CHAPTER 14
GOAL 14: URBANIZATION

SECTION 14.0 URBANIZATION GOAL

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

SECTION 14.1 URBANIZATION BACKGROUND AND DISCUSSION

Urbanization is the process of converting rural land to urban uses, with supporting public facilities and services. The City has more than enough land to accommodate future development for many years beyond 2016, the 20-year planning horizon, according to the Buildable Lands Analysis and Future Lands Needs Analysis under Sections 14.2 and 14.3. However, some re-assignment of plan designations was necessary to accommodate all needed land uses.

14.1.010 Future Industrial Development

The Port of Umatilla established an industrial park that accommodates businesses which are regional employers. These businesses frequently need large sites. There is the potential that additional land will be needed for industrial development, depending on how quickly industrial land is utilized. Super-siting of the Two Rivers Correctional Facility consumed nearly 300 acres of the Port's designated industrial land.

The City identified approximately 250 acres of vacant and developable industrial land, with 209 acres owned by the Port of Umatilla. The City projected a need for an additional 118.5 acres of industrial land. However, a few large businesses could utilize the entire land supply much sooner than anticipated. Therefore, the City evaluated potential areas that are suitable for industrial uses and determined that 320 acres owned by the Port would be the most appropriate location.

The Port land is located east of Beach Access Road and south of the Two Rivers Correction Facility. Public sewer and water are available within the right-of-way of Beach Access Road. The land is not suitable for agricultural use due to lack of water holding capacity of the soil and extremely shallow soil depths through most of the site.

Although there is no identifiable need for additional industrial land at present, the City will work with Umatilla County to establish policies that identify the Port properties as suitable for including within the City's Urban Growth Boundary when the industrial land supply is reduced below a 20-year supply, or a very large industrial use wishes to locate in the Port.

The need to expand the City's Urban Growth Boundary to add industrial land may appear inconsistent with the finding that the present UGB contains far more land than will be needed for all land use categories for the next 20 years. However, the City analyzed other possible locations for changing current designations to industrial, and identified why each alternative location is unsuitable. These reasons are discussed in detail in Section 14.8, but generally include lack of public facilities and expense of extending services to sites; lack of adequate public roads; poor

connections to the existing transportation system, including major streets, rail, and water; proximity to existing and planned residential development; and the "nuisance factor" of locating industrial uses downwind from residential and commercial uses. Based on these factors, the City concluded that the Port is the most suitable location for future industrial development.

14.1.020 Land Uses within the Urban Growth Boundary

The City has the ability to plan, but not to regulate, land use in areas outside of the City limits and within the Urban Growth Boundary. Approximately half of the area within the Urban Growth Boundary is outside of the City limits. The City considers it essential to wisely manage the land supply within the Urban Growth Boundary in order to protect agricultural uses outside of the UGB. The City will work with Umatilla County to establish appropriate measures to protect land within the UGB for future development with urban uses and densities.

14.1.030 Developable Areas

The determination of land that can be regarded as suitable for development is an important consideration with respect to future growth of the City of Umatilla. This analysis entails the identification of the physical and cultural features of the land:

Slope	Gravel pits	Soil erosion
Flood plain	Agricultural land	Geological faults
Areas with basalt at or near the surface	Seasonally high water table within 24" of surface	Wildlife habitats
Major utility easements	Federal and State government ownerships	Significant natural, historic, or archeological features

The identification of agricultural lands is of major importance in this analysis. Agricultural lands have been separated into two categories in this process with criteria suggested as follows:

a. <u>Agriculturally suited lands within City limits</u>:

- SCS soils classification of I-VI (without irrigation)
- Parcel must be larger than 5 acres (as per City's A-1 zone)
- Land must not be urbanized or committed to development
- Soil not affected by salts or alkali

b. <u>Agriculturally suited lands outside City limits</u>:

- SCS soils classification of I-VI (without irrigation)
- Parcel must be larger than 19 acres (as per County's F-1 and F-2 zones)
- Land must not be urbanized or committed to development
- Soil not affected by salts or alkali

Land that does not meet these criteria will be regarded as unsuitable for agriculture, and therefore suitable for development. Agriculturally unsuited areas, based on SCS available information, are depicted in *Figure 14.1-1*.

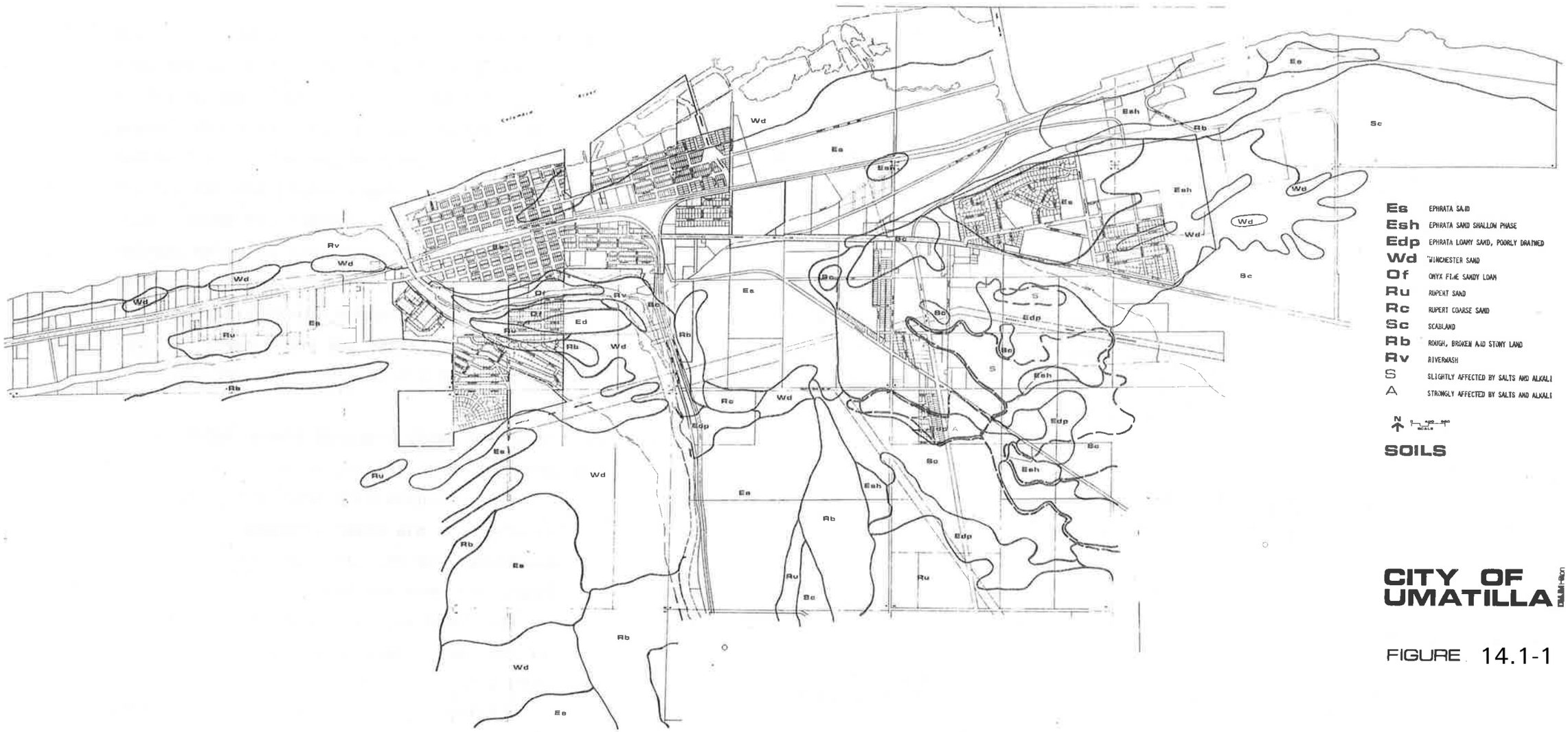
In determining land suitable for development, (i.e., for placement of structures), two categories of suitability have been identified. The difference in criteria for the two categories is the slope of the land, and the presence of basalt at or near the surface. The resulting criteria for the determination of land development suitability is as follows:

a. Primary:

- Land not suited for agriculture
- Less than 12% slope
- None of the following features are present on a parcel of land:
  - Flood plain
  - Gravel pits
  - Soil erosion
  - Geological faults
  - Seasonal high water table within 24" of surface
  - Areas with basalt at or near the surface
  - Wildlife habitats
  - Major utility easements
  - Federal and State government lands
  - Significant natural, historic, or archeological features

b. Secondary:

- Land not suited for agriculture
- 12-25% slope
- Areas with basalt at or near the surface
- None of the following features are present on a parcel of land:
  - Flood plain
  - Gravel pits
  - Soil erosion
  - Geological faults
  - Seasonal high water table within 24" of surface
  - Areas with basalt at or near the surface
  - Wildlife habitats
  - Major utility easements
  - Federal and State government lands
  - Significant natural, historic, or archeological features


Es EPHRATA SAND
Esh EPHRATA SAND SHALLOW PHASE
Edp EPHRATA LOAMY SAND, POORLY DRAINED
Wd WINCHESTER SAND
Of ONYX FINE SANDY LOAM
Ru RUPERT SAND
Rc RUPERT COARSE SAND
Sc SCABLAND
Rb ROUGH, BROKEN AND STONY LAND
Rv RIVERWASH
S SLIGHTLY AFFECTED BY SALTS AND ALKALI
A STRONGLY AFFECTED BY SALTS AND ALKALI
SOILS
CITY OF UMATILLA
FIGURE 14.1-1

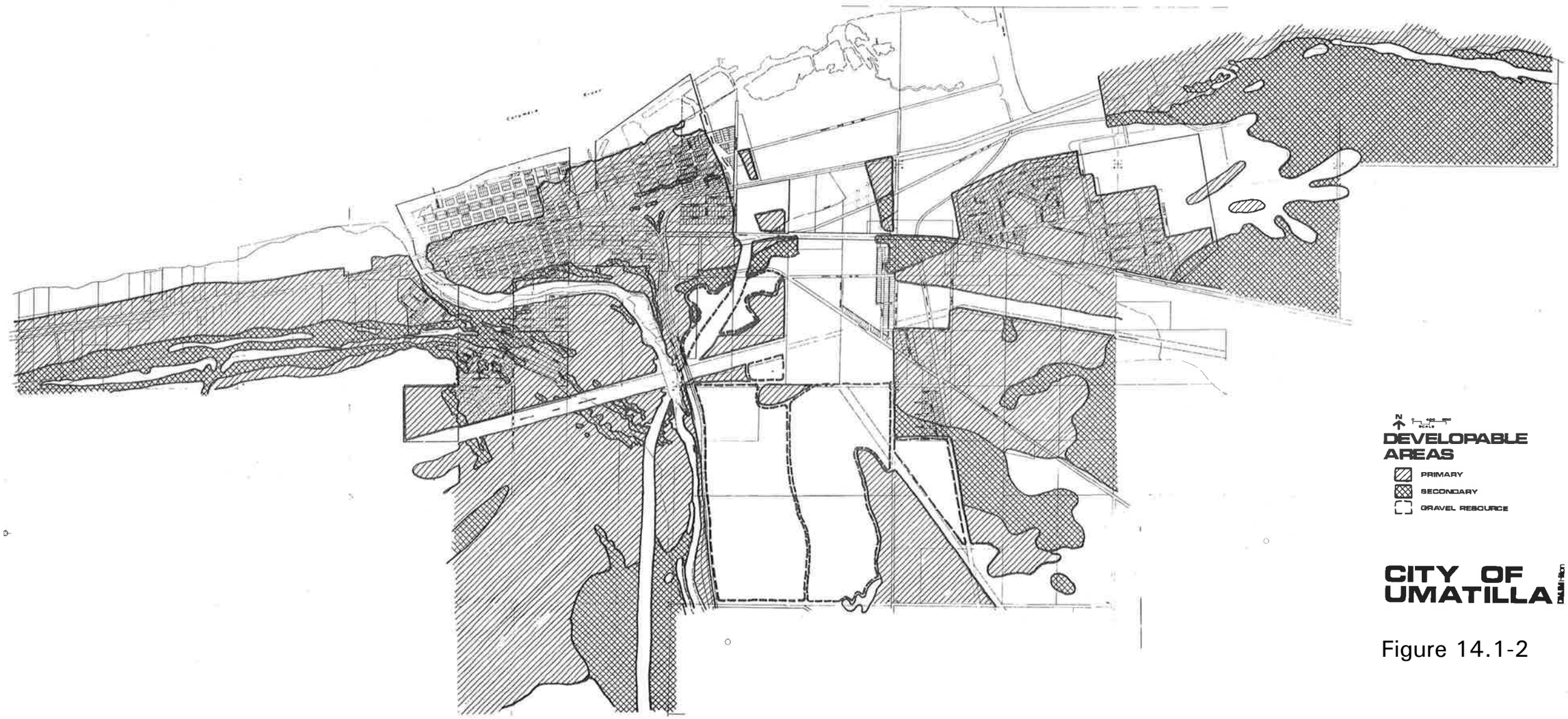

DEVELOPABLE
AREAS
PRIMARY
SECONDARY
GRAVEL RESOURCE
CITY OF
UMATILLA

Figure 14.1-2

The overlaying of the series of maps depicting these features results in a composite Developable Areas map (see *Figure 14.1-2*).

Additionally, limited areas with rough, stony soil that are designated as secondary developable areas have been left in open space in the plan. The Urban Growth Boundary was adopted by the City of Umatilla after several public meetings and citizen input. The developable area within the Urban Growth Boundary is estimated to provide enough land to support the population to the year 2000, and afford flexibility and choice in housing type and living areas.

SECTION 14.2 BUILDABLE RESIDENTIAL LAND INVENTORY

The objective of this section is to calculate the number of acres of buildable residential land in each plan designation in the existing Urban Growth Boundary (UGB) of the City of Umatilla. Buildable residential land is defined as land that is suitable and available and necessary for residential uses and includes both vacant land and developed land that is likely to be redeveloped. This section provides the basis for subsequent calculations on the capacity of the UGB to accommodate future growth.

The following analysis uses a methodology suggested by *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* produced by the Transportation and Growth Management Program (TGM) of the Oregon Department of Transportation (ODOT) and the Oregon Department of Land Conservation and Development (DLCD). The steps used in this methodology have been followed to the greatest extent possible, given the data available for the City of Umatilla.

14.2.010 Gross vacant acres by plan designation

Parcel data for the City of Umatilla were obtained from the Umatilla County Tax Assessor's Office and entered into a Geographic Information System (GIS). This data was field-checked twice in order to verify its accuracy.

Those parcels considered as vacant in the following analysis include both fully vacant and partially vacant parcels. Vacant parcels are parcels without buildings (including platted vacant lots). These parcels were identified as those in the Tax Assessor's database that had a valuation of zero. Partially vacant parcels have improvements on them, but the remainder of the property has none. Partially vacant parcels were identified using the following methodology: parcels larger than two acres, with a residence, were allocated one acre developed and the balance of the property was designated vacant. These parcels included lands in farm use deferral that can be reasonably assumed to be converted to urban uses within the long term. (See Exhibit 1).

