Exhibit A to Resolution No. 04-3513

2004 Performance Measures Report

An evaluation of 2040 growth management policies and implementation

Planning Department
December 2004

METRO

PEOPLE PLACES
OPEN SPACES

About Metro

People places • open spaces

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy and good transportation choices for people and businesses in our region. Voters have asked Metro to help with the challenges that cross those lines and affect the 24 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to protecting open space, caring for parks, planning for the best use of land, managing garbage disposal and increasing recycling. Metro oversees world-class facilities such as the Oregon Zoo, which contributes to conservation and education, and the Oregon Convention Center, which benefits the region's economy.

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Rex Burkholder, District 5;
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Metro's web site: www.metro-region.org

If you don't measure results, you can't tell success from failure.
If you can't see success, you can't reward it.
If you can't see failure, you can't correct it.
Osborne and Gaebler, Reinventing Government, 1992

ACKNOWLEDGEMENT

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PREFACE

Why prepare Performance Measures?
Performance measures provide Metro policy makers, regional stakeholders, and the citizens of the region with the quantitative data needed to assess the implementation of the 2040 Plan and the degree that policies are achieving the 2040 Growth Concept goals. If necessary, the results of performance measures can lead to the Metro Council taking corrective actions to revise existing policies or develop new policies to better achieve desired results.

Performance measures complete a powerful systems management approach of setting goals, completing a plan, implementing the plan and evaluating results.

Metro and State requirements
Title 9 of the Metro Urban Growth Management Functional Plan (Functional Plan) established eight performance measures for monitoring the implementation of the policies contained in the plan (now incorporated into Metro Code 3.07.910 and 3.07.920). Additionally, Oregon State Law (ORS 197.301) requires Metro compile and submit to the Department of Land Conservation and Development nine performance measures…"at least every two years" (see the Revised List of Performance Measures for a list of State required measures).

In addition, OAR 197.296 requires Metro to evaluate the capacity of the Urban Growth Boundary (UGB) at each periodic review to ensure that the UGB has the capacity to accommodate 20 years of growth. ORS 197.302 further requires that Metro's performance measures assess the effectiveness of the actions taken under ORS 197.296 (6) to accommodate 20-year land supply.

Metro's 2003 Performance Measures Report addressed State requirements, self-imposed Metro Code requirements, as well as a number of additional measures that were identified per the instruction of the Metro Council to provide a more comprehensive assessment of how well the region is achieving stated goals and objectives. The 2003 report was approved by the Metro Council in April 2003 and sent to the Oregon Department of Land Conservation and Development on May 1, 2003. As of the writing of this report, Metro has not received word from the State regarding the status of compliance, however, approval is expected.

2004 Performance measures update
When adopting the 2003 report, the Metro Council instructed Metro staff to prepare an interim 2004 performance measures update that would contain a reduced number of indicators and focus on the linkage of these indicators to key policies. Although the 2004 report contains the required State and Metro data factors, the interim report is primarily intended to refine the presentation and organization of Metro's performance measures efforts, and not specifically to address compliance requirements.

Metro staff worked with the volunteer members of the Metro Technical Advisory Committee (MTAC) and Transportation Policy Alternatives Committee (TPAC) to reorganize the data measured in the 2003 report. (80 indicators were reorganized into a total of 32 indicators). Note: Each of the 32 indicators is measured with a number of specific data factors. Available data was used to evaluate some components of 24 indicators for this report.

Report Organization:
The evaluation of regional policies in this report is organized around the following eight fundamental goals that appear in Title 9 of the Functional Plan:

1. ***Encourage a strong local economy*** *by providing an orderly and efficient use of land, balancing economic growth around the region and supporting high quality education.*
2. ***Encourage the efficient use of land within the UGB*** *including buildable industrial and commercial land and focus development in 2040 mixed use centers and corridors.*
3. ***Protect and restore the natural environment*** *including fish and wildlife habitat, streams and wetlands, surface and ground water quality and quantity, and air quality.*
4. ***Provide a balanced transportation system*** *including safe, attractive facilities for bicycling, walking and transit as well as for motor vehicles and freight.*
5. ***Maintain separation between the Metro UGB and neighboring cities*** *by working actively with these cities and their respective counties.*
6. ***Enable communities inside the Metro UGB to enhance their physical sense of place*** *by using among other tools, greenways, natural areas, and built environment elements.*
7. ***Enable communities to provide diverse housing options*** *for all residents by providing a mix of housing types as well as affordable homes in every jurisdiction.*
8. ***Create a vibrant place to live and work*** *by providing sufficient and accessible parks and natural areas, improving access to community resources such as schools, community centers and libraries as well as by balancing the distribution of high quality jobs throughout the region, and providing attractive facilities for cultural and artistic performances and supporting arts and cultural organizations.*

Each fundamental section begins with a statement explaining the "***challenges***" that Metro policies were adopted to address (from the Regional Framework Plan, Functional Plan, Regional Transportation Plan, Metropolitan Greenspaces Master Plan, and Regional Solid Waste Management Plan) and the "***summary of adopted policies***" in the plans. The "***measuring of policies***" and key "***findings***" of the data collected to analyze the policies follows. Each of the eight fundamental sections concludes with a list of policy groupings that were measured in other sections of the report. The revised list of performance measures (32) based on Metro Council directive is included and followed by the glossary. Additional information is also included in the appendix.

2004 Report Additions

The 2004 report contains the results of new data that was not available for inclusion in the 2003 report and this new data provides information on significant issues of regional concern. Noteworthy additions include data on real property values and property taxes by jurisdictions in the Metro region, school performance, transportation system performance, 2040 Centers land supply and consumption, and preliminary results of efforts to inventory and enhance physical features that contribute to each local government's physical sense of place.

Conclusions, Data, and Data Limitations

The performance measures report analyzes trends and focuses on outputs (how much effort has been made). Outcomes (the change that has occurred or how the region has improved) were also addressed, but were based on the relationship between an adopted policy and an outcome. The report does not suggest benchmarks or targets for achieving regional planning objectives and avoids editorial commentary and suggestions of which policies may need revamping.

The data that is presented is this report is the best that is currently available. The major source of data used in this report is the Metro Regional Land Information System database. Information about this database is available on the Metro website www.metro-region.org/. Other key sources of data are the US Census and the Portland State Population Research Center (for population and income data); the Federal Department of Labor, Bureau of Labor Statistics (for employment data); the Tri-County Tax Assessors (for real property values); the Oregon Department of Education (for K-12 schools data); and the Portland State University Center for Transportation Studies (for transportation system performance data).

Evaluation of Policies by 2040 Fundamental

Fundamental 1

Encourage a strong local economy by providing an orderly and efficient use of land, balancing economic growth around the region and supporting high quality education

1. The Challenge

While developing the 2040 Growth Concept, Metro faced critical challenges, including how to accommodate an expected 50 percent increase in population and a 70 percent increase in jobs by 2020 while minimizing the negative impacts this growth could have on the livability of the Metro region. If efforts were not made to increase land use efficiency in the 2040 Growth Concept, the boundary of the region may have needed to expand by 52% (roughly 121,000 acres) by the year 2040. An expansion of this magnitude would absorb the cities outside the UGB such as North Plains and Canby and consume 64,000 acres of exclusive farm use land and rural land to a point halfway to the cities of Sandy and Newberg. Such massive growth on the region's periphery would negatively impact the region's agricultural economy, require the inefficient and costly expansion of urban services, and greatly increase the number of vehicle miles traveled on the region's highways.

2. Summary of Adopted Policies:

Metro's approach to addressing the region-wide challenges is organized by the policy themes listed below. For more details about Metro policies, see the Regional Framework Plan, Urban Growth Management Functional Plan and Regional Transportation Plan (see www.metro-region.org)

A. Land Availability:

Periodically assess (and amend if necessary) the urban growth boundary in order to maintain a supply of land for residential uses and employment in the UGB. In addition, maintain an adequate supply of mixed use land in centers and encourage investment in these areas in order to maximize the efficiency of the region's existing infrastructure. Take steps to preserve (or protect) the quality, quantity of the regional industrial land, and access to the region's industrial land. (Regional Framework Plan, Urban Growth Management Functional Plan)

B. Dispersion of Development:

Promote the distribution of jobs, wages, population, housing, goods and services and economic development, and provide the opportunity for the entire region to share in the benefits and burdens of growth. (Regional Framework Plan)

C. Freight Movement:

Encourage trade by increasing the efficient movement of all modes of freight. (Regional Framework Plan, Urban Growth Management Functional Plan, Regional Transportation Plan)

3. Measuring Policies

A. Land Availability Policies and Land Consumption policies

Information Used to Assess Policies: It is important to note that some land consumption policies from Fundamental 2 (Encouraging the efficient use of land) are measured and analyzed in this section with Fundamental 1 land availability policies. These measures are merged to allow policy makers and other readers of this report to better assess the linkage that exists between land supply and consumption policies, and to recognize the way these factors contribute to encouraging a strong local economy.

The availability of buildable residential, commercial, mixed use and industrial land within the Metro region and the efficiency with which this land is consumed influence greatly the region's capacity for growth. Land availability shapes to a large extent the region's economic landscape by affecting wage distribution, transportation efficiency, housing affordability, and the region's overall quality of life now and in the future.

Industrial land accommodates jobs and industrial growth that generates revenue through state and local taxes including income taxes, fuel taxes, TriMet payroll tax revenues, local property taxes, etc. Commercial land and mixed use land in 2040 Centers supports the vision of the 2040 Growth Concept by creating greater opportunities for concentration of businesses and housing and consumer opportunities that might not exist in areas that are zoned traditionally for only commercial use. Residential land influences the diversity of housing and encourages the housing market to keeps pace with new job creation.

While Metro expands[1] the urban growth boundary when the need arises, the ability of local governments in the Metro region to maximize the efficiency of land consumed for all uses is a primary indicator of whether the region is achieving a principal goal of the 2040 Growth Concept – a more compact urban form. The findings below are based on the analysis of data collected to measure the land supply[2] (availability) and land consumption (change) in the major categories of land found in the Metro UGB.

[1] **UGB Expansion:** Since the late 1970s, the boundary has been moved about three dozen times. Some of those moves totaling approximately 611.55 acres were Metro approved locational adjustments of the UGB (20 acres or less) from 1990 to 2000, while other moves were legislative adjustments of 24,420 acres. There were four times that Metro authorized more substantial expansion of the UGB:

- 1998 - approximately 3,500 acres.
- 1999 - approximately 380 acres.
- 2002 – approximately 18,600 acres.
- 2004 – approximately 1,940 acres

[2] Metro expresses the region's land supply in categories of gross vacant and gross vacant buildable acres. Gross buildable acres are what is remaining after subtracting the constrained land (Title 3 water quality areas).

Finding:

Available Buildable Land in the UGB:

- In over a decade (1990 – 2002), Metro's population increased by 26% (1,051,692 to 1,330,001) while the UGB expanded by 8%.
- More than three-quarters (86%) of the available vacant land zoned for development in the region in 2002 was buildable (outside of Title 3 water quality areas). [see Figure 1.1]
- In 2002, residential zoned land was the largest share (58%) of vacant buildable land in the UGB, followed by industrial (19%), mixed use industrial/commercial (10%), and commercial (9%). [see Figure 1.1 & Table 1.1]
- The Metro Council approved a major expansion of the UGB in 2002 and replenished the supply of buildable residential, commercial and industrial land. [see Figure 1.2]

Consumption of Available Land:

- Consumption of residential zoned land (as a percent of the available residential total) decreased from 10% in 2000 to 6% in 2002 [see Table 1.2]
- Consumption of commercial land (as a percent of the available commercial total) decreased from 18% in 2000 to 6% in 2002 (6%). [see Table 1.2]
- Consumption of industrial land (as a percent of the available industrial total) increased from 8% in 2000 to (9%) in 2002. [see Table 1.2]
- If the supply of buildable land in 2002 were to be consumed at 1999-2002 development levels, this amount of land would serve the region's land needs for approximately 13 years. [see Table 1.3]

  Note: This measure compares past consumption rates with the current land supply. Direct comparison of these results with Metro's Urban Growth Report (UGR) will yield different results because the UGR assumes more aggressive refill rates (than observed rates) and increases in density in 2040 Centers when calculating the 20-year land supply.

Population and Employment Accommodated on Available Land:

- Looking strictly at new population and the amount of residential and mixed use (residential/commercial) land consumed in 2000 and 2001, between 17 and 19 new residents per acre were accommodated on each acre. (see Table 1.4) Note: This measure assumes that all new employment is arriving on newly consumed vacant land and does not discount the population that might have located on refill lands.
- Employment accommodated per acre cannot be calculated due to a net job loss of 37,426 during the 2000 to 2002 period. See Figure 2.3 in Fundamental 2 (Encouraging the efficient use of land) for information on jobs per acre in the 2040 Centers.

Average Lot Sizes and Units Developed:

- Smaller lot sizes account for an increasing share of new housing units from 1996 to 2002. (see table 1.6)
- Lots under 5,000 square feet in size increased from 14% (1,041 units) of the 7,193 units built in 1996 to 51% (1,614 units) of the 3,178 units built in 2002 while all larger lot sizes decreased. (see table 1.6)
- Lots larger than 5,000 square feet decreased as follows: Units built on 5,000-7,500 square feet lots declined from 44% of the total to 30%; units built on 7,501-10,000 square feet lots declined from 23% of the total to 9%; and units built on lots above 10,000 square feet declined from 19% of the total to 10%. [see Table 1.6]

Other relevant results from the data (UGB Expansions):

- In 1998, about 3,500 acres were added to the UGB to make room for approximately 23,000 housing units and 14,000 jobs. This expansion included the area around the Dammasch state hospital site near Wilsonville, the Pleasant Valley area in east Multnomah, the Sunnyside Road area in Clackamas County, and a parcel of land south of Tualatin.

- In 1999, about 380 acres were added to the UGB to better balance the number of homes with the number of jobs available in subregional areas.
- In 2002, about 18,638 acres were added to the UGB to provide 38,657 housing units and 2,671 acres for additional jobs. This action also supported important regional policies to protect existing neighborhoods and protect industrial areas. This expansion brought the total amount of gross vacant land in the UGB to 52,089 acres.
- In 2003 the Metro Council initiated a UGB expansion study specifically for industrial land. Approximately 68,000 acres of land (later reduced by the Metro Council to 28,331 acres) was evaluated on factors such as size of parcel, slope, location in a floodplain, proximity to the urban growth boundary, proximity to other industrial uses and access to a road or freeway interchange. Additional factors included the ability to provide sites with public facilities such as sewer and water, impacts on agriculture and natural resources, and compatibility with nearby uses. On June 24, 2004, the Metro Council took final action and added 1,940 acres to the boundary for industrial purposes. The Oregon Land Conservation and Development Commission is scheduled to decide whether to approve this expansion in November 2004.

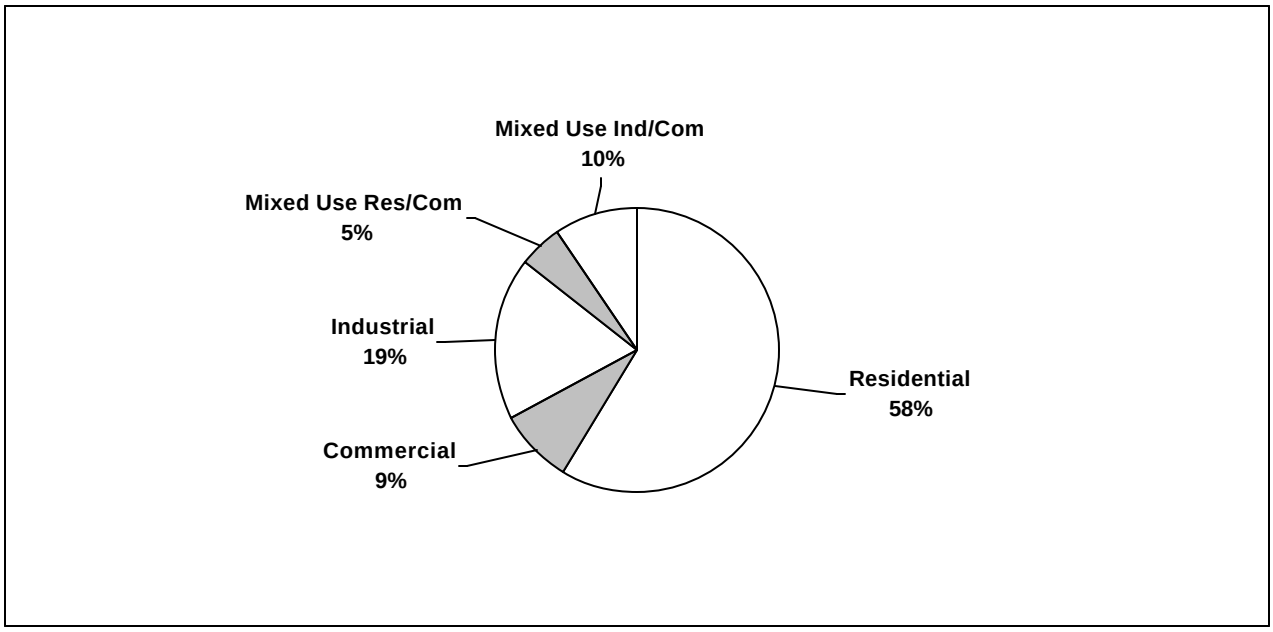
Encouraging strong economy policy elements measured in other sections

- ❑ Encouraging balanced growth of jobs and income (Fundamental 1, section 2.B)
- ❑ Preservation of stable distinct neighborhoods (Fundamental 2)
- ❑ Encouraging redevelopment and infill (Fundamental 2)
- ❑ Maintaining a clear distinction/transition between urban and rural land (Fundamental 5)
- ❑ Creating interconnected but distinct communities (Fundamental 6)
- ❑ Creating a balanced transportation system (Fundamental 4)

Policy Elements Not Measured

- ❑ Access to the region's existing industrial land. (Further work is needed to define "access")
- ❑ Providing infrastructure to keep pace with the 2040 plan. (Efforts are needed to coordinate with local governments to define the parameters of this project and to collect relevant data on services and infrastructure)
- ❑ Encouraging excellence in design

Figure 1.1: Gross Vacant Buildable Acres in the UGB by Land Use Category – 2002



Source: Metro Data Resource Center

Table 1.1: Available Vacant Land Compared to Buildable Land and Consumed Land (2002 –gross acres)

	Available Vacant Land	Buildable Vacant Land	Buildable as % of Available Vacant Land	% of Total Vacant Buildable Land
Residential	26,310	23,218	88%	58%
Commercial	3,809	3,399	89%	9%
Mixed Use Res/Com	2,174	1,930	89%	5%
Industrial	8,809	7,374	84%	19%
Mixed Use Ind/Com	5,057	3,792	75%	10%
Total	46,159	39,713	86%	100%

Source: Metro Data Resource Center

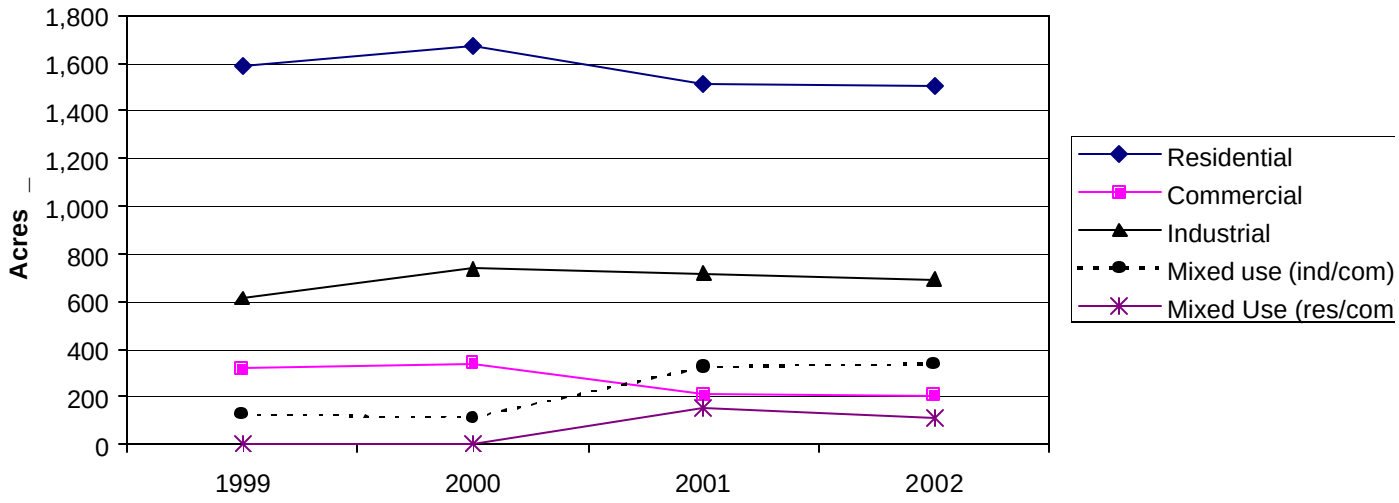
Note: The 18,638 acres expansion were apportioned to land use categories based on older 2040 Concept maps of the expansion areas.
Additional Note: UGB acreage in 2004 was approximately 254,386 acres and in 1990 it was approximately 233,234 acres. Total UGB expansion (through legislative amendments and locational adjustments) was approximately 21,152 acres.

Table 1.2: Available and Consumed Buildable Land in UGB (1999 – 2002 –gross acres)

Land Use Category	2000			2002		
	Available	Consumed	% of Available	Available	Consumed	% of Available
Residential	16,751	1,669	10%	23,218	1,503	6%
Commercial	1,930	339	18%	3,399	207	6%
Mixed Use (res/com)	1,058	n/a	n/a	1,930	113	6%
Industrial	9,611	738	8%	7,374	693	9%
Mixed use (ind/com)	(*n/a)	112	n/a	3,792	338	9%
Total	**29,350**	**2,858**	**10%**	**39,713**	**2,854**	**7%**

(*n/a): In prior years, 1998, 1999 & 2000, Metro reported the mixed use portion of industrial land (i.e., industrial/commercial) and the industrial land together.
(*see ind) In 2002, the mixed use portion was combined with industrial land to create Figure 2.2. However, the table above shows in parenthesis the mixed use (i.e., industrial/commercial) portion (3,792 acres) of industrial land.
Source: Metro Data Resource Center

Figure 1.2: Consumed Vacant Buildable Land (1999-2002)



Note: Data is not available on the acres of mixed use consumed in 1999 and 2000
Source: Metro Data Resource Center

Table 1.3: Available and Consumed Buildable Land and Projected Years Left to Consume Remaining Buildable Land in the UGB, based on 1999, 2000 and 2002 Consumption Levels, Without Consideration for the Impact of Refill Activities.

Land Use Category	1999		2000		2002		Average Acres Consumed – 1999, 2000 & 2002	Years Left to Consume Land Available in 2002
	Available	Consumed	Available	Consumed	Available	Consumed		
Residential	18,244	1,589	16,751	1,669	23,218	1,503	1,587.0	14.6
Commercial	2,179	317	1,930	339	3,399	207	287.7	5.2
Mixed Use (res/com)	402	n/a	1,058	n/a	1,930	113	n/a	n/a
Industrial	9,927	613	9,611	738	7,374	693	681.3	10.8
Mixed use (ind/com)	(*n/a)	127	(*n/a)	112	3,792	338	192.3	19.8
Total	**30,752**	**2,646**	**29,350**	**2,858**	**39,713**	**2,854**	**2,786.0**	**12.9**

Source: Metro Data Resource Center

Table 1.4: Accommodation of New Population Per Consumed Acre in the Metro UGB

Year	Consumed Residential & Mixed Use (Res/Com) Acres	New Population	Persons Per Acre
1999- 2000	1,669	28,474	17*
2001 - 2002	1,616	30,652	19*

Source: US Census as compiled by Metro Data Resource Center, Metro DRC RLIS database
* This measure assumes that all new employment is arriving on newly consumed vacant land and does not discount the population that might have located on refill lands.

Table 1.5: Accommodation of Employment Per Acre in the Metro UGB

Year	Consumed Commercial, Industrial & Mixed Use (Ind/Com) Acres	New Employment	Jobs Per Acre
1999- 2000	451	Can not calculate due to job loss in 2000 - 2002 that was -37,426	
2001 - 2002	545		

Source: US Census as compiled by Metro Data Resource Center, Metro DRC RLIS database

Table 1.6: Average Lot Sizes of Single Family Detached Residences and Units Developed 1996 to 2002

Year Built	<5,000 sf	% Total	5,000 - 7,500 sf	% Total	7,501 - 10,000 sf	% Total	>10,000 sf	% Total	Total
1996	1,041	14%	3,174	44%	1,633	23%	1,345	19%	7,193
1997	1,596	19%	3,796	45%	1,741	21%	1,315	16%	8,448
1998	1,344	26%	2,004	40%	973	19%	751	15%	5,072
1999	2,138	33%	2,328	36%	1,262	19%	803	12%	6,531
2000	2,541	39%	2,175	34%	1,022	16%	753	12%	6,491
2001	2,292	41%	1,852	33%	834	15%	626	11%	5,604
2002	1,614	51%	964	30%	289	9%	311	10%	3,178

Note: Data derived from Tax Assessors' tax files. In 2002, not all development data has been entered. A lag exists, so the year 2002 is missing some development.
Source: County tax assessors as compiled by the Metro Data Resource Center

Fundamental 1 (Economy): continued

B. Dispersion of Development policies

Note: There are two components of the dispersion of development policies. The first is the distribution of jobs, wages, population, housing, goods and services, and economic development. The second component is about providing opportunity for the entire region to share in the benefits and burdens of growth. This second component was measured with data on the tax base capacity of local governments (reflecting the fiscal realities that local governments face in managing growth) and data on the performance of schools throughout the region (reflecting the extent to which educational opportunities contribute to the regional economy).

i) Distribution of population, jobs and wage policies

Information used to assess policies: The distribution of jobs (employment), wages, and population is one indicator of the health of the regional economy. However, the data sources available for assessing these economic factors generally pertain to a set geography, making finer measurements of distribution and dispersion difficult. This report includes data on employment, wages and retail sales on the county level only. Although this data allows for the comparison of jobs and buying power by county, data allowing a more refined measurement of dispersion and distribution is currently unavailable. Metro intends to seek additional data on dispersion and distribution for future performance measures efforts.

Findings:

Population:

- Population of the Metro area has increased annually by roughly two percent since 1998 except for 3% increases in 1991 and 1992 and only a 1% increase in 2003. [see Figure 1.3, Figure 1.4 & Table 1.7]
- The population within Multnomah County accounts for 45% of the region's total population in 2003, a 3% decrease from the share this county claimed in 1990. Washington County accounts for 31% of the region's population in 2003, a 3% increase in regional share from 1990. Clackamas County accounts for 24% of the region's population. (see Table 1.8)
- The share of the region's population claimed by each city was largely unchanged between 1990 and 2000. The Cities of Hillsboro and Oregon City increased their share of population in Metro cities by two percent and one percent respectively. During the same period, the share of the Cities of Portland and Lake Oswego decreased by six percent and one percent respectively. (see Table 1.8)

Employment:

- Between 1995 and 2002, Multnomah County accounted for a majority of the region's employment, ranging from a low of 50% (419,000 jobs) in 1995 to a high of 53% (444,200 jobs) in 2001. (see Figure 1.5 and Table 1.9)
- In this period, Washington County had the second largest portion of the region's employment ranging from a low of 21% (175,000 jobs) in 1995 to a high of 27% (225,000 and 228,400) in 2000 and 2001. (see Figure 1.5, and Table 1.9)
- Between 1995 and 2002, Washington County's largest single-year increase in employment growth occurred in 1996 (10%), Multnomah County's largest increase occurred in 1996 and 1997 (3% both years), and Clackamas County's largest year-to-year increase occurred in 1997 (6%). (see Table 1.10)

- The greatest single-year percentage decreases in employment occurred in Multnomah County and Washington County in 2002 (-3%). (see Table 1.10)
- Manufacturing gradually decreased as a share of the region's employment from 1990 (17.3% - 125,700 jobs) to 2003 (12.8% - 117,900 jobs) (see Tables 1.11)
- Non-manufacturing employment as a percent of the regional total has increased from 69% in 1990 (499,500 jobs) to 73% in 2003 (676,900 jobs). (see Tables 1.11)
- Government jobs in 2003 account for 14% of the region's total employment. (see Tables 1.11)

Note: For information on employment in the 2040 Centers, please refer to Fundamental 2.

Unemployment Rate:

- Prior to 1999, the unemployment rate for the Portland PMSA[3] was lower or close to the US rate. Between 2001 and 2003, however, the Portland PMSA unemployment rate exceeded the US rate by 1 to as many as 2 percentage points. (see Table 1.12)

Disposable Income Distribution:

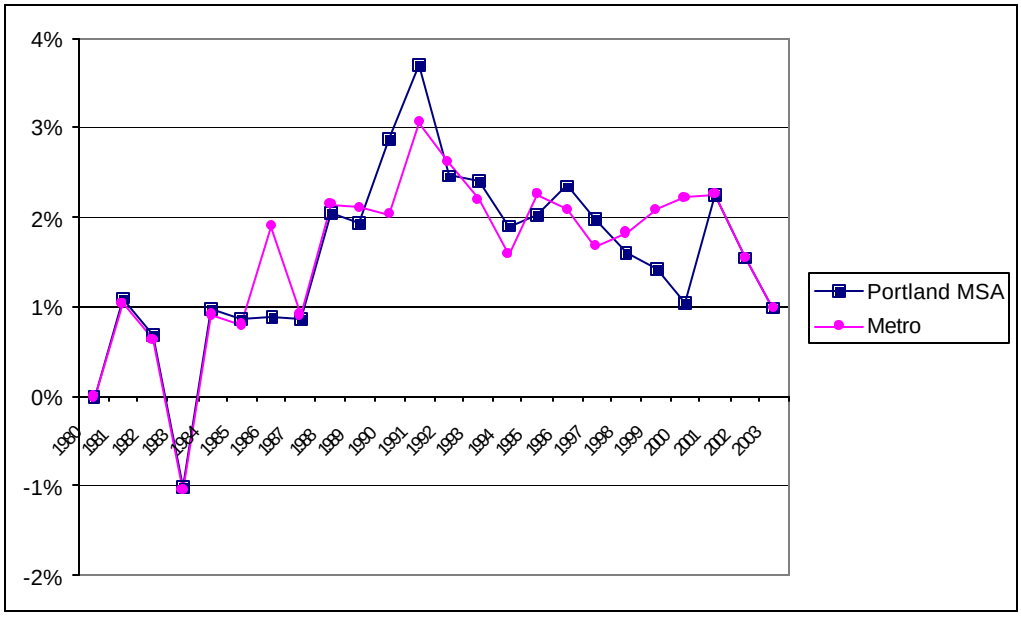
- 2000 Census data shows that 19 of 24 cities in the Metro UGB had a majority of households in their jurisdiction earning less than 120% of the 1999 Regional Median Family income (RHMI) of $48,870. The other five cities (Happy Valley, Lake, Sherwood, Rivergrove, West Linn) have a majority of households earning more than 120% of the 1999 RHMI. (see Table 1.14)
- The highest average annual wage rates are paid by sectors located in Multnomah County. Washington County has the second highest wages. (see Table 1.14)
- In 2002, the manufacturing sector in Washington County provided the highest average annual wage ($61,040) in the region. The information sector provided the highest average annual wage ($54,448) in Multnomah County. (see Table 1.14)

Retail Sales:

- From 1993 through 2000, Washington County led the region with the highest retail sales per capita figure ($10,861 to $18,725). In 2001 and 2002, Multnomah County had the highest retail sales per capita ($18,264 and $17,641). (see Figure 6 and Table 1.15)
- Clark county retail sales per capita increased by 56% from 1993 ($5,897) to 2003 ($9,237), while Clackamas County retail sales per capita increased by 35% during the same period ($7,810 to $10,529). (Table 1.15)
- Total retail sales per capita for the Portland PMSA (6-county area) increased by 71% from 1993 ($8,669) to 2001 ($14,896), and decreased by approximately 10% in 2003 ($13,469) (see Figure 6 and Table 1.15)

[3] Portland-Vancouver OR-WA PMSA (Clackamas, Clark, Columbia, Multnomah, Washington, Yamhill Counties)

Figure 1.3: Population Change in the Portland MSA and Metro Boundary

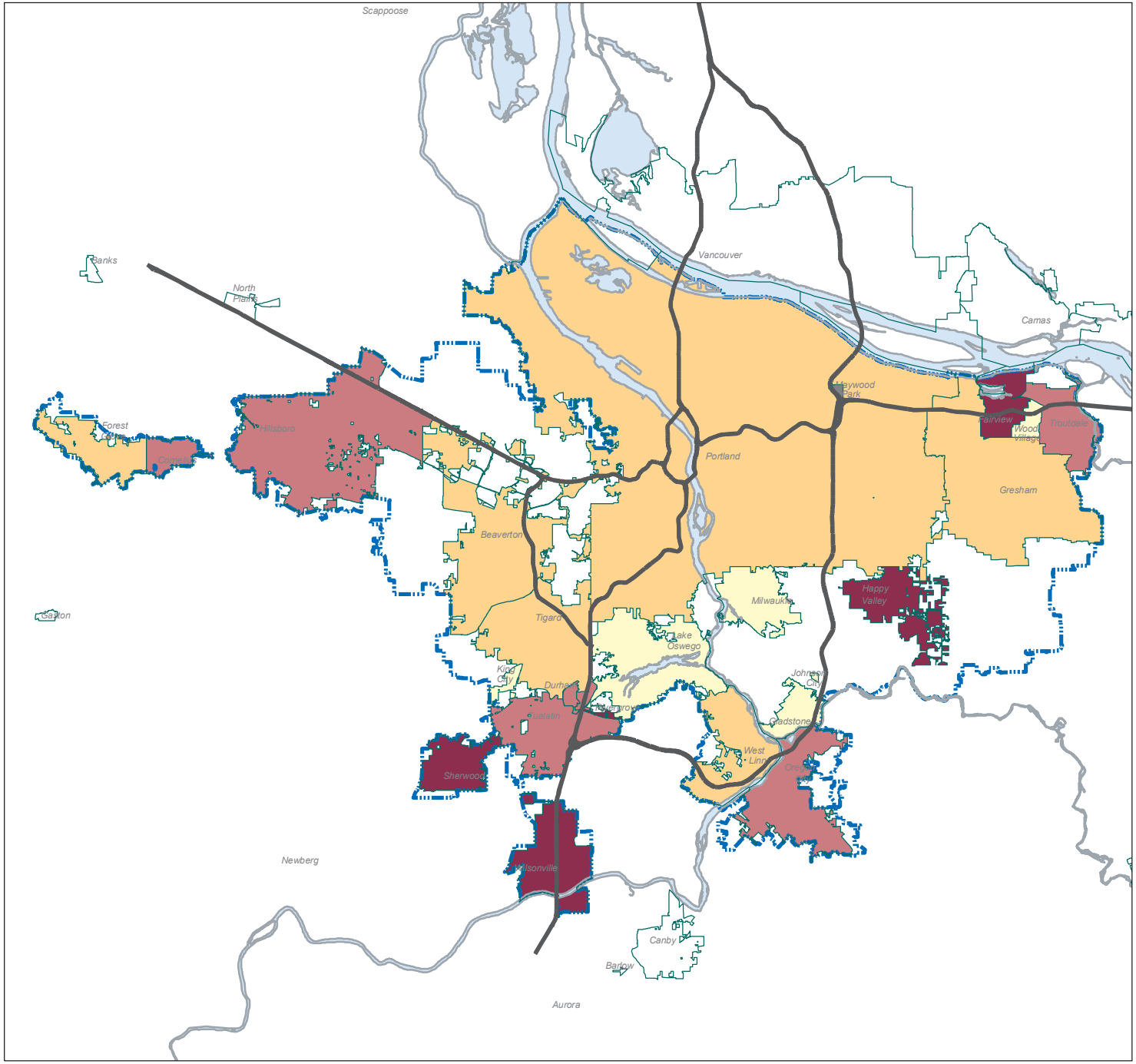


Source: Metro Data Resource Center and US Census
Portland-Vancouver OR-WA PMSA (Clackamas, Clark, Columbia, Multnomah, Washington, Yamhill Counties)

Table 1.7: Change in Population in Portland MSA and Metro Boundary

	Portland MSA	% Change from previous year	Metro	% Change from previous year
1980	n/a	n/a		
1981	11,633	1%	9,900	1%
1982	7,300	1%	6,000	1%
1983	(10,800)	-1%	(10,100)	-1%
1984	10,300	1%	8,700	1%
1985	9,200	1%	7,700	1%
1986	9,700	1%	18,400	2%
1987	9,400	1%	8,900	1%
1988	22,600	2%	21,300	2%
1989	21,800	2%	21,400	2%
1990	32,791	3%	21,000	2%
1991	43,518	4%	32,400	3%
1992	30,066	2%	28,400	3%
1993	29,977	2%	24,500	2%
1994	24,470	2%	18,000	2%
1995	26,552	2%	26,200	2%
1996	31,378	2%	24,700	2%
1997	26,841	2%	20,400	2%
1998	22,250	2%	22,400	2%
1999	19,890	1%	26,300	2%
2000	14,986	1%	28,474	2%
2001	32,569	2%	29,442	2%
2002	23,039	2%	20,828	2%
2003	14,917	1%	13,485	1%

Source: Metro Data Resource Center



R L I S

REGIONAL LAND INFORMATION SYSTEM

Population Change by City 1990 - 2003

Figure 1.4

City Boundaries

Urban Growth Boundary

Percent Increase 1990 - 2003

- -4%
- 2% to 17%
- 25% to 54%
- 65% to 111%
- Up to 1085%

1 inch equals 5.27 miles

0 1 2 4 6 8 Miles

Location Map

METRO

METRO DATA RESOURCE CENTER
600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232-2736
TEL (503) 797-1742 | FAX (503) 797-1909
drc@metro.dst.or.us | www.metro-region.org

