



Oregon
Theodore R. Kubongoski, Governor

Department of Land Conservation and Development
635 Capitol Street, Suite 150
Salem, OR 97301-2540
(503) 373-0050
Fax (503) 378-5518
www.lcd.state.or.us



NOTICE OF ADOPTED AMENDMENT

3/25/2010

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: City of Lebanon Plan Amendment
DLCD File Number 003-09

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A Copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Tuesday, April 06, 2010

This amendment was submitted to DLCD for review prior to adoption pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

*NOTE: The Acknowledgment or Appeal Deadline is based upon the date the decision was mailed by local government. A decision may have been mailed to you on a different date than it was mailed to DLCD. As a result, your appeal deadline may be earlier than the above date specified. NO LUBA Notification to the jurisdiction of an appeal by the deadline, this Plan Amendment is acknowledged.

Cc: Walt Wendolowski, City of Lebanon
Gloria Gardiner, DLCD Urban Planning Specialist

<paa> YA



FORM 2

DLCD

Notice of Adoption

In person electronic mailed

DATE
STAMP

DEPT OF

MAR 18 2010

LAND CONSERVATION
AND DEVELOPMENT

This Form 2 must be mailed to DLCD within 5-Working Days after the Final Ordinance is signed by the public Official Designated by the jurisdiction and all other requirements of ORS 197.615 and OAR 660-018-000

Jurisdiction: City of Lebanon

Local file number: 09-10-52

Date of Adoption: March 10, 2010

Date Mailed: March 16, 2010

Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? Yes No Date:

Comprehensive Plan Text Amendment

Comprehensive Plan Map Amendment

Land Use Regulation Amendment

Zoning Map Amendment

New Land Use Regulation

Other:

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached".
 The City amended Chapter 5: Population and Economy, of the Lebanon Comprehensive Plan to incorporate the "Lebanon Economic Opportunities Analysis (2007)" document as an Appendix. There are no corresponding changes or revisions to the applicable Plan policies.

Does the Adoption differ from proposal? Please select one

No.

Plan Map Changed from:

to:

Zone Map Changed from:

to:

Location:

Acres Involved:

Specify Density: Previous:

New:

Applicable statewide planning goals:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Was an Exception Adopted? YES NO

Did DLCD receive a Notice of Proposed Amendment...

45-days prior to first evidentiary hearing?

Yes No

If no, do the statewide planning goals apply?

Yes No

If no, did Emergency Circumstances require immediate adoption?

Yes No

DLCD file No. 003-09 (17852) [16059]

Please list all affected State or Federal Agencies, Local Governments or Special Districts:
Oregon Business Development Department

Local Contact: Walt Wendolowski, AICP	Phone: (503) 258-4252 Extension:
Address: 853 Main Street	Fax Number: 541-258-4955
City: Lebanon Zip: 97355	E-mail Address: wwendolowski@ci.lebanon.or.us

ADOPTION SUBMITTAL REQUIREMENTS

This Form 2 must be received by DLCD no later than 5 days after the ordinance has been signed by the public official designated by the jurisdiction to sign the approved ordinance(s) per ORS 197.615 and OAR Chapter 660, Division 18

1. This Form 2 must be submitted by local jurisdictions only (not by applicant).
2. When submitting, please print this Form 2 on light green paper if available.
3. Send this Form 2 and One (1) Complete Paper Copy and One (1) Electronic Digital CD (documents and maps) of the Adopted Amendment to the address in number 6:
4. **Electronic Submittals: Form 2 – Notice of Adoption will not be accepted via email or any electronic or digital format at this time.**
5. The Adopted Materials must include the final decision signed by the official designated by the jurisdiction. The Final Decision must include approved signed ordinance(s), finding(s), exhibit(s), and any map(s).
6. **DLCD Notice of Adoption must be submitted in One (1) Complete Paper Copy and One (1) Electronic Digital CD via United States Postal Service, Common Carrier or Hand Carried to the DLCD Salem Office and stamped with the incoming date stamp.** (for submittal instructions, also see # 5)) MAIL the PAPER COPY and CD of the Adopted Amendment to:

**ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540**

7. Submittal of this Notice of Adoption must include the signed ordinance(s), finding(s), exhibit(s) and any other supplementary information (see [ORS 197.615](#)).
8. Deadline to appeals to LUBA is calculated **twenty-one (21) days** from the receipt (postmark date) of adoption (see [ORS 197.830 to 197.845](#)).
9. In addition to sending the Form 2 - Notice of Adoption to DLCD, please notify persons who participated in the local hearing and requested notice of the final decision at the same time the adoption packet is mailed to DLCD (see [ORS 197.615](#)).
10. **Need More Copies?** You can now access these forms online at <http://www.lcd.state.or.us/>. You may also call the DLCD Office at (503) 373-0050; or Fax your request to: (503) 378-5518.

**A BILL FOR AN ORDINANCE AMENDING
CITY OF LEBANON COMPREHENSIVE PLAN
CHAPTER 5: POPULATION AND ECONOMY**

) **ORDINANCE BILL NO. 8**
) **For 2010**
) **ORDINANCE NO. 2791**

WHEREAS, the Planning Commission for the City of Lebanon conducted a hearing on Planning File No. 09-09-52 and made findings recommending certain amendments to the Comprehensive Plan of the City of Lebanon on January 20, 2010; and

WHEREAS, the City Council, pursuant to the provisions of the Lebanon Municipal Code, after appropriate notice given, has conducted a hearing to take testimony, hear arguments and to consider all of the evidence concerning such proposed Comprehensive Plan amendments, such hearing being conducted on March 10, 2010; and

WHEREAS, the City Council has considered all relevant evidence and deliberated.

NOW, THEREFORE, the City of Lebanon ordains as follows:

Section 1. In addition to the findings referred to above, the City Council does hereby adopt and find those matters contained in Exhibit "B" which is incorporated herein by this reference as if fully set forth at this point.

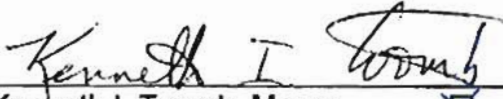
Section 2. Based upon the findings adopted herein, the Lebanon Comprehensive Plan, Chapter 5: Population and Economy is hereby amended as specified in Exhibit "A", which is incorporated herein by this reference as if fully set forth at this point.

Section 3. Said Exhibit "A" shall be attached to, and become a part of, the Lebanon Comprehensive Plan, Chapter 5: Population and Economy upon entry of this order.

Section 4. Exhibit "A" and Exhibit "B" shall be forwarded to the Oregon Land Conservation and Development Commission and any other entities as required by law for their review.

Passed by the Lebanon City Council by a vote of 6 in favor and 0 against and approved by the Mayor on this 10th day of March, 2010.

CITY COUNCIL OF LEBANON, OREGON


Kenneth I. Toomb, Mayor
Bob Elliott, Council President

ATTEST:


Linda Kaser, City Clerk/Recorder

EXHIBIT A

**Update of the City of
Lebanon
Economic Opportunities
Analysis**

Prepared for

City of Lebanon

by

ECONorthwest

99 W. Tenth, Suite 400
Eugene, OR 97401
(541) 687-0051

Final Report

June 2007

This project was funded in part by a Department of
Land Conservation and Development Technical
Assistance Grant

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This report presents an update of the 2004 Economic Opportunities Analysis (EOA) for the City of Lebanon consistent with the requirements of statewide planning Goal 9 and recent amendments to the Goal 9 administrative rule (OAR 660-009). A goal of this project is to evaluate the economic development potential for rail-dependant industries and regional distribution centers in Lebanon and the mid-Willamette Valley.

BACKGROUND

Lebanon adopted an updated Economic Opportunities Analysis in 2004 as part of the *Lebanon Urbanization Study* (June 2004). Recent development activity (e.g., the Lowe's regional distribution warehouse) and potential economic development opportunities have created a need to reassess certain aspects of the City's EOA from a regional perspective.

The 2004 EOA presented forecasts of the demand for commercial and industrial land, but also recognized the potential for large developments to use a significant portion of the City's land base:

"In closing, it is worth noting that the employment projections in this chapter do not take into account a major jump in employment that could result from the location of one or more large employers in the community during the planning period. This could take place if the City were successful in its recruitment efforts, either on its own and/or in conjunction with the Governor's Initiative to bring new industry to the State. Such a major change in the community's employment would essentially be over and above the growth anticipated by the City's employment forecast and the 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 very difficult to include in a study of this nature. The implications, however, are relatively predictable: more demand for land (of all types) and public services." (Lebanon Urbanization Report, June 2004, page 4-23)

Such a change has occurred and creates a need to update the EOA. The location of the Lowe's regional distribution warehouse suggests that Lebanon has some competitive advantage in attracting these types of industries and the potential for developing a regional industry cluster if land were available that meets the site requirements of these businesses. This project evaluates this economic development potential, update the City's EOA to comply with 2006 revisions to the Goal 9 administrative rule (OAR 660-009), and develop a set of strategies consistent with this economic development opportunity.

FRAMEWORK FOR ECONOMIC DEVELOPMENT IN OREGON

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 Land Conservation and Development Commission adopted amendments to this administrative rule in December 2005.¹ 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 the expected 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 adequate to implement policies adopted pursuant to OAR 660-009-0020. Appropriate implementing 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 site 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.

¹ The amended OAR 660-009, along with a Goal 9 Rule Fact Sheet, are available from the Oregon Department of Land Conservation and Development at <http://www.oregon.gov/LCD/econdev.shtml>.

In summary, this report is an update of the 2004 Lebanon Economic Opportunities Analysis, the first key element required by Goal 9. This EOA also includes an employment forecast that leads to identification of needed development sites, and an inventory of commercial and industrial land in Lebanon.

ORGANIZATION OF THIS REPORT

The remainder of this report is organized as follows:

- **Chapter 2: Context for Economic Growth in Lebanon** presents a demographic and socio-economic profile of Lebanon. It also profiles major employers and presents national and state economic trends that will influence Lebanon economy.
- **Chapter 3: Factors Affecting Future Economic Growth in Lebanon** describes national, state, and local economic trends that will influence the regional economy. It reviews local factors affecting economic development in Lebanon and advantages, opportunities, disadvantages, and constraints these factors may present. It ends with a discussion of the comparative advantages formed by the mix of factors present in Lebanon and the implications for the types of firms most likely to locate in Lebanon.
- **Chapter 4: Strategic Considerations for Location of Distribution Centers** describes the site requirements for distribution centers and rail-dependent industries and includes an inventory of lands that meet the site requirements in the Willamette Valley along the I-5 corridor. It also includes a discussion of regional and local transportation capacity.
- **Chapter 5: Conclusions and Implications** discusses the implications of the site requirements and inventory of available sites for the location of distribution centers and rail-dependent industry in Lebanon.

Context for Economic Growth in Lebanon

Chapter 2

This chapter describes national, state, regional, county, and local trends affecting economic growth in Lebanon. It is intended as an update of the economic trend information presented in Chapter 4 of the Lebanon Urbanization Study from June 2004.

LONG-RUN NATIONAL AND STATE TRENDS AFFECTING GROWTH IN LEBANON

NATIONAL CONDITIONS

Economic development in Lebanon over the next twenty to fifty years will occur in the context of long-run national trends. The most important of these trends include:

- **The aging of the baby boom generation, accompanied by increases in life expectancy.** The number of people age 65 and older will double by 2050, while the number of people under age 65 will grow only 12 percent. 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.²
- **Hispanic and Latino are the fastest growing minority in the U.S.** Between 1990 and 2000, Hispanic and Latino population increased from 9% in 1990 to 12.5% of the U.S. population in 2000, an increase of nearly 40%. Between 2000 to 2050, the U.S. Census Bureau projects that Hispanic and Latino people will grow faster than any other group, accounting for about 24% of the U.S. population by 2050.
- **The growing 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. In addition, the percentage of high school graduates that attend college will increase.³

² The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2006, *The 2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, May 1; Congressional Budget Office, 2006, *The Budget and Economic Outlook: Fiscal Years 2007 to 2016*, January; and Congressional Budget Office, 2005, *The Long-Term Budget Outlook*, December.

³ Daniel E. Hecker, "Occupational Employment Projections to 2014," *Monthly Labor Review* 128: 11, November, pp. 70-101.

- **Continued growth in global trade and the globalization of business activity.** With increased global trade, both exports and imports rise. Faced with increasing domestic and international competition, firms will seek to reduce costs and some production processes will be outsourced offshore.⁴
- **Innovation in electronics and communication technology, and its application to production.** Advancements in communication and manufacturing technology increase worker productivity. There will be growth in the production of both services and goods, but the economy's emphasis on services will increasingly dominate.⁵
- **Continued shift of employment from manufacturing and resource-intensive industries to the service-oriented sectors of the economy.** Increased worker productivity and the international outsourcing of routine tasks lead 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 professional and business services, healthcare and social assistance, and other service industries. Construction employment will also grow.⁶
- **The impact of rising energy costs.** As energy costs rise, the share of income spent on transportation will also rise, resulting in energy conservation measures and diversification of energy sources. Changing prices will affect transportation choices by households and businesses, including travel mode and travel patterns in the short run and vehicle purchases and location decisions in the long run.⁷

Rising energy costs will not slow the growth of gross domestic product (GDP) because the ratio of final energy expenditures to GDP has continued to decrease since the 1970s. Growth in the labor force and labor productivity will influence long-term economic growth more than changes in energy prices.⁸

- **The combination of rising energy costs, strong energy demand, and requirements to reduce emissions and increase use of renewable fuels.** Output from the most energy-intensive industries will decline, but growth in the population and in the economy will increase the total amount of

⁴ Jay M. Berman, 2005, "Industry Output and Employment Projections to 2014," *Monthly Labor Review* 128:11, November, pp. 45-69.

⁵ Jay M. Berman, 2005, "Industry Output and Employment Projections to 2014," *Monthly Labor Review* 128:11, November, pp. 45-69.

⁶ Jay M. Berman, 2005, "Industry Output and Employment Projections to 2014," *Monthly Labor Review* 128:11, November, pp. 45-69; and Daniel E. Hecker, "Occupational Employment Projections to 2014," *Monthly Labor Review* 128: 11, November, pp. 70-101.

⁷ Energy Information Administration, 2006, *Annual Energy Outlook 2006 with Projections to 2030*, U.S. Department of Energy, DOE/EIA-0383(2006), February.

⁸ Energy Information Administration, 2006, *Annual Energy Outlook 2006 with Projections to 2030*, U.S. Department of Energy, DOE/EIA-0383(2006), February.

energy demanded. Energy sources will diversify and the energy efficiency of automobiles, appliances, and production processes will increase.⁹

- **Continued westward and southward migration of the U.S. population.** Although there are some exceptions at the state level, a 2006 U.S. Census report documents an ongoing pattern of interstate population movement from the Northeast and Midwest to the South and West.¹⁰
- **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. 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.¹¹

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 2001 following the collapse of Internet stocks and the attacks of September 11. The resulting recession caused Oregon's employment in the Information Technology and high-tech Manufacturing industries to decline. Employment in these industries has partially recovered, however, and 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 AND REGIONAL TRENDS

State and regional trends will also affect economic development in Lebanon over the next twenty to fifty years. The most important of these trends include: the shift from natural resource-based to high-tech industries, a continued lack of diversity in the state economy, public policy, continued in-migration from other states, and the distribution of population and employment across the State.

SHIFT FROM NATURAL RESOURCE-BASED TO HIGH-TECH INDUSTRIES

The composition of Oregon's employment has changed since 1970. Employment growth has been led by the Services sector. The share of Oregon's

⁹ Energy Information Administration, 2006, *Annual Energy Outlook 2006 with Projections to 2030*, U.S. Department of Energy, DOE/EIA-0383(2006), February.

¹⁰ Marc J. Perry, 2006, *Domestic Net Migration in the United States: 2000 to 2004*, Washington, DC, Current Population Reports, P25-1135, U.S. Census Bureau.

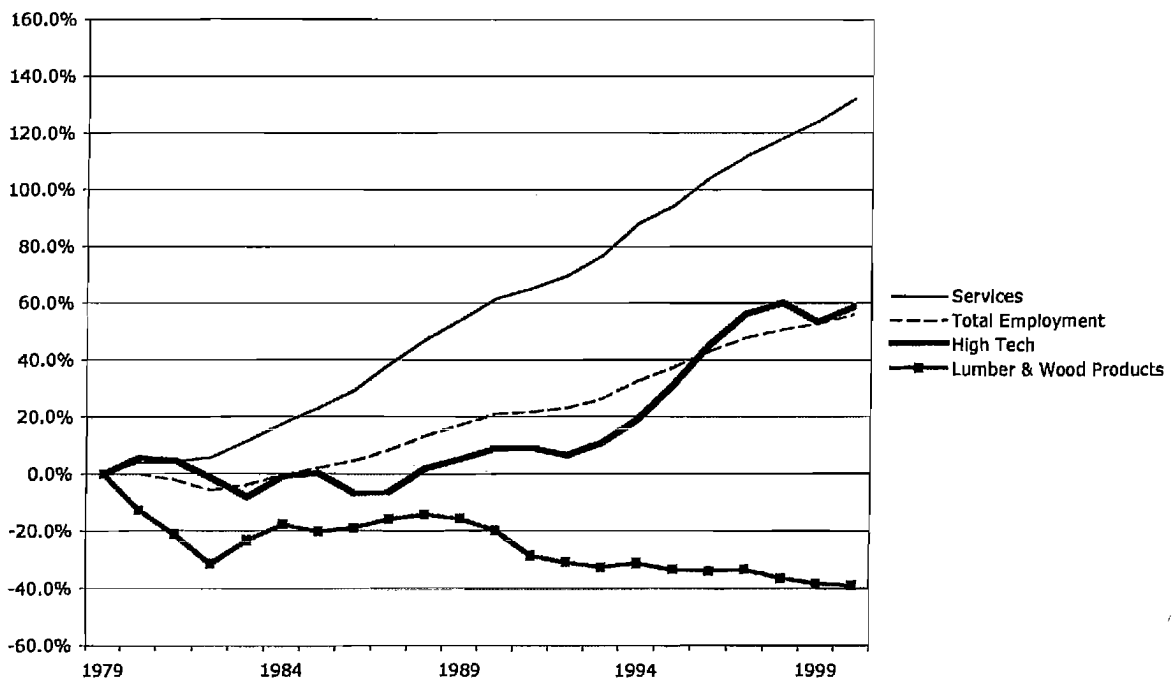
¹¹ For a more thorough discussion of relevant research, see, for example, Power, T.M. and R.N. Barrett. 2001. *Post-Cowboy Economics: Pay and Prosperity in the New American West*. Island Press, and Kim, K.-K., D.W. Marcouiller, and S.C. Deller. 2005. "Natural Amenities and Rural Development: Understanding Spatial and Distributional Attributes." *Growth and Change* 36 (2): 273-297.

total employment in this sector increased from its 1970s average of 19% to 30% in 2000. Slow growth in Manufacturing caused its share of total employment to decline from its 1970s average of 18% to 12% in 2000.

During the same period, 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 industry¹² and concurrent growth of employment in high-technology manufacturing industries (Industrial Machinery, Electronic Equipment, and Instruments¹³).

This pattern is shown in Figure 2-1, which charts the changes in the level of employment since 1979. The peak of Oregon's employment in the Lumber & Wood Products industry was in 1979. From 1979 to 2000, employment in the Lumber & Wood Products industry declined 40%. Over the same time period, employment in High Tech industries increased by 60%, and employment in the Services sector increased by over 130%.

Figure 2-1. Comparison of Oregon employment to 1979 levels, 1979-2000



Source: ECONorthwest, based on data from the Bureau of Economic Analysis.

¹² SIC 24

¹³ SIC 35, 36, 38

CONTINUED LACK OF DIVERSITY IN THE STATE ECONOMY

While the transition from Lumber & Wood Products manufacturing to high-tech manufacturing has increased the diversity of employment within Oregon, it has not significantly improved Oregon's diversity relative to the national economy. Oregon's relative diversity has historically ranked low among states. Oregon ranked 35th in diversity (1st = most diversified) based on Gross State Product data for 1963–1986, and 32nd based on data for the 1977–1996 period.¹⁴ A recent analysis, based on 2003 data, ranked Oregon 33rd.¹⁵ These rankings suggest that Oregon is still heavily dependent on a limited number of industries. Relatively low economic diversity increases the risk of economic volatility as measured by changes in output or employment.

The changing composition of employment has not affected all regions of Oregon evenly. Growth in High Tech and Services employment has been concentrated in urban areas of the Willamette Valley and Southern Oregon, particularly in Washington, Benton, and Josephine Counties. The brunt of the decline in Lumber & Wood Products employment was felt in rural Oregon, where these jobs represented a larger share of total employment and an even larger share of high-paying jobs than in urban areas.

PUBLIC POLICY

Changing economic conditions in Oregon have not only been affected by national and international trends, but also by government action in Oregon. State policy made a concerted effort to attract industries with tax policy (e.g., no unitary tax, which would tax world-wide corporate income of businesses operating in Oregon), changes in corporation codes, reforms to reduce the costs of workers' compensation, investments in infrastructure, and other incentives (e.g., enterprise zones and the Strategic Investment Program, which attempts to stimulate capital-intensive industries through property tax abatement). The State has encouraged international trade and investments with missions and offices in Japan, Taiwan, and other Pacific Rim countries. State policy on land use and environmental quality aim at preserving the natural and cultural amenities that make Oregon attractive to its current and potential residents and businesses—but their effects, however, are not unambiguous, since they may also raise taxes, fees, and land development costs. The State has also developed a program to attract industries to Oregon through a certification process that assures that a site is ready for development within 180 days.

CONTINUED IN-MIGRATION FROM OTHER STATES

Population trends in Oregon are related to economic conditions in other states—most notably, in California. During downturns in California's economy, people leave the state for opportunities in Oregon and elsewhere. As California's

¹⁴ LeBre, Jon. 1999. "Diversification and the Oregon Economy: An Update." *Oregon Labor Trends*. February.

