

# ECONorthwest

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**December 13, 2007**

**TO: LCOG Board of Directors**  
**CC: Bob Swank (via email)**  
**FROM: Bob Parker and Beth Goodman**  
**SUBJECT: UPDATED POPULATION FORECASTS FOR URBAN GROWTH  
BOUNDARY AREAS IN LANE COUNTY**

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The Lane Council of Governments (LCOG) is in the process of coordinating updated population forecasts for Lane County. Shade Tree Properties, Inc. (Shade Tree) contracted with ECONorthwest (ECO) to conduct an independent evaluation of population forecasts for the City of Lowell based on historic growth trends. Shade Tree has also asked ECO to review and provide comments on LCOG's updated population forecast from November 2007.

This memorandum summarizes ECONorthwest's concerns with the November 2007 coordinated population forecast. A separate memorandum describes issues with the population forecast developed by the City of Lowell, which LCOG is advocating adopting as part of the coordinated population forecast for Lane County.

## **LANE COUNTY COORDINATED POPULATION FORECAST**

Oregon counties are required to adopt and maintain a coordinated 20-year population forecast by OAR 660-024-0030. Authority to forecast population was delegated to LCOG by Lane County. LCOG last coordinated the population forecast for Lane County in 2004, developing a forecast that extended from 2000 to 2030.

LCOG has developed a new coordinated population forecast for Lane County, presented in a document titled "Population Forecasts for Urban Growth Boundary Areas in Lane County November 2007." The forecast is presented as an attachment to agenda of the December 13 meeting.

ECONorthwest has the following concerns about the forecast:

- **Lack of findings and documentation of methodology.** The forecast does not include a factual basis to support findings for the projections for any of the cities. In addition, there is little documentation about the methodology used to develop the projections. OAR 660-024-0030(2) says that "the forecast must be developed using commonly accepted practices and standards for population forecasting." In the absence of findings explaining the rationale, applying 5- or 15-year historical trends does not appear to confirm with this administrative rule. Moreover, the rationale provided for keeping the Metro area forecast

(due to size and political sensitivity) does not appear to conform with this administrative rule, nor does it appear to conform with the coordination required of ORS 195.036. The lack of findings and documentation of the methodology make it impossible to evaluate whether the forecast meets the standards set forth in OAR 660-024-0030.

- **Lack of consistency in forecasting methodology.** The forecast document indicates that one of four methods was used to develop the forecasts for each city: (1) use the forecast from the 2004 adopted forecast (the “default” figure); (2) “15 year Trend;” (3) “5 Year Trend;” or (4) city defined forecast. The forecast does not show the analysis used to develop the trend, such as the base forecast years; years included in the trend, or justification for choosing 5 and 15 year trends (rather than other periods such as 10 and 20 year trends).
- **Lack of a 20-year forecast period.** The forecast period is 2006 through 2030, a 24-year period. OAR 660-024-0030(1) requires that counties adopt and maintain a coordinated 20-year population forecast and that cities must adopt a 20-year population forecast. The forecast presents population projections for one year: 2030. Cities that want to plan for a 20-year period ending before 2035 would need to extrapolate the population forecast for the 20-year period.

ECONorthwest has assisted several Oregon counties and cities in the population coordination process (Malheur, Wasco, Jackson, Josephine, Jefferson, and Deschutes). In every instance, these counties treated the coordination process as a legislative land use decision. The forecasting process was documented, the assumptions and rationales for growth rates were incorporated into that documentation as findings, and the counties adopted the forecasts by ordinance. In short, it is not clear that cities will have a legal basis to use the forecasts for land use actions without formal action by Lane County.

These issues call into question both the assumptions and the process the Lane Council of Governments used for the coordinated population forecast for Lane County for 2006 through 2035.

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**13 December 2007**

**TO: LCOG Board of Directors**  
**CC: Bob Swank (via email)**  
**Charles Spies, City of Lowell Administrator (via email)**  
**FROM: Bob Parker and Beth Goodman**  
**SUBJECT: POPULATION FORECAST FOR THE CITY OF LOWELL**

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## SUMMARY

Shade Tree Properties, Inc. (Shade Tree) contracted with ECONorthwest (ECO) to conduct an independent evaluation of population forecasts for the City of Lowell based on historic growth trends and other relevant data. Shade Tree is a residential development firm that has developed and sold real estate in Lowell since 1993. Shade Tree is concerned about possible increases to the City of Lowell's coordinated population forecast—which was updated by the Lane Council of Governments in 2005.

Shade Tree is concerned that the City's wish to secure an immediate expansion of its UGB is causing the City to lobby LCOG for a much higher growth rate than will actually occur. According to the draft *Water System Master Plan Update*, Lowell's current population allocation exceeds existing capacity of the water treatment systems. The City does not have financial reserves available to fund expansion of the water or sewer treatment facilities, requiring the City to borrow to expand these facilities. Shade Tree is concerned that the City has not adequately considered the risks posed by the need to borrow money to fund significant capital investments in water and sewer treatment facilities to serve the population over the next twenty-years. In short, this growth would require significant capital investments in water and sewer treatment facilities which, according to the City's own master plans, would result in significantly higher water and sewer rates for residents of Lowell. Excessive utility rates could negatively impact the housing market in Lowell, discouraging a portion of the planned growth from occurring.

Table S-1 shows historic population growth rates in Lowell from 1980 to 2006. Lowell grew from 661 residents in 1980 to 955 residents in 2006, an increase of 294 residents at an average annual rate of 1.43%. Lowell experienced the fastest growth during the 1980's, where it added 124 residents at an average annual rate of 1.73%. Since 2000, Lowell has grown by 75 residents at an average annual rate of 1.37%. The City has estimated that its population in 2007 will be

1,003 people.<sup>1</sup> If this estimate is correct, Lowell has grown at an average annual rate of 1.89% since 2000.

**Table S-1. Historic population growth rates, Lowell, 1980 to 2006**

Period	Years	Percent		
		Change	Change	AAGR
1980-2006	26	294	44%	1.43%
1980-1990	10	124	19%	1.73%
1990-2000	10	95	12%	1.15%
2000-2007	7	123	14%	1.89%

Source: Population estimates are based on data from Portland State University Population Research Center, except for the 2007 estimate, which is from the document "City of Lowell Request for Population Projection Adjustment," dated December 11, 2006; Calculations by ECONorthwest

Lowell's existing coordinated population forecast (adopted by Lane County on 2/24/05) assumes that the City will grow to 1,700 people by 2030, at an average annual rate of 2.22% between 2000 to 2030. Lowell has requested that the County increase its population allocation to 2,841 residents by 2030, an average annual growth rate of 4.61% between 2006 and 2030.

Although ECO has not conducted comprehensive research about Lowell's economy, we do not know of any factors that are likely to cause Lowell to grow at a rate substantially higher than 2.2% annually. However, there are factors that are likely to cause Lowell to grow at a rate of 2.2% or slower. These factors include: (1) that the majority of residents of Lowell are likely to continue being employed in the Eugene-Springfield area; (2) that transportation costs are likely to remain comparatively high or increase further; and (3) the possible continuation of the changes in Lowell's age structure, resulting in few families with children moving to Lowell. Moreover, there is no evidence that suggest the City has the financial resources (or a financing plan) to address its documented infrastructure capacity limitations.

Based on these considerations, historic population growth, regional housing trends and population growth, and other economic factors, ECO's conclusions about Lowell's likely future growth is that the City is likely to grow at an average annual rate of between 1.2% to 1.8% annually, with 2.2% annual growth as an aspirational higher growth rate. Table S-2 shows ECO's evaluation that Lowell is likely to grow to between 1,270 residents to 1,610 residents by 2030. ECO's evaluation is that it is unlikely that Lowell will sustain growth rates greater than 2.2% over the planning period.

<sup>1</sup> The estimate of 1,003 people is from the document "City of Lowell Request for Population Projection Adjustment," dated December 11, 2006.