Project Date: Aug 11, 2004 Plot time: Aug 11, 2004 J:\hohndel\04194_PerfMeas_PopMap\PopChangeTot.mxd

Table 1.8: Population Distribution – 1990 and 2003

PART ONE -- CITIES

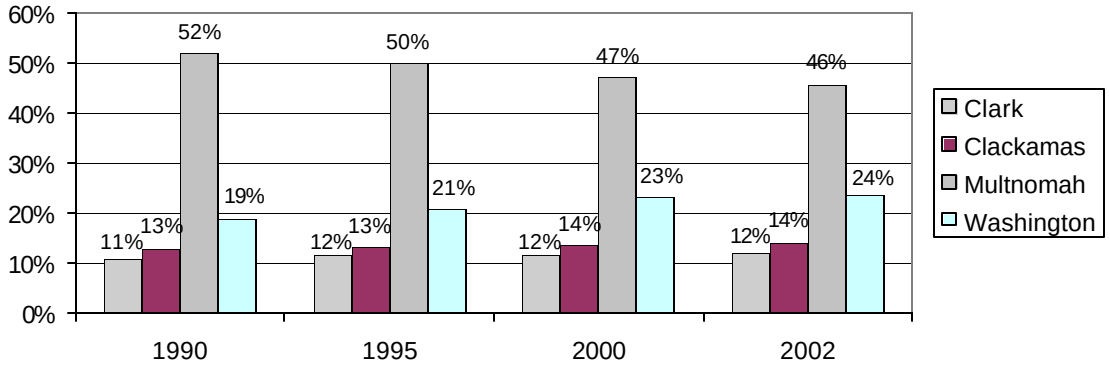
CITIES	1990	% of 1990 Total	2003	% of 2003 Total	1990 - 2003 Change	1990 – 2003 % Increase	Change in Share of Total Population
Beaverton	53,310	7%	79,010	7%	25,700	48%	NC
Cornelius	6,148	1%	10,150	1%	4,002	65%	NC
Durham	748	0%	1,400	0%	652	87%	NC
Fairview	2,391	0%	8,590	1%	6,199	259%	↑1%
Forest Grove	13,559	2%	19,130	2%	5,571	41%	NC
Gladstone	10,152	1%	11,790	1%	1,638	16%	NC
Gresham	68,235	9%	93,660	9%	25,425	37%	NC
Happy Valley	1,519	0%	6,370	1%	4,851	319%	↑1%
Hillsboro	37,520	5%	79,340	7%	41,820	111%	↑2%
Johnson City	586	0%	630	0%	44	8%	NC
King City	2,060	0%	2,100	0%	40	2%	NC
Lake Oswego	30,576	4%	35,860	3%	5,284	17%	↓1%
Maywood Park	781	0%	750	0%	(31)	-4%	
Milwaukie	18,692	2%	20,580	2%	1,888	10%	NC
Oregon City	14,698	2%	28,100	3%	13,402	91%	↑1%
Portland	437,319	56%	545,140	50%	107,821	25%	↓6%
Rivergrove	27	0%	320	0%	293	1085%	NC
Sherwood	3,093	0%	14,050	1%	10,957	354%	↑1%
Tigard	29,344	4%	45,130	4%	15,786	54%	NC
Troutdale	7,852	1%	14,300	1%	6,448	82%	NC
Tualatin	15,013	2%	24,790	2%	9,777	65%	NC
West Linn	16,367	2%	23,820	2%	7,453	46%	NC
Wilsonville	7,106	1%	15,880	1%	8,774	123%	NC
Wood Village	2,814	0%	2,870	0%	56	2%	NC
City Total	779,910	100%*	1,083,760	100%*	303,850	39%	--

PART TWO – TRI COUNTY

COUNTIES	1990	% of 1990 Total	2003	% of 2003 Total		1990 - 2003 increase	% Change in Share of County Total
Clackamas County	278,850	25%	353,450	24%	74,600	27%	↓1%
Multnomah County	538,887	48%	677,850	45%	138,963	26%	↓3%
Washington County	311,557	28%	472,600	31%	161,043	52%	↑3%
County Total	1,129,294	100%*	1,503,900	100%	374,606	33%	---

Source: Source: Metro Data Resource Center; PSU Center for Population, Research and Census
*May not add up to 100% due to rounding.
NC = no change

Figure 1.5: County Share of Regional Employment



Source: US Census compiled by the Metro Data Resource Center

Table 1.9: Percent Share of County Total Employment in the Metro Region

	1995	1996	1997	1998	1999	2000	2001	2002
Clark	12%	12%	13%	13%	13%	14%	14%	14%
Clackamas	13%	14%	15%	15%	16%	16%	16%	16%
Columbia	1%	1%	1%	1%	1%	1%	1%	1%
Multnomah	50%	51%	53%	53%	53%	54%	53%	51%
Washington	21%	23%	24%	25%	26%	27%	27%	26%
Yamhill	3%	3%	3%	3%	3%	3%	3%	3%

Source: US Census compiled by the Metro Data Resource Center

Table 1.10: Employment by County –Percentage Change 1995 - 2002

	1995	1996	% change	1997	% change	1998	% change	1999	% change	2000	% *change*	2001	% change	2002	% change
Clark	97,400	101,900	5%	106,700	5%	110,300	3%	113,000	2%	114,300	1%	114,700	0%	114,400	0%
Clackamas	112,300	116,200	3%	123,100	6%	126,700	3%	130,700	3%	133,600	2%	133,900	0%	134,100	0%
Multnomah	419,800	432,000	3%	444,800	3%	446,300	0%	446,800	0%	455,300	2%	444,200	-2%	429,300	-3%
Washington	175,200	192,000	10%	204,400	6%	211,100	3%	215,800	2%	225,000	4%	228,400	2%	221,700	-3%

Source: US Bureau of Labor Statistics and Oregon Employment Division as compiled by the Metro Data Resource Center

Table 1.11: Regional Employment Growth -- Portland PMSA (Multnomah, Clackamas, Washington, Clark and Yamhill Counties)

Year	Employment						
	Manufacturing		Non-Manufacturing		Government		
	Jobs	**% of Mfr**	**Jobs**	**% of Non-Mfr**	**Jobs**	**% of Govt**	**Total**
1990	125,700	17.3%	499,500	69%	99,800	14%	725,000
1995	134,600	16.0%	594,900	71%	110,100	13%	839,600
1999	141,600	15.0%	680,700	72%	122,200	13%	944,500
2000	142,900	14.8%	698,900	72%	125,400	13%	967,100
2001	135,800	14.2%	697,300	73%	126,200	13%	959,300
2002	123,400	13.2%	685,600	73%	128,500	14%	937,500
2003	117,900	12.8%	676,900	73%	127,200	14%	922,000

Source: US Bureau of Labor Statistics as compiled by the Metro DRC

Table 1.12: Unemployment Rate – US and Portland PMSA (Multnomah, Clackamas, Washington, Clark and Yamhill Counties)

Year	Portland PMSA	U.S.
1990	4.4	5.6
1995	3.7	5.6
1999	4.5	4.2
2000	4.0	4
2001	5.9	4.8
2002	7.8	5.8
2003	8.1	6

Source: US Bureau of Labor Statistics

Table 1.13: Households by Income Group (1999)

Jurisdiction	<= 30%	% Region Total	31% - 50%	% Region Total	51% - 80%	% Region Total	80% - 120%	% Region Total	>120%	% Region Total	Total Households	% Jurisdiction Total
	Up to $14,654		$14,655 - $24,424		$24,425 - $39,078		$39,079 - $58,617		>$58,618			
Inside Metro	60,282	12%	57,721	11%	95,272	18%	106,633	21%	195,517	**38%**	515,425	**100%**
King City	264	**19%**	317	**23%**	296	**21%**	318	**23%**	191	**14%**	1,386	**100%**
Johnson City	27	**9%**	55	**19%**	85	**30%**	66	**23%**	53	**19%**	286	**100%**
Forest Grove	1,087	**17%**	806	**13%**	1,185	**19%**	1,440	**23%**	1,792	**28%**	6,310	**100%**
Portland	35,298	**16%**	28,998	**13%**	44,622	**20%**	45,299	**20%**	69,770	**31%**	223,987	**100%**
Fairview	378	**13%**	310	**11%**	638	**22%**	626	**22%**	892	**31%**	2,844	**100%**
Milwaukie	896	**10%**	1,052	**12%**	1,866	**22%**	1,994	**23%**	2,840	**33%**	8,648	**100%**
Gresham	4,168	**12%**	4,207	**13%**	6,382	**19%**	7,316	**22%**	11,334	**34%**	33,407	**100%**
Oregon City	1,096	**12%**	998	**11%**	1,814	**19%**	2,323	**24%**	3,262	**34%**	9,493	**100%**
Cornelius	308	**11%**	346	**12%**	449	**16%**	782	**27%**	1,000	**35%**	2,885	**100%**
Gladstone	512	**12%**	492	**12%**	670	**16%**	1,016	**25%**	1,455	**35%**	4,145	**100%**
Beaverton	2,683	**9%**	3,374	**11%**	6,162	**20%**	6,225	**20%**	12,389	**40%**	30,833	**100%**
Hillsboro	2,195	**9%**	2,314	**9%**	4,216	**17%**	5,664	**23%**	10,639	**43%**	25,028	**100%**
Tigard	1,401	**8%**	1,847	**11%**	2,781	**17%**	3,359	**20%**	7,111	**43%**	16,499	**100%**
Durham	72	**14%**	78	**15%**	60	**12%**	74	**14%**	233	**45%**	517	**100%**
Wilsonville	441	**7%**	614	**10%**	1,020	**17%**	1,103	**19%**	2,749	**46%**	5,927	**100%**
Wood Village	66	**7%**	111	**11%**	241	**24%**	295	**29%**	298	**29%**	1,011	**100%**
Maywood Park	3	**1%**	17	**6%**	31	**11%**	105	**36%**	138	**47%**	294	**100%**
Troutdale	254	**5%**	391	**8%**	628	**14%**	1,163	**25%**	2,196	**47%**	4,632	**100%**
Tualatin	544	**6%**	638	**7%**	1,517	**18%**	1,814	**21%**	4,104	**48%**	8,617	**100%**
Sherwood	239	**6%**	304	**7%**	547	**13%**	918	**21%**	2,332	**54%**	4,340	**100%**
Lake Oswego	836	**6%**	921	**6%**	1,981	**13%**	2,422	**16%**	8,664	**58%**	14,824	**100%**
West Linn	364	**4%**	563	**7%**	932	**11%**	1,342	**16%**	4,953	**61%**	8,154	**100%**
Rivergrove	3	**3%**	4	**4%**	14	**13%**	18	**16%**	73	**65%**	112	**100%**
Happy Valley	17	**1%**	69	**5%**	85	**6%**	239	**16%**	1,113	**73%**	1,523	**100%**
Clackamas County*	2,836	**8%**	3,586	**10%**	6,877	**19%**	7,806	**22%**	14953	**41%**	36058	**100%**
Multnomah County*	462	**7%**	395	**6%**	825	**12%**	1,156	**17%**	3907	**58%**	6745	**100%**
Washington County*	3,834	**7%**	4,916	**9%**	9,352	**16%**	11,748	**21%**	27070	**48%**	56920	**100%**

Source: U.S. Census; Metro Data Resource Center

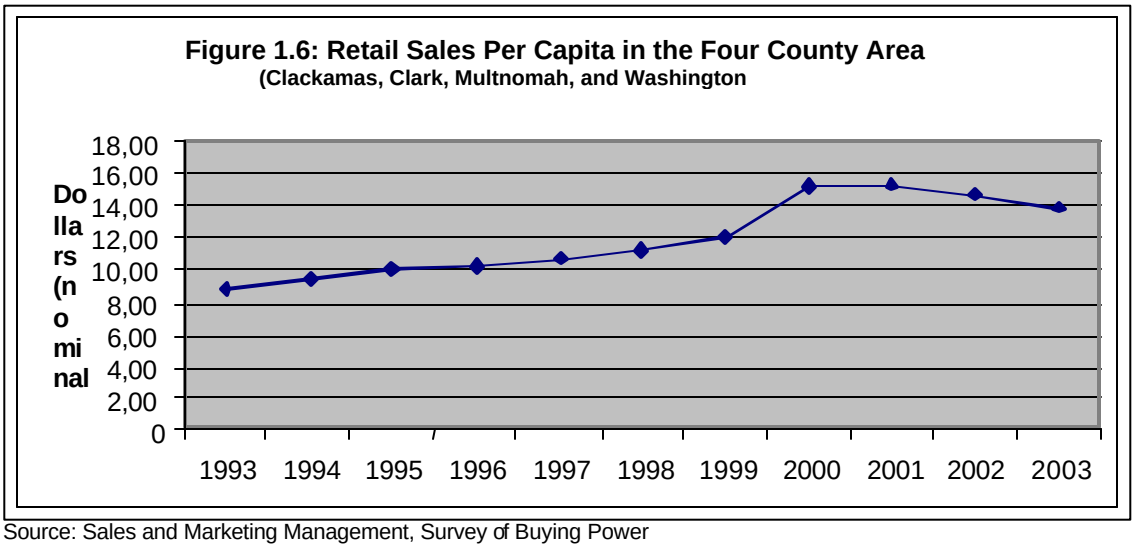
* Unincorporated County Inside Metro Boundary

Based on Regional Household Median Family Income of $48,848

Table 1.14: 2002 Average Annual Wages by County-- Oregon Covered Employment and Wages

Sectors	Clackamas County	Multnomah County	Washington County	Portland MSA	USA
1. Natural Resources and Mining	$20,365	$23,410	$22,025	$22,337	32,917
2. Construction	$40,749	$47,439	$44,894	$44,656	39,027
3. Manufacturing	$41,880	$41,402	$61,040	$49,682	44,097
4. Trade, Transportation & Utilities	$33,682	$34,473	$40,478	$35,655	32,212
5. Information	$42,706	$54,817	$57,784	$54,448	56,103
6. Financial Activities	$45,735	$48,712	$41,894	$46,288	55,172
7. Professional & Business Services	$39,161	$45,052	$38,578	$42,156	43,899
8. Education and Health Services	$34,941	$35,131	$34,998	$34,624	33,931
9. Leisure & Hospitality	$13,197	$18,295	$13,961	$16,130	15,777
10. Other Services	$22,645	$25,699	$28,835	$25,580	N/A
11. Total all government	$35,451	$42,448	$37,018	$39,985	37,935
12. Private Non-Classified	$39,600	$33,377	$39,650	$35,400	36,539
13 Total All Industries	**$34,332**	**$38,239**	**$41,965**	**$38,189**	**36,764**

Source: Oregon Employment Division



Source: Sales and Marketing Management, Survey of Buying Power

Table 1.15: Retail Sales Per Capita

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Clackamas	7,810	8,099	9,634	9,747	10,047	10,885	12,032	12,739	11,946	11,646	10,529
Clark, WA	5,897	6,316	6,729	6,711	7,184	7,315	7,683	9,568	9,913	9,371	9,237
Multnomah	9,642	10,455	10,567	10,943	11,419	11,513	12,068	17,194	18,264	17,641	16,364
Washington	10,861	11,567	12,064	12,640	13,366	14,498	15,745	18,725	17,814	17,081	16,367
Four County	8,909	9,520	10,031	10,316	10,810	11,268	12,053	15,194	15,336	14,760	13,858
Portland PMSA	8,669	9,276	9,776	10,075	10,590	11,046	11,817	14,747	14,896	14,335	13,469

Source: Sales and Marketing Management, Survey of Buying Power
PMSA: Clackamas, Clark, Columbia, Multnomah, Washington, Yamhill Counties
Four County: Clackamas, Clark, Multnomah, Washington Counties

ii) Benefits and burdens of growth policies (Part 1 – Tax Base Capacity)

Information Used to Assess Policies: One approach to measuring the equitable distribution of the benefits and burden of growth is to compare the real property tax base capacity of jurisdictions. The revenue that property taxes generate is proportionate to the value of residential and non-residential properties that are located within each jurisdiction. Jurisdictions with medium- to high-value residential and non-residential uses are better able to adequately fund services and provide a range of growth management services.

With assistance from tax assessors of Clackamas, Multnomah, and Washington Counties, Metro was able to assemble data on the sources of revenue that are available to each local government in the region and the amount of taxes that each government is able to assess on real property. These values are calculated as totals and as per-capita measurements. The findings that follow reflect the fiscal realities that local governments face and the degree to which the benefits and burdens of growth are distributed.

Findings[4]:

Total Taxable

- The five cities in the region with the highest amount of taxable real property are:
  - Portland, $31.6 billion in 2002 and $32.7 billion in 2003;
  - Hillsboro, $5.2 billion in 2002 and $5.4 billion in 2003;
  - Gresham, $4.7 billion in 2002 and $4.8 billion in 2003;
  - Beaverton, $4.7 billion in 2002 and $4.9 billion in 2003; and
  - Lake Oswego, $3.9 billion in 2002 and $4 billion in 2003.

  [see Tables 1.16a&b, 1.17 and 1.18]
- The value of total taxable real property (residential and non-residential) in the Metro region increased by 4% from 2002 ($83.8 billion) to 2003 ($87.3 billion). [see Tables 1.17a&b and 1.18]

Per capita – Total Taxable Value

- The taxable real property value per capita for the Metro area in 2002 was $61,723. [see Tables 1.17a&b and 1.18]
- The four cities with the highest taxable real property value per capita in 2003 are:
  - Lake Oswego, $111,863
  - Wilsonville, $97,381
  - Happy Valley, $93,039
  - Rivergrove, $92,076
  - Tualatin, $84,826.

- From 2002 to 2003 the City of Wood Village increased the most in taxable real property value per capita by 20% (from $48,060 to $57,821). Rivergrove increased by 11% (from $83,035 to $92,076), and Tualatin increased by 10% (from $77,078 to $84,826). The other jurisdictions in the region increased in total taxable value per capita from 2002 to 2003 by a range of roughly 0% to 7%. [see Tables 1.17a&b and 1.18]

Per capita – Residential value

- In 2002, the taxable real property value per capita for residential property in the Metro area was $44,924. [see Tables 1.17a&b and 1.18]

[4] Although this findings pattern to Taxable Value, the table of data for Real Market Value is also provided in this section (see Table 1.19).

- The four jurisdictions with the highest taxable residential value per capita in the region in 2003 are:
  - Lake Oswego $96,509;
  - Happy Valley $86,993;
  - Rivergrove $85,549; and
  - West Linn $79,459.

  [see Tables 1.16a&b, 1.17a&b and 1.18]

Per capita – Non-residential value

- In 2002, the taxable non-residential real property value per capita in the Metro area was $16,799. [see Tables 1.16a&b, 1.17a&b and 1.18]
- Wilsonville had the highest per capita non-residential taxable value in both 2002 and 2003 ($40,771 and $42,664). Tualatin and Wood Village experienced increases in non-residential taxable value per capita from 2002 to 2003 (19% and 39%, respectively). Hillsboro experienced a decrease in non-residential value per capita by 6% from 2002 to 2003 ($32,487 in 2002 to $30,564 in 2003). Note: The decrease in the non-residential per capita taxable values in Hillsboro may be the result of the recession that impacted the high-tech industries that are located in this jurisdiction. [see Tables 1.16a&b, 1.17a&b and 1.18]

Valuation Split: Residential vs. Non- Residential

- The taxable real property values in the Metro region were split (residential to non-residential) 73% to 27% in both 2002 and 2003. [see Tables 1.17a&b and 1.18]
- Cities with the most even taxable valuation split (residential to non-residential) in 2003 are:
  - Hillsboro, 55% to 45%;
  - Wilsonville, 56% to 44%;
  - Wood Village, 43% to 57%;
  - Tualatin, 58% to 42%; and
  - Tigard, 68% to 32%.

  [see Tables 1.17a&b and 1.18]
- Cities with the most uneven taxable valuation split (residential to non-residential) in 2003 are:
  - Rivergrove, 93% to 7%;
  - Happy Valley, 94% to 6%;
  - West Linn, 94% to 6%;
  - Maywood Park, 100% to 0%; and
  - Johnson City, 100% to 0%.

  [see Tables 1.17a&b and 1.18]

Table 1.16 (a & b): Real Property Tax Base Comparison (Taxable Value)

A: Top 5 Rankings (2003)

	Total Taxable Real Property **Value**	**Total** Taxable Real Property Value **Per Capita**	Taxable **Residential** Value **Per Capita**	Taxable **Non-Residential** Value **Per Capita**	**Residential to Non-Residential** Taxable Value closet to 50/50%
1	**Portland** ($32,705,405,489)	**Lake Oswego** ($111,863)	**Lake Oswego** ($96,509)	**Wilsonville** ($42,664)	**Hillsboro** (55% to 45%)
2	**Hillsboro** ($5,402,285,960)	**Wilsonville** ($97,381)	**Happy Valley** ($86,993)	**Tualatin** ($35,781)	**Wilsonville** (56% to 44%)
3	**Beaverton** ($4,914,673,520)	**Happy Valley** ($93,039)	**Rivergrove** ($85,549)	**Wood Village** ($32,888)	**Wood Village** (43% to 57%)
4	**Gresham** ($4,753,715,348)	**Rivergrove** ($92,076)	**West Linn** ($79,459)	**Hillsboro** ($30,564)	**Tualatin** (58% to 42%)
5	**Lake Oswego** ($4,011,395,332)	**Tualatin** ($84,826)	**King City** ($68,379)	**Tigard** ($24,258)	**Tigard** (68% to 32%)

Source: Tax Assessors of Clackamas, Multnomah and Washington Counties

B: Bottom 5 Rankings (2003)

	Total Taxable Real Property **Value**	**Total** Taxable Real Property Value **Per Capita**	Taxable **Residential** Value **Per Capita**	Taxable **Non-Residential** Value **Per Capita**	Least Evenly Split **Residential to Non-Residential** Taxable Value
20	**King City** ($158,866,480)	**Gladstone** ($46,355)	**Fairview** ($31,643)	**Happy Valley** ($6,046)	**Rivergrove** (93% to 7%)
21	**Durham** ($105,900,980)	**Forest Grove** ($41,202)	**Forest Grove** ($30,515)	**Gladstone** ($5,380)	**Happy Valley** (94% to 6%)
22	**Maywood Park** ($42,014,310)	**Fairview** ($39,165)	**Cornelius** ($25,893)	**West Linn** ($4,858)	**West Linn** (94% to 6%)
23	**Rivergrove** ($29,464,327)	**Cornelius** ($32,096)	**Wood Village** ($24,932)	**Maywood Park** ($133)	**Maywood Park** (100% to 0%)
24	**Johnson City** ($5,437,557)	**Johnson City** ($8,631)	**Johnson City** ($8,631)	**Johnson City** ($0)	**Johnson City** (100% to 0%)

Source: Tax Assessor of Clackamas, Multnomah and Washington Counties

Table 1.17 (a & b): Real Property Tax Base Comparison (Real Market Value)

A: Top 5 Rankings (2003)

	Total Real Market Value of Real Property	**Total** (Real Market Value) of Real Property **Per Capita**	Real Market **Residential** Value **Per Capita**	Real Market **Non-Residential** Value **Per Capita**	**Residential to Non-Residential** Real Market Value closet to 50/50%
1	**Portland** ($64,340,444,050)	**Rivergrove** ($156,179)	**Rivergrove** ($133,040)	**Hillsboro** ($97,783)	**Wilsonville** (55% to 45%)
2	**Hillsboro** ($11,775,457,916)	**Lake Oswego** ($153,373)	**Lake Oswego** ($131,902)	**Wilsonville** ($56,114)	**Tualatin** (57% to 43%)
3	**Gresham** ($7,600,504,960)	**Hillsboro** ($148,418)	**Happy Valley** ($110,112)	**Wood Village** ($53,306)	**Portland** (57% to 43%)
4	**Beaverton** ($6,771,358,203)	**Wilsonville** ($124,525)	**West Linn** ($102,247)	**Portland** ($50,927)	**Gresham** (59% to 41%)
5	**Lake Oswego** ($5,499,945,744)	**Happy Valley** ($120,377)	**King City** ($85,649)	**Tualatin** ($48,309)	**Wood Village** (38% to 62%)

Source: Tax Assessors of Clackamas, Multnomah and Washington Counties

B: Bottom 5 Rankings (2003)

	Total Real Market Value of Real Property	**Total** (Real Market Value) of Real Property **Per Capita**	Real Market **Residential** Value **Per Capita**	Real Market **Non-Residential** Value **Per Capita**	Least Evenly Split **Residential to Non-Residential** Real Market Value
20	**King City** ($203,880,640)	**Fairview** ($66,699)	**Fairview** ($47,223)	**Cornelius** ($10,207)	**Johnson City** (100% to 0%)
21	**Durham** ($145,426,890)	**Gladstone** ($59,897)	**Forest Grove** ($41,210)	**Gladstone** ($7,176)	**Maywood Park** (96% to 4%)
22	**Maywood Park** ($59,853,600)	**Forest Grove** ($54,715)	**Cornelius** ($36,329)	**West Linn** ($6,225)	**West Linn** (94% to 6%)
23	**Rivergrove** ($49,977,140)	**Cornelius** ($46,535)	**Wood Village** ($33,007)	**Maywood Park** ($3,415)	**Happy Valley** (91% to 9%)
24	**Johnson City** ($7,583,048)	**Johnson City** ($12,037)	**Johnson City** ($12,037)	**Johnson City** ($0)	**King City** (88% to 12%)

Source: Tax Assessors of Clackamas, Multnomah and Washington Counties

Table 1.18: Property Tax Comparison of Taxable Value Ranked by 2003 Per Capita Total

	Population		Real Property						Valuation Split				Per Capita					
			Residential		Non-Residential		Total		2002		2003		Residential ($)		Non-res ($)		Total ($)	
Jurisdictions	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**	**Res**	**Non-Res**	**Res**	**Non-Res**	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**
Metro	1,358,439	n/a	61,026,537,687	64,007,844,389	22,820,975,089	23,332,825,323	83,847,512,776	87,340,669,712	73%	27%	73%	27%	44,924	n/a	16,799	n/a	61,723	n/a
County																		
Clackamas County	350,850	353,450	16,268,695,738	17,126,808,710	7,116,724,728	7,469,643,192	23,385,420,466	24,596,451,902	70%	30%	70%	30%	46,369	48,456	20,284	21,134	66,654	69,590
Washington County	463,050	472,600	21,811,030,733	23,116,938,984	7,848,419,564	7,853,815,362	29,659,450,297	30,970,754,346	74%	26%	75%	25%	47,103	48,914	16,949	16,618	64,052	65,533
Multnomah County	670,250	677,850	27,416,755,108	28,455,285,646	11,725,663,740	12,031,361,667	39,142,418,848	40,486,647,313	70%	30%	70%	30%	40,905	41,979	17,494	17,749	58,400	59,728
Unincorporated County																		
Multnomah County	13,075	12,430	1,038,348,310	1,052,486,690	577,289,430	593,886,110	1,615,637,740	1,646,372,800	64%	36%	64%	36%	79,415	84,673	44,152	47,778	123,567	132,452
Washington County	194,010	193,495	10,561,124,194	11,152,206,214	1,895,307,752	1,603,945,362	12,456,431,946	12,756,151,576	85%	15%	87%	13%	54,436	57,636	9,769	8,289	64,205	65,925
Clackamas County	181,155	182,035	6,393,352,406	6,669,035,642	4,942,907,673	5,181,398,858	11,336,260,079	11,850,434,500	56%	44%	56%	44%	35,292	36,636	27,286	28,464	62,578	65,100
Inside Metro																		
Lake Oswego	35,750	35,860	3,329,935,535	3,460,822,625	530,615,008	550,572,707	3,860,550,543	4,011,395,332	86%	14%	86%	14%	93,145	96,509	14,842	15,353	107,987	111,863
Wilsonville	15,590	15,880	812,712,511	868,904,012	635,612,467	677,508,324	1,448,324,978	1,546,412,336	56%	44%	56%	44%	52,130	54,717	40,771	42,664	92,901	97,381
Happy Valley	5,810	6,370	489,416,493	554,144,449	34,765,537	38,516,018	524,182,030	592,660,467	93%	7%	94%	6%	84,237	86,993	5,984	6,046	90,221	93,039
Rivergrove	320	320	26,084,776	27,375,523	486,488	2,088,804	26,571,264	29,464,327	98%	2%	93%	7%	81,515	85,549	1,520	6,528	83,035	92,076
Tualatin	24,100	24,790	1,134,111,385	1,215,845,229	723,462,012	887,001,834	1,857,573,397	2,102,847,063	61%	39%	58%	42%	47,059	49,046	30,019	35,781	77,078	84,826
West Linn	23,430	23,820	1,770,422,930	1,892,705,495	112,871,505	115,707,666	1,883,294,435	2,008,413,161	94%	6%	94%	6%	75,562	79,459	4,817	4,858	80,380	84,316
King City	2,110	2,100	139,391,320	143,596,480	14,952,480	15,270,000	154,343,800	158,866,480	90%	10%	90%	10%	66,062	68,379	7,086	7,271	73,149	75,651
Durham	1,390	1,400	76,719,120	79,345,890	25,695,180	26,555,090	102,414,300	105,900,980	75%	25%	75%	25%	55,194	56,676	18,486	18,968	73,679	75,644
Tigard	44,070	45,130	2,163,333,800	2,281,200,540	1,050,699,570	1,094,758,310	3,214,033,370	3,375,958,850	67%	33%	68%	32%	49,089	50,547	23,842	24,258	72,930	74,805
Hillsboro	74,840	79,340	2,769,660,190	2,977,363,510	2,431,354,513	2,424,922,450	5,201,014,703	5,402,285,960	53%	47%	55%	45%	37,008	37,527	32,487	30,564	69,495	68,090
Beaverton	77,990	79,010	3,459,742,910	3,634,103,460	1,212,828,749	1,280,570,060	4,672,571,659	4,914,673,520	74%	26%	74%	26%	44,361	45,995	15,551	16,208	59,912	62,203
Sherwood	13,680	14,050	667,762,500	730,185,770	127,580,870	142,247,550	795,343,370	872,433,320	84%	16%	84%	16%	48,813	51,971	9,326	10,124	58,139	62,095
Portland	538,180	545,140	22,128,279,174	22,955,597,285	9,432,102,814	9,749,808,204	31,560,381,988	32,705,405,489	70%	30%	70%	30%	41,117	42,110	17,526	17,885	58,643	59,995
Wood Village	2,850	2,870	69,394,600	71,555,310	67,577,220	94,389,750	136,971,820	165,945,060	51%	49%	43%	57%	24,349	24,932	23,711	32,888	48,060	57,821
Milwaukie	20,550	20,580	812,909,350	840,356,284	311,827,839	322,014,178	1,124,737,189	1,162,370,462	72%	28%	72%	28%	39,558	40,834	15,174	15,647	54,732	56,481
Maywood Park	750	750	40,623,310	41,914,720	96,690	99,590	40,720,000	42,014,310	100%	0%	100%	0%	54,164	55,886	129	133	54,293	56,019
Troutdale	14,240	14,300	539,665,890	568,823,370	161,037,140	164,764,280	700,703,030	733,587,650	77%	23%	78%	22%	37,898	39,778	11,309	11,522	49,207	51,300
Oregon City	27,270	28,100	1,084,241,618	1,161,129,490	257,295,754	273,772,218	1,341,537,372	1,434,901,708	81%	19%	81%	19%	39,760	41,321	9,435	9,743	49,195	51,064
Gresham	92,620	93,660	3,249,350,730	3,388,677,438	1,429,727,860	1,365,037,910	4,679,078,590	4,753,715,348	69%	31%	71%	29%	35,083	36,181	15,436	14,574	50,519	50,755
Gladstone	11,620	11,790	468,694,454	483,092,318	59,077,070	63,435,383	527,771,524	546,527,701	89%	11%	88%	12%	40,335	40,975	5,084	5,380	45,419	46,355
Forest Grove	18,750	19,130	546,757,100	583,749,920	207,700,630	204,452,470	754,457,730	788,202,390	72%	28%	74%	26%	29,160	30,515	11,077	10,688	40,238	41,202
Fairview	8,400	8,590	248,246,190	271,813,670	62,341,320	64,615,510	310,587,510	336,429,180	80%	20%	81%	19%	29,553	31,643	7,422	7,522	36,975	39,165
Cornelius	9,930	10,150	246,429,770	262,809,800	59,429,490	62,967,610	305,859,260	325,777,410	81%	19%	81%	19%	24,817	25,893	5,985	6,204	30,802	32,096
Johnson City	630	630	5,279,432	5,437,557	-	-	5,279,432	5,437,557	100%	0%	100%	0%	8,380	8,631	-	-	8,380	8,631
Outside Metro																		
Sandy	5,780	6,200	247,626,874	279,130,912	74,476,172	84,294,175	322,103,046	363,425,087	77%	23%	77%	23%	42,842	45,021	12,885	13,596	55,727	58,617
North Plains	1,660	1,640	64,255,652	67,293,550	21,128,960	23,174,520	85,384,612	90,468,070	75%	25%	74%	26%	38,708	41,033	12,728	14,131	51,437	55,163
Canby	13,440	13,910	551,250,184	596,149,237	130,806,551	140,099,500	682,056,735	736,248,737	81%	19%	81%	19%	41,016	42,858	9,733	10,072	50,748	52,929
Banks	1,420	1,430	62,614,640	64,752,090	8,557,390	9,800,380	71,172,030	74,552,470	88%	12%	87%	13%	44,095	45,281	6,026	6,853	50,121	52,135
Estacada	2,440	2,440	71,408,325	75,536,219	32,026,075	33,856,249	103,434,400	109,392,468	69%	31%	69%	31%	29,266	30,957	13,125	13,876	42,391	44,833
Molalla	5,780	5,800	182,166,221	194,636,401	48,488,610	48,203,776	230,654,831	242,840,177	79%	21%	80%	20%	31,517	33,558	8,389	8,311	39,906	41,869
Barlow	140	140	3,712,639	3,839,967	1,614,905	1,663,351	5,327,544	5,503,318	70%	30%	70%	30%	26,519	27,428	11,535	11,881	38,054	39,309
Gaston	610	620	15,372,270	16,040,750	1,270,440	1,308,400	16,642,710	17,349,150	92%	8%	92%	8%	25,200	25,872	2,083	2,110	27,283	27,983

Table 1.19: Property Tax Comparison of Real Market Value Ranked by 2003 Per Capita Total