¹⁵ CFED, 2006, The Development Report Card for the States, <http://www.cfed.org>.

economy recovers, the population exodus tapers off. Such interstate migration is a major source of population change.

According to a U.S. Census study, Oregon had net interstate in-migration (more people moved *to* Oregon than moved *from* Oregon) during the period 1990-2004.¹⁶ Oregon had an annual average of 26,290 more in-migrants than out-migrants during the period 1990-2000. The annual average dropped to 12,880 during the period 2000-2004.¹⁷

The Oregon Department of Motor Vehicles collects data on out-of-state driver licenses surrendered by applicants for Oregon licenses. These data provide an indicator of the source of Oregon's in-migration. During the period 1999-2005, over 30% of surrendered licenses were from California and approximately 17% were from Washington. All other states each accounted for less than 5% of the surrendered licenses.¹⁸ The DMV also collects data on Oregon driver licenses surrendered in other states. These data indicate that Washington and California are the top destinations for Oregon's out-migrants.¹⁹

The *1999 Oregon In-migration Study* found that migrants to Oregon tend to have the same characteristics as existing residents, with some differences—recent in-migrants to Oregon are, on average, younger and more educated, and are more likely to hold professional or managerial jobs, compared to Oregon's existing population. The race and ethnicity of in-migrants generally mirrors Oregon's established pattern, with one exception: Hispanics make up more than 7% of in-migrants but only 3% of the state's population. The number one reason cited by in-migrants for coming to Oregon was family or friends, followed by quality of life and employment.²⁰

DISTRIBUTION OF POPULATION AND EMPLOYMENT ACROSS THE STATE

Oregon's population is not distributed equally across the state. Nearly 70% of Oregon's population lives in the Willamette Valley. With higher growth rates than the rest of the state, the Willamette Valley and Central Oregon have each captured a higher percentage of the state's population over the period 1970-2005. The *1999 Oregon In-migration Study* found that the majority of in-migrants moved to the Willamette Valley.

¹⁶ Marc J. Perry, 2006, *Domestic Net Migration in the United States: 2000 to 2004*, Washington, DC, Current Population Reports, P25-1135, U.S. Census Bureau.

¹⁷ In contrast, California had net interstate *out-migration* over the same period. During 1990-2000, California had an annual average of 220,871 more out-migrants than in-migrants. The net out-migration slowed to 99,039 per year during 2000-2004.

¹⁸ See Oregon Department of Motor Vehicles, "Driver Issuance Statistics," http://www.oregon.gov/ODOT/DMV/news/driver_stats.shtml, accessed May 25, 2006.

¹⁹ For a discussion of the DMV data, see Ayre, A, 2004, *People Moved to Oregon Despite Recession*, Oregon Employment Department, July.

²⁰ State of Oregon, Employment Department. 1999. *1999 Oregon In-migration Study*.

Employment growth generally follows the same trend as population growth. Employment growth varies between regions even more, however, as employment reacts more quickly to changing economic conditions. Total employment increased in each of the state's regions over the period 1970-2004, but the increases in employment did not materialize uniformly across the state. Over 70% of Oregon's employment was located in the Willamette Valley over the period 1970-2004.

ECONOMIC CONDITIONS IN LEBANON

Future economic growth in Lebanon will be affected in part by demographic and economic trends in the city and surrounding region. A review of historical demographic and economic trends provides a context for establishing a reasonable expectation of future growth in Lebanon. In addition, the relationship between demographic and economic indicators such as population and employment can help us form judgments about future trends and resulting economic conditions. This section addresses the following trends in Lebanon: personal income, employment, and business activity.

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.

Oregon's population growth regained momentum beginning in 1987, growing at annual rates of between 1.4% and 2.9% between 1988 and 1996. Population growth for Oregon and its regions slowed in 1997, to 1.1% statewide, the slowest rate since 1987. Between 2000 and 2006 the rate of population growth in Oregon increase slightly to 1.3% annually.

Migration is the largest component of population growth in Oregon. Migration slowed from about 35,000 people in 1996 to 18,000 in 1999. The rate of migration between 2000 and 2004 averaged about 22,800 people moving to Oregon annually. The reasons most often cited for the slowing of migration since 1996 are the recovery of the California economy, the combination of a high cost of living (especially housing) and low wages in Oregon, and a perceived decline in the quality of Oregon's schools.

Table 2-1 shows population over the 1980-2006 period for the U.S., Oregon, the Willamette Valley, Benton County, Linn County, and cities within the Willamette Valley. During this period, more than three-quarters of Oregon's growth occurred in the Willamette Valley. Nearly 40% of the growth in the Willamette Valley was in the cities of Portland, Salem, and Eugene. Population estimates for the Portland-Salem metropolitan area was not available for 2006

but historically this area has accounted for about two-thirds of Oregon's population.

Linn County grew more slowly than Oregon or the Willamette Valley, at an average annual rate of 0.72%, adding 17,655 residents over the 25-year period. Albany, located in Linn and Benton Counties, grew by more than 20,000 people at an average annual rate of 2.19%. Lebanon grew by an average of 1.24% annually and added 3,942 residents over the 26-year period.

Table 2-1. Population in the U.S., Oregon, the Willamette Valley, Benton County, Linn County, and cities within the Willamette Valley, 1980-2006.

Area	Population				Change 1980 to 2006		
	1980	1990	2000	2006	Number	Percent	AAGR
U.S.	226,545,805	248,709,873	281,421,906	299,398,484	69,864,599	31%	1.08%
Oregon	2,639,915	2,842,321	3,421,399	3,690,505	988,785	37%	1.30%
Willamette Valley	1,788,577	1,962,816	2,380,606	2,566,295	777,718	43%	1.40%
Benton County	68,211	70,811	78,153	84,125	15,914	23%	0.81%
Linn County	89,495	91,227	103,069	108,250	18,755	21%	0.73%
Portland	368,139	437,319	529,121	562,690	194,551	53%	1.65%
Salem	89,233	107,786	136,924	149,305	60,072	67%	2.00%
Eugene	105,664	112,669	137,893	148,595	42,931	41%	1.32%
Albany	26,511	29,462	40,852	46,610	20,099	76%	2.19%
Lebanon	10,413	10,950	12,950	14,355	3,942	38%	1.24%

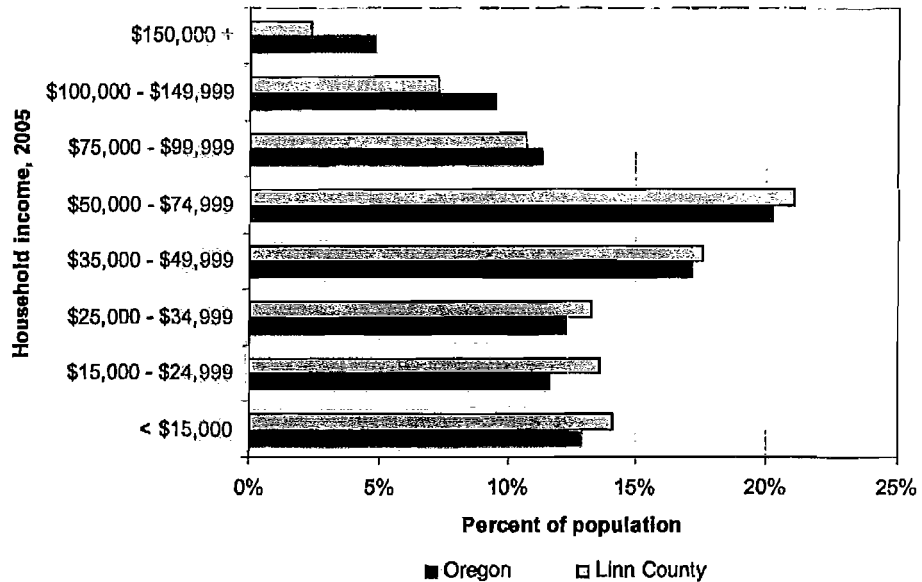
Source: U.S. Census, the Population Research Center at Portland State University; calculations by ECONorthwest

HOUSEHOLD AND PERSONAL INCOME

The median household income in Lebanon in 1999 was approximately \$31,231, which was lower than Oregon's median household income of \$40,916. Lebanon's median household income was also lower than Linn County's, which was \$37,518.

Figure 2-2 shows the distribution of household income of Oregon and Linn County in 2005. Figure 2-2 shows that annual household income is generally lower in Linn County than the state average. Linn County has a greater share of households with an annual income of less than \$35,000 than in Oregon, 41% of households in Linn County compared to 37% in Oregon.

Figure 2-2. Distribution of household income for Oregon and Linn County, 2005

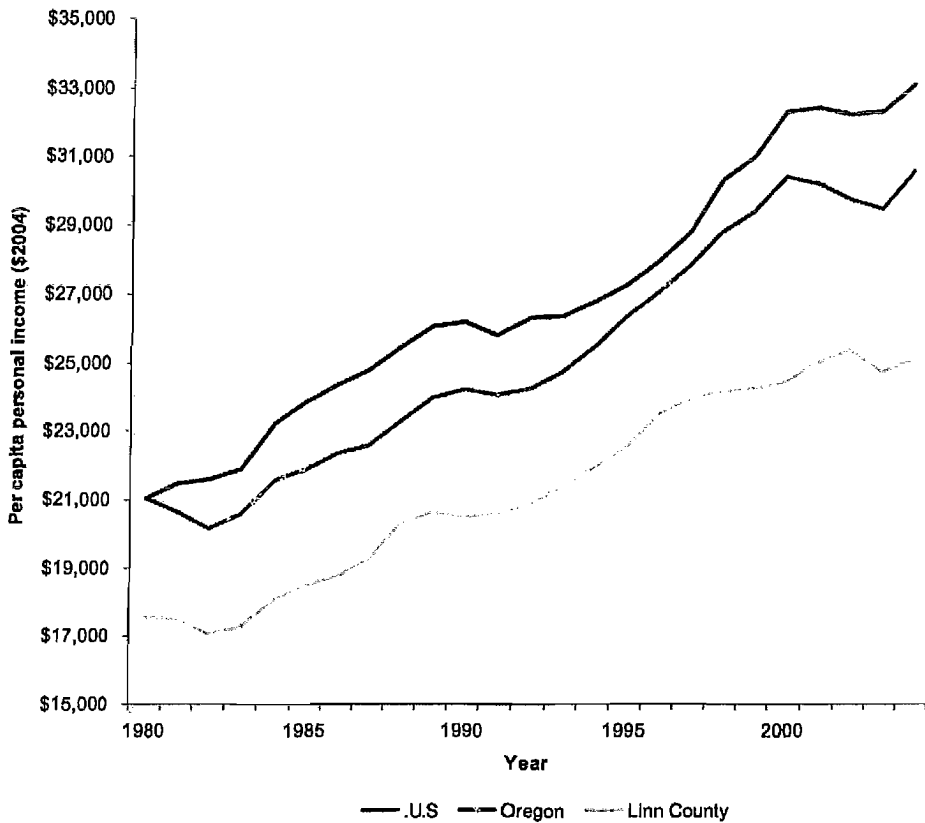


Source: Claritas, 2005

Figure 2-3 shows the change in per capita personal income for the U.S., Oregon, and Linn County between 1980 and 2004 (in constant 2004 dollars). Oregon’s per capita personal income was consistently lower than the U.S. average between 1980 and 2004. While the gap between the Oregon and US average narrowed in the mid-1990s, it widened again starting in the late 1990s through 2003.

Linn County’s personal income over the 24-year period has been consistently lower than Oregon’s personal income. In 2004, per capita personal income in Linn County was approximately 82% of Oregon’s per capita personal income and 76% of the U.S. per capita income. The gap between per capita income in Linn County compared to Oregon has widened since the late-1990s. During the 24-year period, Linn County’s per capita personal income grew by 43%, while personal income grew by 45% in Oregon and 57% nationally during the same period.

Figure 2-3. Per capita personal income in the U.S., Oregon, and Linn County, 1980-2004, (\$2004)



Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce

Lower wages in Linn County and in Lebanon will make Lebanon attractive to industries that typically have lower average pay, such as Retail Trade; Arts, Entertainment, and Recreation; and Accommodations and Food Services.

EMPLOYMENT

Tables 2-2 and 2-3 present data from the Oregon Employment Department that show changes in covered employment²¹ for Linn County between 1980 to 2005. The changes in sectors and industries are shown in two tables: (1) between 1980 and 2000 and (2) between 2001 and 2005. The analysis is divided in 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.

²¹ Covered employment refers to jobs covered by unemployment insurance, which includes most wage and salary jobs but does not include sole proprietors, seasonal farm workers, and other classes of employees.

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 2-2 shows the changes in covered employment by sector in Linn County between 1980 and 2000. Total employment in the County grew from 29,770 to 41,237, adding 11,467 jobs. Every sector added jobs during this period, except for Manufacturing, Mining, and Nonclassifiable jobs. The sectors with the greatest change in employment were Services, Retail Trade, and Construction, adding a total of 8,278 jobs. The sector that decreased the most was Manufacturing, which lost 763 jobs, although that only accounted for 7% of total employment in Manufacturing.

Table 2-2. Covered employment in Linn County, 1980-2000

Sector	1980	1990	2000	Change from 1980 to 2000			
				Difference	Percent	AAGR	Share
Agriculture, Forestry and Fishing	660	987	1,637	977	148%	3.7%	2%
Mining	58	--	25	-33	-57%	-3.3%	0%
Construction	1,314	1,291	2,465	1,151	88%	2.5%	2%
Manufacturing	11,195	10,344	10,432	-763	-7%	-0.3%	-12%
Trans., Comm., and Utilities	1,142	1,375	2,064	922	81%	2.4%	1%
Wholesale Trade	1,077	1,409	1,839	762	71%	2.2%	1%
Retail Trade	4,590	5,630	7,039	2,449	53%	1.7%	2%
Finance, Insurance and Real Estate	978	968	1,245	267	27%	1.0%	0%
Services	3,226	5,681	7,904	4,678	145%	3.6%	8%
Nonclassifiable/all others	103	28	49	-54	-52%	-2.9%	0%
Government	5,427	5,264	6,538	1,111	20%	0.7%	-2%
Total	29,770	32,977	41,237	11,467	39%	1.3%	

Source: Oregon Employment Department, Oregon Labor Market Information System, Covered Employment & Wages. <http://www.qualityinfo.org/olmis/CEP> Accessed May 3, 2006. Summary by industry and percentages calculated by ECONorthwest

Table 2-3 shows the change in covered employment by sector for Linn County between 2001 and 2005. Employment increased by 720 jobs or 2% during this period. The sectors with the largest increases in numbers of employees were Government, Retail, Accommodations, and Admin. Support & Cleaning Services. One reason for the increase in Government employment was that the Oregon Department of Employment reclassified home health care workers into the government category. Sectors that lost the greatest number of employees during this period were Agriculture, Forestry, Fishing & Hunting and Manufacturing.

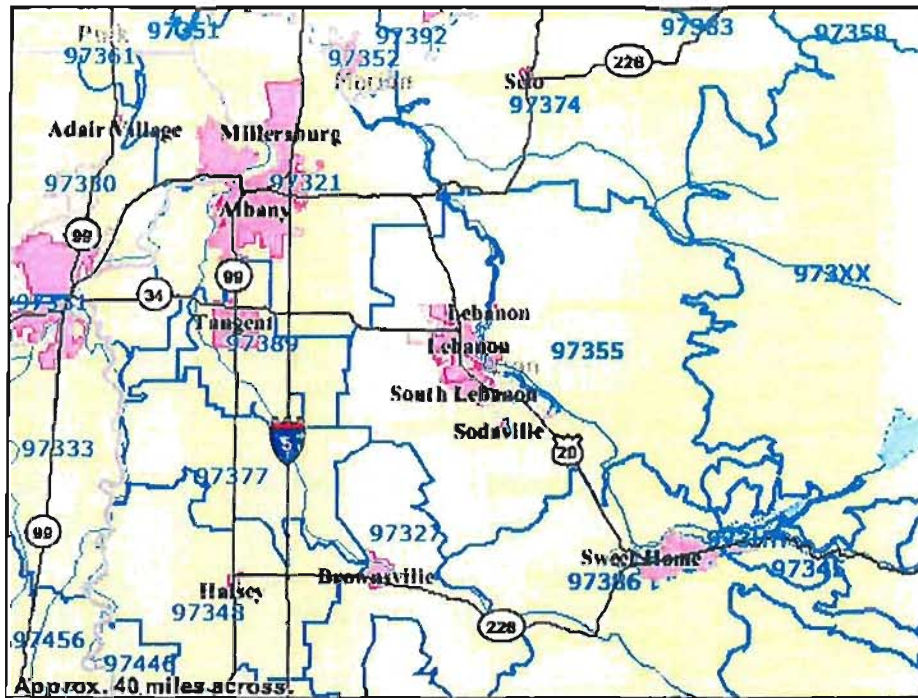
Table 2-3. Covered employment in Linn County, 2001-2005

Sector	2001	2005	Change from 2001 to 2005			
			Difference	Percent	AAGR	Share
Agriculture, Forestry, Fishing & Hunting	2,062	1,684	(378)	-18%	-4.9%	-1%
Mining	23	13	(10)	-43%	-13.3%	0%
Construction	2,142	2,147	5	0%	0.1%	0%
Manufacturing	8,783	8,400	(383)	-4%	-1.1%	-1%
Utilities	168	192	24	14%	3.4%	0%
Wholesale	1,540	1,370	(170)	-11%	-2.9%	0%
Retail	4,398	4,762	364	8%	2.0%	1%
Transportation & Warehousing	2,032	2,096	64	3%	0.8%	0%
Information	634	458	(176)	-28%	-7.8%	0%
Finance & Insurance	848	1,128	280	33%	7.4%	1%
Real Estate Rental & Leasing	485	443	(42)	-9%	-2.2%	0%
Professional, Scientific & Technical Services	629	630	1	0%	0.0%	0%
Management of Companies	493	445	(48)	-10%	-2.5%	0%
Admin. Support & Cleaning Services	2,091	2,442	351	17%	4.0%	1%
Education	232	250	18	8%	1.9%	0%
Health & Social Assistance	3,638	3,683	45	1%	0.3%	0%
Arts, Entertainment & Recreation	302	241	(61)	-20%	-5.5%	0%
Accommodations & Food Services	2,290	2,605	315	14%	3.3%	1%
Other Services (except Public Admin.)	1,383	1,425	42	3%	0.8%	0%
Private Non-Classified	13	10	(3)	-23%	-6.3%	0%
Government	6,536	7,018	482	7%	1.8%	1%
Total Covered Employment & Payroll	40,722	41,442	720	2%	0.4%	

Source: Oregon Employment Department, Oregon Labor Market Information System, Covered Employment & Wages. <http://www.qualityinfo.org/olmls/CEP> Accessed May 3, 2006. Summary by industry and percentages calculated by ECONorthwest

Employment is a key indicator of economic activity in an area. To describe the structure of the Lebanon economy, ECO received confidential ES-202 data on covered employment in the 97355 zip code area, which is shown in Figure 2-4. The 97355 zip code area includes the City of Lebanon, adjacent urban areas that are unincorporated, the communities of Waterloo and Sodaville, and surrounding rural areas. According to the U.S. Census, the Lebanon urbanized area (which includes the City and adjacent urban areas that are unincorporated) composes 65% of population in the 97355 zip code area. Data on the amount of employment in the Lebanon urbanized area is not reported by the Census or other sources, but we believe that the Lebanon urban area should have a higher share of employment than population in the 97355 zip code area.

Figure 2-4. 97355 zip code area, Lebanon area, 2004



Source: U.S. Census.

Table 2-4 shows covered employment and payroll²² in the 97355 zip code area by sector and industry.²³ Table 2-4 does not report employment in industries where there are fewer than three firms in order to maintain the confidentiality of individual employers. The sectors that dominated 2002 employment in the Lebanon area are Services (1,567), Retail Trade (1,305), Manufacturing and Mining (1,062), and Government (883). Together these sectors compose over 75% of total covered employment in the Lebanon area.

At the industry level (multiple industries are included in each sector), the individual industries with the largest level of 2002 employment in the Lebanon area were Health Services (789), Lumber and Wood Products (551), Eating and Drinking Places (453), and Special Trade Contractors (401), Other and Miscellaneous Retail (368). Together these industries accounted for 2,562 jobs or 40% of total covered employment in the Lebanon area. The data in Table 2-4 is based on confidential records for individual employers from the Oregon

²² Oregon covered employment and payroll information is based on confidential tax reports submitted quarterly by employers subject to Unemployment Insurance (UI) law and by the program of Unemployment Compensation for Federal Employees (UCFE). Thus, 'covered' employment and payroll refers to workers and wages that are covered by unemployment insurance. Covered employment does not include agricultural workers, self-employed proprietors, and other classes of employees. Covered employment in generally about 85% of total employment in an area. The data in this chapter is summarized by sector and industry in a manner designed to protect the confidentiality of individual employers.

²³ This report will make frequent use of the terms *sector* and *industry*. *Sectors* are groups of *industries*, as defined in the Standard Industrial Classification system used for economic statistics. For example, the Manufacturing sector contains the Lumber & Wood Products, Primary Metal, and other manufacturing industries.

Employment Department. A review of these records allows a more detailed description of the large employment sectors and industries:

- Health Services employment in the Lebanon area is dominated by the Lebanon Community Hospital and establishments near the Hospital.
- Employment in the Lumber and Wood Products industry is dominated by a few large mills in the Lebanon area, but there are also several Lumber and Wood Products firms in the Lebanon area that employ over 10 people each.
- Eating & Drinking Place employment is spread among 35 employers with an average of 13 employees each; none of these employers had over 50 employees in 2002.
- Only seven firms in the Special Trade Contractors have more than 10 employees, while the remaining 55 firms have fewer than 10 employees.
- Wal-Mart is a large employer in the Lebanon area and is the largest employer in the Other and Miscellaneous Retail industry.
- Employment in the Government sector is dominated by employment in local schools.

