INDEPENDENCE

Comprehensive Plan

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POPULATION

INDEPENDENCE POPULATION PROJECTION

During the period from 1970 through 2007, the population of Independence grew from 2,594 to 7,905 persons. As was the case for many cities in Oregon, population growth slowed dramatically during the period from 1980 to 1990 when the state experienced an economic downturn. From the period from 2000 through 2007, the city's population has grown at an average annual rate of approximately 3.93 percent. As shown in **Table 1**, for the 36-year period from 1970 through 2007, Independence's population has grown at an average annual rate of 3.06 percent.

Table 1
Independence Population
1970 - 2007

Year	Population	AAGR[1]
1970	2,594	---
1980	4,024	4.49%
1990	4,425	0.96%
2000	6,035	3.15%
2007	7,905[2]	3.93%
AAGR 1970-2007		**3.06%**

[1]Average Annual Growth Rate
[2] Population estimate from Portland State University Center for Population Research
Source: US Census, Portland State University, and MWVCOG, 2008

Polk County's population also increased significantly during the period from 1970 through 2007 as shown in **Table 2**. The County's population increased at an average annual growth rate of 1.81 percent annually, with most of the growth occurring in the periods from 1970 through 1980 and 1990 through 2000. Independence's population grew at an average annual rate approximately 1.25 percent higher than that of Polk County during this 36-year period.

Table 2
Population Trends, Polk County and Independence
1970 - 2007

	Population					Average Annual Growth Rate				
Location	**1970**	**1980**	**1990**	**2000**	**2007[1]**	**1970-80**	**1980-90**	**1990-00**	**2000-07**	**AAGR 1970 - 2007**
Polk County	35,349	45,203	49,541	62,380	67,505	2.5%	0.9%	2.3%	1.13%	1.81%
Independence	2594	4,024	4,425	6,035	7,905	4.49%	0.96%	3.15%	3.93%	3.06%

Source: US Census, Portland State University Center for Population Studies, and MWVCOG, 2008
[1] 2007 population estimates from Portland State University

Population forecasts for Oregon counties have been developed by the Oregon Office of Economic Analysis. **Table 3** shows the forecast population for Polk County for the period from 2000 through 2030. By 2030, the County's forecast population is 117,557 persons. The average annual growth rate for this period is 1.76 percent.

Table 3
Polk County Population Forecast
2000 – 2030

Year	Population	AAGR[1]
2000	62,700	---
2005	65,434	0.86%
2010	72,845	2.18%
2015	83,338	2.73%
2020	95,594	2.78%
2025	107,118	2.89%
2030	117,557	1.56%
AAGR 2000-2030		**1.76%**

[1]Average Annual Growth Rate
Source: Oregon Office of Economic Analysis, April 2004

Oregon Revised Statutes (ORS) 195.036 requires that counties "establish and maintain a population projection for the entire area within its boundary for use in maintaining and updating comprehensive plans" and to "coordinate the forecast with the local governments within its area". The last population forecast that was coordinated and adopted by Polk County in 1998 extended to the year 2020.

Oregon Administrative Rules (OAR) 660-024-0030 provides two "safe harbor" provisions for updating local population forecasts. One "safe harbor" provision allows for a 20-year forecast developed by assuming that the city's share of the forecasted county population will be the same as the city's current share of county population based on the most recent certified population estimates from Portland State University and the most recent data for the urban area published by the U.S. Census Bureau (OAR 660-024-0030(4)).

Based on recent population trends, it is not accurate to forecast Independence's population as a constant percentage of the Polk County population. Given the higher average annual rate of population growth in Independence over the past 36 years, the city's portion of the county population has risen over time as shown in **Table 4**.

Table 4
Independence Population as a Percentage of Polk County Population
1970 – 2007

Year	Population		Independence Portion of County Population
	Independence	Polk County	
1970	2,594	35,349	7.34%
1980	4,024	45,203	8.90%
1990	4,425	49,541	8.93%
2000	6,035	62,380	9.67%
2007	7,905[2]	67,505	11.71%

Source: US Census, Portland State University, and MWVCOG, 2008

The other "safe harbor" provision allows for extension of the adopted 20-year forecast using the previously adopted growth rate (OAR 660-024-0030(3)). The most recent 20-year forecast adopted by Polk County in 1998 assumed an average annual growth rate of 2.75 percent for the City of Independence. Given historic population trends for Independence from 1970 through 2007, this "safe harbor" approach provides a more accurate method of forecasting the city's population through the year 2029. While the 2.75 percent growth rate is lower than the actual 3.06 percent growth rate experienced in Independence from 1970 through 2007 (see Table 2 above), most communities experiencing higher growth rates tend to level off and growth at a slower rate over time. Communities experiencing a moderate rate of growth tend to grow at an average rate of around two (2) percent annually which, accounts for periods of higher growth, often associated with a strong economy, as well as periods of slower growth, such as that experience by both Independence and Polk County during the 1980s.

Given these population trends, Independence updated its 2020 population projection by extending the previously adopted growth rate of 2.75 percent through the year 2029 as allowed by safe harbor methods for updating the population forecast found in OAR 660-024-0030(3). **Table 5** shows the population projection for the city through 2029. The 2.75 percent growth rate is applied to the 2007 population estimate developed by Portland State University to derive the population projection through 2029. The projected 2029 population for Independence is 14,358 persons. The projection shows that Independence will add an additional 6,453 residents between 2007 and 2029.

Table 5
Independence Population Projection
2007 - 2029

Year	Population
2007[1]	7,905
2010	8,575
2015	9,821
2020	11,248
2025	12,882
2029	14,358
Population change 2007 – 2029	6,453
AAGR 2007-2029	2.75%

Source: U.S. Census and Portland State University and MWVCOG 2008.
[1] 2007 Population estimate from Portland State University

LAND USE AND URBANIZATION

INTRODUCTION

A land use plan indicates the area into which various types of activities are expected to occur. Independence designates seven (7) categories of land uses to be described and located on the land use map.

1. Low Density Residential. Areas designated as low density residential shall not exceed a density of eight (8) dwelling units per gross acre.

2. Medium Density Residential. Areas designated as medium density residential shall not exceed a density of twelve (12) dwelling units per gross acre.

3. High Density Residential. Areas designated as high density shall not exceed a density of twenty (20) units per gross acre.

4. Commercial. Commercial uses include all activities of a commercial nature. There is no distinction between what kinds of commercial activities are allowed; the specific zoning regulates uses.

5. Industrial. Industrial use covers the range of manufacturing, warehousing, and wholesaling activities.

6. Public Services. Public Service uses include all government and semi-public lands and uses.

7. Agriculture. The Agriculture designation is intended to protect areas for the continued practice of agriculture and permit the establishment of only those new uses that are compatible to agricultural activities.

The land use designations in the Comprehensive Plan are of a general nature and are intended to indicate the expected community growth pattern. Implementation of the plan occurs through more specific actions such as zoning, subdivision control, annexation review, Urban Growth Boundary administration and public facilities planning. Although the plan is designed to be somewhat flexible, it must be understood that it is a significant policy statement and a great deal of responsibility must be exercised in its use and updating.

BUILDABLE LANDS INVENTORY

In 2007, the city conducted a buildable lands inventory (see page 12, Figure 1, Buildable Lands Inventory Map). For each land type (residential, commercial, and industrial), the analysis was broken into two parts. The first part of the inventory describes the amount of net buildable land, by zoning district, within the existing city limits. Next the inventory includes a description of the amount of buildable land located between the city limits and UGB. Land in this area is zoned by the county until it is annexed into the city. The City's Comprehensive Plan does designate, in general, the future use (residential, commercial, or industrial) for such properties.

The analysis of residential, commercial and industrial lands includes totals for land that is completely vacant and redevelopable.

The following parameters are used to determine whether land is vacant or redevelopable.

- Vacant residential land includes all parcels that are at least 5,000 square feet (0.11 acres) in size with improvement values of less than $5,000. The minimum lot size for residential parcels in Independence is 5,000 square feet. Vacant commercial or industrial land includes all parcels with improvement values of less than $5,000.

- Residential land with infill potential consists of residential-zoned parcels that are at least 0.50 acre in size with an improvement value of at least $5,000. This analysis assumes that 0.25-acre is devoted to the existing house, with the remainder considered vacant.

- Redevelopable commercial and industrial land includes parcels in commercial and industrial zones where some limited improvements have been made, but where potential for redevelopment for more intense uses is probable. For the purpose of this analysis, redevelopable land is defined as commercial or industrial parcels with improvement values of at least $5,000, where the ratio of land value to improvement value is 1:1 or greater.

The analysis also includes an assessment of land that is not buildable due to physical constraints. These areas have been subtracted from the amount of gross acreage that is considered buildable. Land that is considered unbuildable due to physical constraints includes the following:

- **Riparian areas** located within 25 feet of Ash Creek protected by Independence Development Code Subchapter 54.105(A).

- **Floodways** identified on the FEMA Flood Insurance Rate Map protected by Independence Development Code Subchapter 51.

- **Floodplain areas requiring two (2) feet or more of fill.** In order for development to occur within floodplain areas, the city's current flood hazard ordinance requires development to be located at least one (1) foot above the base flood elevation level. This often requires bringing fill in to raise the elevation of land located in the floodplain area. Floodplain areas requiring two (2) feet or more of fill are financially impractical for development due to the large expense associated with transferring fill from one area of the floodplain to another.

- **Wetlands** as identified on the National Wetland Inventory (NWI) and protected by state and federal regulations.

Residential Land

Table 1 shows the amount of buildable land for each residential zoning district, within the Independence urban area (both city limits and UGB). Approximately 189.8 acres are available for residential development within the urban area. Of that amount, approximately 101.5 acres are available within the city limits and an additional 88.3 acres are available between the city limits and UGB. Within the urban area, approximately 72.8 acres designated for residential use can be considered residential land with infill potential.

Table 1
Buildable Residential Land
Independence, 2007

Zone/Plan Designation	Vacant (acres)	Infill Potential	Total
Within the City Limits			
Low Density Residential Zone (RS)	5.5	13.6	19.1
Medium Density Residential Zone (RM)	51.4	15.3	66.7
High Density Residential Zone (RH)	6.6	0.0	6.6
Residential Single-Family Airpark (RSA)	9.1	0.0	9.1
Net Buildable Acres Within the City Limits	72.6	28.9	101.5
Between the City Limits & UGB			
Suburban Residential (SR)	44.4	43.9	88.3
Net Buildable Acres Between the City Limits & UGB	44.4	43.9	88.3
Net Buildable Acres Within the Urban Area	117.0	72.8	189.8

Source: Polk County Assessor data, MWVCOG, 2007.

While **Table 1** shows a total of 189.8 acres of residential land available within the UGB, 9.1 acres of vacant land located within the UGB consists of land zoned Residential Single-Family Airpark (RSA). The RSA zone is a specialized zoning designation reserved for single family dwellings that have access to the Independence State Airport by a taxiway and contain aircraft hangars for personal aviation use. Due to the unique characteristics associated with this type of housing, RSA housing needs will be considered through a separate analysis in the future that takes into account aviation and airpark housing trends. Because land zoned RSA is not considered available for non-RSA housing needs, the net buildable acres available for residential development consists of **180.7 acres.**

Commercial Land

Table 2 shows that approximately 14.3 net vacant acres are available for commercial development within the Independence city limits. (No land designated for future commercial use is located between the city limits and urban growth boundary.) Approximately 2.5 acres designated for commercial use can be considered redevelopable.

Land Use - Table 2
Buildable Commercial Land
Independence, 2007

Zone/Plan Designation	Vacant (acres)	Redevelopable	Total
Within City Limits			
Commercial Office Zone (CO)	2.8	0.0	2.8
Commercial Retail Zone (CR)	8.1	1.8	9.9
Commercial Highway Zone (CH)	0.9	0.7	1.6
Net Buildable Acres Within the City Limits	11.8	2.5	14.3

Source: Polk County Assessor data, MWVCOG, 2007

Industrial Land

Table 3 shows the amount of buildable land for each industrial zoning district within the Independence urban area (both city limits and UGB). Approximately 90.4 net vacant acres are available for industrial development within the urban area. Of that amount, approximately 76.5 vacant acres are available within the city limits and an additional 13.9 acres are available between the city limits and UGB. Within the urban area, an additional 15.4 acres designated for industrial use can be considered redevelopable.

Land Use - Table 3
Buildable Industrial Land
Independence, 2007

Zone/Plan Designation	Vacant (acres)	Redevelopable	Total
Within City Limits			
Light Industrial Zone (IL)	47.1	8.1	55.2
Heavy Industrial Zone (IH)	29.4	7.3	36.7
Net Buildable Acres Within the City Limits	76.5	15.4	91.9
Between City Limits & UGB			
Industrial (I)	13.9	0.00	13.9
Net Buildable Acres Between the City Limits & UGB	13.9	0.00	13.9
Net Buildable Acres Within the Urban Area	90.4	15.4	105.8

Source: Polk County Assessor data, MWVCOG, 2007

LAND NEEDS ANALYSIS

The buildable lands inventory is used in conjunction with the 2029 population projection to determine if adequate land is available for future residential, commercial, and industrial development.

Residential Land Needs

To determine the amount of land needed for future residential development, it is necessary to calculate the average net density for the various types of housing developments including single-family and multi-family.

ORS 197.296 requires that jurisdictions review the density of development that has occurred during the period since the last periodic review of comprehensive plans. The last periodic review of the Independence Comprehensive Plan was conducted in 1987.

Single-Family Development

Since 1987, fourteen (14) subdivisions have been approved and at least partially developed. **Table 4** shows recent single-family residential development. This includes subdivision development and infill development through the partitioning process. During this period, 812 single-family dwelling units have been developed on 175.5 acres. The resulting average net density of the development is 4.6 units per acre.

Land Use – Table 4
Single-Family Residential Development[1]
Independence, 1987-2007

Subdivision	Zone District	Single-Family Units	Net Acres Developed	Net Density (units/acre)
Ashbrook	RM	123	25.3	4.9
Donita Estates	RS	42	8.4	5.0
Mt. Fir Estates	RS/RM	64	10.0	6.4
Northgate	RM	38	5.6	6.8
River Oak	RS	26	4.7	5.5
Perkins	RS	8	1.3	5.9
Freedom Estates	RS	57	11.7	4.9
Mt Fir Estates	RM	13	1.9	6.8
Chernishoff	RM	6	0.9	6.7
Green Acres	RM	45	11.5	3.9
Quality Plus Interiors	RM	9	1.4	6.2
Northgate	RM	64	8.3	7.7
Mt Fir West	RM	195	41.4	4.7
Martino	RM	24	6.3	3.8
Infill Partitions	RS/RM	49	18.3	2.7
Total		812	175.5	4.6

[1]Does not include residential development within the RSA zone.
Source: City of Independence, MWVCOG, 2007

Multi-family Development

The majority of multi-family developments over the past ten (10) years have occurred on existing platted lots. **Table 5** shows the location, size and density of multi-family developments constructed since 1987. The average net density of these developments is 10.5 units per acre.

Land Use – Table 5
Multi-Family Residential Development
Independence, 1987-2007

Map & Tax Lot	Zone District	Multi-Family Units	Net Acres Developed	Net Density (units/acre)
8-4-20DC 7900	RM	4	0.5	8.7
8-4-20DC 12100	RM	2	0.2	8.3
8-4-20DC 12800	RM	2	0.2	8.7
8-4-21DB 501	RM	4	0.2	20.0
8-4-28BA 6700	CO	4	0.2	17.4
8-4-29AC 500	RM	4	0.3	12.1
8-4-29BD 1700	RM	2	0.2	10.5
8-4-20DC 3600	RM	72	6.1	11.8
8-4-29BD 1800	RM	2	0.2	10.5
8-4-29BD 1900	RM	2	0.2	10.5
8-4-29BD 2400	RM	2	0.2	10.0
8-4-21CD 901	RM	2	0.1	14.3
8-4-21CA 4600	RM	2	0.3	6.5
8-4-29AC 3101	RM	2	0.2	8.7
8-4-29BD 2100, 2200	RM	42	2.6	16.5
8-4-16C 1800	RM	32	2.7	11.8
8-4-29BD 2300	RM	2	0.2	10.5
Ashbrook Subdivision	RM	47	5.9	7.9
8-4-29BD 1301	RH	42	2.7	15.6
8-4-21CD 2000	RM	10	1.10	9.1
8-4-21CD 2101	RM	4	0.33	12.1
8421DB 503	RH	4	0.20	20.0
8421DB 500	RH	4	0.20	20.0
8429BD 4900	RH	2	0.17	11.8
8429BD 5000	RH	2	0.16	12.5
8429BD 2600	RH	4	0.25	16
8-4-20C 1400	RM	38	3.6	10.4
Ash Creek 8-4-29BD 1300	RH	52	7.8	6.9
Dawn Addition 8-4-21CC 701	RM	12	1.4	8.3
Total		401	38.3	10.5

Source: City of Independence Building Permit data, MWVCOG, 2007

Efficient Residential Land Use

The historic single family and multi-family densities described in Tables 4 and 5 above can be considered somewhat lower than residential densities typically found in urban areas. Statewide Planning Goal 14 (Urbanization) requires cities to utilize land within the UGB efficiently in order to minimize the conversion of farm and forest land resources to urban use. OAR 660-024-0050(4) requires prior to a local government expanding the UGB to demonstrate that the estimated needs cannot reasonably be accommodated on land already inside the UGB. The following measures were adopted to ensure a more efficient use of residential land inside the UGB:

- **Housing Mix Policy** - The city's current housing mix consists of approximately 77 percent single family dwellings and 23 percent multifamily dwellings. In an effort to encourage more efficient development that meets the diverse housing needs of all Independence residents, the city adopted a housing mix policy that encourages new residential development to consist of approximately 70 percent single family housing and 30 percent multi-family housing. This new housing policy represents a shift toward a greater percentage of the city's housing needs met through more land efficient multi-family residential housing development than is currently experienced today.

- **Mixed Residential Density (MX) Zone District** - To further implement the city's policy to encourage a greater mix of housing at efficient residential densities, the city created a new Mixed Density Residential (MX) Zone District. The MX Zone District allows a variety of residential housing types including single family and multi-family dwellings and requires each residential development to achieve an average density of nine (9) dwelling units per acre. The MX zone also includes housing design standards to ensure livable neighborhoods that encourage and support a multi-modal transportation system.

- **Average Density Policy -** Independence adopted an urbanization policy that encourages new single family residential development to achieve an average density of 5.5 dwelling units per net acre and new multi-family developments to achieve an average density of 12.0 dwelling units per net acre. Future residential development will be reviewed every five (5) years through subsequent Comprehensive Plan updates, to monitor whether or not the target residential densities are achieved.

Based upon the adopted policies above, the average net densities used to conduct the analysis of future residential land needs are:

- Single-family residential – **5.5** units per net acre
- Multi-family residential – **12.0** units per net acre.

Future Residential Land Needs

The housing needs analysis (see Housing - **Table 4**) identifies 2,307 new residential units needed to accommodate the projected 2029 population of 14,358 persons. Of the 2,307 new residential units, approximately 1,624 new single-family dwelling units and 683 new multi-family residences will be needed to meet projected housing needs in 2029.

Land Use – Table 6
Projected Housing Mix and Residential Land Needs
Independence, 2029

Housing Type	Additional Units Needed 2029	Percent of New Units	Net Density (units/acre)	Acres Needed 2029
Single Family	1,624	70.0	5.5	295.3
Multi-Family	683	30.0	12.0	56.9
Total	2,307	100.0		352.2

Source: MWVCOG, 2008

Oregon Administrative Rules (OAR) 660-024-0040 (9) allows for a local government to estimate that the 20-year land needs for streets and roads, parks and school facilities will together require an additional amount of land equal to 25 percent of the net buildable acres determined for residential land needs.

Table 7 shows adding the additional 25 percent for public land uses as allowed by OAR 660-24-0040 (9) means that approximately 440.2 acres will be needed to meet Independence's 20-year land needs for residential development. The buildable lands analysis found that approximately 180.7 acres are available for residential development within the entire urban area, with 92.7 acres available within the city limits. As indicated in **Table 7**, an estimated 259.5 acres will be needed to accommodate future residential growth.

About 71 acres of land designated for multi-family development will be needed by 2029. **Table 1** shows that about 73 acres of land zoned RM or RH are currently available for development within the city limits. No additional land zoned RM or RH is needed at this time.

Approximately 369 acres will be needed for single-family development through 2029. At present, about 19 acres zoned RS are available to accommodate single-family residential development. An additional 88 acres outside the city limits, but within the UGB, can be designated for future single-family development.

Table 7
Summary of Residential Land Needs
Independence, 2029

2029 residential land needs	352.2 acres
Additional land needed for public uses - streets, parks, etc. (25% of 20-year land needs)	88.0 acres
Total land needed for residential use through 2029	440.2 acres
Land currently available within the existing UGB for residential development	180.7 acres
Amount of additional land needed for future residential use	259.5 acres

Source: MWVCOG, 2008.

In response to the need to provide a 20-year supply of residential land, Independence identified areas for an expansion of the existing Urban Growth Boundary (UGB) to include an additional 259.3 buildable acres for residential development. **Table 8** shows the properties that were added to the UGB for future residential use.

Land Use Element - Table 8
Urban Growth Boundary Expansion to Meet 2029 Projected Need for Residential Land

Assessor Map/Tax Lot	Plan Designation (Polk County)	Zoning (Polk County)	New Plan Designation	New (Proposed) Zoning	Acres
842900 700	Farm and Forest	Exclusive Farm Use (EFU)	Low Density Residential	Low Density Residential (RS)	9.4
842900 1001			Low Density Residential	Low Density Residential (RS)	1.8
842900 1000			Medium Density Residential	Mixed Density Residential (MX)	19.9
842900 704			Medium Density Residential	Mixed Density Residential (MX)	46.7
843200 100			Medium Density Residential	Mixed Density Residential (MX)	35.5[1]
842900 1100			Medium Density Residential	Mixed Density Residential (MX)	39.7
842900 2100			Medium Density Residential	Mixed Density Residential (MX)	7.0
842900 1300			Low Density Residential	Low Density Residential (RS)	10.0
842900 1200			Low Density Residential	Low Density Residential (RS)	70.2
842900 1600			Low Density Residential	Low Density Residential (RS)	19.8
842900 1500			Low Density Residential	Low Density Residential (RS)	4.0
Total					264.0
Unbuildable land[2]					4.7
Total buildable land					259.3

Source: MWVCOG, 2008.

[1] The total size of Tax Lot 100 is 58.9 acres. Approximately 23.4 acres of Tax Lot 100 would remain outside of the UGB after expansion.

[2]Unbuildable land includes wetland areas as identified on the National Wetland Inventory, and the riparian corridor area located adjacent to South Fork Ash Creek.

Table 9 shows that approximately 438.2 acres of residential land is available for future development after the UGB expansion. The amount of land available meets Independence's projected residential land needs through 2029.

Land Use Element - Table 9
Buildable Residential Land after UGB Expansion
Independence, 2009

Zone/Plan Designation	Vacant (acres)	Redevelopable	Total
Within the City Limits			
Low Density Residential Zone (RS)	5.5	13.6	19.1
Medium Density Residential Zone (RM)	51.4	15.3	66.7
High Density Residential Zone (RH)	6.6	0.0	6.6
Net Buildable Acres Within the City Limits	63.5	28.9	92.4
Between the City Limits & UGB			
Suburban Residential (SR)	44.4	43.9	88.3
Low Density Residential Zone (RS)	32.8	91.4	124.2
Mixed Density Residential Zone (MX)	73.2	66.6	139.8
Unbuildable Land[1]			4.7
Net Buildable Acres Between the City Limits & UGB			345.8
Net Buildable Acres Within the Urban Area			438.2

Source: Polk County Assessor data, MWVCOG, 2008.

[1] Includes wetland areas as identified on the National Wetland Inventory and the riparian corridor area located adjacent to South Fork Ash Creek.

Commercial and Industrial Land Needs

The Economics section of the Comprehensive Plan includes a 2029 forecast of local employment (see Economics). One purpose for forecasting local employment is to determine if sufficient land is currently designated in the Comprehensive Plan to accommodate projected commercial and industrial development.

Table 10 shows the forecasted 2029 employment growth by land use type. Different sectors of the economy will have different land needs. Employment growth was allocated to two land use types as follows:

- Commercial: Retail Trade, Real Estate and Services.
- Industrial: Agriculture, Forestry, Fishing & Hunting; Construction; Manufacturing; and Transportation, Warehousing and Wholesale Trade.

Land Use - Table 10
Total Employment Growth by Land Use Type
Independence, 2029

Land Use Type	2029
Commercial	1,160
Industrial	1,947
Total	3,106

Source: MWVCOG, 2008.

To convert the employment growth shown in **Table 10** above to the number of acres needed by land use type, an assumption must be made regarding the density of jobs per acre.

Table 11 shows in 2005, the City of Independence had 1,406 industrial jobs located on approximately 93 acres of developed industrial land for an average job density of 15.1 jobs per net acre. The table also shows in 2005 the City of Independence had 1,035 commercial jobs located on approximately 44 acres of developed commercial land for an average job density of 23.5 jobs per net acre. This analysis assumes the job density will remain largely the same over time because the types of businesses the City of Independence is likely to attract will be similar to the businesses located in Independence today.

Land Use -Table 11
Commercial and Industrial Job Density
Independence, 2005

Land Use Type	2005 Jobs	2005 Developed Acres	Job Density
Commercial	1,035	44	23.5
Industrial	1,406	93	15.1

Source: MWVCOG, 2007.

Table 12 shows the amount of land needed to accommodate new commercial and industrial employment growth through 2029. Approximately 49.4 acres will be needed to accommodate projected commercial employment growth through this period. Approximately 128.9 acres will be needed to accommodate projected industrial employment growth through this period.

Economics -Table 12
Land Need by Land Use Type
Independence, 2029

Land Use Type	Total Employment Growth	Job Density	Land Demand (acres)
Commercial	1,160	23.5	49.4
Industrial	1,947	15.1	128.9
Total	**3,106**		**178.3**

Source: MWVCOG, 2008.

Table 13 shows a comparison of land needed to accommodate new employment growth (demand) and the available supply of vacant and redevelopable land. The comparison shows that there is a need for approximately 72.7 acres to meet the forecasted commercial and industrial land demand. Site constraints, such as steep slopes, wetland, or floodways, have been identified in the inventory and have been subtracted from the gross amount of buildable acreage.

Land Use - Table 13
Comparison of Supply and Demand for Commercial and Industrial Land
Independence, 2008

Land Use Type	Vacant/Redevelopable Acres
Supply	
Commercial	14.3
Industrial [1]	105.8
Total Supply	120.1
Demand	
Commercial	49.4
Industrial	128.9
Total Demand	178.3
Surplus (Deficit)	
Commercial	(35.1)
Industrial	(23.1)
Total	(58.2)
Additional land needed for public uses - streets, parks, etc. (25% of 20-year land needs)	14.5
Total Commercial and Industrial Land Needs	72.7

Source: MWVCOG, 2008.

The city's existing commercial development policies state the city will retain the downtown as the dominant retail activity center, while the Central Shopping Plaza and north Independence commercial areas serve in supporting roles. To avoid the threat of new commercial areas competing with the downtown area and drawing businesses away from the downtown, and to ensure an efficient use of land inside the UGB, no new commercial areas were designated as part of 2008 Comprehensive Plan update.

The city identified the following measures to ensure an adequate supply of commercial land is available through the year 2029:

- **Infill and Redevelopment -** Independence plans to accommodate all of the city's forecasted commercial retail and a majority of the city's forecasted commercial service needs through infill and redevelopment of existing commercial areas. In addition to existing Comprehensive Plan policies that support this type of development, Independence adopted a new Comprehensive Plan policy to encourage the redevelopment of existing shopping and service facilities.

- **Commercial Redesignations -** Independence rezoned approximately 7.9 acres in the downtown area to Commercial Retail (CR) to provide additional opportunities for commercial development and strengthen the downtown as the primary commercial area within the city.

- **Commercial Services in Industrial Zones** - A limited portion of the city's forecasted commercial service land needs (one-third) will be accommodated on industrial land that allows commercial services that are compatible and complimentary to industrial uses. One-third of the city's forecasted commercial service land needs is approximately 11.7 acres. Examples of these uses include construction installation and repair services; transportation and heavy equipment repair and sales, vocational schools teaching construction and equipment repair services, recreation facilities, commercial uses that are ancillary to uses permitted in industrial zones (e.g. building supply showroom).

Based upon these measures, the city's employment land needs do not include designating new commercial centers either in or outside of the UGB. Upon adding one-third of the projected commercial service land needs (11.7 acres) that will be accommodated on industrial lands to the projected industrial land needs (23.1 acres), there is a need for approximately 34.8 acres of industrial land. **Table 14** shows that upon considering land needed for streets and utilities, there is a need for a total of 43.5 acres of industrial land through the year 2029.

Table 14
Summary of Industrial Land Needs
Independence, 2029

Total amount of additional land needed within the UGB for future industrial use.	34.8 acres
Additional land needed for public uses - streets, utilities, etc. (25% of 20-year land needs)	8.7 acres
Total amount of additional land needed within the UGB for employment development	43.5 acres

Source: MWVCOG, 2008.

The City identified 43.5 acres for inclusion in the Urban Growth Boundary that would meet all of the projected need for industrial land. The property is located northwest of the existing UGB, adjacent to the Independence Airport and identified as Tax Assessor Map Number 8420, tax lots 300 and 400. The area to be included in the UGB would be designated as Industrial on the Comprehensive Plan Map and zoned Industrial Park (IP) upon annexation. The IP zone district allows industrial uses, in addition to some limited commercial services, and provides the greatest flexibility in meeting projected employment land needs through 2029.

To support city policies to maintain the downtown as the focus of commercial activity, the city's remaining commercial land needs will be met through rezoning approximately 7.9 acres of land located adjacent to the downtown area to Commercial Retail (CR) in addition to, infill and redevelopment in existing commercial areas.

Public Land Needs

Public facilities and services needed for future residential and employment land needs were considered consistent with OAR 660-024-0040(9) which allows a local government to estimate the 20 year land needs for public uses (e.g. streets, parks, and schools) will require an additional amount of land equal to 25 percent of the net buildable acres determined for residential and employment land needs.

In addition to public land needs for future residential and employment areas, there is also a need for 41.1 acres of public land located west of the Independence State Airport to allow for airport expansion activities as indicated in the 1997 Independence State Airport Layout Plan.

The Independence State Airport, located on the northern edge of the city, is owned by the State of Oregon. The Independence State Airport is the only publicly-owned airport in Polk County. The airport serves an important role in economic development by providing an additional method of transport and opportunity for airport related businesses or industries requiring access to an airport facility.

In 1997, the Oregon Department of Aviation completed an Airport Layout Plan for the Independence State Airport. The Report provides for anticipated aviation facility needs over a twenty-year period. The improvements identified in the Report will allow the airport to continue to provide "safe, efficient, economical, and environmentally acceptable air transportation."

As indicated in the 1997 Airport Plan, all of the development on the airport is located on the east side of the runway-taxiway system, which abuts developed land to the east (residential airpark land). The airport is bounded by Hoffman Road to the south, leaving the only area for future airport expansion activities to the west. The 1997 Airport Layout Plan also notes that the airport is currently at capacity for land side facilities, with all available airport owned property utilized, including all available hangar space.

To protect the long-term viability of the airport, the Airport Plan Report identifies the need to acquire a 41.1-acre aviation development reserve on the west side of the airport. The Airport Plan Report states the west side development reserve is the best option available to preserve continued aviation use of the site. The reserve provides for future general aviation parking and hangar development.

To meet future public land needs associated with the Independence State Airport, the City identified 41.1 acres for inclusion in the Urban Growth Boundary, consistent with the location identified on the 1997 Independence State Airport Layout Plan. The property is located directly adjacent to the western boundary of the Independence State Airport and identified as Tax Assessor Map Number 8420, Tax Lot 300 and Map Number 8417, Tax Lot 700. The area to be included in the UGB would be designated Public on the Comprehensive Plan Map and zoned Airport Development District upon annexation.

LAND USE

GOAL: To encourage efficient land use, maintain land use designations appropriate to the character of Independence and meet future land use needs.

Policies

1. Independence shall update and revise land use designations when necessary to accommodate demonstrated need for changing circumstances.

2. Independence shall establish and utilize low, medium and high-density residential land use designations.

3. Independence shall establish and utilize a commercial land use designation.

4. Independence shall establish and utilize an industrial land use designation.

5. Independence shall insure that new industrial uses will be compatible with surrounding uses.

6. Independence shall, by use of land use designations and proper zoning techniques establish the downtown central business district as the primary commercial area within the City and encourage its continuation as such.

7. Independence shall zone annexed land consistent with the Comprehensive Plan designation, as well as any relevant Concept Plans adopted for the subject area.

8. The City may require preparation of Master Plans during the annexation process to ensure development of land is consistent with Comprehensive Plan and/or Concept Plan policies and requirements.

9. The Southwest Independence Concept Plan has been adopted as an ancillary document of this Comprehensive Plan. Background information and policies within the Southwest Independence Concept Plan will supersede information in this Comprehensive Plan in the event of any conflicts between the two documents.

URBANIZATION

GOAL: To provide for an orderly and efficient transition from rural to urban land.

Policies

1. Independence shall not extend urban services beyond city boundaries.

2. Independence shall provide public notice of any proposed annexation or land use action and shall provide to the public an assessment of potential impacts to public facilities and services.

3. Independence shall review the urban growth boundary at least every 5 years to determine its adequacy given changing circumstances and population.

4. Independence shall coordinate with Polk County and the City of Monmouth on growth management issues.

5. Independence shall coordinate with Polk County when considering any annexation and shall utilize the policies contained within the intergovernmental agreement between city and county regarding the management of the urbanizable area prior to any annexation or other development action.