	Population		Real Property						Valuation Split				Per Capita					
			Residential		Non-Residential		Total		2002		2003		Residential ($)		Non-res ($)		Total ($)	
Jurisdictions	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**	**Res**	**Non-Res**	**Res**	**Non-Res**	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**
Metro	1,358,439	n/a	84,947,608,467	91,274,542,544	51,753,439,353	53,564,887,245	136,701,047,820	144,839,429,789	62%	38%	63%	37%	62,533	n/a	38,098	n/a	100,631	n/a
County																		
Multnomah County	670,250	677,850	40,878,951,870	44,003,374,770	33,768,940,636	34,429,406,960	74,647,892,506	78,432,781,730	55%	45%	56%	44%	60,991	64,916	50,383	50,792	111,373	115,708
Washington County	463,050	472,600	29,448,447,021	31,131,460,880	16,177,543,878	16,366,706,804	45,625,990,899	47,498,167,684	65%	35%	66%	34%	63,597	65,873	34,937	34,631	98,534	100,504
Clackamas County	350,850	353,450	21,106,968,364	22,471,530,537	9,486,641,978	9,960,312,854	30,593,610,342	32,431,843,391	69%	31%	69%	31%	60,160	63,578	27,039	28,180	87,199	91,758
Unincorporated County																		
Multnomah County	13,075	12,430	1,472,900,560	1,488,797,250	2,771,407,250	2,820,603,860	4,244,307,810	4,309,401,110	35%	65%	35%	65%	112,650	119,775	211,962	226,919	324,612	346,694
Washington County	194,010	193,495	14,728,748,630	15,247,383,566	3,857,620,098	2,754,914,298	18,586,368,728	18,002,297,864	79%	21%	85%	15%	75,917	78,800	19,884	14,238	95,801	93,038
Clackamas County	181,155	182,035	8,249,820,095	8,654,238,357	6,575,426,820	6,905,254,866	14,825,246,915	15,559,493,223	56%	44%	56%	44%	45,540	47,542	36,297	37,934	81,837	85,475
Inside Metro																		
Rivergrove	320	320	37,170,680	42,572,808	4,023,728	7,404,332	41,194,408	49,977,140	90%	10%	85%	15%	116,158	133,040	12,574	23,139	128,733	156,179
Lake Oswego	35,750	35,860	4,403,858,005	4,729,997,294	744,796,992	769,948,450	5,148,654,997	5,499,945,744	86%	14%	86%	14%	123,185	131,902	20,833	21,471	144,018	153,373
Hillsboro	74,840	79,340	3,709,450,091	4,017,339,656	6,966,620,323	7,758,118,260	10,676,070,414	11,775,457,916	35%	65%	34%	66%	49,565	50,634	93,087	97,783	142,652	148,418
Wilsonville	15,590	15,880	1,003,870,665	1,086,367,167	835,725,720	891,089,913	1,839,596,385	1,977,457,080	55%	45%	55%	45%	64,392	68,411	53,607	56,114	117,998	124,525
Happy Valley	5,810	6,370	600,668,719	701,413,106	58,401,598	65,388,307	659,070,317	766,801,413	91%	9%	91%	9%	103,385	110,112	10,052	10,265	113,437	120,377
Portland	538,180	545,140	33,783,933,615	36,577,964,654	27,229,651,446	27,762,479,396	61,013,585,061	64,340,444,050	55%	45%	57%	43%	62,774	67,098	50,596	50,927	113,370	118,026
Tualatin	24,100	24,790	1,445,614,473	1,556,071,539	1,043,517,272	1,197,591,018	2,489,131,745	2,753,662,557	58%	42%	57%	43%	59,984	62,770	43,299	48,309	103,283	111,080
West Linn	23,430	23,820	2,277,098,561	2,435,516,603	144,242,304	148,286,685	2,421,340,865	2,583,803,288	94%	6%	94%	6%	97,187	102,247	6,156	6,225	103,344	108,472
Tigard	44,070	45,130	2,776,013,495	3,006,740,632	1,642,398,170	1,789,015,310	4,418,411,665	4,795,755,942	63%	37%	63%	37%	62,991	66,624	37,268	39,641	100,259	106,265
Durham	1,390	1,400	98,045,620	106,111,940	39,982,420	39,314,950	138,028,040	145,426,890	71%	29%	73%	27%	70,536	75,794	28,764	28,082	99,301	103,876
King City	2,110	2,100	171,987,240	179,863,080	24,068,810	24,017,560	196,056,050	203,880,640	88%	12%	88%	12%	81,511	85,649	11,407	11,437	92,918	97,086
Sherwood	13,680	14,050	898,087,642	986,781,392	215,163,760	242,559,700	1,113,251,402	1,229,341,092	81%	19%	80%	20%	65,650	70,234	15,728	17,264	81,378	87,498
Wood Village	2,850	2,870	88,984,090	94,731,130	128,936,990	152,987,830	217,921,080	247,718,960	41%	59%	38%	62%	31,222	33,007	45,241	53,306	76,464	86,313
Beaverton	77,990	79,010	4,440,191,442	4,770,219,553	1,853,102,279	2,001,138,650	6,293,293,721	6,771,358,203	71%	29%	70%	30%	56,933	60,375	23,761	25,328	80,694	85,703
Gresham	92,620	93,660	4,294,140,660	4,500,181,350	3,079,045,900	3,100,323,610	7,373,186,560	7,600,504,960	58%	42%	59%	41%	46,363	48,048	33,244	33,102	79,607	81,150
Troutdale	14,240	14,300	691,132,770	742,907,170	388,612,730	413,913,550	1,079,745,500	1,156,820,720	64%	36%	64%	36%	48,535	51,952	27,290	28,945	75,825	80,897
Maywood Park	750	750	54,535,140	57,292,130	2,536,230	2,561,470	57,071,370	59,853,600	96%	4%	96%	4%	72,714	76,390	3,382	3,415	76,095	79,805
Milwaukie	20,550	20,580	1,077,906,354	1,122,691,493	399,406,778	409,530,576	1,477,313,132	1,532,222,069	73%	27%	73%	27%	52,453	54,553	19,436	19,899	71,889	74,452
Oregon City	27,270	28,100	1,445,394,767	1,548,006,125	357,302,787	383,461,025	1,802,697,554	1,931,467,150	80%	20%	80%	20%	53,003	55,089	13,102	13,646	66,106	68,735
Fairview	8,400	8,590	360,654,860	405,642,160	159,868,690	167,301,660	520,523,550	572,943,820	69%	31%	71%	29%	42,935	47,223	19,032	19,476	61,967	66,699
Gladstone	11,620	11,790	604,357,473	621,584,917	78,777,306	84,601,017	683,134,779	706,185,934	88%	12%	88%	12%	52,010	52,721	6,779	7,176	58,790	59,897
Forest Grove	18,750	19,130	747,725,105	788,346,100	265,877,660	258,361,230	1,013,602,765	1,046,707,330	74%	26%	75%	25%	39,879	41,210	14,180	13,506	54,059	54,715
Cornelius	9,930	10,150	346,410,160	368,737,160	94,572,730	103,596,630	440,982,890	472,333,790	79%	21%	78%	22%	34,885	36,329	9,524	10,207	44,409	46,535
Johnson City	630	630	7,573,374	7,583,048	-	-	7,573,374	7,583,048	100%	0%	100%	0%	12,021	12,037	-	-	12,021	12,037
Outside Metro																		
North Plains	1,660	1,640	86,816,791	96,280,531	42,666,730	40,504,680	129,483,521	136,785,211	67%	33%	70%	30%	52,299	58,708	25,703	24,698	78,002	83,406
Sandy	5,780	6,200	328,397,804	371,092,582	103,472,944	115,507,380	431,870,748	486,599,962	76%	24%	76%	24%	56,816	59,854	17,902	18,630	74,718	78,484
Canby	13,440	13,910	707,901,948	780,211,476	172,747,420	186,340,837	880,649,368	966,552,313	80%	20%	81%	19%	52,671	56,090	12,853	13,396	65,525	69,486
Banks	1,420	1,430	82,377,450	83,228,990	12,887,150	15,155,420	95,264,600	98,384,410	86%	14%	85%	15%	58,012	58,202	9,075	10,598	67,088	68,800
Estacada	2,440	2,440	99,065,244	102,009,684	51,904,117	52,749,597	150,969,361	154,759,281	66%	34%	66%	34%	40,601	41,807	21,272	21,619	61,873	63,426
Molalla	5,780	5,800	246,431,729	257,887,659	75,446,900	74,022,604	321,878,629	331,910,263	77%	23%	78%	22%	42,635	44,463	13,053	12,763	55,688	57,226
Barlow	140	140	4,724,547	5,185,867	2,071,029	2,137,889	6,795,576	7,323,756	70%	30%	71%	29%	33,747	37,042	14,793	15,271	48,540	52,313
Gaston	610	620	26,278,610	26,468,800	2,866,310	3,143,720	29,144,920	29,612,520	90%	10%	89%	11%	43,080	42,692	4,699	5,071	47,779	47,762

Fundamental 1 (Economy): continued

iii) Benefits and burdens of growth policies (Part 2 – High Quality Education)

Information Used to Assess Policies: Another approach to measuring the equitable distribution of the benefits and burden of growth is to compare the data used to evaluate school performance and progress. The Oregon Department of Education regularly collects a vast amount of data on schools and school districts throughout the state. This information is used to satisfy state and federal requirements and to evaluate school adequacy and progress. School performance is an indicator of the region's desirability to attract and hold employers and employees and is a measure of the way that the benefits and burdens of growth are distributed throughout the region. Below is a summary of the analysis of data on schools in the Metro region.

Finding:

Report Card (1998/1999 and 2002/2003 school years):

Note: The following results are based on zero sum measures so increases in one category translate into decreases in other categories.

Elementary Schools

- Elementary schools rated "exceptional" increased from 4% in 1998/1999 to 16% in 2002/2003 (37 of 227). [see Tables 1.20 & 1.21, and Figures 1.7 & 1.8]
- In both school years, the largest number of elementary schools is rated "strong," and the size of this group decreased from 51% in 1998/1999 (117 of 228) to 44% (99 of 227). [see Tables 1.20 & 1.21, and Figures 1.7 & 1.8]
- The second largest group is that rated as "satisfactory". This group also decreased from 37% in 1998/1999 to 33% in 2002/2003. [see Tables 1.20 & 1.21, and Figures 1.7 & 1.8]

Middle Schools

- Middle schools rated as "exceptional" increased from zero percent in 1998/1999 to 8% in 2002/2003 (5 of 62). [see Tables 1.20 & 1.21, and Figures 1.9 & 1.10]
- Most middle schools are rated "satisfactory," and the size of this group decreased from 65% in 1998/1999 to 60% in 2002/2003 (37 of 62). [see Tables 1.20 & 1.21, and Figures 1.9 & 1.10]
- The second largest group is rated "strong" and increased from 22% in 1998/1999 to 27% in 2002/2003 (17 of 62) [see Tables 1.20 & 1.21, and Figures 1.9 & 1.10]

High Schools

- High schools rated as "exceptional" increased from zero percent in 1998/1999 to 8% in 2002/2003. [see Tables 1.20 & 1.21, and Figures 1.11 & 1.12]
- Those rated as "strong" increased from 10% in 1998/1999 to 22% in 2002/2003.
- Those rated as "low" increased 7% to 12% in 2002/2003 (6 of 49). [see Tables 1.20 & 1.21, and Figures 1.11 & 1.12]
- The greatest share of high schools in both years are rated "satisfactory," but the size of this group decreased from 64% in 1998/1999 to 41% in 2002/2003. [see Tables 1.20 & 1.21, and Figures 1.11 & 1.12]

Socioeconomic status and growth of schools

- The Sherwood and Forest Grove school districts experienced the largest increase (7% and 6%) in total student enrollment between the 2000/2001 and 2001/2002 of all districts in the Metro region. [see Tables 1.22 and 1.23]
- In the same period, Students in the English as a Second Language program (ESL) increased the most in the Hillsboro (32%) and North Clackamas school districts (26%). [see Tables 1.22 and 1.23]
- The districts with the greatest percentages of enrolled students living in poverty are Portland (19% in both 98/99 and 02/03) and David Douglas (18% in both 98/99 and 02/03). [see Tables 1.22 and 1.23]

Reduced and free school lunch program – as of October 2003

- More than half of the students in the David Douglas (58%), Reynolds (56%), Forest Grove (55%) and Parkrose (54%) school districts participated in reduced and free school lunch program during the 2003/2004 school year. A substantial number of Centenial (48%) and Portland (43%) students also participate in the reduced and free school lunch program. [see Table 1.24]
- Roughly 35% (73,668) of the 210,104 students in the region's school districts are participating in the reduced and free school lunch program. [see Table 1.24]

Table 1.20: Report card for the Metro region Public Schools (1998/1999 school year)*

	Number	Exceptional	%	Strong	%	Satisfactory	%	Low	%	Unacceptable	%	Not Rated	%
Other High Schools	228	10	4%	117	51%	84	37%	1	0%	0	0%	16	7%
Middle Schools	60	0	0%	13	22%	39	65%	3	5%	0	0%	5	8%
Elementary Schools	42	0	0%	4	10%	27	64%	3	7%	1	3%	7	17%
Alternative Schools	25	1	4%	4	16%	2	8%	1	4%	0	0%	17	68%

Source: Oregon Department of Education; http://www.ode.state.or.us/sfda/reports/r0045Select.asp

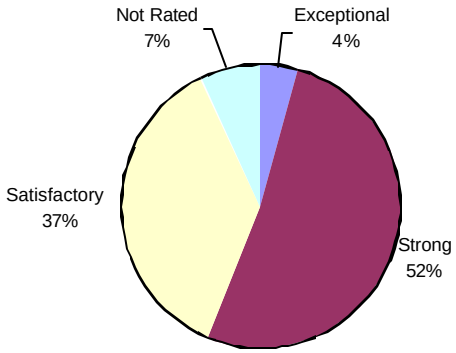
Table 1.21: Report card for the Metro region Public Schools (2002/ 2003 school year)*

	Number	Exceptional	%	Strong	%	Satisfactory	%	Low	%	Unacceptable	%	Not Rated	%
Other High Schools	227	37	16%	99	44%	76	33%	1	0%	0	0%	14	6%
Middle Schools	62	5	8%	17	27%	37	60%	1	2%	0	0%	2	3%
Elementary Schools	49	4	8%	11	22%	20	41%	6	12%	1	2%	7	14%
Alternative Schools	16	2	13%	2	13%	2	13%	0	0%	1	6%	9	56%

Source: Oregon Department of Education; http://www.ode.state.or.us/sfda/reports/r0045Select.asp

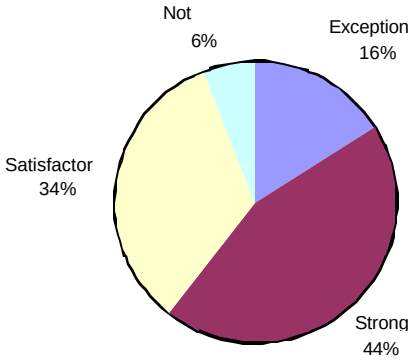
**Note*: *Please note that all percentages are zero sum measurements so a change in a particular category indicates a shift to one or more categories. Also, incomplete data from the schools causes slight fluctuations in the total number of schools from year to year.*

Figure 1.7: Elementary School
1998-



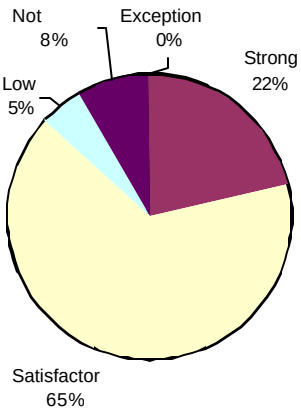
Source: Oregon Department of Education

Figure 1.8: Elementary School Performance
2002-2003



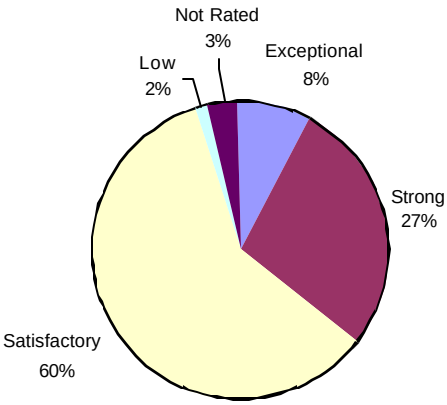
Source: Oregon Department of Education

Figure 1.9: Middle School Performance 1998-1999



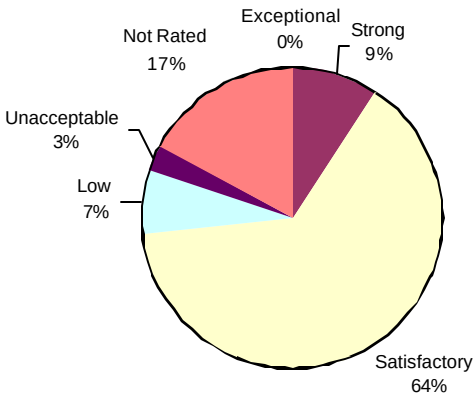
Source: Oregon Department of Education

Figure 1.10: Middle School Performance 2002-



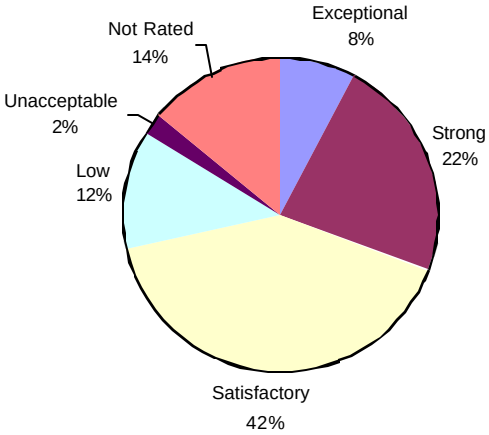
Source: Oregon Department of Education

Figure 1.11: High School Performance (1998-



Source: Oregon Department of Education

Figure 1.12: High School Performance 2002-



Source: Oregon Department of Education

Table 1.22: Socioeconomic Status and Growth of Public Schools in the Metro Region (2000 - 2001 School Year)

School District Name	Total Enrollment	% Total Enrollment	ESL Students		Minority Students		1 Year Dropout Rate Grades 7-8	1 Year Dropout Rate Grades 9-12	Class Size	Student Teacher Ratio
			Number	Percent	Number	Percent				
Beaverton SD (48J)	33,600	16.1%	4,151	**12%**	8,705	**26%**	0.4%	5.6%	22.5	20.6
Canby (86)	5,280	2.5%	899	**17%**	1,002	**19%**	0.5%	2.7%	24	21.0
Centenial (28J)	6,057	2.9%	896	**15%**	1,133	**19%**	1.1%	8.5%	25	21.1
David Douglas (40)	8,173	3.9%	2,144	**26%**	1,921	**24%**	1.0%	4.0%	26.8	19.5
Forest Grove (15)	5,306	2.6%	1,145	**22%**	1,788	**34%**	1.7%	5.8%	25.3	19.8
Gladstone (115)	2,415	1.2%	154	**6%**	321	**13%**	0.5%	1.4%	26.1	22.1
Gresham-Barlow (10J)	11,385	5.5%	1,018	**9%**	1,477	**13%**	0.8%	4.5%	24.5	21.2
Hillsboro SD (1J)	18,081	8.7%	2,742	**15%**	5,151	**28%**	0.6%	3.0%	25	20.9
Lake Oswego (7J)	7,048	3.4%	87	**1%**	659	**9%**	0.3%	2.4%	23.6	19.6
North Clackamas (12)	14,876	7.1%	1,548	**10%**	3,018	**20%**	0.7%	4.4%	22.7	20.4
Oregon City (62)	7,376	3.5%	497	**7%**	868	**12%**	1.1%	1.6%	24.1	21.3
Parkrose (3)	3,507	1.7%	657	**19%**	1,119	**32%**	0.8%	5.3%	22.7	20.4
Portland (1J)	53,096	25.5%	5,754	**11%**	19,903	**37%**	2.2%	11.1%	22.6	17.3
Reynolds (7)	9,607	4.6%	2,058	**21%**	2,651	**28%**	1.3%	4.4%	23.6	20.3
Riverdale (51J)	453	0.2%	3	**1%**	29	**6%**	0.0%	1.0%	18.8	13.0
Sherwood (88J)	2,887	1.4%	71	**2%**	226	**8%**	0.5%	4.0%	25.5	20.9
Tigard Tualatin (23J)	11,505	5.5%	1,224	**11%**	2,113	**18%**	0.2%	3.8%	22.8	19.6
West Linn-Wilsonville (3J)	7,406	3.6%	203	**3%**	683	**9%**	1.2%	2.3%	22.8	21.0
Regional Totals	**208,058**	100.0%	**25,251**	**12%**	**52,767**	**25%**	**.82%**	**4.21%**	**23.8**	

Source: Oregon Department of Education http://www.ode.state.or.us/sfda/reports/r0045Select.asp

Note: The school district boundaries that include the Metro UGB in many cases extend significantly beyond the Metro Area.

A one year drop out rate is the percent of students who dropped out of all grades 9-12 during one school year as a percent of enrollment.

Table 1.23: Socioeconomic Status and Growth of Public Schools in the Metro Region (2001 - 2002 School Year)

School District Name	Total Enrollment	% Total Enrollment	ESL Students		Minority Students		1 Year Dropout Rate Grades 7-8	1 Year Dropout Rate Grades 9-12	Class Size	Student Teacher Ratio
			Number	Percent	Number	Percent				
Beaverton SD (48J)	34,699	16.4%	4,741	**14%**	10,059	**29%**	0.50%	4.10%	22.8	21.2
Canby (86)	5,186	2.4%	878	**17%**	882	**17%**	0.60%	3.40%	22.6	19.9
Centennial (28J)	6,160	2.9%	954	**15%**	1,309	**21%**	0.50%	4.40%	24.3	20.3
David Douglas (40)	8,536	4.0%	2,527	**30%**	2,245	**26%**	1.20%	4.00%	26	19.7
Forest Grove (15)	5,598	2.6%	1,207	**22%**	1,987	**35%**	0.70%	7.70%	25.1	20.5
Gladstone (115)	2,415	1.1%	187	**8%**	336	**14%**	1.20%	0.80%	25.6	21.4
Gresham-Barlow (10J)	11,632	5.5%	1,053	**9%**	1,719	**15%**	0.90%	4.20%	24.6	20.8
Hillsboro SD (1J)	18,519	8.7%	3,632	**20%**	5,661	**31%**	0.50%	3.10%	24.4	20.7
Lake Oswego (7J)	7,133	3.4%	97	**1%**	736	**10%**	1.00%	1.70%	23.2	19.6
North Clackamas (12)	15,274	7.2%	1,953	**13%**	3,402	**22%**	0.50%	4.00%	n/a	19.8
Oregon City (62)	7,488	3.5%	508	**7%**	712	**10%**	0.60%	1.30%	24.3	21.0
Parkrose (3)	3,666	1.7%	694	**19%**	1,285	**35%**	1.20%	8.00%	24.9	22.5
Portland (1J)	52,907	24.9%	6,648	**13%**	20,356	**38%**	2.30%	10.10%	22.7	17.5
Reynolds (7)	9,899	4.7%	2,418	**24%**	3,102	**31%**	1.00%	4.80%	23.2	20.5
Riverdale (51J)	463	0.2%	1	**0%**	37	**8%**	0.00%	0.90%	19	13.3
Sherwood (88J)	3,075	1.4%	88	**3%**	271	**9%**	0.20%	2.00%	24.1	20.5
Tigard Tualatin (23J)	11,765	5.5%	1,427	**12%**	2,360	**20%**	0.30%	4.50%	22.9	19.8
West Linn-Wilsonville (3J)	7,714	3.6%	222	**3%**	793	**10%**	0.30%	2.50%	22.3	22.9
Regional Totals	**212,129**	100.0%	**29,235**	**14%**	**57,252**	**27%**	**75%**	**4.0%**	**23.6**	

Source: Oregon Department of Education http://www.ode.state.or.us/sfda/reports/r0045Select.asp

Note: The school district boundaries that include the Metro UGB in many cases extend significantly beyond the Metro Area.

Table 1.24: Student Participation in Reduced and Free School Lunch Program (October 2003)

School District Name	Students Qualifying for Free Lunches	Students Qualifying for Reduced Lunches	Total Free + Reduced	Total Enrollment by District	Percent of Total Students Participating in Free and Reduced Program in Metro Area
Beaverton SD (48J)	7,386	2,500	**9,886**	35,333	28%
Canby (86)	1,294	390	**1,684**	5,235	32%
Centenial (28J)	2,301	699	**3,000**	6,264	48%
David Douglas (40)	4,171	1,007	**5,178**	8,962	58%
Forest Grove (15)	2,579	533	**3,112**	5,676	55%
Gladstone (115)	453	167	**620**	2,212	28%
Gresham-Barlow (10J)	3,223	909	**4,132**	11,823	35%
Hillsboro SD (1J)	5,024	1,537	**6,561**	18,894	35%
Lake Oswego (7J)	273	144	**417**	6,956	6%
North Clackamas (12)	3,876	1,214	**5,090**	16,540	31%
Oregon City (62)	1,620	613	**2,233**	7,984	28%
Parkrose (3)	1,542	428	**1,970**	3,662	54%
Portland (1J)	16,343	3,638	**19,981**	46,647	43%
Reynolds (7)	4,759	960	**5,719**	10,245	56%
Riverdale (51J)	9	7	**16**	555	3%
Sherwood (88J)	270	95	**365**	3,385	11%
Tigard Tualatin (23J)	2,310	563	**2,873**	11,909	24%
West Linn-Wilsonville (3J)	599	232	**831**	7,822	11%
Grand Total	**58,032**	**15,636**	**73,668**	**210,104**	**35%**

Source: Oregon Department of Education http://www.ode.state.or.us/sfda/reports/r0045Select.asp

Other policies related to the economy measured in other sections

- Focus investment in mixed use centers in order to create increased commercial activity, and a greater concentration of jobs and housing, in order to maximize the efficiency of the region's existing infrastructure. *[See Fundamental 2 for the measurement]*
- Promote the distribution of housing *[*See *Fundamental 7 for the measurement]*

Policy element not measured

- Freight Movement: Encourage trade by increasing the efficient movement of all modes of freight.

Indicators Used for Fundamental 1 Analysis

- **Indicator 1.1: Supply of land inside the UGB and mixed use centers by type. (REQ: Metro #1&4; State #d)**
- **Indicator 1.5: Employment, income and business trends (REQ: Metro #3; State #c)**
  Measures the economic health of the region by looking at general economic indicators such as employment and wages
- **Indicator 1.4: Tax base capacity of jurisdictions in the Metro region – (REQ: Metro #2&8**; State #f)
  Measures the strength of the regional economy by analyzing land development activity and land value.
- **Indicator 1.6: High quality education in the Metro region.**
  Measures the extent to which educational opportunities contribute to a strong regional economy

Fundamental 2

Encourage the efficient use of land within the UGB including buildable industrial and commercial land and focus development in 2040 mixed use centers and corridors[5].

1. The Challenge:

The 2040 Growth Concept promotes the accommodation of growth through increased land use efficiency and the development and redevelopment of established urban areas as 2040 mixed use centers. As mentioned in Fundamental 1, the advantage of this growth management approach is that a more compact urban form creates opportunities for the cost effective provision of public facilities and services, and limits the loss of valuable farmland and other natural resources outside the UGB.

2. Summary of Adopted Policies:

Metro's approach to addressing the challenges are organized by the policy themes listed below. They represent why and how Metro chose to encourage the efficient use of land. For more details about Metro policies, see the Regional Framework Plan, Urban Growth Management Functional Plan and Regional Transportation Plan (see www.metro-region.org)

A. Land Consumption and Urban Form: Maintain a compact urban form, preserve stable distinct neighborhoods, provide infrastructure to keep pace with 2040 plan, encourage balanced growth of jobs and income, encourage redevelopment and infill wherever economically sensible, maintain a clear distinction/transition between urban and rural, create interconnected but distinct communities, encourage excellence in design, create a balanced transportation system.

B. UGB and Mixed Use Centers: Reduce sprawl, evaluate and expand (if needed) UGB based on 20-year land need, protect agricultural and forest lands. Seek greater land use efficiencies through commercial and residential development, infill/redevelopment, encourage pedestrian scale environment, assure affordability and housing options, ensure access to jobs, encourage public investment, create a balanced transportation system.

[5] MPAC recommended changes: Fundamental 2: Encourage the efficient use of land within the UGB <u>including buildable industrial and commercial land</u> and ~~by~~ focus<u>ing</u> ~~on~~ development ~~of~~ in 2040 mixed use centers and corridors.

3. Measuring Policies[6]

A. Land Availability Policies and Land Consumption in the 2040 Design Areas Policies

Information Used to Assess Policies: Title 1 of the Functional Plan requires cities and counties with one or more 2040 design types within their jurisdiction to adopt firm boundaries for these areas. Title 1 also requires local governments to adopt zoning in these areas that allows for, and encourages a mix of land uses including jobs and housing within close proximity of frequent transit service. These efforts by local governments define the boundaries of the design types and create zoning overlays that allow for new mixed use opportunities. The 2040 mixed use areas encourage a vibrant regional economy, make better use of existing infrastructure investment, minimize the loss of farm land, and minimize vehicle miles traveled (VMT). Measuring land availability and consumption in the 2040 design areas is therefore critical to understanding the progress made by the region in using land more efficiently.

The 2040 mixed use design types include the Central City, Regional Centers, Town Centers, Station Communities and Main Streets and Corridors. Figures 3, 4 and 5 show the actual areas planned by local governments, while Figure 6 explains the types of activities and recommended density planned for these areas.

Finding:

Availability:

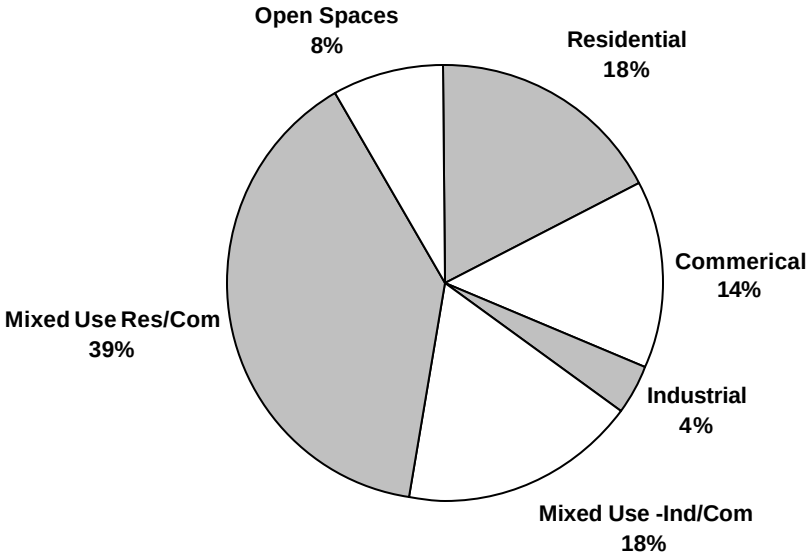
- In 2002, about 7% (3,037 acres) of the gross vacant land (46,159 acres – see Table 1.1 in Fundamental 1) and 6% (2,524 acres) of the buildable land in the UGB (39,713 acres - see Table 1.1 in Fundamental 1) were located in the 2040 Centers. (see Table 2.1b)
- Approximately 17% (514 acres) of the gross vacant land in Centers (3,037 acres) was constrained (within Title 3 water quality areas). (see Table 2.1b)
- The largest single portion (57%) of vacant buildable land in Centers is zoned for mixed use (39% residential/commercial and 18% industrial/commercial). (see Figure 2.1 and Table 2.1a)
- Roughly 57% (124 acres) of the 217 acres of vacant industrial land in 2040 Centers are constrained by Title 3, far more than any other land use category. (see Table 2.1b)

Consumption:

- 176 acres of gross vacant buildable land in Centers were consumed in 1999 and 103 acres in 2002 (approximately 40 % less). [see Figure 2.2 and Table 2.2]
- Residential and commercial land are the two land categories being consumed most in this four year period. [see Figure 2.2 and Table 2.2]
- Mixed use land (residential/commercial and industrial/commercial) in centers remained consistent in this period, while all other land use categories declined. see Figure 2.2 and Table 2.2]

[6] **Special Note on Land Consumption in the UGB:**
As stated in Fundamental 1, the evaluation of Metro's policies on land availability and consumption in the UGB was conducted in Fundamental 1. The focus of the following evaluation is on land availability and land consumption only in the 2040 mixed use enters and corridors. The data on land supply and demand in the 2040 areas helps to inform policy makers and citizens of the region on how Metro is encouraging the efficient use of land by focusing development in these mixed use areas.

Figure 2.1: Buildable Land in 2040 Centers –2002



Source: Metro Data Resource Center

Table 2.1a: Buildable Land and Open Space in Centers Compared to UGB Total Buildable Land (2002 –gross acres)

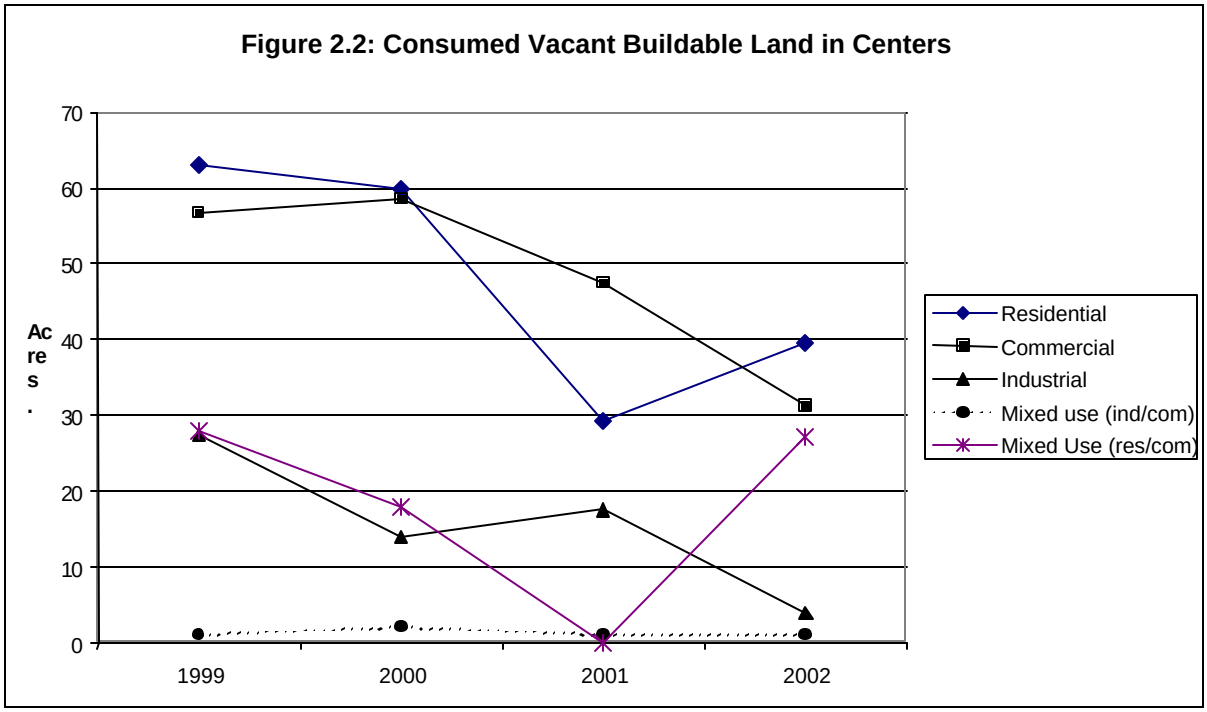
Land use type	UGB*	Centers*	Centers as Percent of Region
Residential	23,218	443 (18%)	2%
Commercial	3,399	347 (14%)	10%
Mixed Use (Res/Com)	1,930	987 (59%)	51%
Industrial	7,374	92 (4%)	1%
Mixed Use (Ind/Com)	3,792	442 (18%)	12%
Parks, Open & Common Spaces	16,018	213 (8%)	1%
Total	**55,731**	**2,524** (100%)	**5%**

* Gross Vacant Buildable Acres
Source: Metro Data Resource Center

Table 2.1b: 2040 Centers Vacant, Buildable and Constrained Land (2002 –gross acres)

	Gross Vacant Acres in Centers	Gross Vacant Buildable Acres in Centers	Constrained Portion (acres)
Residential	538	443	95
Commercial	391	347	44
Industrial	217	92	124
Mixed Use -Ind/Com	520	442	78
Mixed Use Res/Com	1,123	987	136
Open Spaces	249	213	36
Total	**3,037**	**2,524**	**514**

Source: Metro Data Resource Center



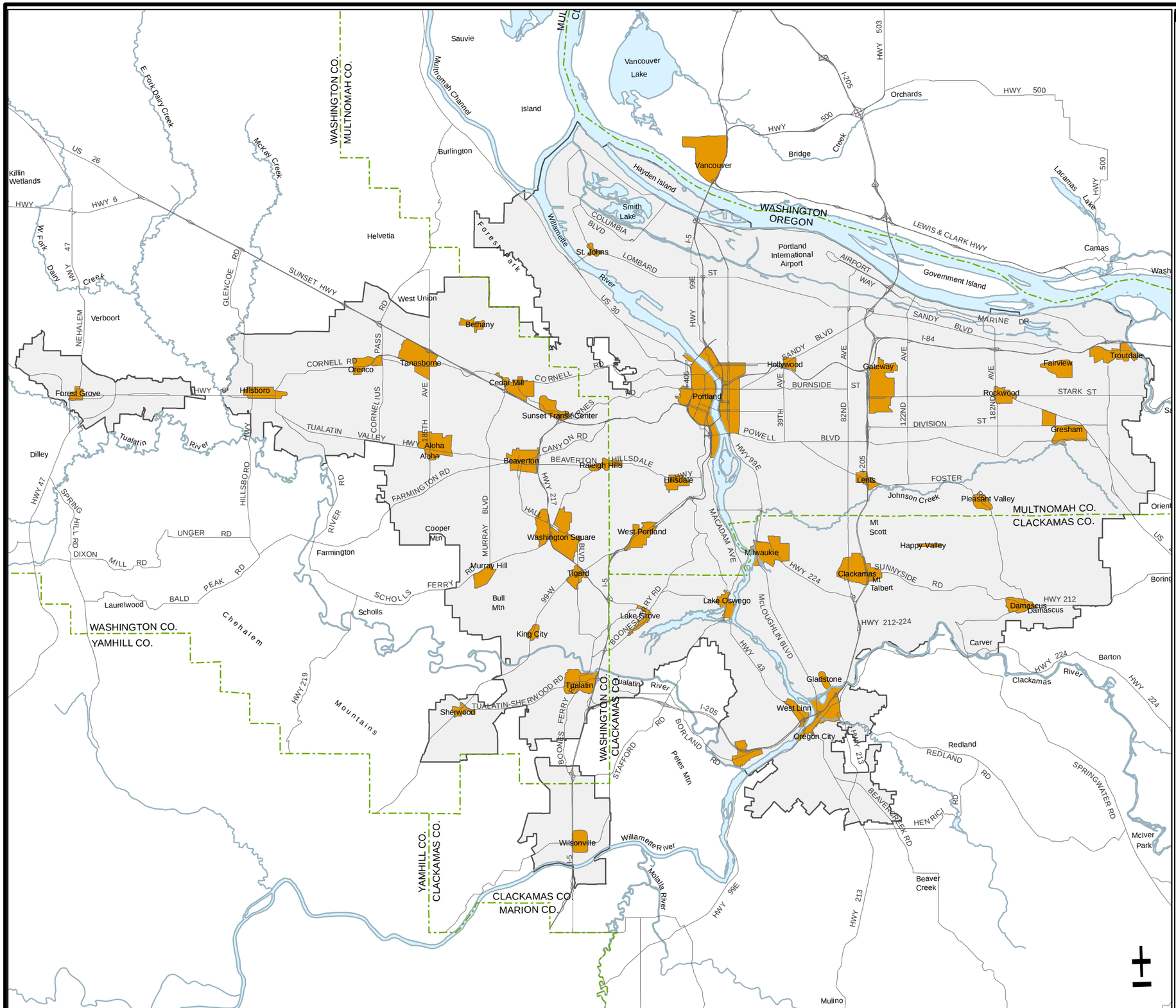
Source: Metro Data Resource Center

Table 2.2: Consumed Vacant Buildable Acres in Centers (1999 -2002)

Land Use Category	1999	2000	2001	2002
Residential	63	60	29	40
Commercial	57	59	47	31
Industrial	28	14	18	4
Mixed use (ind/com)	1	2	1	1
Mixed Use (res/com)	28	18	n/a	27
Total	**176**	**152**	**95**	**103**

Source: Metro Data Resource Center

Figure 2.3



R L I S
REGIONAL LAND INFORMATION SYSTEM

2040 Centers

- Central City
- Regional Center
- Town Center

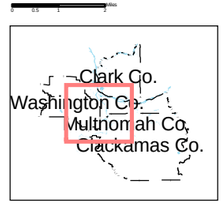
SOURCES:

TAX LOT MAP
County Assessment and Taxation offices, 2001. Data collection scale is 1"=100' in urban areas and 1"=200' or 1"=400' in rural areas. Horizontal accuracy is plus or minus five feet or better in Beaverton, Milwaukie, Oregon City, Tigard and Multnomah County. Other areas are plus or minus ten feet.