City of Umatilla
Buildable Lands Inventory

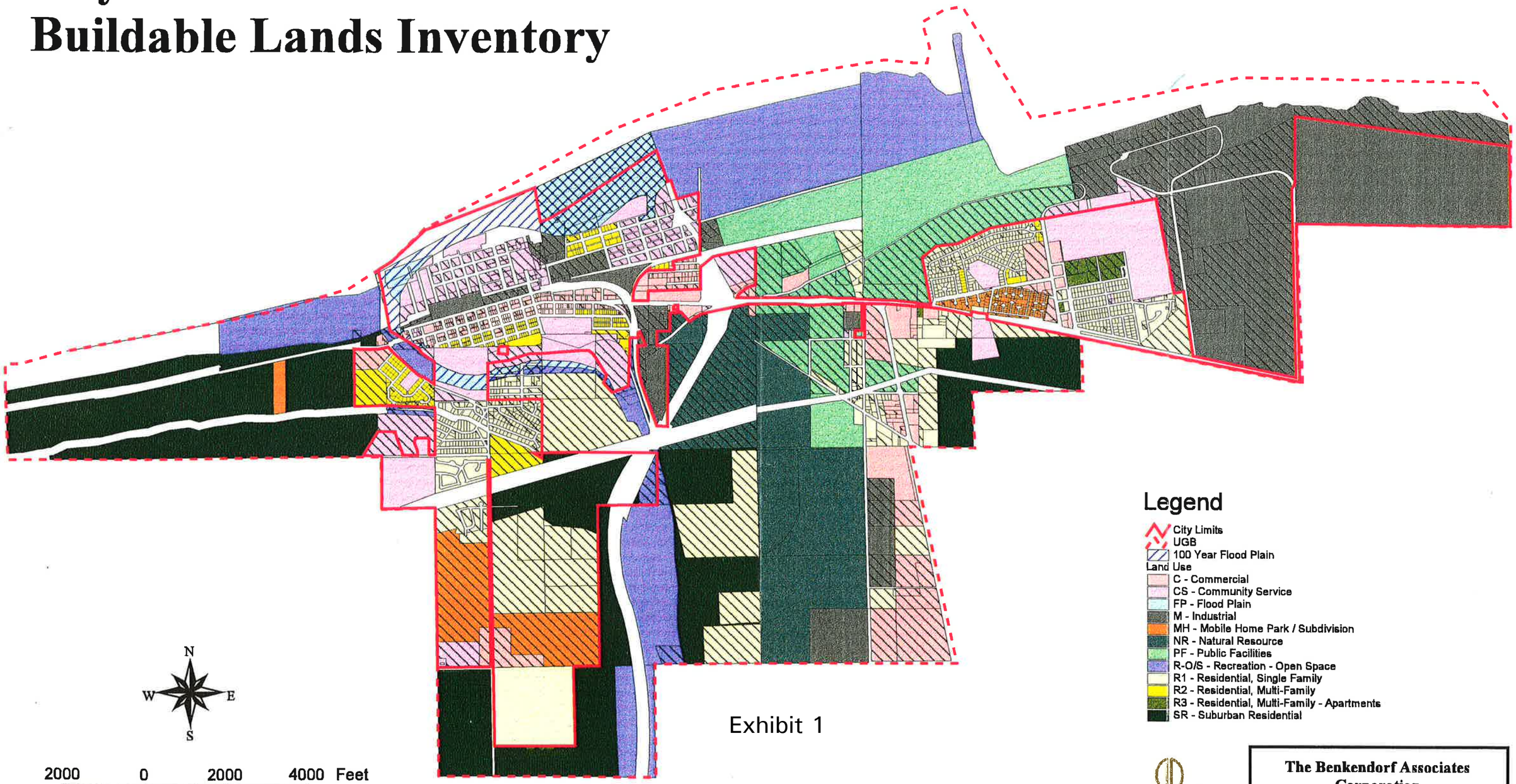


Exhibit 1

PACIFIC MERIDIAN RESOURCES
421 S.W. 6th Avenue Suite 650
Portland, Oregon 97204
503-315-8788

The Benkendorf Associates Corporation
TBAC
522 S.W. 5th Avenue, Suite 703, Portland, Oregon 97204
303 Wellsian Way, Richland, Washington 99352

The two-acre threshold figure is used because parcels smaller than two acres are unlikely to be subdivided further in the City of Umatilla. An assumption was made that an owner of a larger parcel would want to retain at least 1 acre for their existing home site and would need at least another acre to subdivide in order to realize enough economic benefit to subdivide and develop the land. The fact that such larger parcels are available in the city plays a large role in the small-town, rural atmosphere and is an attractive feature to residents. The primary location where most of the larger parcels are located is a rural setting to the west of downtown, currently zoned for SR (Suburban Residential) uses.

The following are the land use zones designated by the City of Umatilla in its Comprehensive Plan:

- Non-Residential:
  - C Commercial
  - CS Community Service
  - FP Flood Plain
  - M Industrial
  - NR Natural Resource
  - R-O/S Recreation - Open Space
  - PF Public Facilities
- Residential:
  - R-1 Residential, Single Family
  - R-2 Residential, Medium Density
  - R-3 Residential, Multi-Family – Apartments
  - SR Suburban Residential
  - MH Mobile Home Residential

Note that the Commercial (C) Zone allows for apartment residential uses, but has not been calculated as residential land for the purposes of this analysis, because the primary uses in the C Zone are commercial.

The following table is an inventory of the vacant and developed land within the Urban Growth Boundary (UGB) of the City of Umatilla. A total of 1,211.4 acres designated for non-residential uses and 1,389.5 acres designated for residential uses are identified as vacant within the UGB, for a total of 2,600.9 acres. Of this total, 807.4 acres (203.2 nonresidential and 604.1 residential acres), or 31 percent, is located within the city limits.

Table 14.2-1
Inventory of Vacant and Developed Land

	Vacant Land			Developed Land			Total Land
Zone	**Inside City**	**Between City and**	**Total Inside**	**Inside City**	**Between City and**	**Total Inside**	**Total Inside**
Non-							
C	62.5	83.3	145.8	47.5	79.5	127.0	272.8
CS	79.2	57.4	136.6	285.1	22.5	307.6	444.2
FP	11.9	-	11.9	24.8	11.4	36.1	48.0
M	34.4	287.5	321.9	332.1	462.0	794.0	1,115.9
NR	0.9	360.7	361.6	-	284.6	284.6	646.2
PF	-	187.1	187.1	0.7	90.4	91.1	278.2
R-O/S	14.3	32.1	46.5	-	158.5	158.5	205.0
Subtotal	**203.2**	**1,008.1**	**1,211.4**	**690.2**	**1,108.9**	**1,798.9**	**3,010.3**
Residential							
R1	252.7	322.5	575.2	257.6	73.6	331.2	906.4
R2	33.1	0.0	33.1	41.7	-	41.7	74.8
R3	14.6	-	14.6	5.6	0.9	6.4	21.0
SR	162.3	462.9	625.2	18.9	398.1	416.7	1,041.9
MH	141.4	-	141.4	19.7	8.9	28.6	170.0
Subtotal	**604.1**	**785.4**	**1,389.5**	**343.5**	**481.5**	**824.6**	**2,214.1**
Total	**807.3**	**1,793.5**	**2,600.9**	**1,033.7**	**1,590.4**	**2,623.5**	**5,224.4**

Source: Pacific Meridian Resources and The Benkendorf Associates Corp., 1998 from data provided by the Umatilla Tax Assessor's Office.
Notes: Does not include BLM land; figures may not add due to rounding; C (Commercial) zone allows for apartment residential uses, but has not been calculated as residential land for the purposes of this analysis.

14.2.020 Gross buildable vacant acres by plan designation

The gross vacant acreage figures within the UGB of the City of Umatilla shown in Table 14.2-1 above are converted into gross buildable vacant acreage figures by subtracting unbuildable acres from total vacant acres.

Unbuildable vacant land is defined as vacant land which is in the NR (Natural Resource) zone or within the FP (Flood Plain) zone. A total of 373.5 acres of land meets these criteria. This represents 14 percent of the total Gross Vacant Acreage. The FP and NR zones include all the land areas within the UGB which are subject to physical constraints. These zones contain all of the land within the city on which steep slopes, major wetland areas or floodplain areas are a possible development constraint.

These calculations are shown in Table 14.2-2, below.

14.2.030 Net buildable acres by plan designation

Net buildable acres are calculated by subtracting land needed for future facilities from gross buildable vacant acres.

For the purpose of this analysis, land needed for future facilities is defined as vacant land, which is zoned CS (Community Service), PF (Public Facilities) or R-O/S (Recreation - Open Space). A total of 370.2 acres of land meets these criteria. This represents 17 percent of the total Gross Buildable Acreage.

Planning for Residential Growth recommends a further step to separate "redevelopable parcels" from the calculations for developed land. Redevelopable parcels are then to be added to the net buildable acreage in order to calculate the final net buildable acreage totals. Residential vacancy rates are currently extremely low in the City of Umatilla. Based on the field survey, we have not identified any residential sites with strong redevelopment potential - i.e., sites "likely to redevelop during the planning period" with a greater residential density than currently exists. Also, it should be noted that those "redevelopable parcels" which are considered "partially vacant" have already been accounted for as described above in Section 14.2.010.

Table 14.2-2 shows a calculation of net buildable acres by plan designation within the UGB of the City of Umatilla. As described in the steps above, Unbuildable Vacant Acreage is subtracted from Gross Vacant Acreage in order to calculate Gross Buildable Acreage. Acreage for public facilities is then subtracted from this in order to determine Net Buildable Acreage. The CS (Community Service), PF (Public Facilities) and R-O/S (Recreation-Open Space) zones account for schools, parks, and other public facilities needed to serve new development. Land needed for streets and utility easements for new development (calculated at 20%) is taken out later, when buildable land by needed net density is calculated. It is reasonable to take out this land at that step, because there is no re-developable land which could be served solely by current streets and utilities identified in the vacant land inventory. All vacant and partially vacant land will require street and utility easements in order to develop.

Table 14.2-2
Net Buildable Acres

Zone	**Gross Vacant**	***Minus***	***Equals***	***Minus***	***Equals***
Non-					
C	145.8	-	145.8	-	145.8
CS	136.6	-	136.6	136.6	0.0
FP	11.9	11.9	0.0	-	0.0
M	321.9	-	321.9	-	321.9
NR	361.6	361.6	0.0	-	0.0
PF	187.1	-	187.1	187.1	0.0
R-O/S	46.5		46.5	46.5	0.0
Subtotal	**1,211.4**	**373.5**	**837.9**	**370.2**	**467.7**
Residential					
R1	575.2	-	575.2	-	575.2
R2	33.1	-	33.1	-	33.1
R3	14.6	-	14.6	-	14.6
MH	141.4	-	141.4	-	141.4
SR	625.2	-	625.2	-	625.2
Subtotal	**1,389.5**	**0.0**	**1,389.5**	**0.0**	**1,389.5**
Total	**2,600.9**	**373.5**	**2,227.4**	**370.2**	**1,857.2**

Sources: Pacific Meridian Resources and The Benkendorf Associates Corp., 1998 from data provided by the Umatilla Tax Assessor's Office.
Notes: Does not include BLM land; figures may not add due to rounding; C (Commercial) zone allows for apartment residential uses, but has not been calculated as residential land for the purposes of this analysis.

As shown in Table 14.2-2 above, there are 467.7 acres of net buildable non-residential land and 1,389.5 acres of net buildable residential land for a total of 1,857.2 acres of net buildable land within the UGB of the City of Umatilla.

14.2.100 ACTUAL DENSITY AND MIX OF HOUSING

As a part of the development of the City of Umatilla's comprehensive plan, a buildable lands inventory was prepared in 1976 and updated by means of a windshield survey conducted in 1986. In order to update this information, this current study tracks development for the nearly 11-year period from January 1987 through June 1998. Because there has been very little development during this period, calculations for the density and mix of housing were prepared for the city's housing stock as a whole as well as for that constructed during the study period. Due to a lack of information available from the 1986 buildable lands inventory, information for the entire city has been obtained from other sources including the U.S. Census Bureau, county tax assessor data and a windshield survey conducted in July 1998.

During the windshield survey of all residential neighborhoods in the city, several housing types were observed. However, according to the building permit information, only single-family homes and manufactured homes in parks were constructed during the study period. All single-family homes constructed in the study period exhibit a narrow range of lot sizes, regardless of the underlying zoning designation. This is, in part, due to the lack of new homes built in the Suburban Residential zoning district, where the minimum lot size per dwelling unit is one acre.

14.2.110 Residential development 1987 – 1998

Residential development information for the study period has been obtained from city and county building permit records. However, as these records do not include lot size, this information has been determined by cross-referencing addresses and/or tax lot numbers found on the permit with county tax assessor data. Each site for which a building permit was sought during the study period is documented in Appendix 14.2-A. The comprehensive plan and zoning designation, number of housing units and resulting density for each site are also listed in Appendix 14.2-A.

As stated above, Appendix 14.2-A lists each development site and its corresponding comprehensive plan and zoning designation, the number of housing units and density. All lot size information has been rounded to the nearest tenth of an acre. As indicated in the Appendix 14.2-A, building permits for 71 housing units were sought during the study period, of which 68 were single-family homes located in the R-1 and R-2 zones, two were manufactured homes in parks located in the manufactured home park (MH) zone, and one was a caretaker's apartment located in the Commercial (C) zone. This last housing unit has been classified as a multi-family unit for lack of a better category.

Table 14.2-3 indicates the number and percentage of housing units by type for which building permits were obtained during the study period as well as for the housing stock as a whole. The number of dwelling units for the study period was obtained from building permit records. It is assumed that all structures for which permits have been issued during the study period have been built. As noted above, 71 units were constructed during the study period, an average of six units annually. The number of existing units in the entire city has been obtained from the 1990 U.S. Census, with the exception of the number of manufactured homes in parks, which was estimated by the windshield survey. The 1990 Census data includes dwelling units, which were built in the study period years of 1987-1989. Therefore, to avoid double-counting, dwelling units built during these years were subtracted from the data. Regarding manufactured homes, the U.S.

Census data does not differentiate between those built in parks and on individual lots. To arrive at an accurate number of manufactured homes in parks, those units which were observed during the windshield survey (77), minus those built during the study period (2), were subtracted from the number of manufactured homes indicated in the census data (188). The remaining units (113) have been assumed to be manufactured homes on individual lots and added to the census data for single-family homes. Units defined by the census as single-family attached units include duplexes and condominiums. The census has indicated that there are 37 single-family attached units in the City of Umatilla; however, there is no accurate information regarding the acreage devoted to an average density of such housing. As indicated in Table 14.2-3, there are 1,272 housing units currently in the Umatilla City limits.

Table 14.2-3
Permitted Housing Types, 1987 – 1998

Housing Type	**Number and Percentage of Units by Housing Type**					
	Study Period		**Pre-Study Period**		**Entire City**	
Single-family detached	68	96%	730	61%	798	63%
Single family attached	0	0%	37	3%	37	3%
Manufactured homes in parks	2	3%	75	6%	77	6%
Multi-family units	1	1%	359	30%	360	28%
Total	71	100%	1201	100%	1272	100%

Source: The Bookin Group and Pacific Meridian Resources from data provided by the U.S. Census Bureau and City of Umatilla and Umatilla County building permits.

Table 14.2-4 indicates the amount of developed land by housing type during the study period and for the entire city. This amount has been calculated from county tax assessor records, which have been sorted according to the zoning designation indicated on each. According to the Umatilla Zoning Ordinance, there are five residential zones in the city: two for exclusive single-family homes (Suburban Residential and R-1), two for multi-family housing (R-2 and R-3), and one for manufactured home parks (MH). Single-family detached homes are allowed in the R-2 zone, and according to the windshield survey, make up most of the development in this zone. Therefore, the total acreage of single-family development includes all developed parcels in the exclusive single-family home zones (277 acres) and 70 percent of the total of those in the R-2 zone (29 acres). Thirty percent of the total of developed parcels in the R-2 zone (13 acres) will be included in the total acreage of multi-family development.

Table 14.2-4
Developed Housing Types, in Acres, 1987 – 1998

Housing Type	**Total and Percentage of Developed Residential Acres**					
	Study Period		**Pre-Study Period**		**Entire City**	
Single-family detached	15 acres	98%	292 acres	89%	306 acres	89%
Single family attached	0 acres	0%	N/A	0%	N/A	0%
Manufactured homes in parks	0.3 acres	2%	19.7 acres	6%	20 acres	6%
Multi-family	0* acres	0%	18 acres	5%	18* acres	5%
Total	15.3 * acres	100%	329.7 acres	100%	344* acres	100%

*Does not include the commercial parcel on which the caretaker unit is located.

Source: The Bookin Group and Pacific Meridian Resources, with data provided by Umatilla County Tax Assessor and City of Umatilla and Umatilla County building permits.

Table 14.2-5 indicates the average density of each housing type for both the study period and for the city as a whole. Lot sizes for all units were obtained from county tax assessor records, averaged, and converted to dwelling units per acre (d.u./acre).

Table 14.2-5
Average Housing Density, 1987 – 1998

Housing Type	Average Density		
	Study Period	**Pre-Study Period**	**Entire City**
Single-family detached	4.5 d.u./acre	N/A	2.6 d.u./acre
Single family attached	N/A	N/A	N/A
Manufactured homes in parks	6.2 d.u./acre	N/A	3.9 d.u./acre
Multi-family	N/A	N/A	22 d.u./acre
Total	4.5 d.u./acre*	N/A	3.7 d.u./acre*

*Does not include the caretaker unit, which is not representative of other multi-family units in the city limits.
N/A B not available.
Source: The Bookin Group and Pacific Meridian Resources from data provided by the Umatilla County Tax Assessor.