**Table S-2. ECO's evaluation of Lowell's likely population growth, 2006 to 2030**

	1.2%	1.8%	2.2%
Year	AAGR	AAGR	AAGR
2006	955	955	955
2025	1,198	1,340	1,444
2027	1,227	1,389	1,508
2030	1,272	1,465	1,610
<b>Change 2006 to 2030</b>			
AAGR	1.20%	1.80%	2.20%
Population	317	510	655

Source: ECONorthwest, 2007

While this evaluation was not about public services, we feel compelled to comment on the relationship between growth and the cost of services. ECO has conducted dozens of fiscal impact studies for municipalities throughout the Northwest. The purpose of such studies is to determine the financial obligations cities commit to when annexing land or bringing land into the UGB.

Lowell's history of moratoria provides evidence that the City has struggled to provide services fast enough to keep pace with development. Between June 1996 and July 2003, Lowell adopted ten ordinances restricting or prohibiting residential development because of insufficient water or wastewater infrastructure to service new development. During the seven-year period, Lowell prohibited residential development from 8/19/1997 through 11/4/1998. During the rest of the period restrictions on development included one or more of the following: the use of temporary wells, rationing of the number of sewer connections, or requiring septic systems for new residential development.

The City's draft *Water Master Plan Update* indicates that it will cost approximately \$4.0 million to upgrade water capacity to service 2,225 residents by 2031. Given that the City has little funds saved to finance these improvements, the *Master Plan Update* recommends increasing water rates by approximately \$57 per household per month in anticipation of obtaining the loans. The City has requested that LCOG assign Lowell an even larger 2030 population of 2,841 people. The *Water Master Plan Update* does not indicate what improvements would be required to serve this number of people. If the City uses a population forecast that assumes substantially greater growth than actually occurs, water and wastewater rates could increase beyond the *Master Plan* estimates. Higher water and wastewater rates are likely to put Lowell at a comparative disadvantage for attracting new residents, depressing population growth. This risk, along with the probability of realizing projected growth rates, should be a key consideration in local policy decisions about how much growth a city wants—and can afford.

## BACKGROUND

Shade Tree Properties, Inc. (Shade Tree) contracted with ECONorthwest (ECO) to conduct an independent evaluation of population forecasts for the City of Lowell based on historic growth trends. Shade Tree is a residential development firm that has developed and sold real estate in Lowell since 1993. Shade Tree is currently developing a subdivision in Lowell, called Sunridge, which has 67 lots platted and plans to plat an additional 20 lots sometime after 2010. Population forecasts are a foundational component of planning, used in comprehensive plans, in evaluating urban growth options, in facilities planning, and other planning activities. ORS 195.036 requires coordination of population forecasts by a designated "coordinating" agency, in this case Lane Council of Governments (LCOG). LCOG last developed coordinated population forecasts in February 2005.

Shade Tree is concerned that the City's wish to secure an immediate expansion of its UGB is causing the City to lobby LCOG for a much higher growth rate than will actually occur. The City is pursuing increases in their population allocation and forecasts growth rates that are higher than the adopted population forecast in the City's *Water System Master Plan Update* (December 2006) and the *City of Lowell Facilities Plan Amendment and Predesign Report for Phase 1 Wastewater Improvements*. According to the draft *Water System Master Plan Update*, Lowell's current population allocation exceeds existing capacity of the water treatment systems. The City does not have financial reserves available to fund expansion of the water or sewer treatment facilities, requiring the City to borrow or use other funding mechanisms to expand these facilities.

Shade Tree is concerned that the City has not adequately considered the risks posed by the need to borrow money to fund significant capital investments in water and sewer treatment facilities to serve the population over the next twenty-years. In short, this growth would require significant capital investments in water and sewer treatment facilities which, according to the City's own master plans. Shade Tree is concerned about the impact of the capital investments on development in Lowell, in the form of increased utility rates or other fees. Excessive utility costs could negatively impact the housing market in Lowell, discouraging a portion of the planned growth from occurring.

The remainder of this memorandum is organized as follows:

- The **Historic Growth Trends** section presents a summary of historic growth trends for population, housing, and building permits.
- The **Population Forecasts** section presents a comparison of population forecasts for Lowell from Lane County, the Region 2050 process, and the City of Lowell's draft *Water System Master Plan Update*.
- The **Conclusions** section presents ECO's evaluation of potential population growth rates for Lowell and possible impacts of overly optimistic population forecasts.

## HISTORIC GROWTH TRENDS

Table 1 shows historic population growth in Lowell from 1980 to 2006, as reported by the Population Research Center at Portland State University (PSU). Population in Lowell has fluctuated during the twenty-five year period, from a low of 650 residents to a high of 1,095 residents. Some of this variance may be attributable to errors in PSU estimates of population in Lowell during the 1980's, 1990's, and early 2000's, rather than actual changes in population in Lowell. Since 2002, Lowell's population appears to have grown steadily.

**Table 1. Historic population growth, Lowell, 1980 to 2006**

Year	Population	Change	Percent Change
1980	661		
1981	650	-11	-1.7%
1982	670	20	3.1%
1983	650	-20	-3.0%
1984	650	0	0.0%
1985	705	55	8.5%
1986	705	0	0.0%
1987	705	0	0.0%
1988	705	0	0.0%
1989	720	15	2.1%
1990	785	65	9.0%
1991	785	0	0.0%
1992	820	35	4.5%
1993	815	-5	-0.6%
1994	840	25	3.1%
1995	955	115	13.7%
1996	955	0	0.0%
1997	1,010	55	5.8%
1998	1,075	65	6.4%
1999	1,095	20	1.9%
2000	880	-215	-19.6%
2001	860	-20	-2.3%
2002	860	0	0.0%
2003	890	30	3.5%
2004	900	10	1.1%
2005	920	20	2.2%
2006	955	35	3.8%
2007	1,003	48	5.0%

Source: Population estimates are based on data from Portland State University Population Research Center, except for the 2007 estimate, which is from the document "City of Lowell Request for Population Projection Adjustment," dated December 11, 2006; Calculations by ECONorthwest

Note: The 2000 population figure reflects an amendment to the Census' count of Lowell's population

Table 2 shows historic population growth rates in Lowell from 1980 to 2006. Lowell grew by an average annual rate of 1.43% from 1980 to 2006, adding 294 residents. Lowell experienced the fastest growth during the 1980's, where it added 124 residents at an average annual rate of

1.73%. Since 2000, Lowell has grown by 75 residents at an average annual rate of 1.37%, with all of the growth occurring since 2003. The City has estimated that its population in 2007 will be 1,003 people. If this estimate is correct, Lowell has grown at an average annual rate of 1.89% since 2000.

**Table 2. Historic population growth rates, Lowell, 1980 to 2006**

Period	Years	Change	Percent	
			Change	AAGR
1980-2006	26	294	44%	1.43%
1980-1990	10	124	19%	1.73%
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2000-2007	7	123	14%	1.89%

Source: Population estimates are based on data from Portland State University Population Research Center, except for the 2007 estimate, which is from the document "City of Lowell Request for Population Projection Adjustment," dated December 11, 2006; Calculations by ECONorthwest

Table 3 shows the changes in the age structure of Lowell's residents between 1990 and 2000. Lowell experienced a decrease in the number of people 17 years and younger, as well as a smaller change in people aged 25 to 44 years. The population of Lowell aged during the 1990's, with a larger than average increase in residents 45 to 64 years, compared with the state average. Lowell experienced growth in people aged 18 to 24 years. The implication of the data in Table 3 is that families with young children are leaving Lowell and that retirees and people nearing retirement are staying in Lowell or moving to Lowell.

**Table 3. Age change, City of Lowell, 1990 to 2000**

Age Group	1990		2000		Change		
	Number	Percent	Number	Percent	Number	Percent	Share
Under 5	78	10%	53	6%	-25	-32%	-4%
5-17	208	26%	186	22%	-22	-11%	-5%
18-24	63	8%	90	11%	27	43%	2%
25-44	265	34%	254	30%	-11	-4%	-4%
45-64	106	14%	204	24%	98	92%	10%
65 and over	65	8%	70	8%	5	8%	0%
Total	785	100%	857	100%	72	9%	0%

Source: U.S. Census, 1990 and 2000

Table 4 shows changes in the number and type of dwelling units in Lowell between 1990 and 2000. Over the ten-year period, Lowell experienced a net increase of 58 dwelling units. The Census data show that Lowell added 71 dwelling units—or about seven dwelling units each year. The majority of the new dwelling units added were mobile or manufactured homes (43 dwellings) and single-family detached residences (20 dwellings). The Census reported that the number of multiple family units decreased by 13 over the ten-year period.

