.4 acres
Access needs	<ul style="list-style-type: none"> <li>Access roads (ideally a major arterial) to serve both customers and delivery trucks.</li> <li>Sufficient space for truck loading and unloading that does not interfere with customer parking is also needed.</li> </ul>	

Note: We used North Plains zoning code guidelines for parking and off-street unloading requirements. North Plains zoning code requires one parking space per 200 SF of gross retail area.

[http://cityofnp.org/files/8313/8143/9281/Chapter\\_16.155\\_Off\\_Street\\_Parking\\_Loading.pdf](http://cityofnp.org/files/8313/8143/9281/Chapter_16.155_Off_Street_Parking_Loading.pdf). We assume 300 SF per parking space.

Other key decision making factors include:

- **Frontage:** A site selector will be interested in amount of frontage available. A typical rule of thumb is one foot of frontage for every three feet of depth. This means a 50 foot wide storefront would have a maximum of 150 feet of depth.<sup>40</sup>
- **Accessibility:** Grocery stores are usually part of a series of destinations in one trip, which means that a site selector will be most interested in a convenient location that minimizes the frequency of people driving out of their way to visit the store. Site selectors for grocery stores prefer locations on the “going home” side of the street (the side which allows the most residents to make a quick right turn into the parking lot).<sup>41</sup> The best location in North Plains to attract residents would be the east side of Glencoe Road, north of U.S. 26.
- **Convenience:** Site selectors emphasize the importance of easy entry and exit from a site. The convenience of accessing a site is influenced by the number and placement of curb cuts on the site. In addition, many site selectors prefer sites located on the far side of traffic signals, which allows for convenient turning and avoids potential customers getting stuck in long lines of backed-up cars at the intersection.
- **Visibility:** Though these requirements may vary by operator, a medium format store operator is more likely to be sensitive to traffic counts than a small-format operator. **Exhibit 13** and **Exhibit 14** show traffic counts for Glencoe Road north and south of U.S. 26 in March 2016. Traffic Count Station 716 north of U.S. 26 has a daily traffic volume of around 7,500 cars in both directions, while Traffic Count Station 614 south of U.S. 26 has a daily traffic volume close to 16,000 cars. A North Plains grocery store could also

1. <sup>40</sup> Raeon, Frank. The A B C's of Site Selection: How to Pick Winners and Avoid Losers. Xlibris. 2015.

2. <sup>41</sup> Raeon, Frank. The ABC's of Site Selection: How to Pick Winners and Avoid Losers. Xlibris. 2015.

market to highway travelers headed to the coast with a visible site and good signage alerting travelers of store offerings. Oregon Department of Transportation data for 2015 show that U.S. 26 has an average daily traffic count of 23,100<sup>42</sup> cars just west of North Plains in both directions.

**Table 13. Glencoe Road Traffic Counts by Station, 2016**

Station	Intersection	Date	North	South	Total
716	Glencoe Rd. and Pacific St. (north of U.S. 26, within North Plains)	March 2016	3,601	3,889	7,490
614	Glencoe Rd. and Beach Rd. (south of U.S. 26, outside North Plains)	March 2016	8,050	7,951	16,001

Source: Washington County Traffic Counts.  
<http://www.co.washington.or.us/LUT/Divisions/TrafficEngineering/Programs/upload/2016TrafficCounts.pdf>

**Figure 30. Traffic Count Station Locations**



Source: Washington County Traffic Counts.  
<http://www.co.washington.or.us/LUT/Divisions/TrafficEngineering/Programs/upload/County-Count-Location-Map.pdf>

<sup>42</sup> ODOT 2015 Traffic Volumes on State Highways, page 79.

[http://www.oregon.gov/ODOT/TD/TDATA/tsm/docs/TVT\\_2015.pdf](http://www.oregon.gov/ODOT/TD/TDATA/tsm/docs/TVT_2015.pdf). Data are for the North Plains Automatic Vehicle Classifier, Sta. 34-007, 0.93 mile northwest of North Plains (Glencoe Road) Interchange



## Identify Incentives

One of the most commonly cited barriers to siting a grocery store in an underserved area is higher development and operating costs. Table 14 shows a set of possible City incentives associated with each phase of the grocery store development process. The City could take actions to provide assistance to the grocery store operator at each step in the process.

**Table 14. Activities by Development Phase**

	1. Site Acquisition	2. Pre-development	3. Construction	4. Occupancy
<b>Key Activities of the Grocery Store</b>	<ul style="list-style-type: none"><li>• Assess project feasibility and constraints</li><li>• Identify appropriate parcel</li><li>• Achieve site control</li></ul>	<ul style="list-style-type: none"><li>• Solicit community input/support</li><li>• Create dev't concept</li><li>• Prepare site layout/design</li><li>• Secure financing</li><li>• Acquire property</li><li>• Obtain permits</li></ul>	<ul style="list-style-type: none"><li>• Contract for construction</li><li>• Build</li></ul>	<ul style="list-style-type: none"><li>• Hire employees</li><li>• Stock store</li><li>• Grand opening</li><li>• Property management/operations</li></ul>
<b>Potential North Plains Support Role</b>	<ul style="list-style-type: none"><li>• Work with land owners to identify/assemble opportunity parcels</li></ul>	<ul style="list-style-type: none"><li>• Release community survey on key desires/features of a grocery store.</li><li>• Help with financing</li></ul>	<ul style="list-style-type: none"><li>• Invest in supportive infrastructure (signals, streetscapes, etc.)</li></ul>	

Source: Adapted from Policylink – Grocery Store Attraction Strategies.  
[http://www.policylink.org/sites/default/files/groceryattraction\\_final.pdf](http://www.policylink.org/sites/default/files/groceryattraction_final.pdf)

## Build Relationships

As part of this project, ECONorthwest interviewed a broker who regularly works with a variety of grocery store operators. Given the retail opportunity gap in North Plains, we suggest the City consider reaching out to brokers and site selectors for the following types of non-traditional grocery store options:

- **Local, independently owned.** One prominent example is Green Zebra, which specializes in stores between 5,000 and 7,000 square feet. The stores have a large prepared foods section, including a butcher and deli, and a produce section. Green Zebra's mission is to increase access to healthy foods.<sup>43</sup>
- **Franchise.** Some grocery stores are operated under a franchise name, but owned locally. Examples could include IGA, Thriftway, and Red Apple Markets. For example, the Thriftway grocery stores in Banks, Oregon and Welches, Oregon are operated by families that specialize in working in rural areas. In exchange for paying the franchise fee, the operator gets purchasing power and promotional assistance.
- **Limited Selection.** Stores like Whole Foods 365 or Grocery Outlet are expanding their footprint in the Portland region with small format stores, mostly in urban areas.

<sup>43</sup> "Eclectic Green Zebra Grocery defies black-and-white definition." CSP Daily News. April 2014.  
[http://www.cspdailynews.com/sites/default/files/magazine-files/IndieSpeaking\\_CSP\\_0414.pdf](http://www.cspdailynews.com/sites/default/files/magazine-files/IndieSpeaking_CSP_0414.pdf)

## Next Steps

The City can take the following steps now:

- **Identify funding tools.** The City should identify any potential incentives that might be available to attract a grocery store. These could include land write-downs, pre-development study grants, and a Business Improvement District that would help to market and maintain a core business district. A list of incentives that other communities have used to attract grocery stores is included in Attachment A.
- **Build relationships.** The City should reach out to site selectors with marketing collateral that summarizes market research, available incentives, and potential development sites for use in conversations with potential developers.
- **Do research.** The City can do more research on how sales for existing grocery retailers are doing. In addition, the City can conduct a survey of local residents to identify unmet needs and provide critical market data to potential development partners.

# North Plains' Strengths, Weaknesses, Opportunities and Threats for Economic Development

Based on the analysis above and discussion with stakeholders in North Plains, the following are the city's strengths, weaknesses, opportunities, and threats for economic development.

## Strengths

- **Access to Route 26.** North Plains has good transportation access to the State's highway network through its proximity to Route 26. Its location on Route 26 makes it a gateway to the Oregon Coast for people traveling from the Portland region.
- **Proximity to employment centers.** North Plains is close to major employment centers in western Washington County, including high-tech "Silicon Forest" companies like Intel.
- **Regional access to workforce.** North Plains' location within the Portland region gives the City's businesses access to a pool of experienced professionals and higher-skilled workers. Higher education establishments in the region provide training for young and lower-skilled workers.
- **Relatively affordable housing.** In comparison with nearby cities, North Plains' real estate market is relatively affordable.
- **Agriculture.** North Plains is located in an agricultural region, with a diverse offering of agricultural products including fruits, wheat, wine, and nursery plants. The nearby agricultural activity provides inputs for locally produced food and beverage products.
- **High quality of life.** North Plains' small-town feel and proximity to outdoor recreation activities make it a desirable place to live.

## Weaknesses

- **Lack of local commercial services.** North Plains does not have a grocery store. The lack of retail services in North Plains means that residents must go elsewhere to do their regular shopping and has fostered a perception of North Plains as a bedroom community.
- **Car-centric transportation options.** Lack of sidewalks in some parts of downtown make North Plains less friendly to pedestrians. Mass transit options are limited.
- **Limited commercial space or professional office space.** North Plains' downtown business district has relatively little commercial or professional office space. The lack of suitable space makes it difficult to attract these types of businesses.
- **Distance and access to I-5.** Although North Plains has excellent automotive access through Route 26, it is relatively far from I-5 compared to other cities in the Portland region. This makes North Plains less competitive in attracting businesses that rely on trucking or access to major markets along I-5. North Plains is also remote from Portland International Airport, which is a weakness for attracting businesses that need frequent access to flying.

## Opportunities

- **Improve services for residents.** Expanding the services available to local residents—for example, by attracting a grocery store or coffee shop—could help North Plains expand its residential and commercial base.
- **(Re)develop vacant buildings and land.** North Plains' supply of vacant land and affordable real estate prices offer opportunities for redevelopment, particularly in commercial areas.
- **Expand agricultural businesses.** North Plains' agricultural businesses could be a target industry for the City. In particular, North Plains could focus on expanding production and processing of local agricultural products and promoting agri-tourism. North Plains also has opportunities to develop manufacturing of cannabis products, such as oils or edible products.
- **Promote technology-related employment.** North Plains' proximity to the Intel and other high-tech employers means that the City is well positioned to attract technology firms and firms in related industries.

## Threats

- **National economic cycles.** North Plains, like all other cities, is subject to national and regional economic cycles. The 2007-2009 recession negatively affected North Plains, with downsizing and closure of businesses.
- **Loss of agricultural lands.** North Plains' proximity to the Portland UGB makes its agricultural setting more vulnerable to long-term development pressure. However, much of the land near North Plains was designated as rural reserves in 2011 or 2014, which means those lands will be protected from urban development for 50 years after designation.

## North Plains' Competitive Advantages

Economic development opportunities in North Plains will be affected by local conditions as well as the national and state economic conditions addressed above. Economic conditions in North Plains relative to these conditions in other portions of western Washington County and the region form North Plains' competitive advantage for economic development. North Plains' competitive advantages have implications for the types of firms most likely to locate and expand in the Area.

There is little that metropolitan area jurisdictions can do to influence national and state conditions that affect economic development, though they can influence local factors that affect economic development. North Plains' primary competitive advantages are: location and quality of life. These factors make North Plains attractive to residents and businesses that want to be located close to the larger cities of the Portland region but value a rural, small-town setting.

The local factors that form North Plains' competitive advantage are summarized in the subsections below.

### Location

North Plains is a city with a population of approximately 2,015 people as of 2015, located in western Washington County to the north of Forest Grove and Hillsboro. U.S. Route 26 runs along the southern boundary of North Plains. North Plains' location will impact the area's future economic development:

- North Plains is located within Washington County, the second-most populated county in the State, with 570,510 people in 2015. North Plains is located about 6 miles from Hillsboro, 14 miles from Beaverton, and 18 miles from Portland. Hillsboro, Beaverton, and Portland were the 5<sup>th</sup>, 6<sup>th</sup>, and 1<sup>st</sup> most populous cities in the State, with 97,480 people, 94,215 people, and 613,355 people respectively.
- The Hillsboro-Beaverton area is the heart of the "Silicon Forest," the nickname for the cluster of high-tech companies in the Portland region. Most notably, Intel has major production and research facilities in Hillsboro. As of April 2016, Intel employed more than 19,000 people in Oregon, with most of those jobs located in Washington County.<sup>44</sup>
- Residents of North Plains have access to cultural activities and amenities such as the Elephant Garlic Festival and summer farmers market. Nearby events include the Northwest String Summit, Helvetia Culture Fest, and the Dixie Mountain Strawberry Festival.
- Located near the foothills of the Coast Range, North Plains has access to outdoor recreational activities, including biking, fishing, and hiking. The award-winning Pumpkin Ridge Golf Club is located just outside North Plains city limits.

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<sup>44</sup> Rogoway, Mike. "Intel will lay off 784 in Oregon this week" *The Oregonian*. 26 April 2016. Retrieved from: [http://www.oregonlive.com/silicon-forest/index.ssf/2016/04/intel\\_will\\_lay\\_off\\_784\\_in\\_oreg.html](http://www.oregonlive.com/silicon-forest/index.ssf/2016/04/intel_will_lay_off_784_in_oreg.html)

North Plains' rural setting and proximity to larger cities in the region such as Hillsboro and Portland are primary competitive advantages for economic development in North Plains.

However, North Plains is a small city in a much larger region, which is a disadvantage for economic development. Businesses that consider locating in North Plains also have more options for locating in other cities within the Portland region.

### **Availability of Transportation**

All firms are heavily dependent upon surface transportation for efficient movement of goods, customers, and workers. Access to an adequate highway and arterial roadway network is needed for all industries. Close proximity to a highway or arterial roadway is critical for firms that generate a large volume of truck or auto trips as well as firms that rely on visibility from passing traffic to help generate business.

North Plains has access to the State's highway system and other transportation opportunities. The Sunset Highway (Route 26) is the primary route through the City, connecting residents and commuters to larger cities in the Portland region. Without traffic, Interstate 5 is about a 20 minute drive from North Plains via either Interstate 405 or Route 217. However, traffic typically causes delays during peak times.

Route 26 is also the fastest route from Portland to the Oregon Coast. Residents and businesses in North Plains have access to other modes of transportation in Portland, including intercity bus service and Amtrak rail service. The closest commercial airport is Portland International Airport (45 minutes away).

Ride Connection runs a free weekday bus that connects North Plains to the Hillsboro Transit Center, Banks, and Forest Grove. From the Hillsboro Transit Center, transit riders can connect to other TriMet routes including MAX light rail. The closest airports with commercial service is Portland International Airport (45 minutes away).

### **Public Facilities and Services**

Provision of public facilities and services can impact a firm's decision regarding location within a region, but ECONorthwest's past research has shown that businesses make locational decisions primarily based on factors that are similar within a region. These factors are: the availability and cost of labor, transportation, raw materials, capital, and amenities. The availability and cost of these production factors are usually similar within a region.

Once a business has chosen to locate within a region, they consider the factors that local governments can most directly affect: tax rates, the cost and quality of public services, and regulatory policies. Economists generally agree that these factors do affect economic development, but the effects on economic development are modest. Thus, most of the strategies available to local governments have only a modest effect on the level and type of economic development in the community.

## Tax Rates

North Plains has among the lowest property tax rates in Washington County.<sup>45</sup> Property tax rates in North Plains for the fiscal year ending 2015 were \$13.38-\$15.07 per \$1,000 of assessed value, compared with \$15.42-\$17.57 for Banks, \$17.50-\$17.96 for Forest Grove, and \$16.59-\$19.38 for Hillsboro.

## Water

North Plains purchases water from the Joint Water Commission, which is the primary drinking water supplier in Washington County. The Joint Water Commission is jointly owned by the City of Hillsboro, the City of Forest Grove, the City of Beaverton, and the Tualatin Valley Water District.<sup>46</sup>

North Plains' water distribution system consists of 13.5 miles of water lines. The City Department of Public Works operates and maintains the water distribution system.

Water rates in North Plains are higher than in other cities because in 2005 the City took out debt to in order to connect its water mains to the Joint Water Commission transmission main.<sup>47</sup> Prior to 2005, North Plains drinking water came from city wells. However, these wells were in danger of contamination from a former creosote plant.

## Wastewater

Wastewater treatment services for North Plains are provided by Clean Water Services, which is the regional wastewater management provider for urban Washington County.<sup>48</sup> In 2016, Clean Water Services served more than 560,000 residents. By 2025, Clean Water Services anticipates that more than 677,000 people will live in its service area, and the agency is planning for that population growth.<sup>49</sup> Wastewater service is not likely to be a constraint on economic growth in North Plains.