14.2.120 Qualitative Characteristics

The following qualitative characteristics can be observed for housing development, which has occurred during the study period:

- Single-family homes make up a larger percentage of recently developed housing than exists in the housing stock as a whole.
- There has been little development within the Suburban Residential zoning district, which requires a minimum lot size of one acre per dwelling unit.
- Recent development in the R-1 and R-2 single-family zones exhibit a narrow range of lot sizes (8,700-13,000 sq. ft.), regardless of minimum lot size differences between the zones.
- Development of all housing types during the study period has occurred at a higher density than exists in the entire city.
- Virtually no multi-family housing has been developed during the study period. This can be explained by the high vacancy rates for multi-family housing which existed in 1990. Most of this extra capacity has since been filled, with recent vacancy rates extremely low for rental apartment units.

14.2.200 HOUSING NEEDS ANALYSIS

The objective of this section is to determine the amount of land needed in the City of Umatilla for each needed housing type for the next 20 years.

The following analysis uses a methodology suggested by *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* produced by the Transportation and Growth Management Program (TGM). The steps used in this methodology have been followed to the greatest extent possible, given the data available for the City of Umatilla. Since the City of Umatilla is a small city, much of the data which is available for larger urban areas, such as Public Use Microdata

Samples (PUMS) from the 1990 U.S. Census and detailed historical data from 1970 and 1980 U.S. Census is not available. Consequently, not all of the suggested analysis steps in the Workbook have been conducted.

14.2.210 New housing units needed in the next 20 years

The most recent population estimate for the City of Umatilla (July 1, 1997) was obtained from the Center for Population, Research and Census at Portland State University. The population living in large group quarters (e.g., college dormitories, prisons, etc.) was subtracted from the estimate. There were no official population estimates available for the population inside the UGB and outside the city limits.

As shown in Exhibit 1, the Buildable Lands Inventory Map, the only currently developed residential parcels located within the UGB, but outside of city limits are in the area zoned for Suburban Residential (SR) to the west of town. There are approximately 60 lots which are classified as developed. Given this small additional population relative to the City (1% of the total projected households), the report uses the official population estimate for the City in order to avoid further estimating the population.

The average household size for the next 20 years has been projected at 2.5 persons/household, based on statewide population trends. In general, average household size is decreasing gradually. The state average is forecast to drop to 2.5 in 20 years. Umatilla County, as a fast-growing area with many households moving from outside the region, has population dynamics that are being influenced by the same trends which are affecting the state of Oregon and the U.S. as a whole. Therefore, using the statewide figures is reasonable as an estimate, given a lack of more specific forecasts for the area.

The total number of households was projected by dividing the projected population in households by the average household size. Table 14.2-6 shows the results of this analysis.

Table 14.2-6
Household Projection 1997-2017

	Current Population (July 1, 1997)	Projected Population (2017)	- Group Quarters Population	= Projected Population in Households (2017)	/ Projected Household Size	= Projected Total Number of Households (2017)
City of Umatilla	3,375	6,000	0	6,000	2.5	2,400

Sources: Portland State University Center for Population, Research and Census (current population), Umatilla County (projection)

As shown in Table 14.2-6, the estimated population of the City of Umatilla in 1997 was 3,375. Umatilla County is currently involved in the allocation process for countywide population projections. At the time of the initial research for this report, Umatilla County was using a preliminary estimate allocation population figure of 6,000, for the City of Umatilla, for a 20-year planning horizon. Current estimates of the final population allocation for the City of Umatilla, in December 1998 are close to this figure. The 6,000 population figure is equivalent to 2,400 households based on a household size of 2.5 persons/household.

The projected total number of new housing units needed in the community in the next 20 years is projected by subtracting the projected number of households from the current estimate of households. This is illustrated in Table 14.2-7.

Table 14.2-7
Projection of Housing Units Needed, 2017

	Current Population (1997)	Current Households (1997)	Projected Total Number of Households (2017)	Projected Needed Housing Units (2017)
City of Umatilla	3,375	1,255*	2,400	1,145

Sources: Portland State University Center for Population, Research and Census, Umatilla County, City of Umatilla

* 2.69 persons/HH

As shown in Table 14.2-7, the projected new number of housing units needed by the year 2017 is 1,145.

14.2.220 National, state, and local demographic and economic trends and factors that may affect the 20-year projection of structure type and mix

This section is intended to determine how the projected number of new households will be distributed among different housing structure types in 20 years. In order to make this determination, it will be necessary to analyze factors that will likely influence housing choice in the future (e.g., the decision to buy a single-family home as opposed to renting an apartment, the need for housing a seasonal labor force, second homes in recreation areas).

Major state and national housing and demographic trends, which may influence the housing types that will be needed in the next 20 years, are summarized below. This information about national and state housing trends is a summary of information in *Planning for Residential Growth: A Workbook for Oregon's Urban Areas*.

- Households are becoming smaller. More households are being formed by "empty nesters," young singles and couples, than by the "traditional family."

- Declining household sizes suggest (with other things, especially income, being equal) a shift toward smaller-sized housing.

- Age of the head of the household is increasing. Aging of the baby boomers is the primary cause of this factor.

- Greater household age generally indicates a greater propensity toward home ownership. However, home ownership rates decline in the 65 and older age group. Older households also have a tendency to "trade down" to smaller housing types as their children leave the household.

- Household incomes are generally increasing though they have not kept pace with housing prices or rents. Demand for more affordable housing types (e.g., manufactured homes, apartments, townhouses, and small-lot single-family houses) will increase as housing costs continue to outstrip income growth.

In conclusion, smaller households, older households and higher housing costs are expanding markets for "alternative housing" and reducing the demand for traditional large-lot single-family development. Housing types which will see greater demand include smaller-lot single-family developments, manufactured housing, clustered single-family housing, duplexes, condominiums, and zero-lot line houses.

There are additional local demographic and economic factors which will influence the demand for housing types. The rapidly expanding economic base, due to a number of new, major projects in the region (including the Two Rivers Correctional Institution (TRCI), Umatilla Chemical Agent Disposal Facility, Union Pacific Railroad (UPRR) Hinkle Locomotive Shop, and Wal-Mart Distribution Center and Truck Maintenance Facility) will lead to an increase in younger families and single professionals relocating to the area. This will also lead to a greater need for smaller, more affordable housing types.

In addition, the large numbers of temporary construction workers for these projects will lead to an increase in the need for more temporary and flexible affordable housing types such as apartments and mobile homes, at least in the short term. These local trends support and amplify the degree to which larger trends affecting the nation as a whole will affect the local market for housing.

14.2.230 Local demographic characteristics of the population and, if possible, household trends that relate to demand for different types of housing

Some of the best indicators of housing needs are household incomes by household size and age of head of household. Ideally, an analysis would examine these statistics cross-tabulated against each other. However, cross-tabulation of this data can only be obtained from Public Use Microdata Samples (PUMS) from the 1990 Census for larger metropolitan areas. The smallest geographic level for which PUMS data is available is 100,000 people. The PUMS area, which includes the City of Umatilla, contains all of the following counties: Gilliam, Wheeler, Morrow, Umatilla, Union, Wallowa, and Baker. This information is not useful for conducting a housing analysis for the City of Umatilla. Therefore, non-cross-tabulated data is examined separately in order to determine the connection of this demographic information to housing need.

Unfortunately, tabulations in the 1970 Census and 1980 Census for household income, household size, and age of householder are unavailable or unavailable in the same format as the 1990 Census. For example, household size and household income breakdowns are unavailable for places with less than 50,000 in population. Therefore, a trend analysis of these variables is impossible. The general trend analysis presented in subsection 14.2.220 is a substitute for a more detailed trend analysis.

Table 14.2-8 below provides a summary of household income, age of the head of household, household size, and tenure for the City of Umatilla in 1990. This information is examined in more detail in subsequent tables.

Table 14.2-8
Household Income, Size, Age of Head of Household, and Tenure, 1990

Household Income	Number	% Share
< $10,000 (Very Low)	204	20.0%
$10-14,999 (Low)	101	9.9%
$15-24,999 (Mid)	297	29.1%
$25-34,999 (High-Mid)	214	21.0%
$35-49,999 (High)	149	14.6%
> $50,000 (Very High)	55	5.4%
Total	1,020	100%
Median Income	$20,799	-
Household Size		
1	236	23.1%
2	293	28.7%
3	195	19.1%
4	135	13.2%
5+	161	15.8%
Total	1,020	100%
Age of Head of Household		
15-24	85	8.2%
25-34	299	28.9%
35-44	223	21.6%
45-54	156	15.1%
55-64	56	5.4%
65+	214	20.7%
Total	1,033	100%
Renter Households	552	
Owner Households	481	

Source: 1990 U.S. Census, STF3A Database.
Note: small discrepancies in the number of households are due to sampling in the Census tabulation.

Table 14.2-9 below illustrates housing types broken down by tenure (whether the housing is renter- or owner-occupied).

Table 14.2-9
Structure Type by Tenure, 1990

Structure Type	Renter-Occupied	% Renter-Occupied	Owner-Occupied	% Owner-Occupied	Vacant	% Vacant	Total
Single-family detached	222	35.7%	338	54.3%	62	10.0%	622
Single-family attached	20	54.1%	6	16.2%	11	29.7%	37
Apartments	264	73.5%	0	0.0%	95	26.5%	359
Manufactured homes	46	24.5%	137	72.9%	5	2.7%	188
Other	0	0.0%	0	0.0%	0	0.0%	0
Total	**552**	**45.8%**	**481**	**39.9%**	**173**	**14.3%**	**1,206**

Source: 1990 U.S. Census, STF3A Database.

As shown in Table 14.2-9, in 1990 there were 1,206 housing units in the City of Umatilla. Of these, 1,033 were occupied and 173 were vacant - a vacancy rate of 14.3 percent. Of the occupied housing units, 552 were renter-occupied and 481 were owner-occupied.

Single-family detached housing units had the highest percentage of owner-occupancy at 54.3 percent. Single-family attached units were overwhelmingly occupied by renters, but also had the largest vacancy rate of all housing types at 29.7 percent. Apartments units also had a large vacancy rate - 26.5 percent - with the remainder naturally occupied by renters. Manufactured homes were owner-occupied at a 72.9 percent rate, suggesting that these units are a popular alternative to ownership of single-family homes.

Table 14.2-10 below examines housing tenure by the age classification of the head of the household.

Table 14.2-10
Age of Household Head by Tenure, 1990

Age of Head of Household	Renter-Occupied	% Renter-Occupied	Owner-Occupied	% Owner-Occupied	Total
15-24	69	81.2%	16	18.8%	85
25-34	223	74.6%	76	25.4%	299
35-44	123	55.2%	100	44.8%	223
45-54	66	42.3%	90	57.7%	156
55-64	6	10.7%	50	89.3%	56
65+	65	30.4%	149	69.6%	214
Total	**552**	**53.4%**	**481**	**46.6%**	**1,033**

Source: 1990 U.S. Census, STF3A Database.

As shown in Table 14.2-10, propensity for home ownership in Umatilla is the least among younger households and increases with age until the head of the household (householder) reaches retirement age, when home ownership rates decrease again.

Among the youngest householder age group (15-24 years), over 80 percent of households were renters in 1990, as compared to 53.4 percent of all households in Umatilla. Householders aged 25-34 also had large rental rates, with almost three-quarters of such households renting their housing. Householders aged 35-44 and 45-54 were more representative of the population as a whole with roughly equivalent rental vs. ownership rates. For older householders aged 55-64, however, almost 90 percent owned their own home. This rate declined to about 70 percent for households with head above the age of 65.

Table 14.2-11 below shows how income correlates with the age of the householder.

Table 14.2-11
Age of Household Head by Income, 1990

Age of Head of Household	<$10,000 (Very Low)	$10,000-14,999 (Low)	$15,000-24,999 (Mid)	$25,000-34,999 (High-Mid)	$35,000-49,000 (High)	$50,000+ (Very High)	Total
15-24	26.7%	9.3%	41.3%	8.0%	14.7%	0.0%	100.0%
25-34	26.6%	4.4%	34.0%	21.0%	9.8%	4.1%	100.0%
35-44	14.3%	9.7%	23.0%	24.0%	22.6%	6.5%	100.0%
45-54	10.4%	8.5%	22.6%	24.4%	31.1%	3.0%	100.0%
55-64	0.0%	10.9%	23.6%	25.5%	0.0%	40.0%	100.0%
65+	26.9%	22.2%	29.8%	18.1%	2.9%	0.0%	100.0%
Total	**20.0%**	**9.9%**	**29.1%**	**21.0%**	**14.6%**	**5.4%**	**100.0%**

Source: 1990 U.S. Census, STF3A Database.

The median household income in 1990 for Umatilla was $20,799. Income ranges have therefore been divided into the categories shown in Table 14.2-11.

As shown in Table 14.2-11, 29.9 percent of all households were in the Very Low and Low income groups, 50.1 percent were in the Mid and High-Mid income groups, and 20 percent were in the High and Very High income groups.

Younger households where the age of the head of the household (householder) was in the 15-24 and 25-34 age groups had lower incomes than the population as a whole and more households in the Very Low, Low and Mid income groups. Households where the householder was in the 35-44 and 45-54 age group had much lower percentages in the Very Low and Low income groups and had 29.1 percent and 34.1 percent rates, respectively, of households in the High and Very High income groups.

Households with householders in the 55-64 age group had the highest incomes, with no Very Low income households and only 10.9 percent of households in the Low income group. Forty percent of these households were in the Very High income group. Households with the householder beyond retirement age (65+ years) had the lowest income levels, with almost half of these households in the Very Low and Low income categories. However, it should be remembered that, relative to housing need, these households tend to be "cash poor and equity rich," meaning that they have high home-ownership rates (69.6 percent, see Table 14.2-9) and have frequently paid off their mortgages. Therefore, the reduced income that these post-retirement households have does not necessarily translate into housing affordability problems.

Table 14.2-12 below illustrates housing affordability among income groups. Note that due to the way the Census tabulates these figures, the income groups shown do not exactly correspond to the income groups in Table 14.2-11.

Table 14.2-12
Housing Affordability by Income Group, 1990

Income Group	Renter-Occupied Paying More Than 30% of Income for Housing	Owner-Occupied Paying More Than 30% of Income for Housing
<$10,000 (very low)	83.2%	64.9%
$10-19,999 (low)	42.9%	70.3%
$20-34,999 (mid)	0.0%	6.0%
$35-49,999 (high)	0.0%	0.0%
>$50,000 (very high)	0.0%	0.0%
Total	**36.6%**	**24.7%**

Source: 1990 U.S. Census, STF3A Database.

A "housing cost burden" is defined by the U.S Department of Housing and Urban Development (HUD) as a household which pays more than 30 percent of its gross income for housing, including utilities. As shown in Table 14.2-12, 36.6 percent of all renter households and 24.7 percent of all owner households had a housing cost burden in 1990. However, housing cost burdens were concentrated almost exclusively among the lower income groups in Umatilla. Of households with an income at less than $10,000 per year, 83.2 percent of those renting and 64.9 percent of those owning their home had a housing cost burden. Among the households with an income of between $10,000 and $19,999, 42.9 percent of renters and 70.3 percent of owners had a housing cost burden. Of the households with incomes greater than $20,000 there are no significant cost burdens experienced - except for 6 percent of owner-occupied households with incomes of $20,000 to $34,999, no households with incomes above $20,000 experience any kind of cost burden whatsoever.

14.2.240 Housing Types that are likely to be affordable to the projected population based on household income

The following types of housing are addressed by this study:

- Detached single-family houses
- Attached single-family houses
- Multi-family apartments
- Multi-family apartments for low-income households (government-assisted)
- Manufactured housing on single-family lots
- Manufactured housing in parks

Table 14.2-13 below illustrates the income groups in the City of Umatilla in 1990, the percentage of total households that each income group represents, and the type of housing which is financially attainable by each group. This information is derived from the analysis in *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* and adapted for the conditions identified in the City of Umatilla.