The information on this map was derived from digital databases on Metro's GIS. Care was taken in the creation of this map. Metro cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied, including the warranty of merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.

1 inch equals 3.2 miles

0 0.5 1 2 Miles



Location Map

METRO

METRO DATA RESOURCE CENTER
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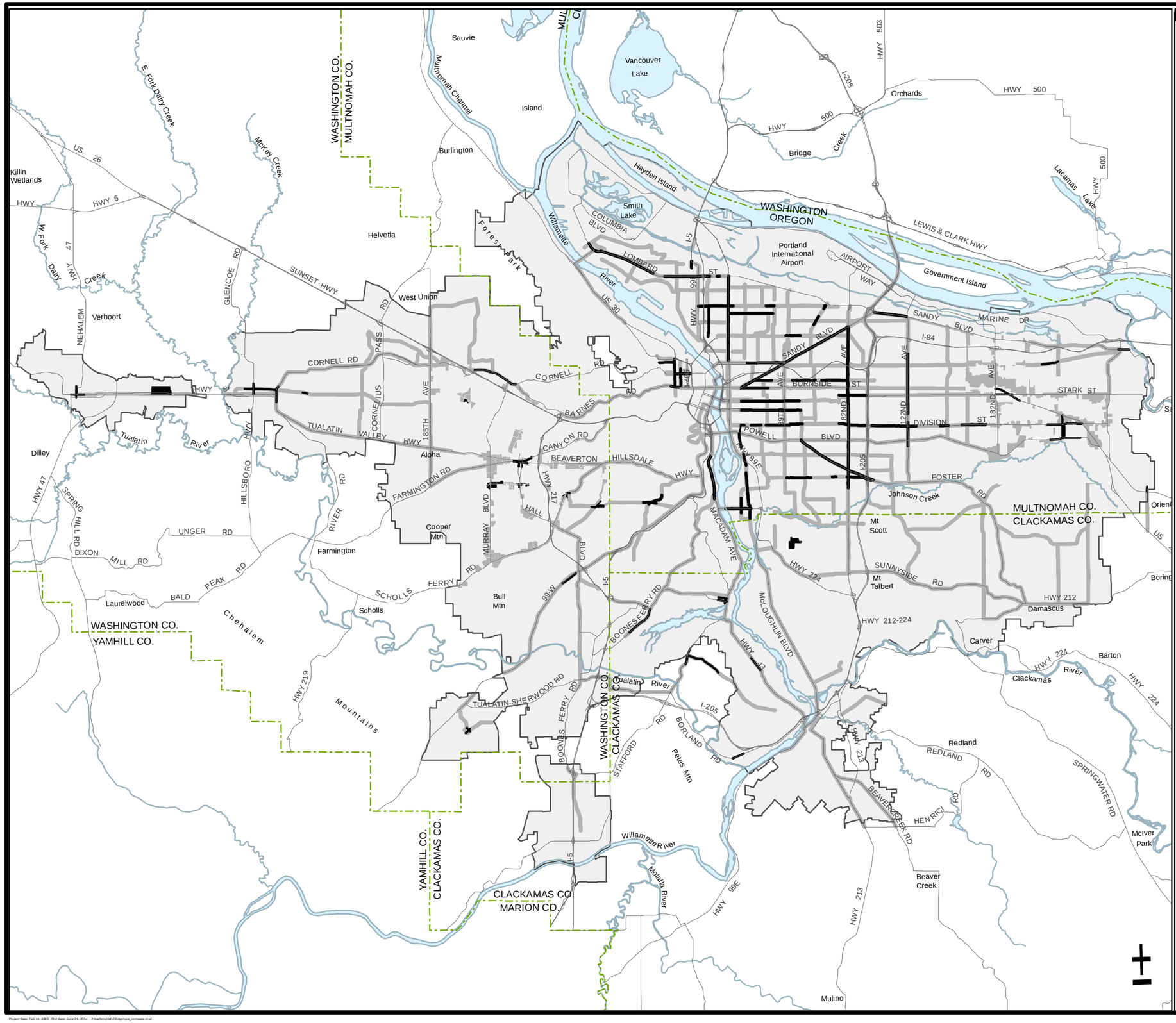
drc@metro.dst.or.us | www.metro-region.org

Project Date: Feb 14, 2003 Plot date: June 21, 2004 J:\hal\proj\04128\dgn\pge_compare.mxd

Figure 2.4



R L I S
REGIONAL LAND INFORMATION SYSTEM

2040 Centers

Legend
- Local Government Mainstreets
- Local Government Corridors
- Urban Growth Boundary

SOURCES:

TAX LOT MAP
County Assessment and Taxation offices, 2001. Data collection scale is 1"=100' in urban areas and 1"=200' or 1"=400' in rural areas. Horizontal accuracy is plus or minus five feet or better in Beaverton, Milwaukie, Oregon City, Tigard and Multnomah County. Other areas are plus or minus ten feet.

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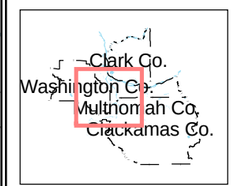
1 inch equals 3.2 miles

0 0.5 1 2 Miles



Location Map

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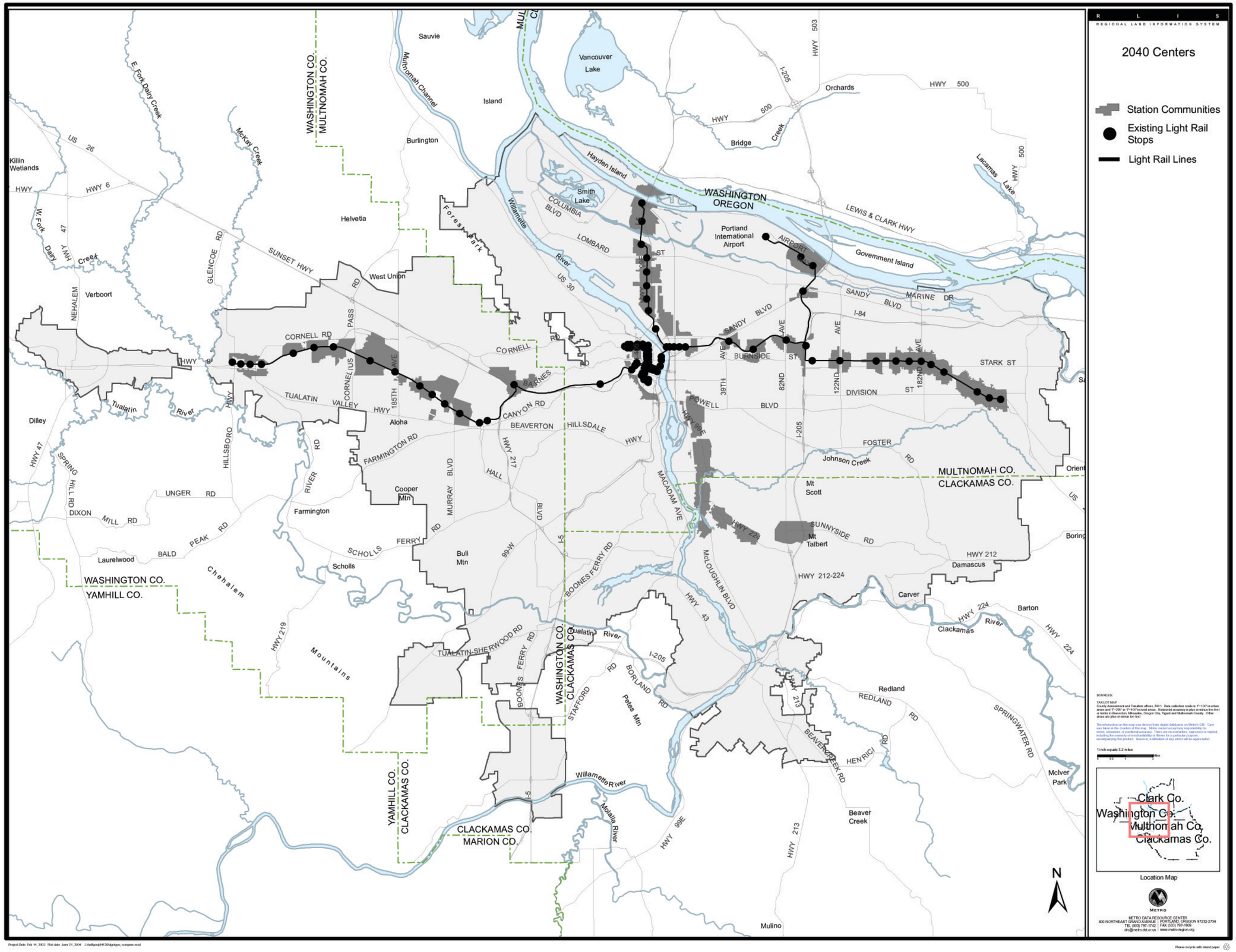
R L I S
REGIONAL LAND INFORMATION SYSTEM
2040 Centers
Station Communities
Existing Light Rail Stops
Light Rail Lines
WASHINGTON CO.
MULTNOMAH CO.
Sauvie Island
Multnomah Channel
Vancouver Lake
Burlington
Killin Wetlands
E Fork Dairy Creek
McKay Creek
US 26
HWY 6
W Fork Dairy Creek
HWY 47
Helvetia
GLENCOE RD
SUNSET HWY
West Union
Verboort
NEHALEM
Forest Park
Willamette River
Hayden Island
Smith Lake
COLUMBIA BLVD
LOMBARD
WASHINGTON
OREGON
Portland International Airport
AIRPORT
Government Island
LEWIS & CLARK HWY
Lacamas Lake
HWY 500
HWY 503
I-205
Orchards
Bridge
Creek
US 30
SANDY BLVD
MARINE DR
I-84
CORNELL RD
PASS RD
CORNELIUS
185TH AVE
BARNES
TUALATIN VALLEY HWY
Aloha
Tualatin River
Dilley
HILLSBORO
CANYON RD
BEAVERTON
HILLSDALE HWY
FARMINGTON RD
BURNSIDE ST
39TH AVE
82ND AVE
122ND AVE
182ND AVE
STARK ST
DIVISION ST
POWELL BLVD
FOSTER RD
Johnson Creek
MULTNOMAH CO.
CLACKAMAS CO.
Mt Scott
SUNNYSIDE RD
Mt Talbert
HWY 224
HWY 212
Damascus
HWY 212-224
Carver
Barton
Clackamas River
HWY 224
Boring
US
Orient
SPRING HILL RD
DIXON MILL RD
UNGER RD
PEAK RD
BALD
Laurelwood
Cooper Mtn
Farmington
SCHOLLS FERRY RD
Scholls
Bull Mtn
MURRAY BLVD
HALL BLVD
HWY 217
99W
I-5
BOONES FERRY RD
MACADAM AVE
McLOUGHLIN BLVD
HWY 43
WASHINGTON CO.
YAMHILL CO.
Chehalem Mountains
HWY 219
TUALATIN-SHERWOOD RD
Tualatin River
CLACKAMAS CO.
STAFFORD RD
BORLAND RD
Petes Mtn
I-205
Redland
REDLAND RD
SPRINGWATER RD
HENRICI RD
BEAVER CREEK RD
McIver Park
Beaver Creek
HWY 213
YAMHILL CO.
CLACKAMAS CO.
CLACKAMAS CO.
MARION CO.
Willamette River
Molalla River
HWY 99E
Mulino
N
SOURCES:
TAXLOT MAP:
County Assessment and Taxation offices, 2001. Data collection scale in T=1N7 in urban areas and T=2N7 or T=4N7 in rural areas. Horizontal accuracy in plus or minus five feet or better in Beaverton, Milwaukie, Oregon City, Tigard and Multnomah County. Other areas are plus or minus ten feet.
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1 inch equals 3.2 miles
Miles
0 0.5 1 2
Clark Co.
Washington Co.
Multnomah Co.
Clackamas Co.
Location Map
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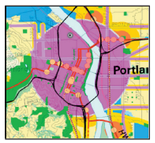
Figure 2.5

What is the 2040 Growth Concept?

The Metro 2040 Growth Concept and Map were adopted in December 1995 and define the preferred form ofgrowth and development that the Portland metropolitan region will follow for a period of up to 50 years. This concept addresses the long-term growth management of the region and includes a general approach to building better communities for people who live here today and who will live here in the future. The Growth Concept is based on containing growth within a carefully managed urban growth boundary, maintaining and enhancing the multi-modal transportation system that ensures mobility of people and goods throughout the region, and preserving access to nature.

The 2040 Growth Concept Map provides a visual reference to the urban form described in the text of the 2040 Growth Concept. There are 10 design types that fall into main categories of mixed-use areas, employment and industrial areas, neighborhoods and corridors (which support both housing and employment). The 2040 Growth Concept is based on mixed-use areas supporting higher densities of employment and housing closely linked to multi-modal transportation systems. These mixed-use areas are intended to be areas of compact development that offer diverse retail opportunities and numerous recreational and cultural activities all within walking distance of adjacent neighborhoods. Mixed-use areas include the central city, regional centers, town centers, main streets and station communities. The circles that represent the mixed-use areas on the 2040 Growth Concept Map are intended to show a general location and scale. Jurisdictions in the region define the actual boundary and characteristics of their mixed-use areas, and other 2040 design types.

Central city

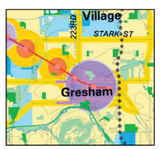


Downtown Portland serves as the hub of business and cultural activity in the region. It has the most intensive form of development for both housing and employment, with high-rise development common in the central business district. Downtown Portland will continue to serve as the finance and commerce, government, retail, tourism, arts and entertainment center for the region.

It is intended to serve the entire region 1.3 million people and grow in employment share commensurate with total regional employment growth.

Recommended average density for housing is 250 persons per acre.

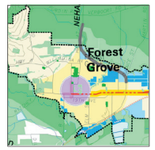
Regional centers



As centers of commerce and local government services serving a market area of hundreds of thousands of people, regional centers become the focus of transit and highway improvements. They are characterized by two-to four-story compact employment and housing development served by high-quality transit. In the growth concept, there are seven regional centers – Gateway and Gresham serve Multnomah County; Hillsboro, Beaverton and Washington Square serve Washington County; Oregon City and Clackamas Town Center serve Clackamas County. Effectively, the eighth regional center is Vancouver serving Southwest Washington.

Recommended average density for housing is 60 persons per acre.

Town centers



Town centers provide localized services to tens of thousands of people within a two- to three-mile radius. Examples include small city centers such as Lake Oswego, Tualatin, West Linn, Forest Grove and Milwaukie and large neighborhood centers such as Hillsdale, St. Johns, Cedar Mill and Aloha. One- to three-story buildings for employment and housing are characteristic. Town centers have a strong sense of community identity and are well served by transit.

Recommended average density for housing is 40 persons per acre.

Station communities

Station communities are areas of development centered around a light-rail or high-capacity- transit station that feature a variety of shops and services that will remain accessible to bicyclists, pedestrians and transit users as well as cars.

Recommended average density for housing is 45 persons per acre.

Main streets

Similar to town centers, main streets have a traditional commercial identity but are on a smaller scale with a strong sense of the immediate neighborhood. Examples include Southeast Hawthorne in Portland, the Lake Grove area in Lake Oswego and the main street in Cornelius. Main streets feature good access to transit.

Recommended average density for housing is 39 persons per acre.

Corridors

Corridors are major streets that serve as key transportation routes for people and goods. Examples of corridors include the Tualatin Valley Highway and 185th Avenue in Washington County, Powell Boulevard in Portland and Gresham and McLoughlin Boulevard in Clackamas County. Corridors are served extensively by transit.

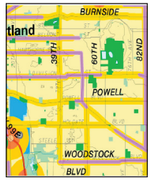
Recommended average density for housing is 250 persons per acre.

Employment areas

An area of mixed employment that can include various types of manufacturing, distribution and warehousing uses as well as commercial and retail development and some residential. However, the retail use primarily serve the needs of the people working or living in the immediate employment area. Retail uses more than 60,000 square feet in size are generally not permitted.

Recommended average density for housing is 20 persons per acre.

Industrial areas



Serving as hubs for regional commerce, industrial land and freight facilities for truck, marine, air and rail cargo provide the ability to generate and move goods in and out of the region. Access to these areas is centered on rail, the regional freeway system and key roadway connections. Keeping these connections strong is critical to maintaining a healthy regional economy. Retail use of more than 20,000 square feet is prohibited.

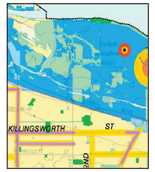
Recommended average density is nine employees persons per acre.

Neighborhoods

Under the 2040 Growth Concept, most existing neighborhoods will remain largely the same. Some redevelopment can occur so that vacant land or under-used buildings could be put to better use. New neighborhoods are likely to have an emphasis on smaller single-family lots, mixed uses and a mix of housing types including row houses and accessory dwelling units. The growth concept distinguishes between slightly more compact inner neighborhoods, and outer neighborhoods with slightly larger lots and fewer street connections.

Recommended average density for housing is 14 persons per acre.

Neighboring cities/green corridors



Communities such as Sandy, Canby, Newberg and North Plains have a significant number of residents who work or shop in the metropolitan area. Cooperation between Metro and these communities is critical to address common transportation and land-use issues. Neighboring cities are connected to the metro area by green corridor transportation routes intended to maintain a clear separation between Metro and these neigboring cities.

Rural reserves/open spaces

An important component of the growth concept is the availability and designation of lands that will remain undeveloped, both inside and outside the urban growth boundary. Rural reserves are lands outside the UGB that provide a visual and physical separation between urban areas and farm and forest lands. Intended for future urban growth boundary expansion. Open spaces include parks, stream and trail corridors, wetlands and floodplains for active and passive recreation, and fish and wildlife habitat.

Fundamental 2 (Efficient Use of Land): continued

B. UGB and Mixed Use Centers Policies

Four components of the UGB and mixed use centers policies were measured in this section. The first two were measured together while the rest were measured individually.

i) Use of 2040 Centers to Reduce Sprawl policies; and
ii) Encouraging increased employment and population in 2040 design types to reduce sprawl and auto dependency policies.

Information Used to Assess Policies: The proportion of the region's jobs and growth in jobs accommodated in 2040 centers is a direct and important measure of how well the centers are serving the function that the 2040 Growth Concept intended. The type of jobs accommodated in the centers is another relevant measure of the region's effort to encourage a mix of land uses, especially in the centers. Increasing efficiency of land use through the encouragement of more compact new residential and commercial development, especially in 2040 centers, has been the emphasis of Metro programs for the last several years.

The findings that follow illustrates the level of effort to use the centers to maintain compact development in the region, as well as the effort to make the centers vibrant through diversification of employment in the centers. Lack of data such as local permit data has not made it possible to report on housing development in the centers. Metro intends to continue to look for ways to collect relevant housing data for future performance measures efforts.

Findings:

Employment Distribution and Jobs Per Acre:

- Approximately 21% (52,811 of 254,386 acres) of the land area in the UGB is located in 2040 centers. More than half (58% or 459,842 of 787,301) of the jobs in the region in 2002 are located in the 2040 mixed use centers and corridors. [see Table 2.3 and Table 2.4]
- 17% of the region's jobs are located in the Central City which represents one percent of the land area in the UGB. [see Table 2.4]
- Coinciding with the 2002-2003 recession, jobs per acre decreased during the 2000-2002 period in the Central City (from 58 to 54), Regional Centers (from 14 to 13), Main Streets (16 to 14), and Corridors (4 to 3), while jobs per acre increased during the same period in Station Areas (from 6 to 8). There was no change in jobs per acre in the Town Centers. [see Figure 2.6 and Table 2.5]
- While Station Areas experienced 22% increase in jobs from 2000 to 2002, other 2040 design areas experienced a decrease in jobs per acre. [see Figure 2.7 and Table 2.6]
- It is important to note that Station Communities are located in the Central City, Regional Centers and Town Centers. The methodology used to calculate jobs by design type assigns jobs in Station Communities to that Station Community, and not to the Central City, Regional Center, or Town Center where the station area falls. The limitation of this methodology is that more jobs may be assigned to Station Areas than to Centers.

Type of Jobs:

- In the Central City, the sectors with the highest number of employees in 2002 are Professional and Business Services (27%), Financial Activities (17%), Trade, Transportation and Utilities (17%), and Leisure and Hospitality (14%). These sectors pay annual wages between $25,800 and $58,300. (This is higher than these sectors pay

outside the Central City where these same sectors range from between $16,130 and $46,288). [see Table 2.7]

- The Trade, Transportation and Utilities sector accounts for one of the three largest shares of employment in each of the seven Regional Centers. This sector includes retail and wholesale trade. [see Table 2.7]
- The Education and Health Services super sector also accounts for a significant portion of the wages in the Clackamas Regional Center (34%), the Gateway Regional Center (42%), the Gresham Regional Center (18%), and the Hillsboro Regional Center (53%). [see Table 2.7]

Table 2.3: Distribution and Sizes of 2040 Centers

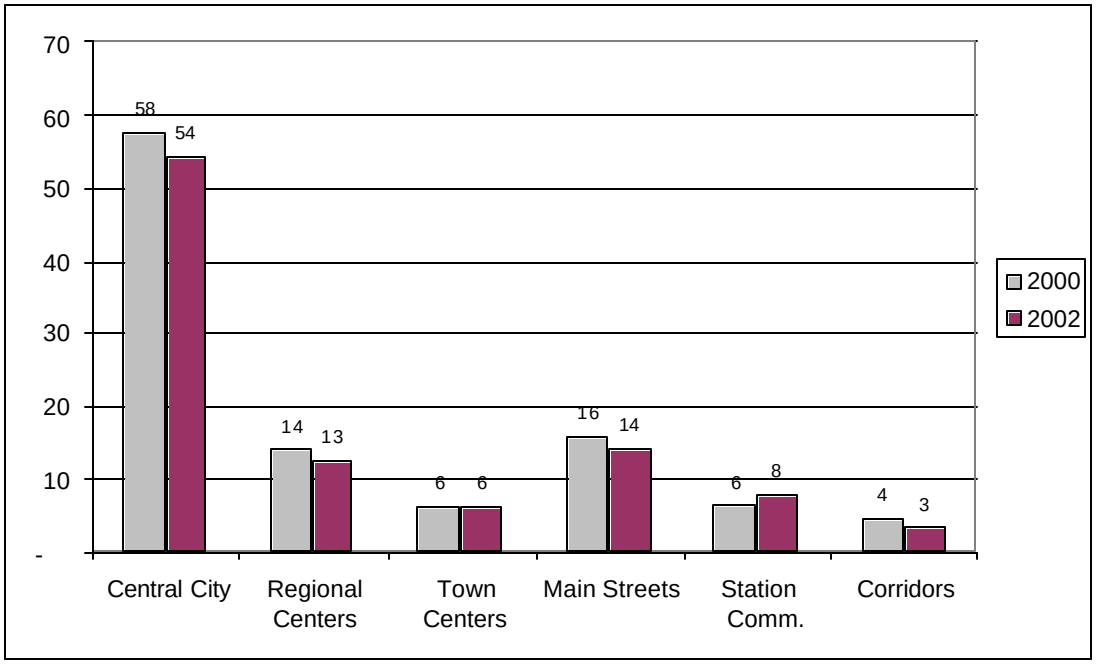
Design Type	Total	Clackamas County	Multnomah County	Washington County
Central City	**1**	N/A	Central City	N/A
Regional Center	**7**	Oregon City	Gresham	Hillsboro
		Clackamas	Gateway	Beaverton
				Washington Square
Town Center	**30**	Lake Oswego	Fairview/Wood Village	Aloha
		Gladstone	Hillsdale	Bethany
		Happy Valley	Hollywood	Cedar Mill
		Lake Grove	Lents	Forest Grove
		Milwaukie	Rockwood	King City
		Pleasant Valley	St. John's	Murray/Scholls
		Damascus	Troutdale	Orenco
		West Linn	West Portland	Raleigh Hills
		Wilsonville		Sherwood
				Sunset Transit Center
				Tanasbourne/185th
				Tigard
				Tualatin
Light Rail Stops (core of Station Communities)	96	N/A	80	16

Table 2.4: Comparison of the Size and Employment in the 2040 Planned 2040 Centers and Corridors with the rest of the UGB

Area	Size (Acre)	% of UGB Area	Employment - 2002	% of Region Employment
2040 Design Area				
• Central City	2,419	1%	131,265	17%
• Regional Centers	3,859	2%	48,648	6%
• Town Centers	6,604	3%	41,419	5%
• Station Communities	11,643	5%	91,776	8%
• Main Streets	4,511	2%	64,181	12%
• Corridors	23,775	9%	82,553	10%
Subtotal of Design Areas	**52,811**	**21%**	**459,842**	**58%**
Rest of Region (UGB)	254,386	79%	327,459	42%
Total	**307,197**	**100%**	**787,301**	**100%**

Source: US Bureau of Labor Statistics and Oregon Employment Dept. as compiled by Metro DRC

Figures 2.6: Jobs per acre in the 2040 Design Type Areas and Corridors (2002)



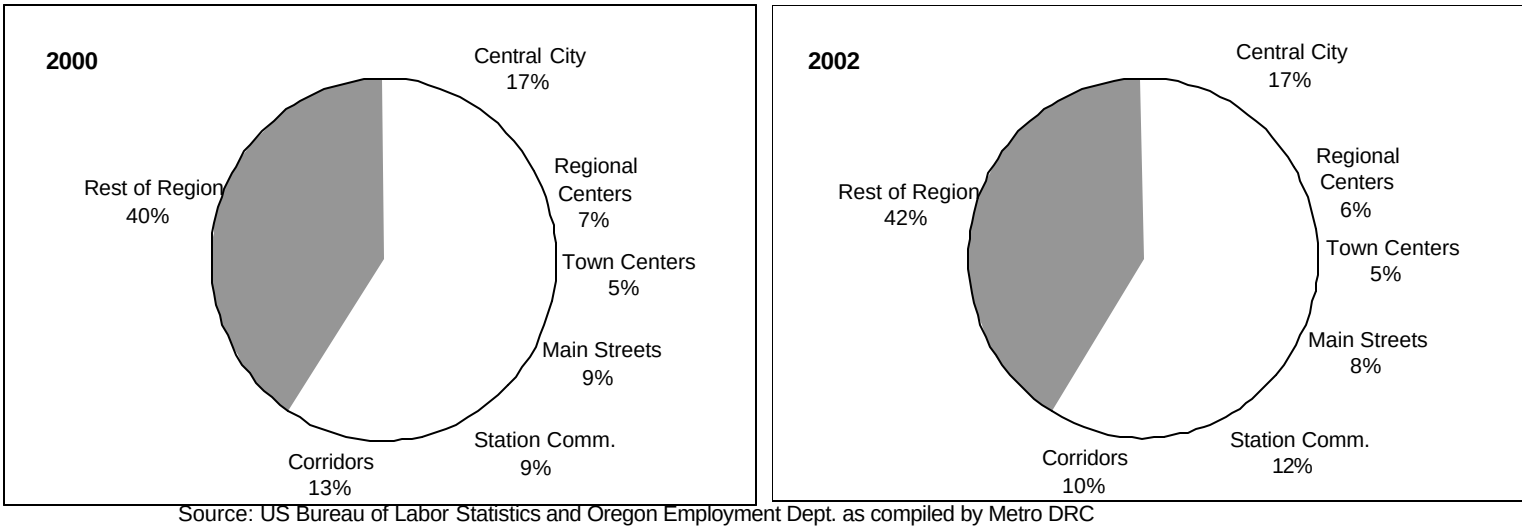
Source: ; US Bureau of Labor Statistics and Oregon Employment Dept. as compiled by Metro DRC

Table 2.5: Jobs per acre in the 2040 Design Type Areas and Corridors - 2002

Design Type	Acres	2000 Jobs	Jobs per acre 2000	2002 Jobs	Jobs per acre 2002
• **Central City**	2,419	139,319	58	131,265	54
• **Regional Centers**	3,859	53,757	14	48,648	13
• **Town Centers**	6,604	41,225	6	41,419	6
• **Main Streets**	4,511	71,991	16	64,181	14
• **Station Communities**	11,643	74,999	6	91,776	8
• **Corridors**	23,775	104,635	4	82,553	3
Total of Design Type	**52,811**	**485,926**	9	**459,842**	9

Source: US Bureau of Labor Statistics and Oregon Employment Dept. as compiled by Metro DRC

Figure 2.7: Total Non-farm Employment in the Tri-County Area – 2000 and 2002



Source: US Bureau of Labor Statistics and Oregon Employment Dept. as compiled by Metro DRC

Table 2.6: Share of Wage and Salary Jobs in the Tri-County Area and 2040 Design Type Areas and Corridors

	2000		2002			
Design Type	**Number of Jobs**	**Percent of Total Jobs**	**Number of Jobs**	**Percent of Total Jobs**	**Percent Increase 2000 - 2004**	**Regional Framework Plan Estimates of Future % of UGB Jobs**
Central City	139,319	17%	131,265	17%	-6%	20%
Regional Centers	53,757	7%	48,648	6%	-10%	11%
Town Centers	41,225	5%	41,419	5%	0%	7%
Main Streets	71,991	9%	64,181	8%	-11%	NA
Station Comm.	74,999	9%	91,776	12%	22%	15%*
Corridors	104,635	13%	82,553	10%	-21%	see footnote*
Centers Subtotal	**485,926**	**59%**	**459,842**	**58%**	-5%	
Non Centers	334,262	41%	327,495	**42%**	-2%	
Total	**820,188**	**100%**	**787,337**	**100%**	-4%	

Source: US Bureau of Labor Statistics and Oregon Employment Dept. as compiled by Metro DRC

Table 2.7: Types of Jobs by Sector and Average Wages in the Central City and Regional Centers

	Estimated Average Annual Wages - Portland MSA	Central City		Beaverton Regional Center		Clackamas Regional Center		Gateway Regional Center		Gresham Regional Center		Hillsboro Regional Center		Oregon City Regional Center		Washington Square Regional Center	
Sector		**Est. Wage**	**Share**	**Est. Wage**	**Share**	**Est. Wage**	**Share**	**Est. Wage**	**Share**	**Est. Wage**	**Share**	**Est. Wage**	**Share**	**Est. Wage**	**Share**	**Est. Wage**	**Share**
Information	$54,448	59,600	7%	$60,200	4%	$26,000	1%	$49,500	1%	$49,000	3%	n/a	n/a	n/a	n/a	$59,300	6%
Manufacturing	$49,682	37,700	4%	$31,500	2%	$44,100	0%	$33,400	2%	$21,000	4%	$15,100	1%	$46,200	28%	$69,200	10%
Financial activities	$46,288	58,300	17%	$43,900	9%	$49,300	10%	$40,000	6%	$27,900	5%	$32,100	3%	$49,900	3%	$65,500	9%
Construction	$44,656	58,700	4%	$40,800	3%	$44,100	0%	41,100	2%	$46,300	9%	$34,200	2%	$41,200	6%	$45,300	1%
Professional and Business Services	$42,156	53,800	27%	$26,500	26%	$26,000	3%	$25,800	9%	$18,400	7%	$25,100	17%	$36,900	10%	$48,600	20%
Trade, Transportation and Utilities	$35,655	36,700	17%	$35,200	28%	$17,900	34%	$25,300	20%	$18,500	33%	$29,100	15%	$24,000	23%	$31,700	40%
Education and Health Services	$34,624	37,700	6%	$20,500	7%	$51,800	34%	$42,400	42%	$26,200	18%	$39,500	53%	$43,300	9%	$39,500	4%
Other Services	$25,580	28,800	4%	$26,100	2%	$21,200	4%	$23,400	3%	$24,000	5%	$27,900	2%	$22,000	5%	$34,800	4%
Natural Resources and Mining	$22,337	81,500	0%	$33,700	0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leisure and Hospitality	$16,130	5,800	14%	$15,300	18%	$12,800	14%	$13,100	15%	$10,400	16%	$12,900	7%	$13,200	17%	$15,800	6%

Source: US Bureau of Labor Statistics and Oregon Employment Dept. as compiled by Metro DRC

See Appendix B1 for individual tables

Sectors:

Construction

Education and health services: Education services, Health care and social assistance

Financial activities: Finance and insurance, Real estate and rental and leasing.

Information: Information

Leisure and hospitality: Arts, entertainment, and recreation, Accommodation and food services

Manufacturing

Natural resources and mining: Agriculture, forestry, fishing and hunting, Mining

Professional and business services: Professional, scientific, and technical services, Management of companies and enterprises, Administrative and support and waste management and remediation services.

Trade, transportation, and utilities: Wholesale trade, Retail trade, Transportation and warehousing, Utilities

Notes:

Confidentiality restrictions on the publication of ES-202 data require a minimum of three or more reporting units at the level of summary used,
and that no reporting unit represent eighty percent or more of that summary level employment. Any data not meeting these conditions has been suppressed (n/a).
ES-202 employment data represent only wage and salary employment subject to unemployment insurance.
Populations excluded from these data would include: self-employed, railroad workers, student workers, elected officials, religious organizations, family farms and some agricultural employees.

Fundamental 2 (Efficient Use of Land): Continued

iii) Redevelopment and Infill Development Policies

Information Used to Assess Policies: Redevelopment and infill, referred to by Metro as "refill", is new development occurring on land designated as already developed. The 2040 Growth Concept identified refill as an important strategy for increasing efficiency of land use and avoiding urban sprawl.

Metro calculates a refill rate in order to estimate the portion of the 20-year land demand that will be accommodated on developed land. The Functional Plan does not contain an explicit target of the amount of refill that must occur, however, the capacity analysis contained in the 1997 Urban Growth Report assumed a refill rate of 28.5 percent for the 20-year planning period. This report contains historical data on the observed refill rate and information on the current supply of land that has potential for redevelopment and infill activities.

Finding:

- Refill activity in the region during the 1997 to 2001 period accounted for about 25.6% of all residential development in the region. [see Table 2.18 and Figure 2.8]

  Note: Please see next page for the explanation of the methodology used to arrive at these results.

Due to data limitations, the DRC does not estimate the supply of land with potential for redevelopment and infill development. For the purposes of this performance measures report, however, the DRC attempted to estimate the amount of the region's developed land supply that is currently eligible for redevelopment and infill.

Finding:

- About 13% (3,558 acres of the 27,048 acres) of all the potential redevelopment and infill development are located in the 2040 centers. [see Table 2.19]
- Industrial land is the land category with the greatest potential for refill development (16,689 acres of the 27,048 acres, or 62%). [see Table 2.19]

  Note: Please see next page for the explanation of the methodology used to arrive at these results.

Table 2.8: Estimated Residential Refill Rate

Year	Refill Rate
1997	29.40%
1998	24.40%
1999	29.30%
2000	15.60%*
2001	27%
1997-2001	**25.6%**

Source: Metro Refill Study, Metro DRC
* Note: Recession dynamics may have contributed to the temporary decline of the refill rate in 2000.

Refill Rate Calculation Methodology: The DRC arrives at the refill rate by studying building permit (and other GIS) data from previous years. The methodology for estimating the refill rate involves selecting a representative sample of single family and multi-family building units. These units are then compared with building permits and Metro's Regional Land Information System (RLIS) data to determine whether the structures were placed on vacant or previously developed tax lots. If the unit was constructed on a developed parcel without removing the existing improvement, the permit is considered infill development. If the unit was constructed on a parcel where the existing improvement was removed, the permit is considered redevelopment (so long as more units were added to the existing tax lot then were removed).

Table 2.9: Potential Redevelopment and Infill Development (Refill) in the 2040 Centers and Metro Area (Gross Buildable Acres Suitable for Refill Development), 2002

Areas Covered	Residential and Mixed Use (Residential & Commercial)		Commercial		Industrial		Total by Area
2040 Centers							
• Central City		132		87	249		**468**
• Regional Centers		98		216	330		**644**
• Station Communities		233		283	1,140		**1,656**
• Town centers		174		192	423		**789**
Total in 2040 Centers	8% of total	**637**	29% of total	**778**	13% of total	**2,143**	13% of total **3,558**
Rest of the Metro UGB		**7,057**		**1,869**		**14,546**	**23,472**
UGB Total		**7,713**		**2,646**		**16,689**	**27,048**

Source: Metro Data Resource Center
Note: Redevelopment and Refill Methodologies are explained below.

Redevelopment and Infill (Refill) Supply Methodology: The DRC applied a mathematical algorithm to the region's developed land that takes into account factors such as building value, market value, vacant land values, zoning, and the number of units per parcel in order to estimate the number properties which could potentially redevelop or have infill occur. The result is a statistical approximation of the number of developed housing units that are likely to redevelop or have infill occur given market conditions (i.e., changes in real estate values) projected in the future. A different set of forecast assumptions would likely yield different results.

Fundamental 2 (Efficient Use of Land): Continued

iv) Stable, Distinct Neighborhoods Policies

Information Used to Assess Policies: While the 2040 Growth Concept stresses the importance of protecting the character of existing single-family neighborhoods and preserving livability in these neighborhoods, residential development occurring since the adoption of the Functional Plan (1996) has been subject to local policies requiring a more efficient use of land (building to 80% of zoned capacity). Metro expects only minimal increases in density in developed neighborhoods since the adoption of the Functional Plan. An analysis of persons per acre and dwelling unit per acre in a sample of existing neighborhoods was conducted to illustrate the degree to which Metro's growth management policies are affecting the livability of existing neighborhoods. Metro staff selected neighborhoods to represent the broad diversity of neighborhood types that exist in the inner and outer neighborhoods throughout the region.