## Land Prices

Commercial and industrial land in North Plains is less expensive than land in Hillsboro or Beaverton. Figure 31 shows the average market value of commercial and industrial land for taxlots in North Plains, Hillsboro, and Beaverton in 2016. On average, the real market of value of commercial land in North Plains is about \$301,500 per acre, compared with \$500,900 per acre in Hillsboro and \$705,300 per acre in Beaverton. Industrial land in North Plains is valued at

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<sup>45</sup> League of Oregon Cities, City Property Tax Report, March 2016. Retrieved from: <http://www.orcities.org/Portals/17/Library/City%20Property%20Tax%20Report%202016.pdf>

<sup>46</sup> Joint Water Commission. Retrieved from: <http://jwcwater.org/>

<sup>47</sup> City of North Plains. "Water". Retrieved from: <http://cityofnp.org/index.php/departments/public-works/water/>

<sup>48</sup> Clean Water Services. "Utility Billing." Retrieved from: <http://www.cleanwaterservices.org/for-residents/utility-billing/>

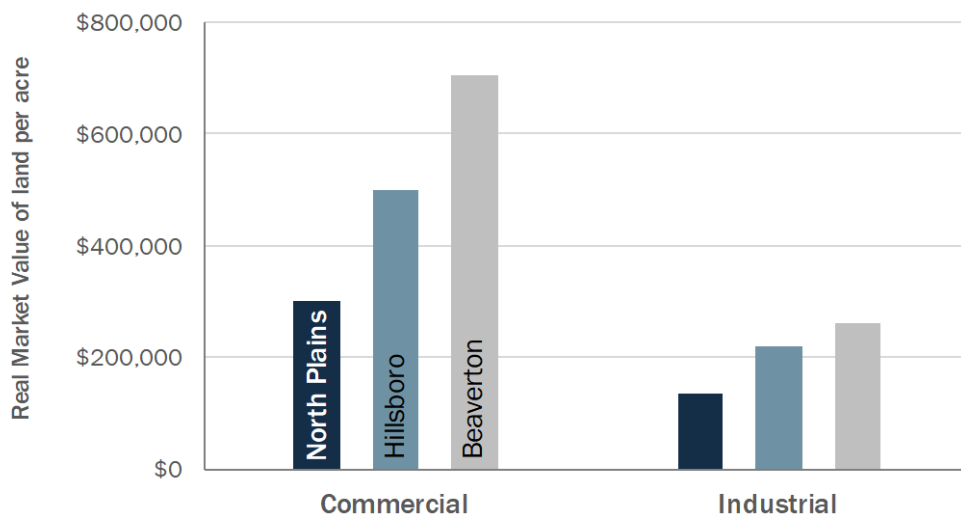
<sup>49</sup> Clean Water Services. "2016-2020 Capital Improvement Program." Retrieved from: <https://www.cleanwaterservices.org/media/1293/capital-improvements-program-2016-2020.pdf>

\$135,000 per acre, compared with \$222,500 per acre in Hillsboro and \$262,900 in Beaverton. The comparatively low cost of employment land in North Plains is a competitive advantage for attracting firms looking for affordable commercial or industrial land in western Washington County.

**Figure 31. Average land value per acre of commercial and industrial taxlots in North Plains, Hillsboro, and Beaverton, 2016.**

Source: ECONorthwest analysis of November 2016 taxlot data from Metro RLIS.

Note: Commercial and industrial taxlots were identified using assessors' land use code.



## Quality of Life

Quality of life is difficult to assess because it is subjective—different people will have different opinions about factors that affect quality of life, desirable characteristics of those factors, and the overall quality of life in any community. Economic factors such as income, job security, and housing cost are often cited as important to quality of life. These economic factors and overall economic conditions are the focus of this report, so this section will focus on non-economic factors that affect quality of life.

North Plains' quality of life is a key comparative advantage for economic development. Key quality of life factors in North Plains are:

- **Scenic rural setting.** North Plains has a small-town atmosphere within a scenic rural setting. North Plains is surrounded by farmland and is close to the foothills of the Coast Range.
- **Cultural amenities and events.** Residents of North Plains have access to cultural amenities and activities in the City and elsewhere in western Washington County and the Portland region. Each August, North Plains hosts the Annual Elephant Garlic Festival. North Plains also has a weekly farmers market during the summer. Nearby cultural events include: Northwest String Summit at Hornings Hideout, Dixie Mountain Strawberry Festival, and Helvetia Culture Fest. In addition, North Plains residents can access the cultural amenities and events in the greater Portland region.



- **Outdoor recreational activities.** There are a number of outdoor recreational activities available near North Plains, including: biking, hiking, and fishing. North Plains is close to the Banks-Vernonia Trail, a 21-mile multiuse path. The Willamette Valley Soaring Club operates a gliderport just outside of North Plains. The nearby Pumpkin Ridge Golf Club has been ranked as one of the country's best public golf courses.
- **Direct auto access to larger cities in the Portland region.** North Plains' proximity to Hillsboro, Beaverton, and Portland gives its residents access to the activities, amenities, markets, and jobs in these larger cities.

North Plains' quality of life makes the City attractive to in-migrants and businesses that are attracted to a small-town atmosphere but value proximity to the larger cities of western Washington County and the Portland region.

## 4. Employment Growth and Site Needs

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Goal 9 requires cities to prepare an estimate of the amount of commercial and industrial land that will be needed over a 20-year planning period. The estimate of employment land need and site characteristics for North Plains is based on expected employment growth and the types of firms that are likely to locate in North Plains over the 20-year period. This section presents an employment forecast and analysis of target industries that build from recent economic trends.

### Forecast of Employment Growth and Commercial and Industrial Land Demand

Demand for industrial and non-retail commercial land will be driven by the expansion and relocation of existing businesses and by the growth of new businesses in North Plains. This employment land demand is driven by local growth independent of broader economic opportunities, including growth of target industries.

The employment projections in this section build off of North Plains' existing employment base, assuming future growth similar to Washington County's long-term historical employment growth rates. The employment forecast does not take into account a major change in employment that could result from the location (or relocation) of one or more large employers in the community during the planning period. Such a major change in the community's employment would exceed the growth anticipated by the City's employment forecast and its implied land needs (for employment, but also for housing, parks, and other uses). Major economic events, such as the successful recruitment of a very large employer, are difficult to include in a study of this nature. The type of implication, however, is relatively predictable: more demand for land (of all types) and public services.

Projecting demand for industrial and non-retail commercial land has four major steps:

1. **Establish base employment for the projection.** We start with the estimate of covered employment in North Plains presented in Table 10. Covered employment does not include all workers, so we adjust covered employment to reflect total employment in North Plains.
2. **Project total employment.** The projection of total employment considers forecasts and factors that may affect employment growth in North Plains over the 20-year planning period.
3. **Allocate employment.** This step involves allocating types of employment to different land-use types.
4. **Estimate land demand.** This step estimates general employment land demand based on employment growth and assumptions about future employment densities.

The remainder of this section follows this outline to estimate employment growth and commercial and industrial land demand for North Plains.

## Employment Base for Projection

The purpose of the employment projection is to model future employment land need for general employment growth. The forecast of employment growth in North Plains starts with a base of employment growth on which to build the forecast. Table 15 shows the resulting estimate of total employment in the North Plains UGB in 2014.

To develop the figures, analysis started with estimated covered employment in the North Plains UGB from confidential Quarterly Census of Employment and Wages (QCEW) data provided by the Oregon Employment Department. Based on this information, North Plains had about 823 covered employees in 2014, accounting for 0.3% of covered employment in Washington County.

Covered employment, however, does not include all workers in an economy. Most notably, covered employment does not include sole proprietors. Analysis of data shows that *covered* employment reported by the Oregon Employment Department for Washington County is only about 84% of *total* employment reported by the U.S. Department of Commerce.<sup>50</sup> We evaluated this ratio for each industrial sector for Washington County and used the resulting ratios to determine the number of non-covered employees. This allowed us to determine the total employment in North Plains. Table 15 shows North Plains had an estimated 914 *total* employees within its UGB in 2014.

**Table 15. Estimated total employment by sector, North Plains UGB, 2014**

Sector	Covered Employment	Total Employment	Covered % of Total
Construction and Agriculture	162	176	92%
Manufacturing	206	213	97%
Wholesale Trade and Transportation	68	78	88%
Retail Trade	32	36	88%
Finance, Insurance, Real Estate, and Information	25	42	59%
Professional Services & Mgt of Companies	86	103	83%
Health Care and Social Assistance	25	29	86%
Food Services	129	135	95%
Other Services	14	24	59%
Government	76	78	97%
<b>Total</b>	<b>823</b>	<b>914</b>	<b>90%</b>

Source: 2014 covered employment from confidential Quarterly Census of Employment and Wage (QCEW) data provided by the Oregon Employment Department.

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<sup>50</sup> **Covered** employment includes employees covered by unemployment insurance. Examples of workers not included in covered employment are sole proprietors, some types of contractors (often referred to as “1099 employees”), or some railroad workers. Covered employment data is from the Oregon Employment Department.

Total employment includes all workers based on data from the U.S. Department of Commerce. Total employment includes all covered employees, plus sole proprietors and other non-covered workers.

## Employment Projection

The employment forecast covers the 2018 to 2038 period, requiring an estimate of total employment for North Plains in 2017.

The City of North Plains does not have an existing employment forecast, and there is no required method for employment forecasting. OAR 660-024-0040(9) sets out some optional “safe harbors” that allow a city to determine employment land need.

North Plains is relying on the safe harbor described in OAR 660-024-0040(9)(a)(B), which allows North Plains to assume that the current number of jobs in the North Plains urban area will grow during the 20-year planning period at a rate equal to “The population growth rate for the urban area in the appropriate 20-year coordinated population forecast determined under Rules in OAR 660, div 32.”

The most recent consolidated population forecast (2017-2067) for the North Plains Urban Growth Boundary (“UGB”) was conducted by the Portland State University Population Research Center (“PSUPRC”) in 2017.<sup>51</sup> In that report, the PSUPRC forecasted an annual average population growth rate of 5.5% for the City of North Plains through 2035 and then 0.8% annually to 2038. Over the 2018 to 2038 period, a weighted-average annual employment growth rate of 5.1% was estimated and is utilized for North Plains employment projections and resulting land need.

Table 16 shows employment growth in North Plains between 2018 and 2038, based on the assumption that North Plains will grow at an average annual growth rate of 5.1%. North Plains will have 1,260 employees within the UGB by 2037, an increase of 307 employees (32%) between 2017 and 2037.

**Table 16. Employment growth in North Plains UGB, 2018–2038**

Year	Total Employment
2018	966
2038	2,612
<b>Change 2018 to 2038</b>	
Employees	1,646
Percent	170%
AAGR	5.1%

Source: PNW Economics, LLC

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<sup>51</sup> [https://www.pdx.edu/prc/sites/www.pdx.edu/prc/files/Washington\\_Report\\_2017\\_Final.pdf](https://www.pdx.edu/prc/sites/www.pdx.edu/prc/files/Washington_Report_2017_Final.pdf)

## Allocate Employment to Different Land Use Types

The next step in forecasting employment is to allocate future employment to broad categories of land use. Firms wanting to expand or locate in North Plains will look for a variety of site characteristics, depending on the industry and specific circumstances. We grouped employment into three broad categories of land-use based on North American Industrial Classification System (NAICS): industrial, retail commercial, and office/commercial services. The forecast represents job growth by land use types and includes job growth from all industry sectors based on their typical employment land usage characteristics, including government employment.

Table 17 shows the expected share of employment by land use type in 2018 and the forecast of employment growth by land use type in 2038 in North Plains' UGB. The forecast shows growth in all categories of employment.

**Table 17. Forecast of employment growth by land use type, North Plains UGB, 2018–2038**

Land Use Type	2018		2038		20-Year Change
	Employment	% of Total	Employment	% of Total	
Industrial	647	67%	1,567	60%	920
Commercial (Retail & Office/Services)	<u>319</u>	<u>33%</u>	<u>1,044</u>	<u>40%</u>	<u>725</u>
<b>Total</b>	<b>966</b>	<b>100%</b>	<b>2,612</b>	<b>100%</b>	<b>1,645</b>

Source: PNW Economics, LLC

## Estimate of Demand for Commercial and Industrial Land

Table 18 shows demand for vacant (including partially vacant) land in North Plains over the 20-year period. The demand for vacant commercial and industrial land is based on employees per acre, which is a measure of employment density based on the ratio of the number of employees per acre of employment land that is developed for employment uses.

Table 18 assumes the following number of net employees per acre: Industrial will have an average of 10 employees per acre, and Retail Commercial and Office and Commercial Services will have an average of 20 employees per acre. These employment densities are consistent with employment densities already exhibited in North Plains. Some types of employment will have higher employment densities (e.g., a two-story office building) and some will have lower employment densities (e.g., a convenience store with a large parking lot).

Table 18 presents an estimate of land need for commercial and industrial lands based on typical land usage patterns by different industry sectors, including institutional uses of office land and industrial land by government.

Table 18 shows that North Plains' businesses will grow by 1,645 employees. This growth will result following demand for vacant (and partially vacant) employment land: 114 acres of industrial land and 94 acres of commercial land.<sup>52</sup>

**Table 18. Demand for vacant land to accommodate employment growth, North Plains UGB, 2018 to 2038**

Land Use Type	20-Year Job Growth	Gross Land Need (acres)
Industrial	920	115
Commercial (Retail & Office/Services)	<u>725</u>	<u>94</u>
<b>Total</b>	<b>1,645</b>	<b>209</b>

Source: PNW Economics, LLC

Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

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<sup>52</sup> These acres are assumed to be gross acres and account for land needed for rights of way and other public facilities at a net land need to gross land need factor of 0.8.

## Target Industries

The characteristics of North Plains will affect the types of businesses most likely to locate in the city. North Plains' attributes that may attract firms are: North Plains' location along Highway 26 and proximity to Hillsboro; the existing employment base; relatively low land prices (compared with Hillsboro and Beaverton); surrounding agricultural areas; access to workers from across the Portland Region; and high quality of life.

An analysis of growth industries in North Plains should address two main questions: (1) Which industries are most likely to be attracted to North Plains? and (2) Which industries best meet North Plains' economic development goals?

The selection of target industries that follows are guidelines and based on North Plains' goals for economic development as described above, economic conditions in North Plains and Washington County, and the city's competitive advantages. North Plains' goals and policies for economic development and land need are further explored in the **Section 5 Land Sufficiency and Conclusions**.

The target industries identified as having potential for growth in North Plains are:

- **Small-scale and medium-scale manufacturing.** North Plains' attributes, especially its location along Highway 26, relatively low land prices, and proximity to Hillsboro and Beaverton, may attract manufacturing firms. Manufacturing firms are likely to be relatively small, from startups with 10 or fewer employers to manufacturers with 200 or more employees. Examples of manufacturing industries that may grow or locate in North Plains include:
  - Electronics and computer manufacturing, such as businesses that provide components to larger manufacturers in the Portland region
  - Machinery manufacturing, such as agricultural or industrial machinery
  - Fabricated metal manufacturing
  - Specialty food and beverage manufacturing, such as wineries, beer brewing, fruit or vegetable products, or other products
  - Renewable and alternative energy products
- **Small-scale and medium-scale warehouse, distribution, and wholesale.** North Plains' location along Highway 26, relatively low land prices may make the city attractive to small to medium-sized wholesale and distribution firms, especially of goods produced in Washington County.
- **Professional services.** North Plains' high quality of life, lower commercial land costs, relatively affordable housing, and proximity to Hillsboro and Beaverton may attract professional and business services that prefer to locate in a smaller city like North Plains, such as software development, research or environmental services, or other services. Professional services may also include independent contractors, such as sole proprietors and others not covered by unemployment insurance.

- **Services for residents.** Population growth will drive development of retail, such as a grocery store, other retail, restaurants, and government services, especially primary education and child care in North Plains.
- **Services for seniors.** The growing population of those near or in retirement in Washington County and the Portland region may attract or create demand for services for seniors, such as like assisted living facilities, retirement centers, and related medical services.
- **Services for visitors:** Growth in tourism will drive demand for services for visitors such as restaurants or a hotel.



## Site Needs for Potential Growth Industries

OAR 660-009-0015(2) requires the EOA to “identify the number of sites by type reasonably expected to be needed to accommodate the expected [20-year] employment growth based on the site characteristics typical of expected uses.” The Goal 9 rule does not specify how jurisdictions conduct and organize this analysis.