**Table 4. Change in dwelling units by type, Lowell, 1990 and 2000**

Housing units	1990 Census		2000 Census		New DU 1990-2000	
	Number	Percent	Number	Percent	Number	% Change
Single-family detached	194	67%	214	62%	20	10%
Single-family attached	2	1%	10	3%	8	400%
Multiple family	33	11%	20	6%	-13	-39%
Mobile/ Manufactured	59	20%	102	29%	43	73%
<b>Total housing units</b>	<b>288</b>	<b>100%</b>	<b>346</b>	<b>100%</b>	<b>58</b>	<b>20%</b>

Source: U.S. Census, 1990 and 2000

Table 5 shows a summary of the number of residential building permits issued for new dwellings in Lowell for 2000 to 2007. As of December 6, 2007, Lowell issued 64 residential building permits since 2000, averaging about 9 permits per year. The majority of the permits were issued between 2005 and 2007, when Lowell issued an average of 12 permits per year. It should be noted that issuance of a building permit does not guarantee the building of a dwelling unit but rather confers the right to build a dwelling unit. In other words, not all building permits will necessarily result in the construction of dwelling units or immediate occupation of the dwelling units once constructed.

**Table 5. Residential building permits issued, for new dwellings Lowell 2000 to 2006**

Year	Permits Issued
2000	4
2001	1
2002	7
2003	7
2004	8
2005	12
2006	13
2007	12
<b>Total</b>	<b>64</b>
<b>Average</b>	<b>9.1</b>

Source: City of Lowell; 2007 data compiled by Shade Tree Properties, Inc.  
Notes: The table includes permits issued as of December 6, 2007

Table 5 does not include permits that were issued and later surrendered by the developer.

Over the 2000 to 2007 period, the City of Lowell subdivided 148 lots subdivided and partitioned 12 lots.<sup>2</sup> Of these, 110 lots in subdivisions and 8 partitioned lots are available for development. If the City experiences building at rates similar to the 2000 to 2007 period (approximately 9

<sup>2</sup> The number of lots created through subdivisions and partitions is based on data from a memorandum from Mayor Weathers at the City of Lowell to Patrick Lanning, LCOG Board Chair, dated June 19, 2007.

building permits issued annually), the 118 lots could take 13 years to develop. If the City experiences building at rates similar to the 2005 to 2007 period (approximately 12 building permits issued annually), it could take more than 9 years to develop existing lots.

Between June 1996 and July 2003, Lowell adopted ten ordinances restricting or prohibiting residential development because of insufficient water or wastewater infrastructure to service new development. During the seven year period, Lowell prohibited residential development from 8/19/1997 through 11/4/1998. During the rest of the period restrictions on development included one or more of the following: the use of temporary wells, rationing of the number of sewer connections, or requiring septic systems for new residential development.

It is possible that the increase in the number of residential building permits issued since 2005 is the result of pent-up demand for housing in Lowell, as a result of the development restrictions listed above. If this were the case, it seems likely that more permits would have been issued in the second half of 2003 and 2004, as housing prices in the Eugene-Springfield area began to increase rapidly. Starting in November 1999, the restriction on development was that new homes needed one of the 65 rationed sewer connections, unless a septic system was used. Fewer than 65 building permits for new homes were issued from 1999 to the present, so it is unlikely that this was a significant factor in the growth rates seen prior to 2005. It is also possible that increase in building permits issued since 2005 has resulted from the perception by developers that there is demand for housing in Lowell. However, we are attempting to determine the effect of the development restrictions or cause of recent increases in building permit activities.

Another possible explanation is that the increase in demand for building permits in Lowell since 2005 reflects an increase in demand for housing regionally. Table 6 shows the number of building permits issued for single-family dwellings by the cities in and around the Eugene Springfield area from 2001 to 2006. With the exception of Junction City and Coburg, cities located closer to the Eugene and Springfield area had a larger average number of permits issued over the six-year period. In addition, the cities closer to Eugene and Springfield (Cottage Grove, Veneta, and Creswell) experienced an increase in the number of building permits issued between 2003 and 2006. The number of permits issued by all cities in the region each year was relatively stable between 2001 to 2006, varying from a low of 923 permits to a high of 1,137 permits issued by all cities in the region.

**Table 6. Building permits issued in the Eugene-Springfield region for single-family units, 2001 to 2006**

Year	Cottage					Junction		Springfield	Eugene	Total
	Oakridge	Lowell	Grove	Veneta	Creswell	City	Coburg			
2001	2	1	17	24	67	12	1	225	633	982
2002	1	6	15	43	80	34	7	243	673	1,102
2003	-	7	19	96	91	13	6	232	559	1,023
2004	8	6	34	112	133	10	2	128	583	1,016
2005	4	13	70	117	60	13	6	98	756	1,137
2006	9	17	39	128	56	8	4	134	528	923
<b>Total Permits</b>	<b>24</b>	<b>50</b>	<b>194</b>	<b>520</b>	<b>487</b>	<b>90</b>	<b>26</b>	<b>1,060</b>	<b>3,732</b>	<b>6,183</b>
Average	4	8	32	87	81	15	4	177	622	1,031

Source: City-data.com

Table 7 shows the number of new *and* existing dwelling units sold in Lowell between 2000 and 2006. Table 7 shows that 50 dwellings were sold in 2004 and 2005, which is nearly half of the

dwellings sold in Lowell during the six-year period. The number of dwellings sold in 2006 declined to 15 dwellings. The data presented in Table 7, combined with the permit data in Table 5, imply the following:

1. There does not appear to be a relationship between sales volume and price and the building moratoria that ended in the middle of 2003. More homes were sold in 2002 than were sold in 2003. More permits were issued in 2005, 2006, and 2007 than in 2003 and 2004.
2. The pattern of sales matches larger regional and statewide housing market patterns, with a more active housing market during the early part of the decade and a decreased housing market starting in 2006 and continuing into 2007.
3. Although Lowell's housing market is less expensive than the Eugene and Springfield housing market, the number of housing sales in Lowell was not exceptionally high.

**Table 7. Number of dwelling units sold and average sales price, Lowell, 2000 to 2007**

Year	Dwelling units	Average sales price
2000	7	\$102,441
2001	8	\$126,513
2002	20	\$118,938
2003	12	\$200,263
2004	25	\$120,526
2005	25	\$183,232
2006	15	\$171,263
2007	17	\$204,780
<b>Total</b>	<b>129</b>	<b>\$156,124</b>

Source: Multiple Listing Service (RMLS)

In December 2007, Lowell had 26 houses for sale, including eight new houses.<sup>3</sup> Of the eight new houses for sale, four have been on the housing market since at least January 2007. The average length that the 26 houses has been listed is 157 days, which does not include time on the market for houses that have been removed from the sales market and relisted. This relatively large number of houses on the market, compared to sales of 17 houses in 2007, suggests that Lowell's housing market has cooled since 2005 and that Lowell will experience little housing development until houses currently on the market begin selling.

## POPULATION FORECASTS

This section presents population forecasts for the City of Lowell from the following sources: Lane County, the Region 2050 process, and the City of Lowell's draft *Water System Master Plan*

<sup>3</sup> Based on Multiple Listing Service data provided to ECONorthwest on 12/10/2007.

*Update.* It concludes with a comparison of historic population growth and growth forecast in the six population forecasts presented in this section.

Table 8 shows four population forecasts for the City of Lowell. The population forecasts presented in Table 8 use different base populations (shown with shading) depending on when the forecast was developed. Small changes in the base population assumption can result in large changes in the population forecast over a long period of time.