Total covered employment in the Lebanon area *declined* from 6,322 in 1997 to 6,258 in 2002, a decrease of 64 jobs or 1%. Table 2-4 shows employment in the Lebanon area by sector and industry between 1997 and 2002.²⁴ Employment growth in the Lebanon area was led by the Services and Retail Trade sectors, which added a total of 218 jobs between 1997 and 2002. Employment gains in these sectors was exceeded by job losses in Manufacturing, which lost 224 jobs between 1997 and 2002. In 2004, total covered employment in Lebanon was approximately 5,992, a decrease of 266 jobs from 2002.

²⁴ 2002 employment data in Table 2-4 were converted from the NAICS system to the SIC system of classifying firms by industry to allow a comparison of employment by industry between 1997 and 2002. This conversion may have resulted in some firms classified in the incorrect industry by SIC in 2002.

Table 2-4. Covered employment and payrolls in 97355 zip code area by sector, 1997–2002 (payroll in constant 2002 dollars)

Sector / Industry	SIC 2	1997			2002			Growth 1997-2002		
		Units	Emp	Payroll	Units	Emp	Payroll	Units	Emp	Payroll
Agriculture, Forestry, Fishing		31	159	\$2,872,611	27	136	\$2,911,518	-4	-23	\$38,907
Agricultural Production - Crops	01	15	94	\$1,725,238	9	79	\$1,750,375	-6	-15	\$25,137
Agricultural Production - Livestock	02	4	21	\$364,673	7	20	\$423,408	3	-1	\$58,735
Agricultural Services	07	7	37	\$649,510	7	33	\$719,185	0	-4	\$69,675
Forestry	08	5	7	\$133,190	4	4	\$18,550	-1	-3	-\$114,640
Construction		79	567	\$16,820,103	104	582	\$21,083,648	25	15	\$4,263,545
General Building Contractors	15	31	84	\$1,690,576	34	72	\$1,500,376	3	-12	-\$190,200
Heavy Construction	16	4	38	\$1,291,846	8	109	\$4,077,685	4	71	\$2,785,839
Special Trade Contractors	17	44	445	\$13,837,681	62	401	\$15,505,587	18	-44	\$1,667,906
Manufacturing & Mining		49	1,286	\$52,173,322	55	1,062	\$45,394,291	6	-224	-\$6,779,031
Lumber & Wood Products	24	28	659	\$24,565,014	30	551	\$22,854,975	2	-108	-\$1,710,039
Industrial Machinery & Equipment	35	6	253	\$10,262,115	9	207	\$7,683,568	3	-46	-\$2,578,547
Other & Misc. Manufacturing & Mining	15	374		\$17,346,193	16	304	\$14,855,748	1	-70	-\$2,490,445
Transportation & Utilities		35	414	\$14,602,522	44	345	\$12,534,209	9	-69	-\$2,068,313
Trucking & Warehousing	42	27	145	\$4,378,154	21	156	\$5,482,819	-6	11	\$1,104,665
Communications	48	4	253	\$9,895,814	10	134	\$6,251,015	6	-119	-\$3,644,799
Other Transportation & Utilities	4	16		\$328,554	13	55	\$800,375	9	39	\$471,821
Wholesale Trade		29	167	\$3,624,586	23	163	\$3,994,558	-6	-4	\$369,972
Durable Goods	50	21	65	\$1,333,793	18	55	\$1,166,657	-3	-10	-\$167,136
Nondurable Goods	51	8	102	\$2,290,792	5	108	\$2,827,901	-3	6	\$537,109
Retail Trade		100	1,197	\$20,481,528	117	1,305	\$21,488,753	17	108	\$1,007,225
Building Materials	52	8	62	\$943,158	9	51	\$915,083	1	-11	-\$28,073
Food Stores	54	12	214	\$3,780,666	24	291	\$5,140,302	12	77	\$1,359,636
Automotive Dealers & Service	55	21	209	\$5,382,635	13	121	\$3,749,579	-8	-88	-\$1,633,056
Apparel	56	3	8	\$120,965	4	8	\$148,379	1	0	\$27,414
Furniture	57	5	28	\$623,473	5	13	\$285,234	0	-15	-\$338,239
Eating & Drinking	58	34	395	\$3,644,907	36	453	\$4,779,038	2	58	\$1,134,131
Other & Misc. Retail	59	17	281	\$5,985,726	26	368	\$6,471,138	9	87	\$485,412
Finance, Insurance, & Real Estate		43	253	\$5,537,748	58	212	\$4,965,234	15	-41	-\$572,514
Depository Institutions	60	3	52	\$1,288,472	7	84	\$1,956,283	4	32	\$667,811
Insurance Agents	64	13	97	\$2,383,866	14	60	\$1,610,202	1	-37	-\$773,664
Real Estate	65	15	81	\$997,052	21	41	\$577,839	6	-40	-\$419,213
Other FIRE	12	23		\$868,358	16	27	\$820,910	4	4	-\$47,448
Services		180	1,457	\$33,828,602	188	1,567	\$39,734,735	8	110	\$5,906,133
Hotels & Lodging Places	70	3	19	\$279,769	5	13	\$209,603	2	-6	-\$70,166
Personal Services	72	9	42	\$556,507	11	37	\$734,151	2	-5	\$177,644
Business Services	73	14	36	\$531,602	7	14	\$348,127	-7	-22	-\$183,475
Auto Repair & Services	75	16	41	\$670,873	18	53	\$1,283,994	2	12	\$413,121
Miscellaneous Repair	76	5	14	\$255,877	6	14	\$180,438	1	0	-\$75,439
Motion Pictures	78	3	25	\$212,965	4	30	\$300,151	1	5	\$87,186
Amusement & Recreation	79	8	71	\$704,535	9	91	\$1,131,560	1	20	\$427,025
Health Services	80	34	755	\$23,391,170	33	789	\$27,306,341	-1	34	\$3,915,171
Educational Services	82	3	66	\$1,115,142	5	89	\$1,759,035	2	23	\$643,893
Social Services	83	18	172	\$2,422,374	25	240	\$3,327,566	7	68	\$905,192
Membership Organizations	86	37	146	\$1,952,174	37	140	\$1,942,427	0	-6	-\$9,747
Engineering & Management	87	15	46	\$1,085,020	14	35	\$903,443	-1	-11	-\$181,577
Private Households	88	11	10	\$98,463	13	14	\$151,208	2	4	\$54,745
Other Services	4	14		\$354,130	1	8	\$156,691	-3	-6	-\$197,439
Nonclassifiable		99	3	\$28,128	3	3	\$53,122	0	1	\$24,994
Government		6	820	\$22,678,726	9	883	\$25,321,403	3	63	\$2,642,677
Total Employment		555	6,322	\$172,647,875	628	6,258	\$177,481,471	73	-64	\$4,833,596

Source: 1997 and 2002 units, employees, and payroll from ES-202 employment data provided by the Oregon Employment Department. Growth calculated by ECONorthwest.

Notes: Units are reporting units, which represent individual businesses or business establishments. Emp is average annual employment. 2002 data was converted from the NAICS to the SIC system of classification by industry.

Future employment in Lebanon will be influenced by employment trends within Linn County and the Willamette Valley. The sectors that have grown the most in Linn County (and in Oregon) since 1980 are Retail, Service, and Construction. Although employment in Manufacturing has decreased since 1980, Manufacturing remains an important sector for Linn County and Lebanon,

offering jobs with higher than average wages. The sectors that have shown the most growth in Lebanon include Retail and Services. More recent business activity in Lebanon is discussed in the next section.

BUSINESS ACTIVITY

The Goal 9 administrative rule (specifically, OAR 660-009-0015(2)) suggests that local governments take into consideration expansion plans of major employers when determining the site requirements of major employers. ECONorthwest interviewed eleven major employers in Lebanon. A number of the major employers plan to expand their workforce and/or expand their facilities. Of the eleven firms interviewed, three have expansion plans and expect to add employees over the next twenty years. Three firms have no plans to add employees or expand their facilities. The remaining firms plan to add staff or maintain staff at current levels but have no expansion plans.

Most firms did not expect to add a large number of employees or purchase significant amounts of land for expansion. Most of the firms with expansion plans expect to use land they already own or purchase five acres or less of land for their expansion. Table 2-5 summarizes the expansion plans of firms interviewed by ECONorthwest.

Table 2-5. Expansion plans of Lebanon firms, 2006

Firm name	Plans to add jobs	Plans to expand facility	Plans to purchase land for expansion
Samaritan Hospital	Yes	Yes	No
Wal-Mart	Yes	Unknown	Unknown
Entek International	Yes	Yes	No
Lebanon Community Schools	Maintain current levels	Unknown	Unknown
Linn Gear Company	Maintain current levels	No	No
Safeway	Maintain current levels	No	No
CenturyTel	No	No	No
JlmCo Electric	No	No	No
Roth's Foodliner	Yes	No	No
Pennington Seed, Inc.	Yes	Yes	Yes
Weyerhaeuser	No	No	No

Source: Interviews conducted by ECONorthwest in 2004 and 2006.

The following is a list of the major employers interviewed, and their responses regarding firm expansion plans.

- Samaritan Hospital (500+ employees):** The hospital will be hiring to maintain current staff levels until they finish construction of a conference center on 53 acres of land they own across the highway from the hospital. They will be partnering with private developers to add a hotel and some retail properties to the site as well. The conference center is expected to be developed within the next 5 years pending the success of the hospital's capital campaign.

- **Lebanon Community Schools (450+ employees):** The school district plans to continue hiring to maintain current staff levels. No information was gathered about facilities expansion or vacant land.
- **Wal-Mart (420+ employees²⁵):** Wal-Mart representatives were only allowed to tell ECONorthwest that they are “always hiring at Wal-Mart.”
- **Entek (270+ employees):** Entek consists of two companies: Entek International and Entek Membranes. Entek International plans no expansions and will maintain current staff levels. Entek Membranes, a new company, plans to make 20 hires in the next three years and remodel their current facilities. Entek owns under 50 acres of land adjacent to their current site.²⁶
- **Linn Gear Company (130+ employees)** Linn Gear plans to hire employees only to maintain current staff levels. They own a couple acres of land adjacent to their current facility but have no expansion plans at this time.
- **Safeway (150+ employees):** Safeway will hire to replace current employees as needed, but has no plans for expansion and no vacant land at this time.
- **CenturyTel of Oregon (75+ employees).** CenturyTel has recently consolidated operations in Oregon and does not plan on expanding the Lebanon facility.²⁷
- **JimCo Electric Inc. (75+ employees).** JimCo has no expansion plans.²⁸
- **Roth’s Foodliner (58+ employees):** Roth’s plans to hire 5-10 employees in the next 5 years, although has no expansions planned for their facilities at this time. They own no vacant land.
- **Pennington Seed Inc. (50+ employees).** According to stakeholder interviews, Pennington Seed is planning a small expansion onto 5 acres of land and adding 10 or fewer employees.
- **Weyerhaeuser (0 employees):** Weyerhaeuser closed their Lebanon location in 2006. Thirty-nine employees were laid off in March 2006, and the remainder were laid off later in 2006. Plans for the vacant site,

²⁵ According to “Around the state,” the Wal-Mart super center in Lebanon employs 420 people.

²⁶ In an interview conducted in October 2006, John Hitt, City Administrator of Lebanon, indicated that Entek may be expanding, using 20 acres of the 50 acres the own and hiring approximately 25 to 50 employees.

²⁷ Based on interview conducted in 2004.

²⁸ Based on interview conducted in 2004.

according to Weyerhaeuser employees, will be handled at the national level.

In addition to what we learned from business interviews, ECO compiled information available on the Oregon Labor Market Information System (OLMIS) web site and information from stakeholder interviews about expansion plans of other firms. The types of business expansion include:

- **Manufacturing:** Pace American, a cargo and utility trailer manufacturer, will open a plant in Lebanon. They own 11 acres of land and will initially employ between 30 and 50 people and could expand to 100 within a year or two. RitaScreen Co. Inc., a maker of aluminum screens, doors, and windows, has leased 55,000 square feet of the former Wal-Mart building in Lebanon. The company plans to begin by hiring 25 employees and they expect to double that number. Lane Manufacturing is considering building a new facility in Lebanon.
- **Professional services:** Willamette Community Bank will open a branch in Lebanon by spring 2007. Century Fields, a retirement and assisted living community, opened fall 2005 in Lebanon.
- **Entertainment and food services:** Lebanon Coffee Co. opened in Lebanon in 2005. The newly renovated Kuhn Theater in Lebanon opened on Dec. 16, 2005.
- **Warehousing and distribution:** OreGro Seeds Inc., a wholesaler and producer of grass seed and legumes sold at home and abroad, will move from Shedd to a 3,000-square-foot office and 25,000-square-foot warehouse on Highway 34 between Lebanon and Albany.

Lowe's is opening a 1.5 million-square-foot distribution center in Lebanon, which is expected to create 400 jobs in the first two years. At full build-out, Lowe's may employ up to 800 people. Lowe's new facility has attracted a number of satellite companies, forming a home improvement cluster in Lebanon.

The recent business activity discussed within this section shows that Lebanon's economy is active. Businesses have expanded or been attracted to Lebanon over the last several years. Nearly half of the businesses interviewed expect to add employees in the foreseeable future. The most notable success in business attraction in Lebanon was attracting Lowe's and, consequently, the satellite companies associated with Lowe's. Lebanon may be able to build on the success of attracting Lowe's to form a transportation and warehousing cluster, which may attract other related businesses.

BUILDABLE LAND IN LEBANON

The Lebanon Urbanization Study from June 2004 presented a buildable lands inventory. This section presents an update of the amount of vacant buildable land

in Lebanon, based on recent development data gathered staff. See the 2004 Urbanization report for the complete buildable lands inventory and the methodology used to conduct the inventory.

BUILDABLE INDUSTRIAL AND OTHER EMPLOYMENT LAND

Table 2-6 shows vacant and partially vacant industrial and other employment land by development and constraint status in 2007. In 2004, Lebanon had approximately 1,310 acres of vacant buildable industrial and other employment land within the UGB. Two years later, the amount of vacant buildable land in the City's UGB is 1,148 acres, a decrease of 162 acres.

Table 2-6. Vacant and partially vacant industrial and other employment land by development and constraint status, Lebanon UGB, January 2007

Location/Plan Designation	Number of Tax			Const. Net Acres	Vacant Net Acres	% of Net Acres
	Lots	Total Net Acres	Dev. Net Acres			
Inside City Limits						
Commercial	39	17.6	1.7	0.1	15.9	1.4%
General Industrial	11	138.1	2.3	7.1	128.7	10.9%
Light Industrial	25	202.6	1.5	1.1	199.9	16.1%
Mixed-Use	29	190.4	2.9	3.6	183.9	15.1%
Subtotal	104	548.7	8.4	11.9	528.4	43.5%
Urban Growth Area (UGA)						
Commercial	4	1.9	0.5	0.0	1.4	0.1%
General Industrial	22	45.5	1.3	9.1	35.1	3.6%
Light Industrial	49	503.8	8.3	53.7	441.8	39.9%
Mixed-Use	47	162.3	12.0	8.5	141.7	12.9%
Subtotal	122	713.4	22.0	71.4	619.9	56.5%
All Lands Inside the UGB						
Commercial	43	19.5	2.2	0.1	17.2	1.5%
General Industrial	33	183.6	3.6	16.2	163.7	14.5%
Light Industrial	25	706.3	9.8	54.9	641.7	56.0%
Mixed-Use	76	352.7	14.9	12.1	325.7	27.9%
Total	177	1,262.0	30.4	83.3	1,148.3	100.0%

Source: City of Lebanon GIS data; analysis by ECONorthwest

Notes: Developed net acres represents developed areas of partially vacant tax lots

Const. = Constrained Land

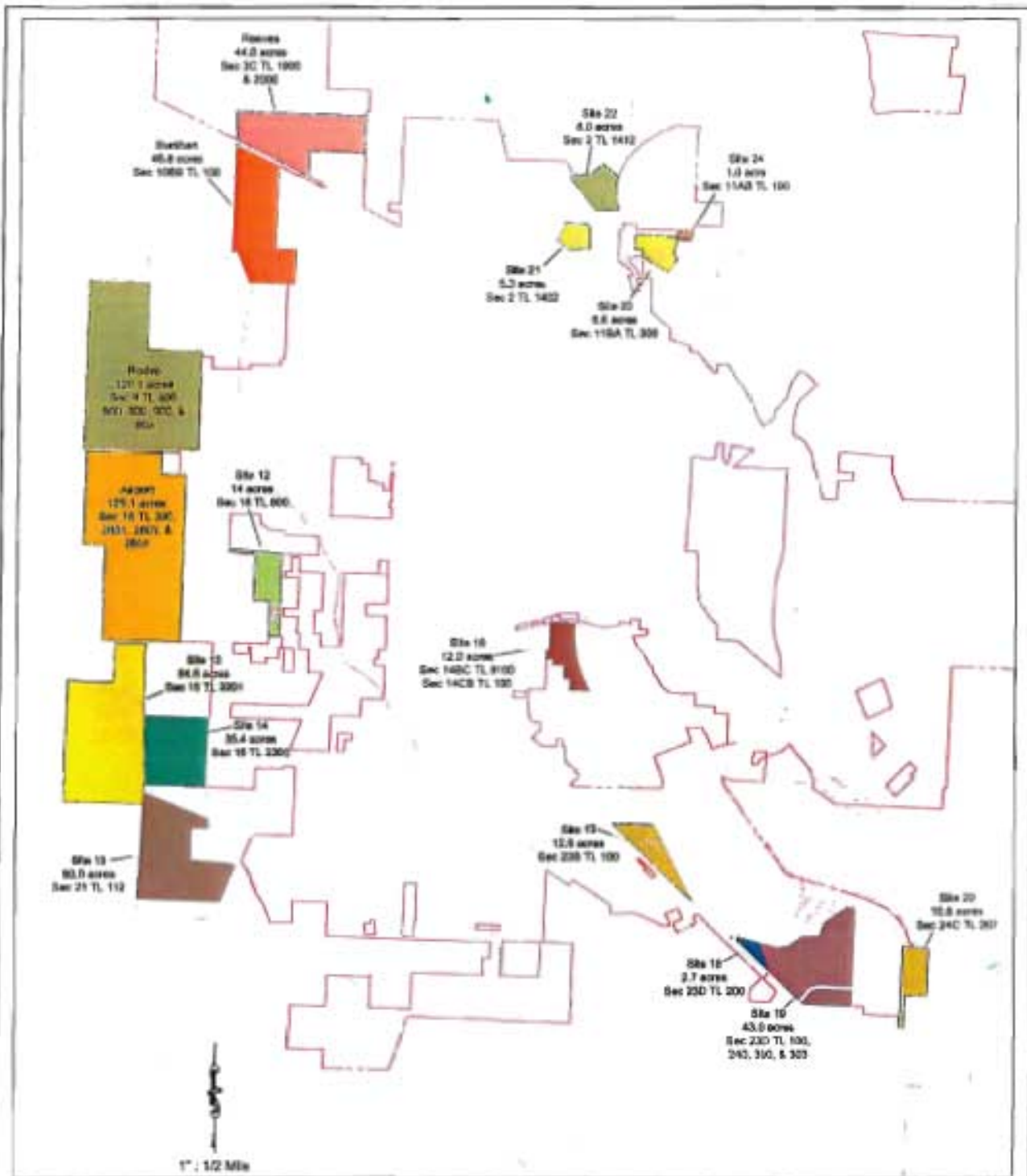
Table 2-7 and Map 2-1 show vacant and partially vacant land by plan designation in the Lebanon UGB. About 305 acres are classified as partially vacant, buildable acres (not including developed portions of partially vacant tax lots), a decrease of 780 acres since 2004. About 843 acres are classified as vacant, a decrease of 940 acres since 2004.

Table 2-7. Vacant and partially vacant industrial and other land by plan designation, Lebanon UGB, January 2007

Location/Plan Designation	Partially Vacant		Vacant		Total		
	Number of Tax Lots	Net Vacant Acres	Number of Tax Lots	Net Vacant Acres	Number of Tax Lots	Net Vacant Acres	Percent of Net Vacant Acres
	Inside City Limits						
Commercial	4	5.7	35	10.1	39	15.9	1.4%
General Industrial	1	12.3	10	116.4	11	128.7	11.2%
Light Industrial	3	4.6	22	195.4	25	199.9	17.4%
Mixed-Use	7	17.5	22	166.4	29	183.9	16.0%
Subtotal	15	40.1	89	488.3	104	528.4	46.0%
Urban Growth Area (UGA)							
Commercial	2	0.6	2	0.7	4	1.4	0.1%
General Industrial	3	6.7	19	28.4	22	35.1	3.1%
Light Industrial	34	220.5	15	221.3	49	441.8	38.5%
Mixed-Use	24	37.3	23	104.5	47	141.7	12.3%
Subtotal	63	265.0	59	354.9	122	619.9	54.0%
All Lands Inside the UGB							
Commercial	6	6.4	37	10.9	43	17.2	1.5%
General Industrial	4	19.0	29	144.8	33	163.7	14.3%
Light Industrial	37	225.0	37	416.7	74	641.7	55.9%
Mixed-Use	31	54.8	45	270.9	76	325.7	28.4%
Total	78	305.1	148	843.2	226	1,148.3	100.0%

Source: City of Lebanon GIS data; analysis by ECONorthwest
Notes: Partially vacant includes only buildable acres.

Map 2-1 shows vacant industrial sites in Lebanon.