Based on the forecasts of employment growth in Table 18 and typical businesses sizes observed in urban Washington County (based greatly on the US Census County Business Patterns database of industry sector employer counts by job counts) employment growth in North Plains will require:

- **Industrial** employment growth will require 115 acres of industrial land need. A total of 22 sites are found to be needed based on a distribution of future target industry employers and industrial land uses ranging from roughly 25 acres in size to an acre or less.
- **Commercial Office, Institutional & Retail** development growth will require 9 acres of commercially-zoned land. A total of 20 sites are estimated to be needed based on office, institutional, services and retail development patterns observed elsewhere in Washington County. Site sizes are estimated to range from as large as 20 acres for an office business park or larger retail commercial center, to as small as an acre or larger for small and very small office, retail, and services firms.

**Table 19. Demand for vacant land by site size to accommodate employment growth, North Plains UGB, 2018 to 2038**

Number of Sites by Use Type		Demand Projection
	Typical Acreage	
<b>Industrial</b>		
Anchor User or Large Park	50.0 or more	-
Large User or Medium Park	25.0 - 50.0	1
Medium User or Smaller Park	10.0 - 25.0	2
Expanding User	5.0 - 10.0	4
Small Businesses	5.0 or less	15
Totals		<b>22</b>
<b>Commercial - Office, Retail &amp; Lodging</b>		
Large Business Park or Retail Center	10.0 - 20.0	2
Medium Business Park or Retail Center	5.0 - 10.0	3
Small Office and Retail, Lodging Site	5.0 or less	15
Totals		<b>20</b>

Source: PNW Economics, LLC

## 5. Land Sufficiency and Conclusions

This chapter presents conclusions about North Plains' employment land sufficiency for the 2018-2038 period. It concludes with a discussion of conclusions about North Plains' land base and its ability to accommodate growth over the next 20 years, as well as recommendations for the City to consider, ensuring it meets its economic growth needs throughout the planning period.

### Land Sufficiency Quantified

Table 20 shows commercial and industrial land sufficiency within the North Plains UGB. It shows:

- **Vacant and Partially Vacant Unconstrained Land** from Table 6 for land within the UGB shows that North Plains has 33 gross acres of industrial land and 14 gross acres of commercial land.
- **Demand for Commercial and Industrial Land** from Table 18. Table 18 shows North Plains will need a total of 115 gross acres for industrial uses and 94 gross acres for commercial uses over the 2018-2038 period.

Table 20 shows that North Plains has:

- An 82-acre deficit of industrial land.
- An 80-acre deficit of commercial land.

**Table 20. Comparison of the Capacity of Unconstrained Vacant and Partially Vacant Land with Employment Land Demand by Plan Designation, North Plains UGB, 2018–2038**

City of North Plains	Land Supply (Suitable Gross Acres)	Land Demand (Gross Acres)	Land Sufficiency (Deficit)
Land Use Type			
Industrial	33	115	(82)
Commercial	14	94	(80)
Retail Commercial		67	
Office & Commercial Services		27	
Lodging Commercial		1	
Employment Land Totals	47	209	(162)

Source: PNW Economics, LLC

Table 21 compares known site sizes for vacant, unconstrained buildable land from Table 6 and Table 7 and reconciles them to demand for employment land by major use from Table 19.

- There is a deficit in all categories of industrial site size, for a total of 12 additional industrial sites needed in North Plains. Of note, the City is entirely lacking four medium-sized sites (5 acres to 25 acres) that will make it possible in the future to grow and attract significant employers.
- North Plains also has a deficit in all appropriately sized commercial sites, whether retail or office and services. Of note, the City will require an additional five sites, ranging in size from 5 acres to 20 acres, that will be able to accommodate true retail center development – with a retail anchor that would likely be a grocery store or other grocery-offering store type – as well as multi-user office business park space to accommodate a variety of sizes and types of office-using employers.

**Table 21. Comparison of the Capacity of Unconstrained Vacant and Partially Vacant Land by Site Size with Employment Land Demand by Plan Designation and Site Size Need, North Plains UGB, 2018–2038**

Number of Sites by Use Type				
	Typical Acreage	Demand Projection	Vacant Unconstrained Supply (Sites) 1/	Balance - Sites Needed
<b>Industrial</b>				
Anchor User or Large Park	50.0 or more	-	-	-
Large User or Medium Park	25.0 - 50.0	1	-	1
Medium User or Smaller Park	10.0 - 25.0	2	-	2
Expanding User	5.0 - 10.0	4	3	1
Small Businesses	5.0 or less	15	7	8
Totals		22	10	12
<b>Commercial - Office, Retail &amp;</b>				
Large Business Park or Retail Center	10.0 - 20.0	2	-	2
Medium Business Park or Retail Center	5.0 - 10.0	3	-	3
Small Office and Retail, Lodging Site	5.0 or less	15	3	12
Totals		20	3	17

Source: PNW Economics, LLC

1/ All industrial-zoned unconstrained parcels are zoned M-2 General Industrial. All commercial-zoned unconstrained parcels are zoned General Commercial C-2.

## Economic Development Policy & Land Sufficiency

The gross industrial and commercial land deficit/need acreages set forth in Tables 20 and 21 describe only the *quantitative* amount of additional urban land the City will need. However, they do not describe the preferred *qualitative* character of that need; i.e., the types of industrial and commercial employers and businesses the City wants over the next 20 years and corresponding, land use suitability features needed to attract and support those employers and uses.

In developing their EOAs, OAR 660-009-0020(5) strongly encourage Cities and Counties to “assess community economic development potential through a visioning or some other public input-based process in conjunction with state agencies (and) . . . to use the assessment of community economic development potential to form the community economic development objectives pursuant to OAR 660-009-0020(1)(a).” (emphasis added)

The adopted North Plains Economic Development Vision describes the types of employers/businesses preferred by the City going forward over the next 20 years. The following Vision economic growth/development policy directions, together, specifically inform both the type of industries and commercial development/growth the City wants to pursue and, based on their specific development needs, the site attributes needed within corresponding UGB expansion sites on which that development/growth would locate:

**Table 22. City of North Plains Economic Development Vision Policies Guiding Employment Land Need Considerations**

Vision Directive	Policy Direction
Objective 1, Policy 1.1	The 20-year commercial and industrial land supply should <i>provide a range of sites sizes and locations to accommodate the market needs of a variety of commercial and industrial employment uses.</i>
Objective 1, Policy 1.4	<i>Support development of a grocery store or market to support local community needs.</i>
Objective 3	Create conditions that <i>create jobs with a range of wages for North Plains’ residents</i> with the goal of increasing employment for people living in North Plains and improving jobs-housing balance.
Objective 3, Policy 3.2	<i>Encourage development of industrial lands with manufacturing and other export-oriented businesses.</i> <sup>53</sup>

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<sup>53</sup> The Vision defines “export-oriented businesses” as “businesses that produce goods or services for consumption outside of North Plains, to serve needs in Washington County, the Portland metropolitan area, and beyond. Export-oriented businesses typically have higher wages than ‘locally serving’ businesses. Many export-oriented businesses are manufacturing”. It describes locally serving businesses as including retail, restaurants or health care businesses.

Table 21, which describes generic commercial and industrial uses and their typical site sizes and, thus, responds to Vision Directive, Objective 1, Policy 1.1, does not alone address the full breadth of the Vision's economic development/growth policy direction expressed by the other Vision Directives cited above. Therefore, expressed need for additional employment land and resulting UGB expansions that respond only to Policy 1.1 would not completely address the full *qualitative* economic spectrum of preferred industrial and commercial economic development/growth prescribed by the above-cited City's Vision policy directions.

On June 18, 2018 the North Plains City Council considered a City EOA Update Presentation entitled "*Focusing on Developing a More 'Robust Economy'*" in which: (1) the following business-specific types of industrial and commercial development, that could address the full spectrum of the above-cited Vision Directives; and, (2) in addition to site sizes typically-needed by such development, the physical, locational, and transportation competitive site advantages of potential UGB expansion sites adjoining the City in attracting such development, were vetted and favorably discussed:

Export-Oriented Employers:

- Computer & Electronic (C&E) Mfg.<sup>54</sup> (5-100+ acres typical site range)
- Multi-tenant Office Complex<sup>55</sup> (5-20 acres typical site range)
- Business Incubator<sup>56</sup> (5-25+ acres typical site range)
- Food Processing<sup>57</sup> (5-25+ acres typical site range)
- Small-scale manufacturing (electronics mfg., machinery mfg. (i.e., agriculture or industrial machinery), metals fabricating, specialty food & beverage manufacturing, renewable and alternative energy products.) (10-50 acres typical site range)
- Small-scale warehouse, distribution & wholesale (5-50 acres typical site range)
- Professional services; and
- Personal services (residents, senior and visitors).

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<sup>54</sup> C&E Industry Cluster Employers span businesses in four (4) tiers: products assembly, packaging & testing, manufacturing & etching, components & machinery, and raw materials.

<sup>55</sup> Multi-tenant Office Complexes are speculative offices available to a variety of office users such as financial offices, legal offices, various professional services.

<sup>56</sup> Business Incubators are flexibly-designed facilities that provide cultivating spaces for new or expanding businesses to grow in their nascent stages.

<sup>57</sup> Food Processing is comprised of 2 categories of businesses that manufacture or process foods and beverages: processing or assembling raw food materials.

## 20-Year Economic Development Land Need Directed by City Policy & Vision

Using their respective, typically-required sites size ranges as their comparison matching factors, the attached matrix table compares and matches the generic industrial and commercial development types described above with their business-specific types counterparts derived from the June 18, 2018 City Council discussions. This refinement process and outcomes provide more certainty and clarity regarding the specific, NAICS-level types of industrial and commercial uses - as well as their specific corresponding site sizes and configurations, location features, transportation access, and infrastructure requirements called for by their industrial or commercial industry standards – that must be sought and accommodated via the needed City UGB expansions.

The matrix table then reconciles the identified specific industrial and commercial development 20-years land needs with the “Safe Harbor” 20-year land need budgets of 82 industrial gross acres and 80 commercial acres. The reconciliation produces the following Safe Harbor UGB expansion recommendations:

**Table 23. Safe Harbor UGB Industrial Land Need Expansion Recommendations**

Recommended UGB Expansion Business Uses	Number of Sites	Site Size <sup>58</sup>	% of Safe Harbor Land Budget
Industrial (82 Acres Safe Harbor Budget)			
Computer & Electronic Mfg. (single user or industrial park anchor (25-50 acres site range)	1	25 acres	30%
Small-scale Mfg. (single user or industrial park) (25-50 acres site range)	1	25 acres	30%
Multi-tenant Office Complex or Small-scale Food Processing (medium user or smaller industrial park anchor) (10-25 acres site range)	1	17 acres	22%
Business Incubator/Professional Services (expanding users) (5-10 acres site range)	2	15 acres	18%
Small-scale warehousing/distribution & Professional services (small businesses) (5 acres or less)	8	2 sites (3-5 acres); 2 sites (3 acres); and 4 sites (below 1 acre) distributed among 33 acres already w/in UGB	Use existing sites w/in UGB

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<sup>58</sup> Actual site sizes of proposed UGB expansions may be higher or lower but would stay within the generic site size ranges associated with the proposed business use.

**Table 24. Safe Harbor UGB Commercial Land Need Expansion Recommendations**

Recommended UGB Expansion Business Uses	Number of Sites	Site Size <sup>59</sup>	% of Safe Harbor Land Budget
Commercial (80 Acres Safe Harbor Budget)			
Retail Commercial/Commercial Services (business park or larger retailer) (10-20 acres)	1	20 acres	25%
Multi-tenant Office Complex/Commercial Services (business park) (10-20 acres)	1	20 acres	25%
Commercial Services/Business Incubators (medium business park or retail center) (5-10 acres)	2	15 acres	15%
Convenience-retail Commercial (medium business park or retail center) (5-10 acres)	1	10 acres	10%
Commercial Services/Convenience-retail/Lodging (5 acres or less)	12	Sites distributed among 14 acres already w/in UGB	Use existing sites w/in UGB

## Oregon UGB Expansion-Related Rules Discussion

Because of considerable parcelization of buildable land currently within its UGB, North Plains does not have buildable land of sufficient sizes to accommodate much of its future industrial and commercial land needs described above and must seek UGB expansions to accommodate those needs:

**Table 25. Summary of Employment Land Parcelization within Current North Plains UGB**

Existing Lot Size Range	Below 1 ac.	1-1.99 acres	2-4.99 acres	5-9.99 acres	10+ acres
Commercial	20 lots w/in 7 total acres	3 lots w/in 4 acres	1 lot @ 3 acres	None	none
Industrial	6 lots w/in 1 acre	none	1 lot @ 3 acres	3 lots w/in 29 acres	none
Totals:	26 lots w/in 8 total acres	3 lots w/in 4 total acres	2 lots w/in 6 total acres	3 lots w/in 29 acres	none

## North Plains UGB Expansion Context

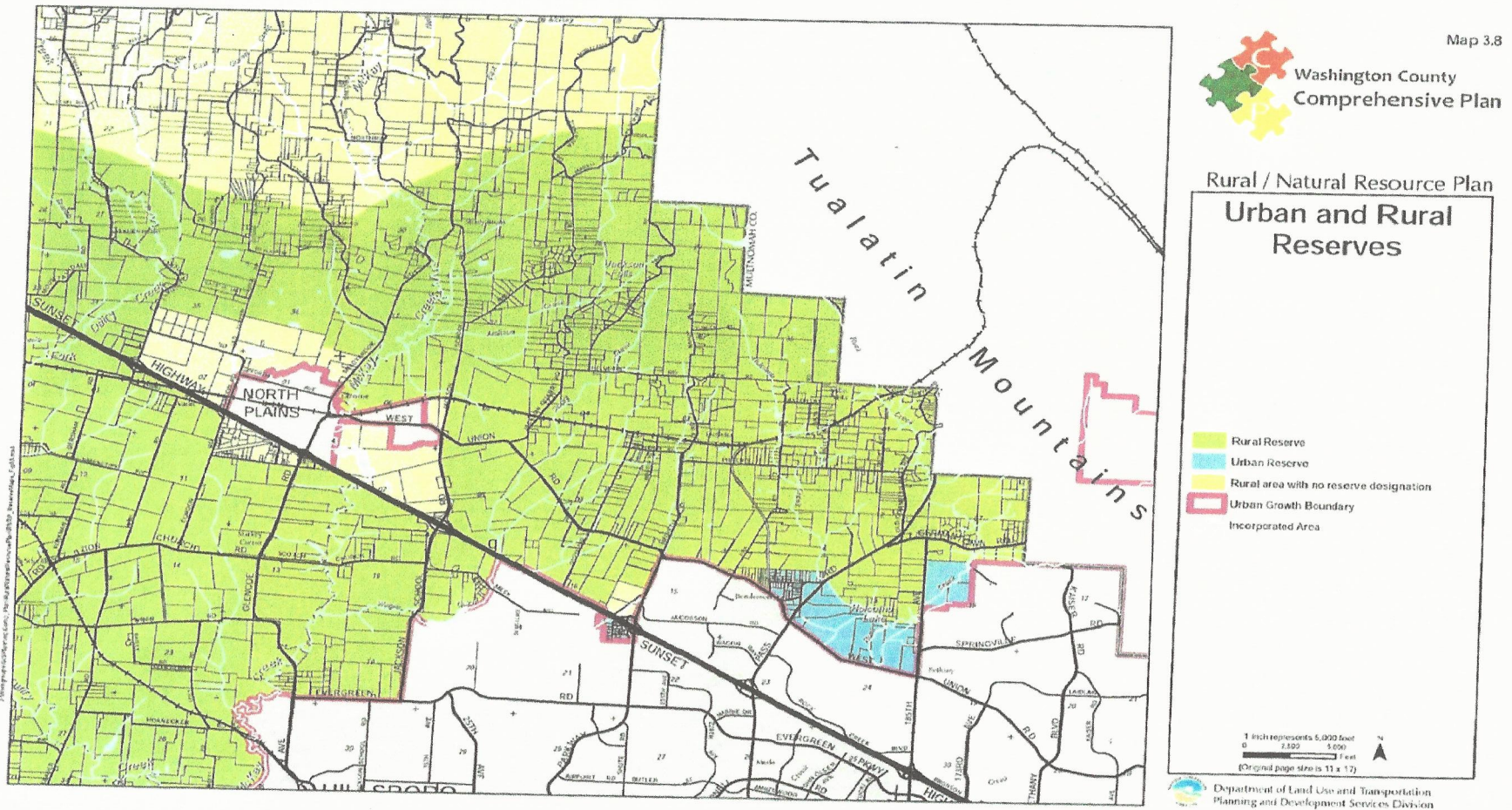
North Plains UGB expansion opportunities are physically and geographically confined, and significantly dictated by State, Regional and Washington County plans, policies and regulations that apply to non-UGB lands surrounding and near the City in the following ways/sequence:

HB 4078 ('14): This State Urban and Rural Reserves law set an outer geographical boundary beyond which the City may not seek UGB expansions as shown in **Map Exhibit No. 1 on the following page** until 2064. Within that boundary the Bill identified “undesigned land” surrounding the City within which, the City may seek such expansions subject to Oregon UGB statutes and implementing

<sup>59</sup> Actual site sizes of proposed UGB expansions may be higher or lower but would stay within the generic site size ranges associated with the proposed business use.