1. **Adopted coordinated forecast.** LCOG adopted a coordinated population forecast for the City of Lowell on February 24, 2005, using the 2000 Census as the base population. The adopted forecast estimates that Lowell will grow by 820 people between 2000 to 2030, at an average annual rate of 2.22%.
2. **Proposed changes to the coordinated forecast allocations.** In the document "*Southern Willamette Valley Regional Growth Management Strategy*," dated August 31, 2006, Region 2050 proposed changes to the adopted coordinated population forecasts. In this population forecast, Lowell is forecast to grow to 2,841 residents between 2005 to 2030, at an average annual rate of 4.61%.
3. **Requested changes to the coordinated forecast.** The City of Lowell requested that the LCOG Board approve a 2030 population projection of 2,823 for Lowell.<sup>4</sup> The basis for this request is that Lowell experienced "significantly greater growth rates than our currently approved projection of 2.2% and based on approved land divisions, primarily in 2006, we anticipate growth rates in the 5.0% range into future years." The population allocation and growth rate for the period from 2005 to 2030 is similar the forecast from the Region 2050 Regional Growth Concept.
4. **Water System Master Plan Update.** The draft *Water System Master Plan Update* assumes that the City will grow at an average annual rate of 3.3% from 2006 to 2031. At that rate Lowell would have 2,154 residents by 2030, an increase of 1,166 residents.

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<sup>4</sup> This is request was articulated in a memorandum from Mayor Weathers at the City of Lowell to Patrick Lanning, LCOG Board Chair, dated June 19, 2007.

**Table 8. Population forecasts, City of Lowell, 2000 to 2030**

Year	Lane County Adopted Forecast (2/24/2005)	Region 2050 Regional Growth Concept (8/31/06)	The City's Requested Changes to the Forecast (6/19/07)	Water System Master Plan Update (12/06)
2000	880	880	880	--
2004	900	--	900	--
2005	--	920	920	--
2006	--	--	955	988
2025	1,500	2,457	--	1,831
2030	1,700	2,841	2,823	2,154
2035	N/A	3,560	3,538	N/A
Change	2000 to 2030	2005 to 2030	2006 to 2030	2006 to 2030
AAGR	2.22%	4.61%	4.62%	3.30%
Population	820	1,961	1,868	1,166

Source: Lane County adopted population forecast, 2/24/05; "Southern Willamette Valley Regional Growth Management Strategy," Region 2050, 8/31/06; Letter to LCOG Board from City of Lowell requesting a 2030 population projection of 2,823, 9/21/07; City of Lowell draft *Water System Master Plan Update*, December 2006; Calculations by ECONorthwest.

Note: The base population assumption (shaded for each forecast) are as follows: the Lane County forecast used the 2000 population as the base, Region 2050 Regional Growth Concept used the 2005 population as the base, and the City's Requested Changes to the Forecast and the draft Water System Master Plan Update used the 2006 population as the base. In addition to the forecasts presented in Table 8, the City of Lowell forecast population growth in the *City of Lowell Facilities Plan Amendment and Predesign Report for Phase I Wastewater Systems Improvements*. This forecast assumed that the City's population would grow to 2,359 people by 2022, based on a 3.2% average annual growth rate and a base population of 1,169 people in 2000 (which was much higher than the Census's count of 880 residents in 2000).

Each of the preceding population forecasts presented use growth rate assumptions that are higher (and in some cases substantially higher) than Lowell's historic growth rate of 1.43% for 1980 to 2006 or Lowell's highest sustained growth rate of 1.73% average annual growth during the 1990's. Since 1960, the first U.S. Census after Lowell incorporated, Lowell has grown by 452 people, at an average annual growth rate of 1.40%. The growth rate assumptions used the forecasts shown in Table 8 would result in growth of about 820 to about 1,920 residents in Lowell by 2030, significantly more population growth than Lowell has experienced since 1960.

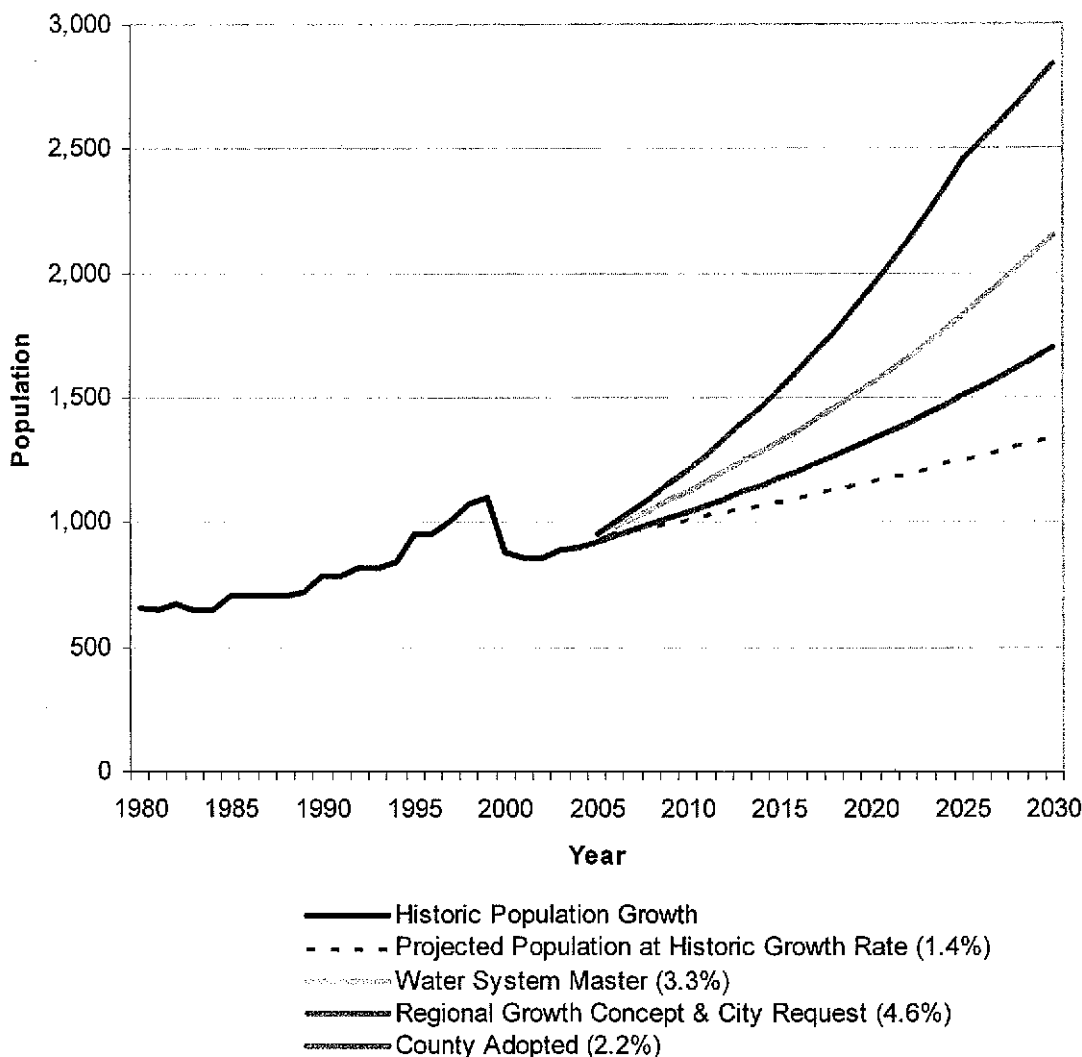
The City's forecast assumes that Lowell will develop at faster than historic rates, when building moratoria may have limited growth. The forecast requested by the City, for growth of 1,868 people at an annual rate of 4.62% over the 2006 to 2030 period, is based on growth trends over the 2005 to 2007 period, including the number of building permits issued and creation of 160 lots (118 of which are not developed currently) through land subdivisions and partitions.

The adopted forecast, for 2.2% average annual growth, fits development trends over the 2005 to 2007 period better than the City's requested forecast. The City has issued an average of 12 permits annually over the 2005 to 2007 period. The adopted population forecast equates to 12.4 dwelling units developed annually, while the City's requested forecast equates to 35.6 dwelling unit developed annually for the 2006 to 2035 period.<sup>5</sup>

<sup>5</sup> This analysis assumes that there are 2.5 people per dwelling unit.

Figure 1 shows a comparison of the forecasts and historic growth since 1990. Figure 1 shows the pattern of Lowell's population growth, as reported by PSU.<sup>6</sup> The forecast that most closely matches Lowell's historic growth pattern is Lane County's existing adopted coordinated forecast, which assumes slower growth (2.22% annually) than the other forecasts. However, the adopted forecast predicts growth in the next twenty-five years that are in excess of Lowell's historic growth rates for the past twenty-six years.