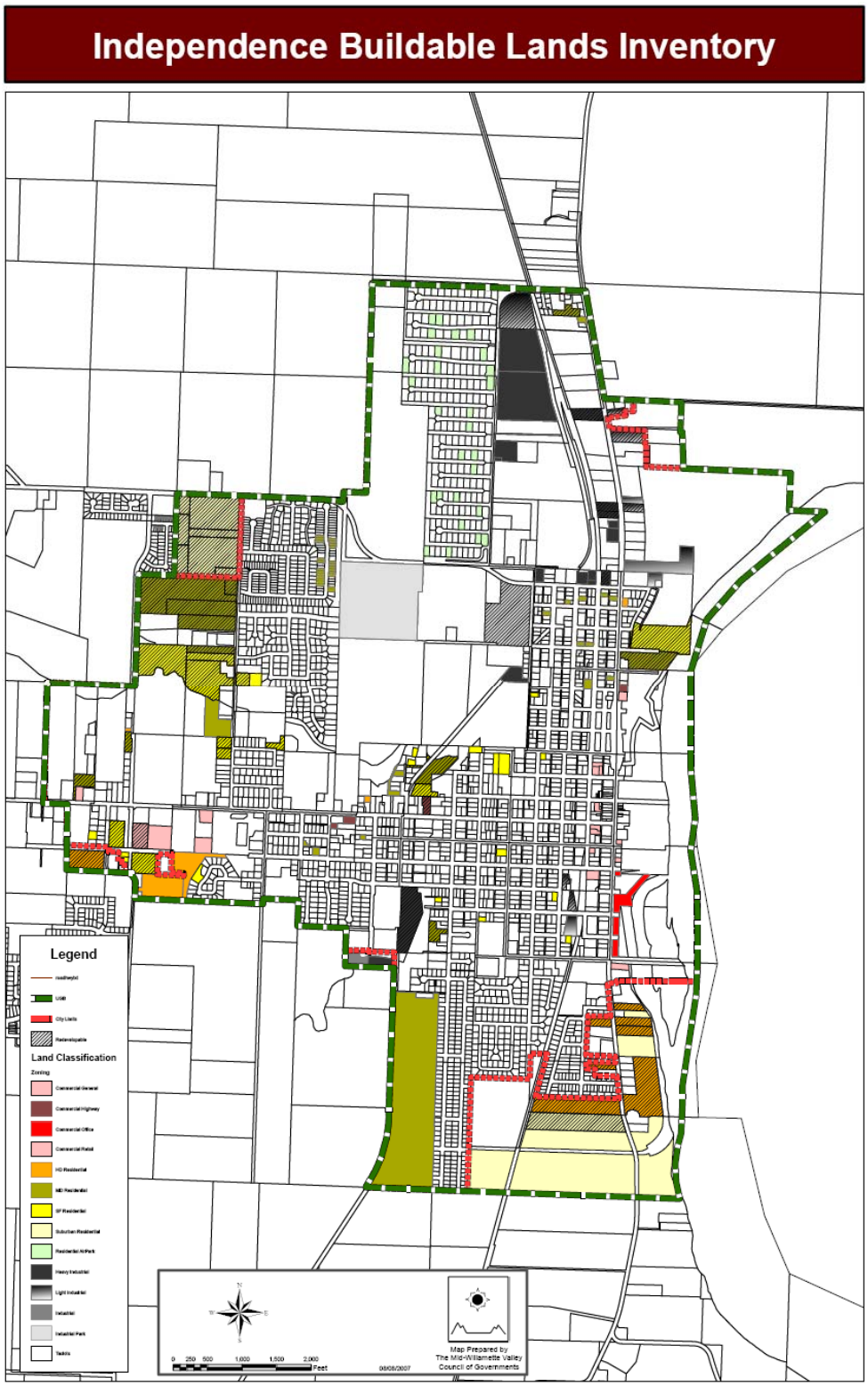
6. Independence shall encourage new single-family residential development to achieve an average density of 5.5 dwelling units per net acre and new multi-family developments to achieve an average density of 12.0 dwelling units per net acre.

7. Independence shall zone annexed land consistent with the Comprehensive Plan designations, as well as any relevant Concept Plans adopted for the subject area.

8. The City may require preparation of Master Plans during the annexation process to ensure development of land is consistent with Comprehensive Plan and/or Concept Plan policies and requirements.

9. The Southwest Independence Concept Plan has been adopted as an ancillary document of this Comprehensive Plan. Background information and policies within the Southwest Independence Concept Plan will supersede information in this Comprehensive Plan in the event of any conflicts between the two documents.

Figure 1: Independence Buildable Lands Inventory Map 2007



HOUSING

Table 1 shows various elements of the local housing market in 2008. The table uses the 2007 population projection for Independence developed by the Center for Population Research at Portland State University.

Table 1
Housing Status
Independence, 2008

Population	Persons in Group Quarters	Persons per Household	Total Dwelling Units[2]	Occupied Dwelling Units[3]	Vacant Units[4]	Owner-Occupied Units	Rental Units	Owner-Occupied Units (percent)	Rental Units (percent)
7,905	125[1]	2.9	2,901	2,725	176	1,868	1,033	64.4	35.6

Source: 2000 U.S. Census, Center for Population Research at Portland State University, 2008

[1] Persons living in group quarters includes persons who are institutionalized or living in non-institutionalized group homes, rooming houses, assisted living facilities, etc. This definition also includes students living in college dormitories.

[2] 'Total dwelling units' does not include group quarters dwelling units.

[3] 'Occupied dwelling units' does not include group quarters dwelling units.

[4] Based upon an assumed vacancy rate of 6.1 percent, which is derived from the average vacancy rate since 1980.

The housing needs model shows that 1,160 rental units are currently needed. The rental unit market is compromised of both multi-family residences (apartments, duplexes, etc.) as well as, single-family dwelling units. Census and building permit data shows that 568 multi-family units are currently located in Independence. The 2000 Census showed that approximately 45 percent of all local rental units were single-family residences. Using this percentage, as many as 465 single-family units are currently used as rental units. Combined with the 568 existing multi-family units, the estimated supply of rental units in Independence consists of 1,033 units where 1,160 are needed.

As shown in **Table 2**, the estimated supply of rental housing units in Independence does not meet the current need for rental units. An additional 127 dwelling units are needed to meet the city's current rental housing needs.

Table 2
Rental Housing Supply and Need
Independence, 2008

Rental Units Needed	Existing Multi-Family Units	Single-Family Units Used as Rentals	Total Number of Existing Rental Units	Difference Between Existing Rental Units and Rental Units Needed
1,160	568	465	1,033	(127)

Source: Oregon Housing and Community Services Housing Needs Model and MWVCOG, 2008

The 2029 population projection for Independence is 14,358 persons. This projection has been coordinated with Polk County through a process required under state law (ORS 195.036). As shown in **Table 3**, 5,208 dwelling units will be needed to accommodate this population. To ensure an adequate supply of housing for all demographic and income levels would be available through the year 2029, the percentage of owner-occupied units versus rental units was adjusted based upon historic and forecasted demographic trends. The percentage of owner-occupied dwelling units was decreased from 64.4 percent to 60 percent and the percentage of rental units was increased from 35.6 percent to 40 percent.

Table 3
Projected Housing Status
Independence, 2029

Population (projected)[1]	Persons in Group Quarters	Persons per Household	Total Dwelling Units	Occupied Dwelling Units	Vacant Units[2]	Owner-Occupied Units	Rental Units	Owner-Occupied Units (percent)	Rental Units (percent)
14,358	227	2.9	5,208	4,890	318	3,125	2,083	60	40

Source: 2000 U.S. Census and MWVCOG, 2008
[1] The population projection has been coordinated with the projections for Polk County as required by Oregon Revised Statutes 195.036.
[2] Based on an assumed vacancy rate from the 2000 U.S. Census of 6.1 percent.

Table 4 shows the total number of additional dwelling units that will be needed for the period from 2008 to 2029. With 2,901 residential units in 2008, an additional 2,307 new housing units will be needed to accommodate the 2029 population.

Table 4
Additional Dwelling Units Needed in Independence by 2029

Total Dwelling Units 2008	Total Dwelling Units 2029	Additional Dwelling Units Needed
2,901	5,190	2,307

Source: U.S. Census, City of Independence and MWVCOG, 2008

Table 5 shows the residential units needed by 2029. Of the 2,307 new residential units, approximately 923 new rental units will be needed. The analysis of new rental units assumes that approximately 65 percent of the rental market is comprised of multi-family residences, with the remainder comprised of single-family units. Based on this assumption, then, approximately 600 new multi-family residences and 323 additional single-family dwellings will be needed to meet the projected need for rental units in 2029. In addition, as shown in **Table 2**, the number of rental units currently available is about 127 units (83 multi-family and 44 single-family dwelling units) short of meeting the existing need. Consequently, in order to meet existing and projected need for such housing, a total of 683 new multi-family units will be needed over the next 20 years in addition to 1,624 new single-family dwelling units. This results in a projected housing mix of 70 percent single family units and 30 percent multi-family units.

Table 5
Additional Dwelling Units Needed in Independence by 2029

Dwelling Units Needed by 2029	Single-Family Units	Multi-Family Units	Total
Dwelling Units Needed to Meet 2008 Rental Demand	44	83	127
Rental Units Needed 2029	323	600	923
Owner-Occupied Units Needed 2029	1,257	0	1,257
Total	1,624 (70%)	683 (30%)	2,307 (100%)

Source: MWVCOG, 2008

HOUSING

GOAL: To insure everyone the opportunity to live in safe and healthy housing and to provide a choice of housing types and densities.

Policies

1. Independence shall encourage the provision of adequate numbers of housing at various price ranges and types.

2. Independence shall provide for the growing population of manufactured homes by designating appropriate areas for the location of manufactured home parks.

3. Independence shall encourage the up grading of housing stock by private individuals.

4. Independence shall maintain a share of the regional low-income housing quota.

5. Independence shall require that high trip-generating multi-family units shall have nearby access to arterial or collector streets.

6. Independence shall encourage use of energy saving technology and methods in future development.

7. Independence shall ensure that residential development in the vicinity of Ash Creek, including the South Fork of Ash Creek, and the Willamette River does not adversely impact riparian areas and water quality.

8. Within the City's MX zone and the Southwest Independence Concept Planning Area, the City will allow for and encourage development of a variety of housing types. The City also may require a combination of minimum, maximum and average densities within these areas to achieve this policy.

9. Independence shall promote residential developments that provide a mixture of housing types available to citizens of diverse ages and incomes that encourage the use of all modes of transportation.

10. Independence shall encourage new residential development to achieve a housing mix of 70 percent single-family dwelling units and 30 percent multi-family dwelling units.

ECONOMICS

INTRODUCTION

Statewide Planning Goal 9 (Economic Development) requires cities to provide an adequate supply of suitable sites for a variety of industrial and other employment uses. The following Economic Opportunity Analysis (EOA) fulfills the Goal 9 requirements to ensure an adequate supply of commercial and industrial land is available for new and expanding businesses in Independence over the 20-year planning horizon. The EOA is a planning tool to help the community understand its economy and plan for economic development initiatives. An EOA also provides guidance for infrastructure planning and investments.

The EOA includes an overview of national, state, regional and local economic trends that will influence future economic development in the community. The EOA also includes an assessment of the community's economic strengths and weaknesses. These data are used to develop a local employment forecast for 2029, which are in turn used to determine the amount and type of commercial and industrial land needed over the planning horizon. This information is compared with the current supply of vacant and underutilized commercial and industrial lands to determine whether or not there are any deficiencies in the short and long-term land supplies. The chapter concludes with a series of Comprehensive Plan policy statements intended to foster economic development in Independence.

ECONOMIC TRENDS

Greater economic forces found at the national, state and regional levels influence economic activity within the Independence area. How well the overall economy is performing at the national level will in turn have an impact on which businesses experience prosperity and decline in Independence and the Willamette Valley region. Recent economic trends and the economic outlook for these areas are the primary basis for our expectations of future economic development in Independence.

Population

Oregon's economic conditions are strongly related to population growth. As shown in **Table 1**, growth was slow for the State, Polk County and Independence due to the recession in the early 1980s. Population increased during the economic expansionary period of the 1990s. Population growth has continued for the State and County through 2007, although at a slower rate than the expansionary period of the 1990s. Unlike the State and County, Independence's population has increased significantly since 1990.

Economics - Table 1
Population - Oregon, Polk County, and Independence 1980-2007

Location	1980	1990	2000	2007	Average Annual Growth Rate		
					1980-90	1990-00	2000-07
Oregon	2,633,156	2,842,321	3,421,399	3,745,455	0.8%	1.9%	1.3%
Polk County	45,203	49,541	62,380	67,505	0.9%	2.3%	1.1%
Independence	4,024	4,425	6,035	7,905	1.0%	3.2%	3.9%

Source: U.S. Census and the Center for Population Research and Census, Portland State University, 2008.

Long-term population forecasts for the City of Independence will likely reflect a continuation of its past growth in early years, with a transition to slower growth in later years as the population growth rate

begins to stabilize. The most recent coordinated population forecast for Independence indicates the city's population will reach 14,513 by 2029[1].

Overview of the Independence Economy

Independence provides a number of economic functions to the central and southern portions of Polk County. The community originally developed as a shipping center for agricultural products along the Willamette River. This function continued with the establishment of the railroad. Independence serves as a commercial-service center of outlying rural and agricultural areas and, most recently, has developed as a "bedroom" community for commuters working in larger cities, such as Corvallis and Salem. Affordable housing costs and relatively short commute times to these larger employment centers will continue to foster population growth in Independence.

Table 3 shows covered employment data for the Independence area based on employer records with a 97351 zip code.[2] The data shows manufacturing accounts for the highest percent of employment in Independence (25.4%) followed by, services (22.5%), and agriculture and forestry (17.6%). Examples of the various types of manufacturing industries located in Independence include: cabinet and wood product assembly; rubber and miscellaneous plastic products; fabricated metals; and stone, clay, glass & concrete products.

Economics - Table 3
Independence Covered Employment
2005

Industry	Number of Jobs	Percent of Total
Agriculture, Forestry, Fishing & Hunting	398	17.6%
Construction	23	1.0%
Manufacturing	573	25.4%
Transportation, Warehousing, Wholesale Trade	106	4.7%
Retail Trade	291	12.9%
Finance, Insurance, Real Estate, Professional and Technical Services	95	4.2%
Health Care and Social Assistance	186	8.2%
Accommodation and Food Services	123	5.4%
Educational Services	230	10.2%
Public	129	5.7%
Miscellaneous Service Industries	106	4.7%
Total	2,260	100.0%

Source: State of Oregon Employment Department sorted and summarized by MWVCOG, 2007.

Covered employment includes only those workers covered under unemployment insurance. The data tends to underestimate total employment by excluding certain employees, such as business owners and

[1] 2030 population projection coordinated with Polk County pursuant to Oregon Revised Statutes 195.025. The projection uses an average annual growth rate of 2.8%
[2] Some businesses with main offices located outside of the 97351 zip code may not be included in the employment statistics.

some agricultural workers. Overall, covered employment accounts for only about 81 percent of all employment in Oregon. In Table 4, 2005 covered employment is converted to total employment using statewide conversion ratios. The percentage in each employment sector that is reported as part of covered employment is shown in the column titled "Covered Employment Percentage". Estimated total employment in Independence in 2005 was 2,799.

Economics - Table 4
Covered and Total Employment
Independence, 2005

Industry	Covered Employment Percentage	2005 Covered Employment	2005 Total Employment
Agriculture, Forestry, Fishing & Hunting	62%	398	642
Construction	73%	23	32
Manufacturing	94%	573	610
Transportation, Warehousing, Wholesale Trade	87%	106	122
Retail Trade	84%	291	346
Real Estate and Services	74%	510	689
Public (Local, State and Federal Employment)	100%	359	359
Total		2,260	2,799

Source: State of Oregon Employment Department sorted and summarized by MWVCOG, 2007.

Economic Outlook

Long-range economic forecasts generally predict growth at the national level, despite short-term national trends, which may run counter to the long-term trend. Several national economic trends will continue to impact Oregon and the Willamette Valley. These include continued population increase due to migration of the U.S. population to the western United States and the decline of employment in resource-intensive industries and the increase in employment in service–oriented sectors of the economy.

The State of Oregon is predicted to perform at least as well in the long-term forecast as the nation, due to its economic advantages that include, location, labor force, and diversity. According to the Oregon Employment Department, the three (3) industrial sectors that are expected to account for most of the state's job growth include: professional and business services; education and health services; and trade, transportation and utilities. The State forecasts additional job losses in the resource-based manufacturing sectors, although at a decreasing rate from the previous forecast period. The Willamette Valley, combined with the Portland Metro Area, is expected to add the majority of jobs over the forecast period.

Regional Employment

Table 5 shows projected employment within Marion, Polk, and Yamhill counties for the period from 2004 through 2014. Industry employment in the region is expected to grow from 169,400 in 2004 to 194,900 in 2014. This represents a growth rate of 15.1 percent. Oregon's statewide industry employment is also projected to increase by 15 percent over that time. The Oregon Employment Department indicates that the services and construction industries will experience the most significant job growth within the

region through 2014. The region's agricultural and food processors will continue to struggle as they face national and international competition. Government employment is forecast to grow more slowly than the average of all industries over the period through 2014.[3]

Economics - Table 5
Employment Projections by Selected Industry
Marion, Polk, and Yamhill Counties, 2004 and 2014

Industry	2004	2014	Percent Change 2004-2014
Total Non-Farm Payroll Employment	169,400	194,900	15.1%
Manufacturing, Total	20,100	20,000	-0.5%
Durable Goods	10,900	10,800	-0.9%
Non-durable Goods	9,200	9,200	0.0%
Non-Manufacturing, Total	149,300	174,900	17.1%
Construction	8,800	10,700	21.6%
Finance, Insurance, Real Estate	8,300	9,200	10.8%
Wholesale and Retail Trade	28,000	32,300	15.4%
Services	58,100	72,000	23.9%
Government	42,500	46,800	10.1%

Source: State of Oregon, Employment Department. *Regional Profile Industry Employment in Region 3, 2004.*

Summary of Economic Trends

In summary, Independence has experienced rapid population growth over the last 15 years. The city is likely to experience strong population growth over the next 10-20 years due to the city's proximity to Salem and Corvallis. Population growth will continue to provide a demand for commercial services and convenience shopping. While still strongly tied to agricultural and forest uses, Independence's economy has diversified in more recent years. A diverse economy will help contribute to a more stable economy and provide a strong base for businesses that locate or expand in Independence over the next 20 years.

ECONOMIC OPPORTUNITIES AND CONSTRAINTS

This section examines factors that influence economic growth opportunities in Independence and the surrounding economic region. By identifying the relevant economic advantages and disadvantages of Independence and the surrounding region, the city can begin to understand what types of industries have the greatest potential for growth and expansion.

Location

Independence is located in the Mid-Willamette Valley approximately 12 miles southwest of Salem along the Willamette River. The terrain in the urban area is generally flat. Outlying areas to the north and south of the city are devoted to agricultural uses. Independence has developed as a both an industrial employment community and as a bedroom community for larger communities such as Corvallis and

[3] Oregon Employment Department, *Regional Profile Industry Employment in Region 3*, 2002.

Salem. Independence's close proximity to Salem serves as an economic advantage because it allows businesses greater access to a variety of support products and services.

Transportation

State Highway 51 is located at the eastern edge of Independence and provides access to State Highway 22 that connects to I-5. I-5 serves as the primary transportation artery in the Willamette Valley and is located approximately 15 miles east of Independence. Interviews with several local firms indicate that Highway 51 provides adequate transportation access for shipment of materials and finished products. However, Independence's lack of direct access to I-5 may hinder its ability to attract larger warehouse and distribution companies or other firms requiring direct access to this type of facility. To a lesser extent, firms in Independence also have access to State Highway 99W which serves Corvallis to the south and McMinnville to the north.

Railroads can be an important form of transportation for businesses that need to transport bulky inputs and finished products. Rail transportation service is currently provided in the City of Independence by the Willamette & Pacific (W&P) Railroad, which generally runs north-south through the community in the middle of the 2nd Street alignment[4]. In 1995, Portland & Western (P&W) Railroad, a sister company, was formed to lease additional UP branches in the valley. The two railroads, which do business under the P&W banner, have since grown to operate 576 miles of railroad in northwestern Oregon, representing 20 percent of the state's rail system. W&P has consistently operated one southbound and one northbound train daily, seven days each week along the line through Independence. The line provides freight service for a large variety of commodities including forest products, iron and steel products, feed grains, fertilizers, and some manufactured consumables, including food products.

In addition to highway and rail facilities, Independence contains a state airport facility. The Independence State Airport is located on the northern edge of the City and accommodates light single- and multi-engine aircraft weighing less than or equal to 12,500 pounds. Owned by the State of Oregon, the Independence State Airport is the only publicly-owned airport in Polk County. The airport provides an additional method of transport and opportunity for airport related businesses or businesses requiring access to an airport facility.

Utilities

The City owns and operates its own wastewater collection treatment and disposal system. The City of Independence has a total of eight sewage pump stations with four serving as intermediate lift stations that eventually feed one of three stations discharging directly to the City's lagoon treatment system. In general, the stations are adequate for existing flows and, with some sewer rerouting, can convey anticipated future flows. Sewer system capacity can accommodate development of vacant industrial properties.

The City also owns and operates its own water distribution system. In general, the city's water system is adequately to serve industrial lands currently located within the UGB. Industrial uses with large water demands may be constrained by the city's existing water supply. Planned water system improvements identified in the city's Water Master Plan include a pipeline replacement program that would help lower lost water and reinforce existing undersized piping and increase the distribution system capability to the northern area where much of the city's industrial lands are located. With the completion of scheduled water improvements, the city's water system capacity can accommodate development of vacant industrial properties.

[4] City of Independence Transportation System Plan. June 2007.

The city has an overall adequate storm drainage system to serve all developed areas. New developments are required to provide storm drainage system compatible with the city system.

MINET (Monmouth-Independence Network) operates a local network that offers high speed Internet, telephone and cable services via fiber optic lines to commercial businesses in the general Monmouth-Independence area. MINET offers these services at competitive rates and a high quality. To date, the entire City of Monmouth and 70 percent of all neighborhoods in Independence are wired. MINET is required to provide their services to anyone who requests them inside the city limits.

Quality of Life

Quality of life is a subjective standard that is hard to quantify. It includes economic factors, such as income, employment, and housing costs, as well as non-economic factors, such as natural and physical amenities, quality of local education, and cultural and recreational opportunities. Quality of life plays a role in economic development because it affects the relative attractiveness of the city to migrants. Net migration is expected to continue to make up a significant percent of Oregon's population growth over the next 20 years. A more attractive quality of life may help Independence attract a greater share of in-migrants. These migrants not only bring job skills to various employment sectors, such as construction, services, and retail trade, but some may also start new businesses in the community.

Independence possesses a number of characteristics that contribute to quality of life. The community offers urban amenities, such as shopping, health care, parks, and schools within a small-town environment. Independence has an active downtown that includes shopping opportunities, a historic district, and access to the Willamette River. The City is committed to revitalizing the historic downtown as witnessed by the $870,000 worth of improvements initiated in 2001 to rebuild main street with expanded sidewalks, street trees, new street furniture, lighting and updated public utilities. Other recent improvements to the downtown area include the Riverview Park Amphitheater, a new public library, Ash Creek Trail, and a new eight (8)-auditorium cinema. Further, residents have access to other nearby cultural and recreation amenities that can easily be reached from the Willamette Valley.

Education and Technical Training Programs

Chemeketa Community College is located approximately 15 miles east of Independence. The Chemeketa Career Center provides educational and vocational rehabilitation assistance. Chemeketa coordinates its program for various companies in the Mid-Willamette Valley Region who need specific educational training for their employees. The Chemeketa Training & Economic Development (TED) Center offers specialized training programs to assist local business.

The Chemeketa Micro Enterprise Development Center (MERIT) is a program, which helps underserved people increase income and build assets through self-employment. The MERIT program helps entrepreneurs in Marion, Polk, and Yamhill Counties develop their business ideas, learn the basics of running a business, and write a business plan. MERIT supports the "underserved"-low-income, minorities, immigrants, women, the disabled, welfare recipients, the unemployed, and anyone else who has difficulty getting small business training or credit through traditional means.

The Chemeketa Small Business Development Center (SBDC) provides business training including feasibility studies, assistance with launching, locating capital sources, development of marketing plans and strategies, and specific workshops. The SBDC can provide advice on specific issues for clients (ex. email campaign- discuss business opportunities and methods to accomplish specific business goals).

Western Oregon University (WOU) in Monmouth can assist industrial firms, if WOU has contacts for experts in the specific area. The Conference and Nonacademic Program Department's activities include customizing training in the business field. Previously, WOU customized training for managers at Teledyne-Wah Chang's Albany office.

The Business Department is the second-largest department at Western Oregon University (the Education Department is the largest department on campus). Business majors pursue internships and specialized projects as they approach graduation. Local businesses can provide internships to these students as a way of providing valuable on-the-job training and experience.

Labor Force

The cost, availability, and skill-level of the local labor force can affect the comparative advantage of a community. One indication of work availability is an area's unemployment rate. The Mid-Willamette Region (Region 3) tends to have slightly lower unemployment rates when compared with Oregon. Although the region's unemployment level may be lower than the state's, the region's jobless rate has generally risen and fallen with the state and national jobless rate, following broader economic and labor market trends. The Oregon Employment Department forecasts Region 3 will continue to have unemployment rates consistently below Oregon's, sometimes by as much as one (1) full percentage point. As a whole, Region 3 will continue to benefit from a more stable labor force than Oregon's rural counties that depend on seasonal employment in agriculture and tourism[5].

Polk County residents generally enjoy a lower jobless rate for a number of reasons, including higher education levels among its residents and their ability to commute to such communities as Salem, where employment in state government is largely stable. The unemployment rate for Polk County in December 2006 was 5.1 percent. In general, a lower unemployment rate does not provide a comparative advantage in a tight labor market.

Land Cost

The Salem Economic Development Corporation maintains a database of available commercial and industrial properties in the Mid-Willamette Valley. The most recent database listing shows 34 properties with advertised sales prices, most of which are in Salem. These properties range in size from 0.54 acre to 150 acres. Sale prices for the properties range from $2,167/acre to $831,202/acre. The average sales price is $202,634/acre and the median price is $184,211/acre.

The Oregon Prospector.com is the state's official public-private website for site consultants and businesses interested in relocating or expanding a business in Oregon. This site provides an on-line database of available commercial and industrial properties in Oregon. The most recent database listing shows four (4) vacant industrial properties in Polk County with advertised sales prices, two (2) of which are in Dallas. The properties are approximately 41.8 acres and 60.5 acres. Sale prices for the properties are $40,640 and $45,000 per acre.

One (1) property located near Independence State Airport is listed on the website. The property is a 190-acre site that is not currently located within the Independence urban growth boundary. The property is currently zoned Exclusive Farm Use (EFU) by Polk County. No sale price was listed.

While none of available industrial properties listed are in the Independence urban area, Polk County Assessor records show that the real market value of a number of vacant industrial properties in the

[5] Oregon Employment Department, *Regional Population Profile - Region 3*, 2005.

community that are larger than 1.0 acre ranges from approximately $42,000 to approximately $62,000 per acre. The real market values used by the Polk County Assessor's office are comparable to the price of available land in Dallas and significantly lower than the cost of available parcels in Salem. While this obviously does not represent a comprehensive market survey, it does indicate that land costs, particularly in relation to the Salem market, are lower in the Independence area. Lower land cost is often a consideration for firms to locate in smaller communities.

Economic Development Initiatives

The City of Independence is fortunate to have several important economic development initiatives in place to support commercial and industrial development within the community. Examples of these initiatives include, the Dallas Monmouth-Independence Enterprise Zone; the Independence Urban Renewal District; and the recent initiative to establish the Greater Independence Business Incubator.

Dallas-Monmouth-Independence Enterprise Zone: The Dallas-Monmouth-Independence Enterprise Zone includes industrial areas along Highway 51 and near the Independence State Airport and a large portion of the Independence Central Business District (CBD). The CBD area was added to the Enterprise Zone to encourage development of an overnight lodging facility in the downtown area consistent with the Independence Downtown Development Plan. The Enterprise Zone is scheduled to sunset in 2009.

Both new and existing businesses located within the Enterprise Zone are eligible for benefits as long as these firms produce 75 percent of gross income from non-retail sales. Enterprise Zone benefits include:

- 100 percent waiver for property taxes for three (3) years.
- 100 percent waiver of land use permit fees.
- 50 percent discount for building permit fees.
- 25 percent discount for System Development Charges.

Independence Urban Renewal District: In 2001, the City of Independence adopted the Independence Urban Renewal District. The Urban Renewal District comprises approximately 249 acres or about 15.2 percent of the land area in Independence. The Independence Urban Renewal District contains a mixture of commercial uses, light and heavy industrial uses, and some residential uses. Approximately 70 percent of the land within the District is zoned for industrial use. The goals of the URD include improving and retaining businesses and diversifying the economic base.

The Urban Renewal Plan identifies projects within the District to implement the Plan such as, infrastructure improvements, acquisition and redevelopment of property. The Urban Renewal District project funding is derived from tax increment financing, which means that the property taxes resulting from the growth in property value within the District can be used to finance development and improvement projects within the District. The city has completed many of the projects identified in the Urban Renewal Plan and has plans to update the Plan in the near future.

Greater Independence Business Incubator: The Independence Incubator Program is a locally managed business assistance program and facility designed to stimulate economic growth by taking advantage of new business-related assets available in the community. Operating both within a managed facility and externally throughout the community, the Incubator Program nurtures entrepreneurship and new start up

businesses through business assistance programming ranging from below-market administrative assistance and support to business-related educational services.

The Incubator is managed and administered by a 501(c)3 non-profit corporation. As the City began to develop financial and community support for the program, a Board of Directors was formed to help provide direction to the development process. The Board is currently working to identify a site to construct a facility for the Business Incubator that will be economically sustainable. The Board is also working to develop operational procedures and will be looking for potential clients in the near future.

Ready-to-Develop Industrial Sites

The Mid-Willamette Valley region and most of Oregon suffers from a scarcity of attractive, ready-to-develop industrial sites, particularly in rural areas. A rural industrial lands inventory is was completed in 2006 covering all of Marion, Polk and Yamhill counties outside of the Salem-Keizer urban area. Utilizing GIS information from county assessors, interviews with local planners, and other sources, the inventory provides a comprehensive list of sites from which additional analysis can be done to further prioritize and identify the most promising locations. In later stages of work, staff and consulting engineers will develop cost estimates for needed improvements on the highest priority sites and applications will be prepared to state and federal development agencies to finance improvements.

The study identified two (2) industrial sites located in Independence. The first site, located at Assessor's Map and Tax Lot Numbers 8420/200, is 30 acres in size. A wetlands determination has been completed for the site; however, a Phase II Environmental Assessment is needed. This property is currently not undergoing the state certification process for industrial ready sites.

The second site, located at Assessor's Map and Tax Lot Numbers 8421/508 and 509, is a total of 21.3 acres. The owner petitioned for a residential zone change but was denied. The City has attempted to contact the owner regarding potential interested buyers and state industrial site certification, but the owner has not expressed any interest at this time.

Regional Economic Opportunities

In March 2007, E.D. Hovee & Company, LLC produced the Marion, Polk, and Yamhill Counties Regional Economic Profile and Assessment. The document is intended as a "first step in a regional strategic planning process for the Marion-Polk-Yamhill County region".[6] The report includes a strategic assessment of the region that includes strengths, weaknesses, opportunities, and challenges as shown in **Table 6**.

[6] Marion, Polk, and Yamhill Counties Regional Economic Profile and Strategic Assessment, March 2007, page 1.

Economics - Table 6
Marion, Polk, and Yamhill Counties Strategic Assessment

Strengths	Weaknesses
• Natural Resources with metro proximity	• Low-skilled, low-wage labor force
• Population center with industrial land	• Air, rail, and Highway 99W transportation issues
• Small business innovation	• Education link to economic development?
• State capital with traded sector businesses	• Slow state job growth & no urban sizzle
• Distinctive, livable communities	• Long intra-regional work commutes
Opportunities	**Challenges**
• 21st century focus on the Pacific Rim	• Job outsourcing
• Pacific Northwest economic and cultural icons (Microsoft, Starbucks, etc.)	• Icon maturation – what's next?
• Livability plus active lifestyle	• Declining regional affordability
• Ethic of green by design and "just do it"	• Geographic isolation from U. S. markets
• U.S. manufacturing resurgence	• Industrial sustainability

Source: Marion, Polk, and Yamhill Counties Regional Economic Profile and Assessment, 2007, page iii.

The Regional Economic Profile and Assessment includes a competitive advantage analysis using IMPLAN. IMPLAN is an input-output model intended, which is an input-output model that can assess the total economic impacts of specific local economic sectors and interrelationships between various local economy sectors and the state.[7]

The IMPLAN model was used to analyze 506 industry sectors of the three-county regional economy. The analysis was intended to identify sectors that are better suited to the region. The analysis found five business clusters that rate highly for comparative advantage within the three county region. These five clusters account for about 56 percent of the region's 2003 employment based on the IMPLAN county data.[8] These clusters include:

- Agriculture, Food and Beverage Products – including a number of agri-business activities ranging from farming to manufacturing of both commodity and specialized food and beverage products.

- Metals, Machinery and Equipment (including Electrical) – including specialties with a high concentration currently within the region, such as iron and steel mills, secondary nonferrous metals processing, ball and roller bearing manufacturing, enameled iron and metal sanitary ware, textile packaging machinery, computer terminals, electric lamp bulbs and parts, and dental equipment.