# Map Exhibit 1. City of North Plains Outer Geographical Boundaries



September 27, 2016



Administrative Rules.<sup>60</sup> As a result, City UGB expansions may occur in only the following surrounding areas shown in **Map Exhibit No. 2 on the following page**:

- South of Hwy 26 on “Exception Land”: About 145 acres spread among 41 parcels (26 parcels containing land improvements) owned by 34 property owners. The largest parcel contains 42 acres. The average parcel size is .36 acres. The predominant County zoning is AF-5 (70% of the area) followed by Rural Residential zoning and about 7 acres of Exclusive Farm Zoning (EFU). Under ORS 197A, the County “exception land” designation of the area makes it a higher priority for urban use if added to the UGB than land within an EFU zone.
  - West Union Road – EFU East Site: About 375 Acres of EFU-zoned land situated directly east of the North Plains UGB along West Union Road.
  - West Union Road – EFU West Site: About 267 Acres of EFU-zoned land situated directly west of the North Plains UGB along Gordon and Mountindale Roads.
  - North Plains-EFU North Site: About 124 Acres of land zoned AF-20 (124 acres) along NW North Avenue.

UGB land priority rules set forth in ORS 197A would require the City to look first to non-EFU lands if UGB expansion is required to accommodate its 20-year land need, unless it can demonstrate that such higher priority lands lack the site characteristics typically needed by the type of additional land uses the City wants to place with the added UGB lands, or for “impracticability reasons” such higher priority land cannot satisfy the 20-year land need.<sup>61</sup>

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<sup>60</sup> See, ORS Chap. 197A, Oregon Administrative Rules, Chap. 660. Division 24.

<sup>61</sup> ORS 197A.320 sets forth the UGB land priority inclusion rules applicable to North Plains: 197A.320(2) requires the City to study all lands contiguous to, and within one-half mile of its UGB except land that may be excluded from such study because:

- It is impracticable to provide the needed public facilities or services to the land (197A.320(2)(A).
- The land is subject to significant development hazards (1907A.320(2)(B))
- Long-term preservation of significant natural, scenic, cultural or recreational resources require limiting or prevent development on land containing such resources (197A.320(2)(C))
- The land is owned by the federal government and managed primarily for rural uses (197A.320(2)(D)).

“Impracticability” may be established by considering the likely (insufficient) amount of development that could occur within the planning period; the likely cost of facilities and services; physical, topographical or other impediments to service provision; and, whether such development has (or has not) occurred on similarly situated lands such that it is (un)likely that the lands will be developed at an urban level during the planning period. (107A.320(3))

When the primary purpose for UGB expansion is to accommodate a particular industry use that requires specific site characteristics and the site characteristics may be found in only a small number of locations, the city may limit the study area (and application of the 197A.320 UGB sites land priority analyses) to land that has, or could be improved to provide, the required site characteristics. (197A.320(6))

Map Exhibit 2. City of North Plains Expansion Areas and Rural Reserve Areas



CITY OF NORTH PLAINS

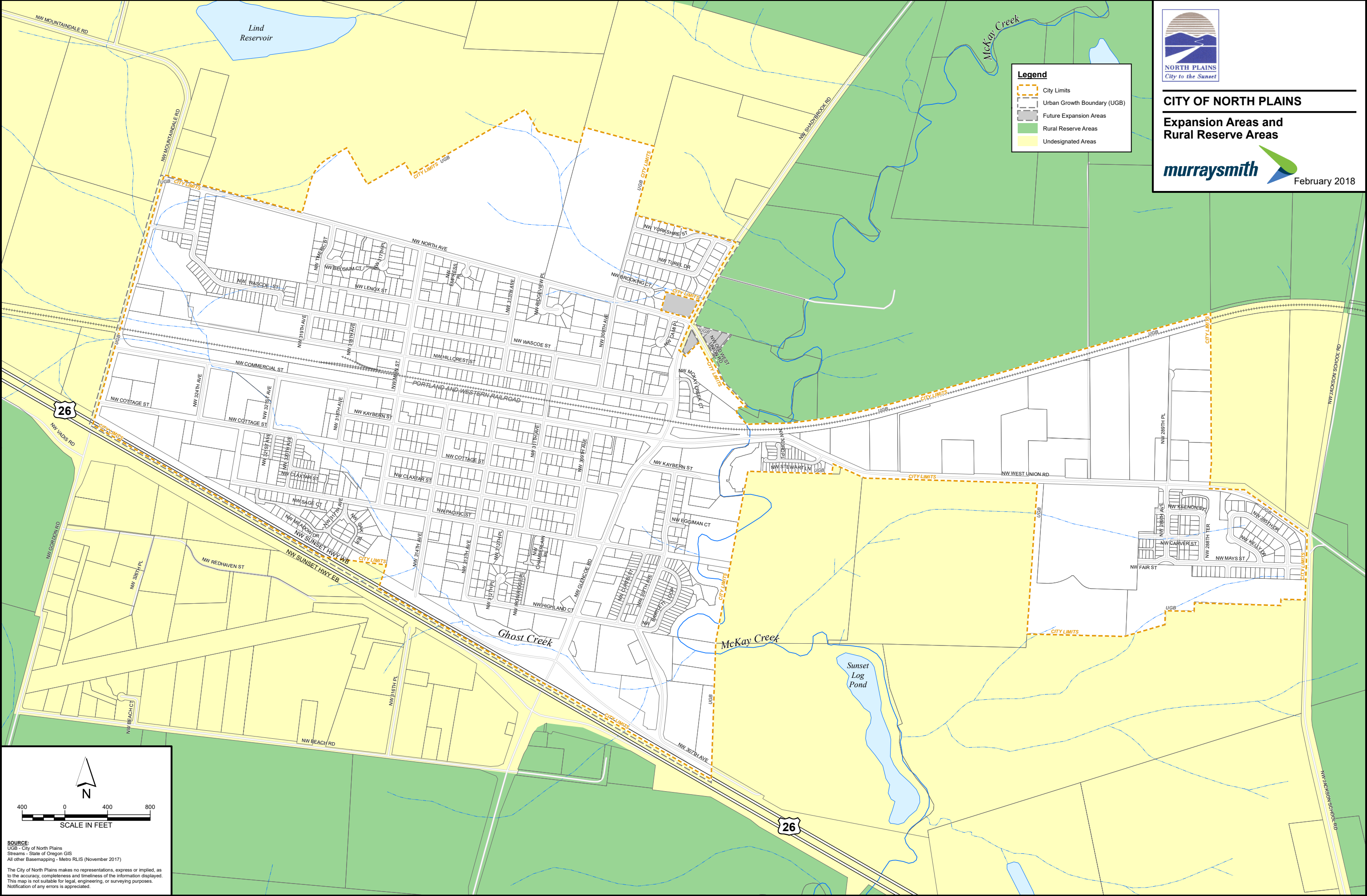
Expansion Areas and Rural Reserve Areas



February 2018

**Legend**

- City Limits
- Urban Growth Boundary (UGB)
- Future Expansion Areas
- Rural Reserve Areas
- Undesignated Areas



0 400 800

SCALE IN FEET

**SOURCE:**  
UGB - City of North Plains  
Streams - State of Oregon GIS  
All other Basemapping - Metro RLIS (November 2017)

The City of North Plains makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, or surveying purposes. Notification of any errors is appreciated.

Date Saved: 2/22/2018 12:02:46 PM  
Plot Date: 2/22/2018  
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User: J:\Projects\04\0682\GIS City Maps\04-0682-100-OR-URBAN GROWTH AREA MAP.mxd  
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## Recommended Employment Site Physical Qualities

### Industrial Site Needs Profile

To provide some additional guidance regarding what industrial users and industrial developments typically require in terms of site size and other qualities, Table 26 provides details for typical site needs information by major industrial sector user likely to grow in North Plains through 2038. Information about industry sector site needs are based on industrial site guidelines employed by Business Oregon in coordination with its economic development partners statewide.

**Table 26. Industrial Site Qualities for Key Industrial Sectors**

Industrial Land/Site Quality	Manufacturing	Warehouse/ Distribution	Wholesale Trade & Transportation	Professional Services/ Health Care
Minimum Site Size	Single User: > 0.5 Acre Multiuser >1 acre	Single User: > 1 Acre	Single User: > 0.5 Acre Multiuser >5 acre	Single User: > 0.5 Acre Multiuser > 1 acre
Site Shape	Square to Rectangle	Square to Rectangle	Square to Rectangle	Square to Rectangle
Site Zoning	Light to Heavy Industrial	Light to Heavy Industrial	General Industrial	Light Industrial
Slope	Minimal	Minimal	Minimal	Minimal
Wetlands	None/Mitigated	None/Mitigated	None/Mitigated	None But Adjacent Acceptable
Utility Easements	None	None	None	None
Sewer (Main Access)	Within 200'	Within 200'	Within 200'	Within 200'
Water (Main Access)	High Capacity within 200'	Within 200'	Within 200'	Within 200'
Electricity (Distribution Line Access)	13 kV or less	13 kV or less	13 kV or less	13 kV or less
Natural Gas Usage	Significant	Minimal	Minimal	Moderate
Local Road Access	Good/Direct	Good/Direct	Good/Direct	Good/Direct
Transportation System Mobility	Important	Important	Crucial	Important
Proximate to Rail	Moderate to Crucial	Moderate	Crucial	Minimal
Proximate to Waterborne	Moderate	Minimal	Moderate	Minimal
Proximate to Air	Moderate	Moderate	Moderate	Crucial
Sensitivity to Nearby Commercial Use	Moderate	High	Moderate	Low
Desire Visibility	Varies	Minimal	Minimal	Moderate
Building Floor Area Ratio	0.32 - 0.36	0.17 - 0.19	0.17 - 0.19	0.23 - 0.26
Industrial Land Demand to 2038	<b>Up to 11 Acres</b>	<b>Policy-Dependent*</b>	<b>Up to 12 Acres</b>	<b>Up to 70 Acres</b>

Source: PNW Economics, LLC

## Office Commercial Site Needs Profile

Table 27 provides the City of North Plains with commercial office development types and their site needs based on likely new development forecasted for the City through 2038. Information is based on site guidelines utilized by PNW Economics, LLC in development feasibility analysis as well as compilation from other Economic Opportunities Analyses for different jurisdictions throughout the State.

**Table 27. Office Commercial Site Qualities by Office Park Size and Format**

	Example Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Parking, Loading, Storage (Loading & Storage not major issues for Offices)
Large Office Users (Business Park 10+ acres)	Community Branches for Banking, Security and Commodity, Real Estate, and Insurance Carriers, and Community Healthcare Professional Business Services, Legal Services, Communications, Transportation Services	Transportation system that provides access to labor is important and will require convenient connections to at least a minor collector and may require convenient connections to major arterial roadways and State Highways. Proximity to Government offices may be a factor. High visibility access to customers is essential for the consumer-oriented users. Airport access is important. Convenient public transportation may be a consideration, especially for a downtown site.	Water, sewer, and storm drainage must be adequate. Site must be able to be served by modern telecommunications.	Business/Office Park- Occupy buildings individually or with a group of tenants. Users often seek sites near campus development patterns with which they interact. Sites are typically 0.5 to 3 acres per user within a larger park of 10 to 20+ acres.	Usually uses on-site surface parking.
				Commercial Centers-These are the preferred development patterns for consumer oriented medium sized office users such as branch banks and real estate offices. Users often seek sites near campus development patterns with which they interact. Sites are typically 0.5 to 3 acres per user within a larger community commercial node of 10 to 50+ acres.	Usually on-site, but may be shared parking with adjoining commercial uses.
Medium and Small Office Users (Business Park Under 10 acres)	Sole proprietor or small partnership of professional service offices for Banking, Security & Commodity, Real Estate, Insurance Agents and Brokers, Business Services and Legal Services	Access to customer base very important to consumer-oriented users such as insurance agents/brokers and real estate agents/brokers. Transportation system that provides access to labor is important, but these users may have to compromise convenient access to labor as a cost saving measure. Proximity to Government offices may be a factor. These office uses can be served by all functional street functional classifications Airport access is important. Convenient public transportation may be a consideration, especially for a downtown site.	Water, sewer, and storm drainage must be adequate. Site should but not always require modern telecommunications.	Downtown- These small user companies absorb the smaller spaces downtown that are too small or have limitations for larger users. Site sizes downtown are predetermined by existing development patterns and to a lesser extent by redevelopment.	Tends to utilize public supplied parking downtown that may include leases of public spaces.
				Business/Office Park- These small user companies absorb the smaller spaces in larger projects that are too small or have limitations for larger users or occupy expansion areas for medium and large users. Sites sizes are typically driven by larger users except when small companies pool resources to occupy sites. Sites are typically 0.5 to 3 acres within a larger office park setting.	Usually uses on-site surface parking.
				Commercial Centers - These small user companies absorb the smaller spaces in larger projects that are too small or have limitations for larger users or occupy expansion areas for medium and large users. These sites tend to be predetermined by the larger users. These sites are most important to consumer-oriented users such as insurance agents.	Usually on-site, but may be shared parking with adjoining commercial uses.



## Retail Commercial Site Needs Profile

Table 28 provides the City of North Plains with commercial retail development types and their site needs based on likely new development forecasted for the City through 2038. Information has identical sourcing to that described for retail office site needs in Table 27.

**Table 28. Retail Commercial Site Qualities by Retail Center Size and Format**

	<b>Transportation; Access to Labor and Customers</b>	<b>Public Facilities/ Utilities</b>	<b>Site Sizes and Development Pattern Discussion</b>	<b>Parking, Loading, Storage</b>
Large and Medium Retail Users (Centers 5 - 20 acres or more)	Transportation system that provides convenient connections and very high visibility from major arterial roadways and state highways is essential. Convenient public transportation may be a consideration, especially for a downtown site. Pedestrian traffic on public sidewalks is very important to Downtown sites. Internal pedestrian important.	Water, sewer, and storm drainage must be adequate. Site must be able to be served by modern telecommunications. Multiple energy suppliers may be a consideration.	<p><b>Large Format Retail</b> — These are large auto-oriented stores that house a collection of goods within a single store. A recent trend has seen smaller vendors co-locate within the larger store (Such as a McDonalds within a Wal-Mart). Individual user site sizes are typically 6 to 14 acres and large format retail tends to seek sites that are clustered with other large format retailers in regional commercial centers that are 20+ acres</p> <p><b>Vehicle/Equipment Sales</b> — These are large vehicle and equipment sales yards that serve a wide regional market area. Typical site sizes are 15 to 40+ acres. Outdoor storage areas are dominant feature with surface customer parking on-site. Loading is often in designated areas on-site.</p>	Usually use on-site surface parking that is sometimes structured and may be shared with adjacent properties. Loading is generally non-peak hours in designated areas, storage is mostly indoors, but some out.
Small Retail and Commercial Services (5 acres or less)	Transportation system that provides convenient connections and visibility from higher order roadways and state highways is important and essential for some users. Convenient public transportation may be a consideration, especially for a downtown site. Pedestrian traffic on public sidewalks is very important to Downtown. Internal pedestrian traffic is important.	Water, sewer, and storm drainage must be adequate. Site must be able to be served by modern telecommunications.	<p><b>Downtown-Small retailers</b> tend to seek ground floor downtown sites. Users tend to be specialty retail, restaurants, bars and similar uses. Site sizes are dictated by existing development patterns or as a result of a large user or speculative development project.</p> <p><b>Free-Standing Shopping Center Pads</b>- These uses are typically service commercial uses such as restaurants, bars and convenience retail such as convenience marts and fuel stations. Sites are very highest visibility within larger projects. Site sizes are .5 to 2 acres co-located within larger projects such as lifestyle centers, regional malls, clusters of large format retailers and community shopping centers.</p> <p><b>Attached Boutique/Specialty</b>— These retail sites are co-located within larger buildings that house anchor users in larger projects such as lifestyle centers, regional malls, clusters of large format retailers and community shopping centers. Small sites are the individual lease suites within larger site.</p> <p><b>Neighborhood Commercial</b> — These are small stand alone users that usually locate along higher order transportation facilities and sometimes cluster with a few other similar sized users. These uses are sometimes occur in residential to commercial conversion areas. These uses tend to be neighborhood service and convenience retail uses such as coffee shops and neighborhood markets. Sites are usually an acre within a smaller cluster that is up to five acres. Usually on-site surface parking at MLDC or pre-existing ratios. Pre-existing ratios may be a limiting factor. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.</p>	<p>Tends to utilize public supplied parking downtown that may include leases of public spaces. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.</p> <p>Usually uses on-site surface parking, may be shared parking with adjoining commercial uses. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.</p> <p>Usually on-site surface parking shared with adjoining commercial uses. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.</p>

## Conclusions and Recommendations

The conclusions about commercial and industrial land sufficiency are:

- **North Plains is forecast for growth in both commercial and industrial employment sectors.** North Plains is planning for growth of nearly 1,645 new jobs in the city over the 2018 to 2038 period. 920 of the jobs will be in industrial land uses and 725 jobs will be in commercial land uses, namely office, services, and retail. Growth of these jobs will result in demand for about 115 gross acres of industrial land and 94 acres of commercial and retail land.
- **North Plains does not currently have enough employment land to accommodate growth.** Table 20 and Table 21 show North Plains has insufficient land in total and in terms of site sizes, respectively, for both commercial and industrial employment growth over the next 20 years.
- **Most new businesses will require small to mid-sized sites.** North Plains' businesses are generally small, averaging 8 employees per business. However, North Plains' economic development Vision and Policies direct the City to diversify and expand its employment base in terms of types of industries as well as sizes. Accordingly, a combination of industrial and commercial sites ranging from 25 acres to one acre or smaller will be required to accommodate City economic vision.
- **North Plains has a number of small commercial and industrial sites that are sufficient for accommodating smaller site need over the next twenty years.** North Plains has 47 acres of vacant, partially vacant, and redevelopable commercial and industrial land, on 34 sites. Of these, 14 acres of land is commercial in 24 sites. Twenty of North Plains' commercial sites are smaller than 1 acre and four are between one and three acres in size. These commercial sites provide opportunities for development of small commercial businesses. To attract a grocery store, however, North Plains should plan to do so within a commercial center anchored by the grocery-offering store but with other retail and services offerings.