**Figure 1. Historic and alternative population forecasts, Lowell, 1990 to 2030**



Source: U.S. Census, PSU, City of Lowell draft *Water System Master Plan Update*, Lane County adopted population forecast, 2/24/05; "Southern Willamette Valley Regional Growth Management Strategy," Region 2050, 8/31/06; Letter to LCOG Board from City of Lowell requesting a 2030 population projection of 2,823, 9/21/07

Notes: The Region 2050 Regional Growth Concept and "City of Lowell Request of Population Projection Adjustment" are represented by the same line because their growth rate assumptions are the same. Slight differences in the base population result

<sup>6</sup> It is possible that the contraction reflects population that never existed in Lowell and was a result of assigning population to building permits issued for purposes other than building new homes.

in slightly different forecast of people in Lowell in 2030. The Region 2050 Regional Growth Concept forecasts 2,841 people in Lowell by 2030, while the City's request forecasts 2,823 people in Lowell in 2030.

The historic population data shows Lowell gaining and losing population over the 1990 to 2006 period. It is likely that this fluctuation does not reflect actual changes in population but reporting anomalies in the data.

The "Projected Population at Historic Growth Rate" line uses the average annual rate of growth in Lowell between 1980 to 2006 show how Lowell's population would grow if it changed at historic rates.

## CONCLUSIONS

Although Lowell's average rate of growth since 1980 (1.43%) was higher than the State average (1.31%) or Lane County's average (0.81%), Lowell's population growth was uneven, with increases of as much as 14% per year to population loss of 3% per year (excluding the 20% decrease resulting from the Census in 2000). As we stated previously, it is likely that much of the apparent fluctuations in Lowell's populations are the result of errors in data reporting, rather than changes in population. Lowell grew by fewer than 300 people between 1980 and 2006, with the slowest growth in the 1990's. The growth in dwelling units between 1990 and 2000 was correspondingly slow. The growth in population since 2000 and the increase in building permits issued in 2005 and 2006 are within the normal range of variability of growth but do not yet represent growth trends that justify increasing assumptions about Lowell's long-term growth rate.

Before discussing possible population forecasts for Lowell, it is useful to describe the limitations of small areas forecasts. Following is a discussion of why small area forecasts are highly uncertain:

- Even if planners had a sophisticated model that links all these important variables together (which they do not), they would still face the problem of having to forecast the future of the variables that they are using to forecast growth (in, say, population or employment). In the final analysis, all forecasting requires making assumptions about the future. These assumptions should be based on historical growth trends, local and regional housing and economic trends and conditions, demographic trends, and other factors .
- Comparisons of past population projections to subsequent population counts have revealed that even much more sophisticated methods than the ones used in the study "are often inaccurate even for relatively large populations and for short periods of time." The smaller the area and the longer the period of time covered, the worse the results for any statistical method.
- Small areas start from a small base. A new subdivision of 200 homes inside the Portland Urban Growth Boundary has an effect on total population of 0.02%. That same subdivision in Lowell would increase the community's housing stock by about 160%— and population by a similar percentage.

In summary, the longer the forecast, the greater the potential that actual population growth will vary from the forecast. Cities should closely monitor actual population growth so that either (1) plans can be modified to account for variations, or (2) policies can be implemented that increase the likelihood of achieving the population growth.

Acknowledging the uncertainty of small area forecasts, ECO's conclusions is that Lowell is likely to grow at an average annual rate of between 1.2% to 1.8% annually, with 2.2% annual growth as an aspirational higher growth rate. Table 9 shows ECO's evaluation that Lowell is likely to grow to between 1,270 residents to 1,610 residents by 2030.

**Table 9. ECO's evaluation of Lowell's likely population growth, 2006 to 2030**

	1.2%	1.8%	2.2%
Year	AAGR	AAGR	AAGR
2006	955	955	955
2025	1,198	1,340	1,444
2027	1,227	1,389	1,508
2030	1,272	1,465	1,610
<b>Change 2006 to 2030</b>			
AAGR	1.20%	1.80%	2.20%
Population	317	510	655

Source: ECONorthwest, 2007

Although ECO has not conducted comprehensive research about Lowell's economy, we do not know of any factors that are likely to cause Lowell to grow at a rate substantially higher than 2.2% annually. However, there are factors that are likely to cause Lowell to grow at a rate of 2.2% or slower. These factors include: (1) that the majority of residents of Lowell are likely to continue being employed in the Eugene-Springfield area; (2) that transportation costs are likely to remain comparatively high or increase further; and (3) the possible continuation of the changes in Lowell's age structure, resulting in few families with children moving to Lowell.

Perhaps more importantly, the City of Lowell will use the coordinated population forecast to make decisions about upgrades to their water and wastewater systems. An addendum to Lowell's *Water System Master Plan Update*<sup>7</sup> recommends upgrades to Lowell's water system, costing about \$4.3 million, including updates necessary to serve existing population during peak demand.

The timing of the need for upgrades these facilities will depend, in part, on Lowell's actual population growth. As the City grows, its need for these services will grow. The draft *Water System Master Plan Update* concludes that Lowell's water plant is already at capacity, and must be expanded to serve the current population. The population assumptions chosen today will be an important determinant in what level of improvements are appropriate for Lowell to undertake.

An analysis of Lowell's municipal infrastructure needs based on a population forecast of 4.62% annual growth shows that Lowell will need about \$8.46 million improvements to its water system and \$6.88 million improvements to the City's sanitary sewer system, for a total of \$15.3 million improvements between 2008 to 2025.<sup>8</sup> The report identified about \$4.7 million improvements needed in the water system to accommodate growth between 2008 to 2018. The

<sup>7</sup> Memorandum from HBH Consulting Engineering to Mr. Chuck Spies about "City of Lowell Draft Water Master Plan Update – Addendum #1," dated March 12, 2007.

<sup>8</sup> "Municipal Infrastructure Analysis" prepared by HBH Consulting Engineering for Seneca Jones Timber Company, December 2007.

analysis did not identify costs associated for the stormwater and transportation systems needed to accommodate growth.

The City does not have a plan that identifies how it will finance infrastructure improvements. The two documents that we found that discuss funding these improvements include:

- **An analysis of financing needed water system improvements.**<sup>9</sup> In this analysis, the City stated that it will not raise water rates beyond a 3% annual increase for inflation and that water system improvements will be financed through SDCs. While we did not conduct a complete evaluation of the City's analysis, we found the following assumptions of concern:
  - **Growth assumptions.** The City assumes that Lowell will experience development of 30 dwelling units annually for the 2008 to 2031 period, consistent with the City's requested population forecast. This assumption is problematic because the City's ability to fund water system improvements is dependant on production of 30 units annually. We have discussed some of the problems with this assumption in this memorandum, including the fact that Lowell has not experienced this level of growth historically. The analysis does not address the question of what happens to planned improvements if the City does not grow as fast as the City expects.
  - **Staffing needs.** The analysis only identifies a need for limited increases in staffing, including 40% of a public works FTE and 40% of a billing clerk FTE. The City's requested population forecast shows Lowell's population increasing by about 200% over the 2006-2030 period. It seems overly optimistic to assume that staffing needs will increase by such a small amount relative to increases in the number of people served.
  - **Current needs.** The City's analysis does not include a funding strategy to finance upgrades needed to serve existing residents, as identified in the draft *Water System Master Plan Update*.
  - **Limited scope.** The City's analysis does not include a funding strategy to finance significant systems replacements for the water system. In addition, this analysis only addresses financing for water system improvements. The City does not have a plan to finance sanitary sewer, stormwater, and transportation improvements.
- **An analysis of long-term population growth in Lowell by Johnson Gardner.** This analysis identifies a number of mechanisms for financing infrastructure improvements, including SDCs, urban renewal district/plan, increasing utility rates, general obligation bond, and state grants and related programs. The analysis suggests that one approach may be a combination of public and private financing based on a developer being willing to finance infrastructure improvements, through a UGB expansion that includes land owned by a developer willing to pay for infrastructure improvements.

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<sup>9</sup> City of Lowell staff report "Analysis of Impact of costs to construct water system improvements" dated 5/30/2007.