- Forest Products (including Logging) – including sectors with a high concentrations currently within the region, such as prefabricated building manufacturing.

- Specialty Materials Manufacturing – ranging from fabrics to aggregate materials to petro-chemical products.

[7] Marion, Polk, and Yamhill Counties Regional Economic Profile and Assessment, 2007, page 39.
[8] Marion, Polk, and Yamhill Counties Regional Economic Profile and Assessment, 2007, page 42.

- Traded sector services- including sectors with a high concentrations currently within the region, such as office administrative services, higher education, and state and local non-education.[9]

Business or industry clusters, refer to groups of similar or interrelated firms that share common markets and technologies and which draw on similar work skills. Under the clustering concept, businesses thrive in particular locations because their network of local connections to a specially skilled local workforce and the availability of local suppliers in proximity to one another generate business advantages that cannot easily be imitated or competed away by low cost competitors. [10]

Opportunities and Constraints Summary

Independence has a number of comparative advantages that will help foster economic development over the planning horizon. Independence's close proximity to both agricultural and forest markets and the Salem urban area, make it an attractive location for future industrial development. Independence has access to a state highway facility, an active rail line and a state airport facility. The City also has two (2) large vacant industrial parcels currently inside the city limits where public utilities are readily available. Additionally, the city has a supportive business environment and high quality of life that contribute to making it an attractive location for both commercial and industrial development.

Target Industries

Local and regional economic development specialists indicate the next step for Independence is to begin to develop business clusters as an economic development initiative to attract similar and interrelated industries to Independence. By examining the existing businesses located in Independence and Independence's comparative advantages, the city can determine the types of businesses that would be most likely to locate in Independence. An example of a business cluster would be industries that produce support materials such as cabinet hinges, lumber, etc. needed to manufacture cabinets. By locating in close proximity to one another, the two companies are able to capitalize on lower transportation and shipping costs.

Based upon a review economic trends, interviews with local businesses and economic development specialists, the following industries will likely expand or locate within the City of Independence over the planning horizon:

- Specialty Materials Manufacturing: Independence is well suited for small to medium size manufacturing industries due to its proximity to rural and urban markets and access to Highway 51. Examples of industries include wood products, rubber and plastics, fabricated metals and transportation equipment.

- Large manufacturing facility: In addition to providing for a variety of small and medium sized industrial parcels, the City of Independence would benefit by having one or more large industrial parcels available for development. Suitable sites would have access to rail and air service and close proximity to a highway.

[9] Marion, Polk, and Yamhill Counties Regional Economic Profile and Assessment, 2007, pages 40-42.
[10] From the website: http://www.oregonclusters.org/faq.html

EMPLOYMENT GROWTH AND LAND DEMAND

Two employment growth forecast methods were used to estimate employment growth in Independence over the 20-year planning period.

The first method used the "Safe Harbor" rule to determine employment needs as identified in Oregon Administrative Rules (OAR) 660-024-0040(8). The Safe Harbor method assumes the number of jobs created in the city will grow at a rate equal to the regional job growth rate provided in the most recent forecast published by the Oregon Employment Department. The most recent forecast provided by the Oregon Employment Department estimates the region's employment will grow by 15 percent from 2004 to 2014. This same growth rate was extrapolated through the 20-year planning horizon to the year 2029.

Table 7 shows the projected total employment growth through the year 2029 using the "Safe Harbor" method. This projection shows that 956 new jobs will be added over the planning horizon, for a total employment of 3,652 by the year 2029. This analysis assumes each sector will continue to make up the same percent of total employment as exists today. Services, manufacturing and agricultural, forestry, fishing and hunting will continue to make up 68 percent of the total employment in the year 2029.

Economics - Table 7
Employment Growth
Independence, 2005 and 2029

Sector	2005		2029	
	Percent	Total	Percent	Total
Agriculture, Forestry, Fishing & Hunting	20.8%	549	20.8%	760
Construction	1.1%	29	1.1%	40
Manufacturing	22.9%	607	22.9%	836
Transportation, Warehousing, Wholesale Trade	4.5%	120	4.5%	164
Retail Trade	12.8%	338	12.8%	467
Real Estate and Services	24.3%	643	24.3%	887
Public (Local, State and Federal Employment)	13.6%	359	13.6%	497
Total	**100%**	**2,645**	**100%**	**3,652**

Source: MWVCOG, 2007.

The second method forecasts the number of new jobs created based upon the population using the employment to population ratio method. The ratio of employment to population is relatively stable over time because the ratio depends on factors such as, the share of the working-age population, labor force participation, and the level of unemployment that tend to balance out over time in larger areas. The employment-to population ratio in larger areas such as, the county and the state, is typically around 50% (one job for every two people).

Table 8 shows the amount of employment in Independence expressed as a ratio of population based upon the most recent employment data available. The employment-to-population ratio is currently about 37.2 percent in Independence.

Table 8
Population/Employment Ratios
Independence, 2005

2005 Population[1]	2005 Employment[2]	2005 Employment Percentage of Population
7,515	2,799	37.2%

Source: MWVCOG, 2007.
[1]PSU population estimate, 2005.
[2] State of Oregon Employment Department, 2007.

Table 9 shows an employment forecast based upon the employment percentage of population method. An employment percentage of population of 40 percent was used to reflect the City's goal to create new employment opportunities in Independence and reduce the need for residents to commute outside of the community for employment opportunities. Using this forecast method, 3,297 new jobs will be added over the planning horizon, for a total employment of 6,096 by the year 2029.

Table 9
Employment Growth
Independence, 2029

2029 Population	Employment Percentage of Population	2029 Employment
14,513	42%	6,096

Source: MWVCOG, 2008.

Table 10 shows the employment growth forecast by employment sector using the employment percentage of population 2029 employment forecast. The forecast assumes that industrial employment sectors (construction, manufacturing and transportation, warehousing, whole trade) will make up a larger percentage of the total employment in the future based upon recent trends showing several large manufactures and industries locating in the City of Independence.

Table 10
Employment Growth
Independence, 2029

Sector	2005		2029	
	Percent	Total	Percent	Total
Agriculture, Forestry, Fishing & Hunting	20.8%	642	20.0%	1,341
Construction	1.1%	32	3.0%	183
Manufacturing	22.9%	610	26.0%	1,524
Transportation, Warehousing, Wholesale Trade	4.5%	122	5.0%	305
Retail Trade	12.8%	346	12.0%	732
Real Estate and Services	24.3%	689	24.0%	1,463
Public (Local, State and Federal Employment)	13.6%	359	10.0%	549
Total		**2,799**		**6,096**

Source: State of Oregon Employment Department, 2007; employment forecast and data summary by MWVCOG, 2008.

Based upon the City's economic goals and comparative advantages the employment percentage of population forecast method was selected as the preferred method for forecasting future commercial and industrial land needs as described below.

Land Demand

A primary function of an Economic Opportunities Analysis is to identify the commercial and industrial land needs. In order to accomplish that, the employment growth forecasted above must be aggregated into general land use categories. Next, the number of new jobs created for commercial and industrial use are converted into the number of acres needed for commercial and industrial uses over the 20 year planning horizon.

The employment sectors forecasted above were allocated to two (2) land use categories as follows:

- Commercial: Retail Trade; Real Estate and Services.
- Industrial: Agriculture, Forestry, Fishing & Hunting; Construction; Manufacturing; and Transportation, Warehousing and Wholesale Trade.

Table 11 shows the 2029 employment growth by land use type. The 2029 employment growth was calculated by subtracting the 2029 total employment from the 2005 total employment figures. **Table 8** indicates there will be 1,160 new commercial jobs created and 1,947 new industrial jobs created, for a combined total of 3,106 new commercial and industrial jobs created by 2029.

Economics - Table 11
Total Employment Growth by Land Use Type
Independence, 2029

Land Use Type	2029
Commercial	1,160
Industrial	1,947
Total	3,106

Source: MWVCOG, 2008.

To convert the employment growth shown in Table 10 above to the number of acres needed by land use type, an assumption must be made regarding the density of jobs per acre. **Table 12** shows in 2005, the City of Independence had 1,406 industrial jobs located on approximately 93 acres of developed industrial land for an average job density of 15.1 jobs per net acre. The table also shows in 2005 the City of Independence had 1,035 commercial jobs located on approximately 44 acres of developed commercial land for an average job density of 23.5 jobs per net acre. This analysis assumes the job density will remain largely the same over time because the types of businesses the City of Independence is likely to attract will be similar to the businesses located in Independence today.

Economics - Table 12
Commercial and Industrial Job Density
Independence, 2005

Land Use Type	2005 Jobs	2005 Developed Acres	Job Density
Commercial	1,035	44	23.5
Industrial	1,406	93	15.1

Source: MWVCOG, 2007.

Table 13 shows the amount of land needed to accommodate new commercial and industrial employment growth through 2029 based upon the employment forecast. Approximately 49.4 acres will be needed to accommodate projected commercial employment growth through this period. Approximately 128.9 acres will be needed to accommodate projected industrial employment growth through this period.

Economics - Table 13
Land Need by Land Use Type
Independence, 2029

Land Use Type	Total Employment Growth	Job Density	Land Demand (acres)
Commercial	1,160	23.5	49.4
Industrial	1,947	15.1	128.9
Total	**3,106**		**178.3**

Source: MWVCOG, 2008.

Site Requirements

An additional consideration is the type of sites needed for future commercial and industrial developments. Site requirements include the physical characteristics required for a particular type of industrial or commercial use to operate, such as, parcel size, site configuration, and access to a specific type of transportation facility. Employment growth is forecasted for all of the major commercial and industrial sectors in Independence over the planning horizon; therefore, it is important that a variety of sites be available to meet the forecasted commercial and industrial land needs.

The majority of employment growth in Independence will likely be small to medium sized businesses. Newly established businesses often seek opportunities to lease space in an existing building due to the expense associated with constructing a new building. Small businesses and start up companies typically need 5,000 to 15,000 square feet of space that allows for a variety of uses including small scale manufacturing, showrooms, warehouse, and office space. Most light industrial flexible buildings are designed to accommodate anywhere between two (2) to ten (10) different businesses for an average total building size of 50,000 to 150,000 square feet. These buildings are usually located in a business park settings on parcels three (3) to five (5) acres. There is also a need for medium sized parcels, five (5) to ten (10) acres in size to provide smaller businesses an opportunity to expand and for medium sized businesses that have larger space requirements.

In addition to small and medium sized parcels, Independence has a need for larger industrial parcels 20 acres and greater in size. The region has an overall shortage of large industrial parcels that are readily available for development[11]. Independence's ability to provide a certified industrial ready site would help increase its chances for attracting this type of employer to locate in Independence. Site requirements for a large manufacturer include a site 20 acres or greater in size. Direct access to a highway or designated truck route is preferable to minimize disruption to residential areas. Direct access to the Independence State Airport is also desirable to provide opportunities for airport related businesses and services.

Industrial parcels should also be relatively free from physical constraints such as steep slopes, wetlands and floodplain constraints. Industrial parcels should be flat (less than two (2) percent slope) and require two (2) feet or less of floodplain fill in order to be economically feasible for development. Additionally, wetland delineation studies should be completed in advance to determine if any mitigation measures are needed.

Employment growth in commercial services will most likely take place in small businesses. Small businesses often lack capital to construct new buildings and therefore, require existing buildings with leasable space. Due to the high turnover in small business start-ups, it is also desirable that building sites provide enough flexibility to accommodate various users. Typically building sizes for commercial service are 5,000 to 10,000 square feet. Commercial uses require access to streets with high traffic volumes and visibility to attract customers. These types of uses often locate in close proximity to one another to allow customers the ability to access other commercial services. Good pedestrian access and attractive streetscapes are important to encourage customers to access nearby services by walking.

[11] Marion, Polk, and Yamhill Counties Regional Economic Profile and Assessment, 2007.

COMMERCIAL AND INDUSTRIAL BUILDABLE LANDS INVENTORY

In 2007, the Mid-Willamette Valley Council of Governments completed a buildable lands inventory for the City of Independence to determine the amount of vacant and redevelopable commercial and industrial land inside the Independence UGB. The following parameters were used to determine whether land is vacant or redevelopable.

- Vacant land includes all parcels with improvement values of less than $5,000

- Redevelopable land includes parcels in industrial and commercial zones where some limited improvements have been made, but where potential for redevelopment for more intense uses is probable. For the purpose of this analysis, redevelopable land is defined as parcels with improvement values of at least $5,000, where the ratio of land value to improvement value is 1:1 or greater.

Table 14 shows the inventory of buildable industrial land. Excluding estimated areas that are constrained, 105.8 acres are available for industrial development in Independence.

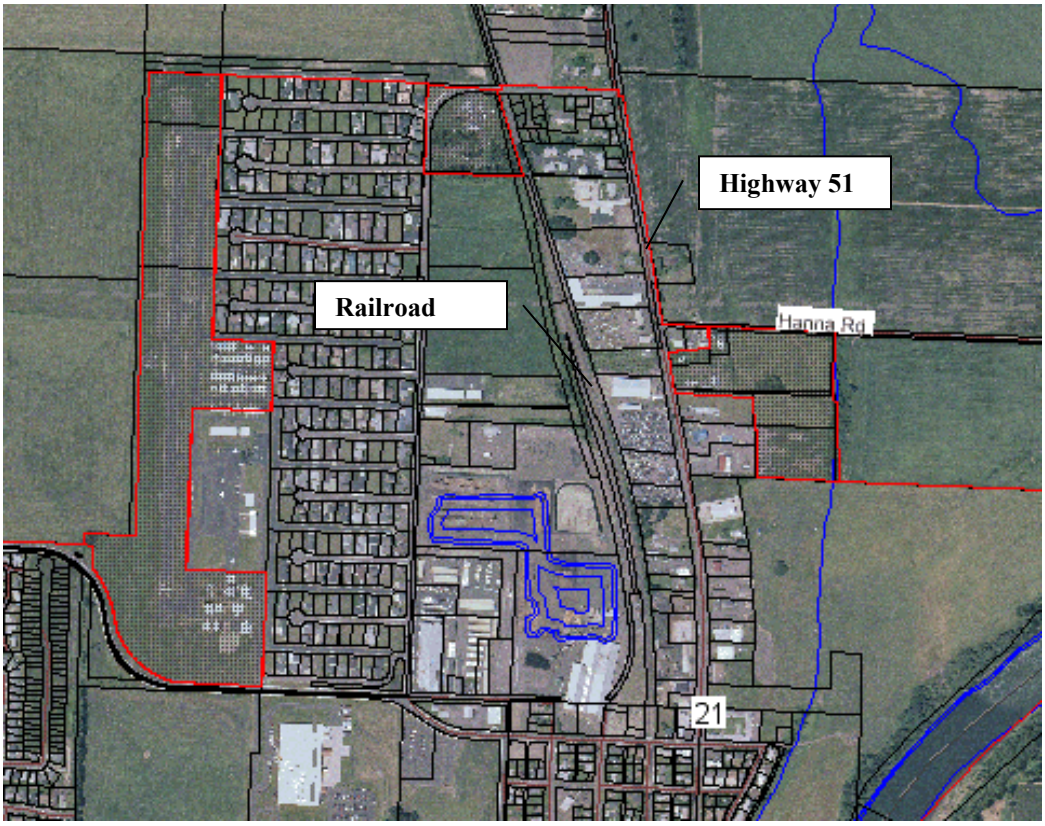
Economics - Table 14
Industrial Buildable Lands Inventory
Independence, 2007

Zone	Vacant Acres	Redevelopable Acres	Total Acres
Light Industrial (IL)	47.1	8.1	55.2
Heavy Industrial (IH)	29.4	7.3	36.7
Between City Limits and UGB			
Light Industrial – Polk County (LI)	13.9	0.0	13.9
Total	90.4	15.4	105.8

Source: Polk County Assessor data, MWVCOG, 2007.

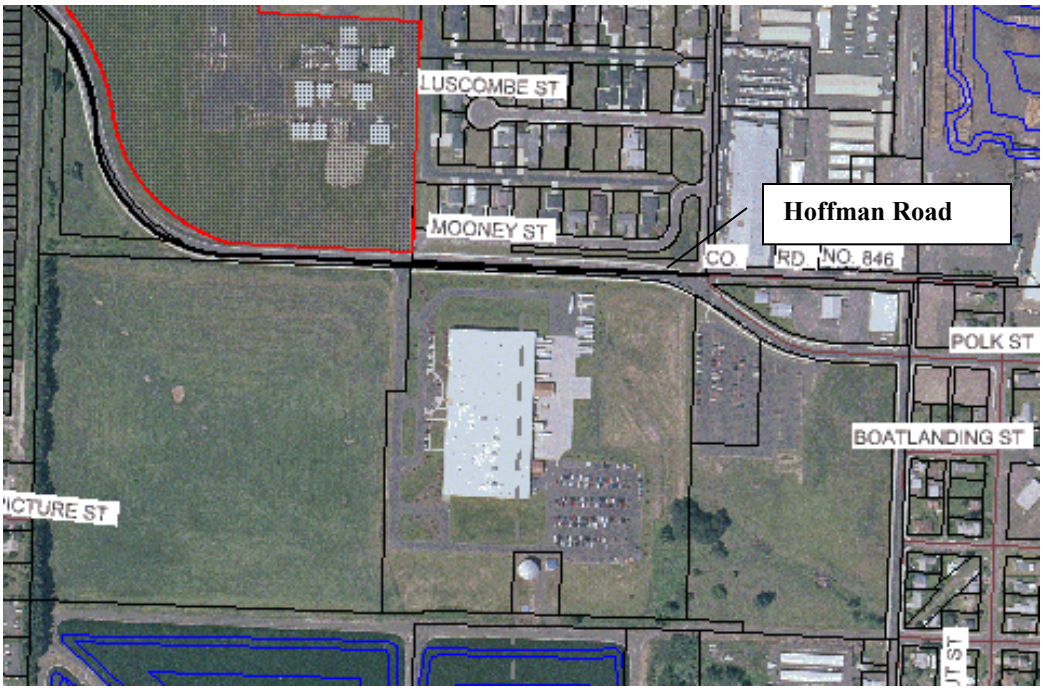
Independence's vacant industrial lands are primarily located on the north side of town adjacent to Highway 51 and south of Hoffman Road as depicted in **Figure 1** and **2** below. Many of the industrial parcels located on the east side of Highway 51 are constrained by the Willamette River Floodplain and associated wetlands. The amount of land constrained by floodplain and wetlands is only an estimate. The exact amount needs to be determined through further wetland determination and delineation studies. Due to these constraints, these sites are not likely to develop in the short term.

Figure 1 - Independence Industrial Area Adjacent to Highway 51



Source: Polk County GIS, 2007.

Figure 2 - Independence Industrial Area South of Hoffman Road



Source: Polk County GIS, 2007.

The buildable lands inventory is further broken down by parcel size as shown in Table 15. The City of Independence currently has a number of vacant and redevelopable industrial sized parcels less than 3.0 acres in size. The city only has one (1) vacant industrial parcel and one (1) redevelopable parcel in the three (3.0) to five (5.0) acres size category. To remain competitive, the vacant land supply should include sufficient parcels in order to ensure prospective buyers a variety of site options over the twenty-year planning period.

Economics - Table 15
Industrial Vacant and Redevelopable Land Inventory by Parcel Size
Independence, 2007

Parcel Size	Number of Vacant Parcels	Number of Redevelopable Parcels
0.0 – 3.0 acres	7	9
3.1 – 5.0 acres	1	1
5.1 – 10.0 acres	2	1
Larger than 10.0 acres	2	0
Total	**12**	**11**

Source: Polk County Assessor data, MWVCOG, 2007.

Table 16 shows the inventory of buildable commercial land. Excluding estimated areas that are constrained, approximately 14.3 acres are available for commercial development in Independence.

Economics - Table 16
Commercial Buildable Lands Inventory
Independence, 2007

Zone	Vacant Acres	Redevelopable Acres	Total Acres
Within City Limits			
Commercial Office (CO)	2.8	0.0	2.8
Commercial Retail (CR)	8.1	1.8	9.9
Commercial Highway (CH)	0.9	0.7	1.6
Total	11.8	2.5	14.3

Source: Polk County Assessor data, MWVCOG, 2007.

The City of Independence has three (3) main commercial areas located along Highway 51 and along the Monmouth-Independence Highway. The heart of the city's commercial areas is the city's historic downtown, which is generally located west of the Willamette River, south of A Street, north of E Street, and east of Third Street. Zoning in the city's downtown consists primarily of Commercial Retail (CR). This zone allows a wide range of commercial facilities and services. The purpose of the CR zone is also to maintain the character and appearance of the downtown core, while allowing for a mixture of commercial and residential uses. Parcel sizes in the downtown core typically range from 6,000 square feet to one (1) acre in size. The majority of the commercial core is developed, however there are several parcels with redevelopment potential.

A second commercial area is located along the Monmouth-Independence Highway. The area consists of approximately 17 acres and generally spans one (1) city block on either side of the highway. The area is generally bounded by Eighth Street on the east and Eleventh Street on the west. The area is zoned Commercial Highway (CH) and allows commercial uses that require exposure and access to major traffic arterials and provide facilities and services to motorists. Typically parcel sizes range from 0.5 to 2.0 acres in size. There are approximately three (3) small vacant parcels in this area ranging in size from 0.18 to 0.44 acres in size. The area also includes one potential redevelopment site approximately 0.65 acres in size.

A third commercial area is located further west along the Monmouth-Independence Highway near the border of Monmouth. The area is generally located west of Thirteenth Street, north of Third Street, and within one (1) to two (2) blocks of either side of the highway. Zoning in this area consists primarily of Commercial Retail (CR), although there are a few parcels located within the area zoned and used for office, public and residential uses. Existing commercial uses in this area consist of various commercial goods and services, including a grocery store, a hardware store and several eating and drinking establishments. Parcel sizes in this commercial area range from 0.33 to 4.4 acres in size. The area currently has several vacant and redevelopable parcels 0.76 to 2.55 acres in size.

LAND NEEDS

Table 17 shows the amount of industrial and commercial land available as compared to the amount of land needed over the planning horizon. **Table 17** indicates there is a need for approximately 23.1 acres of industrial land and 35.1 acres for commercial land for a total employment land need of 58.2 acres. These estimates do not take into account additional land needed for infrastructure (streets, utilities, etc.).

Economics - Table 17
Commercial and Industrial Land Needs
Independence, 2029

Land Use Type	Vacant/ Redevelopable Acres
SUPPLY	
Commercial	14.3
Industrial	105.8
TOTAL SUPPLY	**120.1**
Demand	
Commercial	49.4
Industrial	128.9
TOTAL DEMAND	**178.3**
Surplus (Deficit)	
Commercial	(35.1)
Industrial	(23.1)
TOTAL	**(58.2)**

Source: MWVCOG, 2008.

The city's existing commercial development policies state the city will retain the downtown as the dominant retail activity center, while the Central Shopping Plaza and north Independence commercial area serve in supporting roles. To avoid the threat of new commercial areas competing with the downtown area and drawing businesses away from this area, no new commercial areas were designated as part of the Comprehensive Plan update.

The city identified the following measures to ensure an adequate supply of commercial land is available through the year 2029:

- **Infill and Redevelopment -** Independence plans to accommodate all of the city's forecasted commercial retail and a majority of the City's forecasted commercial service needs through infill and redevelopment of existing commercial areas. In addition to existing Comprehensive Plan policies that support this type of development, Independence adopted a new Comprehensive Plan policy to encourage the redevelopment of existing shopping and service facilities.

- **Commercial Redesignations -** Independence rezoned approximately 7.9 acres in the downtown area to Commercial Retail (CR) to provide additional opportunities for commercial development and strengthen the downtown as the primary commercial area within the city.

- **Commercial Services in Industrial Zones** - A limited portion of the city's forecasted commercial service land needs (one-third) will be accommodated on industrial land that allows commercial services that are compatible and complimentary to industrial uses. One-third of the city's forecasted commercial service land needs is approximately 11.7 acres. Examples of these uses include construction installation and repair services; transportation and heavy equipment repair and sales, vocational schools teaching construction and equipment repair services, recreation facilities, commercial uses that are ancillary to uses permitted in industrial zones (e.g. building supply showroom).

Based upon these measures, the city's employment land needs do not include designating new commercial centers either in or outside of the UGB. Upon adding one-third of the projected commercial service land needs (11.7 acres) that will be accommodated on industrial lands to the projected industrial land needs (23.1 acres), there is a need for approximately 34.8 acres for future industrial use. **Table 18** shows that upon considering land needed for streets and utilities, there is a need for a total of 43.5 acres of employment land through the year 2029.

Economics - Table 18
Summary of Industrial Land Needs
Independence, 2029

Total amount of additional land needed within the UGB for future industrial use.	34.8 acres
Additional land needed for public uses - streets, utilities, etc. (25% of 20-year land needs)	8.7 acres
Total amount of additional land needed within the UGB for employment development	43.5 acres

Source: MWVCOG, 2008.

Short-Term (5 Year) Land Needs

Short-term land needs are characterized by those lands that will be needed for employment growth within the next five (5) years. Ideally, land available for short-term employment growth is not constrained by the lack of infrastructure or those lands considered unavailable due to land speculation. The five-year demand is approximated as one quarter of the projected 20-year demand.

One-quarter of the projected 2029 industrial land demand is about 32 acres. The buildable lands inventory shows the city has sufficient industrial land to meet the short-term industrial land need. The short-term commercial land need is about 12 acres. Based upon a review of the buildable lands inventory, there is sufficient land located within the City's UGB to meet the short-term commercial land need. One of Independence's economic advantages is that the commercial and industrial land supply is not constrained by the lack of available infrastructure.

Long-Term Land Needs

Long-term industrial and commercial land needs consist of lands needed ten (10) to twenty (20) years from today. As shown in Table 17, the city does not have enough land available to meet the projected need for commercial and industrial land through the year 2029. Upon applying measures to ensure an adequate supply of commercial land there remains a need for an additional 43.5 acres to meet employment land needs as shown in Table 18 above.

Oregon Administrative Rules 660-009-0025 requires that, as part of an Economic Opportunities Analysis, the city must designate enough land to meet the total projected land needs for each industrial or other employment use category identified in the plan during the 20-year planning period.

The city identified an area for inclusion in the Urban Growth Boundary that would meet the projected need for employment land. The area consists of one (1) vacant parcel approximately 43.5 acres in size. The property is located northwest of the existing UGB, adjacent to the Independence Airport and identified as Tax Assessor Map 8420, Tax Lot 300. The property meets the size requirements for industrial uses, and can be partitioned or subdivided to make smaller parcels as needed. The property has access to Hoffman Road, which is classified as an arterial street in the Independence Transportation System Plan (TSP). In addition, the proximity of the property to the airport provides additional opportunities for complimentary and supportive airport uses (e.g. shipping, warehouse, machine/equipment repair, etc.).

The area to be included in the UGB would be designated as Industrial on the Comprehensive Plan Map and zoned Industrial Park (IP) upon annexation. The IP zone district allows industrial uses, in addition to some limited commercial services, and provides the greatest flexibility in meeting projected employment land needs through 2029.

Given the city's existing policies to maintain the downtown central business district as the focus of commercial activity, designating new commercial centers outside the downtown area is not desirable as these areas may draw businesses away from the downtown area. Therefore, the city's remaining commercial land needs will be met through infill and redevelopment in existing commercial areas and rezoning properties located adjacent to the downtown area with redevelopment potential to Commercial Retail (CR).

Table 19 identifies properties in the downtown area to be redesignated Commercial on the Comprehensive Plan Map and rezoned Commercial Retail (CR). These properties consist of approximately 7.9 acres.

Economics - Table 19
Proposed Commercial Redesignations in the Independence Downtown Area

Map Number	Tax Lot	Current Comprehensive Plan Designation	Current Zoning	Proposed Comp. Plan Designation	Proposed Zoning	Acreage
8.4.28BA	7100	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.11
8.4.28BA	7101	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.11
8.4.28BA	7000	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.23
8.4.28BA	6900	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.27
8.4.28BA	6800	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.18
8.4.28BA	6500	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.22
8.4.28BA	6600	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.23
8.4.28BA	6700	Medium Density Residential	Multi-family Residential	Commercial	Commercial Retail	0.23
8.4.28BA	901	Industrial	Light Industrial	Commercial	Commercial Retail	1.3
8.4.28BA	4700	Industrial	Light Industrial	Commercial	Commercial Retail	0.13
8.4.28BA	4500	Industrial	Light Industrial	Commercial	Commercial Retail	0.37
8.4.28BA	4302	Industrial	Light Industrial	Commercial	Commercial Retail	0.02
8.4.28BA	4400	Industrial	Light Industrial	Commercial	Commercial Retail	0.13
8.4.28BA	8400	Industrial	Light Industrial	Commercial	Commercial Retail	0.73
8.4.28BA	8201	Industrial	Light Industrial	Commercial	Commercial Retail	0.54
8.4.28BA	8900	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.97
8.4.28BA	8800	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.28
8.4.28BA	3601	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.23
8.4.28BA	3600	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.23
8.4.28BA	3800	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.23
8.4.28BA	3900	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.23
8.4.28BA	8500	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.45
8.4.28BA	8600	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.23
8.4.28BA	8700	Low Density Residential	Single Family Residential	Commercial	Commercial Retail	0.23
					TOTAL	7.9

Key Findings and Future Planning Implications

Overall, the economy in Region 3, comprised of Marion, Polk, and Yamhill Counties, is expected to experience modest economic growth over the next 20 years. The City of Independence is in a strong position to capitalize on that growth due to the city's comparative advantages and economic opportunities. Independence is located in close proximity to both agricultural and forest markets and the Salem urban area. While the city lacks direct access to Interstate 5, access to outside markets is available through Highway 51 that connects with Highway 22, a major east-west state highway. Rail service is available through an active north-south rail line that provides freight service for a large variety of commodities including forest products, iron and steel products, feed grains, fertilizers and some manufactured consumables, including food products. The Independence Airport provides opportunities for small-scale airport related industries. Additionally, the city's short-term land supply is not constrained by the lack of available public utilities. These advantages combined with a supportive business climate and high quality of life makes Independence an attractive destination for future businesses and residents.

Based upon a review of the existing industries located in Independence and the city's comparative advantages, the city can expect to primarily attract small and medium sized specialty manufactures. Examples of industries that would benefit by Independence's proximity to rural and urban markets include industries that specialize in woods products, rubber and plastics, fabricated metals and transportation equipment.

The city's aspiration employment forecast shows total employment in Independence is projected to reach 6,096 jobs by 2029. This forecast implements the city's objective to reduce the need for residents to commute to areas outside of Independence for employment. The employment forecast shows the manufacturing and service sectors will experience the largest employment growth over the 20-year planning period, although the agricultural, forestry, fishing and hunting sector will continue to play an important role in the overall economy.

The city's buildable lands inventory shows there will be a deficit of vacant or redevelopable commercial and industrial land available to meet the projected need through the year 2029. The city needs to expand the UGB to include more land for industrial development to meet the 2029 projected demand. A 45-acre area located northwest of the existing UGB has been identified as the area to meet the city's projected industrial land needs and a limited portion of the city's commercial service land needs. Additional commercial land needs can be met through infill and redevelopment of existing commercial areas, and rezoning property in the downtown area to allow additional commercial development.

In addition to the planning actions described above, Independence should pursue the following the actions to support economic development:

- Encourage the creation of parcels three (3.0) to five (5.0) acres in size to help ensure choices in the market and provide sites that best meet the needs of small and medium size firms most likely to locate in Independence.

- Create a large industrial site (minimum 20 acres in size) within the 43.5-acre area identified as the area to meet the city's industrial land needs that is certified by the state as a ready to develop industrial site.

- Complete wetland determinations and floodplain development feasibility studies on vacant and redevelopable parcels located near the Willamette River. This is an important planning action needed to ensure the long-term land supply is not constrained by physical limitations.

- Create an economic development strategy that identifies specific steps that the city can take to attract new industries and commercial businesses to Independence. The strategy should identify the specific tasks needed to implement the EOA, in addition to, specific timelines for completing the tasks, available funding resources, parties responsible for completing each task, and prioritization of which tasks should be accomplished first.

- Implement a marketing strategy and develop effective communication tools and methods that the City can use to attract target industries.

ECONOMY

GOAL: To provide for and maintain a viable and diverse economy while preserving the present sense of community and high level of environmental quality.

Policies

1. The City of Independence will encourage economic development planning and programming activities, which serve to stimulate private sector development.

2. The City of Independence shall cooperate with relevant federal, state, regional, and local government agencies in economic development planning for the area.

3. The City of Independence will encourage the development of economic activities, which will provide jobs able to utilize the skills of the local labor force.

4. The City of Independence will encourage the development of local job training and other career assistance programs for residents seeking employment.

5. The City of Independence shall support diversity in type, scale, and location of professional, industrial, and commercial activities to maintain a low unemployment rate and to promote diversification of the local economy.

6. The City of Independence shall encourage local employers to provide their employees with opportunities for training and career development.

7. The City of Independence shall encourage all employers to help their employees meet childcare needs. Strategies include: subsidies to help pay the cost of care (especially for low-wage workers); flexible hours and benefits; enhanced child care resource and referral to help find and manage care; and, where appropriate, child care facilities on or near-site.

8. The City of Independence shall seek opportunities to minimize unemployment among all segments of the community.

9. The City of Independence shall monitor changes in demographic information to assure that the type, quantity, and location of services, facilities, and housing remain adequate to meet changing needs.

10. The City of Independence shall support existing businesses and industries and the establishment of locally owned, managed, or controlled small businesses that are compatible with and complimentary to the surrounding area.

11. The City of Independence shall encourage new commercial and industrial development to provide for pedestrian and bicycle traffic, and shall be attractively landscaped.