North Plains has 33 acres of vacant industrial land in 10 sites. Of these, 29 acres are in three sites that are between 5 and 10 acres in size. These industrial sites provide opportunities for development of small and mid-sized industrial businesses. One or more of the industrial sites may be parcelized to create smaller industrial sites. The City should continue working with the landowners of these three sites to encourage development of these sites. However, these sites alone are not sufficient for meeting full 20-year industrial site needs in North Plains.

- **North Plains could support a grocery store, with the expected household growth.** North Plains' population is growing and, with the plans for development of about 1,000 new households over next three to five years, will have close to 2,200 households. Given its demographics and population size, North Plains is most likely to capture a small-scale grocery store of around 10,000 square feet. The presence of major discount stores and warehouse stores within five miles of North Plains means that the largest chains are

unlikely to locate a store in the area immediately. The City should consider the following factors as it works to attract a grocery store:

- *Identify the right grocery store concept.* A North Plains grocery store is unlikely to capture all grocery spending for North Plains residents. Instead, its advantage will be in providing convenience products. Given the few restaurants in North Plains, the store could focus on providing prepared foods with a seating area. There are several alternatives to a traditional grocery store concept that may fit North Plains, including the fresh format (Whole Foods, New Season's), small grocer (Green Zebra), and limited assortment grocer (Aldi, Grocery Outlet).
- *Identify suitable sites within North Plains for a grocery store.* Grocery stores seek out sites that are easy to see from major arterials and have convenient access for customers. North Plains should identify sites that can provide good access and visibility for a potential retail center that includes a grocery store. A retail center with an attractive array of offerings can supplement its local business with business from westbound travelers on U.S. 26.
- *Consider future growth in planning for and marketing North Plains to grocery store chains.* Since 2015, 200 homes have been built and the City anticipates close to 950 additional homes in the next three to five years. Many of these homes will house college-educated householders who work in high-tech companies such as Intel and Gen-Tech in neighboring cities. These households will be attractive to grocery store investors.

Following are recommendations to North Plains based on the analysis and conclusions in this report.

- **Update the Economy Element of the Comprehensive Plan.** We recommend that the Planning Commission and City Council review the revised policies in the North Plains Economic Development Strategy and, after making additional necessary revisions to the objectives and policies, adopt the revised objectives and policies into the Economy Element.

In addition, we generally recommend that cities adopt the economic opportunities analysis as an appendix to their Comprehensive Plan so that when the analysis is next updated, it is easier to replace the outdated economic opportunities analysis with the newer one.

- **Study potential and best options for expansion of the North Plains Urban Growth Boundary to accommodate the estimated insufficiency of employment land need over the next twenty years.** We recommend discussions with Washington County and the Oregon Department of Land Conservation & Development (DLCD) to understand process and legal procedures for studying potential areas for UGB expansion and City annexation to best meet the employment land needs quantities and qualities documented in this EOA, specifically Table 23 and Table 24.

- **The City should identify its role in bringing a grocery store to North Plains.** At a minimum, we recommend that the City work with property owners to select a site for a grocery store and build relationships with grocery store site selectors. The City may want to support development of a grocery store through use of tools such as City systems development charge waiver or deferrals, pre-development study grants, city purchase site and give land write-downs through a public private partnership, develop supportive infrastructure (e.g., traffic signals or streetscape), and a Business Improvement District that would help to market and maintain a core business district.
- **Align the City's goals for economic development with planning for infrastructure development.** Aside from ensuring that there is sufficient land to support employment growth, one of the most important ways that the City can support economic development is through planning for and developing infrastructure (e.g., roads, water, sanitary sewer, and storm water systems). We recommend that the City align its goals for economic development with infrastructure development through updates to the City's Capital Improvements Plan.

The City should consider making investments in downtown, such as infrastructure or place making improvements, such as streetscape, sidewalk, storefront or façade, wayfinding improvements, or revise the downtown revitalization plan. The City should consider using Urban Renewal funds to support these improvements.

- **Form an economic development committee tasked with ensuring on-going economic development efforts.** A key step in supporting economic development is having a forum for discussion of economic development in North Plains. We recommend that the City work with partners and interested stakeholders to develop an economic development committee that the City participates in as a leader. The Economic Development Committee may be able to assist the City in reaching out the businesses to identify issues and barriers to economic development.

The revisions to the Comprehensive Plan presented in the North Plains Economic Development Strategy focus on land-based policies and actions. The city also needs a broader strategy for economic development that focuses on issues such as economic development marketing of North Plains' businesses and business opportunities, completing a market readiness analysis for branding and marketing North Plains for tourism, building business and other partnerships, and coordinating economic development efforts with local and regional economic development organizations, including the North Plains Chamber of Commerce, the Westside Economic Alliance and Business Oregon.

This strategy could be developed by the economic development committee. The strategy should identify a focused list of actions that the commission wants to achieve over a limited time period (e.g., 5 years), with specific assignments to partners and identification of funding sources to implement the actions.

- **Review the Zoning Code and development process to identify opportunities to streamline and reduce development costs.** These opportunities may include: a code review that identifies opportunities to streamline the zoning code or entitlement process,



single-point of contact for developers to provide assistance with the entitlement process by coordinating with outside governmental agencies, and developing a web site that provides information that businesses considering expanding or locating in North Plains would need.

- **Support redevelopment of underutilized commercial sites.** North Plains has a number of commercial sites with opportunities for infill or redevelopment. These sites are located along Glencoe Road and have non-commercial uses on them currently, mostly housing, and may be ripe for redevelopment over the 20-year planning period. To the extent that the City wants to encourage redevelopment of these sites, the City should work with property owners to facilitate redevelopment.

## Recommended Policies & Actions

The above Conclusions & Recommendations were translated into recommended updates to City Objectives, Policies, and Actions. Objectives are based upon existing language in the Economic Element of the City Comprehensive Plan, though community advisory input and discussion helped shape recommended, updated language.

**Objective 1: Ensure Land Availability.** The City will plan for a 20-year supply of suitable commercial and industrial land on sites with a variety of characteristics (e.g., site sizes, locations, visibility, and other characteristics).

**Policy 1.1:** Provide for an adequate supply of commercial and industrial land to accommodate the types and amount of economic development and growth anticipated in the future as described in the Economic Opportunities Analysis. The supply of commercial and industrial land should provide a range of site sizes and locations to accommodate the market needs of a variety of commercial and industrial employment uses.

**Action 1.1a:** Identify changes in zoning or plan designation necessary to provide for an adequate supply of commercial and industrial land.

**Action 1.1.b:** Develop and implement a system to monitor the supply of commercial and industrial lands every five years. This includes monitoring commercial and industrial development (through permits) as well as land consumption (e.g. development on vacant or redevelopable lands).

**Action 1.1.c:** Provide for an adequate short-term supply<sup>62</sup> of suitable commercial and industrial land to respond to economic development opportunities as they arise.

**Policy 1.2:** Provide for opportunities for development of commercial services along Glencoe Road and Commercial Street for residents and visitors to North Plains.

**Action 1.2a:** Work with property owners and their representatives to ensure that key development and redevelopment sites are known, ready to develop, and marketed.

**Action 1.2b:** Enforce nuisance, sign code, and other applicable ordinances for commercial properties throughout the City.

**Policy 1.3:** Allow for development of small-scale commercial services to support local community needs.

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<sup>62</sup> "Short-term supply" means suitable land that is ready for construction usually within one year of an application for a building permit or request for service extension. "

**Action 1.3a:** Evaluate opportunities to zone land for small-scale commercial development in or near areas where a substantial amount of residential development is planned.

**Policy 1.4:** Support development of a grocery store or market to support local community needs.

**Action 1.4a:** Identify one or more commercial sites along Glencoe Road with visibility and easy accessibility from Highway 26 as a potential site for a grocery store. Work with property owners and their representatives to market the site(s) to potential grocery store site selectors.

**Action 1.4b:** Build relationships with grocery store site selectors using and building on the marketing materials developed in the Economic Opportunities Analysis project.

**Action 1.4c:** Evaluate potential incentives as identified in Appendix A of the Economic Opportunities Analysis that the City may offer grocery stores to locate in North Plains.

**Objective 2: Support Downtown Development.** Support development and redevelopment in downtown for commercial services, especially locally serving businesses.

**Policy 2.1:** Continue to implement policies and programs to support and encourage commercial development in downtown.

**Policy 2.2:** Develop policies and programs to encourage infill and redevelopment in downtown as a way to use land and existing infrastructure more efficiently.

**Action 2.2a:** Make infrastructure or place making improvements in downtown, such as streetscape, sidewalk, storefront or façade programs, wayfinding improvements, or revise the downtown revitalization plan.

**Action 2.2b:** Use Urban Renewal funds to develop a catalytic project that supports development of businesses in downtown, such as retail businesses, restaurants or more employment. For example, North Plains might implement place making projects (see Action 2.2a) that help to create a foundation that supports downtown development.

**Action 2.2c:** Evaluate establishment of a Local Improvement District (LID) in downtown to generate funds for capital improvements in downtown.

**Action 2.2d:** Develop a program to support storefront improvements through grants or low-interest loans.

**Policy 2.3:** Support mixed-use development in downtown, such as development of two-story buildings with commercial uses on ground floor and residential uses on the second floor.

**Action 2.3a:** Clarify zoning regulations about mixed-use development, including what type of mixed-use buildings are not allowed on the ground floor.

**Policy 2.4:** Support actions that encourage business activities and events in downtown.

**Action 2.4a:** Develop events, attractions and activities that draw people to downtown.

**Objective 3: Encourage Business Development.** Create conditions that encourage growth of existing businesses, entrepreneurs, and attraction of new businesses to create jobs with a range of wages for North Plains’ residents with the goal of increasing employment for people living in North Plains and improving the jobs-housing imbalance.

**Policy 3.1:** Develop a broader economic development plan that promotes and supports a diverse economic base through growth of businesses, such as the types of businesses identified in the Economic Opportunities Analysis.

**Action 3.1a:** Hire an economic development director to implement the City’s economic development policies and focus on issues related to business growth and attraction in North Plains.

**Action: 3.1b:** Establish an economic development committee or commission lead by the City, with representatives from the City staff, City elected and appointed officials, key economic development partners, and local businesses and residents. If the City hires an economic development director, they should have a leadership role in this committee.

**Action: 3.1c:** The economic development committee or commission should develop a 5-year economic development strategy and action plan, based on local and regional economic trends gathered through the Economic Opportunity Analysis. The economic development strategy should identify tools that the City and other partners will implement to encourage economic development, such as financial incentives or other policies to encourage economic growth.

**Policy 3.2:** Encourage the planning and development of a sufficient amount of industrial lands for manufacturing and other export-oriented businesses<sup>63</sup> that do not have negative impacts on surrounding areas while accommodating future City economic growth and development prescribed in the Comprehensive Plan.

**Action 3.2a:** Work with the property owner to develop an action plan for development of the nearly 30 acres of industrial land on West Union Road. This action plan should identify the types of industrial businesses that could locate on these sites based on the City’s regulations about development of these sites (e.g., the City’s noise

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<sup>63</sup> “Export-oriented businesses” are businesses that produce goods or services for consumption outside of North Plains, to serve needs in Washington County, the Portland metropolitan area, and beyond. Export-oriented businesses typically have higher wages than “locally serving” businesses. Many export-oriented businesses are manufacturing. Locally serving businesses include businesses such as retail, restaurants, or health care.

ordinance). The plan should identify actions to lower development barriers on the site, as well as plans for marketing the site for development.

**Action: 3.2b:** Evaluate opportunities for private industrial development on an unused portion of the three-acre parcel recently purchased by the City for water storage on West Union Road.

**Action: 3.2b:** Evaluate opportunities for providing automotive access and infrastructure on the West Union Road property for adjacent private properties that do not currently have access or infrastructure.

**Action: 3.2d:** Revive the North Plain Enterprise Zone to provide the opportunities for property tax abatements on industrial lands along West Union Road.

**Action 3.2e:** Expand the City's Urban Growth Boundary as necessary to achieve the economic growth and development priorities established in the Comprehensive Plan.

**Policy 3.3:** Support development of tourism-related businesses to attract visitors to North Plains as a destination for day tourism.

**Action 3.3a:** Coordinate with tourism destinations within and around North Plains, such as the Pumpkin Ridge Golf Course or the Vernonia Bicycle Trail, to bring visitors to businesses in North Plains.

**Action 3.3b:** Evaluate opportunities for developing tourism destinations, such as wineries, breweries, or bicycling.

**Action 3.3c:** Evaluate opportunities and sites suitable specifically for hotel or other lodging development to support both tourism as well as business travel as the North Plains economy grows.

**Policy 3.4:** Support growth of existing businesses and entrepreneurs by sharing technical resources, maintaining open communications with local business people, and providing available staff support for economic development projects initiated by the business community.

**Action 3.4a:** Outreach to businesses in North Plains by the economic development director (Action 3.1a) to understand their needs and opportunities for the City to assist with business development.

**Policy 3.5:** Coordinate economic development efforts with local and regional economic development organizations, including the North Plains Chamber of Commerce, the Westside Economic Alliance, and BusinessOregon.

**Action 3.5a:** Work with the North Plains Chamber of Commerce to develop a marketing plan and materials, such as the website described in Action 3.6c, that describe North Plains' advantages and amenities for businesses.

**Action 3.5b:** Work with economic development partners to market North Plains as a place to locate new businesses.

**Policy 3.6:** Ensure that the City's building permitting and land use entitlement processes support business growth.

**Action 3.6a:** Identify changes to North Plain's zoning code or entitlement process to simplify the development process.

**Action 3.6b:** Create a single-point of contact for developers to provide assistance with the entitlement process by coordinating with outside governmental agencies, such as Washington County or Clean Water Services.

**Action 3.6c:** Develop a website that provides information that businesses considering expanding or locating in North Plains would need, such as information about available vacant land and buildings, North Plains Development Services, incentives to encourage development, business services in North Plains, and other information that businesses need when considering developing in North Plains.

**Action 3.6d:** Evaluate incentives to lower development costs, such as deferral of systems development charges or property tax abatement (e.g., use of an Enterprise Zone) to encourage economic development.

**Objective 4: Provide Adequate Infrastructure Support.** Provide adequate infrastructure efficiently and fairly to support employment growth.

**Policy 4.1:** Coordinate capital improvement planning to ensure infrastructure availability on employment land and pursue funding for needed infrastructure to support economic development activities.