Table 14.2-13
Households by Income Group and Type of Financially Attainable Housing

Income Group	Household Income Range	% of Total Households in 1990	Financially Attainable Housing
Very low	<$10,000	20.0%	Multi-family, manufactured homes in parks, subsidized housing
Low	$10-14,999	9.9%	Attached single- and multi-family, manufactured homes in parks
Mid	$15-24,999	29.1%	Single-family manufactured homes, attached single- and multi-family, manufactured homes in parks
High-Mid	$25-34,999	21.0%	Single-family detached on smaller lots, attached single- and multi-family, manufactured homes in parks
High	$35-49,999	14.6%	All housing types
Very high	>$50,000	5.4%	All housing types

Source: 1990 U.S. Census, STF3A Database. Financially attainable housing list derived from *Planning for Residential Growth: A Workbook for Oregon's Urban Areas*, TGM program, ODOT and DLCD, p. 19.

14.2.250 Additional units needed by structure type

As shown in Table 14.2-14 below, residential construction over the last 12 years in Umatilla has almost exclusively been single-family houses. Part of this can be attributed to the previously high rental vacancy rates in 1990 as shown previously in Table 14.2-9. However, it is expected that more rental units will be needed to meet future demand.

Table 14.2-14
Permits for New Residential Construction, 1986 -June 1998

Structure Type	Building Permits
Single-family	68
Single-family attached	
Apartments	1
Manufactured homes in parks	2
Total	71

Source: City of Umatilla and Umatilla County

Table 14.2-15 below presents a numerical distribution of the projected needed housing types for each income group. These distributions are based on Table 14.2-13 above, estimates of current tenure by income, and projections of housing need by income group. Based on the analysis in subsections 14.2.220 and 14.2.230, emphasis has been placed on a greater projected need for alternative housing types to large-lot single-family residences in the next 20 years.

The relative distribution of income groups has been kept the same as in 1990 (see Table 14.2-13). There is no evidence to indicate that the future overall distribution of income groups will vary from previous levels. While new employment opportunities will exist, it is impossible to forecast their impacts on the distribution of income groups. This kind of analysis is not performed at the state level and is beyond the scope of this report.

Homeownership/renter rates were distributed as follows:

- Very Low: 20/80%

- Low: 30/70%
- Mid: 50/50%
- Mid-High: 60/40%
- High: 70/30%
- Very High: 80/20%

It should be noted that, of the Very Low and Low income groups, a large majority of the homeowners should be assumed to be older households (at or beyond retirement age). Households with the householder beyond retirement age (65+ years) had the lowest income levels in the City of Umatilla in 1990, with almost half of these households in the Very Low and Low income categories. Households with the head 65+ account for almost 21 percent of all households, but account for 28 percent of all Very Low income households, and 46% of Low income households.

These households, who are often "equity rich and cash poor" will be able to afford housing which, by a simple income to housing cost analysis, appears unaffordable. This is demonstrated by the almost 70 percent homeownership rate of this household group. Many of these households also trade down to smaller housing types as they grow older, and therefore are able to use built-up equity to purchase housing outright. The reduced income that these post-retirement households have does not necessarily translate into housing affordability problems.

The housing needs of other households in the Very Low and Low income groups should be assumed to be met primarily by rental housing (single- and multi-family). These younger households do not often have sufficient savings for down payments and sufficient income and/or employment history to qualify for loans.

Table 14.2-15
Projection of New Households by Income Group and Housing Need

	Very Low		Low		Mid		Mid-High		High		Very High		TOTAL	
Owner-occupied	%	units	%	units	%	units	%	units	%	units	%	units	%	units
Single-family detached	2%	5	7%	8	32%	107	58%	139	70%	117	80%	49	**76.3%**	**425**
Single-family attached	3%	7	4%	5	1%	3	0%	0	0%	0	0%	0	**2.6%**	**15**
Apartments	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	**0.0%**	**0**
Manufactured homes	15%	34	19%	22	17%	57	2%	5	0%	0	0%	0	**21.1%**	**117**
Total	**20%**	**46**	**30%**	**34**	**50%**	**167**	**60%**	**144**	**70%**	**117**	**80%**	**49**	**100%**	**557**
Renter-occupied														
Single-family detached	7%	16	10%	11	11%	37	13%	31	11%	18	7%	4	**20.1%**	**118**
Single-family attached	4%	9	3%	3	2%	7	2%	5	1%	2	1%	1	**4.5%**	**26**
Apartments	55%	126	42%	48	28%	93	21%	50	18%	30	12%	7	**60.4%**	**355**
Manufactured homes	14%	32	15%	17	9%	30	4%	10	0%	0	0%	0	**15.1%**	**89**
Total	**80%**	**183**	**70%**	**79**	**50%**	**167**	**40%**	**96**	**30%**	**50**	**20%**	**12**	**100%**	**588**
Total	**100%**	**229**	**100%**	**113**	**100%**	**333**	**100%**	**240**	**100%**	**167**	**100%**	**62**	**100%**	**588**
Percentage out of Total Units	**20.0%**	**229**	**9.9%**	**113**	**29.1%**	**333**	**21.0%**	**240**	**14.6%**	**167**	**5.4%**	**62**	**100%**	**1,145**

As shown in Table 14.2-15, a total of 557 owner-occupied units and 588 renter-occupied units are projected to be needed over the next 20 years in the City of Umatilla, for a total of 1,145 housing units. This figure, however, doesn't account for a structural vacancy rate for housing.

Table 14.2-16 shows the projected housing needs and allows for a structural vacancy rate for new units. Vacancy rates are estimated at 2 percent for all new owner-occupied units and 5 percent for all new renter-occupied units. The projected needed housing mix is also compared to the existing housing mix in Umatilla as tabulated in the 1990 U.S. Census.

Table 14.2-16
Projected Housing Needs by Housing Type and Tenure

	Current Housing Mix % (1990)	Projected Need %	Projected Needed Units	Structural Vacancy Rate	Total Projected Needed Units
Owner-occupied					
Single-family detached	70.2%	76.3%	425	2.0%	434
Single-family attached	1.3%	2.6%	15	2.0%	15
Apartments	0.0%	0.0%	0	2.0%	0
Manufactured homes	28.5%	21.1%	117	2.0%	120
Total	**100.0%**	**100.0%**	**557**	**2.0%**	**568**
% of housing mix	**46.6%**	**-**	**48.7%**	**-**	**-**
Renter-occupied					
Single-family detached	40.3%	20.1%	118	5.0%	124
Single-family attached	3.6%	4.5%	26	5.0%	28
Apartments	47.8%	60.4%	355	5.0%	373
Manufactured homes	8.3%	15.1%	89	5.0%	93
Total	**100.0%**	**100.0%**	**588**	**5.0%**	**617**
% of housing mix	**53.4%**	**-**	**51.3%**	**-**	**-**
Total					
Single-family detached	51.6%	47.4%	543	2.7%	557
Single-family attached	3.1%	3.6%	41	3.9%	43
Apartments	29.8%	31.0%	355	5.0%	373
Manufactured homes	15.5%	18.0%	206	3.3%	213
Total	**100.0%**	**100.0%**	**1,145**	**3.5%**	**1,186**

As shown in Table 14.2-16, taking into account structural vacancy rates, a total of 568 owner-occupied units and 617 renter-occupied units are projected to be needed over the next 20-year time period. This breaks down to 48.7% owner-occupied units and 51.3% renter-occupied units.

14.2.260 Net density range needed for each plan designation and the average needed net density for all designations

Based on the types of housing types needed, housing units are allocated to the respective plan designation and needed density levels are determined. Table 14.2-17 shows the current plan designations for residential areas for the City of Umatilla, the permitted and conditional residential uses for each zone, and the minimum lot sizes and maximum densities permitted. Note that the maximum allowed development densities are based on minimum lot sizes and therefore do not include the additional land required for streets and other infrastructure.

Table 14.2-17
Allowed Housing Types and Densities -City of Umatilla

Residential Zone		Permitted Residential Uses	Conditional Residential Uses	Minimum Lot Size in Square Feet	Maximum Allowed Density (Dwelling Units) (DUs) Per Acre
Suburban Residential	SR	Single-family dwelling, double-wide or wider manufactured home	Recreational vehicle parks	1 acre	1.00 for a single-family dwelling on a minimum lot
Single-Family Residential	R-1	Single-family dwelling, double-wide or wider manufactured home	None	8,000	5.45 - for a single-family dwelling on a minimum lot.
Multi-Family Residential	R-2	R-1 + two-, three, and four-family dwelling structures	Mobile homes	6,000 for a single-family unit + 2,000 for each additional unit.	14.52 for a 4-unit dwelling on a minimum lot.
Multi-Family Residential B Apartments	R-3	R-3 + multiple-family dwelling/apartments	None	7,000 for a single-family unit + 1,600 for each additional unit.	16.25 for a 5-unit dwelling on a minimum lot.
Manufactured Home Residential	MH	Manufactured home on individual lots, manufactured home subdivisions	Manufactured home parks, recreation vehicle parks, residential trailers	5 acres for a manufactured home park. 8,000 for manufactured home subdivisions	7.26 for manufactured home parks. 5.45 for manufactured homes in subdivisions.

Source: City of Umatilla Comprehensive Plan - Final Local Review Order, 1987.

Table 14.2-18 allocates the projected needed housing units identified in Table 14.2-16 into plan designations. The following assumptions were used in order to perform this allocation:

- No housing units were allocated into the SR (Suburban Residential) zone. Please note that the comprehensive plan/zoning code changes recommended the elimination of the SR zone.
- All single-family attached units were allocated to the R-2 zone. Please note that the comprehensive plan/zoning code changes recommended the single-family attached units as a permitted use in the R-2 zone.
- Based on the housing affordability data presented in Table 14.2-12, 50 percent of all apartment units were allocated into the "government-assisted apartment" category. These represent the lowest income households for which government assistance will be necessary for rental housing affordability.
- Apartments (both assisted and non-assisted) were allocated on a 50% / 50% basis to both the R-2 and R-3 zones.
- Manufactured homes were allocated on a 75% / 25% basis to the R-1 and R-2 zones. Those allocated to the R-2 zone have been considered as "manufactured homes in parks." Please note that the comprehensive plan/zoning code changes recommended the elimination of the MH zone, which allows for manufactured home parks.

Table 14.2-18
Projected Needed Housing Units by Plan Designation

Housing Type	R-1	R-2	R-3	Total
Single-family detached	558	0	0	557
Single-family attached	0	43	0	43
Apartments	0	93	93	186
Apartments B Government Assisted	0	93	93	186
Manufactured homes	160	0	0	160
Manufactured homes in parks	0	53	0	53
Total	**738**	**282**	**186**	**1,186**

Note: numbers may not add due to rounding.

The analysis for estimating the needed net density range for each plan designation and housing type is begun below. This estimation is based on the types of structures that would be allowed in each designation and on an analysis of what densities are required in order to provide sufficient affordable housing.

Table 14.2-19 shows the average lot size of new residential development in Umatilla in the last 12 years.

Table 14.2-19
Average Lot Size for New Residential Construction, 1986 - June 1998

Lot Size (acres)	Single-Family	Multi-Family	Mobile Homes in Parks	Total
0.1	0	0	1	1
0.2	57	0	1	58
0.3	10	0	0	10
>0.3	1	1	0	2
Total	**68**	**1**	**2**	**71**

Source: Umatilla County Building Permit/Tax Assessor Data

The majority of single-family houses (57 out of 68, or 84 percent) had a lot size of approximately 0.2 acres. This translates to a density of 5 units/acre. Most of the remaining houses were developed on 0.3-acre lots (3.33-units/acre density). As stated in Section 14.2.120, virtually no multi-family housing was developed during the study period. This can be explained by the high vacancy rates for multi-family housing which existed in 1990. Most of this extra capacity has since been filled, with recent vacancy rates extremely low for rental apartment units.

Table 14.2-20 below compares the overall current housing densities to densities of recent housing and currently permitted maximum densities. The densities listed here do not include the 20 percent additional land allocated for streets and other infrastructure.

Table 14.2-20
Existing and Currently Allowed Net Housing Density

Housing Type	Existing Density (1998)	Recent Density (1987-1998)	Maximum Allowed Density (Current Comprehensive Plan)
Single-family detached	3.2	4.5	5.45
Single-family attached	N/A	N/A	10.9
Manufactured homes**	3.7	6.2*	7.26
Apartments	9.2	-	14.52
Total	**4.4**	**4.5**	**-**

*Manufactured homes in parks only.

In order to provide "needed net density figures," an analysis needs to be conducted to determine whether current density restrictions allow for a full range of affordable housing for all housing types.

As shown in Table 14.2-12, only the Very Low and Low Income groups suffered from a significant housing cost burden in the City of Umatilla in 1990. Except for 6 percent of owner-occupied households with incomes of $20,000 to $34,999 in 1990, no households with incomes above $20,000 experienced any kind of cost burden whatsoever.

As stated previously, the relative distribution of income groups has been kept at the 1990 levels. However, the definition of the income groups have been adjusted for inflation from 1990 levels based on an increase in Consumer Price Index from 1989 to 1998 of approximately 30%.

- Very low <$13,000
- Low $13,000 - $19,499
- Mid $19,500 - $32,499
- Mid-high $32,500 - $45,499
- High $45,500 - $65,000
- Very high >$65,000

The following information on housing affordability is derived from a survey of local realtors conducted in December 1998 by The Benkendorf Associates Corp:

- Rent for a 2 bedroom, 1 bathroom apartment is $350 to $425 per month.
- Minimum price for a 3 bedroom, 1 bath, 1000 to 1300 sq. ft. new manufactured home placed on a minimum lot is $85,000.
- Prices of older single-family housing on the market start at $74,000.
- Prices for homes in the Riverview Development start at $76,990 for 2 bedroom 2 bath units and $101,740 for 4 bedroom 2 bath units.
- Prices for a new single-family home in Hayden Project in the McNary area start at $84,000.

Using the HUD definition for rental housing affordability in which housing costs can be no more than 30 percent of income, the following analysis compares current housing prices to affordability levels. Affordable housing for owner-occupied housing has been estimated as no more than 3.8 times annual income, a figure currently used by the home lending industry.

Table 14.2-21
Estimated Current Housing Affordability
City of Umatilla

	Housing cost	Minimum yearly income
2 bd./2ba. apartment	$350	$13,986
3 bd./1ba. new manufactured home	$85,000	$22,368
Older house	$74,000	$19,474
2 bd./2ba. new house	$76,990	$20,261
New house	$84,000	$22,105
4 bd./2ba. new house	$101,740	$26,774

The lowest current apartment rents are unaffordable only to those low income households at or below $13,986, or approximately at the Very Low income cut-off.

Smaller new single-family houses or older single-family houses are affordable to those households with incomes around $20,000, or slightly below the Low Income cutoff. New housing, including larger manufactured homes on single-family lots and single-family houses on larger lots are affordable to all households at or above $22,400, or the lower range of the Mid income group. Larger homes are affordable to households with incomes at about $27,000, or towards the middle of the Mid-Income group.

Recent single-family housing has been developed at an average of 4.5 units/acre, the equivalent of 9,700 sq. ft. lots. If lot sizes were reduced to 6,000 sq. ft., this would be a density of 7.3 units/acre, an increase of approximately 60 percent. Assuming that land costs are 20 percent of final housing prices in the City of Umatilla and all other things being equal, this density increase could possibly lead to reductions of approximately 12% in housing costs for new housing.

While this cost decrease would only be significant on the margins, it could lead to an increase in housing affordability and homeownership possibilities for some lower income households.

Breaking down the figures for needed affordable housing by income groups presented in Table 14.2-15, a total of 46 new owner-occupied units for Very Low income and 34 new owner-occupied units for Low income households are projected to be needed over the next 20 years. The vast majority of these (56 out of 78 units) are projected to be manufactured homes (with 75 percent of these on single-family lots).

As stated in subsection 14.2.250, the majority of the Very Low and Low income homeowner households can be assumed to be age 65 or over. In this age group, 70 percent of the households

are homeowners and have considerable home equity, while at the same time 50 percent are considered Very Low or Low income due to retirement. These households make up 28% of all Very Low households and 46% of Low income households. Therefore, the housing affordability issue for Very Low and Low income homeowners is not as severe as the statistics might indicate.