12. The City of Independence shall develop standards in the Zoning Ordinance to encourage or require with development or redevelopment, the consolidation of vehicle accesses on arterial streets, where appropriate and practical.

13. The City of Independence shall stay responsive to emerging technologies that support local businesses.

14. Independence recognizes that well-planned and well-designed parks and recreation facilities and programs have the potential to attract visitors to Independence and improve the community's economic vitality.

15. Independence recognizes that organized sports activities and competitions can provide economic benefits to local businesses and residents.

16. The City of Independence shall encourage the location of on-site parking behind or beside buildings rather than in the front.

17. Industrial and commercial development adjacent to rail lines shall be designed and constructed in a way that does not preclude the future use of the rail facility.

Commercial Land Use Policies

18. The City of Independence shall encourage a wide variety of commercial activities in convenient and desirable locations to serve city residents.

19. The City of Independence shall retain the downtown areas as the dominant retail commercial area of the City with the Talmadge Road area shopping center and the North Independence areas serving in supportive roles.

20. The City of Independence shall keep an overall downtown redevelopment plan and update the plan as needed, to emphasize the waterfront and existing historic structures.

21. The City of Independence shall discourage strip development along roads and highways and shall promote the clustering of commercial uses.

22. In order to provide for more compact commercial development and to encourage a mix of uses in commercial districts, the City of Independence shall develop standards that will require some types of large commercial development to have multiple stories. These additional levels may be dedicated to other commercial or residential uses permitted in the district.

23. The City of Independence shall encourage redevelopment of existing shopping and service facilities where appropriate.

24. The City of Independence shall encourage property owners to maintain a safe and attractive atmosphere in the downtown area.

Industrial Land Use Policies

25. The City of Independence shall require industrial development to adhere to applicable federal and state air, land and water quality standards.

26. The City of Independence shall encourage the industrial park concept in soliciting new industry for the area.

27. The City of Independence shall designate appropriate and sufficient land in a variety of different parcel sizes and locations to fulfill the community's industrial needs.

28. The City of Independence shall preserve lands designated for industrial use for industrial and other compatible uses and protect these lands from incompatible uses.

29. The City of Independence shall coordinate planning activities with Polk County in order that lands suitable for industrial use, but not needed within the planning period, are zoned in a manner which retains these lands for future industrial use.

30. The City of Independence shall promote business clustering as a means of encouraging future economic development within the city.

TRANSPORTATION

The City of Independence Transportation System Plan (2021) is adopted by reference as a portion of this Comprehensive Plan. Please view the document for background information, as well as the goals and policies for Transportation.

RECREATION

The City of Independence Parks and Open Space Master Plan (2015) is adopted by reference as a portion of this Comprehensive Plan. Please view the document for background information. Goals and policies for Recreation are presented below.

GOAL: To address the evolving recreational needs of the City's diverse population, ensure that parks and recreational facilities reflect current and future recreational trends, and promote community livability and life-long physical health for Independence residents and visitors.

Policies

1. Independence shall meet its current and future recreational needs through implementation of the 2015 Parks and Natural Areas Master Plan as a supporting document of the Comprehensive Plan.

2. Independence shall establish a set of funding mechanisms that will help pay for the development and maintenance of parks and recreation facilities in a cost-effective, financially feasible manner.

3. Independence shall realize the incredible potential of the Willamette Riverfront by enhancing existing facilities and creating new ones along the river.

4. Independence shall create recreational opportunities for visitors that can enhance the City's economic vitality.

5. Independence shall plan for development of new parks in future growth areas and new developments.

6. Independence shall partner with community groups to continue to help maintain and enhance parks and recreation facilities and programs.

7. Independence shall provide facilities for people to walk and bicycle for recreation, travel, health and fitness; and create connections to travel between different parks and recreation areas by walking bicycling and other forms of active travel.

8. Independence shall provide gathering spaces and related facilities for community and family gatherings in all neighborhood and community parks.

9. Independence shall prioritize provision and adequate maintenance of soccer fields, while also providing facilities for other sports, both formal and informal, including baseball/softball, volleyball, basketball, tennis and lawn games.

NATURAL RESOURCES, SCENIC AND HISTORIC AREAS, AND OPEN SPACES

INTRODUCTION

The purpose of Goal 5 is: "*To protect natural resources and conserve scenic and historic areas and open spaces*." The goal language states that local governments shall adopt programs that will protect natural resources and conserve scenic, historic, and open space resources for present and future generations. The goal requires that the following resources be inventoried:

- Riparian corridors, including water and riparian areas and fish habitat
- Wetlands
- Wildlife Habitat
- Federal Wild and Scenic Rivers
- State Scenic Waterways
- Groundwater Resources
- Approved Oregon Recreation Trails
- Natural Areas
- Wilderness Areas
- Mineral and Aggregate Resources
- Energy sources
- Cultural areas

Local governments are encouraged to maintain current inventories of the following resources:

- Historic Resources
- Open Space
- Scenic Views and Sites

Administrative rules to implement Goal 5 were first adopted by the Department of Land Conservation and Development (DLCD) in 1981and then revised in 1996 for all resources except cultural resources. Cultural resource requirements are still based on the original Goal 5 rules. The rules establish the following standard five-step planning process:

1. Inventory local occurrences of resources listed in Goal 5 and determine which sites are "significant", i.e. important.
2. Identify potential land uses on or near each resource site and any conflicts that might result.
3. Analyze the economic, social, environmental, and energy (ESEE) consequences of allowing, limiting or prohibiting such conflicting uses.
4. Adopt policies to allow, limit, or prohibit conflicting uses at each site.
5. Adopt measures such as zoning and ordinances to put the policies into effect.

The 1996 rule revision made several important changes including making new inventories voluntary for historic resources, open space and scenic resources and adding new "safe harbor" procedures for certain resources that are more prescriptive, requiring less work for local governments.

SAFE HARBOR AND STANDARD PLANNING PROCESS COMPARISON

Safe harbor is an important new element of the revised Goal 5 rules that provides greater certainty and short-cuts over the standard five-step planning process, while still providing flexibility. For riparian corridors, wetlands and wildlife habitat local governments have the option of following the standard five-step process or the safe harbor approach. A "safe harbor" consists of an optional course of action that satisfies certain requirements under the standard process. For example, a jurisdiction may adopt a wetland ordinance that meets the requirements of the Goal 5 safe harbor wetland protection program, in lieu of following the ESEE decision process. Depending on the resource, the safe harbor provisions may apply to the inventory, significance determination, analysis, and/or protection program. The standard process gives local governments more flexibility, but is more time consuming, costly to apply, and heightens the risk of litigation.

INDEPENDENCE GOAL 5 PROCESS

The following sections outline the process used to address Goal 5 requirements in Independence.

Resource Inventories and Significance Determinations

A Mid-Willamette Valley Council of Governments (MWVCOG) land use planner conducted inventories for the area within the Independence Urban Growth Boundary (UGB) (Figure 1). Information was collected from federal, state, and local agencies, Independence city staff, existing maps and reports, and local citizens.

Resource Policies

Resource policies were drafted by MWVCOG and reviewed by the City Planner, Planning Commission, and City Council.

Resource Protection Measures

Resource protection measures include ordinances and protection plans. The protection measures apply to significant resources within the city limits and will apply to resources outside the city limits upon annexation to the city.

Goal 5 Resources

Each Goal 5 resource is addressed separately in the following sections. Each section contains the resource definition(s) from DLCD rules (unless another source is listed), specific requirements in place of or in addition to the standard process, if any, for inventory procedures and significance determinations, the methods used to conduct the inventories and significance determinations, the results of the inventories, a determination of adequacy of inventory information and significance determinations. For resources determined to be significant a description of proposed resource protection measures is provided.

RIPARIAN CORRIDORS

Definitions

"Riparian corridor" includes the water areas, fish habitat, adjacent riparian areas, and wetlands within the riparian area boundary (OAR 660-23-090 (1)(d)).

"Water area" is the area between the banks of a lake, pond, river, perennial or fish-bearing intermittent stream, excluding man-made farm ponds (OAR 660-23-090 (1)(h)).

"Fish habitat" means those areas upon which fish depend in order to meet their requirements for spawning, rearing, food supply, and migration (OAR 660-23-090 (1)(a)).

"Riparian area" is the area adjacent to a river, lake, or stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem (OAR 660-23-090 (1)(b)).

"Wetland" is an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions (OAR 660-23-100 (1)).

Inventory Requirements and Methods

Local governments may follow the standard inventory process for riparian corridors or use the “safe harbor” methodology. To sufficiently assess the location, quality and quantity of riparian resources, the city will follow the standard inventory process to determine the location of riparian resources in the Independence UGB.

Inventory Results

No riparian corridor inventory using the standard inventory process has been conducted in Independence to date. The city will continue to explore potential funding sources to complete a riparian inventory.

Adequacy of Information

Not applicable.

Significant Resources

Not applicable.

Resource Protection

DLCD rules require local governments to protect significant riparian corridors either through the standard process or by adopting a safe harbor ordinance. The City of Independence will protect significant riparian corridors through a safe harbor ordinance, if applicable, upon completion of a riparian corridor inventory.

WETLANDS

Definitions

"Wetland" is an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions (OAR 660-23-100 (1)).

Inventory Requirements and Methods

Local governments are required to conduct a local wetland inventory using the procedures in DSL rules (*Local Wetlands Inventory (LWI) Standards and Guidelines*, OAR Chapter 141, Division 86) and assess wetland functions using the Oregon Freshwater Wetland Assessment Methodology (OFWAM).

No local wetland inventory has been conducted in Independence to date. The City of Independence will continue to explore potential funding sources to complete a local wetland inventory.

Inventory Results

No local wetland inventory has been conducted in Independence to date. The City of Independence will continue to explore potential funding sources to complete a local wetland inventory.

Adequacy of Information

Not applicable.

Significant Resources

Not applicable. The National Wetlands Inventory map (Figure 2) identifies several potential wetland sites within the Independence UGB.

Resource Protection

DLCD rules require local governments to protect significant wetlands either through the standard process or by adopting a safe harbor ordinance. The City of Independence will protect significant wetlands through a safe harbor ordinance, if applicable, upon completion of a local wetland inventory.

WILDLIFE HABITAT

Definitions

"Wildlife habitat" is an area upon which wildlife depend in order to meet their requirements for food, water, shelter, and reproduction. Examples include wildlife migration corridors, big game winter range, and nesting and roosting sites (OAR 660-23-110 (1)(b)).

Inventory Requirements and Methods

Local governments may determine wildlife habitat significance using the standard inventory process or apply safe harbor criteria. This inventory provides information to support using the safe harbor method

for identifying significant wildlife habitat in Independence. Additional inventory and assessment work would be required to use the standard process. Under the safe harbor criteria, local governments may determine that "wildlife" does not include fish, and that significant wildlife habitat is only those sites where one or more of the following conditions exist:

(a) The habitat has been documented to perform a life support function for a wildlife species listed by the federal government as a threatened or endangered species or by the state of Oregon as a threatened, endangered, or sensitive species;
(b) The habitat has documented occurrences of more than incidental use by a species described in subsection (a) of this section;
(c) The habitat has been documented as a sensitive bird nesting, roosting, or watering resource site for osprey or great blue herons pursuant to Oregon Revised Statutes 527.710 (Oregon Forest Practices Act) and OAR 629-024-0700 (Forest Practices Rules);
(d) The habitat has been documented to be essential to achieving policies or population objectives specified in a wildlife species management plan adopted by the Oregon Fish and Wildlife Commission pursuant to Oregon Revised Statutes Chapter 496; or
(e) The area is identified and mapped by ODFW as habitat for a wildlife species of concern and/or as a habitat of concern (e.g., big game winter range and migration corridors, golden eagle and prairie falcon nest sites, or pigeon springs).

ODFW and the Oregon Natural Heritage Program (ONHP) were contacted for information on wildlife habitat and species of concern.

Inventory Results

The Oregon Natural Heritage Program (ONHP) derives their data from a combination of Oregon Department of Fish and Wildlife data, reported sightings, and historical records. ONHP reported no records of rare, threatened or endangered plant or animal species in Independence. ONHP identified a *Contia tenuis*, common name: Sharptail Snake, last observed in 1953 and the plant *Sidalcea nelsoniana*, common name: Nelson's sidalcea, last observed in 1918 but later assumed extirpated. Neither of these fit within the significant wildlife habitat conditions identified above.

ODFW reported that no specific wildlife sensitive species surveys had been conducted by ODFW in the Independence UGB area with the exception of bald eagle and great blue heron/rookery surveys. Both of these species were detected within the UGB (Kreager, 2006). According to ODFW, due to the dynamic nature of these species, it is recommended that new surveys be conducted prior to any activity that may disturb, disrupt, or otherwise result in harm (Kreager, 2006).

ODFW reported six Threatened or Endangered plants occurring within Polk County that may occur within the UGB (Kreager, 2006). However, the plants do not qualify under the significant wildlife habitat conditions identified under the safe harbor criteria.

Anecdotal evidence from residents indicates that osprey and fur bearing animals have been sighted along the Willamette River and Ash Creek Corridors.

Adequacy of Information

The available information is adequate to complete the Goal 5 process for wildlife habitat using the safe harbor methodology.

Significant Resources

There is no significant wildlife habitat in Independence.

FEDERAL WILD AND SCENIC RIVERS

Definitions

Federal Wild and Scenic Rivers are river segments and associated corridors designated by the federal government under the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287).

Inventory Requirements and Methods

All Federal Wild and Scenic Rivers are considered significant. The National Park Service's on-line Wild and Scenic Rivers List was reviewed for current information.

Inventory Results

There are no Federal Wild and Scenic Rivers in Independence (NPS, 2006).

Adequacy of Information

The available information is adequate to complete the Goal 5 process for Federal Wild and Scenic Rivers.

Significant Resources

There are no Federal Wild and Scenic Rivers in Independence.

STATE SCENIC WATERWAYS

Definitions

State Scenic Waterways are river segments and associated corridors designated by the state under the Scenic Waterways statutes (Oregon Revised Statutes 390.826).

Inventory Requirements and Methods

All State Scenic Waterways are considered significant. The Oregon State Legislature's on-line Oregon Revised Statutes (2005 edition) was reviewed for current information. Although not included as a State designated Scenic Waterway, the City of Independence does recognize the significance and beauty of those properties adjacent to the City's waterways. The City has a Greenway Overlay zone along the Willamette River, extending east 150 feet from the ordinary low water line of the river. The Greenway Overlay zone requires Administrative Review prior to issuance of building permits for any intensification or change of use or development to ensure compatibility with the Willamette River Greenway. The City's Development Code also carries a height restriction of thirty (30) feet within the Greenway Overlay zone. The overriding purpose of Greenway Overlay is to protect, conserve, enhance and maintain the

natural, scenic, historical, agricultural, economic and recreational qualities of the lands along the Willamette River.

Inventory Results

There are no State Scenic Waterways in Independence.

Adequacy of Information

The available information is adequate to complete the Goal 5 process for State Scenic Waterways.

Significant Resources

There are no State Scenic Waterways in Independence.

GROUNDWATER RESOURCES

Definitions

"Groundwater" is any water, except capillary moisture, beneath the land surface or beneath the bed of any stream, lake, reservoir, or other body of surface water (OAR 660-23-140 (1)(b)).

Inventory Requirements and Methods

By rule, significant groundwater resources are limited to the following:

(a) Critical groundwater areas and ground-water-limited areas designated by the Oregon Water Resources Commission (OWRC), and

(b) Source water protection areas delineated following the standards and procedures in Public Health Division rules and either:

  (1) The public water system served by the wellhead area has a service population greater than 10,000 or has more than 3,000 service connections and relies on groundwater from the wellhead area as the primary or secondary source of drinking water; or

  (2) The source water protection area is determined to be significant under criteria established by a local government, for the portion of the source water protection area within the jurisdiction of the local government.

Inventory Results

Independence has a source water wellhead protection area that encompasses the area south of Monmouth Street and east of the Willamette River. The source water well head protection area delineation has not been certified by the Public Health Division (PHD) (Nelson, 2007).

No critical groundwater areas or groundwater limited areas designated by OWRC are found in Independence (Norton, 2007).

Adequacy of Information

The available information is adequate to complete the Goal 5 process for groundwater resources.

Significant Resources

Water systems serving populations of 10,000 or larger or with 3,000 or more service connections are significant by rule. Independence's public water system served by the wellhead area has a service population smaller than 10,000 and has fewer than 3,000 service connections (Johnson, 2007). Under DLCD rules, Independence can establish significance criteria and make a determination for the wellhead protection area. The standard criteria for significance are based on consideration of the available information on a resource's location, quality, and quantity. DLCD rule language for determining resource location, quality and quantity and available information on groundwater resources in Independence is summarized:

(a) *Information about location shall include a description or map of the resource area for each site. The information must be sufficient to determine whether a resource exists on a particular site.*

The Independence source water wellhead protection area has been delineated but has not yet been submitted to PHD for certification.

(b) *Information on quality shall indicate a resource site's value relative to other known examples of the same resource.*

The city has access to eight individual groundwater wells, six of which are currently in use. None of the wells are believed to be influenced by surface water. Raw well water quality is generally good, with moderate to low levels of iron and manganese. These minerals are removed during treatment (Water System Master Plan, 1997).

(c) *Information on quantity shall include an estimate of the relative abundance or scarcity of the resource.*

The City currently derives all source water from groundwater sources. Although surface water rights from the Willamette River are available, future planning has been performed using additional groundwater sources exclusively. It is recommended the City pursue additional groundwater source capacity to meet future needs (Water System Master Plan, 1997).

Independence's source water wellhead protection area does not meet the location, quality, and quantity criteria for a significant groundwater resource.

Resource Protection

DLCD rules require local governments to protect significant groundwater resources by doing the following:

(a) Reduce the risk of contamination of groundwater, following the standards and requirements of OAR Chapter 340, Division 40; and

(b) Implement wellhead protection plans certified by the Oregon Department of Environmental Quality (DEQ) under OAR 340-040-0180.

OAR Chapter 340, Division 40 establishes the mandatory minimum groundwater quality protection requirements for federal and state agencies, cities, counties, industries, and citizens. Independence will comply with the pollution control requirements and other provisions to protect groundwater quality.

Independence has developed a Drinking Water Protection Plan to protect the drinking water supply. The Plan includes a wellhead protection management plan with management strategies for reducing the risks associated with the potential sources of contamination within the wellhead protection areas of existing wells. The City may wish to submit the source water wellhead protection area to PHD for certification in the future.

APPROVED OREGON RECREATION TRAILS

Definitions

Oregon Recreation Trails are recreational trails for walking, bicycling and horseback riding designated by rule by the Oregon Parks and Recreation Commission (OAR 660-23-150 (1)).

Inventory Requirements and Methods

Local governments are required to designate all recreation trails approved by OPRC as significant resources. OPRC was contacted for current information.

Inventory Results

No Approved Oregon Recreation Trails are found in Independence (Houston, 2006). The City of Independence may wish to consider application for the Ash Creek Trail to be identified as a state identified Oregon Recreational Trail in the future.

Adequacy of Information

The available information is adequate to complete the Goal 5 process for Oregon Recreation Trails.

Significant Resources

No Approved Oregon Recreation Trails are found in Independence.

NATURAL AREAS

Definitions

“Natural areas” include areas listed in the Oregon State Register of Natural Heritage Resources (OAR 660-23-160 (1)).

Inventory Requirements and Methods

All listed natural areas are considered significant. The most recent published edition of the Oregon State Register of Natural Heritage Resources was reviewed and ONHP was contacted for current information.

Inventory Results

No listed Natural Areas are found in Independence (ONHAC, 2003; Alton, 2006).

Adequacy of Information

The available information is adequate to complete the Goal 5 process for natural areas.

Significant Resources

No significant natural areas are found in Independence.

WILDERNESS AREAS

Definitions

"Wilderness areas" are those areas designated as wilderness by the federal government (OAR 660-23-170 (1)).

Inventory Requirements and Methods

All federally designated wilderness areas are considered significant.

Inventory Results

No federally designated wilderness areas are found in Independence.

Adequacy of Information

The available information is adequate to complete the Goal 5 process for wilderness areas.

Significant Resources

No federally designated wilderness areas are found in Independence.

MINERAL AND AGGREGATE RESOURCES

Definitions

“Minerals” includes soil, coal, clay, stone, sand, gravel, metallic ore, and any other solid material or substance excavated for commercial, industrial or construction use from natural deposits situated within or upon lands in this state (Oregon Revised Statutes 517.750).

"Aggregate resources" are naturally occurring concentrations of stone, rock, sand and gravel, decomposed granite, lime, pumice, cinders, and other naturally occurring solid materials used in road building (OAR 660-23-180 (1)(a)).

Inventory Requirements and Methods

Local governments are not required to amend acknowledged inventories or plans with regard to mineral and aggregate resources except in response to an application for a post-acknowledgement plan amendment (PAPA), or at periodic review to include procedures and requirements consistent with this rule for the consideration of PAPAs concerning aggregate resources. An inventory was not conducted. Available information was reviewed.

Inventory Results

The Department of Geology and Mineral Industries (DOGAMI) has inventoried existing and past rock material extraction sites in Polk County in 1981.

The Department of Geologic and Mineral Industries (DOGAMI) provided several sources of aggregate within the Independence UGB (Niewendorp, 2007). However, there are currently no active mine operations within the Independence UGB. The City has a processing plant site located along the Willamette River in Independence, but there is no active mining at the site. Rather, sand & gravel is brought here from other sites and processed, which does not require a DOGAMI permit (Mundie, 2007). Polk County provided two mineral and aggregate sites (Krauger Pit and Haydin Island) within a file mile radius of the city limits. Both sites are listed on the Polk County Goal 5 inventory. Krauger Pit is located approximately 3,500 feet, or 0.66 miles, from the southern Independence UGB and Haydin Island is located more than 21,000 feet, or approximately four miles, from the northern Independence UGB. According to Polk County, none of the sites within a five mile radius are zoned for Mineral Extraction (Sorte, 2008).

Adequacy of Information

The available information is adequate to complete the Goal 5 process for mineral and aggregate resources.

Significant Resources

No identified significant mineral or aggregate resources are found in Independence.

ENERGY SOURCES

Definitions

"Energy source" includes naturally occurring locations, accumulations, or deposits of one or more of the following resources used for the generation of energy: natural gas, surface water (i.e., dam sites), geothermal, solar, and wind areas (OAR 660-23-190 (1)(a)).

Inventory Requirements and Methods

Local governments shall amend their acknowledged comprehensive plans to address energy sources using the standard inventory process. Energy sources applied for or approved through the Oregon Energy Facility Siting Council (EFSC) or the Federal Energy Regulatory Commission (FERC) shall be deemed significant energy sources for purposes of Goal 5. EFSC and FERC on-line sources were reviewed for current information.

Inventory Results

No energy facilities applied for or approved by the Oregon Energy Facility Siting Council are found in Independence (EFSC, 2006). No hydroelectric generating facilities approved or exempted by the Federal Energy Regulatory Commission are found in Independence (FERC, 2006).

Adequacy of Information

The available information is adequate to complete the Goal 5 process for energy sources.

Significant Resources

No significant energy sources are found in Independence.

CULTURAL AREAS

Definitions

The term “cultural resources” is not defined in state law or regulation. Cultural resources broadly defined are the physical remains of a people's way of life. Cultural resources include properties and sites with historic or archaeological significance.

Inventory Requirements and Methods

The standard inventory process is required. The State Historic Preservation Office (SHPO) was contacted for current information.

Inventory Results

SHPO provided a copy of the Polk County historic properties list that included one site within the Independence UGB and one site 3 miles from the current UGB (Curran, 2007). The City of Independence has a nationally registered Historic District, accepted into the registry in 1989.

Adequacy of Information

The information is adequate to proceed with the Goal 5 process.

Significant Resources

Significant cultural areas have been identified in Independence.

HISTORIC RESOURCES

Definitions

"Historic resources" are those buildings, structures, objects, sites, or districts that have a relationship to events or conditions of the human past (OAR 660-23-200 (1)(d)).

"Historic resources of statewide significance" are buildings, structures, objects, sites, or districts listed in the National Register of Historic Places, and within approved national register historic districts pursuant to the National Historic Preservation Act of 1966 (16 U.S.C. 470).

Inventory Requirements and Methods

Local governments are not required to amend acknowledged plans or land use regulations in order to provide new or amended inventories or programs regarding historic resources, except local governments shall protect all historic resources of statewide significance through local historic protection regulations.

SHPO was contacted for current information and the National Register Information System on-line database was queried. The city's Historic Resources Inventory (Independence, 1989) was reviewed.

Inventory Results

A Historic Resources Inventory was completed for the City of Independence between the years 1984-1985. A second report, completed in 1989, incorporates additional structures and a recommendation for historic district boundaries and nomination to the National Register of Historic Places. The City of Independence Historic District, registered on the National Register of Historic Places in 1989, is located in the east section of the city, covers a thirty-nine block area including both commercial and residential properties, and contains 263 individual tax lots. Twenty-nine (29) properties within the Historic District are also listed individually on the National Registry (Table 2).

The National Register Information System (Oregon Parks and Recreation Department 2007) included seven (7) individually listed properties within the City of Independence. The Independence Historic District is also listed on the Oregon National Register Information System.

Adequacy of Information

The information is adequate to proceed with the Goal 5 process.

Significant Resources

Significant historic resources have been identified in Independence. The City of Independence has a Historic Preservation Commission; a quasi-judicial committee approves alteration or demolition of historic resources (Johnson, 2007).

OPEN SPACE

Definitions

"Open space" includes parks, forests, wildlife preserves, nature reservations or sanctuaries, and public or private golf courses (OAR 660-23-220 (1)).

Inventory Requirements and Methods

Local governments are not required to amend acknowledged comprehensive plans to identify new open space resources.

Inventory Results

An inventory of existing parks is included in the City of Independence Parks and Open Space Master Plan (1996). An inventory of open spaces has not been conducted in Independence. Existing parks include Henry Hill Park, Riverview Park, Pioneer Park, Riverview Park (Independence, 1996) and the Northgate site recently deeded to the City of Independence. All of the parks are on city property. The 1996 Parks and Open Space Master Plan also identify sixteen other potential park sites, including the Ash Creek Trail.

Adequacy of Information

Not applicable.

Significant Resources

No significant open space resources have been identified in Independence.

SCENIC VIEWS AND SITES

Definitions

"Scenic views and sites" are lands that are valued for their aesthetic appearance (OAR 660-23-230 (1)).

Inventory Requirements and Methods

Local governments are not required to amend acknowledged comprehensive plans in order to identify scenic views and sites.

Inventory Results

An inventory of this resource has not been undertaken in Independence. As Independence is relatively flat, most of the scenic views are limited to views of the Willamette River and rural, agricultural scenery. Views are pleasant and typical of what can be seen from rural, flat areas in this part of the Willamette Valley. Entering the city from Highway 51 provides scenic views of the Willamette River as one travels south into town and the City of Independence may wish to consider application for a state identified scenic byway in the future. The City's Development Code carries a height restriction of thirty (30) feet

along with Greenway Overlay zone, measured east 150 feet from the banks of the Willamette River. The overriding purpose of Greenway Overlay zone is to protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of the lands along the Willamette River.

Adequacy of Information

Not applicable.

Significant Resources

No significant scenic views and sites have been identified in Independence.

GOAL 5 SIGNIFICANT RESOURCES SUMMARY

The results of the resource inventories and significance determinations are presented in Table 1. Significant resources include riparian corridors, cultural areas, and historic resources.

Table 1. Goal 5 Resource Summary

Resource	Inventory Type	Inventory Results	Significant Resources	Goal 5 Process
Riparian Corridors	Standard	Inadequate information	Unknown	Delay until adequate information available.
Wetlands	Local Wetland Inventory	Inadequate information	Unknown	Delay until adequate information available.
Wildlife Habitat	Safe Harbor	No documented wildlife usage	No	Complete; no further action required
Federal Wild and Scenic Rivers	Standard	Resource does not occur in Independence	No	Complete; no further action required
State Scenic Waterways	Standard	Resource does not occur in Independence	No	Complete; no further action required
Groundwater Resources	Critical groundwater areas; groundwater limited areas; source water wellhead protection areas	No critical groundwater areas; No groundwater limited areas; source water wellhead protection area: Delineation not approved by PHD	No	Protect Resource
Approved Oregon Recreation Trails	Standard	Resource does not occur in Independence	No	Complete; no further action required

Natural Areas	Standard	Resource does not occur in Independence	No	Complete; no further action required
Wilderness Areas	Standard	Resource does not occur in Independence	No	Complete; no further action required
Mineral and Aggregate Resources	None; not required	Inventory not conducted	No	Complete; no further action required
Energy sources	Standard	Resource does not occur in Independence	No	Complete; no further action required
Cultural areas	Standard	One cultural site occurs within the Independence UGB and one site occurs within 3 miles of the Independence UGB. One National Registry Historic District occurs in Independence.	Yes	Protect Resource
Historic Resources	National Historic Register and Local only; standard inventory not required	Six National Historic Register sites and one Historic District occur in Independence	Yes	Protect Resource
Open Space	None; not required	Inventory not conducted	No	Complete; no further action required
Scenic Views and Sites	None; not required	Inventory not conducted	No	Complete; no further action required

Source: MWVCOG, 2007

NATURAL RESOURCES, SCENIC AND HISTORIC AREAS AND OPEN SPACES

Independence has adopted a number of goals and policies to protect natural resources, maintain a livable community, and support sustainable development.

GOAL: Protect natural resources and conserve scenic and historic areas, and open spaces.

In order to preserve and encourage wise use of available natural resources, all development within the City of Independence shall comply with applicable state environmental rules, regulations and standards. Zoning ordinance regulations will be coordinated with state environmental regulations.

Open Space

1. Independence shall maintain the Ash Creek and Willamette River floodway as open space.

2. Independence shall encourage protection of natural areas and open spaces to enhance the livability of Independence.

3. Independence shall seek opportunities to provide access to interpretive facilities and information within natural areas, while also balancing these objectives with protection of ecological values.

4. The City will create an open space corridor along the South Fork of Ash Creek to provide for a combination of riparian area protection, flood storage capacity, wetland preservation and enhancement, stormwater management and development of a linear park and trail.

5. Independence will pursue the establishment of a multi-use path along Ash Creek as specified in the City of Independence Transportation System Plan and Parks Master Plan.

Scenic Resources

1. Independence shall encourage preservation of scenic views along the Willamette River by siting development in a way that maintains view corridors and establishing trails and overlook areas that provide access to views of the river.

2. Priority areas for maintaining unobstructed views of the river will be areas south of the urban core and/or within parks or recreation areas sited along the river.

Fish and Wildlife

1. Independence shall preserve the riparian vegetation along the Willamette River and Ash Creek. In doing so, the City shall use or retain native species while eliminating or curtailing invasive species.

2. Independence shall maintain the sewage treatment lagoons as a de facto waterfowl sanctuary by limiting impacts associated with physical access while creating opportunities for bird-watching or similar activities.

3. Independence shall encourage other agencies and responsible private groups in any effort to improve wildlife habitat along the Willamette River and Ash Creek.

Waterfront Area

1. Independence shall encourage use and development of existing and future waterfront activities and facilities that provide interpretive or other information to inform residents and visitors about previous uses of the river and its ecological value and function.

Historic Areas

1. Independence shall investigate the significance of historic sites and buildings within the city.

2. Independence shall encourage the protection and designation of historic sites as important community cultural resources through the development of a Historic Preservation Control Ordinance.

3. Independence shall, prior to the development of a historic preservation control ordinance, review any application for demolition or exterior alteration of those historic buildings and sites listed in the Independence Comprehensive Plan for conformance with the historic preservation policies of the City.

4. Independence recognizes the historic value of the existing structures in the downtown core area, and shall encourage new development to be architecturally compatible with these structures.

5. Independence will cooperate with state agencies and other historic organizations to catalog and preserve historic buildings, artifacts, and archaeological sites.

Water Resources

1. Independence will compile an inventory of wetlands and riparian corridors and complete the Goal 5 process when adequate information pertaining to location, quality and quantity becomes available. In the interim, an assessment of riparian and wetland resources and appropriate measures of protection shall be applied at the time of plan amendment and zone change approval.

2. Independence will notify the Department of State Lands and Oregon Department of Fish and Wildlife in cases where land use actions may affect protection of riparian corridors or wetland resources.

Groundwater Resources

1. Independence will work with the Oregon Department of Environmental Quality and Oregon Department of Human Service Drinking Water Program, and other state agencies to protect significant groundwater resources.

REFERENCES

Alton, Cliff. 2006. Letter from Oregon Natural Heritage Information Center.

Curran, Chrissy. 2007. Oregon State Historic Preservation Office. Ms. Curran is the Heritage Programs Manager.

Federal Energy Regulatory Commission. 2007. Hydroelectric Projects Under Commission License. http://www.ferc.fed.us/hydro/docs/licenses.xls

Federal Energy Regulatory Commission. 2007. Hydroelectric Projects Exempted From Licensing Requirements. http://www.ferc.fed.us/hydro/docs/exempt.xls

Independence, City of. 1996. City of Independence Parks and Open Space Master Plan.

Independence, City of. 1989. City of Independence Historic Resources Inventory.

Johnson, Karin. 2007. City of Independence Recorder.

Kreager, Ann. 2006. Oregon Department of Fish and Wildlife. Ms. Kreager is a Habitat Conservation Biologist with the Department.

Houston, Rocky, 2006. Oregon Parks and Recreation Department. Mr. Houston is a Recreational Trails Program Coordinator for the Department.

Mundie, Ben. 2007. Department of Geology and Mineral Industries. Mr. Mundie is a Reclamationist for the Department.