LEBANON AREA INDUSTRIAL SITES 2006

SITE	NAME	ZONING	SITE	NAME	ZONING	SITE	NAME	ZONING
	Reeves	Light Ind.		Gill	Light Ind.		French	L. I./SPD
	Burkhardt	Light Ind.		Peart	Light Ind.		LIDC SCIP	General Ind.
	Rodeo	Light Ind.		Russell Dr.	Spec. Dev.		James River	General Ind.
	Airport	Light Ind.		Waldwood	Spec. Dev.		Fromherz	General Ind.
	Airway	L. I./SPD		Feres	General Ind.		Schmidt	Spec. Dev.
	McCallie	Light Ind.		Oakley	L. I./SPD			

NOTE: All map sections are referenced to Township 12 South Range 2 West

Lebanon has a mixture of sizes and locations of industrial sites. The City has eight sites over 30 acres in size (including two sites that are over 100 acres) and eight sites smaller than 30 acres. Lebanon has one industrial site (51 acres) that has been certified by the State as Project Ready.²⁹ The importance of the large industrial sites is discussed in Chapter 4.

Table 2-8 shows vacant land by plan designation by parcel size. This analysis is useful in that it shows the distribution of vacant land by parcel size, which allows an evaluation of whether a sufficient mix of parcels is available. The distribution varies by plan designation. For example, few vacant parcels exist in the General Industrial District—a result that is consistent with the average size of industrial parcels. The residential designations show a broader range of parcel sizes. Lebanon has 12 parcels greater than 20 buildable acres in size, and 5 greater than 50 buildable acres.

Table 2-8. Vacant land by plan designation and parcel size, Lebanon UGB, January 2007

	Vacant Acres in Tax Lots									Total	Percent
	<0.25	0.25-0.49	0.50-0.99	1.00-1.99	2.00-4.99	5.00-9.99	10.00-19.99	20.00-49.99	50.00 or more		
Number of Tax Lots											
Inside City Limits											
Commercial	24	8	3	2	1					39	17%
General Industrial		1	3	2	2		1		1	11	5%
Light Industrial	8	3	1	6	1	2	2	2	1	25	11%
Mixed-Use	2	4	2	4	2	6	4	2		29	13%
Subtotal	34	16	9	13	6	8	7	4	2	104	46%
Urban Growth Area (UGA)											
Commercial	1	2	1							4	2%
General Industrial	3	2		2	1	1	1			22	10%
Light Industrial	1	2	1	3	11	5	4	2	3	49	22%
Mixed-Use	4	7	10	10	4	4	4	1		47	21%
Subtotal	9	13	12	15	16	10	9	3	3	122	54%
Total	43	29	21	28	22	18	16	7	5	226	100%
Vacant Acres											
Inside City Limits											
Commercial	3.1	2.9	2.5	3.5	3.9					15.9	1%
General Industrial		0.3	2.6	2.7	7.2		12.3		103.5	128.7	11%
Light Industrial	1.7	1.3	0.7	7.7	3.0	13.0	38.6	63.9	70.0	199.9	17%
Mixed-Use	0.1	1.7	1.3	5.6	4.3	49.3	51.3	70.2		183.9	16%
Subtotal	4.9	6.2	7.0	19.5	18.4	62.3	102.3	134.2	173.5	528.4	46%
Urban Growth Area (UGA)											
Commercial	0.2	0.6	0.5							1.4	0%
General Industrial	0.3	0.7		2.9	4.5	8.1	18.6			35.1	3%
Light Industrial	0.0	0.6	0.7	3.7	39.8	33.1	73.9	80.3	209.5	441.8	38%
Mixed-Use	0.3	2.6	7.4	13.3	9.3	26.4	58.4	23.8		141.7	12%
Subtotal	0.8	4.8	8.7	20.0	53.6	67.7	160.8	104.1	209.5	619.9	54%
Total	5.7	11.0	15.8	39.6	72.0	130.0	253.1	238.3	383.0	1,148.3	100%
Percent of tax lots	19%	13%	9%	12%	10%	8%	7%	3%	2%	100%	
Percent of Acres	0%	1%	1%	3%	6%	11%	22%	21%	33%	100%	
Average lot size	0.13	0.38	0.75	1.41	3.27	7.22	15.82	34.04	76.60	5.08	

Source: City of Lebanon data; analysis by ECONorthwest

²⁹ Oregon Prospector website (www.oregonprospector.com). Accessed 3/6/2007.

Wetland constraints may also be an important consideration for industrial sites in Lebanon. In a 2007 project for the Cascade West Council of Governments (CWCOG), ECO analyzed the impacts of wetlands on industrial development. The analysis included four sites in Lebanon (Burkhart, Rodeo, Airport, and Reeves on Map 2-1). Of the nearly 300 acres in these four sites, over 160 acres are likely to be impacted by wetlands. Thus, wetlands could play a significant role in the availability of industrial sites in Lebanon.

The CWCOG analysis determined the extent to which the presence of wetlands affects an industrial firm's decision to build on a site. ECO found that the cost of constructing an industrial building greatly outweighs the cost of mitigating wetlands. The cost of mitigating wetlands is only a small portion of overall development costs, and is unlikely to hinder industrial development. This is particularly true for large firms that have the staff capacity to manage the administrative issues that arise during the development of property.

While the cost of wetland mitigation does not appear to be a major factor for larger sites, the uncertainty that wetlands mitigation introduces into the development process is a factor for every developer. Smaller firms, likely to be local businesses, have less experience and capacity to handle such issues, and can find the administrative aspect of developing wetlands to be daunting.

OUTLOOK FOR GROWTH IN LEBANON

The Oregon Office of Economic Analysis (OEA) produces a long-term forecast of population and employment growth by county. The last official employment forecast by OEA was released in 1997 and covered the 2000–2040 period. The OEA population forecast for the same period was most recently updated in 2004. Table 2-9 shows the OEA forecast of population and employment for Linn County and Oregon over the twenty-year 2005–2025 period.

Table 2-9. Forecast of population and employment in Linn County and Oregon, 2005–2025

Year	Population			Employment		
	Oregon	Linn Co.	% of OR	Oregon	Linn Co.	% of OR
2005	3,618,200	106,023	2.9%	1,718,659	46,027	2.7%
2010	3,843,900	110,123	2.9%	1,814,276	48,099	2.7%
2015	4,095,708	115,156	2.8%	1,882,653	49,380	2.6%
2020	4,359,258	120,465	2.8%	1,947,702	50,590	2.6%
2025	4,626,015	126,140	2.7%	2,014,350	51,987	2.6%
Amount of Growth						
05-15	477,508	9,134	-0.1%	163,994	3,353	-0.1%
15-25	530,307	10,984	-0.1%	131,697	2,607	0.0%
05-25	1,007,815	20,117	-0.2%	295,691	5,960	-0.1%
Average Annual Growth Rates						
05-15	1.2%	0.8%	n/a	0.9%	0.7%	n/a
15-25	1.2%	0.9%	n/a	0.7%	0.5%	n/a
05-25	1.2%	0.9%	n/a	0.8%	0.6%	n/a

Source: State of Oregon, Office of Economic Analysis.
Percent of Oregon, amount of growth, and average annual growth rates calculated by ECONorthwest.

Table 2-9 shows that Linn County is expected to add a total of 20,117 people over the twenty-year 2005–2025 period, roughly 10,000 people per decade. Employment in Linn County is expected to grow by 5,960 over the twenty-year period, 3,353 between 2005 and 2015 and 2,607 between 2015 and 2025. Average annual growth rates in Table 2-8 show that population and employment in Linn County are expected to grow less rapidly than in Oregon. This results in a slight decline in Linn County’s share of population and employment in Oregon.

Table 2-10 shows the Oregon Employment Department’s forecast for employment by industry between 2004 and 2014 for Oregon and Region 4, which includes Linn, Benton, and Lincoln Counties. The Oregon Employment Department forecasts a slower rate of growth for Region 4 than the state average. The forecast projects the creation of 11,280 new jobs over the ten-year period.

The sectors that are projected to lead employment growth in Oregon for the ten-year period are: Professional and Business Services, Health Services, Leisure and Hospitality, and Retail Trade. Together, these sectors are expected to add 146,900 new jobs, or 61% of the employment growth in Oregon. The sectors that are expected to lead employment growth in Region 4 are Transportation and Utilities, Professional and Business Services, Education, and Health Services. Together, these sectors are expected to add 10,230 jobs, or 91% of the employment growth in Region 4 between 2004 and 2014.

Table 2-10. Nonfarm employment forecast by industry in Region 4, 2004-2014

Sector/ Industry	2004	2014	Change 2004-2014	
			Number	Percent
Natural Resources & Mining	950	890	-60	-6.3%
Construction	3,620	4,270	650	18.0%
Manufacturing	14,960	13,940	-1,020	-6.8%
Durable Goods	11,350	10,530	-820	-7.2%
Wood Product Manufacturing	2,810	2,570	-240	-8.5%
Nondurable Goods	3,610	3,410	-200	-5.5%
Food manufacturing	1,170	1,090	-80	-6.8%
Transportation, & Utilities	15,550	18,300	2,750	17.7%
Wholesale Trade	1,890	2,120	230	12.2%
Retail Trade	10,500	11,910	1,410	13.4%
Transp., warehousing, & utilities	3,160	4,270	1,110	35.1%
Information	1,550	1,760	210	13.5%
Leisure & Hospitality	10,400	11,930	1,530	14.7%
Accommodation & Food Services	9,470	10,890	1,420	15.0%
Accommodation	2,320	2,610	290	12.5%
Food svcs. and drinking places	7,150	8,280	1,130	15.8%
Financial Activities	3,740	4,140	400	10.7%
Professional & Business Services	7,050	8,980	1,930	27.4%
Administration and support svcs.	3,410	4,570	1,160	34.0%
Education	10,270	13,140	2,870	27.9%
Health Care & Social Assistance	9,710	12,390	2,680	27.6%
Other Services	3,130	3,510	380	12.1%
Government	22,320	23,960	1,640	7.3%
Federal Government	1,330	1,280	-50	-3.8%
State Government	9,360	9,880	520	5.6%
Local Government	11,630	12,800	1,170	10.1%
Local Education	6,120	6,630	510	8.3%
Indian Tribal	1,100	1,280	180	16.4%
Total Nonfarm Payroll Emp.	93,540	104,820	11,280	12.1%

Source: Oregon Employment Department. Employment Projections by Industry 2004-2014. Projections summarized by ECONorthwest.
 *Note: The Oregon Employment Department Issues employment forecasts by region. Region 4 is Benton, Lincoln and Linn Counties combined.

The *Lebanon Urbanization Report* from June 2004 presented an employment forecast for Lebanon for 2002 through 2025. The employment forecast presented below is an update of the previous employment forecast, extending the forecast to 2027 in order to forecast land need for the 20-year period 2007 to 2027. We did not change the growth or employment base assumptions in the updated employment forecast. The most significant change in Lebanon's economy since the 2004 employment forecast is the location of the Lowe's distribution center and the satellite businesses in Lebanon. This change does not necessarily warrant changes in the assumptions about Lebanon's employment growth rate or the distribution of employment by land-use type.

Employment growth in Lebanon will be a primary determinant of the demand for non-residential land in the City's urban growth boundary over the next twenty

years. To forecast employment growth, we began by summarizing 2002 covered employment by sector into four groups with similar types of land uses. These land use types and the corresponding sectors are as follows:

- **Commercial:** Retail Trade
- **Office:** Finance, Insurance, and Real Estate; Services
- **Industrial:** Agriculture, Forestry, Fishing; Mining; Construction; Manufacturing; Transportation, Communications, and Utilities; Wholesale Trade
- **Public:** Federal, State, and Local Government

Covered employment in Table 2-4 represents only 85% of total employment on average because it does not include self-employed proprietors and some other classes of workers. So, we increased covered employment by a factor of 1/.85 or 1.18 to reflect total employment in the 97355 zip code area.

Next, we selected an average annual growth rate for total employment in the Lebanon area for the 2002–2027 forecast period established for this analysis. The selection of an average annual growth rate for total employment in Lebanon is based on average annual growth rates from published forecasts for Linn County and recent employment trends in the Lebanon area:

- The Oregon Office of Economic Analysis expects total employment in Linn County to grow at an average annual rate of 0.6% over the twenty-year 2005–2025 period.
- The Oregon Employment Department expects total employment in Benton, Lincoln, and Linn Counties to grow at an average annual rate of 1.2% over the ten-year 2004–2014 period.
- While total covered employment in the Lebanon area declined between 1997 and 2002, it declined at a lower rate than in Linn County, so that Lebanon area's share of Linn County covered employment increased from 15% to 16% over this five-year period.
- The Lowe's distribution center is expected to add 400 and 750 jobs starting in 2007. Satellite industries will add additional jobs.

The OEA and Oregon Employment Department forecasts suggest a lower bound for likely growth rates for total employment in the Lebanon area: 0.6% to 1.0%. However, there are reasons to expect total employment in the Lebanon area will grow faster than Benton, Lincoln, and Linn Counties. Lebanon has attracted a lot of housing development in recent years and has lower overall housing costs than Corvallis and other cities in the mid-Willamette Valley. Lebanon has a large inventory of serviceable industrial land—including a certified industrial site. As a result, ECO expects that total employment in the Lebanon area will grow slightly faster than total employment in Linn County, resulting in the Lebanon area

gaining share of the County's employment. ECO assumed an average annual growth rate of 1.8% for total employment in the Lebanon UGB over the twenty-five year 2002–2027 forecast period. This rate is consistent with the City's coordinated population forecast and the City's economic development vision.

To allocate total employment in 2027 by land use type, we assumed a percentage distribution based on the Oregon Employment Department forecast for employment by sector in the three-county region. Relative to their share of total employment in the Lebanon area in 2002, we expect the share of total employment in the Office category to remain constant and the share in the Commercial category to decrease by 1% due to an increasing share of employment in the Services and Retail Trade sectors. We also expect the share in Industrial to increase by 4% due to industrial recruitment efforts, and the share in Public to decline by 2% due to a declining share of employment Government sector.

Table 2-11 shows the results of applying this method and assumptions to the level of 2002 covered employment in the Lebanon area. Since the base for the employment forecast is an estimate of total employment in 2002, ECO subtracted estimated employment growth for 2002 to 2005 to estimate twenty-years employment growth for the 2007 to 2027 period. Table 2-10 shows that ECO expects total employment in the Lebanon area to grow by 3,545 jobs over the 20-year 2007–2027 period.

Table 2-11: Employment growth in the Lebanon area by land use type, 2002–2027

Land Use Type	2002			2007 Total Emp	2002 -2027 AAGR	2027		2002 -2027 Growth	2007 -2027 Growth
	Covered Emp	Total Emp	Emp Dist			Emp Dist	Total Emp		
Commercial	1,305	1,535	21%	1,657	1.5%	20%	2,251	716	594
Office	1,779	2,093	28%	2,284	1.8%	28%	3,236	1,143	952
Industrial	2,291	2,695	37%	3,006	2.2%	41%	4,656	1,961	1,650
Public	883	1,039	14%	1,095	1.1%	12%	1,353	314	258
Total	6,258	7,382	100%	8,043	1.8%	100%	11,496	4,134	3,454

Source: ECONorthwest.

Note: shaded areas indicate assumptions by ECONorthwest.

The employment forecast in Table 2-11 uses a base that represents employment in the 97355 zip code area, which includes the City of Lebanon, adjacent urbanized but unincorporated areas, and surrounding rural areas (see Figure 2-3). Thus, the employment growth shown in Table 2-11 is for the 97355 zip code area. While it is possible that some of the employment growth in Table 2-11 will occur outside of the Lebanon urban growth boundary, ECO believes that the lack of urban services and State land use regulations will limit the amount of employment growth outside of the Lebanon UGB.

Lebanon is considering establishing urban reserve areas (URAs) consistent with OAR 660-021. The city can include up to a 50-year land supply within urban

reserve areas. Table 2-12 presents a forecast for employment growth for the 2007 to 2057 period.²⁸ The forecast in Table 2-12 assumes that employment growth occurs as described in Table 2-11 until 2027. Between 2027 and 2057, the forecast assumes that employment in Lebanon grows 1.02% annually, based on the OEA's forecast for population growth in Linn County for the 2030 to 2040 period. The forecast in Table 2-12 assumes that the distribution of employment by land use type will not change between 2007 and 2057. By 2057, Lebanon is expected to have 16,074 jobs, an increase of 7,549 jobs.

Table 2-12: Employment growth in the Lebanon area by land use type, 2007–2057 and 2060

Land Use Type	2007	2057		2060	2007 -2057 Growth
	Total Emp	Emp Dist	Total Emp	Total Emp	
Commercial	1,657	20%	3,053	3,147	1,396
Office	2,284	28%	4,389	4,525	2,106
Industrial	3,006	41%	6,315	6,510	3,308
Public	1,095	12%	1,835	1,892	740
Total	8,043	100%	15,592	16,074	7,549

Source: ECONorthwest.

Note: shaded areas indicate assumptions by ECONorthwest.

²⁸ Table 2-11 presents a forecast for 2060 so that, if the process of establishing an URA takes more time than expected, the City has a forecast for the 50-year period.

Factors Affecting Future Economic Growth in Lebanon

Chapter 3

Economic development opportunities in Lebanon will be affected by local conditions as well as the national and regional economic conditions described in Chapter 2. Factors affecting future economic development in Lebanon include its location, buildable land, labor force, housing, public services, transportation, natural resources, and quality of life. Lebanon shares the general characteristics and advantages of the Willamette Valley, Oregon, and the Pacific Northwest as a whole, such as proximity to I-5 and proximity to the recreational opportunities at the Oregon Coast and Cascade Mountains. Economic conditions in Lebanon relative to conditions in the Willamette Valley form Lebanon's comparative advantage for economic development, which has implications for the types of firms most likely to locate and expand in Lebanon.

This chapter begins with a description of comparative advantage and why it is relevant for this Economic Opportunity Analysis. It then reviews local factors affecting economic development in Lebanon and any advantages, opportunities, disadvantages, or constraints these factors may present. It ends with a discussion of the comparative advantages formed by the mix of factors present in Lebanon and the implications for the types of firms most likely to locate in Lebanon.

There is little that Lebanon can do to influence national and regional conditions that affect economic development. Lebanon, however, can influence local factors that affect economic development.

WHAT IS COMPARATIVE ADVANTAGE?

Each economic region has different combinations of productive factors: land (and natural resources), labor (including technological expertise), and capital (investments in infrastructure, technology, and public services). While all areas have these factors to some degree, the mix and condition of these factors vary. The mix and condition of productive factors may allow firms in a region to produce goods and services more cheaply, or to generate more revenue, than firms in other regions.

By affecting the cost of production and marketing, comparative advantages affect the pattern of economic development in a region relative to other regions. Goal 9 and OAR 660-009-0015(4) recognize this by requiring plans to include an analysis of the relative importance of factors of production. An analysis of comparative advantage depends on the geographic areas being compared. Economic conditions in Lebanon will be largely shaped by national and regional economic conditions affecting the Willamette Valley. This section focuses on the comparative advantages of Lebanon relative to the Willamette Valley, as well as Linn County. The implications of the individual productive factors for Lebanon's overall comparative advantage are discussed at the end of this section.

LOCATION

Lebanon is located approximately eight miles east of I-5 between Salem and Eugene. Lebanon is located approximately 13 miles southeast of Albany and eight miles east of I-5, the main transportation corridor in Oregon. Lebanon is within commuting distance of Albany (8 miles), Corvallis (19 miles), and Sweet Home (14 miles). The City's proximity to these cities gives Lebanon access to the labor force and markets of these cities. According to the Census, the average commute time for Lebanon workers in 2000 was 22 minutes, implying that many employees work in cities other than Lebanon.

Lebanon offers access to rural housing and recreational opportunities. Lebanon has a small-town atmosphere and access to a rural lifestyle, which provides housing and lifestyle options to workers in the mid-Willamette Valley. Lebanon's location within the Willamette Valley and proximity to the Cascade Mountains and Oregon Coast provides ample opportunities for outdoor recreation.

Lebanon's location is a primary comparative advantage for economic development in Lebanon. Its access to I-5 and railroad access provides excellent access to transportation. Lebanon offers residents affordable housing and a small town lifestyle, with major employers and city amenities within driving distance.

TRANSPORTATION

Transportation access and capacity are is one of Lebanon's most important comparative advantages. Firms must have transportation access so that workers and customers can reach their location, and so that shipments of supplies and products can easily reach and leave the site. Lebanon's transportation system includes access to I-5 and state highways, dual carrier rail access, and the Lebanon airport.

Lebanon is located about eight miles from I-5, along Highway 34, which provides a relatively straight, flat connection with I-5. Highway 20 runs through Lebanon's downtown, connecting the City with Albany, Corvallis, and the Oregon Coast to the west and Sweet Home and Central Oregon to the east. Chapter 4 includes an extensive analysis of highway capacity and road transportation in Lebanon.

Freight rail service is available through the Albany and Eastern railroad, which offers access to both the Union Pacific and BNSF rail system—the two major railroads west of the Mississippi River. Amtrak offers passenger rail service with a station in Albany. Chapter 4 includes discussion of freight rail opportunities in Lebanon.

Air transport is available at the Lebanon State Airport, located approximately one mile west of downtown Lebanon. The airport is owned and operated by the Aeronautics Division, State of Oregon Department of Transportation. According to the City of Lebanon's website, the runway is a 2,877-foot long and 50-foot wide paved surface and is equipped with a visual approach slope indicator (VASI)

system and a medium intensity runway lighting system (MIRL). A Fixed Base Operator is located at the airport to provide commercial general aviation services. Commercial air service is available at the Eugene Airport (45 miles south) and the Portland International Airport (90 miles north).

Lebanon's transportation system provides relatively easy access to potential customers and suppliers in the Willamette Valley, west coast, and national markets. This advantage is particularly important for wood processing firms that harvest timber in the Cascade Range along U.S. Highway 20.

PUBLIC SERVICES

The availability of public services is crucial to support employment growth in Lebanon. Water and sewer service are essential for production and to support employees in the workplace. Police and fire services are needed to protect the assets of firms in Lebanon.