Findings:

- Portland's NW 23rd neighborhood had the highest persons per acre in 2002 (37.1) and the most dwellings units per acre (29) of all of the selected neighborhoods. [see Tables 2.10 and 2.11]
- Most established inner neighborhood single-family neighborhoods are "built out" and experienced only slight increases or modest decreases in population and dwelling units per acre between 1990 and 2000. Newer, suburban neighborhoods, (with the most available vacant buildable land) experienced more substantial increases. [see Tables 2.10 and 2.11]
- Most of the selected "New Suburban" and "Mix New/Older Suburban" neighborhoods experienced more than a 10% increase in both persons per acre and dwelling units per acre during the 1990 to 2000 period. [see Table 2.10 and Table 2.11]
- Among the selected "New Suburban" and "Older Suburban" neighborhoods, the Sherwood neighborhood experienced the largest increase in persons per acre (200% - from 0.7 to 2.1) and dwelling units per acre (163% - 0.3 to 0.8), while the selected Beaverton neighborhood experienced the least increase in persons per acre (5% - from 10.4 to 10.9) and dwelling units per acre (2% - 5.2 to 5.3). [see Tables 2.10 and 2.11]

Table 2.10: Change in Persons Per Acre in Sample Neighborhoods - 1990-2000 and 2001-2002

Neighborhood Type	Description (and Census Tract #)	1990	2000	% Change 1990-2000	2001	2002	% Change 2001-2002
Older Suburban	Outer SE PDX (6.01, 6.02)	9.5	10.6	**11%**	11.0	11.1	**0%**
	Beaverton (312)	10.4	10.9	**5%**	11.1	11.1	**0%**
	Oak Grove (213, 214)	5.5	5.8	**6%**	5.9	6.1	**3%**
	Gresham (downtown) (99.01) (100.01, 100.02)	5.8	7.4	**27%**	7.7	7.7	**1%**
New Suburban	Sherwood (321.03, 321.04)	0.7	2.1	**200%**	2.3	2.4	**3%**
	Hillsboro (2) (326.05, 326.06)	1.9	2.9	**53%**	3.2	3.3	**5%**
Mix New/Older Suburban	West Linn (206)	3.1	4.1	**33%**	4.3	4.4	**2%**
	Hillsboro (1) (324.04)	6.3	7.1	**13%**	7.3	7.4	**1%**
	Tigard (308.01)	5.6	6.3	**13%**	6.4	6.4	**0%**
Inner Neighborhood Residential	Irvington (24.01, 25.01)	14	13.6	**-3%**	14.0	14.0	**0%**
	Hawthorne (13.02)	15.2	14.5	**-5%**	15.0	15.0	**0%**
	NW 23rd (28)	33.2	36.5	**10%**	37.2	37.1	**0%**
New Central City High Density Mixed Use	Pearl (51)	4.8	7.2	**50%**	8.2	9.8	**20%**

Source: Metro Data Resource Center

Note:
1. Older Suburban Neighborhood: Suburban subdivisions built between 1945 and 1975.
2. New Suburban Neighborhood: Suburban subdivisions mostly built after 1976.
3. Inner Neighborhood Residential: Residential subdivisions in the central city, mostly built before 1945
4. New Central City High-Density Mixed Use – Areas of intense mixed-use activity in the core of Portland

Note. These sample neighborhoods were chosen to represent the wide range of neighborhood types that exist in the Metro region.

Table 2.11: Change in Dwellings Units Per Acre in Sample Neighborhoods - 1990- 2000 and 2001-2002

Neighborhood Type	Description (and Census Tract #)	1990	2000	% Change 1990-2000	2001	2002	% Change 2001-2002
Older Suburban	Outer SE PDX (6.01, 6.02)	3.7	3.9	**6%**	4.0	4.0	**1%**
	Beaverton (312)	5.2	5.3	**2%**	5.3	5.3	**0%**
	Oak Grove (213, 214)	2.2	2.5	**13%**	2.5	2.6	**3%**
	Gresham (downtown) (99.01) (100.01, 100.02)	2.1	3.1	**46%**	3.1	3.1	**1%**
New Suburban	Sherwood (321.03, 321.04)	0.3	0.8	**163%**	0.8	0.9	**4%**
	Hillsboro (2) (326.05, 326.06)	0.7	1.2	**77%**	1.3	1.4	**9%**
Mix New/Older Suburban	West Linn (206)	1.2	1.6	**32%**	1.6	1.6	**1%**
	Hillsboro (1) (324.04)	2.3	2.7	**19%**	2.7	2.8	**0%**
	Tigard (308.01)	2.1	2.5	**18%**	2.5	2.5	**1%**
Inner Neighborhood Residential	Irvington (24.01, 25.01)	5.3	5.4	**1%**	5.4	5.4	**0%**
	Hawthorne (13.02)	6.7	6.8	**1%**	6.8	6.8	**0%**
	NW 23rd (28)	25.2	29.0	**15%**	29.0	29.0	**0%**
Central City High Density Mixed Use	Pearl (51)	2.1	6.6	**216%**	7.3	8.9	**22%**

Source: Metro Data Resource Center

Note:
1. Older Suburban Neighborhood: Suburban subdivisions built between 1945 and 1975.
2. New Suburban Neighborhood: Suburban subdivisions mostly built after 1976.
3. Inner Neighborhood Residential: Residential subdivisions in the central city, mostly built before 1945
4. New Central City High-Density Mixed Use – Areas of intense mixed-use activity in the core of Portland

Note. These sample neighborhoods were chosen to represent the wide range of neighborhood types that exist in the Metro region.

Related policies analyzed in other sections

- Create a balanced transportation system *[See Fundamental 4]*
- Ensure access to jobs *[See Fundamental 4]*
- Affordability and housing options *[See Fundamental 7]*

Fundamental 2 (Efficient Use of Land) policies not measured

- Access to the region's industrial land.
- Encourage public investment.
- Creating pedestrian scale environment and access to jobs in the 2040 design types to reduce sprawl.

All Indicators Used for Fundamental 2 Analysis

- **Indicator 1.1: Supply of land inside the UGB and mixed use centers by type (Required: Metro #1&4; State #a & d)**
  Measures the current availability of the major categories of land use in the Metro UGB (including land used for residential and employment purposes)
- **Indicator 1.2: Protection of industrial lands (Required: Periodic Review)**
  Measures factors that could compromise the supply of industrial land
- **Indicator 2.1: Consumption of land inside the UGB and mixed use centers by type – (REQ: Metro #1&4; State #d)**
  Measures the consumption/change of the major categories of land in the Metro region
- **Indicator 2.2: Density conditions reflecting the absorption of land in the UGB and mixed use centers by type (REQ: State #b).**
  Measures the efficiency with which several significant land development factors are consuming sectors of available land by type
- **Indicator 2.3: Growth accommodation in mixed use centers - (REQ: Metro #2&7; State #f; and Periodic Review)**
  Measures the contribution that mixed use centers are making in helping the region accommodate new growth

Fundamental 3

Protect and restore the natural environment including fish and wildlife habitat, streams and wetlands, surface and ground water quality and quantity, and air quality[7].

1. The Challenge:

The impact of urbanization on the region's watershed health and biodiversity is well documented. The decline of the region's water quality corresponding with new development is one of the issues addressed in Metro's 1989 Water Quality Issues Report, 1992 Area-wide Water Quality Report, and in the 1997 Regional Framework Plan. A number of uses depend on clean surface water including domestic, business, municipal, recreational, fish and wildlife, and agricultural. Rivers, streams and wetlands (and associated natural areas) provide places for recreation and scenic views that contribute to the region's quality of life as the region grows. For fish and wildlife, these areas provide space for spawning, nesting and rearing, feeding, migrating and other life cycle needs of fauna. Development and implementation of water quality management strategies that protect these resources as development occurs are essential to create and maintain livable communities and maintain a healthy system of natural resources now and for future generations.

2. Summary of Adopted Policies:

Metro's approach to addressing the challenges are organized by the policy themes listed below. They represent how Metro's approach to protecting and restoring the natural environment. For more details about Metro policies, see the Regional Framework Plan, Urban Growth Management Functional Plan, Metropolitan Greenspaces Master Plan and Regional Solid Waste Management Plan. (see also *www.metro-region.org*)

A. Long term strategy to protect and manage natural resources:
Develop a long-term strategy to protect the region's water quality and quantity, air quality, wildlife habitat, and institute effective flood management, watershed management**,** and storm water management. Establish vegetative corridors on streams, minimize erosion, and establish fish and wildlife conservation areas. Collect and evaluate data related to natural resource values. Achieve these objectives through:

- Acquisition
- Land use and environmental regulations and incentives
- Citizen education and environmental stewardship

(Regional Framework Plan, Urban Growth Management Functional Plan, Metropolitan Greenspaces Master Plan)

B. Identify, inventory and protect and manage parks, open spaces and trails:
Identify natural corridors and all regional parks and inventory urban areas deficient in natural areas. Develop and coordinate the protection and management of a regional system of parks, natural areas, open spaces, trails, and greenways and protect wildlife and botanic values in these areas. Assume financial responsibility for the Metro-owned portion of the regional system and coordinate with local providers on other management and funding. Encourage local park providers to develop master plans for local parks and

[7] MPAC recommended changes – Fundamental 3: Protect and restore the natural environment ~~through actions such as protecting~~ including fish and wildlife habitat, ~~and restoring~~ streams and wetlands, ~~improving~~ surface and ground water quality and quantity, and reducing air ~~emissions~~ quality.

trail systems and natural areas. Promote citizen education about environmental stewardship. (Regional Framework Plan, Urban Growth Management Functional Plan, Metropolitan Greenspaces Master Plan)

C. Solid waste prevention and reduction:

Goal 1 and Goal 7 of the Regional Solid Waste Management Plan (RSWMP) focus on development and implementation of solid waste practices that are environmentally sound and that achieve the maximum feasible reduction in solid waste sent to the landfill. Goal 13 of the RSWMP calls for a reduction in the toxicity of mixed solid waste and stresses the need to educate residents about alternatives to hazardous products, and requires Metro to provide convenient disposal service for these hazardous materials. Goal 2 of the RSWMP calls for the development of regional education and information for recycling, waste prevention and market development. (Regional Solid Waste Management Plan)

3. Measuring policies:

A. Long term strategy to protect and manage natural resources:

- Acquisition policy; and
- Land use and environmental regulations and incentives policies

Information Used to Assess Policies: Public acquisition offers the most comprehensive strategy available for protecting remaining forested land and other natural areas in the Metro region from development. In 1995, voters approved Metro's $135.6 million open spaces, parks and streams bond measure the primary goal of purchasing at least 6,000 acres of natural areas, trails and greenways for future use as parks, trails, and fish and wildlife habitat. Local governments within the Metro region were to use their share of the bond money ($25 million) to acquire local greenspaces and improve amenities for natural area protection and public recreation. Metro targeted areas for acquisition that supported a diversity of animal and plant life, were linked to other open space sites, and had the potential for restoration. Metro also targeted natural areas that had potential to serve as educational and scenic resources. Land was the specific target for acquisition, and another goal of the bond measure was to maintain water quality in the region's rivers and streams and to protect the salmon, trout and steelhead residing in these streams.

Findings: Acquisition policy element

Metro Acquisition as of April 2004

- Metro has completed 254 transactions and acquired 8,015 acres of greenspaces throughout the region, including 72 miles of stream frontage. This number includes 44.84 acres of open space acquired by Metro using local share funds on behalf of Multnomah County and North Clackamas Parks and Recreation District (NCPRD). [see Table 3.1]
- The 6,000-acre acquisition goal set by the $135.6 million bond measure has been exceeded by 2,015 acres (with $3,353,000 remaining and acquisition ongoing). [see Table 3.1]

Local Governments' Acquisition as of April, 2004

- $25 million of the $135.6 million open spaces, parks and streams bond measure funds were the "local share" portion of the open spaces program. These funds support both acquisition and park improvement projects in local jurisdictions.
- Local share funds spent on acquisition = $14,093,936
- Local share funds spent on park improvement projects = $9,623,306
- Total local share funds spent = $23,717,242 (out of the $25 million bond measure funds allocated to local governments), with $1,282,758 remaining.
- 20 local jurisdictions and park districts have acquired open space property with local share portion of the bond measure funds: Beaverton, Clackamas County, Cornelius, Forest Grove, Gladstone, Gresham, Hillsboro, Lake Oswego, Milwaukie, Multnomah County (administered by Metro), NCPRD, Oregon City, Portland, Tualatin Hills Parks and Recreation District (THPRD), Tigard, Troutdale, Tualatin, Washington County, West Linn and Wood Village.
- Total acres acquired only with local share funds = 291.45 acres[8]
- Total acres acquired with local share funds and regional funds = 153.45 acres (Note: This number comes from much more complete data, because it involves regional share funds.)
- Total acres acquired using local share funds = 444.87 acres (i.e., 291.45 plus 153.45 acres)

[8] Although the acreage data is more precise than it was in the last report, this acreage count is still an estimate. Final accounting of acres acquired is in progress. Also, this number includes 44.84 acres of open space acquired by Metro using local share funds on behalf of Multnomah County and NCPRD. These 44.84 acres are also included above under "greenspaces acquired by Metro."

Table 3.1: Acres of Greenspaces Acquired by Metro

Year	Transactions	Acres Acquired with Metro Bonds	Miles of Stream Frontage Acquired by Metro
1995*	11	346	2.49
1996	27	1,220	7.14
1997	54	1,379	15.67
1998	48	1,065	9.29
1999	34	1,178	8.13
2000	31	1,346	9.46
2001	22	715	10.17
2002	15	677	5.67
2003	12	85	2.50
2004	2	55	1.24
Total	**254**	**8,015**	**71.76**

Source: Metro DRC and Parks and Greenspaces *1995 was a partial year data.

Findings: Land Use environmental regulations, incentives, citizen education and environmental stewardship policy element:

Environmental Feature		Estimated Length/Acres	Percent of total
Streams	Miles of Title 3 streams vs. total streams in region	871 of 1,126	77%
	Acres of Title 3 stream corridors (water quality resource areas)	15,000	100%
	Forested acres in Title 3 stream corridors	5,963	56%
	Vegetated acres in Title 3 stream corridors	8,718	82%
Wetlands	Acreage of wetlands and Title 3 corridors (water quality resource) areas	12,487	100%
	Forested acres in wetlands and Title 3 areas	3,425	27%
	Vegetated acres in wetlands and Title 3 areas	6,980	56%
Floodplains	Acreage of floodplains in the region (est.)	26,972	100%
	Developed acres floodplains	21,329	79%
	Gross vacant acres in floodplains	5,643	21%
	Forested* acres in floodplains	5,040	19%
	Vegetated* acres in floodplains	9,743	36%

Source: Metro Data Resource Center
* Forested and Vegetated acreage in floodplains are for the floodplain areas within 300 feet of streams.
Estimates of the acreage of Title 3 stream corridors is complicated by the overlapping of Title 3 stream and wetland corridors.

Note;
The Metro Council has adopted a Goal 5 inventory and an analysis of the tradeoffs of different levels of protection of resources (ESEE analysis). A Goal 5 program is scheduled for consideration by the Metro Council during the FY 2004/2005.

The Title 3 floodplain and water quality management regulations were originally mapped in 1998 using the best geographic information available. Metro's initial performance measures report published in May of 2003, collected data on the number of stream miles in these areas and the degree to which these areas were being affected by development.

Since publishing the 2003 performance measures report, Metro has enhanced the precision and accuracy of its geographic information system (GIS) data to support additional resource planning (i.e. the Metro Goal 5 Fish and Wildlife Resource Inventory). The enhancements to natural resource layers including wetlands, streams, and floodplains and the changes to the way this data is collected allow for more accuracy in mapping and a better understanding of the current condition of these resources.

The Title 3 maps adopted in 1998 were a representation of the areas known to meet the threshold for protection at the time of adoption. However, the language of Title 3 required local governments to protect any resources, mapped or unmapped, known to be meeting the criteria (note – see Appendix C1 for criteria). The above data represents Metro's best baseline information on the quantity and condition of resources that are currently receiving protection in the Metro region – regardless of whether they appear on the adopted Title 3 map. The data on vegetation and forestation is derived from 2002 aerial photography.

Fundamental 3 (Protect/Restore the Natural Environment): Continued

B. Identify, inventory and protect and manage parks, open spaces and trails polices:

Information Used to Assess Policies: A thorough inventory of the existing condition of the region's natural areas, waterways, trials, parks and open spaces is a necessary to develop policies to protect and manage this system. An inventory also allows for the identification of baseline conditions that make monitoring changes over time possible. Metro has access to large quantities of land use data and has relationships with other agencies that foster data sharing and allow for the development of the best possible inventory of parks, natural areas, open spaces, trails, and greenways to better protect wildlife and botanic values.

Findings:

- Metro's database of natural resource data is updated as new information becomes available. Metro is currently developing a region-wide Goal 5 program (fish and wildlife habitat) that required a comprehensive update of the region's natural resource inventory.
- See *Fundamental 8 for information on the inventory of parks, open spaces and trails in the Metro region.*

Fundamental 3 (Protect/Restore the Natural Environment): Continued

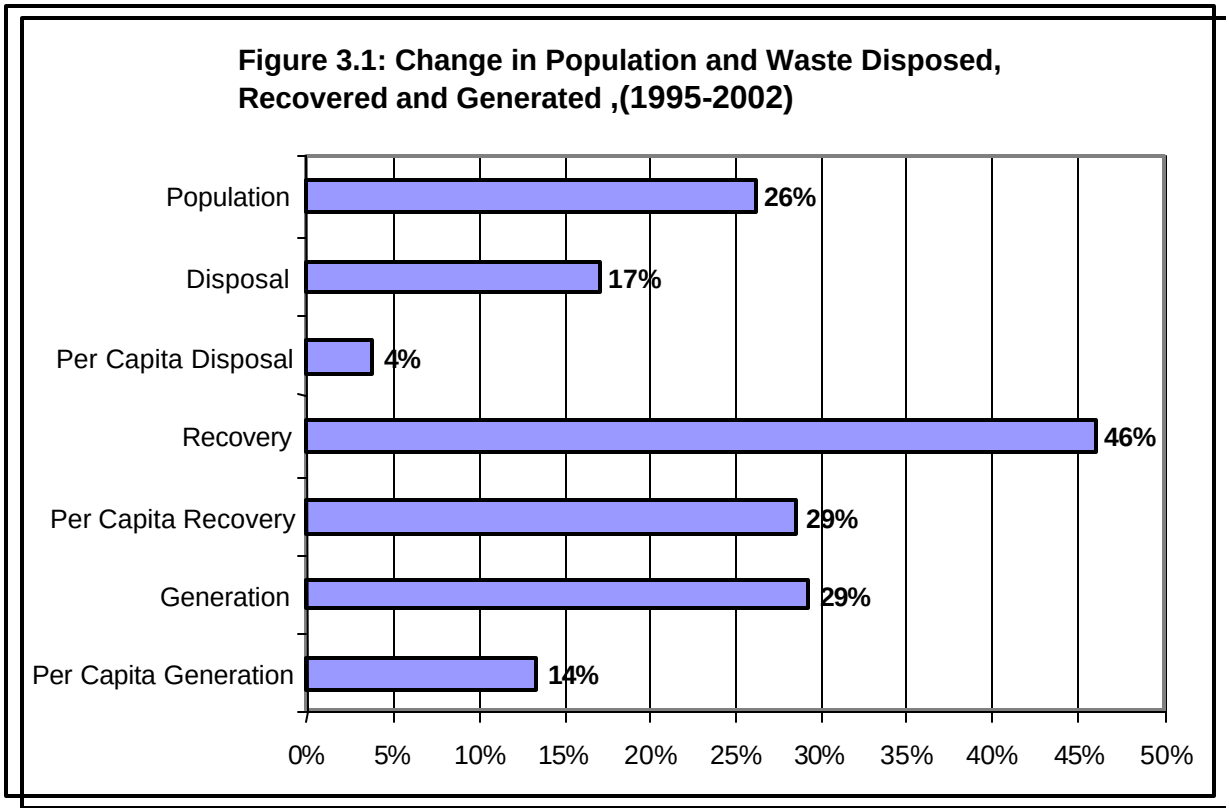
C. Solid waste prevention and reduction:

Information Used to Assess Policies: Changes in the amount of waste generated, recovered and disposed per capita is a good indicator of the region's overall efforts to effectively manage solid waste. The number of Metro-sponsored household hazardous waste collection events held since 1986 is a useful indicator of Metro efforts to alter the toxicity of waste generated and disposed. In addition, this report includes information regarding Metro efforts to prevent and reduce waste through education and outreach.

Findings:

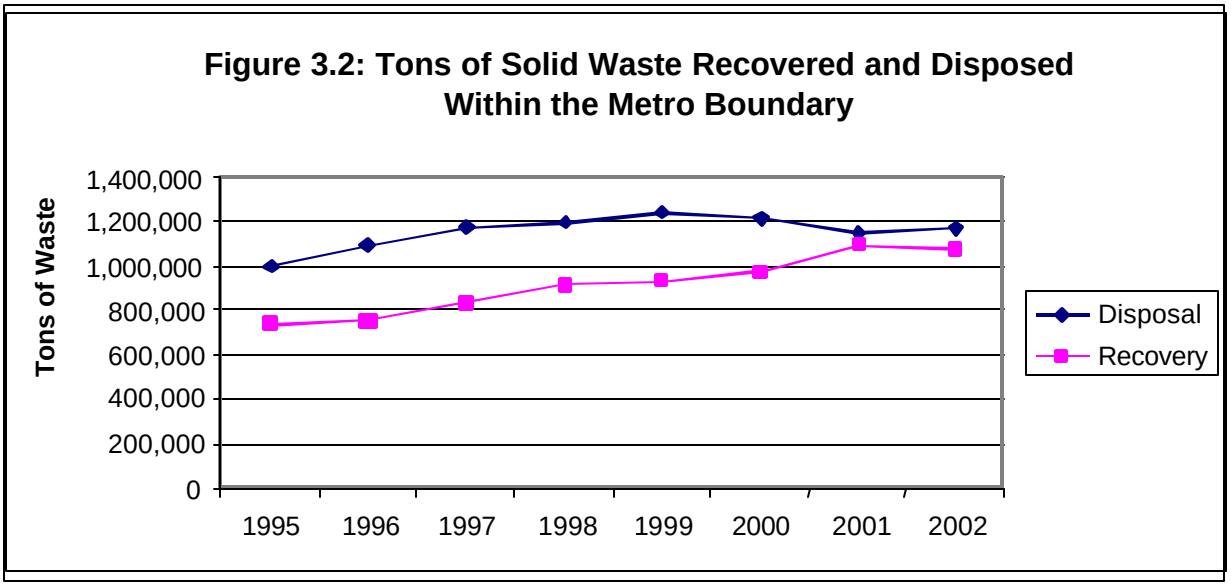
- Since 1995, waste recovered has grown at a rate significantly higher (46%) than both the population (26%) and waste generated (29%) and waste disposed (17%). [see Figure 3.1]
- Waste recovered and disposed in 2002 did not show significant changes from the previous year. [see Figure 3.2 and Table 3.2]
- In 2001, the amount of waste disposed (0.78 ton per capita) and recovered (0.75 ton per capita) was very close (51% disposed and 49% recovered). [see Figure 3.2 and Table 3.3]
- Waste disposed peaked at 0.90 ton per capita in 1999, declined to 0.78 ton per capita in 2001, and increased slightly to 0.79 ton per capita in 2002. The decline reflects an increase in recovery activities and may be influenced by the recession. [see Table 3.3]
- During the last five years (1999 to 2003), the amount of hazardous waste collected has increased by 44%, while the amount collected during the same period was approximately 75 lbs annually per household.
- Metro's recycling information line received an average of 101,900 calls per year during the last decade. [see Figure 3.3]
- In the 2003/2004 fiscal year Metro waste reduction/education staff made a total of 635 presentations, community event appearances, and outreach efforts which reached an estimated 48,879 children, and adults. These numbers represent an increase from the 2002-2003 fiscal year (588 presentations reaching 42,879 citizens). (See Appendix C2 for more waste reduction education information)

Figure 3.1: Change in Population and Waste Disposed, Recovered and Generated ,(1995-2002)



Source: Metro Solid Waste and Recycling Department

Figure 3.2: Tons of Solid Waste Recovered and Disposed Within the Metro Boundary



Source: Metro Solid Waste and Recycling Department

Table 3.2: Tons of Solid Waste Recovered and Disposed Within the Metro Boundary (1995-2000)

	1995	1996	1997	1998	1999	2000	2001	2002
Disposal	995,035	1,097,246	1,173,593	1,196,486	1,240,433	1,207,348	1,151,339	1,165,762
Recovery	735,231	752,470	835,593	912,018	932,889	970,850	1,097,409	1,073,520
Generation	1,730,266	1,849,716	2,009,186	2,108,504	2,173,321	2,178,198	2,248,747	2,239,282

Source: Metro Solid Waste and Recycling Department

Table 3.3: Metro Recovery and Disposal in Tons Per Capita (1995-2000)

	1995	1996	1997	1998	1999	2000	2001	2002
Disposal	0.76	0.83	0.87	0.88	0.90	0.83	0.78	0.79
Recovery	0.56	0.57	0.62	0.67	0.68	0.67	0.75	0.72
Generation	1.33	1.40	1.50	1.55	1.58	1.50	1.53	1.51

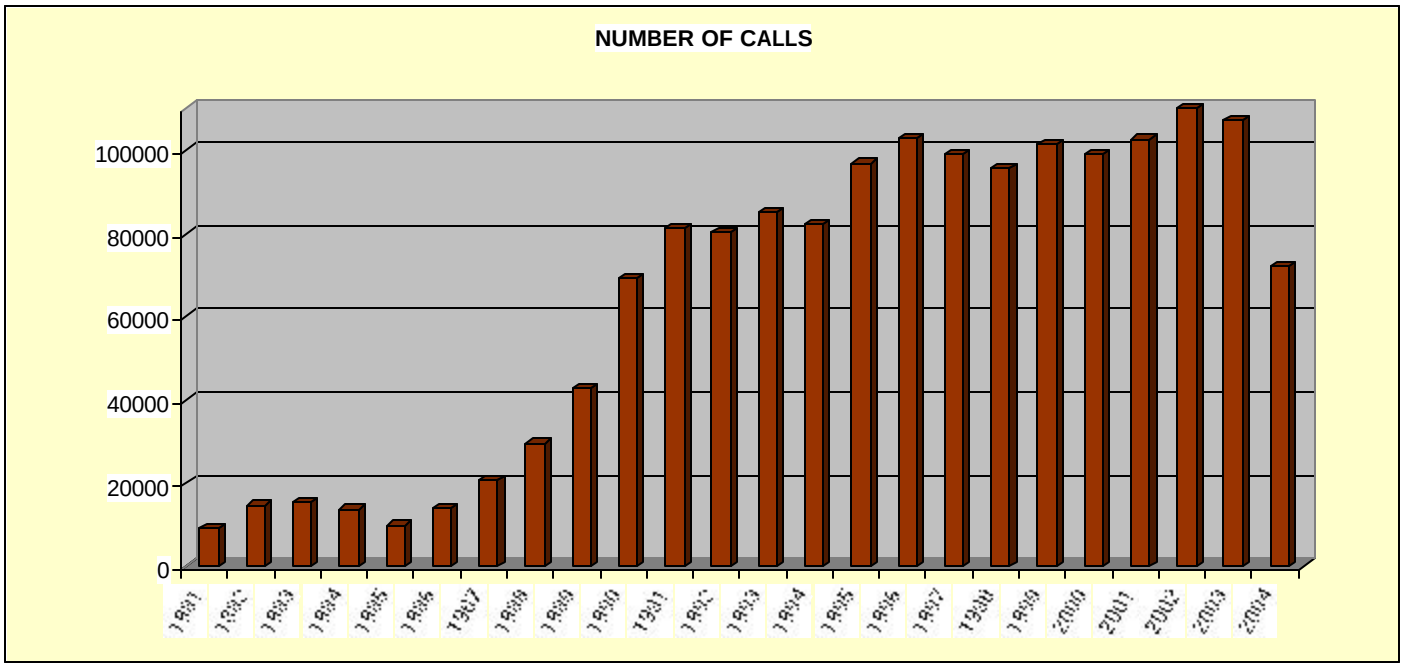
Source: Metro Solid Waste and Recycling Department

Table 3.4: Amount of Household Hazardous Waste Collected in the Metro Boundary

Year	Population	Households Participating in Collection Events	Amount Collected (Pound - lbs)	Amount Collected Per Capita
1995	1,175,633	21,495	1,758,445	1.50
1996	1,194,826	23,277	1,891,340	1.58
1997	1,209,589	24,620	2,143,669	1.77
1998	1,215,803	29,944	2,414,833	1.99
1999	1,277,100	34,239	2,604,496	2.04
2000	1,305,574	33,330	2,880,812	2.21
2001	1,467,300	39,709	2,989,731	2.03
2002	1,484,150	49,620	3,820,019	2.57
2003	N/A	49,012	3,756,360	N/A

Source: Metro Solid Waste and Recycling Department

Figure 3.3: Recycling Information Center Calls (1981 – 2003)



Source: Metro Solid Waste and Recycling Department

Protection and restoration of the environment policy elements measured in other section:

- Encourage local park providers to develop master plans for local parks and trail systems and natural areas.
- Protection of the region's air quality (Fundamental 4)
- Citizen education and environmental stewardship (Fundamental 8)

Policy elements not measured:

- Urban areas deficient in natural areas
- Long terms strategies contained in Greenspaces Master Plan
- Protection of the region's water quality/quantity –
- Storm water management – Will be considered sometime in the near future
- Fish and wildlife conservation areas ?

All Indicators Used for Fundamental 3 Analysis

- **Indicator 3.1: Condition and conversion of environmentally sensitive areas regulated (and not regulated) by Title 3 and Goal 5 – (REQ: Metro #5; State #5)**
  Measures the condition of the natural environment in the Metro region and the effect that regulations intended to protect these resources are having

  Note: Although the 2003 performance measures report evaluated conversion of environmentally sensitive land, this year's report does not contain similar information because of the adoption of a new methodology for establishing a baseline of land in Title 3 areas. Additional years of data are required to measure change in these sensitive areas. This information will be included in future performance measures reports.

- **Indicator 3.2: Acquisition of environmentally sensitive areas with Metro's $135.6 million bond measure approved in 1995. (REQ: Metro #5; State #5)**
  Measures the effort of Metro and local governments in acquiring natural areas
- **Indicator 3.3: Acquisition of other environmentally sensitive areas using non-1995 bond measure funds (including acquisition of development rights, i.e., easements).**
  Measures the effort of various entities in acquiring natural areas with non-bond measure funds.
- **Indicator 3.7: Waste reduction and recycling in the Metro region**
  Measures the efforts that the region is making in reducing, reusing, and recycling waste
- **Indicator 3.6: Air quality - (REQ: State #9)**
  Measures the region's ability to maintain air quality while accommodating increases in population and employment.

Appendix C: Additional Information Included:

- Waste Reduction Education (school program and community events)

Fundamental 4

Provide a balanced transportation system including safe, attractive facilities for bicycling, walking and transit as well as for motor vehicles and freight.

1. The Challenge:

One of the critical challenges during the development of the 2040 Growth Concept was how to recognize the diversity of transportation needs throughout the region and how to balance competing transportation needs while protecting livability in the face of a projected 50 percent increase in population and a 70 percent increase in jobs by 2020.

Part of the region's livability is minimizing environmental and development conditions that prevent street connectivity. A Metro's 1997 study found that with more local street connectivity, traffic delay at major intersections was reduced by 17 percent, number of vehicles on major streets decreased by 13 percent, the greatest traffic benefit were achieved with block lengths of roughly 300 to 500 feet, and connectivity improves emergency response time and enhanced police patrols. Another element of the region's livability is the provision of opportunities for residents to use local streets to travel (by walking or bicycling) to nearby destinations like their neighborhoods grocery store, coffee shop, school or park. Recent national studies have shown a significant association between the form of urban environment and health conditions and behaviors of residents.

The economy of the region is closely tied to transportation and distribution sectors. A study of the goods movement in the region (the 2040 Commodity Flow Analysis) predicts freight volume to more than double by 2040. The projected growth in freight indicates the need for expansion of intermodal facilities, manufacturing, wholesale and distribution activities and to continue to maintain and enhance the freight transportation network.

The region's choice for compact development posed other challenges for the transportation system -- how to reduce the need to expand the transportation system, how to build homes and businesses close to existing transportation system, and how to target new transportation projects to areas that most need access such as the 2040 design type areas.

2. Summary of Adopted Policies:

Metro's approach of addressing the challenges are organized by the policy themes listed below. They represent how Metro chose to provide a balanced transportation system. For more details about the policies, see the Regional Transportation Plan (RTP), Regional Framework Plan and Urban Growth Management Functional Plan.

A. Planning a balanced transportation system:

Planning a transportation system that complements the land use priorities of the 2040 Growth Concept and includes the following elements:

- Street design; emphasizing modal orientation and reflecting function of surrounding land uses;
- Motor vehicle; serving 2040 centers and providing mobility within and through the region;
- Public transportation; providing a level, quality and range of public transportation options;
- Freight; providing efficient, cost-effective and safe movement of freight within and through the region;
- Bicycle; providing a continuous regional network of safe and convenient bikeways connected to other transportation modes and local bikeway systems;

- Pedestrian; providing a safe, direct, convenient, attractive and accessible pedestrian environment for all users.

(Regional Transportation Plan, Regional Framework Plan and Urban Growth Management Functional Plan)

B. Building a balanced transportation system through RTP policies:

- Allocate fiscal resources to ensure transportation benefits and support the 2040 Growth Concept.
- Emphasize the maintenance, preservation and effective use of transportation infrastructure in the selection of the RTP projects and programs.
- Anticipate and address system deficiencies that threaten the safety of the traveling public in the implementation of the RTP.

(Regional Transportation Plan, Regional Framework Plan and Urban Growth Management Functional Plan)

C. Effectiveness of RTP Policies:

- Optimize performance of the region's transportation systems and emphasize livability, mobility, safety and accessibility for all modes of travel.
- Manage and optimize the efficient use of public and commercial parking in the central city, regional centers, town centers, main streets and employment centers to support the 2040 Growth Concept and related RTP policies and objectives.
- Manage and optimize the use of highways in the region to reduce congestion, improve mobility and maintain accessibility within limited financial resources.

(Regional Transportation Plan, Regional Framework Plan and Urban Growth Management Functional Plan)

D. Protecting the environment:

- Protect the region's water quality and overall environment and protect and enhance air quality so that as growth occurs, human health and visibility of the Cascades and the Coast Range from within the region is maintained.
- Also, design transportation systems that promote efficient uses of energy.

(Regional Transportation Plan, Regional Framework Plan and Urban Growth Management Functional Plan)

E. Public process:

Metro will provide complete information, timely public notice, access to key decisions and promote broad-based and early and continuing involvement of the public in all aspects of the transportation planning process and coordinate among the local, regional and state jurisdictions that own and operate the region's transportation system. (Regional Transportation Plan, Regional Framework Plan and Urban Growth Management Functional Plan)

3. Measuring policies

A. Planning a balanced transportation system policies

Information Used to Assess Policies: The design and function of the transportation system has a significant impact on adjacent land uses and the character of communities. Providing a connected street system supports an efficient transportation system by making walking, bicycling and access to transit more direct and spreads out traffic by allowing local vehicle trips to use local rather than regional streets. Less local traffic on regional streets reduces the need to provide additional travel lanes and intersection capacity on the regional street system. Police and fire response also benefit from a well-connected street system.

The Regional Framework Plan and RTP require local jurisdictions to update their development codes to implement the regional standards for street connectivity: new construction of streets in residential and mixed-use developments must include a street connection no further apart than 530 feet, unless prevented by an existing barrier. If a barrier prevents a street connection within 530 feet, a development must try to locate a multi-use path connection within 330 feet of another street or path connection.

Findings:

- All the jurisdictions in the Metro region have amended their development codes to implement the regional standard for street connectivity.
- For the three years measured, the Hollywood, Gresham/Pleasant Valley, and Sunnyside sample areas exceed the regional street connectivity requirements as measured by a standard of 100 intersections per square mile. [see Table 4.1]
- Hollywood has remained unchanged at 254 intersections per square mile since 1996. Of the study areas meeting the regional standard, the Gresham/Pleasant Valley sample area increased by 6% from 1996 to 2003, (119 to 125 intersections per square mile). The Sunnyside sample area increased by 38% from 1996 to 2003 %, (135 to 173 intersections per square mile). [see Table 4.1]
- The biggest increases in sample areas below the regional standard occurred in Forest Grove (46 to 97 or 41%) and Sherwood (71 to 95 or 24%). Both of these sample areas are nearing the regional standard. [see Table 4.1]

Policy Elements Not Measured

- Street design; emphasizing modal orientation and reflecting function of surrounding land uses
- Freight; providing efficient, cost-effective and safe movement of freight in and through the region;

Table 4.1: Street Connectivity in Selected Study Areas

Location	Intersections Per Square Mile in Developed Portion of Sample Area[9]			Change in Intersections Per Square Mile in Developed Portion of Sample Area
	(1996)	(2000)	(2003)	(1996 - 2003)
Hollywood	254	254	254	0
Elmonica	28	32	39	+11
Forest Grove	46	91	97	+41
Gresham - Pleasant Valley	119	114	125	+6
Oregon City	68	85	85	+17
Sherwood	71	98	95	+24
Sunnyside	135	169	173	+38

Source: Metro Planning Department

Data Limitations

This data is only for sample areas in the region, not a comprehensive analysis of street connectivity in all residential and mixed-use areas of the region.

The measurement of 100 intersections per square mile is an example of building street connections at the regional requirement of at least one street connection every 530 linear feet (with exceptions for certain types of barriers). It does not ensure that the street connections are built in the optimal location to provide the benefits of street connectivity.

[9] For measurement purposes, a street connection every 530 feet is equivalent to 100 street intersections per square mile or 6.4 street intersections per acre. While this measurement is not how the region requires street connectivity be implemented, for simplicity, the measurement will be referred to as the "regional standard". The Regional standard for intersections per square mile is 100.

Fundamental 4 (Balanced Transportation): Continued

B. Building a balanced system through RTP Policies

Policy element measured: Allocate fiscal resources to ensure transportation benefits and support the 2040 Growth Concept.