National Park Service. 2007. National Register of Historic Places: National Register Information System. http://www.cr.nps.gov/nr/research/nris.htm

National Park Service. 2006. Wild and Scenic Rivers List. http://www.nps.gov/rivers/wildriverslist.html

Nelson, Dennis. 2007. Oregon Public Health Department. Mr. Nelson is a Groundwater Coordinator at the Department.

Niewendorp, Clark. 2006. Department of Geology and Mineral Industries. Mr. Niewendorp is a Mineral Resources Geologist for the Department.

Norton, Marc. 2007. Oregon Water Resources Department. Mr. Norton is a Hydrogeologist for the Department.

Oregon Energy Facility Siting Council. 2007. Energy Facilities. http://egov.oregon.gov/ENERGY/SITING/index.shtml

Oregon Natural Heritage Advisory Council. 2003. Oregon Natural Heritage Plan. Department of State Lands. Salem, Oregon. http://oregonstate.edu/ornhic/plan.html

Oregon Parks and Recreation Department. 2005. Oregon National Register List. http://www.oregon.gov/OPRD/HCD/NATREG/nrhp_intro.shtml

Sorte, Jerry. 2008. Polk County Planning Department. Mr. Sorte is a Senior Planner at Polk County.

Water System Master Plan. 1997. Stettler Supply Company, Inc., Edward Butts, Principal Engineer. 1997.

Figure 1. City of Independence

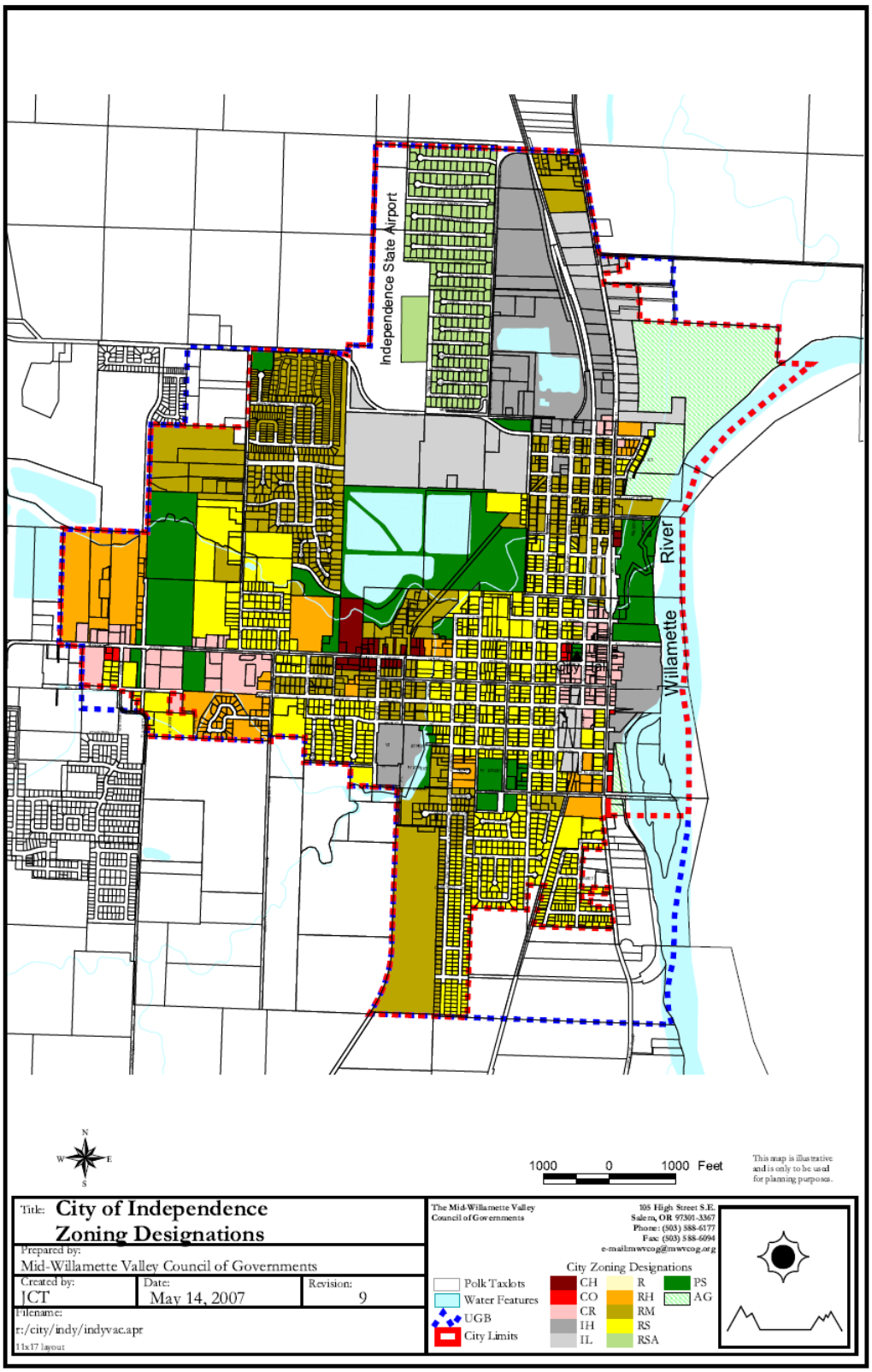


Figure 2. National Wetlands Inventory Map

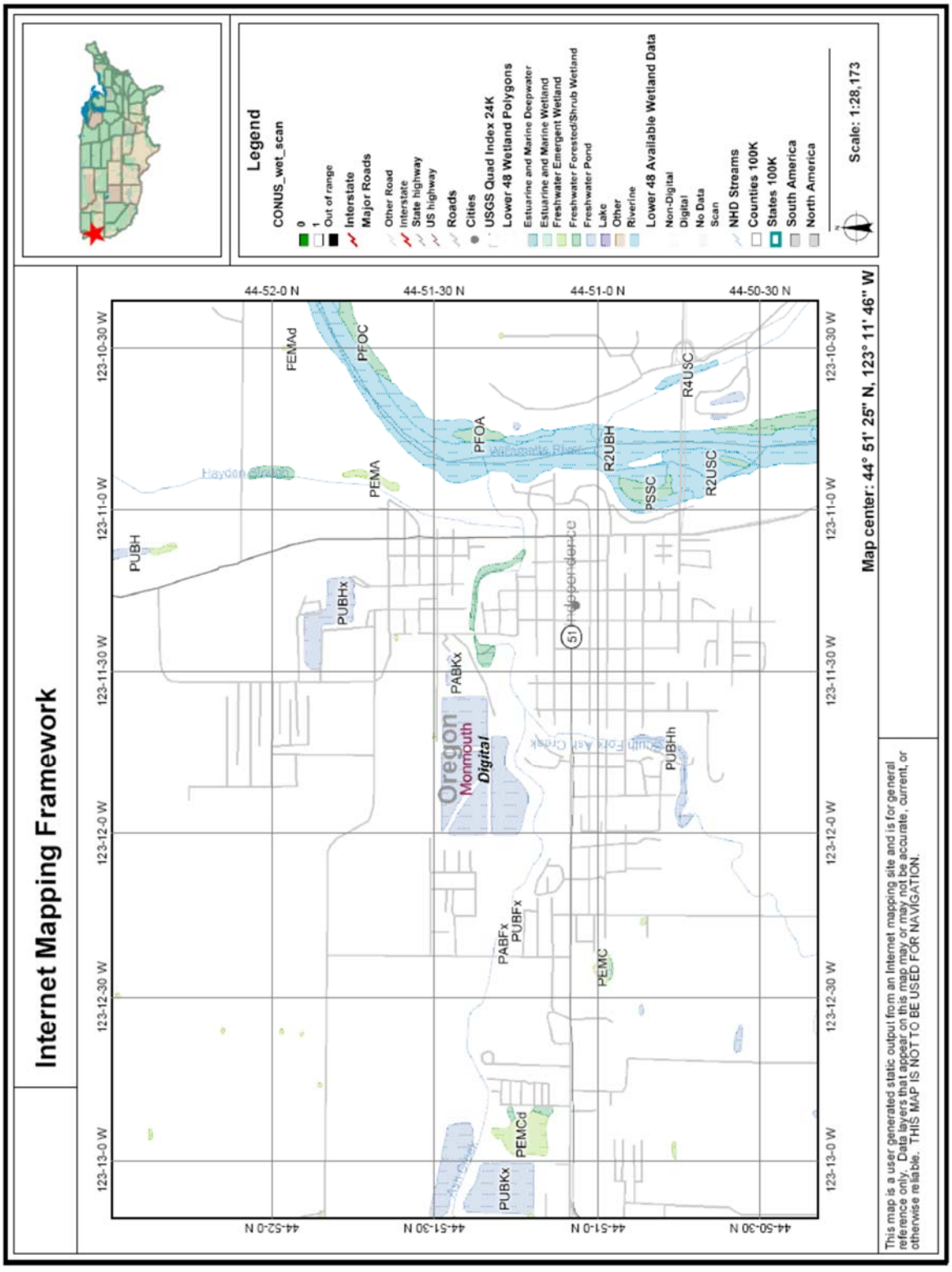


Table 2. City of Independence Historic Resources Inventory, 1989.

NPS Form 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

The Independence Historic District is a large, irregular-shaped area located in the east section of town of Independence. The district is located in Township 8S, Range 4W, Section 21, 44, 45 in Polk County, Oregon. The district is composed of four plats; Thorp's Addition to Independence (1878), Hill's Town of Independence (1879), Patterson's First Addition (1881), and Hill's Addition to the Town of Independence (1889). The district covers a thirty-nine block area; including both commercial and residential properties. One historic site, Pioneer Park, is also included in the nomination. The commercial section of the district is along South Main Street from 'B' Street to 'D' Street. The residential section of the district extends beyond 'D' Street south along South Main Street to 'I' Street, near the Independence city limits. The majority of the residential section of the district lies west of South Main Street, one tax lot beyond Ninth Street. There are 265 individual tax lots in the district and 267 total properties classified in the district. Some properties take up more than one tax lot. There are 22 vacant properties within the district. The district includes 61 Primary Significant Contributing buildings dating from the earliest period of development through 1904; 86 Secondary Significant Contributing buildings dating from 1905-1940; 52 Historic Non-Contributing buildings; 32 Compatible Non-Historic Non-Contributing buildings; and 14 Non-Compatible Non-Contributing buildings. There are also 12 contributing garages within the district. A detailed explanation of the classification system is on page 4.

Setting

Independence, Oregon has a current population of 4,209. It is situated west of the Willamette River in Polk County, Oregon. The topography of the area is fairly regular; sloping down toward the river on the eastern boundary. The town is located along Highway No. 51, twelve miles southwest of Salem. The district takes up a large portion of

of the town encompassing 98.7 acres. The area surrounding the district is made up of simple family homes, constructed during and after the historic period. Monmouth Street and South Main Street make up the spine of the historic district, intersecting at a central point in the downtown. There are a number of large street trees which line the residential streets within the district.

Boundaries

The factors in determining the boundaries for the Independence Historic District are based on the interrelationship of historical, visual, and physical factors. The original Settlement patterns and plats near the Willamette River and Ash Creek were taken into consideration. Many of the residential buildings included within the district were the homes of commercial property owners. The direct historic relationship between these commercial and residential buildings adds to the significance of the district. The visual factors which include building types, styles, and uses and were evaluated. Building groupings, setback, height, and material used in construction were also studied. Physical factors considered in boundary determination included waterways, development of major streets and railroad right-of-way, tax lot division lines, and city limits.

The Independence Historic District is irregularly bounded on the north by Butler and 'B' Streets. The eastern boundary is one tax lot deep along Main Street, extending to the north side of 'I' Street, near the southern edge of the city limits. From 'I' Street, the boundary continues north one tax lot west along the alley to 'E' Street. Between Second and Sixth Streets the boundary line extends south irregularly going as far south as 'G' Street before going north and continuing west one tax lot deep until Seventh Street. At this point the block between Monmouth and 'D' Streets is included. The western boundary line is defined by one tax lot west of Ninth Street on the south side of Monmouth Street, and Ash Creek on the north side of Monmouth.

The northern section of the district is associated with the Thorps Addition to Independence. The historic commercial area of the City starts at 'B' Street and South Main Streets. The eastern boundary defines a change in land use and topography. Large street trees on the southern section of South Main unify the streetscape and define the eastern boundary. The southern edge along Monmouth Street is defined by the continuity of size, style, and age of homes. Monmouth Street is a major spine of the district and creates a visual corridor. The western edge of the district is defined by a change in architectural character, land use, the Southern Pacific Railroad right of way, and Ash Creek.

Architectural Character

There are a variety of building styles represented in the Independence Historic District, spanning late Nineteenth and Twentieth century architecture. Contributing building styles include: Italianate, Queen Anne, Stick Style, Commercial, Colonial Revival, American Renaissance, Bungalow, Craftsman, Spanish Colonial, Vernacular.

Both residential and commercial buildings were constructed during the primary building period between 1969 and 1904. These buildings represent the Italianate, Queen Anne, Stick and Commercial styles; many of these buildings reflect a vernacular interpretation of these styles. The residential buildings in this period of development are generally 1-2 stories in height, sided with horizontal shiplap or weatherboard. The windows are multipaned, double hung shash with simple or decorative surrounds. The details on the porches of buildings constructed during the primary period range from elaborate turned spindle work to more simple posts and balustrades.

The commercial buildings constructed during the primary period are generally 1-3 stories in height. The exterior siding material is stone, stucco, or brick. These buildings generally have flat roofs with a parapet wall or false front. Many of these buildings have storefront alterations, the upper stories on these buildings, however, remain intact.

After 1904, the Bungalow Style, Craftsman, Spanish Colonial Revival and later Vernacular buildings became more popular than the earlier styles. Characteristics of the Bungalow and Craftsman Style include low pitched gable roofs with wide, overhanging eaves, enlarged brackets, decorative purlins, large simple porch posts, and the use of stucco, shingles and brick in addition to weatherboard siding. Characteristics of the Historic Period Styles include a combination of adaptations from previous periods, reflected in embellishments of window and door detail, and the use of a combination of building materials.

The commercial buildings within the district that date from the secondary building period of development are characterized by 1-2 stories in height and the use of brick and stucco for exterior surfacing material. There is a lack of detail on the later concrete buildings from this period. Many of the alterations to the buildings include resurfacing and changes to the storefront facades. The original commercial area of the district encompasses a three block area of tightly grouped slot buildings along South Main Street.

There is one contributing site within the district, the Pioneer Park, located at the end of 'C' and Seventh Streets. There are twelve contributing garages associated with residences in the district. A contributing feature within the district is the number of alleys between the blocks aligned in a north and south direction.

There have been two historic building surveys completed for the City of Independence prior to this project. The City was first included in an Historic Building Windshield Survey which was completed in August, 1980. A Cultural Resources Inventory for the City was completed November, 1984. At this time the contract was amended to allow for further research and the preparation for an historical narrative. The final inventory document was finished June, 1985. There were, however, fifty contributing buildings not included in this inventory which had to be surveyed as part of the historic district project. The final report for the 1984 Inventory included a recommendation for historic district boundaries. These boundaries were reviewed, studied and modified as necessary for the Independence Historic District National Register document. As a result of the Inventory, the Mayor appointed an Ad Hoc Committee on Historic Preservation in March, 1985. The City of Independence established an Independence Preservation Commission in June, 1986. An ordinance relating to the protection of Primary and Secondary contributing buildings within the City was also adopted in 1986. A non-profit organization, the Independence Historic Preservation Corporation was also formed that year.

The classification of the properties within the Independence Historic District are below. The classification criteria for contributing and non-contributing buildings within the district is based on a number of considerations including: building style, type and number of alterations, building materials, setback and number of stories. There are 159 contributing and 117 non-contributing buildings within the district.

1. Primary Significant Contributing: Structures are classified as Primary Significant Contributing if they were built in or before 1904, and reflect the building styles and traditions characteristic of this period of development. These buildings represent the primary period of construction and development in Independence from initial settlement through 1904. The town, in a rich agricultural area, was a primary shipping point for supplies and produce along the Willamette River.

2. Secondary Significant Contributing: Structures are classified as Secondary Significant Contributing if they were built in or between

1905 and 1940. Also buildings from the primary building period are classified as Secondary if they have been altered so they reflect styles from the secondary building period. These buildings represent the secondary period of construction when the City of Independence grew as a result of the increase in hop production and the advent of the automobile.

3. Historic Non-Contributing: Structures are classified as Historic Non-Contributing if they were built during either the primary or secondary periods of construction but have been so altered over time that the contributing elements (siding, windows, massing, entrances, and roof) have been lost or concealed. If their contributing elements were restored, these buildings could be reclassified as Primary or Secondary Significant.

4. Compatible Non-Historic Non-Contributing: Structures are classified as Compatible Non-Historic Non-Contributing if they were built after 1940 but are compatible architecturally (i.e. scale, materials, use) with the significant structures and the historical character of the district.

5. Non-Compatible Non-Contributing: Structures are classified as Non-Compatible Non-Contributing if they were built after 1940 and are incompatible architecturally (i.e. scale, materials, use) with the significant structures and the historic character of the District.

6. Vacant: Properties are classified as Vacant if there are no buildings sited on them (i.e. vacant lots, alleys, parking lots).

The properties within the Independence Historic District are listed on the following pages.

AIR, WATER, AND LAND RESOURCES QUALITY

Oregon's Statewide Planning Goal 6 requires efforts to maintain and improve the quality of air, water, and land resources of the state. This goal is mainly accomplished by local compliance with state and federal regulations. A variety of state agencies administer resource quality protection programs and maintain databases about resource quality but the lead state agency is the Department of Environmental Quality (DEQ).

The purpose of this section is to briefly summarize existing **regulations** and **information in agency databases** regarding land, air, and water quality in the Independence area. Local governments must comply with, and sometimes enforce, existing regulations and this section is intended to be a quick overview of existing environmental requirements. Requirements are complex and ever changing. DEQ publishes a useful document called *"An Oregon Guide to Environmental Requirements for Local Governments"* (DEQ, 1997).

DEQ regulates the discharge of pollutants into the environment. Currently the following activities **will** require a permit or plan approval from DEQ or other state agencies:

- Discharging any material into waters of the state;
- Disposal of wastewater to the land surface or injection of wastewater into the ground;
- Discharge of storm water associated with industrial activity, directly or indirectly, through the storm sewers or storm drainage to surface waters;
- Disturbance of five or more acres of land with clearing, grading, excavating, and/or construction activities;
- Removal of friable asbestos-containing material;
- Ownership or operation of a landfill, transfer station, incinerator, or septage lagoon for non-hazardous wastes; and
- Treatment of petroleum contaminated soil from underground storage tank release on-site or off-site.

The following activities **may** require a permit or plan approval from DEQ or other state agencies:

- Handling or storing petroleum products above ground;
- Discharge of any emission to the air;
- Use of solvents, degreasers, and paint; and gasoline storage by a business;
- Treatment, collection, storage, or disposal of hazardous wastes that are corrosive, toxic, reactive, or ignitable;
- Storage or transport of waste tires;
- Installation or removal of an underground storage tank;
- Construction of a parking lot; and
- Purchase or lease of land for project development (environmental assessment).

Some DEQ permit and plan approval actions affect land uses and, therefore, require a Land Use Compatibility Statement (LUCS) from the city and/or county. The following list of applications must include a LUCS from the affected local government:

- Approval Of Air Quality Notice Of Construction
- Air Contaminant Discharge Permits
- Oregon Title V Air Quality Operating Permit

- Noise Impact Boundaries For Racing Facilities
- Airport Abatement Plan/ Noise Impact Boundaries
- Air Indirect Source Construction Permits.
- Parking And Traffic Circulation Plans
- Solid Waste Disposal Permits/Authorization Letter
- Commercial Composting Facility
- Waste Tire Storage Permits
- Hazardous Waste/Polychlorinated Biphenyl (PCB) Storage, Treatment, And Disposal Permits
- Pollution Control Bond Fund Request
- Wastewater System Facility/Sewer System Plans
- Water Quality Construction Grants
- Municipal Wastewater Treatment System State Revolving Loan Request
- Certification Of Water Quality Standards For Federal Permits
- On-Site Sewer Permits
- Water Discharge Permits: National Pollution Discharge Elimination System (NPDES) And Water Pollution Control Facility (WPCF).

The Oregon Health Division (OHD) requires information about project compatibility with local land use plans and ordinances in the following situations:

- New public water systems
- Major additions, alterations, and extensions of water transmission mains
- Development of new water sources
- Relocation of water treatment or storage facilities.

Additional information and permit assistance for the above activities is available from DEQ's offices in Salem and/or Portland and OHD's offices in Portland or the Marion County Health Department offices in Salem. The following sections present what is known about air, water, and land quality in Independence and provide more detail about permit requirements.

AIR QUALITY

Ambient air quality is monitored by the Oregon Department of Environmental Quality (DEQ) by a statewide air quality surveillance network. Air Quality Index (AQI) values, based on the monitoring information, are calculated for various cities in Oregon. The monitoring stations closest to Independence are located in Salem. These stations continuously monitor for carbon monoxide, ozone, sulfur dioxide, nitrogen dioxide and particulate levels. Lead samples have also been obtained in Salem. Ambient air quality is related to the amount and types of discharged pollutants and meteorological events (DEQ 2001).

Available data from Salem stations indicates that air quality is generally good (DEQ, 2005). In 2005, the summary of AQI values, categorized as good, moderate, unhealthy for sensitive groups, unhealthy and very unhealthy, showed no unhealthful or very unhealthy values for Salem (DEQ, 2005). DEQ monitoring records indicate that Salem experienced 45 days categorized as moderate values and four (4) days where people with heart and lung disease, older adults and children were advised to reduce prolonged or heavy exertion due to high levels of fine particulate matter (mostly from wood smoke, other combustion sources, cars and dust).

Oregon adopted the National Ambient Air Quality Standards (NAAQS) to protect the public health. The EPA has established primary NAAQS to protect public health and secondary NAAQS to protect public welfare. Oregon's control strategies are designed to meet the more stringent secondary NAAQS. DEQ monitoring records indicate that Salem did not exceed or violate national air quality standards for ozone, fine particulate matter, lead, carbon monoxide, nitrogen dioxide, or sulfur dioxide from 1999 to 2005.

Air pollution permits include Air Contaminant Discharge Permits and Oregon Title V Operating Permits, and are dependent on:

- The type of facility proposed
- The amount of emissions
- The type of emissions
- Regional air quality, e.g. is the area in "attainment" of existing air quality standards (DEQ, 1996).

Activities that typically require a permit include asphalt plants, incinerators, grain elevators, rock crushers, boilers, and other major sources of air pollution. In general, facilities that emit more than 10 ton of pollutants per year require a permit and facilities that emit more than 100 ton of pollutants per year require a permit and must meet more stringent standards. DEQ should be contacted for more information and assistance regarding air contaminant discharge permits.

The DEQ maintains a database of Air Contaminant Discharge Permits. Facilities that emit over certain levels of particulates, carbon monoxides, nitrogen oxides, sulfur dioxide, or volatile organic compounds are required to obtain a discharge permit. According to DEQ records, there are four (4) facilities with active Air Contaminant Discharge Permits located in the Independence Urban Growth Boundary (UGB), as shown in **Table 1** below. Of the four (4) permits, two (2) also have an Oregon Title V Operating permit.

Table 1
Air, Water, and Land Resources Quality Element
DEQ Air Contaminant Discharge Permits in the Independence UGB, 2007

Facility	Location	Oregon Title V Operating Permit
Manufacturing Country	900 F St Independence	No
Franklin Sweed	900 N Main Street	No
Marquis Spas	596 Hoffman Road	Yes
Medallion Cabinetry Inc Oregon	625 Hoffman Road	Yes

Source: Oregon Department of Environmental Quality, Oregon DEQ, 2007

Other local air quality concerns can include asbestos, outdoor burning, dust and fugitive emissions, chlorofluorocarbons, and wood stove pollution. These activities are regulated as follows:

- Demolition, renovation, repair, construction, or maintenance activities that involve material containing asbestos are regulated by DEQ.
- Construction of large parking lots (150 to >1000 spaces) in certain areas of the state require a permit.

- Most western Oregon counties require that certain activities take precautions to prevent particulate matter (dust and fugitive emissions) from becoming airborne. Construction and renovation activities, equipment operation, and materials handling are examples of potentially affected activities.
- DEQ, and other state agencies, regulate all types of outdoor burning (e.g. backyard incinerators, construction debris, and field burning) some local governments have added additional restrictions by local ordinances.
- Controlling wood smoke pollution from wood stoves and be mandatory or voluntary, depending on regional air quality.
- The service, maintenance, repair, installation, and disposal of air conditioners and refrigerators are strictly regulated. The chlorofluorocarbons used in these units interact with the atmosphere and create smog and damage the ozone layer.

Air toxics are generally defined as air pollutants known or suspected to cause serious health problems. Serious health effects include cancer, birth defects, lung damage and nerve damage. The U.S. Environmental Protection Agency (EPA) is required to control air toxics based on a list of 188 chemicals initially defined by the Clean Air Act Amendments of 1990. To monitor air toxins, the EPA established the National Air Toxics Assessment (NATA). NATA uses data collected in 1999 to estimate concentrations of 188 hazardous air pollutants, or air toxics, on a national scale. The assessment includes two phases. The first phase of NATA includes estimated air toxics emissions and outdoor air concentrations. The second phase provides estimates of people's exposure to these pollutants and of public health risk.

Within Oregon, there are concentrations of 20 toxic air pollutants estimated to exceed health-based benchmarks, or guidelines for safe levels. These pollutants are acetaldehyde; acrolein; arsenic compounds; benzene; 1,3butadiene; chromium; diesel particulate matter; formaldehyde; napthalene; polycyclic organic matter (POM); 1,1,2,2tetrachloroethane; and tetrachloroethylene (perc). All of these except acrolein, are known or suspected to cause cancer. Major sources are large industrial facilities, like wood products manufacturers and steel mills. Area sources include smaller manufacturers and service industries, such as auto body shops and service stations, and consumer activities. On-road mobile sources are cars and trucks. Non-road mobile sources include motorized watercraft, farm equipment, and all terrain vehicles.

The second phase of NATA makes it possible to estimate cancer and other health risks from exposure to air toxics. **Table 2** shows the health risks associated with exposure to the air toxins measured in the 1999 National Air Toxics Assessment at the national, state and county level. Polk County health risk levels are lower than state levels. Polk County health risk levels are also lower than national levels except for neurological risk. The air pollutants that contribute the most to total health risks in Polk County include: benzene; carbon tetrachloride; polycyclic organic matter (POM); napthalene; chromium VI; tetrachloroethylene; 1,1,2,2tetrachloroethane; ethylhexylphthalate; acetaldehyde; and ethylene dibromide.

Table 2
Air, Water, and Land Resources Quality Element
Health Risks from Exposure to Air Toxics, 1999

	Cancer Risk[1]	Respiratory Risk[2]	Neurological Risk[3]
United States	41	6.39	0.104
Oregon	63	7.42	0.282
Polk County	33	6.17	0.218

Source: U.S. EPA 1999 National Air Toxics Assessment: County-Level Risk
[1]Cancer risk is expressed as a risk level of 1 in a million. This implies the likelihood that up to one person, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the specific concentration over 70 years (an assumed lifetime).
[2]Respiratory risk represents the sum of hazard quotients for substances that affect the same target organ (respiratory).
[3]Neurological risk represents the sum of hazard quotients for substances that affect the same target organ (neurological).

Because motor vehicles emit the most air toxics, people can help by driving less (reducing trips using public transportation, carpooling and telecommuting). Using alternatives to gas powered equipment, such as electric lawnmowers and weed trimmers will also reduce air toxics. As consumers, we can choose products that emit fewer volatile organic compounds, which are usually air toxics as well. Many paints and other products are now available in low toxicity formulations. Other ways of reducing air toxics include reducing woodstove use, doing regular vehicle maintenance and avoiding household pesticide use.

Air quality in the Willamette Valley is affected by all activities occurring in the airshed. The metropolitan areas influence air quality in the rural areas and vice versa. People typically think of the large point sources when considering air quality and underestimate the cumulative impact of individuals operating small engines, driving their cars, and backyard burning.

WATER QUALITY

Information about surface and groundwater quality in the Independence area was obtained from the DEQ, Oregon Health Division (OHD), and other background reports. This information is compiled from monitoring programs run by state agencies to comply with water quality standards set by the U.S. Environmental Protection Agency. Water quality investigations have been undertaken for the Willamette Basin by the United State Geological Survey for surface water and groundwater.

Surface Water Quality

The Clean Water Act (CWA) requires that states publish a list of surface water bodies that fail to meet water quality standards. This list is called the 303(d) list and is published by the DEQ every three years. The most current list is the 1998 list. Plans to improve water quality must be developed when a water body is placed on the 303(d) list.

The City of Independence has one water body on the 303(d) list, the Willamette River. Independence is located within the Willamette Basin and Middle Willamette Subbasin of the Willamette River.

Fish studies completed for the Middle Willamette River found that there is an increased cancer risk for the general public, recreation anglers and subsistence anglers who consume fish from the Middle Willamette River (DEQ 2000). This increased cancer risk is due primarily to PCBs and to a lesser extent, dioxins and pesticides aldrin, dieldrin and DDE. These studies have also found increased non-cancer causing health risks such as, immune system dysfunction, or development impacts for certain population groups such as children, women of child-bearing age and subsistence anglers, due to exposure to concentrations of mercury and PCBs. Due to these increased health risks, the Oregon Department of Health recommends the following fish consumption guidelines for the Middle Willamette River:

- Children six years of age and younger should not eat more than one 4-ounce fish meal every seven weeks.

- All women of childbearing age (15 to 44), including pregnant females and breastfeeding women, should not eat more than one 8-ounce fish meal per month.

- Women past childbearing age, children older than age six, and all other healthy adults may safely eat as much as one 8-ounce fish meal every two weeks.

Water bodies that are placed upon the 303(d) list are required to establish total maximum daily loads (TMDLs) that describe the amount of each pollutant a waterway can receive and still not violate water quality standards. The Willamette Basin TMDL Order was signed by the Department of Environmental Quality (DEQ) on September 21, 2006. The TMDL requires pollution sources to implement actions to improve water quality. The Willamette TMDL has been submitted to the Environmental Protection Agency (EPA) for final approval as required by the federal Clean Water Act (DEQ, 2006). The parameters addressed in the TMDL's include temperature, bacteria and mercury for the reasons discussed as follows.

- Temperature - Waters in the Middle Willamette Subbasin are warmer than is necessary to protect salmonid rearing and spawning. Lack of riparian vegetation and impacts from dams and water withdrawals are the major contributors to high river temperatures.

- Bacteria - People can become sick if they ingest water that is contaminated with bacteria when they are swimming, recreating or in contact with the water. Both urban and rural agricultural sources are major contributors to the high bacterial levels found in many of the rivers of the Middle Willamette Subbasin.

- Mercury - The Willamette has fish consumption advisories due to elevated levels of mercury found in some fish species. The Middle Willamette Subbasin will be addressed as part of a basin-wide strategy for mercury. General sources include point sources, air deposition, and erosion of soils that contain mercury from natural and anthropogenic sources.

DEQ has named certain federal, state and local governments and agencies, including cities, counties, and special districts, as Designated Management Agencies (DMAs) because these agencies and governments have authority to manage and regulate sources of pollutants that are listed in the Willamette TMDL. DMAs are required to develop and submit TMDL implementation plans that address the TMDL pollutants and additional requirements to DEQ within 18 months following issuance of the TMDL order (by May 2008). The City of Independence is listed as one of the DMAs in the Willamette Basin required to submit a TMDL implementation plan. A TMDL implementation plan identifies plans or strategies the DMA is completing to improve water quality and help meet the pollutant reduction goals of the TMDL.

Additional pollutants to be addressed after completing the scheduled TMDL's include PCBs, Aldrin, Dieldrin, DDT and its metabolites, iron, copper, lead and zinc. Other concerns in the Middle Willamette Subbasin include sedimentation and loss of fish habitat.

Major DEQ activities to restore the Middle Willamette Subbasin include: NPDES permitting of waste water discharges including storm water; technical and financial assistance for source identification and implementation activities (grant and loan funding), clean-up activities, monitoring activities, technical assistance to communities to develop a Drinking Water Protection Plan, and the 1994 Rickreall Creek TMDL for Biological Oxygen Demand (BOD).

Efforts to restore the Willamette River involve everyone. Actions include planting vegetation to reduce erosion and keep water cool; changing habits at home, at work, and at play to prevent or reduce pollutants entering waterways; improving fish passage and opening habitat that was blocked by past practices; and reducing erosion and sediment entering streams.

Independence's contribution to surface water pollution in the Middle Willamette River comes mainly from municipal treated sewage effluent and untreated storm water discharges. Increases to the net pollutant load from the sewage effluent discharges may be limited to existing levels for all parameters because of low water quality in the basin.

DEQ administers the water quality permit process. National Pollutant Discharge Elimination System (NPDES) permits regulate discharges to surface waters from commercial or industrial facilities, municipal sewage treatment plants, confined animal feeding operations with point source discharges, and mining operations. Water Pollution Control Facility (WPCF) permits regulate discharges of waste waters land to the land surface or subsurface with no direct discharge to surface waters. Examples include land irrigation, evapotranspiration lagoons, industrial seepage pits, and subsurface sewage disposal systems with flows greater than 2,500 gallons per day.

The application process for NPDES permits includes a review and approval of treatment facilities. In some cases public notices and hearings may be requested by interested parties. Storm water associated with industrial activity, directly or indirectly, and discharged to through storm sewers or storm drainage to surface water may require a permit if the industry is covered by federal storm water regulations. An NPDES permit is also required when clearing, grading, excavation, or construction activities disturb more than one (1) acre. The permit requires that an erosion control plan be submitted to the DEQ before any activity commences. On-site sewage disposal systems require a site evaluation and a permit.