PUBLIC POLICY

Public policy support for economic development includes policies that local governments have to support economic activity, such as economic development policies and local tax policies. This section discusses broad economic development policies from Lebanon's comprehensive plan and compares property tax rates between Oregon, Linn County and Lebanon.

Lebanon's comprehensive plan includes a number of economic goals that focus on the following areas:

- Encouraging a **diversified economic base** for the community that provides long-term employment opportunities in all sectors, including, retail, service, and industrial, especially by encouraging the expansion of existing industries, recruiting new clean industries, and expanding light manufacturing.
- Maintaining an adequate **supply of appropriately zoned land** to provide for the full range of economic development opportunities in City, including commercial, professional, and industrial development, and developing an industrial siting and permitting process that certifies the City's industrial sites as "shovel ready."
- Ensuring that all development in Lebanon takes into consideration availability of **renewable and non-renewable resources**, the availability of land, and pollution control requirements and occurs within the carrying capacity of community resources.
- Providing a full range of commercial, cultural, recreational, educational, health, and other professional **services** funded by a viable tax base to meet the needs of the City's residents and visitors.
- Improving **community appearance**, establishing attractive gateways into the City, and creating visually appealing highway corridors.

Lebanon’s comprehensive plan includes a number of policies designed to implement the economic development goals:

- *Industrial development:* Preserve industrial lands, streamline the industrial development/construction process, assist industrial development by maintaining an inventory of available sites and assuring their readiness to build within 180 days, and support the urban redevelopment of rural industrial lands in the City’s Urban Growth Boundary (UGB) along the Santiam River to efficient and orderly urban uses. In addition, encourage the development or expansion of industries in the vicinity of the Airport.
- *Commercial development:* Encourage neighborhood commercial development at intersections of arterials or collectors. Restrict access points to neighborhood development and encourage shared public transportation access and shared parking where feasible. Allow home business occupations within residential districts.
- *Downtown development:* Encourage mixed-use development in downtown, implement the Downtown Lebanon Transportation Enhancements Plan, and support public improvements in the downtown that improve pedestrian accessibility and connectivity, public parking, and transit opportunities.
- *Environmental protections:* Require that waste and process discharges from future development (when combined with discharges from existing development) not violate, or threaten to violate, state or federal environmental quality statutes or exceed the carrying capacity, degrade, or threaten the availability of air, water, and land resources.
- *Plan for expected growth:* Plan for the projected population of the year 2025 by creating at least 3,700 new jobs.

Collectively, these policies articulate an economic develop strategy for the City of Lebanon and are consistent with the requirements of OAR 600-009-0020 that require cities to adopt economic development policies.

PROPERTY TAXES

The property tax rate in a jurisdiction can affect the location decisions of households and businesses. Table 3-1 shows the average property tax rates per \$1,000 assessed value for Oregon, Linn County, and Lebanon in 2005-2006.

Table 3-1. Property Tax Rate, per \$1,000 of assessed value, Oregon, Linn County and Lebanon, 2005-2006

Area	Tax Rate (per \$1,000 assessed value)
Oregon	\$15.37
Linn County	\$14.84
Lebanon	\$19.14-\$21.54

Source: Oregon Department of Revenue.

Table 3-1 shows that the property tax rate in Lebanon is higher than Linn County and Oregon's average property tax rates.

WATER

Residents and businesses in Lebanon receive water from the Santiam Canal. The maximum amount of treated water available in Lebanon currently is 3.8 million gallons per day, with a peak demand of 2.9 million gallons per day in 2006.

The City requested an additional water right of 18 cubic feet per second (11.6 mgd) from the Department of Water Resources, to the current supply of 9 cubic feet per second. While this supply is forecast to be adequate until 2015, a 1989 Water Facility Study recommended constructing a back-up well and increasing storage capacity from four million gallons to six million gallons. The City has identified a number of short-term improvements, including water line replacements, improvements and maintenance to the treatment facility, and new distribution water mains.

In the long-term, the City is planning on building a new intake and pumping facility adjacent to the South Santiam River and a new transmission main. The City also plans on replacing the sedimentation unit at the water treatment facility. The City is beginning the process of planning for a major expansion of the water and water treatment system and expects that the planning process will be completed by 2012.

The City's supply of potable water should be sufficient to supply expected residential growth. The supply of potable water is not expected to be a constraint on commercial and industrial growth unless the City attracts water intensive industries, such as food processors or a silicon chip fabrication plant.

WASTEWATER

The City of Lebanon maintains the sewer system, including wastewater collection and treatment and sludge disposal. The system experiences inflow and infiltration problems. The wastewater system is has a capacity of 7.2 million gallons per day but exceeds the capacity by up to 1.1 million gallons per day as a result of infiltration. The City has been able to treat the excess waste and comply with EPA standards for effluent discharge.

The wastewater treatment plant is in good condition. The City plans to upgrade the plant incrementally over the next ten years, increasing treatment capacity through the incremental upgrades. The City began construction of a new Westside sewer interceptor, which should help alleviate some of the infiltration problems. Other short-term projects include improving disinfection, outfall diffusion, site maintenance, and the construction of a clarifier. The current sewer system should be able to accommodate anticipated growth with upgrades in some service areas.

The capacity to treat wastewater is a constraining factor providing sanitary sewer to new or expanding firms that have large wastewater treatment needs.

STORMWATER

In the past, developments that included inadequate and uncoordinated storm drainage has led to ponding in some areas during high rainfall events. The City and County now require adequate storm drainage when reviewing development. In recent industrial and commercial developments, such as Lowe's and Wal-Mart, Lebanon has required the developer to address stormwater problems either by making improvements on-site or off-site, depending on the project. The City is also examining "green" designs to reduce stormwater problems.

FIRE

The Lebanon Fire Department provides fire and life safety services to approximately 35,000 people in the cities of Lebanon, Waterloo, Sodaville, and Lacombe, the unincorporated areas of Brownsville, Crabtree, and Scio, and areas in between. The District has six fire engines, three tankers, one aerial apparatus, three brush fire vehicles, four support vehicles, four advanced life support and one basic life support medic units.

PRIVATE UTILITIES

Free curbside recycling of office paper, cardboard, glass, tin, aluminum, plastic, yard debris, and tree cutting is offered by the Albany-Lebanon Sanitation Company. Electric power is supplied by Pacific Power and Light (PP&L) and Consumers Power Incorporated (CPI). Northwest Natural Gas Company provides gas to Lebanon residents. Ridgeway Butte is the only area within the UGB that is not easily serviced by the underground distribution lines for natural gas. CenturyTel provides telephone service in Lebanon.

The City of Lebanon has recently partnered with Valnet to construct a citywide wireless network. The network, utilizing new Wi-Fi mesh hardware from Cisco Systems, is the first of its type in the state.

QUALITY OF LIFE

Lebanon is an attractive location for families that want to raise their children in a close-knit community. A desirable living environment will allow Lebanon to attract skilled workers, some of whom will bring their jobs with them. The relative low cost of living compared to Corvallis also makes Lebanon more attractive to both low- and high-income wage earners (who may commute?). Population growth in general will increase the labor force immediately available in Lebanon, making it more attractive to firms that may locate there.

The small-town atmosphere in Lebanon is created by more than just its small size. Aspects of this character include its traditional downtown with quaint

structures, low-density residential neighborhoods, and proximity to farmland and open space. Lebanon can maintain many of the qualities of a small town even while growing, but the City will need to adopt policies and take actions to protect and enhance these qualities.

In addition to cultural amenities, Lebanon's location provides easy access to scenic and recreational opportunities. Located in the western foothills of the Cascade Range, Lebanon is a short drive from fishing, hunting, boating, camping, backpacking, hiking, and skiing. A variety of parks and trailheads are located to the east along Highway 20.

Livability is also impacted by the quality of parks and schools. The total number of school-aged children (ages 5 to 18 years old) in Lebanon increased approximately 27% between 1990 and 2000. The Lebanon School District recently built two new schools, Pioneer (K-8) and Riverview (K-5), and renovated several schools to accommodate current and future students. The district does not anticipate exceeding capacity in the near future.

The City is responsible for over 11 parks and other landscaped areas (such as the Pioneer Cemetery and the Santiam River Corridor). These landscaped areas range in size from 64 square feet (the downtown planters) to 22.4 acres (River Park) in Lebanon. The City has determined that there is a need for additional neighborhood parks and one additional regional park.

COMPARATIVE ADVANTAGE IN LEBANON

The mix of productive factors present in Lebanon, relative to other communities in Willamette Valley, are the foundation of the City's comparative advantage. Primary comparative advantages in Lebanon include: access to automotive and freight rail transportation access; central location within the Willamette Valley; access to labor from Albany, Corvallis, and Sweet Home; the City's high quality of life resulting from the small town feel, access to cultural and retail opportunities within the mid-Willamette Valley, and access to outdoor recreation.

Chapter 2 reports industries that have shown growth and business activity in Lebanon and Linn County in the past, as well as projections for growth industries in Linn County. These industries are indicative of businesses that might locate or expand in Lebanon. The characteristics of Lebanon will affect the types businesses most likely to locate in Lebanon:

- **Warehousing and transportation.** Lebanon's access to I-5, central location within the Willamette Valley, and availability of large industrial sites may make Lebanon attractive to warehousing and distribution firms. Large warehouse facilities that serve large areas appear to favor central locations, similar to Lebanon's location. Chapter 4 discusses Lebanon's opportunities and constraints for warehousing and distribution facilities in detail.

The access to dual carrier rail in Lebanon provides cost savings to industries that transport goods by rail. It may attract rail dependent industries that transport products such as lumber, agricultural products, or other bulky low to medium value commodities.

- **Manufacturing.** The types of manufacturing businesses likely to locate in Lebanon are those that need easy access to transportation, a semi-skilled labor force, proximity to existing businesses, or proximity to agricultural production. Examples include: satellite businesses for Lowe's, food processing, or other specialty manufacturing.
- **Retail.** Lebanon's growing population and availability of land is likely to attract a variety of retailers to Lebanon, including: big-box retailers, food and beverage stores, restaurants, and specialty retailers.
- **Health care services and government.** Health care and government services will grow as population increases.

SITE NEEDS

OAR 660-009-0015(2) requires the EOA identify the number of sites, by type, reasonably expected to be needed for the 20-year planning period. Types of needed sites are based on the site characteristics typical of expected uses. The Goal 9 rule provides flexibility in how jurisdictions conduct and organize this analysis. For example, site types can be described by plan designation (i.e., heavy or light industrial), they can be by general size categories that are defined locally (i.e., small, medium, or large sites), or it can be industry or use-based (i.e., manufacturing sites or distribution sites).

The analysis of site needs presented in this section builds from existing development patterns in Lebanon, an employment forecast, and an evaluation of the types of sites that industries most likely to locate in Lebanon need. The analysis is presented in aggregate and by major uses (e.g., industrial and retail/services).

SITE REQUIREMENTS FOR NEW AND EXPANDING FIRMS

Firms wanting to expand or locate in Lebanon will be looking for a variety of site and building characteristics, depending on the industry and specific circumstances. Previous research conducted by ECO has found that while there are always specific criteria that are industry-dependent and specific firm, many firms share at least a few common site criteria. In general, all firms need sites that are relatively flat, free of natural or regulatory constraints on development, with good transportation access and adequate public services. The exact amount, quality, and relative importance of these factors vary among different types of firms. This section discusses the site requirements for firms in industries with growth potential in the mid-Willamette Valley, as indicated by the Oregon Employment Department forecast shown in Table 3-2.

Employment growth in Lebanon will drive demand for industrial, commercial, and public land. To estimate the demand for land generated by employment growth, ECO used factors for the number of employees per acre for each of the four land use types used in the employment forecast. This step began by making a deduction from total new employment (referred to as the “refill” assumption). This deduction accounts for: (1) percent of total employment growth that requires no commercial or industrial built space or land; and (2) percent of employment growth on non-residential developed land currently developed.

Typical refill deductions range from 10% in small cities to 30% or more for larger areas. For example, Portland Metro estimated refill at around 40% for 1996 and 1997 in a small empirical study they conducted. A reasonable refill rate for Lebanon is probably 10%.

The next set of assumptions needed to estimate non-residential land need is employees per acre (EPA). This variable is defined as the number of employees per acre on non-residential land that is developed to accommodate employment growth. There are few empirical studies of the number of employees per acre, and these studies report a wide range of results. Ultimately the employees/acre assumptions reflect a judgment about average densities and typically reflect a desire for increased density of development. The final assumption is a net to gross factor. The EPA assumptions are employees per *net* acre (e.g., acres that are in tax lots). As land gets divided and developed, some of the land goes for right-of-way and other public uses. The net to gross factor varies by land use, but 25% is a reasonable assumption for employment lands.

Table 3-2 shows high and low estimated demand for employment land in the Lebanon UGB by land use type for the 2007-2027 and 2007-2057 periods. The results show that Lebanon will need between 212 and 409 gross acres of land for employment within its UGB for the 2007-2027 period. Lebanon will need between 458 and 875 gross acres of land for employment within its UGB for the 2007-2057 period.

Table 3-2. Estimated demand for employment land in the Lebanon UGB by land use type, 2007–2027 and 2007-2057

Land Use Type	Assumptions				Buildable Land Need			
	Total New Emp.	Emp that requires vacant non-res land	Emp. Per Net Acre (Low)	Emp. Per Net Acre (High)	Gross Buildable Acres (Low EPA)	Percent of Acres	Gross Buildable Acres (High EPA)	Percent of Acres
2007 to 2027								
Commercial	594	535	12.0	20.0	52.4	13%	31.4	15%
Office	952	857	12.0	20.0	84.0	21%	50.4	24%
Industrial	1,650	1,485	7.0	15.0	249.6	61%	116.5	55%
Public	258	232	12.0	20.0	22.8	6%	13.7	6%
Total	3,454	3,109			408.8	100%	212.0	100%
2007 to 2057								
Commercial	1,396	1,256	12.0	20.0	123.2	14%	73.9	16%
Office	2,106	1,895	12.0	20.0	185.8	21%	111.5	24%
Industrial	3,308	2,977	7.0	15.0	500.4	57%	233.5	51%
Public	740	666	12.0	20.0	65.3	7%	39.2	9%
Total	7,549	6,794			874.6	100%	458.1	100%

Source: ECONorthwest.

Note: The employee per acre assumptions are based on the recommendations from the Goal 9 Guidebook "Industrial and Other Employment Land Analysis Guidebook." The estimates for the 2004 report were, in some cases higher and in other cases lower, than the guidelines provided in the Guidebook.

The site requirements discussed below will be important for the City to consider not only for expected growth sectors, but they are also important factors in the successful development of the three sites identified as industrial lands of statewide significance.

The site requirements discussed in the previous section will be important in the development of the NW Industrial area site, one of the 25 "industrial sites of statewide significance." According to the state's Industrial Lands Advisory Committee Report (December 15, 2003), the Lebanon site is, "a prime location for industrial development. A unique partnership of property owners and local, state, and federal agencies are working together to complete a conceptual site master plan and a conceptual wetland mitigation plan within the next 12 months."

Since the completion of the 2004 Buildable Lands Inventory, 162 acres of vacant and buildable industrial and other employment land has developed. Nearly 80% of the development took place on land located within the city limits, with the remaining development on lands within the urban growth area. The largest of the projects was the construction of a 1.4 million square foot regional distribution center for Lowe's.

Table 3-2 shows that employment growth in Lebanon is expected in each of the categories defined by type of land use: Office, Commercial, Industrial, and Public. There are a wide variety of firms within each of these categories, and the required site and building characteristics for these firms range widely. As such, a variety of parcel sizes, building types, and land use designations in Lebanon is required to accommodate expected growth.

Table 3-3 summarizes the lot sizes typically needed for firms in selected industries with growth potential in the mid-Willamette Valley. The emphasis in Table 3-3 is on new large firms that have the most potential to generate employment growth. For example, while the number of convenience stores in Lebanon is likely to grow, the site needs for these stores is not included in Table 3-3 because they are unlikely to generate substantial employment growth. Large food stores, which are typically 50,000 to 100,000 sq. ft. in size, are more likely to generate substantial employment growth in Lebanon, and these stores require sites of 5 to 10 acres.

Table 3-3. Typical lot size requirements for firms in selected industries

Industry	Lot Size (acres)
Manufacturing	
Printing & Publishing	5 - 10
Stone, Clay & Glass	10 - 20
Fabricated Metals	10 - 20
Industrial Machinery	10 - 20
Electronics - Fab Plants	50 - 100
Electronics - Other	10 - 30
Transportation Equipment	10 - 30
Transportation & Wholesale Trade	
Trucking & Warehousing	varies
Retail Trade	
General Merchandise & Food Stores	5-10
Eating & Drinking Places	0.5-5
FIRE & Services	
Non-Depository Institutions	1 - 5
Business Services	1 - 5
Health Services	1 - 10
Engineering & Management	1 - 5

Source: ECONorthwest.

More specific site needs and locational issues for firms in potential growth industries include the following issues:

- **Flat sites:** Flat topography (slopes with grades below 10%) is needed by almost all firms in every industry except for small Office and Commercial firms that could be accommodated in small structures built on sloped sites. Flat sites are particularly important for Industrial firms in manufacturing, trucking, and warehousing, since these firms strongly prefer to locate all of their production activity on one level with loading dock access for heavy trucks.
- **Parcel configuration and parking:** Large Industrial and Commercial firms that require on-site parking or truck access are attracted to sites that offer adequate flexibility in site circulation and building layout. Parking ratios of 0.5 to 2 spaces per 1,000 square feet for Industrial and 2 to 3 spaces per 1,000 square feet for Commercial are typical ratios for these firms. In general rectangular sites are preferred, with a parcel width of at least 200-feet and length that is at least two times the width for build-to-

suit sites. Parcel width of at least 400 feet is desired for flexible industrial/business park developments and the largest Commercial users.

- **Soil type:** Soil stability and ground vibration characteristics are fairly important considerations for some highly specialized manufacturing processes, such as microchip fabrications. Otherwise soil types are not very important for Commercial, Office, or Industrial firms—provided that drainage is not a major issue.
- **Road 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 or firms that rely on visibility from passing traffic to help generate business. This need for proximity explains much of the highway strip development prevalent in urban areas today.
- **Rail Transportation:** Rail access can be very important to certain types of heavy industries. Lebanon has good rail access to many industrial sites. Freight rail service is available through the Albany and Eastern railroad, which offers access to both the Union Pacific and BNSF rail system—the two major railroads west of the Mississippi River.
- **Air transportation:** Proximity to air transportation is important for some firms engaged in manufacturing, finance, or business services. The distance of Lebanon to a major airport may be a drawback in attracting some firms.
- **Labor force.** Firms are looking at reducing their workforce risk, that is, employers want to be assured of an adequate labor pool with the skills and qualities most attractive to that industry. Communities can address this concern with adequate education and training of its populace. Firms also review turnover rates, productivity levels, types and amount of skilled workers for their industry in the area, management recruitment, and other labor force issues in a potential site area.
- **Transit:** Transit access is most important for businesses in Health Services, which has a high density of jobs and consumer activity, and serves segments of the population without access to an automobile.
- **Pedestrian and bicycle facilities:** The ability for workers to access amenities and support services such as retail, banking, and recreation areas by foot or bike is increasingly important to employers, particularly those with high-wage professional jobs. The need for safe and efficient bicycle and pedestrian networks will prove their importance overtime as support services and neighborhoods are developed adjacent to employment centers.

- **Fiber optics and telephone:** Most if not all industries expect access to multiple phone lines, a full range of telecommunication services, and high-speed internet communications.
- **Potable water:** Potable water needs range from domestic levels to 1,000,000 gallons or more per day for some manufacturing firms. The demand for water for fire suppression also varies widely. Ashland has already identified that it is unsuitable for water intensive industries.
- **Power requirements:** Electricity power requirements range from redundant (uninterrupted, multi-sourced supply) 115 kva to 230 kva. Average daily power demand (as measured in kilowatt hours) generally ranges from approximately 5,000 kwh for small business service operations to 30,000 kwh for very large manufacturing operations. For comparison, the typical household requires 2,500 kwh per day.
- **Land use buffers:** According to the public officials and developers/brokers ECO has interviewed, many Industrial areas have operational characteristics that do not blend as well with residential land uses as they do with Office and Commercial areas. Generally, as the function of industrial use intensifies (e.g., heavy manufacturing) so to does the importance of buffering to mitigate impacts of noise, odors, traffic, and 24-hour 7-day week operations. Adequate buffers may consist of vegetation, landscaped swales, roadways, and public use parks/recreation areas. Depending upon the industrial use and site topography, site buffers range from approximately 50 to 100 feet. Selected commercial office, retail, lodging and mixed-use (e.g., apartments or office over retail) activities are becoming acceptable adjacent uses to light industrial areas.

In summary, the site requirements for industries have many common elements. Firms in all industries rely on efficient transportation access and basic water, sewer and power infrastructure, but may have varying need for parcel size, slope, configuration, and buffer treatments. Transit, pedestrian and bicycle access are needed for commuting, recreation and access to support amenities.

Table 3-4 shows site needs by site size and major employment use. The estimate of needed sites builds off of the 20-year employment forecast. Employees and employers are distributed in ratios similar to those in 2004. The distribution assumes that Lebanon will continue to attract similar types of employers in the future as exist in the City now. It also assumes that the average number of employees per firm (11) will continue into the future.

The results show that Lebanon needs to provide between 128 and 225 sites to accommodate employment growth between 2007 and 2027. About one-third of these sites will need to be industrial sites; the remainder will be used for retail, services, government, and institutional uses.