The City should develop a plan to identify funding methods to finance needed infrastructure improvements, including sanitary sewer, transportation, and stormwater infrastructure. Without such a plan, the City runs the risk of committing to improvements that would result in excessive SDCs, necessity to raise utility rates, or other financial difficulties, which could put Lowell at a comparative disadvantage for attracting new residents, depressing population growth. Larger cities frequently have the ability to sustain enough growth to make rate increases reasonable. The strategy of “growing into” facilities presents considerably higher risk to small communities. This risk, along with the probability of realizing projected growth rates, should be a key consideration in local policy decisions about how much growth a city wants—and can afford.

**ECO recommends that the City consider keeping the existing population forecast assumption of 2.22% average annual growth. The City should reevaluate population growth in five to ten years to determine whether the City needs a faster growth rate assumption to meet demand for public facilities or land need.**

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*There are three kinds of lies: lies, damned lies, and statistics.*

This well-known saying is part of a phrase attributed to Benjamin Disraeli and popularized in the U.S. by Mark Twain: The semi-ironic statement refers to the persuasive power of numbers, and succinctly describes how even accurate statistics can be used to bolster inaccurate arguments.

The subtle but possibly inaccurate argument proffered here is county wide projections based on recent real estate sales.

I offer you these three things to consider:

A Wall Street Journal article describing the sub-prime meltdown.

Two years ago we were experiencing a kind of craziness in the local Real Estate market. A lot of money was coming into the area from folks who had cashed out elsewhere. This was fueled by sub-prime loans. Houses were on the market for an hour and a half <sup>before</sup> and getting multiple offers. Bidding wars ensued with buyers desperate to invest. It was not a pretty sight. We are now experiencing a significant correction.

Secondly, a graph compiled by our Multiple Listing Service showing the month's supply of houses available to purchase. We now have enough supply to last 8-plus months. Suppose we were to do a projection based on a line drawn between November of 2006 and this November. With 3 month's more houses available than last year, how long would it be before half of the houses in Lane County were for sale simultaneously? 50 years.

The third is another graph showing active listings in contrast to the number of sales in the past year. Using the same logic, if one were to draw a comparison between November of 2006 and November of 2007 and fueled a projection based on 77 fewer houses sold in each successive year we would be selling NO houses in three years.

The risk in basing projections on a likely one-time phenomenon such as the recent real estate boom is that you'll get it all wrong and leave the homebuilders with excessive inventory which they'll have to eat, which will drive prices down and further add to our collective worries.

<sup>^ which</sup>

When I Googled Real Estate boom along with sub-prime, I came up with ~~about~~ 97,900 articles. A few of the best quotes on the topic included these from Independent Real Estate agents:

"The bottom line is that the core of the real estate industry is healthy. If we look outside of today's snapshot we see that the three years leading up to the current "situation" most of the country was realizing what I like to call stupid appreciation. In some areas real estate was appreciating at over 30% which is insane considering

the normal average appreciation since the beginning of all recordkeeping has been 3%. There is no market that can sustain that kind of growth for any amount of time.

We are currently in a correction cycle. The **real estate** ATM is closed, time to go back to work. "

"The borrowers couldn't afford the houses in the first place - they were only able to afford them with a loan that was subsidized on the front end. They were assuming that property values would continue to rise rapidly, and they would either flip or refinance (with another ARM) when their loans adjusted.

Then the music stopped. "

"So the subprime lenders were lending money based on speculation in the **real estate** market, and not on Gross Debt ratios, total debt ratios, stability of income, credit worthiness, etc of the customer.

Looks like the underwriters were on drugs."

Let's not put Lane County's land usage and availability on drugs but maintain the viability of farms and forest land for future needs. I urge you to disregard projections based on or including recent real estate boom years without regard to the cyclic nature of the industry. Thank you.



**J O H N S O N**  
**G A R D N E R**

**MEMORANDUM**

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**DATE:** December 7, 2007  
**TO:** WINTERBROOK PLANNING  
**FROM:** JOHNSON GARDNER, LLC  
**SUBJECT:** Estimate of Long-Term Population Growth in Lowell, Oregon

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This memorandum summarizes an analysis of projected population growth in the town of Lowell, in Lane County, Oregon. Based on available data and growth trends in the region, we project that Lowell's residential growth rate will increase over the coming decades, as the Eugene/Springfield metro area expands in population and employment.

Our findings are summarized below, followed by an explanation of our analysis:

- JOHNSON GARDNER projects an annual population growth rate of 4.1%, for a total population of 6,835 by 2055.
- Various public finance tools are available to the City of Lowell, particularly with the possibility of a large landowner or landowners seeking amendment to the Lowell urban growth boundary.

2006	Growth Rate	2010	2015	2020	2025	2030	...	2040	...	2055
955	4.1%	1,213	1,636	2,207	3,045	3,636		4,870		6,835

Source: Johnson Gardner, LLC

*Contextual Analysis of Lowell*

Data from PSU's Population Research Center (PRC) demonstrate that the smaller cities around Eugene and Springfield have experienced the fastest growth rates in the region. From 1990 to 2005, Creswell grew at an annual rate of over 4.2%, while Veneta grew at over 3.1%. Looking at the more recent period of 2000 to 2006, Veneta's growth has accelerated to over 4.2% as well (source: PRC). In comparison, the growth rate for Eugene, Springfield and the County have all been below 1.2%, though absolute growth has been significant as the basis population for each jurisdiction is much larger.

Still, documented high growth rates in smaller communities such as Creswell and Veneta, given their distance of more than ten miles from the core Eugene-Springfield area, demonstrate that smaller and outlying jurisdictions have experienced, and can continue to anticipate, dramatic population growth rate increases relative to historical averages.

The *Growth Management Strategy* drafted in 2006 by the Lane County Council of Governments notes that from 1990 to 2005, Lowell experienced the lowest growth rate of the documented cities – a rate of just over



1%, greatly reflecting past water system problems and development moratoria. However, if we look at just the end of this period, from 2000 to 2006, we find that the growth rate did in fact accelerate to 1.4%. It is reasonable to expect that were it not for significant water system issues, the City of Lowell would likely have captured its fair share of residential development over the last six years. It is also true that while growth in bedroom communities has thus far affected those closer to Eugene and Springfield, it will impact an expanding number of communities in a widening radius as the metro area grows.

The *Growth Management Strategy* projects that the combined Eugene/Springfield metro area is projected to grow to almost 350,000 people by 2055, an increase of almost 50% over the 2005 population. A metro area of this size, as the center of the regional economy, exerts a significant gravity on the communities around it. While the City of Lowell has not yet experienced the growth of Creswell for instance, it is well within the area and drive time to become an increasingly attractive bedroom community alternative for a metro area of this size.

In fact, Lowell already functions this way. According to the *Strategy*, roughly 70% of Lowell residents already commute to Eugene/Springfield for employment. The Census reports that mean average commute time for Lowell workers is 26.4 minutes. Lowell is roughly 20 miles from the metro area by highway and freeway, and enjoys an additional route into Springfield from the south. Lowell also provides a picturesque setting and strong recreation and locational amenity for households, with Dexter Lake, Lookout Point Lake, and Fall Creek Reservoir either in direct view or highly proximate.

Lowell is located roughly at the mid-point between Eugene/Springfield and Oakridge. Beyond Oakridge are popular recreation areas in the Cascade Range and Central Oregon. Deschutes County grew over 32% between 2000 and 2006, and Bend grew an incredible 43% in that time. Robust growth in population and tourism in Central Oregon will keep traffic and commerce moving along the Highway 58 corridor, and make this a natural direction for population to spread from Eugene/Springfield metro area.

As a convenient stop for increasing commuter traffic from Oakridge and travelers beyond, Lowell also has the potential to see commercial expansion to serve future Lowell and Oakridge residents.

#### *Population Growth Potential*

Based on the above analysis, JOHNSON GARDNER finds that Lowell has the potential to grow significantly larger, under the assumption *that the City of Lowell chooses to actively pursue a policy of sustainable expansion and infrastructure investment* rather than attempt to accommodate growth pressures with the current infrastructure system, which appears to be increasingly unsustainable.

The ability of Lowell to grow faster than presently projected will have much to do with the following features of Lowell, summarized from discussion in the previous section:

- Similar drive time to Eugene-Springfield as rapidly growing Creswell and Veneta;
- Central location along the Highway 58 corridor between the metro area, Oakridge, and beyond; and
- Locational features and recreational amenities available to households seeking such quality of life attractions.