The following conclusions can be drawn regarding housing affordability, distribution and density for Low and Very Low Income households:

- Very Low income renters will require vouchers or other government subsidies to afford rental housing. Drastically increased apartment densities are unlikely to be accepted by the community or provide rental housing below $350/month.
- Almost all Very Low income homeowners are likely to be households with the head aged 65 or older. Income levels will be low, but households will typically have strong equity and low to no monthly payments. Densities are not necessarily an affordability issue for these households. Housing types, i.e., smaller single-story, low maintenance housing types will be in demand for this group. Smaller lot housing and single-family attached housing can meet their needs.
- Low income renters can afford current rent levels.
- A large percentage of low income homeowners are likely to be households with the head aged 65 or greater. The comments about Very Low income households apply here also.

In summary, current overall development densities seem adequate for the provision of affordable housing in the community. However, the key issue is the maximum permitted development density of the R-1 and R-2 zones. Densities are recommended to be increased by decreasing the minimum lot size. At the margin of lower income households, this can make a difference in housing affordability and can provide for a wider range of housing needs.

As shown in Table 14.2-20 above, recent development densities indicate that smaller-lot single-family detached housing is already in higher demand as these figures are 41 percent greater than the existing housing density for single-family detached homes. Needed density levels are shown in the following table. While these overall needed densities are below the maximum densities allowed by the current comprehensive plan and zoning code, current regulations do not allow for smaller lot housing. Recommendations to change this are discussed later. Needed density levels are set at levels slightly higher than current development patterns.

Land needs are estimated in the following table by dividing the number of needed units of each structure type by the needed density for each residential plan designation. This figure is then increased by 20 percent to allow for streets and other infrastructure.

Table 14.2-22 presents the results of this analysis.

Table 14.2-22
Acreage Needed by Plan Designation and Housing Type

Residential Zone	Allocated Units	Needed Average Lot Size	Needed Development Density (units/acre)	Acreage Needed (including 20%)
R-1	717	8,777	4.96	173.4
Single-family detached	557	9,000	4.84	138.2
Manufactured homes	160	8,000	5.45	35.2
R-2	**282**	**5,197**	**8.38**	**40.4**
Single-family attached	43	6,000	7.26	7.1
Manufactured homes in	53	7,500	5.81	11.0
Apartments	93	4,356	10.00	11.2
Apartments - Gvmt. Assist.	93	4,356	10.00	11.2
R-3	**186**	**3,630**	**12.00**	**18.6**
Apartments	93	3,630	12.00	9.3
Apartments - Gvmt. Assist.	93	3,630	12.00	9.3
Total	**1,186**	**7,116**	**6.12**	**232.4**

Note: numbers may not add due to rounding.

A total of 232.4 acres of residential land are projected to be required over the next 20 years to meet the projected housing demand of 1,186 units, assuming that needed development densities are met.

SECTION 14.3 DETERMINE FUTURE LAND NEEDS FOR COMMERCIAL AND INDUSTRIAL LAND USES

The objective of this section is to determine the amount of commercial and industrial land that will be needed in the UGB of the City of Umatilla for the next 20 years. To do this, regional economic forecasts are examined in order to determine the land needed by industry sector and land use type.

The employment data, which is presented in this section, is only available at the county and, in some cases, the regional level. Specific employment data is not available for the City of Umatilla. For this reason, the analysis treats larger regional trends as applying to the City of Umatilla. While this is necessarily a generalization, it does provide a reasonable estimate of land use needs.

14.3.100 EXISTING EMPLOYMENT PATTERNS BY SECTOR

Table 14.3-1 provides a summary of recent population and employment data for Umatilla County for the 1991 through 1997 time period.

Table 14.3-1
Umatilla County Recent Employment Data

Year	Population	Ann. Avg. Wage	Ann. Avg. % Unemp.	Nonfarm Payroll	Per Capita Emp. Income
1991	60,100	$17,706	8.2	21,100	$14,516
1992	61,100	$18,635	9.0	21,750	$15,037
1993	63,000	$19,279	9.0	22,560	$16,342
1994	64,000	$19,769	7.1	23,190	$16,503
1995	65,200	$20,518	6.9	23,510	$17,541
1996	65,500	$20,996	8.4	23,970	$18,324
1997	65,500	NA	8.2	24,430	NA

Source: Oregon Labor Trends - Morrow & Umatilla Counties, Oregon Employment Department, September 1998

As shown in Table 14.3-1, nonfarm payroll employment increased by 3,330 or almost 16% over the 1991 to 1997 time period.

The following is a summary of recent economic trends in Umatilla County provided by the Oregon Employment Department:

> Construction and mining and manufacturing have been boom and bust in Umatilla County, although service producing industry growth was fairly consistent throughout the 1990s. The county's best year in terms of nonfarm job growth was 1993, when 810 jobs were added, and the reason is fairly straightforward: 1993 is the only year thus far in the 1990s where construction and mining, manufacturing, and service-producing industries all posted positive job gains.
>
> Umatilla County's construction industry sustained a fairly high level of employment in both 1995 and 1996. Based on its 1996 employment level, the county's construction industry has added 320 jobs since 1990. Notable projects recently completed in the area include a National Guard facility in Hermiston, a Wal-Mart store in Pendleton, a cogeneration power plant, and improvements made at the Pendleton Municipal Airport. Umatilla County will see further increases in construction employment over the next few years. Some of the larger projects currently underway or planned for the region include a state correctional facility, a locomotive maintenance facility, and a chemical weapons incinerator.
>
> By comparing manufacturing employment levels in 1990 and 1996, there has been a net gain of 110 jobs. However, neither 1995 nor 1996 was a good year, with manufacturing sector losses of 200 and 150 jobs, respectively. Manufacturing employment did see some sizable gains during the 1990s, with increases in 1993 and 1994 measuring 180 and 240 jobs, respectively. Unfortunately, some of those gains, particularly in lumber and wood products, were not sustainable. Food and kindred products posted some good years in the 1990s, and overall employment reached 2,800 in 1996; a gain of 170 jobs compared with its 1990 total.
>
> Among service producing industries, government employment reports a net job gain of 830 jobs since 1990. The treatment of employment related to Indian tribal enterprises changed in 1995, so a major portion of that gain should be attributed to the change in reporting. Finance, insurance, and real estate, a fairly small industry in Umatilla County, gained 120 workers in six years' time to number 800 in 1996. Transportation, communications, and utilities added 110 workers, with a major portion of that gain coming in 1996 thanks to the addition of a cogeneration power plant. The brunt of the service producing industry gain was in the service sector, which had a six-year job increase of nearly 1,000. Trade employment was also up, with retail adding 480 jobs and

wholesale losing 60. Retail trade growth slowed considerably in 1996, however, with just ten jobs added.[47]

Table 14.3-2 provides a summary of the most recently available figures for employment by industry in Umatilla County.

Table 14.3-2
Umatilla County Nonfarm Payroll Employment
(By Place of Work)

	1/ 3/ 4/ **July 1998**	**% of Total**	**July 1997**	*Change From* **July 1997**
Total Nonfarm Payroll Employment	**26,120**	**100.0%**	**24,820**	**1,300**
Goods Producing 6/	6,510	24.9%	6,210	300
Service Producing 7/	19,610	75.1%	18,610	1,000
Manufacturing, Total	**5,250**	**20.1%**	**4,980**	**270**
Durable Goods	1,560	6.0%	1,530	30
Lumber & Wood	910	3.5%	880	30
Other Durable Goods	650	2.5%	650	0
Nondurable Goods	3,690	14.1%	3,450	240
Food & Kindred Products	3,320	12.7%	3,090	230
Other Nondurable Goods	370	1.4%	360	10
Nonmanufacturing, Total	**20,870**	**79.9%**	**19,840**	**1,030**
Construction & Mining	1,260	4.8%	1,230	30
Transportation, Communication, & Utilities	1,570	6.0%	1,420	150
Trade	6,310	24.2%	5,750	560
Wholesale	1,810	6.9%	1,270	540
Retail	4,500	17.2%	4,480	20
Finance, Insurance, & Real Estate	820	3.1%	820	0
Services & Miscellaneous	4,810	18.4%	4,710	100
Business, Legal, Engineering & Mgmt. 8/	860	3.3%	860	0
Health Services	1,470	5.6%	1,410	60
Other Services 9/	2,480	9.5%	2,440	40
Government	6,100	23.4%	5,910	190
Federal	820	3.1%	790	30
State	1,410	5.4%	1,360	50
Local	3,870	14.8%	3,760	110
Local Education	1,910	7.3%	1,900	10
Tribal Government	930	3.6%	790	140
Other Local	1,030	3.9%	1,070	-40

Source: Oregon Labor Trends, Oregon Employment Department, September 1998.

Note Estimates are subject to revision.

1/ Preliminary.

2/ Revised.

3/ Includes employed and unemployed individuals 16 and older. Data are adjusted for multiple job holding and commuting. Includes nonfarm payroll employment, the self-employed, unpaid family workers, domestics, agricultural workers, and labor disputants.

4/ Nonfarm payroll data are based on 1987 Standard Industrial Classification (SIC) manual. The data are by place of work. Persons working multiple jobs are counted more than once. The data exclude the self-employed, volunteers, unpaid family workers, domestics, and persons involved in labor disputes. Persons on sick leave, vacations, or holidays, and being paid for that period by the employer, are considered employed.

[47] Oregon Employment Department, *1998 Regional Economic Profile - Region 12*.

5/ Total nonfarm payroll employment seasonally adjusted and indexed to 1992. Data on the earlier index (1977=100) can be converted to the 1992 base period by multiplying by a factor of .8820, the ration between 1997's annual average employment (6,950) and that of 1992 (7,880).

6/ Goods producing agencies include manufacturing, mining, and construction.

7/ Service-producing industries include transportation, communications & utilities, real estate; services; and government.

8/ Business services include business services, lawyers, engineering, and accounting services.

9/ Other services includes private education, religious organizations, agricultural services, etc.

As shown above, manufacturing accounts for 20.1 percent of the payroll employment in Umatilla County, with nonmanufacturing-related employment accounting for the remaining 79.9 percent. Of the major nonmanufacturing employment sectors, Trade accounts for 24.2 percent of total employment, Services accounts for 18.4 percent, and Government accounts for 23.4 percent.

Large recent employment gains have been made in Umatilla County in the following sectors in the past year: Manufacturing - Food and Kindred Products (230 jobs); Transportation, Communication and Utilities (150 jobs - most of this is probably the expansion of the Union Pacific Railroad Hinkle Locomotive Shop); Wholesale Trade (540 jobs - almost all of this is probably the new Wal-Mart Distribution Center); Health Services (60 jobs); and State Government (50 jobs). Tribal government jobs also had a large increase in jobs, but much of this is due to changes in tabulation procedures by the Oregon Employment Department.

14.3.110 Sector-level employment forecasts

The following section summarizes regional employment projections and estimates the impact on the City of Umatilla.

The following long-term employment forecast was prepared by the Oregon Office of Economic Analysis. As shown in Table 14.3-3 below, employment is projected to increase by 4,088 over the 10-year period from 1995 to 2005. It is expected to increase by another 1,574 over the next 10 years to the year 2015. As these figures demonstrate, long-term economic forecasts call for a gradual slowing down of economic growth towards the second half of a 20-year time frame. This is consistent with statewide and national forecasts.

Table 14.3-3
Umatilla County Employment Forecast

	1990	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**
Umatilla County	21,060	23,600	26,313	27,688	28,703	29,262	29,766

Source: Oregon Office of Economic Analysis, Long Term Population and Employment Forecasts, County Employment Forecasts, January 1997.

Table 14.3-4 shows employment projections made by the Oregon Employment Department for the 1996-2006 time-frame. These projections were only made on a regional basis. Umatilla County is part of Region 12, which includes both Umatilla County and neighboring Morrow County. As shown in Table 14.3-4, an increase of 9,980 jobs is projected for Region 12 for the 1996-2006 period.

Given that Umatilla County's 1996 population of 65,500 represents 88 percent of the Region 12 population of 74,500 (Morrow County population = 9,000), a majority of the projected

employment growth can be assumed to occur in Umatilla County). The employment increases shown in Table 14.3-4, therefore, represent greater estimates than those shown in Table 14.3-3. The employment projection made by the Oregon Employment Department in Table 14.3-4 shall be used as a basis for projections for the City of Umatilla, since it is the less conservative of the two projections and because it breaks down employment projections by industry.

Table 14.3-4
Employment Projections by Industry, 1996 – 2006
Region 12: Morrow & Umatilla Counties

	1996	2006	Change	% Change
Total Nonfarm Payroll Employment	**27,100**	**37,080**	**9,980**	**36.80%**
Goods Producing	6,540	7,160	620	9.50%
Service Producing	20,560	29,920	9,360	45.50%
Manufacturing, Total	**5,590**	**5,820**	**230**	**4.10%**
Durable Goods	1,700	1,820	120	7.10%
Lumber & Wood Products	1,050	1,090	40	3.80%
Other Durables	650	730	80	12.30%
Nondurable Goods	3,890	4,000	110	2.80%
Food Products	3,540	3,620	80	2.30%
Other Nondurables	350	380	30	8.60%
Nonmanufacturing, Total	**21,510**	**31,260**	**9,750**	**45.30%**
Construction & Mining	950	1,340	390	41.10%
Trans., Comm. & Utilities	1,630	3,050	1,420	87.10%
Trade	5,850	8,490	2,640	45.10%
Wholesale Trade	1,280	2,410	1,130	88.30%
Retail Trade	4,570	6,080	1,510	33.00%
Finance, Ins., & Real Estate	930	1,250	320	34.40%
Services	5,370	8,100	2,730	50.80%
Personal Services	130	160	30	23.10%
Business Services	780	1,330	550	70.50%
Other Services	4,460	6,610	2,150	48.20%
Government	6,780	9,030	2,250	33.20%
Federal	780	900	120	15.40%
State	1,350	2,120	770	57.00%
Local	4,650	6,010	1,360	29.20%
Local Education	2,720	3,520	800	29.40%
Other Local	1,930	2,490	560	29.00%

Source: State of Oregon Workforce Analysis, Oregon Employment Department, June 1997.

As shown in Table 14.3-4, employment is expected to increase by 36.8 percent in Region 12 over the 1996-2006 period. Manufacturing employment is expected to grow at a much lower rate than overall employment, with only a 4.1 percent projected growth. The industry sectors with the greatest projected relative increases in employment are: Transportation, Communication, and Utilities (87.1%), Wholesale Trade (88.3%), Business Services (70.5%), and State Government (57.0%). The industry sectors with the largest projected employment gains are: Transportation, Communication, and Utilities (1,420 jobs), Wholesale Trade (1,130 jobs), Retail Trade (1,510 jobs), Other Services (2,150 jobs), and State Government (1,360 jobs).

In order to apply these regional projections to the City of Umatilla, several assumptions are made. These are listed as follows:

- The City of Umatilla will capture employment growth as a percentage of regional employment growth equivalent to the ratio of its current population to the population of the region.

- The City of Umatilla will capture employment growth by industrial sector at the same rate as these industrial sectors make up total employment growth for the region. This necessary assumption probably overestimates employment projections for the City of Umatilla, especially for sectors such as retail and services, which are more likely to locate in the larger population centers of the county such as Hermiston and Pendleton. This assumption also possibly underestimates employment projections for industrial sectors such as manufacturing, food processing and warehousing, given the utilities available in the Port of Umatilla and good transportation connections for the Port area. Still, this assumption provides a useful assessment of the land necessary for employment growth *if* the City of Umatilla is able to capture its 'fair share' of regional employment growth in the next 20 years.

- Employment growth for 1996 will be multiplied by a 1.5 factor to account for an additional 10-year time period (to the year 2016). This factor accounts for the slowing down of employment growth in the last half of the 20-year study period. This means that employment growth for the 2006-2016 period will be half of the employment growth for 1996-2006. This figure is greater than the long-term estimated employment forecast, but is reasonable to use for this study to avoid underestimating land use needs.

The methodology used here is a basic "gravity model," commonly used in economic development analysis. The basic assumption behind this is that a locality will attract investment relative to a given region based on its relative size. In this case, population growth is used as a proxy for employment growth. This is done because there are no direct economic projections for the City of Umatilla (or indeed for any other sub-county area). There are some factors which indicate that the City of Umatilla might be able to attract industrial development at a rate higher than its population growth, and other factors which indicate that the City of Umatilla will not be able to attract commercial development commiserate with its population growth. However, the figures used are based on "all other things being equal," a necessary assumption.

Table 14.3-5 shows 1996 population levels in Umatilla and Morrow Counties. The population of the City of Umatilla accounts for 4.44 percent of the total population of Region 12. The employment projections for the region are multiplied by this in order to estimate employment growth for the City of Umatilla.