**Action 4.1:** Ongoing effort that should be revisited with updates to the capital improvement plan.

**Policy 4.2:** Support home occupations and workers that telecommute by working with telecommunications and other service providers to improve services in North Plains.

**Action 4.2a:** Work with telecommunication service providers to develop higher-speed telecommunications infrastructure and higher-speed Internet service.

**Action 4.2b:** Identify opportunities for development of small offices spaces and shared services to support of growth of independent contractors and entrepreneurs. These facilities may be part of an existing facility, such as the Library, or they may be development of new facilities, such a small business incubator.

**Objective 5: Support Workforce Development.** Work with community partners to support workforce and entrepreneurial training opportunities to meet the needs of North Plains' businesses.

**Policy 5.1:** Provide strategic contributions in staff or dollars to partners to support workforce development.

**Policy 5.2:** Support workforce development of independent contractors and entrepreneurs in North Plains.

**Action 5.1a:** Work with organizations involved with community education, such as the Library or the Parks and Recreation Department, to develop programs to assist independent contractors and entrepreneurs grow and expand in NorthPlains.

# Appendix A: Grocery Store Market Analysis

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This appendix presents the North Plains Grocery Store Market Analysis memorandum.

DATE: November 2016  
TO: Blake Boyles, City of North Plains  
FROM: Emily Picha and Beth Goodman  
SUBJECT: North Plains Grocery Store Market Analysis

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## Introduction and Purpose

ECONorthwest is working with the City of North Plains to develop an Economic Opportunities Analysis and revise the Economic Element of the City's Comprehensive Plan. As part of this work, the City asked ECONorthwest to provide an analysis of existing retail conditions for grocery stores and develop a strategy for attracting a grocery store in the future, given anticipated population growth within the next five years. This memorandum focuses on the following specific questions:

- Can the City of North Plains attract and support a grocery store? If so, what kind?
- How can the City of North Plains assist the private development community in attracting a grocery store or another concept that can support increased access to food?

## Key Findings

With current population and spending patterns in North Plains, we found that the City likely has sufficient demand to attract a small grocery store of up to 10,000 square feet, ideally as part of a larger retail center development with complementary retail outlets. Despite its relatively small size, North Plains could be an attractive location for a small grocery store since it is poised to see an addition of 946 housing units over the next three to five years.

At the same time, the City faces a number of challenges to grocery store investment, including a lack of suitable sites along main roads with good visibility. The City's role will be to lay the groundwork for future investment, including identifying suitable sites, conducting surveys of the community to identify unmet needs, and reaching out to site selectors and grocery stores with information on the City and population base. Additional challenges include the increasing costs of developing and operating grocery stores and competition among similarly sized communities in the Portland area for the same small set of willing partners.

Our research found four key factors that affect grocery store investment and the implications that these have for North Plains:

### Factor 1: Households and incomes

Grocery store site selectors look for concentrations of households at specific income levels that are not currently well-served by existing grocery stores.



**Implication:** North Plains has just over 1,200 households living within three miles of town. Growth in the next three to five years should bring this total to close to 2,200 households. Given its demographics and population size, North Plains is most likely to capture a small-scale grocery store of around 10,000 square feet. The presence of major discount stores and warehouse stores within five miles of North Plains means that existing chains are unlikely to locate a store in the area.

### Factor 2: Finding the right concept

There are several alternatives to a traditional grocery store concept, including the fresh format (Whole Foods, New Season's), small grocer (Green Zebra), and limited assortment grocer (Aldi, Grocery Outlet).

**Implication:** A North Plains grocery store is unlikely to capture all grocery spending for North Plains residents. Instead, its advantage will be in providing convenience products. Given the few restaurants in North Plains, the store could focus on providing prepared foods with a seating area.

### Factor 3: Suitable sites with good visibility and easy access

Grocery stores seek out sites that are easy to see from major arterials and have convenient access for customers.

**Implication:** North Plains should identify sites that can provide good access and visibility for a potential retail center that includes a grocery store. A retail center with an attractive array of offerings can supplement its local business with business from westbound travelers on U.S. 26.

### Factor 4: Future growth

Some fresh format and small-scale grocery stores target their grocery store investments in areas where the share of overall households, including the college-educated population, has increased.

**Implication:** Since 2015, 200 homes have been built and the City anticipates close to 950 additional homes in the next three to five years. Many of these homes will house college-educated householders who work in high-tech companies such as Intel and Gen-Tech in neighboring cities. These households will be attractive to grocery store investors.

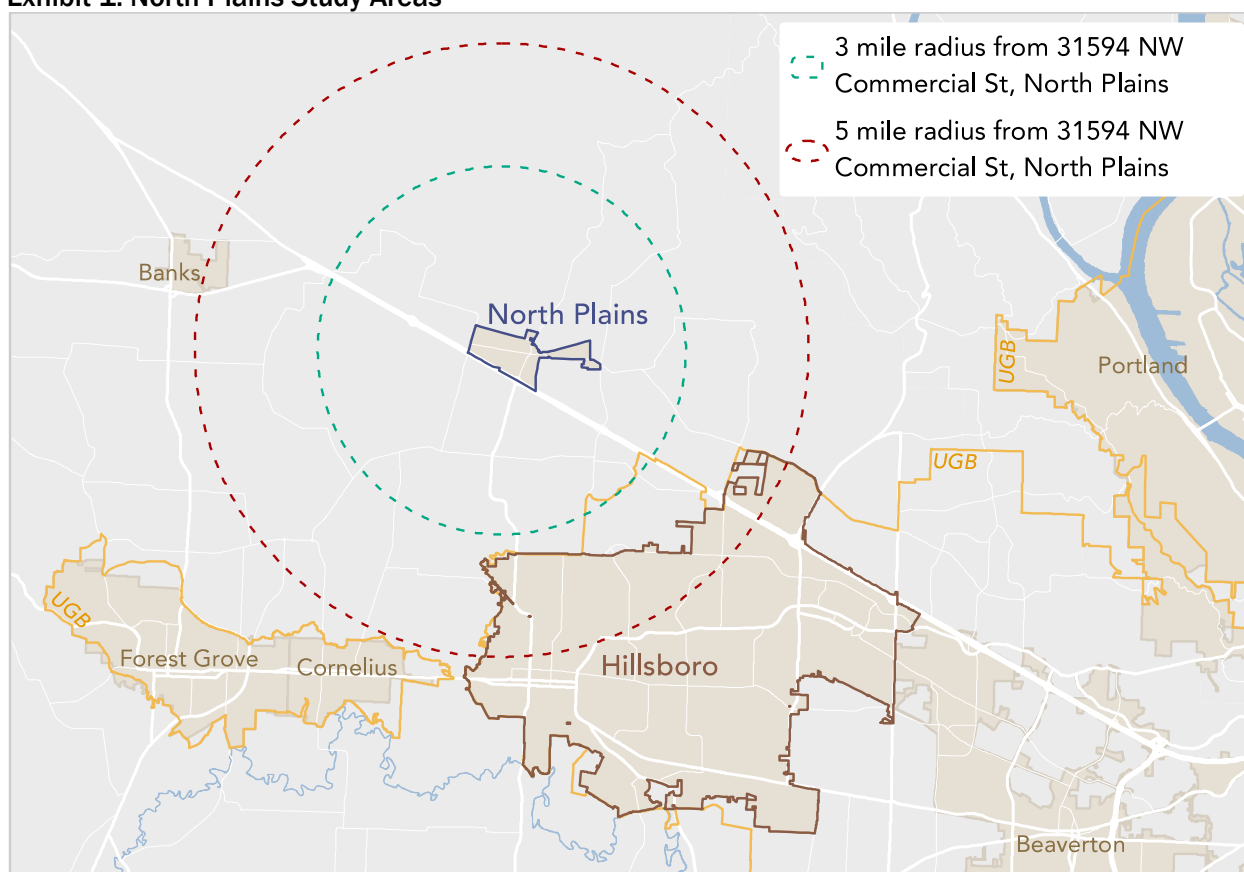
The memorandum has two parts:

- Grocery Store Market Analysis
- Recruitment Strategy

## Grocery Store Market Analysis

This section provides an overview of retail market conditions for grocery store development in North Plains by documenting where residents currently shop and quantifying the interaction between existing retail offerings and customer demand. Our analysis boundaries include the City of North Plains, the area within three miles of North Plains, the area within five miles of North Plains, and Washington County, as shown in Exhibit 1.

**Exhibit 1. North Plains Study Areas**



Source: ECONorthwest and ESRI

A more refined trade area for a grocery store would likely extend farther north than three miles, attracting a portion of overall grocery store spending from households living in rural areas north of the city.

## Demographics

Grocery store site selectors generally look at two variables when considering an area's demographics: 1) total population within a two to three-mile radius of a potential site, and 2) average or median household income. We discussed the analysis boundary that a site selector would use for North Plains with several real estate brokers, and each agreed that a three-mile radius allows for more of the unincorporated nearby population to be accounted for. In addition, brokers indicated that the primary decision criteria for grocery store site selection is local demand, but that pass-through traffic from Highway 26 could provide more customers with an ideal site situated near the highway.

Exhibit 2 shows that within three miles of North Plains, we estimate a total population of 3,405 people and 1,237 households. The median household income is \$70,819 within three miles of North Plains, while the average household income is \$84,000. The difference between median household income and average household income is important because each captures different information about the distribution of data. For example, within three miles of North Plains, there are block groups where the average household income is \$125,000. This number skews the overall area average, whereas the median household income captures the midpoint of area incomes. According to local brokers, most site selectors use median incomes.

**Exhibit 2. Key Demographic Indicators, 3-mile radius of North Plains, 2014**

	Block groups in 3- mile radius
Total population	3,405
Total households	1,237
Expected 3-to 5-year household growth <sup>64</sup>	946
Total expected households, 2020	2,183
Median HH income	\$70,819
Average HH income	\$84,208

Source: American Community Survey 2011-2014 data. Note: Research boundaries for this table were limited to three-mile radius of 31594 NW Commercial Street, North Plains. For block groups extending beyond this boundary, we allocated the total population of that block group based on the share of land within the three-mile radius.

## Retail Market Conditions

This section explores overall retail conditions near North Plains, which can provide broad context on how the local market fares relative to the County. For this analysis, we used three study areas: North Plains, the area within five miles of North Plains (which includes some of Northern Hillsboro) and Washington County. We added the five-mile study area to better capture the activity happening in North Hillsboro, where most North Plains residents shop. Overall, market conditions are slightly weaker within five miles of North Plains than Washington County as a whole, which has implications for the amount and type of new development that is likely to occur. As shown in Exhibit 3, there is around 180,000 square feet of retail space within five miles of North Plains. At \$13.85 per square foot, rents within five miles

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<sup>64</sup> City of North Plains' estimate of new households in North Plains based on: (1) connections to the City's water system during 2015-2016, (2) new building permits issued in 2016, and (3) preliminary plans for new housing locating on land annexing into the City in November 2016.

of North Plains are lower than Washington County (\$18.15). This means that retail space is likely to command lower rents, making it less feasible to construct new retail development.

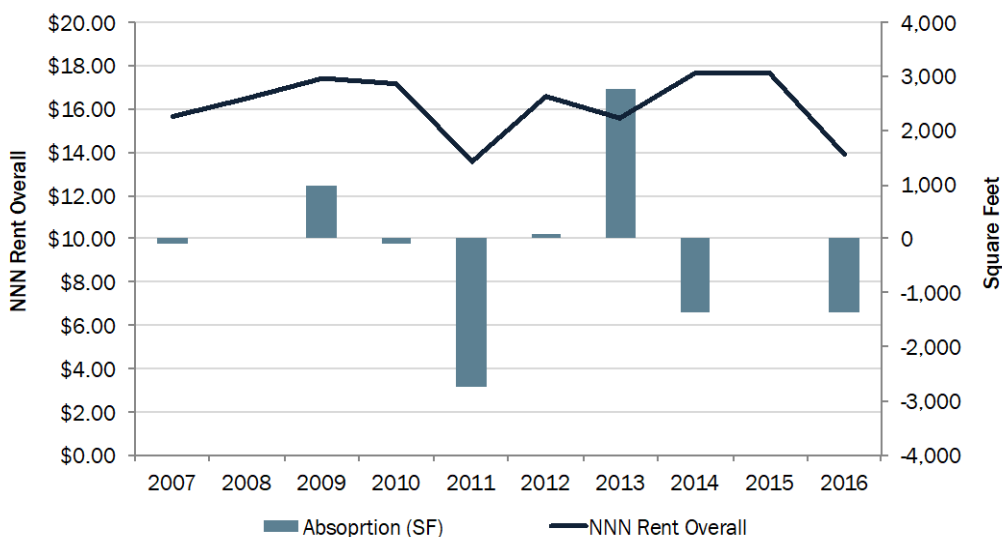
**Exhibit 3. Retail Indicators, 2<sup>nd</sup> Quarter, 2016**

	North Plains	Within 5 Miles	Washington County
Retail SF	52,655	179,752	30,932,532
Vacant SF Total	0	6,191	1,186,056
NNN Rent Overall (PSF)	-	\$13.85	\$18.15

Source: CoStar.

Exhibit 4 shows rents and absorption trends between 2007 and 2016 within five miles of north plains. The line on the graph shows rents, which have oscillated between \$18 per square foot to close to \$14 per square foot since 2015. Given the sudden decrease in rents from 2015, this could be due to the quality and type of spaces offered in 2016 rather than overall market trends. The graph also shows absorption as bars, which is the way commercial real estate investors gauge tenant demand. Total absorption is the total new square footage leased by tenants. The chart shows a recent trend of slightly negative absorption within five miles of North Plains since 2014. Overall, this means that the retail market is stable.

**Exhibit 4. Rent and Absorption Within 5 Miles of North Plains, 2007-2016**



Source: CoStar. Note: Rent is triple net. A triple net lease (Net-Net-Net or NNN) is a lease agreement on a property where the tenant or lessee agrees to pay all real estate taxes, building insurance, and maintenance (the three "Nets") on the property in addition to any normal fees that are expected under the agreement (rent and utilities).

Vacancy is the percentage of unoccupied suites in a commercial real estate property or market. It is another important indicator of overall market health, which can have implications for how new retail space is absorbed into the market and whether existing spaces are meeting the user demand. Exhibit 5 shows vacancies in retail markets near North Plains since 2007. Within five miles of the site, vacancies have been close to Washington County averages, after having higher vacancy levels from 2011 to 2014. This means that the area is not doing better or worse than Washington County.

**Exhibit 5. Vacancies in Retail Markets near North Plains, 2007-2016**



Source: CoStar

## Retail Opportunity Analysis

A retail opportunity analysis can provide some limited information about the types of new businesses and services the area could support by showing how much consumer spending happens outside of a specific geography. If local consumer demand outweighs retail supply, we call this an *opportunity gap*.

Exhibit 6 shows the opportunity gap between local consumer demand and local supply within three miles of North Plains. Overall, retailers have \$62.4 million in sales in North Plains, to residents, workers, and visitors.

North Plains has deficits in all retail categories, with the exception of gas stations, building stores, and non-store retailers. For example, consumers within three miles of North Plains buy about \$4.9 million in goods from grocery stores while grocery stores within three miles of North Plains sell only \$1.2 million in goods. **This means North Plains residents spend \$3.7 million on groceries outside of the three-mile study area.**<sup>65</sup>

**Exhibit 6. Retail Opportunities within a Three-mile Radius of North Plains, 2015**

Retail Stores	2016 Demand (Consumer Spending)	2016 Supply (Retail Sales)	Opportunity Gap/Surplus	North Plains
Total Retail Sales & Eating, Drinking Places	62.4 M	62.3 M	0.1 M	Undersupplied
Motor Vehicle & Parts Dealers-441	13.2 M	2.4 M	10.8 M	Undersupplied
Furniture & Home Furnishings Stores-442	1.2 M	0.2 M	1.1 M	Undersupplied
Electronics & Appliances Stores-443	1.1 M	0.0 M	1.1 M	Undersupplied
Building, Garden Equipment Stores -444	6.7 M	7.7 M	(1.0 M)	Oversupplied
Food & Beverage Stores-445	8.1 M	2.0 M	6.0 M	Undersupplied
Grocery Stores-4451	5.3 M	1.6 M	3.7 M	Undersupplied
Supermarkets, Grocery-44511	4.9 M	1.2 M	3.7 M	Undersupplied
Convenience Stores-44512	0.3 M	0.4 M	(0.1 M)	Oversupplied
Specialty Food Stores-4452	0.7 M	0.0 M	0.7 M	Undersupplied
Beer, Wine & Liquor Stores-4453	2.1 M	0.5 M	1.7 M	Undersupplied
Health & Personal Care Stores-446	3.3 M	0.7 M	2.6 M	Undersupplied
Gasoline Stations-447	4.4 M	29.6 M	(25.2 M)	Oversupplied
Clothing & Accessories Stores-448	2.8 M	1.5 M	1.3 M	Undersupplied
Sporting Goods, Hobby, Music Stores-451	1.1 M	0.1 M	1.0 M	Undersupplied
General Merchandise Stores-452	7.0 M	0.9 M	6.2 M	Undersupplied
Miscellaneous Store Retailers-453	1.7 M	1.0 M	0.7 M	Undersupplied
Non-Store Retailers-454	5.2 M	12.9 M	(7.7 M)	Oversupplied
Foodservice & Drinking Places-722	6.6 M	3.3 M	3.2 M	Undersupplied
Full-Service Restaurants-7221	3.0 M	1.9 M	1.1 M	Undersupplied
Limited-Service Eating Places-7222	2.6 M	0.0 M	2.6 M	Undersupplied
Special Foodservices-7223	0.7 M	0.2 M	0.6 M	Undersupplied
Drinking Places - Alcoholic Beverages-7224	0.3 M	1.3 M	(1.0 M)	Oversupplied

Source: Nielsen Claritas. Note: Research boundaries for this table were limited to three-mile radius of 31594 NW Commercial Street, North Plains.