Table 3-4. Needed sites by site size and major use, Lebanon, 2007-2027

Size of firm	Est Acres Needed	Avg. Site Size	Total Sites Needed	Industrial	Other Emp.
2007-2027					
250 +	200	50+ ac	1-2	1-2	-
100-250	200	20-50 ac	4-8	3-6	1-2
50-99	150	5-20 ac	10-14	6-10	4-8
25-49	60	2-5 ac	12-15	6-10	6-10
10-24	50	1-2 ac	30-40	10-15	20-25
1-9	100	<1 ac	75-150	20-40	45-110
Total	760		133-229	46-83	76-155
2007-2057					
250 +	450	50+ ac	4-6	4-6	-
100-250	450	20-50 ac	10-15	8-12	2-3
50-99	250	5-20 ac	20-27	12-15	8-12
25-49	75	2-5 ac	22-29	12-15	10-14
10-24	80	1-2 ac	45-65	15-25	30-40
1-9	150	<1 ac	105-210	40-60	75-150
Total	1455		206-352	91-133	115-219

Source: estimates by ECONorthwest

The identified site needs shown in Table 3-4 do not distinguish sites by comprehensive plan designation. It is reasonable to assume that industrial uses will primarily locate in industrial zones. Retail and service uses could locate in commercial zones, mixed-use zones, and in some instances residential zones.

Note that the site needs shown in Table 3-4 are based on local demand for sites and do not include sites for industries of statewide significance. For Lebanon these industries include regional distribution centers and rail-dependent industries. These two industries are discussed in more detail in Chapter 4.

Lebanon hopes to take advantage of its proximity to Interstate 5 and Highway 34 to attract large-site industrial users such as Lowes. It also wants to capitalize on the Albany & Eastern rail access and the fact that the spur has access to both Burlington Northern and Union Pacific. ECO worked with the City to apply the general siting characteristics described in Table 3-4 to identify specific site requirements for targeted, large-site industrial firms. Suitable large industrial sites typically require:

- Large blocks of land contiguous to or within the existing UGB or within Urban Reserve Areas;
- Direct access (within one mile) to Highway 34;
- A location that avoids truck traffic through, and minimizes common boundaries with, existing or planned urban residential neighborhoods and downtown;

- Adjacent to existing industrial or commercial development;
- Slopes of five percent or less;
- Sanitary sewer, water and storm drainage facilities.

As noted above, Lowes purchased 204 acres in Lebanon for its 1.3 million square foot regional distribution center. The Lowes site:

- Has a large site (204 acres) within the existing UGB;
- Has direct access (less than 1 mile) to Highway 34;
- Has direct rail access;
- Avoids routing truck traffic through existing or planned urban residential neighborhoods;
- Is adjacent to existing industrial or commercial development;
- Have five or less percent slope;
- Has immediate access to sanitary sewer, water and storm drainage facilities.

We recommend that the City consider adding several large sites (100-200 acres) in an Urban Reserve Area to facilitate its economic development strategy of attracting distribution centers and rail dependent industries.

Strategic Considerations for Location of Distribution Centers and Rail-Dependent Industries

Chapter 4

Regional distribution centers are large buildings that provide warehouse and distribution services for large retailers. Rail-dependent industries are those that rely on rail transport to deliver inputs to the facility or products to markets. Regional distribution centers and rail-dependent industries share some site demands, but there are important differences.

This chapter addresses the site demands of regional distribution centers and rail-dependent industries, and the implications of those demands. This chapter is divided into three sections:

- **Site requirements** describes the land, transportation, infrastructure, and workforce needs of distribution centers and rail-dependent industries.
- **Regional inventory of lands that meet site requirements** assesses and evaluates competing sites along the I-5 corridor.
- **Local and regional transportation assessment** describes how existing transportation infrastructure affects the competitiveness of the site in Lebanon.

SITE REQUIREMENTS

Regional or national chain retailers use distribution centers to supply their stores. Lowe's, a home-improvement supply retail store, is developing a site in Lebanon to locate a regional distribution center. Other existing regional distribution centers in the Willamette Valley include Target's in Albany and Fred Meyer's in Clackamas. As the Pacific Northwest grows, retail facilities grow in number, and so demand for regional distribution centers grows as well. Distribution centers are large warehouses that typically receive merchandise from multiple vendors, and those goods are then redistributed to retailers. Goods are stored and sorted so they can be sent to multiple destinations in a region. Their primary function is to receive goods, and then send the goods out again. Warehousing and distribution involves moving goods at high volume and/or high frequency.

Rail-dependent industries use or generate bulky goods and ship inputs or products over long distances. The timber industry in Oregon is a typical rail user—it generates large volumes of a bulky lumber that travel far to markets.

This section describes sites assets and discusses the importance of the asset.²¹

LAND

Warehouse and distribution centers are typically single-story structures that require large usable land areas to accommodate on-site loading, truck turnaround areas, and trailer and automobile parking. A typical floor-area-ratio (FAR) is 0.5—for every 1,000 square feet of built space the site must have 2,000 total square feet. The low FAR accommodates the truck parking and turnaround area. Some distribution centers require very large site of 100 or more acres. Wal-Mart, for example, transfers a large amount of goods of varying sizes, so it requires an exceptionally large site. Many other distribution facilities require much less land—a 100,000 square foot distribution facility can easily fit on a five-acre site. Large retail chains, such as big-box stores, are more likely to need the much larger sites.

Rail-dependent industries also need large sites. They are typically manufacturing facilities that use or create bulky commodities. Such facilities must have the physical space to store those commodities. The amount of land varies by use, but recent studies conducted to identify opportunities for rail in the Willamette Valley, reported that an intermodal rail facility would require a minimum of three to five acres.

INTERSTATE ACCESS

The distribution process has become time-sensitive—‘just-in-time’ delivery requires that stores can receive goods in a short time frame. Quick access to freeways has become relatively more important over the last five to seven years. Therefore, access to a major interstate highway is an essential site requirement for a distribution facility. Distribution facilities primarily rely on trucks to receive goods and then to send goods to retail stores. A facility typically receives goods from a broad geographic area—including other regions of the U.S. and major ports. Most goods are then delivered to the warehouse on trucks on the interstate system. The distribution center then relies on the interstate system to distribute to its retail stores. In the Pacific Northwest, Interstate 5 is the primary north-south freeway.

Some rail-dependent industries may also require interstate access. For example, a firm that uses inputs delivered by rail could make a product that is transported by truck.

²¹ Much of this discussion is based on previous research conducted by ECONorthwest and Yap, Johansson L. and Rene M. Circ. *Guide to Classifying Industrial Property*, from the Urban Land Institute, pp. 85-93. For rail-dependent industries, ECO relied on “Final Toledo Sweet Home Rail Corridor Feasibility Study”, by HDR Engineering for Cascade West Council of Governments, April 2005. ECO also interviewed commercial real estate brokers and economic development professionals.

ROAD ACCESS

This is distinct from interstate access. The road between the interstate and the distribution center should be short, straight, have few stoplights or stop signs, and few intersections. Because a distribution center generates heavy volumes of truck traffic, the roads serving the facility must be easily navigated by large, long trucks. Distribution centers will pay high prices for land near roads with good access to I-5. Their costs are driven by transport costs, so paying a high price for land with good road and interstate access will reduce long-term operations costs.

Rail-dependent industries have the same requirements. If the facility generates truck traffic, it requires a road that is easily navigated by trucks.

ZONING

Distribution activities require industrial zoning, and cannot be sited on agricultural land. Proper zoning is particularly important in Oregon, with its strong restrictions on uses for non-urban lands. Appropriate zoning applies equally to rail-dependent industries.

PROXIMITY TO LABOR

Distribution centers have a low ratio of employees to square feet of space, and need fewer workers than many other industrial uses. The facilities require entry-level workers with basic adult education. Workers need to have basic reading comprehension and math skills and interpersonal communication and teamwork abilities.³²

Rail-dependent industries' labor demands can greatly vary. Many are likely to be manufacturing facilities, which requires a mix of entry-level and skilled workers.

INFRASTRUCTURE CAPACITY

Distribution centers need basic infrastructure services: water, electricity, and wastewater. The low employment densities generate low demands for water and wastewater, and the warehousing activity has little need for extensive infrastructure. The layout of a large warehouse creates a need for stormwater facilities. The facility and surrounding pavement is impervious surface that generates stormwater run-off that must be managed.

Rail-dependent industries have varying needs for infrastructure. A manufacturing facility can have specialized high demands for water (and wastewater management) and electricity.

³² "Logistics and Supply Chain Work Force Development Needs Interviews, Portland-Vancouver Metropolitan Area" from the Advanced Center for Transportation Technologies, Clark College, Vancouver, Washington. August 2006.

Infrastructure capacity in Lebanon is discussed in detail in Chapter 3 of this report.

PROXIMITY TO POPULATION CENTERS

Distribution centers deliver goods to markets in population centers, and prefer sites close to large population centers. Locating close to major metropolitan areas reduces travel times for distribution. A site that is closer to multiple population centers has an advantage over a site close to a single major population center. For example, a site equidistant between Seattle and Portland has a competitive advantage over a site between Portland and Eugene.

Rail-dependent industries are likely to have markets that are not in major population centers.

RAIL ACCESS

Distribution centers do not use rail. In the past, they did. But just-in-time delivery and improvements to the road infrastructure across the United States has diminished rail's importance to the retail distribution system. New distribution centers in the Northwest—Dollar Tree, Target, Lowe's—are not using rail.

Interest in rail transport has increased with recent increases in the price of fuel. But it is still much more cost-effective for a distribution center to rely on truck transport. A distribution center may select a site with rail access, but it is primarily seen as a positive factor that affects future resale value.

Trucking's flexibility and ability to integrate with all other modes of freight movement has led to its dominance. A recent study on trade capacity found a likely increasing shift to high value goods requiring high frequency, smaller shipments that will promote greater truck use.³³

The ideal site for a distribution center would be a very large site close to a major metropolitan area with direct access to an uncongested interstate highway. For many reasons, few sites are available that meet all of the ideal site characteristics. Highways near major metropolitan areas are likely to be congested, and very large undeveloped sites tend to be further from urban centers. Distribution centers must weigh the relative importance of the different factors and choose a site that is the best fit.

Railroad access is typically used more for manufacturing operations or businesses dependent upon rail for the transport of their goods. In the Willamette Valley, the biggest rail users are the wood products industry and grass seed producers. A potential growth area for rail transport is the biofuels industry—both inputs and products are transported via rail.

³³ "Portland/Vancouver International and Domestic Trade Capacity Analysis" by Global Insight, Inc. for Metro, Oregon Department of Transportation, Portland Development Commission, Port of Portland, Port of Vancouver. 2006.

Rail-dependent industries in Washington and Oregon are expected to see an increase in rail tonnage by about two-thirds by 2035. Rail's share of total freight is expected to decline, but total tons will grow. The rail infrastructure is expected to be strained under the projected growth.

The UP and BNSF are experiencing high levels of demand and limited ability to expand service. High energy prices have increase demand for coal, which has consumed much rail capacity. Railroads have responded by raising rates for carload freight (i.e., non-containerized freight) in favor of coal and container traffic. The railroads are also running longer trains to accommodate increased demand for rail.³⁴

Railroads are encouraging the development of consolidation terminals for carload and domestic intermodal (containerized) freight. Rail is cost-competitive with trucking for large quantities over long distances. The large rail companies are focusing on long distance services, and rely on short lines and trucks to collect and distribute to individual shippers. A 2006 study on trade capacity in the Portland area reported that major railroads will be pushing for facilities on short lines that allow varied shipments to consolidate in rail terminals off the main lines. These terminals will likely be located outside of the Portland area because of high land costs and limited suitable industrial land in the urban area.

REGIONAL SITE INVENTORY

This section describes the existing and planned supply of sites in the study area. The analysis focuses on sites greater than 50 acres in the Willamette Valley, between Wilsonville in the north to Eugene in the south. This section primarily focuses on the competitiveness of sites for a regional distribution center.

To identify competing sites, ECO first searched on Oregon Prospector, an Internet resource that provides a database of available industrial and commercial sites and buildings by city, county, type of property, and size.³⁵ The database is maintained by the Oregon Economic and Community Development Department (OECDD), which works with the private sector to list available properties.

ECO supplemented data collected from the Oregon Prospector site by interviewing commercial real estate brokers and economic development staff at OECDD and cities.

Tables 4-1 and 4-2 show the large industrial sites between Eugene and Oregon City—those that are large enough to support a regional distribution center. Table 4-1 shows the most competitive sites—those that are large, flat, have good access to I-5, and located near compatible uses. Table 4-2 shows the second-tier sites—

³⁴ *Portland and Vancouver International and Domestic Trade Capacity Analysis*. "Growth Opportunities and Challenges Assessment, Outlook on Rail" by HDR Engineering and Cambridge Systematics, Inc. for Metro, Oregon Department of Transportation, Portland Development Commission, Port of Portland, and Port of Vancouver. August 2006.

³⁵ <http://www.oregonprospector.com>.

large sites but they lack key amenities that distribution centers need. Each table is organized alphabetically, by City. The tables list the city, the site location, size in acres, road access, whether or not the site has rail access, the distance in miles from Portland, and a general assessment of the sites advantages and disadvantages. The assessment of advantages and disadvantages focuses on the factors that affect the site's ability to support a regional distribution center.

Table 4-1. Existing or planned large industrial sites between Eugene and Wilsonville-Competitive Sites

City	Location Description	Size (Acres)	Road Access and Issues	Rail Access?	Miles to Portland City Center	Advantages	Disadvantages
Albany	South of Hwy 20, East of I-5 (Kempf property)	67	Site is on I-5 with access via Hwy 20. Needs realignment of some roads out to improve access.	No	70	The property is located on I-5.	Level access would require the realignment of some roads. Current zoning would require a site plan review and an allowed use permit to locate a distribution center on the site. Marketed by the state primarily as an industrial park.
Albany	East of Hwy 99, West of I-5 (Ellingson Road properties)	50+	Access to I-5 via Hwy 99 and Hwy 34. Approximately 4 miles from I-5.	No. But western edge of property is the UP mainline.	74	The site has potential for good access to I-5 and is well situated in the Willamette Valley for distribution. The City has planned for transportation improvements over the UP railroad main line to facilitate better access to the site.	The rail line that runs parallel to Hwy 99 cuts off continuous truck access from the site to Hwy 99. A change to current zoning would be required to locate a distribution center on the site. Multiple parcels would have to be combined for the site to exceed 50 acres.
Lebanon	Reeves Industrial Park	52	Good access to I-5 8 miles from I-5 via Hwy 34	yes	82	Large and flat site. Good access to I-5 Capacity on Hwy 34 and I-5 interchange	10 acres of wetlands on the site, but mitigation plan is in place Relatively far from Portland
Lebanon	Gore Road Site	~600	Good access to I-5 8 miles from I-5 via Hwy 34	yes	82	Large and flat site. Good access to I-5 Capacity on Hwy 34 and I-5 interchange	Wetlands have not been delineated Not fully serviced by infrastructure and not immediately ready for development Relatively far from Portland
Salem	Mill Creek Industrial Park	657 total 50-acre and 146-acre certified sites	Good access to I-5. Two miles from I-5 via Hwy 22.	No	54	Highly desirable site. "Best shovel-ready site around". Very large with good access to I-5. Infrastructure is in place. Wetlands issues resolved. Large and diverse labor force nearby.	Transportation impacts limit the site to only one distribution center, so not likely to attract a 2 nd distribution center. Improvements to on and off-ramps to Hwy 22 from I-5, and Hwy 22 itself are needed to accommodate the truck traffic associated with a distribution center.

Table 4-1. Existing or planned large industrial sites between Eugene and Wilsonville-Competitive Sites

City	Location Description	Size (Acres)	Road Access and Issues	Rail Access?	Miles to Portland City Center	Advantages	Disadvantages
Salem	Gaffin Road	85	Good access to I-5. Two miles from I-5 via Hwy 22.	No	50	Large site that is well situated in the Willamette Valley for distribution and other uses.	A distribution center at the nearby Mill Creek site precludes locating one at the Gaffin Road site, due to road capacity limitations. Improvements to on- and off-ramps from Hwy 22 to I-5 and Hwy 22 itself are needed to accommodate the truck traffic associated with a distribution center. Wetlands limits site to 70 acres of useable space.
Woodburn	Near Winco site	~400	Good access to I-5	No	30	Large site that is close to Portland. Good access to I-5. Excellent site once it is urbanized.	Outside the UGB (this status will change in the immediate future).

Source: Oregon Prospector (www.oregonprospector.com), Mapquest (www.mapquest.com), and interviews conducted by ECONorthwest.

Table 4-2. Existing or planned large industrial sites between Eugene and Wilsonville-Second Tier Sites

City	Location Description	Size (Acres)	Road Access and Issues	Rail Access?	Miles to Portland City Center	Advantages	Disadvantages
Canby	Pioneer Industrial Park	225	Direct access to Hwy 99. 12 miles from I-5.	Yes	27	Good access to Hwy 99E.	Connection to I-5 is long and has many tight turns. Although total size is large, Industrial Park is not a fully contiguous property. More suitable for light industry than distribution.
Corvallis	Airport Industrial Park	190	Direct access to Hwy. 99 and 12 miles to I-5.	Yes-rail spur on site.	89	Flat buildable site. Close proximity to municipal airport and rail spur on site. Adjacent to Hwy. 99.	Site is in flight path, which limits building heights, and some buyers don't want to locate near airport traffic. Mediocre access to I-5 through a school zone, then to Hwy 34. Wetlands not delineated. More suitable for campus-type industrial.
Corvallis	Cascade View Industrial Properties	554	Adjacent to Hwy. 99 and 12 miles from I-5.	Yes-Willamette and Pacific RR rail spur on site.	89	Same as Corvallis Airport Industrial Park.	Same as Corvallis Airport Industrial Park.
Corvallis	Willamette Business Park	50	12 miles from I-5	Yes-rail spur on site.	89	Same as Corvallis Airport Industrial Park.	Same as Corvallis Airport Industrial Park.
Dallas	1500 SE Godsey Road	52	14 miles from I-5. 13 miles from a commercial airport 1.5 miles from Hwy 99W.	No	63	The property is a large, flat, and cleared. Zoned industrial and ready to build. Access to a large regional workforce.	Poor access to I-5. far and via a rural highway.

Table 4-2. Existing or planned large industrial sites between Eugene and Wilsonville-Second Tier Sites

City	Location Description	Size (Acres)	Road Access and Issues	Rail Access?	Miles to Portland City Center	Advantages	Disadvantages
Eugene	Greenhill Technology Park, Phase I and II	100 (combined)	Indirect access to I-5.	No	118	Zoned Special Light Industrial, making it suitable for a broad cross section of high technology and light manufacturing firms. Served by all city services. Close to Eugene Airport.	Site is more suited to campus industrial, not distribution. Indirect access to I-5.
Independence	Hoffman Road	100	Poor access to I-5. Close to Hwy 99W and Hwy 51. Directly adjacent to Independence State Airport.	No	59	Access to a good workforce. Good access to Hwy 99W and Hwy 51.	Outside UGB and zoned EFU. Connection to I-5 is poor: far and through Salem. No infrastructure is in place. Not ready for development in the short-term.
Junction City	Oaklea Industrial Park	70	Near Hwy 99. Poor access to I-5.	No	111	Developing Professional-Industrial Business park located west of Junction City. Close to large recreational vehicle manufacturing cluster.	The site is adjacent to urban and residential uses. Transportation access is via city and county roads from Hwy 99, constraining large industrial uses.
Millersburg	4222 Old Salem RD NE	226	Excellent access to I-5	No	66	Railroad mainline is available along west boundary with siding possible. Zoned for heavy industrial. Urban services available. Close to I-5.	Potential land use conflicts (houses in the area) that need resolving.
Springfield	28th Street and Marcola Road	103	Near Hwy 26	No	113	Master planned for 55 acres of campus industrial.	Close to residential and school uses. Extensive mitigation would be needed. Site does not facilitate high volume truck traffic well. Better suited for campus industrial than distribution uses.
Philomath	2395 Main Street	174	On Hwy 34, 16 miles west of I-5	No	89	Served by urban utilities.	Poor access to I-5. Not zoned for heavy industrial or distribution activities.

Table 4-2. Existing or planned large industrial sites between Eugene and Wilsonville-Second Tier Sites

City	Location Description	Size (Acres)	Road Access and Issues	Rail Access?	Miles to Portland City Center	Advantages	Disadvantages
Stayton	off of Hwy 22	50	Adequate access to I-5. About 12 miles east of I-5, via Hwy 22.	Yes. Slated for Connect Oregon upgrade	50	A shovel-ready site, with wetlands delineated. Good site for manufacturing.	Relatively far from I-5. Somewhat small for a distribution center. The site owners are looking more towards industrial uses on the property.

Source: Oregon Prospector (www.oregonprospector.com), Mapquest (www.mapquest.com), and interviews conducted by ECONorthwest

The assessment of large industrial sites shows a variety of advantages and disadvantages. As a location for a regional distribution center, Lebanon is well positioned.

In our assessment of large industrial site, ECO found that Lebanon compares very well to other large sites. We found that Lebanon's strengths are:

- Good access to I-5, with excess access and interchange capacity on Highway 34.
- Urban services available at the site.
- City staff responds to needs of potential buyers—they provide good information and are helpful throughout the acquisition process.
- The City has done much of the planning to accommodate distribution and heavy manufacturing, minimizing administrative hurdles.
- Property owners are willing to work with the City and potential buyers.
- Access to a blue-collar labor force.

Lebanon's primary weakness is its distance from the Portland metropolitan area—the major regional market for goods, where about two-thirds of Oregon's population lives.

The Mill Creek Industrial Park in Salem was identified by many interviewees as the top industrial site in the region. It is very large, relatively close to Portland, its infrastructure is in place. Wal-Mart had plans to locate a distribute center at the site, but in April 2007 decided to not go through with those plans. Earlier drafts of this report had concluded that with Wal-Mart at Mill Creek, Lebanon became the most desirable site for a distribution center. As of July 2007, the Mill Creek site has not secured a distribution center, and so it remains the most competitive site in the Willamette Valley. The site now has two certified large sites: a 50-acre parcel and a 146-acre parcel.³⁶

The Mill Creek site is likely to attract a distribution center. But a distribution center at the site will impact transportation—the trucks accessing the site will consume excess capacity on Highway 22 and its interchange to the I-5. If it is a large distribution center, it may consume road capacity, precluding the siting of an additional distribution center.