The following table demonstrates JOHNSON GARDNER'S projection of Lowell's potential population growth rate.



2006	Growth Rate	2010	2015	2020	2025	2030	...	2040	...	2055
955	4.1%	1,213	1,636	2,207	3,045	3,636		4,870		6,835

Overall, we project a potential growth rate of 4.1%, and a total population of over 3,600 in 2030 and roughly 6,800 people in 2055 depending upon municipal growth policies. The 4.1% rate is the average growth rate over this period. The above projections reflect that the growth rate is expected to be higher in the beginning – relative to the currently small population, it will not take a large influx of households to generate strong growth. The projected rate translates into roughly 75 new residents per year for the first ten years, or 30 households per year. This is roughly half the annual growth that Veneta and Creswell have each experienced over the past few years.

*Potential Growth & Historic Growth*

It is again worth noting that the analysis presented above assumes that land and infrastructure capacity will be available for Lowell to absorb potential growth, and that the local land use framework will allow or even facilitate this growth. If this is the case, traditional subdivision-style development as well as infill development could easily produce the projected number of new units.

In contrast, a recent report prepared by ECONorthwest<sup>1</sup> projects that the population in Lowell will actually grow at a slower rate than that projected in the *Growth Management Strategy*. These findings are based on, among other factors:

- Historic population growth rates;
- Slow local job growth; and
- Aging population.

A key finding of the analysis is that the official population forecast for the City of Lowell may be too optimistic, thus rendering the likely financial feasibility of necessary City water system improvements more uncertain. The ECONorthwest analysis concludes that improvements will likely cause an undue burden on the current residents and developers who will have to pay for it. The report estimates that the cost of service to individual property owners would increase by well over 100%, in the form of higher utility rates.

Under the assumptions employed in the ECONorthwest report, JOHNSON GARDNER agrees with its basic conclusions. Historically Lowell has indeed grown slowly, and faces some challenges, not the least of which is insufficient water treatment capacity that has led to multiple development moratoria and measures such as allowing septic systems. The ECONorthwest report presents a picture of what the city may face if it pursues historical growth policies in perpetuity, including its existing unsustainable clean water infrastructure, without a forward-leaning approach to overcoming these obstacles to growth.

*Sustainable Growth Policies*

Some of the problems of costly infrastructure improvements could be directly addressed by a more singular growth event, such as the expansion of the Urban Growth Boundary to include a sizeable single-owner parcel or parcels. Unlike annexation to include numerous smaller parcels, sizeable additions held by single or few

<sup>1</sup> "Population Forecast for the City of Lowell," ECONorthwest, February 15, 2007.



owners allows a jurisdiction predictability, coordinated land use and financial planning, and can result in reduced public costs to benefit an entire community.

Expanding the UGB to bring in tracts for residential development can have a self-reinforcing effect. If new development can help pay a significant portion of new infrastructure costs, the costs for existing residents can be kept down. The improvements will then allow additional new growth that has been hampered by insufficient infrastructure.

There are several tools that the City can employ, preferably in combination for tax fairness and equity, under various State of Oregon statutes and programs. The table found at the end of this memorandum provides a summary of six key potential funding resources for various infrastructure need:

- Citywide System Development Charges (SDCs)
- District-Specific SDCs
- Urban Renewal District/Plan
- Increased Utility Rates;
- General Obligation Bond; and
- State Grants & Related Programs.

The list is not exhaustive, but does provide common tools employed by other jurisdictions with significant capital facilities improvement need in the State of Oregon. Due diligence for each source individually and in concert would be recommended, were the City to pursue any of the options.

#### *One Potential Financing Method*

The City of Lowell might consider a mixture of the above approaches – private and public financing to meet the needs of the City and developers alike. As mentioned, one method of achieving the necessary financing for infrastructure might be to allow one or more large growth and development events with the intent of leveraging this growth to pay for most of the needed improvements.

A recent analysis prepared by HBH Engineers estimates infrastructure needs and costs in Lowell by 2030, assuming an advanced growth rate. The report considers the water, waste water, storm water and street systems. The infrastructure needs are a mixture of those that will necessitated by specific developments, and upgrades needed for the City as a whole to accommodate added growth.

Based on our preliminary assessment, JOHNSON GARDNER believes that the costs outlined in the infrastructure analysis are well within the range to make a private/public financing system likely feasible. Such a system might be based on the following parameters.

- The land developer of a large new tract pays for the water, sewer, and road improvements directly attributable to the development itself by building the infrastructure themselves, and/or paying district-specific System Development Charges.
- The City applies an Urban Renewal District that encompasses this new growth, as well as other parts of the city which have felt the most negative effects of inadequate infrastructure. The Urban Renewal District allows the rising tax revenues from these properties to be funneled towards specific projects. This guaranteed revenue source gives the City enhanced bonding capacity to fund earlier upgrades and pay for them over the life of the district.



Urban renewal tax increment financing has been used in many small and mid-sized communities to achieve a range of public goals. Lowell's current inadequate infrastructure capacity, which has historically limited the growth and functioning of the City, is the type of thing that this financing tool is meant to address particularly in light of broader City public infrastructure and economic enhancement that would result.

JOHNSON GARDNER believes that the preliminary cost estimates from the HBH Engineers analysis indicate no fatal flaws to infrastructure financing and feasibility given the combination of private and public financing tools described here. Should the City choose to pursue these or any other financing methods, a more detailed and in-depth feasibility study would be required and should be pursued.

It is important to note that the possible method outlined here is sensitive to the nature of the UGB expansion. This is because an expansion that includes many smaller parcels makes the land expensive for a land developer to aggregate. Expensive land combined with higher than average infrastructure costs makes the development less feasible. If the UGB expansion consists of one or more large parcels, with owners who own the land outright, or have low carrying costs, the increased infrastructure costs become easier for development to shoulder.

#### *Conclusion*

JOHNSON GARDNER finds that if development land and infrastructure capacity exist, Lowell can achieve significantly higher growth than that projected by other sources. The above scenario is meant to demonstrate one way in which Lowell can overcome historically slow growth patterns and development hurdles. New growth can help provide the infrastructure to beget more growth. As the ECONorthwest report states, the alternative is a continuation of historical trends and increasingly stressed infrastructure, which cannot be viewed as sustainable.



<b>Resource Type</b>	<b>Who Pays?</b>	<b>Features &amp; Advantages</b>	<b>Disadvantages &amp; Caveats</b>
<b>Citywide SDCs</b>	Existing City New Development	Pay-as-you-go for new infrastructure need; works best with larger land development and sufficient margin on land value.	Land parcels are smaller (smaller yield) and little margin exists on land value.
<b>District SDCs</b>	District New Development	Higher district-specific SDCs for greater expense of infrastructure extension.	Land parcels are smaller (smaller yield) and little margin exists on land value.
<b>Urban Renewal District</b>	Existing & New Improvements	Frozen tax base and increment-generation would not cause higher cost to existing residents. Funds generated can be used for revenue bond issue, incremental cash/short-term debt projects, or resources for matching funds for State and Federal grants.	Non-municipal taxing jurisdictions, except for local schools by State statute, would forego additional property tax revenue within the district boundary for the 20-year duration of the urban renewal plan.
<b>Increased Utility Rates</b>	Existing & New Population	High rates, in concert with other funding sources to avoid significant increases, can be borrowed against for capital improvement.	The only funding source identified whereby existing residents would experience permanently higher out-of-pocket expenses.
<b>General Obligation n Bond</b>	Existing & New Population	Significant up-front resources for more immediate infrastructure need; later development reduces existing household tax burden for fix debt service.	Existing residents pay disproportionate share of debt service up-front; uncertain margin of voter approval.
<b>State Grants/Programs</b>	Matching funds from Existing & New Population	Low-cost funding options for specific infrastructure projects, particularly water and wastewater projects.	Typically require matching fund resources, therefore likely requiring at least one of the above other revenue sources.