Table 14.3-5
Region 12 Population – 1996

Region 12 Total	74,500
Umatilla County	65,500
Morrow County	9,000
City of Umatilla	3,310
City of Umatilla as % of Region 12	4.44%

Source: Portland State University Center for Population, Research and Census.

Table 14.3-6 below shows the employment projections for Region 12 converted to the City of Umatilla. These figures are then multiplied by 1.5 to extend the projection to the year 2016. As shown in Table 14.3-6, a total of 665 new jobs are projected for the City of Umatilla for 2016. The relative percentages of the industry employment sectors are identical to those described in the analysis for Table 14.3-4.

Table 14.3-6
Employment Projections by Industry, 1996-2016
City of Umatilla

	New Jobs, Region 12 B 1996-2006	New Jobs, City of Umatilla Share B 1996-2006	New Jobs, City of Umatilla - 1996-2016 (1.5x 2006)
Total Nonfarm Payroll Employment	**9,980**	**443**	**665**
Goods Producing	620	28	41
Service Producing	9,360	416	624
Manufacturing, Total	**230**	**10**	**15**
Durable Goods	120	5	8
Lumber & Wood Products	40	2	3
Other Durables	80	4	5
Nondurable Goods	110	5	7
Food Products	80	4	5
Other Nondurables	30	1	2
Nonmanufacturing, Total	**9,750**	**433**	**650**
Construction & Mining	390	17	26
Trans., Comm. & Utilities	1,420	63	95
Trade	2,640	117	176
Wholesale Trade	1,130	50	75
Retail Trade	1,510	67	101
Finance, Ins., & Real Estate	320	14	21
Services	2,730	121	182
Personal Services	30	1	2
Business Services	550	24	37
Other Services	2,150	96	143
Government	2,250	100	150
Federal	120	5	8
State	770	34	51
Local	1,360	60	91
Local Education	800	36	53
Other Local	560	25	37

Source: Oregon Employment Department, and The Benkendorf Associates Corp.

14.3.120 Employee per acre ratios

The following table presents typical square foot per employee and land coverage ratios by land use and industry classification. These numbers are based on typical nationwide figures. There is no data available at the local level for employee per acre ratios.

The coverage ratios, listed in the Table 14.3-7, refer to the typical land area which is taken up by a structure on its site. In other words, the 30 percent coverage ratio for industrial uses means that an industrial building will typically take up 30 percent of the land area on an industrial site. The employees per acre figure is calculated by dividing the square foot floor area per employee

figure by the coverage ratio in order to determine the total land area per employee figure. This figure is then converted to employees per acre.

More compact, pedestrian-oriented development patterns might affect certain sector employee/acre ratios. Some of the office and retail land uses; particularly services and retail trade would be able to increase employee per acre ratios primarily by reducing parking lot size requirements. In this analysis for the City of Umatilla, standard ratios shall be used in order to avoid underestimating land needs. If land use regulations, which encourage compact, pedestrian-oriented development patterns are put into place, land use needs will be less than the estimates presented in this section.

Certain large-scale industrial uses, such as warehousing, which are located on large parcels of land may have lower coverage ratios than are indicated here. The implications of these types of industries on land use needs are discussed below.

Table 14.3-7
Employees Per Acre by Land Use Type and Industry

Land Use and Industry Type	Floor Area Per Job (sq. ft.)	Coverage Ratio	Employees per Acre
Industrial		**30%**	
Manufacturing	750		17.42
Construction and Mining	750		17.42
Transportation, Communication and Public Utilities	1,400		9.33
Wholesale Trade	1,100		11.88
Retail Trade	2,500		5.23
Financial, Insurance and Real Estate	350		37.34
Services	350		37.34
Government	300		43.56
Office	**-**	**40%**	
Manufacturing	225		77.44
Construction and Mining	225		77.44
T.C.P.U	250		69.70
Wholesale Trade	225		77.44
Retail Trade	225		77.44
F.I.R.E	225		77.44
Services	250		69.70
Government	200		87.12
Retail	**-**	**25%**	
T.C.P.U.	300		36.30
Retail Trade	500		21.78
F.I.R.E	300		36.30
Services	300		36.30

Source: Hobson Johnson & Associates and The Benkendorf Associates Corp.

14.3.130 Employee/acre ratios compared to employment forecasts by sector

Table 14.3-7 applies the employee/acre ratios presented in Table 14.3-6 to the employment projections by sector for the City of Umatilla presented in Table 14.3-5. New jobs by sector are listed in the first column. Note that these figures are repeated for each land use type - i.e., new retail trade jobs are listed under industrial, office, and retail land uses. The capture factor refers

to the rate at which the employees of a certain industry type work on a certain land use type. For example, retail trade has a capture factor of 10 percent in industrial space, 2 percent in office space, and 88 percent in retail space. This means that, on average, 10 percent, 2 percent, and 88 percent of retail trade employment is in industrial, office, and retail space, respectively. The capture factors are based on typical nationwide industry averages.

The adjusted new jobs figure refers to the employment in a specific land use type and industry sector after capture factors are taken into account. Floor area requirements are calculated based on the floor area requirements per job shown in Table 14.3-6. Land requirements are calculated by dividing the number of new jobs (adjusted) by the employees per acre for each land use and employment type listed in Table 14.3-6.

Table 14.3-8
Projection of Land Required by Employment Sector
City of Umatilla, 1996-2016

Land Use and Industry Type	New Jobs - 1996-2016	Capture Factor	New Jobs B 1996-2016 (adjusted)	Floor Area Required (sq. ft.)	Land Required (acres)
Industrial	**-**	**-**	**210**	**214,098**	**16.4**
Manufacturing	15	85%	13	9,772	0.7
Construction and Mining	26	60%	16	11,696	0.9
Transportation, Communication and	95	60%	57	79,493	6.1
Wholesale Trade	75	85%	64	70,413	5.4
Retail Trade	101	10%	10	25,158	1.9
Financial, Insurance and Real Estate	21	10%	2	746	0.1
Services	182	25%	45	15,920	1.2
Government	150	2%	3	900	0.1
Office	**-**	**-**	**117**	**28,159**	**1.6**
Manufacturing	15	15%	2	517	0.0
Construction and Mining	26	40%	10	2,339	0.1
T.C.P.U	95	30%	28	7,098	0.4
Wholesale Trade	75	15%	11	2,542	0.1
Retail Trade	101	2%	2	453	0.0
F.I.R.E	21	80%	17	3,839	0.2
Services	182	25%	45	11,371	0.7
Government	150	35%	52	10,496	0.6
Retail	**-**	**-**	**191**	**75,048**	**6.9**
T.C.P.U.	95	10%	9	2,839	0.3
Retail Trade	101	88%	89	44,278	4.1
F.I.R.E	21	10%	2	640	0.1
Services	182	50%	91	27,291	2.5
Total	**-**	**-**	**518**	**317,305**	**24.9**

Source: The Benkendorf Associates Corp. and Hobson Johnson & Associates

As shown in Table 14.3-8, a total of 24.9 acres of land is estimated to be needed over the next 20 years in the City of Umatilla for a total floor area of 317,305 square feet of manufacturing, office and retail space. An estimated 16.4 acres of industrial land and 8.5 acres of non-industrial land, including 1.6 acres for office space and 6.9 acres for retail space, is estimated to be needed. This table only takes into account land needs for 37 percent (2% in industrial space and 35% in office space) of government employment. The remainder is assumed to be located on land zoned

for public facilities and community services (such as schools) and is beyond the scope of this study.

Table 14.3-9 below shows these projected land needs compared to the net buildable acreage available for commercial and industrial land in the City of Umatilla. Net buildable acreage data is taken from Tables 14.2-1 and 14.2-2. The Retail and Office land use needs shown in Table 14.3-8 are assumed to be located in the Commercial plan designation/zone. Industrial land use needs are assumed to locate in the Industrial plan designation/zone.

Table 14.3-9
Projection of Land Required by Employment Sector
City of Umatilla, 1996-2016

	Net Buildable Acreage			
Zone	**Inside**	**Between**	**Total Inside UGB**	**Land Needed 1996-2016**
Industrial (M)	34.4	287.5	321.9	16.4
Commercial (C)	62.5	83.3	145.8	8.5

Source: The Benkendorf Associates Corp. and Pacific Meridian Resources

As shown in Table 14.3-9, the land available for industrial and commercial land uses far exceeds the projected land demand for the next 20 years. In fact, the commercial and industrial land located *inside* city limits is projected to be more than sufficient to meet land demand, with more than twice the amount needed of industrially-designated land and more than seven times the amount needed of commercially-designated land available for development.

As mentioned previously, these land use needs are an estimate for the City of Umatilla based on the City receiving a share of regional employment growth equivalent to its current share of the regional population. If it were assumed that the City of Umatilla could attract industrial development at a rate up to four times that of its population growth relative to the region, 65.6 acres of industrial land would be needed. This seems a reasonable assumption given the attractive transportation and utility services available in the vicinity of the City.

If another large project, such as the Two Rivers Correctional Institution, decides to locate within the City of Umatilla, the land needs would be greater than projected.

The following table shows the land uses of major industrial developments which have happened in the Port of Umatilla District over the last decade.

Table 14.3-10
Recent Industrial Development in the Port of Umatilla District

Firm	**Type**	**Location**	**Acreage**
Gilroy Foods	Food processing	McNary Industrial Park	35 acres
Continental Mills	Food processing	Pendleton	10 acres
Hermiston Foods	Food processing	Hermiston	40 acres
Wal-Mart Distribution Center	Warehousing	Hermiston	189 acres
Guerdon Homes	Manufacturing	Pendleton	30 acres
Sykes Enterprises	Software	Milton-Freewater	8 acres

Source: Port of Umatilla

The following table shows the land uses of major industrial developments which have taken place in the industrial park in Boardman operated by the Port of Morrow.

Table 14.3-11
Industrial Development in the Port of Morrow

Firm	Type	Location	Acreage
Boardman Foods	Food processing	Boardman Industrial Park	17 acres
Logan International	Food processing	Boardman Industrial Park	20 acres
Watts Brothers	Warehousing	Boardman Industrial Park	16 acres
Longview Fiber	Wood chips	Boardman Industrial Park	40 acres
Cascade Specialties	Food processing	Boardman Industrial Park	40 acres

Source: Port of Umatilla

As shown above, the types of industrial developments which have located in the region have relatively large land needs. This points to the need for the City of Umatilla to maintain large contiguous parcels (of 40 acres or more) of industrial land in its UGB to be able to attract these kinds of industries.

14.3.140 Recommendation for code changes for industrial and commercial land

The following recommendations to modify the comprehensive plan and zoning code for commercial and industrial land are based on the analysis above:

- Due to the large amount of commercial land available relative to projected needs, change the Commercial districts to two districts: a Downtown Commercial district and a General Commercial District. The Downtown Commercial District should apply to the central area of the city and allow retail and service uses that require minimal parking and can be served by on-street parking. Maximum setbacks should also be set to bring buildings closer to the street frontage for a more pedestrian-friendly environment. The possibility to encourage larger retail uses on some of the larger vacant parcels in the downtown area should also be investigated. These larger retail uses can serve as important "anchor" stores for downtown revitalization. The location of new retail and service uses in the downtown area to the greatest extent possible should be a priority of the Commercial code. The general commercial area will primarily include the Highway 395 corridor and will accommodate larger retail uses that are unable to locate in the downtown area due to requirements for greater amounts of parking and large display/product storage areas.

- Preserve and possibly add to the large tracts of industrial land available for development. The types of large-scale industrial uses which have located in the area in the past, such as warehousing and food processing, typically require large parcels of land. In order to preserve the capacity to attract these types of industry, the City should preserve large industrial tracts of land, despite the forecasted surplus of land available for industrial uses in the next 20 years. The City of Umatilla is in a strong competitive position, compared to other areas in the region, to attract large industries, due to the availability of utility services, transportation options, and a new high school. This competitive advantage could result in a greater percentage of industries locating in the City, relative to its forecasted share of regional economic growth.

SECTION 14.4 COMPARISON OF NEEDED DENSITY TO ACTUAL DENSITY

The objective of this section is to determine if the average needed density is the same as or less than the density of recent development; whether the mix of needed housing types is different from the mix of recent development; and whether any measures are required.

14.4.100 COMPARISON OF THE EXISTING HOUSING MIX WITH THE NEEDED HOUSING MIX

The current housing mix in the City of Umatilla was obtained by taking the 1990 Census housing mix figures in Table 14.2-9 and adding the new housing units developed from 1990 to the present from Table 14.2-3. Housing units which are projected to be needed over the next 20 years are from Table 14.2-16. Table 14.4-1 below compares the current housing mix to the projected needed housing mix.

Table 14.4-1
Existing and Needed Housing Mix

	Existing Housing (1998)		**Recent Housing Construction Only (1987-1998)**		**Projected New Needed Housing (1998-2007)**	
Housing type	Units	Mix	Units	Mix	Units	Mix
Single-family detached	688	54.0%	68	95.8%	557	47.0%
Single-family attached	37	2.9%	N/A	N/A	43	3.6%
Manufactured homes	190	14.9%	2*	2.8%*	213	18.0%
Multi-family units	360	28.2%	1	1.4%	373	31.4%
Total	**1,275**	**100%**	**71**	**100%**	**1,186**	**100%**

*Includes only manufactured homes in parks; a number of manufactured housing units were developed in single-family residential zones and were counted as single-family detached houses.

As shown in Table 14.4-1 above, the projected new housing mix is roughly equivalent to the current housing mix. A slightly higher percentage of multi-family units and manufactured homes are projected to be needed to meet housing demand. Conversely, single-family detached homes are projected to be needed at a slightly lower rate.

It is important to note however, that over the last 10 years, new housing in the City of Umatilla has been almost overwhelmingly single-family detached homes, including manufactured homes in single-family zones, and that current development patterns will need to change to meet the future demand.

14.4.200 COMPARISON OF THE EXISTING NET DENSITY FOR SPECIFIC HOUSING TYPES WITH THE NEEDED NET DENSITY RANGES

Table 14.4-2 below compares the current housing density to the projected needed density for new housing. The existing housing density and recent housing development density (1987-1998) in the City of Umatilla was obtained from Table 14.2-20. Needed density figures were obtained by combining the needed development densities by residential zone from Table 14.2-22 into needed densities by housing type. The current allowed and needed densities listed here do not include the 20 percent additional land needed for streets and other infrastructure, to make them directly comparable to each other.

Table 14.4-2
Current and Projected Net Housing Density

Housing Type	Existing Density (1998)	Recent Density (1987-1998)	Maximum Allowed Density (Current Comprehensive Plan)	Needed Density for New Housing
Single-family detached	3.2	4.5	5.45	4.8
Single-family attached	N/A	N/A	10.9	7.3
Manufactured homes**	3.7	6.2*	7.26	5.5
Apartments	9.2	-	14.52	10.9
Total	**4.4**	**4.5**	-	**6.1**

*Manufactured homes in parks only.

As shown in Table 14.4-2 above, the needed housing densities for new housing are greater than existing housing densities by about 39 percent. Recent development densities indicate that smaller-lot single-family detached housing is already in higher demand as these figures are 41 percent greater than the existing housing density for single-family detached homes. Recent development has been at similar densities to the needed density figures. As shown above, while needed densities have been set at levels greater than the existing densities, they are still well below the maximum densities allowed by the comprehensive plan and zoning code.

14.4.300 DETERMINE IF MEASURES ARE REQUIRED TO ACHIEVE EITHER THE NEEDED HOUSING MIX OR NEEDED DENSITIES, OR BOTH

As shown in Table 14.4-1, the needed housing mix is roughly equivalent to the existing mix. This would indicate that the existing development code is adequate to encourage the needed housing types. No comprehensive plan or zoning code amendments are proposed in this section.

A more detailed analysis of land available and needed by comprehensive plan/zoning code designation is presented as a part of Section 14.5. That section provides a more thorough analysis of the changes in the comprehensive plan/zoning code which may be needed to ensure adequate land is available for the projected development in each plan designation.

SECTION 14.5 20-YEAR HOUSING NEED COMPARED TO VACANT BUILDABLE LAND

The acreage needed for housing for the next 20 years in the City of Umatilla by housing type and plan designation was obtained from Table 14.2-22. Net buildable acreage was obtained from Tables 14.2-1 and 14.2-2. Table 14.5-1 below shows the results of this analysis.