Information Used to Assess Policies: The 2040 Growth Concept has established a broad regional vision that will guide all future comprehensive planning at the local and regional levels, including development of the Regional Transportation Plan. The 2040 Growth Concept contains a series of land-use building blocks that establish basic design types for the region. Of these, the central city, regional center and industrial area/intermodal facility components are most critical in terms of regional significance and their role in supporting the other growth concept design types. Substantial public and private investment will be needed in these areas over the long-term to realize the 2040 Growth Concept vision. These areas provide the best opportunity for public policy to shape development, and are, therefore, the best candidates for more immediate transportation system improvements.

In order to implement the 2040 Growth Concept, the region needs a transportation system that adequately serves planned land uses and provides travel choices that serve all segments of the population. The RTP has been acknowledged by the State to adequately serve the 2040 Growth Concept for the region through the year 2020 and provides a balanced transportation system, with improvements to the motor vehicle, pedestrian, bicycle, freight, transit and boulevard systems.

The RTP is Metro's primary tool for shaping the transportation system:

- The RTP sets out policies with which local transportation System Plans must comply.
- The RTP prioritizes the major capital projects for a 20-year period into three categories: the first five years, the second five years, and last 10 years.
- The RTP includes additional plans such as corridor plans (i.e. Powell-Foster or Hwy 217) and Concept Plans for new urban areas (i.e. Pleasant Valley and Damascus)

As stated in the RTP, the region plans to spend its transportation dollars on a balanced system. Though the project cost devoted to transit projects appears to decline, the actual amount is similar to the 2000 RTP, and the change is instead due to growth in federal, state, and local road revenues. Road revenues are expected to increase beyond the 2000 projections at both the local and state level, boosting the share of road and bridge projects, relative to transit projects. In addition, a number of major transit projects have been completed since the 2000 RTP was adopted (and thus are no longer included), such as the Central City Streetcar, Interstate MAX and Airport MAX projects.

Through the RTP, the region plans to target its transportation dollars in strategic locations to support the 2040 growth concept. Between 2000 and 2004, the number of projects in the Central City & Regional Centers increased. Much of the increased road revenues will be spent in major corridors and centers that are traditional hubs of the transportation system, thus adding to the increase in share of projects serving the central city and regional centers.

The slight increase in bicycle, pedestrian and boulevard projects shown in Table 4.2 reflects a continued emphasis on many specific projects carried over from the 2000 RTP system, as well as new revenues for such projects proposed by ODOT and several local jurisdictions. While the percentage devoted to these projects is comparatively low, the cost of bicycle and pedestrian

projects, in particular, tend to be modest since they can often be constructed without purchasing right-of-way. The number of bicycle and pedestrian projects – 1/3 of all projects demonstrates the region's commitment to non-motorized transportation.

Findings

- Through the RTP the region plans to target its transportation dollars in strategic locations to support the 2040 growth concept. Between 2000 and 2004, the number of projects in the Central City & Regional Centers increased. [see Table 4.2]
- Though the project cost devoted to transit projects appears to decline, the actual amount is similar to the 2000 RTP, and the change is instead due to growth in federal, state, and local road revenues. [see Table 4.2]
- The slight increase in bicycle, pedestrian and boulevard projects shown in Table 4.2 reflects a continued emphasis on many specific projects carried over from the 2000 RTP system, as well as new revenues for such projects proposed by ODOT and several local jurisdictions. The number of bicycle and pedestrian projects (1/3 of all projects) demonstrates the region's commitment to non-motorized transportation. [see Table 4.2]

Policy Elements Not Measured

- Emphasize the maintenance, preservation and effective use of transportation infrastructure in the selection of the RTP projects and programs.
- Anticipate and address system deficiencies that threaten the safety of the traveling public in the implementation of the RTP.

Table 4.2: Distribution of Financially Constrained System Projects in 2000 RTP and 2004 RTP Federal Update

	Based on cost		Based on count	
2040 Policy Emphasis	**2000**	**2004**	**2000**	**2004**
Projects in Central City & Regional Centers	39%	60%	36%	37%
Projects in Industrial Areas and Ports	34%	17%	24%	18%
Projects in Town Centers, Main Streets & Station Communities	16%	16%	24%	29%
Projects in Other Areas	11%	7%	16%	16%
Total	100%	100%	100%	100%

	Based on cost		Based on count	
Balancing Modes of Transportation	**2000**	**2004**	**2000**	**2004**
Road & Bridge Projects	26%	34%	43%	40%
Freeway & Highway Projects	9%	13%	5%	6%
Bicycle & Pedestrian Projects	4%	7%	35%	33%
Transit Projects	55%	40%	4%	9%
Boulevard Projects	3%	4%	6%	7%
Other Projects	3%	2%	7%	5%
Total	100%	100%	100%	100%

Source: 2004 Federal Update to the Regional Transportation Plan (11/11/03)

C. Effectiveness of RTP Policies

i) Policy element measured: Optimize performance of the region's transportation systems and emphasize livability, mobility, safety and accessibility for all modes of travel.

Information Used to Assess Policies: Providing options to driving alone, especially during peak commute periods, can reduce the cost of public services, protect farm and forest land, reduce air, water and noise pollution, conserve energy and reduce emissions of greenhouse gases that contribute to global climate change. The 2040 Growth Concept promotes land use patterns and a transportation system that make it more convenient for people to walk, bicycle and use transit, and drive less to meet their daily needs.

The Non-SOV (single occupancy vehicle) Modal Targets[10] in the Regional Transportation Plan are intended to be goals for cities and counties to work toward as they implement the 2040 Growth Concept at the local level.

Table 4.3: 2040 Regional Non-SOV Modal Targets

2040 Design Type	Non-SOV Modal Target
Central City	60-70%
Regional centers Town centers Main streets Station communities Corridors	45-55%
Industrial areas Intermodal facilities Employment areas Inner neighborhoods Outer neighborhoods	40-45%

Source: Metro Planning Department (Regional Transportation Plan)

Progress toward reaching these targets serve as an important performance measure and will be used to demonstrate compliance with the State Transportation Planning Rule's objectives to "reduce reliance" on single – occupancy vehicles. As Table 4.3 shows, the most urbanized areas of the region are expected to achieve higher non-SOV mode shares than less developed areas closer to the urban growth boundary.

[10] Non-SOV modal targets shows all other person trips besides those people driving alone (e.g., bike, walk, transit, carpool, vanpool). The targets include all daily trips.

Findings

Non-SOV Modal Performance

- If present trends continue (1996-2003), the region is on track to meet 2040 modal targets in the Central City, Regional Centers, and Town Centers. [see Figure 4.1 and Appendix D1]
- 57% of work trips in the Central City in 2003 were by walking, biking, transit or shared ride, a positive trend that, if continued, will result in meeting the 2040 modal targets. [see Figure 4.1 and Appendix D1]
- 18% of work trips in Regional Centers in 2003 were by walking, biking, transit or shared ride, generally a positive trend, but a recent dip. This recent result should be watched closely and with added investment and trip reduction programs in Regional Centers, 2004 findings will likely show improvement. [see Figure 4.1 and Appendix D1]
- 22% of work trips in Town Centers in 2003 were made my walking, biking, transit or shared ride, a positive trend that, if continued, will result in meeting 2040 targets.[11] [see Figure 4.1 and Appendix D1]

Other Shifts in Travel Behavior: VMT & Transit Rides

- Progress toward the modal targets in the 2040 Centers is part of the regional shift in travel behavior. This is illustrated when comparing the change in population, transit ridership and daily vehicle miles traveled per capita. Between 1990 and 2002, ridership on buses and light rail has grown at a rate (65%) significantly higher than population (29%) and vehicle miles traveled (35%). [see Figure 4.2]
- Daily vehicle miles traveled per capita in the region has declined by 11% between 1996 and 2002, while it has increased 6% nationally. [12] [see Figure 4.2 and 4.3]
- Public transportation has been asked to carry more and more of the overall travel load. While transit use has been rising, light rail ridership has increased faster than bus ridership. Over the past eight years bus ridership has remained relatively flat (increasing 2.4%), while Light rail ridership – boosted by the opening of Westside and Airport Max -- has steadily increased (by 62%). The opening of Interstate Max in 2004 should continue this trend of increased light rail ridership. [see Figure 4.4]
- Between 1998 and 2003, the average weekday originating rides by bus and rail increased by 26 percent. During the same period average weekday originating rides by bus only increased by 4% while that of rail increased by 163%. [see Table 4.4]

See Appendix D2-D10 for more information on ridership, population, vehicle miles traveled and Texas Transportation Institute (TTI) mobility rankings.

[11] The 2040 targets include all trip types, while the survey data includes only work trips. In 2003, the Central City data represents 25,000 employees traveling to 232 employment sites. The Regional Center data represent 9,300 employees traveling to 60 employment sites. The Town Center data represents 9,500 employees traveling to 60 employment sites.

[12] Daily VMT per capita in the region steadily increased from 18.8 miles in 1990 to a highpoint of 21.7 miles in 1996. Since that peak, the per capita rate has decreased gradually to the rate of 19.5 in 2002. See appendix for Table with daily VMT data for 1990 – 2002. See appendix for comparisons of Portland VMT with other regions.

Fundamental 4 (Balanced Transportation): Continued

ii) Policy element measured: Manage the use of highways in the region to reduce congestion, improve mobility and maintain accessibility within limited financial resources.

Information that will be used to assess policies in future performance measures reports:

Traffic volume data in key freeway corridors throughout the region provides a glimpse of where traffic is growing, whether adequate access to the region's major destinations exists and where congestion "choke points" are likely to occur. Travel time data in key corridors in the region helps businesses to plan and optimize the efficiency of freight movement.

Travel time data in key corridors throughout the region also helps prioritize future transit investments. More people will choose transit if the regional transit network is a fast and frequent system that serves regional growth centers such as the central city, regional centers, industrial areas and intermodal facilities such as the Portland International Airport. An easily accessible and reliable transit system will attract new transit riders and help relieve congestion in the region. This will reduce the need for road expansion while improving mobility in the region.

The Oregon Department of Transportation (ODOT) and local transportation planning agencies regularly collect intelligent transportation systems (ITS) data using roadway sensors to conduct real-time management of transportation systems. The Portland State University Center for Transportation Studies has been processing and analyzing this data for a variety of uses. In order to determine how to best use this data for Metro's performance measures efforts in the future, the PSU Center prepared for Metro's review, a preliminary analysis of data covering two time periods (January 2001 and 2002).

The PSU team analyzed archived traffic data from segments of significant highways in the Metro Region and produced three products for Metro's review. The data includes:

- Volume of vehicles passing the 400 inductive loop detectors in the region every 20 seconds.
- Observations on Monday through Friday during peak periods from 4:30 pm to 5:30 pm, covering the periods of January 19, 2001 to January 30, 2001 and of January 21, 2002 to January 30, 2002.

The products produced for review include:

- A table of average travel times during the 4:30-5:30 PM peak period for significant highway segments.
- A color-coded map of average speeds for all Portland highways during the same peak period. See map below
- A series of charts (histograms) for each highway segment, showing the percentage of the time during the day that the segment fell below its acceptable level of service.

Findings:

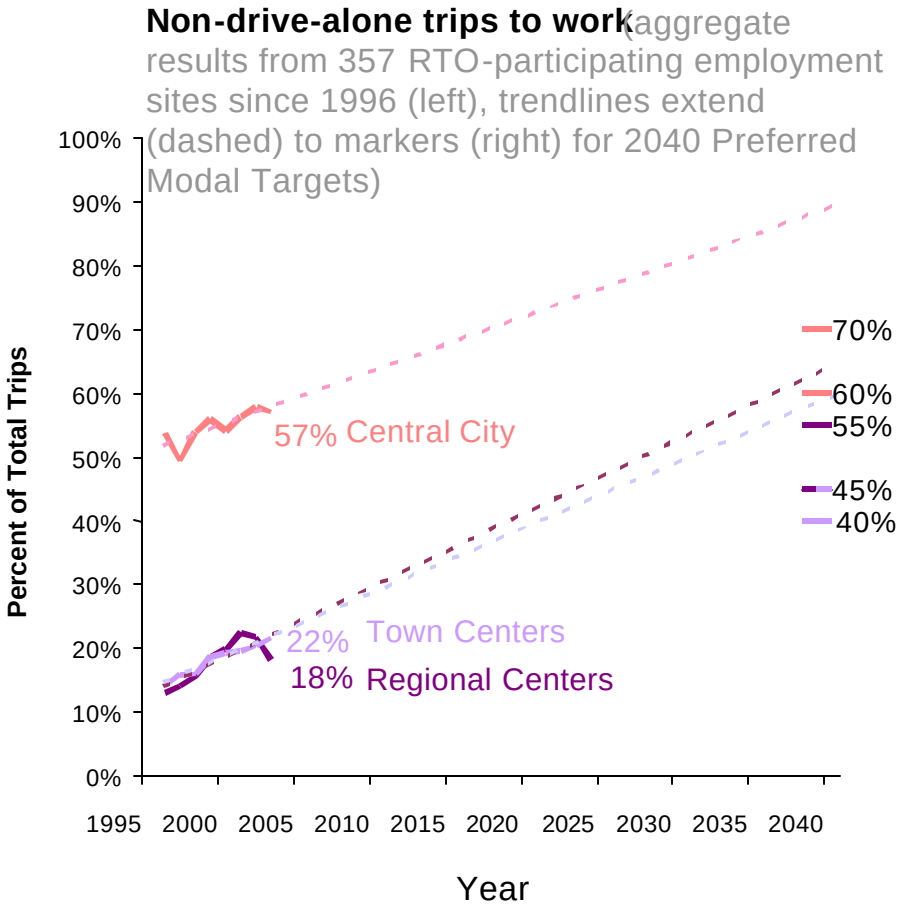
The PSU project offers an excellent opportunity to measure highway performance in the region over the long term, and to better understand variations that are unique to individual highway corridors in the region. The initial results from the 2001-02 startup phase of the project do not provide adequate samples, and thus no detailed conclusions are summarized in this report. However, data currently being collected will be analyzed in more detail for the next update to the

performance measures report, and will provide specific findings on highway performance in the region.

Policy Element Not Measured

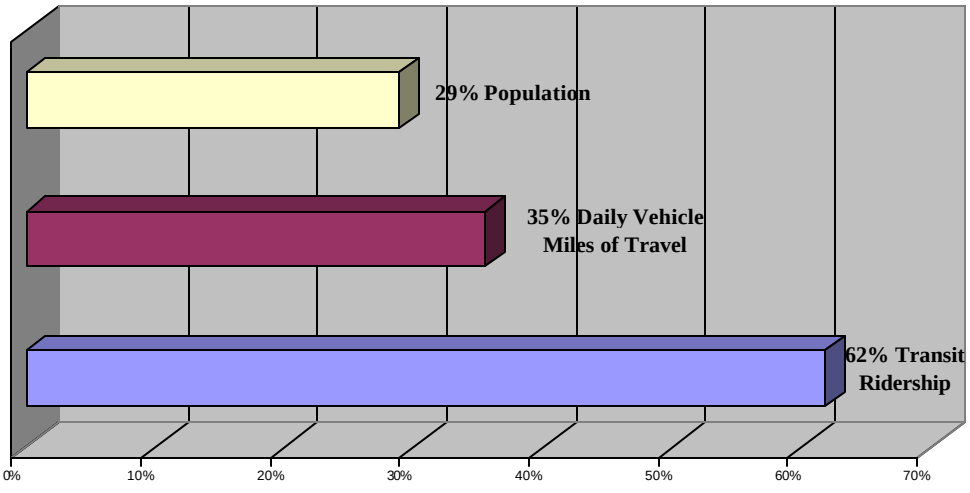
- Manage the use of highways in the region to reduce congestion, improve mobility and maintain accessibility within limited financial resources.
- Manage the efficient use of public and commercial parking in the central city, regional centers, town centers, main streets and employment centers to support the 2040 Growth Concept and related RTP policies and objectives.

Figure 4.1: Non-drive alone trips to work in the Central City, Regional and Town Centers

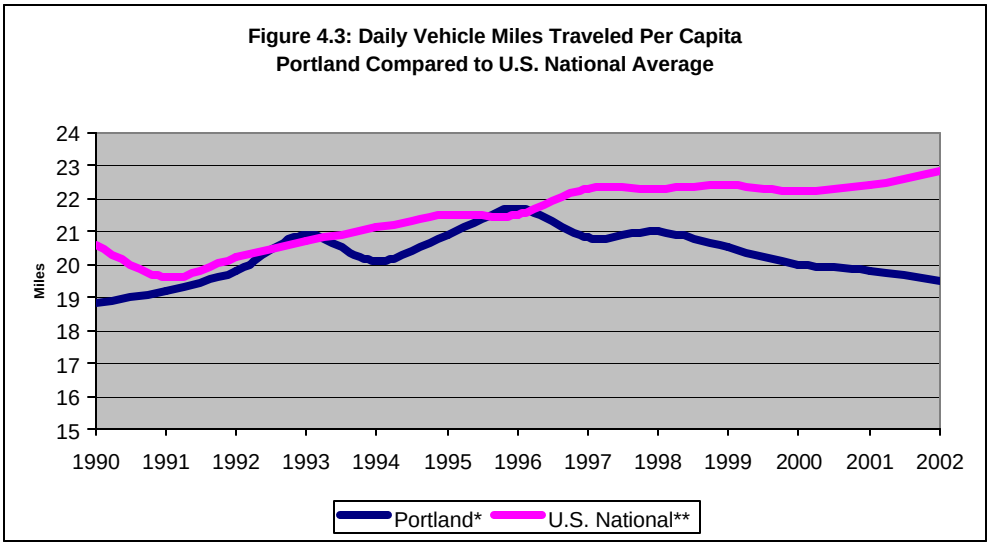


Source: TriMet

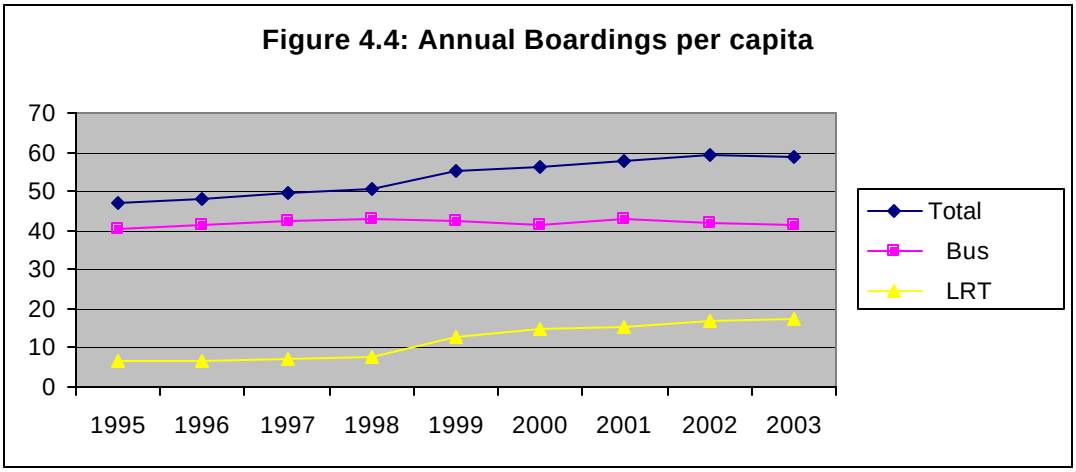
Figure 4.2: Growth in Ridership Exceeds Average Daily Vehicle Miles Traveled and Population (1990-2002)



Source: Metro Data Resource Center; TriMet; State Highway Performance Monitoring System (HPMS)



Source: State Highway Performance Monitoring System (HPMS); Federal Highway Administration, USDOT



Source: TriMet

Table 4.4: Originating Rides by Bus and Rail

Transit Mode	Year			Percent Change	
	1998	2002	2003	1998-2003	2002-2003
Bus Total	152,400	160,100	157,900	4%	-1%
MAX					
Eastside MAX	25,000	37,900	39,700	59%	5%
Westside MAX	N/A	24,300	23,500	N/A	-3%
Airport MAX	N/A	2,300	2,600	N/A	13%
Total	25,000	64,500	65,800	163%	2%
Bus and MAX Total	177,400	224,500	223,700	26%	-0.30%

Source: TriMet

Fundamental 4 (Balanced Transportation): Continued

D. Protecting the environment policies.

Information Used to Assess Policies:

Air Quality
Emissions from cars and trucks contribute to several problems, such as poor health, global warming, and reduced quality of life. Vehicle exhausts contains carbon monoxide and small traces of volatile organic compounds. These compounds produce ground level ozone, a main component of smog, which harms public health and diminishes visibility.

The federal Clean Air Act Amendments of 1990 established air quality standards for key air pollutants including carbon monoxide, ozone and particulate matter. Areas that do not meet the standards are designated in varying degrees of non-attainment from "marginal" to "extreme."

Water quality
Transportation projects often impact watersheds. Streets and driveways combine to form the largest source of impervious surfaces[13] in our urban landscape. A particular challenge is how to address conflicts between planned transportation improvements and identified stream corridors, and how transportation improvements can be constructed in concert with stream corridor protection plans. The regional Green Streets program seeks to mitigate this effect on streams over time through a combination of retrofits to existing streets, and design guidelines for new streets that allow stormwater to infiltrate directly into the ground. As local jurisdictions adopt new guidelines, Metro will begin to monitor the results of these projects. For more information on Metro policies related to protecting sensitive environmental resources, please see Fundamental 3.

Findings:
The 2004 Interim Federal Update to the RTP has been demonstrated to conform with the Federal Clean Air Act[14].

- Cars and trucks cause one-third of the total Ozone pollution in the region. [see Figure 4.7]
- The region has met the Ozone standard since 1997, but has seen an increase during the past year. [see Figure 4.8]
- Cars and trucks cause nearly half of carbon monoxide pollution in the region. [see Figure 4.9]
- The region has met the carbon monoxide standard since 1991 and has seen a downward trend, despite slight upturns in certain years, including the most recently measured year of 2001 to 2002. [see Figure 4.10]

[13] Impervious surfaces are hard surfaces that do not allow water to filter into the ground, and instead, rely on piped stormwater drainage systems that convey runoff directly to streams. The majority of total impervious surfaces are from roads, sidewalks, parking lots and driveways.

[14] In 1991, The Portland-Vancouver Interstate Air Quality Maintenance Area (AQMA) received a marginal non-attainment designation for ozone and moderate non-attainment designation for carbon monoxide. However, by the end of 1991, the area began to meet federal ozone and carbon monoxide standards on a consistent basis. As a result, the region began to work on 10-year maintenance plans and attainment designation requests for both pollutants. These plans were finalized and approved in 1996 and submitted to the US EPA as revision to the Oregon State Implementation Plan (SIP). In 1997 the Portland-Vancouver AQMA moved to attainment status.

Figure 4.7: Ozone Sources

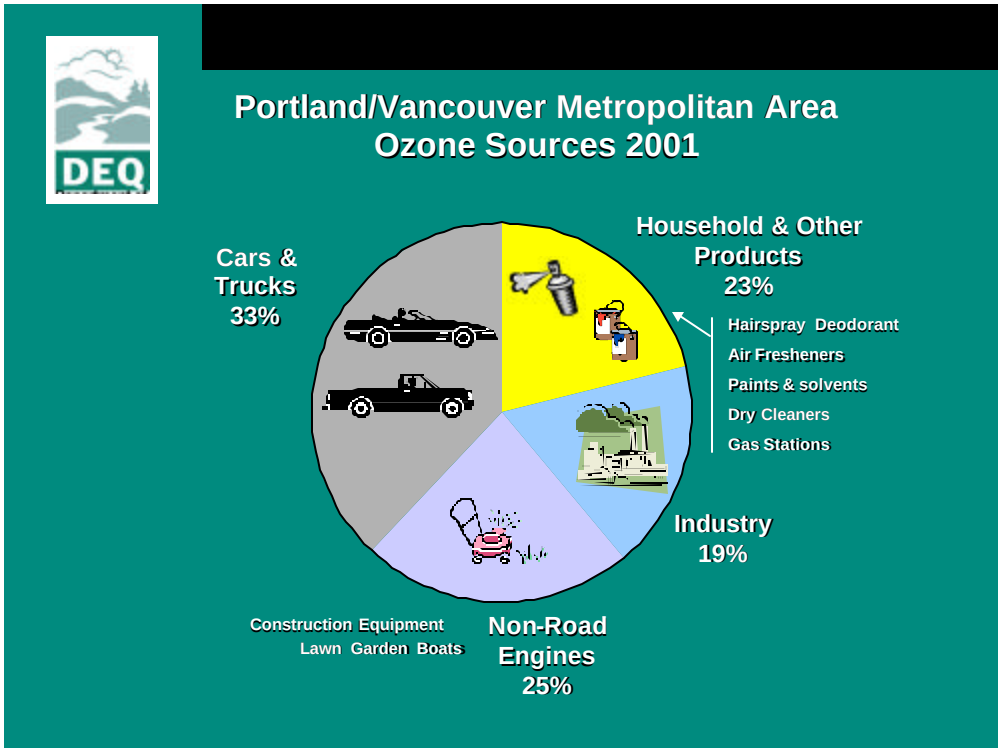


Figure 4.8: Ozone Air Pollution

Ozone Air Pollution

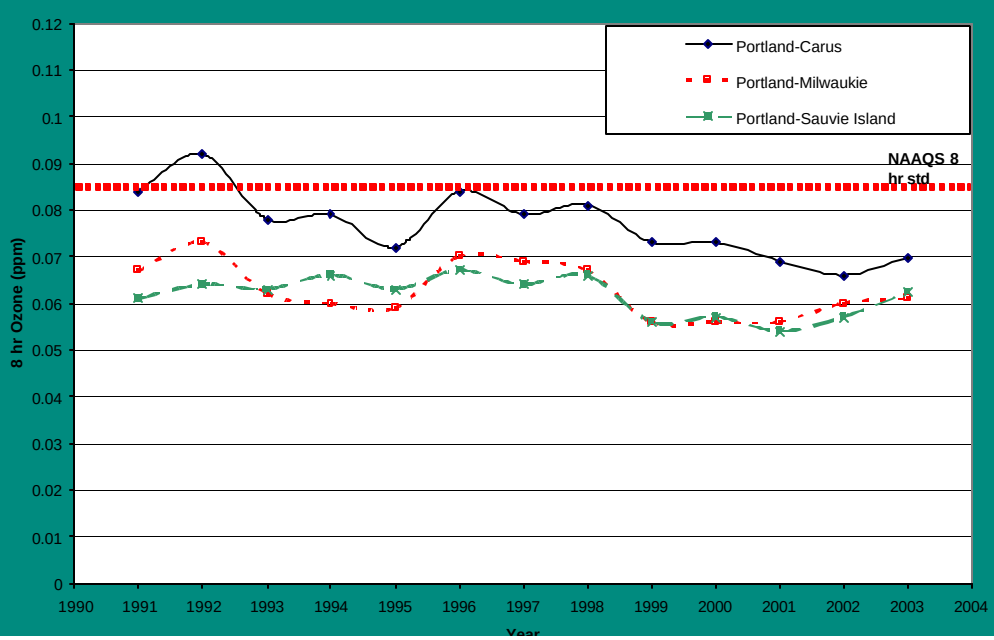


Figure 4.9: Carbon Monoxide Sources

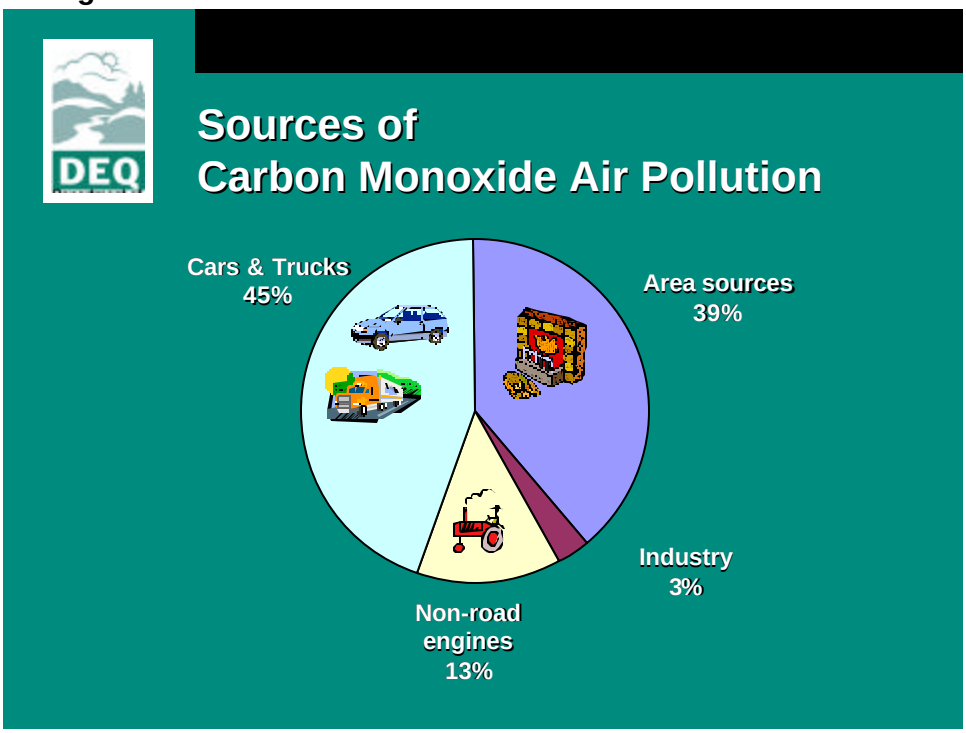
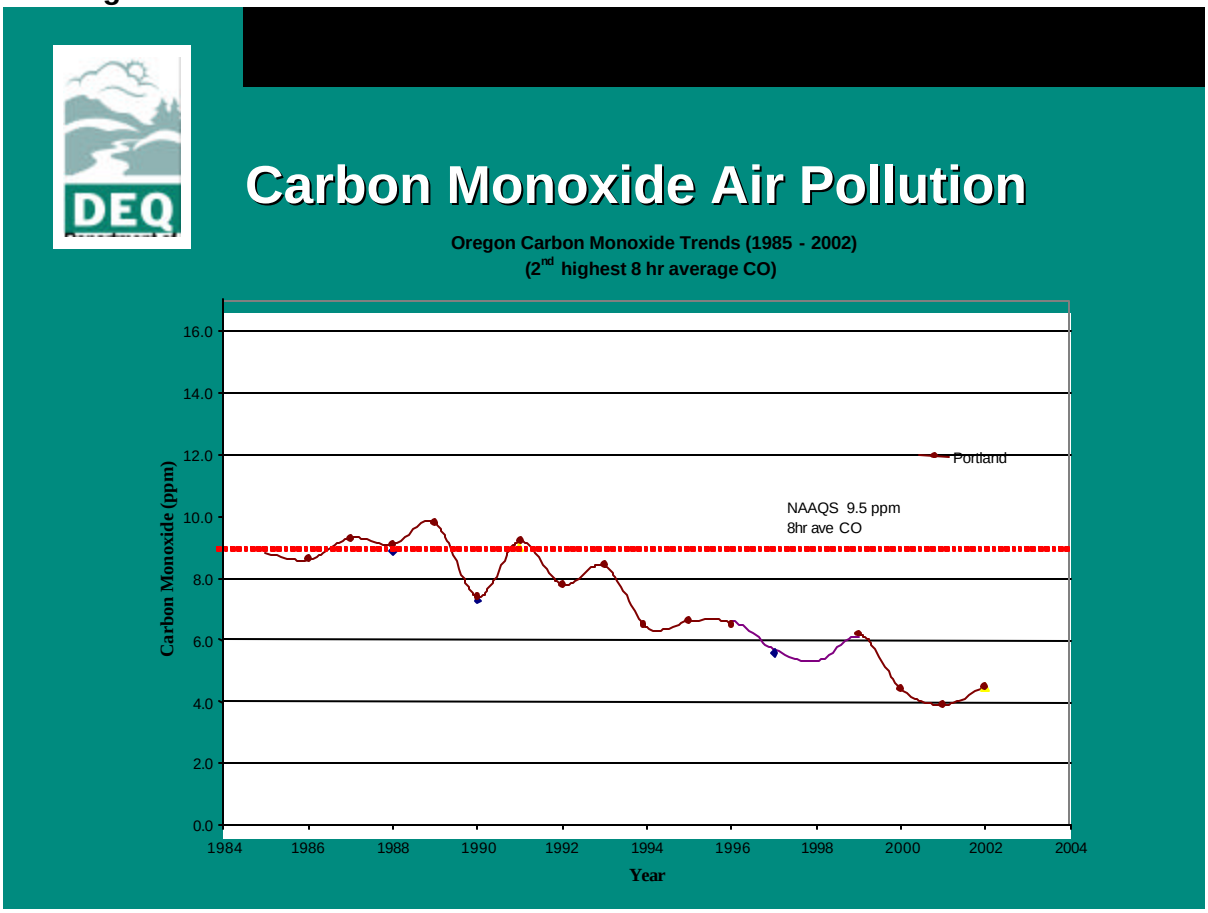


Figure 4.10: Carbon Monoxide Air Pollution



Fundamental 4 (Balanced Transportation): Continued

E. Public process policies.

Information Used to Assess Policies: The Metro Council adopted a revised transportation planning public involvement policy in June 2004. This policy is intended to support and encourage broad-based public participation in the development and review of Metro's transportation plans, programs and projects. The policy was originally developed in July 1995 in response to citizen interest, changes in state and federal transportation planning requirements, and in an effort to reach traditionally under-served portions of the population. The policy details procedures and guidelines that ensure that public involvement efforts are proactive and provide diverse opportunities for participation.

The policy is intended to focus on Metro's major transportation actions and decisions. Planning efforts covered by these procedures include the updates to the Regional Transportation Plan, the Metropolitan Transportation Improvement program, and various corridor studies such as Powell-Foster and Highway 217.

Workshops, public meetings, hearings, open houses, mailings, flyers, surveys, an active web site and paid advertising are some of the methods used to seek input from citizens. Metro coordinates input from the public and our local, regional, state and federal planning partners through several committees, including the Transportation Policy Advisory Committee and the Joint Policy Advisory Committee on Transportation.

Findings:

- While there are no standard measurement tools used to evaluate the effectiveness of Metro's public outreach efforts in transportation and land use planning, Metro's Office of Citizen Involvement has recently drafted a "Committee Survey" that will be used to gather vital feedback from citizen advisory committees on public outreach approaches and activities conducted for each project. The results of these standardized surveys will help to provide benchmarks for measuring the success of Metro's public outreach efforts and will be used to also monitor Metro's progress at meeting Federal Title VI and Environmental Justice goals. Currently, Metro works to create opportunities for public involvement in all policy and program areas.

- Between 1995 and 2004, Metro has focused public involvement efforts on transportation projects (217 corridor, freight project Prioritization, MTIP funding, Powell Foster project, South/North corridor planning, North corridor, RTP systems development) , long range planning projects (Goal 5 fish and wildlife habitat protection, regional affordable housing), and Community Planning (industrial lands). Please see Table 4.5 for description of these efforts. Additionally, education efforts are referenced in Fundamental 3 and Fundamental 8.

Protection of the environment policies analyzed in other sections

- Protect the region's water quality... *[See Fundamental 3 for data and detail analysis]*
- Design transportation systems that promote efficient uses of energy. *[See Section 2.A of this Fundamental 4 chapter for data and detail analysis]*

Additional Data in Appendix D

- 2040 Modal Targets
- Population increases, boarding rides and VMT
- Transit rides per capita
- Service hours per capita
- Originating rides by bus and rail
- Rides per service hour
- 2040 centers annual transit use
- Daily VMT per person (Portland vs. national average of metropolitan areas)
- Annual change of VMT per person relative to other cities in the country
- Texas Transportation Institute urban mobility rankings (Portland vs. Vancouver, WA)
- Public involvement records

All Indicators Used for Fundamental 4 Analysis

- **Indicator 4.1: Funding the RTP Priority System (REQ: State #9)**
  Measures regional success securing funds to build and maintain a regional transportation system adequate to support the Region 2040 Concept Plan.
- **Indicator 4.2: Using transportation investments to leverage land use goals - (REQ: State #9)**
  Measures implementation – especially by local governments -- of regional transportation system policies designed to encourage development of 2040 mixed use centers.
- **Indicator 4.3: System performance -** (**REQ: State #9)**
  Measures effectiveness of region-wide auto, freight and transit systems.
- **Indicator 4.4: Preservation of the existing multi-modal transportation system.**
- **Accessibility in mixed use centers (REQ: State #i)**
  Measures regional efforts to maintain auto and freight access to 2040 Centers by intensifying mixed residential/commercial/employment uses and providing multi-modal access from areas outside the centers.
- **Indicator 3.6: Air quality - (REQ: State #9)**
  Measures the region's ability to maintain air quality while accommodating increases in population and employment.