<sup>65</sup> Within 10 miles of North Plains, there is a \$100 million opportunity gap.

## Potential Retail Demand

To estimate the amount of grocery store space that the City of North Plains could accommodate, we translated the retail opportunities derived from local consumer demand found in Exhibit 6 into square footage assumptions that could be accommodated in the area. We also provided ranges, assuming that 946 estimated new households in the next five years would have the same retail opportunity gap as currently estimated.

Exhibit 7 shows how the retail opportunity gap can be translated to a square foot estimate, given a set of assumptions on sales per square foot. **According to this methodology, the area within three miles of North Plains could theoretically absorb between 7,000 SF and 13,000 SF of grocery store space and 4,500 to 8,000 SF of limited-service eating places (e.g. fast food or quick service, fast-casual restaurants, and cafés) given the existing population.** However, some of this demand could likely be accommodated at existing or new stores/restaurants outside of North Plains.

**Exhibit 7. Retail Opportunities within Three Miles of North Plains, 2016**

Retail Stores	Opportunity Gap (\$)		Average Sales per Square Foot (CRE)	Square Feet	
	Existing Population	Existing + Future Population		Existing Population	Existing + Future Population
Supermarkets	3.7 M	6.5 M	\$507	7,291	12,866
Limited-Service Eating Places	2.6 M	4.6 M	\$582	4,517	7,972
Special Foodservices	0.6 M	1.0 M	\$582	955	1,684

Source: Nielsen Claritas, CRE

([http://irr.com/\\_FileLibrary/Office/P332/Retail%20Sales%20Set%20Rent%20Levels,%20CRE%20July%202012.pdf](http://irr.com/_FileLibrary/Office/P332/Retail%20Sales%20Set%20Rent%20Levels,%20CRE%20July%202012.pdf)), ECONorthwest

Exhibit 8 shows size ranges and characteristics for the main categories of grocery stores. North Plains would be most likely to attract a grocery store at a smaller scale, up to 10,000 square feet.

#### Exhibit 8. Grocery Store Categories

Retail Stores	Size Range (in SF)	Characteristics
Super Warehouse	120,000 – 150,000 SF	A high-volume hybrid of a large Traditional Supermarket and a Warehouse store. Super Warehouse stores typically offer a full range of service departments, quality perishables, and reduced prices, e.g., Cub Foods, Food 4 Less, and Smart & Final.
Traditional Supermarket	35,000-60,000 SF	Stores offering a full line of groceries, meat, and produce with at least \$2 million in annual sales and up to 15% of their sales in GM/HBC. These stores typically carry anywhere from 15,000 to 60,000 SKUs (depending on the size of the store), and may offer a service deli, a service bakery, and/or a pharmacy.
Fresh Format	25,000-40,000 SF	Different from traditional supermarkets and traditional natural food stores, fresh stores emphasize perishables and offer center-store assortments that differ from those of traditional retailers—especially in the areas of ethnic, natural, and organic, e.g., Whole Foods, The Fresh Market, and some independents.
Limited-Assortment Store	20,000-30,000 SF	A low-priced grocery store that offers a limited assortment of center-store and perishable items (fewer than 2,000), e.g., Aldi, Trader Joe's, and Save-A-Lot.
Small Grocery	5,000-20,000 SF	The small corner grocery store that carries a limited selection of staples and other convenience goods. These stores generate approximately \$1 million in business annually.

Source: The Future of Food Retailing, 2014, Willard Bishop. <http://www.fmi.org/research-resources/supermarket-facts#sthash.DOMYZjwy.dpuf>; [http://www.edsuite.com/proposals/proposals\\_169/88\\_1\\_intel\\_-\\_grocery\\_stores.pdf](http://www.edsuite.com/proposals/proposals_169/88_1_intel_-_grocery_stores.pdf); ECONorthwest

A grocery store in North Plains is likely to anchor a larger retail center that features other complementary stores like banks, cafes, and personal services (hair salon, drycleaner, etc.). The real estate industry classifies shopping centers into typologies, based on the number of households, trade area, and where they are located within a community. Exhibit 9 shows three retail center typologies with the average size of the complex, households needed, location considerations, and trade area. Given the rural nature of the area surrounding North Plains, we can consider a slightly larger trade area of three miles.

#### Exhibit 9. Retail Center Typologies, February 2015

	Stores	Average Square Feet	Households Needed	Trade Area	Location Considerations
Convenience Centers	Dry cleaner, bakery, bank, coffee shop, deli, food market, laundry center, pharmacy	10,000-30,000	2,000	1.5-2 miles	On major road between two neighborhoods
Neighborhood Center	Full size anchor supermarket (45-60K SF) with 10-15 smaller personal service and food businesses	50,000-70,000	6,000-8,000	1-2 miles	Homebound side of two major crossroads
Community Shopping Center	Multiple large 10,000-20,000 SF anchor tenants anchored by a 100,000-200,000 SF home improvement or supercenter, etc.	250,000-350,000	50,000+	4-6 miles	Major road intersections, close to regional mall

Source: Gibbs, Robert. Principles of Urban Retail Planning and Development. 2012.

North Plains would be most likely to attract a convenience center, given that the area within

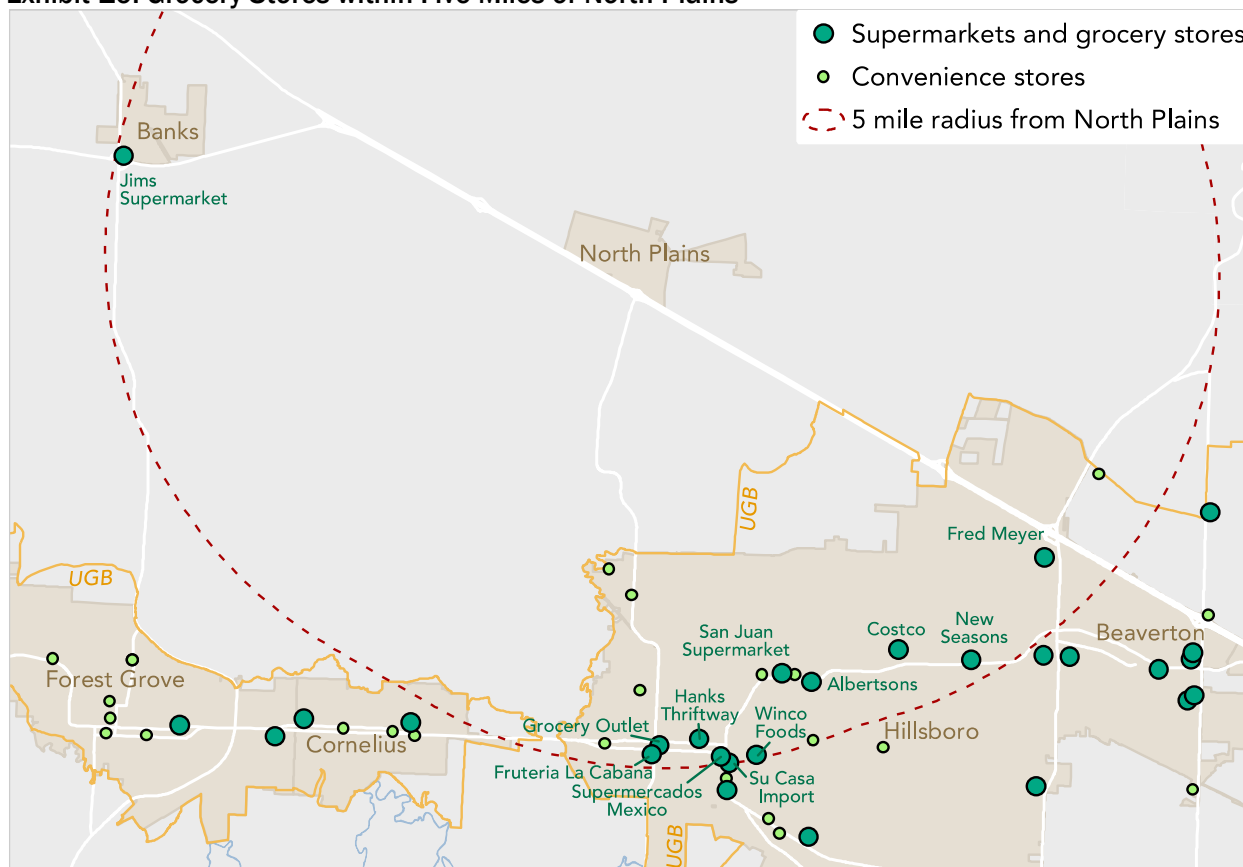


three miles will contain around 2,000 households within the next three to five years. Convenience centers cater to the daily needs of surrounding neighborhoods and often include a small specialty food market and other tenants that include restaurants, personal services, and professional services. These facilities do not always have prices that compete with larger grocery stores, but instead offer convenience and quality goods. Careful building placement is critical to allow good visibility. These are commonly placed at the common entrance between two neighborhoods, preferably on the homebound side of the roadway. With available land and easy access and visibility from U.S. 26, it is possible that the City could attract a neighborhood center with a larger grocery store and a wider variety of retail offerings.

## Existing Grocery Store Supply

There is a large concentration of grocery store options throughout Hillsboro, about five miles from North Plains. Exhibit 10 shows grocery stores close to North Plains. North Plains residents can reach the Fred Meyer on NW Imbrie Drive easily by car on U.S. 26, as it is located right off of the exit. Other choices include New Seasons Market and Costco.

**Exhibit 10. Grocery Stores within Five Miles of North Plains**



Source: Google. Note: Hank's Thriftway closed in 2015, but it still shows up in standard datasets. We left it on the map because it is likely to re-emerge as a grocery store in the future.

Exhibit 11 shows a breakdown of total square feet of grocery stores within five miles of North Plains. Overall there are close to 650,000 square feet of space. In total, there are twelve stores. The area has Costco (a warehouse store), Fred Meyer (a department store), New Season's (a health food store), several discount stores (Winco and Grocery Outlet), and independent ethnic markets. Hank's Supermarket closed in 2015. Most of these grocery stores are traditional, medium- to large-format stores.

**Exhibit 11. Grocery Stores and Supermarkets within Five Miles of North Plains**

Name	Address	City	Building SF	Source
Costco	1255 48th Ave	Hillsboro	205,912	Portland Maps
Fred Meyer	22075 NW Imbrie Dr	Hillsboro	135,036	Estimate, Google My Maps
WinCo Foods	1550 SW Oak St	Hillsboro	74,488	Estimate, Google My Maps
Albertsons	888 NE 25th Ave	Hillsboro	65,210	Costar
Hank's Thriftway - CLOSED	661 SE Baseline St	Hillsboro	38,986	Estimate, Google My Maps
Supermercados Mexico	970 SE Oak St	Hillsboro	37,740	Portland Maps
New Seasons Market	1453 NE 61st Ave	Hillsboro	29,547	Portland Maps
Grocery Outlet	354 S 1st Ave	Hillsboro	25,962	Estimate, Google My Maps
Jim's Supermarket	12350 NW Main St, Ste 100	Banks	18,590	Costar; IRR
San Juan Supermarket	1991 NE Cornell Rd, Ste 170	Hillsboro	12,624	Portland Maps
Su Casa Import	1050 SE Walnut St	Hillsboro	11,238	Estimate, Google My Maps
Fruteria La Cabana	451 S 1st Ave	Hillsboro	9,115	Portland Maps

Source: Google, Portland Maps, CoStar.

A future grocery store in North Plains will need to find its niche among the many grocery stores in Hillsboro where North Plains residents shop. The array of grocery store options five miles from North Plains would narrow the field of potential operators, as each operator would not want to take business from its own store. The most likely grocery concept would be to capitalize on the convenience of a North Plains location by offering convenience goods and prepared foods that customers buy at a premium because they are close to home.

## Site Selection Considerations for a Grocery Store in North Plains

This section provides information on how grocery stores make investment decisions and decide which sites are suitable for further exploration. The City can use this information to inform its own investments in infrastructure and incentives as it tries to attract a grocery store (see the Recruitment Strategy section).

The International Council of Shopping Centers (ICSC) conducted interviews with retail site selectors to determine the general process for determining potential new locations.<sup>66</sup> ICSC found that retailers take the following steps:

1. Determine desired number of stores to open over a certain time period, and in specific regions.
2. Gather demographic/business data to determine where market demand can support new investment.
3. Do groundwork at specific sites to assess land availability in the locations identified in the second step. For those sites: assess site visibility, access, and customer base.
4. Site selectors then use a proprietary model that uses performance data from existing stores to estimate the potential performance of a store at the selected location(s).

This market analysis relates to Steps 1 and 2, but from an overall perspective related to the demand for all grocery stores, rather than the perspective of one specific grocery store chain. Each grocery store will have its own proprietary model for how it will choose to grow over time and which locations are most likely to support a new investment.

The same ICSC report has identified four factors that generally determine site selection decisions for retailers:<sup>67</sup>

- **Strategic fit within the market.** Site selectors look at the array of grocery store options in a given area and how their concept would fit into the market.
- **Economic Conditions.** For grocery stores, the top indicators include median household income and the total number of households and/or people within a trade area. Specialized retailers may rely on additional indicators such as number of college graduates, ethnic composition, housing prices, future population changes etc.
- **Competition:** What retailers are nearby, and how are they performing? Would this investment have an impact on other stores?
- **Cost of operating stores**

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<sup>66</sup> Inside Site Selection: Retailers' search for strategic business locations.  
[http://douglasathas.net/Sub/icsc\\_site\\_selection.pdf](http://douglasathas.net/Sub/icsc_site_selection.pdf)

<sup>67</sup> ibid

It is impossible to know the specific factors that drive the site selection decision for any one grocery store operator. However, the City can use the four factors described above as it moves from broad analysis to recruitment strategy.

## Recruitment Strategy for North Plains

Given the challenging environment for grocery store investment, potential partners will be looking for up-to-date information on available properties as well as possible incentives.

### Identify Potential Sites

Community advocates and municipal officials are well positioned to identify and assemble parcels that are appropriate for grocery store development. Each retailer and developer will have their own site requirements depending on the type of store and whether other retail will be included in the project. While we do not expect that North Plains would attract a medium-size, traditional grocery store, there may be some models that combine different uses that would require a 30,000 SF building. Exhibit 12 shows potential site considerations for a small (10,000 SF) and medium format store (30,000 SF). This table only considers a stand-alone grocery store.

**Exhibit 12. Small vs. Medium Format Site Considerations**

	Smallest Format	Medium Format
Building size	10,000 SF	30,000 SF
Parking required	50,000 SF (50 spaces at a 5 spaces per 1,000 SF)	150,000 SF (150 spaces at 5 spaces per 1,000 SF)
Off-street unloading required	500 SF (two 12x20 foot loading spaces)	1,200 SF (five 12x20 foot loading spaces)
Necessary site size	At least 60,500 SF / 1.4 acres	At least 192,000 SF / 4.4 acres
Access needs	<ul style="list-style-type: none"> <li>Access roads (ideally a major arterial) to serve both customers and delivery trucks.</li> <li>Sufficient space for truck loading and unloading that does not interfere with customer parking is also needed.</li> </ul>	

Note: We used North Plains zoning code guidelines for parking and off-street unloading requirements. North Plains zoning code requires one parking space per 200 SF of gross retail area.