Some of the realtors and economic development professionals we interviewed reported that although the Mill Creek site is the most competitive, as soon as one distributor locates there, Lebanon then moves back to the most competitive site in the Valley.

In Albany, the Kempf and Ellingson Road properties rate well for a large regional distribution center. The road access into the sites has some problems, but the problems can be resolved by reworking the road. Both sites are marketed as

³⁶ Personal communication with Ray Burstedt at SEDCOR, July 18, 2007.

industrial parks, and would require zone changes to accommodate a distribution center.

Interviewees identified another very good site, in Woodburn. It has excellent locational advantages and is in the process of being brought into the Woodburn UGB, making it available for development.

The next section of this chapter provides a detailed assessment of the transportation issues that affect Lebanon.

LOCAL AND REGIONAL TRANSPORTATION ASSESSMENT

Access to roads and highway is an essential site characteristic for regional distribution centers. This section discusses aspect of the transportation system that affect the desirability of the Lebanon site. It describes in detail the following transportation factors.

- **Regional highway capacity** discusses traffic capacity issues on I-5.
- **Highway 34 interchange** describes traffic issues on the interchange connecting Highway 34 to I-5. It also describes traffic issues on interchanges in Albany and Salem.
- **Highway 34** discusses the section of the Highway between Lebanon and the I-5 interchange.
- **Dual rail carrier access** describes how service by the Albany and Eastern railroad in Lebanon affects industrial siting decisions.
- **Rail reload facility** describes how the reload facility in Lebanon affects industrial siting decisions.

REGIONAL HIGHWAY CAPACITY

Oregon's primary transportation corridor is Interstate 5. Lebanon is about eight miles from the I-5, and trucks serving a distribution center in Lebanon would rely on the entire corridor, from Washington to Oregon, and possibly into California.

The Oregon Department of Transportation conducted a detailed assessment of conditions on the I-5, and reported the results in *State of the Interstate Report 2000: A Transportation Conditions Report*. The report describes conditions on the I-5 and its interchanges.

In its assessment of conditions on the I-5, ODOT identified nine levels of congestion in the I-5 Corridor. These levels were defined based on the ratio of average daily traffic volume to hourly capacity. ODOT's congestion levels range from 'uncongested' to 'extremely congested'.

Table 4-2 summarizes traffic and congestion conditions on I-5 near three interchanges: Highways 34, 20, and 22. These interchanges lead to the industrial sites that are most competitive with Lebanon. Highway 34 leads to Lebanon, and Highways 20 and 22 lead to sites in Albany and Salem, respectively.

Table 4-2 shows substantially more congestion in 2020. The analysis contained in the ODOT report assumes no improvements before that time.

Table 4-2. Traffic conditions on I-5 in 2000 and 2020.

Segment	Conditions in 2000	Expected Conditions in 2020
Near Hwy 34 ("Tangent" segment)	Uncongested. Traffic volumes range from 37,000 to 39,000 vehicles per day, 26% are trucks.	Congestion levels will approach moderate. Average daily traffic volumes will increase to 53,000 to 55,000.
Near Hwy 20 ("Albany segment")	Uncongested. Daily traffic between Hwy 20 and North Albany is 40,000. North of North Albany, volumes are 54,000 to 56,000. Truck volume makes up between 19% and 26%.	South of North Albany, congestion levels will approach moderate. North of North Albany, congestion levels will be just over moderately congested. South of North Albany, traffic levels will be 59,000. North of North Albany, volumes will be 84,000 to 86,000.
Near Hwy 22 ("Salem-Keizer" segment)	South of Hwy 22 is moderately congested. North of Hwy 22 is uncongested. South of Hwy 22, traffic volumes are 63,000. North of Hwy 22, volumes are 75,000 to 77,000. Trucks make up 15% to 26% of volume.	South of Hwy 22 will be very congested. North of Hwy 22 will be congested. South of Hwy 22, traffic volumes will be 98,000. North of Hwy 22, volumes will be 115,000 to 123,000.

Source: ODOT, State of the Interstate Report 2000: A Transportation Conditions Report. Appendices H and I. Names of segments are as reported by ODOT.

Lebanon is located near a level and straight section of the I-5. Congestion levels near Highway 34 are low, and are expected to be low in the future. Congestion mostly affects urbanized areas. Congestion is higher, and will be even higher, in the more urbanized parts of the state: Eugene/Springfield, between Albany and Salem, and between Keizer and Wilsonville.

The Lebanon site is located on low congestion portion of the I-5, but any distribution center will deliver to population centers—the urbanized areas with congestion. A distribution facility can avoid congestion near the site, but its trucks will encounter congestion as it delivers goods to Eugene, Salem, Portland, and beyond.

HIGHWAY 34 INTERCHANGE

Road freight from the Lebanon site will access I-5 at the Highway 34 interchange. The Highway 34 interchange, upgraded in the 1990's, is one of the newer interchanges in the Willamette Valley. The only other interchange as new

as the Highway 34 interchange is the South Jefferson/Millersburg interchange between Mission Street in Salem and Beltline in Eugene. The majority of the other interchanges south of Wilsonville and north of Eugene were built in the 1960's and have not been upgraded. The Highway 34 and the South Jefferson/Millersburg interchanges are notably superior in terms of their ease of improvement going forward to facilitate large traffic volumes.³⁷

Transportation planners use the volume-to-capacity (V/C) ratio to quantify traffic flow. Higher ratios indicate more congestion. The ratio is computed by dividing the number of vehicles passing through a section of highway during the peak hour by the capacity of the section. Capacity is the maximum volume of traffic that the roadway section is able to carry on a sustained basis. V/C ratios are typically reported for the weekday peak hour volume or the 30th highest hourly volume of the year. In urban areas, the highest average hourly volumes occur during the afternoon peak commute times. In rural areas, peak (30th hour) volumes can occur on weekends.

The most recent study of traffic volumes on the **Highway 34** interchange (conducted in 2000) showed that traffic volumes on the interchange were in good condition. There are six ramps on and off I-5 at the Highway 34 interchange. There is only one ramp with a capacity problem: the intersection from Highway 34 to the west, headed to south-bound I-5, which has a V/C of 1.07. The primary cause of this congestion is traffic leaving the I-5 for gas stations on the west side of the interchange. This does not mean that there is no additional capacity on the off-ramp. It only means cars may have to wait for a second green light.

The east side of the interchange has good capacity. In 2000, the V/C ratio was 0.52 on the north-bound ramps of the Highway 34 interchange. The east side of the interchange sees less traffic generated by gas stations. It is the east side that serves Lebanon, and any future industrial facilities.

Road freight from Albany access I-5 at the **Highway 20** interchange. ODOT has set the V/C ratio performance standard on the Highway 20, I-5 interchange at 0.75.³⁸ In a recent measurement (2005) the V/C ratio at the southbound intersections of Highway 20 and I-5³⁹ was 0.84.

When the V/C ratio is above the ODOT performance standard, Oregon law requires that developments impacting the affected interchange must mitigate those impacts. (Developers are not required to bring the V/C ratio down to the ODOT performance standard, but they may not increase the V/C ratio above its current level of impairment.) Because the west side of the interchange is already over its performance standard, opportunities to fix capacity issues with low-cost tools

³⁷ This discussion is based on a personal communication with John DeTar, Planner at ODOT, September 21, 2006 and ODOT's *State of the Interstate Report 2000: A Transportation Conditions Report*.

³⁸ The discussion on the Highway 20 interchange is based on a personal communication with Ron Irish, Engineering Technician IV, City of Albany. March 27, 2007.

³⁹ This measurement was taken on the west side of I-5, at the intersection of Highway 20 and Airport road. This intersection measures the traffic flow on the south bound I-5 on and off ramps. Measurements for the north bound on and off ramps were not available.

(such as non-peak hour travel) are limited. The long-term solution is to increase the intersection's capacity through infrastructure improvements. The costs of mitigating impacts may be prohibitive to development.

Depending on growth and other factors, an infrastructure fix to the interchange is not expected in the near term. Under normal funding cycles an upgraded interchange is expected to be roughly 20 years in the future. The interchange could be upgraded sooner to accommodate population and commerce growth.

The Mill Creek site in Salem can access the I-5 from two interchanges: **Highway 22** to the north and **Kuebler Boulevard** to the south. Freight traffic from the Mill Creek site is likely to use Highway 22 for northbound traffic and Kuebler Boulevard for southbound traffic.⁴⁰

To reach the Highway 22/I-5 interchange from the Mill Creek site, traffic leaves the site on Kuebler Road (the road is actually Cordon Road, but becomes Kuebler Road) going south, turns right onto Lancaster Drive, and then turns left onto Highway 22. The intersection at Kuebler and Lancaster has congestion levels below the mobility standard. The standard is 0.88, and current V/C is 0.79. Traffic models show that the V/C will be 1.3 in 2030. Planned and funded improvements will keep the V/C lower than 1.3 (but higher than 0.88). If a distribution center locates at the Mill Creek site, it will be required to pay for improvements to Kuebler Road (north of Lancaster) that will mitigate traffic congestion caused by the distribution center.

The interchange connecting Lancaster Road to Highway 22 is congested. The mobility standard is 0.8. The westbound lane V/C is greater than 1.5, while the mobility standard is 0.8. The eastbound lane is 0.59. The eastbound lane has been signalized, but the westbound lane has not. At this time, road improvement projects in the area have not been prioritized for funding.

The Highway 22/I-5 interchange is modestly congested, and could handle a distribution center. The northbound lane at 0.84 and the southbound lane is 0.89. The mobility standard is 0.80. The interchange receives traffic from many sources, and a distribution would only be a small contributor to expected traffic volume growth.

To reach the Kuebler/I-5 interchange, traffic leaves the Mill Creek site and travels south on Kuebler Boulevard. The east side of the Kuebler Boulevard/I-5 interchange is below the mobility standard of 0.85. The northbound ramp is 0.72 and the southbound ramp is 0.66. One reason for the lack of congestion is the Kuebler Road is only two lanes wide, which limits the flow of traffic to the interchange. Any widening of Kuebler Road would increase congestion on the interchange. In the absence of any improvement, the interchange is expected to be

⁴⁰ The discussion on the Highway 22 and Kuebler Boulevard interchanges is based on a personal communication with Dan Fricke, Senior Transportation Planner, ODOT, July 25, 2007.

congested by 2030. Improvements have been proposed, but they are not funded at this time.

In summary, the Highway 34 interchange compares favorably to the Albany and Salem sites. It has capacity and can handle additional traffic before any mitigation would be required.

HIGHWAY 34 CORRIDOR

Lebanon lies about eight miles east of I-5 on Highway 34, and the Highway is the most direct connection to the I-5. At current traffic volumes, mobility on the Highway 34 corridor is good. Traffic volumes in 2005 from ODOT indicate that there is still capacity on the corridor and that current volumes do not threaten congestion in the corridor. ODOT's analysis shows the volume-to-capacity ratio at mile 7 on the west-bound side was 0.13 in 2000 and on the east-bound side it was 0.24. The mobility standard is 0.7. Therefore, there is still capacity on the Highway, and congestion is not a threat.⁴¹

The place most likely to exceed congestion levels in the future is the turn-off at Denny School Road. The 2005 traffic volumes from ODOT show that almost two-thirds of the traffic on the corridor leaves the Highway at Denny School Road. Traffic volumes are approximately 15,000 on Highway 34 before Denny School Road and approximately 5,000 after. Siting an additional distribution center east of Denny School Road would increase the volume of traffic by this intersection, increasing congestion. Depending on the volume of traffic created by future distribution centers and other corridor users, future increases in congestion at the Denny School Road turn-off could necessitate an interchange or other traffic congestion solutions. The current analysis by ODOT does *not* plan for an interchange at Denny School Road.

The need for additional capacity on the corridor is unclear at this time. As reported by ODOT, current traffic volumes are not congested. Yet the most recent in-depth analysis of corridor mobility was completed in 1996 and was based on traffic data that is from before 1996. New analysis is needed to identify impacts of future development on corridor mobility.

ODOT has found that distribution centers do not have a huge impact on traffic volumes. Distribution centers generate two types of traffic: employee and truck. The employee traffic is likely to coincide with peak traffic times. Truck traffic, however, tends to be at non-peak hours, so it does not greatly affect V/C ratios, which are based on peak travel times.

A distribution center in addition to the Lowe's facility would add traffic to the Highway 34 corridor. But volume-to-capacity ratios are low enough now that an additional distribution center would not have a significant effect on transportation.

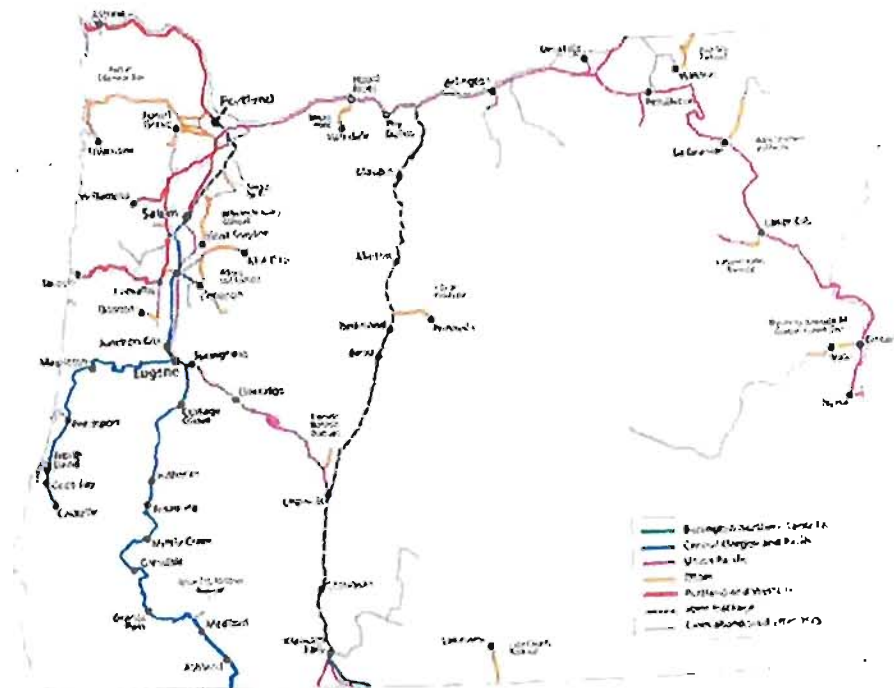
⁴¹ This discussion is based on multiple personal communications with John DeTar, Planner at ODOT in the fall of 2006.

Traffic levels on Highway 34 compare well to Lebanon's primary competition for a new large industrial site: the Mill Creek site in Salem. That site is on Highway 22, which has greater traffic flows as commuters travel to and from Lancaster Drive. Highway 22 has greater potential for congestion than does Lebanon. This is to be expected, as it is a main connector for the City of Salem, a much larger city than Lebanon.

DUAL RAIL CARRIER ACCESS

Lebanon is served by the 65.6-mile long Albany and Eastern railroad. The Albany and Eastern is unique in the state in that it offers access to both the Union Pacific (UP) and the BNSF rail systems – the two major railroads west of the Mississippi River. A 12-mile stretch of the Albany and Eastern between Albany and Lebanon is the only place in the state that can offer access to both the BNSF and the UP.⁴² A portion of this 12-mile stretch runs adjacent industrial lands located in the northwest part of Lebanon.⁴³ Figure 4-1 show a map of railroad line ownership in Oregon.

Figure 4-1. Railroad Line Ownership in Oregon, 2000



Source: Loy, William and Stuart Allan Allen Buckley and James Meacham. Atlas of Oregon, 2nd Edition. university of Oregon Press, 2001.

⁴² A line in Beaverton has similar rail access, but it is in an office park and is only a mile long, which limits its industrial and transit uses.

⁴³ Much of this section is based on a personal communications with Bob Melbo, State Rail Planner at ODOT, October 5, 2006, and Tamara Boyes at the Albany and Eastern Railroad, October 13, 2006.

Albany and Eastern's dual rail carrier status creates an advantage for businesses locating in Lebanon by creating cost-lowering competition between the UP and the BNSF for the rail business along its dual rail corridor and allowing businesses on or near the dual rail corridor to avoid paying costly transfer rates. Because customers on the Albany and Eastern can choose to ship their goods on either the BNSF or the UP, the BNSF and the UP compete for the freight business on the dual rail corridor, theoretically lowering the price for rail service.

For example, if a business were only served by UP and needed to ship to an end destination only served by the BNSF, the business would have to pay the transfer rate to transfer the freight from UP-owned lines to BNSF-owned lines. The transfer rate is the price customers pay to transfer cargo from being carried on one line (i.e., the UP line) to being carried on another (i.e., the BNSF line). Because of their dual rail status, Albany and Eastern can get onto either the BNSF or the UP rail system with no extra costs, creating significant cost savings for businesses located on or near the dual rail section of Albany and Eastern's lines. For example, the Roseburg Lumber Company and Weyerhaeuser transport lumber by truck to Lebanon from Roseburg, Dallas, Cottage Grove, and elsewhere, to take advantage of the cost savings provided by the dual rail status.

The Albany and Eastern's dual rail carrier status is unique in Oregon, but Lebanon is not the only location with access to the Albany and Eastern. A 2005 study identified six other sites with access to the Albany and Eastern.⁴⁴ Five of the six sites are within the City of Albany between Lochner and Marion Streets. The sites are within five miles of I-5 via Highways 34 and 20. They are zoned light industrial or industrial. These sites range in size from seven acres to 50 acres. The sixth site is on Three Lakes Road, outside city limits and zoned EFU.

Lebanon has distinct advantages for firms that need rail service. Distribution centers, however, typically don't need rail service. Safeway and Fred Meyer distribution centers in Clackamas are located on rail lines, they are older distribution centers, built in the 1970's. At that time, rail service was more important to distribution centers. Today the Safeway and the Fred Meyer distribution centers rely primarily on truck transport. New distribution centers typically do not use rail. For example, the Lowes distribution center in Lebanon and the Target distribution center in Albany do not use rail to bring goods to the distribution center.

Commercial brokers interviewed by ECO reported that distribution centers do not make locational decisions based on the presence or absence of rail facilities. The majority of companies that use regional distribution centers are truck and freeway-oriented. They look for sites that lowers truck transportation costs.

⁴⁴ "Toledo Sweet Home Rail Corridor Feasibility Study" by HDR Engineering, Inc. for Cascade West Council of Governments. April 2005. This text is taken from Chapter 3, Physical and Operational Feasibility of Locating a New Intermodal Facility in Linn and Benton Counties.

RAIL RELOAD FACILITY

The Albany and Eastern Railroad Company runs the rail reload station in Lebanon. The transfer station lets companies bring their goods (lumber, steel, liquids, grass seed, animal feed, and other bulk commodities) to the reload station to be loaded and transported by rail to their final destinations. The transfer facility's location along the dual rail portion of the Albany and Eastern line allows companies to ship on both UP and the BNSF lines without paying a transfer rate.

The transfer station was located near the old rail station in downtown Lebanon. The location has several problems associated with it. The large volume of truck traffic to and from the transfer station strains city streets. In addition, the downtown location makes it difficult for large trucks to reach the facility. The transfer station is not a congruent use with the rest of downtown.⁴⁵

To alleviate the problems caused with this downtown location and to upgrade reload services in Lebanon, Lebanon applied for and won a grant through the Connect Oregon program. The grant will fund the construction of a new reload facility near Highway 34 and Lebanon's industrial lands. Of the \$99.5 million awarded through the Connect Oregon program, Lebanon is slated to receive \$1.9 million for a new reload facility.⁴⁶

Building an new reload station removes the strain on city streets, provides better access to the reload station via Highway 34, and moves the reload station's operations into an area with congruent uses. In addition to replacing the existing reload station with a newer, larger, and more accessible facility, the new station allows the facility to grow to meet future demand. As the market for intermodal transfer increases in Portland and other ports serving the Willamette Valley, an additional intermodal transfer station may become feasible. Lebanon's rail and highway transport amenities make it a good candidate for a future intermodal transfer station site.⁴⁷

⁴⁵ Much of this section is based on a personal communications with Bob Melbo, State Rail Planner at ODOT, October 5, 2006.

⁴⁶ As reported on the ODOT website, <http://www.oregon.gov/ODOT/COMM/CO/OTCapproved.shtml>, accessed October 6, 2006.

⁴⁷ personal communications with Bob Melbo, State Rail Planner, 10/5/06

This chapter presents conclusions about land supply and demand and the need for land for industrial and other employment uses in Lebanon.

COMPARISON OF LAND SUPPLY AND DEMAND

This section summarizes from data and analysis presented in Chapter 2 to compared “demonstrated need” for vacant buildable commercial and industrial land with the supply of such land currently within the Lebanon UGB and city limits. Chapter 2 described land supply and land needed for employment.

Table 5-1 shows a comparison of estimated industrial and commercial land need and land demand for the Lebanon UGB between 2007 to 2027 and 2007 to 2057 periods. The results lead to the following findings:

- Total land demand for all uses is estimated to be between 212 gross buildable acres and 409 gross buildable acres for the 2007 to 2027 period. The total land demand for all uses is estimated to be between 458 gross buildable acres and 875 gross buildable acres for the 2007 to 2057 period.
- Lebanon has about 1,148 gross buildable acres available to accommodate development.
- Lebanon has an overall surplus of between 740 gross buildable acres and 936 gross buildable acres of land in its UGB for the 2007 to 2027 period. Over the 2007 to 2057 period, Lebanon has an overall surplus of between 274 gross buildable acres and 690 gross buildable acres of land in its UGB
- ECO identified deficits of gross buildable lands in the Commercial designation (up to 9 gross buildable acres for the 20-year period and up to 44 gross buildable acres over the 50-year period). In the 20-year period, this deficit could be accommodated in the Mixed-Use Zone (formerly the Special Development district), which allows commercial uses. Over the 50-year period, this deficit could be addressed through land available in the Mixed Use and by other measures, such as converting Light Industrial land to Commercial uses or a UGB expansion.