Table 3 shows the water discharge permits in the Independence UGB. These permit holders are required to pretreat the waste waters prior to release. The information in **Table 3** is provided only to characterize the kinds of waste discharges in the area.

Table 3
Air, Water, and Land Resources Quality Element
Surface Water Discharge Permits in the Independence UGB, 2007

Permit Number	Permit Holder	Permit Type	Location
91847	CPM DEVELOPMENT CORPORTATION/VALLEY CONCRETE & GRAVEL COMPANY	GEN12A – STORMWATER, NPDES	15 C ST
110393	CPM DEVELOPMENT CORPORATION/VALLEY CONCRETE & GRAVEL/KRAUGER PIT	GEN 10 - INDUSTRIAL WASTEWATER, NPDES	15 C ST
104677	FRANKLIN EQUIPMENT CO - SWEED DIVISION	GEN01 – INDUSTRIAL WASTEWATER, NPDES	900 N MAIN
104677	FRANKLIN EQUIPMENT CO - SWEED DIVISION	GEN12Z – STORWATER, NPDES	900 N MAIN
111829	G&R WRECKERS/G&R AUTO WRECKERS, INC	GEN12Z – STORMWATER, NPDES	4645 INDEPENDENCE HWY
104852	OREGON DEPARTMENT OF AVIATION/INDEPENDENCE STATE AIRPORT	GEN12Z – STORWATER, NPDES	4705 AIRPORT ROAD
41513	CITY OF INDEPENDENCE	NPDES-DOM-Db – SEWAGE LESS THAN 1 MGD W/LAGOONS,	
109298	NORTHGATE DEVELOPMENT, LLC	GEN12C, STORMWATER, NPDES	NORTHGATE SUBDIVISION, PH.6
115101	PACWEST ENGINEERING OF OREGON, LLC	GEN12C, STORMWATER, NPDES	MT.FIR WEST SUBDIVISION

Source: Oregon Department of Environmental Quality, National Pollutant Discharge Elimination System Permits, 2007.

Groundwater Quality

Statewide goals in Oregon include preventing groundwater contamination and restoring groundwater quality. Independence is located within the Willamette Basin, which includes one of the major river and watershed systems in the state, as well as significant groundwater aquifers (DEQ, 2004). The Willamette Valley contains shallow alluvial sediments, which contain productive groundwater aquifers that are susceptible to pollution from human activities. Willamette Basin groundwater quality studies show impacts from several pollutants, including nitrate, bacteria, pesticides, and volatile organic compounds. Nitrate in groundwater is widespread on both a regional scale and in localized areas. Bacteria are found in groundwater throughout the basin. Pesticides are found in low levels in about one-third of wells sampled in a regional study. Volatile organic compounds (VOCs) are found in contaminated groundwater

in several urban areas in the basin and area of dense population. Sources of pollution within the Willamette Basin include the following:

- waste discharge facilities (e.g. sewage, pulp and paper waste, industrial stormwater, etc.);
- underground injection control systems;
- confined animal feeding operations;
- hazardous substance release sites;
- leaking underground storage tanks;
- on-site sewage disposal systems;
- solid waste facilities;
- agricultural land use; and
- areas with high population densities using on-site sewage disposal systems (DEQ, 2004).

Independence relies exclusively on groundwater for municipal water supply. Drinking water is provided by eight (8) city wells, six (6) of which are currently active. Old Wells #4 and #5 located at Main Street Reservoir/Pump Station are no longer in use due to water quality concerns. Currently, the greatest water quality concerns for Independence is control of coliform bacteria at the Polk Street well, monitoring of synthetic organics at the South Well field, and iron and manganese control.

The Oregon Health Division (OHD) requires cities with community water systems to routine monitor water quality contaminants. Specific contaminants of concern for the City of Independence are listed below.

- **Inorganic contaminants** - includes all regulated metals such as Arsenic, Barium, Cadmium, etc. Routine monitoring tests are required every three (3) years for groundwater sources. The City is currently in compliance for these tests with the most recent tests performed in 2005.
- **Nitrate** -has been detected in the city's water system, although at levels well below the Maximum Contaminant Level (MCL) of 10mg/l and the increased monitoring level of 5 mg/l. Annual monitoring of Nitrates is required by OHD to indicate any increase in Nitrate levels.
- **Asbestos** - The City of Independence has some existing Asbestos-Cement (AC) pipe in its distribution system and therefore must examine the water for the presence of asbestos fibers. Past tests have not indicated detectable levels of these fibers and given the characteristics of the City's water chemistry (i.e. pH > 7.0, adequate alkalinity and hardness, low corrosivity) and the relative small amount of AC pipe in the system, asbestos is not felt to be of concern.
- **Synthetic Organics (SOC's) and Volatile Organics (VOC's)** - include contaminants such as pesticides, solvents, and metals commonly used in present day and past industrial and agricultural practices. The City of Independence is required to submit water quality tests every three (3) years for these contaminants. The most recent tests completed in 2005, did not indicate the presence of any contaminants that exceed enforcement levels. The 2005 tests indicated the presence of Tetrachloroethylene at detectable levels. The relative close proximity of the city's well fields to agricultural areas and past wood treatment facilities, combined with the relatively shallow nature of the wells, makes each well field somewhat vulnerable to these contaminants. Future avoidance of contamination from these contaminants will require monitoring and control of nearby agricultural and industrial practices.
- **Radiological (Gross Alpha)** - The current Federal rule for radiological sampling (Radionuclides) requires one sample every four (4) years. All past tests have not indicated the presence of any Radionuclides, with the most recent tests completed in 2002.
- **Lead and Cooper** - The most recent tests for lead and copper were completed in 2005. The results indicated amounts below the action levels set by the EPA.

- **Total Coliform** - The City is required to submit five (5) coliform bacteria tests per month. The most recent test results were obtained in November 2006. Test results indicated an absence of coliform.

The Safe Drinking Water Act (SDWA), created in 1974, is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. Amendments to the SDWA in 1996, greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap.

Independence in conjunction with the City of Monmouth, retained the Oregon Association of Water Utilities (OAWU) to prepare a joint Wellhead Protection Program to protect groundwater quality in the wellhead areas of the city. Wellhead Protection Programs include a delineation of the aquifer recharge zone, control and protection agreements with local sources of possible contaminants and specific wellhead protection criteria. Many of the proposed monitoring and regulatory components of the 1996 SDWA are tied to implementation of a Wellhead Protection Program.

LAND QUALITY

Land quality is protected in Oregon by regulation of hazardous waste and waste tire storage and transfer; and regulation of underground storage tanks and solid waste. Land quality can ultimately affect water and air quality. Hazardous waste permits are required for activities that:

- Generate useless, unwanted or discarded pesticide or manufacturing residue that is toxic, corrosive, ignitable, or reactive, and
- Establish a hazardous waste disposal site.

Hazardous waste permits may be required for activities that:
- Generate hazardous waste and store it on site for more than 90 days, and
- Store and/or treat hazardous waste on site.

Table 4 shows the number of registered hazardous waste generators located in the Independence UGB. Conditionally Exempt Generators (CEG) are facilities that produce less than 220 pound of hazardous waste per month and accumulate less than 2,200 pounds of waste at any time. CEG's are not required to notify DEQ of their hazardous waste activity but are required to handle the material safely, in accordance with existing regulations.

Table 4
Air, Water, and Land Resources Quality Element
DEQ Registered Hazardous Waste Generators in the Independence UGB, 2007

ID #	Generator	Type	Location
2477	CENTRAL HIGH SCHOOL	CEG	1530 MONMOUTH STREET
6713	FRANKLIN EQUIPMENT COMPANY DBA	CEG	900 N MAIN STREET
6468/887	MARQUIS SPAS	LQG/SQG	596 HOFFMAN ROAD

6404	MEDALLION CABINETRY INC OREGON	LQG	625 HOFFMAN ROAD
5673	SIMPLOT SOILBUILDERS INDEPENDENCE	CEG	225 "E" STREET

Source: Oregon Department of Environmental Quality, Oregon DEQ, 2007.

Solid waste permits are required to operate a site where garbage, demolition waste, industrial waste, land clearing debris, or sludge is stored, received, processed, or landfilled. Operations that plan to store large amounts of tires or chipped tires on a site, and composting facilities also need a permit. A review of DEQ's listing of facilities with solid waste permits indicates there are no facilities in Independence with an active solid waste permit.

Permits are required for underground storage tanks that:

- Contain petroleum products or listed chemical products such as gasoline, diesel, solvents, pesticides, and herbicides, AND
- Are larger than 1,100 gallons, AND
- Have more than 10% of the total volume (including piping) underground.

Underground storage tanks that are unused for a period of 12 months must be permanently decommissioned by either removing the tank or filling it with an inert substance. DEQ must be notified prior to activity, and a report and checklist must be submitted after the work is completed. The activity must be performed by a licensed service provider. Plans to treat petroleum contaminated soils from an underground storage tank release, on or off the site, will require a Solid Waste Letter of Authorization from DEQ and be submitted with a Soil Treatment Plan.

DEQ databases indicated permits for 13 active underground storage tanks (UST) in the Independence area. DEQ records identified 45 decommissioned tanks at various locations throughout the City. The above information should be considered minimum numbers since not all tanks are permitted and not all old tank locations are known.

Table 5 shows the number of active leaking underground storage tank sites (LUST) within the City of Independence. DEQ records indicate there are a total of 28 LUSTs on record. Eleven (11) of the total sites are considered to be active sites, while the remaining 17 sites have been cleaned up. The above information should be considered minimum numbers since not all leaking underground storage tank locations are known.

Table 5
Air, Water, and Land Resources, Quality Element
Active Leaking Underground Storage Tanks (LUSTs) Sites in the Independence UGB, 2007

SITE NAME	ADDRESS	SITE STATUS
CENTRAL SCHOOL DISTRICT	520 HOFFMAN RD	Active
GEORGE SHONES	1082 MONMOUTH ST	Active
INDEPENDENCE BP	178 MONMOUTH ST	Active
JOSE VASQUEZ PROPERTY	11415 MERIDIAN ST	Active
MILLER SERVICE	87 SOUTH MAIN	Active
HEATING OIL TANK	478 S MAIN ST	Active
HEATING OIL TANK	7785 BUENA VISTA ROAD	Active
HEATING OIL TANK	268 S MAIN STREET	Active
HEATING OIL TANK	589 4TH STREET	Active
HEATING OIL TANK	3985 INDEPENDENCE HIGHWAY	Active
HEATING OIL TANK	45 S NORTHWAY	Active

Source: Oregon Department of Environmental Quality, Oregon DEQ, 2007.

SUMMARY OF NATURAL RESOURCE QUALITY

Air, water, and land resource quality is summarized in Table 6.

Table 6
Air, Water, and Land Resources, Quality Element
Summary of Resource Quality

Resource Type	Quality	Comments
AIR	Regional air quality currently meets standards. No documented local problems.	Projected population growth could result in declines in air quality. Stay current with changes in state and federal standards, regulations, and assistance programs.
WATER		
Surface Water	Willamette River water quality problems documented. Quality of surface water in Independence unknown. Beneficial uses, including fish and aquatic habitat and water contact recreation have been degraded due to non-point source pollution.	Stay current with changes in state and federal standards, regulations and assistance programs. Support or participate in local Watershed Council activities. Develop surface water management plan that includes water quality components. Develop and implement a TMDL plan that identifies plans or strategies Independence is completing to improve water quality and help meet the pollutant reduction goals of the TMDL for temperature, bacteria and mercury by May 2008.
Groundwater	Regional water quality problems in shallow aquifer documented (nitrate, pesticides, VOCs). Currently, the greatest water quality concerns for Independence is control of coliform bacteria at the Polk Street well, monitoring of synthetic organics at the South Well field, and iron and manganese control.	A variety of activities in Independence area have the **potential** to degrade groundwater quality. Drinking Water Protection Plan includes proactive, voluntary actions to prevent contamination. Require new development to locate and properly abandon unused wells on property.
LAND	Twenty-eight documented leaking underground storage tanks sites in Independence, 17 of which have been cleaned up. No other problems documented. Surrounded by irrigated agriculture.	Spills on railroad and highway have potential to impact Independence, including groundwater quality. Stay current with changes in state and federal standards, regulation, and assistance programs. Surface Water Management Plans and Drinking Water Protection Plan will include elements that apply to land quality.

REFERENCES

Oregon Department of Environmental Quality (DEQ). 2007. Databases, GIS and Mapping Applications. Online at: http://www.deq.state.or.us/news/databases.htm

Oregon DEQ. 2006. Fact Sheet - Willamette TMDL.

Oregon DEQ. 2005. Air Quality Index. http://www.deq.state.or.us/aq/aqi_home.htm

Oregon DEQ. 2004. Groundwater Quality Report for the Willamette Basin. http://www.deq.state.or.us/wq/groundwa/WillBasinGW.htm

Oregon DEQ. 2000. Middle Willamette Fish Study. http://www.deq.state.or.us/wq/wqfact/MidWillFishStudy.pdf

United States EPA. 1999. National Air Toxics Assessment.

AIR, WATER AND LAND RESOURCES QUALITY

GOAL: To maintain and improve the quality of air, water, and land resources in Independence.

Policies:

Water Resources

1. Independence will cooperate with Polk County and governmental agencies to achieve high water quality as defined by State and Federal standards.

2. Independence will support the water-quality management plans and programs of governmental agencies by regulating land uses, encouraging improved treatment of point sources of pollution, and the controlling of non-point sources of pollution.

3. Independence will cooperate with Polk County and the DEQ in applying state laws and standards for evaluating potential septic tank drainfield sites and will discourage development beyond existing city sewage services in order to provide for public safety and high water quality.

4. Independence will encourage development of water management systems to effectively reduce the problems of erosion, sedimentation, flooding, and soil wetness.

5. Independence will cooperate with designated agencies to develop erosion and sediment control standards and specifications for use by Independence in connection with land development plans and the Federal Water Pollution Control Act and Amendments.

Air Resources

1. Independence will cooperate with the appropriate governmental agencies to achieve high air quality.

2. Independence will consider meteorological factors such as seasonal prevailing wind direction and velocity when making land use decisions for proposed uses likely to pose a threat to air quality.

Noise Quality

1. Independence will cooperate with the Department of Environmental Quality in implementing noise control regulations by regulating land uses.

Land Quality

1. Independence will continue to support the regional solid waste management program.

2. All development activities within the city shall adhere to applicable federal and state air, water, and land quality regulations and standards.

AREAS SUBJECT TO NATURAL DISASTERS AND HAZARDS

INTRODUCTION

Oregon's statewide planning goals and guidelines include a goal to protect life and property from natural disasters and hazards. This goal is accomplished by identifying and inventorying the types of potential natural disasters and hazards that might affect the community. Inventory information is the basis of subsequent planning and implementation activities. The purpose of this section is to identify the types and locations of natural disasters and hazards within the Independence UGB, based on existing information.

SEISMIC HAZARDS

Oregon has experienced damaging earthquakes in the historic past, and geologic evidence indicates that because or our increasing population and development, we may expect earthquakes with even greater damage potential to occur in the future. While the entire state of Oregon is susceptible to earthquakes, the area with the highest probabilities of experiencing an earthquake is western Oregon. Great subduction earthquakes are the most powerful types ever recorded and recent investigations have found evidence that quakes along the Cascadia subduction zone affect Oregon every 400 to 600 years (Fluck, and others, 1997).

Recent research suggests that the Cascadia Subduction Zone is capable of producing magnitude 9 earthquakes. Projected losses in the Cascadia region alone could exceed $12 billion with over 30,000 destroyed buildings and 8,000 lives lost in the event of a magnitude 8.5 Cascadia Subduction Zone earthquake (Wang, 1999).

Local governments, planners, and engineers must consider the threat of earthquakes as they seek to balance development and risk. Actions to reduce the risk from seismic hazards include, identifying locations susceptible to seismic activity generated by local faults or the Cascadia Subduction Zone, adopting strong policies and implementation measures, and using other mitigation techniques.

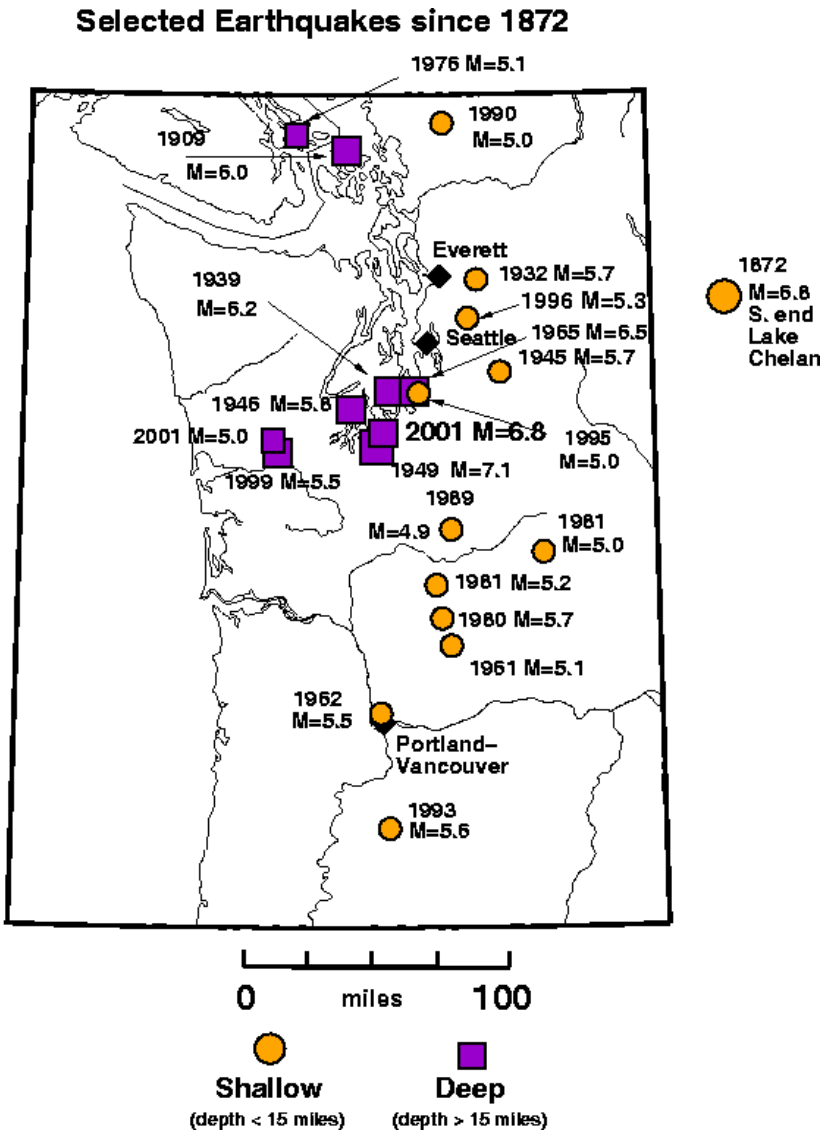
The most recent significant earthquake event affecting Polk County was the February 28, 2001 Nisqually earthquake. The epicenter of the 6.8-magnitude earthquake was near Anderson Island in Pierce County, Washington. The earthquake shook western Washington and areas of western Oregon. Residents in the surrounding area, including Polk County felt the tremor. Fortunately, the impacts of this quake were not severe in Oregon. However, economic losses in Washington were estimated at $1 to $2 billion.

Another recent earthquake in the Willamette Valley area is the Scotts Mills quake of 1993. The Scotts Mills quake of 1993 had a Richter magnitude of 5.7 (moment magnitude of 5.6), and caused widespread, though generally minor, damage in the central and northern Willamette Valley (Madin and others, 1993). The preliminary damage estimate for this quake was $28.4 million dollars, and fortunately included no loss of life. Quake damage was most intense in a northwest-southeast trending area that included Newberg, Woodburn, Mt. Angel, and Molalla.

The March 7, 1963, earthquake in Salem, Oregon measured 4.6 on the Richter scale and was felt by residents in Polk County. Despite the low magnitude of the quake, damage still occurred -

especially to older masonry buildings. The *Itemizer Observer* reported damage to the Polk County courthouse consisted of a considerable quantity of plaster was cracked and in some cases knocked down (*Itemizer Observer*, 1963*.)*. **Figure 1** shows a map of selected Pacific Northwest earthquakes since 1872.

Figure 1: Selected Pacific Northwest Earthquakes Since 1872



Source: Pacific Northwest Seismograph Network.
www.geophys.washington.edu/SEIS/PNSN/INFO_GENERAL/hist.html

Due to increased awareness of potentially damaging earthquakes in Oregon, the Oregon Building Codes Division changed construction standards for western Oregon. Prior to 1993, all of Oregon was in Seismic Zone 2b. In 1993, the western half of Oregon (west of the Cascades) was upgraded to Seismic Zone 3. This increased the structural standards for buildings constructed in this zone. For example, masonry and concrete structures require additional construction provisions and wood walls require additional bracing in Seismic Zone 3.

Independence was one of several communities evaluated for earthquake hazards in an Oregon Department of Geology and Mineral Industries (DOGAMI) report released in 2000. The report evaluated potential earthquake damage based on three factors that can affect the severity of damages that occur during an earthquake: ground shaking amplification, liquefaction, and landslides.

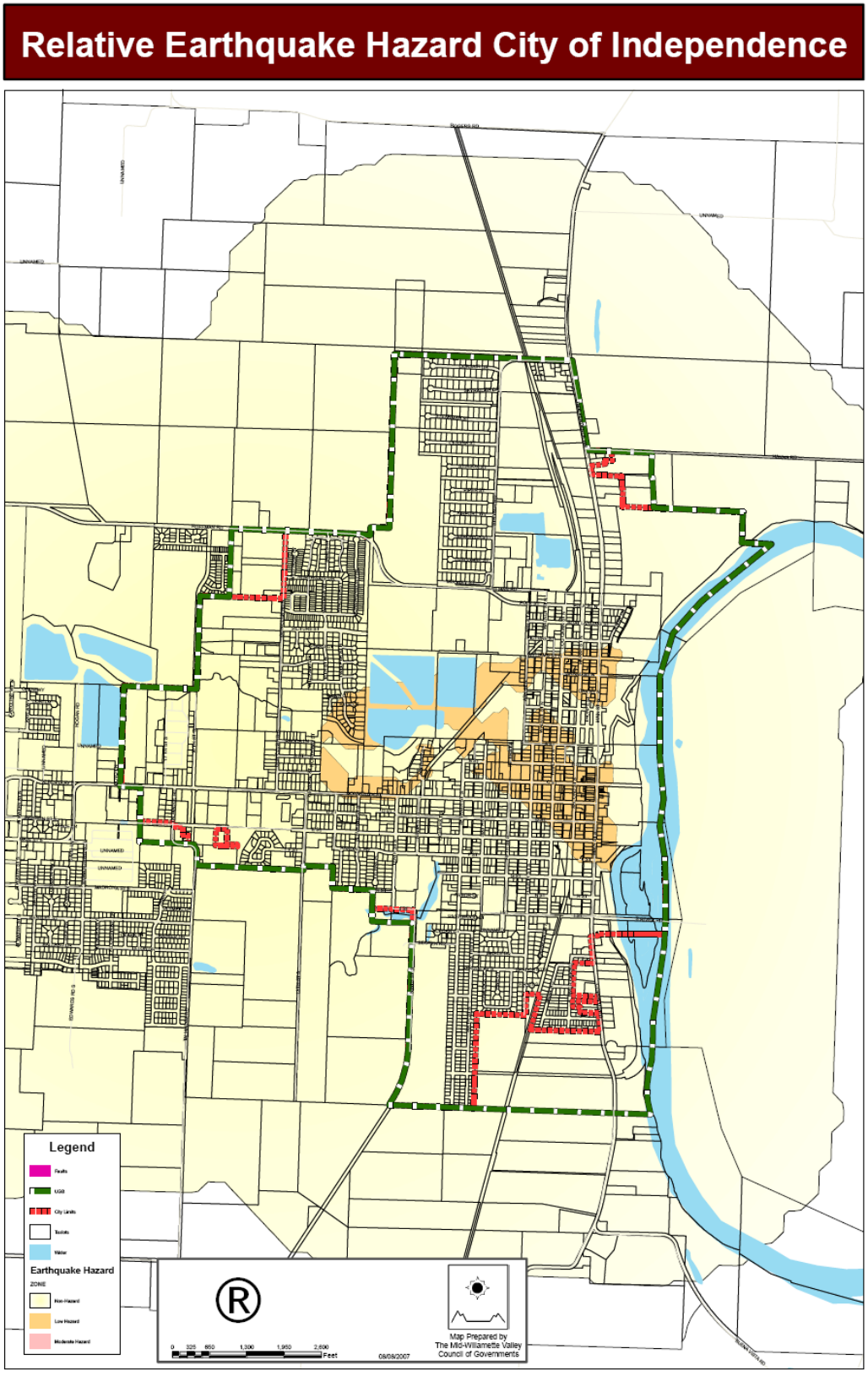
Ground shaking amplification can be determined by examining the types of soils and rocks near the surface. These materials can increase or decrease the strength or frequency of shaking experienced at the surface. In the DOGAMI study, Independence was found to have a low amplification hazard. This means that in the Independence vicinity, there is a low risk from damage associated with ground shaking amplification.

Liquefaction occurs during an earthquake when shaking causes a saturated soil to act as a liquid instead of a solid. Potential damages include differential vertical settlement of foundations and structures, and horizontal flow in the downhill direction or toward the drainages. Liquefaction hazard is enhanced by soil moisture and is greater during the wet winter months and near ponds, drainages, and streams. The results of the DOGAMI study indicate a low risk of damage from liquefaction in Independence.

Hazards from earthquake-induced landslides are calculated by examining the steepness of slopes in an area. Due to the flat topography in most of Independence, the risk of earthquake-induced landslides is low. The DOGAMI study identified this area as having a low risk of earthquake-induced landslides.

Figure 2, the Relative Earthquake Hazard Map, consolidates the hazards described above and shows which areas in the city are most likely to experience damage from an earthquake. The majority of Independence and the surrounding area are not located in an earthquake hazard zone. Areas shown in orange that are located downtown and near the sewage lagoons have a low risk of earthquake damage predicted.

Figure 2: Relative Earthquake Hazard, City of Independence



DOGAMI recently completed a study on the ability of public buildings to withstand an earthquake known as the Oregon Statewide Seismic Needs Assessment (Lewis 2007). The Seismic Needs Assessment Final Report includes covers public school buildings, acute inpatient care facilities, fire stations, police stations, sheriff's offices and other law enforcement agency buildings. The assessment ranks these buildings for the "probability of collapse" due to the maximum possible earthquake for any given area. The rankings range from Very High, High, Moderate to Low. The report is the first step in a multi-part process that will eventually create a pool of state money that can be used to seismically retrofit eligible buildings. A list of the buildings and findings evaluated in the City of Independence may be found in **Table 1** below.

Table 1
Natural Hazards and Disasters Element –
Earthquake Collapse Potential for Selected Public Buildings in Independence, 2007

Facility Name	Facility Type	Earthquake Collapse Potential
Central High School	School	All Buildings - High
Henry Hill Elementary School	School	Building A - Very High Building B - High Building C - Low Building D - Low Building E - High
Independence Elementary School	School	Very High[1]
Talmage Middle School	School	Building A - Moderate Building B - High
Independence Police Department/City Hall	Police-City	High
Polk County Fire District	Fire - RFPD	High

Source: Oregon Statewide Seismic Needs Assessment: Implementation of Oregon 2005 Senate Bill 2 Relating to Public Safety, Earthquakes, and Seismic Rehabilitation of Public Buildings. 2007.

[1] Since DOGAMI completed the Needs Assessment, the Central School District completed a seismic upgrade project for the Independence Elementary School.

FLOOD HAZARDS

Riverine Floods

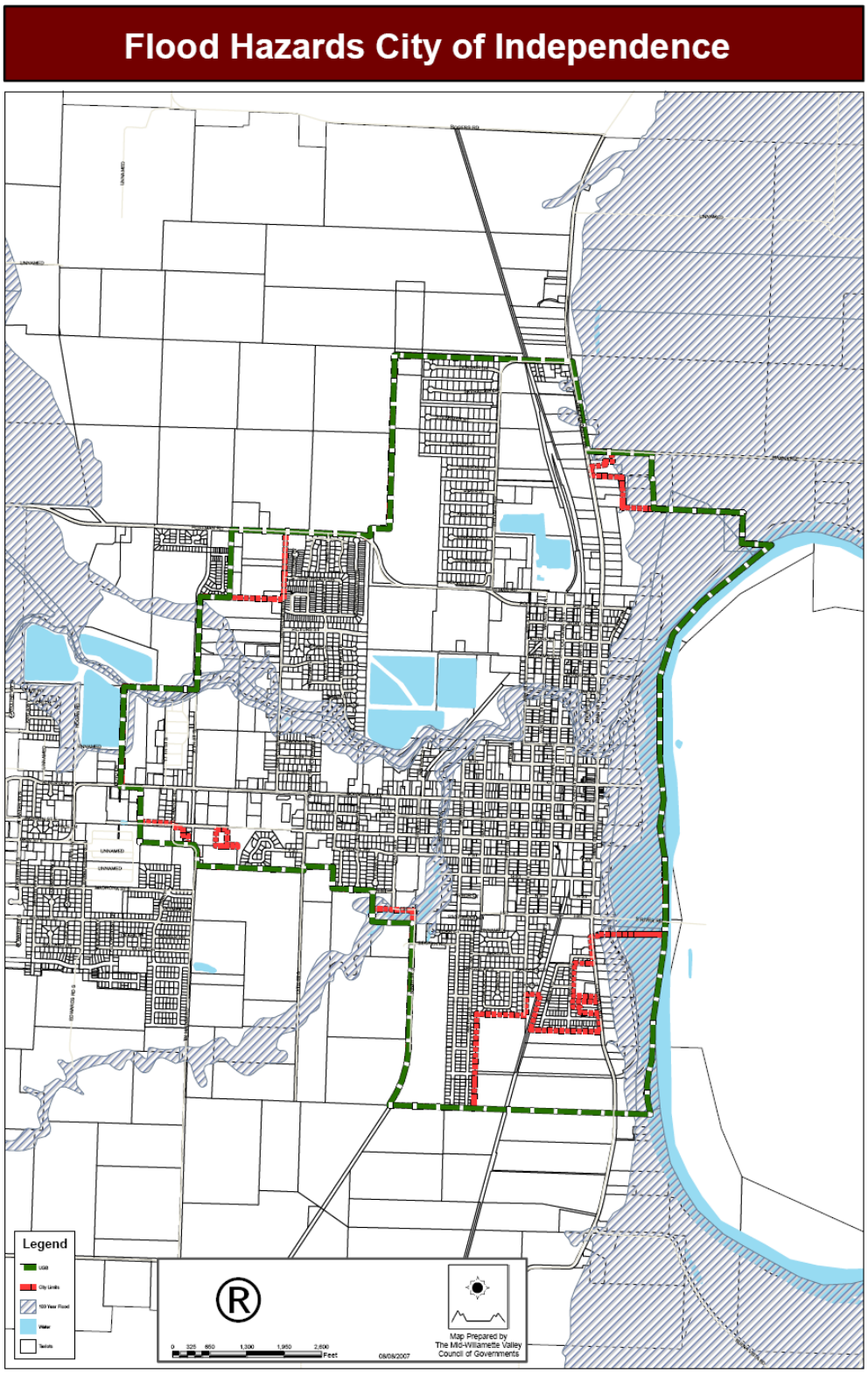
There are two types of flood hazards that could impact the City of Independence: riverine floods and urban flooding. Riverine floods – overbank flooding of rivers and streams – are the most common of all natural disasters. Most communities in the United States have the potential to experience this type of flooding after spring rains, heavy thunderstorms, or snowmelt. These floods can be slow or fast rising, but generally develop over a period of days.

Flooding in large river systems typically results from large-scale weather systems that generate prolonged rainfall over wide geographic areas, causing flooding in hundreds of small streams, which then drain into major rivers. The most severe flooding conditions generally occur when direct rainfall is augmented by snowmelt. If the soil is saturated or frozen, stream flow may increase due to the inability of the soil to absorb additional precipitation. The danger of riverine flooding occurs mainly during the winter months, with the onset of persistent, heavy rainfall and during the spring with the melting of snow in the Cascade and Coast Ranges.

The City of Independence adopted updated floodplain overlay zoning regulations in 2006 to remain in the National Flood Insurance Program (NFIP). Membership in the National Flood Insurance Program makes flood insurance available to the city. The floodplain overlay zone will regulate the area designated as the 100-year floodplain by the Flood Insurance Rate Map (FIRM).

In December 2006, a revised Flood Insurance Study (FIS) and FIRM for Independence took effect. **Figure 3** shows the 100-year floodplain along the Willamette River, and Ash Creek. The 100-year floodplain is defined as those areas having at least a one percent chance of flooding within any given year.

Figure 3: Flood Hazards, City of Independence



Urban Flooding

Urban flooding results when land is converted from fields or woodlands to roads and parking lots, causing the land to lose its ability to absorb rainfall. This transition from pervious to impervious surfaces results in more water running off instead of filtering into the ground. Thus, water moves more quickly to watercourses, with resulting water levels rising above historic, pre-development levels. During periods of urban flooding, streets can become swift moving rivers and basements can fill with water. Storm drains often back up with yard waste causing additional, localized flooding.

Another cause of urban flooding is grading associated with development. Grading may cause changes in drainage direction from one property to another. Although this is a small, isolated impact of development, it may be significant to the adjacent property owner.

Independence has experienced shallow urban flooding primarily due to inadequate storm drainage. While 1996 was a year that brought record flooding in several areas of Oregon, the flooding experienced in Independence was not an unusual occurrence. During abnormal wet years, runoff exceeds the capacity of the local storm drainage system.