Table 14.5-1
Residential Acreage Needed Compared to Buildable Acreage

Residential Zone	Allocated Units	Projected Density (units/acre)	Acreage Needed (includes 20% increase for streets)	Net Buildable Acreage in the City	Net Buildable Acreage in the UGB	Difference Between Acreage Needed and Available in UGB
R1	**717**	**5.0**	**173.4**	**252.7**	**575.2**	**401.8**
Single-family detached						-
	557	4.8	138.2		-	
Manufactured homes	160	5.4	35.2		-	-
R2	**282**	**8.4**	**40.4**	**33.1**	**33.1**	**-7.3**
Single-family attached						-
	43	7.3	7.1		-	
Manufactured homes	53	5.8	11.0			
Apartments	93	10.0	11.2		-	-
Apartments - Gvmt. Assist.						-
	93	10.0	11.2		-	
R3	**186**	**12.0**	**18.6**	**14.6**	**14.6**	**-4.0**
Apartments	93	12.0	9.3		-	-
Apartments - Gvmt. Assist.						-
	93	12.0	9.3		-	
SR	**-**	**-**	**-**	**162.3**	**625.2**	**625.2**
MH	**-**	**-**	**-**	**141.4**	**141.4**	**141.4**
Total	**1,186**	**6.1**	**232.4**	**604.1**	**1,389.50**	**1,157.1**

Sources: Pacific Meridian Resources and The Benkendorf Associates Corp., 1998 from data provided by the Umatilla Tax Assessor's Office.

Notes: Figures may not add due to rounding; C (Commercial) zone allows for apartment residential uses, but has not been calculated as residential land for the purposes of this analysis.

As shown in Table 14.5-1, a total of 232.4 acres of residential land are projected to be required over the next 20 years in the City of Umatilla to meet the projected housing demand of 1,186 units, assuming that needed development densities are met. There are a total of 604.1 net buildable acres of residential land available within the city limits and a total of 1,389.5 net buildable residential acres within the entire UGB of the City of Umatilla (land within city limits plus land within UGB outside of city limits). This means that there is 2.6 times the amount of buildable residential land needed within the city limits and almost 6 times the amount of residential land needed within the entire UGB than required by residential development within the UGB of the City of Umatilla over the next 20 years.

In reviewing the land requirements by comprehensive plan/zoning code designation, there is a large surplus of land beyond the projected requirements in the R-1 (Residential, Single-Family) zone. In the R-1 zone, buildable land exceeds needed land by over 3.3 times in the UGB and by almost 1.5 times inside the city limits.

Note that the SR (Suburban Residential), MH (Manufactured Home Park/Subdivision) zones are recommended to be removed from the comprehensive plan/zoning code and that no units have been allocated to these zones.

The R-2 (Residential, Medium Density) zone has a deficit of 7.3 acres land needed than available. The R-3 (Residential, Multi-Family - Apartments) zone also has projected land needs greater than the available buildable land. There are a total of 18.6 acres of R-3-zoned land projected to be needed while there are currently only 14.6 buildable acres available within the UGB, a deficit of 4 acres.

Clearly, there is an excess of buildable residential land available for development within the UGB in the City of Umatilla.

14.5.100 REQUIRED MEASURES OR PLAN MAP CHANGES

The following recommendations to modify the comprehensive plan and zoning code are based on the analysis above:

- Work with Umatilla County to assure that land outside of the city limits is zoned at rural development standards. Allowing for residential development outside of the current city limits will lead to inefficient, sprawling development patterns which will have more expensive public service provision costs in the long term.

- Rezone land in R-1, SR, and MH zones within the city limits to R-2 and R-3 designations to allow for the needed multi-family housing types. Relative to housing needs in the next 20 years, there is a large surplus of land zoned SR, R-1 and MH, and a deficit of land zoned R-2 and R-3.

Note: DLCD housing needs analysis procedures indicate "if sufficient land is available to meet the future housing needs based on densities of recent development, the remaining tasks are not required." Recommendations to ensure adequate government-assisted housing and to ensure the appropriate location of housing types are outlined in the following section.

SECTION 14.6 ASSURE NEEDED RESIDENTIAL DEVELOPMENT WILL OCCUR

The objective of this section is to identify and evaluate the measures that increase the likelihood that the needed residential development will occur. An evaluation has been made of whether land for needed housing is appropriately located and is zoned at density ranges achievable in the future housing market.

14.6.100 IDENTIFY HOUSING MIX AND DENSITY ISSUES THAT REQUIRE ACTION

As stated in Section 14.5, there is a need for additional land zoned R-2 and R-3 for multi-family uses to meet the housing needs for the next 20 years. These needs can be met by rezoning the residential land now zoned SR, R-1, and MH. The housing mix is much more of an issue than housing density. Recent housing densities are similar to the projected, needed density. A greater mix of multi-family housing types will be needed to meet the future housing needs.

Actions to address the surplus of residential land within the UGB have been recommended as a part of Section 14.5. Only actions dealing with housing mix and location issues are addressed below.

14.6.200 IDENTIFY AND EVALUATE MEASURES TO ADDRESS HOUSING NEED ISSUES

Table 14.6-1 below is identical to Table 14.4-1. It is duplicated here for ease of reference. Table 14.6-1 shows the existing and projected needed housing mix for the City of Umatilla.

Table 14.6-1
Existing and Needed Housing Mix

	Existing Housing (1998)		**Recent Housing Construction Only (1987-1998)**		**Projected New Needed Housing (1998-2007)**	
Housing type	Units	Mix	Units	Mix	Units	Mix
Single-family detached	688	54.0%	68	95.8%	557	47.0%
Single-family attached	37	2.9%	N/A	N/A	43	3.6%
Manufactured homes	190	14.9%	2*	2.8%*	213	18.0%
Multi-family units	360	28.2%	1	1.4%	373	31.4%
Total	**1,275**	**100%**	**71**	**100%**	**1,186**	**100%**

*Includes only manufactured homes in parks; a number of manufactured housing units were developed in single-family residential zones and were counted as single-family detached houses.
Source: The Benkendorf Associates Corp.

As shown in Table 14.6-1 above, the projected new housing mix is roughly equivalent to the current housing mix. A slightly higher percentage of multi-family units and manufactured homes are projected to be needed to meet housing demand. Conversely, single-family detached homes are projected to be needed at a slightly lower rate.

Again, it is important to note that over the last 10 years, new housing in the City of Umatilla has been almost overwhelmingly single-family detached homes (and manufactured homes in single-family zones) and that current development patterns will need to change to meet the future demand.

Approximately one-half of the multi-family units projected to be needed should be considered as government-assisted housing units, as shown in Table 2.3-13. This means that 186 new government-assisted rental units are projected to be needed over the next 20 years by the lowest income households in the city.

Table 14.6-2 below is identical to Table 14.4-2 and has been duplicated here for ease of reference. It compares the current housing density to the projected density for new housing.

Table 14.6-2
Current and Projected Net Housing Density (Units per Acre)

Housing Type	Existing Density (1998)	Recent Density (1987-1998)	Maximum Allowed Density (Comprehensive Plan)	Needed Density for New Housing
Single-family detached	3.2	4.5	5.45	4.8
Single-family attached	N/A	N/A	10.9	7.3
Manufactured homes**	3.7	6.2*	7.26	5.5
Apartments	9.2	-	14.52	10.9
Total	**4.4**	**4.5**	**-**	**6.1**

*Manufactured homes in parks only.

Source: The Benkendorf Associates Corp.

As shown in Table 14.6-2 above, the needed housing densities for new housing are greater than existing housing densities by about 39 percent. Recent development densities indicate that smaller-lot single-family detached housing is already in higher demand as these figures are 41 percent greater than the existing housing density for single-family detached homes. Recent development has been at similar densities to the projected density figures. As shown above, while projected densities have been set at levels greater than the existing densities, they are still well below the maximum densities allowed by the comprehensive plan and zoning code.

The housing densities for specific housing types are not an issue that needs to be addressed by any City actions. The overall housing density for the city, however, will be an issue, if not enough multi-family units are developed. This will result in an overall housing density lower than the total projected density and more land will be required than now projected. This, however, is more of a housing mix than housing density issue.

The critical housing density issue for affordability is whether enough smaller-lot housing units are built to meet housing affordability requirements of lower income households. Recommendations include lowering the minimum lot size in the R-1 and R-2 zones to allow for more affordable, smaller lot housing.

Table 14.6-3 reiterates the data from Table 14.5-1 regarding residential land needed (net buildable land subtracted from needed land) within the UGB over the next 20 years by plan designation.

As shown in Section 14.5, there are 371.7 acres more than the amount of buildable residential land needed within the city limits and 1,157.1 acres more than required by residential development within the UGB of the City of Umatilla over the next 20 years.

Table 14.6-3
Residential Acreage Needed by Plan Designation

Residential Zone	Net Acreage Needed
SR	-
R-1	173.4
R-2	40.4
R-3	18.6
MH	-
Total	**232.4**

Source: The Benkendorf Associates Corp.

Section 14.5 identified the measures appropriate to both reduce the surplus of residential (and industrial and commercial) land within the UGB and to increase the land available for multi-family development (R-2 and R-3 zones). These measures will be sufficient to meet the appropriate amount of land available for development needs over the next 20 years. However, these measures do not guarantee that development will occur as planned or needed. And, they will not necessarily influence the character or location of future development. If the City of Umatilla wishes to influence the nature of future development (i.e., creating a more pedestrian friendly environment, revitalize the downtown area, limit the amount of sprawl), it must go beyond merely ensuring that appropriate land is available for development by plan designation.

Further measures beyond the recommendations in Section 14.5 are necessary to meet the requirements that government-assisted housing needs are addressed and that land zoned for higher densities is in locations appropriate for the housing types needed.

A total of 186 government-assisted multi-family housing units are identified as needed over the next 20 years. There are several measures that the City of Umatilla could take which would increase the likelihood that this need is met:

- Require future multi-family development to reserve a certain percentage of units for households with government assistance (Section 8, etc.). Rental rates on these units may need to be kept down to ensure eligibility under U.S. Department of Housing and Urban Development guidelines. Multi-family units in both R-2 and R-3 zones need to be available to low-income households.

- Provide financial incentives to developers of multi-family units to build more low-cost units. This could be done as a part of the federal Low Income Housing Tax Credit program or as an additional municipal subsidy.

- Assist in the application (with a Housing Authority, non-profit organization or private developer) for additional housing assistance for the construction of low-cost units from federal and/or state sources. The data presented in this document can be used to document the future need for such housing.

The instructions for Section VII of *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* require an examination of the location of land zoned for higher densities to make

sure it is in locations appropriate for the housing types needed. Recommendations for the location of zoning are listed below:

- Currently, most of the R-2-zoned land is centrally located. The additional R-2-zoned land to meet projected housing needs could be taken from the R-1 land located just south of downtown and the Umatilla river, or alternatively, from the land located on the south side of Highway 730 across from the mobile home park on the east side of town. This would maintain the central location of needed higher-density housing.

- Currently, all of the R-3-zoned land is located in one area on the far east end of town. This could be somewhat problematic in terms of access to services and jobs for the lowest-income households in the city and in the concentration of all the lowest-income households in one isolated area. The City should examine the possibility of breaking up R-3-zoned land to make it more evenly distributed across the City and more centrally located to services and jobs. A small amount of additional R-3-zoned land will also be needed to meet the projected need. At a minimum, this land should be located closer to the central area of the City.

Note: The instructions for Section VII of *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* state that "if Section VI shows that there is sufficient land in the UGB based on actual developed densities, proceed to Task 10" (and skip Tasks 8 and 9). Since there is sufficient total land in the UGB for residential development, Tasks 8 and 9 are not necessary.

SECTION 14.7 PLANNING STEPS DETERMINED NOT NEEDED FROM PLANNING FOR RESIDENTIAL GROWTH: A WORKBOOK FOR OREGON'S URBAN AREAS

14.7.010 Measures Needed to Forego Expansion of the UGB

The purpose of this section is to determine if further action is necessary to ensure a sufficient supply of residential land in the UGB to meet the 20-year housing needs.

This section is not necessary as Section 14.5 has demonstrated that there is a sufficient supply of residential land. Sections 14.5 and 14.6 include measures to ensure that residential land is distributed adequately to provide the needed housing types.

14.7.020 Additional Measures

The purpose of this section is to identify measures that will reduce, to the greatest extent reasonable, the need to expand the UGB to accommodate needed housing and to determine if additional residential land is needed to accommodate needed housing.

As noted in Section 14.6, this section is not necessary, since there is enough land in the UGB for future residential development.

14.7.030 Identify Land for UGB Expansions

The objective of this section is to identify UGB expansion areas, based on statutory priorities.

There is no need to expand the UGB for residential land. Please note that this conclusion does not rule out the possible need to expand the UGB for additional industrial land as mentioned in Section 14.3.

SECTION 14.8 INDUSTRIAL LAND IN THE CITY OF UMATILLA – A SUPPLEMENT TO THE BUILDABLE LANDS ANALYSIS AND FUTURE LAND NEEDS ANALYSIS

The City of Umatilla questioned the methodology and assumptions of the Buildable Lands Analysis and Future Lands Needs (BLA) under Sections 14.2 and 14.3 prepared by the consultant.[48] The City believes that the buildable lands analysis understated the need for industrial land. The primary focus of the buildable lands analysis under Sections 14.2 and 14.3 was land needed for housing, with information on industrial and commercial land needs concomitant to determining future employment only as related to potential new households. The City examined issues relating to industrial lands in more detail.

14.8.010 Vacant Industrial Land

The buildable lands analysis under Section 14.2 includes a Buildable Lands Inventory Map (Exhibit 1) that identifies vacant industrial sites. The City identified each property and found that some of the land shown as vacant is actually developed, other properties are held by a public agency and are unlikely to be developed for private uses, and some of the sites have significant physical constraints or encumbrances.[49]

The BLA map shows 475.82 vacant industrial acres.[50] Of the total, 82.12 acres are in public ownership or developed. An additional 143.98 acres, at minimum, is unsuitable for development. The net vacant and useable industrial land total is 249.72 acres (please refer to Appendix 14.2-A for additional information). This figure is probably overstated because all easements for power transmission lines have not been deducted.

The net acreage is composed of 15 lots of varying sizes. The greatest number of lots are small and scattered around the City.

[48] Prepared by The Benkendorf Associates Corporation.
[49] Please refer to Appendix 14-A.
[50] The buildable lands analysis under Section 14.3 indicates 321.9 vacant and useable acres (Tables 14.2-1 and 14.2-2). There is no explanation for the discrepancy between the map and tabular information.

Table 14.8-1 Vacant Industrial Land by Lot Size

Lot area (acres)	Number of Lots	Total Acreage	Average Lot Area
< 1	1	0.14	0.14
1 – 2.5	2	3.25	1.60
2.6 – 5	6	21.42	3.60
6 – 10	3	27.00	9.00
11 – 15	0	0.00	0.00
16 – 20	0	0.00	0.00
21 – 25	1	25.00	25.00
26 – 30	1	29.91	29.90
> 30	1	143.00	143.00
Total Lots	**15**	**249.72**	**16.70**

All of the lots larger than 20 acres are owned by the Port of Umatilla.

Table 14.8-2 Vacant Industrial Land in the Port of Umatilla

Map Number	Tax Lot	Gross Area	Useable Area
5N 28E	300	142.94*	32.00
	401	29.91	29.91
	1201	143.00	143.00**
5N 28E detail	1213	3.98	3.98
Total		**319.83**	**208.89**

* This large tax lot is cut by roads and a railroad easement and includes a major slope. It has a 7-acre and a 25-acre site that are suitable for industrial use.

**This large tax lot has had parcels taken out around the edges so is no longer a useable form and size in its entirety.

The City concludes that there are approximately 250 acres of vacant industrial land, with approximately 209 acres owned by the Port of Umatilla.

14.8.020 Need for Industrial Land

The City's primary disagreement with the buildable lands analysis under Section 14.3 is with the projected need for only 16.4 acres of Industrial land.[51] The City believes that this figure is greatly understated.

The buildable lands analysis under Section 14.3 utilized the assumption that future industrial jobs would relate to the City's share of Region 12 population, or 4.4% of future employment. This simplistic assumption ignores important factors, not the least of which is where industrial growth has occurred in the region.

[51] Table 14.3-8.