Table 5-1. Comparison of industrial and commercial land need and land supply, Lebanon UGB, 2007-2027 and 2007-2057

Plan Designation	Land Need		Supply	(Deficit) Surplus	
	Low Estimate	High Estimate	Gross Bulldable Acres	Low Estimate	High Estimate
Land Need 2007-2027					
Commercial	15.7	26.2	17.2	1.5	(9.0)
General Industrial	17.5	37.4	163.7	146.2	126.3
Light Industrial	99.0	212.1	641.7	542.7	429.6
Mixed-Use	79.8	133.0	325.7	245.9	192.7
Total	212.0	408.7	1,148.3	936.3	739.6
Land Need 2007-2057					0.0
Commercial	36.9	61.6	17.2	(19.7)	(44.4)
General Industrial	35.0	75.1	163.7	128.7	88.6
Light Industrial	198.5	425.4	641.7	443.2	216.3
Mixed-Use	187.6	312.0	325.7	138.1	13.7
Total	458.0	874.1	1,148.3	690.3	274.2

Source: City of Lebanon GIS data; analysis by ECONorthwest

Note: Negative numbers represent a deficit of acres and are shown in parenthesis (). The numbers represent the amount of bulldable land that Lebanon will need to add to its UGB to accommodate development.

Table 5-1 compared land supply with overall demand. Goal 9, however, requires cities consider *site needs* of targeted industries. Table 5-2 compares industrial and commercial site needs with site supply within Lebanon UGB between 2007 and 2057. Generally speaking, Lebanon has a deficit supply of small industrial and commercial sites in the 5-acre and below categories. However, this deficit will probably be compensated for through the division of larger paces. Lebanon has enough industrial lands in the medium category (2-20 acres), but a small deficit of commercial lands.

However, Lebanon has an unmet need for:

- One large industrial site in the 50-200+ acre range.
- Two to six industrial sites in the 20-50 acre range.
- One to two commercial sites in the 20-50 acre range.

Overall this equates to an industrial deficit of between 100 and 500 acres and a commercial deficit of 40 to 100 acres. In order to meet identified long-term site requirements, Lebanon should consider establishing Urban Reserve Areas.

Table 5-2. Comparison of industrial and commercial land need and land supply, gross acres, Lebanon UGB, 2007-2057

Employment need			Industrial Sites			Commercial Sites		
Avg. Site Size	Total Sites Needed	Total Acres Needed	Needed Sites	Site Supply	Site Surplus (Deficit)	Needed Sites	Site Supply	Site Surplus (Deficit)
50+ ac	4-6	450	4-6	5	(1)	-		
20-50 ac	10-15	450	8-12	6	(2-6)	2-3	1	(1-2)
5-20 ac	20-27	250	12-15	20	0	8-12	21	0
2-5 ac	22-29	76	12-15	15	0	10-14	7	(3-7)
1-2 ac	45-65	80	15-25	12	(3-13)	30-40	16	(14-24)
<1 ac	105-210	150	40-60	25	(15-35)	75-150	68	(7-82)
Total	206-352	1455	91-133			115-219		

Source: City of Lebanon; analysis by ECONorthwest

Note: Negative numbers represent a deficit of acres and are shown in parenthesis ().

The numbers represent the amount of buildable land that Albany will need to add to its UGB to accommodate development.

INDUSTRIAL USES

ECO's analysis specifically considered two types of industrial uses: regional distribution centers and rail-dependent industries. Lebanon is well positioned to attract both types of industrial uses.

REGIONAL DISTRIBUTION CENTERS

Lebanon is a good location for an additional regional distribution center. Essential factors for siting these facilities are large parcels with good access to the interstate road system. Lebanon has both.

- Lebanon's access to I-5 is good. The industrial parcels are located directly on Highway 34, so access to the regional highway is good. The sites are about eight miles from I-5, which is further than what is preferred for regional distribution centers. But Highway 34 is an uncongested and straight drive to the freeway. It is an easy road for large trucks to maneuver.

The Highway 34/I-5 interchange is not congested. The on- and off-ramps on the east side of I-5 have enough capacity to handle increased traffic associated with an additional distribution center in Lebanon.

- Lebanon's industrial parcels are large. Regional distribution centers require large sites. Big trucks need plenty of space to back in, turn around, and drive out. Economic development professionals report that the new distribution centers that have located in the northwest have demanded sites greater than 50 acres.

Regional distribution centers also require close proximity to population centers. The largest population center in Oregon is the Portland metropolitan area, the largest in the Pacific Northwest is Seattle.

How important is it to site a distribution center close to the Portland or Seattle areas? The answer is not very clear: it depends. It depends on what geographic

region the distribution center will serve. If it is going to serve Oregon, Lebanon is good location. It is far from Portland, but close to Salem and the Eugene/Springfield metropolitan areas. If the center is going to serve the Pacific Northwest, Lebanon may be too far south, and a location north of Portland, close to Seattle may make more sense. But if the center is going to serve the entire west coast, Lebanon is centrally located. Trucks can access Seattle, Portland, San Francisco, and Los Angeles with relative ease. The new Lowe's facility will distribute goods from Sacramento to Alaska.

Many firms would prefer to site a distribution center further north than Lebanon. Their choices are very limited. The number of large sites with good road access is small. Large industrial sites are difficult to find in the Portland metropolitan area. Vacant industrial land is in short supply near Portland because it has already been developed and occupied by other firms. A regional distribution center needs a large parcel—it must look further away from the metropolitan area because that is where land is less likely to already be developed. The obvious choices for a distribution center site is in the mid-Willamette Valley or along I-84, east of the Cascades.

A firm looking for a large parcel to site a distribution center must optimize the positives and negatives for each available industrial site: size, road access, and proximity to markets.

The best site in the Willamette Valley is the Mill Creek site in Salem. It is large, close to Portland, and has good road access. The site has limited capacity for distribution centers, however. That site is now available (Wal-Mart was in the process of acquiring, but backed out). That area has congestion generated by the many other nearby uses. The site does not have road capacity for more than one distribution center.

The site in Woodburn has potential to be an excellent site for a regional distribution center. It is expected to be brought into the UGB very soon, and after administrative hurdles cleared, able to be developed for a large industrial use.

Other than these sites and Lebanon, there are no sites that are good distribution center locations. They are either far from the I-5, have congestion issues, roads are difficult to navigate, or are too small.

RAIL-DEPENDENT INDUSTRIES

Lebanon is an excellent site for rail-dependent industries. The Albany and Eastern Railroad can access both the UP and BNRC Railroads, which provides costs savings to industries that transport goods by rail. At this time, some lumber companies truck goods to Lebanon to take advantage of the cost savings offered by the Albany and Eastern Railroad. There are a few sites in Albany that offer the same access to the Albany and Eastern, but Lebanon has larger sites and is next to a reload facility that makes transfer goods to or from rail relatively easy.

Demand for rail services is shifting. Increased energy prices has increased demand for coal, and railroads are shipping large volumes of coal. Rail capacity has not been expanded for decades, and the industry cannot easily do so.

The majority of the freight shipped on both UP and BNSF railroads is intermodal (containerized) and coal. Carload traffic (non-containerized) is a smaller portion of total freight. The logistics of carload freight make it more expensive, and railroads have increased carload rates.

A 2006 study of trade issues in the Portland area identified a growing need for consolidation terminals for carload and domestic intermodal freight.⁴⁵ A consolidation terminal could reduce the cost of logistics and reduce the time required to handle the freight. These terminals will likely be located outside of the Portland area because of high land costs and limited suitable industrial land in the urban area. That study concluded that the issue of locating consolidation yards should be conducted to determine their long-term feasibility.

Lebanon's dual-access rail service is a unique advantage. Firms that need rail service are likely to find this feature attractive. The City and OECDD should ensure that marketing materials include information about its dual-rail carrier access.

INDUSTRIAL USES SUMMARY

Lebanon also has comparative advantage for locating industrial uses. The factors that are essential to regional distribution centers make Lebanon attractive for a wide variety of industrial uses. The factors that make Lebanon appealing to all types of industrial users are:

- Lebanon's industrial parcels are large enough to accommodate a large regional facility.
- Lebanon's access to I-5 is good. Highway 34 and the interchange to the I-5 are not congested and are easily navigated.
- Urban services are available at the site.
- Employers have access to a blue-collar labor force.

In addition to these factors, the City itself has established a reputation that enhances its ability to attract industrial firms.

- The City has done much of the planning to accommodate distribution and heavy manufacturing, minimizing administrative hurdles.
- City staff responds to needs of potential buyers—they provide good information and are helpful throughout the acquisition process.

⁴⁵ *Portland and Vancouver International and Domestic Trade Capacity Analysis*. "Growth Opportunities and Challenges Assessment, Outlook on Rail" by HDR Engineering and Cambridge Systematics, Inc. for Metro, Oregon Department of Transportation, Portland Development Commission, Port of Portland, and Port of Vancouver. August 2006.

- Property owners are willing to work with the City and potential buyers.

Interview Sources

This appendix presents a list of people interviewed about supply of and demand for large industrial sites within the Willamette Valley for regional distribution centers and rail dependent industries. ECO interviewed commercial real estate brokers, economic development staff, ODOT staff, and railroad employees.

- Tamara Boyes, Albany and Eastern Railroad
- Jeff Brooks, real estate broker, GVA Kidder Mathews
- Helen Burns-Sharp, Community Development Director, City of Albany
- Paul Carlson, real estate broker, Cushman and Wakefield
- John DeTar, Planner, Oregon Department of Transportation
- Tom Fox, Oregon Economic and Community Development Department
- Dan Fricke, Senior Transportation Planner, Oregon Department of Transportation
- Ron Irish, Engineering Technician IV, City of Albany
- Robin Marshburn, Freight/Planning and Implementation Unit, Oregon Department of Transportation
- Jack McConnell, real estate broker, Norris Beggs & Simpson
- Doug Parker, former Community Development Director, City of Lebanon
- Allan Patterson, real estate broker, Capacity Commercial Group
- Ted Werth, Business Development Coordinator, Oregon Economic and Community Development Department

EXHIBIT "B"

CITY COUNCIL FINDINGS

File No. 09-09-52

I. NATURE OF THE APPLICATION

This matter comes before the Lebanon Planning Council on the application of the City of Lebanon to amend the Chapter 5 of the Lebanon Comprehensive Plan, providing additional background data for future industrial and commercial land needs.

II. BACKGROUND INFORMATION

The City wishes to amend Lebanon Comprehensive Plan, Chapter 5: Population and Economy to incorporate the "Lebanon Economic Opportunities Analysis (2007)" document as an Appendix. There are no corresponding revisions to the Plan policies. The sole purpose of the amendment is to provide updated background information and analysis to address future employment land needs. The document is included as Exhibit "A" of this Ordinance.

III. PUBLIC HEARING

A. Planning Commission Action

A public hearing was held on this application before the Lebanon Planning Commission on January 20, 2010. At that hearing, City Planning File 09-09-52 was made a part of the record. Notice of the hearing was published consistent with the requirements in Chapter 16.20 of the Lebanon Development Code. No objection was raised as to jurisdiction, conflicts of interest, or to evidence or testimony presented at the hearing.

At the conclusion of the hearing, the Planning Commission deliberated on the issue and voted to recommend the City Council adopt the proposed amendments to the Lebanon Comprehensive Plan. The Commission found the proposed amendments consistent with the applicable decision criteria.

B. City Council Action

On March 10, 2010, the Lebanon City Council conducted a public hearing on this application. At that hearing, City Planning File 09-09-52 was made a part of the record. Notice of the hearing was published consistent with the requirements in Chapter 16.20 of the Lebanon Development Code. No objection was raised as to jurisdiction, conflicts of interest, or to evidence or testimony presented at the hearing.

At the conclusion of the hearing, the City Council deliberated on the issue and voted to approve the proposed amendments to the Lebanon Comprehensive Plan, finding the proposed changes complied with the applicable decision criteria.

IV. FINDINGS OF FACT-GENERAL

The Lebanon City Council, after careful consideration of the testimony and evidence in the record, adopts the following General Findings of Fact:

- A. APPLICANT: City of Lebanon.
- B. REQUEST: The City wishes to amend Chapter 5: Population and Economy of the Lebanon Comprehensive Plan to incorporate the "Lebanon Economic Opportunities Analysis (2007)" document as an Appendix. There are no corresponding revisions to the Plan policies. The sole purpose of the amendment is to provide updated background information and analysis to address future employment land needs.
- C. DECISION CRITERIA: The decision to approve or deny shall be based on the criteria contained in the Lebanon Development Code: Chapter 16.28 – Comprehensive Plan and Development Code Text Amendments.

V. APPLICATION SUMMARY

- A. The City of Lebanon adopted a new Comprehensive Plan in 2004. The Plan included an Economic Opportunities Analysis (EOA) forecasting commercial and industrial land demands for a 20-year period. Subsequent to the completion of the 2004 EOA, Lowe's announced their plans to establish a distribution center. This development required the City to revise and update the newly adopted EOA. Completed in 2007, the document is included as Exhibit "A" of this Ordinance.
- B. The 2007 EOA effectively introduced the idea that the City is suitable – and capable – of accommodating distribution centers along with a rail consolidation terminal. Briefly, the 2007 EOA includes the following information:
 - 1. The City is located in an envious position with close proximity to Interstate-5, an interchange with sufficient capacity to handle additional traffic, and a 4-lane connecting route in Highway 34. The local Albany & Eastern rail line connects the community with the two largest west coast rail lines: Union Pacific and Burlington Northern-Santa Fe. Further, the quality of life and regional labor pool is attractive to many industries.
 - 2. The new EOA establishes both 20-year (2007 to 2027) and 50-year (2007 – 2057) forecasts of employment. Employment in the 20-year period will increase by 3,545 jobs, to 11,496. For the 50-year period, employment will increase by 7,549 new jobs to 16,074. The distribution of jobs between, commercial, office, industrial and public is assumed to remain constant.
 - 3. The EOA generated new forecasts for land requirements to meet employment projections. The study estimated a range of 212-to-409 gross acres for the 20-year period and 458-to-875 gross acres for the 50-year time period. The City currently has some 1,148 gross buildable acres within the City's UGB.

4. While there is an overall land surplus, the City remains deficient in Commercial land: up to 9 acres for the 20-year period and up to 44-acres for the 50-year period. However, the EOA anticipates the City's Mixed Use zone will absorb some (or all) of this demand.
 5. Industrial land requirements generally fare well, as larger parcels can be divided to accommodate some industrial needs. However, to meet specific requirements of distribution centers and rail terminals, there is unmet need for:
 - a. One large industrial site in the 50-200+ acre range.
 - b. Two to six industrial sites in the 20-50 acre range.
 - c. One or two commercial sites in the 20-50 acre range.
 6. To meet site-specific needs within the 50-year timeframe, the EOA suggests (*although does not require*) the City consider establishing an Urban Reserve. This effectively reserves land outside the City's UGB for eventual industrial development. In effect, the proposed Urban Reserve establishes a "50-year UGB" specifically to address employment needs. Like any change in the UGB, this requires willing and cooperative land owners and County support.
- C. This action amends the Lebanon Comprehensive Plan, Chapter 5: Population and Economy of the Lebanon Comprehensive Plan to incorporate the "Lebanon Economic Opportunities Analysis (2007)" document as an Appendix to the Chapter. There are no corresponding changes to Plan goals or policies, to provisions in the Development Code, or to the zoning or Plan maps.
 - D. The 2007 EOA generated background data, providing updated information that the City *may* incorporate as part of a future economic strategy. It is also important to note the 2007 EOA does not initiate any action on the City's part regarding amendments to the UGB or establishment of an Urban Reserve. Further, EOA *does not obligate* the City to pursue such options. The EOA establishes the necessary factual foundation to support such changes if the City wishes to pursue these options in the future
 - E. The Community Development Department mailed notice of the application to affected agencies and the Department of Land Conservation and Development (DLCD). No agency, including the DLCD, submitted comments.

VI. CRITERIA AND FINDINGS

- A. Chapter 16.28 establishes the procedures and criteria for amending the text of both the Comprehensive Plan and the Development Code. Section 16.28.010 identifies the purpose of text amendments while Section 16.28.020 identifies the various types of amendments. The proposed changes involve a Post Acknowledgement Plan Amendment to the Comprehensive Plan (Section 16.28.020.B); amendments to Development Code are not part of this request.
- B. Section 16.28.030 identifies those agents authorized to initiate a text amendment. The City Council may initiate a text amendment. This applies to the proposal, as the Council approved a Goal to adopt the EOA during fiscal year 2009/2010.

- C. Section 16.28.040 requires the City Recorder to maintain records of all changes to the Development Code. This is an administrative process requiring City compliance.
- D. Section 16.28.050 requires all proposed amendments to the Comprehensive Plan Text shall be consistent with Oregon's Statewide Planning Goals. The Council makes the following findings regarding compliance with the Statewide Goals:
1. Goal 1, Citizen Involvement: The Planning Commission and City Council will conduct public hearings on the request, consistent with adopted procedures and the intent of the Goal.
 2. Goal 2, Land Use Planning: The proposal does not involve exceptions to the Statewide Goals, as this adoption action complies with the locally adopted, and acknowledged, Development Code requirements.
 3. Goal 3, Agricultural Lands: Any potential impact on farmland will only occur if, and when, the City decides to consider placing such land within an Urban Reserve. Otherwise, the proposal does not involve farmland and an exception to this goal is not required.
 4. Goal 4, Forest Lands: As with farmland, any potential impact will only occur if, and when, the City decides to consider placing such land within an Urban Reserve. Therefore, an exception to this goal is not required.
 5. Goal 5, Open Spaces, Scenic and Historic Areas, and Natural Resources: The proposed amendment provides background information on the future land requirements, potentially triggering UGB expansions or the establishment of an Urban Reserve. The amendments do not affect existing identified historic, cultural, or natural resources within Lebanon.
 6. Goal 6, Air, Water and Land Resource Quality: As the amendments provide background information on the future land requirements, the amendments will not adversely impact air, water or resource quality.
 7. Goal 7, Natural Hazards: The amendments do not reduce or otherwise affect development requirements for identified natural hazard areas.
 8. Goal 8, Recreational Needs: The proposed amendments provide background information on the future industrial land requirements. Therefore, the amendments do not involve land, or create uses, that adversely affect recreational opportunities.
 9. Goal 9, Economic Development: Consistent with Goal 9, the 2007 EOA updates the City's economic forecasts and land needs to meet anticipated employment requirements.
 10. Goal 10, Housing: The proposed amendments relate to the potential need for additional employment lands and do not affect the ability of the City to provide needed housing.

11. Goal 11, Public Facilities and Services: The City will need to consider impacts on these services if, and when, the City seeks to expand the UGB or establish an Urban Reserve. Otherwise, as background information, the proposal does not affect the City's ability to provide necessary public services.
12. Goal 12, Transportation: As with public facilities, the City will need to consider transportation impacts if, and when, the City expands the UGB or establishes an Urban Reserve. Otherwise, as background information, the proposed amendment does not create uses or activities that affect the City's transportation facilities.
13. Goal 13, Energy Conservation: As background information, the amendment is neutral with regard to energy conservation matters.
14. Goal 14, Urbanization: The proposed amendments provide background information on the future land requirements, potentially resulting in the establishment of an Urban Reserve. Any such actions must follow State statute and Administrative Rule requirements. Otherwise, the amendments do not affect or limit development of urban uses within the City.
15. Goals 15 to 19, Willamette River Greenway, Estuarine Resources, Coastal Shores, Beaches and Dunes, Ocean Resources: The proposed amendment does not involve land within the Willamette Greenway or coastal areas.

The Council finds the proposed amendments to Chapter 5 of the Comprehensive Plan are entirely consistent with the intent of the Statewide Goals, or, the Goals do not directly apply to the amendments.

- E. Section 16.28.060 requires Comprehensive Plan text amendments to be consistent with all adopted facility plans, including the Transportation System Plan (Section 16.28.070).

FINDINGS: This proposal amends the Comprehensive Plan by providing updated information on employment projections and associated land requirements. By itself, the EOA does not establish uses, activities or other improvements that affect current master plans, including the Transportation System Plan. Should the City decide to pursue recommendations of the EOA the City will need to address potential impacts on the public facility and transportation systems. However, until that occurs, the amendments do not affect the City's ability to provide necessary public services or maintain the existing transportation system.

- F. Section 16.28.080 outlines the process for text amendments. This is a legislative action pursuant to Chapter 16.20 and requires hearings before both the Planning Commission and City Council. The Commission reviews the request and makes recommendation to the Council. The final decision on this matter rests with the City Council. For the record, the Commission hearing held on January 20, 2010, and the March 10, 2010 Council hearing, complies with the requirements for a legislative action.
- G. Specific decision criteria are contained in Section 16.28.090. The City may approve a Development Code Amendment application if it satisfies the relevant Decision Criteria:

Oregon Department of Land Conservation and Development (DLCD) administrative rules, the applicable Statewide Planning Goals, the applicable provisions of the Lebanon Comprehensive Plan, and any other applicable and relevant facility or special area plans, specific projects or City-wide goals adopted by the City.

FINDINGS: This Section does not apply as the request involves amendments to the Comprehensive Plan and not the Development Code.

VII. CONCLUSION

The City Council concludes the proposed amendments to the Development Code are consistent with the applicable decision criteria.



CITY OF LEBANON
For water, power, gas

City of Lebanon
Community Development
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