In 2005, Independence completed a Storm Drainage Master Plan. This document described the current problems with Independence's stormwater drainage system and proposed solutions. The Master Plan identifies four (4) categories of system deficiencies based on ownership and existing versus UGB build-out scenarios: 1) Existing deficiencies maintained by Independence; 2) Existing deficiencies maintained by ODOT; 3) Urban growth boundary (UGB) deficiencies maintained by Independence and 4) UGB deficiencies maintained by ODOT. Existing system needs are further broken down into three main categories based upon short (0-5 years), medium (5-10 years) and long (10-20 years) needs. Major projects prioritized as short term needs include:

- Improvements to the existing ditch from Hoffman Road to Ash Creek.
- Replacing the existing ditch running along the east side of Stryker Road with a 30-inch pipe conveyance system.
- "F" Street bridge improvements to ensure safe passage of the 100-year storm event.
- Improvements to the existing bridge located at the Gun Club Road crossing of Ash Creek to ensure safe passage of the 100-year storm event without overtopping Gun Club Road.

While improvements to public storm drainage facilities are vital to preventing urban flooding in Independence it is important that new development in the city does not contribute to existing problems. The Independence Development Code requires that any development activity within the city or within the UGB that increases the amount of impervious area of the developed land must implement a drainage plan. Large developments area required to develop a Storm Water Management Plan that shows the development will not exceed 5, 10 and 25-year storm events. These regulations will prevent new development in the city from adding to storm water management problems.

HIGH GROUND WATER TABLE

A high ground water table refers to a situation where the top of the water table is at or near land surface for a part of the year. The water table is defined as the depth where all the empty spaces in the soil, usually occupied by gas, are filled by water.

A high water table can be a hazard for certain types of development and construction. Examples of hazards include: failing basement walls; differential settling of structures; overwhelmed storm water systems; difficulty in maintaining underground utilities; poor surface drainage during the winter; and underground tanks hydrostatically forced out of the ground.

Table 2 details the various soil types found in Independence. Based upon a review of the Soil Survey of Polk County several soils with seasonally high water tables are commonly found in Independence. Examples of soils commonly found in Independence with seasonally high water tables include: Concord, Cove, Dayton, Amity, Holcomb, Waldo and Woodburn.

Table 2
Natural Hazards and Disasters Element –
Selected Characteristics of Soils in the Independence Area

SOIL TYPE	WATER TABLE		DRAINAGE CLASS	BEARING STRENGTH	SHRINK-SWELL	FLOODING
	With Basement	Without Basement				
Amity	Severe	Moderate	Moderate	Moderate	Moderate	Parts
Camas	Slight	Slight	Slight	Slight	Slight	Yes
Chehalis	Slight	Slight	Slight	Moderate	Moderate	Yes
Cloquato	Slight	Slight	Slight	Slight	Slight	Yes
Coburg	Severe	Moderate	Moderate	Moderate	Moderate	
Concord	Severe	Severe	Severe	Slight	Severe	
Cove	Severe	Severe	Severe	Moderate	Severe	Yes
Dayton	Severe	Severe	Severe	Severe	Moderate	
Holcomb	Severe	Severe	Severe	Severe	Severe	
Malabon	Slight	Slight	Severe	Moderate	Moderate	Yes
Newburg	Slight	Slight	Slight	Slight	Slight	Yes
Waldo	Severe	Severe	Severe	Severe	Severe	
Wapato	Severe	Severe	Severe	Slight	Moderate	
Willamette	Moderate	Slight	Slight	Severe	Moderate	
Woodburn	Severe	Moderate	Moderate	Severe	Slight	Parts

Source: *Polk County Soil Survey*, United States Department of Agriculture Soil Conservation Service

WEAK FOUNDATION SOILS

Bearing Strength

The ability of a given soil to support weight is termed the bearing strength of a soil. Strength of a soil is related to this liquid limit, the grain-size distribution, and the shrink-swell capacity of the clay content. Soils with a large proportion of the particles in the clay size have low strength. The larger particles a soil has, the higher is its bearing strength. Compaction of soils under loads can be a problem with low strength soils. This could cause a dwelling to settle unevenly and if severe enough, could cause extensive damage.

The shear strength and load-bearing capacity of most Independence soils (**Table 2**) have low to very low shear strength and low load bearing capacity.

Shrink-Swell Potential

Shrink-swell potential is the relative change in volume to be expected of soil material with changes in moisture content. The extent of shrinking and swelling is influenced by the kind and amount of clay in the soil. Soils with a high shrink-swell potential can cause much damage to dwelling or building foundations and driveways. The swelling of these soils can crack and displace foundations and pavement.

Shrink-swell potential for most of the soils in the city are moderate to severe and could cause damage to structures due to expansion and contraction.

EROSION

The erosion hazard for most soils in Independence is slight due to very gentle to flat slopes. Slopes along the Willamette River were observed to be the steepest in Independence and pose the highest local erosion hazard, especially if they are disturbed. Vegetation removal, or earthwork, will increase the erosion hazard for soil types in Independence because they are composed of small particles, readily detached by the impact of raindrops and transported by flowing water.

LANDSLIDE HAZARDS

Landslides are a natural process defined as the perceptible downslope movement of soil, rock, and vegetation under the influence of gravity. Landslides are triggered by both natural and human-induced changes. Landslide hazards in a particular area are studied beginning with an inventory of existing landslides in order to identify the key local causal factors. Natural landslide hazards are related to several factors that include slope, soil and rock strength, and ground and surface water. In general, areas with steep slopes, high groundwater tables, and highly weathered rock are prone to sliding. Human activity can increase natural slide hazards.

As mentioned in the previous section, most of Independence has very gentle or flat slopes and therefore faces little risk of landslides. The only area in Independence that could experience landslides is along the Willamette River bed. Due to the close proximity to the Willamette River, development is unlikely to occur on these slopes.

REFERENCES

Flück, P., R. D. Hyndman, and K. Wang (1997) "Three-dimensional dislocation model for great earthquakes of the Cascadia subduction zone" *J. Geophys. Res.*, *102*(B9), 20,539–20,550.

Itemizer Observer. March 14, 1963.

Lewis, Don. 2007. *Oregon Statewide Seismic Needs Assessment: Implementation of Oregon 2005 Senate Bill 2 Relating to Public Safety, Earthquakes, and Seismic Rehabilitation of Public Buildings.* Oregon Department of Geology and Mineral Industries (DOGAMI): File Report O-07-02. Online at: **www.OregonGeology.com**.

Madin, Ian, Priest, G.R., Mabey, M.A., Malone, S., Yelin, T.S., and Meier, D., 1993, March 25, 1993 Scotts Mills Earthquake—western Oregon's wakeup call: Oregon Geology, v. 55,
p. 51-57.

Wang, Yumei and J.L. Clark. 1999. *Earthquake Damage in Oregon: Preliminary Estimates of Future Earthquake Losses.* DOGAMI: Special Paper 29.

NATURAL HAZARDS AND DISASTERS

GOAL: To protect life and property in Independence from natural hazards and disasters.

Policies

1. Independence will not permit development other than open-space park uses within the floodway.

2. Independence may allow development in the floodway fringe provided the development is adequately flood-proofed.

3. Independence shall not allow subdivision development in any area containing soils with a severe rating for the intended use, (according to the ORS-1 soils sheets) without first requiring a soils engineer's report detailing the necessary protective measures to prevent possible soils related damage.

4. Independence shall not allow subdivision development in any area with a poor drainage class (according to the ORS-1 soils sheets) unless a site grading plan is included with the building plans that show run off and grading away from the structure.

5. Independence shall attempt to preserve Coburg and Woodburn soils for dwellings without basements.

6. Independence shall, in areas of high shrink-swell potential, encourage non-intensive uses.

7. Independence shall limit future development to area serviceable by sewer and water lines.

8. Independence shall consider adjustments to the flood hazard boundary when updates become available.

9. Independence will promote earthquake hazard awareness and hazard mitigation activities in the community by periodically providing information to residents in their utility bill and displaying pamphlets or other literature related to this topic at city hall.

10. Independence will work with other federal, state and local agencies to coordinate an assessment of the level of earthquake preparedness in the community and vulnerability of key public facilities. Prioritized lists of hazard reduction activities will be developed.

11. Independence will continue to participate in the National Flood Insurance Program. Independence will apply the floodplain overlay zone standards to new development that occurs within designated 100-year floodplains.

12. Independence will protect transportation facilities and plan for emergencies. Transportation facilities and services located in floodways and floodplains must be designed and constructed to withstand flooding or excessive damage will occur. Emergency management plans and routes must take into account which routes are likely to be closed during flood events and identify alternative routes.

13. Independence will support implementation of the Polk County Natural Hazards Mitigation Plan.

14. Independence will continue to implement the Storm Drainage Master Plan and install facilities as funding becomes available.

15. Independence will prevent new storm water runoff problems by requiring storm drainage and erosion plans for new development as required by the Independence Development Code.

PUBLIC FACILITIES AND SERVICES

INTRODUCTION

Public facilities and services are of great importance to the general welfare of a community. Various levels of government or private institutions either own or operate these facilities for the benefit of the community. Some of the services provided are necessities of life, such as sewer, storm sewer and water, whereas others substantially enhance the quality of life, such as schools, park and recreation facilities. Considering the continued population growth, rising living standards, increased leisure time and educational expectations, the City anticipates an increased demand for various types of public services within the planning period. Advance and systematic planning of these public facilities is essential to assuring that the City meets future demands.

A. WATER SYSTEM

The 2023 City of Independence Water System Master Plan guides the development of the Independence water system. Characteristics of the existing system as well as planned improvements to the system are noted within the plan. City policies for the water system are articulated below.

B. SEWER SYSTEM

The 2022 City of Independence Wastewater System Facilities Plan guides the development of the Independence sewer system. Characteristics of the existing system as well as planned improvements to the system are noted within the plan. City policies for the wastewater system are articulated below.

C. STORM DRAINAGE SYSTEM

The city has an overall adequate storm drainage system to serve all developed areas. New developments are required to provide storm drainage system compatible with the city system. Outfalls from the city system are drained into either Ash Creek or the Willamette River.

A preliminary stormwater master plan for the cities of Monmouth and Independence was prepared by Whitaker Engineering, in 2001, as a precursor to developing a regional plan. The focus of the plan is on areas of potential new development of those portions of existing systems that may be affected by future development. The preliminary master plan describes the hydrologic and hydraulic analyses of portions of the stormwater management systems of both Monmouth and Independence, identifies pipe segments that may be inadequate for conveyance of estimated stormwater flows, and provides guidance for establishing policies related to stormwater detention strategies and development of stormwater systems. The City will explore various funding options that will fund develop of a master plan. Planned improvements identified in the master plan will be included

The Ash Creek Water Control District, which includes Independence, is responsible for improvement of the Ash Creek channel to prevent damage to property located near or adjacent to the Creek. The District's Five-Year Plan 1999-2003 calls for a number of structural improvements to Ash Creek including:

- Channel clearing;
- Erosion control;
- Channel widening; and
- Channel alignment.

The District also conducts vegetation control and debris removal along Ash Creek.

D. POLICE SERVICES

The Independence Police Department includes a Police Chief, three (3) sergeants, nine (9) officers, two (2) administrative assistants, and 10 reserve officers. The mission statement of the Police Department is: "To enhance community livability by protecting, the safety, health, and welfare of all citizens by providing professional, efficient, and fair law enforcement, while utilizing partnerships with the community in problem solving efforts."

Emergency services are provided by Salem 911 through the Willamette Valley Communication Center.

Police Department Equipment includes: six (6) marked patrol cars, two (2) unmarked police cars, one (1) speed reader board trailer, and six (6) patrol bicycles. Communications equipment includes: 17 two-way radios, seven (7) cellular/mobile phones, and 13 pagers.

E. FIRE SERVICES

The Polk County Fire Protection District No. 1 provides fire protection for the City of Independence. The mission of the Polk County Fire Protection District No. 1 is to "Serve, Train, Educate and Protect our Community." Its service area is approximately 185 square miles and service population is approximately 20,000 people. The rural district has a staff of 80-90 volunteers and 12 paid positions. Emergency communications services are provided by the Willamette Valley Communications Center.

The Insurance Service Office (ISO) reviews fire districts/departments and applies a fire suppression-rating schedule. Before assigning the rate, the ISO evaluates fire protection services based upon the available water supply, ability to transport water, the number and type of trained personnel, type of available equipment, and handling emergency alarms. Rating ranges from one (1) to ten (10) with number one (1) being the best and number 10 being the worst. In 1998, the City's fire ISO rating was three (3).

The Fire Protection District has 15,000 gallons of water in storage, plus the capacity of the pumpers and tankers. The pumpers have the ability to draft from streams or ponds for additional water.

Apparatus available to the district in 2003 includes the following:

- Two 1993 and one 1992 International H&W Pumpers.
- One 1970 Ford Western States Engine.
- One 1987 Ford Pierce Mini-Pumper.
- One 2002 Sutphen Telescopic Aerial Ladder truck.
- One 1983 Ford 1800 Gallon Tanker.
- One 1988 Kenworth 3000 Gallon Tanker.
- Two 1997 Peterbuilt 3000 Gallon Tankers.
- One 1977 Chevrolet Brush Truck.
- One 1989 Ford Brush/Rescue Truck.
- One 1998 Freightliner Rescue Engine.
- One 2002 and One 1996 Medtech Ambulances.
- One 1992 Road Rescue Ambulance.
- One 1996 Stillenger Rescue Boat.
- One 1991 Kawasaki Water Rescue Jet Ski.

- One 1996 Nash 22-foot Rehab Trailer.
- One 1984 Ford Pick-up for Staff use.

F. SCHOOL SYSTEM

In 2001, there were approximately 2,628 students in the Central School District 13J in 2001. In addition to Independence, the Central School District also includes Monmouth and Rickreall. Table 12 shows that since 1990, school district enrollment has remained near 2,500 students.

Public Facilities Element - Table 12
Central School District Enrollment
1996 - 2002

Year	Enrollment
1990	2,468
1991	2,534
1992	2,544
1993	2,560
1994	2,585
1995	2,606
1996	2,667
1997	2,634
1998	2,674
1999	2,645
2000	2,668
2001	2,628
2002	2,588[1]

Source: Oregon Department of Education, 2003
[1] As reported October 2001.

In September 2002, the new Ash Creek Intermediate School opened adjacent to Central High School. The new school is intended to initially serve 450 students in grades 5 and 6. The school building is designed to ultimately serve 500 students in a K-5 grade configuration by offering two shifts per classroom per kindergarten.

Table 13 shows the October 2001 enrollment figures for schools within the Central School District.

Public Facilities Element - Table 13
Central School District 13J Enrollment and Capacity
By School – October 2001

School	Grades	2001 Enrollment	Capacity
Central High School	9-12	825	814
Eola Elementary School	9-12	25	25
Ash Creek Intermediate School	5-6	NA	500
Talmadge Middle School	6-8	613	544
Henry Hill Elementary School	K-5	326	375
Independence Elementary School	K-5	316	300
Monmouth Elementary School	K-5	494	475
Oak Grove Elementary School	K-5	34	50

Source: Oregon Department of Education, 2003
[1] As reported October 2001.

G. LIBRARY SERVICES

The Independence Library has a present circulation of 40,257 volumes and has 28,935 volumes at present. Construction of a new 7,300 square foot library near City Hall was begun in February 2003. The new facility will be open in September 2003. A significant increase in circulation is expected with the completion of the new library facility.

A bookmobile also serves part of Independence. The library is part of the Chemeketa Cooperative Regional Library Service, which provides improved services to the libraries of Polk and Marion counties, parts of Yamhill County and Linn County, and Chemeketa Community College.

Special services offered by the library include children story hours (also offered in Spanish) a large selection of Spanish books, records, and reading materials, summer children's reading program, after school program, and holiday craft program.

H. SOLID WASTE

Independence does not have a solid waste disposal facility. Local collection is handled by contract with Brandt's Sanitary or by individuals hauling their own waste. Curbside recycling is available to citizens in the community. The company disposes waste at the Coffin Butte landfill near Corvallis.

Citizens are able to participate in a curbside recycling program similar to larger communities in the area. If the City chooses to expand the program, additional opportunities are available but does require an increase in fees.

The City's regional contact is through the Polk County Community Development Department, which administers a solid waste collection franchise ordinance. The Community Development Department also coordinates recycling, and household hazardous waste collection programs.

It is important that the City participate in a regional solid waste management program. A regional solid waste management program strives to maximize the use of existing sites, endorse energy conservation and recycling of wastes, and coordinates solid waste activities of counties in the region. Independence supports a regional solid waste management program that includes recycling opportunities.

PUBLIC FACILITIES AND SERVICES

General

1. It shall be the policy of the City of Independence to investigate the feasibility of cooperation and coordination with other government and quasi-governmental agencies in planning and providing public facilities and services. Wherever feasible, cooperative projects should be promoted to insure the most economic and efficient provision of services to the citizens of the City of Independence.

2. The sizing and location of sewer, water and storm drainage lines is to reflect the requirements of desired land use arrangements and densities of the service area.

3. The installation, repair or resizing of municipal service lines should be done prior to, or concurrent with, street improvements.

Water Service

The provision of water service can be used effectively to guide and promote timely development in Independence. Therefore, it is the policy of Independence that:

1. The City of Independence will implement the water facilities plan adopted in 2023.

2. Extension of water service shall be preceded by an evaluation on the overall benefits to the community.

3. Extension of water service shall be contained to areas within the corporate limits of the city.

4. Preference shall be given to development proposals adjacent to existing water mains.

5. All land use developments are required to install transmission and distribution lines that will provide at least, minimum water pressure and flow for the proposed land use and future land uses.

6. Waterlines and fire hydrants serving a subdivision or new development and connecting it to city mains shall be installed at developers' expense. The installation shall take into account provisions for extension beyond the subdivision or development to adequately grid the city system.

7. The City shall encourage water conservation and the development of a water conservation education program.

8. The City shall actively participate in efforts to develop regional or shared water system facilities.

Sewage Disposal System

The extension of sewer services in Independence is essential to the City's future development since most of the soil is unsuitable for septic tank drain fields. Therefore, it is the policy of Independence that:

1. The City of Independence will implement the Wastewater System Facilities Plan adopted in 2022.

2. Extension of sewer services shall be preceded by a careful evaluation of the costs and benefits of the community.

3. Extension of sewer service shall be limited to areas within the corporate limits of the city unless a recognized public health emergency necessitates otherwise.

4. The City shall coordinate with Polk County to monitor septic tanks both in the City and outside the City within the urban growth boundary.

5. The City shall develop implementation measures necessary to ensure that a sanitary sewer system is provided to urban areas. A Capital Improvements Program will guide and schedule needed improvements.

6. The master plan and capital improvement plan will continue to be the basis of establishing Systems Development Charges for sanitary sewer. The funds will be used to upgrade the sanitary sewer system beyond those improvements required to serve individual developments.

7. All development proposals shall be accompanied by a sanitary sewer plan adequate to meet the above policies and standards, unless waived by the Public Works Director for good cause. No development permit shall be issued for any project until the Public Works Director approves a sanitary sewer plan.

8. New subdivisions and areas of development shall pay for the cost of sanitary sewers installed to serve the subdivision and to connect the subdivision to existing mains.

9. The sizing and location of wastewater lines shall reflect meet requirements of the desired land use arrangements and densities of the service area.

Storm Drainage

1. The City shall develop a stormwater master plan for the Independence urban area

2. All storm drainage is to be channeled into an effective storm drainage system.

3. All new developments shall install engineered and City-approved storm drainage facilities along with other improvements.

4. Drainage facilities shall be provided in subdivisions and developments and shall connect to drainage ways and storm sewers outside the subdivision at developers' expense. The design shall consider the capacity and grade necessary to maintain unrestricted flow from areas draining through the subdivision.

5. Storm drainage improvements through already improved lands will be accomplished as the need arises using resources of bond issues or other funds depending upon the scope and expense of the project.

Schools

Recognizing the need for identifying additional school sites is important to the planning process. It is critical to reserve adequate acreage in a suitable location in order to have the site available when needed. Therefore, the following policies have been formulated as a guide to the future location of schools:

1. The City of Independence recognizes the need and the ability of the Central School District to plan all elements of the services they provide. However, the City shall encourage and promote cooperative planning between the city and the district regarding any development or program having a direct bearing on school location or city services.

2. The location of future school sites should be planned to provide locations apart from existing schools and as near the center or residential neighborhoods as possible. Locations should be accessible from collector or arterial streets, however, should be set back far enough to protect the teaching environment from noise and pollution and the student population from dangerous pedestrian-vehicular traffic conflicts.

3. Future school sites should be sufficiently large to provide school facilities that may be expanded as the need arises. Encouragement should be given to multi-uses of school property such as open space and neighborhood parks.

4. Wherever possible, schools should be planned to serve multiple community purposes. In addition to normal school operations, schools can be used for other activities such as meetings of various types of community and civic groups and as a place to hold various community functions such as public meetings, charitable events, theater presentations, etc.

Solid Waste

The amount of solid waste generated in Independence warrants management. To achieve the proper disposal of solid wastes and keep environmental hazards to a minimum, it is the policy of the City of Independence to:

1. The City shall conserve natural resources and reduce the solid waste requiring disposal by supporting and encouraging recycling of solid waste.

2. The City shall support the regional solid waste program administered by Polk County.

Police, Fire Protection and Ambulance Service

Police, fire protection and ambulance services are crucial factors for the safety and well-being of the citizens of Independence. Therefore, it is the policy of Independence that:

1. Public Safety services shall be maintained at a satisfactory level to protect the citizens of Independence; and

2. Mutual aid agreements and other types of cooperative public safety agreement shall be continued at their present level and expanded in the future where feasible; and

3. New developments shall be carefully evaluated to determine the effects the development may have on public safety services. Should the development have more than a minimal effect on public safety services, the development shall not be approved.

Library Services

Library services play an important role in the well-being of a community be affording all citizen success to reading materials and other library related services. Therefore, it is the policy of Independence that:

1. The City will encourage use of the library and its facilities; and

2. The City will continue to support the Chemeketa Cooperative Regional Library Service in its efforts to improve library service in the region.

WILLAMETTE GREENWAY

Introduction

The land immediately adjacent to the Willamette River, beginning at Dexter Dam and the Cottage Grove Reservoir, extending northward to the Columbia River, including the Multnomah Channel, is the Willamette Greenway. The area encompasses land no less than 150 feet from the ordinary low water line, not to exceed an average of 320 acres per river mile.

The overriding purpose of the Willamette Greenway is to protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River.

The purposes of the Greenway are to be accomplished through exclusive farm use, flood plain setback, and other zoning. Except as provided by law; lands, or interests therein, will only be acquired on a willing-seller basis. The intent of the Greenway Program is to keep the majority of the land along the river in private ownership, while protecting the public's right to its enjoyment.

History

The initial Willamette River Greenway legislation was passed in 1967 to establish a recreation system to acquire lands for scenic and recreational purposes along the river. In 1967, the State Legislature changed the name of the Willamette River Park System and removed certain condemnation powers contained in the earlier act.

The 1973 State Legislature enacted ORS 390.310 to 390.368 establishing the Willamette River Greenway. This law required DOT to prepare a plan for the development and management of the Greenway in cooperation with local governments. The State Parks Division contracted with consultants to develop a preliminary Greenway Plan. Public hearings were held and advisory committees were formed. In October, 1974, DOT published the consultant's work entitled Preliminary Willamette River Greenway. The document contained a plan based on an inventory and analysis and other background data. The DOT staff revised and edited the plan portion and produced a second document entitled the Willamette River Greenway. This plan was adopted by the Oregon Transportation Commission on April, 1976.

The law required the Land Conservation and Development Commission to review and approve the plan before implementation. In June, 1975, DOT sent the plan to LCDC for such a review. During September and October of 1975, LCDC held public hearings and determined that the plan was not consistent with the State law. LCDC drafted the Greenway Goal #15 and an Interim Greenway Order controlling land use within the Greenway. In November, 1975, LCDC held public hearings on its draft and adopted it in December, 1975.

The program was then sent to DOT and local governments to revise the boundary and to develop management and land use plans for the Greenway consistent with the State Goals and Guidelines.

The Law

The authority for the Greenway program is provided by ORS 390.310 through 390.368. The 1973 State Legislature determined a need to establish a program of river lands control that would, "...protect and preserve the natural, scenic and recreational qualities of lands along the Willamette River..." as well as significant historic sites. The Legislature made the following findings and policies regarding the intent of the Greenway.

1. It is in the public interest to protect and preserve natural, scenic, historic and recreational qualities of lands along the Willamette River.

2. It was recognized that a coordinated planning effort is necessary.

3. It is necessary to recognize that existing uses must continue and intensification and change in uses should be limited.

4. It was recognized that farming is compatible with the intent of the Greenway and should not be restricted.

5. The need for central coordination was realized and the responsibility of the development and maintenance of the Greenway.

6. There is no need for public ownership of all lands along the river.

The law requires that a Greenway boundary be drawn which includes, "...all lands situated within 150 feet from ordinary low water line on each side of each channel of the Willamette River and such other lands along the Willamette River as the Department and units of local governments consider necessary for development of such Greenway."

The Goal

The Greenway law provides little explanation of how the plan and management programs should be accomplished. Because of insufficiency of the law to fully explain the jurisdictional interests in the plan and how to complete one, the LCDC adopted a Greenway Goal. The goal sets a framework for coordinated comprehensive planning on the Greenway issue.

The LCDC goal statement is "To protect, conserve, enhance, and maintain the natural, scenic, historic, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway." The goal requires an inventory of resources, uses, and rights associated with the Greenway area, as well as a list of considerations and requirements that must be addressed in planning for the Greenway.

The goal requires that Greenway planning be consistent with all of the State Goals and Guidelines. The goal outlines the required contents of the DOT Greenway Plan and the comprehensive plans of cities and counties.

Implementation measures are also required as a part of the planning process. The "Greenway Compatibility Review" process must be established by county ordinance for the review of intensification, change of use or developments within the Greenway boundary.

The Greenway goal is the mechanism for clarifying the state and local interests in the Greenway while providing a central objective for achieving the intent of the legislation.

The goal further requires the DOT Greenway Plan to consider:

1. The Willamette Greenway boundaries.

2. All of the legal requirements.

3. Use management.

4. Areas to be acquired.

The City Role

The LCDC goal clarified the city's role in planning the Greenway by indicating that it must be incorporated into the comprehensive plan and administered through implementing ordinances. After the boundary has been cooperatively determined by the city and the state, it becomes primarily the city's responsibility to implement the program.

The report and Greenway policies will make the Greenway component of the Comprehensive Plan. The boundary was approved by the LCDC in October, 1977.

A Willamette River Greenway line must consider an inventory of 15 items. The existing line adopted by the LCDC considers these criteria. Before a change of the line can happen there must be an inventory of these items. Proof must be offered that the requested change is more consistent with the intent of the Greenway statutes relative to these 15 items than the existing line. These 15 items appear below:

1. All agricultural lands as provided in Goal 3. This includes all land currently in farm use as defined in ORS Chapter 215.203(2);

2. All current aggregate excavation and processing sites, and all known extractable aggregate sources;

3. All current public recreation sites, including public access points to the river and hunting and fishing areas;

4. Historical and archaeological sites;

5. Timber resources;

6. Significant natural and scenic areas, and vegetative cover;

7. Fish and wildlife habitats;

8. Areas of annual flooding and flood plains;

9. Land currently committed to industrial, commercial and residential uses;

10. The ownership of property, including riparian rights;

11. Hydrological conditions;

12. Ecologically fragile areas;

13. Recreational needs as set forth in Goal 8;

14. Other uses of land and water in or near the Greenway;

15. Acquisition areas which include the identification of areas suitable for protection or preservation through public acquisition of lands or an interest in land. Such acquisition areas shall include the following:

a. Areas which may suitably be protected by scenic easements;

b. Scenic and recreational land for exclusive use of the public;

c. Sites for the preservation and restoration of historic places;

d. Public access corridors;

e. Public parks;

f. Ecologically fragile areas; and

g. Other areas which are desirable for public acquisition may also be identified if the reasons for public acquisition for the Greenway are also identified.

Inventory

The following data is provided to determine the nature and extent of the sources, uses and rights associated directly with the Greenway. This inventory must be used as a source for determining the location or relocation of a boundary, and possible policies for the city Greenway Program. The inventory consists of the following narrative and the accompanying maps.

Agriculture

The statewide planning goals define agricultural lands as land with Class I-IV soils according to the SCS soil survey information. Virtually all soils between the Willamette River and the Southern Pacific right-of-way are Class I-IV. By definition, the area in question is definitely agricultural land. Much of the area in the north and south edges of the land between the Southern Pacific right-of-way and the river (study area) is in agricultural use. The center section near the downtown area of Independence is subject to a mixture of uses including residential, industrial and commercial. However, these uses do not exist below the first terrace line that runs parallel to Main Street, roughly 100 feet east.

Aggregate

Valley Concrete and Gravel has a large gravel operation at the River's edge very near downtown Independence. The source for the gravel is a river gravel bar owned by the state and leased to the operator. The processing plant is a long-term use in its present site. The gravel source is essentially the river. Within the city's jurisdiction, there are no other processing sites or extractable aggregate sources.

Recreation

Just north of the above mentioned sand and gravel operation, there is a public park, Riverview Park, (approximately 11.85 acres). The park lies between the Willamette River and Main Street. Expansion of this park is a possibility that has been talked about in the past. The park is currently owned by Independence and provides access to the river as well as boat landing facilities.

Beginning at a point approximately 2800 feet south of the Independence bridge and continuing north; the State owns an old railroad bed adjacent to the river. The parcel described is the width of the right-of-way and actually extends into the river. The parcel continues along the river bank to the southern edge of the previously described sand and gravel operation. This strip of state property provides access

to the river along a fairly scenic segment. I n total, the strip is roughly 3700 feet of river front property. The lineal nature of the property is well suited for use as a trail.

Historical and Archeological

Ash Creek and the low land immediately adjacent to it is potentially an archeological site. site. Some artifacts, mostly arrowheads, have been found at several Ash Creek locations. Apparently the confluence of Ash Creek and the Willamette River has been an archaeologically significant area for quite sometime.

Historically, the most significant area is the row of buildings on the west side of Main Street beginning at Ash Creek and continuing south for 1100 feet. Portions of these buildings are quite visible from the Willamette River. Another slightly less significant area, but still somewhat important and very visible is the row of buildings east of Main Street and continuing south from Riverview Park for a distance of 400 feet. These buildings have been modified from their original appearance. The back sides of these buildings are very visible from the river. There are historical preservation funds available through the Willamette Greenway Program. It is applicable to only lands within the Greenway boundary. Other parts of Independence have historic significance but the areas mentioned here are most associated with the river and the Greenway Program.

Timber

There are no marketable timber stands in the area immediately affected by the Willamette River. The inventory of timber resources is not included.

Natural Areas

The Nature Conservancy through the Oregon Natural Heritage Program has not delineated any significant natural areas inside Independence's jurisdiction. A natural area is a piece of land, or of land and water, that has substantially retained its natural character, or that – although altered in character – is important as plant or animal habitat, which is set aside for the study and appreciation of its natural features and for the preservation of natural diversity.

Scenic Areas

The overall goal statement of the statewide Willamette Greenway planning goal is, among other things, to protect, conserve, enhance and maintain the scenic qualities along the Willamette River. When considering scenic quality along the river, considerable attention must be given to the landscape as viewed from the river. From the river in Independence the first row of buildings on the first terrace are quite visible. Generally, these buildings are east of Main Street. Several of the buildings on the west side of Main Street in the downtown area are visible from the river. This happens where the first row of buildings does not screen those west of Main Street. Most of the visible buildings are also the historically significant buildings. In the case of Independence, all of the land east of Main Street is visible from Main Street and influenced by the river. In summary, all land east of Main Street (Independence Highway) is very visible from the river. An exception to that exists toward the northern end of Independence's jurisdiction where the primary land use is agriculture and the river bends away from the highway. The agricultural land west of the dike is not visible from the river. The houses west of the agricultural land near the northern end of Independence are not visible from the river either.

Vegetative Cover

The vegetative cover is riparian in nature. Riparian vegetation is very sensitive and provides protection of the water and adjacent lands. In places along the river the riparian vegetation has been removed except for a strip at the waters edge for agricultural uses. The industrial use site is void of nearly all riparian vegetation. The park and residential lands have been landscaped with ornamental species and ground cover. Riparian vegetation is the single most important resource associated with the river and should be protected if at all possible.

Fish and Wildlife Habitat

Naturally, the river provides fish habitat. However, the riparian vegetation is important to the quality of that habitat. Stream-side vegetation plays a major role in water quality. Water quality is essentially habitat quality. Riparian vegetation helps control erosion of adjacent lands and banks. Riparian vegetation helps regulate water temperature and shade. Riparian vegetation helps attract insects that become food. Water quality is very important in terms of fish habitat. Riparian vegetation is important to water quality.

Wildlife habitat in the area adjacent to the river is solely dependent on the stream-side vegetation. Wildlife is attracted by the cover provided by stream-side vegetation with nearby water availability. The type of animal to use the habitat then depends on their tolerance for human presence or food preference. The wildlife near Independence is generally tolerant of human presence. The available food ranges from agricultural crops to ornamental plants. There is also an assortment of bird life adjacent to the river in Independence. Riparian vegetation for nesting and roosting is of importance. With the exception of along Ash Creek, all fish and most wildlife and birds are restricted to the land between Main Street and the Willamette River with most of it being in the area subject to flooding. This area is now void of buildings and should remain so.