The City presently has 794 acres of developed industrial land, a figure that seems remarkable for a community with a population of 3,500.[52]

Umatilla is located at the intersection of major transportation routes: Interstate 84, Interstate 82, U.S. Highway 730, U.S. Highway 395, the Union Pacific Railroad main line, and the Columbia River which offers water borne shipping from Lewiston, Idaho to the Pacific Ocean. The Ports of Umatilla and Morrow are key locations for manufacturing and food processing plants that convert local raw materials such as grain, potatoes, hay, and onions to valuable products that are more easily transported.

Land is relatively inexpensive, especially land without water rights. Uses which need large sites for operations or storage can be accommodated.

Public sanitary sewer and water are available in the Port of Umatilla. Improvements to these systems will be able to accommodate many types of future industrial growth, though a new water source will be required at some point for a large water user such as a food processing plant.

The City believes that the availability of multiple transportation modes, public facilities and services, and relatively inexpensive land translate to a high probability that future industrial growth will continue in the Umatilla-Boardman corridor at a rate higher than a projection based simply on a share of regional population suggests. The City believes it is reasonable to assume that the Two Rivers Correctional Facility will attract support services, that other land extensive uses like the rail repair yard, and other distribution facilities are likely to locate in Umatilla and generate continued growth in the region.

The City, of course, does not exist in a vacuum. Several major developments have located in the West Umatilla County-Morrow County area: the Wal-Mart Distribution Center, the expansion of the locomotive repair facility at Hinkle, the Two Rivers Correctional Facility (state prison), and the incineration facility at the Army Ordnance Depot. Factors that make the City an attractive location apply, to some degree, to the cities of Hermiston and Boardman (site of the Port of Morrow).

Employment projections are available for Region 12, composed of Umatilla and Morrow Counties. The problem is how to allocate jobs within the region. The City suggests that the greatest growth is likely to continue in West Umatilla County and northern Morrow County, where it is now occurring.

Other areas within Region 12 do not have the locational factors found in the Umatilla-Boardman corridor: Pendleton has an industrial park, access to freeway and rail. It will undoubtedly see some industrial development over the next 20 years. There will probably be some industrial development in the unincorporated county, where the co-generation plant and Hinkle rail yard are located. The City of Hermiston has rail and a large supply of industrial land, but lacks

[52] The City has sought ways to put this into perspective, without success. Cities within the region lack information on developed and undeveloped industrial lands, except for the City of Boardman/Port of Morrow, which has approximately 330 developed industrial acres, with a City population of 2,700.

immediate freeway and water access.[53] However, it is less likely that other small communities without good access and public facilities will be able to support new development.

Based on these considerations, the City estimates that 80% of future industrial development in Region 12 will occur in the Umatilla-Boardman-Hermiston area. Of that, approximately 40% will occur in the Port of Umatilla, 40% in the Port of Morrow (Boardman), and the remaining 20% in Hermiston. This assumption is based on the availability of transportation facilities, land, and public facilities in the Ports.

The buildable lands analysis under Sections 14.2 and 14.3 uses information from the Oregon Employment Department as the basis for projecting 9,980 new jobs in Region 12 for 1996-2006. Umatilla's share of these jobs, based on 4.44% of the regional population, is 665 for 1996-2006.[54] This translated to 210 new industrial jobs and a need for 16.4 additional acres of industrial land.

The City estimates that 7,984 of the new Region 12 jobs, 80% of the total, will occur in the Umatilla-Boardman-Hermiston area, with approximately 3,200 jobs (40%) in the City of Umatilla. Approximately 1,517 jobs will be in the industrial sector, requiring an additional 118.5 acres.[55]

14.8.030 Recent Industrial Development

The Port of Umatilla compiled a list of recent industrial developments in the Port of Umatilla and Morrow districts and the lot areas for each development.[56]

[53] Lack of immediate freeway access evidently wasn't a problem for Wal-Mart, which recently constructed a regional distribution facility on a 189-acre site on the south edge of Hermiston.
[54] Table 14.3-6.
[55] These figures are based on a ratio of the BLA to City estimates, as it was not clear how the BLA projection of Table 14.3-8 was derived.
[56] This information is included in Table 14.3-10 and Table 14.3-11.

Table 14.8-3 Major Industrial Projects

Port District	Project	Property Area
Port of Umatilla	Gilroy Foods McNary Industrial Park	35 acres
	Wal-Mart Distribution Center Hermiston	189 acres
	Hermiston Foods Hermiston	40 acres
	Continental Mills Pendleton	10 acres
	Guerdon Homes Pendleton	20 acres
	Sykes Enterprises Milton-Freewater	8 acres
Port of Morrow	Boardman Foods Boardman	17 acres
	Logan International Boardman	20 acres
	Watts Brothers Boardman	16 acres
	Longview Fiber Boardman	40 acres
	Cascade Specialties Boardman	40 acres

It is not unusual for a new industrial development in Region 12 to require a large parcel and the relatively low land prices allow large scale developments. The average lot size for projects in the Port of Umatilla District, excluding Wal-Mart, is 24.6 acres with three projects on sites of 30 acres or larger. The average lot size for projects in the Port of Morrow is 26.6 acres, with two projects utilizing 40 acre sites.

The City concludes that it is important to maintain large tracts in its industrial land inventory to accommodate the type of industrial developments that have been occurring in the region.

14.8.040 Conclusion

The City believes that the buildable lands analysis under Section 14.3 significantly understates the projected need for industrial land and that a more realistic figure is 118.5 acres. The available industrial land supply is approximately 250 acres, with 209 acres owned by the Port. There is only one property – the Port's 143-acre Tax Lot 1201 – which could accommodate a large industrial development, and it is impaired by its odd shape and proximity to uses, which require a relatively "clean" environment.

The City remains concerned that an adequate supply of industrial land can be maintained and has considered where additional industrial land might be located.

The optimum location for a new industrial site is 160 acres owned by the Port of Umatilla, south of the Two Rivers Correctional Facility site on Beach Access Road. Public sanitary sewer and

water are available in the road. Street access is good, with a connection directly to U.S. Highway 730; rail could be made available, and the Port's dock facility is approximately one mile. The site is on the northeast edge of the City, where impacts on residential or commercial areas are minimized by distance and the prevailing southwest wind. The site is currently zoned for Exclusive Farm Use (EFU), although there is no water right and the soils are very poor owing to proximity of bedrock.

There are large tracts of land available south of the City, along Powerline Road. These sites have limited appeal as industrial sites: access on Powerline Road is poor. Although there is a freeway intersection with Powerline Road, the condition of the road itself is unsuitable for heavy truck traffic and the intersection at Highway 730 has poor visibility and safety concerns. Industrial uses would be in conflict with adjacent residential uses and any impacts would be carried across the entire community on prevailing southwest winds. Therefore, the City would not select the "South Hill" as a location for new industrial development.

There is land available west of Umatilla, south of Highway 730. Although there is good access to Highway 730, most of the lots are developed with residential uses on small acreages. It is not likely that these properties could be consolidated into usable industrial sites or that adjacent residences would welcome such uses.

Another possible location for new industrial development is along Lind Road, roughly parallel to and west of U. S. Highway 395, south of Highway 730. There are large tracts available and there are few residential uses in the vicinity. However, road access is poor, with no paved roads connecting to Highway 395. Public sanitary sewer and water cannot be provided to the area, due to the topography. The area is designated "Natural Resource" (NR), recognizing the high-quality of aggregate that is being mined. The location is not likely to have services available to become suitable for industrial uses within the next 20 to 30 years.

Within the City's UGB, there is one suitable for potential future industrial development. The City's first preference would be to expand the UGB to include the 160-acre Port property in order to protect it for future use and to incorporate potential needs into future planning for services. As a second, less preferable option, the City will work with Umatilla County to establish some form of "urban reserve" designation that will identify the site as suitable for industrial development when a need for additional land can be demonstrated. In any case, the designation should not be EFU, which suggests that the site is resource land that should be preserved for agricultural uses.

SECTION 14.9 URBANIZATION FINDINGS

14.9.101 The urban growth boundary should be updated as part of a dynamic process.

14.9.102 An urban environment should be promoted which contributes to functional efficiency and visual attractiveness in both public and private properties.

14.9.103 An urban setting which has an identity and conveys a sense of place should be developed.

SECTION 14.10 URBANIZATION POLICIES

14.10.101 The City has established an urban growth boundary; growth and development will be directed and encouraged within this area on developable lands (see *Figure 14.1-2*). Development will be consistent with the capacity and capability of public services.

14.10.102 The urban growth boundary will be updated and expanded when the vacant developable land within the boundary is utilized or committed.

14.10.103 Upon request, the City will annex lands within the urban growth boundary when it is demonstrated that such annexations are consistent with the Comprehensive Plan policies and within the capabilities of the City's services and facilities.

14.10.104 The City will establish a zone of mutual concern beyond the urban growth boundary. Proposals within this area will be coordinated with Umatilla County.

14.10.105 The City will enter into a formal agreement with the County on how to coordinate issues within the urban growth area. The agreement shall include, but not be limited to: zoning, subdivisions, roads, services, conditional uses, variances, major partitions, and annexations.

14.10.106 Commercial uses will be aggregated at centers of a size and scale consistent with the area to be served.

14.10.107 By September 1, 1988, the City and Umatilla County shall develop new zoning designations for lands between the City of Umatilla city limits and the UGB. These zone designations will assure an orderly and efficient transition from rural to urban land use and resolve all existing Plan/Zone conflicts. *(Ord. 544)*

14.10.108 The City will work with Umatilla County to assume administration of land use regulations outside of the City limits but within the Urban Growth Boundary. The City considers this essential to maintain a sufficient land supply for future urbanization.

14.10.109 The City will implement recommendations of the Buildable Lands Analysis and Future Lands Needs Analysis (BLA) intended to preserve land within the Urban Growth Boundary and outside of the City limits for future urban uses and density. *(Ord. 688)*

14.10.110 The City adopts the "Umatilla Downtown Revitalization Plan" as an Area Plan and a component of the Comprehensive Plan. For portions of downtown Umatilla that are within its study area, the strategies, goals, objectives, and policies of the Downtown Revitalization Plan shall be used to guide development.

14.10.111 Statewide Goals not applicable:

- Forest lands
- Willamette River Greenway
- Estuarine Resources
- Coastal Shore lands
- Beaches and Dunes
- Ocean Resources

Since the urban growth area is located in a region having none of the characteristics of “forest lands” it is not applicable.

Willamette River Greenway is not applicable as it is not located in this region.

The coastal goals are not applicable.

Appendix 14.2-A

RESIDENTIAL DEVELOPMENT IN THE CITY OF UMATILLA 1987-1998

Site #	Net Acres	Plan Dist	Zone Dist	SF	MH/Parks	MF	Total Units	Net Density	Gov. Assis	Yr. Permit
08DC-901	0.2		R2	1			1	1/8700sqf		93
14BD-1200	0.2		R1	1			1	1/8700sqf		97
14BD-1300	0.2		R1	1			1	1/8700sqf		98
14BD-1400	0.2		R1	1			1	1/8700sqf		97
14BD-2200	0.2		R1	1			1	1/8700sqf		97
14BD-2300	0.2		R1	1			1	1/8700sqf		98
14BD-2500	0.2		R1	1			1	1/8700sqf		97
14BD-2600	0.2		R1	1			1	1/8700sqf		97
14BD-2700	0.2		R1	1			1	1/8700sqf		97
14BD-2800	0.2		R1	1			1	1/8700sqf		97
14BD-3100	0.2		R1	1			1	1/8700sqf		96
14BD-3200	0.2		R1	1			1	1/8700sqf		97
14BD-3300	0.2		R1	1			1	1/8700sqf		97
14BD-3400	0.2		R1	1			1	1/8700sqf		97
14BD-3500	0.2		R1	1			1	1/8700sqf		93
14BD-3700	0.2		R1	1			1	1/8700sqf		98
14BD-4300	0.2		R1	1			1	1/8700sqf		97
14BD-4800	0.2		R1	1			1	1/8700sqf		96
14BD-4900	0.2		R1	1			1	1/8700sqf		98
14BD-5000	0.2		R1	1			1	1/8700sqf		97
14BD-XXX	0.2		R1	1			1	1/8700sqf		97
15AA-400 B1	0.2		R1	1			1	1/8700 sq.ft		91
15AB-1200	0.3		R1	1			1	1/13,000sqf		93
15AB-200	0.2		R1	1			1	1/8700sqf		95
15AB-2200	0.2		R1	1			1	1/8700sqf		95
15AB-2700	0.3		R1	1			1	1/13,000sqf		95
15AB-3100	0.2		R1	1			1	1/8700sqf		93
15AB-3200	0.2		R1	1			1	1/8700sqf		98
15AB-3400	0.2		R1	1			1	1/8700sqf		98
15AB-9100	0.2		R1	1			1	1/8700sqf		98
15AB-9300	0.2		R1	1			1	1/8700sqf		98
15AB-9700	0.2		R1	1			1	1/8700sqf		98

RESIDENTIAL DEVELOPMENT IN THE CITY OF UMATILLA 1987-1998

Site #	Net Acres	Plan Dist	Zone Dist	SF	MH/Parks	MF	Total Units	Net Density	Gov. Assis	Yr. Permit
15AD-900	0.1		MH		1		1	1/7000 sqf		92
15BA-1400	0.2		R1	1			1	1/8700sqf		92
15BA-3300	0.2		R1	1			1	1/8700sqf		93
15BA-4800	0.2		R1	1			1	1/8700sqf		96
15BA-4900	0.2		R1	1			1	1/8700sqf		96
15BA-5000	0.2		R1	1			1	1/8700sqf		97
15BA-5200	0.2		R1	1			1	1/8700sqf		98
15BA-5300	0.2		R1	1			1	1/8700sqf		98
15BA-5400	0.3		R1	1			1	1/8700sqf		88
15BA-5500	0.3		R1	1			1	1/13,000sqf		88
15BA-5600	0.2		R1	1			1	1/8700sqf		97
15BA-5700	0.3		R1	1			1	1/13,000sqf		98
15BA-5800	0.2		R1	1			1	1/8700sqf		88
15BA-6000	0.2		R1	1			1	1/8700sqf		98
15BA-6100	0.3		R1	1			1	1/13,000sqf		98
15BA-6200	0.3		R1	1			1	1/13,000sqf		98
15BA-6300	0.2		R1	1			1	1/8700sqf		98
15BA-6400	0.2		R1	1			1	1/8700sqf		98
15BA-6500	0.2		R1	1			1	1/8700sqf		91
15BA-6600	0.2		R1	1			1	1/8700sqf		98
15BA-6700	0.2		R1	1			1	1/8700sqf		98
15BA-6800	0.2		R1	1			1	1/8700sqf		98
15BA-7000	0.2		R1	1			1	1/8700sqf		98
15BA-7100	0.2		R1	1			1	1/8700sqf		98
15BA-7200	0.3		R1	1			1	1/13,000sqf		97
15BA-7600	0.2		R1	1			1	1/8700sqf		96
15BA-7800	0.2		R1	1			1	1/8700sqf		98
15BA-7900	0.2		R1	1			1	1/8700sqf		96
15BA-900	0.2		R1	1			1	1/8700sqf		96
17AD-5001	0.2		MH		1		1	1/7000sgf		91
17CD-4100	0.2		R1	1			1	1/8700sqf		88
17CD-4700	0.2		R1	1			1	1/8700sqf		98

RESIDENTIAL DEVELOPMENT IN THE CITY OF UMATILLA 1987-1998

Site #	Net Acres	Plan Dist	Zone Dist	SF	MH/Parks	MF	Total Units	Net Density	Gov. Assis	Yr. Permit
17CD-4900	0.2		R1	1			1	1/8700sqf		98
17CD-5500	0.2		R1	1			1	1/8700sqf		98
17CD-5900	0.3		R1	1			1	1/13,000sqf		95
17CD-6000	0.26		R1	1			1	1/11,000sgf		98
18DA-2000	0.2		R2	1			1	1/8700sqf		98
28B-1400	4		C			1	1	1/175,000sqf		
28C-1008	1.3		SR	1			1	1/57,000sqf		88
Average density/zone										
Total				68	2	1	71			

R1	**1/9273sqf**
R2	**1/8700sqf**
R1+ R2/2=	**1/8537sgf**
MH	**1/7000sqf**
MF	**1/175,000sqf**
SR	**1/57,000sqf**