See: <http://www.orcities.org/CityResources/FundingGrantOpportunities/tabid/847/cid/ItemView/mid/1454/category/1411/Default.aspx>



**J O H N S O N**  
**G A R D N E R**

STATEMENT OF QUALIFICATIONS

**COMPANY BACKGROUND, JOHNSON GARDNER**

JOHNSON GARDNER was founded with the intent of assembling the most technically capable and knowledgeable consulting professionals in the Northwest. We have assembled a staff of highly qualified and experienced individuals, with over 50 years of combined experience. The firm offers a full range of real estate and economic development services, with extensive experience in a wide range of land uses and development forms. Our experience includes the following types of projects:

- ***Land Use and Regional Economics***
  - *Economic and Fiscal Impact Analysis*
  - *Residential Needs Assessment*
  - *Commercial and Industrial Needs Assessment*
  - *Development Fee/SDC Incidence Analysis*
  - *Litigation Support/Expert Witness Testimony*
- ***Economic and Business Development Planning & Analysis***
  - *Economic Development Plans*
  - *Target Industry Analysis*
  - *Small Business Formation Analysis and Feasibility*
- ***Commercial/Industrial Market Analysis***
- ***Residential Market Analysis***
- ***Periodic Economic and Market Forecasting***
- ***Financial Analysis***
  - *Financial Feasibility Analysis*
  - *Residual Land Value Analysis*
  - *Least Cost Location Analysis*
  - *Public/Private Partnerships*
  - *Urban Renewal District Bonding Capacity Calculations*
  - *Highest and Best Use Analysis*
- ***Strategic Planning***

The Firm has been actively involved in the development of many of the largest and most complex developments in the Pacific Northwest, and is regularly retained by the region's most prominent developers to complete market and financial feasibility studies in the Northwest. In addition, we work for many of the region's leaders on a retainer basis to monitor local real estate markets.

JOHNSON GARDNER has extensive experience forecasting land needs for jurisdictions as well as private-sector clients. The firm has developed a series of proprietary models that allow for land demand forecasts to reflect market realities. These are used for land use forecasting, as well as for short-term forecasting by our institutional and banking clients. Our models are dynamic, and allow for variation in the profile of growth and development activity as a result of policy inputs and inter-regional shifts.



JOHNSON GARDNER serves a diverse mix of clients, including government and public agencies, corporations, developers, institutional investors, financial institutions and non-profit organizations. The diversity of our client base has allowed our firm to approach the development process from a wide range of perspectives. As a result, we have developed a comprehensive understanding of the factors necessary to encourage facilitate and direct the development process in support of public policy objectives. We have been among the leading consultants to private sector developers in the region, are viewed as the primary source of real estate market evaluation by the area's largest commercial lenders, and have worked extensively with public agencies throughout the region. JOHNSON GARDNER regularly melds public policy with market and financial realities, producing accurate, reliable and realistic advice.



## JOHNSON GARDNER CLIENT LIST

### Private Sector

Acadia Properties  
Albertsons, Inc.  
Alexandria Investment Company  
American Pacific Bank  
Amstar Properties, Ltd.  
Angelo Eaton  
Archstone Communities  
Ashton-Tenly  
Associated General Contractors  
Association for Portland Progress  
Austin Industries  
Avalon Bay  
Bank of America  
Bank of the West  
Bank One  
Bardays North  
BCRA Design  
Beaumont Village  
Bedford Properties  
Berrey Properties  
Bircher Mitsui  
Blackhawk Port Blakely  
Bosa Development  
Bowen Real Estate Group  
BRE Properties  
Caitac USA Corporation  
Campus Gateway Associates  
Capital Consultants  
Capital Advisory Group  
Capstone Homes  
CB Richard Ellis  
Centennial Bank  
Centex Homes  
Centre's Edge Development  
Century Real Estate Advisors  
Chemawa Station  
College Housing Northwest  
Concord Group, The  
Corrick Real Estate  
Costa Pacific Homes  
Crossings Corporation  
Decal Custom Homes  
Del Webb Corporation  
Don Morrisette Homes  
Dorn-Platz & Co  
Dry Creek Landfill  
DUC Housing Partnership  
Eagle Crest  
Emmert & Brundidge  
Equity Residential  
Essex Property Trust  
First Westinghouse Equities  
Fred Meyer  
Friends of the Gorge  
Galpin LLC  
GE Capital Corp.  
General Motors  
Genstar  
Gending/Edlen  
Glacier Northwest  
Glacier Park Properties (BNRR)  
Gramor Development  
Group Mackenzie  
GSL Properties, Inc.  
H&S Development  
Harbor Properties  
Harsch Investment Corporation  
HGW, Inc.  
Hillebrand Paradise Ranch  
Holland Partners  
Homart  
HBAMP  
Human Solutions  
Hunt Development  
Innovative Housing

Interstate Bank Developers  
Intracorp  
Intrawest Corporation  
J. Scott Development  
Jai Matadi  
Jenamar Communities  
John F. Buchan Homes  
Jones Lang LaSalle  
JPI  
Kaiser Permanente  
Kauri Investments  
Kemper Company  
Key Bank of Oregon  
Key Bank Of Washington  
Killian Pacific  
Kimco Developers  
Land Solutions  
LandAmerica Lawyers Title  
Legacy Health Systems  
Legacy Partners  
Lennar Affordable Housing  
Lincoln Property Company  
Lowell Homes  
Macerich Company  
MBK Northwest  
Miller Nash  
Milliken  
Myhre Group Architects  
Naumes, Inc.  
Newland Northwest  
Nike, Inc.  
Northwest Aluminum  
Northwest Natural Gas  
Nova Northwest  
Nupark Development  
NW Natural  
Olympic Property Group  
Opus Northwest  
Pacific Lifestyle Homes  
PacifiCap Properties Group  
PaLand  
Polygon Northwest  
Portland Community Design  
Prestige Development  
Quadrant Corporation  
R.A. Gray & Company  
Randall Realty Corporation  
Richmond American Homes  
Rick Burnstead Construction  
Rogue Disposal & Recycling  
Rose CDC  
Running Y Ranch  
Ryland Homes  
Sage SG  
Salem Chamber of Commerce  
Sam Galbreath Associates  
Scherzer Real Estate Group  
Schnitzer Investment Corporation  
Schnitzer NW  
Security Capital Group  
Service Corp International  
Sherman Homes  
Simco  
Simpson Housing  
Sisters of St. Mary  
Sobrato Development  
Southwest Wash. Hospitals  
Specht Development  
Stafford Homes  
Talki Corporation  
Farragon Development  
Taylor Street Center  
The Dahl Company  
The Development Group  
The Fortune Group  
TMT Development

Trammell Crow Residential  
Trendwest Resorts  
Triad Development  
United Dominion Realty Trust  
United Pacific Homes  
Urban Pacific  
US Bancorp  
Vulcan  
Washington Mutual  
Waste Management  
Wells Fargo Bank  
Wellsford Residential  
Weyerhaeuser Real Estate Company  
Winkler Development Corporation  
Winmar Company

### Public Sector

Central Oregon Regional Housing Authority  
City of Beaverton  
City of Bellevue  
City of Central Point  
City of Corvallis  
City of Fairview  
City of Gresham  
City of Hillsboro  
City of LaGrande  
City of Lake Oswego  
City of Lincoln City  
City of Milwaukie  
City of Newberg  
City of Newport  
City of North Plains  
City of Portland  
City of Redmond  
City of Salem  
City of Sandy  
City of Seaside  
City of Springfield  
City of Tigard  
City of Vancouver  
City of Wood Village  
Clackamas Community College  
Clackamas County  
Clark County Housing Department  
Deschutes County Fairgrounds  
Downtown Corvallis Association  
Housing Authority of Portland  
HUD  
HUES  
King County Department of Development  
King County Housing  
Lewis and Clark College  
Metropolitan Service District (METRO)  
Multnomah County  
Oregon Department of Corrections  
Oregon Department of Transportation  
Oregon Economic Development Department  
Oregon Health and Sciences University  
Port of Camas/Washougal  
Port of Coos Bay  
Port of Hood River  
Port of Portland  
Port of The Dalles  
Port of Tillamook Bay  
Port of Siuslaw  
Port of Garibaldi  
Portland Business Alliance  
Portland Development Commission  
Portland Planning Bureau  
Redmond Airport  
Skamania County  
State of Oregon Dept. of Corrections  
Tri Met  
University of Washington  
Urban Housing Group  
Vancouver Housing Authority