Flooding

Much of the area between Main Street and the Willamette River is subject to flooding. From the river landward to the base of the first terrace is all subject to flood. Ash Creek also floods regularly. Most of the area subject to the 100 year flood is not developed in an intensive use. The exception is the sand and gravel site. Uses that would endanger lives if they were to occur in a floodplain have not located in the area prone to flooding. The benefits of this are quite obvious and should continue. The area subject to flood does not lend well to description so reliance on the associated map is suggested.

Land Use

Land use has been briefly described in the agriculture section above. The land uses in the area in question are quite simple. In addition to the above land use explanation, the land use map is descriptive and is indicative of general land uses. Continuation of these land uses into the future is covered in the implementation alternative in this segment of the plan.

Ownership

Except for the local government ownership (Riverview Park) and the State ownership mentioned under recreation, all property owners within the subject area are private. There are just over sixty tax lots in the area east of Main Street and within city limits. Not all sixty of those tax lots are separately owned. There are roughly forty property owners in the same area. Many of the lots with frontage on Main Street are small parcels while the lots below the terrace are generally large lots.

Most property owners own the land to the high-water line. Access to the water is given to all landowners owning land adjacent to the River regardless of the nature of their ownership. This does not include any person except the owner or people the owner gives permission to gain River access through his property.

Oregon recognizes the changes in ownership of land along the River by accretion or diminution. A landowner may gain or lose land as a result of erosion or silt being deposited or changes in the River channel.

Hydrology

When addressing hydrology, the entire Willamette Basin must be considered. The Willamette Basin is the area drained by the Willamette River and all of its tributaries. The Basin is over 12,000 square miles in area. It is bounded on the north by the Columbia River from Bonneville to St. Helens, and on the east, south and west by the summits of the Coast Range, the Calopooya Mountains and the Coast Range, respectively. The north-south length of the Basin is about 150 miles and its average east-west width about 75 miles. The Polk County segment of the Willamette River lies about 20 miles northwest of the center of the Basin. This report will only generally speak to hydrology of the Willamette River, if more information is desired, it can be obtained from the sources listed in the appropriate section at the end of this report. The portion of the Willamette River that forms the eastern boundary of Polk County will be the subject here.

The Willamette is a mature river flowing through a relatively flat alluvial valley. The river meanders widely within its flood plain, which is marked by cutoff meanders, oxbow lakes, braided and distributory channels, and sloughs.

The gradient of the Willamette River flattens from 6 feet per mile to 5 feet per mile as it flows through Polk County. As the river approaches the county, it slows down in velocity. This slowing in velocity results in the river being unable to carry the coarser material it held upstream. It is only able to carry fine grained sediments which are evidence of the rich bottom lands that are attributable to this reach.

Flow in the Willamette River is controlled to some degree the year around by numerous reservoirs on its headwaters and tributaries. The major effect of this upstream control was to establish stable flow conditions. This permits a higher flow during the summer, and allows water to be stored in peak runoff periods.

Runoff is stored in the reservoirs during the winter; these must be released after storms to make room for the next one. The flow is high for a longer period than under non-regulated conditions. This limits the possibility of extremely high water changing the course of the river but the sustained flow has increased bank erosion along low-lying areas near the river.

The average temperature of the river near Salem ranges from 43 - 44 in January and February, up to 58 in the warm summer months. The temperature varies along the course of the river and is generally degrees warmer at Salem than at the point where the Santiam joins the Willamette.

The average annual precipitation in the Willamette Basin is 63 inches. This results in a volume of more than 40 million acre-feet of water falling on the Basin annually. A major portion of this water finds its way to the Willamette and its tributaries.

The regulated minimum flow of approximately 6,000 cubic feet per second (cfs) measured at Salem is needed to assimilate waste effluent after secondary treatment. This treatment level and flow combination is necessary to meet water quality standards for the river.

The 6,000 cfs minimum flow in the Willamette River is partially provided by storage reservoirs in the upper drainage basin. Without augmented flows, the river discharge would drop to approximately 3,500 cfs every summer. Without the augmented flow, secondary treatment of industrial and domestic wastes would not have been sufficient to bring the river up to standards. It must therefore be noted that adequate base is essential to the establishment and maintenance of an effective water quality management plan.

Turbidity, a measurement of particulate, is seasonally high from land runoff. This runoff results in exposure to new gravel areas and the movement of gravel down the river.

The Willamette River meets the State of Oregon Department of Environmental Quality standards for levels of turbidity, BOD (biological oxygen demand) and DO (dissolved oxygen). BOD is the oxygen demand to support life in the river and DO is the amount of dissolved oxygen actually in the river. PH is measured on a scale of I - 10, 7 being neutral, 10 completely alkaline, and 1 completely acid.

BOD levels increase in areas where there is organic effluent released from industries at times when bacterial levels are high due to land runoff. The BOD level varies between 8.5 and 11.5 MG/L (milligrams per liter). PH is generally neutral, 7.0, but may vary from 6.7 to 7.1.

Fragile Areas

Aside from the riparian vegetation found the entire length of the river and varying in width the only other ecologically fragile area is the confluence of Ash Creek. Because of flood potential, riparian vegetation, wildlife habitat, scenic potential, recreation potential, and possible use as a park expansion area, the Ash Creek confluence is a sensitive area. Any development of this site should consider all of the above criteria.

Acquisition

Areas suitable for protection or preservation must be identified for possible public acquisition of the land or acquisition of an interest in the land. According to the LCDC Greenway Goal, such acquisition areas shall include the following:

1. Areas which may be suitably protected by scenic easements;
2. Scenic and recreational land for exclusive use by the public;
3. Sites for the preservation and restoration of historic places;
4. Public access corridors;
5. Public parks;
6. Ecologically fragile areas; and
7. Other areas which are desirable for public acquisition may also be identified for public acquisition may also be identified if the reasons for public acquisition for the Greenway are also identified.

An area just north of Polk Marine Park coincident with the Ash Creek confluence has been discussed as an area for park expansion. If this subject is to come up again in the future it is advantageous to include

the site in the boundary and designate it as an acquisition area. Another future consideration is the extension of a river front trail which is presently a railroad right-of-way. The length of Independence could be served by a trail with either outright acquisition or easement acquisition.

Boundary

The State Law (ORS 390.318) requires that all lands within 150 feet of the ordinary low-water line, on both sides of the Willamette River, be in the Willamette Greenway. In addition, other lands will be included that accomplish the purpose of the Greenway.

All resource characteristics noted in this report and on the inventory maps allow for an objective Greenway boundary determination. It is necessary to identify the lands on which the Greenway considerations, controls, and acquisition will occur. These areas are included within a Greenway boundary.

Vegetation is very important to river stabilization and other resources along the River; in some instances the boundary may follow vegetation lines which quite often follow terrace lines. However, many considerations from the previously mentioned inventory aid in determining a sensible boundary for Independence (see map).

The LCDC adopted boundary adequately protects all resources as inventoried above. A possible exception are the historically significant buildings not within the boundary and thus not eligible for historic restoration grants available through the Greenway Program. However, the view of the buildings from the river is protected because the boundary follows Main Street.

Another possible line with some justification is to follow the 100 year floodplain line. This line is at the bottom of the terrace. At the northern end of the city the 100 year floodplain line would include more land than the adopted LCDC line. The 100 year floodplain line does not include the first row of lots at the top of the terrace. These lots are quite visible from the river and thus does not adequately protect, conserve, enhance, and maintain the scenic resources of land along the Willamette River Greenway.

In the northern end of Independence's jurisdiction a line continuing southward along the river consistent with the minimum line until it intersects with the riparian vegetation line along Ash Creek is adequate. The most flexibility in the line exists in this area. The line could appear as D.O.T.'s line does, along the 100 year floodplain, or following the minimum line until it intersects with the vegetation line. The selected boundary is shown on the appropriate map.

Implementation

Independence will coordinate with the state to implement the Greenway Program. Implementation efforts shall be consistent with the approved DOT Greenway Plan, the City's comprehensive plan, the goals and appropriate statutes.

The Greenway boundary must be shown on the county zoning maps and must be referred to in the zoning ordinance and subdivision ordinance. The city must also establish provisions by ordinance for the review of intensifications, changes of use of developments to insure their compatibility with the Willamette River Greenway. The ordinances must contain the following:

a. The establishment of compatibility review boundaries.

b. A review mechanism.

c. Hearing procedures.

d. Notification of hearing procedures.

e. Mechanism for imposing conditions to carry out the purpose and intent of the Greenway statutes.

The compatibility review can either be done on a case by case basis with individual hearings or at one time through a design plan and administrative review procedure. The small number of existing uses in the Independence Greenway area and the separation of each favors the design plan approach. This approach is administratively the most simple. This mechanism is usually the fastest for the applicant thus aiding the property owner. All development is not excluded, the primary concern is that development be consistent with the intent and purpose of the Greenway Goal. Existing land uses are pre-existing and not contrary to the Goal.

Conclusion

The Willamette Greenway is an effort to conserve, enhance and maintain the natural, scenic, historic, agricultural, economic, and recreational qualities of lands along the Willamette River. The Greenway Program has caused a great deal of public reaction. Much of the reaction has been due to misunderstanding about how the program will be operated and implemented. This report outlines Independence's understanding of the program and clarifies what considerations have been made in determining the location of the boundary on a map. This report further indicates what methods will be used to implement the Greenway Program. This report is intended to illustrate how Independence has achieved the purpose of the Willamette Greenway Program.

WILLAMETTE GREENWAY

GOAL: To protect, conserve, enhance and maintain the scenic, historical, agricultural, economic and recreational quality of land along the Willamette River.

Policies

1. Independence shall cooperate with governmental agencies and special districts to protect all Willamette Greenway lands and resources.

2. Independence encourages agricultural uses within the Willamette River Greenway.

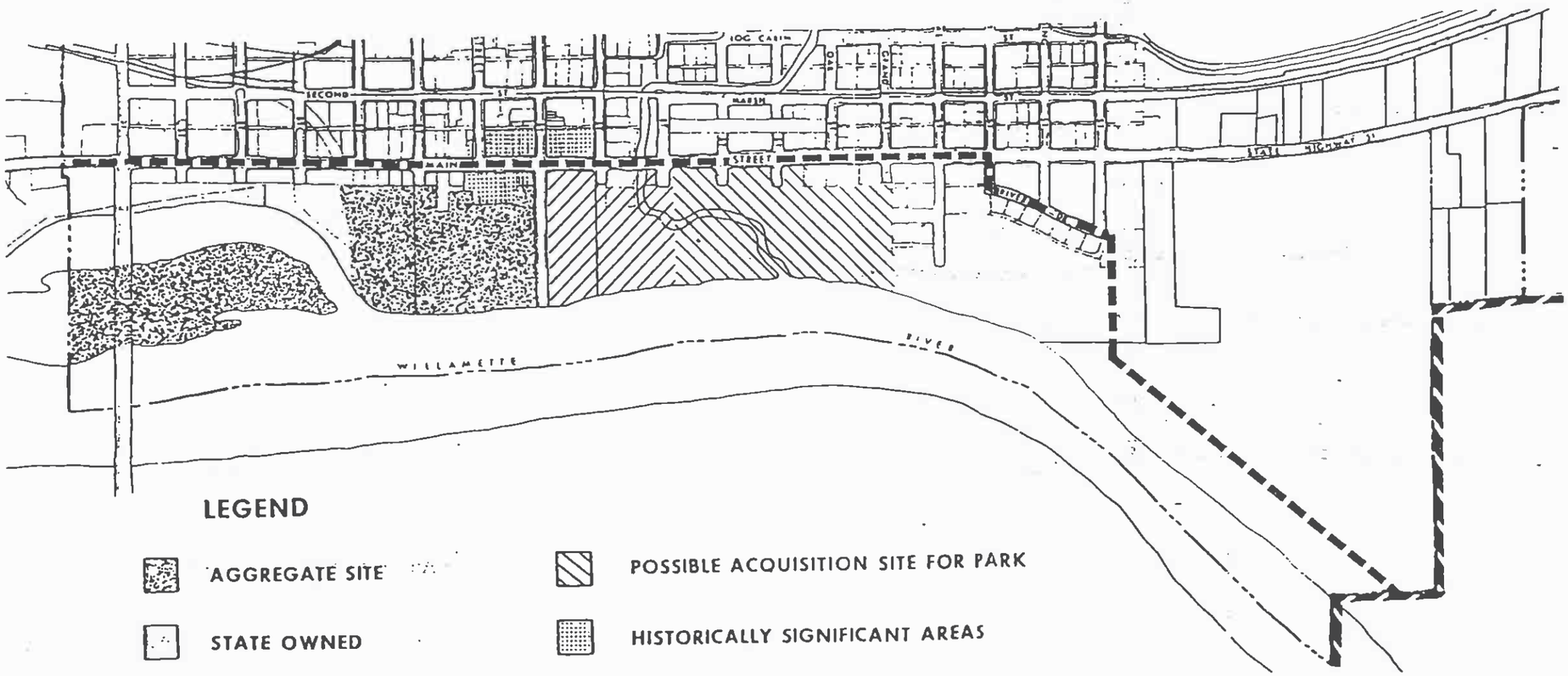
3. Independence considers publicly owned land in the Greenway to have recreational values and will encourage its use as such through implementation of the Independence Parks and Natural Areas Master Plan.

4. Independence recognizes the confluence of Ash Creek as an archeologically significant area, as wildlife habitat, as a potential park expansion area, as a scenic area, as a flood prone area and shall protect it with Greenway Development Code requirements and other implementation tools.

5. Independence recognizes the importance of vegetation to the resource quality along the river and will encourage the preservation of it within the Greenway.

6. Independence shall implement Greenway policies through application of the Willamette River Greenway District provisions of the City's Development Code.

INDEPENDENCE
GREENWAY INVENTORY MAP



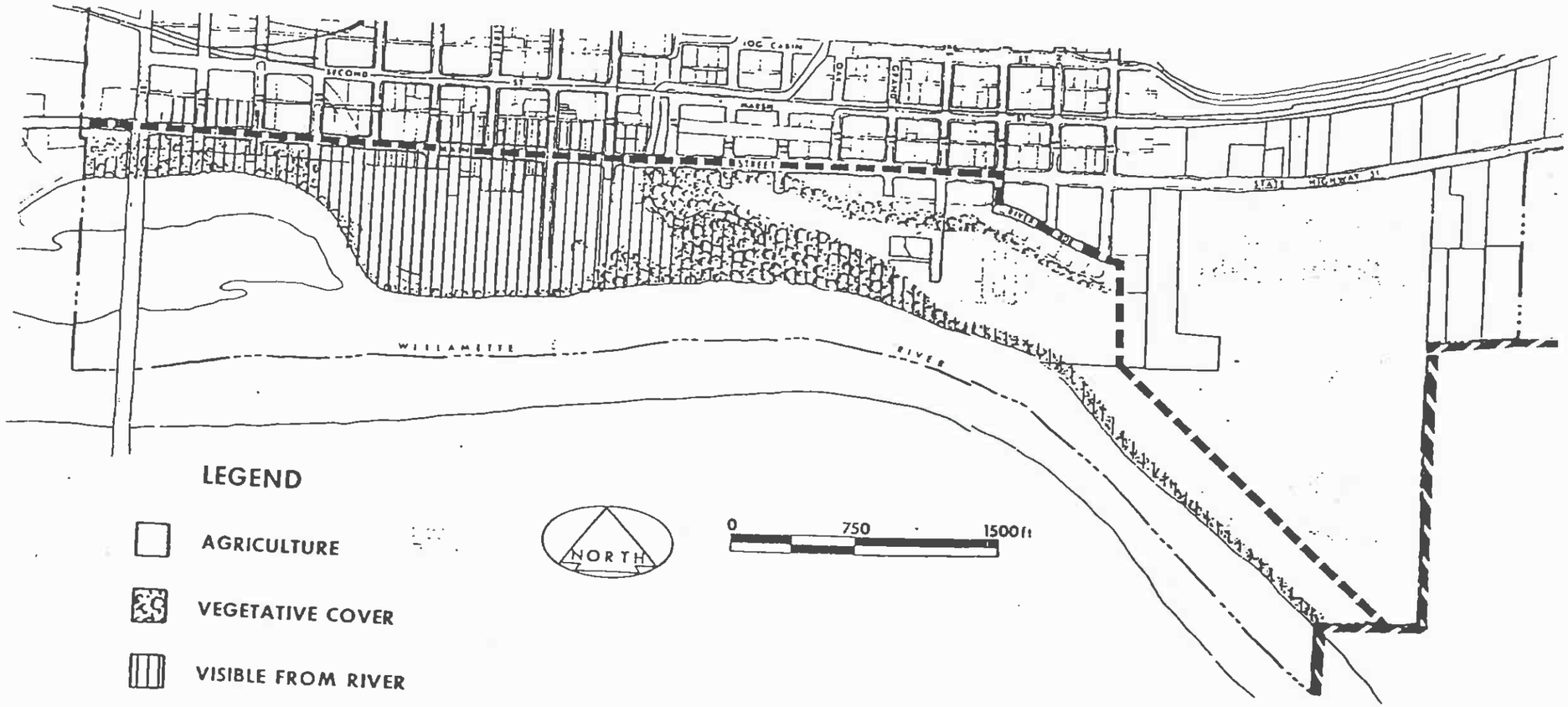
LEGEND

- AGGREGATE SITE
- STATE OWNED
- LOCAL PARK
- GREENWAY BOUNDARY
- POSSIBLE ACQUISITION SITE FOR PARK
- HISTORICALLY SIGNIFICANT AREAS

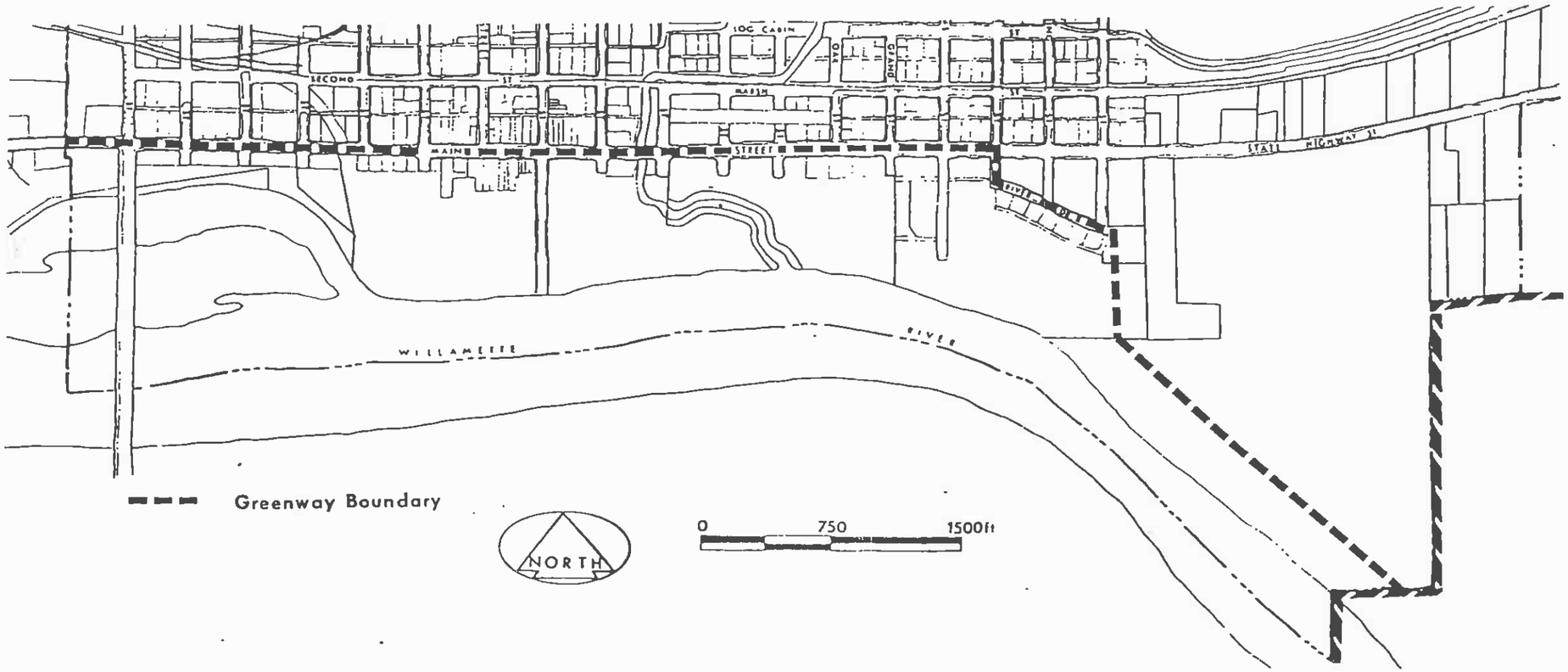
NORTH

0 750 1500ft

INDEPENDENCE
GREENWAY INVENTORY MAP



INDEPENDENCE
PROPERTY LINE MAP



CITIZEN INVOLVEMENT

Independence adopted a Citizen Involvement Ordinance in 1977, a copy of which is available at City Hall. The ordinance provides for the Planning Commission to develop, implement, and evaluate a Citizen Involvement Program.

The Mayor appointed seven citizens to the Citizen Advisory Committee (CAC) and gave them the responsibility for disseminating information on land-use matters to the rest of the community. The CAC is beginning to become more involved with planning related matters than was previously the case.

When the 1975 Comprehensive Plan was developed a series of town hall meetings were held, a questionnaire sent out, and the CAC formed. Since the plan has been developed several years ago, the CAC's enthusiasm (and attendance) had waned. So the committee was reformed.

We began in 1977 by advertising in the Polk Sun that a meeting would be held to form a CAC. While a committee was formed, attendance and enthusiasm were never very high. As time and meetings went on, it became apparent that, a change was in order. Attendance at CAC meetings had dropped to near zero.

So it was decided that more direct, personal approach was needed to re-kindle the area residents interest. So in the middle of April, 1979, a list of participants in the Monmouth-Independence Spring Clean-Up was utilized to call people and personally invite them to a meeting. From this initial meeting the CAC was re-formed. They now meet regularly to discuss planning related issues. We felt that a CAC should not just limit itself to the Comprehensive Plan, but to other things important to the city.

A series of 5 public hearings were held jointly by Planning Commission and City Council. Attendance averaged 20 people per hearing. As a result of the hearings, several changes were made in the plan and the plan map.

IMPLEMENTATION

As a guide for decision making in land use matter, the Comprehensive Plan outlines problems the city is facing and offers solutions to avoid them in the future. However, the Plan is too general in its treatment of problems to effectuate corrective measures without the use of the specific ordinances codes designed to implement the plan's policies. The most common implementation tools available are the zoning and subdivisions ordinances, building and health codes, and capital improvements and community renewal programs. Of these, the zoning and subdivision ordinances and building codes are the most important to implementing this plan. The State health requirements suffice to monitor and regulate the city utilities and other health standards. Capital improvements and community renewal programs have never been officially implemented, although they exist to a small degree in the affairs of the city.

A Capital Improvements Program (CIP), however, would insure that the city's money is being spent wisely. In essence, it involves prioritizing projects in order of importance to the city and then assigns dollars to carry out the work. No community has enough money to accomplish all the projects that it feels are necessary, however, the C.I.P. would insure, at least, that those high priority projects would be given first consideration for available funding.

Subdivision Ordinance

The City's subdivision ordinance was adopted in 1962 and, had not been maintained to reflect recent changes in State legislation. Consequently, the city adopted new subdivision regulations in conformance

with Chapter 92 of the Oregon Revised Statutes. The ordinance contains provisions to insure, among other things:

1. A safe water supply and adequate sanitary and storm sewerage;

2. The safe design and proper construction of new streets, pedestrian ways, utilities and drainage systems;

3. A record of the location of underground utilities;

4. Adequate design and construction of water systems to meet minimum fire-flow requirements;

5. The reservation of needed school sites and recreation and open space areas, and;

6. Buildable, properly oriented, well-drained lots.

Building Codes

The City of Independence uses the Uniform Building Code with amendments specifically tailored to the State of Oregon, Oregon Revised Statutes (ORS) Chapter 456 sets forth the statutory requirement for their use. As such, it is anticipated that the City will continue to utilize the UBC in administering its building inspection program.

The cities of Independence and Monmouth also are involved in a cooperative program whereby some municipal facilities and are shared.

Among them are emergency services, when available local units are overtaxed, and a building inspector. It is anticipated that this program will continue.

PLAN REVISION

The procedure for revising or updating the 1979 Plan will essentially be the same as the process the city went through before. That is, a citizen committee or group of committees will meet regularly to discuss the problems, assess the city's current situation and make policy recommendations responsive to the community's needs. Through the public hearing process, then, those policies will be refined into a revised and updated Comprehensive Plan for Independence.

The first major revision will occur in five (5) years, in 1984. The data base from which the current Plan was drawn may have changed considerably by that time. Minor revisions should not occur more often than once a year unless some extraordinary situation occurs. Table 33 displays the procedure for different types of plan amendments.

TABLE 33

CITY OF INDEPENDENCE
PLAN AMENDMENT PROCEDURES

A. Amendments to the Urban Growth Boundary

Amendments to the urban growth boundary must be concurred in by the City of Independence and Polk County.

B. Amendments to the Comprehensive Plan Other than Amendments to the Urban Growth Boundary

Amendments to the comprehensive plan which apply within the urban growth boundary must be concurred in by the City of Independence and Polk County. Amendments to the comprehensive plan which apply only within the City's incorporated limits may be enacted by the City.

C. Notice

Notice of all proposed amendments which apply within the urban growth boundary must be given to Polk County.

D. Legislative Amendments

Amendments to the urban growth boundary or to other parts of the comprehensive plan which are legislative in character shall be adopted in accordance with Oregon law form the enactment of legislative acts.

E. Quasi-Judicial Amendments and Rules of Procedure

Amendments to the urban growth boundary or to other parts of the comprehensive plan which are quasi-judicial in character shall be adopted in accordance with Oregon law for taking quasi-judicial action. The City should adopt rules of procedure to govern the initiation and processing of amendments to this plan.

F. Review and Revision

The Independence Comprehensive Plan shall be subject to major review and where necessary, revision every five years commencing in 1984. Except for quasi-judicial plan changes, plan amendments should, wherever possible, be reserved for those years when the plan undergoes major review. The plan and implementation measures will be routinely reviewed at least every two years with revision being made where necessary.

G. Initiation

A plan amendment may be initiated by any owner of real property in the City or by any person residing in the City or within the Independence Urban Growth Boundary.

CITIZEN INVOLVEMENT

GOAL: To provide opportunities for citizen involvement and to encourage participation by area residents.

Policies

1. Independence shall develop and maintain a Citizen Involvement Program.

2. Independence shall use news media, mailings, meetings and other locally available means to coordinate planning information to citizens and governmental agencies.

3. Independence shall notify the public by use of signs or posters of any land use action occurring within the city urban growth boundary.

4. The Independence Committee for Citizen Involvement will periodically evaluate the Citizen Involvement Program and report on the status of the program to the Planning Commission, City Council and the State Citizen Involvement Advisory Committees.

ENERGY CONSERVATION

Introduction

The energy conservation element of the Comprehensive Plan is divided into three sections: resource inventory, energy use, and a conservation section. Most of the information found in this element of the plan was drawn from either the Salem Urban Area Energy Study (COG, 1978) or the Energy Background report (Bunn, 1978) of the Polk County Comprehensive Plan. Both of these reports are available from either Polk County Planning Division or City of Salem, Planning Division.

Resource Inventory

Almost all of the energy that Independence uses must be imported from outside the City. Since there is no electricity generated within the City, the City must rely on outside sources This is true of natural gas and propane as well.

There are two possible indigenous sources of energy. The most promising is the use of the heat from the sun. It can be used for space and water heating. The solar alternative is becoming more feasible every year.

The second source of indigenous energy is biomass conversion. There are two possible uses of biomass—one is to burn it, thus producing heat; the other is to ferment it to produce a gas. Currently neither of these alternatives provide incentives high enough for the City to consider large scale use.

Energy Use:

Residential Sector - Space heating consumes the largest of all home energy use. The energy study done by COG in 1978 shows that 68% of the total energy consumption is used for space hearing (see Table 19). The next major type of energy use is for water heating (14% of total). It is assumed that the figures for Salem would be similar to those for Independence. In any event, the proportion of dollars spent relative to each other is what is important.

Table 29 displays the Salem Urban Area Residential Consumption of Energy for 1970. While Salem is very different from Independence in that it is a large urban area, the basic housing type tends to remain the same. For further information on residential energy use, please refer to the Energy Background Report and the Salem Urban Area Energy Plan.

Commercial Sector - Natural gas appears to be the most requested type of heating used in the downtown area followed by electricity (Karren, Personal Communication). By the year 2000, costs for this natural gas are projected to be 31 times the 1970 cost for natural gas (Bunn, 1978). Electrical costs are expected to rise by 20 times. Consumption of energy is expected to double (Bunn, 1978).

Industrial Sector - Natural gas appears to be the most common form of energy used by the manufacturing plants in Independence. Electricity is second in actual BTU's consumed (Bunn, 1978). Propane and other petroleum products are utilized in lesser amounts.

At the present time, little research has been done on the generation of power at the plant site (or on the possibility of co-generation of power) for the individual plants found in town. With de-regulation of oil

prices and the rising costs of electricity and natural gas, this local method of power production may become cost effective in the near future.

Transportation Sector - In 1970 about 24 million gallons of motor fuel was consumed in Polk County (Bunn, 1978). If we scale this down to Independence, we get about 1.76 million gallons for 1970. About 76 percent of motor fuel is used by automobiles, trucks only use 13 percent. The study projects an increase of $260 million by the year, 2000 for the Salem Urban Area (COG, 1978).

Energy consumption by the auto sector is expected to increase approximately 1.6 times, with costs increasing 17 times. Energy consumption by the truck sector is expected to double, with costs increasing 22 times (Table 29). For autos, that is an increase of from $5.76 million in 1970 to $96 million in the year 2000; for trucks, from $.992 million in 1970 to $21.44 million in the year 2000.

Energy Conservation:

Residential Sector - Insulation of houses is one of the most important consideration with regard to conservation of energy. Electricity costs make up about 68% of the total residential energy costs, and is expected to continue to be the dominant energy form. Costs for electricity are forecast to raise 17 times the current price levels. The process of natural gas and petroleum products is also expected to raise by 27 and 24 times respectively (Bunn, 1978). Thus retrofitting houses with adequate insulation will save many dollars.

The City can help energy conservation efforts in new housing by either encouraging or requiring by Ordinance, solar orientation to take advantage of passive solar heat.

A publication by the Yamhill County Energy office describes in depth some of the possibilities for conserving energy through planning techniques. Independence shall investigate those techniques (such as setback requirements, solar orientation and housing standards for insulation and thermal storage) as a part of the next plan revision.

Commercial Sector - Many of the conservation techniques available to the residential sector are available to commerce as well.

Commercial buildings can be weatherized, insulated, solar-oriented (in some instances), landscaped (for climate improvement), and situated within the urban environment in such a way as to conserve transportation fuel just as in the residential sector.

The differences, however, are due to such things as limited building usage and the overheating potential developed because of high lighting levels and high density human occupation. (Yamhill Co., 1977, page 36)

The Yamhill County study compiled the following energy saving suggestions for commercial establishments.

1. Increase the use of sunshades, both interior and exterior;
2. Use reflective or heat-absorbent glass;
3. Locate structures to minimize 'heating-loading" (30% heating or cooling load reduction can occur through property orientation);
4. Increase structural mass and use highly insulative materials;
5. Increase plantings;
6. Extended building usage.

As in the construction or repair of new homes, greater attention must be given to the 'lifecycle cost" of commercial buildings so that the end use and operating efficiency maximize the concept of energy conservation.

Industrial Sector - Co-generation of electricity (using waste heat to generate electricity, or generating electricity and using waste heat from that for the industrial process) is a definite possibility for Independence to consider.

Another possibility is a community heating system. Waste steam or heat from, for instance a foundry or lumber mill could be used to heat nearby residences.

When the city considers additional industry for Independence, a primary consideration should be its ration of energy consumption to number of employees. Energy demanding industries will begin to find that, as energy becomes scarce, the increased costs to their plant mean also increased costs to all taxpayers. With the energy "crunch" upon us, the city will need to consider carefully the effects of a large increase in energy consumption upon the local taxpayers.

TABLE 29

SALEM URBAN AREA RESIDENTIAL COMSUMPTION OF ENERGY, 1970

	ELECTRICITY		NATURAL GAS		PETROLEUM			PERCENT
END USE	BILLION BTU	PERCENT OF TOTAL	BILLION BTU	PERCENT OF TOTAL	BILLION BTU	PERCENT OF TOTAL	TOTAL BTU	OF TOTAL
SPACE HEATING	664	36.0%	965	86.0%	1340	97.3%	2970	68.1
WATER HEATING	458	25.0%	139	12.0%	31.3	2.3%	628	14.4
COOKING	145	7.8%	24	2.2%	6.6	.5%	176	4.1
CLOTHES DRYER	78.	4.2%	1.8	.16%	---	---	80	1.9
LIGHTING	127	6.9%	---	---	---	---	127	2.9
OTHER	386	21.0%	---	---	---	---	386	8.9
TOTAL	1858	----	1130	---	1378	---	4367	---

SOURCE: Energy Consumption in the Pacific Northwest, 1971, Environmental Research Center, Washing State University, Pullman, Washington, April 1974. (Table 20)

ENERGY CONSERVATION

GOAL: To conserve energy.

Policies

1. Independence shall encourage development and utilization of methods to conserve energy by all area residents.

2. Independence shall conserve energy within city administration.

3. Independence shall encourage energy efficient transportation alternatives to the private auto.

4. Independence shall make available to the public, information on energy conservation measures.

5. Independence shall investigate the energy conservation measures presented in the Yamhill County "Relationships of Energy to Land Use" (Yamhill County, 1977), and adopt relevant parts of use in Independence.