Table 4.5: Public Involvement Records: Regional Land Use and Transportation Planning Programs (1995 – 2004)

Dept	Project	Year	Period	Item
Transportation	217 Corridor	2004	Feb-Mar	Public Survey Findings
Long-range Planning	Goal 5- Fish and Wildlife Habitat Protection	2004	May	Public Comment Report, Addendum
Long-range Planning	Goal 5 -Fish and Wildlife Habitat Protection	2004	Mar-May	Public Comment Report
Long-range Planning	Goal 5 -Fish and Wildlife Habitat Protection	2004	Oct 03-Mar 04	Public Comment Report
Community Planning	Industrial Lands	2004	June	Industrial Lands Public Comment Report, Addendum B
Community Planning	Industrial Lands	2004	Mar-Jun	Industrial Lands Public Comment Report, Addendum A
Community Planning	Industrial Lands	2004	Jan-Mar	Industrial Lands Public Comment Report
Transportation	Freight Project Prioritization	2004	Dec 03-Jan 04	Public Comments on Freight Project Prioritization
Transportation	MTIP 2002-2005	2001	July -Sept	Public Comments: Final MTIP Funding Recommendation
Transportation	MTIP 2002-2005	2001	June-July	Public Comments: Project Ranking
Transportation	MTIP 2004-2007	2003	Apr-May	Public Comment Summary & Report
Transportation	MTIP 2004-2007	2003	May-June	Public Comment Summary & Report, Supplemental
Long-range Planning	Goal 5- Fish and Wildlife Habitat Protection	2003	Oct	Public Comment Report
Transportation	Powell/Foster	2003	Sept	Public Involvment Summary
Transportation	South Corridor SDEIS: Downtown Amendment	2003	Oct-Nov	Public Comment Summary
Transportation	South Corridor SDEIS	2003	Dec 02-Feb 03	Public Comment Report
Long-range Planning	Regional Affordable Housing	2000	June	Public Comments
Transportation	RTP Systems Development, Part III	2000	May-June	Public Comment Report
Transportation	South Corridor Transportation Alternatives	2000	Mar-May	Public Comment Report, for scoping
Transportation	South Corridor Transportation Alternatives	2000	Oct-Nov	Public Comment Report
Transportation	North Corridor	1999	June	Public Comment Report: Interstate Max Alignment
Transportation	South/North Corridor SDEIS	1999	April-June	Public Comment Report
Transportation	JPACT	1999	Nov 98 - Feb 99	JPACT Public Comments including "Listening Posts"
Transportation	South/North Corridor	1998	Nov 98 - Dec 98	Public Comments After 1998 Bond Measure
Transportation	South Corridor	1998	Mar-Apr	Public Comments: City of Milwaukie LPA
Transportation	South/North Corridor	1997	Mar-Apr	Public Comments on South/North Corridor Cost-cutting proposals
Transportation	South North Corridor	1995	Mar-June	Public Comment Report on Downtown Segment

Fundamental 5

Maintain separation between the Metro UGB and neighboring cities by working actively with these cities and their respective counties.

1. The Challenge:

Although Metro's growth management policies are directed primarily at land within the Metro region and the UGB, the policies have a definite effect on neighboring cities such as Canby, Sandy, Estacada, Newberg and North Plains and the rural land that is located outside the UGB. As stated earlier in Fundamental 1, during the development of the 2040 Growth Concept, Metro faced critical challenges, including how to accommodate an expected 50 percent increase in population and a 70 percent increase in jobs by 2020 while preserving the livability of the Metro region and neighboring cities.

The unplanned development of rural land outside of Metro could have serious transportation and utility cost impacts in addition to creating job-housing imbalances in neighboring cities. Maintaining a separation between the Metro UGB and the boundaries of neighboring cities would address some of these potential impacts and help to preserve a separate physical identity for the neighboring cities, rural areas, and Metro. The separation would also minimize impacts on agricultural and natural resource areas immediately outside the UGB.

2. Summary of Adopted Policies:

Metro's approach to addressing the challenges are organized by the policy themes listed below. They represent how Metro is approaching the preservation of a separation between Metro and neighboring cities through cooperation with these cities, and through the management of the Metro UGB. For more details about Metro policies, see the Regional Framework Plan and Urban Growth Management Functional Plan (see also www.metro-region.org)

A. Cooperation with Neighboring cities:

Metro will coordinate growth management activities related to the overall population and employment growth in the region with cities outside the UGB. Cooperative agreements should be pursued to provide for maintaining a separation of communities, to minimize the generation of new automobile trips, and to balance of sufficient number of jobs at wages, consistent with housing prices inside and outside the UGB, and to establish "green corridors" that are transportation facilities that serve as a link through rural reserves which limit access to farms and forests of the rural reserve. (Regional Framework Plan and Urban Growth Management Functional Plan)

B. Protection of agricultural and farm resources:

Metro will plan for the long-term growth of the region and actively protect the long-term interests of the most productive agricultural and forest resource lands outside the UGB. Metro will account for these lands in regional economic and development plans. (Regional Framework Plan and Urban Growth Management Functional Plan)

3. Measuring policies

A. Cooperation with Neighboring cities policies: and
B. Protection of agricultural and Farm resources policies.

Information Used to Assess Policies:

Monitoring the expansion of the Metro UGB and the UGB of neighboring cities is one of the key indicators of the efforts made to maintain the separation between the Metro UGB and neighboring cities. Data on population, employment and housing growth in neighboring cities is another key indicator of the amount of growth pressure being experienced by these communities. This report includes data on Metro UGB expansions, neighboring city UGB expansions, and data on population growth in neighboring cities. Metro intends to collect employment and housing data for the neighboring cities for future performance measures reports.

Findings

- The population of the cities of City of Banks increased by 128% (563 to 1,286) and the population of the City of North Plains increased by 65% (972 to 1,605) from 1990 to 2000. Neither Sandy (30% increase in population) nor Canby (42% increase in population) have encroached in the IGA areas designated in the IGA (see Table 5.1] In future performance measures reports, efforts will be made to include data on employment trends and more detailed information on UGB expansions in neighboring cities.
- Although Metro's population increased by 26% during the 1990-2002, the UGB expansion was approximately 9% of the total UGB area. (see Table 5.1]
- Metro's 2003 Performance Measures report noted that 86 acres of land within the Sandy IGA area had been brought within the UGB in Metro's 2002 UGB expansion. The City of Gresham testified that this area was integral and critical for secondary access and local circulation from US 26 to Springwater. (see the map "Canby and Sandy IGA Areas")
- Metro's 2003 performance measures report found that no new rural commercial, rural industrial, non-residential non-agricultural building permits had been granted within 200 feet of both edges of the right-of-way of adopted green corridors (Highway 99E and US 26) and that the IGA was being implemented. Due to a lack of time and resources, this measure was not updated for this 2004 performance measures update.

Related policies addressed in other sections

- Protection of agricultural and farm resources (see Fundamentals 1 and 2)

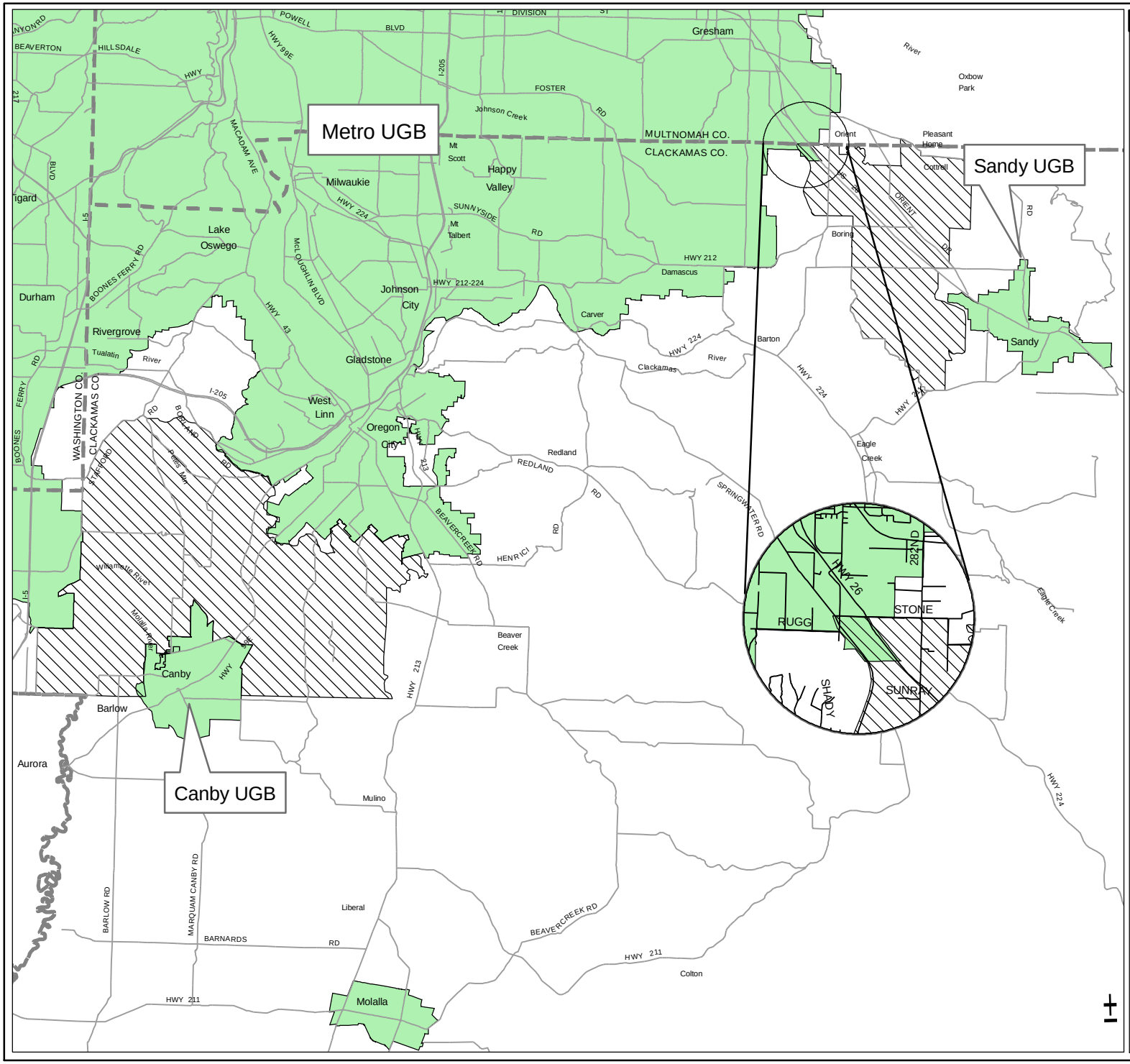
All Indicators Used for Fundamental 5 Analysis

- **Indicator 5.1: Growth accommodation inside the UGB versus growth in neighboring cities.**
- **Indicator 5.2: Effectiveness of intergovernmental agreements to preserve separation of communities.**

Table 5.1: Population Change in Neighboring Cities and Metro Region

City	Population 1990	Population 2000	% Change
Banks (Washington County)	563	1,286	**128%**
Canby (Clackamas County)	8,990	12,790	**42%**
Estacada (Clackamas County)	2,016	2,371	**18%**
Molalla (Clackamas County)	3,637	5,647	**55%**
Newberg (Yamhill County)	13,086	18,064	**38%**
North Plains (Washington County)	972	1,605	**65%**
Sandy (Clackamas County)	4,152	5,385	**30%**
St. Helen (Columbia County)	7,535	10,019	**33%**
Woodburn (Marion County)	13,404	20,100	**50%**
Metro Region	1,051,692	1,281470	**26%**

Source: US Census, Portland State University Population Research Center



R L I S

REGIONAL LAND INFORMATION SYSTEM

Canby and Sandy IGA Areas

And Area of Overlap with Metro UGB

IGA Areas

Metro and neighboring cities' UGBs *

* Includes Metro 2004 expansion

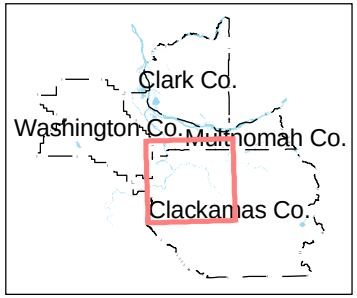
Approximately 85 acres of the Sandy IGA overlaps the Metro UGB.

Figure 5.1

1 inch equals 3.38 miles

0 1 2

Miles



Location Map

METRO

METRO DATA RESOURCE CENTER
600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232-2736
TEL (503) 797-1742 | FAX (503) 797-1909
drc@metro.dst.or.us | www.metro-region.org

Fundamental 6

Enable communities inside the Metro UGB to enhance their physical sense of place by using among other tools, greenways, natural areas, and built environment elements[15].

1. The Challenge

Most cities in the Metro region possess a set of unique built features and or natural characteristics that contribute to each community's identity and physical sense of place. This sense of identity and uniqueness is an important but often neglected factor that contributes to the livability of each city and county area and to the collective livability of the Metro region.

The challenge that the jurisdictions in the Metro region face is to identify the features that make each community unique, and then to work at the local level and with Metro to identify ways that these existing physical characteristics could be enhanced. Every jurisdiction in the Metro region should be encouraged to pursue diversity and excellence in design, and a sense of privacy, community, and personal safety in an urban setting.

2. Summary of Adopted Policies:

Metro's approach to addressing the challenge is the policy below. For more details on this policy, see the Regional Framework Plan and Urban Growth Management Functional Plan (see www.metro-region.org)

Physical sense of place identification and enhancement:
Metro will identify the historic, cultural, topographic and biological features of the regional landscape that contribute significantly to the region's identity and "sense of place", and enhance interconnected but distinct communities in the Metro region. (Regional Framework Plan)

[15] MPAC recommended changes – Fundamental 6: Enable communities inside the Metro UGB to ~~preserve~~ enhance their physical sense of place by using among other tools, greenways, natural areas, and built environment elements

3. Measuring policies

A. Physical sense of place identification and enhancement policies.

Information Used to Assess Policies: Metro is to working with local governments in the region to identify and enhance important features that define each community's physical sense of place. The first step in this effort is for local governments to identify attributes contributing to their physical sense of place. The second step in this effort is for Metro to identify policies or other efforts that could enhance these features.

To implement the first step, Metro prepared and distributed to local governments a survey in January 2004 that asked respondents to identify any physical attributes falling within the following 13 categories[16]:

i) Architecture
ii) Historic sites
iii) Downtown area
iv) Large institutions and facilities
v) Major commercial/industrial complexes
vi) Mainstreets
vii) Unique neighborhoods/street design
viii) Natural Attributes
ix) Green/openspaces
x) Views
xi) Shopping centers
xii) Seasonal markets
xiii) Arts/cultural festival facilities

Respondents were also asked to identify any existing Metro policies that are enhancing, or could possibly enhance these features. The following is a summary of the results of the survey. The complete results of the survey are available in Appendix E1. Future performance measures reports will implement the second step of this effort by evaluating the impact of regional policies on the physical sense of place features within the jurisdictions in the Metro region.

Findings

- Nine[17] of the twenty-four cities and counties in the Metro region responded to the January 2004 performance measures survey regarding physical sense of place identification survey (Beaverton, Durham, Gladstone, Gresham, Milwaukie, Oregon City, Portland, Tigard, and Troutdale)
- Three of the responding jurisdictions (Beaverton, Gresham, Portland) provided information on physical characteristics for each of the 14 categories. (Portland did not give detailed information, while the remaining jurisdictions identified some, or a large portion of the characteristics that appear on the survey.)
- Respondents highlighted several Metro policies that are currently enhancing their physical sense of place:
  - Title 3 water quality resource protections.
  - Metro trail projects.
  - Metro's greenspace acquisitions.
  - Transportation design efforts such as "Creating Livable Streets".
  - The "Greenstreet Manual"

[16] Metro staff worked with members of the Metro Technical Advisory Committee to identify the 13 features.
[17] Metro will continue to work with local jurisdictions to create the inventory of the region's defining physical characteristics.

    - Centers Demonstration project.
- Respondents also suggested that Metro could enhance physical sense of place in the following ways:
    - Financial incentives and support (loans, grants, matching grants) for design improvements and for development of downtown areas.
    - Expansion of green spaces program for select parks and green spaces).

Additional information in Appendix E

- Table of Attributes Contributing to a Physical Sense of Place

All Indicators Used for Fundamental 6 Analysis

- **Indicator 6.1: Built characteristics of the community**
  Measures the unique built attributes of a community that help to define community identity
- **Indicator 6.2: Design/layout of the community**
  Measures unique design and layout characteristics that help define a community's sense of place
- **Indicator 6.3: Natural characteristics of the community**
  Measures the unique natural attributes that contribute to a community's sense of place
- **Indicator 6.4: Retail and service opportunities in the community**
  Measures unique shopping and service opportunities that may help to define a community's character

Fundamental 7

Enable communities to provide diverse housing options for all residents by providing a mix of housing types as well as affordable homes in every jurisdiction[18].

1. The Challenge

The 2040 Growth Concept recognizes that the region's long–term livability and quality of life are linked directly to maintaining a diverse and affordable housing supply as growth occurs. In 2000, a Regional Affordable Housing Technical Advisory Committee (HTAC) report to the Metro Council found that the rising cost of housing during the 1990s resulted in many low income and moderate income households being "priced out" of neighborhoods throughout the region. The HTAC report stated further that a lack of affordable housing and a lack of housing options in the region impacts household stability (providing children, the elderly and people with disabilities a secure home), the cost of doing business (impact of diversity and affordability of housing on employee turn over rate and productivity), and the strength of the tax base of local jurisdictions (avoiding the concentration of poverty through the provision of low income housing in some areas).

2. Summary of Adopted Policies:

Metro's approach of addressing these challenges are organized by the policy themes listed below. For more details about Metro policies, see the Regional Framework Plan and Urban Growth Management Functional Plan (see www.metro-region.org)

A. Monitoring and coordination:
Metro will monitor regional and subregional indicators of economic vitality, such as the balance of jobs, job compensation and housing availability. If Metro finds that existing efforts are inadequate, it shall facilitate collaborative regional approaches that better support economic vitality for all parts of the region.

B. Voluntary affordable housing production goals and land use strategies:
The housing needs of the urban population should be met by taking a regional "fair-share" approach. Metro's voluntary affordable housing production goals in Title 7 of the Functional Plan should be considered for adoption by local jurisdictions in the region. Local jurisdictions in the region should also consider adopting land use and non-land use affordable housing tools and strategies in Title 7 of the Functional Plan. Local governments in the region will report progress towards increasing the supply of affordable housing.

[18] MPAC recommended changes – Fundamental 7: ~~Ensure availability of~~ Enable communities to provide diverse housing options for all residents by providing a mix of housing types as well as affordable homes in every jurisdiction.

3. Measuring policies

A. Monitoring and coordination policies: and
B. Voluntary affordable housing production goals and land use strategies policies.

Information Used to Assess Policies: The distribution of household income and the diversity and distribution of affordable housing throughout the region are important factors in assessing whether the region's housing supply is meeting housing demand. This report includes data that address this question, as well as data on the vacancy rate, that State law requires Metro to include. The efforts of local governments to comply with the voluntary affordable housing production goals and the land use and non-land use tools and strategies in Title 7 of the Functional Plan are included in Appendix F1.

Findings

Affordable Housing:

- About 47% (104,014) of the 225,235 total rental units in 2000 were affordable to households earning 50% or less of the Regional Household Median Income (RHMI) of $48,870. (see Table 7.1]
- The largest share (98,219 or 44%) of affordable rental units is affordable to households in the 51-80% of the RHMI. (see Table 7.1]
- Almost half (105,753 or 47%) of the affordable rental units are located in the City of Portland, while the second largest portion (9% or 20,511 units) are located in the Washington County unincorporated area inside in the Metro region. (see Table 7.2]
- There has been a steady increase in the share of single family dwelling built on lot sizes under 5,000 square feet and the decrease in the share of single family dwelling built on lot sizes above 7,500 square feet. Smaller lot sizes contribute to a diversity of housing options. (see Figure 7.1]

Household Income Groups

- Roughly 23% (118,003) of the 515,425 households in the region earn less than 50% of the RHMI in 2000. Approximately 21% (106,633) of the households earn between 80% and 120% of the RHMI while 38% (195,517) of households earn above 120%. (see Table 7.3)

Proportion of Single Family and Multi-family Dwelling Units:

- A total of 199,240 residential units were permitted from 1990 to 2002. About 67% (133,717) of these permits were for single-family dwellings and 33% were in multi-family dwellings (65,523). (see Figure 7.2 and Table 7.4)
- Every year from 1990 to 2002, more single-family units were permitted in the Portland PMSA than multi-family units. The ratio of single-family units to multi-family units was nearly balanced in 1990 an in 1996/1997. The disparity between single-family units an multi-family units was its most severe in 1992 and 1993. (see Figure 7.2 and Table 7.4)
- The ratio of new single family units to multi-family units permitted in the Clackamas and Washington Counties was 67% in 1990 to 33% in 2002, while the ratio in Multnomah County for the same years was evenly split. Between 1996 and 1999, more multi-family permits than single family permits were issued in Multnomah County. (see Table 7.4 and Table 7.4]

Vacancy Rate:

- The multi-family vacancy rate reached a high of 7% in 1999, fell to 4.3% in 2000 and increased to 8.3% in 2003. (see Figure 7.3) Note: Lower interest rates, competition from new construction, changes in demographics, and high unemployment are all factors that can contribute to higher multi family vacancy rates.

Voluntary affordable housing production goals & land use strategies

- See Appendix F1 for information on local government compliance with the Functional Plan, Title 7.

Table 7.1: Proportion of Housing in the Region that is Affordable (by Income Bin) - 2000

Income Bin	Number of Units	Percent of Total Rental Units in the Region
Less than 30% of RHMI	17,107	8%
31% - 50% of RHMI	86,907	39%
51% - 80% of RHMI	98,219	44%
81%-120% of RHMI	14,032	6%
Other Rental Units	8,970	3%
Total Rental Units in the Region	**225,235**	**100%**

Source: 2000 US Census as compiled by Metro DRC
The methodology for analyzing the 2000 Census data on affordable housing units (rental units and owner occupied housing) was therefore based on HTAC's four income groups (less than 30%, 30%-50%, 51%-80%, and 81%-120% of the region's median Household Income).

Table 7.2

Rental Units Affordable to Households in Specified Income Groups, 2000 By Jurisidiction As a Percentage of Total Rental Units in the Jurisdiction

	Percentage of Regional Median Household Income in 1999								
	<= 30% (Up to $14,654)		31% - 50% ($14,655 - $24,424)		51% - 80% ($24,425 - $39,078)		80% - 120% ($39,079 - $58,617)		Total Rental Units
Inside Metro	**17,107**	**8%**	86,907	**39%**	**98,219**	**44%**	**14,032**	**6%**	**225,239**
Beaverton	553	3%	6,000	35%	8,934	52%	1,171	7%	17,158
Cornelius	13	2%	478	56%	335	39%	0	0%	854
Durham	22	9%	68	27%	151	60%	9	4%	252
Fairview	65	5%	377	30%	775	62%	7	1%	1,253
Forest Grove	308	10%	1,514	50%	705	23%	233	8%	3,007
Gladstone	124	8%	528	34%	759	49%	49	3%	1,539
Gresham	865	5%	7,147	44%	7,401	46%	466	3%	16,257
Happy Valley	0	0%	41	58%	10	14%	20	28%	71
Hillsboro	529	4%	2,963	23%	7,954	61%	975	7%	13,088
Johnson City	4	14%	16	55%	9	31%	0	0%	29
King City	0	0%	166	40%	132	32%	41	10%	413
Lake Oswego	90	2%	649	14%	2,801	61%	713	16%	4,558
Maywood Park	2	6%	7	21%	11	32%	10	29%	34
Milwaukie	321	9%	1,627	45%	1,429	39%	161	4%	3,649
Oregon City	420	10%	1,298	31%	2,069	50%	169	4%	4,153
Portland	12,848	12%	47,911	45%	36,077	34%	5,427	5%	105,753
Rivergrove	0	0%	0	0%	5	33%	10	67%	15
Sherwood	102	11%	224	23%	473	50%	103	11%	954
Tigard	241	3%	3,107	42%	3,344	45%	548	7%	7,394
Troutdale	57	4%	307	24%	834	65%	89	7%	1,287
Tualatin	36	1%	1,056	25%	2,559	61%	266	6%	4,190
West Linn	52	3%	579	28%	895	44%	362	18%	2,042
Wilsonville	91	3%	854	28%	1,652	54%	248	8%	3,039
Wood Village	20	7%	119	42%	138	48%	8	3%	285
Clackamas County (Uninc. -Inside Metro)	185	1%	3,836	30%	6,272	49%	1,129	9%	12,758
Multnomah County (Uninc. -Inside Metro)	18	3%	143	21%	356	51%	104	15%	697
Washington County (Uninc. -Inside Metro)	142	1%	5,892	29%	12,140	59%	1,715	8%	20,511

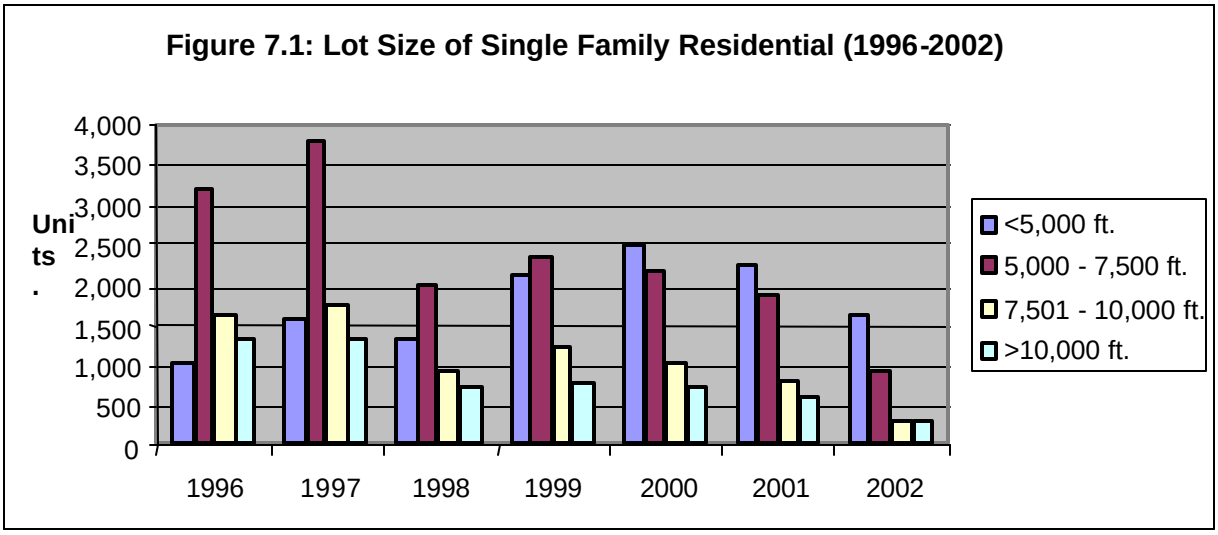
Source: US Census 2000 Summary File 3 Table H54 and H59, April, 2000 compiled by Metro DRC
Regional Median Household Income (RMHI) in 1999 of $48,870 calculated using Pareto interpolation, based upon 1999 median household income for block groups inside the Metro jurisdictional boundary.

Table 7.3: Households by Income Group (1999)

Jurisdiction	<= 30%	% Region Total	31% - 50%	% Region Total	51% - 80%	% Region Total	80% - 120%	% Region Total	>120%	% Region Total	Total Households	% Jurisdiction Total
	Up to $14,654		$14,655 - $24,424		$24,425 - $39,078		$39,079 - $58,617		>$58,618			
Inside Metro	60,282	12%	57,721	11%	95,272	18%	106,633	21%	195,517	**38%**	515,425	**100%**
King City	264	**19%**	317	**23%**	296	**21%**	318	**23%**	191	**14%**	1,386	**100%**
Johnson City	27	**9%**	55	**19%**	85	**30%**	66	**23%**	53	**19%**	286	**100%**
Forest Grove	1,087	**17%**	806	**13%**	1,185	**19%**	1,440	**23%**	1,792	**28%**	6,310	**100%**
Portland	35,298	**16%**	28,998	**13%**	44,622	**20%**	45,299	**20%**	69,770	**31%**	223,987	**100%**
Fairview	378	**13%**	310	**11%**	638	**22%**	626	**22%**	892	**31%**	2,844	**100%**
Milwaukie	896	**10%**	1,052	**12%**	1,866	**22%**	1,994	**23%**	2,840	**33%**	8,648	**100%**
Gresham	4,168	**12%**	4,207	**13%**	6,382	**19%**	7,316	**22%**	11,334	**34%**	33,407	**100%**
Oregon City	1,096	**12%**	998	**11%**	1,814	**19%**	2,323	**24%**	3,262	**34%**	9,493	**100%**
Cornelius	308	**11%**	346	**12%**	449	**16%**	782	**27%**	1,000	**35%**	2,885	**100%**
Gladstone	512	**12%**	492	**12%**	670	**16%**	1,016	**25%**	1,455	**35%**	4,145	**100%**
Beaverton	2,683	**9%**	3,374	**11%**	6,162	**20%**	6,225	**20%**	12,389	**40%**	30,833	**100%**
Hillsboro	2,195	**9%**	2,314	**9%**	4,216	**17%**	5,664	**23%**	10,639	**43%**	25,028	**100%**
Tigard	1,401	**8%**	1,847	**11%**	2,781	**17%**	3,359	**20%**	7,111	**43%**	16,499	**100%**
Durham	72	**14%**	78	**15%**	60	**12%**	74	**14%**	233	**45%**	517	**100%**
Wilsonville	441	**7%**	614	**10%**	1,020	**17%**	1,103	**19%**	2,749	**46%**	5,927	**100%**
Wood Village	66	**7%**	111	**11%**	241	**24%**	295	**29%**	298	**29%**	1,011	**100%**
Maywood Park	3	**1%**	17	**6%**	31	**11%**	105	**36%**	138	**47%**	294	**100%**
Troutdale	254	**5%**	391	**8%**	628	**14%**	1,163	**25%**	2,196	**47%**	4,632	**100%**
Tualatin	544	**6%**	638	**7%**	1,517	**18%**	1,814	**21%**	4,104	**48%**	8,617	**100%**
Sherwood	239	**6%**	304	**7%**	547	**13%**	918	**21%**	2,332	**54%**	4,340	**100%**
Lake Oswego	836	**6%**	921	**6%**	1,981	**13%**	2,422	**16%**	8,664	**58%**	14,824	**100%**
West Linn	364	**4%**	563	**7%**	932	**11%**	1,342	**16%**	4,953	**61%**	8,154	**100%**
Rivergrove	3	**3%**	4	**4%**	14	**13%**	18	**16%**	73	**65%**	112	**100%**
Happy Valley	17	**1%**	69	**5%**	85	**6%**	239	**16%**	1,113	**73%**	1,523	**100%**
Clackamas County*	2,836	8%	3,586	10%	6,877	**19%**	7,806	**22%**	14953	**41%**	36058	**100%**
Multnomah County*	462	7%	395	6%	825	**12%**	1,156	**17%**	3907	**58%**	6745	**100%**
Washington County*	3,834	7%	4,916	9%	9,352	**16%**	11,748	**21%**	27070	**48%**	56920	**100%**

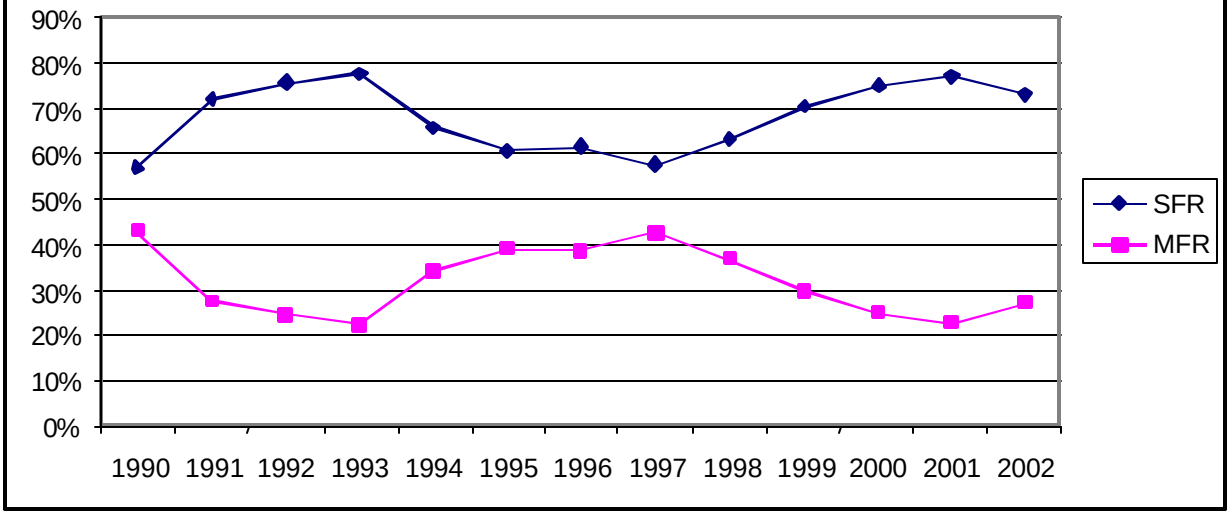
*Unincorporated County Inside Metro Boundary
Source: Census 2000, Summary File 3, Table p52. Compiled by Metro DRC

Figure 7.1: Lot Size of Single Family Residential (1996-2002)



Source: Metro Data Resource Center

Figure 7.2: Proportion of New Single Family Housing (SFR) to New Multi Family Housing Units (MFR) in the Portland PMSA



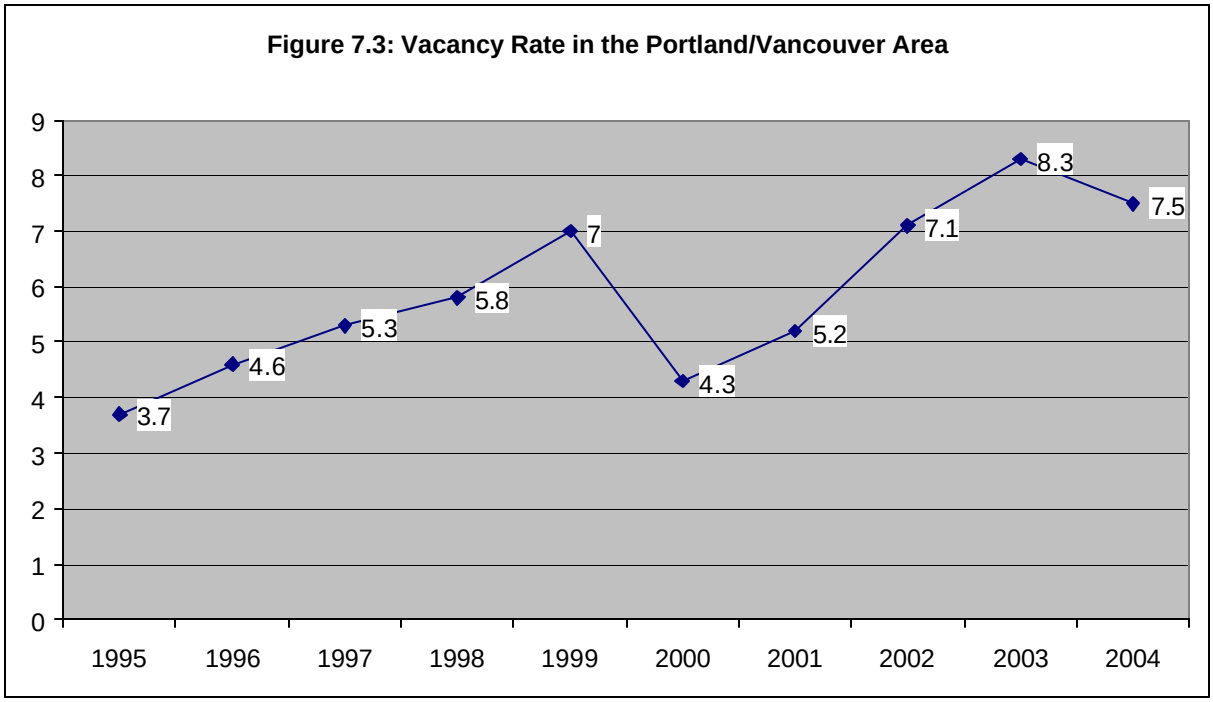
Source: Texas Real Estate Center

Table 7.4: Proportion of Single Family Housing (SFR) to Multi Family Housing (MFR) in the Portland PMSA

Year	SFR	Percent	MFR	Percent
1990	9,177	57%	6,926	43%
1991	7,534	72%	2,904	28%
1992	8,958	76%	2,890	24%
1993	10,647	77%	3,092	23%
1994	11,208	66%	5,799	34%
1995	10,951	61%	7,081	39%
1996	11,205	61%	7,055	39%
1997	11,317	57%	8,387	43%
1998	11,325	63%	6,575	37%
1999	10,595	70%	4,482	30%
2000	9,724	75%	3,238	25%
2001	10,654	77%	3,185	23%
2002	10,422	73%	3,909	27%
Total 1990-2002	**133,717**	**67%**	**65,523**	**33%**

Source: Texas Real Estate Center
http://recenter.tamu.edu/info/about.html

Figure 7.3: Vacancy Rate in the Portland/Vancouver Area



Source: Millette & Rask Commercial Realty Associates, 2004

Housing and affordable housing related policies analyzed in other sections

- Regional and subregional indicators of economic vitality (see Fundamental 1)

Policies not measured:

- Balance of jobs and housing.
- Vacancy rate (required by Functional Plan Title 9)

Additional Information in Appendix F

- Functional Plan Title 7 Compliance results by Cities and Counties.
- Supply of affordable housing to defined income groups using 2000 Census data.

All Indicators Used for Fundamental 7 Analysis

- **Indicator 7.1 – Affordable housing supply, consumption, and affordability in the UGB and mixed use centers - (REQ: Metro #2&8; State #2&7)** *Measures the supply and demand for affordable housing in the Metro region and the factors that affect a person's ability to pay for housing*

  Note: Metro's 2003 Performance Measures report addressed the State requirement to measure land price. The private data used for the 2003 report is unavailable to present an update in this report. Metro is currently seeking alternate sources of data on land price to present in subsequent performance measures efforts.

- **Indicator 7.2 – Affordability by development pattern in the UGB and mixed use centers (via computation of Smart Commute Mortgage Index or Location Efficient Mortgage Index)**
  Measures transportation savings that home buyers can realize by purchasing a home in neighborhoods served with abundant public transportation with easy access, via non-auto travel modes to jobs, shopping cultural activities and other destinations.

Fundamental 8

Create a vibrant place to live by providing sufficient and accessible parks and natural areas, improving access to community resources such as schools, community centers and libraries, and providing attractive facilities for cultural and artistic performances and supporting arts and cultural organizations.

1. The Challenge:

A growing population puts pressure on public parks and natural areas to satisfy the recreational needs of those residing within the Metro area. A regional system of parks, natural areas, trails and greenways provides citizens of the region with educational opportunities, contributes to the region's physical sense of place, promotes the mental, physical and emotional health of adults and children, plays a role in attracting businesses, and contributes to the regional economy through tourism and other recreation industries.