[http://cityofnp.org/files/8313/8143/9281/Chapter\\_16.155\\_Off\\_Street\\_Parking\\_Loading.pdf](http://cityofnp.org/files/8313/8143/9281/Chapter_16.155_Off_Street_Parking_Loading.pdf). We assume 300 SF per parking space.

Other key decision making factors include:

- **Frontage:** A site selector will be interested in amount of frontage available. A typical rule of thumb is one foot of frontage for every three feet of depth. This means a 50 foot wide storefront would have a maximum of 150 feet of depth.<sup>68</sup>
- **Accessibility:** Grocery stores are usually part of a series of destinations in one trip, which means that a site selector will be most interested in a convenient location that minimizes the frequency of people driving out of their way to visit the store. Site selectors for grocery stores prefer locations on the “going home” side of the street (the side which allows the most residents to make a quick right turn into the parking lot).<sup>69</sup> The best location in North Plains to attract residents would be the east side of Glencoe Road, north of U.S. 26.
- **Convenience:** Site selectors emphasize the importance of easy entry and exit from a site. The convenience of accessing a site is influenced by the number and placement of curb cuts on the site. In addition, many site selectors prefer sites located on the far side of traffic signals, which allows for convenient turning and avoids potential customers getting stuck in long lines of backed-up cars at the intersection.
- **Visibility:** Though these requirements may vary by operator, a medium format store operator is more likely to be sensitive to traffic counts than a small-format operator. **Exhibit 13** and **Exhibit 14** show traffic counts for Glencoe Road north and south of U.S. 26 in March 2016. Traffic Count Station 716 north of U.S. 26 has a daily traffic volume of around 7,500 cars in both directions, while Traffic Count Station 614 south of U.S. 26 has a daily traffic volume close to 16,000 cars. A North Plains grocery store could also market to highway travelers headed to the coast with a visible site and good signage alerting travelers of store offerings. Oregon Department of Transportation data for 2015 show that U.S. 26 has an average daily traffic count of 23,100<sup>70</sup> cars just west of North Plains in both directions.

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3. <sup>68</sup> Raeon, Frank. *The A B C's of Site Selection: How to Pick Winners and Avoid Losers*. Xlibris. 2015.

4. <sup>69</sup> Raeon, Frank. *The ABC's of Site Selection: How to Pick Winners and Avoid Losers*. Xlibris. 2015.

<sup>70</sup> ODOT 2015 Traffic Volumes on State Highways, page 79.

[http://www.oregon.gov/ODOT/TD/TDATA/tsm/docs/TVT\\_2015.pdf](http://www.oregon.gov/ODOT/TD/TDATA/tsm/docs/TVT_2015.pdf). Data are for the North Plains Automatic Vehicle Classifier, Sta. 34-007, 0.93 mile northwest of North Plains (Glencoe Road) Interchange

**Exhibit 13. Glencoe Road Traffic Counts by Station, 2016**

Station	Intersection	Date	North	South	Total
716	Glencoe Rd. and Pacific St. (north of U.S. 26, within North Plains)	March 2016	3,601	3,889	7,490
614	Glencoe Rd. and Beach Rd. (south of U.S. 26, outside North Plains)	March 2016	8,050	7,951	16,001

Source: Washington County Traffic Counts.  
<http://www.co.washington.or.us/LUT/Divisions/TrafficEngineering/Programs/upload/2016TrafficCounts.pdf>

**Exhibit 14. Traffic Count Station Locations**



Source: Washington County Traffic Counts.  
<http://www.co.washington.or.us/LUT/Divisions/TrafficEngineering/Programs/upload/County-Count-Location-Map.pdf>

## Identify Incentives

One of the most commonly cited barriers to siting a grocery store in an underserved area is higher development and operating costs. Exhibit 15 shows a set of possible City incentives associated with each phase of the grocery store development process. The City could take actions to provide assistance to the grocery store operator at each step in the process.

**Exhibit 15. Activities by Development Phase**

	5. Site Acquisition	6. Pre-development	7. Construction	8. Occupancy
<b>Key Activities of the Grocery Store</b>	<ul style="list-style-type: none"><li>• Assess project feasibility and constraints</li><li>• Identify appropriate parcel</li><li>• Achieve site control</li></ul>	<ul style="list-style-type: none"><li>• Solicit community input/support</li><li>• Create dev't concept</li><li>• Prepare site layout/design</li><li>• Secure financing</li><li>• Acquire property</li><li>• Obtain permits</li></ul>	<ul style="list-style-type: none"><li>• Contract for construction</li><li>• Build</li></ul>	<ul style="list-style-type: none"><li>• Hire employees</li><li>• Stock store</li><li>• Grand opening</li><li>• Property management/operations</li></ul>
<b>Potential North Plains Support Role</b>	<ul style="list-style-type: none"><li>• Work with land owners to identify/assemble opportunity parcels</li></ul>	<ul style="list-style-type: none"><li>• Release community survey on key desires/features of a grocery store.</li><li>• Help with financing</li></ul>	<ul style="list-style-type: none"><li>• Invest in supportive infrastructure (signals, streetscapes, etc.)</li></ul>	

Source: Adapted from Policylink – Grocery Store Attraction Strategies.  
[http://www.policylink.org/sites/default/files/groceryattraction\\_final.pdf](http://www.policylink.org/sites/default/files/groceryattraction_final.pdf)

## Build Relationships

As part of this project, ECONorthwest interviewed a broker who regularly works with a variety of grocery store operators. Given the retail opportunity gap in North Plains, we suggest the City consider reaching out to brokers and site selectors for the following types of non-traditional grocery store options:

- **Local, independently owned.** One prominent example is Green Zebra, which specializes in stores between 5,000 and 7,000 square feet. The stores have a large prepared foods section, including a butcher and deli, and a produce section. Green Zebra's mission is to increase access to healthy foods.<sup>71</sup>
- **Franchise.** Some grocery stores are operated under a franchise name, but owned locally. Examples could include IGA, Thriftway, and Red Apple Markets. For example, the Thriftway grocery stores in Banks, Oregon and Welches, Oregon are operated by families that specialize in working in rural areas. In exchange for paying the franchise fee, the operator gets purchasing power and promotional assistance.

<sup>71</sup> "Eclectic Green Zebra Grocery defies black-and-white definition." CSP Daily News. April 2014.  
[http://www.cspdailynews.com/sites/default/files/magazine-files/IndieSpeaking\\_CSP\\_0414.pdf](http://www.cspdailynews.com/sites/default/files/magazine-files/IndieSpeaking_CSP_0414.pdf)



- **Limited Selection.** Stores like Whole Foods 365 or Grocery Outlet are expanding their footprint in the Portland region with small format stores, mostly in urban areas.

## Next Steps

The City can take the following steps now:

- **Identify funding tools.** The City should identify any potential incentives that might be available to attract a grocery store. These could include land write-downs, pre-development study grants, and a Business Improvement District that would help to market and maintain a core business district. A list of incentives that other communities have used to attract grocery stores is included in Attachment A.
- **Build relationships.** The City should reach out to site selectors with marketing collateral that summarizes market research, available incentives, and potential development sites for use in conversations with potential developers.
- **Do research.** The City can do more research on how sales for existing grocery retailers are doing. In addition, the City can conduct a survey of local residents to identify unmet needs and provide critical market data to potential development partners.

# Attachment A: Incentives Toolkit

All information sourced from: “Grocery Store Attraction Strategies Resource Guide”, PolicyLink and Bay Area Local Initiatives Support Corporation, 2008.

[http://www.policylink.org/sites/default/files/groceryattraction\\_final.pdf](http://www.policylink.org/sites/default/files/groceryattraction_final.pdf)

## Development Incentives

- **Streamlined coordination of planning process.** Municipalities can fast-track the approvals and permitting process for grocery stores that meet community expectations. Additionally, if environmental review is needed, offers to expedite this process could be considered as a possible incentive. Some localities appoint a staff member to help the developer and retailer through the planning process.
- **Flexibility with zoning and development regulations.** As communities work to attract new development, it can be useful to review development regulations for selected sites and make any necessary adjustments so that a developer could easily build a new store without special reviews or permitting. Some examples of specific regulatory adjustments to consider include:
  - Reduce setback so that lots can accommodate traditional supermarket footprints
  - Assist with zoning for truck-loading
  - Allow flexible parking requirements
  - Adjust height restrictions to facilitate mixed-use development
  - Provide relief from mandates such as reducing or waiving linkage fees or affordable housing requirements
- **Fee waivers.** Permitting and impact fees for a large commercial development can often be substantial; a municipality may offer to waive those fees to encourage desirable development.
- **Discounted land.** Some municipalities have supported grocery store development by assembling developable parcels and then making this land available to developers of grocery retail for a discounted price for either sale or lease.
- **Site preparation assistance.** Additionally, if environmental review and/or remediation is necessary prior to developing a site, local government may offer to clean up the site, or provide grants to defray the cost of the developer undertaking cleanup.
- **Local tax credits.** Local governments may also offer tax benefits such as property tax abatement.
- **Coordinate state and federal tax credits.** In addition to local tax benefits there are state and federal incentives available in certain designated areas. It can be an added incentive if a local government representative offers to assist developers and/or grocery retailers in accessing these credits or financing sources that benefit from these credits.

- **Public parking facilities.** Communities may offer to build or share public parking lots with a grocery retailer who may not have space for all the necessary parking on a specific site.
- **Invest in transportation infrastructure.** Public investment can improve access to the site, including streets, transit, and sidewalks.

## Public Financing Sources

Local governments often compile and advertise financing sources that may be available to support new grocery development. Some sources that have been successfully used to attract new grocery stores include: Community Development Block Grant funds, Section 108 loans, bond financing, and tax increment financing via redevelopment agencies.

- **Community Development Block Grants (CDBG).** A federal program administered by the U.S. Department of Housing and Urban Development (HUD) that provides funds to state and local agencies. These agencies then identify local priorities and invest the funds accordingly. CDBG funds can be invested in a project as an outright grant or in the form of a loan. Some CDBG money may be available to support grocery store development, but allocations from this source are very competitive. More information about CDBG: [www.hud.gov/offices/cpd/communitydevelopment/programs/entitlement](http://www.hud.gov/offices/cpd/communitydevelopment/programs/entitlement)
- **Section 108 Loan Program** is a federal HUD program that helps local governments finance community development projects. Local government can make a very low interest loan to a project developer that is guaranteed by the federal government. In the event that the loan is not repaid, HUD will recapture any losses from the local government's annual allocation of CDBG funds. <https://www.hudexchange.info/programs/section-108/>
- **Tax increment financing (TIF)** is often used to finance community improvement projects and may be available to support development of a new grocery store.
- **Office of Community Services,** a program of the U.S. Department of Health and Human Services, operates several grant and technical assistance programs that support community economic development projects. Their Urban and Rural Community Economic Development Program offers grants of up to \$700,000 for business development or commercial real estate projects that likely result in the creation of new jobs for low-income people. <http://www.acf.hhs.gov/office-of-community-services>

## Tax Credits

- **New Markets Tax Credits (NMTC)** provide a federal tax benefit to private investors who invest in commercial ventures in qualified low-income areas. Eligible projects include commercial, industrial, or mixed-use real estate developments as well as manufacturing and service businesses. The Department of the Treasury allocates the tax credits to Community Development Entities (CDEs) through a competitive process.

CDEs then raise money for a fund from private investors and use the money to finance qualifying projects. Investors claim tax credits, equal to 39 percent of the total equity investment, over a seven-year period. The value of the tax benefit makes up for a lower rate of return from the project relative to the level of risk, effectively generating an overall return that is comparable to alternative investments. The complex structure and costs of putting together a NMTC favor very large projects. The tax credits can be invested directly in a project, or by using a leveraged structure to provide more capital to the project and more benefit to private investors. [www.cdfifund.gov](http://www.cdfifund.gov) *The City of North Plains is not eligible for New Market Tax Credits.*

## Private Financing Sources

- **Private Banks.** Generally interested in lending capital for development projects that can demonstrate the ability to earn enough revenue to comfortably make monthly loan payments. Additionally, all private banks are required by a federal law, the Community Reinvestment Act (CRA), to invest in the communities they serve, including moderate- and low-income neighborhoods within their service areas. The government evaluates each institution's performance in this effort periodically and rewards them for increasing their activities in economically distressed communities. Every major bank has a CRA officer to whom inquiries about the availability of CRA funds can be directed. In addition, community development banks are private, for-profit banks chartered specifically for the purpose of financing the revitalization of distressed or underserved communities. Link: [www.communitydevelopmentbanks.org](http://www.communitydevelopmentbanks.org)
- **Community development financial institutions (CDFIs).** Socially motivated lenders that exist to provide financing for projects with clear social benefits that would find it difficult to access traditional financing. Most CDFIs offer lower interest rates and more flexible loan terms than traditional banks. CDFIs are frequently willing to provide loans that are "junior" to a traditional bank loan, meaning that in the event of financial problems, the CDFI is repaid only after the bank is paid off in full. There are a number of national nonprofit CDFIs that provide financing and technical assistance to organizations working to improve their communities. The Local Initiatives Support Corporation ([www.lisc.org](http://www.lisc.org)) is the nation's largest nonprofit CDFI. Other national CDFIs include the Enterprise Foundation (<http://www.enterprisefoundation.net/>), The Low Income Investment Fund (<http://www.liifund.org/>), and the Nonprofit Finance Fund ([www.NFF.org](http://www.NFF.org).) In addition, Community Loan Funds are generally local nonprofits that seek funds from socially motivated investors and lend the money to nonprofit sponsored projects in their local community. A list of local Community Loan Funds: [www.communitycapital.org](http://www.communitycapital.org)
- **Charitable foundations** may also be willing to provide some financing in the form of a grant or a loan for a smaller portion of the project. For the most part, foundations don't solicit funding proposals for commercial real estate projects. Instead, a foundation may choose to provide funding for a project because of a long-standing relationship with the project sponsor (or sometimes a nonprofit tenant) and recognition of the impact that the project is likely to have on an issue that is important to the foundation. Foundations can

provide outright capital grants to help pay development costs, grants for predevelopment expenses, or help pay for staffing or consultants to coordinate project development. Some foundations offer Program Related Investments (PRIs), which are generally very low-interest loans for projects that further the foundation's program mission. For databases of foundations see: The Grantsmanship Center: [www.tgci.com](http://www.tgci.com), The Foundation Center: [www.fdncenter.org](http://www.fdncenter.org)

## Operating Incentives

- **Coordinated job training and recruitment.** Attracting and retaining qualified employees is a challenge for grocery operators. Local governments and community organizations can provide funding and/or coordination of employee training and recruitment. This incentive could also be tied to a potential community benefit agreement to hire local residents for jobs with fair wages and benefits.
- **Streamlined occupancy permit process.** Operators want to know that they will be able to open the store according to their timeline, which can be stalled by occupancy permit issues. Local governments can streamline this process and designate a representative to shepherd the approvals process.
- **Reduced public utilities and/or city services fees.** Providing discounted rates for energy, trash, recycling, and/or water and sewer charges may help entice a grocery operator to locate in an underserved community.
- **Designated Business Improvement District (BID) or Community Benefits District (CBD).** A potential supermarket operator may be interested in knowing that a BID or CBD is operating on the commercial corridor. (CBDs and BIDs are organized by existing local business owners who commit to support maintenance and beautification, safety programs, promotional activities, and small-scale capital improvements through a nominal assessment.) The presence of a BID might help convince the supermarket owner that the community is committed to providing a safe and clean shopping environment in which to do business. Local governments and community advocates can support the creation of a CBD/BID and even potentially offer some initial funding. Most often a CBD/BID is created by petitioning the city, which sets the money raised aside and tracks how much is available for improvements.
- **U.S. Small Business Administration (SBA)** operates a number of programs designed to facilitate financing and provide technical assistance for small businesses. SBA provides loan guarantees that enable eligible businesses to borrow from local commercial banks on favorable terms. Communities can promote these programs and provide technical assistance to small business owners on how to use these programs to enhance or expand their grocery business. <http://www.sba.gov>
- **Work Opportunity Tax Credit.** This federal tax credit is available to employers who hire employees who were previous welfare recipients. This may provide a substantial benefit to some supermarket employers depending on the location of the new store. <https://www.doleta.gov/business/incentives/opptax/>

- **Marketing and promotions assistance:** The community can offer to assist the grocery operator with initial marketing and promotions of the store including helping to get positive media coverage of the store, handing out flyers, or co-sponsoring promotional events.

## Other Sources

Healthy Food Financing Handbook:

[http://thefoodtrust.org/uploads/media\\_items/hffhandbookfinal.original.pdf](http://thefoodtrust.org/uploads/media_items/hffhandbookfinal.original.pdf)