Community resources such as schools, community centers, libraries and cultural facilities also contribute to the region's quality of life and help to enhance the character of neighborhoods, and centers. These resources face similar pressure as the population of the region grows.

The challenge the Metro region faces is to continue to incorporate efforts to manage growth with planning for parks, natural areas, and other natural and cultural resources that contribute greatly to the livability of each community and to the livability of the region as a whole.

2. Summary of Adopted Policies:

Metro's approach of addressing the challenges is to identify and protect a cooperative regional system of parks, natural areas, trails and greenways, and provide citizens with access to natural resource-based recreation, environmental education and volunteer stewardship activities and provide habitat for wildlife primarily through the means listed below. For more details about Metro policies, see the Metropolitan Greenspaces Master Plan and Regional Framework Plan (see www.metro-region.org)

A. Acquisition:

Continuing to acquire lands identified as important parts of the Regional Greenspaces System and Regional Trails Plan including lands located in and outside of Metro's UGB. Coordinate Metro's land and trail corridor acquisition efforts with local, state and federal governments, local park providers, citizens and non-profit organizations. (Metropolitan Greenspaces Master Plan, Urban Growth Management Functional Plan)

B. Access to Recreational Opportunities:

Working together with local, state and federal governments, local park providers, business, citizens and non-profit organizations to ensure that citizens have access to parks, trails and recreation opportunities in their communities. Coordinating consistency in preparing master and management plans for components of the Regional Greenspaces System to ensure that natural resources are being protected while providing the public with recreation opportunities. (Metropolitan Greenspaces Master Plan, Urban Growth Management Functional Plan)

C. Management and Restoration:

Managing Metro-owned components of the Regional Greenspaces System for fish and wildlife habitat and natural resource dependent recreation. Seeking opportunities to improve the value of the public open spaces through habitat restoration of Metro sites and working cooperatively with private and public landowners to provide support and technical assistance as resources allow. Promoting land use design and management options that encourage ecological diversity and restoration opportunities. (Metropolitan Greenspaces Master Plan, Urban Growth Management Functional Plan)

D. Education and Stewardship:
Involving citizens in hands-on environmental education and stewardship activities that support Metro's land management goals and objectives and creates a more informed citizenry that can play an active role in decision-making about the use of and care for the region's natural resources. (Metropolitan Greenspaces Master Plan, Urban Growth Management Functional Plan)

E. Coordination:
Coordinating with local governments through their land use programs to protect natural areas and vegetation along rivers and stream corridors and improve water quality. Promoting building patterns that conserve wildlife habitat and wildlife corridors in and outside of the UGB and conserve prime agricultural and forest lands outside the UGB. (Metropolitan Greenspaces Master Plan, Urban Growth Management Functional Plan)

F. Improve Access to Community Resources:
Provide access to community resources such as the Oregon Zoo, Oregon Convention Center, Portland Center for the Performing Arts, and the Exposition Center.

3. Measuring policies

A. Acquisition policy; and
B. Access to Recreational Opportunities policies.

Information Used to Assess Policies: There is a strong foundation established in Metro's policy history for preserving the role that parks and open spaces play in contributing to the Metro region's livability. A strong connection between the built and the natural environment defines to a large degree the historical and cultural identity of the Metro region. Natural areas integrated cohesively into the urban fabric provide recreational opportunities, aesthetic benefits, natural hydrological and other benefits. These areas improve habitat for fish and wildlife, and contribute to the overall quality of life in the region by making the region an attractive place to live, visit, and locate a business. The growing popularity of outdoor recreation activities, such as walking and running, cycling, skateboarding and wildlife observation, has increased the need for quality regional trails and parks that are accessible to all residents of the region.

The Metropolitan Greenspaces Master Plan, adopted in 1992, identified a cooperative regional system of parks, natural areas, greenways and trails that would enhance recreational opportunities and preserve the connection between the growing population and its natural surroundings. Acquisition is an important tool that Metro and other governments use to expand the regional system.

Findings

Acquisition:

- Metro has acquired about 33% more acres (2,015 acres) than the goal (6,000 acres) of the $135 million bond measure for open spaces, parks and greenspaces approved by voters in 1995. See Fundamental 3, Table 3.1, for more information on this subject.

Parks and Greenspaces:

- A 2003 Metro parks inventory found that 85% (41,702 acres) of the total acres of parks and greenspaces inside and outside the UGB (48,818 acres) are open to the public. (see Table 8.1)
- About 59% of the parks and greenspaces open to the public are inside the UGB while 41% are outside. (see Table 8.1)
- Metro manages roughly 9% or 3,673 acres of parks and greenspaces inside and outside the UGB that are open to the public, while the rest 91% are managed by local governments and service districts. (see Table 8.1)
- The parks and greenspaces open to the public are in 2,610 sites. (see Table 8.1)
- Approximately 62% of the region's residents (UGB population) are within walking distance (¼-mile) of public parks, greenspaces or regional trails. (see Figure 8.1)

Trails:

- According to a 2002 inventory, about 133 miles of regional trails exist inside the UGB, and 5 miles of regional trails exist outside the UGB. [19]. (see Table 8.2)
- The same inventory showed that there are about 21 miles of water trails inside the UGB and 137 miles of water trails outside the UGB. (see Table 8.2)

[19] Additional 161 miles regional trails and 19 miles of greenway corridors inside the UGB have been proposed, while an additional 137 miles of regional trails have been proposed outside the UGB as part of the regional system.

Table 8.1: Number of Parks and Acres of Metro/Other Parks and Greenspaces Per Thousand Persons (2003)

Ownership and Location	Number of Sites	Total Acreage	Number of Sites Open to Public	Total Acreage Open to Public	Parks/Open Spaces Acreage Open to Public Per 1,000 residents	Parks/Open Spaces Acreage with and without public access per 1,000 residents
Metro (inside UGB)	127	3,471	26	2,415	1.8	2.6
Metro (outside UGB)	118	7,319	16	1,258	0.9	5.5
Total Metro	***245***	***10,789***	***42***	***3,673***	**2.8**	**8.1**
Other***** (inside UGB)	2,378	22,007	2,378	22,007	16.5	16.5
Other (outside UGB)	190	16,022	190	16,022	12.0	12.0
Total Local	***2,568***	***38,029***	**2,568**	**38,029**	**28.6**	**28.6**
Total Parks and Open Spaces	**2,813**	**48,818**	**2,610**	**41,702**	**31.4**	**36.7**

Source: Metro Data Resource Center, 2003 Parks Inventory, 2002 UGB population
***** Other includes local, state and private parks.

Figure 8.1: Park Accessibility for the Population in the Metro UGB - 2003

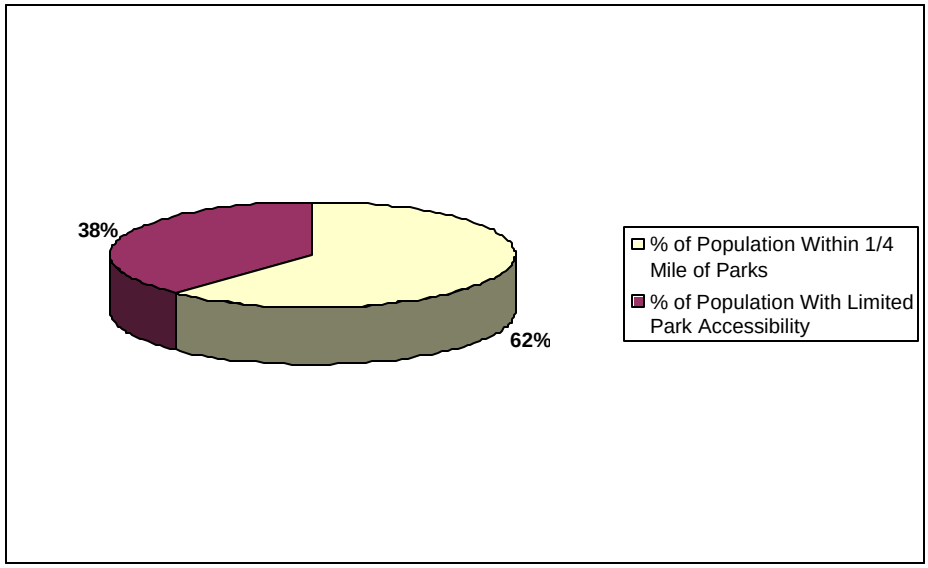


Table 8.2: Miles of Completed Regional Trails

Inside the UGB			Outside the UGB	
Type	**Miles**		**Types**	**Miles**
Existing Regional Trails	133		Existing Regional Trails	5
Water Trails (rivers)	21		Water Trails (River)	137

Note: Proposed trails and Water Trails are difficult to calculate because some trails do not have an ending point Inside the UGB.
Source: Metro Parks and Greenspaces

Parks Accessibility

Figure 8.2

2000 Census population within 1/4 mile of publicly accessible parks and openspaces

Total Population in UGB: 1,292,162
Population within 1/4 mile: 872,337

Legend

- Urban growth boundary
- 1/4 mile parks buffer

Performance measures; September, 2004; j:/bosworth/04226

D. Education and Stewardship policies; and
F. Improve Access to Community Resources policies.

Information Used to Assess Policies: Education and stewardship efforts are an important compliment to the other efforts by Metro and local governments to create a cooperative regional system of parks, natural areas, greenways and trails that enhance recreational opportunities and preserve the connection between the growing population and its natural surroundings.

These opportunities provide children and adults with the opportunity to become invested in the protection and preservation of the region's natural environment. In addition, these efforts create opportunities for citizens to learn about the environment, natural and cultural history, fish and wildlife species and their habitats, social studies and civics.

Findings:

- Through public nature walks and classes and special field trips for groups and schools, Metro's environmental education program reaches approximately 10,000 people per year, including 7,000 children. Participants learn wildlife tracking and observation skills, wetland and ancient forest ecology, plant and animal identification and other nature-related topics while experiencing the region's unique natural environment on Metro's parks and open spaces property.

- The Metropolitan Greenspaces Program, a partnership between U.S. Fish and Wildlife Service and Metro, provides funding for urban projects that emphasize environmental education, habitat enhancement and watershed health. As of 2003, the Greenspaces grant program has awarded more than 160 organizations with funding for more than 300 projects for habitat restoration and environmental education. These projects have involved thousands of children and adults in the region in education and service activities.

- In 2003, more than 3,800 volunteers donated approximately 219,000 hours (equivalent to a value of about $3,726,000 based on national average established by independent study) with various Metro programs and facilities. These volunteers care for parks and greenspaces, educate others about the region's natural resources, foster stewardship in citizen protection of the natural environment, and promote use of the region's cultural and civic facilities. (see Table 8.3)

Table 8.3: Citizen Volunteers (2003)

	Program	Number of Volunteers	Total Hours Donated	Value of Volunteer Hours
1	Care for Metro parks and greenspaces, and education of citizens	1,503	18,339	$311,946
2	Oregon Zoo	1,500	143,500	$2,440,935
3	Oregon Convention Center	101	4,892	$83,204
4	Portland center for Performing Arts	700	52,337	$890,250

Policy elements not measured related to creating a vibrant place to live and work:

- Managing Metro-owned components of the Regional Greenspaces System for fish and wildlife habitat and natural resource dependent recreation.
- Seeking opportunities to improve the value of the public open spaces through habitat restoration of Metro sites and working cooperatively with private and public landowners to provide support and technical assistance as resources allow.
- Promote land use design and management options that encourage ecological diversity and restoration opportunities.
- Coordinating with local governments through their land use programs to protect natural areas and vegetation along rivers and stream corridors and improve water quality.
- Promoting building patterns that conserve wildlife habitat and wildlife corridors in and outside of the UGB and conserve prime agricultural and forest lands outside the UGB.

Related policies analyzed in other sections

- Long term strategy to protect and manage natural resources through acquisition, citizen education and stewardship and land use environmental regulations and incentives. (Fundamental 3)

All Indicators Used for Fundamental 8 Analysis

- **Indicator 8.1: Parks and greenspaces in the Metro Region - (REQ: State #8)**
  Measures the amount of parks and greenspaces that are available to citizens of the Metro region
- **Indicator 8.2: Access to community resources**
  Measures contribution of Metro land use policies and facility management to the support of cultural amenities in the region.
- **Indicator 8.3: Opportunities and support for arts and recreation**
  Measures contribution of Metro and the region in supporting cultural and artistic activities

Revised list of performance measures (32) for Metro Performance Measures Reports based on Metro Council Resolution No. 03-3262 directing the Chief Operating Officer to prepare for Council consideration a prioritization of performance indicators (80 in the 2003 Performance Measures Reports) and recommendations, if any, for changes to the indicators.

Fundamental 1: Encourage a strong local economy by providing an orderly and efficient use of land, balancing economic growth around the region and supporting high quality education.

Indicator 1.1: Supply of land inside the UGB and mixed use centers by type. *Measures the current availability of the major categories of land in the Metro UGB*

Related State (ORS 197.301) measures[20]:
#:1:The rate of conversion of vacant land to improved land.
#4: The number of residential units added through redevelopment and infill.

Indicator 1.2: Protection of industrial lands. *Measures factors that could compromise the supply of industrial land*

Related Statewide Planning Goal 14 (Periodic Review) measures:
#3. Measure the amount of land in Regionally Significant Industrial Areas or Industrial Areas currently zoned for industrial use that is rezoned to allow commercial, residential, institutional or other non-industrial use.

Indicator 1.3: Industrial land access and movement of goods. *Measures the amount and value of goods that travel to, from and within the Metro Region and assesses the transportation system that supports this freight movement*

Indicator 1.4: Tax base capacity of jurisdictions in the Metro region. *Measures the strength of the regional economy by analyzing land development activity and land value*

Related State (ORS 197.301) measures
#2: The density and price ranges of residential development, including both single family and multifamily residential units.
#6: The sales price of vacant land. [Not Measured)

Indicator 1.5: Employment, income and business trends. *Measures the economic health of the region by looking at general economic indicators such as employment and wages*

Related State (ORS 197.301) measures
#3 The level of job creation within individual cities and the urban areas of a county inside the metropolitan service district.

Indicator 1.6: High quality education in the Metro region. *Measures the extent to which educational opportunities contribute to a strong regional economy*

[20] The list of the State measures is attached to this Exhibit B.

Fundamental 2: Encourage the efficient use of land within the UGB including buildable industrial and commercial land and focus development in 2040 mixed use centers and corridors.

Indicator 2.1a: Absorption of land inside the UGB and mixed use centers by type. *Measures the consumption/change of the major categories of land in the Metro region*

Related State (ORS 197.301) measures
#1: The rate of conversion of vacant land to improved land.
#4: The number of residential units added through redevelopment and infill.

Indicator 2.1b: Density conditions reflecting the absorption of land in the UGB and mixed use centers by type. *Measures the efficiency with which several significant land development factors are consuming sectors of available land by type*

Indicator 2.2: Growth accommodation in mixed use centers. *Measures the contribution that mixed use centers are making in helping the region accommodate new growth*

Related State (ORS 197.301) measures
#2: The density and price ranges of residential development, including both single family and multifamily residential units.
#3:The level of job creation within individual cities and the urban areas of a county inside the metropolitan service district.

Related Statewide Planning Goal 14 (Periodic Review) measures:
#2. Measure the number of Centers for which local governments have adopted strategies under new Title 6 of the Metro Urban Growth management Functional Plan.

Indicator 2.3: Accessibility in mixed use centers. *Measures regional efforts to maintain auto and freight access to 2040 Centers by intensifying mixed residential/commercial/employment uses and providing multi -modal access from areas outside the centers.*

Related State (ORS 197.301) measures
#9: Transportation measures including mobility, accessibility and air quality indicators.

Related Statewide Planning Goal 14 (Periodic Review) measures:
#1. Measure the investment in transportation improvements in centers overall and as a percentage of overall transportation investments.

Fundamental 3: Protect and restore the natural environment including fish and wildlife habitat, streams and wetlands, surface and ground water quality and quantity, and air quality.

Indicator 3.1: Condition and conversion of environmentally sensitive areas regulated (and not regulated) by Title 3 and Goal 5. *Measures the condition of the natural environment in the Metro region and the effect that regulations intended to protect these resources are having*

Related State (ORS 197.301) measures
#5: The amount of environmentally sensitive land protected and developed.

Indicator 3.2: Acquisition of environmentally sensitive areas with Metro's $135.6 million bond measure approved in 1995. *Measures the effort of Metro and local governments in acquiring natural areas*

Related State (ORS 197.301) measures
#5: The amount of environmentally sensitive land protected and developed.

Indicator 3.3: Acquisition of other environmentally sensitive areas using non-1995 bond measure funds(including acquisition of development rights, i.e., easements). *Measures the effort of various entities in acquiring natural areas with non-bond measure funds.*

Indicator 3.4: Restoration of environmentally sensitive lands. *Measures the efforts of Metro, local governments, and other organizations to restore degraded natural areas*

Indicator 3.5: Preservation of environmentally sensitive areas through non-regulatory means. *Measures the number and effectiveness of programs that create incentives for people to protect environmentally sensitive areas*

Related State (ORS 197.301) measures
#5: The amount of environmentally sensitive land protected and developed.

Indicator 3.6: Air quality. *Measures the region's ability to maintain air quality while accommodating increases in population and employment.*

Related State (ORS 197.301) measures
#9:Transportation measures including mobility, accessibility and air quality indicators.

Indicator 3.7: Waste reduction and recycling in the Metro region. *Measures the efforts that the region is making in reducing, reusing, and recycling waste*

Fundamental 4: Provide a balanced transportation system including safe, attractive facilities for bicycling, walking and transit as well as for motor vehicles and freight

Indicator 4.1: Funding the RTP Priority System. *Measures regional success securing funds to build and maintain a regional transportation system adequate to support the Region 2040 Concept Plan.*

Related State (ORS 197.301) measures
#9:Transportation measures including mobility, accessibility and air quality indicators.

Indicator 4.2: Using transportation investments to leverage land use goals. *Measures implementation, especially by local governments, of regional transportation system policies designed to encourage development of 2040 mixed use centers.*

Related State (ORS 197.301) measures
#9:Transportation measures including mobility, accessibility and air quality indicators.

Indicator 4.3: System performance. *Measures effectiveness of region-wide auto, freight and transit systems.*

Related State (ORS 197.301) measures
#9:Transportation measures including mobility, accessibility and air quality indicators.

Indicator 4.4: Preservation of the existing multi-modal transportation system. *Measures the degree to which regional facilities are being adequately maintained and additional funding that may be needed to meet specified preservation standard.*

Fundamental 5: Maintain separation between the Metro UGB and neighboring cities by working actively with these cities and their respective counties

Indicator 5.1: Growth accommodation inside the UGB versus growth in neighboring cities. *Measures the pressure that is being placed on Metro and its surrounding rural communities to grow together*

Indicator 5.2: Effectiveness of intergovernmental agreements to preserve separation of communities. *Measures the number, and effectiveness of certain agreements that were signed between Metro and others to preserve a separation of communities*

Fundamental 6: Encourage communities inside the Metro UGB to enhance their physical sense of place by using among other tools, greenways, natural areas, and built environment elements

Indicator 6.1: Built characteristics of the community. *Measures the unique built attributes of a community that help to define community identity*

Indicator 6.2: Design/layout of the community. *Measures unique design and layout characteristics that help define a community's sense of place.*

Indicator 6.3: Natural characteristics of the community. *Measures the unique natural attributes that contribute to a community's sense of place*

Indicator 6.4: Retail and service opportunities in the community. *Measures unique shopping and service opportunities that may help to define a community's character*

Fundamental 7: Encourage the availability of diverse housing options for all residents by providing a mix of housing types as well as affordable homes in every jurisdiction

Indicator 7.1 – Affordable housing supply, consumption, and affordability in the UGB and mixed use centers. *Measures the supply and demand for affordable housing in the Metro region and the factors that affect a person's ability to pay for housing.*

> *Related State (ORS 197.301) measures*
> #2: The density and price ranges of residential development, including both single family and multifamily residential units.
> #7: Residential vacancy rates.

Indicator 7.2 – Affordability by development pattern in the UGB and mixed use centers (via computation of Smart Commute Mortgage Index or Location Efficient Mortgage Index) *Measures transportation savings that home buyers can realize by purchasing a home in neighborhoods served with abundant public transportation with easy access, via non-auto travel modes to jobs, shopping cultural activities and other destinations.*

Fundamental 8: Create a vibrant place to live and work by providing sufficient and accessible parks and natural areas, improving access to community resources such as schools, community centers and libraries, and providing attractive facilities for cultural and artistic performances and supporting arts and cultural organizations.

Indicator 8.1: Parks and greenspaces in the Metro Region. *Measures the amount of parks and greenspaces that are available to citizens of the Metro region.*

Related State (ORS 197.301) measures
#8: Public access to open spaces.

Indicator 8.2: Access to community resources. *Measures contribution of Metro land use policies and facility management to the support of cultural amenities in the region.*

Indicator 8.3: Opportunities and support for arts and recreation. *Measures contribution of Metro and the region ins supporting cultural and artistic activities.*

State (ORS 197.301) Performance Measures requirements

197.301 Metropolitan service district report of performance measures.
(1) A metropolitan service district organized under ORS chapter 268 shall compile and report to the Department of Land Conservation and Development on performance measures as described in this section at least once every two years. The information shall be reported in a manner prescribed by the department.
(2) Performance measures subject to subsection (1) of this section shall be adopted by a metropolitan service district and shall include but are not limited to measures that analyze the following:
a. The rate of conversion of vacant land to improved land;
b. The density and price ranges of residential development, including both single family and multifamily residential units;
c The level of job creation within individual cities and the urban areas of a county inside the metropolitan service district;
d. The number of residential units added to small sites assumed to be developed in the metropolitan service district's inventory of available lands but which can be further developed, and the conversion of existing spaces into more compact units with or without the demolition of existing buildings;
e. The amount of environmentally sensitive land that is protected and the amount of environmentally sensitive land that is developed;
f. The sales price of vacant land;
g. Residential vacancy rates;
h. Public access to open spaces; and
i. Transportation measures including mobility, accessibility and air quality indicators.
[1997 c.763 §3]

Glossary

Accessory dwelling units (ADU) – A separate additional living unit, including separate kitchen, sleeping, and bathroom facilities, attached or detached from a primary residential unit, on a single family lot. ADUs are usually subordinate in size, location, and appearance to the primary unit. The most common types of accessory dwelling units are attached units, contained within a single family home, known variously as "mother-in- law apartments," "accessory apartments" or "granny flats."

Benchmark – A specific standard or target that is established in order to measure performance.

Balanced cut and fill – A policy contained within Title 3 which is intended to prevent any net increase in fill within the floodplain.

Brownfields – Abandoned or underutilized properties where expansion of redevelopment is complicated by either real or perceived environmental contamination.

Buildable land – Vacant land identified through the Metro Data Resource Center's vacant land inventory after subtracting land in Title 3 areas.

Capture rate – A measure of the proportion change or difference in demographic categories such as employment, households or population for a specific geography.

Central City – The downtown and adjacent portions of the City of Portland.

Comprehensive plan (local) – The all inclusive, generalized, coordinated land use map and policy statement of cities and counties defined in ORS 197.015(5).

Consumed land – Buildable land that has converted to development.

Corridors – While some corridors may be continuous, narrow bands of higher intensity development along arterial roads, others may be more "nodal," that is, a series of smaller centers at major intersections or other locations along the arterial that have high-quality pedestrian environments, good connections to adjacent neighborhoods and good transit service.

Design type – The conceptual areas described in the Metro 2040 Growth Concept text and map in Metro's RUGGOs including central city, regional centers, town centers, station communities, corridors, main streets, inner and outer neighborhoods, industrial areas and employment areas.

Developed land (DRC definition) – Land that supports structures and/or improvements and/or is dedicated to a particular land use. These determinations are made based on the analysis of aerial photography and all developed land is removed from the regional vacant land inventory.

Disposal (Solid Waste) – The amount of waste that is not recovered through reuse, recycled, composted and recovered for energy.

Employment areas – Areas of mixed employment that include various types of manufacturing, distribution and warehousing uses, commercial and retail development as well as some residential development. Retail uses should primarily serve the needs of the people working or living in the immediate employment area. Exceptions to this general policy can be made only for certain areas indicated in a functional plan.

Environmentally sensitive lands – Lands that retain natural features important for water quality, stormwater and flood management, or lands that provide natural habitat for fish and wildlife or a scenic value. (Land inventories conducted for Metro's Title 3 and Goal 5 programs or calculations of the region's park land include some of, but not all of the land in the region meeting this definition.)

Exception land – An "exception" is taken for land when either commitments for use, current uses or other reasons make it impossible to meet the requirements of one or a number of the statewide planning goals. Hence, lands "excepted" from statewide planning goals 3 (Agricultural Lands) and 4 (Forest Lands) have been determined to be unable to comply with the strict resource protection requirements of those goals and are thereby able to be used for other than rural resource production purposes. Lands not excepted from statewide planning goals 3 and 4 are to be used for agricultural or forest product purposes, and other, adjacent uses must support their continued resource productivity.

Exclusive farm use – Land zoned primarily for farming and restricting many uses that are incompatible with farming, such as rural housing. Some portions of rural reserves also may be zoned as exclusive farm use.

Fair share – A proportionate amount by local jurisdiction; used in the context of affordable housing in this document. "Fair share" means that each city and county in the region agrees to work with Metro to establish local and regional policies to accommodate affordable housing.

Family wage job – A permanent job with an annual income greater than or equal to the average annual covered wage in the region. The most current average annual covered wage information from the Oregon Employment Division shall be used to determine the family wage job rate for the region or for counties within the region.

Floodplain – The area immediately adjacent to the stream or river channel that becomes inundated with overbank flows during large storm events. The Title 3 Floodplain is considered to be those areas mapped as floodplain, a combination of the FEMA 100-year floodplain and the areas known to have flooded in the Flood of 1996.

Floor area ratio (FAR) – The ratio of building floor area in relation to the amount of site area. FAR's are used to measure to what extent a building covers a site.

Freight mobility – The efficient movement of goods from point of origin to destination.

Functional plan – A limited-purpose, multi-jurisdictional plan for an area or activity having significant district-wide impact upon the orderly and responsible development of the metropolitan area. Serves as a guideline for local comprehensive plans consistent with ORS 268.390.

Generated (solid waste) – The amount of waste material made available for disposal or recovery.

Geographic information system (GIS) – A computer based system that enters, stores, manages, analyzes, and presents spatial (and associated non-spatial) data, combining databases and graphics operations to make a variety of products, from lists to maps.

Greenspaces – Natural areas, open space, trails and greenways that function for both wildlife and people.

Greenways – Generally linear vegetated corridors associated with rivers and streams that are shared by both humans and wildlife.

Gross acre – Land without any net reductions.

Gross vacant buildable acre – Measure of buildable land before reductions to net acre.

Growth concept – A concept for the long-term growth management of our region stating the preferred form of the regional growth and development, including where and how much the UGB should be expanded, what densities should characterize different areas, and which areas should be protected as open space.

High-capacity transit – Transit routes that may be either a road designated for frequent bus service or for a light-rail line.

Household hazardous waste – Products used in the yard and home that are hazardous to people, fish and wildlife if misused or disposed of incorrectly. These products include but are not limited to paints and stains, pool and spa chemicals, pesticides and poisons, automotive products, and batteries.

Housing affordability – The availability of housing such that no more than 30 percent (an index derived from federal, state and local housing agencies) of the monthly income of the household need be spent on shelter.

Indicators – Typically numerical measures used to track changes in the status of trends of physical, social or economic systems.

Industrial areas – An area set aside for industrial activities. Supporting commercial and related uses may be allowed, provided they are intended to serve the primary industrial users. Residential development are not considered a supporting use, nor shall retail users whose market area is substantially larger than the industrial area be considered supporting uses.

Infill – Development on a parcel without a pre-existing structure where Metro considers the parcel developed in the fiscal year (or years) prior to the fiscal year for which the building permit issued.

Infrastructure – Roads, water systems, sewage systems, systems for storm drainage, telecommunications and energy transmission and distribution systems, bridges, transportation facilities, parks, schools and public facilities.

Inner neighborhoods – Areas in Portland and older cities that are primarily residential, close to employment and shopping areas, and have slightly smaller lot sizes and higher population densities than in outer neighborhoods.

Intermodal – The connection of one type of transportation mode with another.

Intermodal facility – A transportation element that accommodates and interconnects different modes of transportation and serves the statewide, interstate and international movement of people and goods.

Jobs/housing balance – The relationship between the number, type, mix and wages of existing and anticipated jobs balanced with housing costs and availability so that non-auto trips are optimized in every part of the region.

Jurisdiction – A governmental entity such as a city or county.

Main streets – Neighborhood shopping areas along a main street or at an intersection, sometimes having a unique character that draws people from outside the area. Northwest 23rd Avenue and Southeast Hawthorne Boulevard are current examples of main streets.

Metro Code – The Metro Code is the body of laws enacted by the Metro Council, under the authority of the Metro Charter. The Code is divided into Titles, each corresponding to an area of Metro's jurisdiction under the Charter (Planning, Solid Waste, etc.). Each Title is further divided into chapters and sections.

Metro region (Metro boundary) – The jurisdictional boundary of Metro, the elected regional government of the metropolitan area.

Metropolitan housing rule – A rule (OAR 660, Division 7) adopted by the Land Conservation and Development Commission to assure opportunity for the provision of adequate numbers of needed housing units and the efficient use of land within the Metro UGB. This rule establishes minimum overall net residential densities for all cities and counties within the UGB, and specifies that 50 percent of the land set aside for new residential development be zoned for multi-family housing.

Mixed use – Usually refers to the mixing of residential uses with offices or retail uses. Mixed use can be within an area or within a single building.

Mixed use development – Areas of a mix of at least two of the following land uses and includes multiple tenants or ownerships: residential, retail and office. This definition excludes large, single-use land uses such as colleges, hospitals, and business campuses. Minor incidental land uses that are accessory to the primary land use should not result in a development being designated as "mixed use development."

Metropolitan Transportation Improvement Program (MTIP) – A staged, multiyear, intermodal program of transportation projects which is consistent with the metropolitan transportation plan.

Native vegetation – Any vegetation native to the Portland Metropolitan area or listed on the Metro Native Plant List as adopted by Metro Council resolution.

Natural areas – A landscape unit composed of plant and animal communities, water bodies, soil and rock; largely devoid of human-made structures; maintained and managed in such a way as to promote or enhance populations of wildlife.

Neighborhood centers – Retail and service development that surrounds major MAX stations and other major intersections, extending out for one-quarter to one-half mile.

Neighboring cities – Cities such as Sandy, Canby and Newberg that are outside Metro's jurisdiction but will be affected by growth policies adopted by the Metro Council or other jurisdictions, such as North Plains, Estacada or Scappoose, which may be affected by Metro actions.

Net acre – An area measuring 43,560 square feet which excludes: any developed road right-of-way through or on the edge of the land; and Title 3 areas, including any open water areas, floodplains, natural resource areas protected under statewide planning Goal 5 in the comprehensive plans of cities and counties in the region, slopes in excess of 25 percent and wetlands requiring a federal fill and removal permit under Section 404 of the Clean Water Act. These excluded areas do not include lands for which the local zoning code provides a density bonus or other mechanism which allows the transfer of the allowable density or use to another area or to development elsewhere on the same site; and all publicly-owned land designated for park and open spaces use.

Net developed acre – 43,560 square feet of land after excluding present and future rights-of-way, school lands and other public uses.

Open space – Developed parks with active recreational facilities such as ball fields, tennis courts, playgrounds, community gardens, golf courses, cemeteries, vacant lands with the potential of becoming a park or natural area.

Oregon Statewide Planning Goals – The 19 goals that provide a foundation for the state's land use planning program. The 19 goals can be grouped into four broad categories: land use, resource management, economic development, and citizen involvement. Locally adopted comprehensive plans and regional transportation plans must be consistent with the statewide planning goals.

Originating trips (and transit boarding) – Represents people trips. A trip starting on a bus and transferring to another bus or to a MAX is counted as one originating trip and/or two boarding. (See Transit Boarding)

Outer neighborhoods – Areas in the outlying cities that are primarily residential, farther from employment and shopping areas, and have larger lot sizes and lower population densities than inner neighborhoods.

Pedestrian scale – An urban development pattern where walking is a safe, convenient and interesting travel mode. It is an area where walking is at least as attractive as any other mode to all destinations within the area. The following elements are not cited as requirements, but illustrate examples of pedestrian scale: continuous, smooth and wide walking surfaces; easily visible from streets and buildings and safe for walking; minimal points where high-speed automobile traffic and pedestrians mix; frequent crossings; storefronts, trees, bollards, on-street parking, awnings, outdoor seating, signs, doorways and lighting designed to serve those on foot; well integrated into the transit system and having uses that cater to people on foot.

Persons per acre – Term expressing the intensity of building development by combining residents per net acre and employees per net acre.

Portland Primary Metropolitan Statistical Area (PMSA) – Includes Multnomah, Clackamas, Washington, Columbia and Yamhill Counties in Oregon and Clark County in Washington. Note: The US Census defined the 1990 Portland PMSA as Clackamas, Clark, Multnomah, Washington and Yamhill Counties, and defined the 2000 Portland PMSA as Clackamas, Clark, Columbia, Multnomah, Washington and Yamhill Counties.

Portland Standard Metropolitan Statistical Area (SMSA) – Includes Multnomah, Clackamas and Washington Counties in Oregon and Clark County in Washington.

Recovery (solid waste) – The amount of waste that is reused, recycled, composted and recovered for energy.

Redevelopment – Development on a parcel of land where a structure or the identifiable remains of a structure were visible on the parcel in the fiscal year prior to the issuance of the building permit.

Refill – Redevelopment and infill development.

Refill rate – The rate at which redevelopment and infill occur.

Regional Framework Plan – Required of Metro under the Metro charter, the Regional Framework Plan must address nine specific growth management and land use planning issues (including transportation), with the consultation and advice of MPAC. To encourage regional uniformity, the plan shall also contain model terminology, standards and procedures for local land use decision making that may be adopted by local governments.

Regional centers – Areas of mixed residential and commercial use that serve hundreds of thousands of people and are easily accessible by different types of transit. Examples include traditional centers such as downtown Gresham and new centers such as Clackamas Town Center.

Rezoning – An action taken by a city or county governing body to change the type of zoning on one or more pieces of land; a rezoning, as from R-1, "single family residential," to R-2, "medium-density residential."

Riparian areas – The land and vegetation adjacent to waterbodies such as streams, rivers, wetlands, and lakes that are influenced by perennial or intermittent water and hydric soils.

Regional Land Information System (RLIS) – Metro's geographic information system, known as the RLIS. RLIS makes possible the integration of information about land ownership, demographic and forecast data and environmental systems such as soils and wetlands. RLIS provides information and analytical capabilities to Metro programs, as well as to regional partners in the public and private sector.

Regional Urban Growth Goals and Objectives (RUGGOs) – An urban growth policy framework that represents the starting point for the agency's long-range regional planning program.

RTP priority system – The most critical transportation improvements needed to adequately serve travel needs in the Portland metropolitan region during the next 20 years.

Rural reserves – Areas that are a combination of public and private lands outside the UGB, used primarily for farms and forestry. They are protected from development by very low-density zoning and serve as buffers between urban areas.

Station communities – An area generally within ¼- to ½-mile radius of light-rail stations or other high-capacity transit that is planned as a multi modal community of mixed uses and substantial pedestrian accessibility improvements.

Stream route database – The Metro Data Resource Center's most current data regarding the location of streams and rivers in the Metro region.

Town centers – Areas of mixed residential and commercial use that serve tens of thousands of people. Examples include the downtowns of Forest Grove and Lake Oswego.

Trail – Multi modal/recreational (e.g., hiking, biking, pedestrian, equestrian) alignment generally used by people.

Transit Boarding (and originating trips) – A trip starting on a bus and transferring to another bus or to a MAX is counted as one originating trip and/or two boarding. (See Originating trips)

Transportation Planning Rule (TPR) – The implementing rule of statewide land use planning goal (#12) dealing with transportation, as adopted by the state Land Conservation and Development

Commission (LCDC). Among its many provisions, the rule includes requirements to preserve rural lands, reduce VMT, reduce parking spaces and to improve alternative transportation systems.

Transportation System Plan (TSP) – A plan for one or more transportation facilities that are planned, developed, operated and maintained in a coordinated manner to supply continuity of movement between modes, and within and between geographic and jurisdictional areas.

Tree canopy – Areas of forested land cover as interpreted from aerial photos by the Metro DRC. The minimum mapping unit used by the DRC was a polygon one acre. For forest landcover types, technical staff were trained to identify relatively dense groupings of trees (>60 percent coverage) as forested patches. Cross analysis with satellite canopy data shows that 76 percent of the patches delineated are predominately closed forest canopy (76 percent to 100 percent total coverage). The remaining 24 percent are predominately open forest (51 percent to 75 percent total coverage).

Urban form – The net result of efforts to preserve environmental quality, coordinate the development of jobs, housing, and public services and facilities, and interrelate the benefits and consequences of growth in one part of the region with the benefits and consequences of growth in another. Urban form, therefore, describes an overall framework within which regional urban growth management can occur. Clearly stating objectives for urban form and pursuing them comprehensively provides the focal strategy for rising to the challenges posed by the growth trends present in the region today.

Urban growth boundary (UGB) – A boundary that identifies urban and urbanizable lands needed during the 20-year planning period to be planned and serviced to support urban development densities, and that separates urban and urbanizable lands from rural land.

Urban unincorporated areas – Areas inside of the Metro UGB that are outside of a city boundary.

Vacant land – Land identified in the Metro or local government inventory as undeveloped land.

Wetlands – Ecosystems that may occur adjacent to stream channels and within the floodplain that depend on frequent and recurrent shallow inundation or saturation at, or near the soil surface.

Zoning – A demarcation of a city or county by ordinance into zones and the establishment of regulations to govern the use of the land (commercial, industrial, residential, type of residential, etc.) and the location, bulk, height, shape, use and coverage of structures within each zone.

Appendix

Performance Measures Complete Report

Contents: