October 2009

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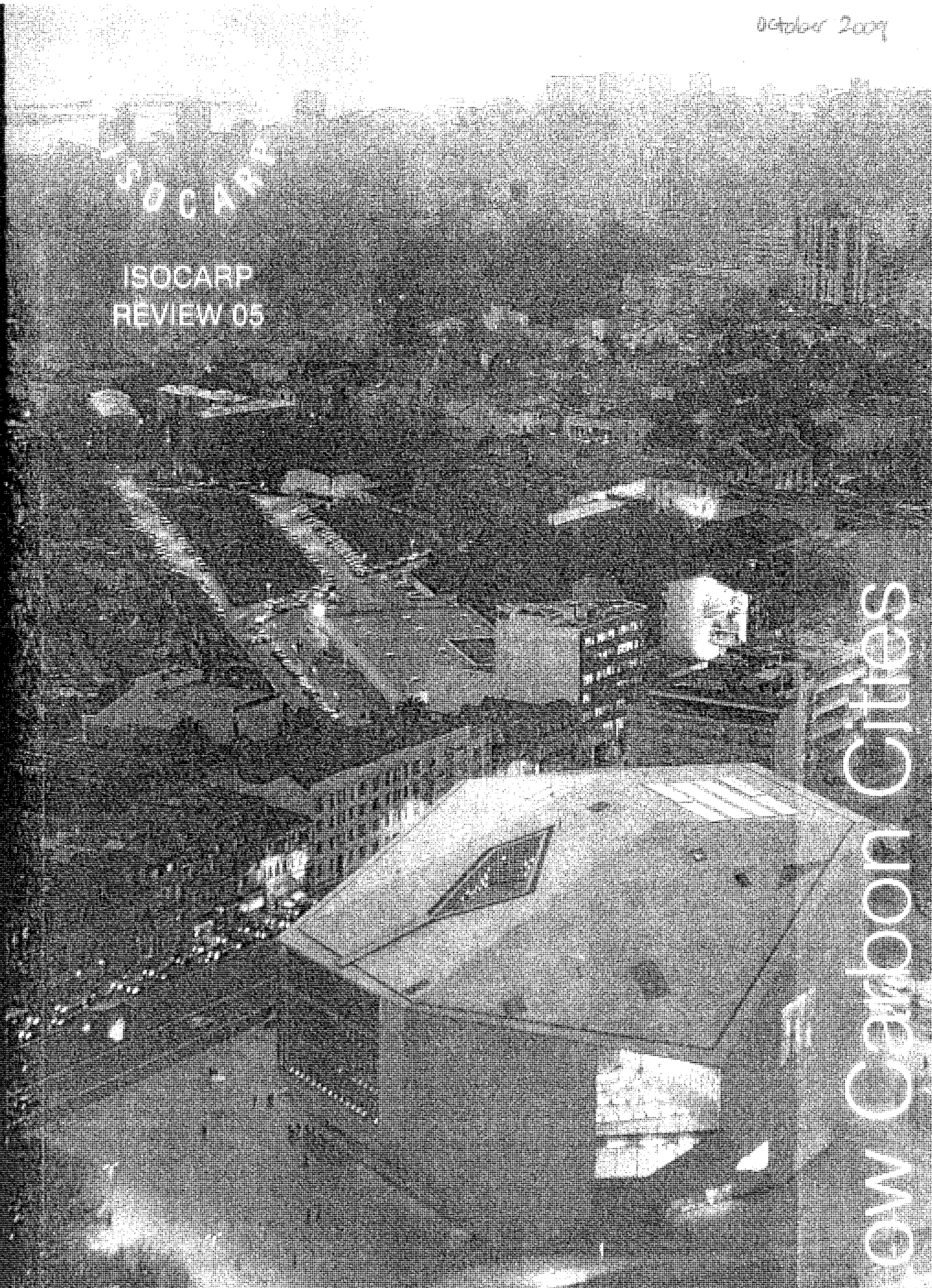
ISOCARP REVIEW 05



Low Carbon Cities

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Richard Benner

Portland Metropolitan Region Turns a Climate Change Corner

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MULTNOMAH COUNTY CARBON EMISSIONS, BY SECTOR
(Metric Tons, CO_2 equivalent)

	1990	1995	2000	2005	2006	2007
Residential Energy Use	1,770,974	1,758,764	2,015,339	1,722,750	1,772,171	1,759,674
Commercial Energy Use	1,885,692	2,036,343	2,380,636	2,086,713	2,142,319	2,132,798
Industrial Energy Use	1,530,295	1,757,799	1,935,596	1,367,695	1,398,802	1,367,204
Transportation Fuel	3,441,087	3,385,929	3,369,741	3,418,793	3,424,911	3,483,801
Waste Disposal	237,691	226,778	147,349	82,954	79,362	66,153
Total	8,875,739	9,165,613	9,848,661	8,678,935	8,817,565	8,809,630
(Relative to 1990)		(+3.3%)	(+11.0%)	(-2.2%)	(-0.7%)	(-0.7%)

City of Portland Bureau of Planning and Sustainability

Figure 1 | Multnomah County Carbon Emissions, by Sector

Between 1990 and 2007, total emissions of greenhouse gasses (GHG) rose 17 percent in the U.S. In Portland and surrounding Multnomah County, during the same period, total GHG emissions dropped to 0.7 percent below the 1990 level. A three percent decline in per capita emissions nationally was overwhelmed by population growth. Meanwhile, Portland and Multnomah County grew faster than the U.S., yet experienced a 17 per cent decline in per capita emissions.[1] Figure 1

Why has Portland bucked the national trends? Those of a spiritual bent might attribute Portland's success to residents' superior virtue, noting that Portlanders own more hybrid cars per household than residents of other U.S. cities[2] and sport one of the highest recycling rates in the nation (64 per cent in 2007).[3] Descendants of settlers from the puritan Northeast U.S. may believe Portlanders' legendary frugality is responsible, citing the $2.6 billion residents save every year by commuting shorter distances.[4]

Planners of the region take a different view. Citing total and per capita emissions numbers, they contend that people of the region achieved this success by attending countless and long meetings during the cold, wet times of the year (September through June), huddled with their neighbors, contemplating the future.[5] This argument is well-received by spiritual leaders and local economists because this odd behavior suggests both higher virtue and lower consumption. The author, having spent more than 30 years in planning, most of it in meetings, endorses the planning theory: the region's growth management – from the statewide planning goals, to Metro's Growth Concept, to city and county comprehensive plans – deserves most of the credit. Growth management is changing the urban form of the region and yielding dramatically lower driving per capita.

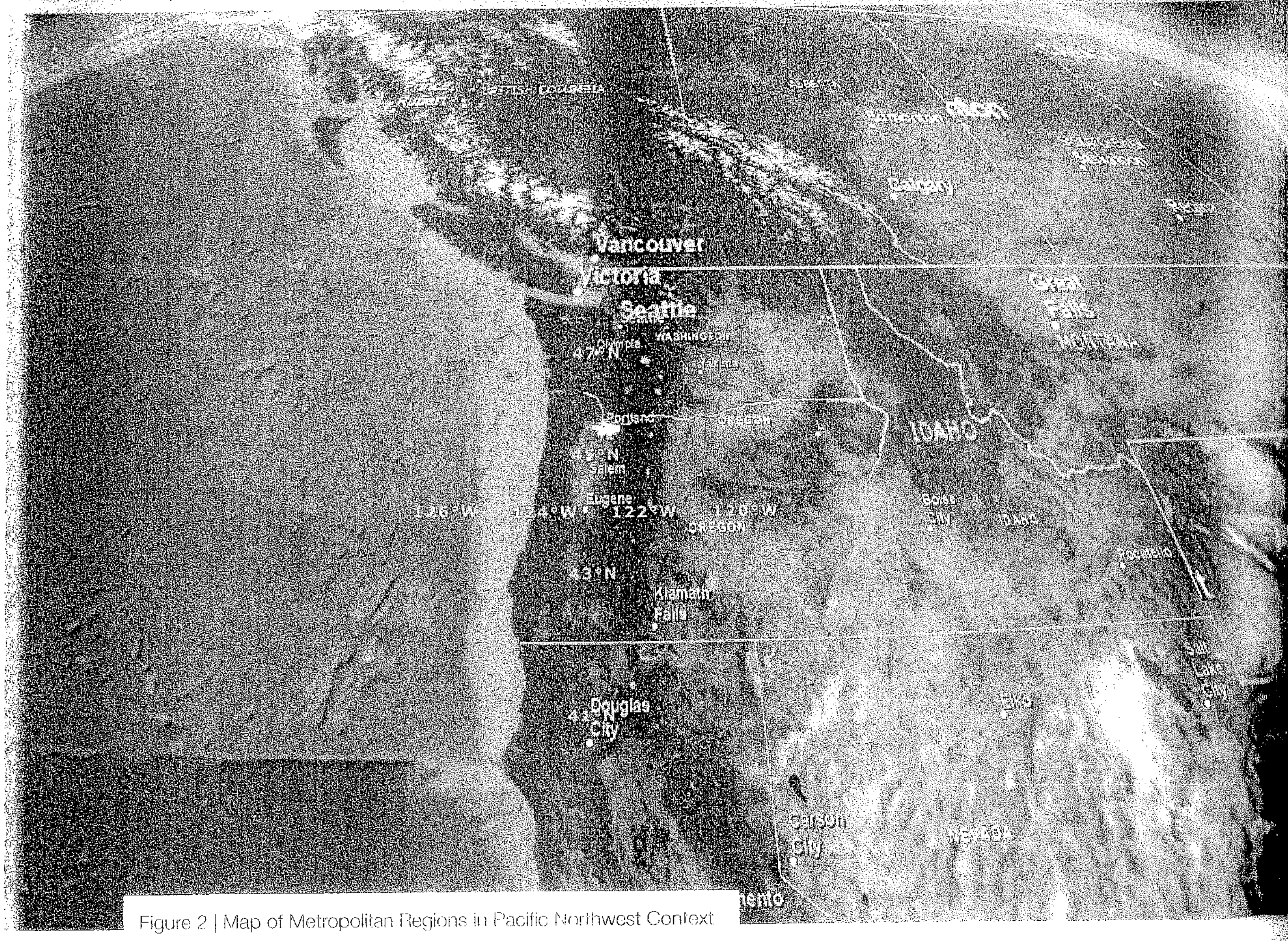

Figure 2 | Map of Metropolitan Regions in Pacific Northwest Context

Regional Setting

The 1.4 million people of the Portland metropolitan region reside at the confluence of two great rivers of the West, the Columbia and the Willamette. Mount Hood rises to the east, with the Columbia River Gorge National Scenic Area adjacent to the eastern edge of the urban growth boundary. The Tualatin Mountains on the northwest side constitute a significant wildlife corridor between the region and the Coast Range. The region's natural beauty and bounty have cultivated among residents a fierce devotion to the landscape and the lifestyle it affords them.

Figure 2

The lush northwest forests in the larger region played a dominant role in the economy and culture of settlers, from the mid-1800s until the 1980s, when over-harvesting led to changes in federal forest policies that reduced harvest levels. The rich soils and abundant rainfall in the valley of the Willamette yield a cornucopia of crops and made agriculture the second pillar of the settler economy (agriculture now leads forestry in economic impact). The landscape and natural resources of the region led settlers to develop trade between Portland and its hinterlands and a system of navigable waterways, railroads, roads, bridges and airports to facilitate international trade. The resulting economy and culture stimulated the emergence of a regional identity that led, in turns, to regional thinking, regional governance and regional growth management.

Political Context

Metro, the nation's only popularly-elected regional government, is chartered by voters to protect the region's quality of life. But it is intentionally lodged between state and local governments, in the political middle of an overall framework that is essential to the achievement of the region's vision. In 1973, the Oregon Legislature enacted Senate Bill 100, which set the state on its unique planning course. The law requires every city

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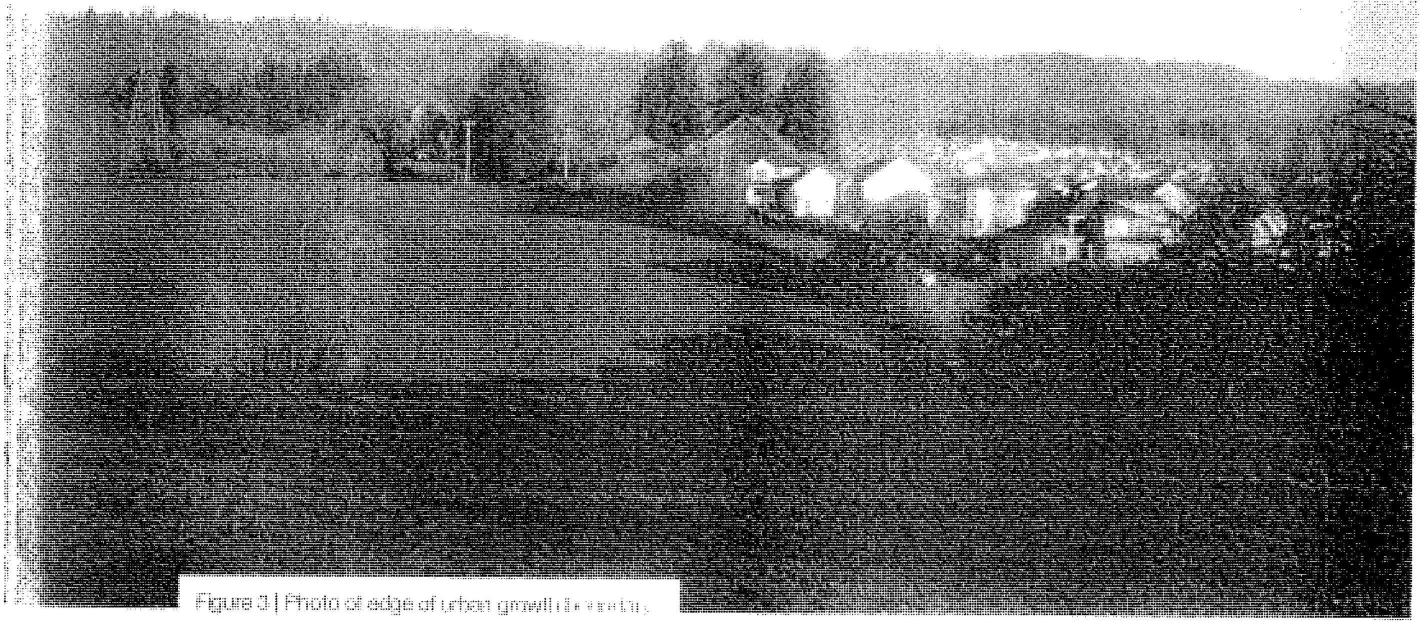


Figure 3 | Photo of edge of urban growth [illegible]

and county to adopt a comprehensive plan that meets nineteen statewide planning goals (which have the force of law). These goals address issues ranging from citizen involvement to housing, the economy and protection of farm and forest land.

Upon its founding in 1979, Metro, too, became subject to the statewide planning goals. For Metro, the most important is the Urbanization Goal. It requires every city and urban region to establish an "urban growth boundary" (known as the "UGB") to limit the extent of urbanization. The Urbanization Goal and the statewide goals that protect farm and forest land outside UGBs establish the fundamental growth management strategy for the state and the Portland metropolitan region.

Metro assumed responsibility for the UGB surrounding 25 cities and the urbanized portions of three counties that comprise the urbanized region. As discussed below, Metro's growth concept calls for a compact development form. The "compactness" of the region is measurably improving. It owes much of this success to three critical roles played by the state-required regional UGB: (1) ensuring that cities near the Portland metropolitan area don't sprawl onto rural land between the cities and the metro (they have their own UGBs), (2) strictly limiting ex-urban development on these same rural lands; and (3) allowing Metro and "neighbor cities" to expand their UGBs only if they can demonstrate that they have taken all reasonable actions to use land inside their existing UGBs more efficiently.

Figure 3

Formation of Metro

Concern about regional issues in the Portland area reaches back to 1925 with the formation of a legislative committee to study problems of local governments in the metropolitan area. Over the next five decades, regional governance evolved into two agencies, the Metropolitan Service District (MSD) and the Columbia Region Association of

Governments (CRAG). Both were created under a typical model for associations of governments. MSD was created to deliver regional services efficiently and assumed responsibility for the zoo and the solid waste disposal system. CRAG was created to coordinate planning for land use, transportation, water quality and criminal justice. Each had a governing body of predominantly local elected officials, with significant cross-over between them.

By the mid-1970s Oregon and the Portland area were going through a significant shift in policy direction. The state had established the statewide planning program described above. The City of Portland was aggressively working to reverse the decline of its downtown and retain strong, family-oriented neighborhoods. The region was embroiled in controversy over proposed urban freeway construction that would have had dire effects on neighborhoods. And the nation was beginning to tackle significant environmental issues, particularly air and water pollution.

A "good government" coalition of representatives from government, business and civic organizations called for a new regional governance structure with authority to tackle these issues and be accountable to the public. Assisted by a grant from the National Academy of Public Administration, the Tri-County Local Government Commission drafted a proposal that was adopted largely intact by the 1977 Oregon Legislature.

The new law authorized a regional government to be elected by voters of the three-county region. The law provided for a 12-member council elected by districts and an executive officer elected at-large to manage the organization. It assigned the duties of CRAG and MSD to the new entity and gave it power to tax and ensure local plans are consistent with regional plans. It shrank the boundaries of CRAG and MSD to the area of contiguous urbanization. In May, 1978, people of the region voted 55 to 45 percent to create a new regional government, now called Metro. That November voters elected the first Metro Council and Executive Officer. The change in government went into effect in January, 1979.

After a decade of operation, it became apparent that the region needed authority to make governance decisions on its own, without having to seek state legislation for every change. The Oregon Legislature authorized, and voters statewide approved, a change to the Oregon Constitution allowing Metro a home-rule charter. A commission drafted a charter for consideration by Metro's voters that declared livability of the region to be Metro's primary responsibility. It required Metro to adopt a 50-year "future vision" and a long-range regional framework plan with which city and county comprehensive plans would have to comply. It also called for establishment of the Metro Policy Advisory Committee (MPAC), composed predominantly of local elected officials, to advise the Metro Council on any land use requirement that would apply to local governments. The charter was approved by the region's voters in 1992.

2040 Growth Concept: the Region Charts a Course

Metro established the UGB for the region in 1979, surrounding a land area intended to accommodate 20 years of growth (229,000 acres). A recession that ran into the early '80s slowed development inside the UGB. But the region's economy came roaring back in the late '80s and its population grew faster than the rest of the nation. Leaders in the region understood that the UGB would not, by itself, stop sprawling development patterns *within* the boundary. Metro developed a "base case" scenario in 1992 to show what the region would look like in 2040 under existing zoning in the UGB. Development at low densities would exhaust the remaining supply of land inside the UGB and force expansion onto 120,000 acres, much of it productive farmland. Dependence upon the auto and the length and number of trips would rise. Air quality would decline and infrastructure costs, especially for new roads, would be daunting. In 1992, Metro had neither the knowledge nor the technology to determine the effect of the "base case" on GHG emissions. It was not even a subject of public discussion.

Leaders in the region rejected the base case as the region's future and called for new policies to "build up, not out." Polling showed a majority of residents would accept slightly higher densities in their neighborhoods if necessary to avoid expansion onto farmland. After unprecedented public involvement, Metro composed the "2040 Growth Concept," a long-range regional plan adopted by the Council in 1995. The plan relied upon a "tight" UGB to encourage more efficient use of land, and for new policies in city and county comprehensive plans to allow higher densities in focus areas. Despite opposition from development interests whose principal market was land close to the edge of the UGB, cities and counties of the region embraced the Growth Concept and began to implement it.

The 2040 Growth Concept merges land use planning and transportation planning to reinforce the objectives of both. It concentrates mixed-use and higher-density development in 38 "centers"; 33 "light rail station communities"; and 400 miles of "corridors" that connect many of the centers. The Growth Concept then plans high-capacity transit (principally light rail) to connect the "central city" (Portland) and seven "regional centers (Hillsboro, Gresham and Beaverton among them)." Bus service, often with 10-minute headways, connects 30 "town centers" with the central city and regional centers.

The Growth Concept builds upon this fundamental land use and transportation superstructure. The central city serves as the hub of business and cultural activity in the region. The regional centers provide commercial and civic services in a market of hundreds of thousands of people. Town centers offer localized services for tens of thousands within a three- to five- mile radius. At a finer grain, the Concept recognizes the importance of "Main Streets" as traditional neighborhood commercial hubs within walking distance of surrounding residential districts. The Growth Concept has brought infill and a mix of uses to some residential areas, mostly in centers and along Main Streets and corridors. But an estimated 80 percent of traditional residential areas have not been significantly affected by these changes.

To bring the Growth Concept to life, the Metro Council relies upon traditional land use and transportation strategies and new tools developed with cities and counties in the region. These strategies and tools are collected in Metro's over-arching Regional Framework Plan (RFP), adopted in 1997. The Council adopted an Urban Growth Management Functional Plan to implement land use strategies in the RFP through city and county comprehensive plans and zoning ordinances. The Council adopted a Regional Transportation Plan to implement transportation strategies and build the multi-modal transportation system called for in the Growth Concept. The Council also adopted a Metropolitan Greenspaces Master Plan to guide investments in parks and greenspaces. Each of these implementation plans is part of, and must be consistent with, the framework plan. Recognizing that plans and regulations alone do not, themselves, build better communities, the Council aligned its transportation and other investments to encourage development in centers, corridors and Main Streets.

Regional Transportation Planning

The mid-70s also brought a shift in regional transportation policy. The initial segments of a regional freeway system had been built, but there were dueling visions for expansion of the region's transportation system. The pre-Metro regional planning organization, CRAG, had adopted a major freeway expansion plan developed by the state highway department. Three new segments of the interstate system were mired in controversy. Meanwhile, TriMet, the newly-creat-

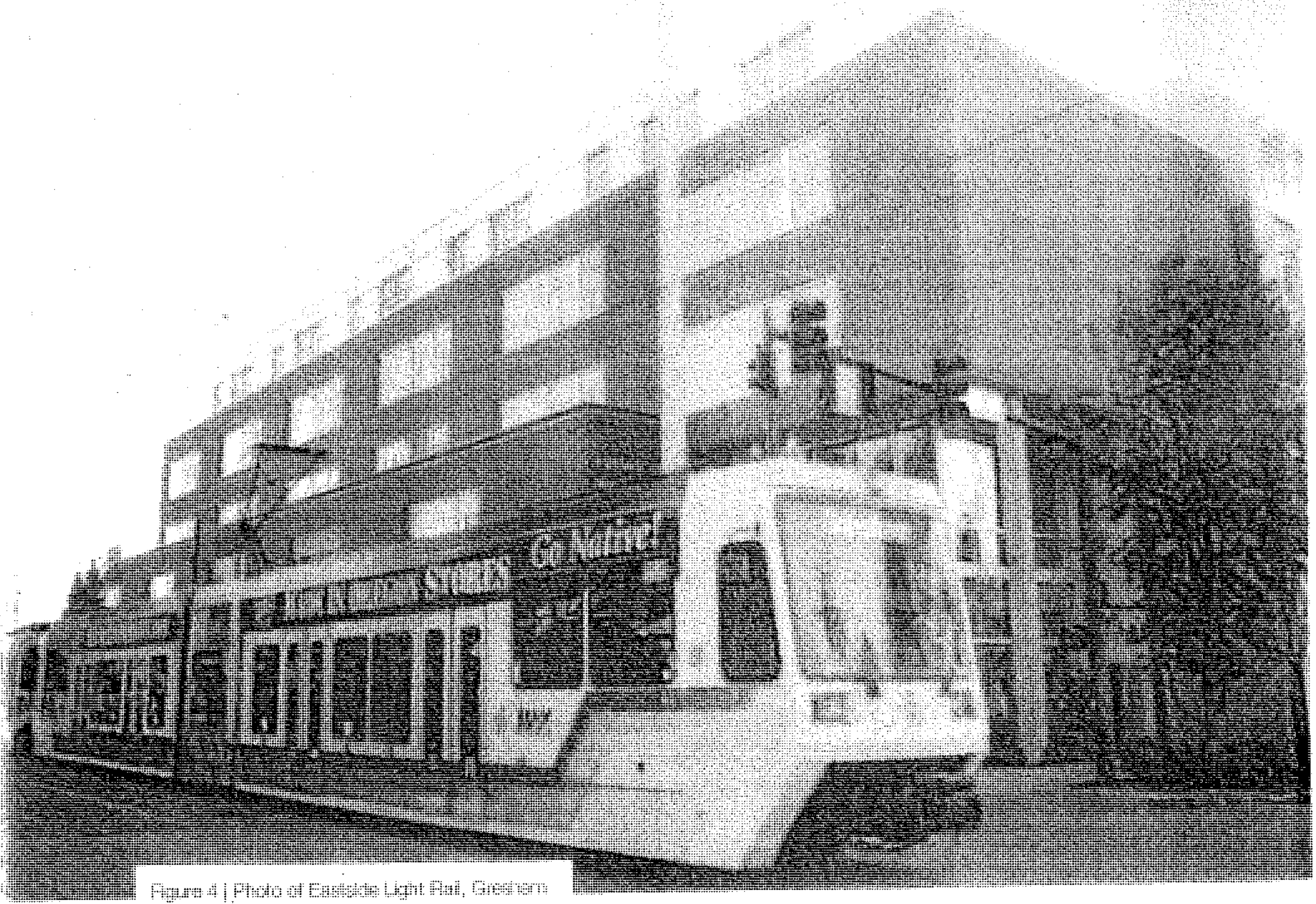


Figure 4 | Photo of Eastside Light Rail, Gresham

ed public transit agency, called for significant transit expansion.

To overcome a stalemate, a Governor's Task Force on Transportation was formed to sort out the region's policy direction. The overall freeway expansión plan was cancelled. Policies were re-directed toward a multi-modal transportation system. The role of Metro staff and elected levels was strengthened.

Since this shift, regional collaboration on multi-modal transportation issues has been centered at Metro. A dual decision-making structure was established to meet the federal requirements for a metropolitan planning organization: a Joint Policy Advisory Committee on Transportation (JPACT), composed of elected officials representing cities, counties and Metro, and representatives of transportation agencies, and the elected Metro Council. A professional staff at Metro carries out regional transportation planning, light-rail project development, travel-demand forecasting, land use planning, economic and demographic forecasting and, more recently, transit-oriented development and demand management.

A critical Metro/JPACT responsibility is to allocate flexible transportation funds. Throughout the late '70s and '80s most of these funds came from the transfer of federal funds from the canceled freeways to other projects. After 1991, they flowed from new flexible funds provided by federal transportation legislation. Figure 4

For a sustained 30+ year period, Metro and its regional partners have aggressively developed a regional light rail and streetcar system, numerous smaller projects to support a more compact urban development pattern and an expanding system of bus, bike, pedestrian and trail projects.

Building a Compact Urban Form

The fundamental growth management strategy in the 2040 Growth Concept is

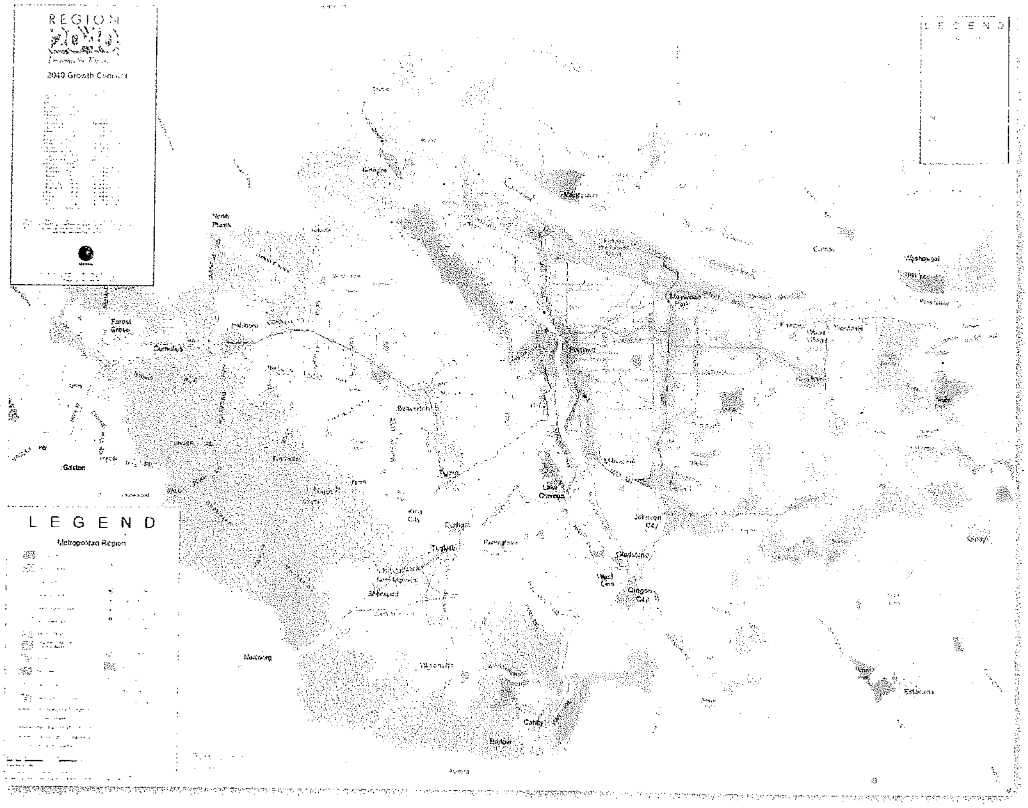


Figure 5 | Map of the 2040 Growth Concept

to develop a compact urban form, using lands inside the UGB as efficiently as possible. Maintaining a tight UGB has generally succeeded in channeling market forces from a sprawling edge to the designated centers. State law requires Metro to review the capacity of the UGB every five years to ensure it provides a 20-year land supply. But the law directs Metro to seek needed capacity from more efficient use of existing urbanized land before expanding the UGB. This requirement reinforces the 2040 Growth Concept, which stresses redevelopment and infill (dubbed "refill" locally). Metro has developed a detailed and sophisticated land-monitoring process to inventory vacant land and track the rate of refill. Metro's most recent process provided a 20-year development capacity (2002-2022) by relying upon refill at the rate of 29 percent for residential, 45 percent for industrial and 52 percent for commercial, plus a modest expansion of the UGB (20,000 acres, 8.7 percent). This means Metro expects the region will accommodate 29 percent of new households, 45 percent of new industrial jobs and 52 percent of new commercial jobs through refill. Figure 5

The UGB is only one tool available to Metro and its partner local governments. The region employs a wide array of regulatory, incentive and investment tools, and constantly seeks new tools. The first Metro action after adoption of the 2040 Growth Concept in 1995 was, with the urging of MPAC, to call for removal of zoning barriers to higher densities in centers. City and county elected officials at the MPAC table negotiated a series of household and employment growth targets, with regional equity in mind. The targets evolved into Metro requirements: each city and county undertook a re-zoning process to provide the targeted capacity. Cities and counties can distribute and re-distribute residential capacity as they choose, but they cannot reduce zoned capacity below

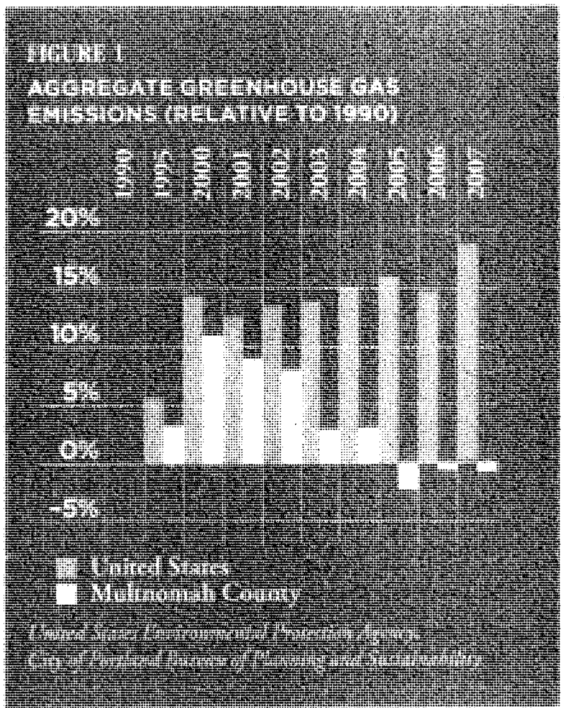


Figure 6 | Aggregate Greenhouse Gas Emissions

the targets. To help concentrate development in centers and corridors, Metro also set housing unit and employment targets for them and ratios for city and county minimum and maximum parking standards.

This widespread re-zoning generated opposition. In 2002, an anti-planning group gathered sufficient signatures to place a measure on the regional ballot that would have repealed Metro's authority to require up-zoning. The measure was voted down by the region's voters, but only after the Metro Council placed an alternative measure on the ballot -- which passed -- limiting its own authority to require cities and counties to increase density in certain single-family neighborhoods. Because the 2040 Growth Concept focuses high density in nodal centers rather than single-family neighborhoods, passage of the measure has not impeded progress toward compactness.

Metro encourages cities and counties to use non-regulatory tools to encourage development in centers and corridors, such as prioritization of transportation improvements to support development in those areas. Foremost has been the steady expansion of the regional light rail system. The goal is to connect the central city and all regional center by light rail and make the area around every station a high-density "Station Community." Recently, the expansion of the system has been supplemented by a central city streetcar system that provides local circulation and leverage for high-density residential and mixed-use development.

The region also places a priority on allocating certain categories of federal highway funds to projects that leverage development in centers and corridors. The result has been more than a decade of improvements to downtown Main Streets, sidewalks, bike paths and trails, bus stops and accessibility in centers and corridors. Of particular note is the conversion of flexible federal highway funds to federal transit dollars to help fund transit-oriented development through the Federal Transit Administration's Joint Development regulations. The most common use of this tool has been land value "write-downs" for developments that include higher density and mixed-use beyond what the market would support.

Although the region's long-range vision emphasizes "refill" in centers and corridors, action has been taken to affect the broader landscape. When the Growth Concept was adopted in 1995, 7,500 square feet was the smallest single-family lot zoning allowed in the urban areas around Portland. Re-zoning to meet the statewide planning goal on housing and Metro housing targets yielded a large supply of 3,500-5,000 square foot lots, which the market quickly absorbed. Metro also requires cities and counties to allow accessory dwellings in their single-family zones. These provide an affordable housing opportunity with minimal effects on neighborhoods. To ensure efficient use of industrial land and protect freight transport facilities, Metro requires cities and counties to prohibit large-scale retail and certain types of offices in the region's most important industrial areas. Figure 8

When Metro and the cities and counties of the region committed to more efficient use of land in centers and corridors, they recognized that more intensive development must be matched with better access to parks and open space. Learning to think of the region's floodplains, wetlands, streams and riparian areas as "greenfrastructure," the region developed complementary greenspaces strategies using land acquisition, regulation, and a broad program of public engagement and incentives. In 1995 and 2006, voters passed measures sponsored by Metro and a coalition of local governments, businesses and conservation organizations to authorize a combined total of $364 million in general obligation bonds to purchase land for parks and greenspaces. A portion - $69 million – is allocated to cities, counties and park districts to protect water quality and habitat and park and open space improvements. Metro has acquired over 8,000 acres across the region and expects to add another 3,500 to 4,500 acres to the region's parks, trails, greenspaces and natural areas.

Region Becomes More Compact; Emissions Drop

It was not a stated objective of the 2040 Growth Concept (1995) to reduce greenhouse gas emissions. In the years leading to its adoption, air quality, costs of public infrastructure, protection of farmland outside the UGB and re-vitalization or downtowns of the region were uppermost in the minds of regional leaders. But cities and counties, especially Portland and Multnomah County, began to address emissions reduction on a track that paralleled development of the Growth Concept.[6] The city led the way by adopting the nation's first carbon dioxide reduction strategy in 1993. Eight years later, the county joined the city in a joint Local Action Plan on Global Warming (2001), setting a CO_2 reduction target of ten percent below the 1990 level by 2010. Each of these efforts identified the links among development patterns, vehicle miles traveled (VMT) and GHG emissions. Each called for more compact development as a principal strategy to reduce VMT and emissions. These efforts not only complemented and reinforced implementation of the 2040 Growth Concept, they also added a compelling new reason to "build" the Growth Concept. New people and new organizations have enlisted in the drive toward compact, mixed-use, walkable communities and investments in transit, bicycle and pedestrian infrastructure.

From the beginning of implementation of the Growth Concept, Metro and many observers outside the state - from the U.S. Census Bureau to university researchers and the Brookings Institution - have been measuring the results of the region's growth management efforts. The data show that the city of Portland, surrounding Multnomah County and the entire region are all becoming more compact. Between 1982 and 1997, the amount of land consumed nationally for urban development increased by 47 percent while the nation's population grew only 17 percent.[7] From 1990 to 1996, Portland spread just 13 percent, the same as its growth rate.[8] Each new person moving into the Washington, D.C metropolitan area used 480 yards of space in 2000. Each person moving into the Portland metro area used 120 yards.[9] Between 1990 and 2000 population density in the region (including Clark County, Washington, with less rigorous growth management) increased by 13 percent. In contrast with most metropolitan regions in the U.S., the center of this region (city of Portland) grew as fast as its suburbs - about 43 percent – from 1980 to 2000. In the same period, Seattle grew 14 percent while its suburbs grew 46%; for Denver it was 12 percent to 47 percent.[10] Between 1990 and 2000, 88 percent of the Portland region's growth (again, including Clark County, Washington's growth) occurred in high-density urban areas, compared to 7-63 percent for four other metropolitan statistical areas of comparable size (Charlotte, Columbus, Orlando, and San Antonio).[11] Figure 7

The region's trend toward greater "compactness", complemented by investments in non-auto modes, appears to be reducing vehicle miles traveled (VMT). The Federal Highway Administration's Highway Performance Monitoring System (HPMS) shows the Portland metropolitan area's average daily vehicle miles traveled per capita is lower than the national average for urbanized areas and declining while the national trend continues upward. Average U.S. VMT is increasing by 1.8 percent per year, 2.5 times the rate of population growth. Residents of the ten most-sprawling communities in the U.S. drove an average of 27 VMT/capita/day. Residents of the ten least-sprawling communities average 21 VMT/capita/day.[12] In the Portland-Vancouver region it was 19.5 in 2007.[13]

Trips by transit, on foot and by bike are replacing and shortening auto trips. Transit ridership in the region (excluding Clark County, Washington) rose from 58 million in FY 1995 to 96.9 million in FY 2007.[14] According to the Federal Transit Administration, the Portland metropolitan area ranks 23rd in population while TriMet ranks 10th in overall annual ridership and 8th highest in annual ridership per capita. Transit ridership and mode share continue to increase.[15] Only six of the nation's 41 metropolitan statistical areas (MSAs) saw an increase in trips per revenue mile, including the Portland MSA.[16] Figure 8

Data show a modest increase in walking work trips within the city. Planners attribute the increase to infill housing in the central city.[17] The Brookings Institution (2007) rated metropolitan areas for walkability and found the Portland metro area to be the 5th most walkable region in the country.

Most impressive, however, has been the remarkable growth in bicycle trips. The number of summer-day trips on the four principal bridges across the Willamette River to downtown Portland from the east side rose from 2,855 in 1991 to 16,700 in 2008, a 584 percent increase. The number of auto trips across the bridges did not increase over that same period. Bike trips now comprise 13 percent of all trips across the bridges.[18] Of all trips in the U.S., 0.4 percent are by bicycle. In 2005, Portland had a bicycle commute mode share of 3.5 percent.[19] As evidenced by the bridge counts, the bicycle share continues to grow.

Emerging data also indicate that the region is experiencing some of the hoped-for benefits of its planning efforts. The shift from auto travel is saving people of the region a considerable amount of money. Because commutes in the Portland area are four miles shorter than the national average (20.3 miles/day v. 24.3 miles/day), households in the region spent seven percent less on transportation in 2004 than households in other western metropolitan statistical areas.[20] A report for CEOs for Cities estimates that the region's residents save $2.6 billion per year, $800 million of which would otherwise leave the state.[21]

The CEOs for cities report cites data showing that people "trade" housing costs for transportation costs, suggesting a new dimension of the land use-transportation connection: compact development encourages walking, biking and transit use, thereby saving travel dollars, thereby freeing household income for mortgage or rent payments. The combination of household income for housing and transportation (the two highest costs typically faced by a household) shows the Portland region to be among the lowest of all regions studied.[22] Figure 9

	Charlotte	Columbus	Orlando	San Antonio	Portland
Urban	7%	31%	64%	63%	88%
Suburban	50%	45%	23%	8%	9%
Exurban	45%	18%	12%	12%	1%
Rural	-1%	7%	2%	17%	3%

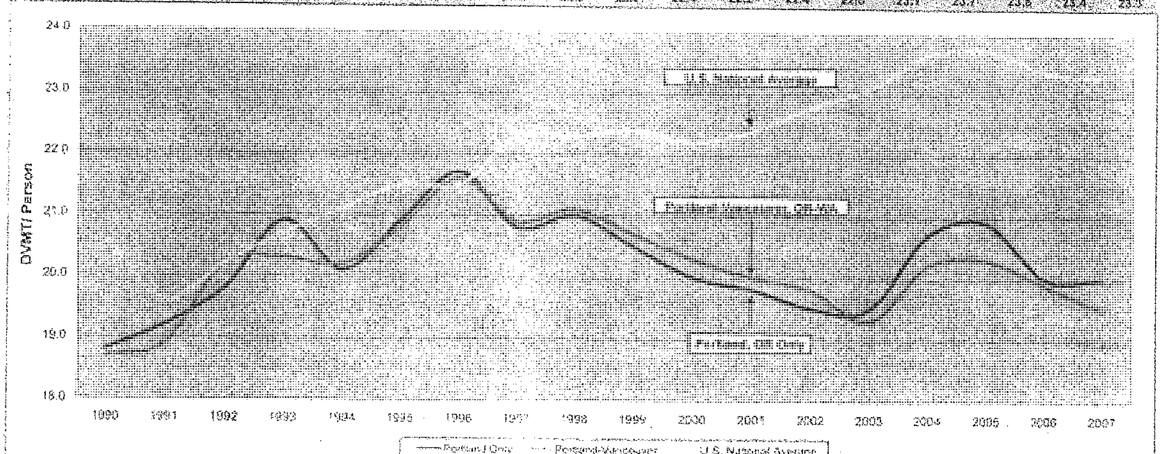
Source: Nelson and Sanchez. 2003

Figure 7 | Population Growth in Portland and MSAs with Similar Populations

Daily VMT (Vehicle Miles of Travel) Per Person - 1990 To 2007
Portland, OR Only, Portland-Vancouver OR-WA, And The U.S. National Average Data

(Revised 5-21-09)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Portland Only	18.8	19.2	19.9	20.9	20.1	20.9	21.7	20.8	21.0	20.5	20.0	19.8	19.5	19.6	20.7	20.9	20.0	20.0
Portland-Vancouver	18.7	18.9	20.2	20.3	20.2	20.8	21.6	20.8	21.1	20.7	20.3	20.0	19.5	19.3	20.2	20.3	19.9	19.5
U.S. National Average	20.5	19.6	20.2	20.7	21.1	21.5	21.5	22.3	22.3	22.4	22.2	22.4	22.8	23.1	23.7	23.8	23.4	23.3



*The population and VMT for 1990 to 2003 were based on the 1990 Census defined urban area. The 2004 and beyond population and VMT data were based on the geographic area of the 2000 Census defined urban area. This change in the Census defined urban area may be responsible for the uptick in the graphs of the Portland and Vancouver data after 2003.

Urban Area Sources: 1990-2007 data are from the FHWA in Washington, D.C.
DVMT/ Person data can be located in the FHWA webpage, "2007 Highway Statistics" 4.4.5. Urbanized Area Summaries, Section 4.4.5.2, Selected Characteristics, Table HM-72
The internet website location of the 'Highway Statistics' series (as of Feb 12, 2009) is: http://www.fhwa.dot.gov/policyinformation/statistics/2007/

National Average Source: The National Average of DVMT/ Person is calculated from 'Total DVMT' for all Federal-Aid Urban Areas, divided by total 'Estimated Population' as it appears on Sheet 9, of Table HM-72, which lists all the Federal-Aid Urbanized Areas in the U.S. The 1990-2007 data is located in the above cited website.

"Federal-Aid Urbanized Area is an area with 50,000 or more persons that, at a minimum, encompasses the land area delineated as the urbanized area by the Bureau of the Census" (from Sheet 9 Table HM-72). Portland-Vancouver, OR-WA is a Federal-Aid Urbanized Area.

If you have any questions, contact David Horowitz. David.Horowitz@oregonmetro.gov or phone 503-797-1769

Figure 8 | Daily VMT (Vehicle Miles of Travel) Per Person – 1990-2007

Conclusion

Be it residents' superior virtue, their historic frugality, or their dedication to planning, the region has corrected its greenhouse gas emissions course.[23] But this success has drawn attention to how far the region must yet come. The city will not reach the goal set in its 1993 CO_2 reduction strategy (20 percent below the 1988 level). Despite efforts to re-develop into a compact, mixed-use pattern, fewer than 25 percent of Portland neighborhoods receive a "Walkscore" of 80 points or higher (Sightline Institute indicator of walkable neighborhoods).[24] Fully 69 percent of the city's population live in neighborhoods that do not have the characteristics of "20-Minute Neighborhoods", a goal of the city's overhaul of its comprehensive plan.[25] The region is becoming more compact. But it faces the same challenge nearly all U.S. cities face: reversing 60 years of auto-oriented development by refitting suburban land use patterns. Figure 10

Nonetheless, success has whetted the region's appetite for further reductions. The draft City of Portland and Multnomah County Climate Action Plan 2009 proposes a 2050 reduction goal of 80 percent and an interim 2030 goal of 40 percent, with 64 actions to be taken by 2012. In the category of Land Use and Mobility the Plan sets two 2030 objectives:

- 90 percent of city residents and 80 percent of county residents can easily walk or bicycle to meet all basic daily, non-work needs.
- Reduce per capita daily vehicle miles traveled by 50 percent from 2008 levels.

Legislation passed by the Oregon Legislature (House Bill 2001) directs Metro to use its sophisticated modeling capabilities to develop a growth management scenario that would meet state emissions reduction goals (similar to Climate Action Plan goals). This work will provide residents of the region ample opportunity for their much-loved winter pastime – huddling in countless, long meetings peering into the future.

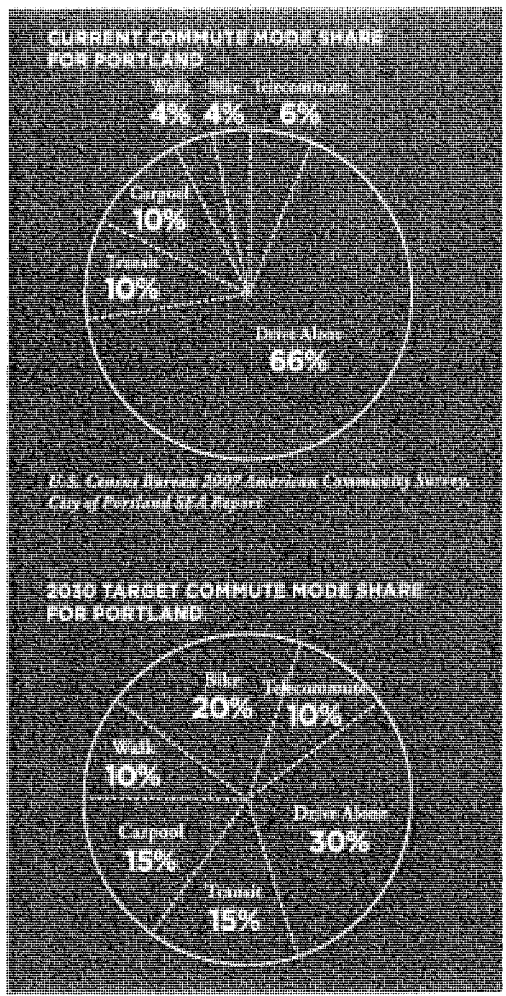


Figure 9 | Current Commute Mode Share for Portland

1 City of Portland and Multnomah County DRAFT Climate Action Plan, 2009, pp. 5; 23-24.

2 www.hybridcars.com Dashboard, October, 2008.

3 City of Portland and Multnomah County DRAFT Climate Action Plan, 2009, pp. 34; 39.

4 Cortright, Joseph (2007) 'Portland's Green Dividend' *Impresa Economics, White Paper for CEOs for Cities* (July).

5 *See* Putnam, Robert D., (2000) *Bowling Alone: The Collapse & Revival of American Community*, New York: Simon & Schuster.

6 In 2005, Portland signed the U.S. Mayors' Climate Protection Agreement. Since then, the metropolitan cities of Lake Oswego, Oregon City, Beaverton, Milwaukee, Hillsboro and Gresham have also signed. In 2007, Multnomah and Clackamas Counties joined the Cool Counties Initiative. In 2008, the Metro Council 'resolves' to adopt a regional climate change plan.

	1990	2007	2030	Percent change from 2007	2050	Percent change from 2007
Total carbon emissions (metric tons)	8,875,739	8,809,630	5,283,000	-40%	1,756,000	-80%
Population	584,000	702,000	967,000	+38%	1,276,000	+82%
Per person carbon emissions (metric tons)	15.2	12.	5.5	-56%	1.4	-89%
Passenger miles per day per person	17.4	18.5	13.2	-29%	6.7	-64%
Electricity (kWh per person)	13,046	12,300	8,319	-32%	4,146	-66%
Natural gas (Therms per person)	391	383	320	-16%	104	-73%

Figure 10 | Budget for a Low-Carbon Future (Multnomah County)

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October 13, 2009

CITY OF
LAKE OSWEGO

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SALLY MONCRIEFF,
COUNCILOR

MARY OLSON,
COUNCILOR

BILL TIERNEY,
COUNCILOR

David Bragdon, Council President and
Metro Council
Metro Regional Center
600 NE Grand Avenue
Portland, OR 97232-2736

Dear Mr. Bragdon and Metro Council Members:

Subject: Making the Greatest Place Program
October 15, 2009 Public Hearing

The Lake Oswego City Council met on October 6, 2009 and reaffirmed its strong support for the vision outlined by Metro's Making Greatest Place program.

The key themes identified in CEO Michael Jordan's recommendations include:

- Make the Most of What We Have (Invest in downtowns, centers, main streets, and employment areas consistent with the 2040 Growth Concept).
- Protect Our Urban Growth Boundary (to the maximum extent possible accommodate growth in the existing UGB).
- Walk Our Talk (Adopt performance targets and be accountable).

These recommendations are in step with Lake Oswego's comprehensive plan goals, policies, and actions. Through its plan, Lake Oswego has supported a mix of housing and employment uses and a walkable environment in its two town centers: the downtown and Lake Grove. The City has made major investments in the downtown that have helped to leverage private development projects. Similar investments are being planned for Lake Grove.

Lake Oswego, historically, has been a leader in voicing support for a tight urban growth boundary. Metro staff recommendations promote a tight urban growth boundary with only conservative expansions. The draft Metro Urban Growth Report sets out an approach that may result in little or no expansion of the UGB in 2010/2011. Lake Oswego supports this approach and recognizes that a critical component of this decision rests with cities and whether housing and employment capacities can be

America in Bloom Champion

enhanced. The City is committed to helping expand capacity by working with private property owners in the "Foothills area", east of the downtown, to create a dense, new transit oriented neighborhood that will be served by an extension of the street car line from Portland. We appreciate Metro's continued support of this critical transit extension.

Over the past two years the Metro Urban and Rural Reserves Steering Committee and advisory bodies in each of the three Metro area counties have been meeting to make recommendations regarding reserves. The County recommendations were finalized the beginning of September. The Clackamas County Board of Commissioners, based on input from a County advisory committee, recommended that most of the Stafford basin be left undesignated with only the areas along I-205 included as an urban reserve area. In the recommendations made by the Metro CEO (clarified orally on September 23), the entire Stafford basin is proposed as an urban reserve area. On October 6, the Lake Oswego City Council restated its opposition to making the entire Stafford basin an urban reserve area. The Council envisions a rural/agricultural enclave in the upper Stafford basin consistent with the visions expressed by the cities of Tualatin and West Linn and by Clackamas County. The Lake Oswego City Council believes that if any part of the Stafford basin is included as an urban reserve, its inclusion in the UGB must be contingent upon the concurrent provision of high capacity transit service along the I-205 corridor.

Thank you for the opportunity to share our views on these important matters.

Sincerely,

Jack D. Hoffman
Mayor of the City of Lake Oswego

cc: Lake Oswego City Council

101409rsc-09

Eli Spevak
6325 N. Albina Ave. #6
Portland, OR 97217
(503) 422-2607

Reserves Steering Committee
CORE 4 Members
Metro Regional Center
600 NE Grand Avenue.
Portland, OR 97232

October 14, 2009

Attention: John Williams, Land Use Planning Manager, Reserves Staff

My name is Eli Spevak. I am owner/principal in the real-estate development and general contractor firm Orange Splot LLC. My company is located in Portland and has been in business since 2006. Before starting my own company, I worked for the Housing Development Center where I managed the development of over 250 units of affordable housing, typically in multifamily projects of 25 – 60 units.

My company's niche is the development of green, community-oriented, residential in-fill projects in N/NE Portland. We are known for our commitment to green buildings, sustainable development practices, and innovative models of relatively dense in-fill development that fit in beautifully with existing neighborhoods. These projects include fairly compact homes accompanied by interior and exterior common spaces shared by all residents. They have been extremely well received – selling out immediately and being featured in local and national magazines and Portland's annual Build It Green! home tours.

All of our projects are located in existing centers for two primary reasons: (1) it is extremely important to our clients/buyers that they live within easy walking or biking distance to urban amenities and (2) by building within existing centers we can accommodate population growth without having to expand the UGB into productive and beautiful farm and forest land – which is a core value of both my company and our clients.

We've been consistently successful at finding close-in property with un-tapped density on which to build our projects. In the current market there are far more suitable properties available in N/NE Portland with development potential than we have the capacity to pursue, and looking ahead we see no lack of appropriately zoned land to keep us and other in-fill developers busy for decades. Our success, branding and marketing is in no small part due to smart land use planning and a commitment to complimentary public investments within the UGB.

My message to you today is simple: be very cautious about how much urban land we commit to for urban reserves. Indeed, in my ideal world, we would leave the urban reserves as they are today. I am concerned that by adding too much land we will dilute the region's scarce resources and existing investments in parks, libraries, schools, transportation infrastructure and utilities that make our communities livable and equitable places in which to live. We need to make sure that our priority is to use and reuse the land, buildings, and infrastructure we already have more effectively. All market indications are that we will need to do more to invest in our existing centers and corridors, not less.

Your work is also very important to the success of my small company. We have grown from building 4-home clusters to 8-home clusters, and rely on continued public investment in maintaining the infrastructure in existing neighborhoods to make these neighborhoods continue to be amenity-rich and accessible places where my clients will continue to want to live and work.

I am a big believer in investing in our existing centers and corridors. If we want vibrant centers and neighborhoods, investing in these locations should be our first priority. The places I work in have undergone amazing transformations for the better. We can redevelopment and reuse existing buildings in ways that are the most cost-effective, most efficient, and in the end, the most sustainable. It is also no secret that finance capital for development projects is very limited – and this is likely to continue for some time. Just like scarce public infrastructure dollars, it is essential that we prioritize. And this is one more reason that I urge you to err on the side of caution. We can always add more urban land later, if circumstances change.

In closing, let me again urge you to cautiously calibrate any amount of future urban reserves our region needs. My firm and other redevelopment colleagues in this field depend on your wise decisions.

Thank you again for your hard work.

Sincerely,

Eli Spevak
Orange Splot LLC

TRI MET

October 15, 2009

Michael Jordan
Chief Operating Officer
Metro
600 NE Grand Ave
Portland, OR 97232-2736

Dear Michael,

Making the Greatest Place attempts to address an impressive array of issues, aspirations, plans, and efforts. TriMet encourages Metro to continue to strive to be comprehensive. The diverse elements encompassed in Making the Greatest Place need additional work to ensure they are consolidated, interrelated, and consistent. TriMet offers our comments in support of this important goal and looks forward to continuing to work with Metro to Make the Greatest Place. TriMet staff is ready to assist Metro where needed.

This letter contains high-level comments on fundamental approach and policy. Attachment 1 contains detailed comments and suggestions.

Overall and Policy Comments

- **Performance Measurement:** Performance measures are invoked frequently though targets have not been adopted by Metro Council. The region needs to commit to specific measurable targets that describe whether policies and investments are succeeding in order to know how aggressive we must be in our actions. Indicating the general direction we want to head is insufficient. JPACT endorsed specific draft performance targets for measures covering economy, environment, and equity (Table 2.3 of RTP). Those targets should be formally adopted by the region and used, with robust monitoring and feedback loops to inform future RTP, TSP and land use efforts.

- **Outcomes Based Planning:** Focusing on "outcomes" is a stated goal throughout the Making the Greatest Place documents, particularly in the Regional Transportation Plan. However, the current draft falls short of fully integrating outcomes-based planning. TriMet encourages more effort be given to setting up a system where outcomes are measured and costs and benefits of investments are analyzed. Importantly, the "outcomes" based approach needs more attention to resources and an on-going program to track performance and *correct performance* over time.

- **Increase Travel by Pedestrians, Cyclists, and Transit Users:** Pedestrian, bicycle and transit modes provide mobility while minimizing negative impacts. These modes are more sustainable than other "alternative modes" such as car sharing, which in turn is more sustainable than SOV travel. Similarly, freight movement must be prioritized over SOV commuting. The goals and policies of the RTP and related documents should reflect this.

- **Walkability:** Pedestrian analysis and strategies deserve more emphasis and stronger tools and strategies to reach goals of walkability.

- **Congestion Management:** Managing congestion is just one element in a much larger vision and set of performance targets. Funding choices, design, and support for transportation projects must be guided by the 2040 vision and meeting aggressive performance targets rather than projections of auto demand on our roadways.
  - Efforts to provide transportation choices must be coupled with a much stronger focus on the potential for managing demand and dramatically increasing walking, biking, and transit ridership.
  - Parking management strategies are some of the most effective in other regions for managing demand. These need more emphasis.

- **Budget and Commitment:** We need to budget transportation dollars to follow our vision, not just our demand models. All of us will need to work together to adjust project lists to better conform to stated goals and vision.
  - In order for the vision to become a reality, institutional and financial structures must be focused on making centers and main street corridors 'work' (i.e. achieving desired land use outcomes and activity). This may even require an additional funding and institutional vehicle at a regional or at least sub-regional level to help create projects that further this end.

- **Institutional Challenges:** Roadways within the region are managed by a confusing mix of jurisdictions (e.g., state, counties, cities) whose management imperatives may be at odds with 2040 vision. The region should consider how it can direct control to the level of government most able to implement regional vision. We need to find processes to work through conflicting policies and standards.

- **HCT System Expansion Policy:** The HCT's system expansion policy (SEP) is not well-defined. TriMet understands that Metro intends to further define and enhance the SEP. Future work on a SEP must both make sure station areas can live up to expectations and make sure progress is made toward concrete projects.
  - Working with local jurisdictions, the SEP should more clearly articulate a process that allows and encourages them to use all of the tools available to them to create more active, walkable communities not only as a prerequisite for HCT but to achieve other benefits of the 2040 vision.
  - TriMet looks forward to being fully involved in the continued development of the SEP.

- **Limited UGB Expansion:** The Urban Growth Report establishes that there is limited need for expansion of the UGB and designations of urban reserves. TriMet is already strained to meet the demand for high quality transit service necessary to achieve the 2040 vision. Expansion of the UGB would likely dilute either the quality or the coverage of transit service or both. TriMet would have great difficulty providing commitments that would be necessary to promote efficient use of a vast supply of urban reserves. Small additions to the UGB that can be integrated into the existing urban structure will enable TriMet to focus resources to serve centers, mainstreets, and corridors with a level of service the makes transit an attractive alternative to driving.

- **Critical Unresolved Issues:** The final section of the RTP contains a weighty list of unresolved issues. They are challenging, complex, and worthy of long study, but they are also critical. The region should begin addressing them immediately following completion of the RTP. Work should not be postponed until the next RTP cycle.

TriMet appreciates the opportunity to comment on this far-reaching and forward-looking set of efforts encompassed by Making the Greatest Place. TriMet stands ready to assist Metro in further developing and refining the elements into a coherent whole that can effectively move the region in the direction of the 2040 vision.

The attachment to this letter contains detailed comments on each of the many documents.

Cordially,

Neil S. McFarlane
Executive Director
Capital Projects

Attachment: Attachment 1 – Detailed Comments

Housing Land Advocates

October 15, 2009

Greatest Place Comments
Planning and Development
600 NE Grand Ave.
Portland, OR 97232

Re: Comments Regarding "Strategies For A Prosperous and Sustainable Region

Dear Mr. Jordan:

The Housing Land Advocates ("HLA") is an advocacy organization dedicated to using land use planning and the law to address affordable housing conditions in Oregon. As such, we take this opportunity to provide comments on Metro's current planning effort, "Making the Greatest Place" and the recommended strategies to implement it. Specifically, we have reviewed the documents pertaining to this planning effort and are concerned that affordable housing, as a regional issue and policy, is not being addressed. In addition, we have recommendations for strategies that Metro should use to address the lack of affordable housing within the region.

A. Metro should affirmatively act to link affordable housing, land use and transportation policy.

HLA's overarching goal with respect to Metro's planning authority is to encourage the use of its entire toolbox to establish concrete goals, and clear and objective planning standards for achieving a mix of affordable housing in a fair allocation across all regional neighborhoods. While we believe that Metro's approach to review both housing costs and transportation costs in its Housing Needs Analysis is an important step in planning for global affordability, HLA believes the analysis falls far short of providing steps to overcome the lack of supply of affordable housing in the region. In light of Metro's past attempts to address affordable housing, with little or no perceivable improvements in the availability of affordable housing in the region, HLA is ready to offer its participation in establishing working solutions.

We have five main suggestions for increasing the land available for, and, over time, supply of affordable housing in the Metro region:

1. Set concrete regional goals, objectives and performance measures. If local governments are to be inspired to undertake serious consideration of the location and

supply of affordable housing, Metro must make affordable housing a regional goal and objective.

2. Recommend changes in any local comprehensive plan to ensure that the plan conforms to the district's goals and objectives and the statewide planning goals.
3. Review comprehensive plans for compliance with Goal 10 and the administrative rules.
4. Set affordable housing standards for jurisdictions within the Metro region in order to achieve an equitable regional distribution of affordable housing as it does with town centers and transit.
5. Develop one regional policy and plan that directly links affordable housing to transportation, land use, natural resource protection and livability goals, objectives and actions. Develop performance measures that address this link.

These suggestions are based on the available statutory authority for Metro to take immediate action to plan for and increase the supply of affordable housing throughout the region. In addition, HLA strongly recommends a more hands on approach by Metro so that Metro can come into compliance with federal fair housing laws. The following is an outline of the tools currently available for Metro's use in undertaking a process to achieve the five suggestions set forth above.

Pursuant to Metro's statutory authority, ORS 268.380 identifies Metro's power to review local plans. Once Metro internally establishes that affordable housing is a goal of the agency, then pursuant to ORS 268.380(1) (b), Metro can recommend changes in any plan to ensure that the plan conforms to the district's goals and objectives and the statewide planning goals.[1] In addition, this broad power allows Metro to both enforce its policies on local governments and ensure that at a minimum Goal 10 compliance, in terms of planning for buildable lands, is undertaken as Metro reviews comprehensive plans.

Further, ORS 268.380(1) (d) allows Metro to facilitate the efforts of various local governments to ensure that affordable housing goals can be achieved. This achievement can be made by Metro coordinating its activities and the related activities of the cities and counties within the region with the land use planning development activities of the federal government, and other local government bodies. This statutory authority is provided because agencies like Metro are necessary to achieve society's broad goals of affordable housing by looking at the challenge from a regional level. We cannot ensure adequate supply of affordable housing without Metro's leadership in identifying the amount and location of affordable housing and which partners are necessary to achieve regional planning to address affordable housing demand.

[1] Note Goal 10's needed housing definition includes government-assisted housing. Metro's authority to review plans for compliance with Goal 10 is an additional source for Metro's requirement to adhere to the federal fair housing laws. See Section B, *infra.*

Metro can and should identify affordable housing as a planning activity that has a metropolitan impact. Pursuant to ORS 268.390(2), Metro can prepare and adopt functional plans for affordable housing both because of its impact to transportation, as evidenced by Metro's inclusion of transportation costs in the Housing Needs Analysis, and by its own right for the region-wide impacts that affordable housing has on the fabric of community development. If Metro adopts an affordable housing regional framework, then under ORS 268.390(5) it can adopt implementing ordinances that require each city and county within the jurisdiction of the district to make land use decisions consistent with the regional framework plan. This statutory authority provides Metro with the control necessary to bring affordable housing to the forefront of local planning decisions.

In addition, the regional framework gives Metro the needed policy structure to ensure that local governments take notice of the affordable housing goals and ordinances of Metro when making their own land use planning decisions. ORS 268.390(5) (d) gives Metro the ability to require changes in local land use standards and procedures to remedy a local government's decision to deviate from or failure to implement the regional framework. With this remedy, Metro also has enforcement powers under ORS 368.390(7) to withhold discretionary funds from the city or county that fails to adhere to the regional framework plan for affordable housing.

This outline suggests that constructing a workable affordable housing policy is possible given Metro's toolbox. We encourage Metro to make efficient and quick use of these tools to resolve the inequities resulting from a lack of affordable housing in all neighborhoods in our region.

B. Making the Greatest Place Recommendations failure to acknowledge the growing concentration of lower income households, results in an inequitable distribution of affordable housing opportunities within the region by race and ethnicity.

Of significant concern to HLA is the lack of awareness of a growing concentration of poverty and ethnicity within the region. Metro's Housing Needs Analysis forecasts an increasing concentration of lower income households within the region, separate and apart from other areas which will have a substantially lower number of lower income households. This is not the result of affordable housing opportunities within the areas of increasing concentration of lower income households. It is a clear indication of the ***lack*** of affordable housing elsewhere.

Strikingly, the Housing Needs Analysis fails to consider race and ethnicity in its housing projections. Historically, policies and practices of state and local governments have resulted in segregated residential patterns.[2] Neither the Urban Growth Report nor the Housing Needs Analysis state why it is appropriate to ignore past and current trends affecting the present distribution of housing opportunities when estimating future housing patterns across the region. Failure to include a discussion of who has access to the various housing opportunities across the region is a critical one and substantially undermines the credibility and effectiveness of the recommendations.

There is nothing that would indicate the factors responsible for lack of equitable housing opportunities for lower income or minority households have ceased to exist or will not impact current or future housing opportunities. For example, rising housing costs in Portland have reached levels that are not affordable to low income households, many of whom are African American, leading to the gentrification of Portland and other Metro jurisdictions. The result has been a diaspora of these lower income households and minority families out of neighborhoods that traditionally provided housing for these groups. These households have moved from the inner neighborhoods of North, Northeast and Southeast of Portland to concentrate in the outer areas of Multnomah County and elsewhere over the past decade. The City of Portland conducted a survey of its citizens in 2006 and reported the following finding:

Portlanders identifying with minority groups frequently experience inequities and injustices in their lives.

They attribute the persistent income gaps between whites and minority groups and the lack of sufficient affordable housing to the legacy of racial segregation.

And

African Americans and other groups express anger and resentment over their displacement from North and Northeast Portland neighborhoods.[3]

Multnomah County's 2005 Analysis of Impediments described the trend in the following manner:

Lower-income renters feel the impact disproportional. Areas of the city such as North and Northeast Portland that once experienced high vacancy rates (9.6% in 1990) have seen a decrease (4.6% in 2002) while citywide rates during this period have

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[2] *Initial Report of the United States of America to the United Nations Committee on the Elimination of Racial Discrimination*, at 53, delivered to the U.N. Committee on the Elimination of Racial Discrimination (Sept. 2000), available at http://www.state.gov/documents/organization/100294.pdf

[3] *Vision into Action: The Vision PDX Input Report,* available at http://www.visionpdx.com/reading/inputsummary/social_issues/index.

remained stable (5.6%). Economic forces in Portland threaten the preservation of affordable rental housing that has traditionally housed the most vulnerable households in the area, the disabled, the elderly who live on a fixed income, and families with low incomes that need to live close to the places where family members work. As of 2002 one-bedroom apartments were renting for $691-899, and it was "increasingly difficult to obtain downtown housing that is affordable to low-income households. Twenty-eight percent of renters within the central city area face a severe housing cost burden."

As housing prices continue to rise, the poverty rate in Multnomah County continues to be at 11.6%, ranking it the 24th worst in the nation among major metropolitan areas. As the City has said, "The challenge in the next decade will be to ensure that Portland is an affordable city to all of its residents." (P. 65)

A review of the Housing Needs Analysis reveals that the migration of lower income households to outer SE. Portland neighborhoods, towards Gresham and Milwaukie will continue over the next twenty years. These are places that lack good access to parks; transit; pedestrian and bicycle facilities; employment opportunities; cultural amenities; and quality K-12 programs.

The segregation of households by class and income is not a phenomenon unique to Multnomah County. Within Washington County, lower income households are concentrated within the western half of the county, specifically within Forest Grove, Cornelius and Hillsboro. Indeed, seven (7) block groups within the Hillsboro contain a poverty population ranging from 45% to 30%.[4] The majority of those block groups are concentrated within the city limits of Hillsboro and are predominantly populated by Hispanic households.[5]

The failure to address the growing concentration of poverty may be a violation of fair housing laws. It is well recognized that the lack of affordable housing burdens the very low and low income households to a greater extent than higher income households. However, it is also well known that minorities and persons with disabilities are disproportionately represented within these lower income groups. This is true on a national level as well as within our own region. For example, 62% of Hispanic households in Washington County are of extremely low, low or moderate income compared to 25% of the White population. Although Hispanics account for 14% of the county's population, at least 62% of Hispanic households experience difficulty in obtaining affordable housing compared to 29% of White households.[6] A review of the demographics of the neighborhoods of elementary schools led to the conclusion in that there is evidence that neighborhoods within Washington County are segregated by race

[4] Washington County Consolidated Plan 2005-2010, Figure 4-1 Low Mod Concentration
[5] Washington County Consolidated Plan 2005-2010, Figure 4-6 Ethnic Concentration
[6] Washington County 2004 Analysis of Impediments, p.

and income. [7] It was not surprising that in 2004, Washington County determined that the lack of affordable housing for lower income households was an impediment to fair housing.[8]

Metro is an entity that is covered by the Fair Housing Act Amendments of 1988 and Oregon's Anti-Discrimination Act (ORS 649A et seq.). Metro should analyze the impacts of all its policies to determine whether or not they will decrease or increase the development of affordable housing, and if in adopting such policies it is in compliance with state and federal anti-discrimination laws. In doing so, Metro would be acting consistently with current federal policy regarding housing, transportation and energy. On June 16, 2009, EPA joined with the U.S. Department of Housing and Urban Development (HUD) and the U. S. Department of Transportation (DOT) to help improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide. Through a set of guiding livability principles and a partnership agreement that will guide the agencies' efforts, this partnership will coordinate federal housing, transportation, and other infrastructure investments to protect the environment, promote equitable development, and help to address the challenges of climate change.

We firmly recommend that Metro take the affirmative steps outlined above to address the lack of affordable housing and the inequitable distribution of housing opportunities within the region. Housing, in particular its location, is the primary mechanism for accessing opportunity in our society. Housing location determines the quality of schools children attend, the quality of public services, access to employment and transportation, health risks, access to health care and public safety. Without a change in current policies or land use practices, rising housing costs will continue to dictate housing patterns throughout the region and will be the determining factor of where lower income households will and will not live.

Conclusion

Metro cannot throw up its hands and claim to be doing the best it can to address affordable housing in the region because it lacks more tools to make positive change. Gentrification and spatial segregation by income, class and racial and ethnic groups will continue unless we collectively do something about it at the regional and local levels. Portland will not become the "greatest place" that it rightly aspires to be if it ignores fundamental social and economic trends in its planning processes.

[7] Washington County 2004 Analysis of Impediments p.19

[8] Washington County 2004 Analysis of Impediments p.81

Housing Land Advocates

HLA looks forward to continuing the conversation with Metro to help create a regional framework for affordable housing and to analyze broader land use mechanisms to implement that regional framework. Such mechanisms may include, but are not limited to, alterations in system development charges, inclusionary zoning, tax base sharing, density bonuses, and modified parking standards.

We encourage Metro to convene a conversation with community members interested in planning for and making affordable housing a reality in the region. Thank you for your consideration of these comments.

Sincerely,

Ellen Johnson
Chair, Housing Land Advocates

cc: Michael Jordan, COO, Metro
Mr. Gerald "Jerry" Cohen, AARP Oregon State Director
Julie Nepveu, AARP Foundation Litigation
Bandana Shrestha, AARP Oregon
Margaret Neal, Portland State University
Janet Hammer, Portland State University
Alan Delatorre, Portland State University
Moloy Good, Fair Housing Council of Oregon

102109cw-4

Site choices of recent solar manufacturing recruits to Oregon

Company	City	Acres	Using existing building?	Notes
PV Powered	Bend	9	Undetermined (appears yes)	Company founded in Bend. 100,000 square feet of building on former Oregon Woodworking site. Manufactures power inverters.
Solaicx	Portland	21	yes	
SolarWorld	Hillsboro	94	yes	Company in final stages of expansion at Hillsboro site. Moved into existing Komatsu silicon wafer facility.
Peak Sun Silicon	Millersburg	8	no	Company has option to purchase an additional 90 acres in Millersburg
XsunX	Wood Village	8.28	yes	Company first chose Oregon as a location and then began a site selection process, looking for existing buildings. The building that XsunX leases previously housed Merix, a high-tech manufacturer.
SpectraWatt	Hillsboro	20	no	Intel spinoff on Intel campus (has 20 acres). Halted construction because of a lack of investment money. Moving to New York because of public incentives.
Sanyo	Salem	20	no	
Oregon Crystal Technologies	Gresham	Less than 1	yes	In Rockwood urban renewal area – deciding between 2 existing buildings

102109cw-5

Use of large lots added to the UGB (2002-2009)

Purpose and summary

An analysis of the use of the large lot inventory that was added to the UGB since 2002 can help inform policy discussions about how to best address the region's large lot demand into the future. As summarized below, very little development has occurred on the region's large lots that were added to the UGB over the last seven years.

Non-industrial uses on lands with Title 4 designations

Title 4 of the Metro Urban Growth Management Functional Plan seeks to provide and protect a supply of sites for employment by limiting the types and scale of non-industrial uses in Regionally Significant Industrial Areas (RSIAs), Industrial and Employment Areas. Title 4 also seeks to provide the benefits of "clustering" to those industries that operate more productively and efficiently in proximity to one another than in dispersed locations. Title 4 does not, however, prohibit non-industrial uses outright. Instead, it places limits on the square footage of new buildings for retail commercial and retail service uses.

Because non-industrial uses are, with certain restrictions, allowed on Title 4 lands, Metro does not track those uses. However, there are anecdotes of instances where large lots with Title 4 designations have been purchased by school districts, park districts, and medical institutions. These uses, where allowable, may ultimately have the effect of reducing the region's supply of buildable large lots that were included in the UGB to meet industrial demand. This is of particular concern in Regionally Significant Industrial Areas that are chosen because of their freight access and availability of specialized utilities.

Title 4 map amendments

Title 4 lays out a process for cities to seek amendments to Title 4 designations. To date, there have been relatively few Title 4 map amendments or requests for amendments. Most of the amendments that have been made were done to acknowledge pre-existing, non-employment uses (i.e. to correct mapping errors). Not counting those corrections, approximately 43 acres have had the Title 4 designation removed (not in an area added to the UGB from 2002 onward).

Concept planning

Title 4 designations have been applied to some lands upon their inclusion in the UGB. Those designations are refined through subsequent concept planning and zoning. For areas added to the UGB since 1997, concept plans have remained faithful to the intent of the original Title 4 designations, producing acreages for employment uses that are consistent with and sometimes exceeding the original Title 4 designation acreage.

Development on large lots added to the UGB (2002-2009)

Notes on methodology

This analysis was completed during October 2009, and is based on visual inspection of satellite imagery. Corrections based on local knowledge are welcomed. Large lots are defined as 25 or more gross acres in a single taxlot. This differs somewhat from the definition used in the draft 2009 Urban Growth Report, which defines large lots as single lots with 25 acres or more of buildable area, after removing portions with environmental constraints.

		2002 UGB expansion	2004 UGB expansion	2005 UGB expansion	Totals
Entire expansion	Total acres	18,870	2,030	620	21,520
	Large lots	85	10	3	98
	Total acres of large lots	3,320	440	110	3,870
	Large lots fully or partially developed since expansion	6	0	0	6
Non-Title 4 large lots	Large lots developed as residential	4	0	0	4
	Large lots developed as "other"	1 (Sherwood school)	0	0	1
Title 4 large lots	Large lots with Title 4 designation	40	10	3	53
	Title 4 large lots developed as industrial	1 (Genentech in Hillsboro)	0	0	1
	Title 4 large lots developed as non-industrial	0	0	0	0

Cotugno to Liberty
Oct. 22, 2009

CORRIDOR POTENTIAL – EXPLORED

The region's corridors, as designated on the 2040 growth concept map, have great potential for redevelopment and cities have aspirations to see this redevelopment occur. Conservative estimates of this redevelopment illustrate the opportunity to meet the capacity gap identified in the UGR and, over the longer term, reduce the need for urban reserves for housing and employment.

1. Local jurisdictions have not implemented the zoning that reflects the intended function of the corridors as mixed use areas in all places. As of 2006, the zoning for the areas around the 400 miles of corridors showed that only 50% were multi-family or commercial[i]:

gross acres	Zoning as of 2006[ii]
13,296 is	SFD
3,167	MFD
more than 5,400	rural", "agriculture" or "forest
7,922	zoned commercial
2,256	Industrial
41,907	Corridor total

2. Metroscope scenarios completed in 2008 found that less than half of the zoned residential capacity in corridors could be expected to develop within 20 years, based on current market conditions and assumptions of continued expansion of the UGB as in the past.

3. Local jurisdictions have aspirations to see their corridors develop into more vibrant areas that contribute to the sense of place of their community and increase revenues. Through the Local Aspirations process, local jurisdictions identified over 40 corridors that they are either actively planning or are reconsidering. Table below (from expert panel background report) summarizes these corridors. Most of this active engagement today focuses only on those corridors currently zoned commercial or multi-family.

4. Metroscope scenarios completed in 2007 documented the redevelopment opportunities in corridors. Assuming only **15** corridors in the region eliminated height limits on multi-family and commercially zoned areas, increased the urban amenity values and that the region retained a tight UGB, the scenario forecasted a 31% increase in residential development. This translates into xxx more households, or xx% of the gap identified in the UGR. None of this additional capacity is counted in the current UGR

5. Leaders in the region are actively working to put the type of amenities in place to support that redevelopment and offer financial incentives and their efforts could far exceed those estimated for the 15 corridors identified in the scenario. Examples of these amenities include:

   - **Portland Streetcar** – over x miles of streetcar are planned. Streetcar has demonstrated a market effect to promote redevelopment. A recent study by Eric Hovee[iii] of the Grand/MLK eastside streetcar estimated that it could support redevelopment of up to 75% of the existing zoned capacity. Coupled with strategic zone changes, Portland estimates this could be higher (source? Question for BOPS)[iv]**NOTE: this is the points that Mayor Adams would make)**
   - **Future HCT lines:** the Region has selected two new priorities for future HCT extensions along the Powell Corridor and the Barbur / 99W Corridor. Both of these areas present significant redevelopment potential either by supporting the market to redevelop the existing zoning along Powell or Barbur, or to redefine the opportunities of the corridor through zoning changes and other financial incentives along the99W corridor in Tigard. (note – consider using HCT index tool exercise in just one or two station areas to illustrate potential size of redevelopment – see Crista and Tigard staff) **(This point Dirkson could make)**
   - **Sidewalk and other access, park and enhancements** – transportation and park plans identified many additional RTP and in current park planning projects that will support redevelopment (source??). Some of these corridors include station communites, such as the ones in Gresham where recent studies note the greater potential. (**NOTE: these are the points that other leaders (ie Bemis) could make)**

6. Changing zoning requires time and care and is not something that is ever done. These zone changes will add capacity, beyond what is counted today. Over the next 50 years, these zone changes are likely given the opportunities these corridors present and the beneficial impact that leaders in the region see for their communities.

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[i] Metro's UGMFP does not require specific zoning for corridors.
[ii] Source: 2006 corridor study with Eco NW through TGM grant
[iii] Note to get copy of this report from Tony.
[iv] This is where bureau of planning reports on streetcar redevelopment plans could be included, if any are available.

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Metro | Agenda

Meeting: Metro Policy Advisory Committee (MPAC) Retreat
Date: Friday, October 23, 2009
Time: 8 a.m. to 3 p.m.
Place: Oregon Zoo, Skyline Room

7:45 AM		**REGISTRATION/SIGN-IN**	
8:00 AM		**WELCOME**	**Tom Brian, Chair**
8:05 AM		**INTRODUCTIONS**	
8:15 AM		**AGENDA OVERVIEW**	
8:20 AM	*	**<u>URBAN GROWTH REPORT</u>**	
		• Urban Growth Report Overview (UGR 101):	**Malu Wilkinson**
		o Description of 20-year Demand vs. Supply	
		o 2009 adoption of the 20-year land supply "gap"	
		o 2010 adoption of actions to close the "gap"	
		o Comment and Response Log	
		o Description of legal sufficiency	**Dick Benner**
		• Feedback on Residential Urban Growth Report:	**Facilitator: Andy Cotugno**
		o **There is a "gap" of 26,100 to 103,600 housing units**	
		• Feedback on Employment Urban Growth Report:	**Facilitator: Andy Cotugno**
		o **There is <u>no</u> "gap" for general industrial land There is a 1,000 acre "gap" at the high end of the demand forecast for non-industrial land**	
9:45 AM		**BREAK**	
10 AM	*	**<u>URBAN GROWTH REPORT (continued)</u>**	
		• Feedback on Large Lot Industrial Urban Growth Report:	**Facilitator: Andy Cotugno**
		o **There is a "gap" of 200-800 acres for future industrial large lot developments (50-100 acres in size)**	
		• Developing the 2010 work plan for closing the "gap"	**Facilitator: Andy Cotugno**
		o **What policies and investments need to be implemented to increase capacity?**	
		o **What should the 2010 work plan include to address equitable housing affordability?**	
NOON		**LUNCH**	
12:45 PM	*	**<u>REGIONAL TRANSPORTATION PLAN</u>**	
		• Regional Transportation Plan Overview (RTP 101):	**Kim Ellis**
		• Feedback on Outstanding Issues	**Facilitator: Robin McArthur**
		o **Work plan to address Greenhouse Gas emission reduction**	**Mike Hoglund**
		o **Adoption of performance targets**	**Kim Ellis**
		o **State approval of alternative mobility standards**	**Kim Ellis**
		o **Input on corridor refinement priorities**	**Deborah Redman**
3:00 PM		**ADJOURN**	**Tom Brian, Chair**

* Material available electronically.
\# Material provided at meeting.
All material will be available at the meeting.

For agenda and schedule information, call Kelsey Newell at 503-797-1916, e-mail: kelsey.newell@oregonmetro.gov.
To check on closure or cancellations during inclement weather please call 503-797-1700.

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Metro | Memo

Date: 10/7/2009
To: MPAC members
From: Malu Wilkinson, UGR Project Manager
RE: MPAC discussion on the Urban Growth Report, the analysis of 20-year demand and capacity for jobs and housing within the urban growth boundary

This memo includes the issues identified by MPAC at the September 23, 2009 meeting related to the Urban Growth Report, which is the analysis of 20-year demand and capacity for jobs and housing within the urban growth boundary. Items 1-5 are targeted for MPAC discussion on October 14, 2009, the remaining items are included with responses to the questions raised.

ITEMS FOR DISCUSSION

1. ***Given the range forecast and the assessment of capacity likely to develop inside the urban growth boundary, the UGR analysis concludes that of the 20-year forecasted households, 12% at the low end and 46% at the high end of the range will not be accommodated within the UGB without policy or investment changes (i.e., there is a gap that ranges from a deficit of 26,100 to 103,600 dwelling units). Is this a reasonable assertion?***

Background: The draft urban growth report considers the likelihood that development over the next 20 years will reach capacity (as currently zoned). Key factors include an assumption that only half of the current zoned capacity for multi-family and mixed-use residential and half of the residential capacity in areas brought into the UGB since 1997 will be built due to lack of investments and other infrastructure. The analysis assumes that 33% (regional average) of residential demand will be met through infill and redevelopment – allowed under current local zoning. Based on recent experience, the analysis assumes that 61.8% of households forecasted for the 7-county area will locate within the Metro UGB over the next 20 years. The focus of 2010 will be to determine what mix of local and regional investments and urban growth boundary expansions close this gap and best support the six outcomes.

Staff recommendation: The residential analysis does allow sufficient flexibility for the Metro Council to fill the capacity gap through documenting new local or regional investments and/or policy decisions or by expanding the urban growth boundary, drawing strategically from urban reserves to support vibrant communities.

MPAC discussion:

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2. ***Given the range forecast and the assessment of employment capacity likely to develop inside the urban growth boundary, the UGR analysis concludes that there is no gap for general industrial demand and a gap of approximately 1,000 acres at the high end of non-industrial demand (about 17% of forecasted demand). Is this a reasonable assertion?***

Background: The employment analysis in the draft urban growth report uses local zoning and market factors to assess how well the land within the UGB can support forecasted jobs over the next 20 years. Vacant employment land was classified into tiers based on “development readiness”, half of the capacity on land in the lower tiers is assumed to be used in the 20-year timeframe. As in the residential analysis, half of the employment capacity in areas brought into the UGB since 1997 is assumed to be unused due to lack of investments and other infrastructure. The analysis assumes that 20% of industrial demand and 52% of non-industrial demand (regional averages) will be met through infill and redevelopment – allowed under current local zoning. Based on MetroScope scenarios that model the effects of current policies and trends, the analysis assumes that 73-75% of jobs forecasted for the 7-county area will locate within the Metro UGB over the next 20 years. The focus of 2010 will be to determine what mix of local and regional investments and urban growth boundary expansions best support the six outcomes.

Staff recommendation: The employment analysis does allow sufficient flexibility for the Metro Council to fill the capacity gap through documenting new local or regional investments and/or policy decisions or by expanding the urban growth boundary, drawing strategically from urban reserves to support a strong regional economy.

MPAC discussion:

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3. ***Given the range forecast and historical preferences for large lots by certain sectors and the current inventory of employment land in the region, the analysis identifies a gap of 200-800 acres for future large lot employment. Is this a reasonable assertion?***

Background: For the purposes of the large lot analysis, only vacant buildable land is considered as supply. Without tax lot assembly, this analysis identifies surplus capacity of 25-to-50-acre lots, but a potential deficit of tax lots over 50 acres and lots over 100 acres (around 800 acres at the high end). An analysis of the potential for land assembly closes the gap by around 600 acres. A subcommittee of MPAC will meet over the next few months to discuss the best approaches for meeting large lot demand in the region. The focus of 2010 will be to determine what mix of local and regional investments and urban growth boundary expansions close this gap and best support the six outcomes.

Staff recommendation: The MPAC Employment Subcommittee is charged with identifying options to address the need for large lots to support the traded sector in the regional economy. The large lot element of the employment analysis does allow sufficient flexibility for the Metro Council to fill the capacity gap through documenting new local or regional investments and/or policy decisions or by expanding the urban growth boundary, drawing strategically from urban reserves to support a strong regional economy.

MPAC discussion:

4. ***Given the gap identified in the UGR, what policies and investments need to be implemented in the cities to increase capacity? When in 2010?***

Background: The draft urban growth report identifies a significant portion of the zoned capacity in the region that is not likely to be developed over the next 20 years if current policies and investment trends are continued. Local and regional investments and actions can be put in place to maximize the use of the capacity that is currently within the Metro UGB. Examples include: High Capacity Transit Plan; CET extension; East Happy Valley plan adoption; Oregon City SDC incentives in regional center; East Hayden Island comprehensive plan; State RTP adoption; and Portland Plan. Local actions and regional actions must be documentable, and must be in place by December 2010 to be counted in this growth management decision.

Staff recommendation: Focus discussion in early 2010 on local and regional actions that increase the likelihood of development under current zoning and pending zone changes, therefore closing the gap identified in the UGR.

MPAC discussion:

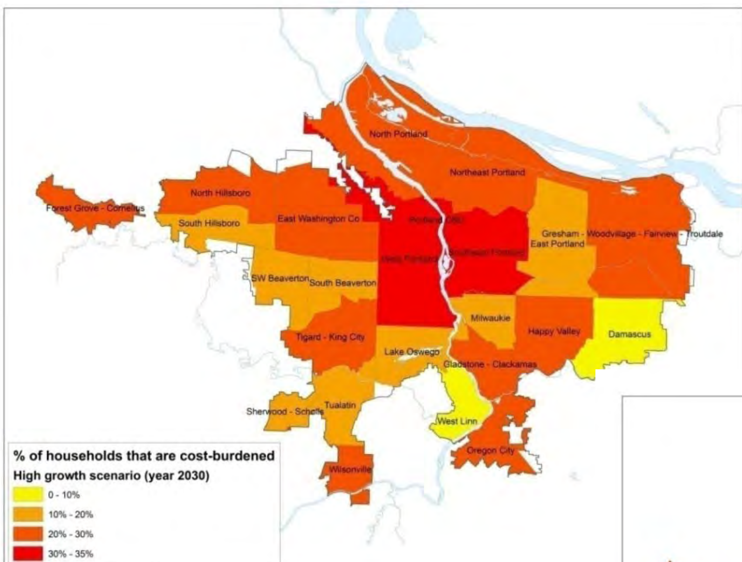
5. ***Equity – housing for whom? What about housing affordability?***

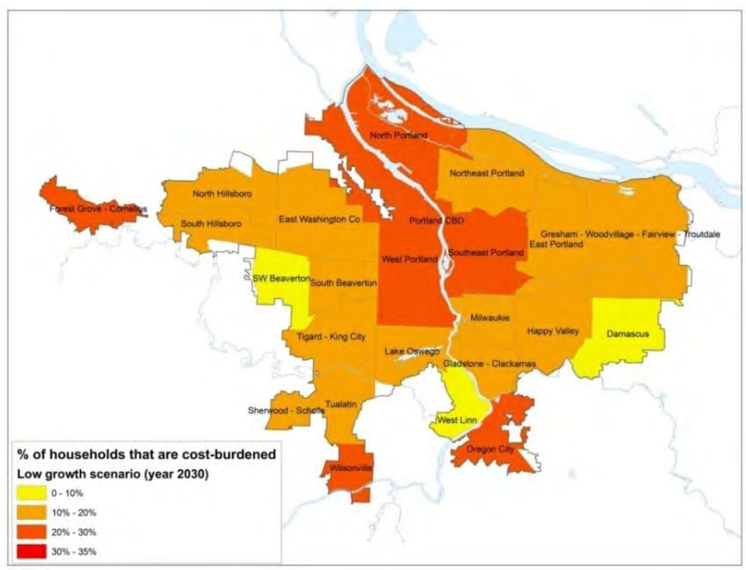
Background: The UGR includes an assessment of the impact of current policies and trends on future cost-burdened households. Cost-burdened households are defined as renters spending more than 50% of their income on housing and transportation combined. The analysis indicates that, without policy or investment intervention, the number of cost-burdened households is likely to double over the next 20 years.

It appears that the primary causes of increased housing prices are the very success of efforts to enliven centers and corridors (which inherently leads to increased demand), the continued underfunding of infrastructure (which effectively reduces housing supply), inadequate public investments to offset multi-family construction costs, and a shortage of choices for people who want smaller, less expensive residences. New ideas are needed to preserve our region's livability and affordability. A failure to maintain affordable housing choices in the central city, centers, and corridors may put additional growth pressures on existing single-family neighborhoods and push more residents to less central locations where they could be more susceptible to increases in energy prices.

Local and regional policy and investment choices will influence housing choice and affordability in the Portland metropolitan region. As regional leaders make these choices, actions and investments to consider include:

- Linking transportation investments with investments in affordable housing to decrease the overall cost of living.
- Explore policies that could be tailored to encourage the market to provide more housing choices such as accessory dwellings, cottage housing, and high quality manufactured housing.
- Develop incentives for affordable housing in areas that provide transportation choices.





Staff recommendation: As the region's leaders make decisions in 2010, they should consider the impact of growth management decisions, transportation investments and other public investments on cost-burdened households.

MPAC discussion:

ANSWERS TO MPAC QUESTIONS

6. ***What happened to large lot industrial tracts brought into the UGB in 2002/2004?***

Response: Staff is currently doing an analysis to determine how much of that land has been developed and for what purpose. The results will be provided to MPAC as soon as possible.

7. Does Metro have the legal authority to protect land brought into the UGB for large lot industrial?

Response: Yes, if the identified need is for large lot industrial then Metro can put restrictions on land brought into the UGB for that purpose, similar to the Title 4 requirements that are currently in place. Title 4, as currently written, does allow for some non-industrial uses.

8. ***Does Metro have the legal authority to direct local governments to assemble lots to meet an identified large lot need?***

Response: Metro's statute gives it the authority to require local government to develop land assembly programs and to place conditions on UGB expansion that require assembly of parcels.

9. ***Where is the housing and employment capacity in Washington, Multnomah and Clackamas counties?***

Response: The urban growth report analysis of capacity begins with local zoning and the region's vacant buildable land. Data tables describing the amount of vacant employment and residential land by jurisdiction are available in the full report, which has been vetted by city and county staff and a number of consultants (employment, pgs. 73-77; residential, pgs. 118-125). Redevelopment and infill (refill) capacity varies by location, but is based on the underlying local zoning and an assessment of land to improvement value (for redevelopment). Further details may be found in the draft UGR: vacant employment acres by market subarea (pg. 73); effective refill rates for employment by market subarea (pg. 77); distribution of vacant residential capacity by jurisdiction (pg. 122); explanation of residential refill rate (pgs. 124-125). The performance section of the draft UGR includes maps that show the distribution of future jobs and households based on current policies and trends (pgs. 132, 134). Appendix 7 to the UGR includes summaries of forecasted housing mix and affordability by subarea.

10. ***Impact of growth in neighboring cities and relation to capacity gap?***

Response: Based on historic patterns, the UGR assumes that 61.8% of the next 20 years of residential growth in the seven-county region will be within the Metro UGB. This would mean that there would be substantial growth in neighboring communities. If that doesn't occur, then additional pressure may occur for growth within the Metro UGB. The UGR assumes 73-75% of jobs will be located in the Metro UGB over the next 20 years. The remaining job growth is forecasted to occur in neighboring cities.

11. *What happens if growth slows?*

Response: The regional forecast has been peer reviewed and is based on data from IHS Global Insight, a nationally respected economic research firm. The growth rate for the Metro region is slightly higher than the national average due to the desirability of this region for new people and employers. If growth does not occur as rapidly as forecasted, the region will have more time to invest in pipes, pavement and community assets to support vibrant communities and a strong economy. Documentation of infrastructure needs has clearly shown there are more needs than resources so the likelihood of overspending for growth that doesn't materialize is slim.

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ACCEPTING THE POPULATION AND EMPLOYMENT FORECASTS AND THE URBAN GROWTH REPORT AS SUPPORT FOR DETERMINATION OF CAPACITY OF THE URBAN GROWTH BOUNDARY	)))	RESOLUTION NO. 09-XXXX Introduced by Chief Operating Officer Michael Jordan with the Concurrence of Council President David Bragdon

WHEREAS, state law requires Metro to determine the capacity of the urban growth boundary (UGB) to accommodate the next 20 years' worth of population and employment growth by the end of December, 2009; and

WHEREAS, Metro published range forecasts of population and employment growth to the years 2030 and 2060 on March 19, 2009; and

WHEREAS, Metro published a preliminary analysis of the capacity of the existing UGB to accommodate the range of new dwelling units relating to the range of forecast population growth on March 31, 2009; and

WHEREAS, Metro published a preliminary analysis of the capacity of the existing UGB to accommodate the range of new employment relating to the range of forecast employment growth on May 6, 2009; and

WHEREAS, Metro sought and received comments on the preliminary analyses of housing and employment capacity from its Metro Policy Advisory Committee (MPAC) and its Joint Policy Advisory Committee on Transportation (JPACT), local governments in the region, public, private and non-profit organizations and citizens;

WHEREAS, Metro considered the comments and published revised draft analyses of the capacity of the existing UGB to accommodate growth to year 2030 on September 15, 2009; and

WHEREAS, Metro sought and received comments on the revised draft analyses from MPAC and JPACT; local governments in the region; and public, private and non-profit organizations and citizens; and

WHEREAS, the Metro Council held open houses and public hearings on the revised draft analyses on September 21, 22 and 24 and October 1, 8 and 15, 2009; and

WHEREAS, Metro considered comments received and made revisions to the final draft analyses of the capacity of the existing UGB to accommodate the range of new dwelling units and employment relating to the range of forecast population and employment growth; now, therefore, BE IT RESOLVED that the Metro Council

1. The Council accepts the "20 and 50 year Regional population and employment forecasts" dated December __, 2009, attached and incorporated into this resolution as Exhibit A, as a basis for analysis of need for capacity in the UGB to accommodate growth to the year 2030 and for actions the Council will take to add capacity by ordinance in 2010, pursuant to ORS 197.296(6) and statewide planning Goal 14.
2. The Council accepts the "Urban Growth Report 2009-2030", dated December __, 2009, attached and incorporated into this resolution as Exhibit B, as a basis for analysis of need for capacity in the UGB to accommodate growth to the year 2030 and for actions the Council will take to add housing and employment capacity by ordinance in 2010, pursuant to ORS 197.296(6) and statewide planning Goal 14.
3. Acceptance of Exhibits A and B by the Council meets Metro's responsibility under state law to analyze the capacity of the UGB to accommodate growth to the year 2030 as a preliminary step toward providing sufficient capacity to accommodate that growth. The Council will make a final land use decision to respond to this capacity analysis in 2010.
4. The Council directs the Chief Operating Officer to submit Exhibits A and B, together with such actions the Council adopts by ordinance to add any needed capacity pursuant to ORS 197.296(6) and statewide planning Goal 14, to the Land Conservation and Development Commission as part of periodic review pursuant to ORS 197.626, following adoption of the capacity ordinance in 2010.

ADOPTED by the Metro Council this 17th day of December, 2009

____
David Bragdon, Council President

Approved as to form:

____
Daniel B. Cooper, Metro Attorney

Draft Urban Growth Report

MPAC retreat discussion materials

October 23, 2009

Contents

1. Map of residential buildable land inventory*
2. Maps of historic and forecasted residential refill rates
3. Graph of residential supply and demand ranges
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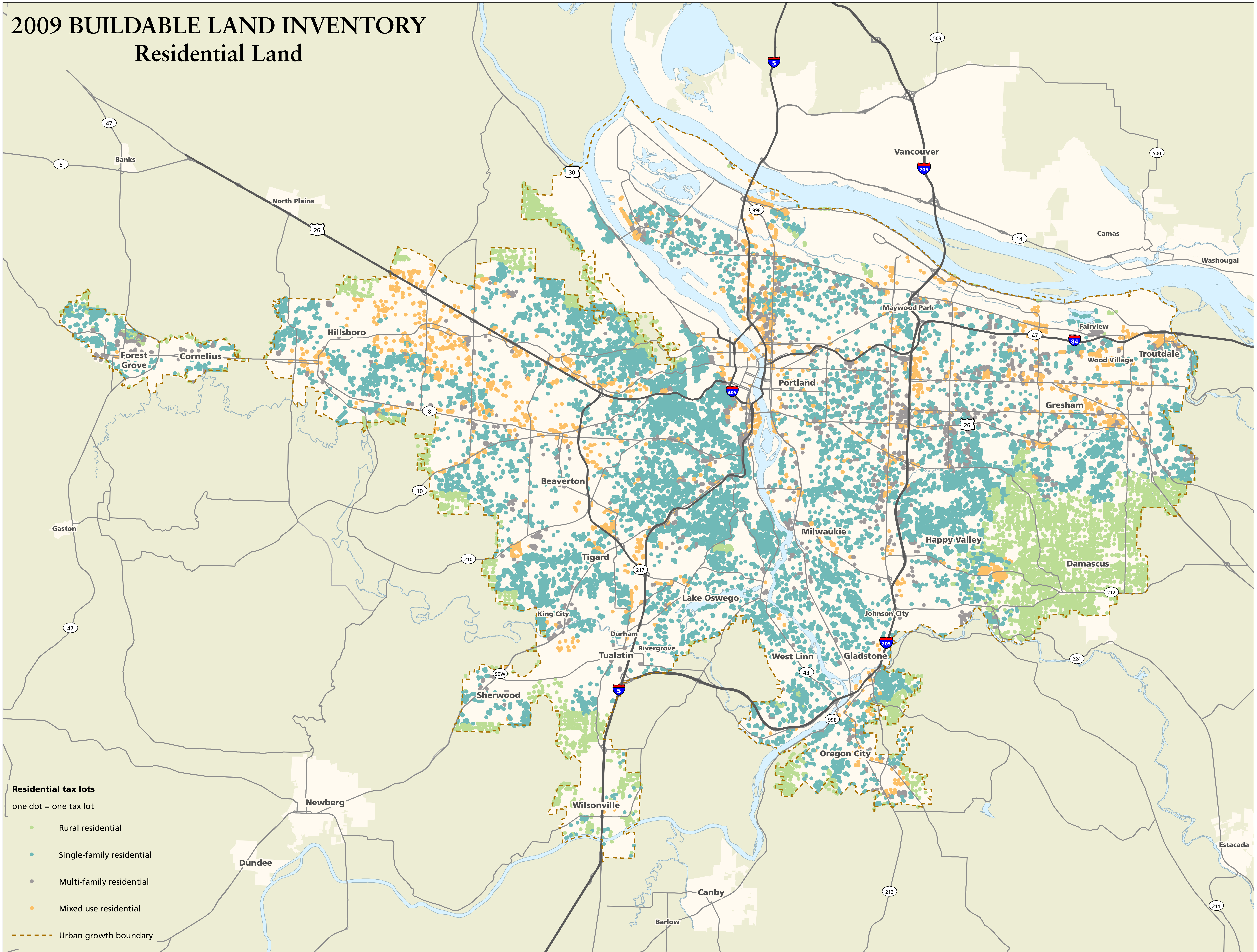
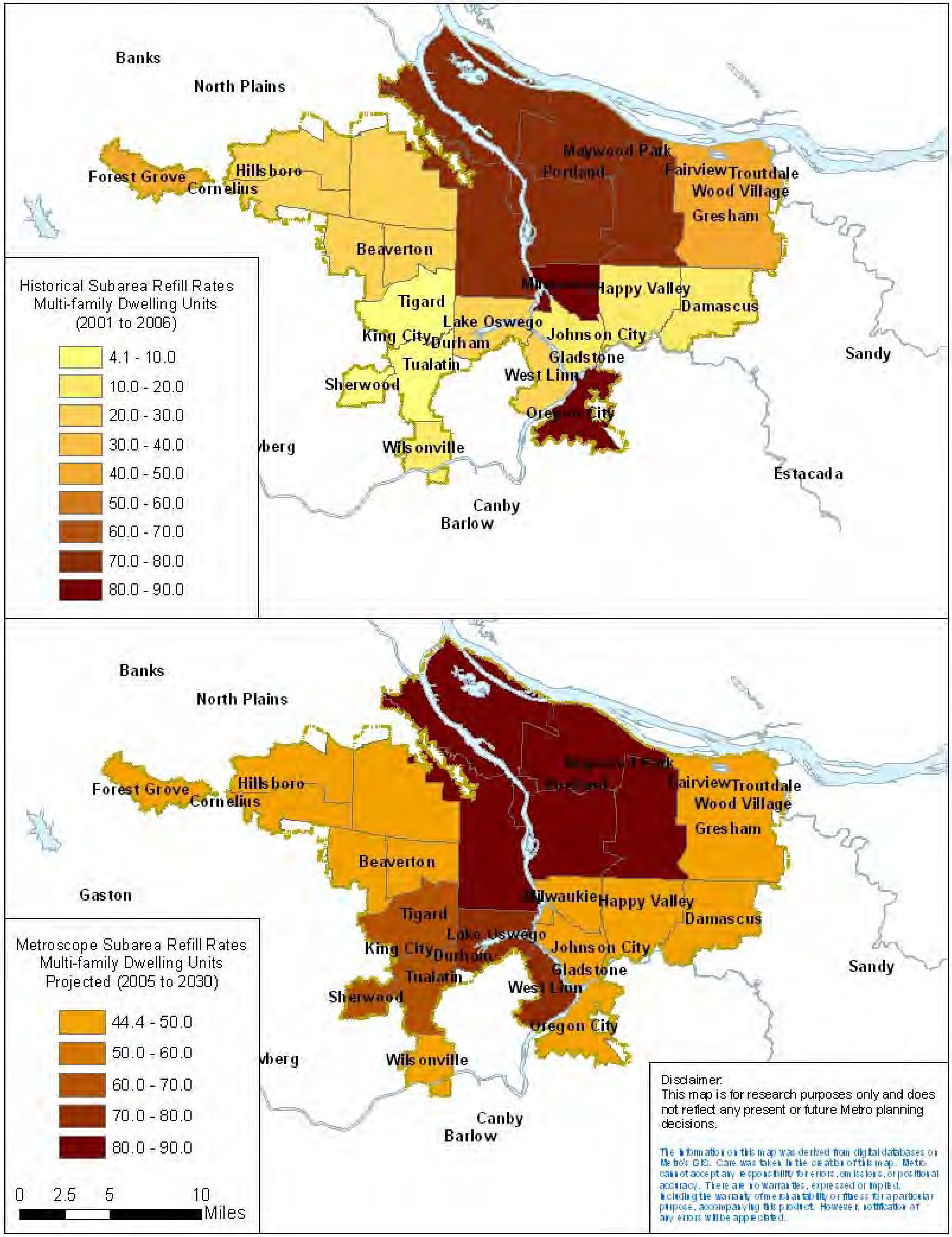
5. Site choices of solar manufacturing firms in Oregon
6. Map of employment and industrial buildable land inventory*
7. Effective employment refill rates
8. Graph of non-industrial supply and demand ranges
9. Graph of industrial supply and demand ranges
10. Map of large lot inventory for employment and industrial uses*
11. Comparison of large lot supply and demand
12. Map of shares of households that are cost burdened (low growth scenario)
13. Map of shares of households that are cost burdened (high growth scenario)

**Maps of buildable land inventories do not include tax lots in new urban areas that do not yet have urban zoning.*

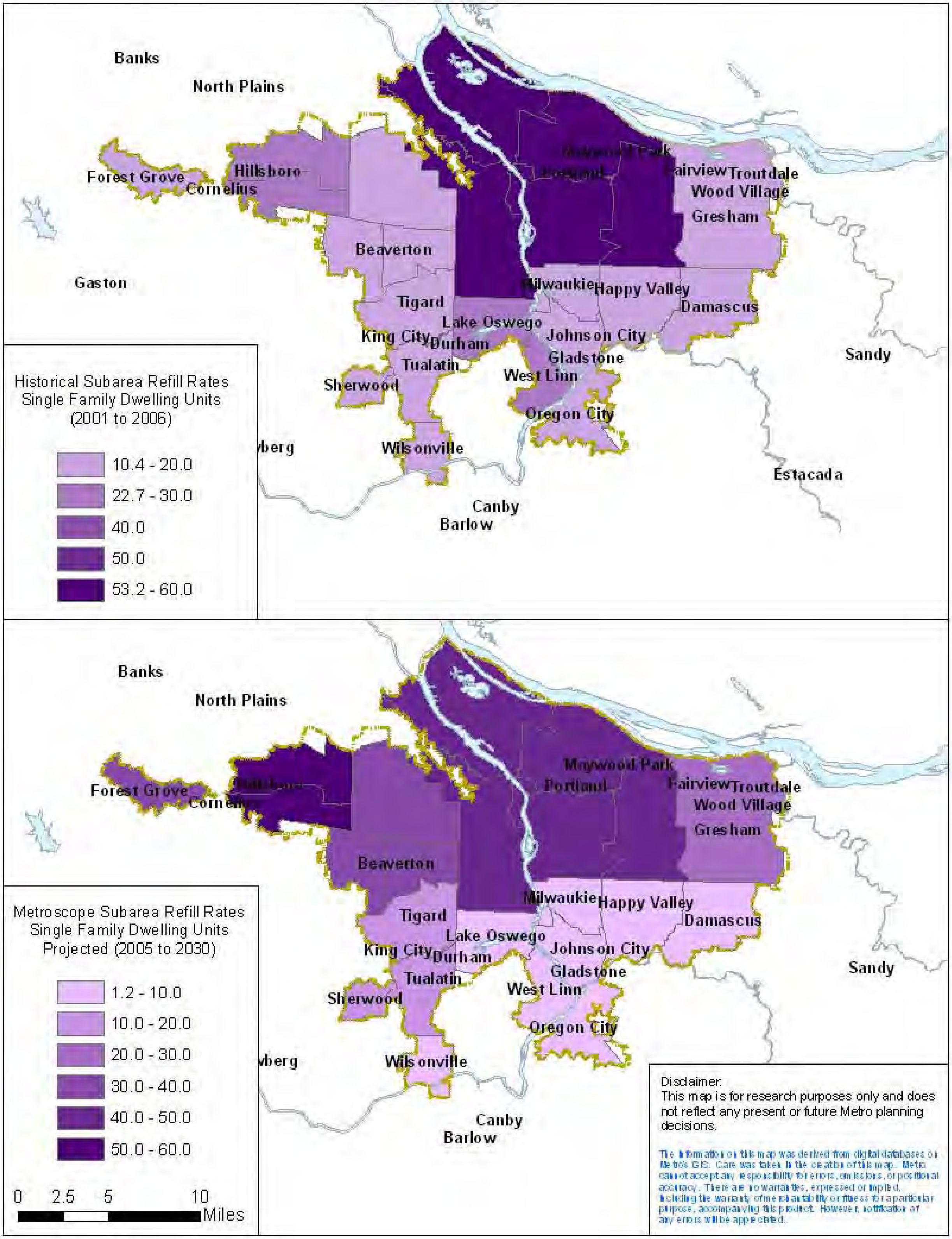
2009 BUILDABLE LAND INVENTORY
Residential Land

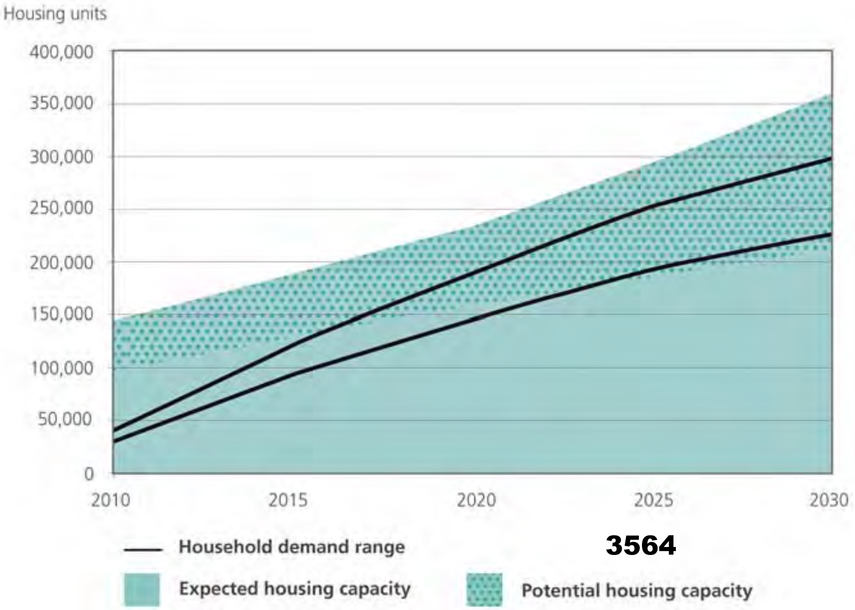


Multi-family residential refill rates (historical and forecasted)



Single-family residential refill rates (historic and forecasted)




Housing units
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2010
2015
2020
2025
2030
Household demand range
Expected housing capacity
Potential housing capacity

3564

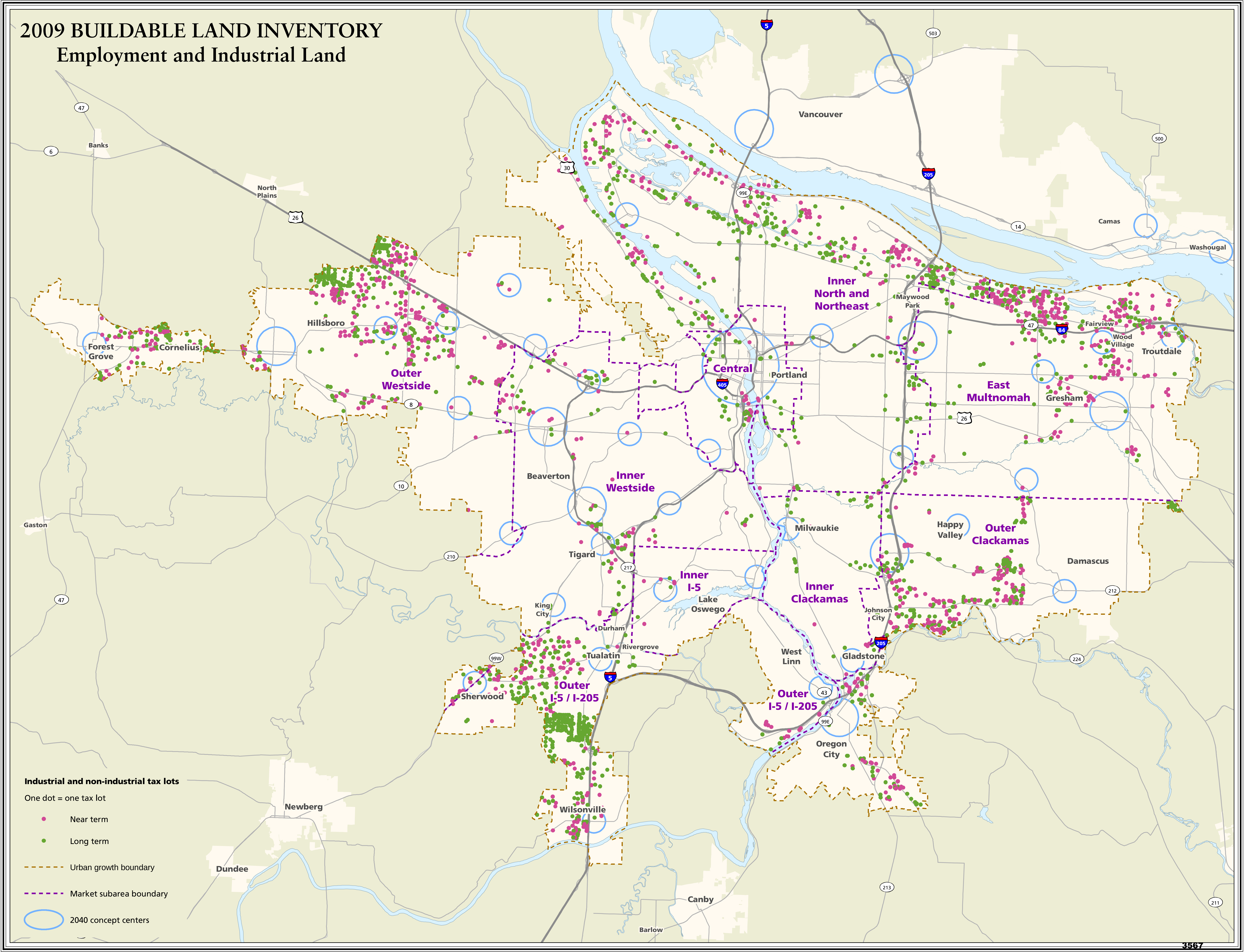
Forecasted change in employment by sector 2009-2030 (7-county area)

	Low Forecast		High Forecast	
	New jobs	**Share of new jobs**	**New jobs**	**Share of new jobs**
Manufacturing	2,400	.7%	25,400	4.7%
Non-manufacturing	295,300	90.6%	484,000	89.2%
Government	28,300	8.7%	33,500	6.2%
Total	326,000	100.0%	542,900	100.0%

Site choices of solar manufacturing firms in Oregon

Company	City	Acres	Using existing building?	Notes
PV Powered	Bend	9	Undetermined (appears yes)	Company founded in Bend. 100,000 square feet of building on former Oregon Woodworking site. Manufactures power inverters.
Solaicx	Portland	21	yes	
SolarWorld	Hillsboro	94	yes	Company in final stages of expansion at Hillsboro site. Moved into existing Komatsu silicon wafer facility.
Peak Sun Silicon	Millersburg	8	no	Company has option to purchase an additional 90 acres in Millersburg
XsunX	Wood Village	8.28	yes	Company first chose Oregon as a location and then began a site selection process, looking for existing buildings. The building that XsunX leases previously housed Merix, a high-tech manufacturer.
SpectraWatt	Hillsboro	20	no	Intel spinoff on Intel campus (has 20 acres). Halted construction because of a lack of investment money. Moving to New York because of public incentives.
Sanyo	Salem	20	no	
Oregon Crystal Technologies	Gresham	Less than 1	yes	In Rockwood urban renewal area – deciding between 2 existing buildings

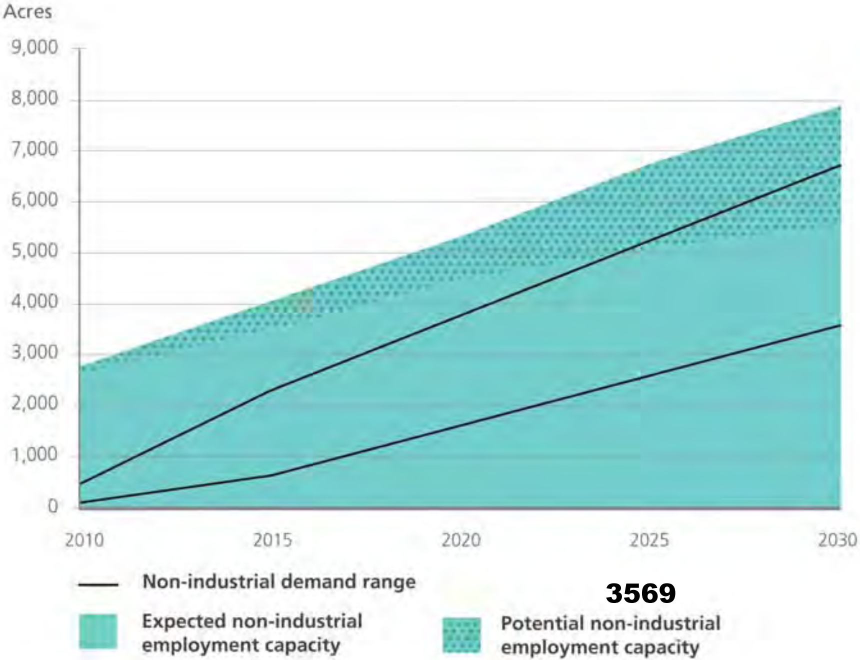
2009 BUILDABLE LAND INVENTORY
Employment and Industrial Land



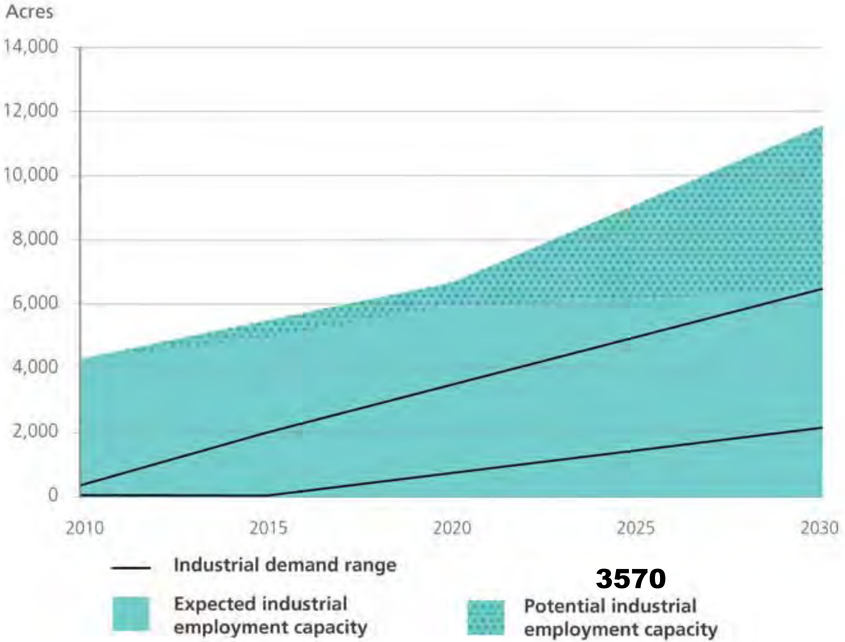
Effective employment refill rates (medium growth scenario)

2010-2015	Industrial	WD	Flex	Office	Retail	Instit	Ind	Non-Ind
Central	0%	0%	67%	80%	77%	75%	67%	77%
Inner Westside	19%	0%	20%	50%	50%	59%	20%	53%
Inner North & East	0%	36%	36%	47%	47%	57%	36%	50%
Inner Clackamas	18%	0%	19%	51%	50%	60%	19%	53%
Inner I-5	20%	21%	21%	51%	51%	58%	21%	53%
Outer Westside	20%	20%	20%	30%	25%	37%	20%	31%
East Multnomah Co	0%	10%	10%	30%	25%	36%	10%	30%
Outer Clackamas	20%	0%	20%	30%	0%	36%	20%	35%
Outer I-5/205	10%	10%	10%	30%	25%	36%	10%	30%
REGION	17%	30%	24%	55%	51%	58%	22%	55%

2015-2030	Industrial	WD	Flex	Office	Retail	Instit	Ind	Non-Ind
Central	0%	68%	67%	80%	77%	75%	68%	77%
Inner Westside	0%	20%	20%	50%	50%	59%	20%	53%
Inner North & East	0%	36%	36%	47%	47%	57%	36%	50%
Inner Clackamas	0%	19%	19%	51%	50%	60%	19%	53%
Inner I-5	20%	21%	21%	51%	51%	58%	21%	52%
Outer Westside	20%	20%	20%	30%	25%	37%	20%	31%
East Multnomah Co	10%	10%	10%	30%	25%	36%	10%	30%
Outer Clackamas	20%	20%	20%	30%	25%	36%	20%	30%
Outer I-5/205	10%	10%	10%	30%	25%	36%	10%	30%
REGION	17%	24%	21%	49%	51%	55%	20%	51%
2010-2030 regional weighted average							**20%**	**52%**

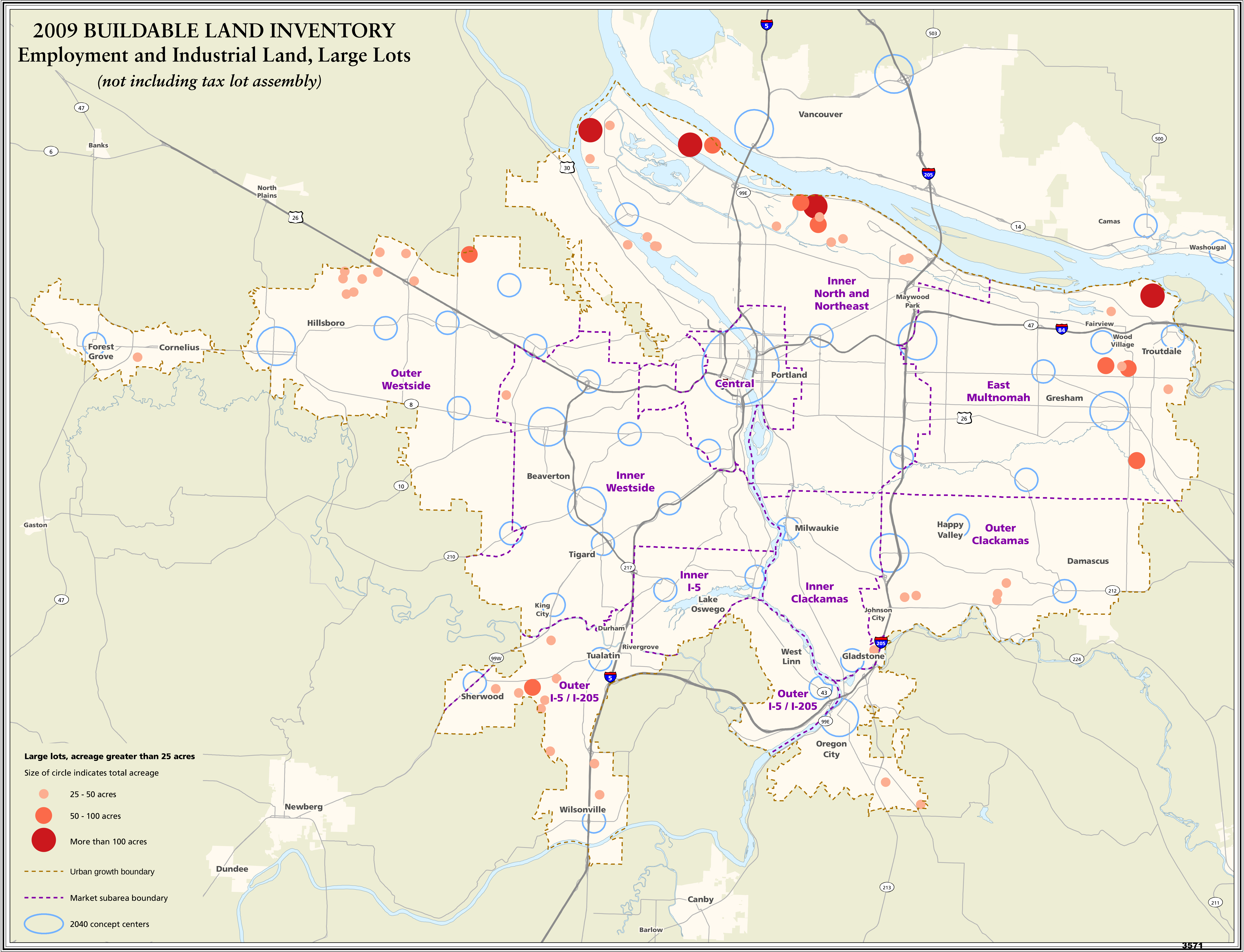

Acres
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
2010
2015
2020
2025
2030
Non-industrial demand range
Expected non-industrial employment capacity
Potential non-industrial employment capacity

3569


Acres
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2010
2015
2020
2025
2030
Industrial demand range
Expected industrial employment capacity
Potential industrial employment capacity

3570

2009 BUILDABLE LAND INVENTORY
Employment and Industrial Land, Large Lots
(not including tax lot assembly)



Comparison of large lot supply and the demand range through 2030
(single and multi-tenant large lot users)

Without tax lot assembly assumption

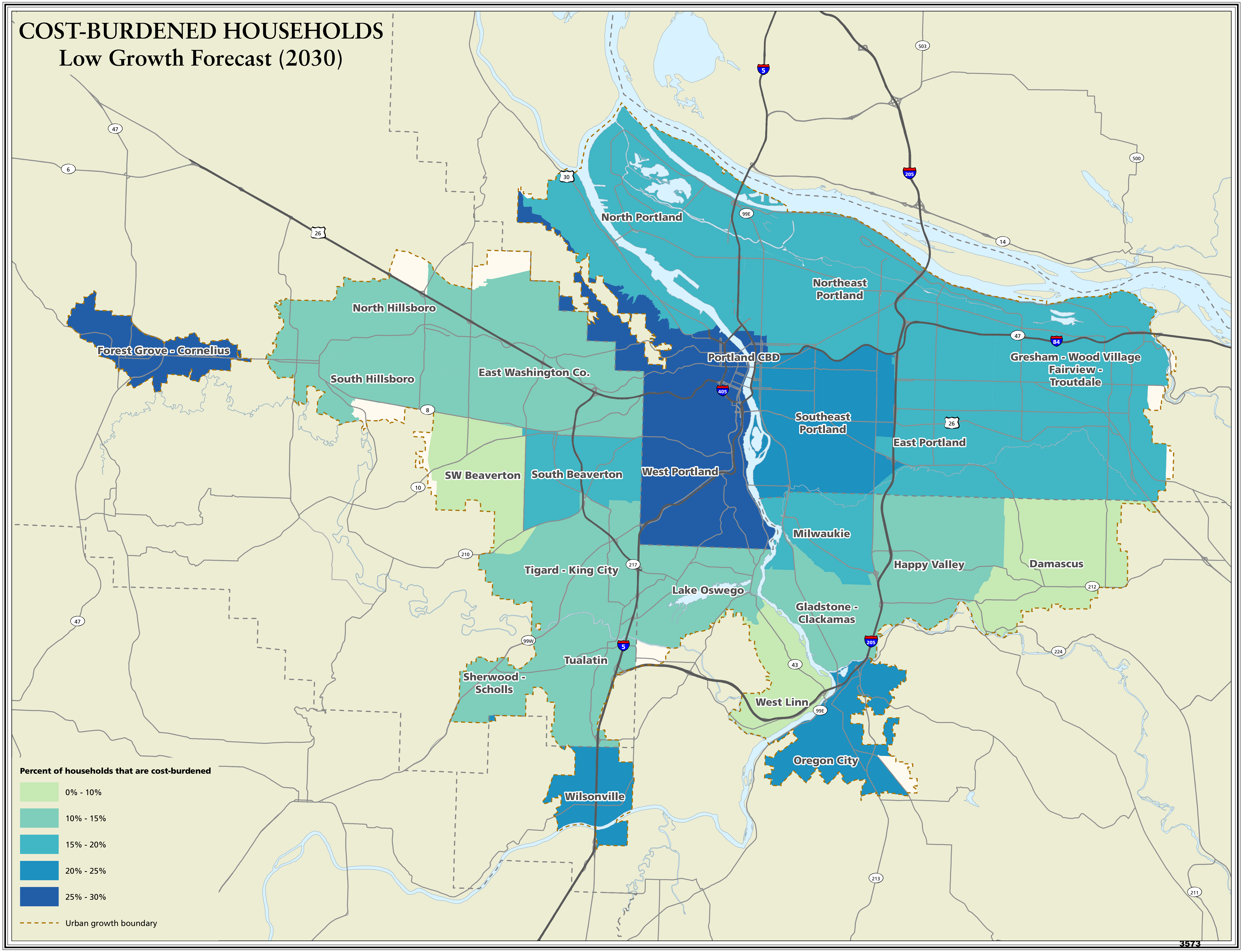
Lot size (acres)	Lots available	High growth lot demand	Low growth lot demand	Additional large lots needed
25 to 50	37	27	17	0
50 to 100	9	16	11	2 to 7
100 plus	4	5	5	1

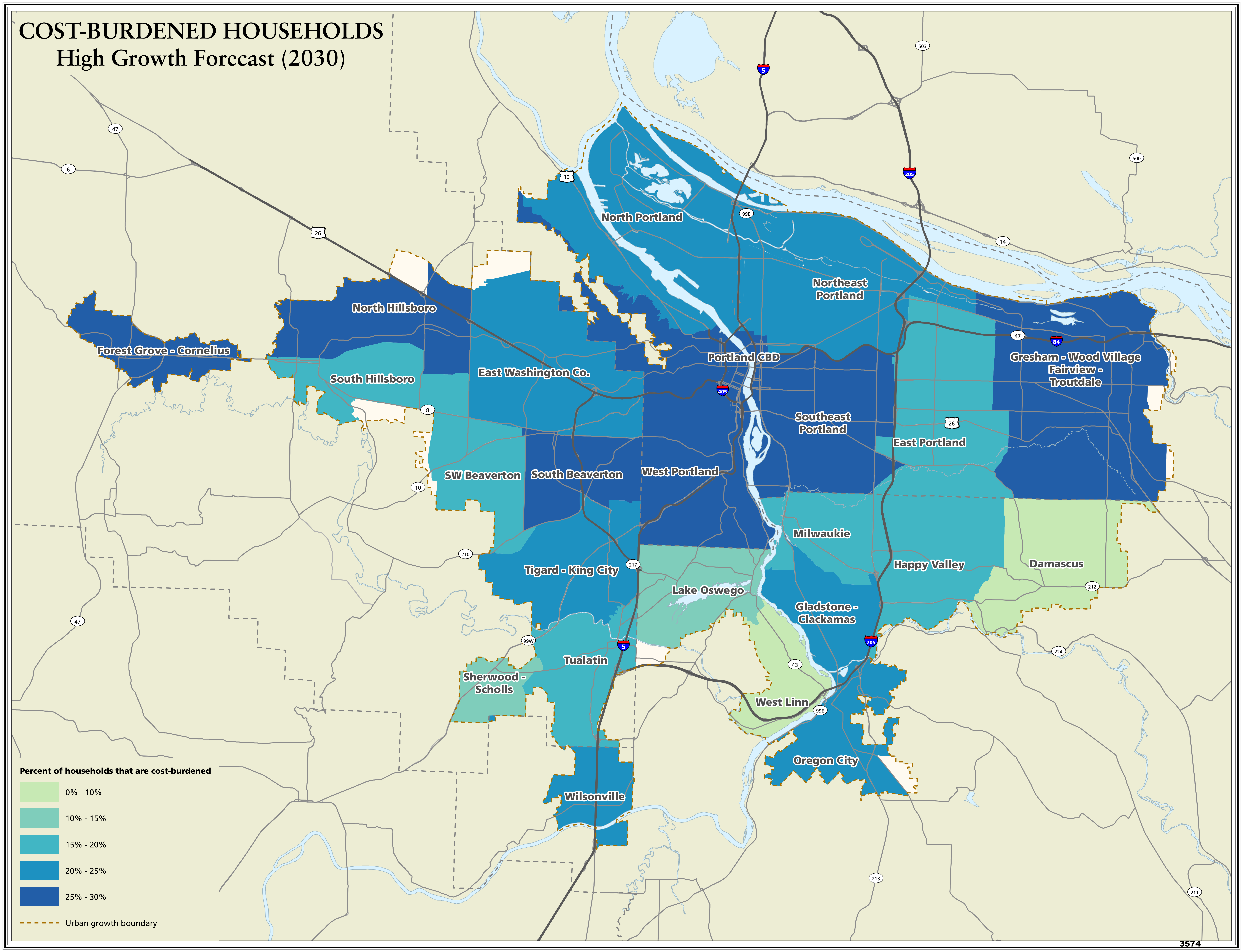
With tax lot assembly assumption

Lot size (acres)	Lots available	High growth lot demand	Low growth lot demand	Additional large lots needed
25 to 50	25	27	17	0 to 2
50 to 100	15	16	11	0 to 1
100 plus	4	5	5	1

Summary result: Potential need for 200 to 800 additional acres of large lot capacity

COST-BURDENED HOUSEHOLDS
Low Growth Forecast (2030)




COST-BURDENED HOUSEHOLDS
High Growth Forecast (2030)
North Portland
Northeast Portland
North Hillsboro
Forest Grove - Cornelius
Portland CBD
East Washington Co.
South Hillsboro
Gresham - Wood Village Fairview - Troutdale
Southeast Portland
East Portland
SW Beaverton
South Beaverton
West Portland
Milwaukie
Happy Valley
Damascus
Tigard - King City
Lake Oswego
Gladstone - Clackamas
Tualatin
Sherwood - Scholls
West Linn
Oregon City
Wilsonville
Percent of households that are cost-burdened
0% - 10%
10% - 15%
15% - 20%
20% - 25%
25% - 30%
Urban growth boundary
3574

Preliminary summary of comments on draft employment analysis

Employment UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Metro's cluster forecast is incorrect because it does not include NAICS code 334, which is the code under which solar panel manufacturing would fall.	All NAICS codes, including 334, are included in the Metro forecast. NAICS code 334 is also included in the cluster forecast. The UGR's narrative erroneously states that SolarWorld is in NAICS code 2211, but this text error has no effect on the forecast or the assessment of land need. See Appendix 3 to the UGR for a list of the NAICS codes that are included in each cluster. See Appendix 12 to the UGR for the complete forecast, which includes all sectors.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	The UGR should forecast future land needs for specific industry clusters, including high tech, solar manufacturing, and bio-pharma.	Statewide Planning Goal 14 (Urbanization) requires that Metro ensure capacity for housing and employment. It does not require Metro to supply land with the specific characteristics that may be desired by individual industries or industry clusters. When making specific decisions to expand the UGB, the needs of industry clusters may be considered.
City of Cornelius, City of Forest Grove, City of North Plains, City of Hillsboro, City of Banks, Johnson-Reid, Port of Portland, Portland Business Alliance	The UGR does not adequately incorporate the analysis found in the Hillsboro Draft Economic Opportunities Analysis.	Statewide Planning Goal 9 (Economic Development) requires cities and counties to provide for the specific types of employment needs and opportunities they identify in their Economic Opportunity Analyses. Goal 9 does not, however, apply to Metro. Though it may be beneficial to have a regional economic development strategy, Metro has not been charged with the task of developing that strategy and does not presume to have that role. Metro does, however, have a role in coordinating the population and employment forecasts for the region. Adding up the results of individual city forecasts would likely overstate regional growth in some sectors and understate it in others. Metro has some methodological concerns with the Hillsboro Draft Economic

		Opportunity Analysis (EOA). Primary concerns include: 1) The Hillsboro EOA's forecast treats Metro's medium forecast as a low (baseline) forecast. The Hillsboro EOA forecast explicitly rejects the long-term impacts of the current recession on manufacturing sectors. 2) The Hillsboro EOA includes limited or no documentation of how it calculates additional growth in its priority clusters. The Hillsboro forecast for solar panel manufacturing employment is based on the Oregon Department of Energy goal for megawatts of electricity generated from solar panels. This methodology is predicated on the assumption that a significant share of the world's solar panels will be manufactured in Hillsboro. Yet, solar panel manufacturing has entered a phase of standardization and overseas production, where companies will be competing based on low prices and low wages. Ramped up solar panel production in China and a softening of demand in Europe have resulted in a 50% drop in solar panel prices over the last year. This same trend has occurred in many other manufacturing sectors and is not expected to reverse itself. No documentation of the methodologies used to forecast additional growth in the bio-tech and high tech clusters was provided in the Hillsboro EOA. 3) The Hillsboro EOA includes no analysis of potential for redevelopment or infill to accommodate new jobs. The EOA assumes that all new jobs must locate on vacant land. This is clearly not the case, nor is it in keeping with the region's vision for compact urban form. SolarWorld, North America's largest solar panel manufacturer, chose to locate in an existing building in Hillsboro and are currently expanding on site.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Metro's forecast understates growth in solar manufacturing, bio-pharma, and high tech manufacturing, sectors in which our region has historic strengths.	The Metro forecast is based on data from IHS Global Insight, an internationally respected economic forecasting firm whose data is used by numerous public and private institutions. That data is subsequently adjusted to reflect our region's historic trends and economic strengths. Metro's forecast, in fact, indicates that the region will have a faster rate of growth in manufacturing and, more specifically, electronics manufacturing than the United States as a whole. But, as with the rest of the U.S., it is anticipated that manufacturing will represent a smaller share of total employment in the

		future. The recent recession is anticipated to have long-lasting effects, particularly on industrial sectors. Metro's econometric model has been peer-reviewed as has the recent Metro forecast (which includes the employment forecast). The peer review panel expressed confidence in the forecast's methodologies and results. Additionally, the peer review panel included a representative from Johnson-Reid (source of comment).
Westside Economic Alliance	Metro's forecast calls for a substantial decrease in manufacturing employment. "The Westside Economic Alliance rejects the premises used to explain these forecasts and challenges Metro to reconsider the implications of this vision."	The Metro seven-county forecast indicates growth in manufacturing employment at both the high and low ends of the forecast range. The forecast indicates that manufacturing will represent a smaller share of future employment. The Metro forecast also indicates that at the high end of the employment range forecast, manufacturing may bounce back faster than the rest of the economy.
Westside Economic Alliance	Metro's forecast is incorrect because it assumes that phenomena such as global warming, rising fuel prices, and a degraded environment will stifle population growth in the seven-county region.	Metro's seven-county forecast makes no assumptions about the effects of various possible catastrophic events. Forecasted population growth rates are the product of large-scale demographic trends. The UGR suggests that rising fuel prices and climate change are compelling reasons to consider growth management policies carefully.
Westside Economic Alliance	The seven-county forecast is wrong because growth rates are lower than at any time since Oregon was granted statehood.	Growth rates are forecasted to decline, but this is because of the mathematics of having an ever larger denominator (the existing population). When expressed in absolute numbers, the forecast is consistent with previous forecasts, which have proven accurate.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	The presence of an existing solar manufacturing cluster in Hillsboro will result in western Washington County capturing the bulk of future high tech and solar manufacturing jobs.	Solar manufacturing firms can be found throughout Oregon, the United States, and the world. Hillsboro's Draft Economic Opportunity Analysis lists seven recent solar manufacturing recruits. Two out of the seven recruits are in Hillsboro (one of those two, SpectraWatt, has announced plans to relocate to New York because of public subsidies), while the remaining firms are dispersed throughout the state. More recently, an eighth recruit, Oregon Crystal Technologies, has announced that it is locating in Gresham's Rockwood Urban Renewal District.
Port of Portland	A job forecast is inadequate for assessing land needs associated with commodity flows (freight, logistics).	This is a comment that Metro received on the preliminary UGR as well. Metro would welcome specific suggestions on how to perform this portion of the assessment differently, but has not received any to date.

		The UGR's analysis, considers land extensive uses with fewer employees. The overall demand model assumptions on employees per square foot by building type have also been revised based on the feedback received on the preliminary analysis. These adjustments should address some concerns about land needs for freight uses.
Port of Portland	Freight facility expansion would likely consume other industrial land, which, in turn, would trigger demand for additional industrial land elsewhere in the region.	Freight-related jobs are included in the regional forecast and demand for capacity that is generated by these jobs is included in the UGR's assessment. Suggestions that a job forecast is not an adequate means of estimating land needs for freight uses have not been accompanied by concrete suggestions for an alternative methodology.
Port of Portland	Modify the region's assumed job capture rate to make it more aggressive.	The capture rates (industrial and non-industrial) used by Metro in the UGR are an output of scenario modeling. The policy and investment inputs into that modeling are intended to represent a continuation of current policies and investment trends. If the region is to achieve a higher job capture rate, it would likely need to implement new policies and investments. Expressing a different point of view, we have received comments from Clark County and Vancouver that the assumed capture rate is too high.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Large, vacant lots are needed in order to attract solar manufacturers to the Portland metropolitan region.	The location choices of several of Oregon's recent solar manufacturing recruits indicate that large, vacant lots are not needed by most firms. Of the seven recent recruits listed in Hillsboro's Draft Economic Opportunities Analysis (EOA), six are on properties smaller than 25 acres (three of those are on less than 10 acres) and one (SolarWorld) is on a site that is 94 acres. An eighth recent recruit not listed in the Hillsboro EOA, Oregon Crystal Technologies, chose to locate on a site that is smaller than one acre in Gresham's Rockwood Urban Renewal District. Sixty-three percent of these recent recruits, including SolarWorld, North America's largest solar manufacturer, have located in existing buildings. One firm, SpectraWatt, is leaving Oregon for New York despite having a vacant 20 acre site (cited reason is because the public subsidies offered were more enticing). The UGR indicates a long-term need for several large lots. The Metro staff recommendation is that we find ways to use our existing inventory of land

		more efficiently.
Port of Portland, Commercial Real Estate Economic Coalition	Land must be in the right amount and in the right location for the needed purpose.	Statewide Planning Goal 14 (Urbanization) requires that Metro ensure capacity for housing and employment. It does not require Metro to supply land with the specific characteristics that may be desired by individual industries or industry clusters. The purpose of the UGR is to identify any gap in capacity, not to assess how and where to address the gap. Local and regional investments can support efficient utilization of land inside the UGB.
Port of Portland	Much of the region's inventory of industrial land is not ready for development due to substantial constraints including brownfield status, location or lack of infrastructure, and regulatory overlays.	These constraints are taken into account in the UGR. Brownfield sites are assumed to only be available for development in the longer term. Only half of the capacity in recent UGB expansion areas is assumed to be available in the 20-year time frame because of infrastructure shortcomings. Portions of tax lots with environmental constraints are not included in the buildable land inventory. See Tables 27 and 28 on pages 72 and 73 of the UGR for additional information.
Port of Portland	The buildable land inventory does not account for upland habitat protections that reduce capacity for development.	Title 13 (Nature in Neighborhoods) upland habitat protections only apply to future UGB expansion areas. The UGR assesses the current UGB's capacity.
Port of Portland	The lack of development in new urban areas (areas brought into the UGB since 1997) is not necessarily because of a lack of infrastructure or governance, but because the land is not suitable for industrial development.	Past UGB expansions have been made in the types of locations that are dictated by current State law. Over time, these areas are intended to develop into complete communities, including employment opportunities. It is hoped that the designation of urban reserves will identify sites that are well-suited for development. Metro staff believes that infrastructure and governance must be addressed to make any future UGB expansion areas developable.
City of Tualatin	The UGR should not assume that industrial uses will locate in multi-story buildings.	The UGR's analysis does not assume that industrial uses will locate in multi-story buildings.
Employment UGR—policy comments		
City of Cornelius, City of Forest Grove, City of North Plains,	Undersupplying land for priority industry clusters would be harmful to the economy.	Metro performs the UGR analysis every five years to ensure a 20-year supply of capacity for jobs. The effect of this is that, in the short-term (5 years), there will be four times the needed capacity for jobs. It is extremely unlikely that

City of Hillsboro, City of Banks, Johnson-Reid, Port of Portland, Portland Business Alliance, Commercial Real Estate Economic Coalition		that amount will be insufficient to accommodate growth before the next UGR analysis in five years. This five-year cycle creates a built-in cushion to allow for choices amongst sites. Experience has shown that the majority of recent solar manufacturing recruits have located in existing buildings and/or on smaller sites.
Port of Portland	Regional choices related to land supply and transportation will determine the economic future of the region.	Many factors at the global, national, state, regional and local levels have effects on the region's economy. The UGR is not intended to serve as an economic development strategy; it informs land supply decisions that will be made in 2010.
Port of Portland	One of the "six desired outcomes" is economic competitiveness and prosperity—why is there no strategy presented to achieve this outcome or an assessment of how other desired outcomes may conflict with this outcome.	The purpose of the UGR is to identify whether a capacity gap exists and, if so, to what degree. This UGR intentionally presented a variety of policy options to consider for addressing land needs and achieving the region's desired outcomes, but it is not the purpose of the UGR to determine the specifics of those policy options. The viability of those policy options does not have an impact on the capacity analysis. Those policy options can be more thoroughly considered in late 2009 and in 2010.
Port of Portland	The UGR and transportation investment strategy need to link up with industry cluster needs. Use the Portland Regional Partners for Business list of clusters instead of the Portland Development Commission's (PDC) list.	Though it may be beneficial to have a regional economic development strategy, Metro has not been charged with the task of developing that strategy and does not presume to have that role. Because there is no agreed upon regional economic development strategy, there is no "right" cluster list to use. The Draft UGR used the PDC list as a way of presenting information in a different format that resonates with some readers. The full forecast, which includes all employment sectors, is the basis for the capacity assessment. The cluster forecast does not figure into the capacity assessment. New cluster definitions will not change the capacity assessment.
Port of Portland	Two key elements of the strategy for providing large lot supply (brownfield cleanup and fast process for	The purpose of the UGR is to identify whether a capacity gap exists and, if so, to what degree. This UGR intentionally presented a variety of policy options

	UGB expansions) will be undefined at the close of public comment on October 15.	to consider for addressing land needs, but it is not the purpose of the UGR to determine the specifics of those policy options. The viability of those policy options does not have an impact on the capacity analysis. Those policy options can be more thoroughly considered in late 2009 and in 2010.
Port of Portland, Commercial Real Estate Economic Coalition	Brownfield cleanup should be a priority	Metro concurs that brownfield cleanup should be a regional priority and welcomes partnerships to institute more brownfield cleanup programs. A MPAC subcommittee will be looking at brownfield cleanup as one option to make more of the region's existing industrial capacity available.
Port of Portland	A regional infrastructure fund is needed to make industrial sites shovel ready.	Infrastructure funding shortfalls have made it difficult to develop the region's existing supply of land for industrial uses. Metro welcomes a discussion of new funding mechanisms as part of the region's overall investment strategy.
Portland Business Alliance	There is no reason to expect that funding will be more readily available for refill development than for expansion and to assume otherwise overstates the region's ability to accommodate growth in the existing land supply.	The refill rates that are assumed in the UGR are based on a continuation of existing public investment trends.
Port of Portland Portland Business Alliance	The "fast track" UGB expansion process that has been proposed by some will not be fast enough once planning, annexation, zoning, and infrastructure construction are considered.	An MPAC subcommittee will take up the issue of how to ensure that large lots are available and protected for industrial uses. The fast-track process is one proposal. We welcome other proposals.
Johnson-Reid	The draft UGR does not consider lands north of the existing Washington County UGB as candidate expansion areas for employment growth, modeling, and employment land capacity study.	The UGR's purpose is to identify any gap in the capacity of the current urban growth boundary (UGB) to accommodate growth. The UGR is not intended to examine how or where to fill a capacity gap outside of the current UGB. Scenario modeling was used to inform the UGR. Those scenarios assume a continuation of current policies and investment trends and, as such, assume that future UGB expansions will follow the existing hierarchy of lands as defined by State law. When urban and rural reserve designations are made, scenario assumptions about future UGB expansions will be adjusted.
Port of Portland	Habitat protection programs at the regional and local levels reduce the efficiency with which land is used inside the UGB.	Habitat protection and provision of parks and open spaces are key components of the 2040 Growth Concept. Balancing these goals with efficient development of land is often challenging and we're always looking for new ways of doing so.
Port of Portland	The UGR implies that there has been a problem of industrial land conversion and that there is a need to	Metro staff hopes to compile more information to determine whether industrial land conversion has been occurring and, if so, why. An MPAC

	revise Title 4 of the Urban Growth Management Functional Plan. Title 4 provides adequate protection. If there are conversions from industrial uses, it is an enforcement issue.	subcommittee will take up the issue of how to ensure that large lots are available and protected for industrial uses.
Port of Portland Portland Business Alliance	30 days is not an adequate amount of time for public review and comment on the UGR	Metro must meet a State-mandated deadline (end of 2009) for the Metro Council's acceptance of the UGR. The public will be able to comment throughout most of 2010 on the various policy choices that will be considered for closing any capacity gap identified in the UGR. Metro staff appreciates the time commitment that various advisory committees have made in providing review of the UGR. Metro has been working with advisory committees to refine the approach and contents of the UGR since winter of 2008. A preliminary UGR was released in May 2009 in order to proactively solicit and respond to technical comments. To the extent possible, comments received on the preliminary UGR have been addressed in the draft UGR. Please see Appendix 1 to the Draft UGR for a summary of comments received and draft Metro staff responses.

Preliminary summary of comments on draft residential analysis

Residential UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
Home Builders Assoc.	How does Metro plan on achieving refill rates of 50%	The draft UGR assumes a 33% refill rate, which is in keeping with historic rates and, according to Metro's market-based economic model, is likely to be achieved under current zoning.
City of Tualatin Portland Business Alliance	A 33% refill rate may not be a reasonable expectation.	The draft UGR assumes a 33% refill rate, which is in keeping with historic rates and, according to Metro's market-based economic model, is likely to be achieved under current zoning.
City of Tualatin	Where is the analysis that indicates where refill will be occurring?	Refill rates are expected to vary from city to city, with generally higher rates in Portland than in outlying communities. Metro staff is willing to share this additional scenario analysis with interested parties.
Home Builders Assoc.	Lands that are likely spots ("low-hanging fruit") for refill have already seen refill occur.	Redevelopment and infill (redevelopment in particular) are ongoing market phenomena. There are many underutilized sites throughout the region that remain ripe for redevelopment and new opportunities will continue to emerge over time.
Home Builders Assoc.	How does Metro anticipate having 71,000 housing units subsidized to the tune of up to $50,000 per home and what will the impact be on schools and other public services if urban renewal districts are used to created these subsidies and pull money away from other public services?	For the purpose of scenario modeling, Metro assumed a continuation of existing investment trends. The residential incentive assumptions that Metro made were reviewed by cities, counties, the Portland Development Commission, and the Metro Technical Advisory Committee. There are no assumptions made about new levels of investment. Better performance may be achieved with additional investments, investments in different locations, or simply with additional time. It is not the role of the UGR to determine the possible impact on schools and other public services if cities continue their urban renewal programs.
Home Builders Assoc.	The assumption about future park needs that is made in the UGR capacity calculation is incorrect.	There is no perfect way of estimating future park needs since there is no regional parks per capita standard. The methodology used in the Draft UGR is the same methodology that was used in the 2002 UGR, which was on the advice of the Metro Technical Advisory Committee. Metro staff has not received any concrete suggestions on how to improve this calculation.

		The acres of parks and open space cited in the Regional Infrastructure analysis include natural areas and other non-active use spaces. The UGR's parks calculation is only intended to estimate the land need for active-use parks (i.e. not natural areas) since these are lands that could otherwise be buildable for residential purposes. Many existing urban areas will likely witness population growth, but will not necessarily have the option of purchasing additional park space. The effect of increasing the acres assumed for future parks in the UGR would be to increase the need for UGB expansions. Such expansions would not guarantee that parks are provided where population growth is occurring.
Residential UGR—policy comments		
City of Lake Oswego	The City supports the UGR's analysis and is committed to helping expand capacity in the Foothills area of Lake Oswego to create a dense, new transit-oriented neighborhood.	Metro looks forward to working with Lake Oswego and other cities to identify how to regional and local actions can be coordinated to achieve local aspirations that are supportive of the 2040 Growth Concept.
Home Builders Assoc.	The public will not accept higher densities	The UGR analysis does not assume any change to current zoning, so the UGR does not assume higher zoned densities in existing neighborhoods. The 2040 Growth Concept calls for focusing growth in centers and corridors as directed by the region's citizens.
City of Wilsonville Coalition for a Livable Future	Infill and redevelopment in centers and corridors are generally preferable and more efficient that outward expansion. Infill and redevelopment protect natural resources. There is no money for infrastructure in UGB expansion areas. Infill and redevelopment can help to fund the maintenance of existing infrastructure. Infill and redevelopment will be necessary to reduce carbon emissions.	Infill and redevelopment are key market responses that the 2040 Growth Concept calls for in centers and corridors.
Home Builders Assoc.	Policies that push more households to live outside the Metro UGB do not mesh with Metro's goals for sustainability.	Metro staff concurs that there are negative implications of having more people choose to live in neighboring cities and commuting back to the Metro region. The draft UGR identifies a residential capacity gap. There are multiple ways to fill that gap that will be discussed in 2010.
Home Builders Assoc.	30 days is not an adequate amount of time for public review and comment on the UGR	The public will be able to comment throughout most of 2010 on the various policy choices that will be considered for closing any capacity gap identified in the UGR.

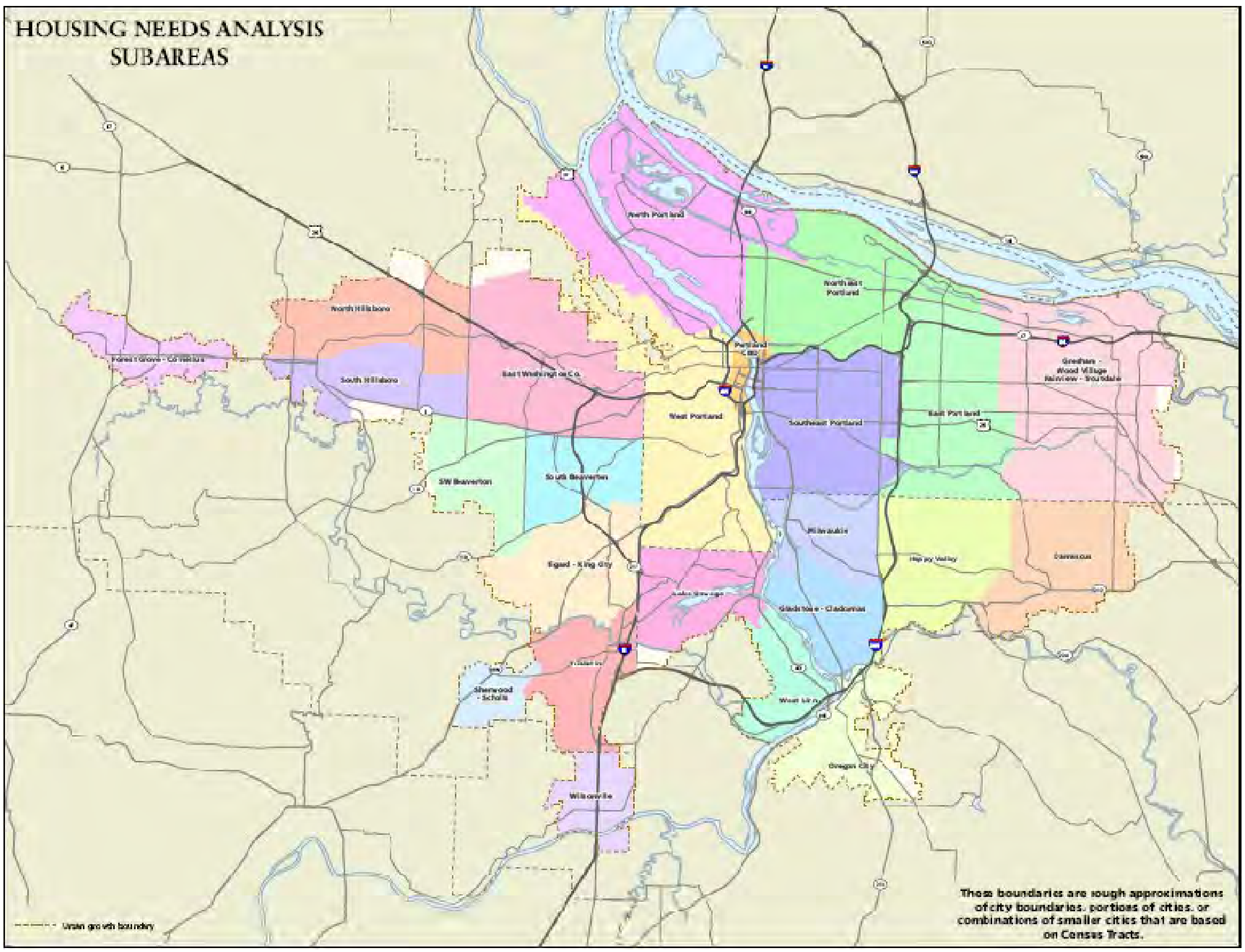
		Metro staff appreciates the time commitment that various advisory committees have made in providing review of the UGR. Metro has been working with advisory committees to refine the approach and contents of the UGR since winter of 2009. A preliminary UGR was released in May 2009 in order to proactively solicit and respond to technical comments. To the extent possible, comments received on the preliminary UGR have been addressed in the draft UGR. Please see Appendix 1 to the Draft UGR for a summary of comments received and draft Metro staff responses. Metro continues to try to give review and comment opportunities, but must meet a State-mandated deadline (end of 2009) for the Metro Council's acceptance of the UGR.

Appendix 7: Portland metropolitan area housing choice forecasts; subarea profiles

Purpose

Historically, most residents of this region have been able to choose from a variety of housing types that match their preferences and budgets. However, there is work to be done to ensure that future generations have the same range of choices and that those choices support the region's vision of creating vibrant and walkable communities, protecting air and water quality, and reducing greenhouse gas emissions.

The following profiles describe forecasted housing dynamics for the 24 subareas pictured in the map below. Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.



These profile sheets are intended to describe the total number of households, unique housing mix, incomes, and housing and transportation expenses forecasted for subareas in the Portland metropolitan region (within the Metro urban growth boundary (UGB)). Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends, but assume two different amounts of population growth for the 7-county area by the year 2030 (low and high growth).

The results of these scenarios should not be taken as foregone conclusions. Different assumptions would produce different results. Changes in policies and investments can change the outcomes for the region's communities.

Relationship of this analysis to the urban growth report

The scenario assumptions and results described in this analysis inform the urban growth report, but do not constitute the urban growth report. The urban growth report is an analysis of residential demand and capacity, while scenarios provide information about the possible performance of the region's residential capacity in light of forecasted demand. Performance is measured as housing mix, density, cost and affordability. If residential development of a particular type and tenure (rent/own) is reported as a scenario forecast, capacity for that household type is implicitly available. In this sense, scenarios do not identify a capacity gap. That determination is left to the urban growth report.

Three additional reasons that the results of these scenarios will differ somewhat from numbers reported in the urban growth report are:

Capture rate: The urban growth report assumes that 61.8 percent of future residential growth in the 7-county area will occur in the Metro UGB. This 61.8 percent capture rate is based on historic data. This UGR capture rate helps to establish the amount of residential demand (through the year 2030) that must be accommodated in the Metro UGB. Scenarios, on the other hand, produce a capture rate as an output of the scenario (i.e. it is not an assumption fed into the model). Consequently, the household numbers reported as scenario results, while similar, are not the same as the household demand numbers used in the urban growth report.

Refill rate: As with the capture rate, the urban growth report assumes a future refill rate. Scenarios, on the other hand, produce a refill rate as an output. Consequently scenario results will again differ somewhat from numbers used in the urban growth report's capacity analysis.

Timeframe: Scenario results are reported for the 2005 to 2030 timeframe. The UGR analysis covers the 2010 to 2030 timeframe. As a consequence, the results are somewhat different.

Household types

The MetroScope scenario model uses 400 types of households[1] that are determined by household size, income, household age and whether children are present. To make analysis and presentation feasible, the 400 types have been simplified to eight household types.

These eight household types are ranked roughly commensurate with income (income generally increases from household type one to household type eight). Differences in household characteristics translate into different choices of housing types and locations and transportation modes, as well as level of cost burden.

Table 1: Descriptions of the eight household types

Household type	Median household size (residents)	Median annual income	Median householder age	Percent with children in household	Characteristics
1	1.34	$13,800	55	1%	These are some of the lowest-income households. Among renters, these are exclusively single-person households—primarily the elderly. Owners have a more even age and household size distribution.
2	1.87	$25,000	50	21%	These households can be of any age, but their income is among the lowest. These households are primarily childless.
3	2.14	$35,800	48	28%	With a bit more income than household type two, these households are primarily in the 25 to 44 age bracket, mostly without children, although about a third of homeowners have children.
4	2.45	$46,700	49	31%	With a broad age distribution and approaching middle income, these households are usually childless, especially among renters.
5	2.90	$57,000	47	47%	These households are larger and wealthier. The majority of homeowners have children.
6	2.95	$69,200	46	45%	With more income than household type five. Almost half of these households are between 25 to 44 years of age. Although the majority do not have children, two- and three-person households are most common.
7	2.81	$100,100	50	30%	Mostly without children, these households include very high-income couples, especially among owners.
8	3.99	$113,300	42	83%	Most of the homeowners in this household type have children. They are high wage earners.

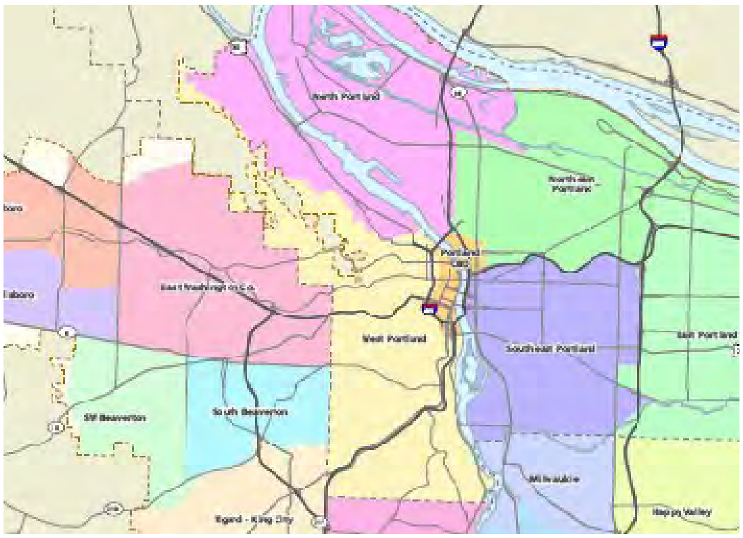
[1] Household refers to the residents, not the residence

Housing and transportation costs

Traditionally, housing affordability analyses look at the cost of the residence itself without regard for transportation costs. In reality, people weigh a variety of factors when choosing where to live. One such factor is transportation costs. In many cases, highly desirable locations have high housing costs, but very low transportation costs (because of their central location and access to multiple modes of transportation), while other locations have lower housing costs, but very high transportation costs (because they are distant from jobs and services). In order to illustrate the tradeoffs of different housing choices, this analysis includes information about housing and transportation costs.

Portland central business district, map reference number 11

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

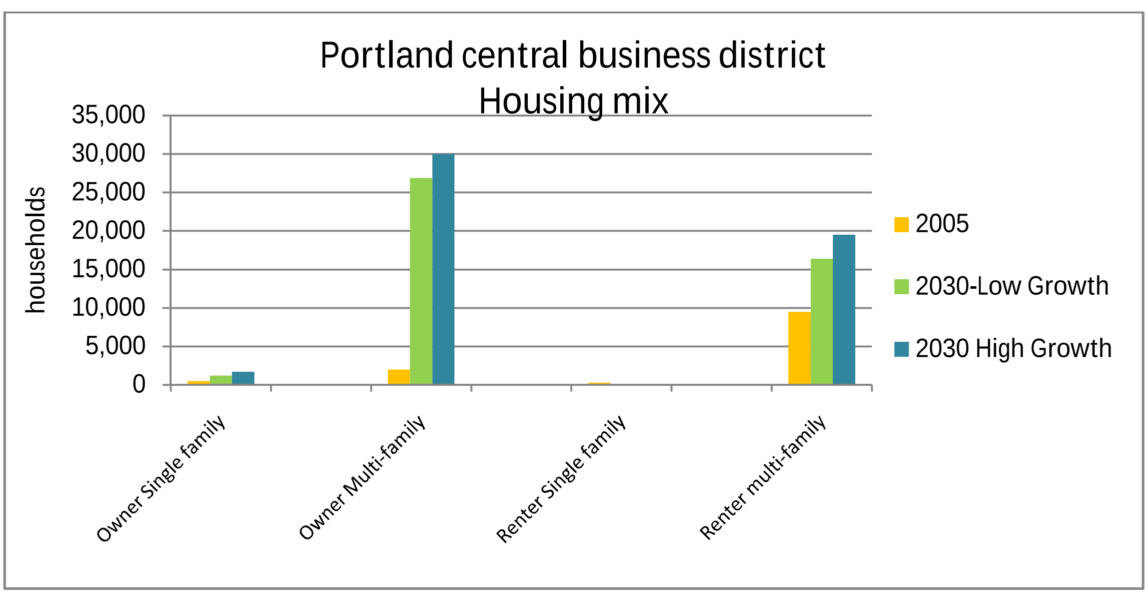
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Forecast summary:

The Portland central business district subarea includes areas such as downtown Portland, the Pearl District, the university district, old town/Chinatown, the Lloyd district, and Goose Hollow. A substantial share of the metro region's commercial core and jobs are centered in this area (around 15 percent) and fewer residential developments. The 2005 average income for households in this subarea is lower than the average income for the region, but it is projected to increase slightly by 2030. This subarea is characterized by high rates of owner occupied and rental multi-family households (16 and 77 percent, respectively), which are much higher than the average regional shares of multi-family households. This distinction is expected to increase in both growth scenarios for 2030.

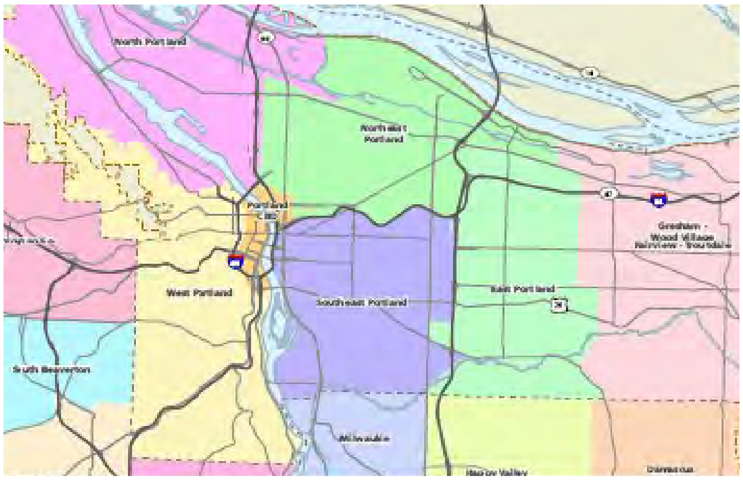
While the average household spends a smaller share of its annual household income on transportation costs compared to households in other subareas, the share of annual income projected to be spent on housing in this subarea is much higher than other subareas, ranging from 66 to 84 percent in the 2030 growth scenarios. This is because this is a location that is likely to remain in high demand. Though the number of cost-burdened households is forecasted to increase, the share of households that is cost-burdened is forecasted to decrease from 53 percent in 2005 to 29 to 33 percent in 2030. This is higher than the forecasted regional average for cost-burdened households (projected to be between 17 to 23 percent of all households in the region by 2030).

Portland central business district	2005	2030 (low-growth)	2030 (high growth)
Total households	12,300	44,500	51,100
Subarea share of region's households	2%	6%	6%
Total jobs	123,900	174,400	208,800
Subarea share of region's jobs	15%	17%	15%
Percent of all households by household type			
Household type 1 (median income $13,800)	30%	20%	21%
Household type 2 (median income $25,000)	11%	9%	9%
Household type 3 (median income $35,800)	12%	12%	13%
Household type 4 (median income $46,700)	5%	11%	11%
Household type 5 (median income $57,000)	11%	16%	16%
Household type 6 (median income $69,200)	11%	18%	12%
Household type 7 (median income $100,100)	9%	10%	25%
Household type 8 (median income $113,300)	11%	3%	3%
Average annual cost information for all households			
Transportation costs	$2,300	$2,400	$2,400
Housing costs	$16,000	$33,300	$43,600
income	$38,000	$50,800	$51,900
% Income spent on transportation	6%	5%	5%
% Income spent on housing	42%	66%	84%
% Income spent on housing and transportation	48%	70%	89%
Average annual cost information for all renters			
Transportation costs	$1,900	$1,700	$1,800
Housing costs	$10,300	$11,900	$14,400
Income	$26,100	$24,000	$24,300
% Income spent on transportation	7%	7%	7%
% Income spent on housing	40%	50%	59%
% Income spent on housing and transportation	47%	57%	66%
Number of cost burdened households	6,400	12,900	16,800
Share of households that are cost burdened	53%	29%	33%



Northeast Portland, Map Reference Number 12

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes the Northeast sections of Portland, roughly bounded by I-84, I-205, I-5 and the Columbia River. The average household income for this subarea is slightly lower than the average income level for the region. The shares of single family owner occupied households (62 percent) and rental multi-family households (21 percent) are fairly comparable to the regional average rate for these household types (60 and 29 percent respectively). The shares of these household types are projected to remain consistent with the regional average rates in 2030. The share of annual income spent on transportation is relatively low in 2005 and 2030 and is projected to decrease over time, but the share of annual income spent of housing is projected to increase slightly. Both the number and share of households that are cost-burdened are projected to increase by the year 2030, but the shares of households that are cost-burdened are forecasted to be similar to the average regional rates.

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

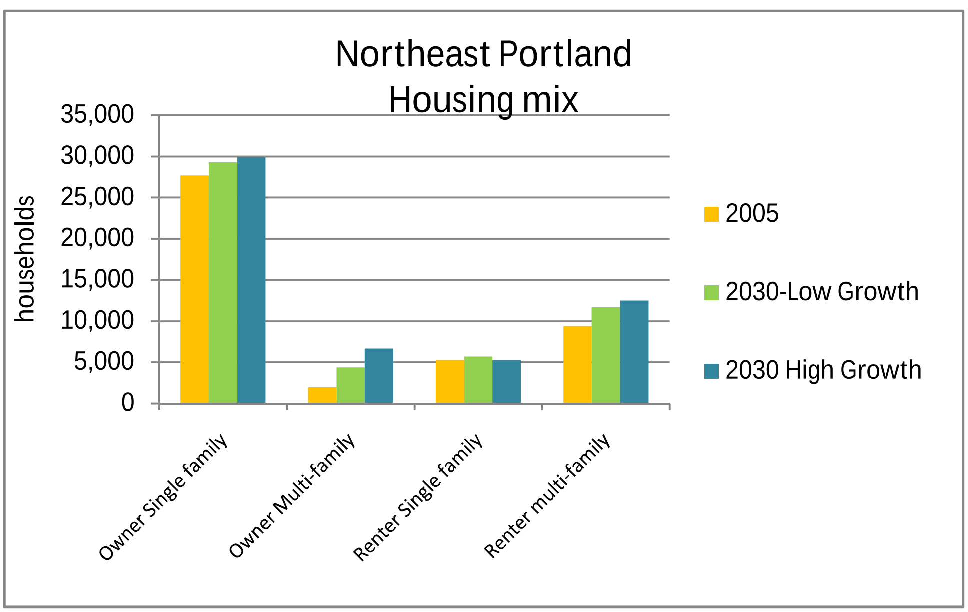
Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

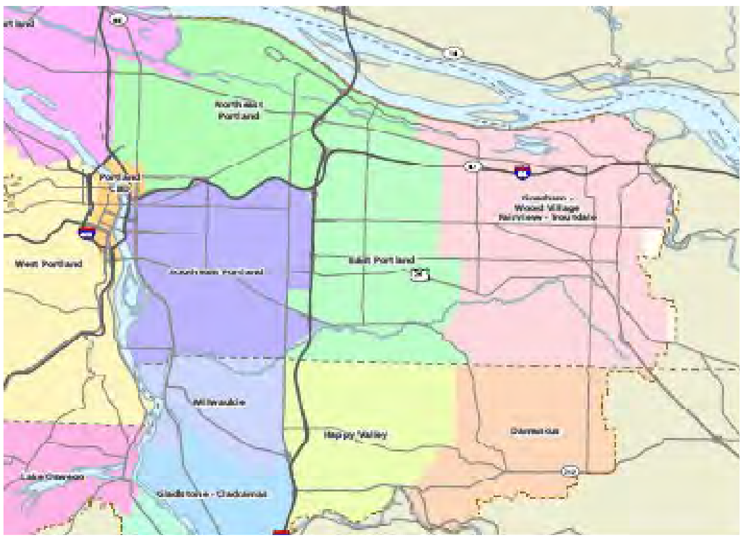
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Northeast Portland	2005	2030 (low-growth)	2030 (high growth)
Total households	44,400	51,100	54,300
Subarea share of region's households	8%	6%	6%
Total jobs	66,000	68,300	88,800
Subarea share of region's jobs	8%	7%	6%
Percent of all households by household type			
Household type 1 (median income $13,800)	18%	19%	20%
Household type 2 (median income $25,000)	16%	15%	15%
Household type 3 (median income $35,800)	13%	13%	14%
Household type 4 (median income $46,700)	12%	12%	12%
Household type 5 (median income $57,000)	10%	9%	9%
Household type 6 (median income $69,200)	10%	10%	8%
Household type 7 (median income $100,100)	12%	13%	15%
Household type 8 (median income $113,300)	9%	8%	8%
Average annual cost information for all households			
Transportation costs	$3,800	$3,700	$3,600
Housing costs	$21,600	$23,000	$28,100
Income	$50,000	$50,000	$49,900
% Income spent on transportation	8%	7%	7%
% Income spent on Housing	43%	46%	56%
% income spent on housing and transportation	51%	53%	63%
Average annual cost information for all renters			
Transportation costs	$2,500	$2,500	$2,500
Housing costs	$8,800	$9,900	$11,600
Income	$28,200	$28,200	$28,500
% Income spent on transportation	9%	9%	9%
% Income spent on Housing	31%	35%	40%
% Income spent on housing and transportation	40%	44%	49%
Number of cost burdened households	7,400	9,300	13,100
Share of households that are cost burdened	17%	18%	24%



Subarea: Gresham-Wood Village-Fairview-Troutdale, Map Reference Number: 13

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes Gresham, Wood Village, Troutdale and Fairview. The average income for this area is lower than the regional average for both 2005 and 2030. In 2005, the shares of single family owner occupied (61 percent) and multi-family rental houses (31 percent), which make up the majority of households in this subarea, are fairly comparable to regional average shares for these household types (60 percent and 29 percent respectively). While the shares of these household types remain consistent with the regional average rates in the two growth scenarios for 2030, the rate of owner occupied multi-family households is projected to increase from one percent in 2005 to five to ten percent in 2030. The share of annual income spent on transportation and housing remains consistent with the average for the region.

While the number and share of households that are cost-burdened remains relatively constant from 2005 to the low-growth 2030 scenario, the high-growth 2030 scenario projects increases in both these categories. These increases would make the share of households that is cost-burdened in this subarea higher than the forecasted regional rate (regional average rate is projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

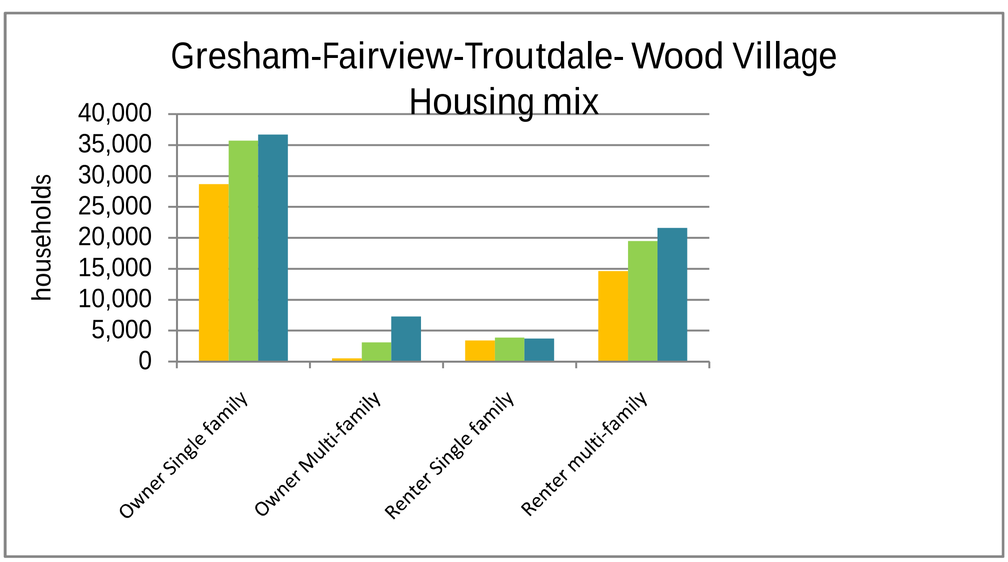
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

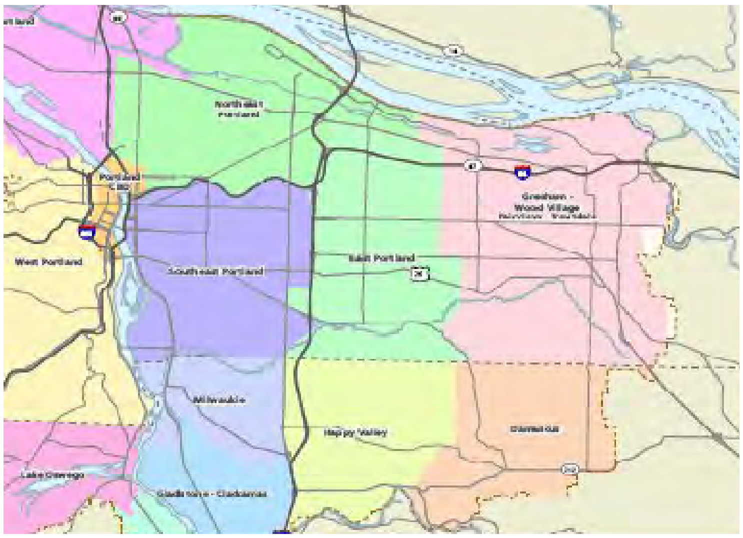
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Gresham-Wood Village-Fairview-Troutdale	2005	2030 (low-growth)	2030 (high growth)
Total households	47,300	62,300	69,300
Subarea share of region's households	8%	8%	8%
Total jobs	47,700	58,000	92,100
Subarea share of region's jobs	6%	6%	7%
Percent of all households by household type			
Household type 1 (median income $13,800)	9.3%	10%	11%
Household type 2 (median income $25,000)	14%	13%	14%
Household type 3 (median income $35,800)	16%	15%	16%
Household type 4 (median income $46,700)	17%	17%	16%
Household type 5 (median income $57,000)	17%	16%	16%
Household type 6 (median income $69,200)	12%	13%	12%
Household type 7 (median income $100,100)	10%	8%	9%
Household type 8 (median income $113,300)	6%	8%	7%
Average annual cost information for all households			
Transportation costs	$6,200	$6,200	$6,100
Housing costs	$15,800	$19,700	$23,200
Income	$49,500	$49,700	$49,100
% Income spent on transportation	13%	13%	12%
% Income spent on housing	32%	40%	47%
% Income spent on housing and transportation	45%	43%	59%
Average annual cost information for all renters			
Transportation costs	$4,400	$4,500	$4,500
Housing costs	$8,000	$9,200	$10,700
Income	$30,900	$32,100	$32,800
% Income spent on transportation	14%	14%	14%
% Income spent on housing	26%	29%	33%
% Income spent on housing and transportation	40%	43%	47%
Number of cost burdened households	7,400	9,800	17,900
Share of households that are cost burdened	16%	16%	26%



Subarea: East Portland, Map Reference Number: 14

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes Portland neighborhoods between I-205 and the border of Gresham. The average income for this subarea is lower than the regional average and is projected to decrease slightly relative to the regional average by 2030. The shares of owner occupied single family (62 percent) and rental multi-family rental households (26 percent) in 2005 are very comparable to regional average rates for these housing types (60 percent and 29 percent respectively). While the shares of these household types remain consistent with the regional average rates in 2030, the rate of owner occupied multi-family households is projected to increase from two percent in 2005 to seven to thirteen percent in 2030. The share of annual income spent on transportation and housing remains consistent with the average for the region. The number and share of households that are cost-burdened are projected to increase only slightly between 2005 and 2030 and remain similar to the forecasted regional rate (regional average is projected to be between 17 to 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

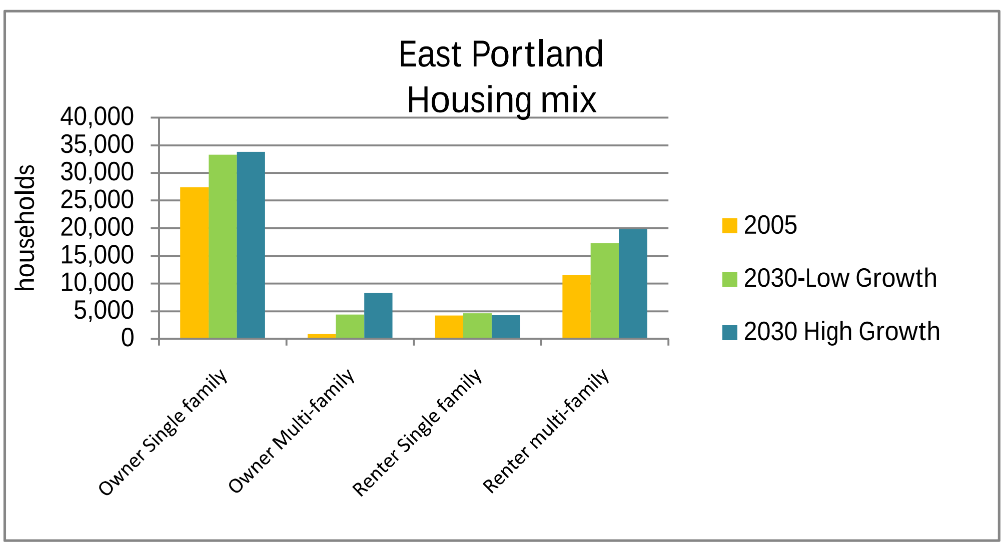
Cost-burdened household:
Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

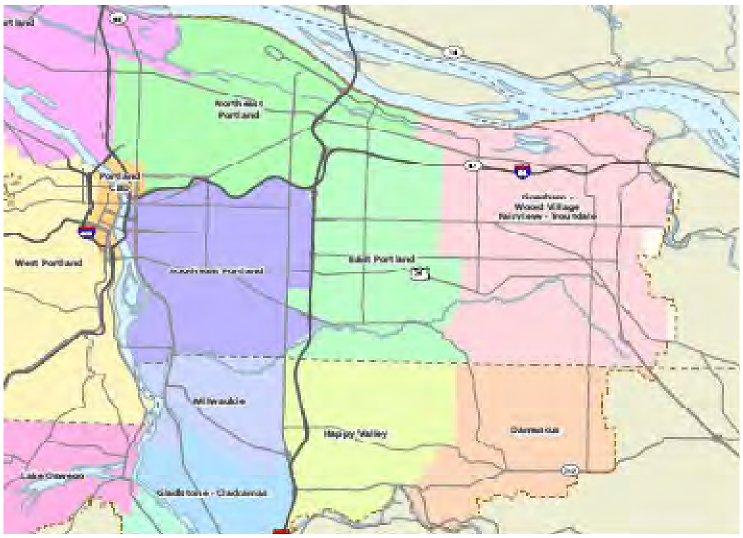
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

East Portland	2005	2030 (low-growth)	2030 (high growth)
Total households	44,000	59,700	66,200
Subarea share of region's households	8%	8%	8%
Total jobs	23,000	29,600	42,200
Subarea share of region's jobs	3%	3%	3%
Percent of all households by household type			
Household type 1 (median income $13,800)	15.2%	18%	19%
Household type 2 (median income $25,000)	20%	20%	20%
Household type 3 (median income $35,800)	18%	17%	18%
Household type 4 (median income $46,700)	15%	16%	15%
Household type 5 (median income $57,000)	12%	11%	11%
Household type 6 (median income $69,200)	9%	8%	7%
Household type 7 (median income $100,100)	7%	7%	7%
Household type 8 (median income $113,300)	5%	4%	4%
Average annual cost information for all households			
Transportation costs	$4,500	$4,300	$4,200
Housing costs	$14,500	$16,700	$19,200
Income	$42,400	$40,100	$39,400
% Income spent on transportation	11%	11%	11%
% Income spent on housing	34%	42%	49%
% Income spent on housing and transportation	45%	53%	60%
Average annual cost information for all renters			
Transportation costs	$3,400	$3,400	$3,400
Housing costs	$7,900	$8,900	$10,200
Income	$29,100	$29,200	$29,600
% Income spent on transportation	12%	12%	11%
% Income spent on housing	27%	30%	34%
% Income spent on housing and transportation	39%	42%	45%
Number of cost burdened households	7,800	11,000	12,400
Share of households that are cost burdened	18%	18%	19%



Subarea: Southeast Portland, Map Reference Number: 15

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes Portland neighborhoods south of I-84, east of the Willamette River, and west of I-205. The Southeast Portland subarea, home to the highest share of the region's households (12 percent) relative to other subareas in the region, is projected to see a slight decrease in its share of the region's households from 2005 to 2030. The average income for this subarea, lower than the regional average, is projected to remain constant through 2030. Southeast Portland's share of owner occupied single family households in 2005 (53 percent) is slightly lower than the regional average rate for that housing type (60 percent) and is projected to remain constant by 2030. In 2005, the shares of rental single family and rental multi-family households (13 and 30 percent respectively) were higher than the regional averages for these housing types (9 percent and 29 percent respectively) and are projected to decrease slightly by 2030.

While the share of annual income spent on transportation costs relative is fairly low relative to other subareas (eight percent of income), the number and share households that are cost-burdened are projected to increase slightly from 2005 to 2030. The share of households that are considered cost-burdened, at roughly 25 percent in 2005 and upwards of 30 percent in 2030, is higher than the forecasted average range for the region (the regional average rate is projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

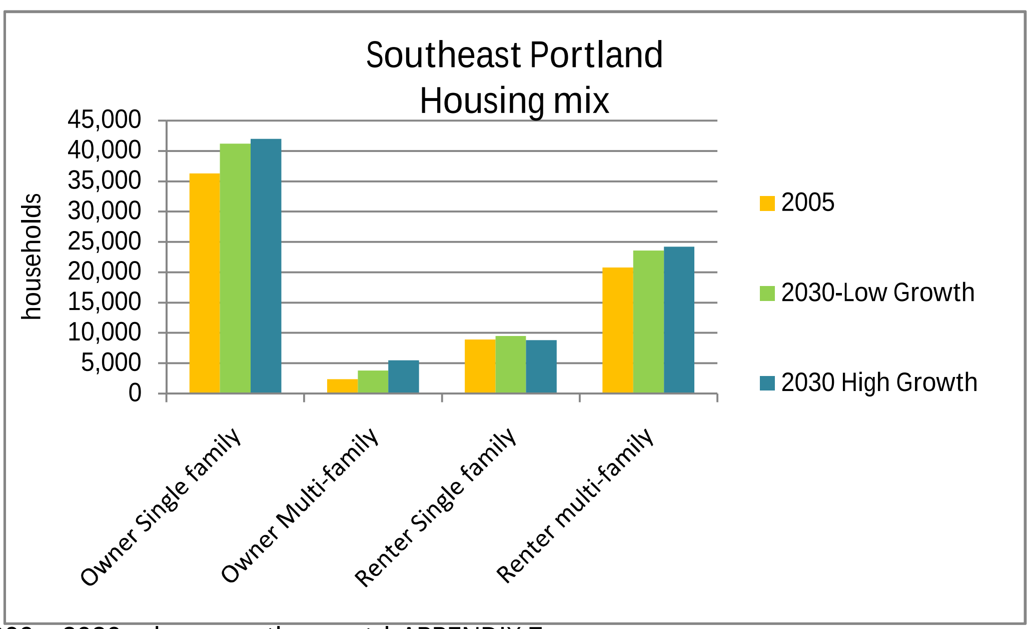
Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

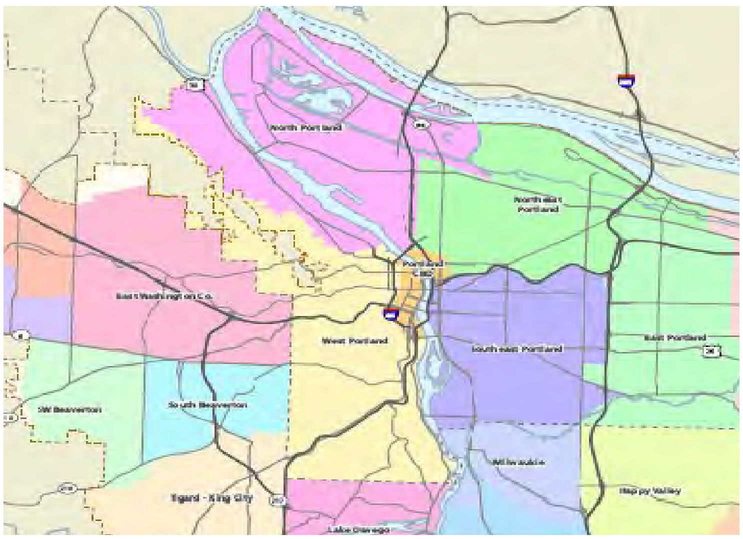
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Southeast Portland	2005	2030 (low-growth)	2030 (high growth)
Total households	68,300	78,100	80,500
Subarea share of region's households	12%	10%	9%
Total jobs	70,400	87,300	105,900
Subarea share of region's jobs	8%	8%	8%
Percent of all households by household type			
Household type 1 (median income $13,800)	17%	18%	18%
Household type 2 (median income $25,000)	19%	17%	17%
Household type 3 (median income $35,800)	15%	16%	16%
Household type 4 (median income $46,700)	13%	14%	14%
Household type 5 (median income $57,000)	11%	10%	10%
Household type 6 (median income $69,200)	9%	9%	8%
Household type 7 (median income $100,100)	10%	11%	12%
Household type 8 (median income $113,300)	7%	6%	6%
Average annual cost information for all households			
Transportation costs	$3,500	$3,500	$3,500
Housing costs	$18,400	$20,500	$25,100
Income	$43,900	$43,900	44,000
% Income spent on transportation	8%	8%	8%
% Income spent on housing	42%	47%	57%
% Income spent on housing and transportation	50%	55%	65%
Average annual cost information for all renters			
Transportation costs	$2,400	$2,400	$2,400
Housing costs	$8,400	$9,500	$11,100
Income	$26,400	$26,000	$26,400
% Income spent on transportation	9%	9%	9%
% Income spent on housing	32%	37%	42%
% Income spent on housing and transportation	41%	46%	51%
Number of cost burdened households	16,200	18,500	26,100
Share of households that are cost burdened	24%	24%	32%



Subarea: West Portland, Map Reference Number: 16

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

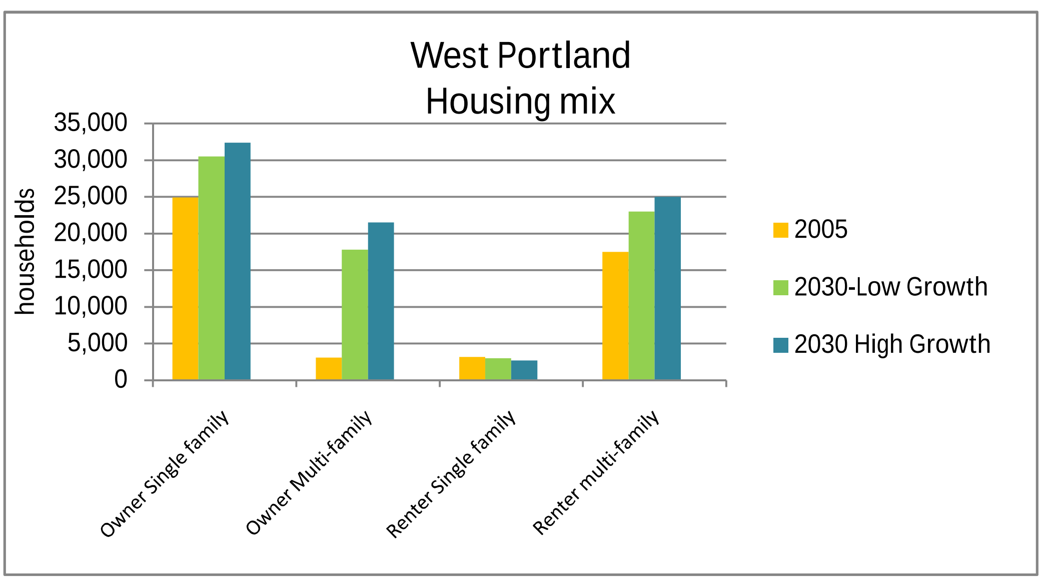
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Forecast summary:

This subarea includes Portland neighborhoods west of the Willamette River (excluding Forest Park and the central business district). The average income for this subarea is higher than the regional average income level. In 2005, the share of owner occupied single family households (51 percent)was lower than the regional average rate (60 percent), while the share of rental multi-family households (36 percent) was higher than the regional average rate for that household type (29 percent). The share of owner occupied single family households is projected to decrease to 41 percent in 2030 and the share of owner occupied multi-family households is projected to increase from six percent in 2005 to in 25 percent in 2030.

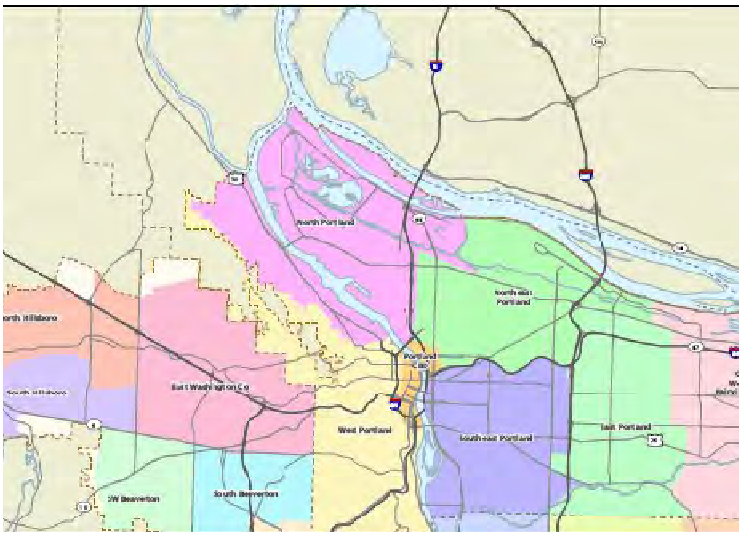
While the share of annual income spent on transportation is low compared to other subareas in the region, the share of income spent on housing in this subarea is projected to increase to a range of 57 to 74 percent by 2030. This is because this is a location that is likely to remain in high demand. In addition, the share of households considered cost-burdened, projected to increase from 24 percent in 2005 to 26 to 29 percent in 2030, is slightly higher than the forecasted regional average for cost-burdened households (projected to be between 17 and 23 percent of all households in the region by 2030).

West Portland	2005	2030 (low-growth)	2030 (high growth)
Total households	48,800	74,200	81,500
Subarea share of region's households	9%	9%	9%
Total jobs	69,100	90,200	106,900
Subarea share of region's jobs	8%	9%	8%
Percent of all households by household type			
Household type 1 (median income $13,800)	9%	10%	9%
Household type 2 (median income $25,000)	11%	10%	9%
Household type 3 (median income $35,800)	10%	11%	11%
Household type 4 (median income $46,700)	9%	11%	10%
Household type 5 (median income $57,000)	9%	8%	8%
Household type 6 (median income $69,200)	11%	11%	8%
Household type 7 (median income $100,100)	16%	17%	21%
Household type 8 (median income $113,300)	26%	23%	23%
Average annual cost information for all households			
Transportation costs	$4,300	$4,100	$4,100
Housing costs	$31,900	$38,500	$52,100
income	$67,000	$67,800	$70,300
% Income spent on transportation	6%	6%	6%
% Income spent on housing	48%	57%	74%
% Income spent on housing and transportation	54%	63%	80%
Average annual cost information for all renters			
Transportation costs	$2,300	$2,200	$2,300
Housing costs	$10,600	412,300	$14,900
Income	$27,900	$27,900	$28,100
% Income spent on transportation	8%	8%	8%
% Income spent on housing	38%	44%	53%
% Income spent on housing and transportation	46%	52%	61%
Number of cost burdened households	11,700	19,100	23,800
Share of households that are cost burdened	24%	26%	29%



Subarea: North Portland, Map Reference Number: 17

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

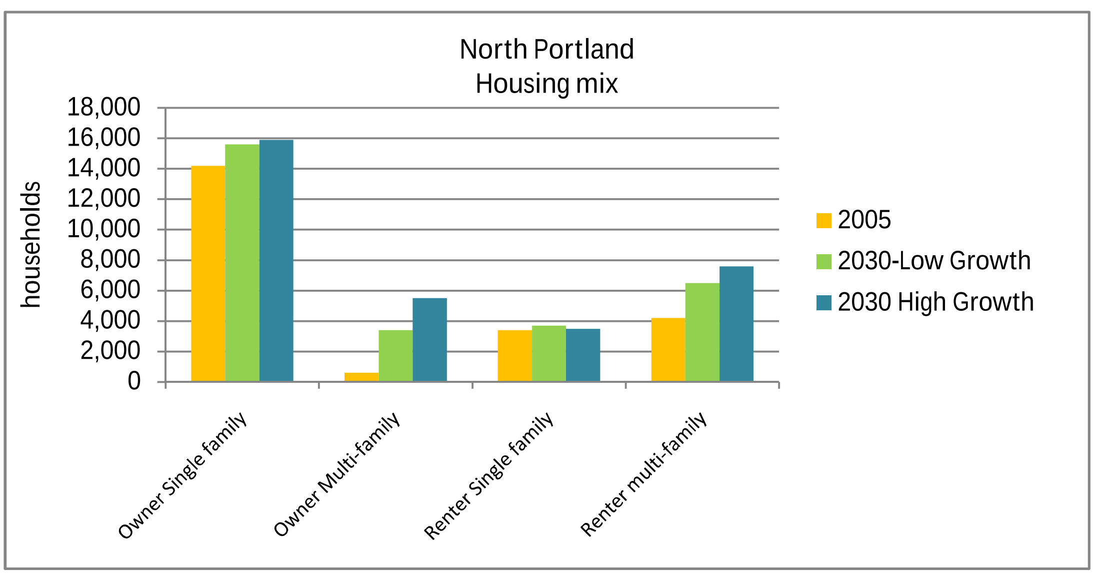
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Forecast summary:

This subarea includes Forest Park, neighborhoods in north Portland, and employment and industrial areas along the Willamette River and is home to a high share of the region's jobs. These scenarios indicate that the total number of jobs in this subarea is projected to increase by the year 2030. The average household income for residents of this subarea is significantly lower than the regional average income level. The shares of owner occupied and rental single family households in 2005 (63 percent and 15 percent respectively) are slightly higher than regional average rates for these housing types (60 percent and 9 percent respectively), but the share of owner occupied single family housing is projected to decrease to 53 to 49 percent in 2030. However, the shares of owner occupied and rental multi-family households are both projected to increase by 2030.

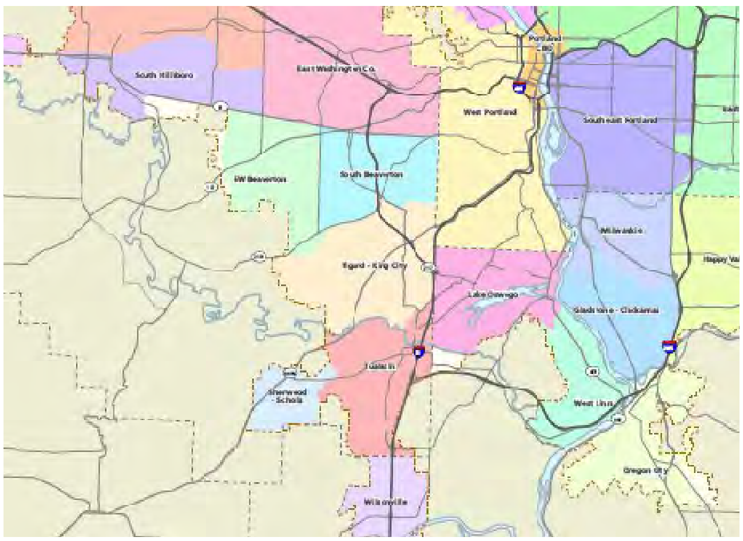
The share of annual income spent on housing and transportation is fairly consistent with the regional average. The number and share of households that are cost-burdened are projected to increase slightly by 2030 and remain fairly comparable to the forecasted regional average (projected to be between 17 and 23 percent of all households in the region by 2030).

North Portland	2005	2030 (low-growth)	2030 (high growth)
Total households	22,400	29,200	32,500
Subarea share of region's households	4%	4%	4%
Total jobs	71,900	80,600	102,100
Subarea share of region's jobs	9%	8%	7%
Percent of all households by household type			
Household type 1 (median income $13,800)	29%	32%	37%
Household type 2 (median income $25,000)	22%	21%	21%
Household type 3 (median income $35,800)	14%	13%	14%
Household type 4 (median income $46,700)	9%	9%	9%
Household type 5 (median income $57,000)	7%	6%	6%
Household type 6 (median income $69,200)	7%	6%	6%
Household type 7 (median income $100,100)	7%	7%	7%
Household type 8 (median income $113,300)	6%	5%	5%
Average annual cost information for all households			
Transportation costs	$3,800	$3,600	$3,500
Housing costs	$14,000	$15,500	$17,800
Income	$37,100	$35,400	$34,800
% Income spent on transportation	10%	10%	10%
% Income spent on housing	38%	44%	51%
% Income spent on housing and transportation	48%	54%	61%
Average annual cost information for all renters			
Transportation costs	$3,000	$3,000	$3,000
Housing costs	$7,700	$8,700	$10,100
Income	$27,500	$28,200	$29,000
% Income spent on transportation	11%	10%	10%
% Income spent on housing	28%	31%	35%
% Income spent on housing and transportation	39%	41%	45%
Number of cost burdened households	4,000	5,700	6,600
Share of households that are cost burdened	18%	19%	20%



Subarea: Lake Oswego, Map Reference Number: 21

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea roughly approximates the boundaries of the City of Lake Oswego. The average income for residents of this subarea is much higher than the regional average, with only five percent of all households identified as cost burdened in 2005. The primary housing types in Lake Oswego are owner occupied single family and rental multi-family households. While the share of owner occupied single family households in Lake Oswego (68 percent) is higher than the regional average rate for this household type (60 percent), the share of rental multi-family households (20 percent) is slightly lower than the regional average rate (29 percent). There is relatively little household growth projected by the year 2030.

The share of annual income spent on transportation is slightly lower than rates for other subareas in the region, while the share of annual income that is spent on housing is comparable to other subareas in the region. While the share of households that are cost-burdened is projected to increase to 11 to 13 percent by 2030, the share of cost-burdened households is lower than the forecasted regional average rate (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

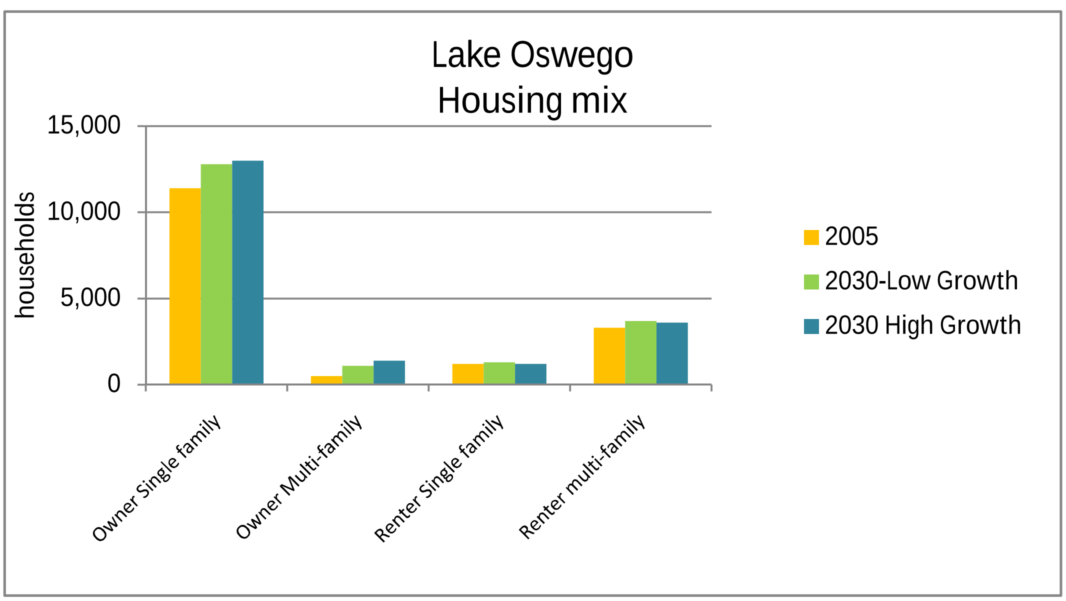
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Lake Oswego	2005	2030 (low-growth)	2030 (high growth)
Total households	16,400	18,900	19,200
Subarea share of region's households	3%	2%	2%
Total jobs	15,600	22,000	26,300
Subarea share of region's jobs	2%	2%	2%
Percent of all households by household type			
Household type 1 (median income $13,800)	2%	2%	2%
Household type 2 (median income $25,000)	3%	3%	3%
Household type 3 (median income $35,800)	3%	3%	3%
Household type 4 (median income $46,700)	6%	6%	6%
Household type 5 (median income $57,000)	9%	9%	9%
Household type 6 (median income $69,200)	14%	16%	13%
Household type 7 (median income $100,100)	23%	22%	26%
Household type 8 (median income $113,300)	41%	40%	38%
Average annual cost information for all households			
Transportation costs	$7,200	$7,200	$7,100
Housing costs	$35,100	$37,600	$47,900
Income	$89,000	$89,200	$90,000
% Income spent on transportation	8%	8%	8%
% Income spent on housing	39%	42%	53%
% Income spent on housing and transportation	47%	50%	61%
Average annual cost information for all renters			
Transportation costs	$4,900	$5,000	$5,000
Housing costs	$11,500	$13,500	$15,800
Income	$47,900	$48,600	$48,700
% Income spent on transportation	10%	10$	10%
% Income spent on housing	24%	28%	32%
% Income spent on housing and transportation	34%	38%	43%
Number of cost burdened households	900	2,000	2,500
Share of households that are cost burdened	5%	11%	13%



Subarea: Gladstone-Clackamas, Map Reference Number: 22

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

<u>Cost-burdened household:</u> Renters that spend more than half of their household income on transportation and housing.

<u>Household types:</u> Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

<u>Housing costs</u>: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

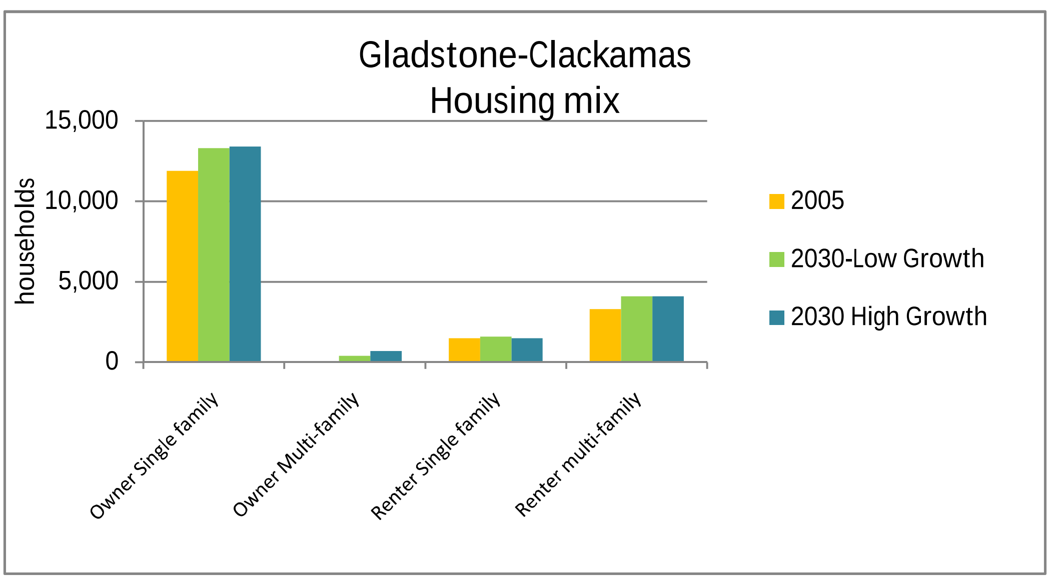
<u>Transportation costs:</u> A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Forecast summary:

This subarea includes the City of Gladstone and surrounding unincorporated areas of Clackamas County. In 2005, the average income level for residents of this subarea was less than the regional average, but is projected to increase slightly relative to the regional average by 2030. In 2005, the share of owner occupied single family households (71 percent), was higher than the average regional rate for this housing type (60 percent), but is projected to decrease slightly by the year 2030. The share of rental multi-family housing (20 percent in the year 2005), is slightly lower than the regional average rate for this housing type (29 percent), and is forecasted to remain fairly constant by 2030.

The shares of annual income spent on housing and transportation costs are fairly consistent with regional averages. The share of households that are cost-burdened is projected to increase from 13 percent in 2005 to 15 to 21 percent in 2030. Though this would represent an increase for this subarea, this rate is on the low end of the forecasted regional average (projected to be between 17 and 23 percent of all households in the region by 2030).

Gladstone-Clackamas	2005	2030 (low-growth)	2030 (high growth)
Total households	16,800	19,400	19,700
Subarea share of region's households	3%	2%	2%
Total jobs	10,300	12,500	14,900
Subarea share of region's jobs	1%	1%	1%
Percent of all households by household type			
Household type 1 (median income $13,800)	8%	11%	11%
Household type 2 (median income $25,000)	13%	14%	14%
Household type 3 (median income $35,800)	14%	16%	16%
Household type 4 (median income $46,700)	17%	18%	18%
Household type 5 (median income $57,000)	18%	16%	17%
Household type 6 (median income $69,200)	14%	12%	10%
Household type 7 (median income $100,100)	10%	8%	9%
Household type 8 (median income $113,300)	7%	5%	5%
Average annual cost information for all households			
Transportation costs	$6,200	$6,000	$5,900
Housing costs	$17,100	$20,100	$24,100
Income	$54,400	$49,700	$49,400
% Income spent on transportation	11%	12%	12%
% Income spent on housing	31%	40%	49%
% Income spent on housing and transportation	43%	52%	61%
Average annual cost information for all renters			
Transportation costs	$4,400	$4,300	$4,400
Housing costs	$8,000	$8,900	$10,200
Income	$32,100	$30,600	$31,100
% Income spent on transportation	14%	14%	14%
% Income spent on housing	25%	29%	33%
% income spent on housing and transportation	39%	43%	47%
Number of cost burdened households	2,100	2,800	4,200
Share of households that are cost burdened	13%	15%	21%



Subarea: Milwaukie, Map Reference Number: 23

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.

Forecast summary:

This subarea includes the City of Milwaukie as well as unincorporated areas of Clackamas County. In 2005, the average income for residents of this subarea was lower than the regional average, but it is projected to increase by the year 2030 to be slightly higher than the regional average. In 2005, the shares of single family owner occupied (58 percent) and multi-family rental households (31 percent), the two primary housing types in this subarea, were fairly consistent with regional average rates for these housing types (60 percent and 29 percent respectively). The shares of single family owner occupied and multi-family rental households are forecasted to remain constant from 2005 to 2030.

The shares of annual income spent on housing and transportation are relatively consistent with regional averages. The share of cost-burdened households is projected to increase slightly from 18 percent 2005 to 19 percent 2030, but remains fairly comparable to the forecasted regional average rate (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

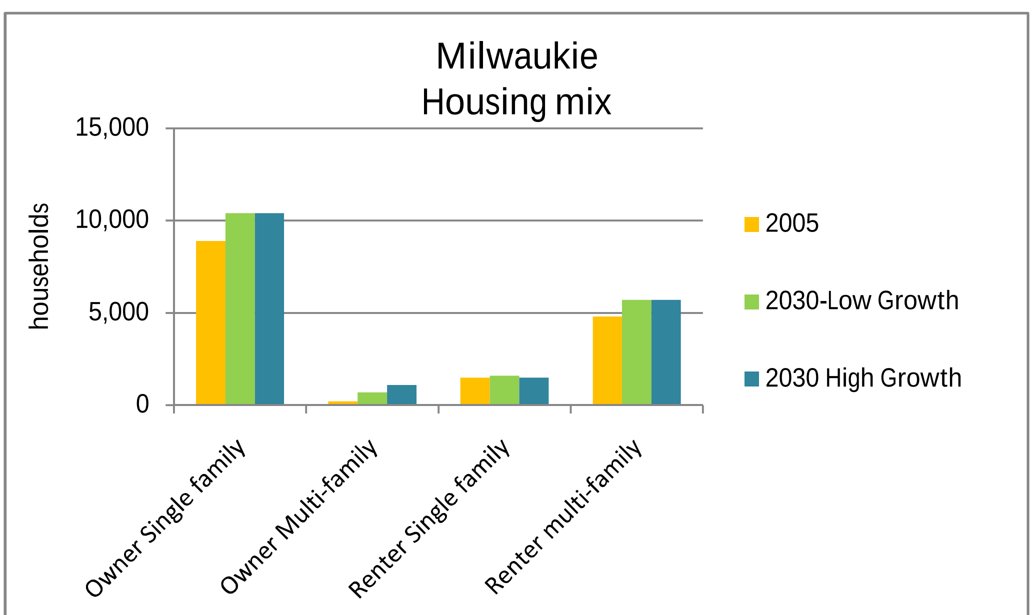
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

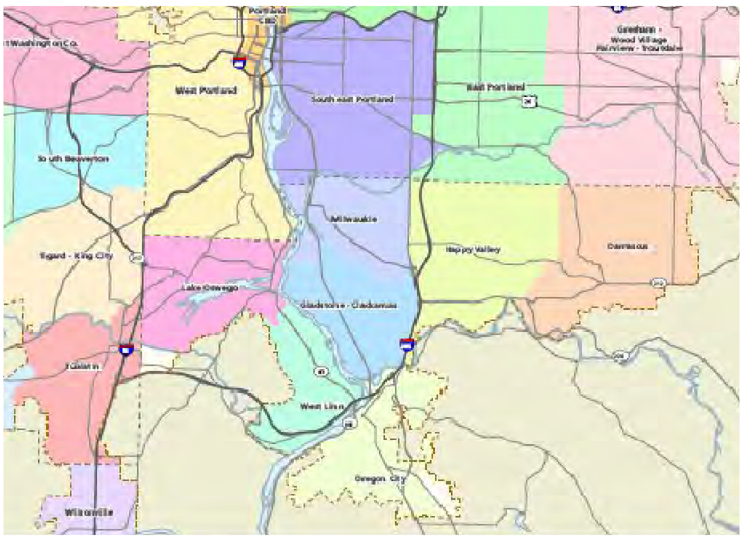
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Milwaukie	2005	2030 (low-growth)	2030 (high growth)
Total households	15,400	18,400	18,700
Subarea share of region's households	3%	2%	2%
Total jobs	22,200	24,100	29,700
Subarea share of region's jobs	3%	2%	2%
Percent of all households by household type			
Household type 1 (median income $13,800)	13%	16%	16%
Household type 2 (median income $25,000)	17%	17%	17%
Household type 3 (median income $35,800)	17%	17%	18%
Household type 4 (median income $46,700)	18%	19%	18%
Household type 5 (median income $57,000)	14%	13%	13%
Household type 6 (median income $69,200)	9%	8%	7%
Household type 7 (median income $100,100)	7%	6%	7%
Household type 8 (median income $113,300)	6%	4%	4%
Average annual cost information for all households			
Transportation costs	$4,700	$4,500	$4,500
Housing costs	$14,100	$16,500	$19,500
Income	$43,600	$40,500	$40,300
% Income spent on transportation	11%	11%	11%
% Income spent on housing	32%	41%	48%
% Income spent on housing and transportation	43%	52%	59%
Average annual cost information for all renters			
Transportation costs	$3,700	$3,600	$3,600
Housing costs	$7,900	$8,900	$10,100
Income	$30,700	$29,500	$29,700
% Income spent on transportation	12%	12%	12%
% Income spent on housing	26%	30%	34%
% Income spent on housing and transportation	38%	42%	46%
Number of cost burdened households	2,700	3,400	3,500
Share of households that are cost burdened	18%	19%	19%



Subarea: Happy Valley, Map Reference Number: 24

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes Happy Valley as well as unincorporated areas of Clackamas County. In 2005, the average income for residents of this subarea was higher than the regional average and is projected to increase slightly by the year 2030. The share of owner occupied single family households in Happy Valley (67 percent) is higher than the regional average rate for this housing type (60 percent), but is projected to decrease slightly by the year 2030. The shares of owner occupied multi-family and rental multi-family households are both projected to increase slightly by 2030, but are forecasted to remain consistent with or lower than the regional average rates for these housing types.

The share of annual income spent on housing and transportation is fairly consistent with other subareas across the region. The share of cost-burdened households is projected to increase slightly from 10 percent 2005 to 11 to 20 percent in 2030, but remains low compared to the forecasted regional rate (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

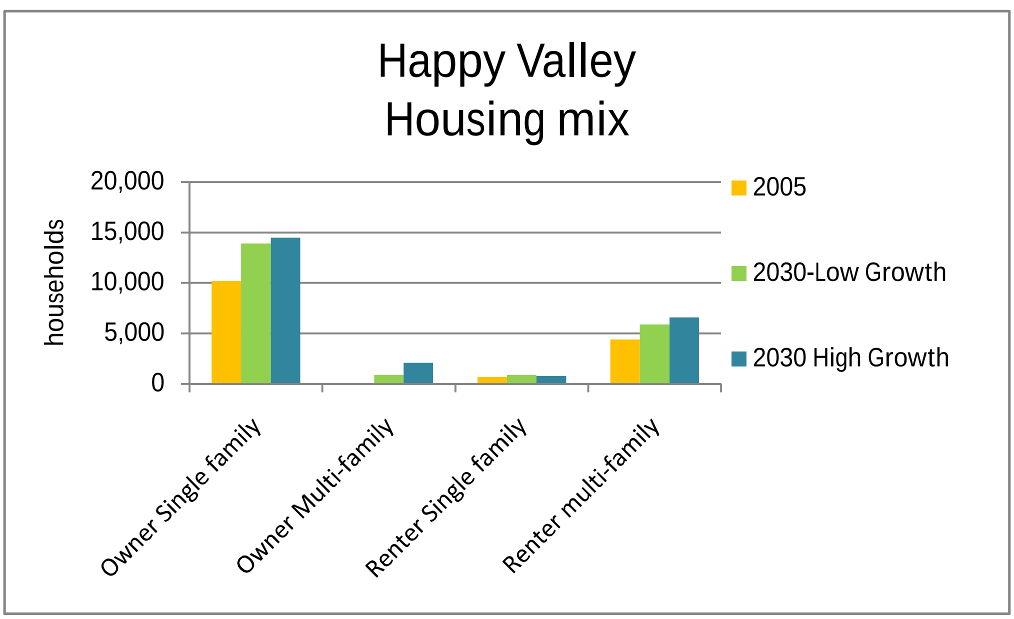
<u>Cost-burdened household:</u> Renters that spend more than half of their household income on transportation and housing.

<u>Household types:</u> Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

<u>Housing costs</u>: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

<u>Transportation costs:</u> A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Happy Valley	2005	2030 (low-growth)	2030 (high growth)
Total households	15,300	21,600	24,000
Subarea share of region's households	3%	3%	3%
Total jobs	32,300	36,100	50,400
Subarea share of region's jobs	4%	3%	4%
Percent of all households by household type			
Household type 1 (median income $13,800)	4%	5%	6%
Household type 2 (median income $25,000)	5%	5%	5%
Household type 3 (median income $35,800)	8%	8%	9%
Household type 4 (median income $46,700)	12%	13%	13%
Household type 5 (median income $57,000)	16%	15%	15%
Household type 6 (median income $69,200)	18%	19%	16%
Household type 7 (median income $100,100)	17%	15%	17%
Household type 8 (median income $113,300)	19%	20%	19%
Average annual cost information for all households			
Transportation costs	$7,100	$7,100	$6,900
Housing costs	$21,000	$26,900	$32,400
Income	$71,000	$70,100	$69,500
% Income spent on transportation	10%	10%	10%
% Income spent on housing	30%	38%	47%
% Income spent on housing and transportation	40%	48%	55%
Average annual cost information for all renters			
Transportation costs	$4,500	$4,600	$4,700
Housing costs	$8,500	$9,700	$11,200
Income	$33,500	$34,000	$35,300
% Income spent on transportation	14%	13%	13%
% Income spent on housing	25%	29%	32%
% Income spent on housing and transportation	39%	42%	45%
Number of cost burdened households	1,600	2,400	4,800
Share of households that are cost burdened	10%	11%	20%



Subarea: Damascus, Map Reference Number: 25

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.

Forecast summary:

This subarea includes the City of Damascus as well as scattered unincorporated areas of Clackamas County. As this area is newly developing, the subarea's share of the region's households and jobs is relatively low compared to other subareas, but is projected to grow by 2030. In 2005, the average income for residents of this subarea was higher than the regional average and is projected to increase proportionally relative to the regional average by the year 2030. With 92 percent of all households categorized as owner occupied single family in 2005, Damascus has a much higher rate of owner occupied single family households than the regional average rate for that housing type (60 percent). This share is projected to remain fairly constant from 2005 to 2030 as are the shares of other housing types. In 2005, the share of annual income spent on housing was 26 percent, lower than the regional average, but is projected to increase by the year 2030.

While the number and share of households that are cost-burdened are projected to increase in 2030, the share of households that are cost-burdened is still very small at 4 to 6 percent and is much lower than the forecasted regional average (projected to be between 17 and 23 percent of all the households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

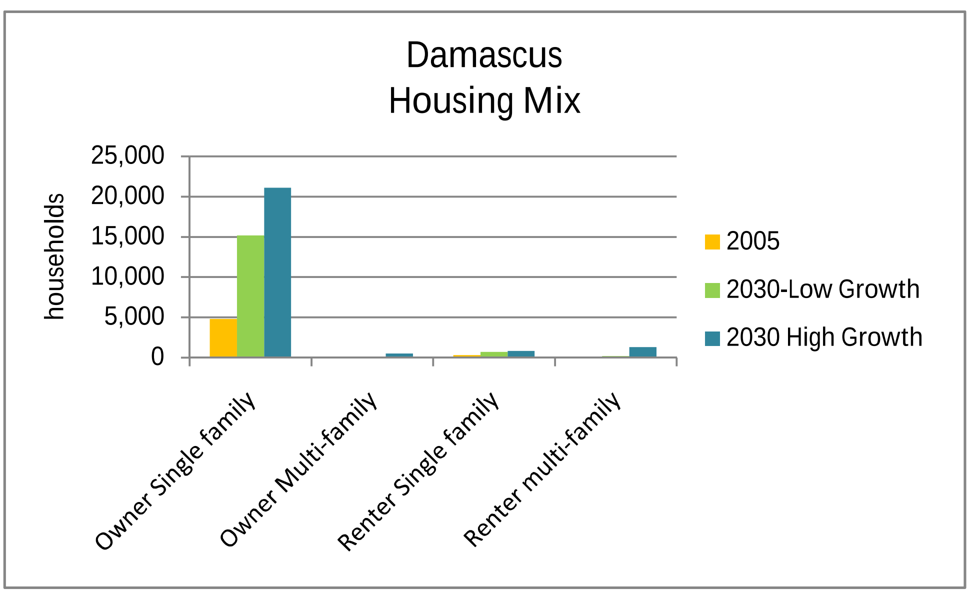
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

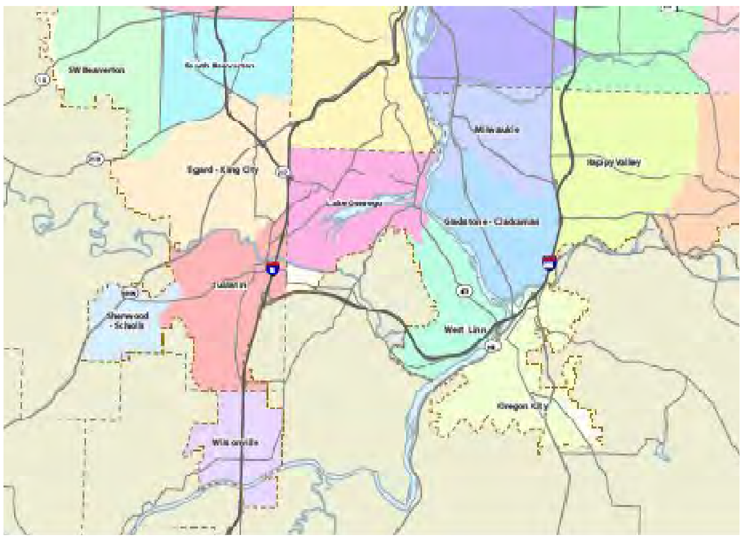
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Damascus	2005	2030 (low-growth)	2030 (high growth)
Total households	5,200	16,200	23,800
Subarea share of region's households	1%	2%	3%
Total jobs	3,300	4,100	10,600
Subarea share of region's jobs	0%	0%	1%
Percent of all households by household type			
Household type 1 (median income $13,800)	4%	5%	6%
Household type 2 (median income $25,000)	5%	4%	5%
Household type 3 (median income $35,800)	3%	4%	4%
Household type 4 (median income $46,700)	6%	6%	6%
Household type 5 (median income $57,000)	12%	12%	13%
Household type 6 (median income $69,200)	20%	23%	18%
Household type 7 (median income $100,100)	26%	23%	27%
Household type 8 (median income $113,300)	24%	24%	21%
Average annual cost information for all households			
Transportation costs	$10,800	$10,900	$10,600
Housing costs	$23,600	$34,900	$40,600
Income	$89,300	$88,000	$85,100
% Income spent on transportation	12%	12%	12%
% Income spent on housing	26%	40%	48%
% Income spent on housing and transportation	38%	52%	60%
Average annual cost information for all renters			
Transportation costs	$6,700	$7,000	$7,000
Housing costs	$8,200	$9,500	$9,900
Income	$36,400	$43,000	$41,400
% Income spent on transportation	18%	16%	17%
% Income spent on housing	23%	22%	24%
% Income spent on housing and transportation	41%	38%	41%
Number of cost burdened households	200	600	1,400
Share of households that are cost burdened	3%	4%	6%



Subarea: Oregon City, Map Reference Number: 26

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes the City of Oregon City as well as surrounding unincorporated areas of Clackamas County. In 2005, the average income for residents of this subarea was fairly consistent with the regional average in 2005, but is projected to slightly decrease from 2005 to 2030. While the share of single family owner occupied households in 2005 (71 percent) is higher than the regional average rate for that housing type (60 percent), it is projected to decrease slightly to 66 to 61 percent by the year 2030. The share of rental multi-family households in 2005 (21 percent), the other primary housing type in the subarea, was lower than the regional average rate (29 percent), but is projected to increase to 25 to 27 percent by 2030, which would make it consistent with the regional average rate.

The share of annual income spent on transportation costs (15 percent) is slightly higher than the regional average, while the share of annual income spent on housing is relatively similar to the regional average. The share of households that are considered cost-burdened is projected to nearly double from 11 percent in 2005 to 21 to 22 percent in 2030. However, this rate would be similar to the forecasted regional average rate for cost-burdened households (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

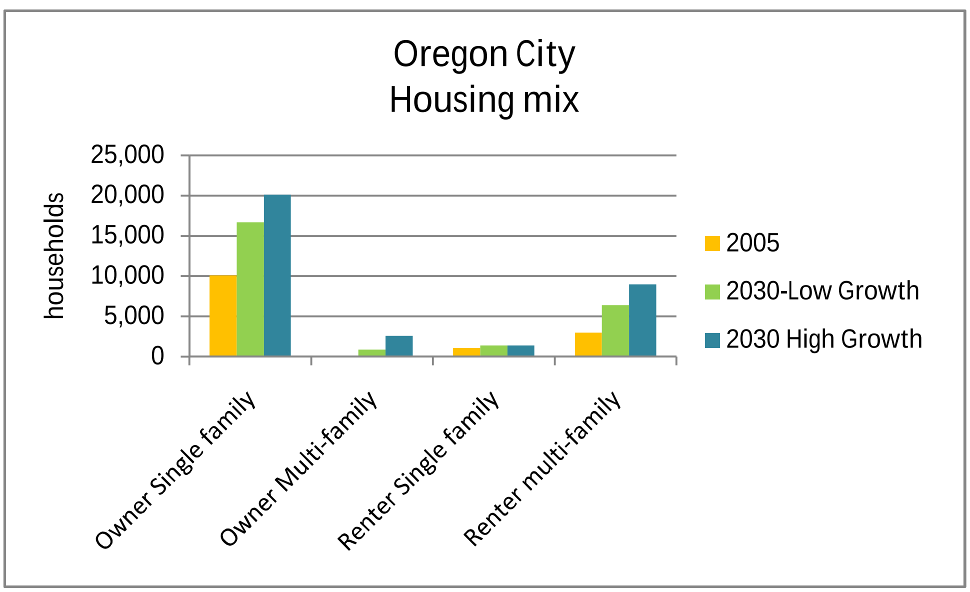
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

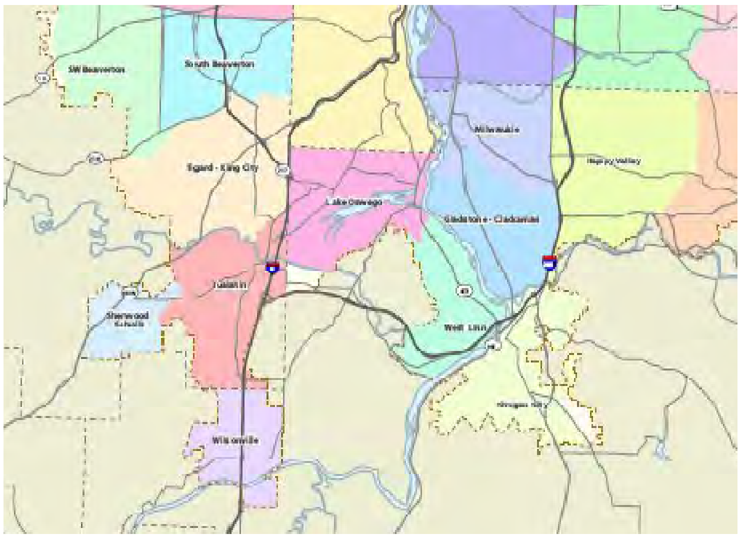
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Oregon City	2005	2030 (low-growth)	2030 (high growth)
Total households	14,300	25,300	33,100
Subarea share of region's households	3%	3%	4%
Total jobs	14,100	20,500	29,400
Subarea share of region's jobs	2%	2%	2%
Percent of all households by household type			
Household type 1 (median income $13,800)	9%	11%	13%
Household type 2 (median income $25,000)	11%	11%	12%
Household type 3 (median income $35,800)	11%	11%	12%
Household type 4 (median income $46,700)	15%	16%	15%
Household type 5 (median income $57,000)	16%	15%	15%
Household type 6 (median income $69,200)	16%	16%	13%
Household type 7 (median income $100,100)	14%	13%	13%
Household type 8 (median income $113,300)	9%	8%	7%
Average annual cost information for all households			
Transportation costs	$8,500	$8,300	$8,000
Housing costs	$17,200	$22,800	$26,400
Income	$58,700	$56,200	$54,500
% Income spent on transportation	15%	15%	15%
% Income spent on housing	29%	40%	48%
% Income spent on housing and transportation	44%	55%	63%
Average annual cost information for all renters			
Transportation costs	$6,200	$5,900	$5,700
Housing costs	$7,900	$9,200	$10,200
Income	$33,700	$32,500	$31,500
% Income spent on transportation	18%	18%	18%
% Income spent on housing	26%	28%	32%
% Income spent on housing and transportation	42%	46%	50%
Number of cost burdened households	1,600	5,300	7,100
Share of households that are cost burdened	11%	21%	22%



Subarea: West Linn, Map Reference Number: 27

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes the City of West Linn. It should also be noted that these scenarios assume future UGB expansions to the south of this subarea (based on the current state land hierarchy) and that some of the resulting new households and jobs are reported for this subarea. Those UGB expansions will not necessarily occur. In 2005, the average income for residents of this subarea was substantially higher than the regional average and is projected to increase by the year 2030. In 2005, the share of owner occupied single family households (80 percent) was much higher than the regional average (60 percent) and is projected to increase to 86 to 89 percent by 2030. There is little projected increase in the shares of other household types from 2005 to 2030.

The share of annual income spent on housing and transportation is fairly comparable to the regional average. However, the share of households that are cost-burdened in this area (five percent in 2005) is projected to remain relatively constant in 2030, much lower than the forecasted regional average rate (regional average is projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

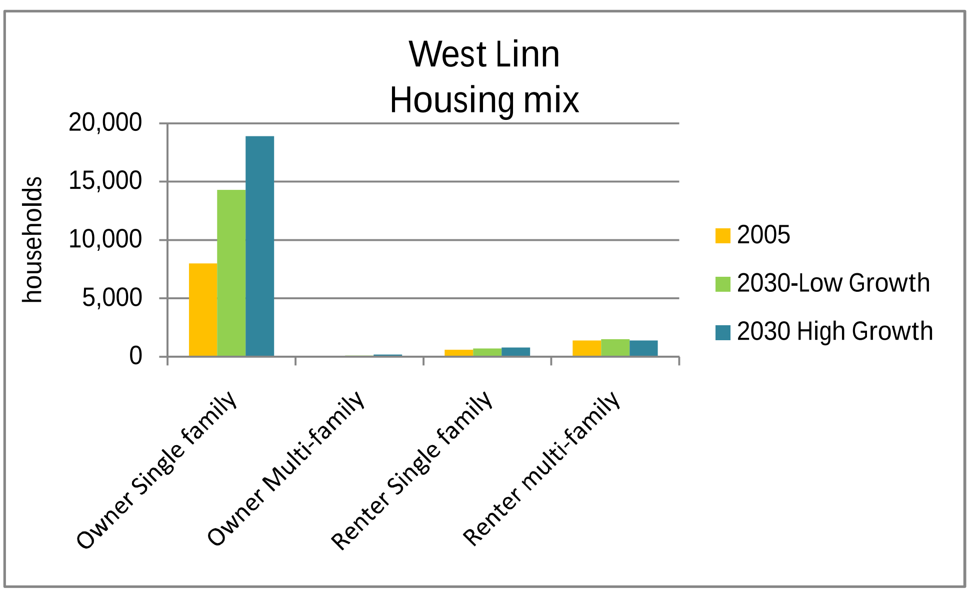
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

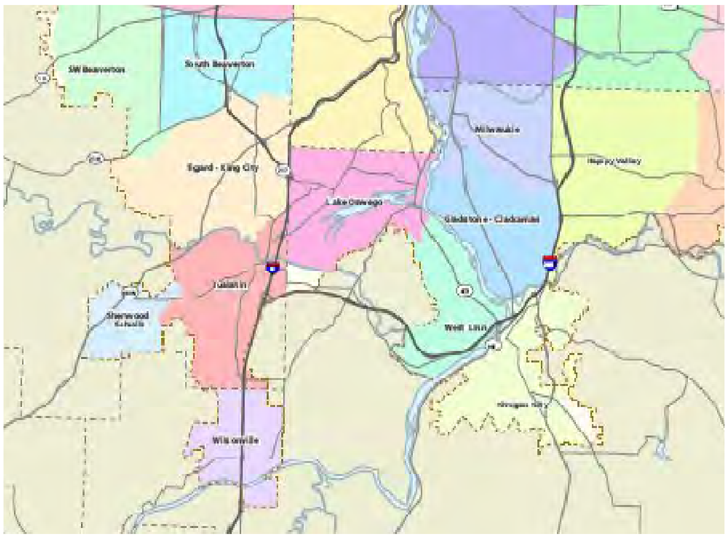
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

West Linn	2005	2030 (low-growth)	2030 (high growth)
Total households	10,000	16,600	21,200
Subarea share of region's households	2%	2%	2%
Total jobs	5,400	6,200	9,400
Subarea share of the region's jobs	1%	1%	1%
Percent of all households by household type			
Household type 1 (median income $13,800)	2%	1%	1%
Household type 2 (median income $25,000)	4%	2%	2%
Household type 3 (median income $35,800)	4%	3%	3%
Household type 4 (median income $46,700)	8%	6%	5%
Household type 5 (median income $57,000)	8%	7%	7%
Household type 6 (median income $69,200)	13%	15%	12%
Household type 7 (median income $100,100)	20%	19%	25%
Household type 8 (median income $113,300)	40%	47%	48%
Average cost information for all households			
Transportation costs	$8,900	$9,400	$9,400
Housing costs	$29,500	$38,200	$49,100
Income	$90,300	$97,900	$100,800
% Income spent on transportation	10%	10%	9%
% Income spent on housing	33%	39%	49%
% Income spent on housing and transportation	43%	49%	58%
Average cost information for all renters			
Transportation costs	$6,300	$6,700	$6,700
Housing costs	$10,700	$13,200	$15,300
Income	$51,000	$55,400	$55,600
% Income spent on transportation	12%	12%	12%
% Income spent on housing	21%	24%	28%
% Income spent on housing and transportation	33%	36%	40%
Number of cost burdened households	517	908	875
Share of households that are cost burdened	5%	6%	4%



Subarea: Wilsonville, Map Reference Number: 28

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes the City of Wilsonville as well as scattered unincorporated areas of Clackamas County. For the years 2005 and 2030, average incomes for residents of this subarea are slightly higher than the regional averages. In 2005, the share of single family owner occupied households (58 percent) was slightly lower than the regional average rate for this housing type (60 percent), but is projected to increase by 2030. In 2005, the share of rental multi-family households (34 percent), the other significant housing type in Wilsonville, was higher than the regional average rate for this housing type (29 percent).

The share of annual income spent on transportation costs (14 percent) is slightly high relative to the regional average, while the share of annual income spent on housing is fairly consistent with the regional average. The share of households that are cost-burdened is projected to increase from 17 percent in 2005 to 20 to 24 percent in 2030, which is consistent with the regional rate for households that are cost-burdened (the regional average is projected to be between 17 and 23 percent of all households by the year 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

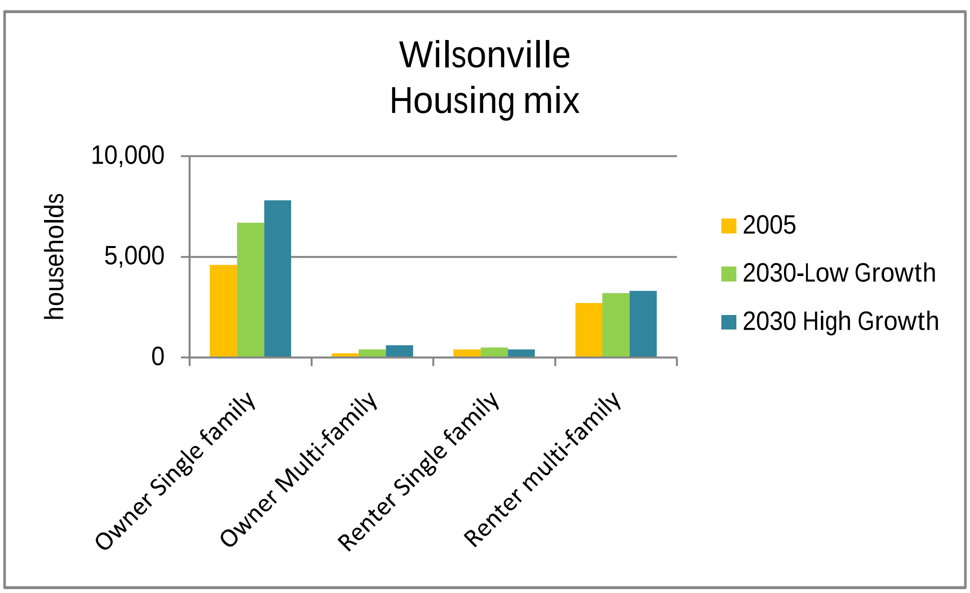
<u>Cost-burdened household:</u> Renters that spend more than half of their household income on transportation and housing.

<u>Household types:</u> Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

<u>Housing costs</u>: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

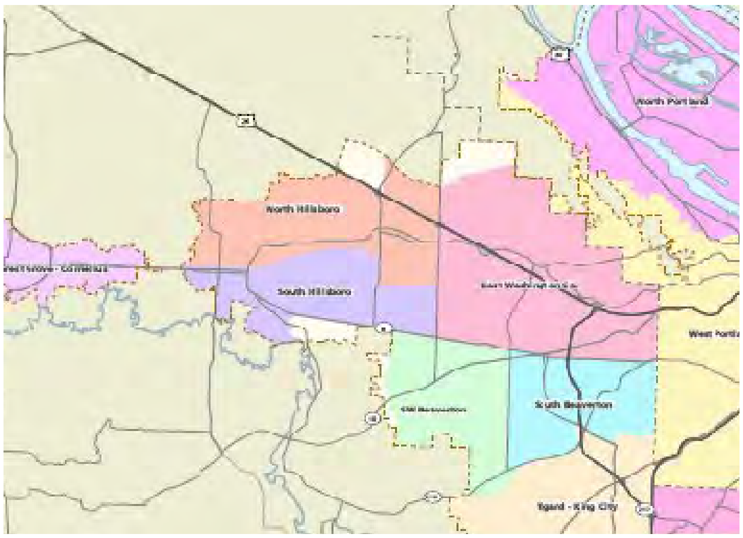
<u>Transportation costs:</u> A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Wilsonville	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	7,900	10,900	12,200
Subarea share of region's households	1%	1%	1%
Total jobs	15,200	19,400	28,400
Subarea share of region's jobs	2%	2%	2%
Percent of all households by household type			
Household type 1 (median income $13,800)	4%	5%	5%
Household type 2 (median income $25,000)	4%	5%	5%
Household type 3 (median income $35,800)	7%	7%	8%
Household type 4 (median income $46,700)	9%	10%	10%
Household type 5 (median income $57,000)	12%	11%	12%
Household type 6 (median income $69,200)	20%	21%	17%
Household type 7 (median income $100,100)	23%	24%	27%
Household type 8 (median income $113,300)	21%	16%	16%
Average annual cost information for all households			
Transportation costs	$10,100	$10,100	$10,100
Housing costs	$22,200	$27,800	$35,100
Income	$72,300	$72,200	$73,900
% Income spent on transportation	14%	14%	14%
% Income spent on housing	31%	38%	47%
% Income spent on housing and transportation	45%	52%	61%
Average annual cost information for all renters			
Transportation costs	$7,100	$6,900	$6,900
Housing costs	$9,400	$10,600	$12,100
Income	$39,300	$36,700	$36,300
% Income spent on transportation	18%	19%	19%
% Income spent on housing	24%	29%	33%
% Income spent on housing and transportation	42%	48%	52%
Number of cost burdened households	1,300	2,100	2,900
Share of households that are cost burdened	17%	20%	24%



Subarea: North Hillsboro, Map Reference Number: 31

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

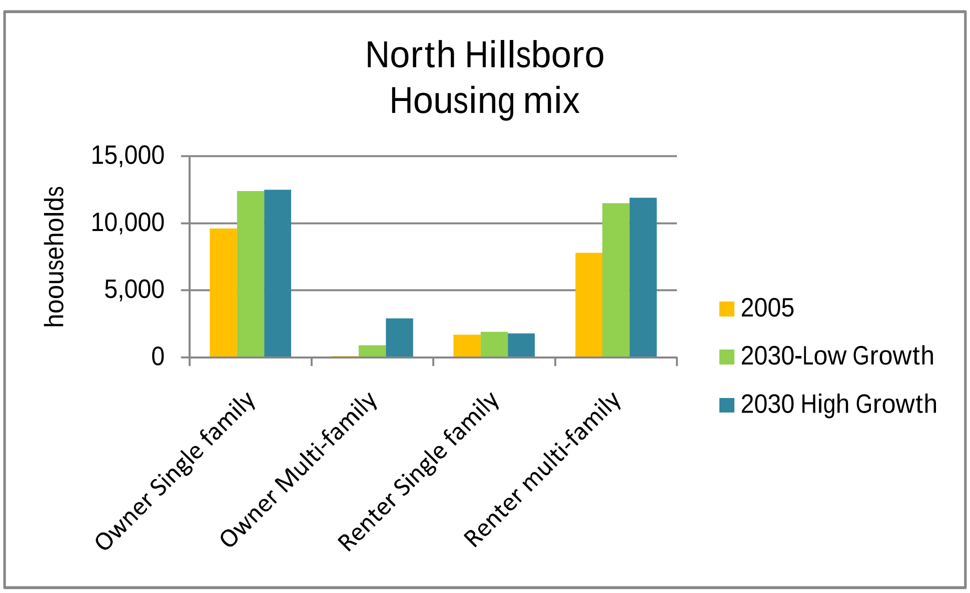
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Forecast summary:

This subarea includes sections of Hillsboro as well as some unincorporated areas of Washington County. The average historic and forecasted incomes for residents of this subarea are slightly lower than the regional average. The subarea's share of the region's housing remains constant from 2005 to 2030. This subarea is forecasted to see job growth by the year 2030. In 2005, the housing mix is almost split evenly between owner occupied single family and rental multi-family households (50 and 40 percent respectively). In 2005, the share of multi-family rental households was higher than the regional average for this housing type (regional average 29 percent). This rate is projected to increase slightly by 2030. However, the share of owner occupied single family households, slightly lower than the regional average rate in 2005 (regional average 60 percent), is projected to decrease by the year 2030.

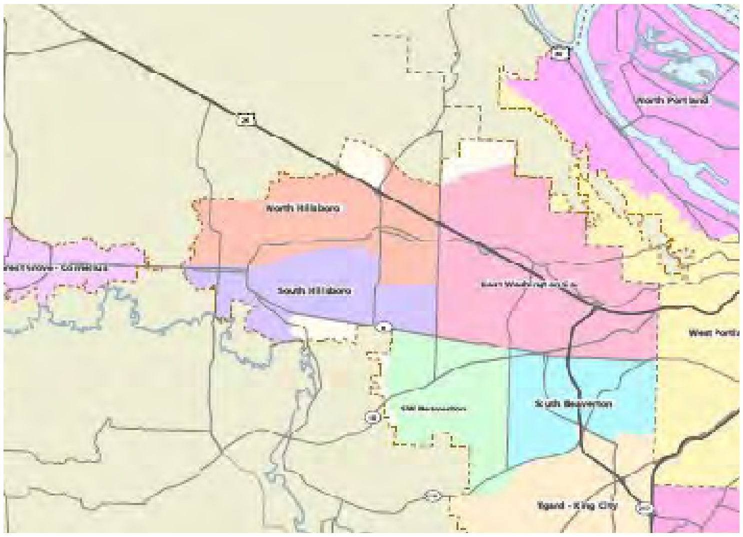
While the share of annual income spent on transportation is higher than the regional average, the share of annual income spent on housing costs is slightly lower than the regional average. By the year 2030, the share of households that are cost-burdened is projected to increase from nine percent to 13 to 27 percent, a range that exceeds the forecasted regional rate for cost-burdened households (regional average is projected to be between 17 and 23 percent of all households in the region by 2030).

North Hillsboro	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	19,300	26,700	29,200
Subarea share of region's households	3%	3%	3%
Total jobs	19,300	29,900	56,300
Subarea share of region's jobs	2%	3%	4%
Percent of all households by household type			
Household type 1 (median income $13,800)	5%	7%	9%
Household type 2 (median income $25,000)	8%	10%	10%
Household type 3 (median income $35,800)	9%	11%	12%
Household type 4 (median income $46,700)	13%	15%	15%
Household type 5 (median income $57,000)	16%	16%	16%
Household type 6 (median income $69,200)	19%	19%	16%
Household type 7 (median income $100,100)	20%	15%	15%
Household type 8 (median income $113,300)	10%	8%	7%
Average annual cost information for all households			
Transportation costs	$7,100	$6,700	$6,400
Housing costs	$16,200	$19,000	$22,400
Income	$56,400	$51,100	$50,000
% Income spent on transportation	13%	13%	13%
% Income spent on housing	29%	37%	45%
% Income spent on housing and transportation	41%	50%	58%
Average annual cost information for all renters			
Transportation costs	$5,700	$5,200	$5,200
Housing costs	$9,300	$10,200	$11,800
Income	$42,500	$37,300	$37,200
% Income spent on transportation	14%	14%	14%
% Income spent on housing	22%	27%	32%
% Income spent on housing and transportation	36%	42%	46%
Number of cost burdened households	1,800	3,500	7,800
Share of households that are cost burdened	9%	13%	27%



Subarea: East Washington County, Map Reference Number: 32

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes sections of the City of Beaverton as well as unincorporated areas of Washington County. The average household income, while slightly higher than the regional average, is projected to decrease slightly from 2005 to 2030. In 2005, the share of owner occupied single family households (51 percent) was slightly lower than the regional average rate for this housing type (60 percent) and is projected to decrease by 2030. The share of multi-family households in 2005 (30 percent) is fairly consistent with the regional average rate for that housing type (29 percent) and remains fairly constant through 2030. Finally, the share of owner occupied multi-family households, consistent with the regional average rate in 2005 (regional average of two percent), is projected to increase by the year 2030.

The share of income spent on transportation and housing is fairly consistent with the regional average. While the number of cost-burdened households in this subarea is projected to increase from 2005 to 2030, the share of households that are cost-burdened could, depending on the growth scenario, remain constant at 12 percent or increase to 21 percent by the year 2030. The higher rate would be comparable to the forecasted regional rate for cost-burdened households (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

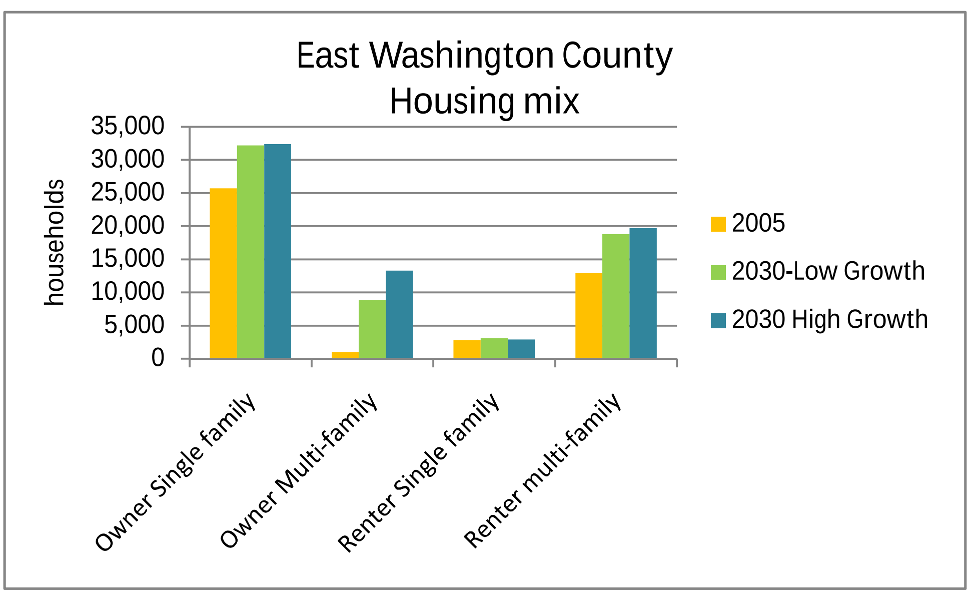
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

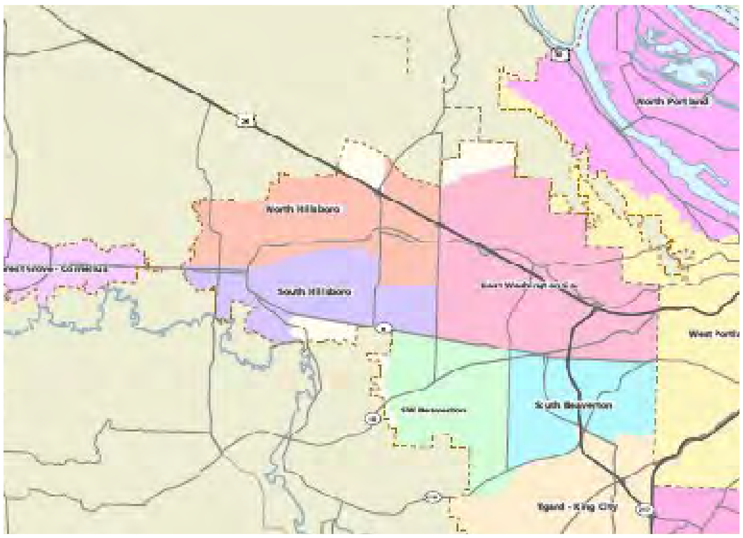
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

East Washington County	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	42,400	63,000	68,3000
Subarea share of region's households	7%	8%	8%
Total jobs	65,600	87,000	122,800
Subarea share of region's jobs	8%	8%	9%
Percent of all households by household type			
Household type 1 (median income $13,800)	4%	7%	7%
Household type 2 (median income $25,000)	7%	9%	10%
Household type 3 (median income $35,800)	10%	10%	11%
Household type 4 (median income $46,700)	13%	13%	12%
Household type 5 (median income $57,000)	14%	12%	13%
Household type 6 (median income $69,200)	16%	16%	13%
Household type 7 (median income $100,100)	19%	17%	19%
Household type 8 (median income $113,300)	19%	16%	14%
Average annual cost information for all households			
Transportation costs	$5,900	$5,500	$5,300
Housing costs	$22,400	$25,600	$30,900
Income	$67,800	$64,100	$63,400
% Income spent on transportation	9%	9%	8%
% Income spent on housing	33%	40%	49%
% Income spent on housing and transportation	42%	49%	57%
Average annual cost information for all renters			
Transportation costs	$3,900	$3,900	$3,900
Housing costs	$9,200	$10,600	$12,400
Income	$35,400	$35,900	$36,100
% Income spent on transportation	11%	11%	11%
% Income spent on housing	26%	30%	34%
% Income spent on housing and transportation	37%	41%	53%
Number of cost burdened households	5,100	7,300	14,300
Share of households that are cost burdened	12%	12%	21%



Subarea: South Beaverton, Map Reference Number: 33

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes parts of Beaverton as well as unincorporated areas of Washington County. The average income for residents of this subarea in 2005 and 2030 is slightly lower than the regional average. While the share of owner occupied single family (51 percent) is lower than the regional average rate for this housing type in 2005 (60 percent), the share of rental multi-family households in 2005 (38 percent) is higher than the regional average rate (29 percent). This housing mix is not projected to experience much change by the year 2030.

The share of income spent on housing and transportation in 2005 and 2030 is comparable to the regional average, but, for renters, the share of income spent on housing and transportation costs is slightly higher than the regional average. In addition, the share of households that are cost-burdened is higher than the regional average and is projected to increase to 19 percent to a third of all households in 2030. This is higher than the forecasted regional rate for cost-burdened households (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

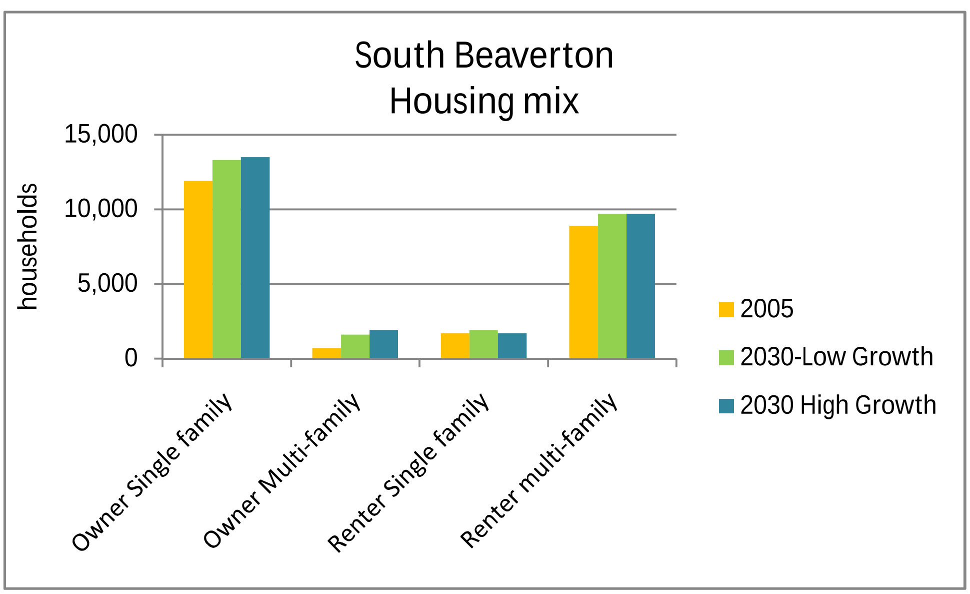
Definitions:
<u>Cost-burdened household:</u> Renters that spend more than half of their household income on transportation and housing.

<u>Household types:</u> Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

<u>Housing costs</u>: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

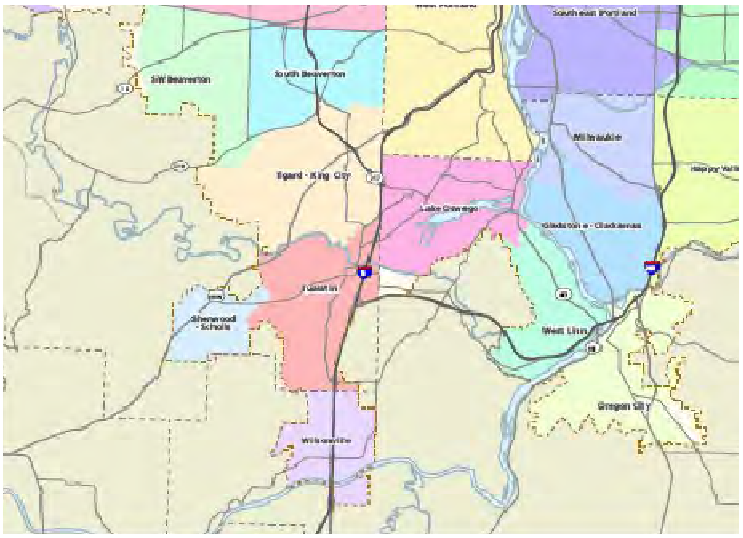
<u>Transportation costs:</u> A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

South Beaverton	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	23,200	26,600	26,800
Subarea share of region's households	4%	3%	3%
Total jobs	36,000	39,100	48,600
Subarea share of region's jobs	4%	4%	4%
Percent of all households by household type			
Household type 1 (median income $13,800)	7%	9%	9%
Household type 2 (median income $25,000)	12%	13%	13%
Household type 3 (median income $35,800)	13%	13%	14%
Household type 4 (median income $46,700)	17%	17%	17%
Household type 5 (median income $57,000)	16%	15%	16%
Household type 6 (median income $69,200)	14%	14%	12%
Household type 7 (median income $100,100)	12%	12%	13%
Household type 8 (median income $113,300)	9%	7%	7%
Average annual cost information for all households			
Transportation costs	$4,900	$4,700	$4,700
Housing costs	$17,300	$20,600	$25,300
Income	$52,300	$50,600	$50,700
% Income spent on transportation	9%	9%	9%
% Income spent on housing	33%	41%	50%
% Income spent on housing and transportation	42%	50%	59%
Average annual cost information for all renters			
Transportation costs	$3,600	$3,500	$3,500
Housing costs	$8,700	$9,800	$11,300
Income	$33,200	$32,500	$32,300
% Income spent on transportation	11%	12%	11%
% Income spent on housing	26%	30%	35%
% Income spent on housing and transportation	37%	42%	46%
Number of cost burdened households	4,200	$5,000	8,000
Share of households that are cost burdened	18%	19%	30%



Subarea: Tigard-King City, Map Reference Number: 34

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

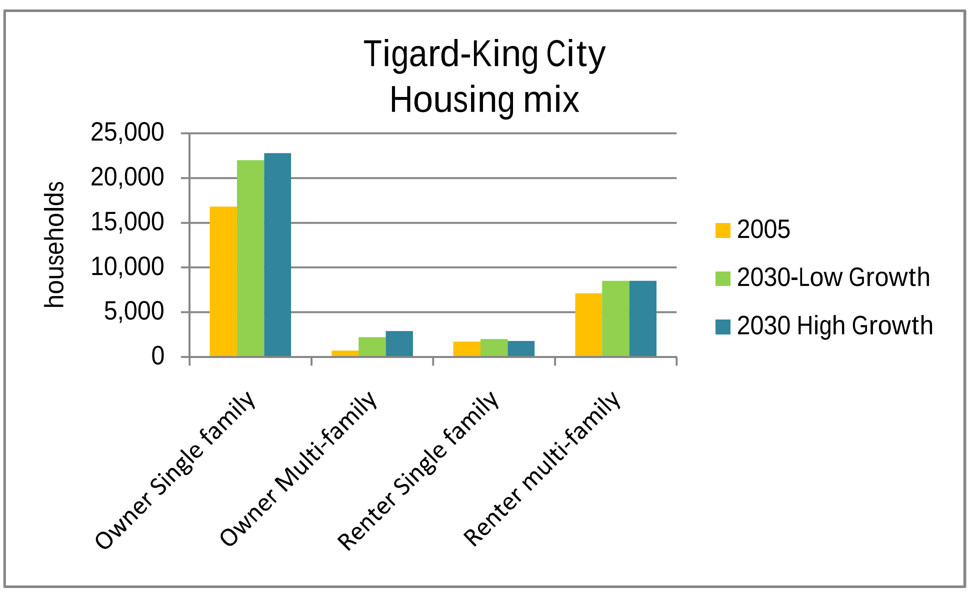
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Forecast summary:

This subarea includes Tigard, King City, and some unincorporated areas of Washington County. The average income for residents of this subarea is consistent with the regional average for both 2005 and 2030. While the share of owner occupied single family (64 percent percent) is lower than the regional average rate for this housing type in 2005 (60 percent), the share of rental multi-family households in 2005 (27 percent) is higher than the regional average rate (29 percent).

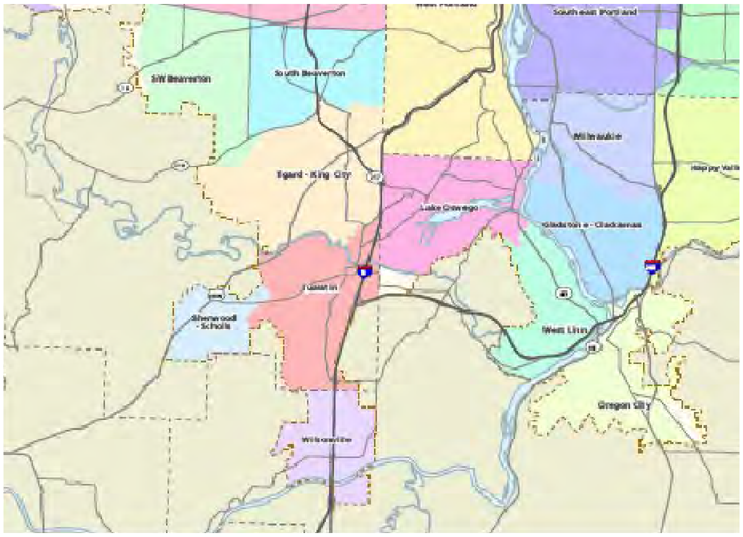
The share of annual income spent on transportation and housing is fairly comparable to the regional average. While the number of cost-burdened households in this subarea is projected to increase from the years 2005 to 2030, the share of households that are cost-burdened could either remain constant at 12 percent or increase to 21 percent, depending on the growth scenario. These rates would be lower than or comparable to the forecasted regional rate for cost-burdened households (projected to be between 17 and 23 percent of all households in the region by 2030).

Tigard, King City	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	26,400	34,600	36,100
Subarea share of region's households	5%	4%	4%
Total jobs	37,900	46,500	60,600
Subarea share of region's jobs	5%	4%	4%
Percent of all households by household type			
Household type 1 (median income $13,800)	5%	7%	8%
Household type 2 (median income $25,000)	9%	11%	12%
Household type 3 (median income $35,800)	12%	14%	15%
Household type 4 (median income $46,700)	15%	16%	16%
Household type 5 (median income $57,000)	16%	15%	15%
Household type 6 (median income $69,200)	15%	14%	11%
Household type 7 (median income $100,100)	14%	13%	15%
Household type 8 (median income $113,300)	13%	10%	9%
Average annual cost information for all households			
Transportation costs	$6,200	$5,900	$5,900
Housing costs	$20,100	$24,000	$29,300
Income	$61,900	$58,500	$58,100
% Income spent on transportation	10%	10%	10%
% Income spent on housing	32%	41%	50%
% Income spent on housing and transportation	42%	51%	60%
Average annual cost information for all renters			
Transportation costs	$4,100	$3,900	$3,500
Housing costs	$8,800	$9,800	$11,400
Income	$34,000	$32,500	$32,600
% Income spent on transportation	12%	12%	12%
% Income spent on housing	26%	30%	35%
% Income spent on housing and transportation	38%	42%	47%
Number of cost burdened households	3,300	4,300	7,500
Share of households that are cost burdened	12%	12%	21%



Subarea: Tualatin, Map Reference Number: 35

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes the City of Tualatin as well as unincorporated areas of Washington County. In 2005, the average income for residents of this subarea was slightly higher than the regional average and is projected to increase by 2030. In 2005, the share of owner occupied single family households (56 percent)was lower than the regional average rate for this housing type (60 percent) and the share of rental multi-family households (36 percent) was higher than the regional average rate (29 percent). However, the share of owner occupied single family households is projected to increase from 66 to 72 percent in the year 2030 and the share of rental multi-family households is projected to decrease to 21 to 26 percent in 2030.

The share of annual income spent on transportation and housing is comparable to the regional average rate. While the number of cost-burdened households in this subarea is projected to increase by the year 2030, the share of households that are cost burdened is projected either to decrease slightly or increase to 17 percent, depending on the growth scenario. This rate would be on the low end of the forecasted regional average range (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

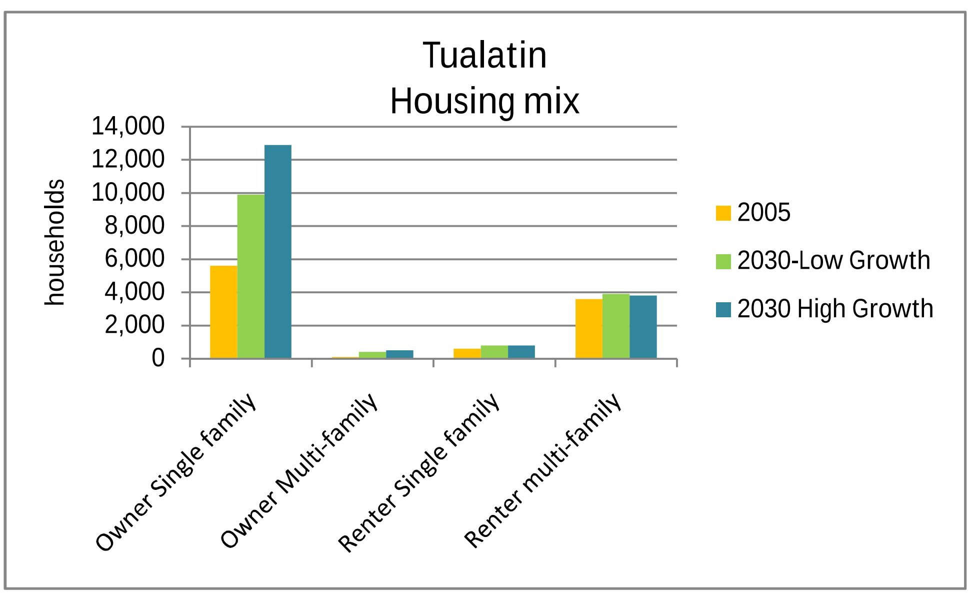
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

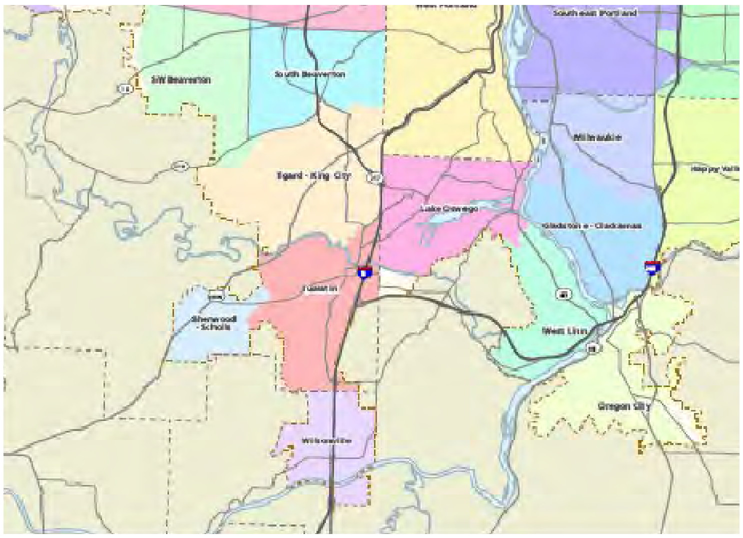
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Tualatin	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	9,900	15,000	18,000
Subarea share of region's households	2%	2%	2%
Total jobs	32,200	39,900	51,200
Subarea share of region's jobs	4%	4%	4%
Percent of all households by household type			
Household type 1 (median income $13,800)	4%	4%	3%
Household type 2 (median income $25,000)	8%	6%	5%
Household type 3 (median income $35,800)	9%	8%	7%
Household type 4 (median income $46,700)	13%	13%	12%
Household type 5 (median income $57,000)	16%	15%	15%
Household type 6 (median income $69,200)	17%	16%	14%
Household type 7 (median income $100,100)	16%	11%	12%
Household type 8 (median income $113,300)	19%	29%	32%
Average annual cost information for all households			
Transportation costs	$7,200	$8,300	$8,800
Housing costs	$19,300	$28,000	$37,000
Income	$64,100	$73,000	$77,800
% Income spent on transportation	11%	11%	11%
% Income spent on housing	30%	38%	48%
% Income spent on housing and transportation	41%	49%	59%
Average annual cost information for all renters			
Transportation costs	$4,600	$4,500	$4,600
Housing costs	$8,800	$10,100	$11,600
Income	$36,000	$35,300	$35,700
% Income spent on transportation	13%	13%	13%
% Income spent on housing	25%	29%	33%
% Income spent on housing and transportation	38%	42%	45%
Number of cost burdened households	1,300	1,700	3,000
Share of households that are cost burdened	13%	12%	17%



Subarea: Sherwood-Scholls, Map Reference Number: 36

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes the city of Sherwood and unincorporated areas of Washington County. In 2005, the average income for residents of this subarea was higher than the regional average. Average incomes are projected to decrease slightly by 2030. In 2005, the share of owner occupied single family owner households, the primary housing type in the Sherwood-Scholls area, is much higher (82 percent) than the regional average rate for this housing type (60 percent). While this share is projected to decrease by 2030, it will still be high compared to the regional average rate.

The share of income spent on transportation is slightly high relative the regional average, while the share of income spent on housing is fairly consistent with the regional average. The share of households that are cost-burdened, relatively low at five percent in 2005, is projected to increase to 10 to 14 percent by the year 2030. This would be a lower share than the regional average (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

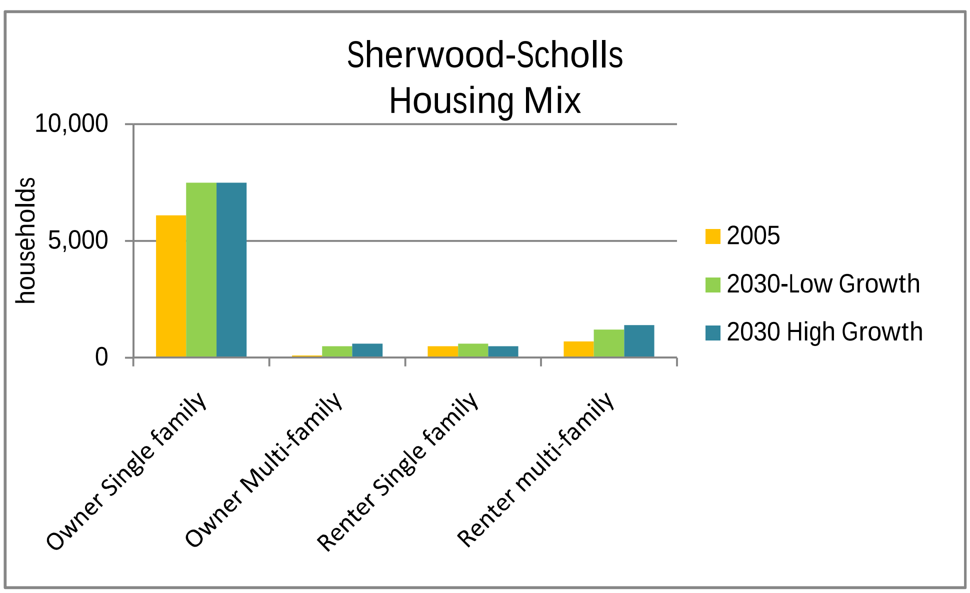
Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

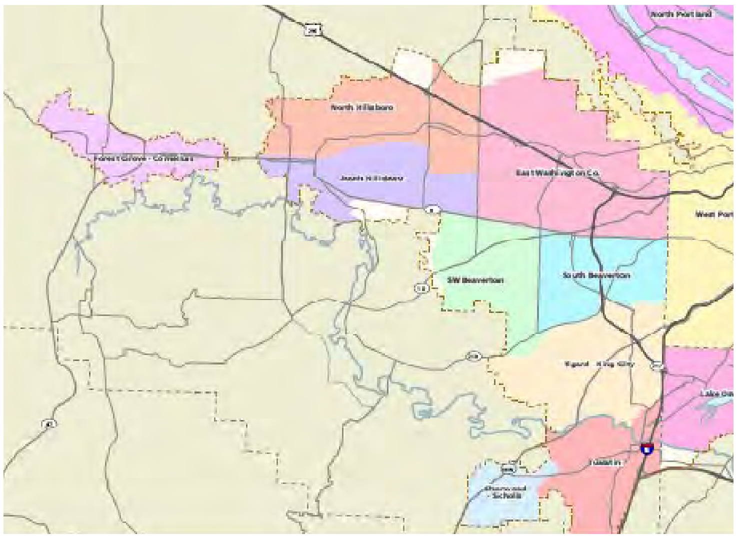
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Sherwood-Scholls	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	7,400	9,800	10,000
Subarea share of region's households	1%	1%	1%
Total jobs	28,000	34,700	45,000
Subarea share of region's jobs	3%	3%	3%
Percent of all households by household type			
Household type 1 (median income $13,800)	4%	6%	6%
Household type 2 (median income $25,000)	4%	5%	5%
Household type 3 (median income $35,800)	7%	8%	9%
Household type 4 (median income $46,700)	15%	17%	17%
Household type 5 (median income $57,000)	18%	18%	19%
Household type 6 (median income $69,200)	18%	18%	15%
Household type 7 (median income $100,100)	19%	17%	18%
Household type 8 (median income $113,300)	15%	12%	11%
Average annual cost information for all households			
Transportation costs	$10,200	$9,800	$9,700
Housing costs	$22,700	$28,100	$34,300
Income	$75,100	$69,700	$69,200
% Income spent on transportation	14%	14%	14%
% Income spent on housing	30%	40%	50%
% Income spent on housing and transportation	44%	54%	64%
Average annual cost information for all renters			
Transportation costs	$6,300	$6,400	$6,700
Housing costs	$8,800	$10,100	$11,800
Income	$38,500	$38,800	$40,300
% Income spent on transportation	16%	17%	17%
% Income spent on housing	23%	26%	29%
% Income spent on housing and transportation	39%	43%	46%
Number of cost burdened households	400	1,000	1,400
Share of households that are cost burdened	5%	10%	14%



Subarea: SW Beaverton, Map Reference Number: 37

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes the SW sections of Beaverton as well as large areas of unincorporated Washington County. In 2005, the average income for residents of this subarea was slightly higher than the regional average and is projected to increase by the year 2030. While, in 2005, the share of owner occupied single family (66 percent) is higher than the regional average rate (60 percent) for this housing type, the share of rental multi-family households (25 percent) is lower than the regional average rate (29 percent). By the year 2030, the share of owner occupied single family households is projected to increase slightly and the share of rental multi-family households is projected to decrease slightly.

The share of annual income spent on transportation and housing is fairly consistent with the regional average rate. The share of households that are cost-burdened is projected to increase from 8 percent in 2005 to 9 to 15 percent in 2030, which is lower than the forecasted regional average rate (projected to be between 17 and 23 percent of all households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

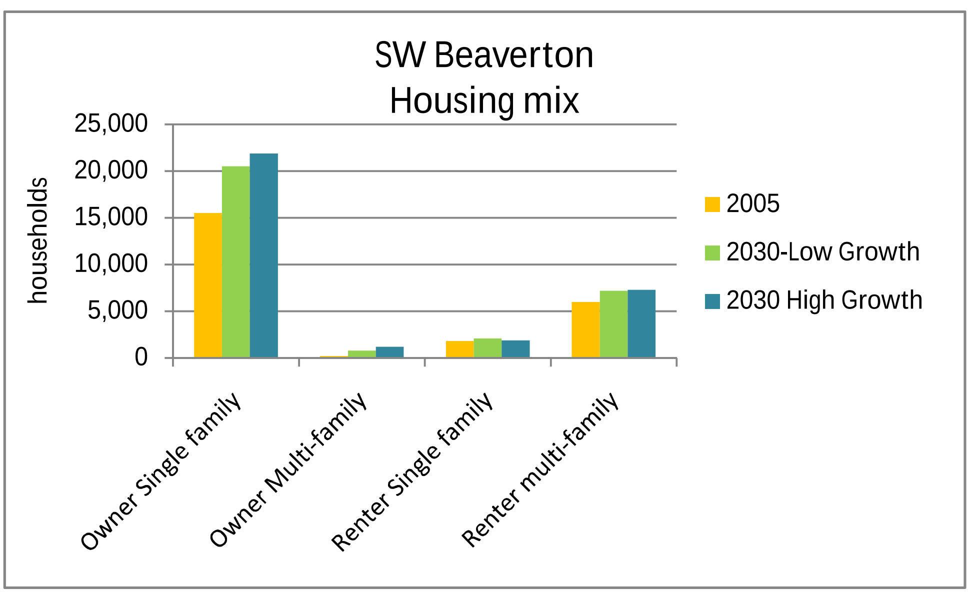
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

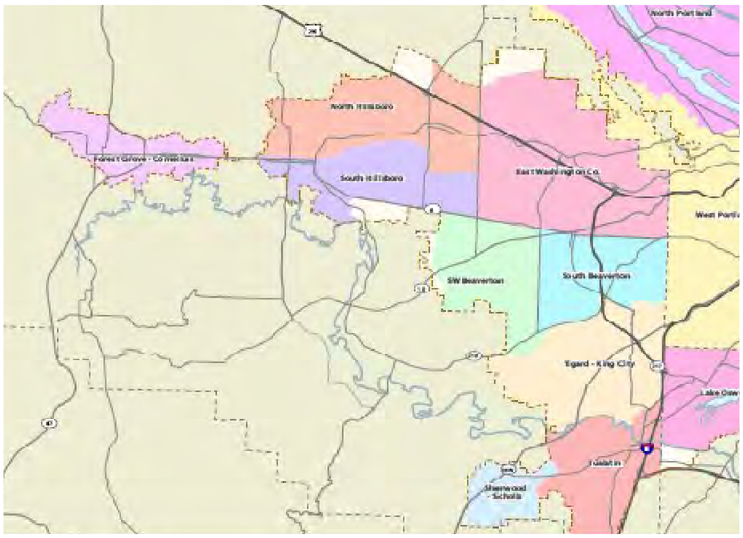
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

SW Beaverton	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	23,500	30,500	32,300
Subarea share of region's households	4%	4%	4%
Total jobs	4,300	5,300	6,800
Subarea share of region's jobs	1%	1%	0%
Percent of all households by household type			
Household type 1 (median income $13,800)	5%	5%	5%
Household type 2 (median income $25,000)	8%	8%	8%
Household type 3 (median income $35,800)	10%	10%	11%
Household type 4 (median income $46,700)	15%	15%	14%
Household type 5 (median income $57,000)	15%	14%	15%
Household type 6 (median income $69,200)	16%	17%	15%
Household type 7 (median income $100,100)	16%	14%	17%
Household type 8 (median income $113,300)	16%	16%	16%
Average annual cost information for all households			
Transportation costs	$6,700	$6,700	$6,700
Housing costs	$20,100	$25,700	$32,300
Income	$64,800	$65,200	$66,400
% Income spent on transportation	10%	10%	10%
% Income spent on housing	31%	39%	49%
% Income spent on housing and transportation	41%	49%	59%
Average annual cost information for all renters			
Transportation costs	$4,800	$4,800	$4,900
Housing costs	$9,100	$10,800	$12,500
Income	$36,600	$40,100	$40,400
% Income spent on transportation	12%	12%	12%
% Income spent on housing	23%	27%	31%
% Income spent on housing and transportation	35%	39%	43%
Number of cost burdened households	1,900	2,600	5,000
Share of households that are cost burdened	8%	9%	15%



Subarea: South Hillsboro, Map Reference Number: 38

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

Definitions:

Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

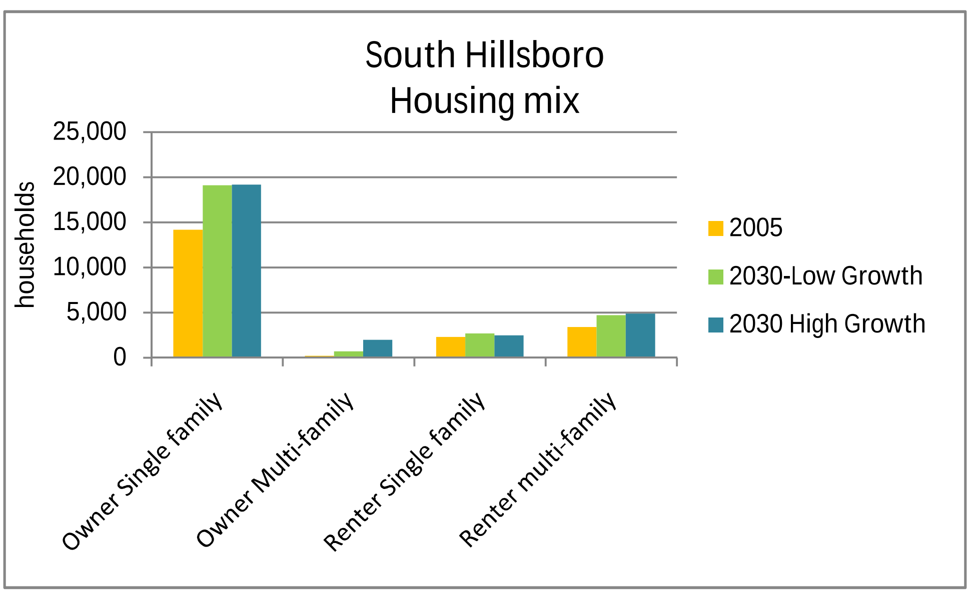
Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Forecast summary:

This subarea includes the southern portion of the City of Hillsboro. In 2005, the average income for residents of this subarea was slightly lower than the regional average income and is projected to decrease slightly by the year 2030. Housing costs are projected to increase slightly by 2030. While the share of owner occupied single family (66 percent) was higher than the regional average rate for this housing type in 2005 (60 percent), the share of rental multi-family households (25 percent) was lower than the regional average rate (29 percent). The share of owner occupied single family households is projected to increase slightly in 2030 and the share of rental multi-family households is projected to decrease slightly by 2030. The share of rental single family households, at ten percent in 2005, was slightly higher than the regional average rate for that housing type (7 percent), a trend that continues through the year 2030.

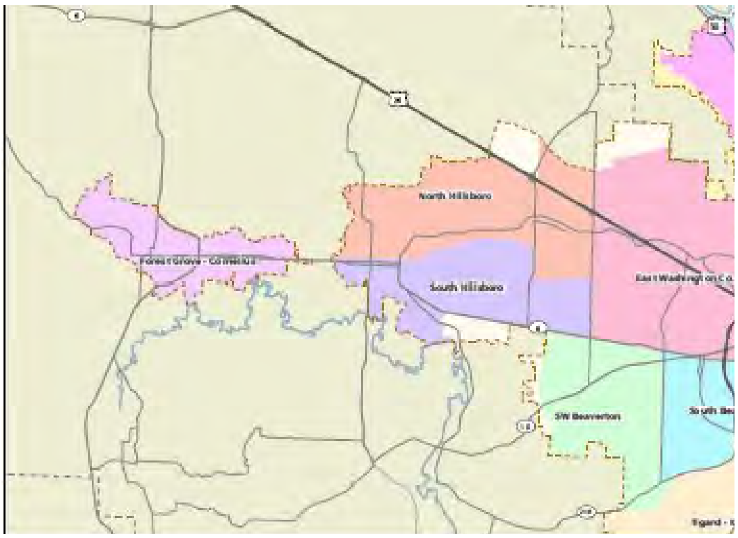
While the share of annual income spent on transportation costs is slightly higher than the regional average, the share of annual income spent on housing costs is fairly consistent with the regional average. The share of households that are cost-burdened is projected to increase from 9 percent in 2005 to 10 to 16 percent in 2030, which is slightly lower than the forecasted regional average rate (projected to be between 17 and 23 percent of all households in the region by 2030).

South Hillsboro	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	20,100	27,100	28,600
Subarea share of region's households	4%	3%	3%
Total jobs	10,300	11,800	19,100
Subarea share of region's jobs	1%	1%	1%
Percent of all households by household type			
Household type 1 (median income $13,800)	7%	8%	10%
Household type 2 (median income $25,000)	14%	14%	15%
Household type 3 (median income $35,800)	17%	18%	18%
Household type 4 (median income $46,700)	19%	20%	19%
Household type 5 (median income $57,000)	16%	15%	15%
Household type 6 (median income $69,200)	11%	10%	8%
Household type 7 (median income $100,100)	9%	8%	8%
Household type 8 (median income $113,300)	8%	7%	6%
Average annual cost information for all households			
Transportation costs	$6,800	$6,700	$6,600
Housing costs	$16,500	$21,100	$25,100
Income	$52,400	$50,600	$49,400
% Income spent on transportation	13%	13%	13%
% Income spent on housing	31%	42%	51%
% Income spent on housing and transportation	44%	55%	64%
Average annual cost information for all renters			
Transportation costs	$5,200	$5,200	$5,200
Housing costs	$8,700	$10,200	$11,800
Income	$39,100	$39,300	$39,200
% Income spent on transportation	13%	13%	13%
% Income spent on housing	22%	26%	30%
% Income spent on housing and transportation	35%	39%	43%
Number of cost burdened households	1,900	2,800	4,600
Share of households that are cost burdened	9%	10%	16%



Subarea: Forest Grove-Cornelius, Map Reference Number: 39

Data is given for the year 2005 and as projections for high and low growth scenarios for 2030. These two scenarios both assume a continuation of current policies and investment trends. The scenarios examine the possible implications of two different population growth rates (low and high growth). Different policies and investments would produce different results.



Forecast summary:

This subarea includes the cities of Forest Grove and Cornelius. In 2005, the average income for residents of this subarea was significantly lower than the regional average and is also projected to be lower than the regional average in 2030. While the share of owner occupied single family (67 percent) is higher than the regional average rate for this housing type in 2005 (60 percent), the share of rental multi-family households in 2005 (23 percent) is lower than the regional average rate (29 percent). The share of owner occupied single family households is projected to increase slightly in 2030 and the share of rental multi-family households is projected to remain relatively constant through the year 2030.

The share of annual income spent on transportation costs, 22 percent in 2005, was much higher than the regional average. The share of annual income spent on housing is comparable to the regional average. In addition, the share of households that are cost burdened, at 21 percent in 2005, is projected to increase to 28 to 29 percent by the year 2030, which is higher than the forecasted regional average rate (projected to be between 17 and 23 percent of all the households in the region by 2030).

Subarea boundaries are based on groupings of Census Tracts that are intended to roughly approximate city boundaries, portions of cities, or groupings of smaller cities.

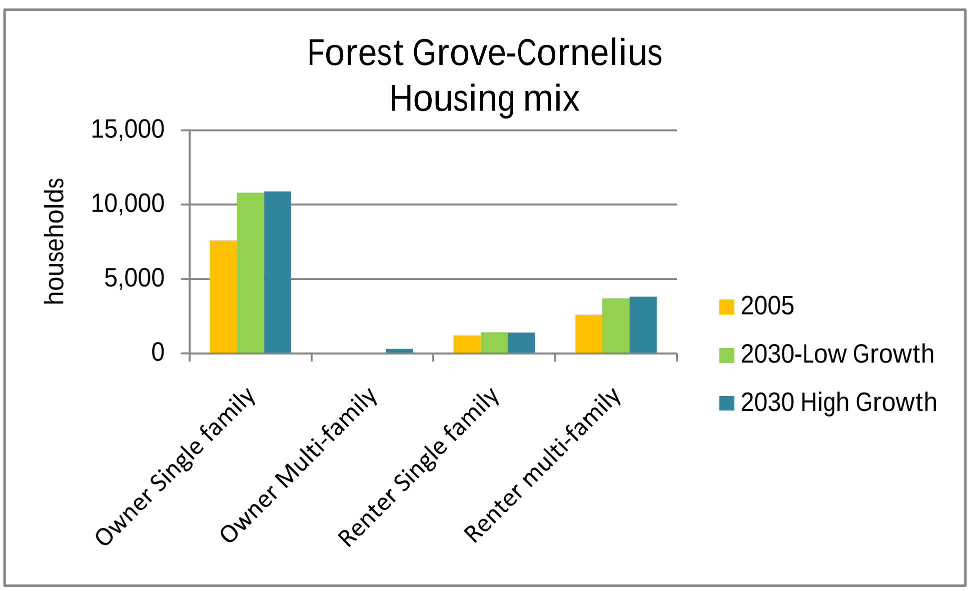
Definitions:
Cost-burdened household: Renters that spend more than half of their household income on transportation and housing.

Household types: Households have been grouped into eight categories according to household size, income, age of householder, and whether or not they have children. These household types are numbered one to eight, with progressively higher household incomes.

Housing costs: A comprehensive set of annual household expenditures including rent or mortgage payments, utilities, furnishings, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Transportation costs: A comprehensive set of annual transportation expenditures including gasoline, car payments, auto insurance, transit fares, etc. Costs vary, reflecting different demographic preferences and location choices. Costs are expressed in year 2005 dollars.

Forest Grove-Cornelius	2005	2030 (low-growth)	2030 (high growth)
Total dwelling units	11,500	15,900	16,400
Subarea share of region's households	2%	2%	2%
Total jobs	4,800	7,700	12,900
Subarea share of region's jobs	1%	1%	1%
Percent of all households by household type			
Household type 1 (median income $13,800)	13%	15%	16%
Household type 2 (median income $25,000)	20%	20%	20%
Household type 3 (median income $35,800)	18%	18%	19%
Household type 4 (median income $46,700)	16%	17%	16%
Household type 5 (median income $57,000)	10%	11%	11%
Household type 6 (median income $69,200)	9%	9%	7%
Household type 7 (median income $100,100)	8%	6%	7%
Household type 8 (median income $113,300)	7%	5%	5%
Average annual cost information for all households			
Transportation costs	$10,200	$10,300	$10,100
Housing costs	$14,500	$18,200	$21,700
Income	$46,300	$44,300	$43,500
% Income spent on transportation	22%	23%	23%
% Income spent on housing	31%	41%	50%
% Income spent on housing and transportation	53%	64%	73%
Average annual cost information for all renters			
Transportation costs	$6,700	$6,300	$6,300
Housing costs	$7,000	$7,900	$9,100
Income	$27,500	$24,900	$25,100
% Income spent on transportation	25%	25%	25%
% Income spent on housing	25%	32%	36%
% Income spent on housing and transportation	50%	57%	61%
Number of cost burdened households	2,400	4,400	4,700
Share of households that are cost burdened	21%	28%	29%



City of Tualatin
www.ci.tualatin.or.us

October 20, 2009

Tom Brian
Chair MPAC
600 NE Grand Avenue
Portland, OR 97232

RE: "MAKING THE GREATEST PLACE" RECOMMENDATIONS

Dear Chair Brian and MPAC Members:

On Wednesday, September 30, 2009, Tualatin's City Council met in a work session to discuss Michael Jordan's recommendations for "Making the Greatest Place". We appreciate the opportunity to review and comment on the reports released on September 15, 2009. We provided our comments below categorized by sections of the report. We are also aware that there will be other opportunities to comment through JPACT and the Metro Council as further review occurs on the recommendations.

The *Strategies for a sustainable and prosperous region* included the quote below that exemplifies the spirit of Local Aspirations and the exercise the region went through last winter. That is the opportunity for local jurisdictions to provide choices to current and future residents by creating great communities in the region. Our Council believes that the Local Aspirations we and other cities worked to develop should guide the region's decision making in terms of growth and investments.

> "Some people want to live in the suburbs and feel strongly that their quality of life, their American dream, is a house and a yard and a fence. Others want to live in a vital city where they're a regular at the coffee shop down the street. It's not that one is better than the other, but it is a fact that within this region, you can choose either, and that's what we're trying to achieve- not that everyone chooses the same, but that people can find what they want."
>
> -Ethan Seltzer, Director, Toulan School of Urban Studies and Planning, Portland State University (Metro, *Overview September 15, 2009 COO Report- Strategies for a sustainable and prosperous region.* p11, September 15, 2009)

Performance Measures

While we acknowledge the need to track the region's progress toward achieving the six desired outcomes, we are concerned with the process used for establishing that tracking mechanism. The Performance Measures report does not contain enough information about how the performance targets will be developed. There should be more opportunities to participate in the development besides MPAC and JPACT. Additionally, the report does not clearly articulate the consequences of these measures on local jurisdictions. For example there is no discussion of what type of data collection and reporting could be required. Finally, Metro should provide some clarification of the policies and processes that could be required to achieve the indicator targets. Our concern is that without involvement from local jurisdictions in establishing the targets, policies and processes we will not be able to ensure these targets align with our Local Aspirations.

Urban Growth Report

The residential section of the UGR uses a 33% refill rate for expected capacity and 7% refill rate for potential capacity. The expected housing capacity refill rate is higher than the average from 1997 to 2006 of 15.6% to 34.2% and may not be a reasonable expectation. The additional 7% assumed for potential growth relies on policy changes and investments. These investments are presumably those identified in the *Investing in Great Places matrix, September 15, 2009* but neither of these reports identifies the source of potential funding for investments. It is unreasonable to identify a potential capacity refill rate that relies on an unknown source of funding. Finally, where is refill at a 40% rate expected to occur? Where is the analysis and mapping showing where the refill will occur? This information is critical in determining capacity and the implications on the urban and rural reserve process and how it fits into Tualatin’s Local Aspirations.

Protecting existing single-family neighborhoods is mentioned as an investment priority in the *Strategies for a sustainable and prosperous region* and in the UGR. These reports indicate this can be accomplished by focusing growth in cities and town centers and main streets within the current urban growth boundary and encouraging growth in centers and corridors to minimize impacts on existing neighborhoods. Tualatin’s Local Aspirations are similarly focused in that we intend to protect the character of our existing single family neighborhoods and commercial and industrial areas while focusing redevelopment and any requisite policy changes and investments within our Town Center. Consequently, any refill rate higher than a historic average should only apply to centers and corridors.

In the employment section and the technical appendices there were several mentions of multi-story facilities for employment uses. We object to the assumption that industrial uses such as manufacturing, warehouse and distribution, and tech flex will locate in multi-story buildings as part of a future trend.

Regional Transportation Plan

We appreciate Metro’s efforts to update the RTP and other regional plans. Balancing the needs to move people and freight, protect neighborhood livability, protect the environment, and support the growth in the region’s economy is a very complex and difficult task.

In reviewing the RTP it feels like we are not reviewing a plan but looking at a series of good ideas and some vague actions that may implement them. For example:

- Without modeling results it is not known if the projects in the draft RTP will achieve the goals of the plan.
- Without new performance standards how do we know how close we are coming to meeting them.
- The schedule does not appear to allow any time for iterations or discussion about the performance of the plan and projects versus the impacts on neighborhood, versus the cost to implement, versus the impacts on the economy versus changing the goals of the plan.
- It seems like there should be time built in to allow for this analysis to occur and if needed change the goals, measures, and projects to better achieve what we are trying to do.

Moving ahead to stay on schedule does not seem to be as important as taking the time to complete this project in a manner that will allow us all to work toward its implementation and making this region a Great Place.

Tualatin is very concerned about the implementations of the recommendations from the I-5 to 99W Corridor study. We were very disappointed in the final efforts of the project. To have listened to and agreed with the concerns and issues raised by Wilsonville and Clackamas County over the final recommendations on the project, and all the participants AGREED with their issues and recommendations, and then to have them vote against their own recommendations was disheartening. That said we are very appreciative of the effort of Andy Cotugno to put together a plan to implement the recommendations of the I-5 to 99W Corridor Study. Mr. Cotugno’s plan addresses Tualatin’s concerns and we feel provides a logical well thought out series of events to address the transportation issues between I-5 and 99W in our area.

The I-5 to 99W Policy Steering Committee recommendations are included in the RTP appendix and shown in the work plan as something that needs to be resolved in the next few months. Our main concern has been and continues to be traffic in the Tualatin Town Center. We expect to deal with the traffic generated in Tualatin. Our concern is the thru traffic. To address this we are asking for MPAC’s help and commitment on three key projects and concepts.

1. Widening Tualatin Sherwood Road. Project 10568:

   Widening Tualatin Sherwood Road between Hwy 99W and Teton needs to be postponed until after 124^{th} is connected between Tualatin Sherwood Road and Tonquin Road. We feel 124^{th} will provide an outlet for the industrial traffic to access I-5 at Stafford Road in an all industrial route and not through the Tualatin Town Center. Widening without 124^{th} will only bring more traffic to the Tualatin Town Center.
2. Extending Tualatin Road through the Community Park, across the Tualatin River and on to the Bridgeport Village Area. Project 10731:

We agree some improvement here is necessary to provide alternate routes to having all the east west traffic passing through the Tualatin Town Center. Widening Tualatin Road and the extension to the Bridgeport Village area to 4-5 lanes instead of the 2-3 lanes currently planned, and connecting to 99W on the west end in Sherwood is not in keeping with the scale of our vision. The proposal to evaluate and correctly scale these improvements that Andy had proposed addresses our concerns.

The appendix and project 10731 do not appear to be consistent. We urge Metro to resolve this inconsistency in favor of the language proposed by Andy Cotugno this summer.

3. Extending 124th from Tualatin Sherwood Road south to Tonquin and on to I-5 at exit 286. Project 10736.

   This is a high priority for Tualatin and Wilsonville. This extension will provide access to an approximate 1,000 acres of industrial land. Tualatin is finishing the planning for the portion of the area north of Tonquin Road. The area between Tualatin and Wilsonville still needs some planning work. We are working with Wilsonville to accomplish this.

We look forward to participating in the discussions about the performance standards of the transportation system and how all components of the “Making the Greatest Place” work together and address all of the goals of the plans. We request you delay the final decisions so we can all be sure we are making the best choices, not just the choices that meet the schedule.

Aspirations and Investments

The *Investing in Great Places matrix* identified five common themes that emerged from Local Aspirations. Based on the matrix and the narrative it is clear that financial investments will be required to implement any policy changes that accomplish Local Aspirations. Tualatin’s concern is where those sources of funding are going to come from. The report identifies developing an investment strategy as the next step in taking Local Aspirations to a strategy. While elements of such a strategy were identified targeted sources of possible funding were not identified.

We intend to submit information about the 99W Corridor in Tualatin. That corridor has been identified for future consideration of High Capacity Transit, and we will indentify additional investments that could support or be supported by HCT in the 99W Corridor.

Urban and Rural Reserves

Specifically, we are concerned with the recommendation for the Stafford Triangle portion of the Stafford Basin. We do not agree with the recommendation to expand urban reserves beyond Clackamas County’s recommendation. Further, we submitted correspondence to Clackamas County and to the Regional Steering Committee and the Core 4 stating our recommendation that this area be designated a rural reserve with the exception of the 840 acres located in Washington County within the Stafford Basin. This area is bound by I-5 on the west, I-205 on the north, 65th Avenue on the east and

Frobase Road on the south. To summarize our concerns previously stated providing urban level services to this area would be cost prohibitive to the City of Tualatin, there are questions of governance that need to be resolved, and urban level development could impact the quality of life in our existing neighborhoods. The City Council's top priority is to maintain quality of life in Tualatin by maintaining the character of existing residential neighborhoods and continuing that character in new neighborhoods as the City grows. This priority guided our Local Aspirations and emerged from Tualatin's *Community Vision and Strategic Action Plan: Tualatin Tomorrow*. Designating urban reserves identified by Clackamas County and expanding the area according to Metro's recommendation would not adhere to our Local Aspirations or our community's desire to preserve our quality of life.

The cities of Lake Oswego and West Linn have also stated their opposition to the Stafford Basin as an urban reserve in their Local Aspirations.

Additionally, in the technical appendix to this report an assumed density of 15 dwelling units per acre was used to calculate the residential acreage range for urban reserves. Our concern with this assumed density is that we are not clear as to where this density applies. Is it only assumed for urban reserve land or has this density been applied to other land in calculating capacities? Through our Local Aspirations we have stated our intention to continue the existing residential neighborhood character in any new areas. An assumed density of 15 dwelling units per acre does not conform to our aspirations.

Regarding Mr. Jordan's recommendation for Urban Reserve land in the South Sherwood/ West Wilsonville area, we agree with his recommendations. Mr. Jordan's assessment of land between the cities of Tualatin and Sherwood is correct in that urban reserve land will provide the opportunity to extend 124th Avenue to a future east west arterial road and make use of future public and private infrastructure investments. We also agree with the analysis that if the area is deemed suitable for urban reserves then all of the land should be designated urban without creating an island of rural reserve land. We continue to object to Clackamas County's recommendation for a small portion of this area to be a designated a rural reserve. Additionally, we support the City of Sherwood's aspirations for urban reserves in this area to support their long term jobs and housing needs.

Again, thank you for the opportunity to comment on these recommendations.

Sincerely,

Lou Ogden
Mayor

Mission: To enhance the region's economy and quality of life by providing efficient cargo and air passenger access to national and global markets.

October 15, 2009

David Bragdon, President
Metro Council
600 NE Grand Avenue
Portland, Oregon97232

Dear David:

Thank you for the opportunity to comment on the Chief Operating Officer Michael Jordan's Report and Recommendation for *"Making the Greatest Place"* (the Recommendation). We appreciate the many hours of work that have gone into this effort and recognize that the integration of land use and transportation policies, planning and investments is the cornerstone for accomplishing many of the our regions' desires. In this region, where incentives are limited and regulation is not, these same levers - land supply and transportation investment - have a profound effect on our region's attractiveness for job growth and economic vitality.

Measures of economic performance, including unemployment rate and per capita income growth, indicate we are facing some of the worst economic challenges since the early '80s. However, only one of the 16 performance measures in the Recommendation relates to economic prosperity ("wealth creation"), and none relate directly to economic competitiveness. From my perspective, we do not have the right formula or focus, to influence a positive sustainable outcome for this region's economy without taking major action. For that reason we would like to discuss some of the current assumptions in "Making the Greatest Place" and propose changes for your consideration. Detailed discussion of these issues is attached.

Industrial land supply within the Urban Growth Boundary (UGB)

The Urban Growth Report (UGR) suggests that we have an adequate supply of industrial land within the UGB, but much of it is not ready for development due to substantial constraints including brownfield status, location or lack of infrastructure, and regulatory overlays. A fundamental for economic growth is land supply. The land must be the right amount in the right location for the needed purpose. The availability of industrial land that is developable for the expected market is the key.

To address the issues of industrial land supply, we **recommend** Metro:

1. Take an active role in reconciling conflicting policies and implementation at both the regional and local level to ensure an adequate supply of industrial land is available for our region's projected growth.
2. Link the UGR and transportation investment strategy with industry cluster needs and expand the industry cluster list to include a broader representation of the region's employment base. This includes a hard look at the role of trade, transportation and distribution and logistics in the regional economy.

121 NW Everett Portland OR 97209
Box 3529 Portland OR 97208
503 944 7000

3. Commit resources to redevelopment of brownfields within the UGB, using the Transit Oriented Development model, - which underwrites land cost to facilitate development.

Employment Land Forecast Assumptions

While we appreciate Metro's effort to develop a new employment demand paradigm as a part of the forecast, we remain concerned about some critical gaps in the methodology and assumptions. For example, the forecast does not address land supply needs associated with commodity flow forecasts and associated freight facilities. In addition, the assumptions associated with declining capture rate are not well explained and the implications are not adequately discussed in the Recommendation. Metro's declining capture rate stands in sharp contrast to the doubling of the capture rate proposed by the City of Portland in their Economic Opportunities Analysis for the Portland Plan. It also does not comport with the historical capture rate of the region. Tim Duy, an economist with the University of Oregon, states that:

> "...if you assume firms will locate outside the core, and then you do not plan for sufficient growth and infrastructure opportunities, then firms will be forced into the periphery. Or avoid the region altogether..."

To address these concerns, we **recommend** Metro:

1. Modify the capture rate to reflect a more aggressive effort at capturing economic activity in this region.
2. Reconcile the large lot land demand needs among major jurisdictions within the region to reflect the "State Goal 9: Economic Development" methodology and approach.
3. Account for freight facility demand in its evaluation of industrial land supply.
4. Account for land needs associated with commodity flows and the international gateway function of the Portland region.

Urban Reserves for Future Growth

We believe based on our industrial land development experience that the Recommendation includes an insufficient aggregate amount of urban reserve land for future industrial uses and the locations do not match market demand. We believe that evaluation criteria developed by Metro in 2004, with input from the Port, local governments and other stakeholders, as well as criteria elicited in expert interviews conducted by Metro in spring of 2009, more accurately identifies those areas suitable as future industrial land to be brought into the UGB.

As such, we **recommend** Metro reevaluate their criteria for Urban Reserves to include:

1. Freeway access within three miles of an interchange via an arterial street, with no intermediate conflicting uses;
2. I-5, I-84, I-205 and US 26 access, with I-5 being most important;
3. Access and proximity to multimodal freight infrastructure (rail, marine and air cargo);
4. Proximity to other industrial uses (clustering potential);

5. Slopes of less than 5%;
6. Potential for property aggregation into large acreage industrial sites; and
7. Work force access.

Transportation Investment

The Port appreciates the work that has gone into the Regional Transportation Plan (RTP), particularly the Regional Freight Plan. Our transportation investment strategy must match up with our land use and economic development objectives (investment in the transportation system for freight or other modes can translate to a direct benefit to existing businesses as evidenced by the Cost of Congestion to the Economy of the Portland Region Study.) Our region's small market size and status as a gateway to the world and interior US, dictates that we both plan for and invest in the transportation infrastructure to ensure goods and services can reach their markets cost effectively. For these reasons, we **recommend** Metro:

1. Continue to involve the Freight Task Force in helping to shape and implement the Regional Freight and Goods Movement Action Plan and RTP work program.
2. Ensure a funding allocation for freight out of Metro Transportation Improvement Plan (MTIP) flexible funds, consistent with other modes.
3. Allocate MTIP flexible funds based on an economic filter, considering return on investment.
4. Require accounting of project performance from recipients for all funding allocations using metrics such as project cost, implementation deadlines and actual demonstrated benefit.

The Port appreciates the opportunity to comment on the COO's Recommendation. My staff and I are committed to assisting your staff on this important effort. We look forward to continued opportunities for discussion of these regional issues as Metro moves forward on several policy fronts: UGB, RTP, Urban reserves. We view this as the beginning of an important conversation about our region's future, including continued discussions about the potential development of a Regional Infrastructure Fund to ensure the Greatest Place vision and our economic aspirations can be realized.

Sincerely,

Bill Wyatt

Bill Wyatt
Executive Director

Attachment

cc: MPAC
JPACT
TPAC
MTAC
ECAC
Freight Task Force

Detailed Comments from the Port of Portland on Chief Operating Officer Michael Jordan's Report and Recommendation for "*Making the Greatest Place*"-October 15, 2009

Process

- The Port has been an active participant in the different components of the Recommendation through a number of advisory committees including among others, MTAC, TPAC, ECAC and JPACT. Despite this active participation, we believe that 30 days is not an adequate amount of time to comment on 1,700+ pages of material, much of which was new information not previously shared with Metro advisory committee members.
- The Port is concerned that several key elements of the recommendation will be left undefined until after the close of public testimony on October 15th. Two examples include a viable process for adding large industrial parcels to the regional land supply in a timely manner and a viable process for converting brownfields into productive industrial use in a timely manner.

Economic Development Role and Focus of Metro

- While Metro is not the regional economic development agency, regional policy choices related to land supply and the transportation system will determine the economic future of the region.
- One of the desired outcomes stated in the Recommendation is "Economic Competitiveness and Prosperity". However, this statement is not followed up with actions or a strategy to achieve this outcome, nor an assessment of how other desired outcomes may conflict with this outcome.
- Only one of the 16 performance measures relates somewhat to economic prosperity ("wealth creation"), and none directly to economic competitiveness.
- The Aspirations and Investments matrix of actions largely ignores the role of private investment in implementing our regional aspirations. Instead the matrix suggests that the private sector role is limited to "collaboration" with local and regional governments.
- Choice of Clusters: The target industry clusters in the Recommendation reflect clusters identified by PDC for the City of Portland including the following:

    - Active wear and outdoor gear;
    - Advanced manufacturing;
    - Bioscience;
    - Cleantech; and
    - Software.

  These clusters represent only about 105,000 jobs out of more than 700,000 jobs in the Metro region. Advanced manufacturing is not well differentiated from basic manufacturing, so if it is excluded, these clusters only reflect about 40,000 jobs out of more than 700,000 jobs in the region.

The Port believes a better regional representation of industry clusters comes from Portland Regional Partners for Business. These clusters include:

- High Tech;
- Metals;
- Machinery and Transportation Equipment;
- Nursery Products;
- Specialty Foods and Food Processing;
- Creative Services;
- Bioscience;
- Sustainable Industries; and
- Distribution and Logistics.

Employment Land Forecast Assumptions:

- Capture rate: The Recommendation provides little explanation about why employment capture rates for the Metro portion of the seven counties are assumed to drop 5% to 7 % (to 73-75%) by 2030 and then drop an additional 5% by 2060. Yet, the trend over the last 25 years has been for the capture rate to vary up and down between 80-85%. As noted in the UGR (p. 33) "Capture rates tend to rise and fall relative to changes to the phase of regional business cycles". As a result, the way in which the Recommendation addresses the capture rate raises some major policy questions/concerns:

    - There is an assumption that has not been tested, that neighboring communities in the seven county study area have the capacity and the desire to take the amount of new growth implied by a reduced capture rate of 73-75%.
    - If the capture rate has been undercounted, then future land demand has not been fully accounted for since more growth was assumed to occur outside of Metro's service boundary; and
    - Even if the capture rate is accurate at 73-75%, it seems as if Metro would want to consider policies to counter this capture rate forecast, given the negative implications of increased vehicle miles traveled and increased greenhouse gas emissions.

- Large lot demand: Assumptions in the Recommendation for demand for industrial land in general and for large lots specifically appear to be much too low. The Cities of Hillsboro and Portland each conducted their own Economic Opportunities Analysis (EOA) earlier this year and projected a shortfall of several hundred acres for Portland and several thousand acres for Hillsboro and western Washington County over the next 20 years. These EOAs projected future industrial land demand using Goal 9 methodology acknowledged by the State DLCD.
- Future land demand for Freight Facilities excluded from the analysis: The UGR (p.58) states "Large-lot demand for marine and rail terminal uses in not included in this analysis", based on the rationale that freight facilities would not expand on the fringe of the region. However,

freight facility expansion would likely consume other industrial land which in turn would trigger demand for addition industrial land elsewhere in the region. Ignoring this piece of the demand forecast likely undercounts total industrial land need by several hundred acres.

Industrial Land Supply within the Urban Growth Boundary:

- Development within the UGB and Conflicting Regulation: The Port is supportive of maximizing development of existing land within the UGB. However, often Metro's own policy decisions stymie this development potential, most notably through the local implementation of Title 13 Nature in Neighborhoods. For example, while Metro has made some effort to account for riparian areas protected under Title 13 and 3 in its employment land assumptions, it has not considered the impact of upland areas proposed for protection as "Habitats of Concern" under Title 13. Likewise, implementation policies and regulations of individual jurisdictions may hinder or limit development that could otherwise occur within the UGB. The Port recommends that Metro takes an active role in reconciling these conflicting policies and implementation issues at both the Metro and local level.
- Brownfields: The Port as a brownfield developer supports a strategy of focusing on brownfield development within the UGB. However, the Port also believes that the existing tool box is not adequate to incent redevelopment of most brownfield sites. Even thought brownfield redevelopment is a key component and assumption of the Recommendation, there are no new strategies proposed to implement this approach. One specific suggestion is that Metro take the Transit Oriented Development model and adopt it for brownfields, to underwrite land cost and facilitate development potential.
- Infrastructure: The Port is supportive of maximizing development within the UGB by providing infrastructure to underserved industrial sites. Although the concept is not fully developed, the Port believes a regional infrastructure fund could aid in providing infrastructure funding to make existing industrial sites "shovel ready".
- Lack of Development on Land Brought into the UGB: The Recommendation (COO report p. 19) suggests that areas added to the UGB since 1998 have not developed due to lack of infrastructure and local governance. At least from an industrial land perspective, much of the land brought in since 1998 does not meet the industrial land characteristics required form many industrial businesses. Other land meeting most of the criteria, in particular the Evergreen expansion area in Hillsboro, has developed quickly. In short, land brought into the UGB with characteristics suitable for industrial land is likely to develop relatively quickly for industrial uses.
- Problem of Industrial Land Conversion: The Recommendation implies that Metro Title 4 has been ineffective in preventing conversion of industrial land to non-industrial uses. The Port believes that Title 4 in its current form is very clear in limiting the amount of non-industrial uses on Title 4-designated lands. Jurisdictions across the region, including Portland, Troutdale and Hillsboro have strictly adhered to the requirements of Title 4 through the implementation and enforcement of their local zoning codes. If other jurisdictions have approved uses not in compliance with Title 4, the Port believes this is an enforcement issue for Metro, not an issue that requires modification to Title 4.

Future Availability of Industrial Land:

- Fast-Track Addition of Large Lots to the UGB: The Recommendation (COO Report p. 15) suggests that Metro could make "...strategic UGB expansions as needed to take advantage of real opportunities to attract key employers." However, as mentioned earlier, the Recommendation is not specific about how such a "fast-track" process to add large lots to the UGB would function. Even assuming that large lots could be brought into the UGB quickly, the site would not be "shovel-ready" for up to two years, given the legal requirements of annexation, comprehensive plan amendment and zone changes, as well as the time to install public infrastructure. Few if any businesses are willing or able to wait that length of time for land entitlements only.
- Market Choice: The Port is also concerned that the Recommendation does not acknowledge the need for a choice of sites throughout the region. Providing a theoretical minimum amount of employment land does not provide for the needs of businesses from both inside and outside the region seeking to expand or locate here. Businesses all have different needs related to site size, market access, and work force access, to name but a few. Expert interviews with industrial land brokers conducted as a part of the UGR process this spring indicated limited site choices in the region today, particularly for large lots. In short, the Recommendation does not consider the risk to the regional economy if there is not enough supply to comprise a viable industrial land market.
- Urban Reserves: The Port recommends adoption of urban reserves for future industrial use with the following characteristics:

    - Freeway access within three miles of an interchange via an arterial street, with no intermediate conflicting uses;
    - I-5, I-84 and I-205 and US 26 access, with I-5 being most important;
    - Access and proximity to multimodal freight infrastructure (rail, marine and air cargo);
    - Proximity to other industrial uses (clustering potential);
    - Slopes of less than 5%;
    - Potential for property aggregation into large acreage industrial sites; and
    - Work force access.

    Based on these characteristics, the Port is concerned that an insufficient amount of urban reserve land is proposed in aggregate in the Recommendation for future industrial uses and is not well distributed across all counties, in particularly Multnomah and Clackamas Counties. As noted in the Recommendation (COO Report p. 17), one of the six desired outcomes is "Equitable distribution of the benefits and burdens of growth", which includes in large part, geographic distribution.

Transportation Investment

- The Port appreciates the work that has gone into the Regional Transportation Plan (RTP), particularly the Regional Freight and Goods Movement Action Plan. However, the Port believes there are a number of ways in which Metro can improve its commitment to freight mobility, given the importance of these projects to the regional economy:

- Continue to involve the Freight Task Force in helping to shape and implement the Regional Freight and Goods Movement Action Plan and RTP work program.
- Ensure a funding allocation for freight out of Metro Transportation Improvement Plan (MTIP) flexible funds, consistent with other modes.
- Use an economic filter, describing return on investment to prioritize and allocate MTIP transportation dollars.
- Require accounting of project performance from recipients for all funding allocations using metrics such as project cost, implementation deadlines and actual demonstrated benefit.

MAKING THE GREATEST PLACE

Engagement strategies and community response

Draft report

October 28, 2009

Metro | *People places. Open spaces.*

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2. Regional Transportation Plan summary of public comment
3. Urban Growth Report summary of public comment
4. Urban and rural reserves summary of public comment
5. Summary of general public comments
6. Stakeholder engagement summary

Appendices (will be available online at www.oregonmetro.gov/greatestplace)

I. Online survey results (including open-ended comments) *
    i. Regional Transportation Plan
    ii. Urban Growth Report
    iii. Urban and rural reserves
II. Regional Transportation Plan comment log
III. Urban Growth Report comment log
IV. Reserves comment log
V. General comment log
VI. Stakeholder engagement and community meeting schedule
VII. Public opinion research/summary */**
VIII. Advertising and outreach strategy and samples
IX. Advisory committee members attending public hearings **

* Complete results available now at www.oregonmetro.gov/greatestplace

** Print copies included in draft report

Submit substantive comments on draft report to patty.unfred@oregonmetro.gov or call 503-797-1685.

Making the Greatest Place:
Engagement strategies and community response

Executive Summary

On Sept. 15, 2009, Metro's chief operating officer, Michael Jordan, released a set of recommendations in a report entitled, "Making the Greatest Place: Strategies for a sustainable and prosperous region". The process of developing these recommendations and preparing for a series of regional decisions was unique and entailed many "firsts": regional collaboration resulting in state approval to change the way we make growth decisions, development of outcomes-based planning and related measurements, and the combination of several major land-use and transportation decision processes into one inter-related set of recommendations. In reality, Making the Greatest Place didn't begin on Sept. 15 but spanned a period of four years; involved hundreds of decision-makers, stakeholders and local government partners; required years of research, modeling, scenario development and forecasting, and incorporated public and stakeholder suggestions along the way. And it doesn't end after the 30-day public comment period.

The COO's recommendations primarily addressed three key themes: making the most of what we have by maintaining and investing in existing communities, limiting urban growth boundary expansion to protect farm, forestland and natural areas, and creating good jobs. The recommendations were based on values established by residents of the region through the 2040 Growth Concept—values that prioritize compact, walkable communities with a variety of transportation options and the preservation of farm and forestland— and consistently reiterated over the years, most recently through a public opinion survey conducted in the summer of 2009. The recommendations in Jordan's report were based on staff analysis and allowed the Metro Council, other elected officials, and members of regional advisory committees an opportunity to listen to the discussion and incorporate that feedback into the series of decisions that will be made beginning in December this year.

> *"It is important to remember that this document does not represent a* decision *by anyone; it is a set of* recommendations *that are intended to invite, and give focus to, the regional conversation that will ensue." – COO report, p. 13*

The recommendations revolved around three major policy processes required by state law: the Regional Transportation Plan, which provides a blueprint for transportation investments until 2035; the Urban Growth Report, which estimates the employment and residential needs of the region for the next 20 years and the capacity of the existing urban growth boundary to accommodate that growth; and a new process of designating urban and rural reserve areas, in collaboration with Clackamas, Multnomah and Washington counties, that will help shape how our region will grow—and what areas will be protected from urban growth—over the next 40 to 50 years. Although the four partners in the reserves process, known as the Core 4 (Metro and the three counties), were not far enough along in the process to make specific recommendations for urban and rural reserves, the COO report proposed general guidelines for the establishment of reserves.

The entire staff report, including all the combined individual program area reports and appendices, adds up to a whopping 1,748 pages. The recommendations were boiled down to a 32-page overview report, which contained two pages of recommendations around three strategies:

1. Make the most of what we have: Invest to maintain and improve our existing communities
2. Protect our urban growth boundary: To the maximum extent possible, ensure that growth is accommodated within the existing boundary.
3. Walk our talk: Be accountable for our actions and responsible with the public's money.

Metro staff developed a public involvement and engagement plan for the Sept. 15 launch and 30-day comment period. The plan was reviewed by the Metro Committee for Citizen Involvement in August and revised to incorporate MCCI suggestions. Metro staff implemented three steps in the process of community engagement around Making the Greatest Place: information delivery, engagement and outreach, and collection and analysis of feedback.

INFORM

Print materials

In an effort to demonstrate sustainable practices, staff sought to make copies of all materials available primarily in electronic format. All elements of the report were available in a searchable DVD format as well as available for download on the Metro web site. Advisory committee members were also encouraged to download information from the DVDs but MPAC and JPACT members were provided with complete binders of print materials upon request. Approximately 1,200 overview brochures were distributed in print form at open houses and engagement events; 750 DVDs were also distributed during the engagement period.

Web

Metro's web site was the information hub and received nearly 6,000 hits during the comment period. The "greatest place" web page contained downloadable versions of all the report files, links to additional program information, links to online surveys and an overview video from COO Jordan. Metro's planning and policy newsfeed provided new information daily, including coverage of public hearings and stakeholder meetings.

Publicity

In addition to paid advertising in community newspapers publicizing the public comment period and the open houses, public hearings and online comment opportunities, Metro staff sought to reach the public in a variety of other ways. HTML e-mail messages were sent to an extended list of roughly 6,000 recipients, all of whom were informed and encouraged to sign up for the policy and planning news feed for continued updates. Metro hosted a media briefing on Sept. 15, attended by about 12 members of local media outlets, to provide information about the recommendations and the comment opportunities. A video featuring COO Jordan provided an explanation of the process and an invitation to all to participate and provide comments. All public hearings during the comment period were filmed and replayed multiple times on local cable television.

ENGAGE

Open houses and hearings

Metro hosted seven open houses and five public hearings throughout the region, most of them during the evening to facilitate public participation:

- Hillsboro – open house only, Spanish language translation provided (Sept. 21)
- North Portland – open house only, Spanish language translation provided (Sept. 22)
- Beaverton – open house and public hearing (Sept. 24)
- Gresham – open house and public hearing, Spanish language translation provided (Oct. 1)
- Happy Valley – open house and public hearing (Oct. 8)
- Oregon City – open house and public hearing (Oct. 13)
- Metro Regional Center – open house and public hearing (Oct. 15)

The open houses were designed to inform participants about the recommendations, and included large visual boards, maps and program "stations" with reports, fact sheets and staff available to answer questions. Participants were given the option of providing written testimony or signing up to provide oral testimony (when the open house was coupled with a public hearing).

Two hundred seventeen people attended these events, and of those, 160 people provided testimony at the hearings. Each public hearing was attended by the Metro Council as well as three to seven representative members of Metro's two policy advisory committees – the Joint Policy Advisory Committee on Transportation and the Metro Policy Advisory Committee.

Engagement events

Metro staff scheduled presentations at a wide variety of community and stakeholder meetings, from business organizations to advocacy groups to elected bodies. Thirty-three presentations were delivered during the comment period and an additional 10 are scheduled from mid-October through early November. At nearly every meeting, Metro staff members provided an overview of the recommendations and were accompanied by a Metro Councilor, whose role was to listen and respond to feedback and questions from the audience. Issues, comments and questions from most of the events were captured by candid summaries in Metro's policy and planning newsfeed; summaries of the remaining events were provided to the Metro Council weekly and posted to the Metro website. Nearly one thousand people participated in the 33 meetings held during the comment period.

LISTEN

Oral testimony

One hundred sixty people took advantage of the opportunity to speak directly with Metro Councilors and other decision makers by providing testimony at one of the five public hearings. Participants were asked to provide summaries of their comments in writing and those were included in the public comment record.

Written comments
The public was encouraged to provide written comments in a variety of ways – through hand-written comments on cards at the open houses, sending written comments to Metro, or sending comments via e-mail. More than 400 individual e-mails were received (in addition, there were roughly 2,000 generic forwarded e-mails on specific topics) and 128 other written comments were received. (NOTE: some of the comments were potentially counted in multiple issue tracks, thus the number of "unique" commenters is expected to be somewhat less. An accurate figure will be recorded in the final version of this report.)

Online opinion survey
Visitors to the Making the Greatest Place web page were encouraged to take brief surveys that specifically related to the three main program areas of the recommendation: the Regional Transportation Plan, the Urban Growth Report, and urban and rural reserves. Seven hundred forty-five surveys were completed among the three tracks (481 on the RTP, 60 on the UGR and 204 on reserves). These do not necessarily represent 745 different individuals, however, as some people may have taken more than one of the three surveys.

Public opinion research
In summer 2009, 600 residents of the metropolitan region (200 each from Clackamas, Multnomah and Washington counties) were contacted by Davis Hibbitts & Midghall research firm and asked a series of questions about the livability of the region. The questions were intended to gauge residents' attitudes and preferences about growth policies and tradeoffs.

KEY THEMES: What we heard throughout the public comment period

Urban growth boundary – One of the most striking shifts was the understanding of and support for maintaining the urban growth boundary as much as possible. From the public opinion research in which participants volunteered the term "urban growth boundary" to the online survey to the written comments, residents generally expressed strong support for preserving the existing urban growth boundary. The primary reason for that support is to protect farm, forestland and natural areas outside the boundary, but the principle of maintaining what we already have before building in new areas also resonated strongly with people. Public opinion research indicated that people were generally supportive of increased density in their neighborhood if it protected resource lands outside the boundary – but that they also had clear limits to the amount and design of density acceptable.

Statistics: Though not a scientific sampling of the region's population, 88 percent of online survey respondents do not feel that Metro should expand the urban growth boundary to accommodate future housing needs. Ninety-one percent of online survey respondents felt very strongly or strongly that the region should "protect farmland at all costs with a tight urban growth boundary"

Quotes:

"Infill. There is a ton and a half of land in surface parking lots, run-down areas, and sprawling single-level buildings that can be redeveloped."

"Please don't expand the urban growth boundary prior to significant attention and improvement in East Portland/Mid-Multnomah County. Outer East Portland suffers from significant underinvestment. Too few parks, too few resources for local transportation, and too little attention to strategic zoning. If Metro decides to urbanize more farmland, this would spread resources more thinly, and would merely add to the inattention Mid-County suffers from."

"I would like to see my city redevelop underdeveloped and vacant lands and focus more development along major thoroughfares. I have observed in my neighborhood and adjacent areas, that when more development comes we get more services that are easier to access by foot, bicycle, short car trip, or bus. It improves our quality of life and protects farm and forest land."

"Not everyone wants to live in a pod!"

Urban and rural reserves – In terms of sheer percentages, residents in general support minimal urban reserves and maximum rural reserves in order to protect farm and resource land. In written comments on reserves, the majority of respondents expressed support for the Metro staff recommendations, particularly focusing growth inside the urban growth boundary and protecting farmland and natural areas. In stakeholder meetings, there was skepticism expressed about the reserves process – especially in terms of how long a designation would last. Although some felt leaving land "undesignated" was too indecisive, others felt it was critical to keep options open in the future.

Statistics: Eighty-seven percent of online survey respondents felt strongly or very strongly that the region should aim to set aside less land for urban reserves to spur investment in our current downtowns and to conserve more farms, forests and natural areas.

Quotes:

"Use urban and rural reserves to protect valuable farmland, reduce our carbon emissions, build efficient infrastructure and support vibrant city centers. Please don't pave over our region's beauty."

"My family of four buys vegetables, berries, fruit, eggs, beef, landscaping plants, pumpkins, and Christmas trees all year long from local farmers which provides our family with safe and fresh produce. It is great to be able to raise our children with a firsthand knowledge of where food comes from. In many cases, our hands remove the produce from the plant or tree on which it grew."

"You're leaving gray areas to the future... I'm sure as heck I don't want to come back here when I'm 70 years old to do this process again." (referring to leaving land "undesignated")

"Failure to designate close-in prime lands as Rural Reserves even though they meet all the criteria while 'protecting' lesser lands not threatened by development does not meet the intent of Senate Bill 1011."

"We believe it is only prudent to err on the side of adding more land to urban reserves than less. This leaves our options open without immediately adding land to the UGB."

Jobs capacity – Business groups in particular expressed concern that the staff recommendations underestimated the demand for industrial and commercial large lots and overestimated the availability of land for jobs within the urban growth boundary. While they supported growth within the urban growth boundary, they felt there wasn't a specific strategy for attracting large industrial businesses to the region and that a fast-track policy would not be effective.

Quotes:

"We can't be restricted to fill-in and brown spaces; we need a complete portfolio of options."

"Be wary of current methods for estimating land needs for commercial and industrial areas."

"The focus needs to be first on getting some new business activity."

"I'm concerned that we're not being bold enough and that this plan doesn't have an economic development strategy as a foundation for it."

Transportation priorities – Comments on the Regional Transportation Plan were very diverse, although a majority generally supported the balance of projects. Frequently, comments specifically mentioned support for sidewalks and bike facilities. Stakeholder opinions varied depending on the affiliation, with freight and business interests generally feeling that we should invest more in roads and highways while bicycle and other advocacy groups felt the RTP didn't do enough to provide non-auto transportation options and reduce anticipated levels of greenhouse gas emissions. Opinions were split on funding options for transportation with no clear consensus, although the largest support was expressed for increased state gas tax and vehicle registration fees. Two projects accounted for nearly all of the project-specific comments – Sunnybrook Boulevard extension in Clackamas County and the "Alternative 7" proposal to connect Interstate 5 with Oregon Highway 99W.

Statistics: Forty-three percent of online survey respondents felt that the RTP contained the right (or mostly right) balance of projects while 31 percent felt it did not.

Quotes:

"If nothing happens to I-5, we still need to promote the arterial (road) system to help get freight around."

"I find it really exciting, the way Metro is thinking...It's not just about bicycle transportation, it's about what we want as a community and as a state."

"I would ask you to keep in mind the low-income households in the area who do not own any type of working automobile at all."

"A lot of us in rural communities are really fed up with choo choo trains while seeing our roads go to pot."

"It seems to me that it's pretty obvious at this point that the big untapped resource is user fees."

Equity issues, performance measures and other – A notable number of general comments brought up the issues of equity, affordable housing, performance measures and accountability, and concern about financing infrastructure costs.

Quotes:

"I'm pleased that (equity) is one of your six desired outcomes, but what are the metrics relating to equity? How will we know when we get there?"

"Specifically, we have reviewed the documents pertaining to the planning effort and are concerned that affordable housing, as a regional issue and policy, is not being addressed."

"The region needs to commit to specific measurable targets that describe whether policies and investments are succeeding in order to know how aggressive we must be in our actions."

Although not everyone agreed on the appropriate course of action, many comments provided support for the process in general and an appreciation for the amount of work that had gone in to the recommendations.

Quote:

"Managing growth is difficult, but more important work does not exist. It impacts everything about our lives, from our schools to the air we breathe and the food we can eat. So thanks, keep up the hard work."

Process feedback

In a preliminary evaluation of the public comment and engagement process, Metro communications staff compiled a list of comments that could inform future endeavors of this nature and magnitude. The comments are anecdotal, but represent the spectrum of critique that Metro staff has received.

- **Materials** – Numerous constituents, including business representatives and government staff members, complimented Metro on the clarity and visual appeal of the documents.
- **Transparency** – Metro staff received extremely positive feedback on the policy and planning newsfeed, launched on Sept. 15, which included candid summaries of stakeholder meetings and public hearings. (www.oregonmetro.gov/planningnews)
- **Time frame** – Several stakeholder groups complained that 30 days was not enough time to dive into the details of the recommendations.
- **Information overload** – Some constituents felt that there was too much information to realistically absorb. At least one felt that Metro didn't interpret the contents enough for the general public to understand.
- **Online survey** – Initially Metro received comments that it was difficult to find the online survey; this was resolved through a quick web redesign. Some felt that not enough was done to advertise the online survey.
- **Connections** – Some felt it was difficult to see the connections between the various policy pieces (e.g., RTP, UGR, reserves) and how they were interrelated.
- **Maps** – Many people were frustrated that Metro's reserves recommendations were in narrative form and would have preferred a map.
- **Location of hearings** – Despite attempts to hold hearings and open houses in geographically balanced locations, some people still complained that hearings weren't scheduled in Hillsboro (open house only) and Wilsonville.

Although Metro staff did not receive any comments relating to outreach to typically underserved communities, including low-income and non-English speaking communities, staff continues to evaluate how effective we have been in reaching those groups. Although Metro offered Spanish language translation at the Hillsboro and North Portland open houses and the Gresham open house and public hearing, no one used the services of the translator. Information about the engagement schedule and translation services, including flyers in Spanish, was distributed to partners serving the Spanish-speaking community.

Next steps

A preliminary community engagement report will be presented to the Metro Policy Advisory Committee on Oct. 28 and to the Transportation Policy Advisory Committee on Oct. 30. After incorporating any substantive changes, a final report will be shared with the Joint Policy Advisory Committee on Transportation, Metro Policy Advisory Committee, Core 4 reserves committee, Transportation Policy Advisory Committee, Metro Technical

Advisory Committee and the Metro Council. The final report will be posted on the Metro web site.

URBAN GROWTH REPORT
DRAFT Public comment summary

This report summarizes the written comments received during the 30-day public comment period ending October 15 on issues relating to those contained in the Urban Growth Report.

Online survey

During the 30-day public comment period, we received 60 comments from 57 individuals relating to the Urban Growth Report through our online survey. That survey posed questions relating to:

- whether to expand the urban growth boundary to accommodate future housing needs,
- what actions cities and counties should take to support more housing in downtowns and near major transportation routes
- which actions should be part of a strategy to support more jobs in existing downtowns and employment areas (expanding the UGB was one of the options provided), and
- which strategies Metro and local governments should pursue to reduce the number of cost-burdened households in the region.

A complete copy of the full survey questions and results are attached to this document. The highlights of the results from the survey are:

- More than 88 percent of survey respondents do not feel that Metro should expand the urban growth boundary to accommodate future housing needs.
- Among the strategy options listed for supporting more jobs in downtowns and employment areas, cleaning up brownfield sites, reusing abandoned buildings and targeting public investments were nearly unanimously supported, though brownfields and reusing buildings had stronger support than the public investments option. Nearly 80 percent of respondents suggested the Metro Council not consider UGB expansion as part of this strategy.
- Nearly two-thirds of respondents support both investments in high quality transit and more housing choices near transit as tools in a strategy to reduce the number of cost-burdened households. Only six percent believe neither strategy should be pursued.

Some of the questions allowed for open-ended responses. All of the responses are included with this summary, but here are a few of the responses that are representative of the entire group:

- "I would like to see my city redevelop underdeveloped and vacant lands and focus more development along major thoroughfares. I have observed in my neighborhood and adjacent areas, that when more development comes we get more services that are easier to access by foot, bicycle, short car trip, or bus. It improves our quality of life and protects farm and forest land."
- "Continue infill efforts and use available underused areas to support more housing."
- "Infill. There is a ton and a half of land in surface parking lots, run-down areas, and sprawling single-level buildings that can be redeveloped."
- "Build up, not out. Build denser housing near transportation hubs (such as bus or MAX stops). Build on currently empty lots, and remove dilapidated buildings to create space to build better housing. Create incentives for builders not to build 'McMansions' that house only one family and waste space for others."

- "Not everyone wants to live in a pod!"
- "Affordable housing in inner areas and better transit in more suburban areas are both needed. Now, what to do about Clark County..."
- "We need to do both. It is very difficult to develop affordable housing, but we need to keep working on that in areas with high quality transit that are close to jobs and other services. We also need to serve people who are living in affordable housing and not well served by transit."
- "Affordable housing residents need transportation options for employment and services. Placement of housing near transit options and providing such options where they do not currently exist, is critical to maintaining equity and quality of life for all."
- "There are two classes of transit riders, those who elect to use transit over using an automobile, and those who don't have any other choice. Focus on the economically disadvantaged; improved transit options will create additional employment opportunities for them. The economically advantaged will always be able to adapt to their transit and multi-modal commuting options."
- "Those individuals that can't afford where they live should consider moving to a new location. The taxpayer shouldn't be forced to pay for the housing or the transportation for 'cost burdened' households. After all, don't we ALL fit into that category?"

Online survey participants were asked to provide their ZIP codes. Fourteen of the 60 responses came from the 97140 ZIP code (Sherwood), while 29 responses came from Portland ZIP codes. All of the responses came from within the tri-county area.

Written comments received via mail and e-mail

We received 140 e-mail messages through the greatestplace@oregonmetro.gov e-mail address that addressed, in some fashion, issues related to the Urban Growth Report. Some comments addressed the need to focus on infrastructure investment in existing communities. Others expressed concern about slowing population growth or whether Metro had accounted for enough employment land to meet the growing needs of the region.

A few comments from some of the e-mail messages include:

- "So many of us are just beginning to understand the enormous value of having farms close to our cities and towns - fostering farmers' markets and getting ourselves healthier. I want you to use our urban and rural reserves to protect farmland, reduce carbon emissions, build efficient infrastructure and support vibrant city centers."
- "We must protect the Urban Growth Boundary and rural reserves for the sake of our quality of life, and because in the era of climate change, we need to promote growth that minimizes the waste of energy and other resources that result from sprawling development and the fuel-burning lifestyles it generates. However, we must also ensure that greater urban density comes with good design and choices. Fortunately, we have enough land available within the UGB to allow that to happen."
- "Wake up! We don't need a Metro Boundary, we need local planning."
- "Please don't expand the urban growth boundary prior to significant attention and improvement in East Portland/Mid-Multnomah County. Outer East Portland suffers from significant underinvestment. Too few parks, too few resources for local transportation, and too little attention to strategic zoning. If Metro decides to urbanize more farmland, this would spread resources more thinly, and would merely add to the inattention Mid-County suffers

from."

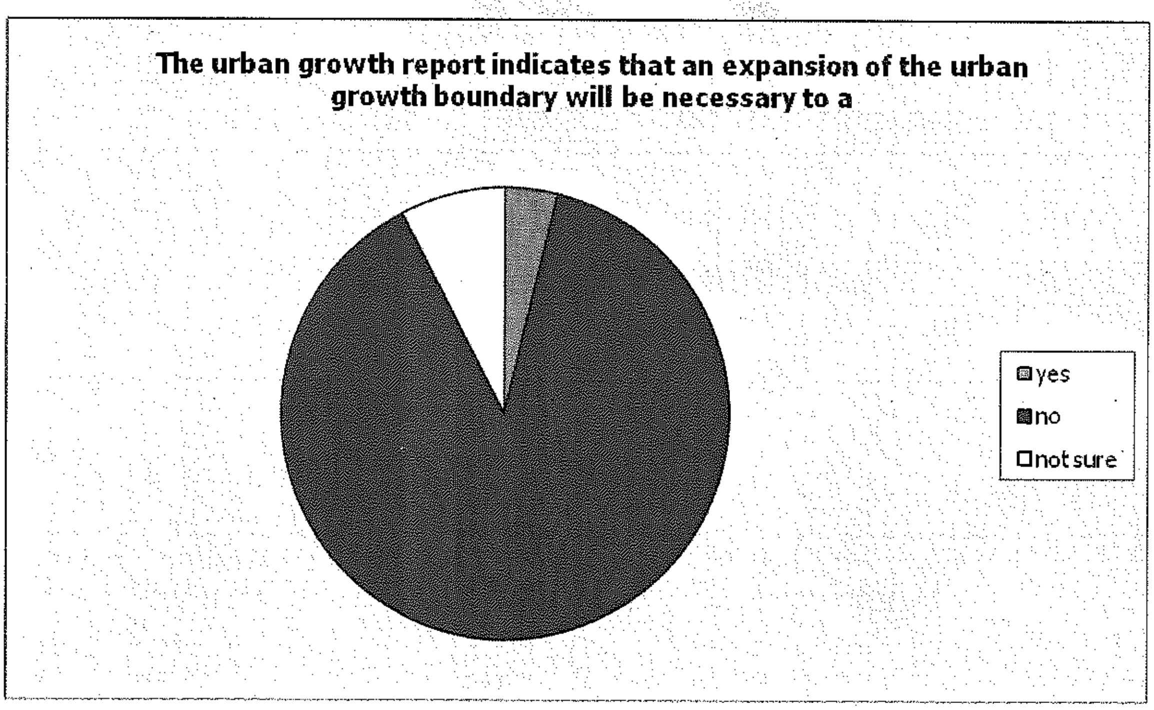
Other than e-mail, 19 additional written comments were received that addressed issues related to the UGR. Most of these comments were submitted to complement oral testimony provided at one or more of the five public hearings held between September 24 and October 15. These comments addressed concerns about the supply of available employment land, a need to consider climate change as a central focus of land use and planning efforts, questions about the assumed refill rate, and a need to better link land use and transportation policy with affordable housing efforts. These comments include written submissions from the cities of Lake Oswego, Tualatin and Wilsonville; business advocacy organizations such as the Portland Business Alliance, Commercial Real Estate Economic Coalition and Westside Economic Alliance; the Port of Portland; Coalition for a Livable Future, AARP and Housing Land Advocates.

Summary: Online survey results

Making the Greatest Place: Urban growth report comment

The urban growth report indicates that an expansion of the urban growth boundary will be necessary to accommodate future housing needs unless local governments take actions to make the most efficient use of existing housing opportunities inside the current urban growth boundary to prevent expansion onto farm and forestland. Local actions could include zoning changes, offering development tax credits or using other tools to encourage development in downtowns and along major streets with high quality transit. Do you believe Metro should expand the urban growth boundary to accommodate future housing needs?

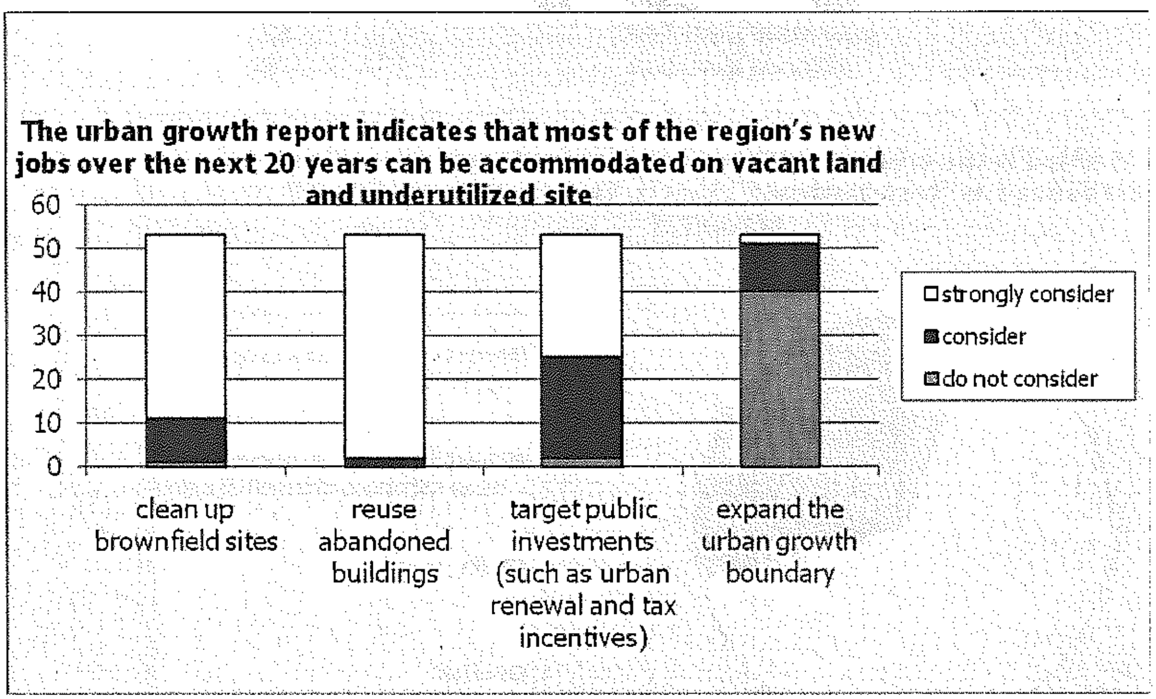
Answer Options	Response Percent	Response Count	
yes	3.8%	2	
no	88.5%	46	
not sure	7.7%	4	
	answered question		**52**
	skipped question		**8**



Making the Greatest Place: Urban growth report comment

The urban growth report indicates that most of the region's new jobs over the next 20 years can be accommodated on vacant land and underutilized sites within the current urban growth boundary through a variety of actions Metro and your local government can take to support more jobs in existing downtowns and employment areas. Rate the following actions that could be considered as part of this strategy.

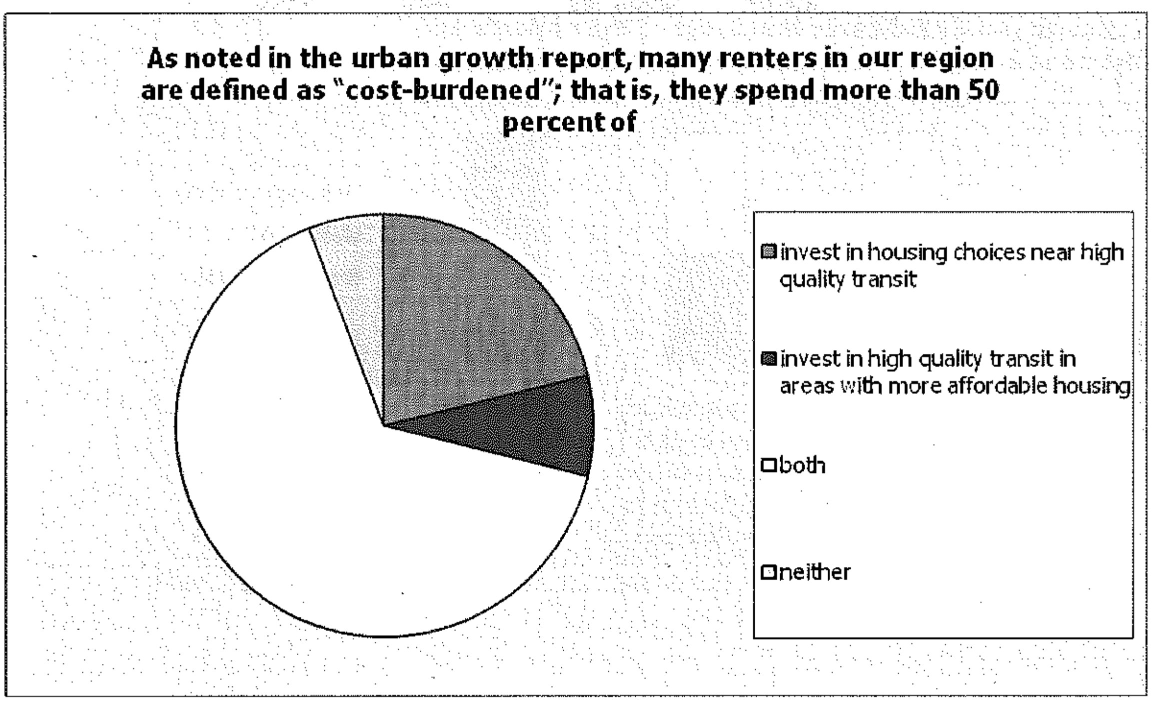
Answer Options	strongly consider	consider	do not consider	Response Count
clean up brownfield sites	42	10	1	53
reuse abandoned buildings	51	2	0	53
target public investments (such as urban renewal and tax incentives)	28	23	2	53
expand the urban growth boundary	2	11	40	53
			answered question	**53**
			skipped question	**7**



Making the Greatest Place: Urban growth report comment

As noted in the urban growth report, many renters in our region are defined as "cost-burdened"; that is, they spend more than 50 percent of their household income on housing and transportation costs. In downtowns and along main streets where housing may be more expensive, renters often rely on transit, walking or biking to keep their living expenses manageable. In some areas where housing is less expensive, renters are often further from their jobs and quality transit service, which increases their transportation costs. Which strategy should Metro and local governments focus on to reduce the number of cost-burdened households in the region?

Answer Options	Response Percent	Response Count	
invest in housing choices near high quality transit	21.2%	11	
invest in high quality transit in areas with more affordable housing	7.7%	4	
both	65.4%	34	
neither	5.8%	3	
	answered question		52
	skipped question		8



General Comments Summary

Thousands of area citizens submitted comments on Chief Operating Officer Michael Jordan's recommendations, "Making the Greatest Place: Strategies for a sustainable and prosperous region." But many who voiced their opinions did not fit neatly into Metro's policy categories (Regional Transportation Plan, Urban Growth Report, urban and rural reserves). Some offered comments on a range of topics, while others were extremely focused in their concerns. Metro received 55 comments like this in the form of letters, emails, or written on the comment cards provided at Metro's open houses.

Of the recorded comments, several were broad comments that took on several pieces of Jordan's recommendations. These included letters from city government representatives, community and business organizations, and regional residents concerned about how the recommendations will affect them. The comments were not only broad in scope, but broad in their variety.

Eight comments considered in this summary were simple e-mails of support and gratitude. In general, the authors of these messages did not go into detail, but commended the Metro Council and staff on all recommendations and offered their support.

Several sent in comments saying they support dense neighborhoods that would allow for the protection of surrounding farmland. But not all were in favor of density. Notably, the Homebuilders Association of Metropolitan Portland said it is impossible to increase density while maintaining the character of existing neighborhoods.

Four comments dealt primarily with transportation, but those four comments offered very different viewpoints. One man railed against Metro's focus on bikes and mass transit, while the Port of Portland submitted rail projects to be added to the Regional Transportation Plan.

We also received two written comments on the Stafford Basin. Both wanted to protect the area from urbanization.

From there, the comments became more focused in their scope. People took on homelessness, affordable housing, historical preservation, childcare, school funding, density, open space and performance measures.

Comment Highlights

Summary goes only so far. Better to let those who wanted to be heard say what they want to say...

"I read with humor and dismay Michael Jordan's comments in relation to this in Sunday's Oregonian. We don't want to be the Pearl. Comments made by Metro continue to indicate how out of touch and unrepresentative our councilors are to its constituents. We are a RURAL community. We want to be what we are, a community with great schools (less than 1% dropout rate); a community with which its citizens can be involved in a plethora of activities that are unique to Sherwood; and a community that is our own. Sherwood has experienced tremendous

growth over the past 20 years, and will continue to do so because people want to live HERE and not in Portland. "

Tom Nelson, Economic Development Manager, City of Sherwood

"We are very concerned that the preliminary results from the model analysis for the performance measures are indicating that our investments and programs are not necessarily better than a no-build alternative. The results for greenhouse gas emissions are particularly troubling. The results show that an additional $23 billion invested in the region and the results are a 49% increase."

Courtney Duke, Senior Transportation Planner, City of Portland

"Specifically, we have reviewd the documents pertaining to this planning effort and are concerned that affordable housing, as a regional issue and policy, is not being addressed."

Ellen Johnson, Chair, Housing Land Advocates

"BMF believes strongly that it is vital for local governments throughout the Portland metropolitan area to make every possible effort to protect and preserve our existing communites. Communities of every shape and size, from the smallest of residential neighborhoods to the busy commercial district of downtown Portland, are the foundation of what makes the Portland area already one of the greatest places to live."

Cathy Galbraith, Executive Director, Bosco-Milligan Foundation

"If Metro is looking at developing the region equitably, I would like to see them work with individual city governments, such as Portland, to ensure that future development serves everyone in the region."

April Burris, Southeast Uplift Neighborhood Coalition

"We believe it is only prudent to err on the side of adding more land to urban reserves than less. This leaves our options as a region open without immediately adding land to the UGB."

Sandra McDonough, President/CEO, Portland Business Alliance

"Currently the so-called new or green economy is eliminating more private sector jobs than it is replacing."

Terry Parker, Portland Resident

"Metro is based on a series of lies. In reality, people do not want infill. People do not want density. Density is not more livable. Transit does not save energy. Transit does not save money. Transit is slow."

Jim Karlock, Portland Resident

"We are concerned with the recommendation for the Stafford Triangle portion of the Stafford Basin. We do not agree with the recommendation to expand urban reserves beyond Clackamas County's recommendation."

Lou Ogden, Mayor, City of Tualatin

"The League supports good governance, wise use of resources—fiscal as well as physical, a stable economy, social policies that promote healthy communities and natural resources policies that promote clean air and water, energy efficiency and protection of significant natural areas."

Elizabeth Pratt, President, The League of Women Voters

"On October 6, the Lake Oswego City Council restated its opposition to making the entire Stafford basin an urban reserve area. The Council envisions a rural/agricultural enclave in the upper Stafford basin consistent with the visions expressed by the cities of Tualatin and West Linn and by Clackamas County. The Lake Oswego City Council believes that if any part of the Stafford basin is included as an urban reserve, its inclusion in the UGB must be contingent upon the concurrent provision of high capacity transit service along the I-5 corridor."

Jack D. Hoffman, Mayor, City of Lake Oswego

"The region needs to commit to specific measureable targets that describe whether policies and investments are succeeding in order to know how aggressive we must be in our actions."

Neil S. McFarlane, Capital Projects Executive Director, Trimet

"However, good aspirations don't translate into marketable solutions, and the need for jobs and economic development in our region, with the accompanying need for housing choice and affordability, need to be provided more weight."

David Nielsen, CEO, Home Builders Association of Metropolitan Portland

"We remain concerned about some critical gaps in the methodology and assumptions. For example, the forecast does not address land supply needs associated with commodity flow forecasts and associated freight facilities. In addition, the assumptions associated with declining capture rate are not well explained and the implications are not adequately discussed in the Recommendation."

Bill Wyatt, Executive Director, Port of Portland

"Metro's analysis feels very much like a "black box" where the analysis is confusing, hidden from view, and massaged to get the desired political results. We particularly feel this way when several councilors are known to have stated publicly that there is no need to expand the UGB well before Metro staff completed their analysis."

Bob LeFeber, Broker, Commercial Realty Advisors

"While AARP applauds Metro's efforts to create a comprehensive set of strategies to create a long-term sustainable and prosperous region, we are concerned by the report's lack of consideration of affordable and accessible housing, as a regional concern and policy."

Gerald Cohen, State Director, AARP

"If the population of Portland grows as expected, the number of children needing safe, high-quality, geographically-accessible and affordable child care is likely to double as well. Currently, in many parts of the Metro area, good child care is hard to find and often financially out of reach for many families - even those with two working parents. This is a key component of sustainability for families who, as employees, are investing in our local economy. "

Andrea Paluso, Family Forward Oregon

"Our understanding is that if Climate Change increases the number of floods and wildland fires, temperatures elsewhere in the U. S., especially in the arid regions of the Southwest, is it possible Climate Change "refugees" might increase population projects even more than your current modeling suggests?"

Mike Houck, Executive Director, Urban Greenspaces Institute

"The group also urges Metro to implement the Integrated Mobility Strategy proposed by the Metro Greenspaces Blue Ribbon Committee – to link the many modes of transportation together into a seamless system. In order to accomplish that, a steady revenue stream needs to be identified that can be used for off-road multi-use paths like the Sullivans Gulch Trail, North Portland Greenway, Fanno Creek Greenway Trail, and Springwater Corridor."

Linda Robinson, Sullivans Gulch Trail Corridor Committee

"Many choose to live in Portland proper and pay the price of a daily two plus hour commute by train or over an hour and a half by car because Hillsboro single person housing is so limited."

Noel Arnold, Hillsboro Resident

"The City's park system still has tremendous funding needs. These needs include parkland acquisition and development in current park deficient areas, trail acquisition and development, and, perhaps most importantly, operations and maintenance funds to keep the system healthy and vital to the region's growing and diversifying population."

Zari Santner, Director, Portland Parks & Recreation

"I would ask you to keep in mind the low-income households in the area who do not own any type of working automobile at all."

Jean DeMaster, Human Solutions

"With global climate change and peak oil, it is our responsibility as a region to develop compact and livable communities."

Debbie Aiona, Portland Resident

"Managing growth is difficult, but more important work does not exist. It impacts everything about our lives, from schools to the air we breathe and the food we can eat. So thanks, keep up the hard work."

Shara Alexander, Resident

"No matter how much attention is given to jobs, if we do not have a viable ecosystem it will not matter."

Dell Goldsmith, Resident

"Who's going to provide new schools for expansions? Our schools are already maxed out."

Anne Hayes, Beavercreek Hamlet

"It appears that floor-to-area ratios remain unchanged for commercial development. It would seem that you would want to look at this as a tool for increased density."

Graham Peterson, Resident

"Our local homeless population is growing faster than local charities and current government efforts can keep up with. We should therefore consider setting aside certain public lands for the purpose of re-establishing local poor farms."

David Regan, Resident

DRAFT Summary: Stakeholder meetings

Following the Sept. 15 release of Metro Chief Operating Officer Michael Jordan's recommendations, "Making the Greatest Place: Strategies for a sustainable and prosperous region," Metro Councilors and staff held 33 meetings with community organizers, local governing bodies and business organizations. These meetings gave members of the community a chance to speak directly to Metro Councilors about the recommendations: what they liked, what they hated, and what they could live with. About 975 people attended these meetings, offering insight on how the recommendations would affect their constituencies.

Overall, Portland area stakeholders supported the Greatest Place goals of reinvesting in existing communities, preserving valuable farmland and open space in the region, and maintaining the urban growth boundary. Many groups, like the Coalition for a Livable Future and the Bicycle Transportation Alliance, shared the vision set forth by the Greatest Place report, but had issue with specific parts of the recommendations. Almost universally, the stakeholders appreciated the amount of effort that Michael Jordan and the Metro staff put into the report, even when they disagreed with their conclusions.

But some stakeholders had serious issues with the recommendations' basic tenets. Most notably, many business leaders worried that the Greatest Place recommendations did little to secure economic prosperity in the region. They said while the report encourages growth within the existing urban growth boundary, it does little to specify how large industrial businesses could relocate to the area, thus providing new jobs for the region's expected influx. Some business leaders accused Metro of trying to limit growth rather than plan for it.

Many also said the Regional Transportation Plan also had some problems. What those problems were depended on who was talking: freight interests saw too much effort being paid to mass transit and bicycle traffic, while bike advocates and environmentalists said the RTP would encourage more single-occupant commuter traffic, which would contribute to congestion and exacerbate global climate change.

There was also a good deal of skepticism about the reserves process. Many are nervous about the amount of protection a rural designation would offer them, or about the actual longevity of the designation. The idea of leaving some lands "undesignated lands" was seen by some as a wishy-washy plan that indicated indecisiveness on the part of Metro staff, but others saw undesignated lands as critical to keeping their options open in the future.

Farmers were particularly vocal about undesignated lands. Many said that if their properties were left undesignated, they would be reluctant to make long term investments in crops or expensive farm equipment. Others did not want Metro to lock them into the agriculture industry for the next forty to fifty years, and advocated for their lands to be left undesignated, with some even saying they wanted their lands to be urban reserves.

In nearly every stakeholder meeting, those in attendance raised questions about how Metro would finance the implementations of the Greatest Place recommendations. People were worried about taxes, fees and tolls, and even those willing to pay higher taxes still found the recommendations overly ambitious. The Multnomah County Board of Commissioners expressed concern that Metro's recommendations leaned too heavily on urban renewal areas, and some members of the Portland Business Alliance said maintaining area roads is not possible without some source of user fees.

Even among those who generally favored the plan there were doubts about Metro's goals, notably its ability to hold itself accountable. Many who only saw the executive summary viewed the "Walk Our Talk" section as lacking substance or structure. They wanted to know specifically how Metro would police itself and what would happen if Metro did not meet its goals.

Metro Councilors and staff still have eight stakeholder engagements scheduled between Oct. 19 and Nov. 10, including meetings with the Washington County Board of Commissioners and 1000 Friends of Oregon.

Stakeholder highlights

The conversations at Metro's stakeholder meetings were often lively and thought-provoking. Here's a rundown of what some area stakeholders said about the Making the Greatest Place recommendations:

"A lot of us in rural communities are really fed up with choo choo trains while seeing our roads go to pot."

Dick Joyce, Joyce Farms, expressing concern that mass transit is getting too much attention. Oregon Association of Nurseries meeting, Sept. 16

"You're leaving gray areas to the future...I'm sure as heck I don't want to come back here when I'm 70 years old to do this process again."

John Coulter, Fisher Farms, on his displeasure with leaving lands "undesignated." Oregon Association of Nurseries meeting, Sept. 16

"To sit here and listen to you say you don't know what the market is, is frightening."

Mark Whitlow, attorney. Commercial Real Estate Economic Coalition meeting, Sept. 17

"They like farming, but they don't really know what it is... If you want farming, you have to allow us to farm. You have to give us the tools."

Theresa Lund, William Dillard Nursery, saying residential support for farming wanes when faced with the realities of the farming industry. Multnomah County Farm Bureau meeting, Sept. 17

"Most of the really bad mistakes we make, we make for all the right reasons."

Jon Egge, MP Plumbing, on governments failing to look at the unintended consequences of their actions. North Clackamas Chamber of Commerce meeting, Sept. 21

"We can't be restricted to fill-in and brown spaces; we need a complete portfolio of options."

Les Davis, Lithtex Printing Solutions, arguing for more employment lands outside the current urban growth boundary. Greater Hillsboro Chamber of Commerce meeting, Sept. 22

"I'm concerned that we're not being bold enough and that this plan doesn't have an economic development strategy as a foundation for it."

Susie Lahsene, Port of Portland. Columbia Corridor Association meeting, Sept. 23

"If nothing happens to I-5, we still need to promote the arterial (road) system to help get freight around."

Linda Moholt, Tualatin Chamber of Commerce, arguing in favor of connecting roads between I-5 and 99w. South Metro Business Alliance meeting, Sept. 23

"We were figuring we had to get this done... When are you figuring your body will weigh in?"

Charlotte Lehan, Clackamas County Commissioner, expressing frustration that the Commission was the only elected body to offer reserve recommendations. Clackamas County Board of Commissioners meeting, Sept. 29

"I find it really exciting, the way Metro is thinking... It's not just about bicycle transportation. It's about what we want as a community and as a state."

Mary Roberts, Bicycle Transportation Alliance, in supporting the recommendations' goal to offer more transportation choices for the region. Bicycle Transportation Alliance meeting, Sept. 29

"I'm pleased that (equity) is one of your six desired outcomes, but what are the metrics relating to equity? How will we know when we get there?"

Sue Marshall, Lake Oswego consultant, wondering how Metro plans to achieve its goal of making equitable communities. Coalition for a Livable Future meeting, Sept. 30

"It seems to me that it's pretty obvious at this point that the big untapped resource is user fees."

Bill Scott, Zipcar, advocating tolls and user fees to help maintain existing roads and build new ones. Portland Business Alliance meeting, Sept. 30

"The focus needs to be first on getting some new business activity."

Dwight Unti, Gresham real estate agent. Gresham Chamber of Commerce meeting, Oct. 7

"So I should hope and pray for urban reserves so at least I have options?"

Jason Montecucco, farmer, worrying that a rural reserve designation would devalue his land if he chose to sell it. Clackamas County Farm Bureau meeting, Oct. 8

"I'm skeptical that any of these designations are finite."

Shawn Cleave, government affairs specialist, expressing doubt that urban and rural reserves will stay designated as such for 50 years. Clackamas County Farm Bureau meeting, Oct. 8

"We have a really worthy goal by the end of this exercise as long as we can address issues such as Multnomah County being able to provide services associated with growth."

Judy Shiprack, Multnomah County Commission, on making sure budgeting for urban services is part of the planning process. Multnomah County Board of Commissioners meeting, Oct. 13

"I haven't seen any analysis that would bolster that argument."

David Jothen, Damascus City Council, challenging the notion that brown field development is cheaper than green field development. East Metro Economic Alliance meeting, Oct. 15

"This is a great process, and I think that what you're trying to do is admirable."

Burton Weast, Portland consultant, praising the Greatest Place recommendations. Clackamas County Business Alliance meeting, Oct. 14

METRO Public Opinion Survey Summary
October 2009

Introduction

The survey was designed to develop valid and statistically reliable information regarding voter attitudes about the quality of life in the region and growth management principles. Six hundred (600) voters in the Metro region were randomly selected and interviewed on the phone between July 31 and August 3, 2009.[1] The complete report presents noteworthy regional and other subgroup variations for all questions.

Voters are optimistic about the direction of the region, and enjoy the quality of life they have.

A majority of voters (58%) think things in the region are headed in the right direction. As found in other surveys for Metro about the quality of life in the region, voters value the environment, landscape, and the types of activities and lifestyles these things provide. They also value the small community feel, access to a variety of activities, and type of people living in the region.

There is widespread support for the region's Urban Growth Boundary (UGB), smart growth, and protecting the region's farmland, natural areas, and standing forests.

The environment is one of the top things that contributes to voters' quality of life in the region, and many communicated they do not want population growth and new development to jeopardize it. Voters strongly support development within the current UGB, including along transportation corridors, building on vacant lots, redeveloping old buildings, and creating higher density neighborhoods (if they have parks, natural areas, and access to convenient shopping and public transit) to preserve farm and forestland.

Voters across the three counties feel similarly about the quality of life they have in the region.

They like the same things (e.g., outdoor recreation opportunities, environmental quality, weather, and people/sense of community). They also have similar concerns (e.g., traffic congestion, public safety, government, employment).

[1] Any sampling of opinions or attitudes is subject to a margin of error, which represents the difference between a sample of a given population and the total population (here, voters in the Metro region). For a sample size of 600, the margin of error would be +/-4.0%.

While there are differences in priorities and the acceptability of planning principles across age, education, and income groups, the starkest demographic differences are by residency type and county.

Multnomah and Washington County voters showed stronger support for the UGB, higher density growth, and alternative modes of transportation than those in Clackamas County. Even so, a majority of Clackamas County voters supported new development to accommodate population growth coming through the redevelopment of land within the current UGB, reusing and revitalizing old buildings and vacant lots in already developed areas resulting in more people and increased activity in those areas, and development of public transit biking and walking as an alternative to the automobile.

Importantly, over the past decade Washington County voters, whose views were once more uniform with those living in Clackamas County, have identified closer to or in many cases almost equally with their counterparts in Multnomah County. Voters with higher levels of education and income levels also showed the most support for the UGB and the planning principles tested. While those ages 18 to 34 had strong support for high density development and public transit infrastructure, they were less likely to have strong opinions about whether or not the UGB is moved.

Voter support for the urban growth boundary and higher density development is dependent on certain things

- Understanding the potential for redevelopment of vacant lots within the UGB and revitalizing old buildings and being assured that this kind of development will precede or be done concurrently with the development of any undeveloped land within the boundary.
- Being assured that new development of any kind is carefully designed and accompanied with parks, natural spaces, easy access to public transit, and is walkable.
- Knowing the location of any new development relative to nearby neighborhoods and the level of increase in population density and activity level; otherwise, voters will assume the worst.
- Understanding that higher density development is a way to conserve farm and forest land and natural spaces, and is an alternative to urban sprawl.

<u>Making the Greatest Place public hearings</u>
MPAC and JPACT member representation

5:15 p.m., Thurs., Sept. 24
Beaverton City Hall
4755 SW Griffith Drive, Beaverton

1. Nathalie Darcy, MPAC
2. Teri Leahan, MPAC
3. Craig Dirksen, JPACT
4. Jef Dalin, JPACT
5. 5. Rick VanBeveren, MPAC

5:15 p.m., Thurs., Oct. 1
Gresham Conference Center, Oregon Trail Room
1333 NW Eastman Parkway, Gresham

1. Craig Dirksen, JPACT
2. Amanda Fritz, MPAC
3. Jim Kight, MPAC
4. Donna Jordan, MPAC/JPACT
5. Shirley Craddick, MPAC

5:15 p.m., Thurs., Oct. 8
Happy Valley City Hall
16000 SE Misty Drive, Happy Valley

1. Craig Dirksen, JPACT
2. Shirley Craddick, MPAC
3. Donna Jordan, MPAC/JPACT

5:15 p.m., Tues., Oct. 13
Clackamas County Public Service Bldg.
2051 Kaen Road, Oregon City

1. Jody Carson, MPAC
2. Craig Dirksen, JPACT
3. Ann Lininger, JPACT
4. Wilda Parks, MPAC
5. Lynn Peterson, JPACT
6. Jef Dalin, JPACT
7. Charlotte Lehan

5:15 p.m., Thurs., Oct. 15
Metro Regional Center, Council Chamber
600 NE Grand Avenue, Portland

1. Matt Berkow, MPAC
2. Nathalie Darcy, MPAC
3. Craig Dirksen, JPACT
4. Dennis Doyle, MPAC
5. Wilda Parks, MPAC
6. Jef Dalin, JPACT

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Portland, OR 97232-2736
503-797-1700
503-797-1804 TDD
503-797-1797 fax

www.oregonmetro.gov

Metro | *Memo*

Date: October 26, 2009

To: MPAC

From: Malu Wilkinson, UGR Project Manager

Re: Proposed amendment to the 2009 Urban Growth Report: range of large lot need

---

Policy context

At the October 23, 2009 MPAC retreat, members of MPAC expressed support for the Draft Urban Growth Report's (UGR) analysis and its conclusions regarding the region's capacity to accommodate residential, non-industrial, and general industrial growth. However, members of MPAC requested that Metro staff balance the UGR's forecast-based, technical assessment of the region's large lot employment need with a policy perspective. This additional policy perspective is intended to further acknowledge the following:

- The inherent uncertainty of forecasting employment in large, traded-sector firms, which may consider several cities, regions, states or countries when choosing a site. The range of large lots that will be needed over the next 20 years will be the product of a number of factors that are impossible to forecast, including:
  - Decisions of individual firms that participate in a global marketplace
  - The political will of cities, the region, and the State (both here and in other regions) to implement economic development strategies
- The need to have flexibility in the region's plans to attract and retain potential traded-sector employment growth
- Cities in the region are required to complete Economic Opportunity Analyses (EOA) under Statewide Land Use Planning Goal 9. The City of Hillsboro recently completed such an analysis in cooperation with the cities of Forest Grove, Cornelius, North Plains and Banks. The City of Hillsboro has also indicated it has received a number of inquiries from traded-sector firms seeking large sites. To meet its economic development goals, the City of Hillsboro has identified a need for an additional five to seven lots of at least 50 acres over the next 20 years. While Metro cannot take all of the local analyses and add them up to determine a regional need, the City of Hillsboro's recent work can serve as a proxy to support considering a wider range of large lot demand over the next 20 years.
- Rail and marine freight uses are critical to the health of the region's economy. These freight terminal uses can require relatively large areas of land, but do not necessarily require high employment densities. Consequently, their needs may not be adequately accounted for in the UGR using an employment forecast.

This proposed amendment is consistent with the guidance offered by Oregon Administrative Rule 660-024-0040, which states that: *"the 20-year need determinations are estimates which, although based on the best available information and methodologies, should not be held to an unreasonably high level of precision."*

Proposed amendment to the UGR

Metro staff proposes that the final UGR should recognize the policy benefits of considering a wider range of potential large lot demand for employment purposes. The proposed amendment would also acknowledge the limits of further technical analysis in conclusively quantifying the extent of this demand. It is proposed that the large lot analysis portion of the UGR show a gap in the region's large lot supply of between 200 to 1,500 acres (this would revise the Draft UGR, which showed a gap of 200 to 800 acres).

Next steps

The proposed widening of the UGR's range for large lot need does not indicate a decision to choose either the low or the high end of the range, or a conclusion on whether the gap will be filled through urban growth boundary expansions or actions that provide large lots within the current UGB.

The widened range provides more flexibility for the MPAC Employment Subcommittee to discuss policy options for addressing the region's need for large lots. During 2010, MPAC and the Metro Council will also continue a dialogue about where in the region additional large lot capacity may be needed or desired and the policy options that are available to close the gap. Such options include, but are not limited to: assembly of tax lots, brownfield cleanup, regulations to protect industrial areas, investments in infrastructure, and a "fast-track UGB" expansion process that responds to verified opportunities to attract traded-sector firms.

In 2010, MPAC and the Metro Council will identify which combination of actions (increased investments and efforts inside the UGB or potential UGB expansions) best supports the six outcomes that define a successful region. The Metro Council will consider that decision by ordinance at the end of 2010.

October 27, 2009

Michael Jordan
Chief Operating Office
Metro
600 NE Grand Ave
Portland, OR 97232

RE: Proposed Amendments Resolution No. 09-xxxx - For the Purpose of Accepting the Population and Employment Forecasts and the Urban Growth Report as Support for Determination of Capacity of the Urban Growth Boundary.

Dear Mr. Jordan:

Our simple request is to considerably expand the range of population and employment forecast as part of the Urban Growth Report process. Please have your staff prepare an amendment(s) for consideration by MPAC and the Metro Council.

Given the staff proposal involves consideration of a range of forecasts for population and employment needs determination, expanding the range for both population and employment will remain constant with the prevailing Metro approach.

Expansion of the needs range in the proposed Resolution will allow Metro to meet its state law requirement to determine need by December, 2009. More significantly, it will allow MPAC and Metro, additional time to more carefully review the Urban Growth Reports and its various assumptions.

Metro has heard from numerous reviewers that 30 days to review 1700 pages is simply too little time. The same is true for MPAC and certainly the local governments of Washington County. Expansion of the need ranges will allow all to legitimately continue the review into year 2010.

I have previously requested from Mr. Andy Cotugno additional analysis and information on a number of Urban Growth Report matters. Apparently the extremely short amount of time has not allowed Mr. Cotugno to prepare such requested analyses and certainly did not provide MPAC or the local governments of Washington County time to fully discuss such analyses or consider alternatives to the myriad of critical technical/policy assumptions with the Urban Growth Report.

We remain extremely concerned about the background and content within the Urban Growth Report regarding, for instance, the following issues:

Department of Land Use & Transportation • Long Range Planning Division
155 N. First Avenue, Suite 350-14, Hillsboro, OR 97124-3072
Phone: (503) 846-3519 • Fax: (503) 846-4412

1. Existing Zoned Capacity
2. Capture Rate
3. Refill Rate
4. Average dwelling unit density for additions to the UGB
5. UGR Industrial Trends vs. Local Government EDA results
6. Large Industrial Lots issue

Thank you for your assistance.

Sincerely,

Tom Brian
Chairman
Washington County Board of Commissioners
MPAC Chairman

Jerry Willey
Mayor of Hillsboro
MPAC Representative

Denny Doyle
Mayor of Beaverton
MPAC Representative

Keith Mays
Mayor of Sherwood
MPAC Representative

c: Andy Cotugno

CITY OF

PORTLAND, OREGON

Sam Adams, Mayor
Nick Fish, Commissioner
Amanda Fritz, Commissioner
Randy Leonard, Commissioner
Dan Saltzman, Commissioner

10/28/09

City of Portland Proposed Amendments
DRAFT Resolution NO. 09-XXXX

From Mayor Sam Adams and Commissioner Amanda Fritz

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ACCEPTING THE POPULATION AND EMPLOYMENT FORECASTS AND THE URBAN GROWTH REPORT AS SUPPORT FOR DETERMINATION OF CAPACITY OF THE URBAN GROWTH BOUNDARY

Add:

"WHEREAS, state law requires Metro to provide capacity to encourage the availability of dwelling units at price ranges and rent levels commensurate with the financial capabilities of households expected over the planning period; and

"WHEREAS, Metro published a Housing Needs Analysis that showed the effects on housing affordability of forecast growth under existing policies and investment levels; and

Amend:

"2. The Council accepts the "Urban Growth Report 2009-2030", dated December __, 2009, **with its Housing Needs Analysis,** attached and incorporated in this resolution as Exhibit B, as a bases for analysis of need for capacity in the UGB to accommodate growth to the year 2030 and for actions the Council will take to add housing and employment capacity by ordinance in 2010, pursuant to ORS 197.296(6) and statewide planning Goals 14 **and 10**.

Rationale:

MPAC has had considerable discussion about regional equity and affordable housing. By referencing the regional Housing Needs Analysis in the resolution, the Metro Council will expressly acknowledge that the evidence-based analysis on equity and housing is important and that the implications of its findings must be addressed. The analysis indicated, without policy or investment intervention, the number of cost-burdened households is likely to double over the next 20 years. The analysis uses a new method that includes transportation costs to determine cost-burdened households. Significant findings about geographic equity and cost-burdened household distributions will be affected by policy and investment choices by regional decision makers. The region's policy and investment choices in transportation and transit can influence both the equity and region's share of cost burdened households - and can play an important role in reducing the share of households in the region spending more than 50% of income on housing and transportation combined compared to 2000. (See Metro Memo dated 10/7/09 from Malu Wilkerson to MPAC, p. 3, Question # 5. Equity ...)

POLICY REPORT

Achieving Sustainable, Compact Development in the Portland Metropolitan Area: New Tools and Approaches for Developing Centers and Corridors

PREPARED BY

The Institute of Portland Metropolitan Studies
Portland State University

NOVEMBER, 2009

Cover Photo taken from Hollywood Vision Plan, 2000, http://www.sustainableportland.org/bps/index.cfm?a=116067&c=41664

This report has been prepared by the Institute of Portland Metropolitan Studies based on the deliberations of a group of Portland area experts in real estate development and finance, known for this purpose as the Expert Advisory Group on Developing Centers and Corridors, convened in July through October of 2009.

Expert Advisory Group on Developing Centers and Corridors

Convener/Facilitator:

Gil Kelley, Senior Research Fellow, Institute for Portland Metropolitan Studies*

Expert Advisory Group Members:

Dennis Wilde, Principal, Gerding-Edlin Development; Residential, Commercial and Institutional Developers

Vern Rifer, Principal, Vernon L. Rifer Real Estate Development Inc.; Residential and Commercial Developers

Jerry Johnson, Principal, Johnson/Gardner; Economists and Real Estate Development Experts

Kate Allen, Housing Policy Manager; City of Portland, Office of Commissioner Fish

Matthew Stanley, Senior Relations Officer; Umpqua Bank

Mark New, New & Neville; Real Estate Appraisers

Abe Farkas, Principal, ECO Northwest, Economic and Planning Consultants

Kevin Cavenaugh, Principal, Cavenaugh & Cavenaugh, LLC & Ten-Pod Development, Architects & Developers

Jim Irvine, Principal, The Conifer Group; Residential Developers

Dave Leland, Principal, Leland Consulting; Planning and Development Consultants

Steve Burdick, Principal, Killian Pacific; Residential Developers

Beverly Bookin, Principal, The Bookin Group; Urban Planning Consultants

Don Hanson, Principal, OTAK; Land Planners and Development Consultants

Ed McNamara, Principal, Turtle Island Development; Residential Developer

John Southgate, Development Director, City of Hillsboro

Alice Rouyer, Redevelopment Director, City of Gresham,

Ron Bunch, Community Development Director, City of Tigard

Michael Mehaffy, Principal, Structura Naturalis Inc.; Planners and Development Consultants

John Spencer, Principal, Spencer and Kupper; Planners and Development Consultants

* Mr. Kelley is the former Director of Planning for the City of Portland. He served as project lead for this effort and is the principal author of this report. Dr. Sheila Martin, IMS Director, and Elizabeth Mylott, Research Assistant also contributed to this study. IMS wishes to thank the staff of Metro for their participation and support, particularly Robin McArthur, Andy Shaw, Chris Deffebach, Megan Gibb and Beth Cohen.

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November 12, 2009

Mr. Michael Jordan
Chief Operating Officer
Metro
600 NE Grand Avenue
Portland, OR 97232

Dear Mr. Jordan:

We are pleased to transmit the findings and conclusions of the Expert Advisory Group on Developing Centers and Corridors. This group was convened by the Institute for Portland Metropolitan Studies at the request of Metro and was charged with investigating the barriers to compact, mixed use development in the metropolitan area, with a particular focus on centers and corridors. The group met several times over the summer and enthusiastically offers a perspective on the current and long-term challenges to development, a set of overall recommendations on enhancing the investment environment, and a proposed Action Plan for increasing public and private investment in centers and corridors.

We have written up their findings and recommendations in this report and would be happy to present this report, with the assistance of members of the Expert Advisory Group (EAG), to the Metro Policy Advisory Committee and to Metro Council. The EAG and some of the regular observers of the group's proceedings (primarily local elected officials) have also expressed an interest in presenting these findings to local city councils and planning commissions.

Please let us know how we can help you present and further the work that has begun here.

Sincerely,

Sheila Martin, PhD
Director

Gil Kelley,
Senior Research Fellow

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This report presents the findings of a group of public and private real estate development experts that investigated the tools and strategies that will be needed to get us from here ....

Photos taken from Metro's image library

... to here. As you will read, simply hoping the economy will rebound won't be sufficient.

Executive Summary

This report represents the work of a group of local public, private and institutional experts in real estate development and finance convened by the Institute of Portland Metropolitan Studies at Portland State University. This was done at the request of Metro, which wanted outside expert advice on ways to achieve more robust development of centers and corridors in the Portland metropolitan area, an important aspect of implementing the 2040 Growth Concept. Although the expert advisory group (EAG) enthusiastically took on this task, it wanted to first back up a step and deliberate over whether and to what extent center and corridor-based development was indicated by long term trends and what larger implications this might have for both the local real estate development industry and for regional governance. In other words, rather than to simply offer a list of new micro strategies, the EAG wanted to preface its advice with an opinion about the magnitude of shifts that may now be occurring in the marketplace and extend its advice into the realm of governance, particularly with regard to what they see as a more sustainable and effective framework for public-private-institutional collaboration for managing growth and building desirable communities. The background and purpose of the EAG work is further explained in Chapter 1.

The group's principal findings and conclusions, explained in Chapter 2, are that:

A. Compact mixed-use development is highly indicated by major trends.
The direct and indirect costs (including environmental costs) of low-density, sprawled development are becoming much greater and will be very difficult to sustain. This trend will likely continue and escalate as the true costs of energy and carbon are "priced in" to the development equation. Demographic changes and consumer interests are shifting demand toward more compact development forms. The current credit situation is unlike anything the U.S. has experienced in many decades. This condition will likely last several years and the credit market will likely not return to the way it was. The current level of public investment in compact urban development is not sufficient to address escalating costs of development. There will be a need for recalibration of the ratio of public to private investment in compact urban development, at least in the near to medium term, and this may differ from place to place.

B. The Portland metropolitan area will need to overcome present obstacles and create new mechanisms to encourage the development of centers and corridors that is needed to accommodate increased demand.
The variety of financial, regulatory and design challenges to center and corridor development require new, more innovative approaches, including enhanced public-private-institutional cooperation. Given the scarcity of resources in the public sector there is a need to both prioritize investments and consider ways to enhance resources for investment. Improving certainty and reducing transaction costs in local development deals (including permitting) will be needed if infill supply is to be accessible. Good design will be critical in gaining and sustaining public acceptance and building the kind of communities that we want. Many of these changes will not be possible unless the region develops a focused and sustained collaboration between public, private, non-profit and institutional sectors to deliver on the promise of a new way of building our communities.

The EAG advocates an "action plan" in Chapter 3, a set of strategies that should be employed to encourage more robust development in centers and corridors, including:

1. Establish a structure for on-going cross-sector structure collaboration and learning, including a task force composed of public, private, non-profit, professional association and institutional interest and a University of 2040-type educational structure. Teams from the Expert Advisory Group will also engage in an early outreach and education effort about the findings of this report.

2. Develop a diagnostic tool for assessing the health of individual centers and corridors that can determine the relative strengths and weaknesses of various components in locally specific ways. A diagnostic tool would address vision, orientation and commitment to the private sector, available resources and the physical and market conditions in the area. Local jurisdictions may need to realign internal structures and protocols to address significant barriers that often stand in the way of facilitating compact development.

3. Develop a Public-Private "Development Toolkit", including a set of center and corridor design prototypes, a checklist for initial assessment of potential public-private investments (development partnerships) for local governments, a public-private Development Handbook and continue to enhance pilot programs and demonstration projects. Conducting an assessment of the use of more traditional tools already in use in some jurisdictions will help provide a better understanding of their applicability to other centers and corridors.

4. Develop a new approach to gap financing. Lenders are unwilling to assume any construction or stabilization risk until their problem assets are resolved. Assemblage of land is a barrier of entry for development projects in smaller communities. Underwriting and construction loan management could be outsourced to commercial lenders with a core competency in construction lending. Interest rate risk would be mitigated with an appropriate hedge. Commercial banks are reluctant, unwilling, or unable to portfolio residential condominium loans while condominium projects achieve stabilization. Local governments could make up for this lack of available financing through providing a variety of levels of support including providing credit enhancements (e.g. third party guarantees, letters of credit, etc.) to lenders of development projects.

5. Create a new mechanism for metropolitan infrastructure investments that will support compact mixed-use development. Although further details of such a mechanism will need to be further investigated, it could be governed by the following characteristics: flexible funding source, strategic allocation not "dividing the spoils" allocation, emphasis on leveraging public and private dollars and key outcomes, constant over a long period of time.

6. Advocate for legislative changes and position the region for federal and foundation funding. State law should be amended to allow local governments in the Metro region the voluntary option of whether to adopt geographically limited discretionary review for certain large, high impact developments in town centers and corridors designated in the 2040 Growth Concept. Another issue that needs to be addressed by the legislature is enhancing local authority for public infrastructure financing. State limitations on local taxes for infrastructure funding that will be necessary to build/rebuild centers and corridors should be removed. The region should also make efforts to position itself for federal support within the emerging "placed-based" funding emphasis of key federal departments and programs.

It is important to note that the EAG believes that developing these strategies further should be accompanied by an assessment of the readiness of all designated corridors and centers to fulfill 2040 aspirations, even with new tools and strategies. The EAG believes that not all centers and corridors can be expected to develop as envisioned in the 2040 Growth Concept, at least not within the expected time frame and perhaps, not as robustly. In order to accommodate this reality, the EAG feels that there ought to be flexibility within the regional planning process to designate new centers, including some at or near the edge and to possibly change the designation of some existing centers.

This report was developed by the EAG with the primary focus of encouraging center and corridor development in both the long and short term. The group recognized that Metro, and its regional partners, are currently engaged in decision-making about the urban growth boundary and designating urban rural reserves and further recognized that these decisions are governed by state law and have their own processes and will be governed by adopted regional criteria. While the group expressed the hope that Urban Growth Boundary and Urban Reserves decisions be strategic in light of the larger forces illuminated in this report, the information presented in this report is intended to focus on current and future challenges to successful center and corridor development.

Most importantly, the group recommends that implementation of these new efforts not simply be left to Metro to initiate or deliver on its own. Instead, these strategies should be fleshed out, added to and implemented by a new or reinvigorated collaboration between public and private interests, including community and institutional interests. In this construct, Metro would retain and even enhance its leadership role but would be able to engage the kind of cross-sector collaboration that will be needed to lead desired and necessary change in a positive way. Without this and without prioritizing this as an early action, the EAG believes that limited initiatives can be accomplished but the overall effort required will not be able to be sustained, nor its full potential realized. The need for a collaborative regional strategy is more fully explained in Chapters 3 and 4.

The EAG members thank Metro for the opportunity to offer candid and thoughtful advice and stand ready to help in continued work to build “the greatest place”.

Chapter 1

Purpose and Background

Background

The Portland area's regional government, Metro, has broad authority to plan for the future of the metropolitan area, particularly for the urbanized areas of Clackamas, Multnomah and Washington counties that include and surround the city of Portland.[1] Metro's work in this regard is guided by a long-term regional growth management plan, the 2040 Growth Concept, first adopted in 1995, that carries out the mandates of Oregon's land use planning law and establishes a vision for the region.[2] Metro's role has largely been to set development policy and to rely on the private sector and local jurisdictions to implement 2040 Growth Concept. However, Metro has also been involved in implementation of the long range plan in two significant ways: allocating regional transportation funds to local jurisdictions for construction of a variety of road, transit, bicycle and pedestrian projects; and acquiring permanent open space though voter-approved public bonds.[3] Although Metro has independent taxing authority, it has used this power very sparingly.[4]

Since its inception fifteen years ago, the 2040 Growth Concept has posited compact, mixed-use, transit-oriented development as a central element of shaping regional growth patterns, limiting sprawl and creating livable communities. The primary locations for accommodating this kind of urban form are in areas known as *centers* and *corridors*, so designated in the 2040 Growth Concept. Directing growth into centers, corridors, and employment areas as designated in the 2040 Growth Concept has been the region's overarching strategy to preserving farms, forests and natural areas outside the boundary and protecting single-family neighborhoods within existing communities. Specifically, the region has agreed that encouraging compact development can help to address climate change, ensure equity, create jobs, and protect the region's quality of life. The centers and corridors recently inventoried for Metro's study on center and corridor performance (which did not account for the entirety of 2040 designated corridors) comprise about 12 percent of the land area within the urban growth boundary but attract about 22 percent, almost double, of the total development activity inside the three-county area.[5] In 2002, Metro voters, upon referral by the Metro Council, committed to retain the low-density character of existing single family neighborhoods currently within the urban growth boundary – designated as single family

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[1] The UGB was first established by Metro in 1979 and approved by Land Conservation and Development the following year. Since then, the boundary has been expanded a total of 186 times. However, only 3 expansions have been of significant acreage (over 1000 acres), with the biggest addition in 2002 with over 18,000 acres. From 1998-2008, the percent of total residential permits for the three-county region that occurred inside the UGB is 89 percent versus 11 percent outside the UGB [Draft 2009-2030 Urban Growth Report, Residential Analysis].

[2] Oregon Senate Bill 100, passed in 1973, created the Department of Land Conservation and Development (DLCD) and the Land Conservation and Development Commission (LCDC), which developed 19 statewide land use planning goals. Metro's own long-range growth management plan, the 2040 Growth Concept was first adopted by the Metro Council in 1995.

[3] The Regional Flexible Fund process, through which federal funds are allocated to transportation projects, occurs every two years and is documented in the Metropolitan Transportation Improvement Plan (MTIP). The amount allocated for Regional Flexible Funds in the 2012-2013 cycle was $67,799,741. Metro has also issued two bond measures for open space. Voters approved the $135.6 million 1995 open space bond measure to protect over 8,130 acres of natural areas and 74 miles of river frontage. Voters also approved the $227.4 million 2006 natural areas bond measure, which has already protected over 800 acres of natural habitat.

[4] The Metro charter gives Metro authority to ask for voter approval for broad-based revenue sources such as a property tax, sales tax or income tax. Metro's only property tax levy for operations is dedicated to the Oregon Zoo. The charter also grants the council authority to adopt taxes of limited applicability without a vote of the people, but only after review by a citizen tax study committee. The only niche tax currently levied by Metro is an excise tax on Metro's goods and services.

[5] According to building permit data from 2000-2007 that was recently analyzed for a Metro study on center and corridor performance. The centers used in the study include all regional and town centers, but only 70 corridors were analyzed for the study. There are many more 2040 corridors in the region than the 70 studied.

residential neighborhoods outside of regional and town centers.[6] Other areas include employment and industrial areas that could also see substantial investment and re-development. The basic spatial diagram of the 2040 Growth Concept is shown in Figure 1.

As part of its strategies to manage growth, address climate and equity concerns, protect quality of life, and promote job creation, Metro has made a number of efforts in the last five years to encourage compact center and corridor-based development. These efforts include conducting public and leadership education, convening development forums and assisting pilot projects with gap financing and technical assistance. However, although centers and corridors in the metro area have been emerging and developing, they have not done so as quickly or as robustly as hoped. Centers and corridors in the region have the potential to be more successful than they have demonstrated so far. Most local jurisdictions have come to embrace the 2040 aspirations by zoning for more mixed-use capacity and, in some cases, creating urban renewal districts to spur local development. Many centers and corridors have also seen substantial transportation improvements in the last 15 years, including provision of light rail transit. However, in most cases, this transit investment alone has not provided a sufficient basis for aggressive private investment in nearby development. In order to ensure existing urban areas can accommodate future growth and achieve sufficient capacity for households and jobs, additional, more innovative tools will be needed to encourage private investment in centers and corridors.

Metro is currently shifting its focus and energy towards implementing the 2040 Growth Concept. A focus on implementation will be crucial to support the Making the Greatest Place initiative, the region's new, integrated approach to guiding growth and development that responds to new market, financial, social, and environmental challenges. Metro is placing emphasis on the creation of new tools and approaches designed to achieve key outcomes agreed upon by the region, such as vibrant communities, economic prosperity, and leadership on climate, within the overall 2040 Growth Concept policy framework.

Metro's request of IMS

In June, 2009, Metro asked the Institute of Portland Metropolitan Studies at Portland State University (IMS) to convene experts in real estate development and finance to identify obstacles and recommend possible strategies for enhancing the state of center and corridor development. The subsequent recommendations will be presented to Metro's Chief Operating Officer and to the Metro Policy Advisory Committee and Metro Council. It is hoped that these findings and recommendations will become part of the Making the Greatest Place policy discussions and deliberations Metro is conducting over the year with constituent jurisdictions, the general public and a variety of stakeholders on the future shape of the region, leading up to an important set of decisions that Metro will make later this year and in 2010. These decisions involve: whether, where and how to expand the urban growth boundary; where and how to designate urban and rural reserves; how to prioritize and perhaps enhance infrastructure funding within the region; whether and how to change metro-level development policies for constituent jurisdictions; and how to best foster public-private partnerships at multiple levels for implementation of the 2040 Growth Concept. Local jurisdictions will also be developing and refining aspirations and mechanisms for development of centers and corridors for which they may find these recommendations useful.

[6] In 2002, the Metro Council referred Measure 26-29 to voters which amended the Metro charter to, prohibit Metro from requiring increased density in existing single-family neighborhoods. The measure passed.

From July through September, 2009 IMS convened a group of public and private development and finance experts from around the Portland metropolitan area. That group, known for this purpose as the Expert Advisory Group on Developing Centers and Corridors (EAG), was composed of developers, lenders, planners, development consultants, appraisers, brokers, public sector development officials and public infrastructure providers. The group met several times at Portland State University over the summer and engaged in an active on-line discussion as well. Sub-group meetings on finance and on design and regulation augmented the large group meetings.

The EAG considered the following questions:

- Are market, financing and other trends pointing to compact, mixed-use development or not?
- If so, are there specific obstacles to this type of development in the Portland metropolitan area that should be removed?
- What actions might be taken to improve the investment environment for center and corridor development, and by whom?

Based on the EAG deliberations over these questions, IMS has prepared this report, which sets forth a number of findings and conclusions about compact, mixed-use development in centers and corridors. Also included is a six-point action plan recommended by the EAG. The action plan is aimed at developing new strategies and tools that would encourage and accelerate the development of centers and corridors in the metropolitan area over the next ten to twenty years.

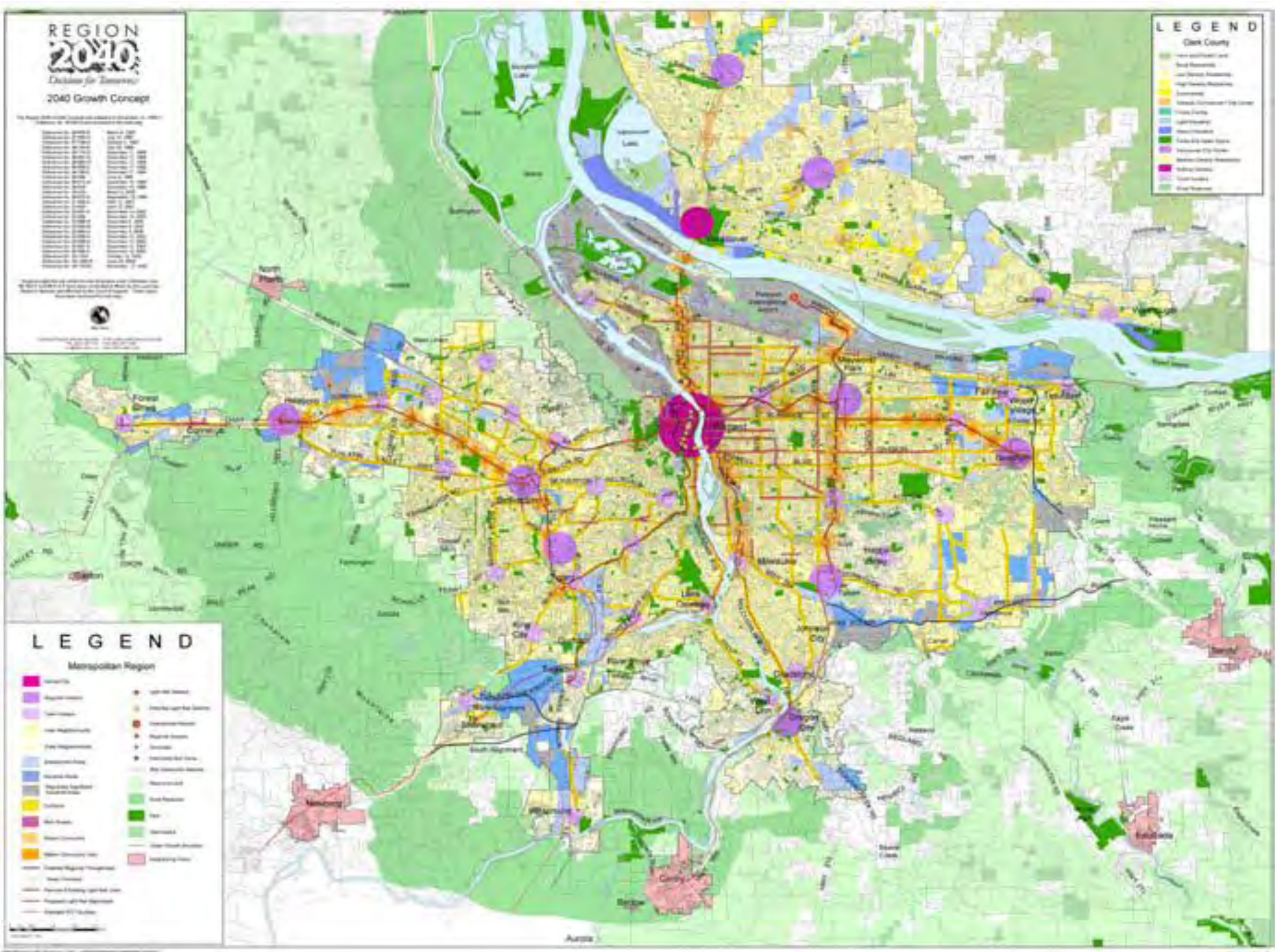
The action plan makes the following recommendations, which are described in more detail in chapter 3:

A. Establish a structure for on-going cross-sector collaboration and learning
B. Develop a diagnostic tool for assessing the health of individual centers and corridors
C. Develop a public-private development toolkit to facilitate appropriate development
D. Develop a new approach to gap financing
E. Create a new mechanism for metropolitan infrastructure investments that will support compact mixed use development
F. Advocate for legislative changes and position the region for federal and foundation funding

The reader will note that the EAG's findings and recommendations are dramatic; they suggest an ambitious agenda and recommend a new kind of cross-sector collaboration to implement this agenda. Expanding the discussion of these objectives to leaders in the government, private, non-profit and community sectors is paramount in the group's recommendations, as is creating an ongoing, collaborative forum for continued work and education. In writing this report IMS has attempted to state the conclusions and recommendations in the voice of the EAG itself.

The members of the EAG have expressed an interest and desire to stay involved in some way as these recommendations are shared and acted upon by Metro, local governments and other groups and organizations throughout the metropolitan area.

Figure 1 - 2040 Growth Concept



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Chapter 2

Findings and Conclusions

The shape of future development in the Portland area will be the result of several factors, some under our control and some not. These external and internal factors were identified as an important context for subsequent findings and recommendations on center and corridor development. Important external factors, climate change, increasing energy and resource costs, demographic and consumer preference shifts, infrastructure delivery deficiencies and financial/credit changes, will require us to rethink or intensify key policies and strategies that we now use. These factors represent major trends that are already beginning to evidence themselves here and elsewhere and will intensify greatly over the next several years and decades. Our ability to respond to them will have much to do with whether Portland remains a desirable place to live and a competitive place to do business. Because these factors are so large and change-inducing we have taken some effort to describe their magnitude in the next section.

There is also a crucial set of internal factors that must be re-aligned to make the most of an adaptive, creative and ultimately successful urban development strategy for the Portland metropolitan area in light of the external drivers. These factors include:

- Developing a set development templates that will work for retrofitting the area's centers and corridors within market and financial constraints;
- Building the capacity of the local development community to create value in new ways;
- Greatly enhancing public-private-institutional collaboration for both investing and learning;
- Educating local officials, planners and citizen/interest groups about the value of new development models and collaboration; and
- Developing new tools and processes for local development and development review.

These challenges and opportunities are enumerated in this chapter; recommended actions follow in the next chapter.

Challenges and Opportunities Ahead

We are entering a time of great change in urban development in the United States; this is a watershed moment in which the national economy is being reshaped and in which our patterns of urban development will also be reshaped. Global economic and environmental forces mean that the next decade will likely produce shifts in thinking and investment that may be as transformative as those in the decade following the Second World War. That decade, and the policies and investments that began in it, have largely shaped the pattern of development we live in today. The GI Bill, the mortgage interest deduction (initially limited to single family home ownership), the building of the modern highway system, the shutdown of inner city rail/streetcar systems, the availability of cheap land at the city edges, cheap fuel and energy and the re-orientation of consumer interests and the residential building industry to the expanding suburbs combined to spawn a new pattern of cities in the U.S. The post-war American city, outside of its pre-war core, is typically sprawling, automobile-dependent, socially segregated, monolithic in character, energy consuming, multi-jurisdictional and fiscally strained.

Sixty years on, the "post-war" way of building cities and communities has become no longer sustainable and may not even be desirable to consumers. Energy costs are rising, the level of carbon emissions as they relate to global warming has become a defining issue, over-extended private lending is contracting and the gap between public resources and demands for public service and infrastructure continues to widen. At the same time, demographic changes in our population and changing consumer interests are pointing to a new demand for more urban, walkable environments with a variety of housing types and services nearby. The post-war building era is rapidly closing – it may even have closed already, with the recent collapse of the financial and credit markets. In the coming decades our cities and our national economy will be challenged to find new ways of organizing a more sustainable pattern of development. This will certainly involve finding good ways of filling in and redeveloping already "urbanized" areas – both urban and suburban - that can be transformed to create the kind of neighborhoods and communities that include elements of livability and vitality that are now being demanded by an increasing number of Americans.

The Portland metropolitan area may have an advantage over most American metropolitan areas, a running start in meeting these new challenges. This is because we have been very intentional about our development over the last several decades, making deliberate efforts to provide a level of "livability" and land conservation that are not typical of the post-war American city. Although the application of this intentionality has been uneven and the subject of continued local and regional debate, it has produced two advantages that the region may now build upon: a pattern of investments in physical development that has begun to anticipate the challenges of maintaining livability, sustainability, prosperity and equity in the "post-carbon era"; and, perhaps more importantly, a "civic infrastructure" that promotes collaboration among government, business, institutions and public interests in shaping our communities. This collaboration has encouraged innovation and promoted cost-sharing. We can use these building blocks (our "DNA") to continue to develop our region and our communities in ways that are healthy, vital and sustainable while maintaining our sense of place and special identity, even as the metropolitan area (seven-county) grows by one million more people over the next 30 years.[7]

However, we should not assume that this potential for success will be realized on its own. It will not occur as a result of simply continuing current policies and practices, nor even by making incremental adjustments to them. Instead, we must again take stock of the situation, be very intentional in our efforts and bold in our thinking. We urge the Portland metropolitan region's policy-makers, developers, lenders, planners, architects and community leaders to understand the magnitude of the shifts occurring in the present pause in market activity and to think creatively and act deliberately. What will be demanded as the market recovers is nothing short of a new paradigm in investment, one where compact, mixed-use and sustainable development is the norm, rather than the exception or the "leading edge" as it is now, and one where public-private-institutional-community collaboration is the foundation of success. This report sets forth some ideas about how to start down this new path of more sustainable and successful urban development.

General Finding #1: Compact mixed-use development is highly indicated by major trends

The EAG considered whether market, financing and other trends point to compact, mixed use development going forward. Our assessment is that although forces and results have been mixed thus far; this type of development will be the prototype for the next several decades. We cannot over-emphasize the importance of this. In general, this finding is supportive of the "architecture" of the 2040 Growth Concept and of keeping a tight urban growth boundary. However, as discussed in General Finding number 2; the 2040 Growth Concept and current policy are not sufficient to fully

[7] These forecasts were released by Metro in March 2009 and are for the seven-county Portland-Beaverton-Vancouver Primary Metropolitan Statistical Area (PMSA), http://library.oregonmetro.gov/files/20-50_range_forecast.pdf

capture the future activity indicated by these trends. Our first conclusion was reached for the following four reasons:

a. The direct and indirect costs (including environmental costs) of low-density, sprawled development are becoming much greater and will be very difficult to sustain. This trend will likely continue and escalate as the true costs of energy and carbon are "priced in" to the development equation.

Climate change is now documented; carbon emissions are the cause. In Oregon, transportation alone accounts for 34 percent of greenhouse gas emissions. Compact urban development and an increase in mass transit ridership can reduce transportation emissions. Pedestrian friendly compact development with a mix of land uses can reduces driving from 20 to 40 percent, and is increasingly being cited as an important factor in achieving greenhouse gas reductions.[8] According to the Environmental Protection Agency, in 2008 passenger cars , vans, and SUVs accounted for 64 percent of all transportation emissions.[9] Accordingly, changing land use patterns to more compact development and making investments in improved transit and transportation options can achieve meaningful greenhouse gas reductions in the long term, ranging from 9 to 15 percent reduction by 2050.[10] From a consumer standpoint, peak oil and rising energy prices, long lead time for fuel efficient fleet of vehicles, and transportation costs as a share of household budget mean shorter commute trips will be demanded and home sizes will be smaller.

One challenge to increasing the amount of compact urban development is the costs and difficulty in delivering public infrastructure. In some areas the available infrastructure is not sufficient to support additional development. Metro is just beginning to document these costs through its research and planning initiatives. The 2008 Regional Infrastructure Analysis found that the public and private investment needed to accommodate growth in jobs and housing in the Portland metropolitan area through 2035 is $27 to 41 billion, with $10 billion needed just to repair and rebuild existing infrastructure. Traditional funding sources are expected to cover only about half that amount.

b. Demographic changes and consumer interests are shifting demand toward more urban development forms.

The population of the United States is projected grow by about 100 million between now and 2050. The population, which is aging, will continue to urbanize (90 percent of U.S. residents will live in cities versus 81 percent now). There is growing evidence that the population wants a more efficient living pattern – smaller homes, less private open space but more walkable neighborhoods with services close by, shorter commute times and transportation options.[11]

Metro estimates that the population of the seven-county Portland metropolitan area will increase from 1.9 million in 2000 to 3.6 to 4.4 million in 2060.[12] Demographic changes in the Portland metropolitan area from 2000 to 2030 include a decrease in the percent of households with children (32 to 28 percent) and an increase in the percent of households without children (from 68 to 72 percent).[13] In addition, households without children in the Portland metropolitan area are

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[8] Growing Cooler: The Evidence on Urban Development and Climate Change, Urban Land Institute, October 2007.
[9] Regional High Capacity Transit System Plan Summary Report, Metro, September 2009,
[10] Moving Cooler,: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions, July 2009
[11] National Association of Realtors & Smart Growth America, American Preference Survey 2004.
[12] 20 and 50 year population and employment range forecasts, March 2009 draft
[13] Arthur Nelson, Metropolitan Portland mega-trends 2005-2040, presentation to Metro Council October 8, 2008

projected to account for 86 percent of growth from 2000 to 2040.[14] These trends projecting smaller households without children underline the idea that demand is shifting from single-family homes to smaller multi-family units and even rentals.[15]

This demand for multi-family units in more compact and walkable settings can be met at a variety of urban and suburban scales. Centers and corridors represent an opportunities to showcase and develop new types of development.

c. **The current credit situation is unlike anything the U.S. has experienced in many decades. This condition will likely last several years and the credit market will likely not return to the way it was.**

As a result of the recent financial crisis, commercial banks are consumed by managing “problem loan” portfolios. The need to clear out backlog, including toxic loans, will prevent many commercial banks from entering into new projects for several years. Additionally, regulatory and shareholder pressure exists to reduce the percentage of loan portfolios that are related to land acquisition, speculative development, and investor real estate. Underwriting criteria has tightened, and lending for certain project types has been curtailed.

Mezzanine lenders are consumed by existing problem assets in their investment portfolio. The ability to raise capital for new mezzanine funds is limited until exit strategies, such as sale or refinance of underlying asset, for portfolio investments improve. Institutions like Fannie Mae, who in the past bought up many of these loan packages, will no longer be buying them; and it is not clear who will take on that role. Banks are also reluctant to carry too much on their books, even after backlog is cleared. Large projects will be viewed as high risk loans because the market won’t necessarily absorb all of the units/spaces as quickly as in the “easy credit era” that just ended. There is no good exit strategy for lenders who will already be holding a lot of unwanted property. In the future, large equity shares will be standard.

In this new lending environment, the credit-worthiness of developer/development partners will be emphasized much more so than in the past and may become a part of federal guidelines. Developers are now required to make larger equity investments at project inception, and demonstrate ready access to liquid resources to make additional equity contributions in the event that their projects are over budget or are not achieving targeted stabilization (e.g. lease-up, sale) as underwritten. A substantial gap exists between the capital required to invest in centers and corridors to support more intensive, compact urban development required to meet the region’s growth needs and the capital available to fund the investment.

Smaller/phased projects, for example 20-50 units in one to three buildings as opposed to 200 units in one building, may be easier to finance. Re-use projects that add three to five residential units in the top floor of an updated building may be the scale the market could support. The current financial preference for smaller projects holds implications for centers and corridors and requires a rethinking of construction types.

d. **The current level of public investment in compact urban development is not sufficient to address escalating costs of development. There will be a need for recalibration of the ratio of public to private investment in compact urban**

[14] Arthur Nelson, Metropolitan Portland mega-trends 2005-2040, presentation to Metro Council October 8, 2008
[15] Arthur Nelson, Metropolitan Portland mega-trends 2005-2040, presentation to Metro Council October 8, 2008

development, at least in the near to medium term, and this may differ from place to place.

Public or institutional investment will be very important, perhaps critical for the next several years, given the financial situation described above. From a public policy point of view, we may need to recalibrate the role and share of public investment in desired development outcomes. Two approaches of public investment and involvement in desired development outcomes-infrastructure provision and direct participation in lending (including land resources)- are possible and may be needed in tandem to address the current situation. Direct participation in lending may be more difficult to implement in terms of public acceptance unless there are clear public benefits and some check and balance or relative transparency. Third party institutional and non-profit entities acting as "brokers"/participants would provide greater skill and nimbleness but require accountability where public resources are concerned.

Implications of Finding #1**:**

These factors indicate there will likely be a pronounced shift in demand toward infill development in the coming years, but this can only happen if supply is provided and barriers that prevent the supply of compact development types are removed.

The set of factors described above point strongly to the fact that demand will be for development inside the current metropolitan area foot print, assuming supply can be achieved. At workshops held in 2008, the region's mayors, councilors, and commissioners endorsed scenarios that accelerated and intensified development in centers and corridors and more recently, local aspirations from communities around the region reinforced this goal. Yet for these aspirations to be realized, significant design, regulatory, and financial tools are required to achieve capacity already existing within the metro area. It is also necessary to shift our thinking about land supply. Although we have traditionally thought of supply as being raw land outside and at the edge of the region, we need to start thinking of it as underutilized land inside existing communities.

There is capacity inside the existing metro area, but it is not accessible or developable in the same way as undeveloped land outside the boundary. Metro models estimate that the region's centers and corridors have much more zoned capacity than can be developed under current market conditions.[16] This strongly supports the need for a new set of tools to unlock this excess and underutilized zoned capacity. For example, the City of Portland has estimated that 400 acres of vacant or underutilized land within its boundaries could become available for development in the next 20 years resulting in up to 100 million square feet of new building area.[17]

It is important to recognize that not all aspirations for growth in the region may be realized. The 2040 Growth Concept is a fifty year vision and not all centers and corridors will be developed as the 2040 Growth Concept envisions them, at least not in the 20-year time frame and perhaps not as robustly. In addition, some employment land may be warranted at the edge of the metropolitan region to meet specific needs as industry changes and evolves.

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16 "Achieving Mixed use Compact Development in Centers and Corridors; Aspirations, Challenges, and Tools", Background Information prepared for Expert Advisory Group by Metro staff, July 2009.

17 City of Portland, local aspirations, June 2009

General Finding #2: The Portland metropolitan area will need to overcome present obstacles and create new mechanisms to further the development of centers and corridors

The EAG also considered the following question, "What are the specific obstacles to center and corridor development in the Portland metropolitan area?"

e. The Portland metropolitan area has a significant supply of underdeveloped land inside the urban growth boundary but current development approaches will need to be reworked and some development constraints will need to be removed to unlock that supply.

Communities around the region have aspirations for accommodating significant growth in regional and town centers, corridors, and employment areas. Generally, the communities with high aspirations for growth such as Hillsboro, Tigard, Gresham, and Oregon City have the capacity to accommodate desired growth. However, full recognition of that density on the part of the public has not been tested in very many places since the original visual preference work by Metro. Although the zoned land supply is there, it is hard to realize the potential of this capacity with existing thinking and the traditional toolkit and approaches used by local governments. There are several constraints on development that if addressed, might free up additional supply within centers and corridors. These barriers include:

- fragmented property ownership
- difficulty in aggregating land in small parcels
- availability and cost of parking
- inflexible development code
- and fees that don't support compact development

To better accommodate these constraints, much new development will need to be finer grained and perhaps phased; a new breed of developer or overall development approach may also be needed to work this landscape. Since our region tends to have smaller more niche developers that lack the capacity to shift to alternative cities and learn new regulatory protocols, the lack of developer capacity also needs to be addressed.

f. Given the scarcity of resources in the public sector there is a need to both prioritize investments and consider ways to enhance resources for investment.

Many local jurisdictions are interested in pursuing development through urban renewal and property taxes in general, but these tools have long term limitations under Oregon law due to restrictions on revenue raised through property taxes.[18] In addition, the need to focus the marginal dollars generated by development that best achieves desired outcomes must be balanced with concerns about ensuring a geographically equitable distribution of resources. This raises issues of equity and geographic spread versus "leveragability". In any case, prioritization, although difficult

[18] Measure 5, adopted in 1990, limits the amount of property taxes that can be collected from each property by $5 per $1,000 of real market value (RMV) for education taxes and $10 per $1,000 of RMV for general government taxes. Measure 50, adopted in 1997, separated real market value from assessed value and reduced assessed value to 10 percent minus the 1995-1996 assessed value amount.. In addition, Measure 50 froze existing property tax bases into permanent rates and limited assessed value growth to 3 percent per year unless major renovations occur on the property. Measure 50 provisions also apply to new properties, which are taxed at the same assessed value to real market value ratio as existing property..

politically, will have little effect without a new discipline around exercising leverage and cost sharing.

g. Improving certainty and reducing transaction costs in local development deals (including permitting) will be needed if infill supply is to be accessible.

Throughout the initial stages of the development process, tensions exist between certainty and flexibility and between community acceptance and time efficiency on the part of the developer. In order to overcome barriers and expedite development, certain elements of the development process need to be improved. Development and design review templates or frameworks can be developed to be regionally applicable but open to adaptation by local communities. Financial mechanisms for lowering risk in initial development deal negotiations might include the provision of seed money up front. Pilot projects that use clear information to advertise successes of reducing transaction costs and risks will be important to promoting this agenda.

h. Good design will be critical in gaining and sustaining public acceptance and building the kind of communities that we want.

The public and private sectors must pursue and promote contextually appropriate, quality development and involve community members and neighbors in the development process on a narrow spectrum of issues to help them better understand community benefits of certain development. Ordinances need to be reviewed for standards and State law that limits discretionary design review may need to be changed. A model zoning code, including form based concepts would be one way to help communities adjust their current zoning to accommodate new growth. A design toolkit, supported by Metro and a public private collaboration, is another approach that would allow communities to develop customized design standards, providing continuity and coordination while allowing individual control over the character of the result.

i. There is need for a focused and sustained collaboration between public, private, non-profit and institutional sectors to deliver on the promise of a new way of building our communities.

A focused and sustained collaboration between the public, private, non-profit and institutional sectors has not really existed in a formal way before. Although project-focused alliances have real value, the scale and complexity of the current challenge demand a higher level and more explicit forms of collaboration. An action plan like the one proposed here, including development of mechanisms for public financing and the creation of development toolkits and new development approaches may allow the results that single entities acing alone cannot achieve. Collaboration should not be viewed as being solely in the service of "deal-making" or co-investing; it must also serve the interest of education (continuous learning) and adaptive change (as we learn more and find new challenges). There needs to be a collective focus, beginning now, on educating leaders and the general public, starting with education of Metro and local officials and extending to development and design professionals and to neighborhood and other community organizations. An ongoing public private collaborative dialogue will increase understanding and build trust between different sectors.

Chapter 3

Recommended Action Plan

The Expert Advisory Group recommends that a six-part action plan be adopted as a holistic development strategy for the region. Although key elements of this plan are directed at and recommended for Metro to implement, it is equally important that local governments, professional associations, lenders and development groups also endorse it and participate in its further development. Metro should take the lead in convening the partners that will be needed to further develop and implement this Plan. Metro should also take a larger long term role in facilitating the implementation of compact urban development, by increasing its focus on an enhanced role in education, technical assistance, gap financing, infrastructure financing, and legislative advocacy.

A. Establish a structure for on-going cross-sector structure collaboration and learning.

Justification: The future of urban development, particularly infill development, will require multiple parties acting together in new ways. The traditional roles of government (regulator and infrastructure provider) and private developers (capital formation and real estate development) are not sufficient to accomplish robust center and corridor development. A more strategic view by governments of the use of tools at their disposal and more willingness on the part of private developers and lenders to meet public and community objectives and engage local governments as partners are required. This challenge may also require the emergence of a third kind of entity: quasi-governmental/quasi-private entities to facilitate aspects of development and redevelopment. This could take the form of a parking authority or regional "gap-financing" bank, possibly one that also brokers development credit transfers.

Furthermore, the shift to this new way of developing centers and corridors will take time and learning. This will require a sustained collaboration that is suitable for not only facilitating development but also for fostering on-going learning and adaptation. We need a convener, a public/private/institutional transaction broker and a University of 2040, where ongoing training and idea exchange/experimentation can occur. This kind of institution could provide a forum for regional exchange of local success stories in centers and corridors, useful strategies for achieving aspirations and ways to overcome challenges. Some formal partnership between local and regional actors should be formed to initiate this collaborative effort. Finally, public education about the importance of compact urban development and the new tools needed to achieve it should begin *now*, while the Making the Greatest Place process is engaging the community and local political leaders about achieving local aspirations.

Recommendation #1: Establish a task force composed of public, private, non-profit, professional association and institutional interests, and charge them with designing a structure that will accomplish three specific purposes:

a. Devise an implementation strategy for this action plan
b. Engage a spectrum of interests – particularly those policy and professional parties who will be key to the action plan's implementation; and
c. Examine and suggest ways in which a partnership and education function could be funded and sustained over time

The Metro Council President should convene this effort, together with the President of Portland State University and the Dean of the University of Oregon (Portland).

Recommendation #2: Establish a University of 2040.

A collaborative research think tank, the University of 2040 would advance best practices, while providing education for communities, developers, lenders and appointed and elected officials on facilitating compact urban development. The research and education provided by the University of 2040 will be central to the success of center and corridor development. Community groups must be shown that developers can act as partners, helping to achieve community aspirations. Developers need to learn how to work with the public sector to craft public-private partnerships. City councils and staff need to be educated about the complexities of financing, vertical ownership, and other on the ground realities of center and corridor development. City agencies need to engage in communication with each other and Metro to access support services. The Center for Real Estate at PSU runs a mentoring program for developers but the efforts need to be expanded. A University of 2040 that provides continual education and resources around achieving aspirations set forth in the 2040 Growth Concept Growth Concept could easily build off this foundation.

Recommendation #3: Engage in an early outreach and education effort about the findings of this report.

Teams from the Expert Advisory Group need to make contact with people at the ground level, including property owners, city officials and developers to communicate on the benefits of increased density, including improved service and urban amenities. EAG members can assist Metro over the next year in outreach efforts aimed at gaining understanding and acceptance of the findings and recommendations in this report.

B. Develop a Diagnostic Tool for Centers and Corridors

Justification: Although centers and corridors throughout the Portland metropolitan area share many attributes and aspirations, they are not all the same. They do not currently perform at equal levels nor should they be expected to perform in the exact same ways. A diagnostic tool for center and corridor health would provide a clear assessment of which areas have the necessary preconditions for successful development. This tool could be used by local governments as a self-assessment tool, by the region as a guide to making targeted regional investments and by developers to identify which areas are ready for investment. Talking in generalities can be of little use to local officials, developers and activists concerned with developing particular places. A convenient assessment tool is needed to assess the local conditions of these places and help in developing strategies for improvement and in efficient allocation of regional resources for assistance. In order to best use limited resources, both Metro and local governments need to make strategic investment decisions. Developers and lenders can benefit from knowing what level of commitment cities have for improvement and where they stand in the continuum of effort that will be required to achieve high performance. Developers and lenders will also make their own assessments for market values and conditions for individual projects.

The diagnostic tool will also allow communities interested in working with Metro to direct growth in predetermined centers and corridors to determine whether they have the requisite conditions for growth. If conditions in the community are not ready for growth, the diagnostic tool will provide guidelines as to the types of conditions needed. The tool would help Metro invest their resources, help local governments build awareness, political support and the right conditions for growth. The diagnostic tool would also help developers by allowing communities to demonstrate their willingness and ability to make a public investment.

For example: Due to an insufficient street network, some regional centers lack adequate on-street parking. Creation of a street network would increase the amount of on-street parking thus allowing for new higher density development in the center. The street network would also provide greater connectivity, not only for cars and transit but also for pedestrians. The investment in infrastructure would demonstrate to Metro and potential developers that the community is a willing and enthusiastic participant in center development. Furthermore, the new streets would help to gain the support of the residents around the center by assuaging fears about traffic congestion while building a more livable community.

<u>Recommendation #4</u>: Develop a diagnostic tool for assessing the health of individual centers and corridors that can determine the relative strengths and weaknesses of various components in locally specific ways. A diagnostic tool might include the following:

Vision:

- Does the community have a vision that is both unique to the place and fits with the Metro 2040 Growth Concept?
- Are local codes supportive of the type of development envisioned for the area?
- Does the city have redevelopment plans and strategies for targeted areas?

Orientation and commitment to private sector:

- Is there private sector interest and/or engagement?
- Has the community identified redevelopment sites/areas and opportunities?
- Has there been a proactive outreach demonstration to the private sector on the part of the jurisdiction?
- Has the city demonstrated willingness to act as a backstop for a certain number of projects?
- Have market studies been conducted?

Resources:

- Does the community have development tools and financial incentives to facilitate desired development?
- Is the community targeting other public funds (parks, transportation, etc) towards meeting desired redevelopment goals?
- What kind of private investments have been made that carry out the intent of the plan? Do these projects have official priority designation? Are staff assigned to plan implementation? Is there a budget?

Physical and market conditions (external factors):

- What is the ratio of vacant, underutilized land compared to improvement to land values?
- What is the land utilization? Floor area ratio?
- How does the corridor function – capacity to ratio?
- What are the ownership structures and parcelazation structure?
- Are the market conditions right for this type of development?
- What size of financing gap would exist for projects and what are the options?

The diagnostic tool should be easily understood by local staffs, officials, citizens and development interests, even though some of the underlying analysis may be technical. Metro, or the 2040 University function should lead the initial development of this tool and provide some level of on-going training and assistance to communities in using and refining it.

Recommendation # 5: Local jurisdictions may need to realign internal structures and protocols to address significant barriers that often stand in the way of facilitating compact development.

These challenges include a lack of a shared goal or mission among different city departments on development and building review processes, difficulty in helping to assemble small parcels of land for development to use, and translating community aspirations into urban development. Strong direction from city leaders will be required to achieve greater alignment between city departments. The diagnostic tool mentioned in the preceding recommendation could be one way for local jurisdictions to identify necessary changes in the protocol and priorities their city. However, a shift in the overall development approach of local jurisdictions will be required to fully achieve and accommodate the elements of this action plan and for those cities and counties to realize stated aspirations about center and corridor development.

C. Develop a Public-Private "Development Toolkit"

Justification: That public-private partnerships are essential to the success of high-density center and corridor development can be challenging for inexperienced developers and officials. Metro can help to facilitate such partnerships through the provision of guidance and technical support, including physical design prototypes and basic public-private development agreement guidelines and examples.

Recommendation #6: Prepare a set of center and corridor design prototypes or a design manual

Entering into a lengthy and costly public design review process with unknown outcomes can pose a significant risk to developers and finding ways to mitigate that risk is important to encouraging more quality and successful development activity in centers and corridors. Public and private expectations about the form of infill development can be greatly enhanced by having a family of physical development prototypes. These can help local efforts to implement area plans and strategies for town centers and corridors and can be helpful in developing and refining codes and in infrastructure budgeting. These prototypes can be used to illustrate site plans, building forms, phased development, parking and street design. This can perhaps be accomplished with 10 to 15 basic prototype development templates, with variations. Development codes could be adjusted to allow simplified and expedited review of projects that conform to these, including simple design review. Projects that want to or need to go another route could be subjected to more discretionary review. The exterior detailing of the approved prototypes could be subject to creativity.

Design prototypes should cover site, near off-site and building plans and elevations for at least these infill development types:

1. Mixed-use (housing above or beside office or retail)
2. Base story (wood or concrete) plus 3 stories of wood-frame over
3. Base (concrete) plus 5 stories (steel) over
4. Courtyard housing
5. Phased development

Recommendation #7: Prepare a checklist for initial assessment of potential public-private investments (development partnerships) for local governments.

Many local jurisdictions have no clear way of assessing whether a development deal that involves some expenditure of public resources or special approvals is better than the next one. In addition, it is often unclear to local jurisdictions what public investments are most crucial in attracting private development and crafting successful public-private collaborations. Both the public and private parties often defer all risk and decision to the end of the process. A standardized initial assessment process could help all parties in sorting out which deals have potential to go further in the process and which should be reconfigured or rejected. A simple decision-tree analysis could simplify the process and add transparency for the public. As an example, a checklist might ask the following questions:

- Is the proposed project within the designated target area?
- Is the proposed project envisioned in the sub-area/development strategy for the target area?
- Is the amount of the requested public participation necessary for the development to have a reasonable probability of earning a market return on the investment of his/her resources?
- Can the City reasonably anticipate earning a return on the public participation equal to the percent it would currently pay on general obligation bonds assuming a new present value calculated over a 25 year term?
- Will the architectural design of the project be commendable?

Recommendation #8: Prepare a public-private Development Handbook

After an initial screening and a project is "green-lighted" to move forward, there is still a need for the actors involved to understand the components of an eventual deal for a public-private development. This understanding can be greatly enhanced for smaller jurisdictions and relatively inexperienced developers by having some standard materials that can be customized during the process. Even for experienced developers and agency staff, potential surprises and risks can be avoided or lowered by having a common set of understandings at the outset of the negotiation process. A handbook for public-private partnerships with model agreements and processes could be helpful and could be augmented with information particular to local jurisdictions. Metro and/or the University 2040 function should prepare this material and conduct trainings with the help of real estate professionals. Alternately, a series of questions to be addressed in a non-binding letter of understanding, followed by a formal agreement, can help guide jurisdictions through the public-private development process. The following examples represent the types of questions that should be included among the many questions to be included in such a list:

- If the site is owned by the public entity, who will be responsible for remediation of any soil contamination?
- Which group(s) will have design review or oversight, when will this oversight occur and when is the determination considered vested?
- Who is responsible for the cost of each infrastructure piece (sewer, water, streets, sidewalks, street lights, street furniture) and who is responsible for the construction of these improvements?
- If a public ROW is vacated, is there a cost to the developer, how much, what rights are retained by the public and what obligations are assigned to the public and to the developer?

Recommendation #9: Continue and enhance pilot programs and demonstration projects

Expand the Metro Transit Oriented Development (TOD) program to enable it facilitate additional developments around the metropolitan area, particularly where there are high levels of leverage available. This should include not only some level of gap financing but also some predevelopment/feasibility work, and possibly infrastructure funding. As the recommendations in the next section are implemented and grow (gap financing bank, & regional infrastructure finance) this expanded TOD program could combine and coordinate the application of some of those resources.

Recommendation #10: Conducting an assessment of the use of more traditional tools already in use in some jurisdictions will help provide a better understanding of their applicability to other centers and corridors. This could be done in conjunction with the development and deployment of the "diagnostic tool" described in Recommendation #4. Some of this work may have already been done by Metro as part of its centers program. The following tools should be examined:

- High capacity transit plans/availability
- On the ground density/capacity versus zoned density/capacity
- Urban Renewal/TIF programs
- Economic Improvement Districts
- Reduced parking strategies/codes
- Mixed use development codes
- TDM programs
- Flexible zoning codes
- Incentives for more efficient energy use, including the disclosure of a building's energy performance at the time of sale, that will help to fuel needed building and district-scale economies – e.g. market pricing bonus/penalty, district energy.
- Investment protocols and partnership information including incentive based pilots of prototypes that can be taken to scale for regional centers, entry-level requirements for self identifying (if you are willing to come to this level then you have access for these programs).

D. Develop a new approach to gap financing

Justification: Mezzanine lenders are consumed by existing problem assets in their investment portfolio. The ability to raise capital for new mezzanine funds is limited until exit strategies (e.g. sale or refinance of underlying asset) for portfolio investments improve. Commercial banks are consumed by management of problem loan portfolios. In addition, regulatory and shareholder pressure exists to reduce the percentage of loan portfolios that are related to land acquisition, speculative development, and investor real estate. Underwriting criteria has tightened, and lending for certain project types has been curtailed. Secondary markets (e.g. Fannie Mae, Freddie Mac) have tightened underwriting requirements, frustrating exit strategies for construction lenders on condominium and single family residential projects. Developers are now required to make larger equity investments at project inception, and demonstrate ready access to liquid resources to make additional equity contributions in the event that their projects are over budget or are not achieving targeted stabilization (e.g. lease-up, sale) as underwritten. A substantial gap exists between the capital required to invest in centers and corridors to support more intensive, compact urban development required to meet the region's growth needs and the capital available to fund the investment. This gap might require a more active public role and involvement in the financial equation. The lending market is changing and now is the time to build the capacity to structure a variety of creative lending tools and mechanisms that take advance higher levels of collaboration between the public and private sector

Recommendation #11: Local governments use Community Development Block Grants (stimulus), or other federal or local resources to acquire land or under-performing properties (bank "Other Real Estate Owned") located in Centers and Corridors, at a low cost (e.g. lenders are motivated sellers). Acquired properties can be "inventories" until market conditions improve. Pursuant to a development agreement, properties can be donates as "developer equity" once performance based "success" hurdles have been achieved (e.g. meets "green", transit, affordability, market stabilization tests, etc.

Benefits: Land or under-performing properties can be acquired at a low cost (e.g. lenders are motivated sellers). Acquired properties can be "inventoried" until market conditions improve. Pursuant to a development agreement, properties can be donated as "developer equity" once performance based "success" hurdles have been achieved (e.g. meets "green", transit, affordability, market stabilization tests, etc).

Recommendation #12: Local governments use bond authority to provide construction and stabilization financing for projects. Underwriting and construction loan management could be outsourced to commercial lenders with a core competency in construction lending. Interest rate risk would be mitigated with an appropriate hedge.

Benefits: Local government benefits from project completion, and may earn a return on the loan portfolio (e.g. coupon, less cost of funds/fees to lender for underwriting and servicing/interest rate hedge/credit risk). If possible, local government could participate in project profits due to the level of risk assumed.

Recommendation #13: Commercial banks are reluctant, unwilling, or unable to portfolio residential condominium loans while condominium projects achieve stabilization. Local governments can portfolio residential condominium loans while condominium projects achieve stabilization. Underwriting and interim servicing of residential mortgages would be outsourced to mortgage lending departments of commercial banks (fee for service) to insure that mortgages meet secondary market requirements, payments are applied correctly, and hazard insurance is tracked. Local government mitigates rate risk with an appropriate hedge. Cash returned to local government when portfolio can be sold on the secondary market.

Benefits: Local government benefits from project completion, and may earn a return on the loan portfolio (e.g. coupon, less cost of funds/fees to lender for underwriting and servicing/interest rate hedge/credit risk). Developer and lender enjoy greater certainty to their exit strategy.

Recommendation #14: Local governments provide credit enhancements (e.g. third party guarantees, letters of credit, etc.) to lenders of development projects.

Benefits: Local government minimizes cash outlay (assuming project performs) and benefits from project completion. Developer and lender enjoy greater certainty to their exit strategies.

Recommendation #15: Demographics must be well researched and support the project problem it is designed to solve (e.g. seniors, workforce housing, live workspaces, etc). Local governments need to enlist the assistance of experienced developers for input on what will be required for successful development. Larger projects must be scalable (e.g. a 200 unit housing project would be phased as four 50-unit buildings to reduce construction and stabilization risk. Commercial lenders with capabilities to provide construction, stabilization and permanent financing need to be at the table at project inception.

Benefits: Large and small developers have the capacity and interest to participate. Construction and stabilization risk is reduced.

E. Create a new mechanism for metropolitan infrastructure investments that will support compact mixed-use development. Although further details of such a mechanism will need to be investigated, it could be governed by the following characteristics:

- Flexible funding source
- Strategic allocation not "dividing the spoils" allocation
- Emphasis on leveraging public and private dollars and key outcomes
- Constant over a long period of time

F. Advocate for legislative changes and position the region for federal and foundation funding

Justification: One attempt broaden the authority to allow discretionary design review to include housing in centers and corridors locations, had region-wide endorsement from Metro and a coalition of cities in the 2007 legislative session, but did not pass, It was mentioned once. The 2007 bill (SB 891) nearly passed when industry groups were either supportive or took a neutral stance, but a very small group of affordable housing advocates were effective with one legislator in raising the concern that design review could add to the cost of housing developments and that some jurisdictions might use the authority to discourage needed housing. In a different strategy, the City of Portland sought a similar bill in 2009 (SB 907) and those were unsuccessful as well, drawing additional opposition from the state homebuilders association. The city has experienced examples of poor design and siting for large housing developments along key light rail station areas, particularly in East Portland where the lot pattern and lack of street grid to do not lend themselves to a "clear and objective" measurable "standards" template.

Recommendation #16: State law should be amended to allow local governments in the metro Region the voluntarily option of whether to adopt geographically limited discretionary review for certain large, high impact developments in town centers and corridors designated in the Region 2040 Plan. Despite the previous challenges of passing similar legislation, this effort should be continued as it would address significant challenges to development in centers and corridors. For example once common templates and overall design guidelines are in place for local centers and corridors, the permit approval process should be much easier to navigate for applicants and the public; however, some form of design review will be needed to maintain quality, reassure the public and prevent writing overly prescriptive codes. In complex mixed –use environments this is best accomplished by limited discretionary design review. However, currently State law (ORS 197.303 – known as the Oregon Needed Housing Statute) prohibits local jurisdictions from enacting such discretionary authority for development where housing is included, even in limited geographies outside of Portland's Central City and Gateway Regional Center districts.

Recommendation #17: Metro should help cities improve the design quality in their centers and corridors by convening a stakeholders group for advice and consultation on how to conduct a study of the design review issue. A study might include best practices, examination of better "standards" for difficult sites and a cost-benefit analysis to assess any impacts to affordable housing – using existing design review examples. Metro could propose a safe harbor region-wide minimum design guideline template or a "clear and objective" standards template that then could be executed locally.

Recommendation #18: Infrastructure Finance - Local governments have limited authority to raise revenues in order to provide increased capital for public investments and public private partnerships. State law currently places restrictions and in some cases, outright prohibitions, on city, county and regional government taxing authority. Past initiatives capping property taxes have significantly reduced core local government revenues. The region should petition the state to review limitations on local taxing authority to provide new tools to make public investments in centers and corridors, particularly removing state restrictions on local taxing authority. Allowing the Portland metropolitan region to raise revenues to support public investments will be critical to the success of future growth and development

Recommendation #19: Place-based Programming at the federal level - A new approach to federal funding that encourages collaboration among several federal agencies (HUD, EPA, DOT) provides an opportunity for the metro region to be an innovator in leveraging dollars to execute key development projects. The region should work to be a leader in demonstrating how to combine funds from different sources together to make a difference in the financial feasibility of the project. For example, the region should work to leverage existing transportation dollars, MTIP, HUD, CDBG or new affordable housing funds, and brownfields and other environmental funds and use this experience to support future success in securing additional federal funding.

Chapter 4

Role for METRO

Metro is central to the successful development of centers and corridors. The following new or expanded roles for Metro within its existing general authority should be considered. In some cases it may be decided that a new or other existing third party should take on all or part of a role described here, at some point in time. However, all of these are essential for carrying out an adequate centers and corridors development program of sufficient scale and timing and Metro should have some role.

- *Convener/facilitator* - Convene experts such as the task force mentioned in the action plan to refine the implementation of these recommendations.
- *Education and Outreach* - Enhanced role in funding and facilitating education and outreach programs and forums that share local successes in these endeavors.
- *New tools for center and corridor/compact, mixed-use development* - Develop and promote new tools to address obstacles to development.
- *Infrastructure financing* - Help to increase the total funding available by bringing new money to the table to support infrastructure. Also working to be creative in using a mix of public dollars to leverage private funds.
- *Gap financing bank* – Possibly act as manager of money put together by several lenders, lending sources.
- *Pilot programs/manager of predevelopment funds* -
- *Expanded incentives* - Operate a program to entice jurisdictions with various incentives to pursue compact urban development.
- *Technical support* – Increase technical support for project phasing and implementation, template development agreements, model zoning code, SDC credits, public-private collaboration, and diagnostic tools so local partners may better tackle challenging projects.

Chapter 5

Next Steps

This report contains recommendations that can be accomplished in both the long and the short term. Elements of the action plan also must be accommodated within the existing programs, priorities and budget capacity of Metro and local jurisdictions. Specifically, Metro's three-year long "Making the Greatest Place" effort is in the final stages of decision making. This process will culminate in decisions on transportation and land use priorities through actions on the Regional Transportation Plan, the Urban Growth Report, and urban and rural reserves in 2009. With these decisions, Metro has indicated that it will shift to an "implementation" phase of Making the Greatest Place.

This focus on implementing the policy priorities designated in the Making the Greatest Place process will help guide the agency's overall budget priorities and the Planning Department's 5-year strategic plan that are currently underway. Metro Council and Metro staff will use the recommendations on promoting development outcomes presented in this report to help inform these budget and strategic planning processes, and decide how to advance the action plan described here.

Metro staff will also continue to coordinate with interested EAG members on the details of the group's recommendations as time, schedules, and interest allow. The EAG believes that there are a few recommended actions that can and should be adopted within the next several months. First, the EAG strongly emphasizes the importance of conducting outreach to local jurisdictions and the general public around the findings and recommendations presented in the report. Select EAG members will present the report to the Metro Council and to the Metropolitan Policy Advisory Committee (MPAC) as well as to local jurisdictions who are interested.

In addition, the EAG feels that it is important for Metro to begin the process of developing a collaborative effort between the public, private and institutional sectors that promotes successful center and corridor development. As mentioned in the action plan, the EAG recommends that Metro Council President David Bragdon convene potential partners from the University of Oregon, Portland State University, local jurisdictions and private developers and real estate interests to discuss how to best advance regional collaboration and education around compact urban development. It is unclear what form this effort will take. The EAG strongly recommends that Metro lay the groundwork for this effort shortly after the report is released in order to maintain momentum around the recommendations and build support for future efforts like the University of 2040.

Background Documents
Investing in Centers and Corridors

Challenge:

As we recover from the current recession and real estate development rebounds from its present dormant state, what will make private investment to develop centers and corridors in metropolitan Portland more attractive, robust and timely? What will make these projects "pencil out"?

Assumptions:

1. **Population and employment in metropolitan Portland will grow substantially** over the next two decades and billions of dollars of private and public capital will be expended to serve this need, as well the changing needs of the current population and employers. The Portland metro area has had, and will likely continue to have an explicit and **proactive set of public policies (at the local and metropolitan level) that will help shape this growth**. In general terms, these policies have been effective in directing growth and change to date toward regionally held aspirations for quality of life, economic vitality and environmental health.

2. **Several other important trends indicate that compact, mixed-use development** (such as that available in centers and corridors) **will play an increasing role in market demand and public expenditures** in the coming decades: rising energy costs to consumers and businesses, the emerging imperative to reduce the "carbon footprint" of urban development, the growing and systemic deficiencies in public infrastructure financing and the need for infrastructure efficiencies, an aging population and reduced household size, and growing consumer interest in convenient, walkable and sociable districts as centers for daily life.

3. **Centers and corridors play a central role in adopted policy and in recently affirmed local aspirations for focusing new development.** Whereas significant land areas with the metro region are planned for (or will continue to serve as) low-density residential use or for industrial/employment use, more intensive, mixed-use development of centers and corridors throughout the region is and will remain a key public policy objective. Although centers and corridors represent only about 12 percent of the land area inside the current Urban Growth Boundary, they represent the potential for several times that amount in development capacity. They also represent perhaps the most important opportunity for developing local identity and local housing, employment and transportation options. To some extent this pattern and policy also exists in Clark County, which is outside of Metro's jurisdiction but is an essential part of the metropolitan economy. Through conversations and work sessions with local elected leaders and stakeholders, Metro has recently reaffirmed local aspirations to further develop centers and corridors as a central component of directing new growth and investment.

4. **Whereas there have been notable successes in center-based mixed-used development in the last decade, it is clear that there are also significant challenges and obstacles to be overcome in developing many of the region's centers and nearly all of its corridors to a level commensurate with local and regional aspirations.** The

Pearl District, South Waterfront, the Hollywood district and several main streets in Portland have seen a clear pattern of investment that reflect these goals, as has downtown Vancouver. There have also been notable projects in Gresham, Hillsboro, Lake Oswego and Milwaukee that indicate future potential for development of robust mixed-use districts. However, many centers and corridors, even those well served by transit and with appropriate zoning, have seen little of this kind of investment. Metro has summarized the challenges faced by local cities and counties in achieving compact, mixed-use development, based experiences reported by local jurisdictions and, to some extent, by private sector developers, as well as from Metro's own TOD program (see summary list attached). These range from regulatory issues, to infrastructure finance to community acceptance (neighbors) and other issues. This list of challenges should be reviewed and augmented by this Expert Advisory Group.

5. **Compact mixed use districts (centers and corridors) in the Metro area should not all be expected to develop at once and, because conditions vary from area to area; future strategies will need to be nuanced to fit local situations and the metropolitan development toolkit should be sufficiently broad to allow different approaches in different locales.** A number of factors influence the readiness of centers and corridors for robust, compact mixed-use development, including market strength, community and political will and presence of infrastructure. In the attached summary of center and corridor development over the last decade, prepared by Metro staff, it's clear that some centers are established, others are emerging and some are only planned or new and have not yet become ready for the kind of development envisioned by the 2040 Growth Concept. One question that arises then is: should infrastructure investments be concentrated in areas that show readiness now and turn to investments in other places once they reach a point of readiness? The Metro summary document provides a good jumping off point for discussion of this and other issues.

Key questions for discussion by the Expert Advisory Group:

1. Which of the identified challenges/obstacles are most important to work on in the coming months, or year, and by whom? Are there additional challenges to be identified?

2. Will public-private partnerships (project-based or broader) be essential to center and corridor-based development? In what forms?

3. Are there new or existing tools or strategies that merit particular consideration? What are some leading ideas for further exploration?

Achieving Mixed Use Compact Development in Centers and Corridors:
Aspirations, Challenges, and Tools
Background Information

Prepared for Expert Advisory Group by Metro staff, July 2009

Introduction and Background on 2040 Growth Concept

Consistent with the region's 2040 Growth Concept, local jurisdictions throughout the Metro region have created visions for their communities and adopted plans for growth. Using a variety of tools, and financial incentives, communities have implemented some of their plans and have aspirations to see even more of their visions turn to reality.

A key part of the 2040 Growth Concept calls for investments in centers and corridors to support more intensive, compact urban development in order to meet the region's growth needs. Regional Centers are larger and serve markets of 100,000s while Town Centers serve markets of 10,000s. Corridors, main streets and station areas are other locations targeted for mixed use development. Though they cover only 12 percent of the region's land area, centers and corridors hold existing zoned capacity to meet a significantly larger share of the region's growth.

At workshops held last fall, the region's mayors, commissioners and councilors endorsed scenarios that accelerated and intensified development in centers and corridors and expressed willingness to consider new tools to support this development.

The Institute of Metropolitan Studies, under contract by Metro, will convene a dozen experts in the field of finance and development to provide advice on how to encourage private investments and achieve the kind of vibrant places that communities desire.

This paper, prepared by Metro staff, provides background information for the panel on the status of the centers and corridors in the region, the aspirations and challenges for these areas and the tools that have been considered in the past to overcome barriers. The paper is intended to help set the stage for discussion and recommendations by the expert panel on the following questions:

- Are we identifying the right challenges? Are there some missing?
- Are these the right tools? What tools should we be applying?
- How can the public and private sector best work together to leverage successful development?

Status of Centers and Corridors

Over the last 15 years, since the 2040 Growth Concept was adopted, local jurisdictions have developed plans for the Central City, seven Regional Centers and 33 Town Centers designated on the regional 2040 Growth Concept map. In addition, communities have developed plans for main streets and station communities designated at light rail stations outside of these centers. To a lesser extent, communities have planned for mixed use development on corridors designated on the 2040 Growth Concept map, which make up 400 miles of major and minor arterials and state highways. Centers and corridors combined make up about 12 percent of the area inside the urban growth boundary. Metro's models estimate that these areas have much more zoned capacity than can be developed under current market conditions.

- For the last eight years for which data was available (2000 – 2007), the three-county region (Clackamas, Multnomah and Washington counties) recorded $20.5 billion in commercial and residential improvement investments based on building permit data. These investments (in raw dollars unadjusted for price changes) included the whole range of improvements for which building permits are required from parking lot resurfacing to multi-story office buildings. Of this amount, about two thirds was devoted to residential investment and one third was devoted to commercial investment. While centers and corridors only make up about 12 percent of total regional acres, they attracted 22 percent (or almost twice) of the total investment in the region. Commercial investment predominates in the Central City and Regional Centers while residential development predominates in the Town Centers and corridors.

Three-County private investments as measured by building permit values 2000 - 2007			
	Commercial	Residential	Total
Three county investments	$6.8 B	$13.7 B	$20.5B
Share of three county investments in Centers and Corridors	$2.5B (36.8%)	$2.0 B (14.6%)	$4.5B (22%)

Source: Building permit value data from Multnomah, Washington and Clackamas counties 2000-2007.

- The region's centers have experienced different levels of private re-investment and effects on creating compact mixed use development. Some centers are established and have existing examples of vibrant mixed use businesses and residences, others are just emerging as centers and others are new centers in the planning stages. Very few of the region's corridors have developed as vibrant, compact mixed use areas. The large acreage of these areas and zoned capacity presents a large untapped potential.

- Many factors influence the readiness and development interest in centers and corridors.
    - **Existing urban form-** Some centers have a pedestrian friendly, grid-like development pattern, some are highly auto-oriented and lack a pedestrian environment.
    - **Investment incentives-** Some jurisdictions have directed financial assistance through urban renewal and other incentives to enhance development potential in centers and corridors, many have not.
    - **Level of establishment-** Some centers are established and have existing examples of vibrant mixed use while others are just emerging and others are new centers in the planning stages.

- Past regional investments also have influenced the readiness of development in centers and corridors, including:
    - **Level of regional access-** Some centers are located along limited access highways while other centers and corridors are located on local or county arterials;
    - **Level of transit service-** Some centers and corridors have high capacity transit or frequent bus service while others have little or no service; and
    - **Level of street enhancements and connectivity-** Including green spaces, trails and other amenities.

The following examples give a very brief overview of current status of development in the Central City, Regional Centers, Town Centers and Corridors.

- **Central City:** About half of the 3000 acres included in the Central City, (after accounting for parks, the river and public right of way), can accommodate development. The area includes about 21,000 housing units and 70,000 jobs today. Since 1990, the area has developed an average of 1.3 million square feet of new development per year, according to the Bureau of Planning. The Central City has the highest levels of private investment, estimated at $25/square foot based on the building permit data – or 10 times the value invested other centers and corridors. Values from building permit data can be more than ten times less than assessed value. Since 2000, the building permit data suggest about $1.6 billion was invested in the Central City, or about one quarter of the total centers and corridors permit value.

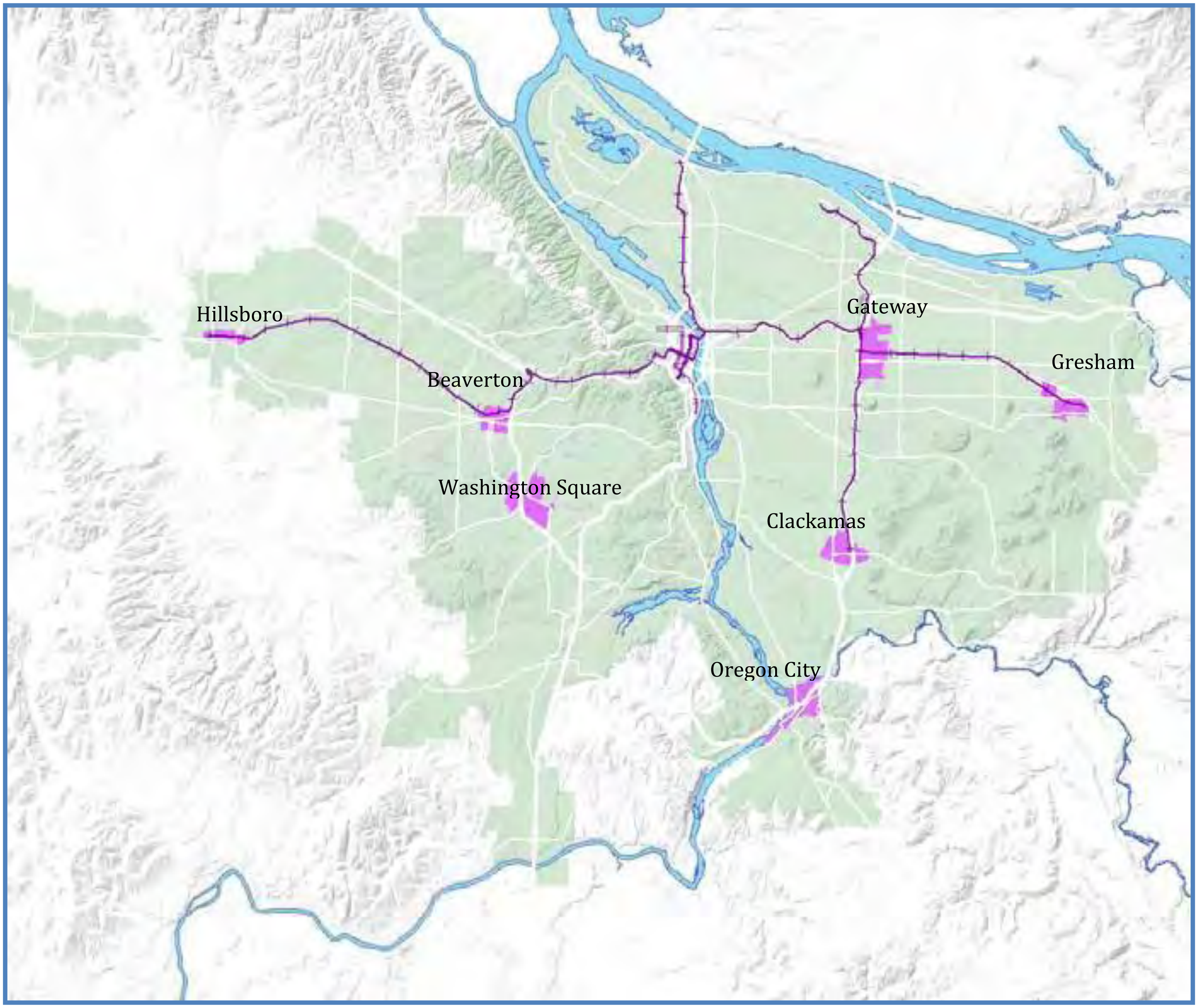

Figure 1: Areas Designated as Regional Centers in Local Plans

- **Regional Centers:** The seven Regional Centers, shown in Figure 1, account for about 3,400 acres. They range in size from 144 acres (Hillsboro) to 617 acres (Gateway). On average, they have a density of about 28 people per acre (people per acre refers to people who live and/or work in the area), less than 2 businesses per acre and 3 dwelling units per acre[19], as shown in Figure 3. They reflect a mix of orientation – from government centers to regional shopping malls to historic town centers. The following highlights a few of the distinguishing characteristics of these Regional Centers:

[19] State of the Centers Report, Metro, 2009.

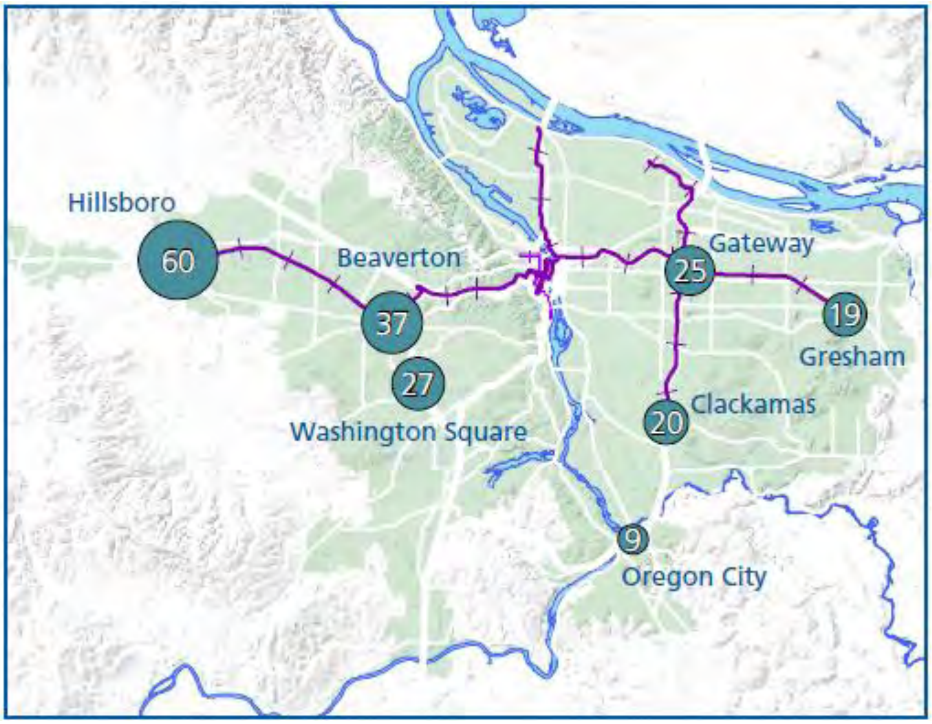

Figure 2: People per Acre in Regional Centers (includes residents and workers).
Source: State of the Centers Report, Metro January 2009 (ESRI business analyst data, www.ESRI.com**)**

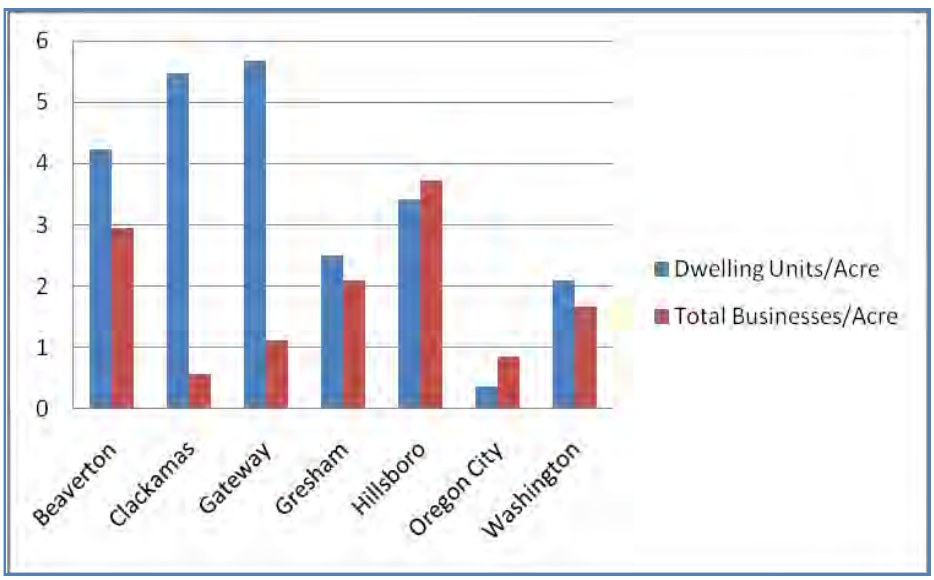

Figure 3: Residential and Business Density in Regional Centers
This figure helps illustrate the variety of urban form among the regional centers and shows which centers contain primarily residential or business developments or both.
Source: State of the Centers Report, Metro January 2009 (ESRI business analyst data, www.ESRI.com)

- Washington Square Regional Center - Home of a major retail mall dating to the 1970s, the Center is located in both Tigard and Beaverton and has access to Highway 217 and several Washington County arterials and most recently, the new Westside Express rail. It has the lowest number of people per acre (5 people/acre) of all the Regional Centers based on the number of people living and working in the area and is a regional destination for shoppers. The Washington Square Center plan, a multi-jurisdictional effort, was completed within the last ten years to guide development.

- Hillsboro Regional Center – Located in historic county seat of Washington County, Hillsboro has more people per acre (60 people/acre) than other Regional Centers largely due to its government and institutional job base. It has direct light rail access to the Central City and is some distance from a limited access Highway 26 to the north. The City released a draft Downtown Community Plan in June and is in the process of revising their downtown code and considering urban renewal among other investments to support development. Recent larger scale development projects include the new Pacific University Campus expansion in downtown as well as a new City Hall and housing.

- Gresham Regional Center – The center includes two neighborhoods, Civic Neighborhood and downtown, within its 387 acres. The downtown is the historic center of Gresham while the Civic Neighborhood is the new government and commercial area developed around the light rail station. The area currently has 19 people per acre, an average level of dwelling units per acre and above average level of businesses per acre, compared to other Regional Centers. The city of Gresham has made a major investment in civic buildings and has partnered with Metro on several transit-oriented development projects. The City is currently updating its downtown code to support redevelopment and has applied vertical housing tax credits and explored other financing tools. Highway access between I-84 and Highway 26 has long been on the region's list of transportation projects to improve access to the Regional Center and manage through traffic.

- Beaverton Regional Center – Serving as a commercial center located at the crossroads of two state highways (Hwy 8 and Hwy 10), Beaverton has a historic downtown with multiple property owners and small businesses, as well as larger scale development in the commercial area around the Beaverton Fred Meyer. Beaverton developed plans around the light rail stations and partnered with Metro for transit oriented development at the Beaverton Round and the Westgate site. The area has more people per acre (37 people/ acre) along with more dwelling units and businesses per acre than average for Regional Centers.

- Gateway –Located in the city of Portland, Gateway is the only center served by two Interstates (I-84, I-205) and, when the Max Green Line opens in the fall, by three light rail lines. Gateway has one of the highest levels of dwelling units per acre (6) and people per acre (25) in the region. The 617-acre area includes established commercial and residential neighborhoods. Plans for Gateway call for major street improvements, including sidewalks, medians and increased connectivity within the super blocks, and new parks, plazas and other amenities to support redevelopment. The City has established an urban renewal area for Gateway to provide financial incentives.

- Oregon City Regional Center – Oregon City is similar to Hillsboro as a historic county seat and has access from Highway 99E and I- 205. The center has the lowest number of people acre (at 9) compared to other regional centers and covers 414 acres. The City of Oregon City has focused recent redevelopment efforts on two opportunity sites within the Center: a commercial development called The Rivers; and a mixed use residential project at The Cove. Both projects are in the final stages of planning.

- Clackamas Regional Center – In an unincorporated area, the Clackamas Regional Center is the home of a major regional shopping mall. The center, which includes the residential areas near the mall, has one of the highest dwelling units per acre (6) and lowest number of businesses per acre. Urban renewal funds supported access to the Center from I-205, the soon-to-be opened MAX Green Line, access within the center and other investments in the 489-acre center. The County has plans for new development opportunities associated with the station areas along the MAX Green line.

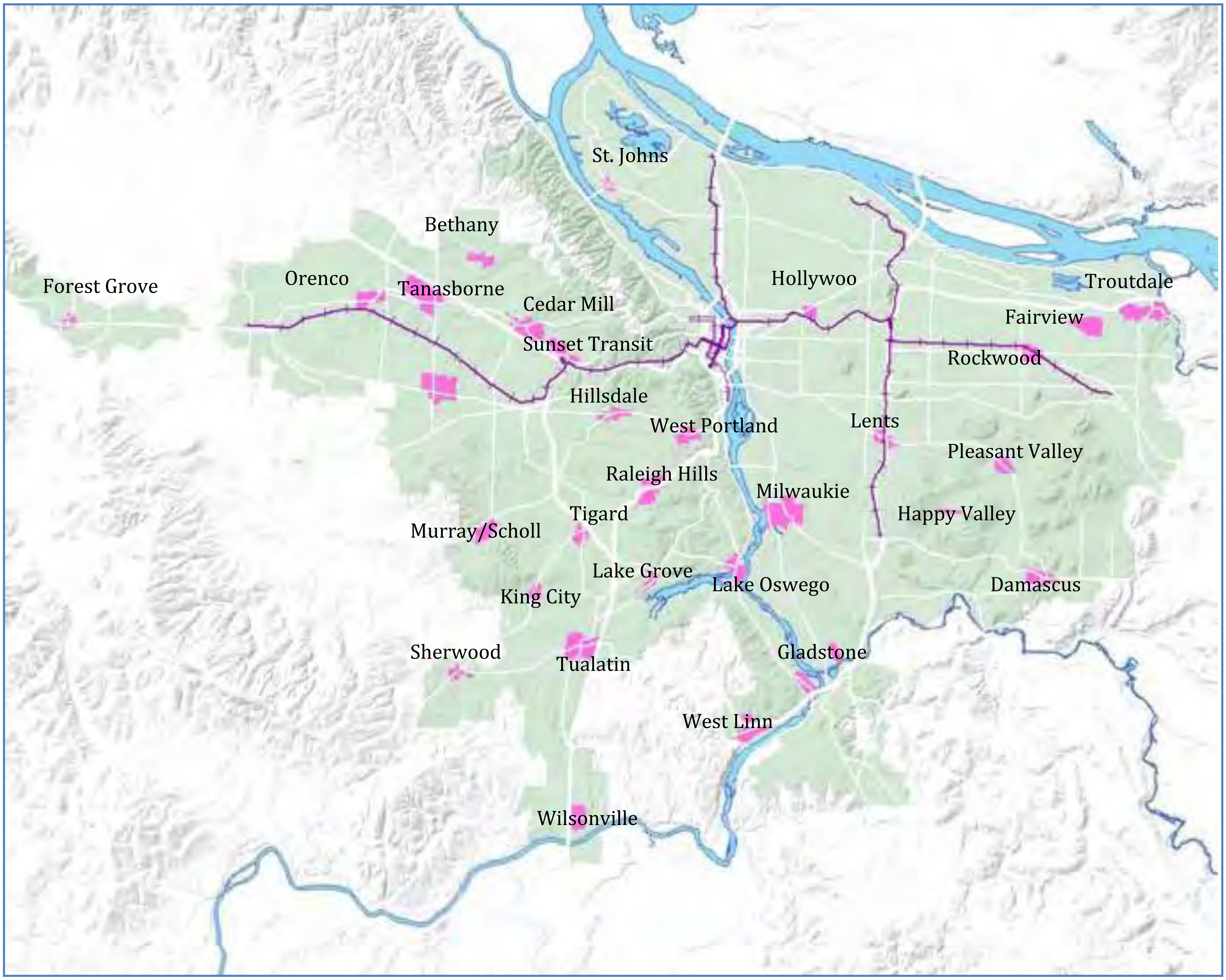

Figure 4: Areas Designated as Town Centers in Local Plans

- **Town Centers:** The Town Centers as a whole cover about 7,800 acres and range in size from the smallest at 48 acres (Gladstone) to the larges at 405 acres (Tanasbourne). Figures 4 and 5 illustrate the Town Center locations and their size. On average, Town Centers are more residential than the Regional Centers with higher average dwelling units per acre (5) and fewer businesses per acre (.5). The Town Centers cover a wide range of mixed use development status with some relatively recently developed, some emerging as centers and some more established. Some Town Centers are the downtown areas of small towns, some are new towns and some are older neighborhoods. Figure 6 illustrates the variety in the current physical character of the Town Centers. Some, such as Hollywood, have higher residential and commercial density. Others, such as Murray/Scholls have residential, but not commercial density and others, such as Pleasant Valley, are not yet developed. A few examples of the current status of Town Centers include:

    - Established Town Centers – Some Town Centers contain established historic downtowns with some already existing mixed use or compact development. Tigard, Lake Oswego, Tualatin and Forest Grove Town Centers are examples of centers located in established commercial districts with some mixed use development. Lake Oswego is an example of a center that applied urban renewal to support commercial and residential development at the Town Center scale. Hollywood and Hillsdale, in Portland, offer other examples of mixed use development in an older, established neighborhood. Milwaukie, another historic downtown, also has had recent mixed use development. These centers have access to a state highway or interstate. Over the years, these communities have invested in redevelopment and streetscape improvements and have developed plans for their communities that include high capacity transit, trails, parks or plazas.

    - Emerging Town Centers – Some Town Centers are more recently developed and are emerging as leaders with some mixed use or compact development. Orenco and Tanasbourne in Hillsboro, Bethany and Fairview Village Town Center are examples of Centers that have begun to develop over the past 20 years with more residential than business density. These emerging centers have somewhat limited transit service available, although Orenco is in a light rail station area, and have vehicular access from either state highways or interstates.

    - New Town Centers – Some centers are so new that they have not yet developed and are in the planning stages. These include the Pleasant Valley and Damascus centers which were recently added to the urban growth boundary as well as area that are still developing their centers plans, such as Happy Valley. These areas have limited vehicular access and little to no transit service.

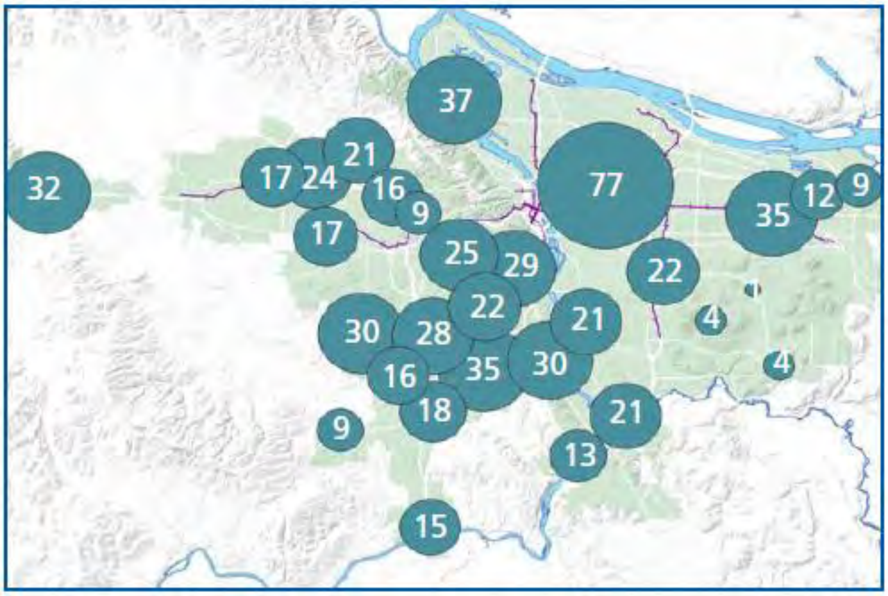

Figure 5: People per Acre in Town Centers (includes residents and workers).
Source: State of the Centers Report, Metro January 2009 (ESRI business analyst data, www.ESRI.com)

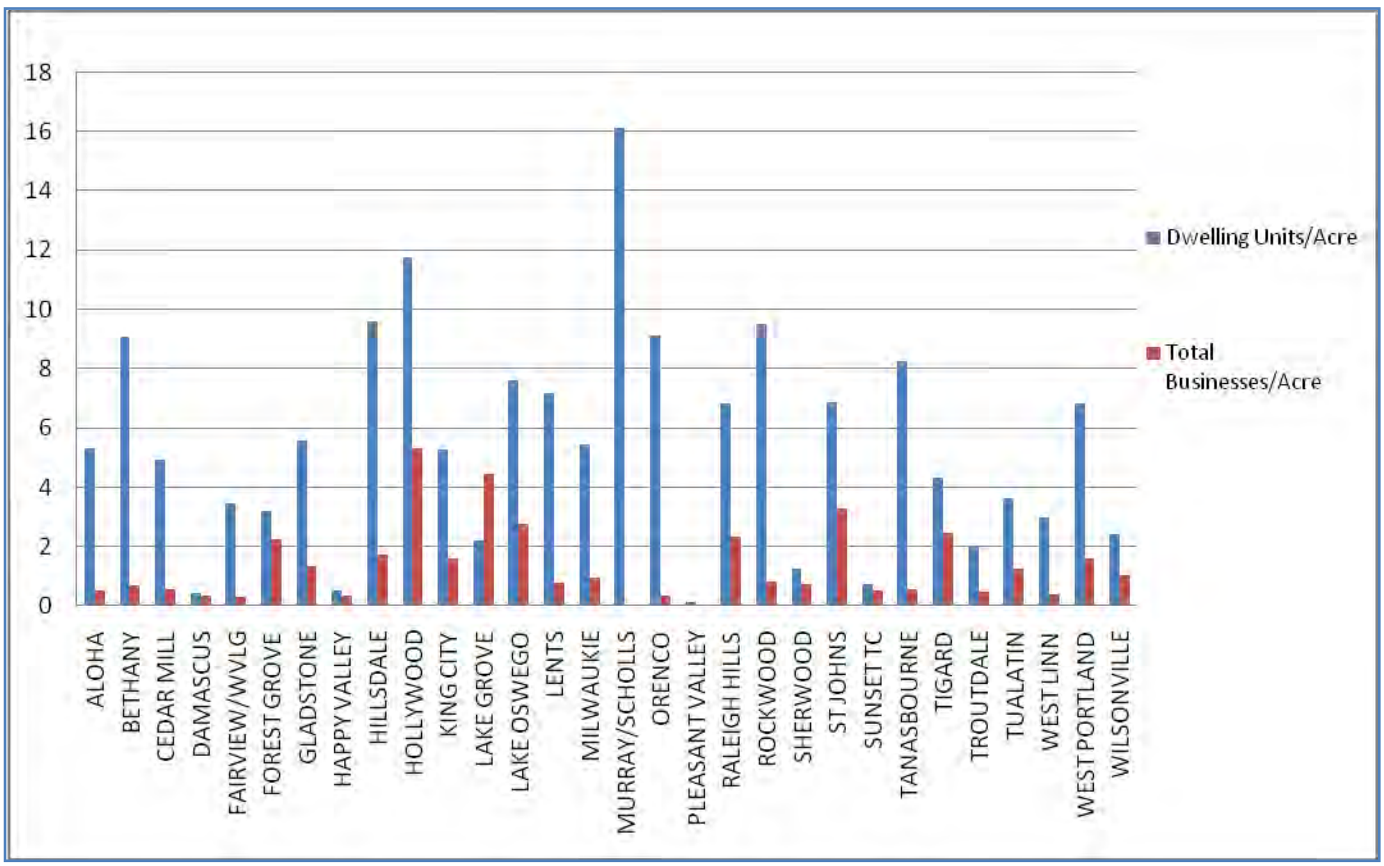

Figure 6: Residential and Business Density in Town Centers
This figure helps illustrate the variety of urban form among the town centers and shows which centers contain primarily residential or business developments or both.
Source: State of the Centers Report, Metro January 2009 (ESRI business analyst data, www.ESRI.com)

- **Corridors**: Corridors reflect the largest acreage of any of the 2040 design types at over 16,000 acres. The corridors are located along existing and past state highways and major arterials and include some historic main street districts. The Corridor designation on the 2040 Growth Concept map, represented in figure 7, includes a half block on either side of the road. Some of the corridors are designated as main streets. Many of the corridors, but not all, are served by frequent bus service and most of the corridors carry high traffic volumes. Few communities have developed plans to implement these corridors as mixed use development and some of the corridors remain in single family residential use. The corridors are quite varied and represent great potential for redevelopment. Examples of the variety of corridors include:

    - Main streets – Examples of corridors on main streets include Tacoma Street in Sellwood and Adair/Baseline in Cornelius and Walker Road in Beaverton. In Portland, Southeast Belmont, and Southeast Hawthorne are examples of main streets with mixed use development. Some of these Main streets function more like centers in that commercial and multi-family development extend beyond a half block on either side of the road.

    - Major city or county arterials- Examples of these corridors include Northeast MLK, Interstate Avenue, Division Street and other major arterials in East Portland with commercial and residential redevelopment. While they may carry high traffic volumes, the street design of the more developed corridors supports other modes.

    - State Highways - Many of the region's corridors are located along state highways that play a major role in vehicular traffic flow. Examples include, 82nd Avenue, McLaughlin Boulevard, Powell Boulevard and Beaverton Hillsdale Highway. While these corridors have experienced commercial and residential investment, little mixed use and compact development has occurred.

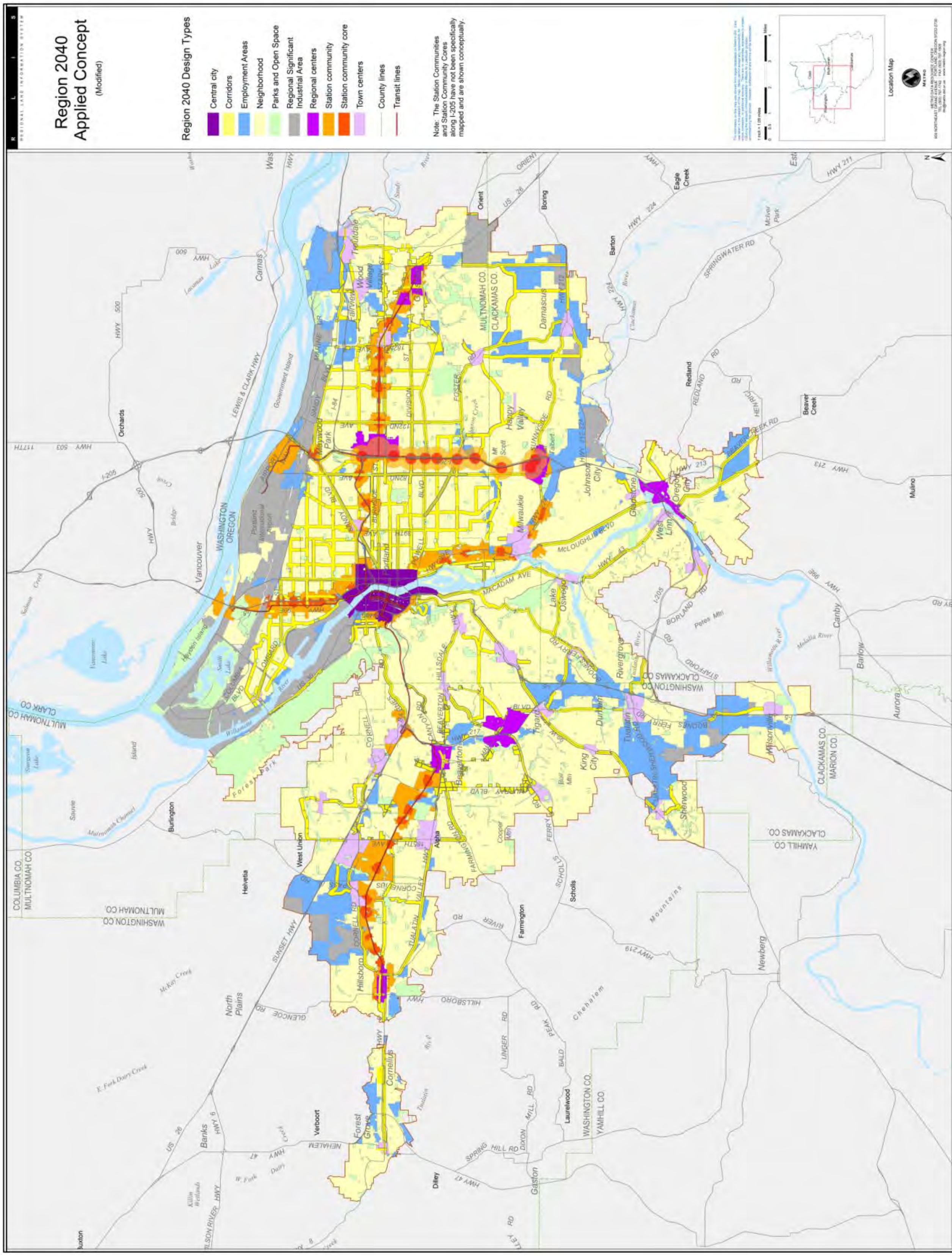

Figure 7: Applied Region 2040 Concept Map
This map represents areas designated as 2040 design types in local plans.

Aspirations

- Communities have significant aspirations for growth in their centers and corridors and face a variety of challenges in achieving these aspirations. Metro recently requested planning directors to summarize the aspirations for growth in their community, the values that guide that growth and the barriers to achieving their aspirations. Unlike zoning or other reported data, the local aspirations submissions reflect where communities are investing their leadership skills, time and financial resources and identify barriers to achieving these aspirations.

- The aspirations reflect the consistent values of the region as a whole – a desire to develop vibrant, sustainable communities, attract strong, well–paid jobs, increase the jobs/housing balance and protect and improve natural areas. The aspirations reflect commitment to developing in centers and corridors consistent with the 2040 Growth Concept and demonstrate that aspirations in new areas such as Bridgeport Village, where more intense development is located outside of a center or corridor, are the exception.

- Some communities aspire for growth that could double or triple their current population or jobs while others are aspire to grow 25 percent or less. The aspirations reflect the mixed state of planning and challenges facing the centers and corridors in the region. These aspirations will likely evolve as communities update their comprehensive plans and modify their policies to respond to changing circumstances and growth challenges.

The following summaries are drawn from the local aspirations and illustrate the range of development that communities are trying to achieve and the challenges they face:

- **Central City:** Has the highest aspirations for growth and has zoned capacity available to meet these aspirations for years to come. Planning staff estimate that roughly 400 acres of vacant or underutilized land either is now or could likely become available for development in the next 20 years within the Central City resulting in over 100 million square feet of new building area if it were all developed. If 50 percent or 60 percent of this were developed as residential, it could represent between 50,000 and 60,000 new dwelling units. Aspirations include increasing the share of the region's job growth in the Central City. With zoning and infrastructure largely in place, the City aspires to develop zoned capacity and achieve their job growth targets.

- **Regional Centers**: Communities also have aspirations for significant growth in the Regional Centers. Highlights from some of the aspirations for Regional Centers include:

    - Tigard's aspirations for Washington Square Regional Center call for development of 50 dwelling units/acre and floor area ratio (FAR) of 2.0 or greater. Beaverton is considering options for increasing zoning to support their aspirations for redevelopment of an existing office park area west of Hwy 217. Aspirations call for improved access across Highway 217, and creation of an integrated, pedestrian and bike-friendly center with an integrated bus and high capacity transit system.

Aspirations include connecting to the new WES station from one side of Highway 217 to another and improving access from one side of the mall to the other across the parking surrounding the mall. Aspirations also call for addressing the congestion on Highway 217 to improve access and mobility standards to support redevelopment.

- Hillsboro Regional Center – The City's downtown plan calls for 2000 to 3000 more jobs (a 25 percent increase) and 3000 more dwelling units (a 100 percent increase) in the larger Hillsboro Downtown area. Aspirations call for developing in a style that is compatible with the historic downtown area. Metro and the City also co-own a one acre redevelopment site in the heart of downtown directly adjacent to the Hillsboro Transit Centers that the City aspires to develop.

- Gresham Regional Center – Aspirations reflected in adopted plans for development in the downtown portion of the Regional Center include growing from 2500 jobs to 6000 jobs and from 1000 residents to 3,300 residents. In Civic Neighborhood, aspirations reflected in adopted plans call for doubling from 1000 jobs to 2000 jobs and increasing residences five-fold from 400 residences to 2000. Aspirations for Civic Neighborhood envision a tall, dense, mixed-use, transit-oriented urban environment with two MAX stations, Gresham's largest concentration of retail stores and home to the tallest buildings in Gresham, both commercial office and residential. Aspirations for downtown Gresham envision a community with amenities such as boutique retail, coffee shops, performing arts center, relocated City Hall, bike shops, brew pubs and other nightlife, child care, multiple fine dining restaurants and a grocery store.

- Beaverton Regional Center – Beaverton is developing a comprehensive vision for its downtown using information gathered through an extensive public visioning process that was completed last year. The City aspires to have a vibrant mixed use and sustainable downtown that connects the library to the Round. The City has invested in supporting redevelopment at the Beaverton Round MAX station and the adjacent Westgate and is considering urban renewal as a tool. Beaverton also desires to improve the infrastructure within the center and has identified multiple investments in their transportation system plan to support circulation, access, and connectivity. The City has conducted parking studies and is interested in improving parking management.

- **Town Centers**: Aspirations for Town Centers reflect greater diversity than for Regional Centers. Some centers have aspirations for significant growth while others aspire for limited additional growth. The following highlights a few of the more significant of the aspirations and challenges.

  - Tigard Town Center –Tigard has aspirations for 2500 housing units and 1.9 million square feet of commercial in their downtown, which currently has about one million square feet of commercial. Tigard envisions a mixed use urban village that includes two-to-eight story buildings with transit supportive land use densities. Their aspirations include improved street connectivity, parking standards and, potentially, structured parking. Tigard has already made multiple investments to support these plans, including preparation of a new vision document, location of new WES station, Main Street enhancements, adoption of urban renewal and relocation plans for the transit center, new investments in Fanno Creek trail and plans for a new plaza. High capacity transit is envisioned as a part of their center as well as an integrated bus/rail transit center.

  - Amber Glen/Tanasbourne –Hillsboro has aspirations to expand the Tanasbourne Town Center with development at the adjacent 252-acre Amber Glen site and re-designating the Town Center to a Regional Center. Plans call for 2000 new jobs and 5000 new dwelling units on the Amber Glen site for a total of 24,000 units and 14,000 jobs in the combined center. Hillsboro has an active development planning process with the major property owners of the area. Aspirations include investing in the infrastructure for the center, including a new park and light rail transit extension as well as developing mid-rise housing.

- **Corridors**: Several jurisdictions identified aspirations for re-evaluating the potential for mixed-use development along corridors. Compared to the aspirations for centers, aspirations for corridors are not as well developed and some are being considered for the first time. Successful examples of corridor development patterns are harder to find, but some examples include recent development on the east side of Portland such as Southeast Hawthorne, Southeast Belmont and Northeast Sandy and along MLK and Interstate. A few examples of aspirations for corridors include:

  - Tigard identified aspirations for the Hwy 99W corridor for 40 to 50 dwelling units per acre and 30 to 40 employees per acres with a FAR of 2.0 or greater and two to 10 story buildings with larger buildings at key nodes. High capacity transit is a key component of this aspiration. Highway 99 W is one of the most congested and most used facilities in the region and aspirations include addressing impacts to the highway, improving pedestrian and bike safety and achieving high quality urban design and aesthetics.

  - Beaverton identified interest in examining the potential to redevelop several corridors. One example was a possible re-evaluation of the Main Street at Walker Road and 158th, an area currently planned for 750 dwelling units and 3000 jobs.

  - Portland identified enormous redevelopment potential in corridors and main streets, particularly in East Portland based on the revitalization corridors have recently seen along Southeast Hawthorne, Southeast Belmont, Southeast Division, Southeast Milwaukie, Northeast Broadway, Northeast MLK, Northeast Alberta, Northeast Killingsworth and Northwest 23rd and 21st Avenues, Northwest Thurman Street and parts of Beaverton-Hillsdale Highway. Aspirations for the corridors include improved infrastructure, access and circulation, higher rent levels, regional and fright traffic, expanded local market areas, more complete street infrastructure and smaller pedestrian-oriented or community-focused clusters.

- In East Multnomah County, Wood Village and Fairview aspirations reflect interest in developing along the Halsey and Sandy corridors and Wood Village is considering plan amendments to support mixed use along the corridor. Gresham is initiating a study of their transit corridors for potential increased mixed use development.

Table 1: Corridors Redevelopment Potential as Identified by Planning Directors in Local Aspirations

Corridor	Location	Aspiration
Walker Road and 158th	Beaverton	Current zoning calls for 750 dwelling units and 3080 jobs by 2020. Exploring options for corridor development
Beaverton Hillsdale Highway	Beaverton	Current zoning calls for 750 dwelling units and 3080 jobs by 2020. Exploring options for corridor development.
Sandy Boulevard	Fairview	Interest in redeveloping 90.5 acres of vacant and re-developable land
Hwy 8	Forest Grove	Commercial corridor development
Sandy Boulevard	Wood Village	Adopted new streetscape design and /or development standards and mixed use development standards for neighborhood commercial zone
Halsey Street	Wood Village	Adopted new streetscape design and /or development standards and mixed use development standards for neighborhood commercial zone
Interstate Avenue	Portland	Add 3250 dwelling units and 1,220 jobs between 2005 and 2035
82nd Avenue	Portland	Mixed use development potential, particularly at key opportunity sites and along future streetcar line
Sandy Boulevard	Portland	Additional mixed use, residential and commercial development potential, particularly around key nodes and future streetcar line.
Martin Luther King Jr. Boulevard	Portland	Continued mixed use, commercial and residential development
Cully Boulevard	Portland	Additional small business and local serving retail for neighborhood
NE Killingsworth Street	Portland	Mixed use commercial plans, particularly linked to future of PCC and PPS
Powell Boulevard	Portland	Potential for redevelopment, particularly linked to future light rail line
Foster Road	Portland	Commercial development similar to Sellwood Moreland
SE Belmont Street	Portland	Realize planned development and potential of future streetcar lines to support development
SE Hawthorne Boulevard	Portland	Realize planned development and potential of future streetcar lines to support development
SE Division Street	Portland	Realize planned development with future streetcar lines to support development along Green Line station and, east of I-205, to achieve activity level similar to Hillsdale
Milwaukie Avenue	Portland	Potential for additional mixed use commercial along future LRT line
Tacoma Street	Portland	Achieve existing main street zoning (45'building heights and 3:1 FAR)
SE/NE 122nd Avenue	Portland	Commercial and residential development as planned with activity level similar to Hillsdale.
Kenton/Denver	Portland	Redevelopment goal similar to Sellwood Moreland activity
Interstate Avenue	Portland	Redevelopment along light rail line
SE 136th	Portland	Potential for future corridor designation

Challenges

Over the last fifteen years, many challenges to developing in centers and corridors have emerged. Based on the recent local aspiration submissions, the research that Metro has completed while developing a series of Community Investment Toolkits, and the experience in supporting transit oriented development, several major challenges have been identified in achieving development according to the 2040 goals. A full bibliography of recent research is attached. Some of the key challenges are summarized below:

- Market: The market does not support the rent levels needed to make vertical mixed use development financially feasible. Market feasibility becomes more challenging at greater distances from the Central City.

- Zoning: The local aspirations and Metro data indicate that zoned capacity is not a problem – the challenge lies in developing codes that make the type of development we want to see the easiest thing to build. Many development codes present challenges for 2040 mixed use vertical development in some communities. For example, density requirements, height limits, and open space requirements can be barriers to developing mixed use or higher density projects.

- Design: Transitions between more compact development and existing neighborhoods has been identified as a problem affecting the implementation of projects in corridors and centers. These new developments face urban design challenges and the need for stakeholder support.

- Public Private Partnerships: Creating vibrant communities requires private investments and working relationships between the public and private sectors. Many communities lack the expertise and capacity to engage in public private partnerships.

- Parking: Parking presents multiple challenges. Too much parking is a barrier for pedestrian and transit use and limits FAR while an adequate or even abundant parking supply is a necessity for most lenders. Structured parking is often a suitable but costly solution, and funding these structures requires new public and private partnerships.

- Public Amenities: Vibrant communities have natural areas, parks, open space or some public space. Local jurisdictions have faced a variety of challenges in funding and designing these to create the sense of place that makes a center or corridor successful and able to leverage additional development.

- Corridor design: Lacking a wealth of successful examples, communities face a challenge in visualizing and designing a corridor that is compatible with higher traffic volumes and speed as well as with an attractive linear pattern of development.

- Fragmented property ownership: While some centers, particularly the newer centers, have single property owners, most face the challenge of moving forward on a coherent vision among multiple property owners with different objectives.

- Development code: While zoned capacity is not identified as a challenge except in the new developing areas, barriers in the existing code and the permitting process have been identified as challenges. Several cities are revising their code to support mixed use development now.

- Fees: Finding the right balance of using fees to support compact development and generate revenue is a challenge. Several cities discount fees to support redevelopment. Setting up the fee structure that supports compact development is a challenge when cities need revenue. Some cities have developed tiered system development charge fees and others give credits for transit oriented development. High fees further reduce the financial feasibility of compact mixed use.

- Local access: Achieving local circulation and street connectivity are challenges for most centers. Retrofitting an established neighborhood, such as Gateway or downtown Beaverton is expensive and affects many stakeholders.

- Regional highway access: Providing or maintaining access to the regional highway system is also a challenge. Emerging and new centers need new interchanges, highway or arterial access in order to achieve their aspirations. These projects compete for funding and take years to build.

- Transit access: Local aspirations identified improved transit access more than any other challenge to achieving their aspiration. Improved service, either by streetcar, light rail, frequent bus or even new bus route connections, is seen as important to increasing the market, improving access and supporting more compact development. Increasing transit services before the market is fully developed brings funding challenges.

Tools to implement the 2040 Growth Concept

Over the last 15 years, communities have tried to implement the 2040 Growth Concept and have faced a variety of challenges and tried a mix of tools to help get the development on the ground that the local jurisdictions envisioned. Metro's Community Investment Toolkits provide examples of some of these tools. Tools that have been used include:

- Financial: A variety of financial tools have been applied to help close the gap between what the market will support and the higher mixed use development costs. Some of the most common tools include urban renewal, tax abatements and fee reductions. In addition, financial tools have included direct public investments in a project and in the infrastructure to support the project. Additional funding sources include the gas tax, property tax, system development charges, street utility fees and local improvement districts. Figure 5 shows where urban renewal is currently applied within the region and the extent of the urban renewal capacity that is used.

- Land Assembly: The public and private sector have had to apply tools to assemble land with multiple property owners in established areas. Newer areas, with fewer owners, still require land assembly. Private sector tools include a variety of lease purchases and agreements. Public sector tools include voluntary, willing seller agreements or use of eminent domain.

- Parking tools: Public sector tools include changing parking code minimums or maximums, regulating on-street parking and allowing for shared-use parking. The Central City has led the region with public parking structures. In the areas outside of the Central City, the private sector has invested in parking structures for private developments, most notably for medical facilities. Shared parking arrangements have been made in some locations.

- Plans and codes: Development plans, mixed use development zoning and code changes are tools the public sector has used to support and implement their vision. Most communities in the region have developed plans for their centers and few have developed plans for their corridors. This is a tool that continues to be updated as community plans evolve.

- Public sector staff: Having public sector staff oriented and trained to work with the private sector is a tool that only a few communities have had the resources to support. Hillsboro is an example of making a priority to have public staff to support private development and it has helped support the redevelopment in their downtown and other parts of the City.

- Public infrastructure investments: Investments in community infrastructure, including parks, plazas, trails, streets and sidewalks, is an approach that communities throughout the region have applied. Metro's Metropolitan Transportation Improvement Program (MTIP) criteria have supported funding applications for allocations of federal transportation funds. Metro's open space bond measure, which dedicated a share for local park use, has been an important source of funding for parks.

- Transit investments: The region has made capital transit investments a priority as a tool to leverage redevelopment. The private sector has contributed to the local match for specific projects.

- Education and Marketing: Jurisdictions have developed marketing and education plans as part urban renewal plans and implementation. Other examples include the use of visualization tools to develop neighborhood and other stakeholder support and urban design and planning classes. Additionally, private sector broker materials market individual sites and districts.

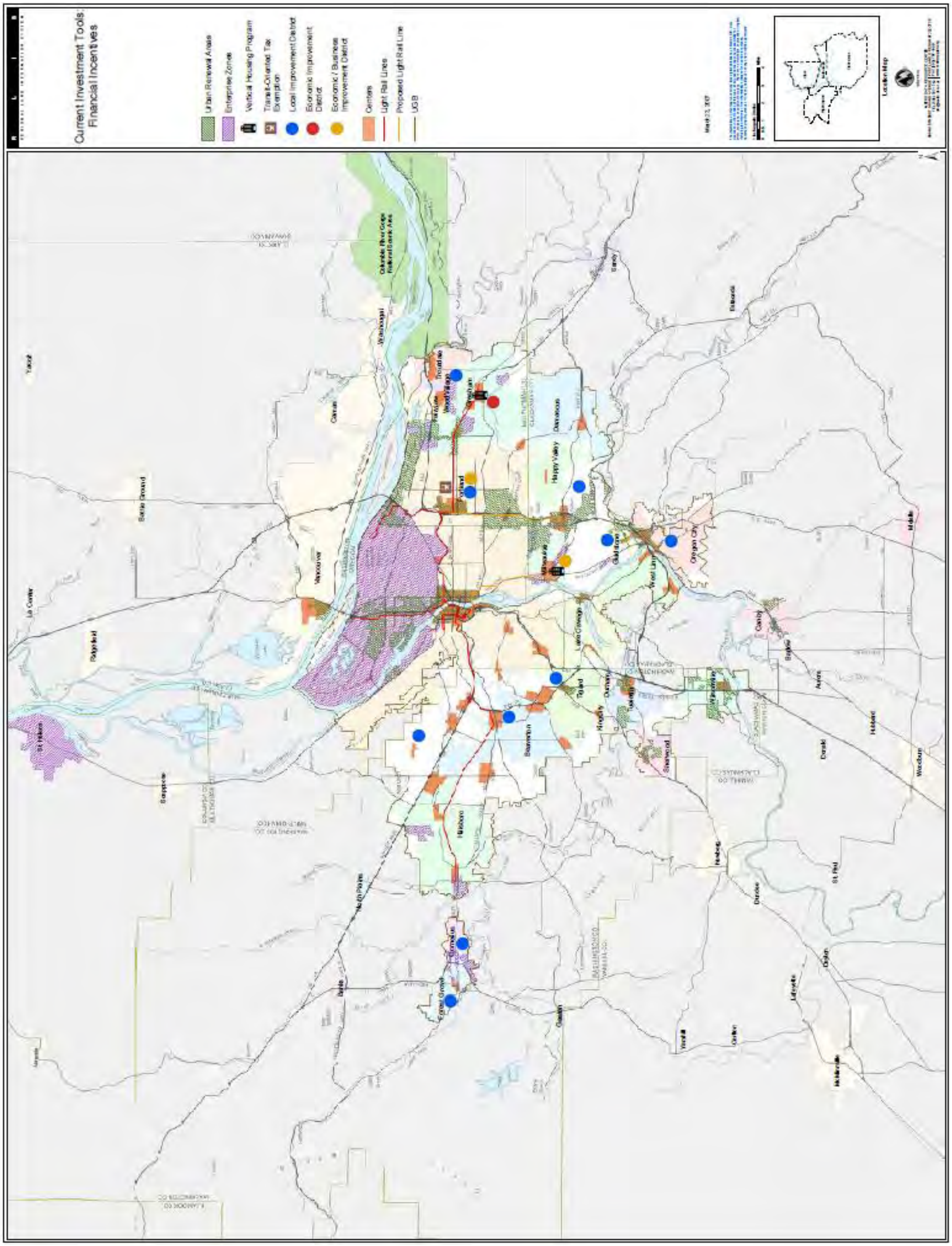

Figure 8: Financial Incentives Currently Used Around the Region
Source: Community Investment Toolkit, Volume 1: Financial Incentives, Metro June 2007

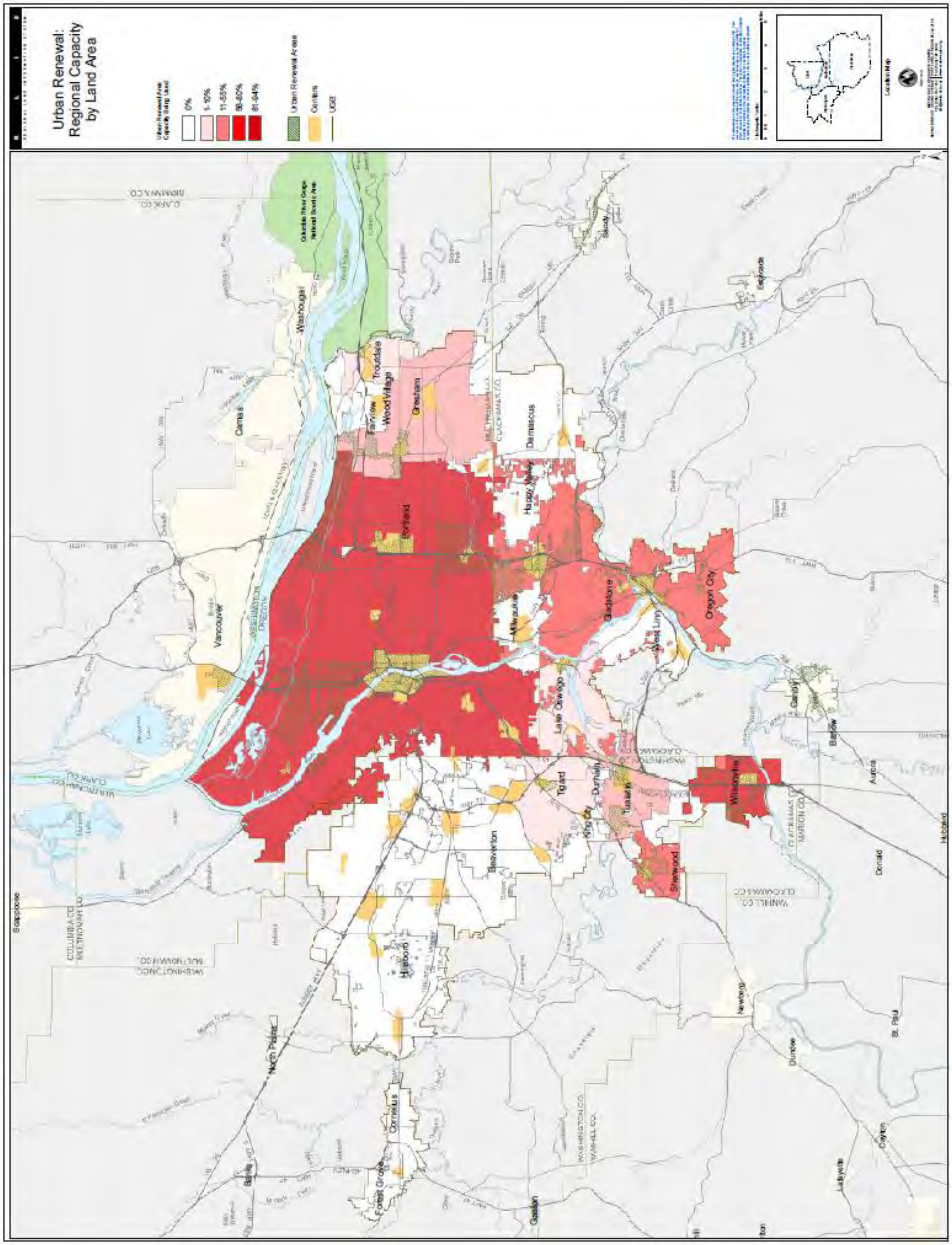

Figure 9: Map of Urban Renewal Currently Used in the Region
Source: Community Investment Toolkit, Volume 1: Financial Incentives, Metro June 2007

Expertise Needed
The expert panel is intended to help determine if the barriers and challenges identified in this report are the right ones and what tools can be applied locally and regionally to achieve the private investments desired. In doing so, the expert panel will help answer the following question:

- What are the best tools to support a strong public private partnership and achieve the local aspirations for development in centers and corridors?

Annotated Bibliography

This bibliography includes the sources, studies, and reports used for this summary report as well as additional publications that relate to center and corridor development.
Local Aspirations Summary, January 2009

Local aspirations were submitted from communities around the region in response to a set of questions developed by Metro. The content of local aspirations from communities around the region is focused on three main topics; their plans for growth in centers and corridors and other areas in the community, their ambitions for the future of their community, and the list of policy and investment choices required for achieving this desired character of their community. Depending on the ambition and character of each jurisdiction's summary in response, their local aspirations were deemed either high medium or low.
http://www.oregonmetro.gov/index.cfm/go/by.web/id=30756

Atlas of Mobility Corridors, April 2009

Created as part of the RTP update, the Atlas of Mobility Corridors is a way to present land use and transportation conditions for each of the region's twenty-four major travel corridors. Each corridor featured in the Atlas is described according to location in the region, transportation facilities, land use patterns, and gaps in various travel mode such as pedestrian, freight, transit, and bike. The Atlas provides a way to compare circumstances and data between corridors in the region.
(No web link)

State of the Centers Report, January 2009

The State of the Centers Report provides the status of the 37 centers identified in the 2040 growth concept and highlights six types of centers that illustrate different points along an activity spectrum. Each profile describes current conditions of regional and town centers including density, jobs-housing balance, and community amenities. The activity spectrum is based on hours and types of activity and density. The report also provides current statistics on each center including information on residents, median age, income and household size, current park and transit services, and key infrastructure for center development.

http://rim.metro-region.org/webdrawer/rec/194279/view/Metro%20%20Advisory%20Committee%20Records%20-%20Full%20Committee%20Meeting%20Records%20-%20State%20of%20the%20Centers%20Report.PDF

Linking Investments with Our Vision - Investment Scenarios, fall 2008

Metro tested five different investment scenarios to understand how public investments can be made efficiently and promote private investment in centers and corridors to help the region grow in accordance with 2040 growth concept. The five scenarios vary by location, total dollar amount, and timing of the investments in urban centers and corridors categorized under low, medium, and high investment with all other non-investment policy actions left unchanged. The results of the test indicate that investments are most effective when used in a targeted manner and particularly in the central city and in regional centers. Targeted incentives and investments in centers and corridors can be an effective means of attracting additional households to these areas.
(No web link)

Regional Infrastructure Analysis, June 2008

This report summarizes costs for eight infrastructure types throughout the region needed to achieve great communities and accommodate growth in the region over the next 30 years, ranging from 27 to 41 billion. Traditional funding sources are expected to cover only about half the estimated costs of infrastructure investment. The report discusses four approaches to infrastructure planning, development and finance strategies including efficient service delivery, demand management, innovative planning and design, and new funding.

http://library.oregonmetro.gov/files/regionalinfrastructureanalysis.pdf

Promoting Vibrant Communities with System Development Charges, Galardi Consulting, Dr. Arthur C. Nelson, Paramatrix, and Beery, Elsner, and Hammond, LLP July 2007

This report contains model System Development Charges (SDCs) that promote greater financial equity and the region's 2040 Growth Concept. A goal of this study was to explore SDCs that reflect the real costs associated with serving different developments and the report outlines how to calculate SDCs to reflect these differences in infrastructure costs and impacts to the system. The report presents the variety of technical and policy based approaches that local jurisdictions can choose for their SDCs and the considerations for selecting an SDC structure such as impact fees versus full cost recovery, location-specific SDCs, and the impacts of green design on infrastructure costs. It also discusses incorporating 2040 infrastructure types, such as parking garages, into local SDC fee schedules.

http://library.oregonmetro.gov/files/sdc_report.pdf

Urban Living Infrastructure Report, Johnson Gardner, June 2007

The Urban Living Infrastructure Report explores whether urban amenities improve the financial feasibility of mixed use urban residential development by resulting in higher prices for residential development. Financial viability remains the primary obstacle to achieving many of the development forms envisioned by the 2040 growth concept. Higher density development forms tend to cost more per square foot to build, and require higher pricing to make them viable. The study uses a hedonic analysis of 2006 home transaction prices adjacent to various urban amenities in five urban metropolitan areas throughout the region (SE Division, Sellwood, Multnomah Village, Lake Oswego, and SW Murray/SW Scholls Ferry). The results show that the availability of certain urban amenities has an impact on pricing for a variety of homes.

(No web link)

Community Investment Toolkit, June 2007

The Community Investment Toolkit presents strategies and tools that can be used to stimulate investment in the region's centers, corridors, employment, and industrial areas to implement the 2040 Growth Concept. The strategies include financial incentives, urban design and local zoning and building codes, and employment and industrial areas.
Volume One: Financial Incentives.
Volume one of the Community Investment Toolkit provides financial tools that local jurisdictions can use to stimulate private investment and encourage implementation of the 2040 growth concept. The investment tools discussed in this report include the Vertical Housing Program, Transit-Oriented Tax Exemption programs, urban renewal areas, and improvement districts as well as enterprise zones. This toolkit assesses the opportunities and challenges with using each tool as well as tips for local implementation. It also highlights the use of each financial incentive in the region through case studies.

http://library.oregonmetro.gov/files/financial_incentives_toolkit_final.pdf

Volume Two: Innovative Design and Development Codes:

Volume two of the Toolkit outlines code changes and design guidelines that can assist in creating better neighborhoods and more efficient use of land. The major strategies featured in the toolkit include design and code fixes to facilitate transitions from suburban to urban style development over time, code flexibility to support building design that fits in the existing neighborhood context, and managing parking to maximize and support the urban form. In addition, this toolkit features strategies to better engage the public and private sector in zoning and the planning and development process.

http://library.oregonmetro.gov/files/design_dev_codes_toolkit.pdf

Regional Housing Choice Implementation Strategy, April 2006

This report presents the implementation strategy and recommendations of the Housing Choice Task Force formed in 2005. The charge of the Housing Choice Task Force was to assess barriers that hinder work-force housing supply in the 2040 Growth Concept and to compile the experience from local pilot projects that identify the solutions to meet local Affordable Housing Production Goals to develop solutions for increasing housing and affordable housing supply. The report includes recommended solutions to reduce the cost of housing and increase the development of affordable housing and implementation strategies for overcoming traditional barriers to affordable housing development.

http://library.oregonmetro.gov/files/regional_housing_choices_imp_strat_032306.pdf

Metro Summary Report: Metro Corridors Project, ECO Northwest, Freedman Tung & Bottomly, Kittelson & Associates, Johnson Gardner, and Angelo Eaton, June 2005

The Metro Corridors Report, a product of the Metro Corridors Project, includes a summary report, a land use and analysis report, a case study report and a technical report. The study summarizes the issues and policies in Metro-designated Corridors and evaluates how 2040 goals for Corridors can be achieved. The adopted Metro goal for Corridors is to make them pedestrian and bike friendly and to increase density. This report describes the varied nature of corridors in the region, the challenges they face in development, and policy options to accelerate development in corridors. Most of Metro's analytical work and policy has focused on the various classifications of Centers identified in the Growth Concept. This report is part of a project that focuses on Corridor development. However, the recommendations presented in this report are mostly targeted to Corridors in suburban locations, and slightly less applicable to Corridors in inner-city locations. (No web link)

Ten Principles for Achieving Region 2040 Centers, Leland Consulting Group, Parsons Brinckerhoff, 2002

This report outlines ten proactive strategies to achieve 2040 centers in the region with a focus on creating incentives and removing barriers to center development. The principles cited in the report are general and meant to apply to centers of all size, mix of uses, character and stage of development, regardless of location and timing of development. The report defines what it means to be a center, what elements make up a center, and how a center can best interact with adjacent corridors. The report delineates challenges to investing in centers including financial and regulatory barriers and describes how thoughtful planning and leadership between the public and private sector can serve to address those challenges.

http://www.oregonmetro.gov/files/planning/centers_principles.pdf

Creating livable streets: Street design guidelines for 2040, June 2002

The Creating Livable Streets handbook provides regional street design guidelines that support the goals of the 2040 growth concept and regional transportation plan for both new and existing streets. The goals of the handbook are to integrate street design more closely with land use considerations, support multi-modal activity, community livability, and economic activity.

(No web link)

Green Streets: Innovative Solutions for Stormwater and Stream Crossings, June 2002

The Green Streets handbook illustrates green street designs for efficient multimodal traffic use while maintaining nature in neighborhoods. The topics covered include the basic concepts of green street design, innovative solutions to stormwater and stream crossings and tree planting. The handbook also features case studies and examples of successful green streets approaches throughout the region and a strategy for implementing green streets.

(No web link)

Main Street Study: a User's Guide to Main streets, March 1996

This implementation guide focuses on main streets as a key design type of the 2040 growth concept and as important element for creating local character in a regional context, fostering local business development, and reducing automobile traffic. The handbook provides a variety of tools and strategies for encouraging main streets both old and new as a subset of larger commercial corridors. The handbook features case studies of successful main streets around the region and delineates five lessons to apply to main streets throughout the region including streetscape design elements, multi-modal transportation and accessibility, desired land use mix, regulatory fixes, and local business organization. Specific recommendations or next steps are provided for both the private and public sector.

(No web link yet)

Regional Main streets: An Implementation Strategy to Promote Main Street and Corridor Development, July 1995
This report describes the factors, public and private actions, and physical guidelines that are necessary to making corridors and main streets successful. The report describes an implementation strategy for main streets and corridors that includes regional and local actions as well as government and community roles. Regional standards are developed to provide local jurisdictions with specific code and plan amendments to better implement the policy direction of the 2040 growth concept. Specific standards and guidelines are categorized under land use, density, design, circulation, and parking. The overall conclusion of the report is that regulation is one strategy in an array of implementation strategies that can be utilized to encourage and engage main streets and corridors around the region.
(No web link yet)

Metro 2009 Performance Measures Report

An analysis of growth management data in response to Oregon State statute --ORS 197.301 and ORS 197.296

Planning and Development Department
November 2009

METRO

Metro ***People places. Open spaces.***

Metro, the regional government that serves 1.4 million people who live in the 25 cities and three counties of the Portland metropolitan area, provides planning and other services that protect the nature and livability of our region.

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Auditor – Suzanne Flynn

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Oregon's State Land Use Performance requirements for Metro

As part of its requirements for comprehensive land use planning and coordination, the state legislature requires in **Oregon Revised Statutes (ORS) 197.301** that Metro compile a report to the Department of Land Conservation and Development (DLCD) on nine performance measures every two years. Metro prepared its first performance measures report in 2002 and submitted it to DLCD in March 2003. In December 2004, Metro submitted its second report to DLCD. Both reports analyzed data for the performance measures required by the state as well as for those adopted by Metro council for the purpose of evaluating progress towards implementing the 2040 Growth Concept in title 9 of Metro's Urban Growth Management Functional Plan. Unlike the previous reports, this report focuses only on the measures required by state statute while Metro, through the Making the Greatest Place effort, evaluates how to update other measures of regional performance.

The nine measures are:

1. the rate of conversion of vacant land to improved land;
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;
4. 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;
5. the amount of environmentally sensitive land that is protected and the amount of environmentally sensitive land that is developed;
6. the sales price of vacant land;
7. residential vacancy rates;
8. public access to open spaces;
9. transportation measures including mobility, accessibility and air quality indicators.

In addition, **ORS 197.296** defines factors to establish sufficiency of buildable lands within the urban growth boundary (UGB) and requires Metro to consider new measures that demonstrate improvement in efficiency of land use for 20 years. During the 2002 Metro Periodic Review work, the Metro Council established three additional measures to evaluate efforts to improve efficiency of land use in the existing UGB and agreed to report them to DLCD. The three additional measures are:

10. the investment in transportation improvements in centers overall and as a percentage of overall transportation investments;
11. the number of Centers for which local governments have adopted strategies under new Title 6;
12. the amount of land in Regionally Significant Industrial Areas or industrial areas currently zoned for industrial use that is rezoned to allow commercial, residential, or institutional use.

This 2009 performance measures report relies on available information from numerous sources. While the data is primarily for the area within the Metro UGB, sometimes it includes the larger three counties or Portland / Vancouver region. For some of the measures, the data is available for only a few years. Where possible, data is presented over ten years or longer. This report does not interpret the data, nor provide the policy context for interpretation of the data. Although a large amount of data was compiled and analyzed, care should be taken in reaching conclusions based on the data presented, as no measure can tell the whole story of land use development in the Portland metro area.

This report is organized by each measure and includes Metro's definition of key terms in the ORS measures, findings of the data collected for analysis, followed by key charts containing the data used in the findings. Additional information related to the findings and measures can be found in the attachment and links to web pages provided.

1. Measure: The rate of conversion of vacant land to improved land

Definition

The following terms are defined by Metro as follows: a) "rate of conversion" is the average quantity of land consumed or used for development purposes during a given time interval, expressed in acres per year; b) "vacant land" includes the tax lots upon which there is no visible land use from aerial photography interpretation. In addition, if a developed tax lot has a half acre or greater portion that is vacant, the lot is considered partially vacant and partially developed. The vacant portion is included in the vacant land database; and c) "improved land" is land that has been fully or partially developed in residential, commercial, industrial and mixed use zones, including land used for roads, rights of way, parks, schools and utilities, and land set-aside for uses such as parks and schools.

Findings

- Information in the Metro's Regional Land Information System (RLIS) show that the acres of vacant land developed from 2001 to 2007 was 15,540 acres
- Average annual consumption of vacant land over the six year period was 2,590 acres
- Over the six year period, most of the vacant land was developed in 2001, 2002 and 2006.
- During the six year period, vacant land inside the UGB increased due to the UGB expansion. Of the 20,874 acres brought into the UGB, (18,838 acres in 2003, and 2,036 acres in 2005), 74% (15,501 acres) were considered vacant, while 26% (5,373 acres) were developed land.

Additional information

Additional information can be found in the Urban Growth Report on Metro's website at http://library.oregonmetro.gov/files/3b-urban_growth_report.pdf

Table 1.1: Vacant land developed (acres and percent) in the UGB (2001 – 2007)

	2001	2002	2003	2004	2005	2006	2007
Total Vacant land	46,307	42,109	52,658	50,822	51,497	49,677	46,267
Vacant land developed	4,198	3,344	1,836	933	1,820	3,410	n/a
Percent of vacant land developed	9.97%	6.35%	3.61%	1.8%	3.66%	7.37%	n/a

Source: Metro Research Center

2. Measure: The density and price ranges of residential development, including both single family and multifamily residential units

Definition

The following terms are defined by Metro as follows: a) "density" is the number of housing units per net acre or gross acre; and b) "price range" applies to only single family residential units, whereas "rent" applies to multifamily residential units.

Findings

Density of Residential Development

- According to local governments' building permit data in Metro's RLIS, the number of units built per net acre increased from about 5.5 units in 1995 to 10.7 in 2006.
- The number of units built per gross acre increased from 4.2 in 1995 to 6.6 in 2006, reflecting the decrease in median lot sizes from 6,738 square feet in 1995 to 4,300 square feet in 2006
- On the average, new multi-family dwelling units used about one-quarter of the amount of land used by single family dwelling units during 1995-2006 period

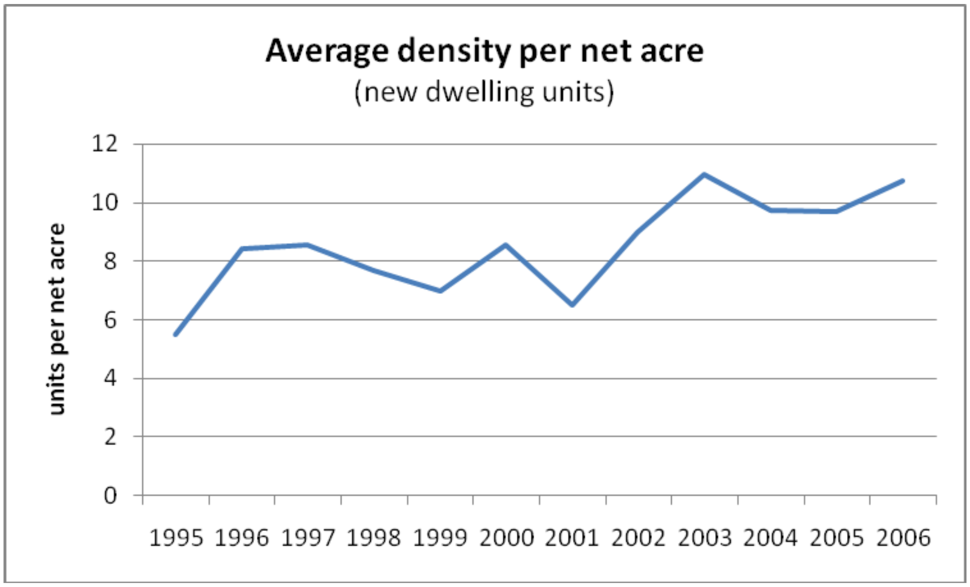
Price Ranges of Residential Development

- According to data from Regional Multiple Listing Service (RMLS), from 1993 to 2008, the median price of owner-occupied single family dwellings in the Portland-Vancouver metropolitan region rose by 160%, reaching a peak price in 2005 of almost $300,000. In this same time period, the average size of a single family home increased 9% from 1,858 square feet to 2,025 square feet.
- Data from the U.S. Department of Housing and Urban Development and Metro Multifamily Housing Association show median rent by type of units. The range of rent in 2000 varied from $463 for efficiency units, $569 for one-bedroom units, $702 for two-bedroom units, $976 for three-bedroom units, and $1,060 for four-bedroom units.
- During the 2000 - 2009 period, rent increase reached its peak for efficiency units in 2006 at $545, for one-bedroom units in 2009 at $645, for two-bedroom units in 2009 at $842, for three-bedroom units in 2004 at $1,106. Data for four-bedroom units was only available for the six years (2000-2005). During that time the peak was in 2005 at $1,257.
- From 2000 to 2009, the overall percent change in rent is as follows: 13.4% for efficiency units, 8.2% for one-bedroom units, 2% for two-bedroom units, 6.5% for three-bedroom units. Due to data limitation the percentage change in rent for four-bedroom units from 2000 to 2005 was 15.6%.

Additional information

Additional information can be found in the Urban Growth Report on Metro's website at http://library.oregonmetro.gov/files/3b-urban_growth_report.pdf

Figure 2.1: Average density per net acre of all new dwelling units (single family dwelling and multifamily dwelling) in the Metro UGB (1995-2006)



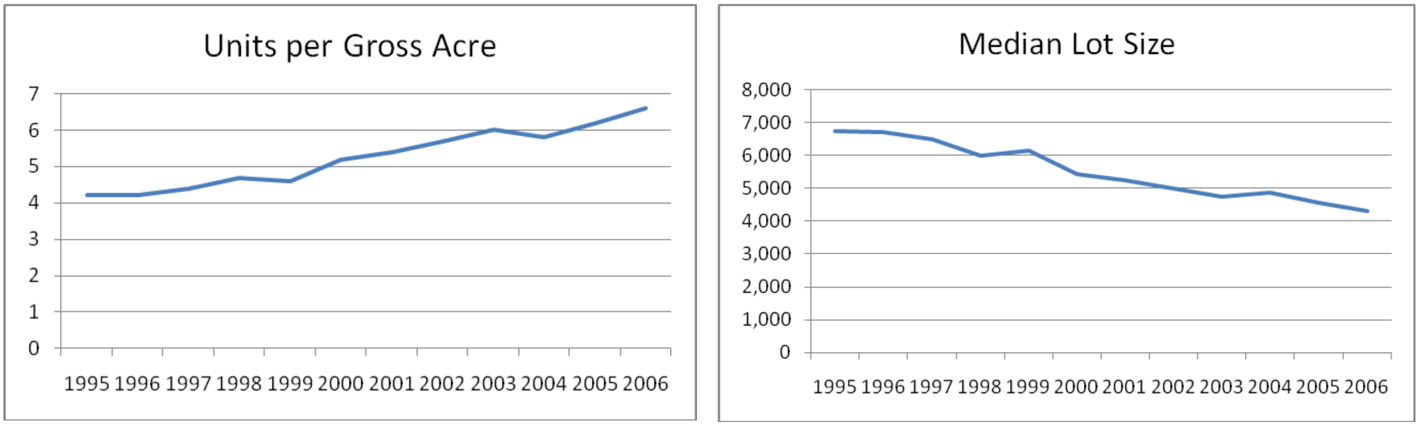
Source: Metro Research Center

Table 2.1: Average density per net acre of all new dwelling units (single family dwelling and multifamily dwelling) in the Metro UGB (1995-2006)

Year	Units per Net Acre
1995	5.5
1996	8.4
1997	8.6
1998	7.7
1999	7.0
2000	8.6
2001	6.5
2002	9.0
2003	10.9
2004	9.7
2005	9.7
2006	10.7

Source: Metro Research Center

Figure 2.2: Units per gross acres & median lot size of newly constructed single family dwelling in the Metro UGB (1995-2006)



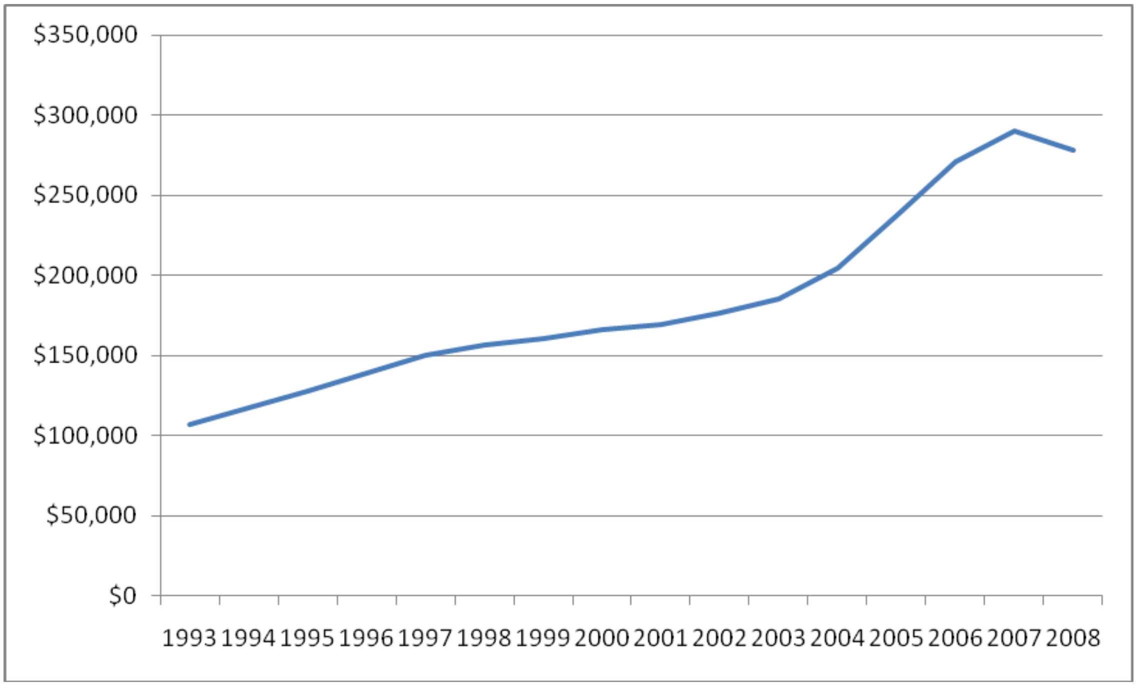
Source: Metro Research Center

Table 2.2: Units per gross acres and median lot size of newly constructed single family dwellings in the Metro UGB (1995-2006)

Year	Units per Gross Acre	Median Lot Size square feet	Median House Size square feet
1995	4.2	6,738	1,858
1996	4.2	6,698	1,896
1997	4.4	6,481	1,957
1998	4.7	5,996	1,882
1999	4.6	6,151	1,958
2000	5.2	5,436	1,904
2001	5.4	5,250	1,838
2002	5.7	5,000	1,793
2003	6.0	4,750	1,830
2004	5.8	4,858	1,914
2005	6.2	4,549	1,973
2006	6.6	4,300	2,025

Source: Metro Research Center

Figure 2.4: Median sale price of single family homes -- Portland metropolitan area RMLS (2009)



Source: Regional Multiple Listing Service, 2009

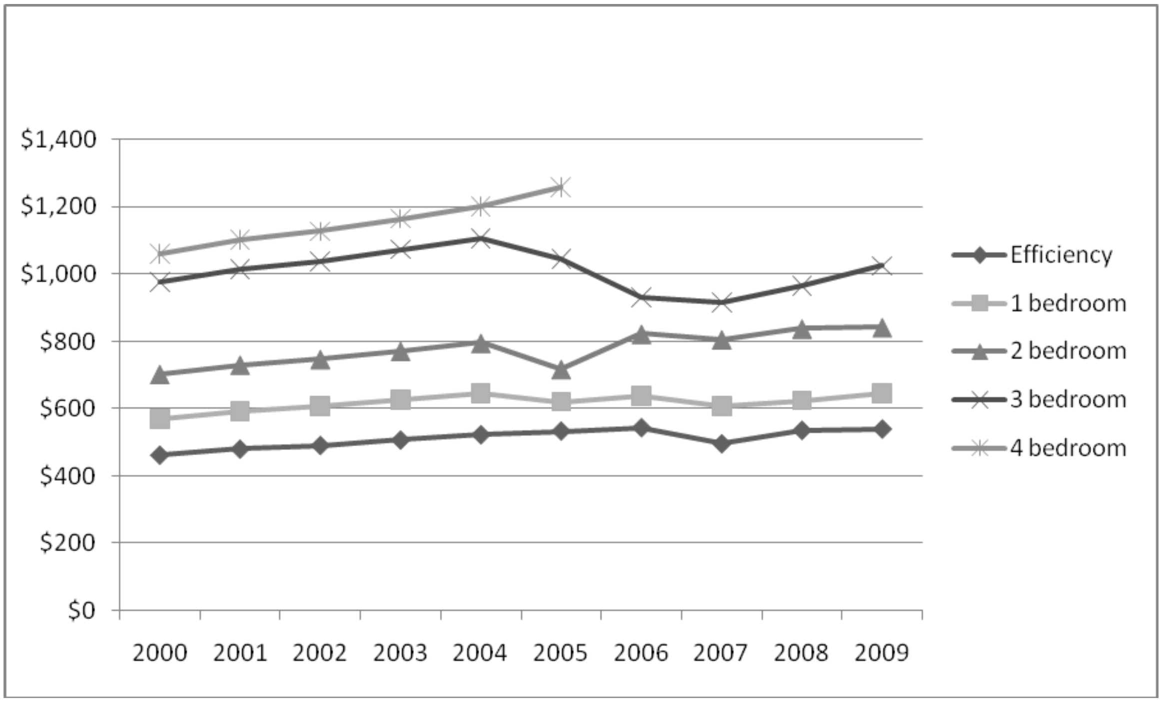
Table 2.4: Median sale price of single family homes - Portland metropolitan area RMLS (2009)

Year	Median Sale Price	Percent Change from Previous Year
1993	$107,000	
1994	$117,000	9.3
1995	$128,000	9.4
1996	$139,900	9.3
1997	$150,000	7.2
1998	$156,900	4.6
1999	$160,200	2.1
2000	$166,000	3.6
2001	$169,200	2.3
2002	$176,900	4.1
2003	$185,500	4.9
2004	$204,500	10.2
2005	4237,500	16.1
2006	$270,500	13.9
2007	$290,000	7.2
2008	$278,000	-4.10

Source: Regional Multiple Listing Service

Figure 2.5: Median rent of multifamily (apartment) units - Portland metropolitan area

**Rent for 4 bedroom units not available for 2006 to 2009 (see table below)*



Source: U.S. Housing and Urban Development and Metro Multifamily Housing Association

Table 2.2: Median Rent of Multifamily (Apartment) Units - Portland Metropolitan Area

Year	Efficiency	1 bedroom	2 bedroom	3 bedroom	4 bedroom
2000	$463	$569	$702	$976	$1060
2001	481	592	730	1015	1102
2002	492	606	747	1038	1127
2003	508	625	771	1073	1164
2004	524	644	795	1106	1200
2005	535	620	717	1044	1257
2006	545	637	822	930	NA
2007	497	608	806	915	NA
2008	537	624	838	966	NA
2009	541	645	842	1024	NA
% Change 2000 - 2009	**13.40%**	**8.20%**	**2%**	**6.50%**	**15.60%**

3. Measure: The level of job creation within individual cities and the urban areas of a county inside the metropolitan service district

Definition

Metro defines "level of job creation" as the total number of jobs in the tri-county area, cities in the Metro region, and within the design types on the 2040 Growth Concept map.

Findings

Jobs in the Region

- According to covered employment[1] data of the Bureau of Labor Statistics, the tri-county region had 842,039 jobs in 2006 and cities and the Metro area had 808,389 jobs. The number of jobs increased by over 200,000 between 1990 and 2000, weakened during the 2000 and 2003 economic downturn, and was followed by another relatively high job growth through 2007 in the tri-county total area.

Jobs in 2040 Growth Concept Design Types[2]

- Based on Oregon Employment Department data used by Metro Data Research Center, in 2006, the Title 4 Regional Significant Industrial Area (RSIA), Industrial and Employment areas combined were home to 28% or 223,293 of the 842,039 jobs in the tri-county area in 2006.
- Corridors were home to a 18% or 153,744) of the jobs in the tri-county area in 2006.
- Central City was also home to 17% or 141,276 of the jobs in the tri-county in 2006.
- Regional Centers and Town Centers accounted for 7% (59,868) and 6% (53,903) of the jobs in the Tri-County in 2006.
- Most significant gain (15,595) in employment occurred in the Title 4 Industrial areas during the 2000-2006 period, while the Title 4 RSIA area was the only design type area to report job loss (-4,455).
- Job gains in Corridors (2,200) and Central City (2,060) during the 2000-2006 period were also higher compared to other design type areas.
- 'Other' areas (including Station Communities and Neighborhoods and areas outside Metro in the tri-county area) accommodated 24% or 200,950 of jobs in the tri-county.

Jobs in Cities

- In 2006, Portland (including Maywood Park) was home to 47% (379,389) of the jobs in the region, other cities had 39.5% of the jobs (319,238) while the unincorporated areas accounted for 13.5% (109,762) of jobs in the region.
- Other cites with a higher number of jobs in 2006 were Hillsboro (7.5% -- 60,634), Beaverton (6.5% -- 52,717), Tigard (4.8% -- 38,897), Gresham (3.8% -- 31,451), Tualatin (2.7% -- 21,865), and Wilsonville (2.4% -- 19,508).

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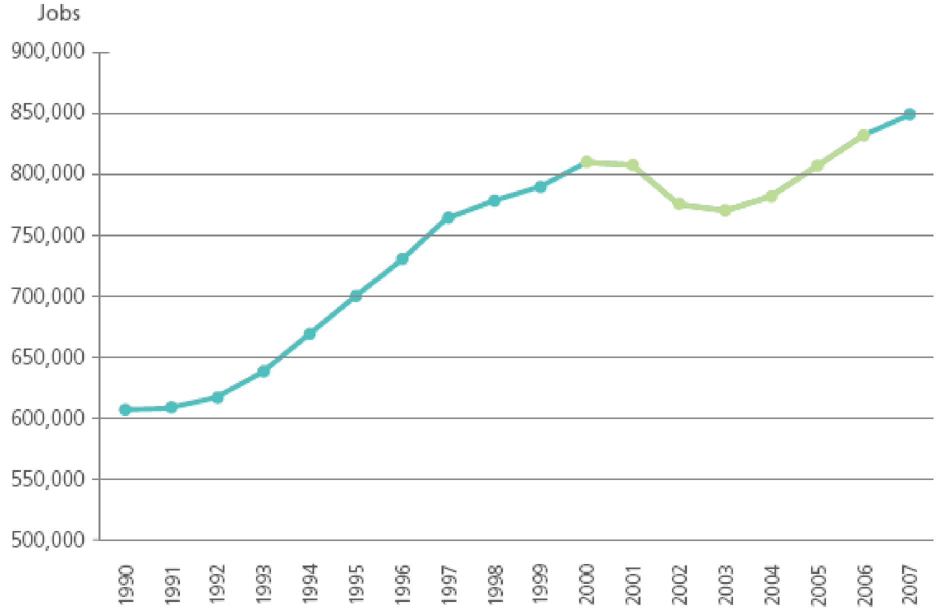
[1] Covered employment includes jobs covered by unemployment insurance and generally covering about 99% of all employment. Some of the jobs not included are interstate railroad workers, self-employment, domestic service, some agriculture labor not employing at least 10 persons.

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

Additional information

Additional information can be found in the Urban Growth Report on Metro's website at http://library.oregonmetro.gov/files/3b-urban_growth_report.pdf

Figure 3.1: Employment in Tri-County area 1990-2007 (total covered employment)



Source: Metro Research Center

Figure 3.2: Employment by 2040 Design Type in tri-County area – 2000 – 2006

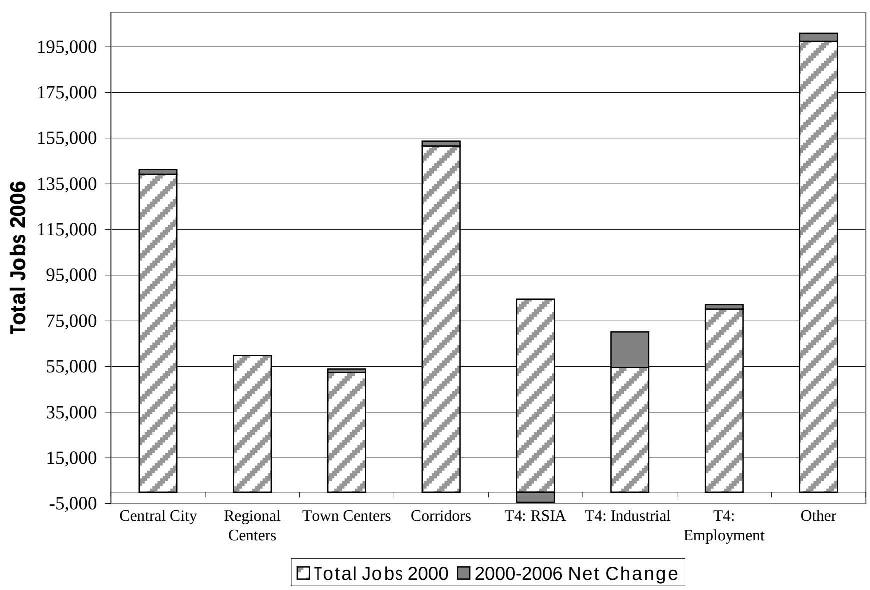


Table 3.1: Employment by 2040 Design Type – 2000 - 2006

	Central City	Regional Centers	Town Centers	Corridors	Title 4: RSIA	Title 4: Industrial	Title 4: Employment	Other*	Total Jobs in Tri-County
Total Jobs 2000	139,216	59,754	52,419	151,543	84,497	54,577	80,152	197,400	819,558
Total Jobs 2006	141,276	59,868	53,903	153,744	80,041	70,173	82,079	200,950	842,039
% Jobs in 2006	17%	7%	6%	18%	10%	8%	10%	24%	100%
2000-2006 Net Change	2,060	114	1,484	2,200	-4,455	15,595	1,928	3,550	22,481

Source: Metro, E.D. Hovee & Company, LLC. *[*"Other" inlcudes Station Communities, Neighborhoods, & other areas]*

Table 3.2: Jobs by cities and unincorporated areas of Metro UGB-- 2000 and 2006

	Jurisdiction	**2000 Total Employment**	**2006 Total Employment**	**Total Change in Employment, 2000-2006**	**Percent Change in Employment, 2000-2006**
1	Beaverton	49,776	52,717	2,941	6%
2	Cornelius	1,732	2,227	495	29%
3	Damascus	na	1,410	na	na
4	Durham	660	1,188	528	80%
5	Fairview	1,763	2,671	908	52%
6	Forest Grove	5,849	6,353	504	9%
7	Gladstone and Johnson City	2,814	2,826	12	0%
8	Gresham	28,199	31,451	3,252	12%
9	Happy Valley	657	1,026	369	56%
10	Hillsboro	43,990	60,634	16,644	38%
11	King City	496	481	-15	-3%
12	Lake Oswego and Rivergrove	14,878	19,042	4,164	28%
13	Milwaukie	11,257	12,542	1,195	11%
14	Oregon City	10,969	14,524	3,555	32%
15	Portland and Maywood Park	373,425	379,986	6,561	2%
16	Sherwood	2,882	4,848	1,966	68%
17	Tigard	35,893	38,897	3,004	8%
18	Troutdale	3,904	6,373	2,469	63%
29	Tualatin	21,290	21,865	575	3%
20	Unincorporated	106,607	109,762	3,155	3%
21	West Linn	3,164	4,183	1,019	32%
22	Wilsonville	15,259	19,508	4,249	28%
23	Wood Village	800	1,731	931	116%
	Total	745,059	808,389	61,920	8%

4. Measure: 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

Definition

The following terms are defined by Metro as follows: a) "small sites assumed to be developed" is the portion of a taxlot that zoning allows for the creation of a new lot; b) "inventory of available lands but which can be further developed" is the stock of land with appropriate zoning that has infrastructure capacity needed to attract or support new construction needs; and c) "conversion of existing spaces into compact units" is increasing density of existing taxlot by infill and/or redevelopment (also referred to as refill).

Findings

Residential Construction Activities

- According to local governments' building permit data in the Metro research center, during the 2001-2006 period, 43,455 new residential units were built in the Metro area --- 61% (26,515 units) of these were detached single family units, while multifamily dwellings made up the remaining 39% (16,940 units)
- The proportion of multifamily dwellings in the mix rose from 33% (2,381 units) in 2003-2004 to 48% (4,374 units) in 2005-2006, while single family dwellings proportion declined from 67% (4,910 units) to 52% in the same years respectively

Refill (Redevelopment and Infill) share on Residential Construction Activities

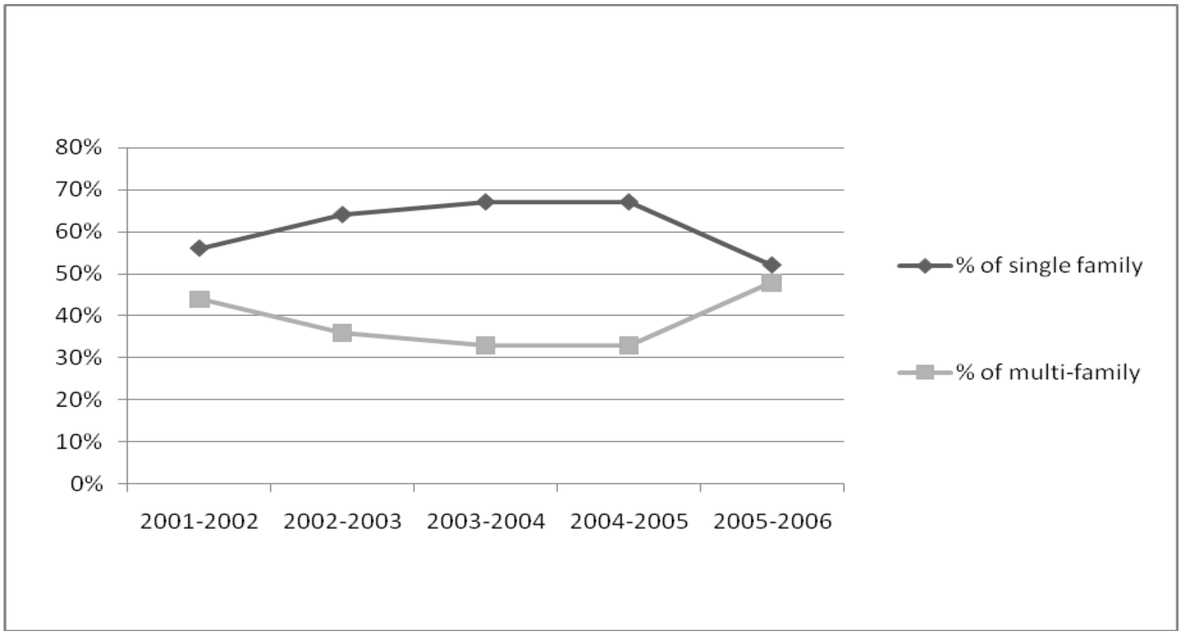
- Based on an analysis of local governments' building permits by Metro research center 76.5% of all the new units built during the five year period (2001-2002 to 2005-2006) were built on vacant land, while 23.5% of them were built through refill on existing taxlot by infill and/or redevelopment.
- The annual refill rate has fluctuated over the years, increasing from 15.6% in 2001-2002 to a peak of 30.3% in 2003-2004, and declining to 19.7% in 2004-2005 and increasing again to 27.3% in 2005-2006.
- The refill rate[3] during the 2001-2006 period was 23.5%, representing units built through refill while 76.5% of the units were built on vacant land during the same period.

Additional information

Additional information can be found in Appendix 9 to the Draft Urban Growth Report on Metro's website at http://library.oregonmetro.gov/files/3b-urban_growth_report.pdf

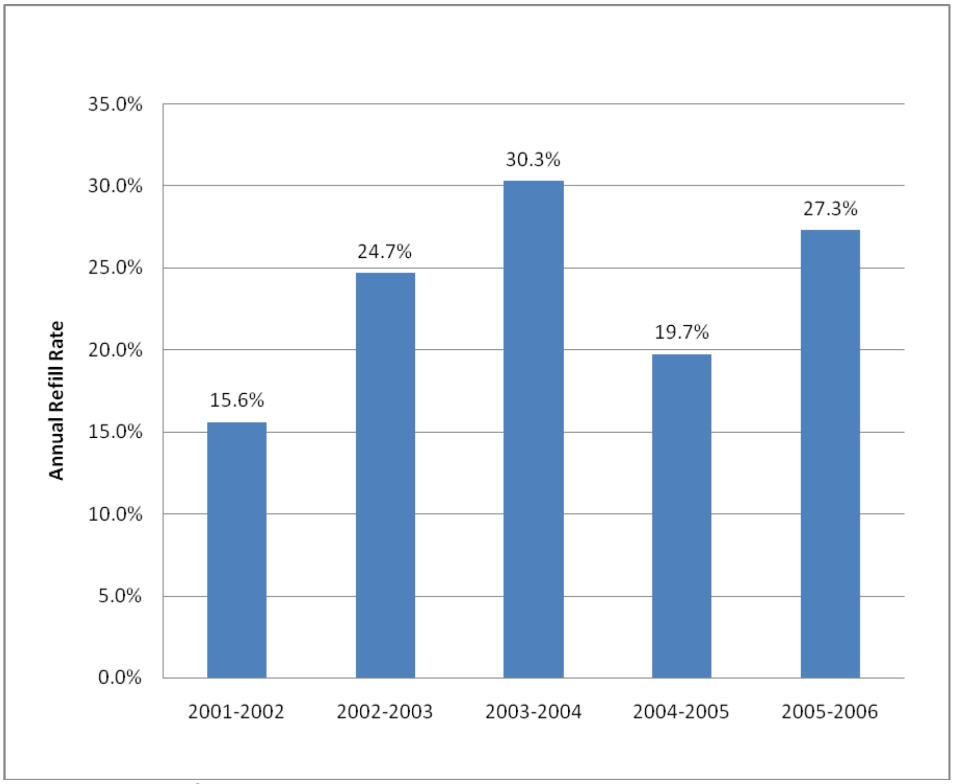
[3] **"Refill Rate"** is the percentage of new dwelling units that are built on land that is already considered to be developed, instead of on vacant land. It is important to note here that the number of refill units is being compared to the total of all new units built over a particular time period. So the refill rate is a proportion of new development, not a proportion of some land base.

Figure 4.1: New single family and multifamily dwellings built in the UGB 2001-2006



Source: Metro Research Center

Figure 4.2: Historical Residential Refill Rates



Source: Metro Research Center

Table 4.1: Distribution of new dwelling units by permit type 2001-2006

Dwelling Unit Type	Total Units	Proportion of Development	Units built on Vacant Land	Units built on Refill Land	Share of Units built as Refill
Multi Family	16,940	39%	11,455	5,485	32.4%
Single Family	26,515	61%	21,805	4,710	17.8%
Total	43,455	100%	33,260 *(76.5% of total)*	10,195 *23.5% of total)*	23.5%

Source: Metro Research Center

5. Measure: The amount of environmentally sensitive land that is protected and the amount of environmentally sensitive land that is developed

Definition

Metro defines "environmentally sensitive land that is protected" as the land identified within the urban growth boundary as regionally significant habitat areas and the amount of these lands with buildings, or impervious services as "developed."

Findings

Environmentally Sensitive Areas

- Metro identified over 80,000 acres of environmentally sensitive land, or regionally significant habitat, following the State's Goal 5 process, and has adopted a program to monitor the habitat loss over time. The regionally significant habitat was acknowledged by DLCD in 2007 as part of Metro's Urban Growth Management Functional Plan Title 13, Nature in Neighborhoods.
- The regionally significant habitat includes the highest value riparian habitat and upland wildlife habitat. The riparian habitat generally falls within 50-200 feet of streams/wetlands if the area is not developed and is vegetated and varies depending on existing conditions; steep slopes or undeveloped floodplain. The upland habitat reflects factors such as habitat patch size and shape and proximity to water resources and other habitat areas

Protection of Environmentally Sensitive Areas

- Metro's Nature in Neighborhoods program commits to protecting the region's environmentally sensitive areas through a combination of land use regulatory actions, voluntary protection and restoration and acquisition.
- Metro requires local jurisdictions to protect over 39,000 acres of the highest value riparian areas in the regionally significant inventory. Riparian resources are protected through programs that cities have adopted in compliance with Metro's Title 13, Nature in neighborhoods. For those that are not yet in compliance, many of their environmentally sensitive areas are protected under existing local programs or they have met Metro's interim protection requirements. For upland habitat, Metro is supporting an approach that relies on voluntary efforts, acquisition and changes in building practices.
- According to Metro's State of the Watershed Report, between 2005 and 2007, the region saw less than 2% loss of undeveloped floodplains (292 acres) and less than 1% (181 acres) loss of unique areas considered habitats of concern.
- Within the riparian areas, Metro's inventory identifies approximately 7,000 acres that also had some level of development as of 2005 and another 14,000 acres were developed as parks in 2005. Metro has not yet completed the monitoring of the change in this level of development in these areas. Reporting on loss of these other environmentally sensitive areas and/or potential restoration of additional areas, will be available in 2010 when the next State of the Watershed Report is prepared, or when Metro updates the inventory.
- Metro's acquisition of natural areas since 1995 is an important tool and strategy for protecting environmentally sensitive land in the region. As of the end of 2008, acquisitions have protected 9,096 acres inside and outside of the UGB for maintaining the region's water quality, wildlife habitat and quality of life in the region.

Table 5.1: Acres of Natural Areas Acquired by Metro

Year	Transactions	Acres Acquired with Metro Bonds
1995	11	346
1996	27	1,220
1997	54	1,379
1998	48	1,065
1999	33	1,178
2000	30	1,295
2001	22	715
2002	15	677
2003	12	85
2004	6	159
2005	6	69
2006	6	14
2007	18	611
2008	18	283
Total	**306**	**9,096**

Source: Metro Sustainability Center

- Other non-profit organizations and local jurisdictions have protected environmentally sensitive areas through acquisition. Due to the difficulty of tracking the intended purpose of these acquisitions, a total of all purchases and easements for the purpose of protection are not available.

<u>Ongoing Monitoring</u>

- Every two years at the end of even-numbered years, Metro is committed to reporting the acres and percent loss of the highest value inventoried habitat. The first full two-year comparison will be conducted in late 2010. Metro updated a portion of the baseline environmental indicators using new aerial photography and significantly improved methodologies in the State of the Watersheds report in 2008.
- Every two years at the end of odd-numbered years, Metro is committed to reporting the efforts in the region toward voluntary habitat protection and restoration. In 2007, too few cities had their new programs in place to allow for a complete report on voluntary efforts, though reporting methodologies, including use of web-based tools, were developed. The first report will be based on the local jurisdiction reports due at the end of 2009, with the report due in early 2010.

<u>Additional information</u>

- Additional information on the Regionally Significant Inventory and the State of the Watersheds report can be found on Metro's website at http://www.oregonmetro.gov/index.cfm/go/by.web/id=312

6. **Measure: The sales price of vacant land**

Definition

Metro defines: a) "sales price" as the fair market value (or price a buyer is willing to pay) for an acre of a land use type (residential, commercial, industrial, mixed use, park, school, etc) that is usually determined through valuation analysis; and b) "vacant land" includes the tax lots upon which there is no visible land use from aerial photography interpretation.

Findings

A complete survey of the sales price of vacant land is not available. However, Metro collected sales price data in selected areas of the region as part of the analysis of the effect of certain land use restrictions and their effect on property value under Measure 37.

- According to land valuation data used for Measure 37 by Metro, the price of typical residential zoned land in 2006 was in the range of $96,199/acre (low) in Damascus/Gresham (south) to $397,881/acre (high) in Damascus.
- In Sherwood, the price of typical general commercial zoned land in a high density area in 2006 was $464,000/acre, while the price of highway commercial zoned land in a low density area was $116,000/acre.
- Price of typical industrial zoned land in 2006 was in the range of $64,000/acre (low) in Sherwood to $304,900/acre (high) in Clackamas County/Wilsonville. The low price range reflects possible alternatives uses for land in an old gravel pit zoned industrial.

Table 6.1: Typical Vacant Land Price in selected areas within the UGB – 2006

Land Use Type and 2040 Design Type	Location	Estimated Market Value	
		Low Value / acre	High Value/acre
Residential (Inner Neighborhood Design Type)	Damascus / Gresham (south)	$96,199	$179,209
Residential (Inner Neighborhood Design Type)	Damascus	$160,619	$397,881
Residential (Corridor Design Type)	Damascus	$107,535	$217,425
Industrial (Regional Significant Industrial Area)	Sherwood	$64,000[4]	NA
Industrial (Regional Significant Industrial Area)	Clackamas County / Wilsonville	$148,800	$304,900
□ General Commercial[5]	Sherwood	$464,000	NA
□ Highway Commercial[6]	Sherwood	$116,000	NA
Inner Neighborhood	Damascus	$107,418	$218,100

Source: Metro Research Center

[4] Property is in a gravel pit area that has to be reclaimed
[5] General commercial in a built up area with good infrastructure and landscape, etc
[6] Highway commercial on a less built up and low density area.

7. Measure: Residential vacancy rates

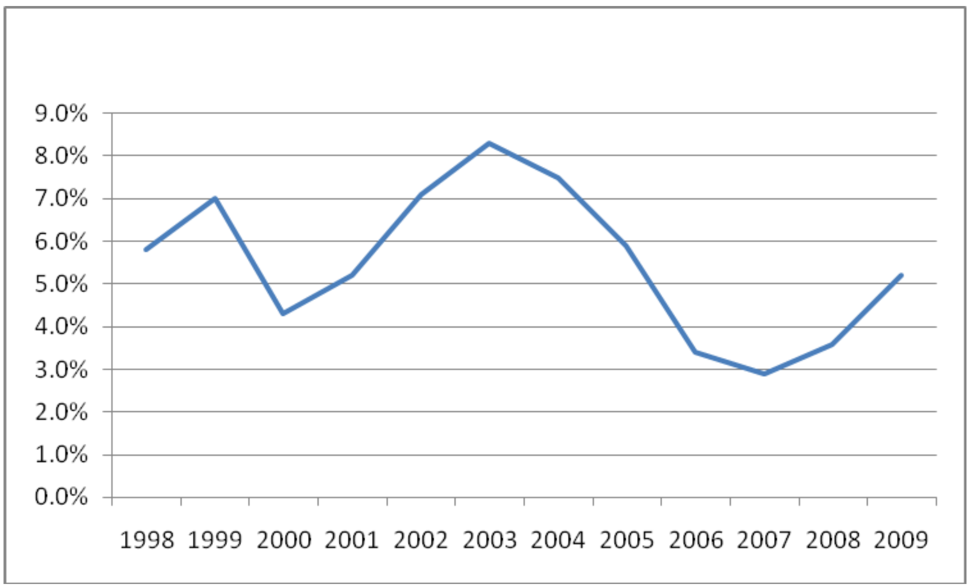
Definition

Metro defines "vacancy rate" as the percentage of rental units (both multifamily dwellings and rented single family dwellings) that are not rented during a given period.

Findings

- Vacancy rates are published by The Millet Rask Report and Barry Apartment Report, and Metro Multifamily Housing Association for the Portland metro area, including the three counties for multi-family rental units. According to these reports, multi-family vacancy rate reached a high of 8.3% in 2003 and declined to a low of 2.9% in 2007. No data is available for vacancy rates for rented single family dwellings.

Figure 7.1: Residential (Rental) Vacancy Rates for Portland Metropolitan Area



Source: The Millet Rask Report; Barry Apartment Report; Metro Multifamily Housing Association

8. Measure: Public access to open spaces

Definition

The following terms are defined by Metro as follows: a) "public access" is publicly owned, appropriately developed and signed as open to the public; and b) "open spaces" are natural areas that have plants (as distinguished from a hard surface public plaza or athletic facility like a sports complex), or any park and trail. In addition, trails are defined as multi-use paths that are separated from roads and are complementary to the natural environment and terrain. Regional trails are connected to local trails, bike and sidewalk networks.

Findings

Parks and Natural Areas in Public Ownership

- According to Metro's 2008 parks inventory and 2009 acquisition data, Metro owned or managed 10,790 acres of parks and natural areas in 2003 and 12,935 acres in 2009. This reflects an increase in 20% from 2003 to 2009.
- In 2003, when parks and natural areas owned only by local governments was included, the public owned 38,029 acres of parks and natural areas. Combined with those owned by Metro, the region had 48,819 acres of publicly owned parks and natural areas in 2003.
- In 2009, parks and natural areas owned and managed by local, state and federal governments was 841,460 acres in the tri-county area, and these includes areas such as the Mt Hood National Forest and the Willamette River trail. Combined with those owned by Metro, the tri-county area has 854,395 acres of publicly owned parks and natural areas in 2009.
- Metro owns and manages 22% of the publicly owned parks and natural areas in 2009, and local, state and federal governments manage 78%.
- Currently, about 37% (4,745 acres) of the total parks and natural areas managed by Metro (12,935 acres) are inside the UGB, while the remaining 63% (8,190 acres) are outside the UGB.
- About 3% (29,220 acres) of the total parks and natural areas managed by local, state and federal governments (841,460 acres) are inside the UGB, while the rest 97% (812,240 acres) are outside the UGB.

Parks and Natural Areas per 1000 Person

- Based on the 2003 population within the UGB, the total parks and natural areas acreage (48,819) in 2003 equate to 32.23 acres of local/Metro managed parks and natural areas per every 1,000 persons in the region.
- Based on the 2008 population within the UGB, the total parks and natural areas acreage (854,395) in 2008 equate to 417.035 acres of local/state/federal/Metro managed parks and natural areas per every 1,000 persons in the region.

Trails

- Metro's 2008 parks inventory found that the 133 miles of regional trails inside the UGB has increased by 28% in 2008 to 170 miles.
- The 137 miles of regional trails outside the UGB in 2003 has increased by approximately 45% in 2008 to 198 miles.

Additional information

Additional information can be found in the Natural Areas, Parks and Trails section of Metro's website at http://www.oregonmetro.gov/index.cfm/go/by.web/id=24253

Table 8.1: Number* and Acres of Metro/Other Parks and Natural Areas – 2003 and 2009

Ownership and Location	Open Space Acres (2003)	Open Space Acres (2009)	Change from 2003-2009	Number of Publically Owned Sites (2003)	Number of Publically Owned Sites (2009)	Change from 2003-2009
Metro owned or managed						
Inside UGB	3,471	4,745	1,274	127	169	42
Outside UGB	7,319	8,190	871	118	157	39
Metro Total	10,790	12,935	2,145	245	326	81
Other Publicly Owned or managed						
Inside UGB	22,007	29,220	7,213	2,378	2,393	15
Outside UGB	16,022	812,240	796,218	190	469	279
Other Total (Local, State, Federal)	38,029	841,460	803,431	2,568	2,862	294
Total (Metro and Local Governments)	48,819	854,395	805,576	2,813	3,188	375

Source: Metro Sustainability Center

* The main reason for the significant difference in acreage from the previous is that Metro's Regional Land Information System's parks and trails layers have been continually updated and maintained, and therefore are much more comprehensive. An example of this is that the Mt Hood National Forest is now being included with the Parks data layer, but it wasn't in the 2003 data. Another example is that the Willamette River trail was not included in the 2003 data, but it is now correctly included with the water trails

Table 8.2: Parks and Open Spaces per 1,000 Persons*inside the UGB – 2003 and 2009

	Open Space Acreage per 1000 Residents* (2003)	Open Space Acreage per 1000 Residents* (2009)	Change from 2003-2009
Inside UGB	19.06	23.834	4.77
Outside UGB	130.964	1,315.462	1,184.50
Total	32.229	417.035	384.81

Source: Metro Sustainability Center

**Assumes 1,336,520 residents in 2003 and 1,425,054 residents inside the UGB*

Table 8.3: Miles of Completed Regional Trails – 2003 and 2009

	Miles of Completed Regional Trails (2003)	Miles of Completed Regional Trails (2009)	Change from 2003-2009
Inside UGB	133	170	37
Outside UGB	137	198	61
Total	270	368	98

Source: Metro Sustainability Center

9. Measure: Transportation measures including mobility, accessibility and air quality indicators

Definition

The following terms are defined by Metro as follows: a) "mobility" is the ability to move people and goods to destinations quickly; b) "accessibility" is the ability or ease to reach desired goods, services, activities, and destinations with relative ease, within a reasonable time, at a reasonable cost and with reasonable choices; and c) "air quality" is air that is healthy for residents – ensuring that the region's air meets and/or exceeds federal and state standards.

Findings

Mobility and Accessibility

Findings for mobility and accessibility measures are based on changes in vehicle miles traveled, transit ridership, and travel time reliability for major freeways.

> *Note about travel time reliability for freeways*: While average travel time represents average time for travel throughout the year, travel time reliability represents an estimate of "how bad delay will be on specific routes during the heaviest (or busiest) traffic days" during the month. Travel time reliability includes the extra time the driver can add to his/her average travel time when using the route.

Vehicle Miles Traveled (VMT) per Capita

- According to Federal Highway Administration and State Highway Performance Monitoring System data, since 1998 vehicle miles traveled per capita in this region declined from 21 to 19.3, (or 8.8%), while it has increased nationally from 22.3 to 23.3 (or 4.4%). Data for 1990 through 2008 is included in this report.

Transit ridership

- Between FY1998 and FY2008, average annual growth rate for the overall transit system originating rides was approximately 4% in the TriMet service district.
- Much of this increase has been due to the increase in rail ridership. Average annual growth rate of bus originating rides was short of one percent while the average annual growth rate of rail originating rides was 15% during the 1998 to 2008 period.
- Bus originating rides were 44.7 million in FY1998 and rose to 48.2 million in 2008, while rail originating rides were 8.3 million in FY98 and rose to 29.4 million in 2008.

Travel time reliability for major freeways

- According to highway performance monitoring system count data collected from freeways and other major corridors in the Metro region and analyzed by Portland State University in 2008, morning (8 a.m.) travel time is worse than evening (5 p.m.) travel time on I-84 west bound and US 26 eastbound.
- Evening (5 p.m.) travel time is worse than morning (8 a.m.) travel time on I-5 northbound, I-5 southbound, I-205 northbound, I-205 southbound, I-405 southbound, I-84 eastbound, 217 northbound, 217 southbound, and US 26 westbound.
- In 2008, the corridors with the most unreliable travel time in the evening were I-405 southbound, OR 217 southbound and I-84 eastbound. The corridors with the most unreliable

travel time in the morning were US 26 eastbound, OR 217 southbound and OR 217 northbound.

Air Quality

The two indicators of air quality used to analyze air quality measure are ozone (smog) emission sources and the measured concentration of ozone. To assess how ozone affects the region, ozone trend was compared to vehicle miles travelled and the region's population.

- According to state emission sources data for 1996 and 2005, for ozone (smog) precursors, the portion of carbon monoxide (CO) and particulate matter (PM -10 microns in size or less) in the Portland area caused by on-road mobile sources[7] (cars and trucks) increased substantially, whereas the portion of nitrogen oxide (NOx) and volatile organic compound (VOC) caused by on-road sources decreased slightly during the same period.
- Air quality monitoring data indicates that from 1998 to 2008 the concentration level of toxins that contribute to air quality problems decreased. CO decreased by 48% (4.6 to 2.4 ppm), PM-10 decreased by 25% (59.0 to 43.9 ug/m3), and ozone decreased 18% (0.080 to 0.065) during the period.
- A comparison of ozone and vehicle miles travelled and population of the Portland area, from 1990 to 2008, indicates that while the population trend has continued to grow and total vehicle miles travelled has also grown, the ozone level has trended down.

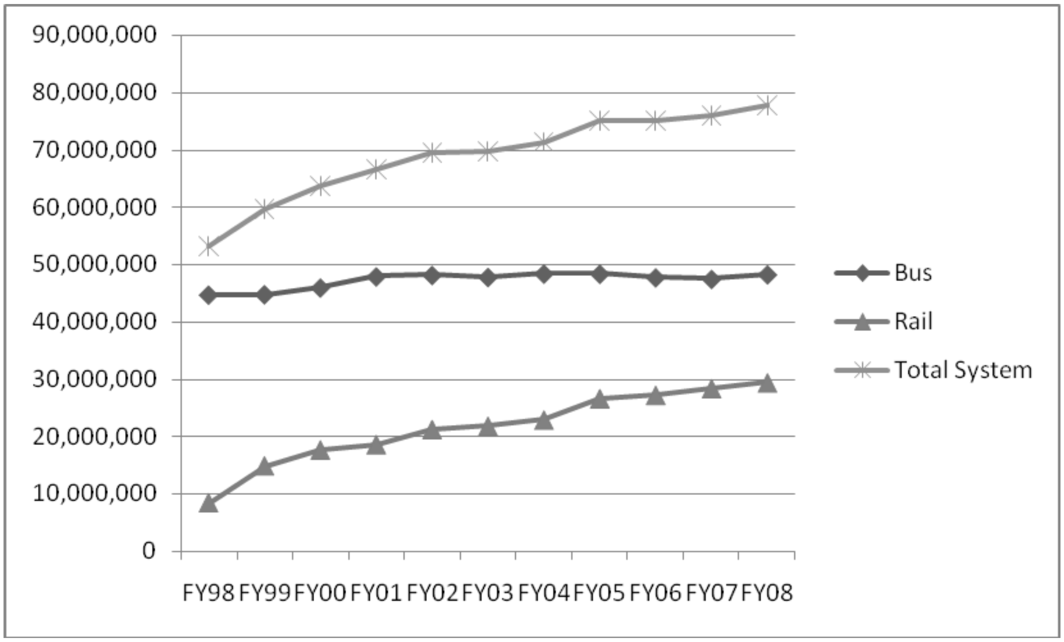
Additional information

Additional information can be found on:

- DEQ website at http://www.oregon.gov/DEQ/AQ/
- Metro's Air Quality Conformity Determination page at http://www.oregonmetro.gov/index.cfm/go/by.web/id=6502

[7] On-road sources - such as highway vehicles as cars, trucks, busses.

Figure 9.1: Transit Originating Rides by Bus and Rail



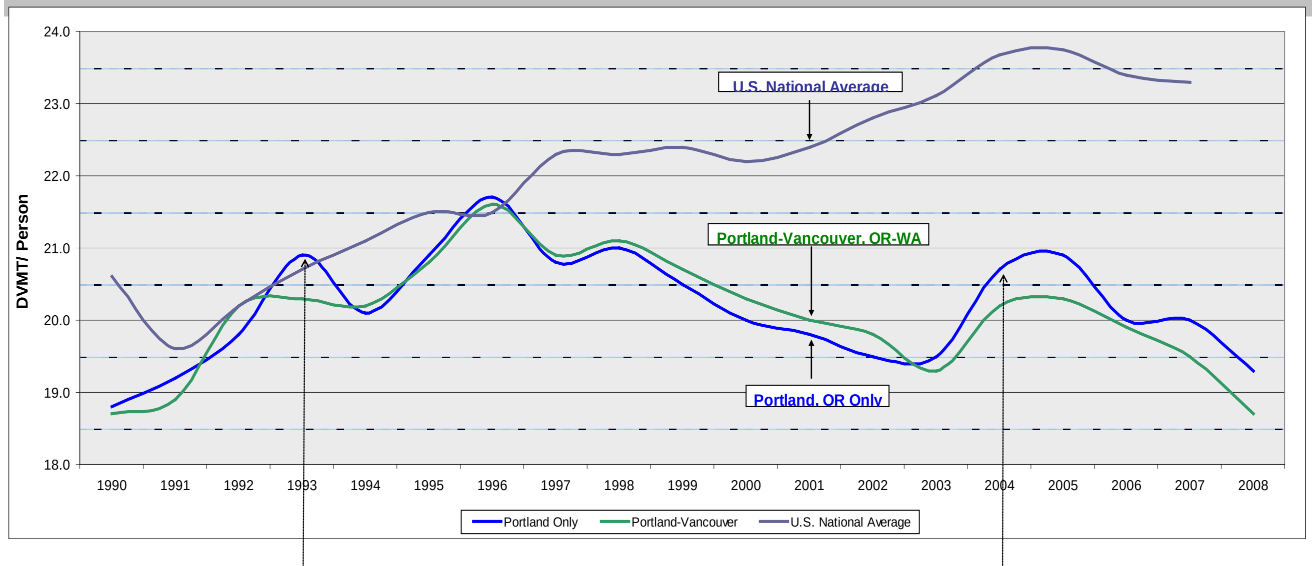
Source: TriMet

Figure 9.2: Daily Vehicle Miles Traveled

Daily VMT (Vehicle Miles of Travel) Per Person - 1990 To 2008
Portland, OR Only, Portland-Vancouver OR-WA, And The U.S. National Average Data

(Revised 8-03-09)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Portland Only	18.8	19.2	19.8	20.9	20.1	20.9	21.7	20.8	21.0	20.5	20.0	19.8	19.5	19.5	20.7	20.9	20.0	20.0	19.3
Portland-Vancouver	18.7	18.9	20.2	20.3	20.2	20.8	21.6	20.9	21.1	20.7	20.3	20.0	19.8	19.3	20.2	20.3	19.9	19.5	18.7
U.S. National Average	20.6	19.6	20.2	20.7	21.1	21.5	21.5	22.3	22.3	22.4	22.2	22.4	22.8	23.1	23.7	23.8	23.4	23.3	



Please Note: The population and VMT for 1990 to 2003 were based on the 1990 Census defined urban area. 2004 to 2008 population and DVMT data were based on the geographic area of the 2000 Census defined urban area. This change in the Census defined urban area may be responsible for the rise in the graphs of the Portland and Vancouver data after 2003.

2008 Data Sources: *The 2008 data for Portland, OR was received from the Oregon Highway Performance Monitoring Sytems (HPMS) office 7/29/09. Likewise, the information for Vancouver, WA was received from the Washington State HPMS office, 6/18/09. While both sets of data were the official state submittals to the Federal Highway Administration's (FHWA) office in Washington, D.C.; the information is subject to review by the FHWA, and may change by time the data is finalized and published, approximately in the October-December 2009 time period. At that time, the U.S. National Average should be available.*

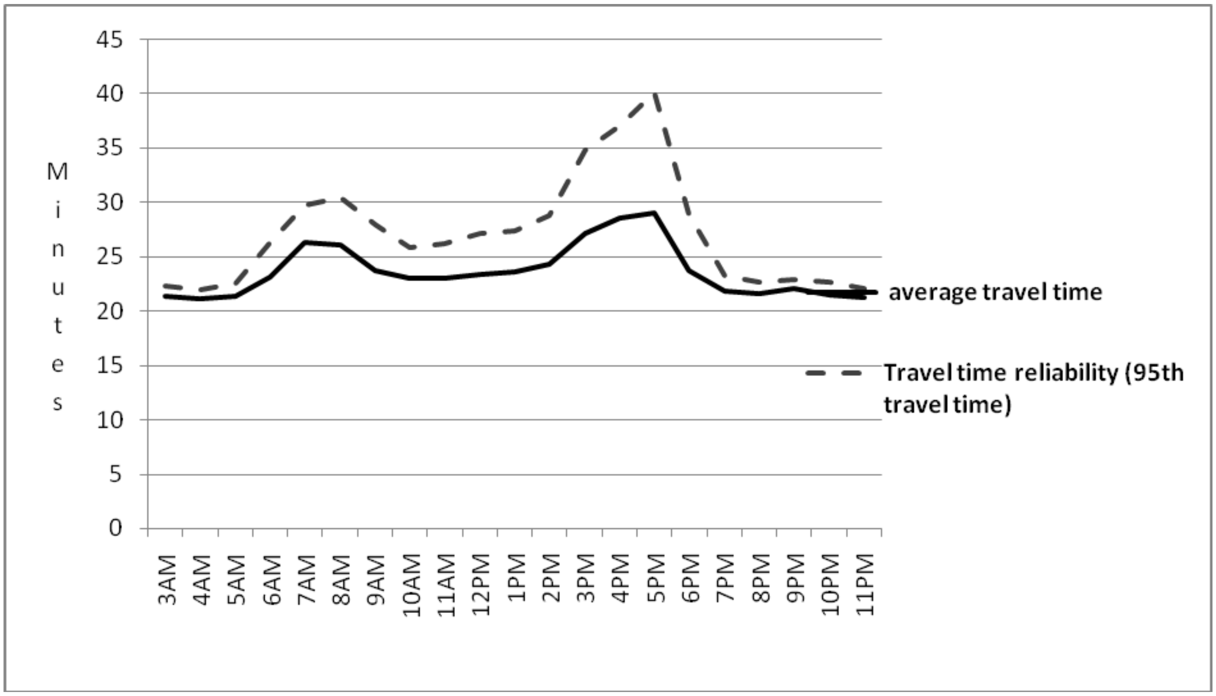
Urban Area Sources: *1990-2007 data are from the FHWA in Washington, D.C.*
DVMT/ Person data can be located in the FHWA webpage; '2007 Highway Statistics'; 4.4.5. Urbanized Area Summaries, Section 4.4.5.2, Selected Characteristics , Table HM-72 (dated October 2008).
The internet website location of the 'Highway Statistics' series (as of August 3, 2009) is: http://www.fhwa.dot.gov/policyinformation/statistics/2007/hm72.cfm

National Average Source: *The National Average of DVMT/ Person is calculated from 'Total DVMT,' for all Federal-Aid Urban Areas, divided by total 'Estimated Population,' as it appears on Sheet 9, of Table HM-72; which lists all the Federal-Aid Urbanized Areas in the U.S. The 1990-2007 data is located in the above cited website.*

"Federal-Aid Urbanized Area *is an area with 50,000 or more persons that, at a minimum, encompasses the land area delineated as the urbanized area by the Bureau of the Census" (from Sheet 9 Table HM-72). Portland-Vancouver, OR-WA is a Federal-Aid Urbanized Area.*

If you have any questions, contact David Horowitz, Metro Regional Government, Portland, OR: David.Horowitz@oregonmetro.gov or phone, 503-797-1769.

Figure 9.3: Travel time* for a freeway in the region -- Interstate 5 (I-5) southbound (21 miles)
showing average travel time and average reliable (dependable) travel time – 2008



Source: Portland State University - http://portal.its.pdx.edu

**NOTE*: Travel times for other freeways in the region are summarized in the following Table 9.1. Additional charts for other freeways in the Region (1-5, 1-205, 1-84, 1-405, & US 26, OR 217) are in file at Metro.*

Table 9.1: Average Annual Travel Time Reliability* for Freeways in the Region -2008

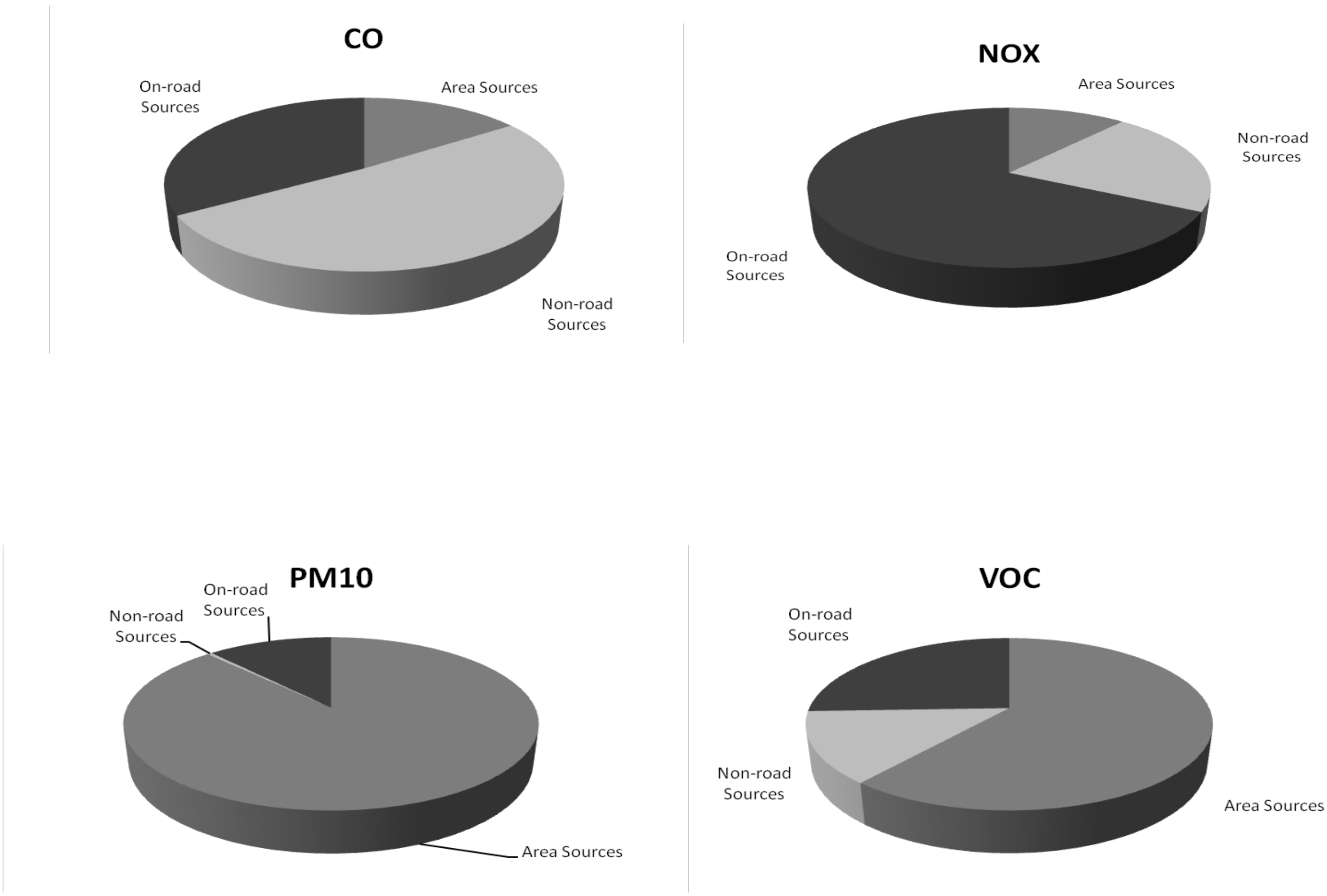
Freeway Termini	**Approx Length (miles)**	**8 a.m. Travel Time Reliability**		**5 p.m. Travel Time Reliability**	
		Average Travel Time	Busiest Travel Time (95th Percentile)	Average Travel Time	Busiest Travel Time (95th Percentile)
1-5 Northbound (South of Stafford Rd/Wilsonville to OR/WA Border/Columbia River)	23	32 minutes	42 minutes	47 minutes	73 minutes
1-5 Southbound (OR/WA Border/Columbia River to Between Nyberge and Stafford Rd/Wilsonville)	21	26 "	30 "	29 "	40 "
1-205 Northbound (South of Stafford Rd/Wilsonville to OR/WA Border/Columbia River)	20	22 "	32 "	28 "	44 "
1-205 Southbound (Start of freeway to South of Stafford Rd)	24	24 "	30 "	27 "	38 "
1-405 Southbound (N of Everett to end of freeway)	2	3 "	3 "	5 "	9 "
1-84 Eastbound (I-5 junction to 60th)	4	3 "	4 "	7 "	11 "
1-84 Westbound (Halsey to Between 33rd and I-5 junction)	4	7 "	10 "	5 "	7 "
OR 217 Northbound (full freeway)	7	8 "	12 "	11 "	16 "
OR 217 Southbound (full freeway)	11	14 "	21 "	19 "	34 "
US 26 Eastbound (East of Helvetia to Portland downtown)	13	19 "	32 "	18 "	28 "
US 26 Westbound (Portland downtown to Bethany)	8	7 "	10 "	11 "	15"

Source: Portland State University - http://portal.its.pdx.edu

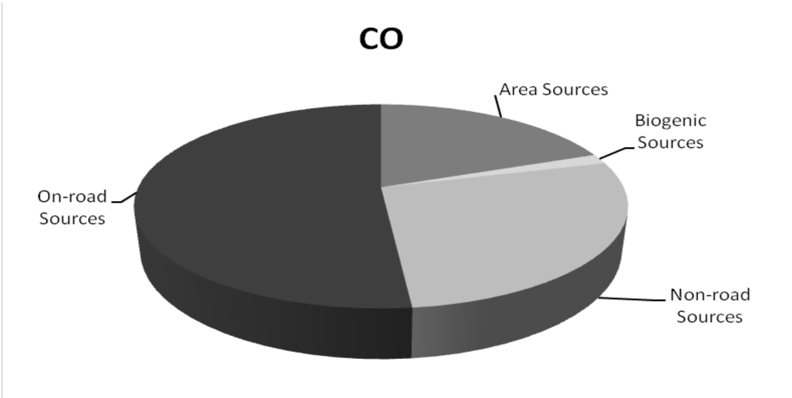
*Travel Time Reliability measures the effect of congestion on average trip speed, or travel speeds

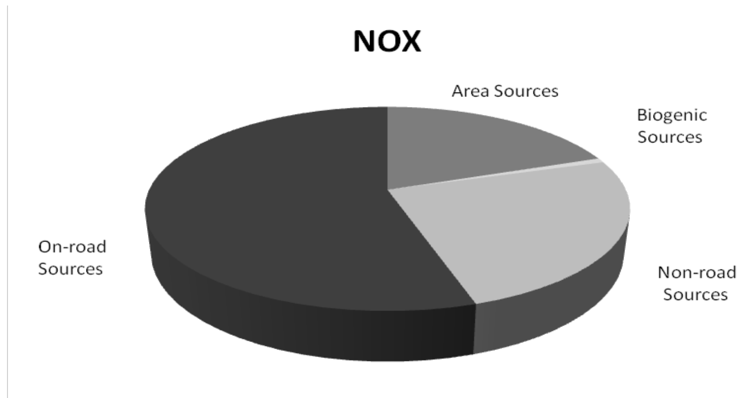
Figure 9.4: **Portland Metro Air Quality: Emission Sources (1996 and 2005)**

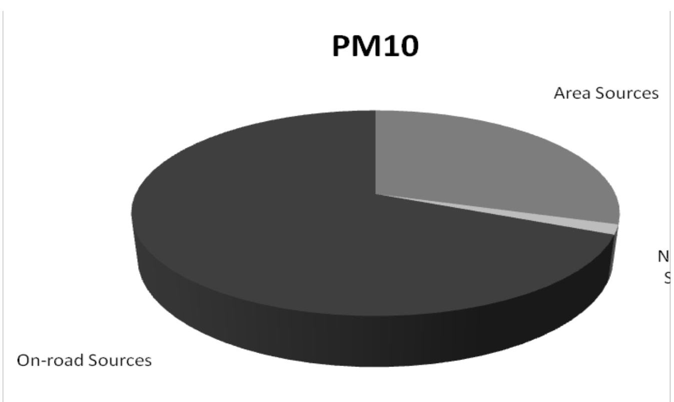
1996 Tri County Ozone Precursors



2005 Tri County Ozone Precursors







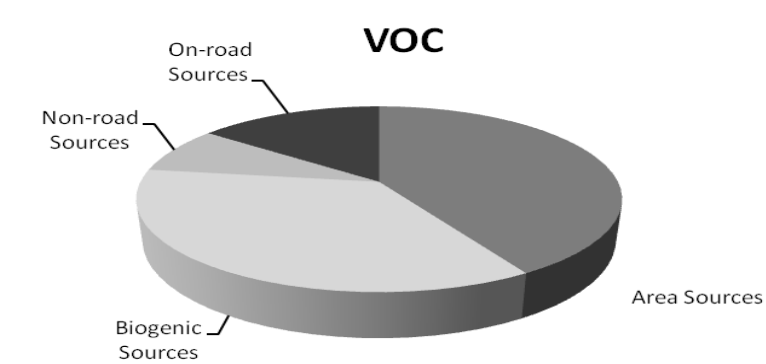


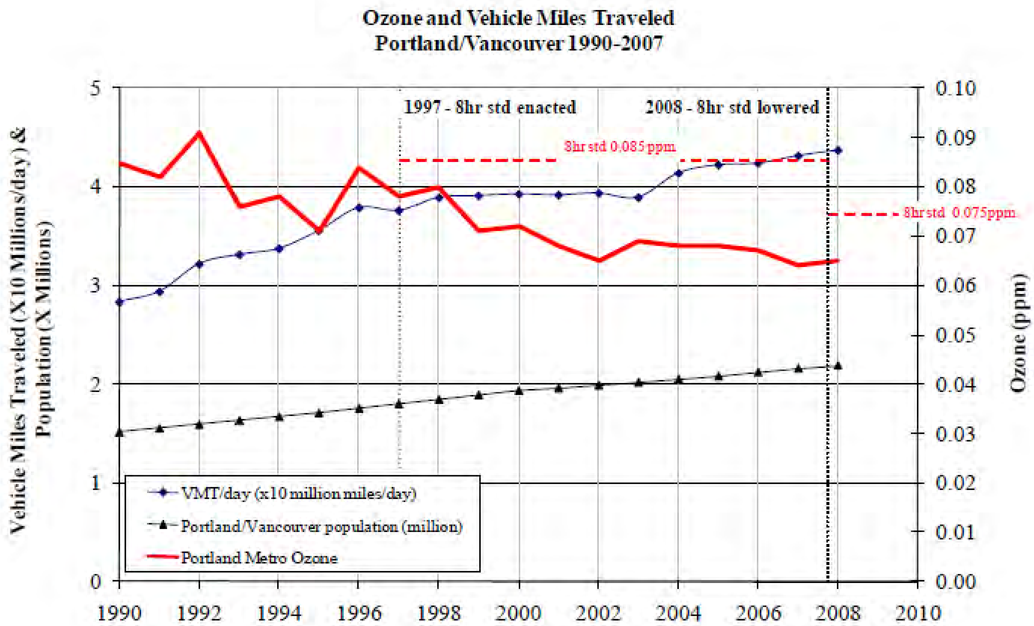
Table 9.2: Air quality monitoring: measured concentration of ozone precursors in the Portland metropolitan area -- 1998 to 2008

Year	CO (ppm)	PM10 (ug/m3)	Ozone (ppm)
1998	4.6	59.0	0.080
1999	6.2	63.0	0.071
2000	4.4	45.0	0.072
2001	3.9	44.0	0.068
2002	4.5	48.0	0.065
2003	4.0	31.6	0.069
2004	3.7	65.5	0.068
2005	3.0	56.8	0.068
2006	3.4	46.8	0.067
2007	3.5	48.1	0.064
2008	2.4	43.9	0.065

Source: Oregon department of Environmental Quality

Figure 9.5: Ozone and Vehicle Miles Travelled and Population – Portland/Vancouver – 1990- 2007

Oregon Department of Environmental Quality 2008 Air Quality Annual Report



Ozone is the 3yr average of the fourth highest 8hr average at the maximum site

Figure 34b. Portland/Vancouver ozone trend using the three year average of fourth highest eight hour ozone value with Vehicle Miles Traveled and Population trends. In 2008 the eight hour standard was lowered to 0.075 ppm.
Population figures are from Portland State University Population Research Center. Vehicle miles traveled are taken from Metro for the Portland/Vancouver area.

10. Measure: Measure the investment in transportation improvements in centers overall and as a percentage of overall transportation investments

Definition

The following terms are defined by Metro as follows: a) "investment in transportation improvements" applies to projects or services that provide access or mobility for people or goods; and b) "percentage of overall transportation investments" is the percentage of transportation funds administered by the metro area Metropolitan Planning Organization: currently the Urban Surface Transportation Program and Congestion Mitigation Air Quality federal funding programs.

Findings

- Metro does not track spending of all transportation funds spent by the Oregon Department of Transportation and local governments, a definition of what qualifies as a project or program as "in centers" is difficult to define, and investment in centers is not the only policy objective of the Metropolitan Transportation Improvement (MTIP) program.
- Between 2008 and 2013, of the federal regional flexible funds that Metro allocated, 73% of Metro regional flexible funds have been allocated in ways that directly support mixed-use centers.

Table 10.1: Annual Regional Flexible Fund Allocation in the Centers*

Federal FY	Amount Allocated	Percent Allocated in Centers*
2008 – 09	$63.113 million	69.42%
2010 – 11	$45.400 million	73.34%
2012 – 13	$67.799 million	76.56%
Total / Cumulative	$176.316 million	73.17%

Source: Metro MTIP Program

*Centers include Central City, Regional Centers, Town Centers, Station communities, and Main Streets as designated in the 2040 Growth concept and intended for mixed use development. If a project had a portion of its location in a center and made a significant contribution to the transportation function of the center, it was included in the allocation to mixed-use areas (e.g. bus stop improvement program, light rail bond contribution, Sullivan's Gulch Trail plan). Programs that operate in centers and are alternative mode focused (Transit Oriented Development and Regional Travel Options) were also included in the allocation to mixed-use centers and corridors.

Additional information

Additional information can be found in the Regional Flexible Fund and Metropolitan Transportation Improvement program pages on Metro's website at
http://www.oregonmetro.gov/index.cfm/go/by.web/id=19681
http://www.oregonmetro.gov/index.cfm/go/by.web/id=3814

11. Measure: Measure the number of centers for which local governments have adopted strategies under new Title 6.

Definition

Metro defines: a) "centers" as areas designated in the region's 2040 Growth Concept map as the Central city, Regional and Town Centers and Station Communities; and b) "adopted strategies under Title 6" as the requirement in Title 6 of Metro's Urban Growth Management Functional Plan for local governments to adopt a strategy to enhance centers within its jurisdiction.

Findings

- The centers in the 2040 Growth Concept are diverse and local jurisdictions have responded with a mix of strategies. Metro's 30 town centers and seven regional centers reflect a diverse mix of established commercial districts, developing communities and newly urbanizing areas. This diversity is captured in Attachment A Metro's "State of the Center report." Even within the Central City, a mix of intensity exists and calls for the need for different strategies.
- In 2008, after several rounds of informal interviews with planning directors regarding their strategies for centers, Metro asked local jurisdiction staff to submit a local aspiration report that described the aspirations for growth in their centers and corridors, values that guide that growth and policies and investment actions that they anticipate will be needed to achieve these aspirations.
- In 2009, Metro summarized the strategic regional and local investments and actions that local jurisdictions had completed, were in progress, or were proposed to support their aspirations. These strategies are summarized in the "Investing in Great Places Matrix" (see Attachment B) to this report. This reflects the current strategies that local jurisdictions are taking to enhance their centers, corridors and employment areas.
- Though information was not available from all of the communities, the Investment Matrix indicates that most communities have analyzed the physical and regulatory and financial barriers to development and have a program of actions to address them ranging from transportation investments, regional parks, natural areas and trails, civic and other infrastructure, street, pedestrian and bicycle enhancements, zoning code changes, parking strategies, financial incentives and public private collaboration.
- With financial assistance from Metro and the state's Transportation and Growth Management program, several cities completed centers strategy reports, including Beaverton for the Downtown Regional Center and Tigard for the Washington Square Regional Center. Rather than require cities to submit reports for all centers, Metro has focused on assisting jurisdictions in overcoming the barriers to development through light rail and transportation planning, transit oriented development resources, land use planning assistance, funds for natural areas and other tools.

Additional Information

Additional information can be found in Metro's State of the Center Report and the Local Aspirations submissions on Metro's website at http://www.oregonmetro.gov/index.cfm/go/by.web/id=30760 and http://library.oregonmetro.gov/files/3d_aspirations_and_investments.pdf

12. Measure: 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.

Definition

The following terms are defined by Metro as follows: a) "Regionally Significant Industrial Areas or industrial areas" (RSIAs) are generally referred to in the Metro code as Title 4 land, and includes designated areas near the region's most significant transportation facilities for the movement of freight and other areas most suitable for movement and storage of goods; and b) "rezoned" is the act of a local government to change the zoning on one or more pieces of land/properties, and thus requires an amendment of the zoning map, and some cases an amendment of the comprehensive plan map.

Findings

Industrial land and RSIAs size

- According to data in Metro's RLIS, the amount of land designated as industrial land and RSIAs in 2005 (38,468 acres) did not change in 2008
- The data also show that 68% (26,200 acres) of the land in these areas was zoned "industrial" in 2005 and also in 2008. The portion of the remaining areas (2%) zoned commercial, multifamily residential, single family residential, mixed use residential, public facilities and parks and open spaces increased slightly by 148 acres, while land zoned rural decreased by 220 areas (from 8,246 acres to 8,026 acres), and mixed use employment decreased by two acres (from 3,119 acres to 3,117 acres).

Rezoned industrial land and RSIAs

- During the same period, some areas within the industrial zone were rezoned into other land uses, most notably commercial, mixed use employment and rural zones, while some areas in these zones were rezoned back into the industrial zone. Although the industrial zone land lost 452 acres due to rezoning, 511 acres of land in other zoning classifications were rezoned into the industrial zone.
- Close examination of the rezoning within areas zoned industrial show that 223 acres were rezoned into rural zone, while 409 acres of rural land were rezoned into the industrial zone. Other notable rezoning activities are the 126 acres that were rezoned into mixed use employment and the 95 acres of mixed use employment land that were rezoned into the industrial zone. Overall, the net effect from 2005 to 2008 was the loss of 59 acres from the industrial zone.
- In 2007, four local governments proposed to remove a total 62.43 acres of land in the Title 4 acres (RSIA, Industrial, Employment) to other uses. Of this, only 50% was zoned industrial which represented approximately 0.05% of total industrially zoned land.

Additional information

Additional information can be found in the Urban Growth Report on Metro's website at http://library.oregonmetro.gov/files/3b-urban_growth_report.pdf

Table 12.1: Title 4[8] Industrial Land and Regionally Significant Industrial Areas – 2005 and 2008

Zoning Classification	**2005**	2005 - 2008 Period			**2008**
		Gross Loss	**Gross Gain**	**Net Change**	
Industrial (IND)	26,200	-452	511	59	26,259
Commercial (COM)	243	-66	77	11	254
Multifamily Residential (MFR)	89	-10	25	15	104
Single Family Residential (SFR)	200	*-4*	39	35	235
Mixed Use Employment (MUE)	3,119	-130	128	-2	3,117
Mixed Use Residential (MUR)	196	0	16	16	212
Public facilities (PF)	0	0	59	59	59
Parks and open Spaces (POS)	175	-2	29	27	202
Rural (RUR)	8,246	-452	232	-220	8,026
Total Title 4 Land	38,468				38,468

Source: Metro Research Center

Table 12.2: Rezoning of Land from 2005 to 2008 (Acres)

	Other, Non-Industrial, Zones								
	COM	MFR	MUE	MUR	PF	POS	RUR	SFR	***Total***
From IND to Other zones	-31	-22	-126	-3	0	-11	-223	-35	***-452***
From Other zones to IND zone	1	**4**	95	0	0	2	409	0	***511***
Net Change	-30	-18	-31	-3	0	-9	186	-35	***59***

Source: Metro Research Center

[8] Employment land in Title 4 areas was not included in the data for this performance measure.

TOD Project Seven-Day Notice

Per the TOD Program Work Plan adopted by Council Resolution 98-2619, "as soon as practical upon approval by the Steering Committee, the Executive Officer will provide written notification to the Metro Council of potential TOD projects and the Council will have seven (7) days to notify the Executive of a request to review a potential project in executive session... "z

Project Name: NW 20th & Pettygrove Apartments – TOD Project

Action Item: On November 12th, 2009, the TOD Steering Committee authorized $350,000 for the purchase of a TOD Easement for Phase II Development's NW 20th & Pettygrove Apartments. The transit oriented workforce housing project in NW Portland is a 6-story apartment building that includes 90 residential units, 4,000 sq ft of common space, 59 secured bike parking spaces, a number of green design elements, and a low off-street parking ratio of 0.27 spaces per unit. Located less than ¼-mile from Portland Streetcar stations, the site enjoys a high degree of transit accessibility within a fine grained network of pedestrian and bicycle friendly gridded streets.
The project was authorized with the following conditions:

1. 6-story building height;
2. 90 apartment units;
3. A maximum of 24 off-street automobile parking spaces; and,
4. Pedestrian oriented design features at the ground level.

Project Background: NW 20th & Pettygrove Apartments fills an undersupplied market niche of transit oriented workforce housing within the urban amenity rich Northwest District. This is significant to maintaining a jobs-housing balance given the high number of service jobs and the recent spate of condo conversions in the neighborhood. By reducing the need for private auto use, the strong transit orientation of the project will further enhance the affordability of units for residents and limit the project's impact on local and regional infrastructure and natural systems. Walking and biking mode splits are also expected to be high for the project. The eclectic NW 21st/23rd Ave Main Streets are within pleasant walking distances and offer shopping and services for everyday needs. Bicycle connectivity is provided by the Overton and Raleigh bike boulevards (east-west) and the 18th and 19th Ave bikeways (north-south).

Project Description:
NW 20th & Pettygrove's 90 apartments on 0.34 acres represent a net density of 261 units per acre, 50 percent greater than recent construction in the area. In terms of building intensity, the project optimizes the maximum allowable building height of 65' and exceeds the base floor to area ratio (FAR) of 4:1 by virtue of a 1:1 FAR bonus for small site residential development. The unit mix includes 40 studios, 40 one-bedrooms and 10 two-bedrooms. The smaller, more efficient units are intentionally designed to help meet the workforce housing gap in the neighborhood.

Project Location: The project is located just outside the Center City in NW Portland on the southeast corner of NW 20th & NW Pettygrove.

Project Budget: Localized MTIP funding for the TOD Program will support this $350,000 project expense. Most of the project's cost premiums are associated with the added residential density components of the project. They include $480,000 for interior halls, $280,000 for structured parking, $56,000 for secure bicycle parking, $30,000 for plumbing and $18,000 for lobby improvements.

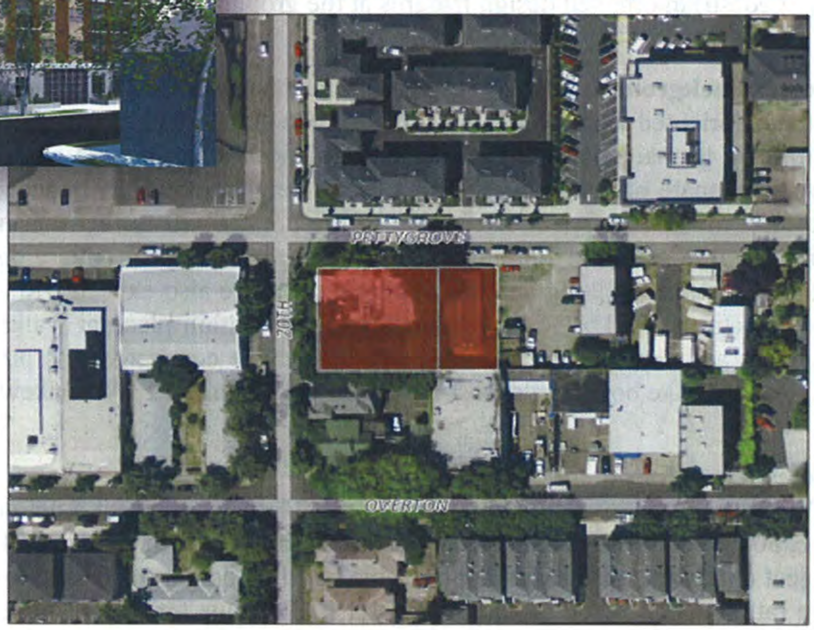
The induced ridership model estimates that the project will generate an increase of 36 transit trips per day and over 13,000 annual trips. These induced trips are projected to generate additional farebox revenues with a net present value of over $372,000 over the next 30 years. Based on the proposed TOD Program easement, the cost per induced rider is $2.11, which is well within the range of $0.31 - $3.85 that has been funded to date. Overall, the proposed TOD investment represents 2.7 percent of total development costs.

Potential Issues: The Portland City Council has recently expanded the fees and level of scrutiny for design review in the area. This additional review process is expected to increase project costs and extend its schedule. Phase II Development is working with the Bureau of Development Services to limit the financial impacts of the process, thereby maintaining project feasibility and affordability.

Michael Jordan   11/18/09

Michael Jordan, Chief Operating Officer   Date

NW 20th & Pettygrove Apartments



TOD Project Seven-Day Notice

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Project Name: College Station – TOD Project

Action Item: On November 12th, 2009, the TOD Steering Committee authorized up to $500,000 for the purchase of a TOD Easement for American Campus Communities' College Station, a mixed-use 900-bed Portland State University (PSU) student housing development. The project fills an undersupplied market niche of student housing near PSU's urban campus that will help attract younger students and advance the school's planned transition to a more balanced commuter and traditional campus. Located in the south end of downtown Portland adjacent to the MAX Yellow and Green Lines and less than a ¼-mile from the Portland Streetcar, the project's direct transit orientation on the new Transit Mall will allow students to conveniently travel to campus destinations and beyond without the need of a private auto.
The project was authorized with the following conditions:

1. 16-story building height;
2. 900 student beds;
3. 15,000 sq ft of commercial space;
4. no off-street parking; and
5. due consideration of need for additional bicycle parking.

Project Background: College Station represents a unique joint collaboration among TriMet, PSU and a private development partner, American Campus Communities (ACC). To accommodate the Portland Mall MAX Green Line Project, TriMet acquired several properties in Block 158, defined by SW College and Jackson Streets and SW 5th and 6th Avenues, in the University District of south downtown Portland. Pursuant to a development agreement between PSU and TriMet, these properties will be consolidated with PSU's ¼ block ownership and developed by ACC. Consolidation and site preparation of a developed downtown block, however, entails extraordinary costs. Although the properties are generally underdeveloped, the existing buildings increase acquisition costs and will require demolition. The project partners are seeking the TOD Program's investment to help offset these costs.

Project Description:
College Station is a 16-story high-rise that includes approximately 120,000 square feet of residential space, 15,000 square feet of ground floor commercial space, two new Yellow and Green Line MAX stations, 2,000 square feet (172 spaces) of bicycle parking and no off-street parking. The project's 900 student beds on 0.88 acres represent a net density of 1,025 beds per acre, 85 percent greater than recent student housing construction in the area.

Project Location: The project is located in the University District of SW Portland. The block is bounded by SW 5th and 6th Ave to the east and west and SW College and Jackson St to the north and south (see site map below).

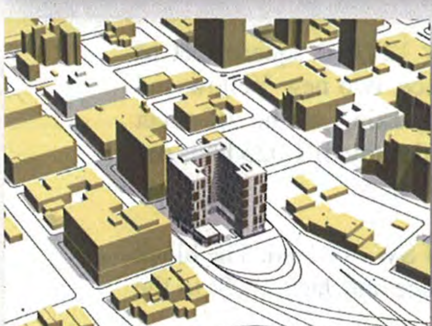
Project Budget: Localized MTIP funding for the TOD Program will support up to $500,000 or the cost of existing building demolition, whichever is less. Most of the project's cost premiums ($1.7 million) are associated with the added building height of the project. They include $736,000 for exterior skin to meet high rise requirements, $650,000 for site preparation, and $368,000 for an additional elevator.

The induced ridership model estimates that College Station will generate an increase of 80 transit trips per day and nearly 35,000 annual trips. These induced trips are projected to generate additional farebox revenues with a net present value of $835,000 over the next 30 years. Based on the proposed TOD Program Easement, the cost per induced rider is $1.57. Overall, the proposed TOD investment represents 0.6 percent of total development costs.

Potential Issues: In order to protect the TOD Program's investment in development and future transit ridership, the proposed TOD easement will not fund upfront demolition costs. Project partners will need to absorb these costs until the easement is acquired in installments over the course of actual project construction.

Michael Jordan 11/18/09

Michael Jordan, Chief Operating Officer Date



TOD Project Seven-Day Notice

Per the TOD Program Work Plan adopted by Council Resolution 98-2619, "as soon as practical upon approval by the Steering Committee, the Executive Officer will provide written notification to the Metro Council of potential TOD projects and the Council will have seven (7) days to notify the Executive of a request to review a potential project in executive session..."z

Project Name: The Knoll at Tigard

Action Item: On November 12, 2009, the TOD Steering Committee authorized $100,000 for the purchase of a TOD Easement for an urban style affordable (30-50% of the area median income) senior housing project located on SW Hall Boulevard at Hunziker Road Ave less than ½-mile from both the 12-Barbur Ave frequent service bus and the downtown Tigard WES station. The project meets the TOD/Centers criteria. The project was authorized with the following conditions:

1. 3 and 4 story building height;
2. Forty Eight (48) apartment units; and
3. A maximum of forty two (42) parking spaces at the ground level.

Project Background: The Knoll is a multi-story apartment building that will provide affordable active living for low income seniors and will be developed by Community Partners for Affordable Housing (CPAH). Formed in 1994, CPAH has developed 225 units of affordable housing in five projects throughout Washington County and Southwest Portland. CPAH has previously sought and received funding from the TOD Program for the Watershed project located in Hillsdale. These units will help fill an important need for housing options for seniors in Washington County. Market research conducted by CPAH indicates that there are over 1000 seniors within this market alone that would qualify for housing at the Knoll. Located on SW Hall Boulevard and SW Hunziker Road, this project will both serve as a landmark gateway into the Tigard town center, and will serve as a catalyst for new urban development in Tigard. The Knoll is located less than a ½-mile from both the 12-Barbur Boulevard frequent service bus line and the Tigard WES station.

Project Description:
The Knoll is a multi-story project, with a four story element facing Hall and Hunziker streets, with the northern portion of the building stepping down to three stories to match the scale of the surrounding residential areas more closely. This urban style project will provide 48 energy efficient housing units that will be priced for seniors at 30-50% of area median income, and approximately 3,000 square feet of community and meeting space. The developers were successful in seeking a variance to reduce the required parking by 20% and achieve a 0.85:1 ratio. The project will include only 42 parking spaces.

Project Location: The project is located on the corner of SW Hall and Hunziker Road and is within Tigard's 2040 Town Center.

Project Budget: Localized MTIP funding for the TOD Program will support this $100,000 project expense. Most of the cost premiums are associated with the added building height and vertical mixed use (community center/residential) components of the project. They include $115,000 for elevators, $134,000 for fire life safety, $46,000 for additional HVAC, and $77,000 for gypcrete.

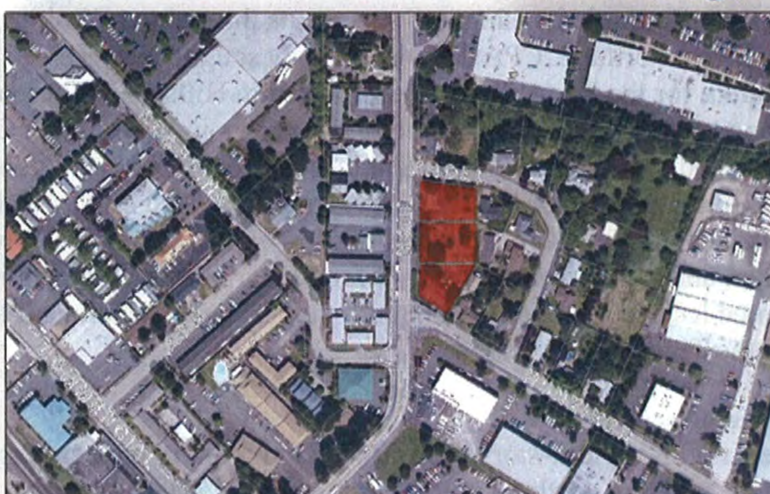
Compared to the base case, the total induced transit ridership will be 10 daily trips assuming an 10% modal split for transit. This results in a 30-year capitalized farebox revenue of $100,289. The cost per induced transit ride for an $100,000 investment is $2.70 per ride, which is well within the range of $0.31 - $3.85 that has been funded to date.

Potential Issues: CPAH is currently negotiating with their tax credit partner and has not secured permanent financing. CPAH is on track to close on their financing in early spring but with current market conditions and strict lending requirements there is potential for the project financing to be delayed. However CPAH has been successful at securing funds to bridge their financing gap and have received a lower than expected cost estimate for construction, all favorable conditions for meeting their expected timeline.

Michael Jordan 11/18/09

Michael Jordan, Chief Operating Officer Date

The Knoll at Tigard



T O D   I M P L E M E N T A T I O N   P R O G R A M

TOD Project Seven-Day Notice

Per the TOD Program Work Plan adopted by Council Resolution 98-2619, "as soon as practical upon approval by the Steering Committee, the Executive Officer will provide written notification to the Metro Council of potential TOD projects and the Council will have seven (7) days to notify the Executive of a request to review a potential project in executive session... "

Project Name: Acquisition of TriMet Right of Way at Gresham Civic MAX Station

Action Item: On November 12, 2009, the TOD Steering Committee authorized the expenditure of $269,000 to acquire excess right of way property adjacent to Metro-owned TOD properties north and south of the future Gresham Civic MAX Station, with the condition that TriMet apply an equal amount of funds towards the costs of completing those station improvements, in accordance with the terms of the Inter-Governmental Agreement (IGA).

Project Background: TriMet and Metro agreed, in a letter agreement signed in 2003, that TriMet would make excess right of way property near NW Civic Drive in Gresham available to support transit oriented development on the adjacent properties. Property was previously transferred to support The Crossings project, located south of the MAX line on the east side of NW Civic Drive and completed in 2006. Over the past year, TriMet and Metro staff have taken the various actions required to secure Federal Transportation Administration and City of Gresham approvals of the property transfer: property appraisals were obtained and subjected to peer review in order to independently establish fair market value; a federal "Documented Categorical Exclusion" from additional environmental review requirements was obtained; property lines were surveyed and then approved by Multnomah County; City of Gresham property line adjustment applications were filed and approved; and Federal Transportation Authority (FTA) authorization was secured to dispose of the property at real market value.

Project Description: TOD Steering Committee approval, and 7-day notice review by the Metro Council, is requested to authorize the acquisition of excess TriMet right of way land adjacent to Metro TOD properties north (32,430 square feet) and south (1,683 square feet) of the future Gresham Civic Drive light rail station. In accordance with federal requirements that TriMet be paid full market value for the property, Metro will make a payment of $269,000 to TriMet. TriMet will then apply those funds to the budget for the Gresham Station and Plaza project, which TriMet is managing under an IGA with Metro.

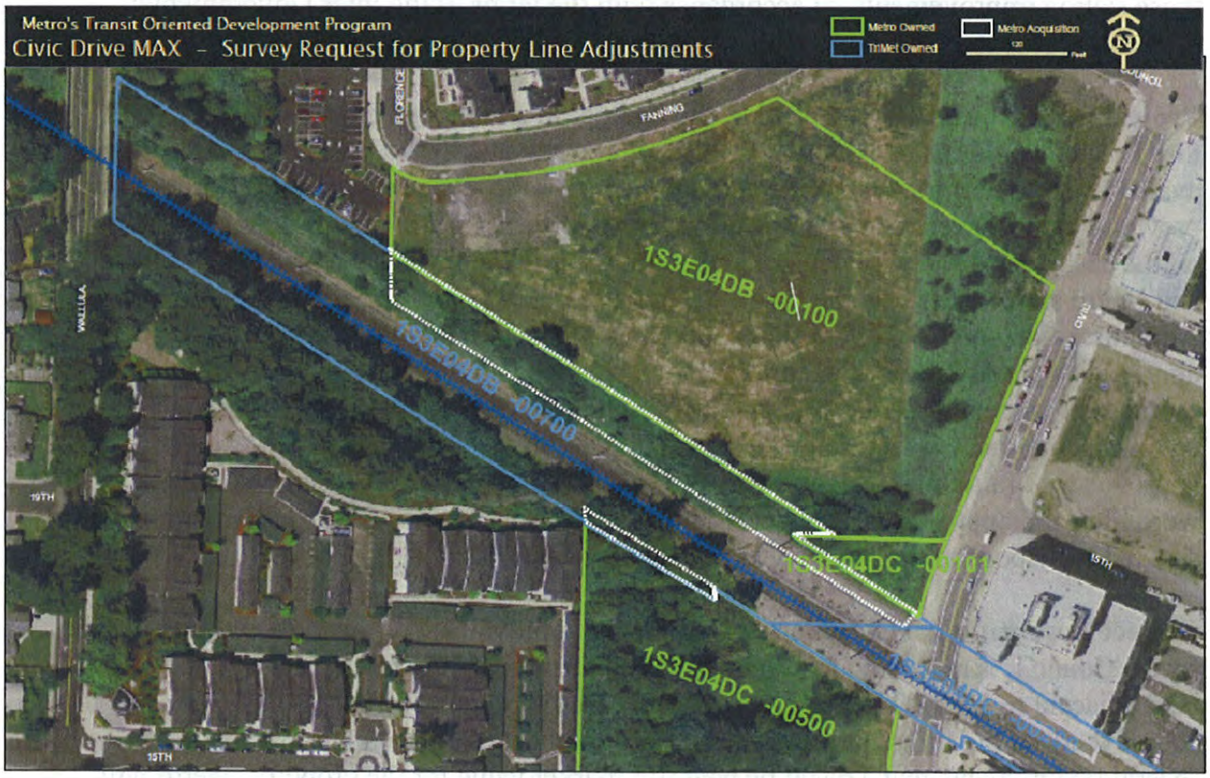
Project Location: This property is located adjacent to Metro-owned TOD properties on the west side of NW Civic Drive, on both the north and south sides of the tracks, as shown on the map above.

Project Budget: Land acquisition costs ($269,000) will be charged to Metro TOD program budget, Gresham Station and Plaza project allocation. However, since there are also federal requirements that the income earned from federal projects be spent on eligible program costs, and since TriMet by policy supports transit oriented development, TriMet has agreed by IGA to apply the $269,000 in sale proceeds to the budget of the Gresham Station and Plaza project. As a result, there is no net cost to the TOD Program for this right-of-way acquisition and the Gresham Station and Plaza budget remains fully funded.

Potential Issues: None.

Michael Jordan
Chief Operating Officer

11/18/09
Date



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600 NE Grand Ave.
Portland, OR 97232-2736 www.oregonmetro.gov

Metro | *Memo*

Date: November 24, 2009

To: Metro Council Work Session

From: Ross Roberts, Deputy Planning and Development Director
Deborah Redman, Principal Planner

Subject: Staff Proposal for Corridor Refinement Plan/HCT Corridor Phasing and Funding

Purpose of this Memorandum

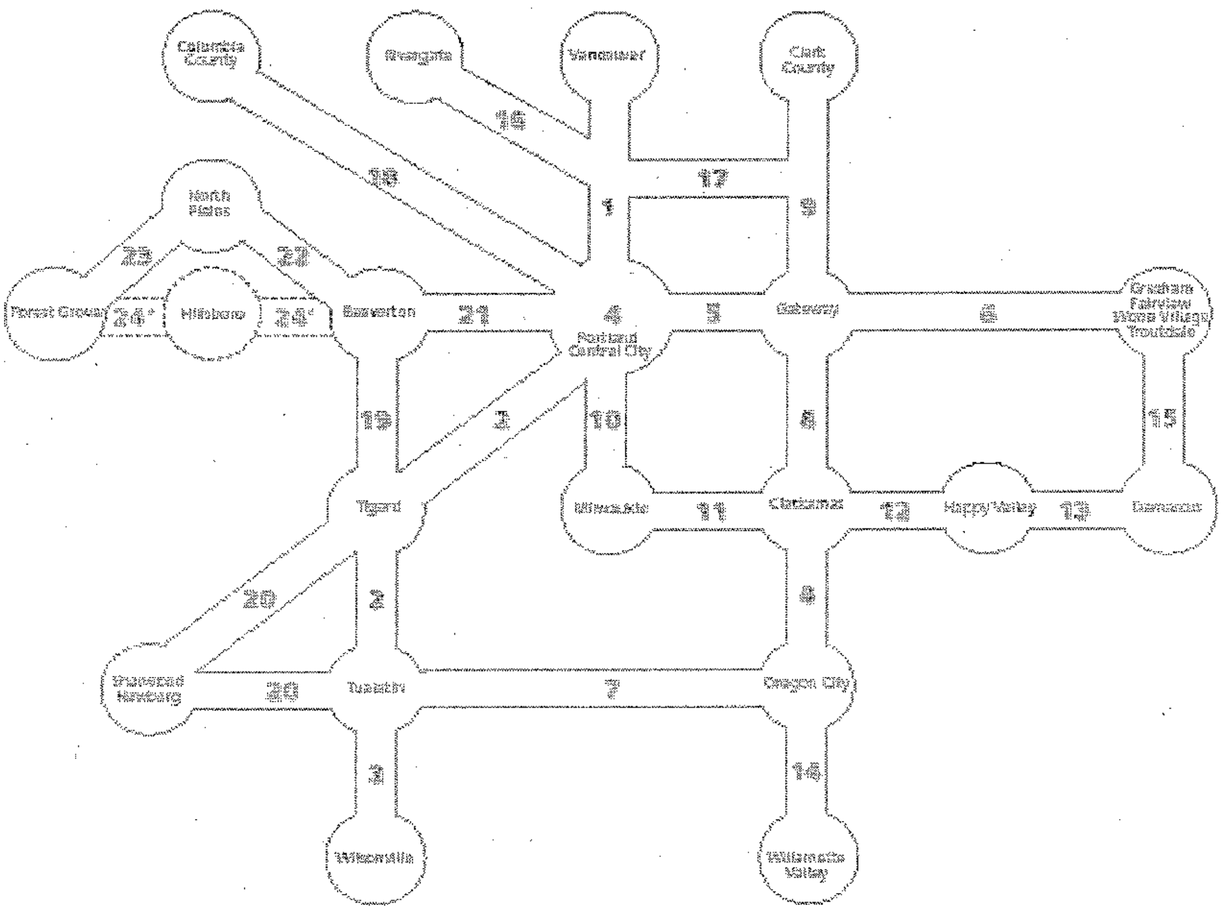
This memo introduces staff suggestions for completing the remaining corridor refinement plans and two High Capacity Transit (HCT) corridors by 2020. (See Attachment A.) It is intended to provide decision-makers with a framework for reviewing the technical rankings and local support letters related to the corridor refinement plans, and integrating that effort with the HCT system expansion program.

Background: Previous Review of Refinement Plan Prioritization

The region has reviewed and approved prioritization factors during September and early October. Subsequently, staff worked with the first five prioritization factors that related to technical considerations, to rate and rank the corridors. Meanwhile, local jurisdictions worked to document the local commitment factors intended to address issues of readiness and ripeness for corridor planning that help determine the success and fruitfulness of such regional efforts. The prioritization factors have been refined by TPAC (September 25) and approved by JPACT (October 8). In addition, they have been reviewed and refined by the Regional Transportation Plan Work Group (September 21 and October 12) and a TPAC subcommittee composed of county, city, ODOT and TriMet representatives (October 5.)
Technical rankings were presented to and accepted by TPAC on October 30, and reviewed by JPACT on November 12, 2009.

Staff had hoped that the refinement plan schedule would have been accepted for inclusion within the Regional Transportation Plan, for action by JPACT on December 10, 2009. However, TPAC (November 20, 2009) recommended that the refinement plan prioritization be held over until its January 2010 meeting. Staff has been working with Metro's partners to refine and revise the schedule since the TPAC decision occurred. The draft schedule attached to this memorandum, dated November 24, 2009, thus represents Metro staff's modifications based on TPAC and subsequent discussions, including a meeting with ODOT Region 1 staff.

For Reference: Mobility Corridors in the Portland Metropolitan Region



Results of Prioritization and Technical Rankings

Based on the comparison of data used to assess and compare each corridor against the regionally selected prioritization factors, ratings based on technical factors alone would result in prioritize the corridors as follows:

- Mobility Corridors #2, #3 and #20 - Portland Central City to Wilsonville, which includes I-5 South
- Mobility Corridor #4 - Portland Central City Loop, which includes I-5/I-405 Loop
- Mobility Corridors #7, #8 & #9 - Clark County to I-5 via Gateway, Oregon City and Tualatin, which includes I-205
- Mobility Corridor #15 - Gresham/Fairview/Wood Village/Troutdale to Damascus
- Mobility Corridor #24 - Beaverton to Forest Grove, which includes Tualatin Valley Highway

Demonstrations of Local Support

Letters from local jurisdictions demonstrating the factors for local support were submitted by early November. Letters of local support were focused on corridors #2, #3 and #20 (centered on I-5 from Portland-Wilsonville, Barbur Blvd. and 99W to Sherwood); #15 (East Multnomah County) and #24 (Beaverton to Forest Grove) with very strong, organized local agency and community support for the I-5/Barbur and East Multnomah County corridors. Staff factored this support into its recommendation for a refinement plan completion strategy and schedule, as shown in Attachment A.

Rationale for Staff Proposal for Corridor Refinement Planning Efforts

In order to accomplish as much refinement planning work as possible with likely funding and staff resources, we have discussed an ordering and, in some cases, segmenting, of the five remaining corridor plans. This ordering is in advance of final action by JPACT and Metro Council, and so may be changed in large or small ways. However, the order presented in the chart (Attachment A) considers the accepted technical rankings, and takes into account the current levels of local support.

The schedule of plans presented on the attachment to this memorandum considers the following issues:

- Technical rankings
- Demonstrated local support
- Respective levels of effort of the five corridors
- Complexity and cost of the refinement planning work required
- Ability of local jurisdictions to take more responsibility for one or more pieces of work that are likely to be required in a given corridor
- Ability to logically segment work
- Potential for project development to proceed on a separate track
- Ramp-up time needed for more complex corridors (to be included in a preparatory phase described below)—allowing staggered plan initiation points
- A proposed scenario for linking High Capacity Transit (HCT) system expansion process and priorities to the refinement planning process, where appropriate
- Stakeholder comments and suggestions

Leveling Planning Effort across Several Corridors: The level of effort required of Metro may not be significant in all corridors, nor must Metro lead all corridor refinement plans.

- In East Multnomah County, for example, the local jurisdictions are already well-organized and could shoulder some of the responsibility for coordinating among themselves to develop a detailed problem statement, and to identify any early actions that would be needed to take advantage of opportunities, or prevent loss of future opportunities such as losing right-of-way.

Preparatory Phase: In some cases, a preparatory stage is recommended, prior to the formal commencement of the refinement plans. In more complex, longer corridors with numerous jurisdictions, this includes the following efforts:

- Stakeholder identification
- Chartering for the refinement plan work
- Scoping and segmentation issues
- Negotiation of the necessary study MOUs between agencies to establish roles and commitments.

It will be time well spent, to develop levels of agreement on study elements that will further interagency relationships. Note that the transitions between preparatory work and formal refinement planning efforts are marked by a stakeholder decision point on the draft schedule, Attachment A.

Funding Issues Still Unresolved:

The draft schedule is predicated on the region and local jurisdictions committing to sufficient funding to accomplish these refinement plans and HCT analyses. This discussion must begin now. The schedule will be revised if we cannot augment the relatively small level of resources currently identified.

600 NE Grand Ave.
Portland, OR 97232-2736

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Metro | *Agenda*

Meeting:	MPAC Employment Subcommittee
Date:	Wednesday, December 2, 2009
Time:	3:30 to 5 p.m.
Place:	Metro, Council Chambers

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1. Welcome and introductions
2. Discuss timeline and meeting topics
   - Did we leave anything out?
   - What information will be helpful for your discussion?
3. Relationship between Economic Opportunity Analyses and the Urban Growth Report
   - See attached memo
4. Site characteristics – connection to growth management decisions and concept planning
5. Next meeting

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Metro | *Memo*

Date:	November 24, 2009
To:	MPAC employment subcommittee
From:	Malu Wilkinson, Ted Reid
Re:	Relationship between city Economic Opportunity Analyses and the Urban Growth Report

Some of the comments that Metro staff has received on the draft Urban Growth Report (UGR) suggest that the UGR should incorporate information from Economic Opportunity Analyses (EOAs) that have recently been completed by several cities in the region. This memo is intended to describe the similar but distinct purposes of the UGR and local EOAs and to indicate the portions of EOAs that do or do not lend themselves to being integrated into the UGR.

Purpose of the UGR
The UGR provides an assessment of the urban growth boundary's (UGB) capacity to accommodate population and employment growth through the year 2030.

Purpose of EOAs
Typically, cities perform EOAs to inform periodic updates to their comprehensive plans. Among other purposes, EOAs provide a comparison of employment land demand with existing land supply in the city. In response to EOA capacity findings, cities can adopt new strategies such as revising their zoning, pursuing taxlot assembly, cleaning up brownfields, and making investments in infrastructure.

Oregon's Administrative Rules state that EOAs should contain:

1. Review of national, state, regional, county and local trends;
2. Identification of required site types;
3. Inventory of industrial and other employment lands; and
4. Assessment of community economic development potential.

Cities with recent EOAs
Cities in the Metro region that have recently conducted EOAs include: Cornelius, Forest Grove, Hillsboro, Portland, Damascus, Wilsonville, and the Columbia-Cascade River District (jointly for Gresham, Fairview, Wood Village and Troutdale).

Forecast sources for EOAs

Recent EOAs have used forecasts by either Metro or the Oregon Employment Department. Both are reliable sources of information. However, neither of these sources provides forecast data at the individual city scale. Consequently, cities must come to their own determination about the share of growth that they may capture[1]. Table 1 provides a comparison of recent EOA forecasts.

Table 1: Comparison of forecasts used for the UGR and recent EOAs

Jurisdiction	Forecast used as basis	Original forecast geography	Analysis time horizon	Estimated base year employment	Forecasted average annual growth rate (employment)	New jobs forecasted
Metro UGR	Metro (2009)	7-county	2010 - 2030	766,000 low 950,000 high	1.4% low 1.7% high	240,000 low 380,000 high
Wilsonville	various	Clackamas & Washington counties	2005 - 2030	17,986	3.2%	20,079
Hillsboro	Metro medium forecast (May 2008) used as basis for Hillsboro low forecast	7-county	2008 - 2035	75,529	2.5% low 3.8% high	69,768 low 128,582 high
Forest Grove	Oregon Employment Department	Washington & Multnomah counties	2008 - 2028	9,092	2.5% low 3.2% high	5,748 low 7,876 high
Cornelius	Oregon Employment Department	Washington & Multnomah counties	2008 - 2028	2,485	2.0% low 7.1% high	1,221 low 7,371 high
Columbia-Cascade River District	Oregon Employment Department	Washington & Multnomah Counties	2006 - 2026	7,487	7.44% low 9.13% high	25,125 low 37,775 high
Damascus	Oregon Employment Department	Clackamas County	2007 - 2030	2,682	5% low 8% high	6,194 low 14,142 high
Portland	Metro (2009 medium forecast)	7-county	2010 - 2035	394,150 (in 2006)	.8% low 2.1% high	47,680 low 299,800 high

[1] A comparison of city capture rates is not meaningful since the original forecast geographies tend to differ. To establish city job capture rates, EOAs use a variety of methods, including assessments of historic employment data, assessments of the cities' share of the region's vacant land, or simple assertions.

EOA target industries
Cities are encouraged to identify in their EOA the industries that they wish to grow. Those goals are sometimes reflected in their demand analyses. Sectors that are frequently the focus of recent EOAs include: high tech, solar panel manufacturing, health care, and distribution/logistics.

Why the EOAs land need assessments can't be "added up" in the UGR
For a number of reasons, it is not possible for Metro to simply add up various EOA analyses to produce the UGR:

- Growth management is only effective if it is coordinated at the regional level
- Not all cities in the region have EOAs
- EOAs use different analysis timeframes than the UGR
- EOAs use a variety of different forecasts as bases and most do not include the effects of the current recession
- Each EOA makes an independent determination of how much growth the city will capture out of the larger forecast geography (i.e., there is no regional coordination)
- Many cities aspire to have growth in similar industries (e.g. high tech) and are largely silent on others (e.g. education and service sectors)
- EOAs use a variety of different methods for assessing redevelopment and infill capacity

Most of the seven EOAs use a time period that is fairly close to the time period used in the UGR (years 2010 to 2030). Not controlling for differences in the time periods, Table 2 illustrates how job growth in these seven EOAs stacks up next to the UGR's forecast for the Metro UGB:

Table 2: Compilation of EOA forecasts compared to UGR assessment

	Metro UGB jobs	Jobs in EOA cities	EOA cities' share of Metro UGB jobs	Implied* jobs remaining for non-EOA cities in UGB
Base year jobs	766,000 low 950,000 high	509,400	54% to 66%	350,600
Low growth forecast (new jobs)	240,000	175,800	73%	64,200
Low growth forecast (total jobs)	1,000,000	685,200	69%	314,800
High growth forecast (new jobs)	380,000	515,600	136%	(135,600)
High growth forecast (total jobs)	1,330,000	1,025,000	77%	305,000

**Implied, assuming the Metro forecast as well as these seven EOAs are correct*
A comparison of forecasted growth by employment sector is not possible since there is not a consistent approach to how sectors are reported or aggregated.

If these seven EOA's growth forecasts and the Metro forecast are accurate, other cities in the region (those without EOAs listed here) would see either anemic job growth or substantial job losses (losses of about 135,600 jobs).

How EOAs can help inform regional growth management decisions

Though the UGR requires a consistent, regional approach to its analysis, the growth management decisions that are subsequently made (2010 forward) can be informed by EOAs. In particular, EOAs can provide guidance on the employment sectors or clusters that are priorities for cities and information on the site characteristics that may be desired by different sectors and clusters. These site qualities could be addressed in concept plans (which could inform decisions about where to expand the UGB, if expansions are needed). EOAs sometimes include the following information about the site requirements of different sectors:

- Transportation
- Access to customers and labor
- Public facilities and utilities
- Site sizes and development patterns (densities)
- Ownership vs. rental
- Parking, storage, loading

Agenda Item Number 4.1

Resolution No. 09-4094, For the Purpose of Accepting the Population and Employment Forecasts and the Urban Growth Report as Support for Determination of Capacity of the Urban Growth Boundary

COUNCILOR HOSTICKA

Metro Council Meeting
Thursday, December 10, 2009
Metro Council Chamber

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ACCEPTING THE POPULATION AND EMPLOYMENT FORECASTS AND THE URBAN GROWTH REPORT AS SUPPORT FOR DETERMINATION OF CAPACITY OF THE URBAN GROWTH BOUNDARY	))))))	RESOLUTION NO. 09-4094 Introduced by Chief Operating Officer Michael Jordan with the Concurrence of Council President David Bragdon

WHEREAS, state law requires Metro to determine the capacity of the urban growth boundary (UGB) to accommodate the next 20 years' worth of population and employment growth by the end of December, 2009; and

WHEREAS, the Metro Council will direct its efforts to provide capacity for the next 20 years' worth of growth toward achieving the Outcomes that are part of its overall Making the Greatest Place initiative, as indicated by performance measures; and

WHEREAS, Metro published range forecasts of population and employment growth to the years 2030 and 2060 on March 19, 2009; and

WHEREAS, Metro published a preliminary analysis of the capacity of the existing UGB to accommodate the range of new dwelling units relating to the range of forecast population growth on March 31, 2009; and

WHEREAS, state law requires Metro to provide capacity to encourage the availability of dwelling units at price ranges and rent levels, and of transportation choices, that are commensurate with the financial capabilities of households expected over the planning period; and

WHEREAS, Metro published a preliminary Housing Needs Analysis on April 22, 2009, that showed the effects on housing affordability and household transportation costs of forecast growth under existing policies and investment levels; and

WHEREAS, Metro published a preliminary analysis of the capacity of the existing UGB to accommodate the range of new employment relating to the range of forecast employment growth on May 6, 2009; and

WHEREAS, the region has an interest in an adequate supply of land appropriate for industries that prefer larger tracts of land near transportation facilities and an interest in efficient use of existing land and transportation facilities; and

WHEREAS, Metro sought and received comments on the preliminary analyses of housing and employment capacity from its Metro Policy Advisory Committee (MPAC) and its Joint Policy Advisory Committee on Transportation (JPACT), local governments in the region, public, private and non-profit organizations and citizens; and

WHEREAS, Metro considered the comments and published revised draft analyses of the capacity of the existing UGB to accommodate growth to year 2030 on September 15, 2009; and

WHEREAS, Metro sought and received comments on the revised draft analyses from MPAC and JPACT; local governments in the region; and public, private and non-profit organizations and citizens; and

WHEREAS, the Metro Council held open houses and public hearings on the revised draft analyses on September 21, 22 and 24 and October 1, 8 and 15, 2009; and

WHEREAS, Metro considered comments received and made revisions to the final draft analyses of the capacity of the existing UGB to accommodate the range of new dwelling units and employment relating to the range of forecast population and employment growth; now, therefore,

BE IT RESOLVED that the Metro Council

1. The Council accepts the "20 and 50 year Regional population and employment forecasts" incorporated into the "Draft Urban Growth Report 2009-2030", dated September 15, 2009, as revised by this resolution, as a basis for analysis of need for capacity in the UGB to accommodate growth to the year 2030 and for actions the Council will take to add capacity by ordinance in 2010, pursuant to ORS 197.296(6) and statewide planning Goal 14.

2. The Council accepts the "Draft Urban Growth Report 2009-2030", dated September 15, 2009, with its analysis of housing needs, attached and incorporated into this resolution as Exhibit A, with the revisions described in the Staff Report dated December 3, 2009, attached as Exhibit B, as a basis for analysis of need for capacity in the UGB to accommodate growth to the year 2030 and for actions the Council will take to add housing and employment capacity by ordinance in 2010, pursuant to ORS 197.296(6) and statewide planning Goals 14 and 10.

3. The Council directs the staff to work with MPAC to identify site opportunities for industries that prefer large tracts, with a priority to mechanisms to remediate brownfields and assemble smaller parcels inside the UGB to make them more "market-ready."

4. Acceptance of Exhibit A by the Council meets Metro's responsibility under state law to analyze the capacity of the UGB to accommodate growth to the year 2030 as a preliminary step toward providing sufficient capacity to accommodate that growth. The Council will make a final land use decision to respond to this capacity analysis in 2010.

5. The Council directs the Chief Operating Officer to submit Exhibit A , together with such actions the Council adopts by ordinance to add any needed capacity pursuant to ORS 197.296(6) and statewide planning Goal 14, to the Land Conservation and Development Commission as part of periodic review pursuant to ORS 197.626, following adoption of the capacity ordinance in 2010.

ADOPTED by the Metro Council this 10th day of December, 2009

David Bragdon, Council President

Approved as to form:

Daniel B. Cooper, Metro Attorney

Resolution 09-4094
Exhibit A

CLICK HERE FOR REPORT

DRAFT URBAN GROWTH REPORT

2009 – 2030

Employment and residential

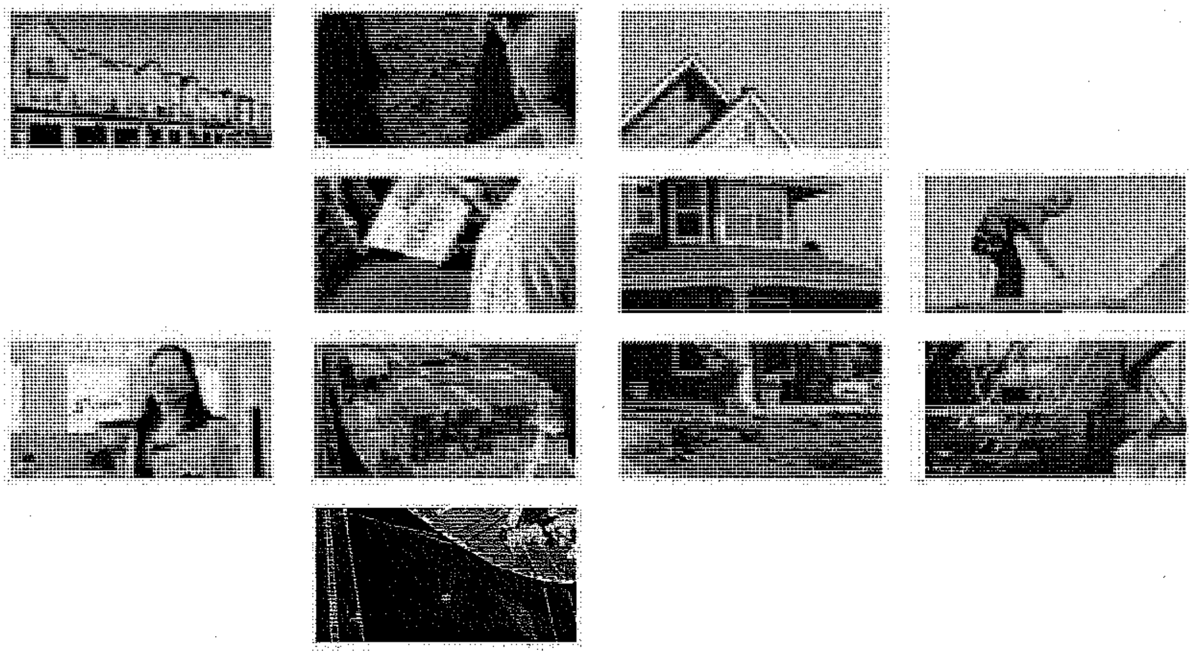
September 15, 2009

CLICK HERE FOR REPORT

Resolution 09-4094

September 15, 2009 **Exhibit A**

Employment and residential



DRAFT URBAN GROWTH REPORT

2009 – 2030

Appendices 2 - 13

September 15, 2009

EXHIBIT B
STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 09-4094, FOR THE PURPOSE OF ACCEPTING THE POPULATION AND EMPLOYMENT FORECASTS AND THE URBAN GROWTH REPORT AS SUPPORT FOR DETERMINATION OF CAPACITY OF THE URBAN GROWTH BOUNDARY

Date: December 3, 2009 Prepared by: Malu Wilkinson, x1680

BACKGROUND

Purpose of the forecast and the urban growth report
Oregon land use law requires that, every five years, Metro assess the region's capacity to accommodate the numbers of people anticipated to live or work inside the Metro urban growth boundary (UGB) over the next 20 years. To make this determination, Metro forecasts population and employment growth over a 20-year timeframe; conducts an inventory of vacant, buildable land inside the UGB; assesses the capacity of the current UGB to accommodate population and employment growth either on vacant land or through redevelopment and infill; determines whether additional capacity is needed; and documents the results of these analyses in an urban growth report (UGR). The UGR is the basis for subsequent consideration of the actions to be taken to close any identified capacity gap.

On the advice of the Metro Policy Advisory Committee, the Metro Council has indicated its intent to take an outcomes-based approach to assessing growth management options in 2010. It is intended that growth management decisions will help to foster the creation of a region where:

1. People live and work in vibrant communities where they can choose to walk for pleasure and to meet their everyday needs.
2. Current and future residents benefit from the region's sustained economic competitiveness and prosperity.
3. People have safe and reliable transportation choices that enhance their quality of life.
4. The region is a leader in minimizing contributions to global warming.
5. Current and future generations enjoy clean air, clean water and healthy ecosystems.
6. The benefits and burdens of growth and change are distributed equitably.

Should the Metro Council vote in favor of this resolution, it would be accepting the UGR and 20-year forecast as a reasonable and complete basis for making growth management decisions in 2010. By this resolution, the Council would also be accepting the 50-year forecast as a basis for designating urban and rural reserves. Council acceptance of the forecasts and the UGR does not constitute a land use decision, but provides a platform for subsequent growth management decisions.

Summary of forecast and UGR findings
<u>Population and employment range forecast</u>
20-and-50-year range forecasts of population and employment growth have been completed by Metro staff and peer reviewed by economists and demographers. The 20-year range forecast informs the UGR

and the 50-year range forecast informs the Urban and Rural Reserves process. The use of a range forecast acknowledges uncertainty and allows for growth managemeut decisions to focus on desired outcomes rather than a specific number. The forecast is for the seven-county primary metropolitan statistical area, which includes Clackamas, Multnomah, Washington, Yamhill, Columbia, Clark, and Skamania counties.

The 20-year forecast indicates that, by the year 2030, there will be a total of 1,181,300 to 1,301,800 households and a total of 1,252,200 to 1,695,300 jobs in the larger seven-county area. There is a 90 percent chance that growth will occur within this range.

The 50-year forecast indicates that, by the year 2060, there will be a total of 1,478,400 to 1,792,500 households and a total of 1,648,400 to 2,422,900 jobs in the larger seven-county area. There is a 90 percent chance that growth will occur within this range.

In his September 15, 2009 recommendation, Metro's Chief Operating Officer, Michael Jordan, recommended that growth management decisions made by the Council in 2010 focus not on the extreme ends of the range forecast, but on the middle third of the forecast range.

Urban Growth Report

In addition to the 20-year range forecast, the UGR includes an analysis of the share of the UGB's zoned capacity that is likely to be developed by the year 2030. The UGR's analysis assumes a continuation of current policies and investment trends. No changes to existing zoning are assumed, although it is likely that up-zoning will take place in the future as communities develop and implement their aspirations. The UGR's assessment of the likelihood of development is based on historic data, scenario modeling, and the professional expertise of Metro staff, local city and county staff, economic consultants, and business representatives. UGR results are portrayed for four different categories--residential, general industrial employment, general non-industrial employment, and large lot employment—that are summarized as follows:

Residential capacity

There is ample zoned capacity within the current UGB to accommodate the next 20 years of residential growth. However, the UGR's analysis indicates that, without additional infrastructure investments or other policy changes, insufficient zoned capacity will be available for development. At both ends of the range forecast (high and low) there is a gap in the UGB's capacity to accommodate the next 20 years of residential growth on vacant land or through redevelopment and infill (refill). Depending on the amount of residential growth that may be realized, the UGR finds demand for additional capacity to accommodate 27,400 to 104,900 dwelling units.

The UGR also includes an assessment of future cost-burdened households in the region. The assessment defines a household as cost-burdened if they rent and spend more than half of their after-tax income on housing and transportation expenditures. If current policy and investment trends are continued, the number of cost-burdened households in the region may double by the year 2030. Under that scenario, between 17 to 23 percent of all households inside the Metro UGB may be cost-burdened. This would represent between 51 to 69 percent of renter households. This analysis also finds that, as is the case today, there are likely to be concentrations of cost-burdened households in some communities and very few in others. Centers and corridors provide residents with the most affordable transportation options, but high market demand in those locations is likely to continue driving housing prices upwards. Investing in housing and transit in centers and corridors is one way of closing the residential capacity gap and reducing the number of cost-burdened households.

General industrial employment capacity
This portion of the UGR assesses the current UGB's capacity to accommodate industrial job growth on vacant land or through redevelopment and infill (refill). The assessment of demand for large, vacant lots is handled separately. The UGR finds that, at both ends of the employment range forecast, there is adequate capacity inside the current UGB to accommodate the next 20 years of general industrial job growth.

General non-industrial employment capacity
This portion of the UGR assesses the current UGB's capacity to accommodate non-industrial (e.g. office, retail, institutional) job growth on vacant land or through refill. The analysis indicates sufficient zoned capacity, but a need to make investments or policy changes to support the high end of the demand range. Depending on the amount of non-industrial employment growth that is realized, the UGR finds that there is demand for zero to 1,168 acres of additional capacity for non-industrial employment.

Large lot employment capacity
The "large lot" portion of the UGR's analysis was completed in recognition of the fact that some firms in traded-sector industries prefer or require large, vacant lots. The UGR defines a large lot as a single taxlot with at least 25 acres of vacant, buildable area. Demand for large lots is likely to be the product of the decisions of individual firms rather than larger industry sector trends. The UGR's forecast-based assessment originally determined that, over the 20-year period, there is demand for 200 to 800 acres of additional capacity for large-lot employment uses. This range depends on the amount of employment growth realized as well as whether assembly of adjacent lots of 25 acres or more was assumed.

For several reasons listed below, at its November 18, 2009 meeting, the Metro Policy Advisory Committee (MPAC) recommended that the UGR identify a wider range of potential large lot demand:

- Large lot demand will be the result of the decisions of individual firms, so it is inherently difficult to forecast.
- Some cities in the region have identified large, traded-sector firms as the focus of their economic development plans.
- It may be preferable from a policy standpoint to have flexibility to accommodate traded-sector firms.
- The use of an employment forecast may be an inadequate means of estimating large lot demand for freight, rail, and marine terminal uses.

Consequently, MPAC has recommended that the UGR identify a demand for 200 to 1,500 acres of additional capacity for large-lot industrial uses. This demand may be satisfied through a variety of means, including brownfield cleanup, infrastructure investments, taxlot assembly, or UGB expansions.

Process for writing the forecast and the urban growth report
Process overview
The forecast and UGR have been written and revised over the course of over a year and are informed by the expertise of economic consultants and Metro staff, business focus groups, comments from numerous stakeholders, advisory committee input, a panel of economic advisors, scenario modeling, and historic data. The analyses have benefited from this extensive review.

Expert review of the population and employment forecast
The national data that drives the regional forecast comes from IHS Global Insight, an internationally respected economics firm whose data is relied upon by numerous public and private entities. Metro's

econometric model, which is used to create the regional population and employment forecast, has been subjected to considerable expert scrutiny over the years. A November 24, 2009 memo from Metro's Chief Economist, to Malu Wilkinson, Metro Principal Regional Planner, describes recent peer reviews of the forecast model and its results and is included as Attachment 3 to this staff report.

In 2006, a panel of economic advisors was convened to evaluate Metro's econometric model and forecasts. The panel included:

- Tim McDaniels, professor and interim director, Institute of Resources and Environment, School of Community and Regional Planning, University of British Columbia
- Marshall Vest, economist and director of the Economic and Business Research Center at the University of Arizona's Eller College of Management
- Tom Potiowsky, State Economist for the State of Oregon

The panel of economic advisors reviewed the model's equations, overall statistical fit and results, finding:

- The Metro econometric model is one of the more advanced regional econometric models in the country and that it exhibits sound economic theory.
- The Metro econometric model is the right type of model for the purposes for which it is used.
- It is appropriate to use national economic projections from IHS Global Insight to drive the regional forecast. It was noted that the State of Oregon also uses IHS Global Insight data in preparing the biennial budget.
- In the context of performing risk analysis, a range forecast can be superior to a single point forecast.

A Public Review Draft 2005-2060 Regional Population and Employment Forecast was released on May 19, 2008. Accompanying this release, Metro hosted a panel discussion of the forecast. To inform the UGR, a preliminary 20 and 50-Year Regional Population and Employment Forecast was released in March 2009. This newer forecast incorporates the short-and long-term effects of the current recession. During the summer of 2009, the forecast was subjected to a peer review by local economists and demographers. The peer review panel found the forecast range to be reasonable and generally felt that actual growth may end up in the lower to middle portion of the range, but that, as a policy matter, it may be beneficial to plan somewhere in the higher portion of the employment range forecast. Peer review comments were addressed in a draft forecast released in September 2009. These changes did not involve amendments to the forecast's data.

<u>External expertise that informed the employment analysis</u>
To complete the employment analysis portion of the UGR, Metro staff worked with a consultant team led by E.D. Hovee and Co. that included FCS Group, Bonnie Gee Yosick, and Davis Hibbits Midghall, well-respected economic and public opinion consulting firms. Metro staff also formed the Employment Coordination and Advisory Committee (ECAC), which consisted of representatives from local city staff, bnsiness advocacy groups, the Port of Portland, and the Portland Development Commission. ECAC met on multiple occasions to provide comments and input on the UGR. Additionally, from December 2008 through February 2009, business representatives were included in focus groups that discussed the region's opportunities and challenges in fostering job growth.

<u>Preliminary versions of analyses released for comment</u>
In order to solicit early feedback, Metro staff released: a preliminary population and employment forecast and a preliminary residential UGR in March 2009; a preliminary housing needs analysis in April 2009;

and a preliminary employment UGR in May 2009. To the extent possible, comments received on the preliminary forecast, preliminary UGRs, and the preliminary housing needs analysis were addressed in the draft forecast and draft UGR, which were released in September 2009.

Metro advisory committee involvement
For over a year, MPAC, the Joint Policy Advisory Committee on Transportation (JPACT), and the Metro Technical Advisory Committee (MTAC) have been engaged in discussions of the UGR and possible growth management strategies. Beginning in September 2008, MPAC and JPACT considered the demographic changes that may impact residential growth and how the region plans to address population growth. This included a presentation on the topic by a visiting national scholar, Dr. Arthur (Chris) Nelson. During fall 2008, staff also presented to MPAC and JPACT the results of a series of "cause and effect" scenarios intended to illustrate the potential effectiveness of several different growth management and investment strategies. These "cause and effect" scenarios were also presented to the Transportation Policy Advisory Committee (TPAC) and to MTAC in an extended session.

Throughout the spring and summer of 2009, MTAC discussed the forecast, the preliminary UGRs and the preliminary housing needs analysis. During the summer of 2009, MTAC held two, three-hour-long sessions devoted entirely to discussing the preliminary analyses. These longer sessions were in addition to regular MTAC meetings where the forecast and the UGR were frequent agenda items. At the longer MTAC sessions, MTAC made recommendations on the UGR that were addressed in the draft UGR, which was released in September 2009.

MPAC discussed the forecast, UGR, and housing needs analysis on multiple occasions during the spring and summer of 2009. Several MPAC meetings included small group discussion formats to allow for more in-depth dialogue. At an October 23, 2009 retreat, MPAC took up the topic of the forecast and the draft UGR for four hours. Eric Hovee, the economic consultant who assisted in the UGR's employment analysis, was available at the retreat to answer questions posed by MPAC.

Additional stakeholder and public comment
Throughout 2009, the Metro Council and Metro staff have also engaged with numerous stakeholders on the topics of the forecast and the UGR. These meetings have included business interest groups, elected officials, land use planning advocacy groups, housing affordability advocacy groups, and city and county staff.

To solicit comments on the draft UGR (and other elements of the *Making the Greatest Place* initiative), seven open houses and five public hearings were held in locations throughout the region in September and October 2009. During this public comment period, comments were received in writing, as oral testimony, and electronically.

Comments received on the draft UGR
Because the UGR makes projections regarding future conditions, it elicits a variety of strong opinions from different perspectives. Staff believes that the forecast and UGR are based on sound and careful analysis and that the outstanding differences of opinion expressed by some cannot be reconciled with additional technical analysis. To aid the Council in its consideration of the completeness of the forecast and UGR, comments received on the draft UGR and staff responses are summarized in Attachment 1 to this staff report. To the extent possible or appropriate, staff has addressed comments in the final urban growth report. The general nature of comments is summarized below.

Business advocacy groups, the Port of Portland, Washington County, and the cities of Hillsboro, Cornelius, and Forest Grove have called for more optimistic employment forecasts (particularly in the high-tech manufacturing sector), higher capture rates[1], and lower refill rates[2]. These stakeholders have also suggested that the UGR's analysis should more fully take into account the site characteristics sought after by specific industry sectors. Finally, these stakeholders have requested that the UGR incorporate the conclusions of Economic Opportunity Analyses recently conducted by several cities.

The Homebuilder's Association of Metropolitan Portland disagrees with some of the UGR's assumptions and conclusions. Most notably, they find infeasible the 33 percent residential refill rate assumed in the UGR.

The cities of Portland, Lake Oswego, and Wilsonville as well as land use and housing affordability advocacy groups have expressed confidence in the analysis, calling for a focus on making more efficient use of the UGB's existing capacity and pointing to the need to take measures that address a changing economy, shifting demographics, climate change, brownfield cleanup, and housing affordability.

Comments from the general public typically focused on UGB decisions that the Council may consider in 2010 (rather than providing comments on the forecast and UGR analyses themselves). Those public comments were overwhelmingly in favor of making more efficient use of the region's existing capacity.

All of these discussions and comments have resulted in improvements to the final UGR's technical assumptions and its framing of policy choices. The revisions and technical corrections that Metro staff recommends making to the September 15, 2009 Draft UGR are summarized in Attachment 2 to this staff report.

Staff recommends two noteworthy revisions to the analysis. The first revision is the expansion of the range of additional capacity that may be demanded for large lot industrial uses (revised from 200-800 acres to 200-1,500 acres), as unanimously recommended by MPAC. The second is a revision to the estimate of acres that may be demanded for future parks, which, to a small degree, reduces the current UGB's residential capacity. This revision for future park acreage uses the approach recommended by MPAC in 2002, but provides an updated estimate that correlates to the current population forecast.

MPAC recommendation

On November 18, 2009, the UGR and forecast were taken up as an action item by MPAC. MPAC recommended several additions to the language of the resolution that is before the Council. MPAC's key additions to the resolution are a specific reference to the importance of addressing housing affordability and the need to focus on brownfield cleanup and lot assembly to address large lot industrial demand. MPAC also recommended a revision to the UGR's estimate of large-lot demand, which was discussed earlier in this staff report. With those revisions, MPAC unanimously recommended that the Metro Council vote in favor of this resolution.

Next steps

If the Metro Council votes in favor of this resolution, it accepts the forecast and the UGR as complete. The Council is not yet making a decision on where within the demand ranges to plan or whether to make

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[1] Capture rate refers to the share of the larger 7-county area's population or employment growth that is expected to come to the Metro UGB.

[2] Refill rate refers to the share of future residential or employment development that occurs through redevelopment or infill.

a UGB expansion. During 2010, Metro staff will work with cities in the region to identify new policies or investments that increase the capacity of the current UGB (e.g. zoning) or increase the likelihood that capacity in the current UGB will be developed in the next 20 years (e.g. investments in centers, corridors, employment and industrial areas, and recent UGB expansion areas). Only policies or investments that are formally adopted or approved can be considered. The effects of those actions will be assessed by the end of 2010, when the Metro Council considers the adoption of a capacity ordinance. Any remaining capacity gap would need to be addressed through UGB expansions.

2010: At least 50 (and up to 100) percent of any capacity need must be addressed by the end of 2010. Any capacity need that is being addressed through efficiency measures inside the current UGB must be identified.

2011: The end of 2011 is the State deadline for making UGB expansions, if needed.

ANALYSIS/INFORMATION

1. **Known Opposition**
   Business interest groups, the Port of Portland, several cities in Washington County, and Washington County itself previously indicated that the September 15, 2009 Draft UGR did not identify a large enough gap in the UGB's capacity to accommodate employment growth. A particular focus of their criticism of the UGR has been large-lot employment demand, which these stakeholders contend is underestimated in the UGR to the detriment of the region's future economic health. MPAC has recommended a revision to the range of capacity demanded for large-lot employment uses. This revision has satisfied cities in Washington County with seats at MPAC, but Metro staff is unaware whether this revision satisfies all others who have voiced concern.

2. **Legal Antecedents**
   The forecast and UGR are completed to satisfy:
   - Statewide Planning Goals 10 (Housing) and 14 (Urbanization)
   - Oregon Revised Statutes 197.296, 197.299, and 197.303 (Needed Housing in Urban Growth Areas)
   - Oregon Administrative Rules, Division 24 (Urban Growth Boundaries)
   - Metro Regional Framework Plan, Chapter 1 (Land Use)
   - Metro Code, section 3.01.020(a) and (b)

3. **Anticipated Effects**
   Council acceptance of the forecast and UGR will allow Metro to meet its legal requirements under State law and to begin work identifying the possible policy options to consider in 2010 to enable the region to achieve its desired outcomes.

4. **Budget Impacts**
   The budget for fiscal year 2009/2010 includes staff resources for this work program. The fiscal year 2010/2011 budget will need to include staff resources.

RECOMMENDED ACTION

Staff recommends that the Metro Council accept the 20 and 50 year Regional population and employment forecasts and the capacity analysis in the Urban Growth Report 2009-2030, with the revisions recommended in this Staff Report.

ATTACHMENT 1

DRAFT URBAN GROWTH REPORT COMMENT INDEX
Fall 2009

FROM	*AFFILIATION*	*DATE*
Alford, Heidi		October 14, 2009
Anderson, Michael	Oregon Opportunity Network	October 14, 2009
Arcana, Judith		September 18, 2009
Battan, Jim		September 16, 2009
Becker, Michael		September 18, 2009
Bender, Rodney		September 18, 2009
Bidwell, Michael Patrick		September 18, 2009
Bookin, Beverly	Commercial Real Estate Economic Coalition	September 24, 2009
Boone, James L.		September 20, 2009
Brewster, Ginny		September 17, 2009
Brewster, Ginny		September 17, 2009
Brown, David		September 18, 2009
Brown, R.		September 18, 2009
Burke, Elizabeth		September 18, 2009
Carley, Ron and Fuglister, Jill	Coalition for a Livable Future	October 15, 2009
Carillo, Ken		September 18, 2009
Cavenaugh, Kevin		September 16, 2009
Cohen, Gerald J.	AARP – Oregon State Office	October 15, 2009
Conable, Barbara		September 18, 2009
Cox, Bill		September 18, 2009
Cusack, Tom		
Cushwa, Nancy		September 18, 2009
Davis, Tim		September 17, 2009
Deagle, Susie		September 18, 2009
Dibblee, Martha		September 15, 2009
Digman, Joe		September 18, 2009
Dorner, Catherine		September 18, 2009
Durtschi, Kay	Citizen Member – Metro Technical Advisory Committee	October 15, 2009
Effman, Jason		September 18, 2009
Elteto, Louis		September 18, 2009
Fain, Lisa		September 18, 2009
Fitzgerald, Marianne	Southwest Neighborhoods, Inc.	October 15, 2009
Franchesi, Cheryl and Terry		October 15, 2009
Frank, Lona Nelsen	ALPACAS of Tualatin Valley LLC	September 16, 2009
Gadea, Francisco		September 18, 2009
Gerth, John		September 18, 2009
Goldfarb, Gabriela		October 8, 2009
Goldsmith, Dell		October 10, 2009
Green, Karla		September 18, 2009
Gregory, Michele	Multnomah County Planning Commissioner	September 16, 2009
Hagen Jr., Jon Edwin		September 18, 2009
Hammon, Virginia		October 8, 2009
Hanrahan, Steve		September 18, 2009
Harvey, Linda A.		September 18, 2009
Hauk, Marna		September 18, 2009
Helm, Polly		October 15, 2009
Heyne, Klaus		September 18, 2009

City of Hillsboro (Alwin Turiel)	City of Hillsboro	October 8, 2009
Hoem, Shirley		September 15, 2009
Houck, Mike	Urban Greenspaces Institute	October 10, 2009
Hunter, Christopher		September 18, 2009
Jackson, Kelly M.		September 18, 2009
Jacobson, Pat and Jake		September 18, 2009
Johnson, Chuck		September 18, 2009
Johnson, Ellen	Housing Land Advocates	October 15, 2009
Johnson, Michael		September 18, 2009
Jones, D.		September 18, 2009
Kaplan, Seth		September 18, 2009
Karlock, Jim		October 15, 2009
Kemper, Heather	Legal Aid Services of Oregon	October 15, 2009
Kraft, Tom		September 15, 2009
Kulley, Marlowe		September 17, 2009
City of Lake Oswego (Mayor Jack Hoffman)	City of Lake Oswego	October 13, 2009
LeFeber, Bob	Commercial Realty Advisors	October 14, 2009
Lanker, Stefan		September 18, 2009
Larco, Dorothy		September 18, 2009
Laws, Kathleen		September 18, 2009
Leinova, Avery S.		September 18, 2009
Lindsey, Carolyn		September 18, 2009
Lord, Pamela J.		September 18, 2009
Malmquist, Bret		September 18, 2009
Meehan, Hilary		September 18, 2009
Merchant, Bonnie		September 18, 2009
Micheletti, Dustin		September 18, 2009
McClanahan, Gary		September 18, 2009
McClay, Mauria		September 18, 2009
McCracken, Rhiannon		September 18, 2009
McDonough, Sandra	Portland Business Alliance	October 15, 2009
McGrath, Teresa		September 20, 2009
McKinney, Trenton		September 18, 2009
Neer, Steven		September 18, 2009
Nielsen, Charles E.		October 10, 2009
Nielsen, David	Home Builders Association of Metropolitan Portland	October 13, 2009
Newman II, Will		September 17, 2009
Newman II, Will		October 15, 2009
Parker, Terry		October 15, 2009
Parks, Lindsay		October 8, 2009
Pearmine, Katie		September 18, 2009
Peterson, Kathryn		September 18, 2009
Platt, Thomas		September 18, 2009
Platt, Thomas		September 18, 2009
Port of Portland (Bill Wyatt)	Port of Portland	October 15, 2009
City of Portland (Mayor Sam Adams)	City of Portland	October 15, 2009
Pratt, Elizabeth	The League of Women Voters of Portland	October 15, 2009
Price, William R.		September 18, 2009
Qamar, Lawrence		October 15, 2009
Reid, Bill	Johnson Reid LLC	September 29, 2009
Roberts, Jeff		September 21, 2009

Rojas, Carlos		September 16, 2009
Rollow, Nina		September 18, 2009
Ross, Kelly	Western Advocates	October 15, 2009
Schlueter, Jonathan	Westside Economic Alliance	October 15, 2009
Seamons, Joe		September 18, 2009
Smith, Jefferson		October 15, 2009
Spady, Sha		September 21, 2009
Stec, Bradley		September 18, 2009
Stephens, Charlie		
Stout, Mel		September 15, 2009
Streicker, Gail		September 18, 2009
Swaren, Ron		October 15, 2009
Sweeney, J. J.		September 18, 2009
Thompson, James		September 18, 2009
Thrower, Ashley		September 18, 2009
Toll, Peter		September 16, 2009
City of Tualatin (Mayor Lou Ogden)	City of Tualatin	October 14, 2009
Waksman, Steve and Deborah		September 18, 2009
Wallauer, Martha and Robert		September 17, 2009
Washington County (Greg Miller)	Washington County	October 15, 2009
Waterston, Debra		September 18, 2009
Wilkerson, Carol Metzger		September 18, 2009
City of Wilsonville (Stephan Lashbrook)	City of Wilsonville	October 15, 2009
Wixson, Gene		September 18, 2009
Woodruff, Claire		September 18, 2009
Woods, Deanna G.		September 18, 2009
Young, Laura		October 12, 2009
Cities of Banks, Cornelius, Forest Grove, Hillsboro and North Plains (Mayors Kinsky, Bash, Kidd, Willey and Hatcher	Multiple Cities	October 9, 2009

Employment UGR—technical comments

Comment attribution	Comment summary	Metro staff response
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Metro's cluster forecast is incorrect because it does not include NAICS code 334, which is the code under which solar panel manufacturing would fall.	All NAICS codes, including 334, are included in the Metro forecast. NAICS code 334 is also included in the cluster forecast. The UGR's narrative erroneously states that SolarWorld is in NAICS code 2211, but this text error has no effect on the forecast or the assessment of land need. See Appendix 3 to the UGR for a list of the NAICS codes that are included in each cluster. See Appendix 12 to the UGR for the complete forecast, which includes all sectors.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	The UGR should forecast future land needs for specific industry clusters, including high tech, solar manufacturing, and bio-pharma.	Statewide Planning Goal 14 (Urbanization) requires that Metro ensure capacity for housing and employment. It does not require Metro to supply land with the specific characteristics that may be desired by individual industries or industry clusters. Long-term predictions about the site needs of specific (and emerging) industries are likely to be incorrect. When making specific decisions to expand the UGB, the needs of industry clusters may be considered.
City of Cornelius, City of Forest Grove, City of North Plains, City of Hillsboro, City of Banks, Johnson-Reid, Port of Portland, Portland Business Alliance, Commercial Association of Realtors	The UGR does not adequately incorporate the analysis found in the Hillsboro Draft Economic Opportunities Analysis.	Statewide Planning Goal 9 (Economic Development) requires cities and counties to provide for the specific types of employment needs and opportunities they identify in their Economic Opportunity Analyses (EOA). Goal 9 does not, however, apply to Metro. Oregon Administrative Rule 660-024-0040(5) states that "except for a metropolitan service district [Metro]... the determination of 20-year employment land need for an urban area must comply with applicable requirements of Goal 9..." EOAs often identify specific employment sectors that are the focus of a city's economic development strategy. In EOAs, those priority clusters are sometimes assumed to see additional growth beyond what is indicated in a trend forecast. The UGR, on the other hand, provides an assessment of all employment sectors without identifying priority sectors. Though it may be beneficial to have a regional economic development strategy, Metro has not been charged with the task of developing that strategy and does not presume to have that role. Metro does, however, have a role in coordinating the population and employment forecasts for the region. Adding up the results of individual city forecasts would likely overstate regional growth in some sectors and understate it in others. Metro has some methodological concerns with the Hillsboro Draft Economic Opportunity Analysis (EOA). Primary concerns include: 1) The Hillsboro EOA's forecast treats Metro's older, pre-recession, medium forecast as a low (baseline) forecast. The Hillsboro EOA forecast explicitly rejects

Comment attribution	Comment summary	Metro staff response
		the long-term impacts of the current recession on manufacturing sectors. 2) The Hillsboro forecast for NAICS code 334 (computer and electronic product manufacturing), and photovoltaic panel manufacturing, in particular, is so optimistic that it overwhelms the entire seven-county forecast for this sector. Population growth rates as well as the growth rates for other employment sectors have to have some logical consistency and also fit within the context of a national forecast. If the Hillsboro forecast for this sector were correct, it would have serious implications for overall regional growth as well. Factoring in the multiplier impact of the Hillsboro photovoltaic forecast would essentially explode the forecast for manufacturing, which in turn would stimulate growth in nonmanufacturing sectors such as services, retail, finance and other industries. Assuming the multipliers play out as usual, the employment forecast would likely increase from 1.5 percent annual growth (the current Metro forecast) and exceed two percent annual growth. Already, the Metro regional forecast is projected to grow faster than the U.S. average by 75 percent. At above two percent, our region's projected growth would exceed twice the normal rate. In addition, population growth would have to follow suit. Over a 20 year period, greater than two percent population and total employment growth is not realistic or sustainable. It is unlikely that a mature region like Portland metro can grow so much faster over the long-term than the regional, state and national trends depicted by other forecasters. The Hillsboro forecast for photovoltaic panel manufacturing employment is based on the Oregon Department of Energy goal for megawatts of electricity generated from solar panels. This methodology is predicated on the assumption that a significant share of the world's solar panels will be manufactured in Hillsboro. Solar panel manufacturing has entered a phase of standardization and overseas production, where companies will be competing based on low prices and low wages. Ramped up solar panel production in China and a softening of demand in Europe have resulted in a 50 percent drop in solar panel prices over the last year. This same trend has occurred in many other manufacturing sectors and is not expected to reverse itself. The greater degree of specificity found in the Hillsboro forecast, with its effort to make predictions about particular technologies (e.g. solar panels) makes it more

Employment UGR—technical comments

Comment attribution	Comment summary	Metro staff response
		likely to be incorrect. When planning for the longer term, policy decisions will be much better served by forecasts that portray generalized aggregates that are tied to national data that have been exposed to continuous scrutiny. The Hillsboro EOA does not provide documentation of the methodologies used to forecast additional growth in the bio-tech and high tech clusters.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Metro's forecast understates growth in solar manufacturing, bio-pharma, and high tech manufacturing, sectors in which our region has historic strengths.	The Metro forecast is based on data from IHS Global Insight, an internationally respected economic forecasting firm whose data is used by numerous public and private institutions. That data is subsequently adjusted to reflect our region's historic trends and economic strengths. Metro's forecast, in fact, indicates that the region will have a faster rate of growth in manufacturing and, more specifically, electronics manufacturing than the United States as a whole. But, as with the rest of the U.S., it is anticipated that manufacturing will represent a smaller share of total employment in the future. The recent recession is anticipated to have long-lasting effects, particularly on industrial sectors. Metro's forecast model has been peer-reviewed as has the recent Metro forecast (which includes the employment forecast). The peer review panel expressed confidence in the forecast's methodologies and results.
Westside Economic Alliance	Metro's forecast calls for a substantial decrease in manufacturing employment. "The Westside Economic Alliance rejects the premises used to explain these forecasts and challenges Metro to reconsider the implications of this vision."	The Metro seven-county forecast indicates growth in manufacturing employment at both the high and low ends of the forecast range. The forecast indicates that manufacturing will represent a smaller share of future employment. The Metro forecast also indicates that at the high end of the employment range forecast, manufacturing may bounce back faster than the rest of the economy.
Westside Economic Alliance	Metro's forecast is incorrect because it assumes that phenomena such as global warming, rising fuel prices, and a degraded environment will stifle population growth in the seven-county region.	Metro's seven-county forecast makes no assumptions about possible catastrophic events. Forecasted population growth rates are the product of large-scale demographic trends. The UGR suggests that rising fuel prices and climate change are compelling reasons to consider growth management policies carefully. The use of a range forecast allows for that policy discussion.
Urban Greenspaces Institute	If Climate Change increases the number of floods and wildland fires, temperatures elsewhere in the U. S., especially in the arid regions of the Southwest, is it possible Climate Change "refugees" might increase population projects even more than your current	Metro staff agrees that there is evidence to suggest that climate change may cause inter-regional migrations, but it is not clear what the degree and direction of these migrations may be. Consequently, Metro's seven-county forecast makes no assumptions about possible catastrophic events. The UGR suggests that rising fuel prices and climate change are compelling reasons to consider growth

Employment UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
	modeling suggests?	management policies carefully. The use of a range forecast allows for that policy discussion.
Westside Economic Alliance	The seven-county forecast is wrong because growth rates are lower than at any time since Oregon was granted statehood.	Growth rates are forecasted to decline, but this is because of the mathematics of having an ever larger base (existing) population. When expressed in absolute numbers, the forecast is consistent with previous forecasts, which have proven accurate (see Table 1, attached to the end of this document, for a comparison of an older Metro forecast with actual growth).
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	The presence of an existing solar manufacturing cluster in Hillsboro will result in western Washington County capturing the bulk of future high tech and solar manufacturing jobs.	Solar manufacturing firms can be found throughout Oregon, the United States, and the world. Please see Table 2, attached to the end of this document, for a summary of Oregon's recent solar recruits' location choices. Two out of the nine recruits are in Hillsboro (one of those two, SpectraWatt, has since relocated to New York because of public subsidies), while the remaining firms are dispersed throughout the state.
Port of Portland	A job forecast is inadequate for assessing land needs associated with commodity flows (freight, logistics).	This is a comment that Metro received on the preliminary UGR as well. Metro would welcome specific suggestions on how to perform this portion of the assessment differently, but has not received any to date. Staff proposes that the final UGR should reflect the Metro Policy Advisory Committee's recommendation to revise the identified demand for large lot capacity from 200-800 acres to 200-1,500 acres. This revision would acknowledge the potential shortcomings of using an employment forecast as the sole basis for assessing large lot demand. The UGR's analysis considers land extensive uses with fewer employees. The overall demand model assumptions on employees per square foot by building type have also been revised based on the feedback received on the preliminary analysis. These adjustments should address some concerns about land demand for freight uses.
Port of Portland	Freight facility expansion would likely consume other industrial land, which, in turn, would trigger demand for additional industrial land elsewhere in the region.	Freight-related jobs are included in the regional forecast and demand for capacity that is generated by these jobs is included in the UGR's assessment. Suggestions that a job forecast is not an adequate means of estimating land demand for freight uses have not been accompanied by specific suggestions for an alternative methodology.

Employment UGR—technical comments

Comment attribution	Comment summary	Metro staff response
		Staff proposes that the final UGR should reflect the Metro Policy Advisory Committee's recommendation to revise the identified demand for large lot capacity from 200-800 acres to 200-1,500 acres. This revision would acknowledge the potential shortcomings of using an employment forecast as the sole basis for assessing large lot demand.
Port of Portland	Modify the region's assumed job capture rate to make it more aggressive.	The capture rates (industrial and non-industrial) used by Metro in the UGR are an output of scenario modeling. The policy and investment inputs into that modeling are intended to represent a continuation of current policies and investment trends. If the region is to achieve a higher job capture rate, it would likely need to implement new policies and investments. Expressing a different point of view, we have received comments from Clark County and Vancouver that the assumed capture rate is too high.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Large, vacant lots are needed in order to attract solar manufacturers to the Portland metropolitan region.	The location choices of several of Oregon's recent solar manufacturing recruits indicate that large, vacant lots are not needed by most firms. Please see Table 2, attached to the end of this document, for a summary of Oregon's recent solar recruits' location choices. Of the nine recent recruits listed, seven are on properties smaller than 25 acres (three of those are on less than 10 acres). Two-thirds of these recent recruits, including SolarWorld, North America's largest solar manufacturer, have located in existing buildings. One firm, SpectraWatt, has left Oregon for New York despite having a vacant 20 acre site (cited reason is because the public subsidies offered were more enticing). Staff proposes that the final UGR should reflect the Metro Policy Advisory Committee's recommendation to revise the identified demand for large lot capacity from 200-800 acres to 200-1,500 acres. This revision would acknowledge the potential shortcomings of using an employment forecast as the sole basis for assessing large lot demand. The Metro staff recommendation is that the region should find ways to use our existing inventory of land more efficiently.
Port of Portland, Commercial Real Estate Economic Coalition	Land must be in the right amount and in the right location for the needed purpose.	Statewide Planning Goal 14 (Urbanization) requires that Metro ensure capacity for housing and employment. It does not require Metro to supply land with the specific characteristics that may be desired by individual industries or industry clusters.

Employment UGR—technical comments

Comment attribution	Comment summary	Metro staff response
		The purpose of the UGR is to identify any gap in capacity, not to assess how and where to address the gap. Local and regional investments can support efficient utilization of land inside the UGB.
Port of Portland	Much of the region's inventory of industrial land is not ready for development due to substantial constraints including brownfield status, location or lack of infrastructure, and regulatory overlays.	These constraints are taken into account in the UGR. Brownfield sites are assumed to only be available for development in the longer term. Only half of the capacity in recent UGB expansion areas is assumed to be available in the 20-year time frame because of infrastructure shortcomings. Portions of tax lots with environmental constraints are not included in the buildable land inventory. See Tables 27 and 28 on pages 72 and 73 of the UGR for additional information.
Commercial Association of Realtors	The UGR should not assume that public financing will be in place for unknown targeted public investments.	The UGR only assumes those policies and investment trends that currently exist.
Port of Portland	The buildable land inventory does not account for upland habitat protections that reduce capacity for development.	Title 13 (Nature in Neighborhoods) upland habitat protections only apply to future UGB expansion areas. The UGR assesses the current UGB's capacity.
Urban Greenspaces Institute	How many acres of the region's supply of buildable land for employment are urban forest canopy, headwaters areas, and other natural resource lands?	The UGR's buildable land inventory takes into account existing environmental regulations, discounting the inventory where appropriate.
Port of Portland	The lack of development in new urban areas (areas brought into the UGB since 1997) is not necessarily because of a lack of infrastructure or governance, but because the land is not suitable for industrial development.	Past UGB expansions have been made in the types of locations that are dictated by current State law. Over time, these areas are intended to develop into complete communities, including employment opportunities. It is hoped that the designation of urban reserves will identify sites that are well-suited for development. Metro staff believes that infrastructure and governance must be addressed to make any future UGB expansion areas developable.
City of Tualatin, Commercial Association of Realtors	The UGR should not assume that industrial uses will locate in multi-story buildings.	The UGR's analysis does not assume that industrial uses will locate in multi-story buildings.
Commercial Association of Realtors	The UGR should not assume "ever-increasing" floor-area ratios for all building types with no regard for market feasibility.	Metro staff concurs and asserts that the UGR's assumptions regarding floor-area ratios (FAR) are conservative. No change in FAR is assumed in the short-term and very modest increases (10%) are assumed in the long-term. Assumptions about increases in FARs for industrial uses are particularly modest. The FARs that are assumed in the UGR account for the thresholds at which structured parking becomes necessary.
Commercial Association	The refill rates assumed in the UGR do not seem	The refill rates assumed in the UGR are the product of modeling that is informed

Employment UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
of Realtors	reasonable.	by historic data and professional expertise.

Employment UGR—policy comments

Comment attribution	Comment summary	Metro staff response
City of Cornelius, City of Forest Grove, City of North Plains, City of Hillsboro, City of Banks, Johnson-Reid, Port of Portland, Portland Business Alliance, Commercial Real Estate Economic Coalition	Undersupplying land for priority industry clusters would be harmful to the economy.	Metro performs the UGR analysis every five years to ensure a 20-year supply of capacity for jobs. The effect of this is that, in the short-term (five years), there will be four times the needed capacity for jobs. It is extremely unlikely that amount will be insufficient to accommodate growth before the next UGR analysis in five years. This five-year cycle creates a built-in cushion to allow for choices among sites. Experience has shown that the majority of recent solar manufacturing recruits have located in existing buildings and on smaller sites. The final UGR will reflect the Metro Policy Advisory Committee's recommendation to revise the identified demand for large lot capacity from 200-800 acres to 200-1,500 acres. This revision acknowledges potential shortcomings of using an employment forecast as the sole basis for assessing large lot demand.
Port of Portland	Regional choices related to land supply and transportation will determine the economic future of the region.	Many factors at the global, national, state, regional and local levels have effects on the region's economy. The UGR is not intended to serve as an economic development strategy; it informs land supply decisions that will be made in 2010.
Port of Portland	One of the "six desired outcomes" is economic competitiveness and prosperity—why is there no strategy presented to achieve this outcome or an assessment of how other desired outcomes may conflict with this outcome?	The purpose of the UGR is to identify whether a capacity gap exists and, if so, to what degree. This UGR intentionally presented a variety of policy options to consider for addressing land demand and achieving the region's desired outcomes, but it is not the purpose of the UGR to determine the specifics of those policy options. The viability of those policy options does not have an impact on the capacity analysis. Those policy options can be more thoroughly considered in 2010.
Port of Portland	The UGR and transportation investment strategy need to link up with industry cluster needs. Use the Portland Regional Partners for Business list of clusters instead of the Portland Development Commission's (PDC) list.	Though it may be beneficial to have a regional economic development strategy, Metro has not been charged with the task of developing that strategy and does not presume to have that role. Because there is no agreed upon regional economic development strategy, there is no "right" cluster list to use. The Draft UGR used the PDC list as a way of presenting information in a format that addresses the economic development priorities of many cities in the region. The full forecast, which includes all employment sectors, is the basis for the capacity assessment. The cluster forecast does not figure into the capacity assessment. New cluster definitions will not change the capacity assessment.
City of Portland	The vast majority of our jobs are created through the growth of small businesses. We need to nurture and	Metro's analysis indicates that most employment will occur in smaller firms. Attracting larger firms is also of importance to the region's economy.

Employment UGR—policy comments

Comment attribution	Comment summary	Metro staff response
	retain those companies while attracting others.	
Port of Portland	Two key elements of the strategy for providing large lot supply (brownfield cleanup and fast process for UGB expansions) will be undefined at the close of public comment on October 15.	The purpose of the UGR is to identify whether a capacity gap exists and, if so, to what degree. This UGR intentionally presented a variety of policy options to consider for addressing land demand, but it is not the purpose of the UGR to determine the specifics of those policy options. The viability of those policy options does not have an impact on the capacity analysis. Those policy options can be more thoroughly considered in late 2009 and in 2010.
Port of Portland, Commercial Real Estate Economic Coalition	Brownfield cleanup should be a priority	Metro concurs that brownfield cleanup should be a regional priority and welcomes partnerships to institute more brownfield cleanup programs. A MPAC subcommittee will be looking at brownfield cleanup as one option to make more of the region's existing industrial capacity available.
City of Portland	The City of Portland is committed to cleaning up, over time, the City's brownfield sites.	The City has a strong brownfields cleanup program and Metro efforts, focused elsewhere in the region, serve as a complement. Metro staff is open to new opportunities to partner with the City of Portland in brownfield cleanup.
City of Portland	The City of Portland is committed to consolidating and assembling adjoining parcels to provide larger sites. Opening up huge tracts of otherwise excellent agricultural land for industry, when we have land with services already in the UGB, doesn't make sense from a regional investment point of view.	Metro staff is open to opportunities to partner with the City of Portland in employment land assembly.
Port of Portland	A regional infrastructure fund is needed to make industrial sites shovel ready.	Infrastructure funding shortfalls have made it difficult to develop the region's existing supply of land for industrial uses. Metro welcomes a discussion of developing a regional investment strategy, including discussions about possible funding sources.
Portland Business Alliance	There is no reason to expect that funding will be more readily available for refill development than for expansion and to assume otherwise overstates the region's ability to accommodate growth in the existing land supply.	The refill rates that are assumed in the UGR are based on a continuation of existing public investment trends.
Commercial Association of Realtors	The Association appreciates the UGR's improved analytical approach and sensitivity to market realities, but does not believe its estimates or projections. The UGR should make conservative, market-based assumptions.	Metro staff appreciates the input given by the Commercial Association of Realtors that informed some of the UGR's technical assumptions. Metro staff believes that its approach to this analysis is market reality-based.

Employment UGR—policy comments

Comment attribution	Comment summary	Metro staff response
Commercial Association of Realtors	The UGR should not assume that the market will respond to our policies and investments.	As pointed out by the Commercial Association of Realtors, this UGR has an improved analytical approach that acknowledges market dynamics. The UGR's market assumptions are informed by modeling, historic evidence and the professional expertise of Metro staff, consultants, and private sector representatives.
Commercial Association of Realtors	The UGR should not assume political support for some set of future policy actions	The UGR only assumes those policies and investment trends that currently exist.
Port of Portland Portland Business Alliance	The "fast track" UGB expansion process that has been proposed by some will not be fast enough once planning, annexation, zoning, and infrastructure construction are considered.	An MPAC subcommittee will take up the issue of how to ensure that large lots are available and protected for industrial uses. The fast-track process is one proposal. Metro welcome other proposals.
Johnson-Reid	The draft UGR does not consider lands north of the existing Washington County UGB as candidate expansion areas for employment growth, modeling, and employment land capacity study.	The UGR's purpose is to identify any gap in the capacity of the current urban growth boundary (UGB) to accommodate growth. The UGR is not intended to examine how or where to fill a capacity gap outside of the current UGB. Scenario modeling was used to inform the UGR. Those scenarios assume a continuation of current policies and investment trends and, as such, assume that future UGB expansions will follow the existing hierarchy of lands as defined by State law. When urban and rural reserve designations are made, scenario assumptions about future UGB expansions will be adjusted.
Port of Portland	Habitat protection programs at the regional and local levels reduce the efficiency with which land is used inside the UGB.	Habitat protection and provision of parks and open spaces are key components of the 2040 Growth Concept. Balancing these goals with efficient development of land is often challenging and Metro is always looking for new ways of doing so.
Port of Portland	The UGR implies that there has been a problem of industrial land conversion and that there is a need to revise Title 4 of the Urban Growth Management Functional Plan. Title 4 provides adequate protection. If there are conversions from industrial uses, it is an enforcement issue.	Metro staff hopes to compile more information to determine whether industrial land conversion has been occurring and, if so, why. An MPAC subcommittee will take up the issue of how to ensure that large lots are available and protected for industrial uses.
Commercial Association of Realtors, Citizen comments (less than five)	Expand the UGB	The decision about whether or not to expand the UGB will be made by the Metro Council, in consultation with MPAC, in 2010. That decision will be based on the UGR's analysis and any new policies or public investments that are adopted by the end of 2010 that affect the region's capacity.
Citizen comments	Focus growth inside the existing UGB	The decision about whether or not to expand the UGB will be made by the Metro

Employment UGR—policy comments

Comment attribution	Comment summary	Metro staff response
(approximately 100)		Council, in consultation with MPAC, in 2010. That decision will be based on the UGR's analysis and any new policies or public investments that are adopted by the end of 2010 that affect the region's capacity.
Port of Portland, Portland Business Alliance, Commercial Association of Realtors	30 days is not an adequate amount of time for public review and comment on the UGR	Metro must meet a State-mandated deadline (end of 2009) for the Metro Council's acceptance of the UGR. The public will be able to comment throughout most of 2010 on the various policy choices that will be considered for closing any capacity gap identified in the UGR. Metro staff appreciates the time commitment that various advisory committees have made in providing review of the UGR. Metro has been working with advisory committees to refine the approach and contents of the UGR since winter of 2008. A preliminary UGR was released in May 2009 in order to proactively solicit and respond to technical comments. To the extent possible, comments received on the preliminary UGR have been addressed in the draft UGR. Please see Appendix 1 to the Draft UGR for a summary of comments received and draft Metro staff responses.

Residential UGR—technical comments

Comment attribution	Comment summary	Metro staff response
City of Portland	Future trends such as higher energy costs, carbon taxes or regulations, and changing demographics make Portland well-positioned to provide future residents with the kinds of housing choices that they will desire. Portland has the ability to accommodate 140,000 more households without any changes to zoning.	The UGR's analysis indicates that the City of Portland and the region have ample zoned capacity to accommodate the next 20 years of residential growth. The UGR shows a need to attract the residential market to that zoned capacity. Policies and investments that encourage redevelopment and infill in centers and corridors should remain the region's focus. The trends cited by the City may attract more of the forecasted households to existing urban areas than contemplated by the UGR.
Home Builders Association of Metropolitan Portland	How does Metro plan on achieving refill rates of 50 percent?	The draft UGR assumes a 33 percent refill rate, which is in keeping with historic rates and, according to Metro's market-based economic model, is likely to be achieved under current zoning.
City of Tualatin Portland Business Alliance	A 33 percent refill rate may not be a reasonable expectation.	The draft UGR assumes a 33 percent refill rate, which is in keeping with historic rates and, according to Metro's market-based economic model, is likely to be achieved under current zoning.
City of Tualatin	Where is the analysis that indicates where refill will be occurring?	Refill rates are expected to vary from city to city, with generally higher rates in Portland than in outlying communities. Please see Maps 1-4, attached to the end of this summary, which show historic and forecasted refill rates throughout the region for single-family and multi-family residential development.
Home Builders Association of Metropolitan Portland	Lands that are likely spots ("low-hanging fruit") for refill have already seen refill occur.	Redevelopment and infill (redevelopment in particular) are ongoing market phenomena. There are many underutilized sites throughout the region that remain ripe for redevelopment and new opportunities will continue to emerge over time.
Home Builders Association of Metropolitan Portland	How does Metro anticipate having 71,000 housing units subsidized to the tune of up to $50,000 per home and what will the impact be on schools and other public services if urban renewal districts are used to created these subsidies and pull money away from other public services?	The Home Builders Association is referring to scenario assumptions in its comment. For the purpose of scenario modeling, Metro assumed a continuation of existing investment trends. The residential incentive assumptions that Metro made were reviewed by cities, counties, the Portland Development Commission, and the Metro Technical Advisory Committee. There are no assumptions made about new levels of investment. Better performance may be achieved with additional investments, investments in different locations, or simply with additional time. It is not the role of the UGR to determine the possible impact on schools and other public services if cities continue their urban renewal programs.
Home Builders Association of Metropolitan Portland,	The assumption about future park needs that is made in the UGR capacity calculation is incorrect. Cities and park providers have more financial resources today than they	There is no specific guidance in state planning law, from ORS 197.296 or Goal 8 on Recreational Needs, on methods to determine park needs. There is no perfect way of estimating future park needs since there is no regional level of service standard

Residential UGR—technical comments

Comment attribution	Comment summary	Metro staff response
Western Advocates, Inc.	did in 2002 (year of previous UGR) to purchase park land.	for parks. To maintain an approach that is consistent with the approach used in 2002, staff proposes keeping the implicit parks level of service found in the 2002 UGR: In 2002 UGR: Forecasted 220,700 dwelling unit growth in 20 year period System-development-charge-based park deduction = 1,100 acres Implied level of service = 1,100 park acres for 220,700 new dwelling units Assuming same implied level of service as in 2002, then in 2009 UGR: Forecasted 262,400 dwelling unit growth in 20 years (baseline assumption) 1,100 /220,700 * 262,400 = **1,300 acres** of new park deduction The acres of parks and open space cited in the Regional Infrastructure Analysis include natural areas and other non-active use spaces. The UGR's parks calculation is only intended to estimate the land demand for active-use parks (i.e. not natural areas) since these are lands that could otherwise be buildable for residential purposes. The buildable land inventory takes into account vacant lands that are not buildable because of regulatory protections (Titles 3 and 13 of the Urban Growth Management Functional Plan).
Legal Aid Services of Oregon (Hillsboro Regional Office), Tom Cusack	Revise the table appearing on page 21 of Appendix 8 (needed housing data tables) to more accurately show the need for subsidies at higher rent levels than the less-than-$400 rent level currently shown.	Metro staff appreciates the careful review of the data and agrees that additional rent and ownership price categories should be denoted as "partially assisted." All categories of rental housing below $1,100 in rent and owner-occupied housing that is $200,000 or less in value may need government assistance. Corrections to tables 303.1a and 303.1b in Appendix 8 will be made in the final UGR.
Tom Cusack	Metro should review existing reports, Census data, and the American Community Survey data to determine the relative rate of Portland Metro housing mismatch by income and rent levels and adjust their demand/supply projections accordingly.	The UGR's method and the method proposed by Mr. Cusack are both valid approaches, but are suitable for different purposes. The method proposed by Mr. Cusack would provide an assessment of current conditions, but would not depict the housing production that is likely to occur in the next 20 years as required for the UGR. To get a sense of the mismatch referenced by Mr. Cusack, the housing needs analysis scenarios forecast future housing production and the number of future cost-burdened households (renters paying more than 50 percent of their income

Residential UGR—technical comments

Comment attribution	Comment summary	Metro staff response
		for housing and transportation). The UGR's approach acknowledges the fact that higher income households cannot be prevented from occupying market rate housing that is cheaper than what they could potentially afford.
Legal Aide Services of Oregon (Hillsboro Regional Office)	The report fails to mention and account for the impact of units otherwise affordable to lower income households being occupied by higher income households.	As pointed out in the comment, the analysis doesn't indicate what a household <u>should</u> pay (given their income), just what they <u>do</u> pay. This approach acknowledges that, rather than being static, housing prices are a product of market demand. This analytical approach is true to the dynamic faced by low income households in today's market. Without a housing quota system that sets aside housing for different income levels, this is also how future housing markets are expected to function. To assess affordability, the analysis provides information about the share of income spent on housing and transportation. For some households, this share is relatively small and for others it is substantial. It remains for policy discussion what can be done to improve these outcomes.
Legal Aid Services of Oregon (Hillsboro Regional Office), Tom Cusack	Add a narrative discussion and table that shows the relevant need for government housing including housing that receives public assistance.	Metro staff will add narrative to better describe affordable housing needs. The analysis indicates how many households (by rent or home price) <u>may need</u> government assistance. However, the question of how many households <u>should receive</u> government assistance is a policy matter that is open to interpretation. The UGR provides several analyses that can inform that discussion: Tables 303.1a and 303.1b, found in Appendix 8, provide the number of new, renter-occupied and owner-occupied dwelling units by rent or value range. In most rent ranges, there would appear to be a need for some amount of government assistance. This determination would also depend on wage levels. Tables 303.2a and 3032.b, found in Appendix 8, provide the number of renter-occupied dwelling units where the occupant is spending more than 50 percent of their income on transportation and housing. The UGR deems these households to be cost-burdened. The UGR further asserts that costs to these households may be reduced through a number of mechanisms including, but not limited to, subsidies. Other mechanisms include transit investments and changes to local zoning codes to allow a greater diversity of housing types and sizes.

Residential UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
Legal Aid Services of Oregon (Hillsboro Regional Office)	Households with children, not seniors, will represent the majority of low income renters.	In trying to make the report more readable, Appendix 7 blends owners and renters. As a consequence, the low income renters with children household type is perhaps not as visible in the report as it could be. Household type two for renters has the same low income as household type one but is younger and has a larger household with a much greater chance of children being present. This household type has a higher propensity to consume renter single family homes and to travel much further than renter household type one. As noted in the comment, they consume a larger house or apartment than do seniors. As a consequence their cost burden is substantially higher (15 – 30%) than household type one.

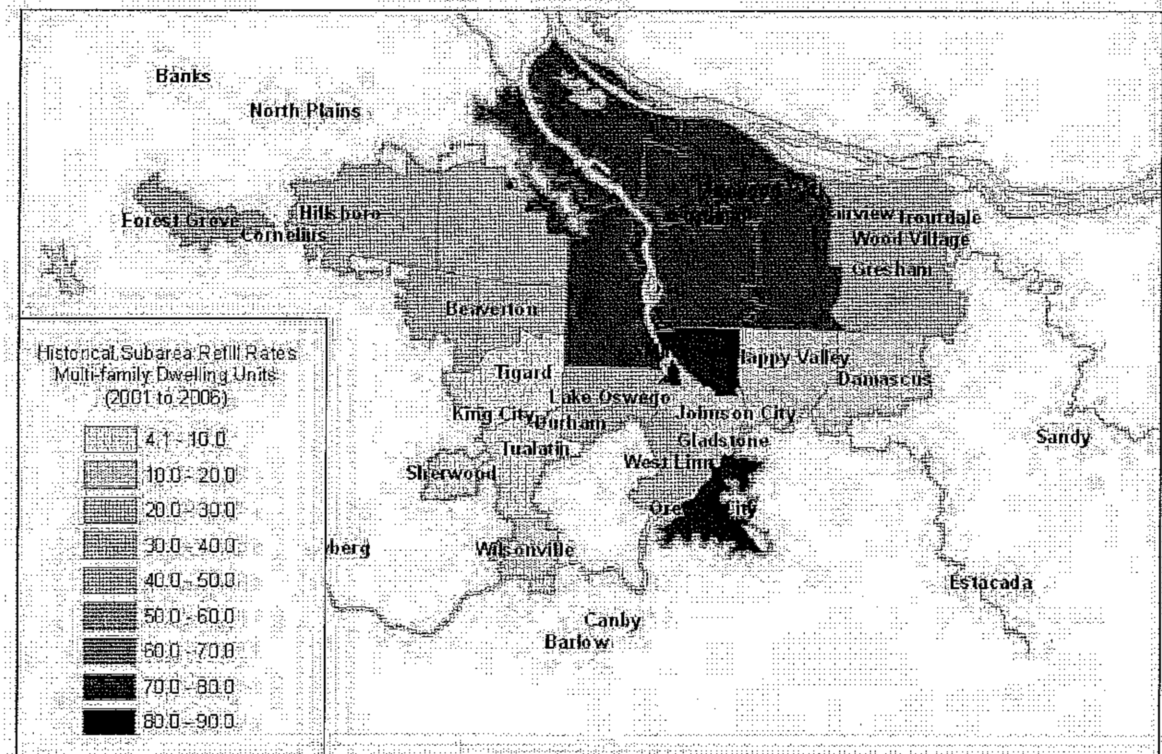
Residential UGR—policy comments

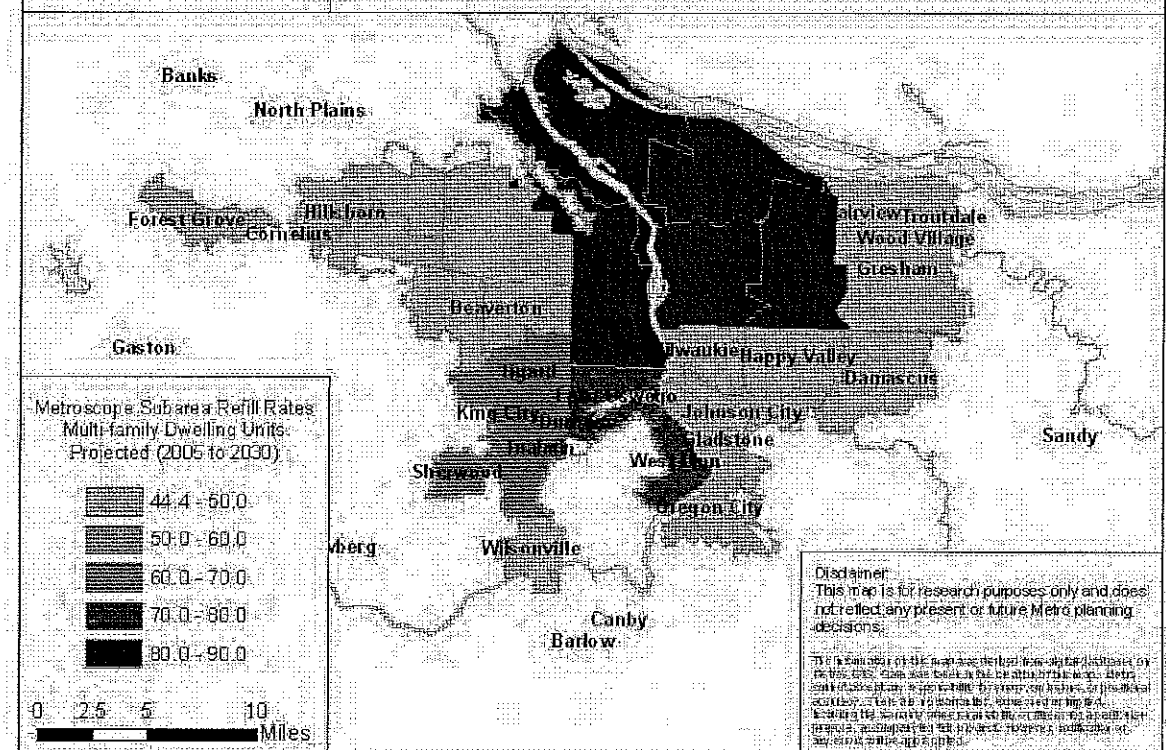
Comment attribution	Comment summary	Metro staff response
City of Lake Oswego	The City supports the UGR's analysis and is committed to helping expand capacity in the Foothills area of Lake Oswego to create a dense, new transit-oriented neighborhood.	Metro looks forward to working with Lake Oswego and other cities to identify how to regional and local actions can be coordinated to achieve local aspirations that are supportive of the 2040 Growth Concept.
Home Builders Association of Metropolitan Portland	The public will not accept higher densities.	The UGR analysis does not assume any change to current zoning, so the UGR does not assume higher zoned densities in existing neighborhoods. The 2040 Growth Concept calls for focusing growth in centers and corridors as directed by the region's citizens.
City of Wilsonville Coalition for a Livable Future	Infill and redevelopment in centers and corridors are generally preferable and more efficient that outward expansion. Infill and redevelopment protect natural resources. There is no money for infrastructure in UGB expansion areas. Infill and redevelopment can help to fund the maintenance of existing infrastructure. Infill and redevelopment will be necessary to reduce carbon emissions.	Infill and redevelopment are key market responses that the 2040 Growth Concept calls for in centers and corridors.
League of Women Voters of Portland	Compact urban form and the integration of land use and transportation will be essential for addressing climate change and providing equity of opportunity. Areas around transit centers and light rail stations, such as Lents and Gateway offer great potential and deserve attention in the investment strategy.	Metro staff concurs.
Home Builders Association of Metropolitan Portland	Policies that push more households to live outside the Metro UGB do not mesh with Metro's goals for sustainability.	Metro staff concurs that there are negative implications of having more people choose to live in neighboring cities and commuting back to the Metro region. The draft UGR identifies a residential capacity gap. There are multiple ways to fill that gap that will be discussed in 2010.
Urban Greenspaces Institute	The urban forest canopy, headwaters areas, and upland habitat must receive heightened protection if the region is to pursue infill and redevelopment. Title 13 is insufficient protection.	In determining the region's capacity for growth, the UGR must only assume regulations that are currently in place.
League of Women Voters of Portland	The League supports the diversification of the region's housing stock, by type and price.	Metro staff concurs that additional housing options are needed in the region in order to reduce the number and share of households that are cost-burdened.
Oregon Opportunity Network,	Housing and transportation affordability must be considered in growth management and investment	Metro staff concurs and notes that the UGR analysis finds that many of the region's existing centers and corridors offer the most affordable housing and

Residential UGR—policy comments

Comment attribution	Comment summary	Metro staff response
Housing Land Advocates, AARP, Legal Aid Services of Oregon (Hillsboro Regional Office)	decisions. Transit-Oriented Development should be promoted.	transportation options. Yet, an affordability problem is likely to persist and perhaps worsen with a continuation of current policies and investment trends. Growth management policies and transportation investments alone will not, however, solve the affordability problem.
Legal Aid Services of Oregon (Hillsboro Regional Office)	Set concrete, regional goals, objectives and performance measures for housing affordability. Go beyond voluntary measures as they have not resulted in local jurisdictions making affordable housing a priority.	Metro staff appreciates this input. These tasks do not, however, fall under the purview of the UGR.
Home Builders Association of Metropolitan Portland	30 days is not an adequate amount of time for public review and comment on the UGR	The public will be able to comment throughout most of 2010 on the various policy choices that will be considered for closing any capacity gap identified in the UGR. Metro staff appreciates the time commitment that various advisory committees have made in providing review of the UGR. Metro has been working with advisory committees to refine the approach and contents of the UGR since winter of 2009. A preliminary UGR was released in May 2009 in order to proactively solicit and respond to technical comments. To the extent possible, comments received on the preliminary UGR have been addressed in the draft UGR. Please see Appendix 1 to the Draft UGR for a summary of comments received and draft Metro staff responses. Metro continues to try to give review and comment opportunities, but must meet a State-mandated deadline (end of 2009) for the Metro Council's acceptance of the UGR.
Citizen comments (less than five)	Expand the UGB	The decision about whether or not to expand the UGB will be made by the Metro Council, in consultation with MPAC, in 2010. That decision will be based on the UGR's analysis and any new policies or public investments that are adopted by the end of 2010 that affect the region's capacity.
Citizen comments (approximately 100), Southwest Neighborhoods, Inc.	Focus growth inside the existing UGB	The decision about whether or not to expand the UGB will be made by the Metro Council, in consultation with MPAC, in 2010. That decision will be based on the UGR's analysis and any new policies or public investments that are adopted by the end of 2010 that affect the region's capacity.

Maps 1 through 4:
Multi-family residential refill rates (historical and forecasted)





Single-family residential refill rates (historic and forecasted)

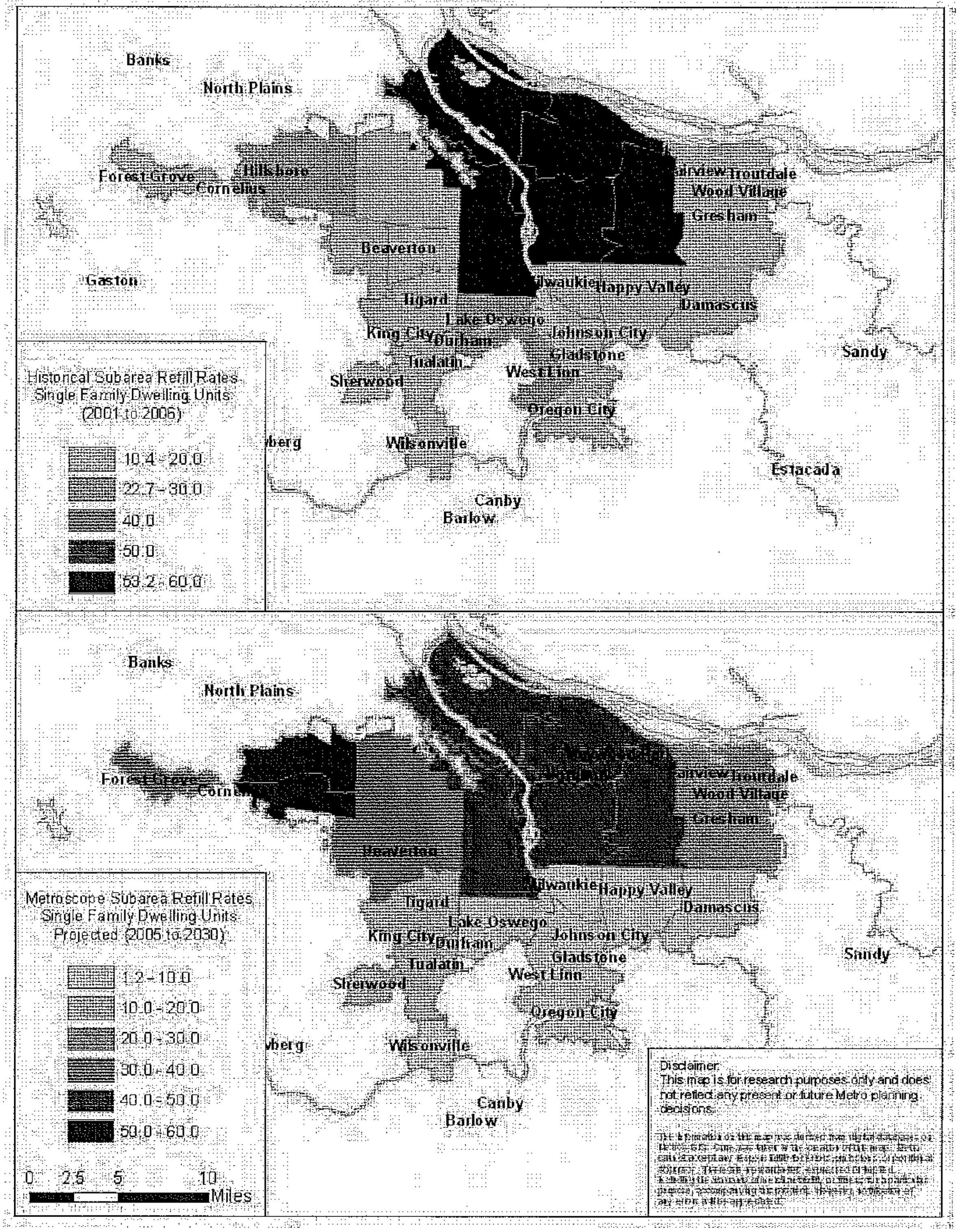


Table 1: Regional Forecast Comparison: History and 2000 UGR Forecast

Population - Portland Region (5 counties)

	Forecast	History	Difference	% Difference	commentary
2000	1,874,450	1,874,450	0	0.0%	forecast base year was 2000 Census
2001	1,902,500	1,922,984	-20,484	-1.1%	recession clouds pessimism in forecast outlook --> underforecast population growth
2002	1,934,340	1,958,976	-24,636	-1.3%	
2003	1,963,690	1,983,367	-19,677	-1.0%	
2004	2,007,710	2,003,354	4,356	0.2%	jobless recovery dampens regional up turn
2005	2,049,190	2,035,565	13,625	0.7%	
2006	2,090,960	2,075,034	15,926	0.8%	
2007	2,132,750	2,115,394	17,356	0.8%	
2008	2,170,100	2,147,260	22,840	1.1%	unforeseen recession taints trend forecast --> over forecast population growth
2009	2,203,000	2,158,115	44,885	2.1%	as steep drop in housing prices and economy depresses in-migration flows

Sources: Metro Regional Forecast: 2000-2030, Sept. 2002; U.S. Census Bureau; PSU; OFM

Employment - Portland Region (5 counties)

	Forecast	History	Difference	% Difference	commentary
2000	958,010	960,910	-2,900	-0.3%	forecast base year was 2000 BLS jobs
2001	954,750	953,750	1,000	0.1%	job growth stalls as recession hits the region
2002	951,300	932,260	19,040	2.0%	recession grips regional economy over a longer and deeper duration
2003	976,480	922,520	53,960	5.8%	--> over forecast growth during this down-cycle
2004	1,009,280	941,930	67,350	7.2%	
2005	1,043,510	971,190	72,320	7.4%	"jobless" recovery begins adding to a jobs recovery as real estate & finance bubble
2006	1,068,030	1,002,487	65,543	6.5%	spurs economic growth across the nation as growth inches towards pre-recession
2007	1,090,440	1,021,862	68,578	6.7%	growth trend
2008	1,120,200	1,022,319	97,881	9.6%	recession hits again --> over forecast jobs as growth again cycles deeper below
2009	1,144,900	N.A.			expected pre-recession employment trends

sources: Metro Regional Forecast: 2000-2030, Sept. 2000; U.S. Bureau of Labor Statistics and Oregon State Employment Division

5 counties = Multnomah, Clackamas, Washington, Yamhill and Clark

Table 2: Site choices of solar manufacturing firms in Oregon

Company	City	Acres	Using existing building?	Notes
PV Powered	Bend	9	Undetermined (appears yes)	Company founded in Bend. 100,000 square feet of building on former Oregon Woodworking site. Manufactures power inverters.
Solaicx	Portland	21	yes	
SolarWorld	Hillsboro	94	yes	Company in final stages of expansion at Hillsboro site. Moved into existing Komatsu silicon wafer facility.
Peak Sun Silicon	Millersburg	8	no	Company has option to purchase an additional 90 acres in Millersburg
XsunX	Wood Village	8.28	yes	Company first chose Oregon as a location and then began a site selection process, looking for existing buildings. The building that XsunX leases previously housed Merix, a high-tech manufacturer.
SpectraWatt	Hillsboro	20	no	Intel spinoff on Intel campus (has 20 acres). Halted construction because of a lack of investment money. Moved to New York because of public incentives.
Sanyo	Salem	20	no	
Oregon Crystal Technologies	Gresham	Less than 1	yes	In Rockwood urban renewal area – deciding between 2 existing buildings
Uni-Chem	Eugene	200	yes	Locating in old Hynix semiconductor factory, which is 1,000,000 square feet. Remainder of property is vacant.

ATTACHMENT 2

Proposed revisions and corrections to September 15, 2009 Draft Urban Growth Report

Additions to text are shown underlined
Deletions are shown ~~strikethrough~~

Employment analysis

Pg. 35:
Delete the final paragraph on the page.

Appendix 3, page 1:
Delete the final paragraph on the page.

Pg. 54, Table 20:
Edit the caption to read as follows:
"Table 20: ~~Net~~ New employment, square feet and acreage demand, net of refill, by market ring under two growth scenarios (2010 to 2030)"

Pg. 55:
Text to be revised as follows:

"Capacity demand varies by market subarea, accounting for market realities in the location decisions made by the region's employers. Based on analysis of the trends just described, net of refill demand, there will be ~~a need~~ demand for between 274 and 4,930 acres of ~~additional~~ industrial capacity and between 1,944 and 3,832 acres of ~~additional~~ non-industrial capacity within the UGB by 2030."

"Figures 14-17 show the 20-year capacity demand (net of refill ~~redevelopment~~ demand) by market subarea. At the low end of the population and employment forecast there is a projected flat demand for industrial jobs, commensurate with national trends showing a decline in manufacturing."

Pgs. 56-57, Figures 14-17:
Edit captions to clarify that demand is net of refill demand

Pg. 58:
Edit the first paragraph on the page as follows:

"New industrial opportunities that require large buildable lots are difficult to forecast accurately. Demand for large industrial lots (greater than 25 gross acres) is usually precipitated by one or more large employers looking for a new location for a production or warehouse facility. This is dependent on the decisions of individual firms and not the trends of an industry as a whole. Consequently, forecasts of large lot demand are inevitably uncertain. With that caveat, this analysis looks at the large lot preferences of large employers and multi-tenant business parks using a forecast-based approach. Given this uncertainty, the Metro Policy Advisory Committee has recommended the consideration of additional large lot demand that supplements the demand identified through the employment forecast-based approach."

Edit the final paragraph on the page as follows:

"Large-lot demand for marine and rail terminal uses is not included in this analysis. These types of facilities may have relatively few employees and little building square footage. Consequently, a job forecast may be an inadequate means of forecasting land demand for these uses. This is another reason why additional large lot demand is considered as a supplement to the demand identified through the employment forecast-based approach." ~~Furthermore~~ However, these uses are extremely location specific and their preferences are not likely to be met ~~accommodated~~ through UGB expansions.

Pg. 83:
Last paragraph on page to be revised as follows:

"Figures 30 and 31 depict the 5- and 20-year acreage ~~building square foot~~ demand range (from the 20-year forecast) for industrial and ~~commercial~~ non-industrial employment along with the previously described capacity range. Large lot demand and capacity are addressed separately. The demand range is illustrated with two lines that show the upper and lower end of the acreage ~~building square foot~~ demand forecast."

Pg. 84:
Insert the following text below figure 30:

"This portion of the analysis assesses the current urban growth boundary's capacity to accommodate industrial job growth on vacant, buildable land or through refill. The assessment of demand for large, vacant lots for industrial uses is handled separately. At both ends of the employment range forecast, there is adequate capacity inside the current urban growth boundary to accommodate the next 20 years of general industrial job growth."

Pg. 85:
Insert the following text below figure 31:

"Depending on the amount of non-industrial employment growth that is realized, there is demand for zero to 1,168 acres of additional capacity."

Pg. 86:
To reflect MPAC's recommendation on large lots for industrial uses, edit the heading at the top of the page to read as follows:

"Comparison of large lot supply with forecast-based assessment of ~~potential~~ large lot demand"

To reflect MPAC's recommendation, edit the second paragraph on the page to read as follows:

"Without any assumption about tax lot assembly, this employment forecast-based analysis identifies surplus capacity of 25-to-50-acre lots, but a potential deficit of tax lots over 50 acres and lots over 100 acres (under both the high and low growth forecasts), as shown in Table 32."

To reflect MPAC's recommendation, add the following section to the end of the page:

"**Policy basis for considering an expanded range of large lot demand**
The forecast-based assessment of large lot demand provides policy makers with an initial range of potential demand to consider. However, as noted, assessing future large lot demand with a job forecast-based approach has limitations. There are legitimate policy reasons to consider a wider range of demand for large lots, using the initial forecast-based approach for a sense of scale. Doing so gives policy makers the flexibility to weigh the risks and benefits of providing too much or too little large lot capacity.

There is inherent uncertainty in forecasting employment in large, traded-sector firms, which may consider several cities, regions, states or countries when choosing a site. These firms can have economic multiplier effects, bringing wealth into the region and leading to spinoff firms and employment. A few cities in the region have identified large lot users (particularly high-tech manufacturers) as a primary focus of their economic development plans. The range of large lots that will be in demand over the next 20 years will be the product of a number of factors that are impossible to forecast, including:

- Decisions of individual firms that participate in a global marketplace; and
- The political will of cities, the region, and the State (both here and in other regions) to implement economic development strategies.

The forecast-based analysis also assumes that preferences for large lots will remain largely the same in the future as they are today. There are at least two countervailing trends that indicate preferences may change, particularly for industrial, warehouse, and distribution uses. The direction and degree of change is open to interpretation:

- Rising land prices may lead to more efficient use of land, thereby increasing the number of employees per acre; and
- The substitution of machinery and robotics for human labor may reduce the number of employees per acre.

An employment forecast-based approach may also have shortcomings for estimating land demand for rail, air and marine terminal uses. These uses are critical to the health of the region's economy. Freight terminal uses can require relatively large areas of land, but do not necessarily require high employment densities. Consequently, demand for these uses may not be adequately accounted for using an employment forecast alone.

No amount of technical analysis can provide a completely precise assessment of future large lot demand. Thus, the Metro Policy Advisory Committee has expressed a desire to have flexibility in the region's plans to attract and retain potential traded-sector employment growth. Due to the limitations of further technical analysis, the expansion of the potential range of large lot demand is being done on a policy basis rather than through technical analysis. This expansion of the range is consistent with the guidance offered by Oregon Administrative Rule 660-024-0040, which states that: *"the 20-year need determinations are estimates which, although based on the best available information and methodologies, should not be held to an unreasonably high level of precision."*

When the forecast-based analysis and policy considerations are taken into account, as recommended by the Metro Policy Advisory Committee, the total 20-year demand for additional capacity in large lot configurations is between 200 and 1,500 acres. Within this range, there is a need for policy flexibility in determining the sizes and locations of large lots to provide, so this final analysis does not specify those characteristics."

Residential analysis

Pg. 114:

Insert a map of the residential buildable land inventory.

Pages 115-117

Edit the section on parks as follows:

"**Parks:** To calculate the UGB's capacity for residential growth, this urban growth report deducts the amount of vacant land inside the UGB that may be used for future parks (effectively, this amount of land is not available for residential development). This calculation only includes future parks that are intended for active uses, such as ball fields or playgrounds. Habitat or natural areas are not included since they are already deducted from the vacant land inventory.

There are several possible ways to calculate the number of acres that may be used for future parks. ~~One approach would be to use a level of service standard for parks. However, an agreed upon regional standard does not exist. Since no alternative approach has been suggested,~~ This urban growth report builds on ~~uses~~ the ~~same~~ methodology that was used for the 2002 report. That ~~This~~ methodology was recommended by MPAC in 2002 and was based on estimated park land acquisition revenues~~, based on~~ from system development charges (SDCs).

To inform the analysis in this report, current park SDC rates were inventoried for each city in the region. (Information may be found in Appendix 6.) Most of the local governments that levied parks SDCs in 2002 have increased their rates. In addition, two cities, King City and Rivergrove, have started levying parks SDCs since 2002. Also, a few local governments are currently employing a system whereby different fees are levied in different locations.

The 2002 urban growth report estimated that 1,100 acres of vacant land inside the UGB would be used for future parks. Like other possible approaches to estimating future park acreage inside the UGB, this SDC approach has its limitations and should be taken as a reasonable estimate rather than a precise accounting. Due to these limitations (summarized below), the updated inventory of park SDC rates does not provide a compelling reason to substantially alter ~~change~~ this assumption:

- Each city will respond to residential growth in different ways. For instance, some cities may not have much vacant land left for parks, but will use SDC revenues to make capital improvements to existing parks.
- Different cities will witness different amounts of residential growth. A local government with high parks SDCs may not see a lot of growth over the next 20 years, while a local government with low SDC rates may see tremendous growth, or vice versa.
- While a majority of local governments around the region have increased their parks SDCs over the last several years, this does not mean that there is additional money for land acquisition.
    - It is likely that the increased rates are an attempt to more fully recuperate land acquisition or capital improvement costs and that updated SDC rates still do not cover all costs.

    - The cost of flat, vacant land will continue to increase. SDC revenues will not necessarily keep pace with land values.
- Funding for parks is and probably will continue to be limited. Metro's 2008 *Regional Infrastructure Analysis* found that the cost and availability of land is one of the biggest challenges in providing sufficient parks to accommodate future growth.
- A line item in an urban growth report for parks will not necessarily result in parks for citizens to enjoy. The effect is simply that the vacant land supply assumption is reduced, increasing the potential need for UGB expansions. A UGB expansion will not address park needs in existing urban areas, which are likely to see substantial growth.
    - There is a Major UGB Amendment process that can be initiated by local jurisdictions to bring land into the UGB for park needs that are not anticipated in cyclical legislative UGB expansions (as contemplated in the context of this report). The Major Amendment Process may be a more appropriate means of addressing specific park needs that can be accommodated through UGB expansions.

Limited funding and limited vacant land in urban locations point to a need for creative and collaborative solutions that help ensure the future provision of parks throughout the region:

- Efficient use of existing land and infrastructure by taking advantage of power line easements or the space around reservoirs and water towers. For example, Tualatin Hills Park and Recreation District utilizes existing Bonneville Power Administration rights of way to operate parks and trails.
- Collaboration between multiple districts or other local governments. Sunnyside Village Green Park is a collaborative effort between North Clackamas Parks and Recreation District and Clackamas County's Water Environment Services Department that combines park facilities with stormwater management infrastructure.
- The Trust for Public Land's 2009 article on "shoehorn parks" recognizes that school facilities can be leveraged to create park capacity, but doing so requires great collaboration and commitment to success from park districts and the school system (Harnik, 2009). Popular events like Portland's Sunday Parkways demonstrate that streets can serve as temporary park space.

<u>To maintain an approach that is consistent with the one recommended by MPAC in 2002, an implied parks level of service was calculated as follows:</u>

<u>The 2002 Urban Growth Report forecasted growth of 220,700 dwelling units over the 20 year period and identified that 1,100 acres should be deducted from the vacant land supply for future parks for the same time period. The implied level of service was 1,100 park acres for 220,700 new dwelling units. The current Urban Growth Report forecasts 262,400 new dwelling units in the UGB over the next 20 years (baseline assumption). Applying the same implied level of service standard as used in 2002 (1,100 /220,700 * 262,400) results in a deduction of 1,300 acres from the region's vacant land supply to address future park demand."</u>

Appendix 6, page 11
Edit the final paragraph on the page to read as follows:

"The 2002 urban growth report estimated that 1,100 acres of vacant land inside the UGB would be demanded ~~used~~ for future parks. Like other possible approaches to estimating future park acreage demand inside the UGB, this SDC approach has its limitations and should be taken as a reasonable estimate rather than a precise accounting. Due to these limitations (summarized below), the updated inventory of park SDC rates does not provide a compelling reason to substantially alter ~~change~~ this assumption:"

Add the following text:

"To maintain an approach that is consistent with the one recommended by MPAC in 2002, an implied parks level of service was calculated as follows:

The 2002 Urban Growth Report forecasted growth of 220,700 dwelling units over the 20 year period and identified that 1,100 acres should be deducted from the vacant land supply for future parks for the same time period. The implied level of service was 1,100 park acres for 220,700 new dwelling units. The current Urban Growth Report forecasts 262,400 new dwelling units in the UGB over the next 20 years (baseline assumption). Applying the same implied level of service standard as used in 2002 (1,100 /220,700 * 262,400) results in a deduction of 1,300 acres from the region's vacant land supply to address future park demand."

Pg. 127:

Correct the residential supply range on the bottom of the page such that the expected supply is 196,900 dwelling units and the potential supply is 356,800 dwelling units. This correction is necessary because of the revised estimate of future parks acreage demand and to correct calculation errors.

Appendix 6, page 2:
Replace the table with the following. This table contains changes that are necessary because of the revised future parks acreage estimate and to correct calculation errors.

Line No.		Item	Low	Baseline	High	
		2009 to 2030 Urban Growth Report (UGR)				
		Residential Dwelling Capacity Range Assessment				
		December 2009				
			Residential DEMAND Assumption			
Line No.			Low	Baseline	High	
		Residential Demand Estimates (in Dwelling Units)				
1a/		7-County Population Forecast (2007 to 2030)	728,200	875,000	1,024,400	
1b/		7-County Household Forecast (2007 to 2030)	348,600	408,300	469,100	
2/		**Capture 61.8% of 7-County Forecast in Metro UGB**	**215,400**	**252,300**	**289,900**	
3/	plus:	4% vacancy rate (source: 2000 Census)	8,600	10,100	11,600	
4/		**Dwelling Unit Demand in the Metro UGB:**	**224,000**	**262,400**	**301,500**	
			Residential SUPPLY Assumptions			
		July 2007 Vacant Land Inventory (Metro UGB):		**BASELINE**		
5/		**Gross Vacant Land in current Metro UGB**		**44,800**		
6/	less:	Local Water Quality, floodways and Habitat Protection areas (ENV)		8,600		
7/		**Gross Vacant Buildable Acres in Metro UGB (GVBA)**		**36,200**		
8/	less:	Fed., State, Municipal exempt land (actual count)		3,200		
9/	less:	Acres of Platted Single Family Lots (actual count)		1,300		A
10/	less:	Acres for Future Places of Worship and Social Org. (actual = 600 acres)		700		C
11/	less:	Major Easements (Natural Gas, Electric & Petroleum) (actual count)		1,000		R
12/	less:	Acres for Future Streets (0%, 10%, 18.5%)		4,900		E
13/	less:	Acres for New Schools (H=45, M=55, E=70; actual = 1,000 acres)		1,000		S
14/	less:	Acres for New Parks (based on SDC fees)		1,300		
15/	less:	New Urban Areas (actual net of ENV, future streeets and dev. land)		7,900		
16/		**Net Vacant Buildable Acres (NVBA) - total**		**14,800**		
		Net Vacant Buildable Acres (NVBA) by Type (less-New Urban Areas):		**Metro UGB**		
17a/		Net Vacant Buildable Acres - Mixed Use Residential (MUR)		1,000		
17b/		Net Vacant Buildable Acres - Residential		6,300		
			Residential CAPACITY Assumption			
		Residential Housing Supply Assessment - Metro UGB	Low	Baseline	High	
18/		**Dwelling Unit Capacity of Vacant Land at Local Zoning (or Plan) - 2008 Q3**	**62,500**	**62,500**	**62,500**	
18a/	less:	High-density MFR products not market feasible within next 20 years	(18,400)	(18,400)		
19/	add:	Res. Development in vac. Mixed Use Districts (MUR)	28,600	28,600	28,600	
20/	less:	Capacity Lost to SFR Underbuild @ 5%	(2,200)	(2,200)	(2,200)	
21a/	add:	Res. Development Capacity on ENV land (no. taxlots wholly in Title 3)	100	100	100	
21b/	add:	Res. Development Capacity on Title 13 areas (80% of zoned capacity)	19,300	19,300	19,300	U
22/	add:	Units from Platted Single Family Lots under 3/8 acre (actual count)	8,800	8,800	8,800	N
23/	add:	Units from Residential Refill @ 33%	73,900	86,600	99,500	I
23a/	add:	Units from Residential Refill @ 40% (addition of 7% more)			21,100	T
23b/	add:	Potential Units from *Subsidized* Residential Refill			71,100	S
24/	add:	Estimated Capacity from New Urban Areas	48,000	48,000	48,000	
25/	less:	New Urban Development not yet market feasible	(24,000)	(24,000)		
26/		**Subtotal: Dwelling Unit Capacity Supply Range**	**196,600**	**209,300**	**356,800**	
			Low Supply - High Demand		**Low Demand - High Supply**	
27/		**Full range of difference between capacity and demand (dwelling units):**	**(104,900)**	**(53,100)**	**132,800**	
			Low Supply- Low Demand		**Low Supply- High Demand**	
28/		**UGR assessment of difference between capacity and supply (dwelling units)**	**(27,400)**		**(104,900)**	

Pg. 128:
Insert the following text after the second-to-last paragraph on the page:

"Through the year 2030, counting only the "solid" capacity, there is demand for additional capacity to accommodate between 27,400 to 104,900 households."

Appendix 7, pg. 3:
Revise the table to include median household income levels for the eight household types. Include this information throughout the appendix.

Appendix 8, pg. 8:
Edit the text to read as follows:
"Figure~~s~~ 4.1AB ~~and C~~ shows the region's residential capacity by generalized zoning. Figure 4.1AB depicts the gross buildable acres of ~~residential~~ land by "vacant" and "partially vacant" categories."

Appendix 8, pg. 8:
Insert the following table and notes:

Table 4.1AB: Gross vacant and partially vacant acres inside the UGB by zoning class (year 2007)

Zone Class	Fully Vacant Tax lot Acres	Partially Vacant Tax Lot Acres	Total Vacant Acres
CC	21	24	45
CG	349	195	543
CN	28	34	62
CO	89	51	140
FF	2,788	3,570	6,358
IH	768	1,066	1,834
IL	2,415	2,386	4,801
MFR1	41	95	135
MFR2	168	174	341
MFR3	116	144	260
MFR4	95	96	191
MFR5	9	32	41
MFR6	1		1
MFR7	73	51	124
MU	2	0	2
MUE	1,114	1,371	2,485
MUR1	79	35	114
MUR10	105	66	170
MUR2	120	160	279
MUR3	24	21	45
MUR4	141	150	291
MUR5	177	71	249
MUR6	21	9	31
MUR7	200	87	286
MUR8	128	146	275
MUR9	110	97	207
PF	54	246	299
POS	274	349	622
RRFU	4,130	7,253	11,383
SFR1	47	61	108
SFR10	40	46	86
SFR11	41	16	57
SFR12	77	74	152
SFR14	44	8	52
SFR15	26	44	71

SFR2	778	884	1,662
SFR3	36	41	77
SFR4	1,463	1,663	3,126
SFR5	1,032	1,045	2,077
SFR6	1,043	1,470	2,513
SFR7	407	331	739
SFR8	21	34	55
SFR9	164	378	541
Total	**18,859**	**24,073**	**42,932**

Note: Acreages reported in this table differ somewhat from the ocres reported in the UGR because of differences in how public rights of way, public lands, etc. ore accaunted for.

Appendix 8, pg. 8:

Delete references to Table 4.1C. Data for Table 4.1C has been consolidated to appear in table 4.1AB.

Appendix 8, pg. 10:
Insert the following table and notes:

Table 5.1: Metro UGB historical land use consumption in acres: 2002-2007

Year	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Developed land	201,336	203,145	204,456	205,894	209,419	210,582
Vacant land	52,514	50,705	51,151	49,727	46,235	45,076
Total	*253,849*	*253,850*	*255,607*	*255,621*	*255,654*	*255,658*
Vacant land detail	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Residential vacant	16,488	15,617	14,944	13,672	12,307	12,099
Nonresidential vacant	12,047	11,679	11,865	9,764	8,881	8,485
Open space, rural, parks	16,560	16,290	17,303	15,362	15,610	15,307
Total gross buildable acres	*45,095*	*43,586*	*44,112*	*38,798*	*36,797*	*35,891*
Constrained land	7,419	7,118	7,039	10,929	9,437	9,185
Total vacant land	*52,514*	*50,705*	*51,151*	*49,727*	*46,235*	*45,076*

Notes:

- *Acreages reported in this table differ somewhat from the acres reported in the UGR because of differences in how public rights of way, public lands, etc. are accounted for.*
- *For years 2005 - 2007: res = MFR, MUR, SFR; non-res = COM, IND, MUE; other = PF, POS, RUR. Except: no PF in 2005*
- *For years 2002 - 2004: res = MFR, SFR; non-res = COM, IND, MUC; other = POS, RUR*
- *For years 2002 - 2005: PF are part of COM*
- *Constrained land for years 2005 - 2007 is based on the constrained land analysis completed for the 2009 UGR and includes Title 3 and Title 13 land*
- *Constrained land for years 2002 - 2004 is based on Title 3 land only*

Appendix 8, pg. 20:
Insert the following sentence in first paragraph:

"All dollar amounts are expressed in 2005 dollars."

Appendix 8, pgs. 20 and 21:
Correct tables 303.1a and 303.1b to reflect potential demand for government assistance at more price levels. Corrected tables to appear as follows:

Figure 303.1a: owner-occupied dwelling units by price (2005$) and housing type (2005 and 2030)

Owner-occupied dwelling units							
	Total dwelling units			**Detached Housing**		**Attached Housing**	
Approx. dwelling value	Year 2005	Year 2030	Difference in dwelling units 2005 to 2030)	Single-family and manufactured units	Manufactured units in parks	Single family units	Apartments, townhouses, condos
< $150,000	30,259	44,411	14,152	A	A	A	A
$150,000 - $200,000	27,191	26,954	(237)	A	A	A	A
$200,000 - $250,000	31,796	15,301	(16,495)	MRKT	MRKT	MRKT	MRKT
$250,000 - $300,000	21,442	30,657	9,215	MRKT	MRKT	MRKT	MRKT
$300,000 - $400,000	44,089	41,522	(2,566)	MRKT	MRKT	MRKT	MRKT
$400,000 - $500,000	49,363	52,167	2,804	MRKT	MRKT	MRKT	MRKT
$500,000 - $750,000	58,184	107,613	49,429	MRKT	MRKT	MRKT	MRKT
> $750,000	96,294	265,820	169,527	MRKT	MRKT	MRKT	MRKT
Total Units	358,617	584,445	225,828	116,848	*	*	108,980

Figure 303.1b: renter-occupied dwelling units by price (2005$) and housing type (2005 and 2030)

Renter-occupied dwelling units							
	Total dwelling units			Detached Housing		Attached Housing	
Approx. monthly rent	Year 2005	Year 2030	Difference in dwelling	Single-family and manufactured	Manufactured units in parks	Single family units	Apartments, townhouses, condos
< $400	43,167	19,195	(23,972)	A	A	A	A
$400 - $475	18,967	31,926	12,958	A	A	A	A
$475 - $550	25,514	25,812	298	A	A	A	A
$550 - $625	27,479	24,531	(2,948)	A	A	A	A
$625 - $750	24,854	38,485	13,630	A	A	A	A
$750 - $900	34,359	43,000	8,641	A	A	A	A
$900 - $1,100	13,315	40,881	27,566	A	A	A	A
> $1,100	26,038	64,724	38,686	MRKT	MRKT	MRKT	MRKT
Total Units	213,693	288,554	74,861	1,676	*	*	73,185

Appendix 8, pgs. 20 and 21:
Edit note that accompanies tables 303.1a and 303.1b to read as follows:

"A" denotes housing that would be partially assisted, given the dwelling unit value. <u>It is a question for policy makers how many of these units will receive government assistance. As of November 2007, 10,608 households in the tri-county area received Section 8 vouchers.</u>

Pgs. 133 and 135:
Correct data labels on pie charts (charts for high growth erroneously show the same percentages as low growth).

Pg. 151:
Under "policy choices," insert the following additional policy option:

<u>"Expansion of housing voucher programs could increase housing choices for more households."</u>

Pg. 153:
Edit the first paragraph of the "future cost burden" section as follows:

"If we continue with current policy and investment direction, the number of cost-burdened households could double by the year 2030. In the year 2005, there were approximately 94,000 cost-burdened households inside the Metro UGB (about 16 percent of <u>all</u> households in <u>the</u> Metro region <u>or about 43 percent of renter households</u>). By the year 2030, if current trends and policies continue, between 17 to 23 percent of <u>all</u> ~~the~~ households inside the Metro region <u>or 51 to 69 percent of renter households</u> could be described as cost-burdened. If the high end of the population range forecast is reached by the year 2030 and new policies and investments are not pursued, the number of cost-burdened households may more than double, totaling 200,000 households."

Pg. 154:
Correct the number of cost burdened households in the year 2005 (92,060).

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ATTACHMENT 3

Metro | Memo

Date:	November 24, 2009
To:	Malu Wilkinson, urban growth report project manager
From:	Dennis Yee, Metro Chief Economist
Re:	Technical Reviews Conducted to Validate Metro's Regional Macro-economic modeling and forecasting

Background

Leading up to Metro's periodic assessment of the urban growth boundary's capacity to accommodate residential and employment growth, three separate review panels were formed at various times to assist Metro in the validation of its economic/demographic modeling and forecasting methods and to analyze forecast results. The population and economic trends of the Portland-Beaverton-Vancouver PMSA region were examined by these review panels. Each panel validated Metro's overall modeling and forecasting methods and was asked to look closely at a certain aspect of the modeling and forecasting methodology. The panels' independent expertise was utilized to review and recommend improvements.

Review Panel One *(National review panel convened to validate forecast theory and practice)*

The first review panel was convened in 2006 – mainly to review the forecast methodology, analyze the technical efficiency of econometric equations and model specifications and to review the soundness of Metro's proposed probabilistic population forecast approach [i.e., range forecast methodology] and range / risk forecasting and analysis.

Composition of review panel one

- Dr. Lawrence Carter, University of Oregon – expert in demographic forecasting
- Dr. George Hough, Portland State University – director of center for population research and census
- Dr. Tom Potiowsky – State Economist, Oregon
- Dr. Marshall Vest – director of Economic and Business Research Center, Professor of Economics, University of Arizona
- Dr. Mary Allender, University of Portland – Assoc. Professor of Economics and Statistics
- Dr. Tim McDaniels, University of British Columbia – environmental policy, decision making & risk management

Summary remarks and conclusions of review panel one

1. The panel was asked to review and then validate Metro's economic and demographic forecast methodology and confirm the correctness of using a range forecast approach.

- Panel members unanimously agreed that a range forecast is the preferred approach in helping decision makers with managing an uncertain economic future and providing leeway for managing forecast risk especially in the extreme long-run as is the case in Metro's management of the urban growth boundary. The nature of Metro's decision making should, according to the panel, rely upon an economic model that utilizes a structural approach for forecasting growth trends, and also permits analysts to run scenarios and test policy sensitivities to various land use, economic or transportation policy variables. Metro's modeling framework according to the panel is well suited for the type of analytical applications employed by Metro.

2. Upon confirming the general approach of the Metro economic model, the panel turned to analyzing and validating the individual structures of the economic model and its efficacy for Metro planning and policy analysis purposes.
    - Panel members reviewed the technical specifications of each economic equation, variable and statistical efficiency and soundness of the equations. They determined that the Metro economic model represented the current practice of modeling regional economies and employed state of the art theories and practices.
    - They found the use of the inter-industry demand variables which capture the input-output relationships between regional industries to be a unique and innovative approach that should improve forecasting accuracies and represent well the possibilities of testing policy sensitivity on industry employment changes.
    - The panel analyzed the linkages between regional job growth and national job trends. Staff explained that the econometric equations were developed to maximize the information that national forecasts would reveal in regional growth and that Metro utilized as national forecast drivers the projections produced by IHS Global Insight, Inc., a nationally recognized firm. Panel members did not believe we could necessarily do any better assuming forecast drivers from other vendors. In fact both, Oregon and Arizona forecasters utilize to a high degree products produced by Global Insight.

3. Certify the overall fitness of the Metro economic model for its use in projecting population and employment growth for the Portland-Beaverton-Vancouver, OR-WA PMSA.
    - The panel reviewed the soundness of the model by comparing the job multipliers[3] reported by Metro's econometric model and those of other known models for other regions in the U.S. The regional model passed all the battery of usual econometric and statistical tests for goodness of fit.

[3] Multipliers summarize and describe the internal properties and workings of the model –they are one of many diagnostic tools. Exceedingly large multipliers would cause the model to exhibit unstable properties and explosive non-convergence, which would tend to invalidate the model. None of the employment multipliers in the short or long-run displayed a significant problem.

Review Panel Two *(Statewide review panel convened to validate the 50-year range forecast and assumptions)*

In May 2008, Metro forecasters developed a 50-year regional forecast and implemented the recommendations from the first panel to utilize probabilistic population forecasting techniques and to produce a range forecast. Statewide professionals who were more familiar with Oregon and in particular Portland's economy were called together to discuss their views and analyze the 50-year forecast outlook for the Metro region. In front of an audience of 200 interested stakeholders, these two moderated panels discussed the merits of the range forecast (per the recommendation of the first panel) and validated the soundness of Metro's modeling and assumptions with the objective of certifying the reasonableness of a 50-year population and employment outlook. One panel also discussed the long-range demographic, economic, climate, energy and land use trends that could emerge during the forecast period to influence regional population, employment and land use.

<u>Composition of review panel two</u>

Panel discussion exploring long-range issues and trends that influence regional population, economy and land use

Moderated by Duncan Wyse, President of Oregon Business Council

- Eric Hovee, Principal at ED Hovee & Co., LLC
- Joe Cortright, President of Impressa LLC
- Mike Martens, Director of Spatial Analysis, EcoTrust
- Dr. Bruce Weber, Prof. of Agriculture and Resource Economics, Oregon State University

Expert panel to present and discuss results from different forecasting methods and to provide perspectives through a moderated discussion.

- Dr. Kanhaiya Vaidya – Senior State Demographer, Oregon Office of Economic Analysis
- Art Ayre – State Labor Economist, Oregon Employment Department
- Terry Morlan – Director of Planning, Northwest Power & Conservation Council
- Dennis Yee – Chief Economist, Metro

<u>Summary remarks and conclusions of review panel two</u>

1. Among the topics discussed were: aging population and its impact on future housing demand; economic growth and what could be drivers for the next wave of growth and innovation in the state; climate change and its impact on migration in the US; climate change and Oregon's emphasis on "green development"; and the future makeup of the Willamette Valley's agricultural economy in light of urban development pressures.
    - Although the panelists raised interesting issues that would likely confront the Portland region and impact Portland area population and economic projections, it was plain from the tenor of the discussion that these highly informed commentators had a sense of the risks to the regional forecast, but it was unclear as to how these "mega-trends" would ultimately impact the forecast in a quantifiable fashion.
    - Panelists concluded that these "mega-trends" can impact the forecast and impose significant uncertainty and risk to a forecast. The appropriate response to this very uncertain future is to use a range forecast that affords a high degree of planning flexibility.

2. The chief objective of the afternoon review panel was to gather input and comments about how "mega-trends" may eventually feed through to impact regional long-term growth. Each of the panel members are forecast practitioners who have had significant experience in forecasting growth in Oregon. The panel was charged with reviewing the implementation and results of Metro's 50-year regional range forecast.
    - The state demographer confirmed that the state and Metro employ similar cohort-component models for forecast long-run population trends. There are differences in key assumptions, but they owe to variations between state-level demographics vs. Metro demographics which tend to more urban conditions that impact fertility and mortality rate assumptions.
    - The state labor economist prepares county-level employment estimates. Although no two forecasts are necessarily alike, he concluded that the underlying assumptions are consistent between the Metro model vs. the state's county-level economic model. Growth rates in Metro's base case scenario and the state's forecasts were highly comparable (the state does not produce a range forecast so only base case numbers could be compared).
    - The NW Power Planning Council utilizes sophisticated forecast simulation software. This software is capable of generating a multitude of scenarios which are combined to form a "solution space" or "forecast envelope" (i.e., range forecast). The forecast director for the Power Planning Council echoed numerous times the importance of risk planning and the need for economic and demographic forecasts to recognize uncertainty in its growth trends. Although Metro uses a different software approach in formulating its forecast ranges, there was agreement that "range forecasting" is the appropriate means to project long-term regional growth.

Review panel three *(Local review panel convened to validate the 20-year range forecast and regional growth assumptions which could impact the economy, population and land use trends)*
A third panel was formed in 2009 to review the 20-year regional forecast that became the basis for the urban growth report for housing and employment. This panel's chief responsibility was to validate the 20-year range forecast and to identify any regional trends that didn't comport with national trends. This panel was composed of local practitioners, forecasters, consultants and stakeholders who rely on the forecast for municipal planning purposes.

Composition of review panel three

- Steve Kelley, Senior Planner, Washington County
- Scott Drumm, Manager, Research & Market Information, Port of Portland
- Eric Hovee, Principal at ED Hovee & Co., LLC
- Scott Bailey, Washington State Economist, Vancouver area focus
- Brendan Buckley, Johnson-Reid LLC
- Uma Krishnan, City of Portland Demographer
- Todd Chase, FCS group LLC

Summary remarks and conclusions of review panel three

1. Review appropriateness of range forecast methodology
   - The panel agreed that due to forecast uncertainty and the degree of risk going into the future, a "range forecast" was more preferable than a "point forecast". Planning flexibility was an oft-cited reason in favor of proceeding with a range forecast.

2. Discuss reasonableness of the "width of the range forecast"
   - The panel did not spend much effort reviewing the variance assumptions that comprise the range, but generally believed that using historical variances as a surrogate for future forecast variances was a satisfactory means of estimating future ranges. The ranges were estimated using "monte carlo" simulation software such that a 90% cumulative distribution function was defined as the forecast range for population. Overall, total employment and population "widths" for the forecast range seemed statistically appropriate, but some disagreement arose when discussion turned to individual industry projections for employment. (see next bullet)

3. Review soundness of forecast outlook
   - There was minimal concern that the annualized growth rates for both population and employment projections for the region were slower than at any recent historical experience except for decade of the 80's which saw growth plummet due to the recession. It was explained that in the last 30 years, the Portland region is now (over 2 million people) twice its former size. Even with lower predicted growth rates (1.4% APR), growth compounding each year the region is expected to again nearly double in size during the next 30 years.
   - The debate on the regional forecast centered mostly around selected industries and, in particular, the potential for some emerging industry(s) to erupt with significant job growth and, with that job trend, bring large firms that could anchor growth in that particular industry for decades to come. The debate circled around how much faster can we reasonably predict job growth in one industry to outpace the U.S. average or U.S. forecast. The Metro forecast already assumes (as a placeholder) the high tech sector in the region to be a sector that we predict to be a "high-flyer" in manufacturing. (Most other Metro manufacturing sectors are projected to perform slightly better over the forecast period than the U.S. projected average, but high-tech has been singled out to be an above average growth sector.) [Please see Metro Regional Forecast Employment appendix that compares the US forecast against the Metro forecast.] The debate boils down to a matter of degree about how much faster high tech in the region will likely outpace nationwide trends. Metro believes that its forecasting is sound and based on statistically valid relationships modeled between the regional economy and the U.S. A minority of the panel members disagreed, believing that anecdotal interviews and ad hoc evidence point to significantly faster economic growth.

4. Discuss impact land supply has on regional growth projections
    - Land supply is not presently an explicit explanatory variable in the regional macro-economic model. In the past, there was no statistical evidence that showed land supply as a sticking point to economic growth. However, in the past, vacant land was not as scarce as it is today for urban style development purposes. Land has not been a limiting factor in the past, so it's not surprising that Metro's statistical modeling would not reveal any tangible correlation.
    - Recently, practical measurements of land supply indicate much less available land than previous measures have shown. Members agreed that land is a factor input into production and a key ingredient in promoting economic development. Still, there has been scant statistical evidence that we can draw upon to embed a land and capital substitution parameter into the econometric model that would stand up to statistical inquiry. On the other hand, there is mounting conjectural evidence that large tracts of inexpensive land can be a motivating factor to attracting large scale manufacturing plants to a particular region.
    - Technological innovation and comparative manufacturing advantages may make this point moot in the distant future, but again the panel could not settle on a conclusion. This issue is still unresolved and to be determined in future forecasts.

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ACCEPTING THE POPULATION AND EMPLOYMENT FORECASTS AND THE URBAN GROWTH REPORT AS SUPPORT FOR DETERMINATION OF CAPACITY OF THE URBAN GROWTH BOUNDARY	))))))	RESOLUTION NO. 09-4094 Introduced by Chief Operating Officer Michael Jordan with the Concurrence of Council President David Bragdon

WHEREAS, state law requires Metro to determine the capacity of the urban growth boundary (UGB) to accommodate the next 20 years' worth of population and employment growth by the end of December, 2009; and

WHEREAS, the Metro Council will direct its efforts to provide capacity for the next 20 years' worth of growth toward achieving the Outcomes that are part of its overall Making the Greatest Place initiative, as indicated by performance measures; and

WHEREAS, Metro published range forecasts of population and employment growth to the years 2030 and 2060 on March 19, 2009; and

WHEREAS, Metro published a preliminary analysis of the capacity of the existing UGB to accommodate the range of new dwelling units relating to the range of forecast population growth on March 31, 2009; and

WHEREAS, state law requires Metro to provide capacity to encourage the availability of dwelling units at price ranges and rent levels, and of transportation choices, that are commensurate with the financial capabilities of households expected over the planning period; and

WHEREAS, Metro published a preliminary Housing Needs Analysis on April 22, 2009, that showed the effects on housing affordability and household transportation costs of forecast growth under existing policies and investment levels; and

WHEREAS, Metro published a preliminary analysis of the capacity of the existing UGB to accommodate the range of new employment relating to the range of forecast employment growth on May 6, 2009; and

WHEREAS, the region has an interest in an adequate supply of land appropriate for industries that prefer larger tracts of land near transportation facilities and an interest in efficient use of existing land and transportation facilities; and

WHEREAS, Metro sought and received comments on the preliminary analyses of housing and employment capacity from its Metro Policy Advisory Committee (MPAC) and its Joint Policy Advisory Committee on Transportation (JPACT), local governments in the region, public, private and non-profit organizations and citizens; and

WHEREAS, Metro considered the comments and published revised draft analyses of the capacity of the existing UGB to accommodate growth to year 2030 on September 15, 2009; and

WHEREAS, Metro sought and received comments on the revised draft analyses from MPAC and JPACT; local governments in the region; and public, private and non-profit organizations and citizens; and

WHEREAS, the Metro Council held open houses and public hearings on the revised draft analyses on September 21, 22 and 24 and October 1, 8 and 15, 2009; and

WHEREAS, Metro considered comments received and made revisions to the final draft analyses of the capacity of the existing UGB to accommodate the range of new dwelling units and employment relating to the range of forecast population and employment growth; now, therefore,

BE IT RESOLVED that the Metro Council

1. The Council accepts the "20 and 50 year Regional population and employment forecasts" incorporated into the "Draft Urban Growth Report 2009-2030", dated September 15, 2009, as revised by this resolution, as a basis for analysis of need for capacity in the UGB to accommodate growth to the year 2030 and for actions the Council will take to add capacity by ordinance in 2010, pursuant to ORS 197.296(6) and statewide planning Goal 14.

2. The Council accepts the "Draft Urban Growth Report 2009-2030", dated September 15, 2009, with its analysis of housing needs, attached and incorporated into this resolution as Exhibit A, with the revisions described in the Staff Report dated December 3, 2009, attached as Exhibit B, as a basis for analysis of need for capacity in the UGB to accommodate growth to the year 2030 and for actions the Council will take to add housing and employment capacity by ordinance in 2010, pursuant to ORS 197.296(6) and statewide planning Goals 14 and 10.

3. The Council directs the staff to work with MPAC to identify site opportunities for industries that prefer large tracts, with a priority to mechanisms to remediate brownfields and assemble smaller parcels inside the UGB to make them more "market-ready."

4. Acceptance of Exhibit A by the Council meets Metro's responsibility under state law to analyze the capacity of the UGB to accommodate growth to the year 2030 as a preliminary step toward providing sufficient capacity to accommodate that growth. The Council will make a final land use decision to respond to this capacity analysis in 2010.

5. The Council directs the Chief Operating Officer to submit Exhibit A , together with such actions the Council adopts by ordinance to add any needed capacity pursuant to ORS 197.296(6) and statewide planning Goal 14, to the Land Conservation and Development Commission as part of periodic review pursuant to ORS 197.626, following adoption of the capacity ordinance in 2010.

ADOPTED by the Metro Council this 10th day of December, 2009

David Bragdon, Council President

Approved as to form:

Daniel B. Cooper, Metro Attorney

Officially Approved
Approvato Ufficialmente
Consiglio Metropolitano
METRO COUNCIL
Metro Council

Resolution 09-4094
Exhibit A

CLICK HERE FOR REPORT

DRAFT URBAN GROWTH REPORT

2009 – 2030

Employment and residential

September 15, 2009

CLICK HERE FOR REPORT

Resolution 09-4094

September 15, 2009 **Exhibit A**

Employment and residential

DRAFT URBAN GROWTH REPORT

2009 – 2030

Appendices 2 - 13

September 15, 2009

EXHIBIT B
STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 09-4094, FOR THE PURPOSE OF ACCEPTING THE POPULATION AND EMPLOYMENT FORECASTS AND THE URBAN GROWTH REPORT AS SUPPORT FOR DETERMINATION OF CAPACITY OF THE URBAN GROWTH BOUNDARY

Date: December 3, 2009 Prepared by: Malu Wilkinson, x1680

BACKGROUND

Purpose of the forecast and the urban growth report

Oregon land use law requires that, every five years, Metro assess the region's capacity to accommodate the numbers of people anticipated to live or work inside the Metro urban growth boundary (UGB) over the next 20 years. To make this determination, Metro forecasts population and employment growth over a 20-year timeframe; conducts an inventory of vacant, buildable land inside the UGB; assesses the capacity of the current UGB to accommodate population and employment growth either on vacant land or through redevelopment and infill; determines whether additional capacity is needed; and documents the results of these analyses in an urban growth report (UGR). The UGR is the basis for subsequent consideration of the actions to be taken to close any identified capacity gap.

On the advice of the Metro Policy Advisory Committee, the Metro Council has indicated its intent to take an outcomes-based approach to assessing growth management options in 2010. It is intended that growth management decisions will help to foster the creation of a region where:

1. People live and work in vibrant communities where they can choose to walk for pleasure and to meet their everyday needs.
2. Current and future residents benefit from the region's sustained economic competitiveness and prosperity.
3. People have safe and reliable transportation choices that enhance their quality of life.
4. The region is a leader in minimizing contributions to global warming.
5. Current and future generations enjoy clean air, clean water and healthy ecosystems.
6. The benefits and burdens of growth and change are distributed equitably.

Should the Metro Council vote in favor of this resolution, it would be accepting the UGR and 20-year forecast as a reasonable and complete basis for making growth management decisions in 2010. By this resolution, the Council would also be accepting the 50-year forecast as a basis for designating urban and rural reserves. Council acceptance of the forecasts and the UGR does not constitute a land use decision, but provides a platform for subsequent growth management decisions.

Summary of forecast and UGR findings

<u>Population and employment range forecast</u>

20-and-50-year range forecasts of population and employment growth have been completed by Metro staff and peer reviewed by economists and demographers. The 20-year range forecast informs the UGR and the 50-year range forecast informs the Urban and Rural Reserves process. The use of a range forecast acknowledges uncertainty and allows for growth management decisions to focus on desired outcomes rather than a specific number. The forecast is for the seven-county primary metropolitan statistical area, which includes Clackamas, Multnomah, Washington, Yamhill, Columbia, Clark, and Skamania counties.

The 20-year forecast indicates that, by the year 2030, there will be a total of 1,181,300 to 1,301,800 households and a total of 1,252,200 to 1,695,300 jobs in the larger seven-county area. There is a 90 percent chance that growth will occur within this range.

The 50-year forecast indicates that, by the year 2060, there will be a total of 1,478,400 to 1,792,500 households and a total of 1,648,400 to 2,422,900 jobs in the larger seven-county area. There is a 90 percent chance that growth will occur within this range.

In his September 15, 2009 recommendation, Metro's Chief Operating Officer, Michael Jordan, recommended that growth management decisions made by the Council in 2010 focus not on the extreme ends of the range forecast, but on the middle third of the forecast range.

Urban Growth Report

In addition to the 20-year range forecast, the UGR includes an analysis of the share of the UGB's zoned capacity that is likely to be developed by the year 2030. The UGR's analysis assumes a continuation of current policies and investment trends. No changes to existing zoning are assumed, although it is likely that up-zoning will take place in the future as communities develop and implement their aspirations. The UGR's assessment of the likelihood of development is based on historic data, scenario modeling, and the professional expertise of Metro staff, local city and county staff, economic consultants, and business representatives. UGR results are portrayed for four different categories--residential, general industrial employment, general non-industrial employment, and large lot employment—that are summarized as follows:

Residential capacity

There is ample zoned capacity within the current UGB to accommodate the next 20 years of residential growth. However, the UGR's analysis indicates that, without additional infrastructure investments or other policy changes, insufficient zoned capacity will be available for development. At both ends of the range forecast (high and low) there is a gap in the UGB's capacity to accommodate the next 20 years of residential growth on vacant land or through redevelopment and infill (refill). Depending on the amount of residential growth that may be realized, the UGR finds demand for additional capacity to accommodate 27,400 to 104,900 dwelling units.

The UGR also includes an assessment of future cost-burdened households in the region. The assessment defines a household as cost-burdened if they rent and spend more than half of their after-tax income on housing and transportation expenditures. If current policy and investment trends are continued, the number of cost-burdened households in the region may double by the year 2030. Under that scenario, between 17 to 23 percent of all households inside the Metro UGB may be cost-burdened. This would represent between 51 to 69 percent of renter households. This analysis also finds that, as is the case today, there are likely to be concentrations of cost-burdened households in some communities and very few in others. Centers and corridors provide residents with the most affordable transportation options, but high market demand in those locations is likely to continue driving housing prices upwards. Investing in housing and transit in centers and corridors is one way of closing the residential capacity gap and reducing the number of cost-burdened households.

General industrial employment capacity
This portion of the UGR assesses the current UGB's capacity to accommodate industrial job growth on vacant land or through redevelopment and infill (refill). The assessment of demand for large, vacant lots is handled separately. The UGR finds that, at both ends of the employment range forecast, there is adequate capacity inside the current UGB to accommodate the next 20 years of general industrial job growth.

General non-industrial employment capacity
This portion of the UGR assesses the current UGB's capacity to accommodate non-industrial (e.g. office, retail, institutional) job growth on vacant land or through refill. The analysis indicates sufficient zoned capacity, but a need to make investments or policy changes to support the high end of the demand range. Depending on the amount of non-industrial employment growth that is realized, the UGR finds that there is demand for zero to 1,168 acres of additional capacity for non-industrial employment.

Large lot employment capacity
The "large lot" portion of the UGR's analysis was completed in recognition of the fact that some firms in traded-sector industries prefer or require large, vacant lots. The UGR defines a large lot as a single taxlot with at least 25 acres of vacant, buildable area. Demand for large lots is likely to be the product of the decisions of individual firms rather than larger industry sector trends. The UGR's forecast-based assessment originally determined that, over the 20-year period, there is demand for 200 to 800 acres of additional capacity for large-lot employment uses. This range depends on the amount of employment growth realized as well as whether assembly of adjacent lots of 25 acres or more was assumed.

For several reasons listed below, at its November 18, 2009 meeting, the Metro Policy Advisory Committee (MPAC) recommended that the UGR identify a wider range of potential large lot demand:

- Large lot demand will be the result of the decisions of individual firms, so it is inherently difficult to forecast.
- Some cities in the region have identified large, traded-sector firms as the focus of their economic development plans.
- It may be preferable from a policy standpoint to have flexibility to accommodate traded-sector firms.
- The use of an employment forecast may be an inadequate means of estimating large lot demand for freight, rail, and marine terminal uses.

Consequently, MPAC has recommended that the UGR identify a demand for 200 to 1,500 acres of additional capacity for large-lot industrial uses. This demand may be satisfied through a variety of means, including brownfield cleanup, infrastructure investments, taxlot assembly, or UGB expansions.

Process for writing the forecast and the urban growth report
Process overview
The forecast and UGR have been written and revised over the course of over a year and are informed by the expertise of economic consultants and Metro staff, business focus groups, comments from numerous stakeholders, advisory committee input, a panel of economic advisors, scenario modeling, and historic data. The analyses have benefited from this extensive review.

Expert review of the population and employment forecast
The national data that drives the regional forecast comes from IHS Global Insight, an internationally respected economics firm whose data is relied upon by numerous public and private entities. Metro's

econometric model, which is used to create the regional population and employment forecast, has been subjected to considerable expert scrutiny over the years. A November 24, 2009 memo from Metro's Chief Economist, to Malu Wilkinson, Metro Principal Regional Planner, describes recent peer reviews of the forecast model and its results and is included as Attachment 3 to this staff report.

In 2006, a panel of economic advisors was convened to evaluate Metro's econometric model and forecasts. The panel included:

- Tim McDaniels, professor and interim director, Institute of Resources and Environment, School of Community and Regional Planning, University of British Columbia
- Marshall Vest, economist and director of the Economic and Business Research Center at the University of Arizona's Eller College of Management
- Tom Potiowsky, State Economist for the State of Oregon

The panel of economic advisors reviewed the model's equations, overall statistical fit and results, finding:

- The Metro econometric model is one of the more advanced regional econometric models in the country and that it exhibits sound economic theory.
- The Metro econometric model is the right type of model for the purposes for which it is used.
- It is appropriate to use national economic projections from IHS Global Insight to drive the regional forecast. It was noted that the State of Oregon also uses IHS Global Insight data in preparing the biennial budget.
- In the context of performing risk analysis, a range forecast can be superior to a single point forecast.

A Public Review Draft 2005-2060 Regional Population and Employment Forecast was released on May 19, 2008. Accompanying this release, Metro hosted a panel discussion of the forecast. To inform the UGR, a preliminary 20 and 50-Year Regional Population and Employment Forecast was released in March 2009. This newer forecast incorporates the short-and long-term effects of the current recession. During the summer of 2009, the forecast was subjected to a peer review by local economists and demographers. The peer review panel found the forecast range to be reasonable and generally felt that actual growth may end up in the lower to middle portion of the range, but that, as a policy matter, it may be beneficial to plan somewhere in the higher portion of the employment range forecast. Peer review comments were addressed in a draft forecast released in September 2009. These changes did not involve amendments to the forecast's data.

<u>External expertise that informed the employment analysis</u>

To complete the employment analysis portion of the UGR, Metro staff worked with a consultant team led by E.D. Hovee and Co. that included FCS Group, Bonnie Gee Yosick, and Davis Hibbits Midghall, well-respected economic and public opinion consulting firms. Metro staff also formed the Employment Coordination and Advisory Committee (ECAC), which consisted of representatives from local city staff, business advocacy groups, the Port of Portland, and the Portland Development Commission. ECAC met on multiple occasions to provide comments and input on the UGR. Additionally, from December 2008 through February 2009, business representatives were included in focus groups that discussed the region's opportunities and challenges in fostering job growth.

<u>Preliminary versions of analyses released for comment</u>

In order to solicit early feedback, Metro staff released: a preliminary population and employment forecast and a preliminary residential UGR in March 2009; a preliminary housing needs analysis in April 2009;

and a preliminary employment UGR in May 2009. To the extent possible, comments received on the preliminary forecast, preliminary UGRs, and the preliminary housing needs analysis were addressed in the draft forecast and draft UGR, which were released in September 2009.

Metro advisory committee involvement

For over a year, MPAC, the Joint Policy Advisory Committee on Transportation (JPACT), and the Metro Technical Advisory Committee (MTAC) have been engaged in discussions of the UGR and possible growth management strategies. Beginning in September 2008, MPAC and JPACT considered the demographic changes that may impact residential growth and how the region plans to address population growth. This included a presentation on the topic by a visiting national scholar, Dr. Arthur (Chris) Nelson. During fall 2008, staff also presented to MPAC and JPACT the results of a series of "cause and effect" scenarios intended to illustrate the potential effectiveness of several different growth management and investment strategies. These "cause and effect" scenarios were also presented to the Transportation Policy Advisory Committee (TPAC) and to MTAC in an extended session.

Throughout the spring and summer of 2009, MTAC discussed the forecast, the preliminary UGRs and the preliminary housing needs analysis. During the summer of 2009, MTAC held two, three-hour-long sessions devoted entirely to discussing the preliminary analyses. These longer sessions were in addition to regular MTAC meetings where the forecast and the UGR were frequent agenda items. At the longer MTAC sessions, MTAC made recommendations on the UGR that were addressed in the draft UGR, which was released in September 2009.

MPAC discussed the forecast, UGR, and housing needs analysis on multiple occasions during the spring and summer of 2009. Several MPAC meetings included small group discussion formats to allow for more in-depth dialogue. At an October 23, 2009 retreat, MPAC took up the topic of the forecast and the draft UGR for four hours. Eric Hovee, the economic consultant who assisted in the UGR's employment analysis, was available at the retreat to answer questions posed by MPAC.

Additional stakeholder and public comment

Throughout 2009, the Metro Council and Metro staff have also engaged with numerous stakeholders on the topics of the forecast and the UGR. These meetings have included business interest groups, elected officials, land use planning advocacy groups, housing affordability advocacy groups, and city and county staff.

To solicit comments on the draft UGR (and other elements of the *Making the Greatest Place* initiative), seven open houses and five public hearings were held in locations throughout the region in September and October 2009. During this public comment period, comments were received in writing, as oral testimony, and electronically.

Comments received on the draft UGR

Because the UGR makes projections regarding future conditions, it elicits a variety of strong opinions from different perspectives. Staff believes that the forecast and UGR are based on sound and careful analysis and that the outstanding differences of opinion expressed by some cannot be reconciled with additional technical analysis. To aid the Council in its consideration of the completeness of the forecast and UGR, comments received on the draft UGR and staff responses are summarized in Attachment 1 to this staff report. To the extent possible or appropriate, staff has addressed comments in the final urban growth report. The general nature of comments is summarized below.

Business advocacy groups, the Port of Portland, Washington County, and the cities of Hillsboro, Cornelius, and Forest Grove have called for more optimistic employment forecasts (particularly in the high-tech manufacturing sector), higher capture rates[1], and lower refill rates[2]. These stakeholders have also suggested that the UGR's analysis should more fully take into account the site characteristics sought after by specific industry sectors. Finally, these stakeholders have requested that the UGR incorporate the conclusions of Economic Opportunity Analyses recently conducted by several cities.

The Homebuilder's Association of Metropolitan Portland disagrees with some of the UGR's assumptions and conclusions. Most notably, they find infeasible the 33 percent residential refill rate assumed in the UGR.

The cities of Portland, Lake Oswego, and Wilsonville as well as land use and housing affordability advocacy groups have expressed confidence in the analysis, calling for a focus on making more efficient use of the UGB's existing capacity and pointing to the need to take measures that address a changing economy, shifting demographics, climate change, brownfield cleanup, and housing affordability.

Comments from the general public typically focused on UGB decisions that the Council may consider in 2010 (rather than providing comments on the forecast and UGR analyses themselves). Those public comments were overwhelmingly in favor of making more efficient use of the region's existing capacity.

All of these discussions and comments have resulted in improvements to the final UGR's technical assumptions and its framing of policy choices. The revisions and technical corrections that Metro staff recommends making to the September 15, 2009 Draft UGR are summarized in Attachment 2 to this staff report.

Staff recommends two noteworthy revisions to the analysis. The first revision is the expansion of the range of additional capacity that may be demanded for large lot industrial uses (revised from 200-800 acres to 200-1,500 acres), as unanimously recommended by MPAC. The second is a revision to the estimate of acres that may be demanded for future parks, which, to a small degree, reduces the current UGB's residential capacity. This revision for future park acreage uses the approach recommended by MPAC in 2002, but provides an updated estimate that correlates to the current population forecast.

MPAC recommendation

On November 18, 2009, the UGR and forecast were taken up as an action item by MPAC. MPAC recommended several additions to the language of the resolution that is before the Council. MPAC's key additions to the resolution are a specific reference to the importance of addressing housing affordability and the need to focus on brownfield cleanup and lot assembly to address large lot industrial demand. MPAC also recommended a revision to the UGR's estimate of large-lot demand, which was discussed earlier in this staff report. With those revisions, MPAC unanimously recommended that the Metro Council vote in favor of this resolution.

Next steps

If the Metro Council votes in favor of this resolution, it accepts the forecast and the UGR as complete. The Council is not yet making a decision on where within the demand ranges to plan or whether to make

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[1] Capture rate refers to the share of the larger 7-county area's population or employment growth that is expected to come to the Metro UGB.

[2] Refill rate refers to the share of future residential or employment development that occurs through redevelopment or infill.

a UGB expansion. During 2010, Metro staff will work with cities in the region to identify new policies or investments that increase the capacity of the current UGB (e.g. zoning) or increase the likelihood that capacity in the current UGB will be developed in the next 20 years (e.g. investments in centers, corridors, employment and industrial areas, and recent UGB expansion areas). Only policies or investments that are formally adopted or approved can be considered. The effects of those actions will be assessed by the end of 2010, when the Metro Council considers the adoption of a capacity ordinance. Any remaining capacity gap would need to be addressed through UGB expansions.

2010: At least 50 (and up to 100) percent of any capacity need must be addressed by the end of 2010. Any capacity need that is being addressed through efficiency measures inside the current UGB must be identified.

2011: The end of 2011 is the State deadline for making UGB expansions, if needed.

ANALYSIS/INFORMATION

1. **Known Opposition**
   Business interest groups, the Port of Portland, several cities in Washington County, and Washington County itself previously indicated that the September 15, 2009 Draft UGR did not identify a large enough gap in the UGB's capacity to accommodate employment growth. A particular focus of their criticism of the UGR has been large-lot employment demand, which these stakeholders contend is underestimated in the UGR to the detriment of the region's future economic health. MPAC has recommended a revision to the range of capacity demanded for large-lot employment uses. This revision has satisfied cities in Washington County with seats at MPAC, but Metro staff is unaware whether this revision satisfies all others who have voiced concern.

2. **Legal Antecedents**
   The forecast and UGR are completed to satisfy:
   - Statewide Planning Goals 10 (Housing) and 14 (Urbanization)
   - Oregon Revised Statutes 197.296, 197.299, and 197.303 (Needed Housing in Urban Growth Areas)
   - Oregon Administrative Rules, Division 24 (Urban Growth Boundaries)
   - Metro Regional Framework Plan, Chapter 1 (Land Use)
   - Metro Code, section 3.01.020(a) and (b)

3. **Anticipated Effects**
   Council acceptance of the forecast and UGR will allow Metro to meet its legal requirements under State law and to begin work identifying the possible policy options to consider in 2010 to enable the region to achieve its desired outcomes.

4. **Budget Impacts**
   The budget for fiscal year 2009/2010 includes staff resources for this work program. The fiscal year 2010/2011 budget will need to include staff resources.

RECOMMENDED ACTION

Staff recommends that the Metro Council accept the 20 and 50 year Regional population and employment forecasts and the capacity analysis in the Urban Growth Report 2009-2030, with the revisions recommended in this Staff Report.

ATTACHMENT 1

DRAFT URBAN GROWTH REPORT COMMENT INDEX
Fall 2009

FROM	*AFFILIATION*	*DATE*
Alford, Heidi		October 14, 2009
Anderson, Michael	Oregon Opportunity Network	October 14, 2009
Arcana, Judith		September 18, 2009
Battan, Jim		September 16, 2009
Becker, Michael		September 18, 2009
Bender, Rodney		September 18, 2009
Bidwell, Michael Patrick		September 18, 2009
Bookin, Beverly	Commercial Real Estate Economic Coalition	September 24, 2009
Boone, James L.		September 20, 2009
Brewster, Ginny		September 17, 2009
Brewster, Ginny		September 17, 2009
Brown, David		September 18, 2009
Brown, R.		September 18, 2009
Burke, Elizabeth		September 18, 2009
Carley, Ron and Fuglister, Jill	Coalition for a Livable Future	October 15, 2009
Carillo, Ken		September 18, 2009
Cavenaugh, Kevin		September 16, 2009
Cohen, Gerald J.	AARP – Oregon State Office	October 15, 2009
Conable, Barbara		September 18, 2009
Cox, Bill		September 18, 2009
Cusack, Tom		
Cushwa, Nancy		September 18, 2009
Davis, Tim		September 17, 2009
Deagle, Susie		September 18, 2009
Dibblee, Martha		September 15, 2009
Digman, Joe		September 18, 2009
Dorner, Catherine		September 18, 2009
Durtschi, Kay	Citizen Member – Metro Technical Advisory Committee	October 15, 2009
Effman, Jason		September 18, 2009
Elteto, Louis		September 18, 2009
Fain, Lisa		September 18, 2009
Fitzgerald, Marianne	Southwest Neighborhoods, Inc.	October 15, 2009
Franchesi, Cheryl and Terry		October 15, 2009
Frank, Lona Nelsen	ALPACAS of Tualatin Valley LLC	September 16, 2009
Gadea, Francisco		September 18, 2009
Gerth, John		September 18, 2009
Goldfarb, Gabriela		October 8, 2009
Goldsmith, Dell		October 10, 2009
Green, Karla		September 18, 2009
Gregory, Michele	Multnomah County Planning Commissioner	September 16, 2009
Hagen Jr., Jon Edwin		September 18, 2009
Hammon, Virginia		October 8, 2009
Hanrahan, Steve		September 18, 2009
Harvey, Linda A.		September 18, 2009
Hauk, Marna		September 18, 2009
Helm, Polly		October 15, 2009
Heyne, Klaus		September 18, 2009

City of Hillsboro (Alwin Turiel)	City of Hillsboro	October 8, 2009
Hoem, Shirley		September 15, 2009
Houck, Mike	Urban Greenspaces Institute	October 10, 2009
Hunter, Christopher		September 18, 2009
Jackson, Kelly M.		September 18, 2009
Jacobson, Pat and Jake		September 18, 2009
Johnson, Chuck		September 18, 2009
Johnson, Ellen	Housing Land Advocates	October 15, 2009
Johnson, Michael		September 18, 2009
Jones, D.		September 18, 2009
Kaplan, Seth		September 18, 2009
Karlock, Jim		October 15, 2009
Kemper, Heather	Legal Aid Services of Oregon	October 15, 2009
Kraft, Tom		September 15, 2009
Kulley, Marlowe		September 17, 2009
City of Lake Oswego (Mayor Jack Hoffman)	City of Lake Oswego	October 13, 2009
LeFeber, Bob	Commercial Realty Advisors	October 14, 2009
Lanker, Stefan		September 18, 2009
Larco, Dorothy		September 18, 2009
Laws, Kathleen		September 18, 2009
Leinova, Avery S.		September 18, 2009
Lindsey, Carolyn		September 18, 2009
Lord, Pamela J.		September 18, 2009
Malmquist, Bret		September 18, 2009
Meehan, Hilary		September 18, 2009
Merchant, Bonnie		September 18, 2009
Micheletti, Dustin		September 18, 2009
McClanahan, Gary		September 18, 2009
McClay, Mauria		September 18, 2009
McCracken, Rhiannon		September 18, 2009
McDonough, Sandra	Portland Business Alliance	October 15, 2009
McGrath, Teresa		September 20, 2009
McKinney, Trenton		September 18, 2009
Neer, Steven		September 18, 2009
Nielsen, Charles E.		October 10, 2009
Nielsen, David	Home Builders Association of Metropolitan Portland	October 13, 2009
Newman II, Will		September 17, 2009
Newman II, Will		October 15, 2009
Parker, Terry		October 15, 2009
Parks, Lindsay		October 8, 2009
Pearmine, Katie		September 18, 2009
Peterson, Kathryn		September 18, 2009
Platt, Thomas		September 18, 2009
Platt, Thomas		September 18, 2009
Port of Portland (Bill Wyatt)	Port of Portland	October 15, 2009
City of Portland (Mayor Sam Adams)	City of Portland	October 15, 2009
Pratt, Elizabeth	The League of Women Voters of Portland	October 15, 2009
Price, William R.		September 18, 2009
Qamar, Lawrence		October 15, 2009
Reid, Bill	Johnson Reid LLC	September 29, 2009
Roberts, Jeff		September 21, 2009

Rojas, Carlos		September 16, 2009
Rollow, Nina		September 18, 2009
Ross, Kelly	Western Advocates	October 15, 2009
Schlueter, Jonathan	Westside Economic Alliance	October 15, 2009
Seamons, Joe		September 18, 2009
Smith, Jefferson		October 15, 2009
Spady, Sha		September 21, 2009
Stec, Bradley		September 18, 2009
Stephens, Charlie		
Stout, Mel		September 15, 2009
Streicker, Gail		September 18, 2009
Swaren, Ron		October 15, 2009
Sweeney, J. J.		September 18, 2009
Thompson, James		September 18, 2009
Thrower, Ashley		September 18, 2009
Toll, Peter		September 16, 2009
City of Tualatin (Mayor Lou Ogden)	City of Tualatin	October 14, 2009
Waksman, Steve and Deborah		September 18, 2009
Wallauer, Martha and Robert		September 17, 2009
Washington County (Greg Miller)	Washington County	October 15, 2009
Waterston, Debra		September 18, 2009
Wilkerson, Carol Metzger		September 18, 2009
City of Wilsonville (Stephan Lashbrook)	City of Wilsonville	October 15, 2009
Wixson, Gene		September 18, 2009
Woodruff, Claire		September 18, 2009
Woods, Deanna G.		September 18, 2009
Young, Laura		October 12, 2009
Cities of Banks, Cornelius, Forest Grove, Hillsboro and North Plains (Mayors Kinsky, Bash, Kidd, Willey and Hatcher	Multiple Cities	October 9, 2009

Employment UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Metro's cluster forecast is incorrect because it does not include NAICS code 334, which is the code under which solar panel manufacturing would fall.	All NAICS codes, including 334, are included in the Metro forecast. NAICS code 334 is also included in the cluster forecast. The UGR's narrative erroneously states that SolarWorld is in NAICS code 2211, but this text error has no effect on the forecast or the assessment of land need. See Appendix 3 to the UGR for a list of the NAICS codes that are included in each cluster. See Appendix 12 to the UGR for the complete forecast, which includes all sectors.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	The UGR should forecast future land needs for specific industry clusters, including high tech, solar manufacturing, and bio-pharma.	Statewide Planning Goal 14 (Urbanization) requires that Metro ensure capacity for housing and employment. It does not require Metro to supply land with the specific characteristics that may be desired by individual industries or industry clusters. Long-term predictions about the site needs of specific (and emerging) industries are likely to be incorrect. When making specific decisions to expand the UGB, the needs of industry clusters may be considered.
City of Cornelius, City of Forest Grove, City of North Plains, City of Hillsboro, City of Banks, Johnson-Reid, Port of Portland, Portland Business Alliance, Commercial Association of Realtors	The UGR does not adequately incorporate the analysis found in the Hillsboro Draft Economic Opportunities Analysis.	Statewide Planning Goal 9 (Economic Development) requires cities and counties to provide for the specific types of employment needs and opportunities they identify in their Economic Opportunity Analyses (EOA). Goal 9 does not, however, apply to Metro. Oregon Administrative Rule 660-024-0040(5) states that "except for a metropolitan service district [Metro]... the determination of 20-year employment land need for an urban area must comply with applicable requirements of Goal 9..." EOAs often identify specific employment sectors that are the focus of a city's economic development strategy. In EOAs, those priority clusters are sometimes assumed to see additional growth beyond what is indicated in a trend forecast. The UGR, on the other hand, provides an assessment of all employment sectors without identifying priority sectors. Though it may be beneficial to have a regional economic development strategy, Metro has not been charged with the task of developing that strategy and does not presume to have that role. Metro does, however, have a role in coordinating the population and employment forecasts for the region. Adding up the results of individual city forecasts would likely overstate regional growth in some sectors and understate it in others. Metro has some methodological concerns with the Hillsboro Draft Economic Opportunity Analysis (EOA). Primary concerns include: 1) The Hillsboro EOA's forecast treats Metro's older, pre-recession, medium forecast as a low (baseline) forecast. The Hillsboro EOA forecast explicitly rejects

Employment UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
		the long-term impacts of the current recession on manufacturing sectors. 2) The Hillsboro forecast for NAICS code 334 (computer and electronic product manufacturing), and photovoltaic panel manufacturing, in particular, is so optimistic that it overwhelms the entire seven-county forecast for this sector. Population growth rates as well as the growth rates for other employment sectors have to have some logical consistency and also fit within the context of a national forecast. If the Hillsboro forecast for this sector were correct, it would have serious implications for overall regional growth as well. Factoring in the multiplier impact of the Hillsboro photovoltaic forecast would essentially explode the forecast for manufacturing, which in turn would stimulate growth in nonmanufacturing sectors such as services, retail, finance and other industries. Assuming the multipliers play out as usual, the employment forecast would likely increase from 1.5 percent annual growth (the current Metro forecast) and exceed two percent annual growth. Already, the Metro regional forecast is projected to grow faster than the U.S. average by 75 percent. At above two percent, our region's projected growth would exceed twice the normal rate. In addition, population growth would have to follow suit. Over a 20 year period, greater than two percent population and total employment growth is not realistic or sustainable. It is unlikely that a mature region like Portland metro can grow so much faster over the long-term than the regional, state and national trends depicted by other forecasters. The Hillsboro forecast for photovoltaic panel manufacturing employment is based on the Oregon Department of Energy goal for megawatts of electricity generated from solar panels. This methodology is predicated on the assumption that a significant share of the world's solar panels will be manufactured in Hillsboro. Solar panel manufacturing has entered a phase of standardization and overseas production, where companies will be competing based on low prices and low wages. Ramped up solar panel production in China and a softening of demand in Europe have resulted in a 50 percent drop in solar panel prices over the last year. This same trend has occurred in many other manufacturing sectors and is not expected to reverse itself. The greater degree of specificity found in the Hillsboro forecast, with its effort to make predictions about particular technologies (e.g. solar panels) makes it more

Employment UGR—technical comments

Comment attribution	Comment summary	Metro staff response
		likely to be incorrect. When planning for the longer term, policy decisions will be much better served by forecasts that portray generalized aggregates that are tied to national data that have been exposed to continuous scrutiny. The Hillsboro EOA does not provide documentation of the methodologies used to forecast additional growth in the bio-tech and high tech clusters.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Metro's forecast understates growth in solar manufacturing, bio-pharma, and high tech manufacturing, sectors in which our region has historic strengths.	The Metro forecast is based on data from IHS Global Insight, an internationally respected economic forecasting firm whose data is used by numerous public and private institutions. That data is subsequently adjusted to reflect our region's historic trends and economic strengths. Metro's forecast, in fact, indicates that the region will have a faster rate of growth in manufacturing and, more specifically, electronics manufacturing than the United States as a whole. But, as with the rest of the U.S., it is anticipated that manufacturing will represent a smaller share of total employment in the future. The recent recession is anticipated to have long-lasting effects, particularly on industrial sectors. Metro's forecast model has been peer-reviewed as has the recent Metro forecast (which includes the employment forecast). The peer review panel expressed confidence in the forecast's methodologies and results.
Westside Economic Alliance	Metro's forecast calls for a substantial decrease in manufacturing employment. "The Westside Economic Alliance rejects the premises used to explain these forecasts and challenges Metro to reconsider the implications of this vision."	The Metro seven-county forecast indicates growth in manufacturing employment at both the high and low ends of the forecast range. The forecast indicates that manufacturing will represent a smaller share of future employment. The Metro forecast also indicates that at the high end of the employment range forecast, manufacturing may bounce back faster than the rest of the economy.
Westside Economic Alliance	Metro's forecast is incorrect because it assumes that phenomena such as global warming, rising fuel prices, and a degraded environment will stifle population growth in the seven-county region.	Metro's seven-county forecast makes no assumptions about possible catastrophic events. Forecasted population growth rates are the product of large-scale demographic trends. The UGR suggests that rising fuel prices and climate change are compelling reasons to consider growth management policies carefully. The use of a range forecast allows for that policy discussion.
Urban Greenspaces Institute	If Climate Change increases the number of floods and wildland fires, temperatures elsewhere in the U. S., especially in the arid regions of the Southwest, is it possible Climate Change "refugees" might increase population projects even more than your current	Metro staff agrees that there is evidence to suggest that climate change may cause inter-regional migrations, but it is not clear what the degree and direction of these migrations may be. Consequently, Metro's seven-county forecast makes no assumptions about possible catastrophic events. The UGR suggests that rising fuel prices and climate change are compelling reasons to consider growth

Employment UGR—technical comments

Comment attribution	Comment summary	Metro staff response
	modeling suggests?	management policies carefully. The use of a range forecast allows for that policy discussion.
Westside Economic Alliance	The seven-county forecast is wrong because growth rates are lower than at any time since Oregon was granted statehood.	Growth rates are forecasted to decline, but this is because of the mathematics of having an ever larger base (existing) population. When expressed in absolute numbers, the forecast is consistent with previous forecasts, which have proven accurate (see Table 1, attached to the end of this document, for a comparison of an older Metro forecast with actual growth).
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	The presence of an existing solar manufacturing cluster in Hillsboro will result in western Washington County capturing the bulk of future high tech and solar manufacturing jobs.	Solar manufacturing firms can be found throughout Oregon, the United States, and the world. Please see Table 2, attached to the end of this document, for a summary of Oregon's recent solar recruits' location choices. Two out of the nine recruits are in Hillsboro (one of those two, SpectraWatt, has since relocated to New York because of public subsidies), while the remaining firms are dispersed throughout the state.
Port of Portland	A job forecast is inadequate for assessing land needs associated with commodity flows (freight, logistics).	This is a comment that Metro received on the preliminary UGR as well. Metro would welcome specific suggestions on how to perform this portion of the assessment differently, but has not received any to date. Staff proposes that the final UGR should reflect the Metro Policy Advisory Committee's recommendation to revise the identified demand for large lot capacity from 200-800 acres to 200-1,500 acres. This revision would acknowledge the potential shortcomings of using an employment forecast as the sole basis for assessing large lot demand. The UGR's analysis considers land extensive uses with fewer employees. The overall demand model assumptions on employees per square foot by building type have also been revised based on the feedback received on the preliminary analysis. These adjustments should address some concerns about land demand for freight uses.
Port of Portland	Freight facility expansion would likely consume other industrial land, which, in turn, would trigger demand for additional industrial land elsewhere in the region.	Freight-related jobs are included in the regional forecast and demand for capacity that is generated by these jobs is included in the UGR's assessment. Suggestions that a job forecast is not an adequate means of estimating land demand for freight uses have not been accompanied by specific suggestions for an alternative methodology.

Employment UGR—technical comments

Comment attribution	Comment summary	Metro staff response
		Staff proposes that the final UGR should reflect the Metro Policy Advisory Committee's recommendation to revise the identified demand for large lot capacity from 200-800 acres to 200-1,500 acres. This revision would acknowledge the potential shortcomings of using an employment forecast as the sole basis for assessing large lot demand.
Port of Portland	Modify the region's assumed job capture rate to make it more aggressive.	The capture rates (industrial and non-industrial) used by Metro in the UGR are an output of scenario modeling. The policy and investment inputs into that modeling are intended to represent a continuation of current policies and investment trends. If the region is to achieve a higher job capture rate, it would likely need to implement new policies and investments. Expressing a different point of view, we have received comments from Clark County and Vancouver that the assumed capture rate is too high.
City of Cornelius City of Forest Grove City of North Plains City of Hillsboro City of Banks Johnson-Reid	Large, vacant lots are needed in order to attract solar manufacturers to the Portland metropolitan region.	The location choices of several of Oregon's recent solar manufacturing recruits indicate that large, vacant lots are not needed by most firms. Please see Table 2, attached to the end of this document, for a summary of Oregon's recent solar recruits' location choices. Of the nine recent recruits listed, seven are on properties smaller than 25 acres (three of those are on less than 10 acres). Two-thirds of these recent recruits, including SolarWorld, North America's largest solar manufacturer, have located in existing buildings. One firm, SpectraWatt, has left Oregon for New York despite having a vacant 20 acre site (cited reason is because the public subsidies offered were more enticing). Staff proposes that the final UGR should reflect the Metro Policy Advisory Committee's recommendation to revise the identified demand for large lot capacity from 200-800 acres to 200-1,500 acres. This revision would acknowledge the potential shortcomings of using an employment forecast as the sole basis for assessing large lot demand. The Metro staff recommendation is that the region should find ways to use our existing inventory of land more efficiently.
Port of Portland, Commercial Real Estate Economic Coalition	Land must be in the right amount and in the right location for the needed purpose.	Statewide Planning Goal 14 (Urbanization) requires that Metro ensure capacity for housing and employment. It does not require Metro to supply land with the specific characteristics that may be desired by individual industries or industry clusters.

Employment UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
		The purpose of the UGR is to identify any gap in capacity, not to assess how and where to address the gap. Local and regional investments can support efficient utilization of land inside the UGB.
Port of Portland	Much of the region's inventory of industrial land is not ready for development due to substantial constraints including brownfield status, location or lack of infrastructure, and regulatory overlays.	These constraints are taken into account in the UGR. Brownfield sites are assumed to only be available for development in the longer term. Only half of the capacity in recent UGB expansion areas is assumed to be available in the 20-year time frame because of infrastructure shortcomings. Portions of tax lots with environmental constraints are not included in the buildable land inventory. See Tables 27 and 28 on pages 72 and 73 of the UGR for additional information.
Commercial Association of Realtors	The UGR should not assume that public financing will be in place for unknown targeted public investments.	The UGR only assumes those policies and investment trends that currently exist.
Port of Portland	The buildable land inventory does not account for upland habitat protections that reduce capacity for development.	Title 13 (Nature in Neighborhoods) upland habitat protections only apply to future UGB expansion areas. The UGR assesses the current UGB's capacity.
Urban Greenspaces Institute	How many acres of the region's supply of buildable land for employment are urban forest canopy, headwaters areas, and other natural resource lands?	The UGR's buildable land inventory takes into account existing environmental regulations, discounting the inventory where appropriate.
Port of Portland	The lack of development in new urban areas (areas brought into the UGB since 1997) is not necessarily because of a lack of infrastructure or governance, but because the land is not suitable for industrial development.	Past UGB expansions have been made in the types of locations that are dictated by current State law. Over time, these areas are intended to develop into complete communities, including employment opportunities. It is hoped that the designation of urban reserves will identify sites that are well-suited for development. Metro staff believes that infrastructure and governance must be addressed to make any future UGB expansion areas developable.
City of Tualatin, Commercial Association of Realtors	The UGR should not assume that industrial uses will locate in multi-story buildings.	The UGR's analysis does not assume that industrial uses will locate in multi-story buildings.
Commercial Association of Realtors	The UGR should not assume "ever-increasing" floor-area ratios for all building types with no regard for market feasibility.	Metro staff concurs and asserts that the UGR's assumptions regarding floor-area ratios (FAR) are conservative. No change in FAR is assumed in the short-term and very modest increases (10%) are assumed in the long-term. Assumptions about increases in FARs for industrial uses are particularly modest. The FARs that are assumed in the UGR account for the thresholds at which structured parking becomes necessary.
Commercial Association	The refill rates assumed in the UGR do not seem	The refill rates assumed in the UGR are the product of modeling that is informed

Employment UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
of Realtors	reasonable.	by historic data and professional expertise.

Employment UGR—policy comments		
Comment attribution	**Comment summary**	**Metro staff response**
City of Cornelius, City of Forest Grove, City of North Plains, City of Hillsboro, City of Banks, Johnson-Reid, Port of Portland, Portland Business Alliance, Commercial Real Estate Economic Coalition	Undersupplying land for priority industry clusters would be harmful to the economy.	Metro performs the UGR analysis every five years to ensure a 20-year supply of capacity for jobs. The effect of this is that, in the short-term (five years), there will be four times the needed capacity for jobs. It is extremely unlikely that amount will be insufficient to accommodate growth before the next UGR analysis in five years. This five-year cycle creates a built-in cushion to allow for choices among sites. Experience has shown that the majority of recent solar manufacturing recruits have located in existing buildings and on smaller sites. The final UGR will reflect the Metro Policy Advisory Committee's recommendation to revise the identified demand for large lot capacity from 200-800 acres to 200-1,500 acres. This revision acknowledges potential shortcomings of using an employment forecast as the sole basis for assessing large lot demand.
Port of Portland	Regional choices related to land supply and transportation will determine the economic future of the region.	Many factors at the global, national, state, regional and local levels have effects on the region's economy. The UGR is not intended to serve as an economic development strategy; it informs land supply decisions that will be made in 2010.
Port of Portland	One of the "six desired outcomes" is economic competitiveness and prosperity—why is there no strategy presented to achieve this outcome or an assessment of how other desired outcomes may conflict with this outcome?	The purpose of the UGR is to identify whether a capacity gap exists and, if so, to what degree. This UGR intentionally presented a variety of policy options to consider for addressing land demand and achieving the region's desired outcomes, but it is not the purpose of the UGR to determine the specifics of those policy options. The viability of those policy options does not have an impact on the capacity analysis. Those policy options can be more thoroughly considered in 2010.
Port of Portland	The UGR and transportation investment strategy need to link up with industry cluster needs. Use the Portland Regional Partners for Business list of clusters instead of the Portland Development Commission's (PDC) list.	Though it may be beneficial to have a regional economic development strategy, Metro has not been charged with the task of developing that strategy and does not presume to have that role. Because there is no agreed upon regional economic development strategy, there is no "right" cluster list to use. The Draft UGR used the PDC list as a way of presenting information in a format that addresses the economic development priorities of many cities in the region. The full forecast, which includes all employment sectors, is the basis for the capacity assessment. The cluster forecast does not figure into the capacity assessment. New cluster definitions will not change the capacity assessment.
City of Portland	The vast majority of our jobs are created through the growth of small businesses. We need to nurture and	Metro's analysis indicates that most employment will occur in smaller firms. Attracting larger firms is also of importance to the region's economy.

Employment UGR—policy comments		
Comment attribution	**Comment summary**	**Metro staff response**
	retain those companies while attracting others.	
Port of Portland	Two key elements of the strategy for providing large lot supply (brownfield cleanup and fast process for UGB expansions) will be undefined at the close of public comment on October 15.	The purpose of the UGR is to identify whether a capacity gap exists and, if so, to what degree. This UGR intentionally presented a variety of policy options to consider for addressing land demand, but it is not the purpose of the UGR to determine the specifics of those policy options. The viability of those policy options does not have an impact on the capacity analysis. Those policy options can be more thoroughly considered in late 2009 and in 2010.
Port of Portland, Commercial Real Estate Economic Coalition	Brownfield cleanup should be a priority	Metro concurs that brownfield cleanup should be a regional priority and welcomes partnerships to institute more brownfield cleanup programs. A MPAC subcommittee will be looking at brownfield cleanup as one option to make more of the region's existing industrial capacity available.
City of Portland	The City of Portland is committed to cleaning up, over time, the City's brownfield sites.	The City has a strong brownfields cleanup program and Metro efforts, focused elsewhere in the region, serve as a complement. Metro staff is open to new opportunities to partner with the City of Portland in brownfield cleanup.
City of Portland	The City of Portland is committed to consolidating and assembling adjoining parcels to provide larger sites. Opening up huge tracts of otherwise excellent agricultural land for industry, when we have land with services already in the UGB, doesn't make sense from a regional investment point of view.	Metro staff is open to opportunities to partner with the City of Portland in employment land assembly.
Port of Portland	A regional infrastructure fund is needed to make industrial sites shovel ready.	Infrastructure funding shortfalls have made it difficult to develop the region's existing supply of land for industrial uses. Metro welcomes a discussion of developing a regional investment strategy, including discussions about possible funding sources.
Portland Business Alliance	There is no reason to expect that funding will be more readily available for refill development than for expansion and to assume otherwise overstates the region's ability to accommodate growth in the existing land supply.	The refill rates that are assumed in the UGR are based on a continuation of existing public investment trends.
Commercial Association of Realtors	The Association appreciates the UGR's improved analytical approach and sensitivity to market realities, but does not believe its estimates or projections. The UGR should make conservative, market-based assumptions.	Metro staff appreciates the input given by the Commercial Association of Realtors that informed some of the UGR's technical assumptions. Metro staff believes that its approach to this analysis is market reality-based.

Employment UGR—policy comments		
Comment attribution	**Comment summary**	**Metro staff response**
Commercial Association of Realtors	The UGR should not assume that the market will respond to our policies and investments.	As pointed out by the Commercial Association of Realtors, this UGR has an improved analytical approach that acknowledges market dynamics. The UGR's market assumptions are informed by modeling, historic evidence and the professional expertise of Metro staff, consultants, and private sector representatives.
Commercial Association of Realtors	The UGR should not assume political support for some set of future policy actions	The UGR only assumes those policies and investment trends that currently exist.
Port of Portland Portland Business Alliance	The "fast track" UGB expansion process that has been proposed by some will not be fast enough once planning, annexation, zoning, and infrastructure construction are considered.	An MPAC subcommittee will take up the issue of how to ensure that large lots are available and protected for industrial uses. The fast-track process is one proposal. Metro welcome other proposals.
Johnson-Reid	The draft UGR does not consider lands north of the existing Washington County UGB as candidate expansion areas for employment growth, modeling, and employment land capacity study.	The UGR's purpose is to identify any gap in the capacity of the current urban growth boundary (UGB) to accommodate growth. The UGR is not intended to examine how or where to fill a capacity gap outside of the current UGB. Scenario modeling was used to inform the UGR. Those scenarios assume a continuation of current policies and investment trends and, as such, assume that future UGB expansions will follow the existing hierarchy of lands as defined by State law. When urban and rural reserve designations are made, scenario assumptions about future UGB expansions will be adjusted.
Port of Portland	Habitat protection programs at the regional and local levels reduce the efficiency with which land is used inside the UGB.	Habitat protection and provision of parks and open spaces are key components of the 2040 Growth Concept. Balancing these goals with efficient development of land is often challenging and Metro is always looking for new ways of doing so.
Port of Portland	The UGR implies that there has been a problem of industrial land conversion and that there is a need to revise Title 4 of the Urban Growth Management Functional Plan. Title 4 provides adequate protection. If there are conversions from industrial uses, it is an enforcement issue.	Metro staff hopes to compile more information to determine whether industrial land conversion has been occurring and, if so, why. An MPAC subcommittee will take up the issue of how to ensure that large lots are available and protected for industrial uses.
Commercial Association of Realtors, Citizen comments (less than five)	Expand the UGB	The decision about whether or not to expand the UGB will be made by the Metro Council, in consultation with MPAC, in 2010. That decision will be based on the UGR's analysis and any new policies or public investments that are adopted by the end of 2010 that affect the region's capacity.
Citizen comments	Focus growth inside the existing UGB	The decision about whether or not to expand the UGB will be made by the Metro

Employment UGR—policy comments		
Comment attribution	**Comment summary**	**Metro staff response**
(approximately 100)		Council, in consultation with MPAC, in 2010. That decision will be based on the UGR's analysis and any new policies or public investments that are adopted by the end of 2010 that affect the region's capacity.
Port of Portland, Portland Business Alliance, Commercial Association of Realtors	30 days is not an adequate amount of time for public review and comment on the UGR	Metro must meet a State-mandated deadline (end of 2009) for the Metro Council's acceptance of the UGR. The public will be able to comment throughout most of 2010 on the various policy choices that will be considered for closing any capacity gap identified in the UGR. Metro staff appreciates the time commitment that various advisory committees have made in providing review of the UGR. Metro has been working with advisory committees to refine the approach and contents of the UGR since winter of 2008. A preliminary UGR was released in May 2009 in order to proactively solicit and respond to technical comments. To the extent possible, comments received on the preliminary UGR have been addressed in the draft UGR. Please see Appendix 1 to the Draft UGR for a summary of comments received and draft Metro staff responses.

Residential UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
City of Portland	Future trends such as higher energy costs, carbon taxes or regulations, and changing demographics make Portland well-positioned to provide future residents with the kinds of housing choices that they will desire. Portland has the ability to accommodate 140,000 more households without any changes to zoning.	The UGR's analysis indicates that the City of Portland and the region have ample zoned capacity to accommodate the next 20 years of residential growth. The UGR shows a need to attract the residential market to that zoned capacity. Policies and investments that encourage redevelopment and infill in centers and corridors should remain the region's focus. The trends cited by the City may attract more of the forecasted households to existing urban areas than contemplated by the UGR.
Home Builders Association of Metropolitan Portland	How does Metro plan on achieving refill rates of 50 percent?	The draft UGR assumes a 33 percent refill rate, which is in keeping with historic rates and, according to Metro's market-based economic model, is likely to be achieved under current zoning.
City of Tualatin Portland Business Alliance	A 33 percent refill rate may not be a reasonable expectation.	The draft UGR assumes a 33 percent refill rate, which is in keeping with historic rates and, according to Metro's market-based economic model, is likely to be achieved under current zoning.
City of Tualatin	Where is the analysis that indicates where refill will be occurring?	Refill rates are expected to vary from city to city, with generally higher rates in Portland than in outlying communities. Please see Maps 1-4, attached to the end of this summary, which show historic and forecasted refill rates throughout the region for single-family and multi-family residential development.
Home Builders Association of Metropolitan Portland	Lands that are likely spots ("low-hanging fruit") for refill have already seen refill occur.	Redevelopment and infill (redevelopment in particular) are ongoing market phenomena. There are many underutilized sites throughout the region that remain ripe for redevelopment and new opportunities will continue to emerge over time.
Home Builders Association of Metropolitan Portland	How does Metro anticipate having 71,000 housing units subsidized to the tune of up to $50,000 per home and what will the impact be on schools and other public services if urban renewal districts are used to created these subsidies and pull money away from other public services?	The Home Builders Association is referring to scenario assumptions in its comment. For the purpose of scenario modeling, Metro assumed a continuation of existing investment trends. The residential incentive assumptions that Metro made were reviewed by cities, counties, the Portland Development Commission, and the Metro Technical Advisory Committee. There are no assumptions made about new levels of investment. Better performance may be achieved with additional investments, investments in different locations, or simply with additional time. It is not the role of the UGR to determine the possible impact on schools and other public services if cities continue their urban renewal programs.
Home Builders Association of Metropolitan Portland,	The assumption about future park needs that is made in the UGR capacity calculation is incorrect. Cities and park providers have more financial resources today than they	There is no specific guidance in state planning law, from ORS 197.296 or Goal 8 on Recreational Needs, on methods to determine park needs. There is no perfect way of estimating future park needs since there is no regional level of service standard

Residential UGR—technical comments

Comment attribution	Comment summary	Metro staff response
Western Advocates, Inc.	did in 2002 (year of previous UGR) to purchase park land.	for parks. To maintain an approach that is consistent with the approach used in 2002, staff proposes keeping the implicit parks level of service found in the 2002 UGR: <u>In 2002 UGR:</u> Forecasted 220,700 dwelling unit growth in 20 year period System-development-charge-based park deduction = 1,100 acres Implied level of service = 1,100 park acres for 220,700 new dwelling units <u>Assuming same implied level of service as in 2002, then in 2009 UGR:</u> Forecasted 262,400 dwelling unit growth in 20 years (baseline assumption) 1,100 /220,700 * 262,400 = **1,300 acres** of new park deduction The acres of parks and open space cited in the Regional Infrastructure Analysis include natural areas and other non-active use spaces. The UGR's parks calculation is only intended to estimate the land demand for active-use parks (i.e. not natural areas) since these are lands that could otherwise be buildable for residential purposes. The buildable land inventory takes into account vacant lands that are not buildable because of regulatory protections (Titles 3 and 13 of the Urban Growth Management Functional Plan).
Legal Aid Services of Oregon (Hillsboro Regional Office), Tom Cusack	Revise the table appearing on page 21 of Appendix 8 (needed housing data tables) to more accurately show the need for subsidies at higher rent levels than the less-than-$400 rent level currently shown.	Metro staff appreciates the careful review of the data and agrees that additional rent and ownership price categories should be denoted as "partially assisted." All categories of rental housing below $1,100 in rent and owner-occupied housing that is $200,000 or less in value may need government assistance. Corrections to tables 303.1a and 303.1b in Appendix 8 will be made in the final UGR.
Tom Cusack	Metro should review existing reports, Census data, and the American Community Survey data to determine the relative rate of Portland Metro housing mismatch by income and rent levels and adjust their demand/supply projections accordingly.	The UGR's method and the method proposed by Mr. Cusack are both valid approaches, but are suitable for different purposes. The method proposed by Mr. Cusack would provide an assessment of current conditions, but would not depict the housing production that is likely to occur in the next 20 years as required for the UGR. To get a sense of the mismatch referenced by Mr. Cusack, the housing needs analysis scenarios forecast future housing production and the number of future cost-burdened households (renters paying more than 50 percent of their income

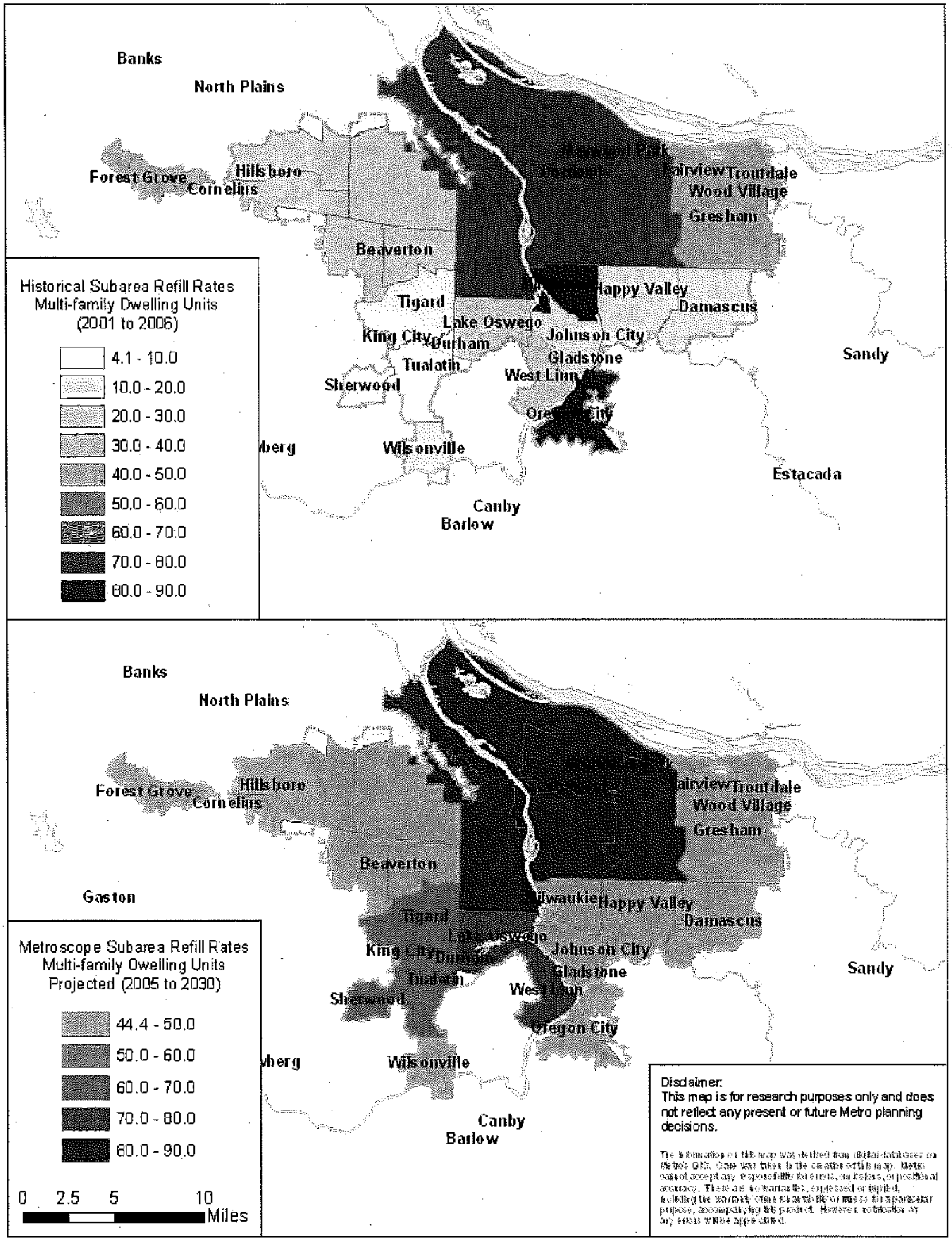
Residential UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
		for housing and transportation). The UGR's approach acknowledges the fact that higher income households cannot be prevented from occupying market rate housing that is cheaper than what they could potentially afford.
Legal Aide Services of Oregon (Hillsboro Regional Office)	The report fails to mention and account for the impact of units otherwise affordable to lower income households being occupied by higher income households.	As pointed out in the comment, the analysis doesn't indicate what a household <u>should</u> pay (given their income), just what they <u>do</u> pay. This approach acknowledges that, rather than being static, housing prices are a product of market demand. This analytical approach is true to the dynamic faced by low income households in today's market. Without a housing quota system that sets aside housing for different income levels, this is also how future housing markets are expected to function. To assess affordability, the analysis provides information about the share of income spent on housing and transportation. For some households, this share is relatively small and for others it is substantial. It remains for policy discussion what can be done to improve these outcomes.
Legal Aid Services of Oregon (Hillsboro Regional Office), Tom Cusack	Add a narrative discussion and table that shows the relevant need for government housing including housing that receives public assistance.	Metro staff will add narrative to better describe affordable housing needs. The analysis indicates how many households (by rent or home price) <u>may need</u> government assistance. However, the question of how many households <u>should receive</u> government assistance is a policy matter that is open to interpretation. The UGR provides several analyses that can inform that discussion: Tables 303.1a and 303.1b, found in Appendix 8, provide the number of new, renter-occupied and owner-occupied dwelling units by rent or value range. In most rent ranges, there would appear to be a need for some amount of government assistance. This determination would also depend on wage levels. Tables 303.2a and 3032.b, found in Appendix 8, provide the number of renter-occupied dwelling units where the occupant is spending more than 50 percent of their income on transportation and housing. The UGR deems these households to be cost-burdened. The UGR further asserts that costs to these households may be reduced through a number of mechanisms including, but not limited to, subsidies. Other mechanisms include transit investments and changes to local zoning codes to allow a greater diversity of housing types and sizes.

Residential UGR—technical comments		
Comment attribution	**Comment summary**	**Metro staff response**
Legal Aid Services of Oregon (Hillsboro Regional Office)	Households with children, not seniors, will represent the majority of low income renters.	In trying to make the report more readable, Appendix 7 blends owners and renters. As a consequence, the low income renters with children household type is perhaps not as visible in the report as it could be. Household type two for renters has the same low income as household type one but is younger and has a larger household with a much greater chance of children being present. This household type has a higher propensity to consume renter single family homes and to travel much further than renter household type one. As noted in the comment, they consume a larger house or apartment than do seniors. As a consequence their cost burden is substantially higher (15 – 30%) than household type one.

Residential UGR—policy comments		
Comment attribution	**Comment summary**	**Metro staff response**
City of Lake Oswego	The City supports the UGR's analysis and is committed to helping expand capacity in the Foothills area of Lake Oswego to create a dense, new transit-oriented neighborhood.	Metro looks forward to working with Lake Oswego and other cities to identify how to regional and local actions can be coordinated to achieve local aspirations that are supportive of the 2040 Growth Concept.
Home Builders Association of Metropolitan Portland	The public will not accept higher densities.	The UGR analysis does not assume any change to current zoning, so the UGR does not assume higher zoned densities in existing neighborhoods. The 2040 Growth Concept calls for focusing growth in centers and corridors as directed by the region's citizens.
City of Wilsonville Coalition for a Livable Future	Infill and redevelopment in centers and corridors are generally preferable and more efficient that outward expansion. Infill and redevelopment protect natural resources. There is no money for infrastructure in UGB expansion areas. Infill and redevelopment can help to fund the maintenance of existing infrastructure. Infill and redevelopment will be necessary to reduce carbon emissions.	Infill and redevelopment are key market responses that the 2040 Growth Concept calls for in centers and corridors.
League of Women Voters of Portland	Compact urban form and the integration of land use and transportation will be essential for addressing climate change and providing equity of opportunity. Areas around transit centers and light rail stations, such as Lents and Gateway offer great potential and deserve attention in the investment strategy.	Metro staff concurs.
Home Builders Association of Metropolitan Portland	Policies that push more households to live outside the Metro UGB do not mesh with Metro's goals for sustainability.	Metro staff concurs that there are negative implications of having more people choose to live in neighboring cities and commuting back to the Metro region. The draft UGR identifies a residential capacity gap. There are multiple ways to fill that gap that will be discussed in 2010.
Urban Greenspaces Institute	The urban forest canopy, headwaters areas, and upland habitat must receive heightened protection if the region is to pursue infill and redevelopment. Title 13 is insufficient protection.	In determining the region's capacity for growth, the UGR must only assume regulations that are currently in place.
League of Women Voters of Portland	The League supports the diversification of the region's housing stock, by type and price.	Metro staff concurs that additional housing options are needed in the region in order to reduce the number and share of households that are cost-burdened.
Oregon Opportunity Network,	Housing and transportation affordability must be considered in growth management and investment	Metro staff concurs and notes that the UGR analysis finds that many of the region's existing centers and corridors offer the most affordable housing and

Residential UGR—policy comments		
Comment attribution	**Comment summary**	**Metro staff response**
Housing Land Advocates, AARP, Legal Aid Services of Oregon (Hillsboro Regional Office)	decisions. Transit-Oriented Development should be promoted.	transportation options. Yet, an affordability problem is likely to persist and perhaps worsen with a continuation of current policies and investment trends. Growth management policies and transportation investments alone will not, however, solve the affordability problem.
Legal Aid Services of Oregon (Hillsboro Regional Office)	Set concrete, regional goals, objectives and performance measures for housing affordability. Go beyond voluntary measures as they have not resulted in local jurisdictions making affordable housing a priority.	Metro staff appreciates this input. These tasks do not, however, fall under the purview of the UGR.
Home Builders Association of Metropolitan Portland	30 days is not an adequate amount of time for public review and comment on the UGR	The public will be able to comment throughout most of 2010 on the various policy choices that will be considered for closing any capacity gap identified in the UGR. Metro staff appreciates the time commitment that various advisory committees have made in providing review of the UGR. Metro has been working with advisory committees to refine the approach and contents of the UGR since winter of 2009. A preliminary UGR was released in May 2009 in order to proactively solicit and respond to technical comments. To the extent possible, comments received on the preliminary UGR have been addressed in the draft UGR. Please see Appendix 1 to the Draft UGR for a summary of comments received and draft Metro staff responses. Metro continues to try to give review and comment opportunities, but must meet a State-mandated deadline (end of 2009) for the Metro Council's acceptance of the UGR.
Citizen comments (less than five)	Expand the UGB	The decision about whether or not to expand the UGB will be made by the Metro Council, in consultation with MPAC, in 2010. That decision will be based on the UGR's analysis and any new policies or public investments that are adopted by the end of 2010 that affect the region's capacity.
Citizen comments (approximately 100), Southwest Neighborhoods, Inc.	Focus growth inside the existing UGB	The decision about whether or not to expand the UGB will be made by the Metro Council, in consultation with MPAC, in 2010. That decision will be based on the UGR's analysis and any new policies or public investments that are adopted by the end of 2010 that affect the region's capacity.

Maps 1 through 4:
Multi-family residential refill rates (historical and forecasted)



Single-family residential refill rates (historic and forecasted)

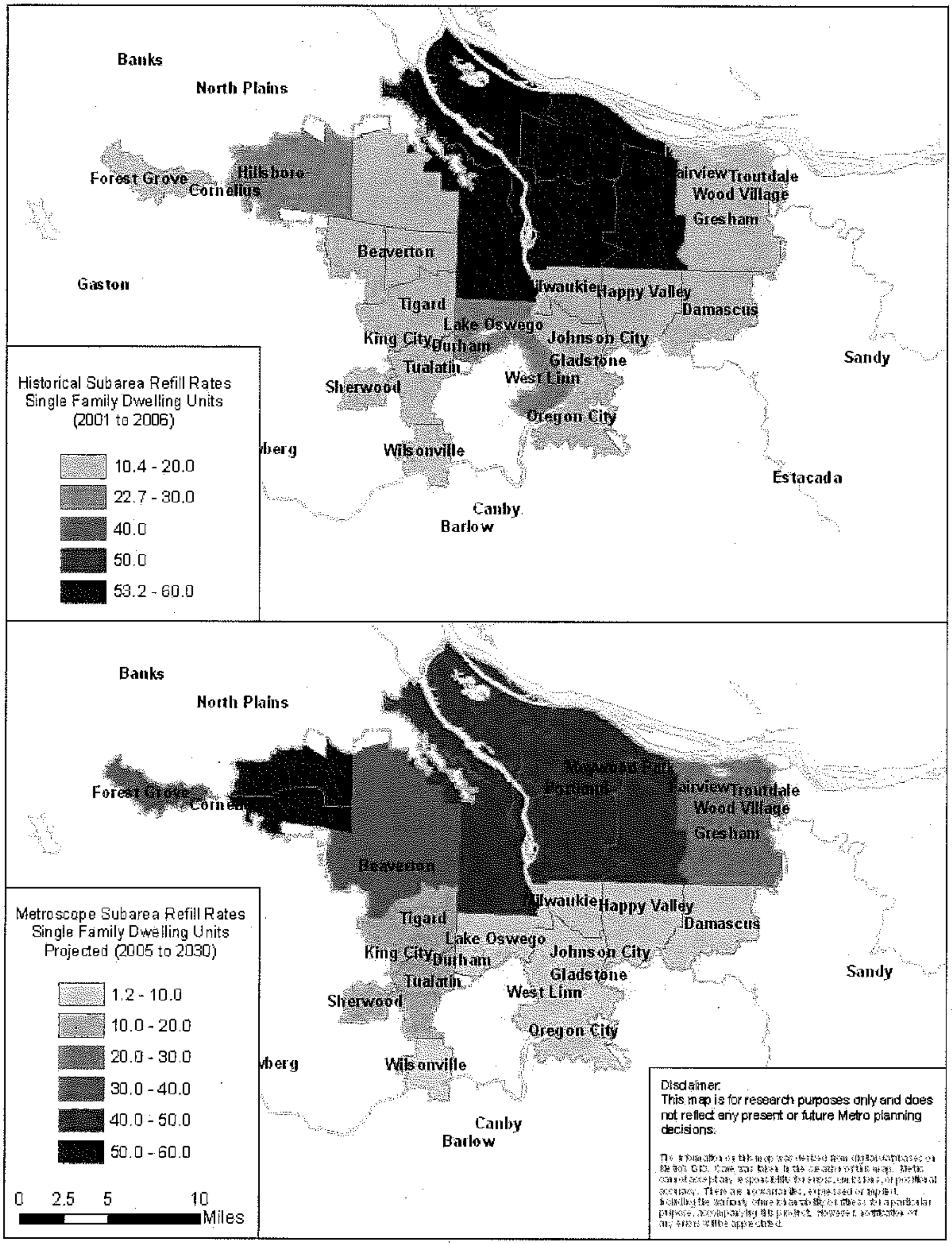


Table 1: Regional Forecast Comparison: History and 2000 UGR Forecast

Population - Portland Region (5 counties)

	Forecast	History	Difference	% Difference	commentary
2000	1,874,450	1,874,450	0	0.0%	forecast base year was 2000 Census
2001	1,902,500	1,922,984	-20,484	-1.1%	recession clouds pessimism in forecast outlook --> underforecast population growth
2002	1,934,340	1,958,976	-24,636	-1.3%	
2003	1,963,690	1,983,367	-19,677	-1.0%	
2004	2,007,710	2,003,354	4,356	0.2%	jobless recovery dampens regional up turn
2005	2,049,190	2,035,565	13,625	0.7%	
2006	2,090,960	2,075,034	15,926	0.8%	
2007	2,132,750	2,115,394	17,356	0.8%	
2008	2,170,100	2,147,260	22,840	1.1%	unforeseen recession taints trend forecast --> over forecast population growth
2009	2,203,000	2,158,115	44,885	2.1%	as steep drop in housing prices and economy depresses in-migration flows

Sources: Metro Regional Forecast: 2000-2030, Sept. 2002; U.S. Census Bureau; PSU; OFM

Employment - Portland Region (5 counties)

	Forecast	History	Difference	% Difference	commentary
2000	958,010	960,910	-2,900	-0.3%	forecast base year was 2000 BLS jobs
2001	954,750	953,750	1,000	0.1%	job growth stalls as recession hits the region
2002	951,300	932,260	19,040	2.0%	recession grips regional economy over a longer and deeper duration
2003	976,480	922,520	53,960	5.8%	--> over forecast growth during this down-cycle
2004	1,009,280	941,930	67,350	7.2%	
2005	1,043,510	971,190	72,320	7.4%	"jobless" recovery begins adding to a jobs recovery as real estate & finance bubble
2006	1,068,030	1,002,487	65,543	6.5%	spurs economic growth across the nation as growth inches towards pre-recession
2007	1,090,440	1,021,862	68,578	6.7%	growth trend
2008	1,120,200	1,022,319	97,881	9.6%	recession hits again --> over forecast jobs as growth again cycles deeper below
2009	1,144,900	N.A.			expected pre-recession employment trends

sources: Metro Regional Forecast: 2000-2030, Sept. 2000; U.S. Bureau of Labor Statistics and Oregon State Employment Division

5 counties = Multnomah, Clackamas, Washington, Yamhill and Clark

Table 2: Site choices of solar manufacturing firms in Oregon

Company	City	Acres	Using existing building?	Notes
PV Powered	Bend	9	Undetermined (appears yes)	Company founded in Bend. 100,000 square feet of building on former Oregon Woodworking site. Manufactures power inverters.
Solaicx	Portland	21	yes	
SolarWorld	Hillsboro	94	yes	Company in final stages of expansion at Hillsboro site. Moved into existing Komatsu silicon wafer facility.
Peak Sun Silicon	Millersburg	8	no	Company has option to purchase an additional 90 acres in Millersburg
XsunX	Wood Village	8.28	yes	Company first chose Oregon as a location and then began a site selection process, looking for existing buildings. The building that XsunX leases previously housed Merix, a high-tech manufacturer.
SpectraWatt	Hillsboro	20	no	Intel spinoff on Intel campus (has 20 acres). Halted construction because of a lack of investment money. Moved to New York because of public incentives.
Sanyo	Salem	20	no	
Oregon Crystal Technologies	Gresham	Less than 1	yes	In Rockwood urban renewal area – deciding between 2 existing buildings
Uni-Chem	Eugene	200	yes	Locating in old Hynix semiconductor factory, which is 1,000,000 square feet. Remainder of property is vacant.

ATTACHMENT 2

Proposed revisions and corrections to September 15, 2009 Draft Urban Growth Report

Additions to text are shown <u>underlined</u>
Deletions are shown ~~strikethrough~~

Employment analysis

Pg. 35:
Delete the final paragraph on the page.

Appendix 3, page 1:
Delete the final paragraph on the page.

Pg. 54, Table 20:
Edit the caption to read as follows:
"Table 20: ~~Net~~ New employment, square feet and acreage demand, <u>net of refill</u>, by market ring under two growth scenarios (2010 to 2030)"

Pg. 55:
Text to be revised as follows:

"Capacity demand varies by market subarea, accounting for market realities in the location decisions made by the region's employers. Based on analysis of the trends just described, <u>net of refill demand</u>, there will be ~~a need~~ <u>demand</u> for between 274 and 4,930 acres of ~~additional~~ industrial capacity and between 1,944 and 3,832 acres of ~~additional~~ non-industrial capacity within the UGB by 2030."

"Figures 14-17 show the 20-year capacity demand (net of <u>refill</u> ~~redevelopment~~ demand) by market subarea. At the low end of the population and employment forecast there is a projected flat demand for industrial jobs, commensurate with national trends showing a decline in manufacturing."

Pgs. 56-57, Figures 14-17:
Edit captions to clarify that demand is net of refill demand

Pg. 58:
Edit the first paragraph on the page as follows:

"New industrial opportunities that require large buildable lots are difficult to forecast accurately. Demand for large industrial lots (greater than 25 gross acres) is usually precipitated by one or more large employers looking for a new location for a production or warehouse facility. This is dependent on the decisions of individual firms and not the trends of an industry as a whole. Consequently, forecasts of large lot demand are inevitably uncertain. With that caveat, this analysis looks at the large lot preferences of large employers and multi-tenant business parks <u>using a forecast-based approach. Given this uncertainty, the Metro Policy Advisory Committee has recommended the consideration of additional large lot demand that supplements the demand identified through the employment forecast-based approach."</u>

Edit the final paragraph on the page as follows:

"Large-lot demand for marine and rail terminal uses is not included in this analysis. These types of facilities may have relatively few employees and little building square footage. Consequently, a job forecast may be an inadequate means of forecasting land demand for these uses. <u>This is another reason why additional large lot demand is considered as a supplement to the demand identified through the employment forecast-based approach.</u>" ~~Furthermore~~ <u>However, </u>~~t~~hese uses are extremely location specific and <u>their preferences </u>are not likely to be <u>met </u>~~accommodated~~ through UGB expansions.

Pg. 83:
Last paragraph on page to be revised as follows:

"Figures 30 and 31 depict the 5- and 20-year <u>acreage</u> ~~building square foot~~ demand range (from the 20-year forecast) for industrial and ~~commercial~~ <u>non-industrial</u> <u>employment</u> along with the previously described capacity range. <u>Large lot demand and capacity are addressed separately.</u> The demand range is illustrated with two lines that show the upper and lower end of the <u>acreage</u> ~~building square foot~~ demand forecast."

Pg. 84:
Insert the following text below figure 30:

"<u>This portion of the analysis assesses the current urban growth boundary's capacity to accommodate industrial job growth on vacant, buildable land or through refill. The assessment of demand for large, vacant lots for industrial uses is handled separately. At both ends of the employment range forecast, there is adequate capacity inside the current urban growth boundary to accommodate the next 20 years of general industrial job growth.</u>"

Pg. 85:
Insert the following text below figure 31:

"<u>Depending on the amount of non-industrial employment growth that is realized, there is demand for zero to 1,168 acres of additional capacity.</u>"

Pg. 86:
To reflect MPAC's recommendation on large lots for industrial uses, edit the heading at the top of the page to read as follows:

"Comparison of large lot supply with <u>forecast-based assessment of</u> ~~potential~~ large lot demand"

To reflect MPAC's recommendation, edit the second paragraph on the page to read as follows:

"Without any assumption about tax lot assembly, this <u>employment forecast-based</u> analysis identifies surplus capacity of 25-to-50-acre lots, but a potential deficit of tax lots over 50 acres and lots over 100 acres (under both the high and low growth forecasts), as shown in Table 32."

To reflect MPAC's recommendation, add the following section to the end of the page:

"**Policy basis for considering an expanded range of large lot demand**
The forecast-based assessment of large lot demand provides policy makers with an initial range of potential demand to consider. However, as noted, assessing future large lot demand with a job forecast-based approach has limitations. There are legitimate policy reasons to consider a wider range of demand for large lots, using the initial forecast-based approach for a sense of scale. Doing so gives policy makers the flexibility to weigh the risks and benefits of providing too much or too little large lot capacity.

There is inherent uncertainty in forecasting employment in large, traded-sector firms, which may consider several cities, regions, states or countries when choosing a site. These firms can have economic multiplier effects, bringing wealth into the region and leading to spinoff firms and employment. A few cities in the region have identified large lot users (particularly high-tech manufacturers) as a primary focus of their economic development plans. The range of large lots that will be in demand over the next 20 years will be the product of a number of factors that are impossible to forecast, including:

- Decisions of individual firms that participate in a global marketplace; and
- The political will of cities, the region, and the State (both here and in other regions) to implement economic development strategies.

The forecast-based analysis also assumes that preferences for large lots will remain largely the same in the future as they are today. There are at least two countervailing trends that indicate preferences may change, particularly for industrial, warehouse, and distribution uses. The direction and degree of change is open to interpretation:

- Rising land prices may lead to more efficient use of land, thereby increasing the number of employees per acre; and
- The substitution of machinery and robotics for human labor may reduce the number of employees per acre.

An employment forecast-based approach may also have shortcomings for estimating land demand for rail, air and marine terminal uses. These uses are critical to the health of the region's economy. Freight terminal uses can require relatively large areas of land, but do not necessarily require high employment densities. Consequently, demand for these uses may not be adequately accounted for using an employment forecast alone.

No amount of technical analysis can provide a completely precise assessment of future large lot demand. Thus, the Metro Policy Advisory Committee has expressed a desire to have flexibility in the region's plans to attract and retain potential traded-sector employment growth. Due to the limitations of further technical analysis, the expansion of the potential range of large lot demand is being done on a policy basis rather than through technical analysis. This expansion of the range is consistent with the guidance offered by Oregon Administrative Rule 660-024-0040, which states that: *"the 20-year need determinations are estimates which, although based on the best available information and methodologies, should not be held to an unreasonably high level of precision."*

When the forecast-based analysis and policy considerations are taken into account, as recommended by the Metro Policy Advisory Committee, the total 20-year demand for additional capacity in large lot configurations is between 200 and 1,500 acres. Within this range, there is a need for policy flexibility in determining the sizes and locations of large lots to provide, so this final analysis does not specify those characteristics."

Residential analysis

Pg. 114:

Insert a map of the residential buildable land inventory.

Pages 115-117

Edit the section on parks as follows:

"**Parks:** To calculate the UGB's capacity for residential growth, this urban growth report deducts the amount of vacant land inside the UGB that may be used for future parks (effectively, this amount of land is not available for residential development). This calculation only includes future parks that are intended for active uses, such as ball fields or playgrounds. Habitat or natural areas are not included since they are already deducted from the vacant land inventory.

There are several possible ways to calculate the number of acres that may be used for future parks. ~~One approach would be to use a level of service standard for parks. However, an agreed upon regional standard does not exist. Since no alternative approach has been suggested,~~ This urban growth report builds on ~~uses~~ the ~~same~~ methodology that was used for the 2002 report. That ~~This~~ methodology was recommended by MPAC in 2002 and was based on estimated park land acquisition revenues~~, based on~~ from system development charges (SDCs).

To inform the analysis in this report, current park SDC rates were inventoried for each city in the region. (Information may be found in Appendix 6.) Most of the local governments that levied parks SDCs in 2002 have increased their rates. In addition, two cities, King City and Rivergrove, have started levying parks SDCs since 2002. Also, a few local governments are currently employing a system whereby different fees are levied in different locations.

The 2002 urban growth report estimated that 1,100 acres of vacant land inside the UGB would be used for future parks. Like other possible approaches to estimating future park acreage inside the UGB, this SDC approach has its limitations and should be taken as a reasonable estimate rather than a precise accounting. Due to these limitations (summarized below), the updated inventory of park SDC rates does not provide a compelling reason to substantially alter ~~change~~ this assumption:

- Each city will respond to residential growth in different ways. For instance, some cities may not have much vacant land left for parks, but will use SDC revenues to make capital improvements to existing parks.
- Different cities will witness different amounts of residential growth. A local government with high parks SDCs may not see a lot of growth over the next 20 years, while a local government with low SDC rates may see tremendous growth, or vice versa.
- While a majority of local governments around the region have increased their parks SDCs over the last several years, this does not mean that there is additional money for land acquisition.
    - It is likely that the increased rates are an attempt to more fully recuperate land acquisition or capital improvement costs and that updated SDC rates still do not cover all costs.

    - The cost of flat, vacant land will continue to increase. SDC revenues will not necessarily keep pace with land values.
- Funding for parks is and probably will continue to be limited. Metro's 2008 *Regional Infrastructure Analysis* found that the cost and availability of land is one of the biggest challenges in providing sufficient parks to accommodate future growth.
- A line item in an urban growth report for parks will not necessarily result in parks for citizens to enjoy. The effect is simply that the vacant land supply assumption is reduced, increasing the potential need for UGB expansions. A UGB expansion will not address park needs in existing urban areas, which are likely to see substantial growth.
    - There is a Major UGB Amendment process that can be initiated by local jurisdictions to bring land into the UGB for park needs that are not anticipated in cyclical legislative UGB expansions (as contemplated in the context of this report). The Major Amendment Process may be a more appropriate means of addressing specific park needs that can be accommodated through UGB expansions.

Limited funding and limited vacant land in urban locations point to a need for creative and collaborative solutions that help ensure the future provision of parks throughout the region:

- Efficient use of existing land and infrastructure by taking advantage of power line easements or the space around reservoirs and water towers. For example, Tualatin Hills Park and Recreation District utilizes existing Bonneville Power Administration rights of way to operate parks and trails.
- Collaboration between multiple districts or other local governments. Sunnyside Village Green Park is a collaborative effort between North Clackamas Parks and Recreation District and Clackamas County's Water Environment Services Department that combines park facilities with stormwater management infrastructure.
- The Trust for Public Land's 2009 article on "shoehorn parks" recognizes that school facilities can be leveraged to create park capacity, but doing so requires great collaboration and commitment to success from park districts and the school system (Harnik, 2009). Popular events like Portland's Sunday Parkways demonstrate that streets can serve as temporary park space.

To maintain an approach that is consistent with the one recommended by MPAC in 2002, an implied parks level of service was calculated as follows:

The 2002 Urban Growth Report forecasted growth of 220,700 dwelling units over the 20 year period and identified that 1,100 acres should be deducted from the vacant land supply for future parks for the same time period. The implied level of service was 1,100 park acres for 220,700 new dwelling units. The current Urban Growth Report forecasts 262,400 new dwelling units in the UGB over the next 20 years (baseline assumption). Applying the same implied level of service standard as used in 2002 (1,100 /220,700 * 262,400) results in a deduction of 1,300 acres from the region's vacant land supply to address future park demand."

Appendix 6, page 11

Edit the final paragraph on the page to read as follows:

"The 2002 urban growth report estimated that 1,100 acres of vacant land inside the UGB would be demanded ~~used~~ for future parks. Like other possible approaches to estimating future park acreage demand inside the UGB, this SDC approach has its limitations and should be taken as a reasonable estimate rather than a precise accounting. Due to these limitations (summarized below), the updated inventory of park SDC rates does not provide a compelling reason to substantially alter ~~change~~ this assumption:"

Add the following text:

"To maintain an approach that is consistent with the one recommended by MPAC in 2002, an implied parks level of service was calculated as follows:

The 2002 Urban Growth Report forecasted growth of 220,700 dwelling units over the 20 year period and identified that 1,100 acres should be deducted from the vacant land supply for future parks for the same time period. The implied level of service was 1,100 park acres for 220,700 new dwelling units. The current Urban Growth Report forecasts 262,400 new dwelling units in the UGB over the next 20 years (baseline assumption). Applying the same implied level of service standard as used in 2002 (1,100 /220,700 * 262,400) results in a deduction of 1,300 acres from the region's vacant land supply to address future park demand."

Pg. 127:
Correct the residential supply range on the bottom of the page such that the expected supply is 196,900 dwelling units and the potential supply is 356,800 dwelling units. This correction is necessary because of the revised estimate of future parks acreage demand and to correct calculation errors.

Appendix 6, page 2:

Replace the table with the following. This table contains changes that are necessary because of the revised future parks acreage estimate and to correct calculation errors.

2009 to 2030 Urban Growth Report (UGR)

Residential Dwelling Capacity Range Assessment

December 2009

Line No.		Residential DEMAND Assumption: Low	Baseline	High	
	Residential Demand Estimates (in Dwelling Units)				
1a/	7-County Population Forecast (2007 to 2030)	728,200	875,000	1,024,400	
1b/	7-County Household Forecast (2007 to 2030)	348,600	408,300	469,100	
2/	**Capture 61.8% of 7-County Forecast in Metro UGB**	**215,400**	**252,300**	**289,900**	
3/	plus: 4% vacancy rate (source: 2000 Census)	8,600	10,100	11,600	
4/	**Dwelling Unit Demand in the Metro UGB:**	**224,000**	**262,400**	**301,500**	
		Residential SUPPLY Assumptions			
	July 2007 Vacant Land Inventory (Metro UGB):		**BASELINE**		
5/	**Gross Vacant Land in current Metro UGB**		**44,800**		
6/	less: Local Water Quality, floodways and Habitat Protection areas (ENV)		8,600		
7/	**Gross Vacant Buildable Acres in Metro UGB (GVBA)**		**36,200**		
8/	less: Fed., State, Municipal exempt land (actual count)		3,200		
9/	less: Acres of Platted Single Family Lots (actual count)		1,300		A
10/	less: Acres for Future Places of Worship and Social Org. (actual = 600 acres)		700		C
11/	less: Major Easements (Natural Gas, Electric & Petroleum) (actual count)		1,000		R
12/	less: Acres for Future Streets (0%, 10%, 18.5%)		4,900		E
13/	less: Acres for New Schools (H=45, M=55, E=70; actual = 1,000 acres)		1,000		S
14/	less: Acres for New Parks (based on SDC fees)		1,300		
15/	less: New Urban Areas (actual net of ENV, future streeets and dev. land)		7,900		
16/	**Net Vacant Buildable Acres (NVBA) - total**		**14,800**		
	Net Vacant Buildable Acres (NVBA) by Type (less New Urban Areas):		**Metro UGB**		
17a/	Net Vacant Buildable Acres - Mixed Use Residential (MUR)		1,000		
17b/	Net Vacant Buildable Acres - Residential		6,300		
		Residential CAPACITY Assumption: Low	Baseline	High	
	Residential Housing Supply Assessment - Metro UGB				
18/	**Dwelling Unit Capacity of Vacant Land at Local Zoning (or Plan) - 2008 Q3**	**62,500**	**62,500**	**62,500**	
18a/	less: High-density MFR products not market feasible within next 20 years	(18,400)	(18,400)		
19/	add: Res. Development in vac. Mixed Use Districts (MUR)	28,600	28,600	28,600	
20/	less: Capacity Lost to SFR Underbuild @ 5%	(2,200)	(2,200)	(2,200)	
21a/	add: Res. Development Capacity on ENV land (no. taxlots wholly in Title 3)	100	100	100	
21b/	add: Res. Development Capacity on Title 13 areas (80% of zoned capacity)	19,300	19,300	19,300	U
22/	add: Units from Platted Single Family Lots under 3/8 acre (actual count)	8,800	8,800	8,800	N
23/	add: Units from Residential Refill @ 33%	73,900	86,600	99,500	I
23a/	add: Units from Residential Refill @ 40% (addition of 7% more)			21,100	T
23b/	add: Potential Units from *Subsidized* Residential Refill			71,100	S
24/	add: Estimated Capacity from New Urban Areas	48,000	48,000	48,000	
25/	less: New Urban Development not yet market feasible	(24,000)	(24,000)		
26/	**Subtotal: Dwelling Unit Capacity Supply Range**	**196,600**	**209,300**	**356,800**	
		Low Supply - High Demand		**Low Demand - High Supply**	
27/	**Full range of difference between capacity and demand (dwelling units):**	(104,900)	(53,100)	**132,800**	
		Low Supply- Low Demand		**Low Supply- High Demand**	
28/	**UGR assessment of difference between capacity and supply (dwelling units)**	(27,400)		(104,900)	

Pg. 128:
Insert the following text after the second-to-last paragraph on the page:

"Through the year 2030, counting only the "solid" capacity, there is demand for additional capacity to accommodate between 27,400 to 104,900 households."

Appendix 7, pg. 3:
Revise the table to include median household income levels for the eight household types. Include this information throughout the appendix.

Appendix 8, pg. 8:
Edit the text to read as follows:
"Figure~~s~~ 4.1AB ~~and C~~ shows the region's residential capacity by generalized zoning. Figure 4.1AB depicts the gross buildable acres of ~~residential~~ land by "vacant" and "partially vacant" categories."

Appendix 8, pg. 8:
Insert the following table and notes:

Table 4.1AB: Gross vacant and partially vacant acres inside the UGB by zoning class (year 2007)

Zone Class	Fully Vacant Tax lot Acres	Partially Vacant Tax Lot Acres	Total Vacant Acres
CC	21	24	45
CG	349	195	543
CN	28	34	62
CO	89	51	140
FF	2,788	3,570	6,358
IH	768	1,066	1,834
IL	2,415	2,386	4,801
MFR1	41	95	135
MFR2	168	174	341
MFR3	116	144	260
MFR4	95	96	191
MFR5	9	32	41
MFR6	1		1
MFR7	73	51	124
MU	2	0	2
MUE	1,114	1,371	2,485
MUR1	79	35	114
MUR10	105	66	170
MUR2	120	160	279
MUR3	24	21	45
MUR4	141	150	291
MUR5	177	71	249
MUR6	21	9	31
MUR7	200	87	286
MUR8	128	146	275
MUR9	110	97	207
PF	54	246	299
POS	274	349	622
RRFU	4,130	7,253	11,383
SFR1	47	61	108
SFR10	40	46	86
SFR11	41	16	57
SFR12	77	74	152
SFR14	44	8	52
SFR15	26	44	71

SFR2	778	884	1,662
SFR3	36	41	77
SFR4	1,463	1,663	3,126
SFR5	1,032	1,045	2,077
SFR6	1,043	1,470	2,513
SFR7	407	331	739
SFR8	21	34	55
SFR9	164	378	541
Total	**18,859**	**24,073**	**42,932**

Note: Acreages reported in this table differ somewhat from the acres reported in the UGR because of differences in how public rights of way, public lands, etc. are accounted for.

Appendix 8, pg. 8:

Delete references to Table 4.1C. Data for Table 4.1C has been consolidated to appear in table 4.1AB.

Appendix 8, pg. 10:
Insert the following table and notes:

Table 5.1: Metro UGB historical land use consumption in acres: 2002-2007

Year	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Developed land	201,336	203,145	204,456	205,894	209,419	210,582
Vacant land	52,514	50,705	51,151	49,727	46,235	45,076
Total	*253,849*	*253,850*	*255,607*	*255,621*	*255,654*	*255,658*
Vacant land detail	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Residential vacant	16,488	15,617	14,944	13,672	12,307	12,099
Nonresidential vacant	12,047	11,679	11,865	9,764	8,881	8,485
Open space, rural, parks	16,560	16,290	17,303	15,362	15,610	15,307
Total gross buildable acres	*45,095*	*43,586*	*44,112*	*38,798*	*36,797*	*35,891*
Constrained land	7,419	7,118	7,039	10,929	9,437	9,185
Total vacant land	*52,514*	*50,705*	*51,151*	*49,727*	*46,235*	*45,076*

Notes:

- *Acreages reported in this table differ somewhat from the acres reported in the UGR because of differences in how public rights of way, public lands, etc. are accounted for.*
- *For years 2005 - 2007: res = MFR, MUR, SFR; non-res = COM, IND, MUE; other = PF, POS, RUR. Except: no PF in 2005*
- *For years 2002 - 2004: res = MFR, SFR; non-res = COM, IND, MUC; other = POS, RUR*
- *For years 2002 - 2005: PF are part of COM*
- *Constrained land for years 2005 - 2007 is based on the constrained land analysis completed for the 2009 UGR and includes Title 3 and Title 13 land*
- *Constrained land for years 2002 - 2004 is based on Title 3 land only*

Appendix 8, pg. 20:
Insert the following sentence in first paragraph:

"All dollar amounts are expressed in 2005 dollars."

Appendix 8, pgs. 20 and 21:
Correct tables 303.1a and 303.1b to reflect potential demand for government assistance at more price levels. Corrected tables to appear as follows:

Figure 303.1a: owner-occupied dwelling units by price (2005$) and housing type (2005 and 2030)

Owner-occupied dwelling units							
	Total dwelling units			**Detached Housing**		**Attached Housing**	
Approx. dwelling value	Year 2005	Year 2030	Difference in dwelling units 2005 to 2030)	Single-family and manufactured units	Manufactured units in parks	Single family units	Apartments, townhouses, condos
< $150,000	30,259	44,411	14,152	A	A	A	A
$150,000 - $200,000	27,191	26,954	(237)	A	A	A	A
$200,000 - $250,000	31,796	15,301	(16,495)	MRKT	MRKT	MRKT	MRKT
$250,000 - $300,000	21,442	30,657	9,215	MRKT	MRKT	MRKT	MRKT
$300,000 - $400,000	44,089	41,522	(2,566)	MRKT	MRKT	MRKT	MRKT
$400,000 - $500,000	49,363	52,167	2,804	MRKT	MRKT	MRKT	MRKT
$500,000 - $750,000	58,184	107,613	49,429	MRKT	MRKT	MRKT	MRKT
> $750,000	96,294	265,820	169,527	MRKT	MRKT	MRKT	MRKT
Total Units	358,617	584,445	225,828	116,848	*	*	108,980

Figure 303.1b: renter-occupied dwelling units by price (2005$) and housing type (2005 and 2030)

Renter-occupied dwelling units							
	Total dwelling units			Detached Housing		Attached Housing	
Approx. monthly rent	Year 2005	Year 2030	Difference in dwelling	Single-family and manufactured	Manufactured units in parks	Single family units	Apartments, townhouses, condos
< $400	43,167	19,195	(23,972)	A	A	A	A
$400 - $475	18,967	31,926	12,958	A	A	A	A
$475 - $550	25,514	25,812	298	A	A	A	A
$550 - $625	27,479	24,531	(2,948)	A	A	A	A
$625 - $750	24,854	38,485	13,630	A	A	A	A
$750 - $900	34,359	43,000	8,641	A	A	A	A
$900 - $1,100	13,315	40,881	27,566	A	A	A	A
> $1,100	26,038	64,724	38,686	MRKT	MRKT	MRKT	MRKT
Total Units	213,693	288,554	74,861	1,676	*	*	73,185

Appendix 8, pgs. 20 and 21:
Edit note that accompanies tables 303.1a and 303.1b to read as follows:

"A" denotes housing that would be partially assisted, given the dwelling unit value. <u>It is a question for policy makers how many of these units will receive government assistance. As of November 2007, 10,608 households in the tri-county area received Section 8 vouchers.</u>

Pgs. 133 and 135:
Correct data labels on pie charts (charts for high growth erroneously show the same percentages as low growth).

Pg. 151:
Under "policy choices," insert the following additional policy option:

<u>"Expansion of housing voucher programs could increase housing choices for more households."</u>

Pg. 153:
Edit the first paragraph of the "future cost burden" section as follows:

"If we continue with current policy and investment direction, the number of cost-burdened households could double by the year 2030. In the year 2005, there were approximately 94,000 cost-burdened households inside the Metro UGB (about 16 percent of <u>all</u> households in <u>the</u> Metro region<u> or about 43 percent of renter households</u>). By the year 2030, if current trends and policies continue, between 17 to 23 percent of <u>all</u> ~~the~~ households inside the Metro region <u>or 51 to 69 percent of renter households</u> could be described as cost-burdened. If the high end of the population range forecast is reached by the year 2030 and new policies and investments are not pursued, the number of cost-burdened households may more than double, totaling 200,000 households."

Pg. 154:
Correct the number of cost burdened households in the year 2005 (92,060).

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ATTACHMENT 3

Metro | *Memo*

Date:	November 24, 2009
To:	Malu Wilkinson, urban growth report project manager
From:	Dennis Yee, Metro Chief Economist
Re:	Technical Reviews Conducted to Validate Metro's Regional Macro-economic modeling and forecasting

Background

Leading up to Metro's periodic assessment of the urban growth boundary's capacity to accommodate residential and employment growth, three separate review panels were formed at various times to assist Metro in the validation of its economic/demographic modeling and forecasting methods and to analyze forecast results. The population and economic trends of the Portland-Beaverton-Vancouver PMSA region were examined by these review panels. Each panel validated Metro's overall modeling and forecasting methods and was asked to look closely at a certain aspect of the modeling and forecasting methodology. The panels' independent expertise was utilized to review and recommend improvements.

Review Panel One *(National review panel convened to validate forecast theory and practice)*

The first review panel was convened in 2006 – mainly to review the forecast methodology, analyze the technical efficiency of econometric equations and model specifications and to review the soundness of Metro's proposed probabilistic population forecast approach [i.e., range forecast methodology] and range / risk forecasting and analysis.

<u>Composition of review panel one</u>

- Dr. Lawrence Carter, University of Oregon – expert in demographic forecasting
- Dr. George Hough, Portland State University – director of center for population research and census
- Dr. Tom Potiowsky – State Economist, Oregon
- Dr. Marshall Vest – director of Economic and Business Research Center, Professor of Economics, University of Arizona
- Dr. Mary Allender, University of Portland – Assoc. Professor of Economics and Statistics
- Dr. Tim McDaniels, University of British Columbia – environmental policy, decision making & risk management

<u>Summary remarks and conclusions of review panel one</u>

1. The panel was asked to review and then validate Metro's economic and demographic forecast methodology and confirm the correctness of using a range forecast approach.

- Panel members unanimously agreed that a range forecast is the preferred approach in helping decision makers with managing an uncertain economic future and providing leeway for managing forecast risk especially in the extreme long-run as is the case in Metro's management of the urban growth boundary. The nature of Metro's decision making should, according to the panel, rely upon an economic model that utilizes a structural approach for forecasting growth trends, and also permits analysts to run scenarios and test policy sensitivities to various land use, economic or transportation policy variables. Metro's modeling framework according to the panel is well suited for the type of analytical applications employed by Metro.

2. Upon confirming the general approach of the Metro economic model, the panel turned to analyzing and validating the individual structures of the economic model and its efficacy for Metro planning and policy analysis purposes.
   - Panel members reviewed the technical specifications of each economic equation, variable and statistical efficiency and soundness of the equations. They determined that the Metro economic model represented the current practice of modeling regional economies and employed state of the art theories and practices.
   - They found the use of the inter-industry demand variables which capture the input-output relationships between regional industries to be a unique and innovative approach that should improve forecasting accuracies and represent well the possibilities of testing policy sensitivity on industry employment changes.
   - The panel analyzed the linkages between regional job growth and national job trends. Staff explained that the econometric equations were developed to maximize the information that national forecasts would reveal in regional growth and that Metro utilized as national forecast drivers the projections produced by IHS Global Insight, Inc., a nationally recognized firm. Panel members did not believe we could necessarily do any better assuming forecast drivers from other vendors. In fact both, Oregon and Arizona forecasters utilize to a high degree products produced by Global Insight.

3. Certify the overall fitness of the Metro economic model for its use in projecting population and employment growth for the Portland-Beaverton-Vancouver, OR-WA PMSA.
   - The panel reviewed the soundness of the model by comparing the job multipliers[3] reported by Metro's econometric model and those of other known models for other regions in the U.S. The regional model passed all the battery of usual econometric and statistical tests for goodness of fit.

[3] Multipliers summarize and describe the internal properties and workings of the model –they are one of many diagnostic tools. Exceedingly large multipliers would cause the model to exhibit unstable properties and explosive non-convergence, which would tend to invalidate the model. None of the employment multipliers in the short or long-run displayed a significant problem.

Review Panel Two *(Statewide review panel convened to validate the 50-year range forecast and assumptions)*

In May 2008, Metro forecasters developed a 50-year regional forecast and implemented the recommendations from the first panel to utilize probabilistic population forecasting techniques and to produce a range forecast. Statewide professionals who were more familiar with Oregon and in particular Portland's economy were called together to discuss their views and analyze the 50-year forecast outlook for the Metro region. In front of an audience of 200 interested stakeholders, these two moderated panels discussed the merits of the range forecast (per the recommendation of the first panel) and validated the soundness of Metro's modeling and assumptions with the objective of certifying the reasonableness of a 50-year population and employment outlook. One panel also discussed the long-range demographic, economic, climate, energy and land use trends that could emerge during the forecast period to influence regional population, employment and land use.

<u>Composition of review panel two</u>

Panel discussion exploring long-range issues and trends that influence regional population, economy and land use

Moderated by Duncan Wyse, President of Oregon Business Council

- Eric Hovee, Principal at ED Hovee & Co., LLC
- Joe Cortright, President of Impressa LLC
- Mike Martens, Director of Spatial Analysis, EcoTrust
- Dr. Bruce Weber, Prof. of Agriculture and Resource Economics, Oregon State University

Expert panel to present and discuss results from different forecasting methods and to provide perspectives through a moderated discussion.

- Dr. Kanhaiya Vaidya – Senior State Demographer, Oregon Office of Economic Analysis
- Art Ayre – State Labor Economist, Oregon Employment Department
- Terry Morlan – Director of Planning, Northwest Power & Conservation Council
- Dennis Yee – Chief Economist, Metro

<u>Summary remarks and conclusions of review panel two</u>

1. Among the topics discussed were: aging population and its impact on future housing demand; economic growth and what could be drivers for the next wave of growth and innovation in the state; climate change and its impact on migration in the US; climate change and Oregon's emphasis on "green development"; and the future makeup of the Willamette Valley's agricultural economy in light of urban development pressures.
    - Although the panelists raised interesting issues that would likely confront the Portland region and impact Portland area population and economic projections, it was plain from the tenor of the discussion that these highly informed commentators had a sense of the risks to the regional forecast, but it was unclear as to how these "mega-trends" would ultimately impact the forecast in a quantifiable fashion.
    - Panelists concluded that these "mega-trends" can impact the forecast and impose significant uncertainty and risk to a forecast. The appropriate response to this very uncertain future is to use a range forecast that affords a high degree of planning flexibility.

2. The chief objective of the afternoon review panel was to gather input and comments about how "mega-trends" may eventually feed through to impact regional long-term growth. Each of the panel members are forecast practitioners who have had significant experience in forecasting growth in Oregon. The panel was charged with reviewing the implementation and results of Metro's 50-year regional range forecast.
    - The state demographer confirmed that the state and Metro employ similar cohort-component models for forecast long-run population trends. There are differences in key assumptions, but they owe to variations between state-level demographics vs. Metro demographics which tend to more urban conditions that impact fertility and mortality rate assumptions.
    - The state labor economist prepares county-level employment estimates. Although no two forecasts are necessarily alike, he concluded that the underlying assumptions are consistent between the Metro model vs. the state's county-level economic model. Growth rates in Metro's base case scenario and the state's forecasts were highly comparable (the state does not produce a range forecast so only base case numbers could be compared).
    - The NW Power Planning Council utilizes sophisticated forecast simulation software. This software is capable of generating a multitude of scenarios which are combined to form a "solution space" or "forecast envelope" (i.e., range forecast). The forecast director for the Power Planning Council echoed numerous times the importance of risk planning and the need for economic and demographic forecasts to recognize uncertainty in its growth trends. Although Metro uses a different software approach in formulating its forecast ranges, there was agreement that "range forecasting" is the appropriate means to project long-term regional growth.

Review panel three *(Local review panel convened to validate the 20-year range forecast and regional growth assumptions which could impact the economy, population and land use trends)*
A third panel was formed in 2009 to review the 20-year regional forecast that became the basis for the urban growth report for housing and employment. This panel's chief responsibility was to validate the 20-year range forecast and to identify any regional trends that didn't comport with national trends. This panel was composed of local practitioners, forecasters, consultants and stakeholders who rely on the forecast for municipal planning purposes.

Composition of review panel three

- Steve Kelley, Senior Planner, Washington County
- Scott Drumm, Manager, Research & Market Information, Port of Portland
- Eric Hovee, Principal at ED Hovee & Co., LLC
- Scott Bailey, Washington State Economist, Vancouver area focus
- Brendan Buckley, Johnson-Reid LLC
- Uma Krishnan, City of Portland Demographer
- Todd Chase, FCS group LLC

Summary remarks and conclusions of review panel three

1. Review appropriateness of range forecast methodology
   - The panel agreed that due to forecast uncertainty and the degree of risk going into the future, a "range forecast" was more preferable than a "point forecast". Planning flexibility was an oft-cited reason in favor of proceeding with a range forecast.

2. Discuss reasonableness of the "width of the range forecast"
   - The panel did not spend much effort reviewing the variance assumptions that comprise the range, but generally believed that using historical variances as a surrogate for future forecast variances was a satisfactory means of estimating future ranges. The ranges were estimated using "monte carlo" simulation software such that a 90% cumulative distribution function was defined as the forecast range for population. Overall, total employment and population "widths" for the forecast range seemed statistically appropriate, but some disagreement arose when discussion turned to individual industry projections for employment. (see next bullet)

3. Review soundness of forecast outlook
   - There was minimal concern that the annualized growth rates for both population and employment projections for the region were slower than at any recent historical experience except for decade of the 80's which saw growth plummet due to the recession. It was explained that in the last 30 years, the Portland region is now (over 2 million people) twice its former size. Even with lower predicted growth rates (1.4% APR), growth compounding each year the region is expected to again nearly double in size during the next 30 years.
   - The debate on the regional forecast centered mostly around selected industries and, in particular, the potential for some emerging industry(s) to erupt with significant job growth and, with that job trend, bring large firms that could anchor growth in that particular industry for decades to come. The debate circled around how much faster can we reasonably predict job growth in one industry to outpace the U.S. average or U.S. forecast. The Metro forecast already assumes (as a placeholder) the high tech sector in the region to be a sector that we predict to be a "high-flyer" in manufacturing. (Most other Metro manufacturing sectors are projected to perform slightly better over the forecast period than the U.S. projected average, but high-tech has been singled out to be an above average growth sector.) [Please see Metro Regional Forecast Employment appendix that compares the US forecast against the Metro forecast.] The debate boils down to a matter of degree about how much faster high tech in the region will likely outpace nationwide trends. Metro believes that its forecasting is sound and based on statistically valid relationships modeled between the regional economy and the U.S. A minority of the panel members disagreed, believing that anecdotal interviews and ad hoc evidence point to significantly faster economic growth.

4. Discuss impact land supply has on regional growth projections
    - Land supply is not presently an explicit explanatory variable in the regional macro-economic model. In the past, there was no statistical evidence that showed land supply as a sticking point to economic growth. However, in the past, vacant land was not as scarce as it is today for urban style development purposes. Land has not been a limiting factor in the past, so it's not surprising that Metro's statistical modeling would not reveal any tangible correlation.
    - Recently, practical measurements of land supply indicate much less available land than previous measures have shown. Members agreed that land is a factor input into production and a key ingredient in promoting economic development. Still, there has been scant statistical evidence that we can draw upon to embed a land and capital substitution parameter into the econometric model that would stand up to statistical inquiry. On the other hand, there is mounting conjectural evidence that large tracts of inexpensive land can be a motivating factor to attracting large scale manufacturing plants to a particular region.
    - Technological innovation and comparative manufacturing advantages may make this point moot in the distant future, but again the panel could not settle on a conclusion. This issue is still unresolved and to be determined in future forecasts.

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Recommended bibliographic listing:
ULI–the Urban Land Institute and PricewaterhouseCoopers LLP. *Emerging Trends in Real Estate® 2010*. Washington, D.C.: ULI–the Urban Land Institute, 2009.

ULI Catalog Number: E38
ISBN: 978-0-87420-138-3

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Executive Summary

After more than a year spent in suspended animation lagging already shattered housing markets, the commercial real estate industry hits bottom in 2010, suffering a surge of painful writedowns, defaults, and workouts. Massive government infusions finally build up loss reserves in financial institutions to levels allowing them to foreclose or strike deals with many overleveraged borrowers. In turn, banks will start to dispose of real estate owned, and government regulators will package and sell more bad loans and real estate assets acquired in takeovers of increasing numbers of failed community and regional banks. Transaction markets will begin to thaw and value declines ultimately will average more than 40 percent off mid-2007 pricing peaks. These property market reversals likely will be the worst registered since the Great Depression, eclipsing the industry debacle of the early 1990s.

In a classic timing play, investors with cash should be poised to take advantage of highly attractive buying opportunities at cyclical lows. Stressed owners, meanwhile, gird to hold on if possible and try to maximize property cash flows by focusing on asset management and leasing strategies in a decidedly tenants' market. *Emerging Trends* surveys indicate that 2010 will be the worst time for investors to sell properties in the report's 30-year history, but will offer a much-improving environment to buy (with cash).

Debt markets will remain severely compromised—resuscitated banks will increase lending slowly, employing strict underwriting standards and requiring significant equity stakes from borrowers. Moribund CMBS markets remain entangled in complex workouts of failed multitranched structures with mounting levels of troubled loans maturing through 2015. Restoring confidence in a revamped CMBS model becomes a major priority for the government and financial industry, but a quick fix is unlikely.

A lackluster economic recovery characterized by problematic job growth will hamper the pace of any real estate market resurgence, which probably cannot gain much traction until late 2011 or 2012. In the meantime, rents and occupancies will continue to fall well into 2010, savaging the prospects of weakened owners struggling with financing issues.

Retail and office properties take the biggest hits—debt-burdened consumers continue to rein in shopping and companies delay rehiring while looking to shave occupancy costs and improve productivity.

Once hiring increases, apartments should rebound more quickly than other sectors thanks to pent-up demand from the expanding population of young adults—20-somethings get tired of living with parents and doubling or even tripling up with roommates.

The pummeled hotel sector also can benefit quickly once businesses start to loosen travel budgets.

First-to-hit-bottom housing markets stabilize further, despite more foreclosures, and show modest improvement in some areas as homebuyers look for generational deals. But restrained mortgage lenders and cash-poor purchasers limit the scope of any rebound.

Developers go on enforced holidays. Commercial property sectors generally avoided overbuilding, but slack demand pushes up vacancies and many new projects can't hope to meet leasing projections or debt-service obligations. Values sink well below replacement cost and any construction loans will be extremely expensive to negotiate. Development doesn't pencil out when investors can buy existing real estate in the bargain basement.

Metro market prospects decline from coast to coast, but investors expect the nation's premier 24-hour gateway cities to weather the ongoing turmoil better and recover more quickly than most interior locations and secondary cities. Value losses will be mitigated somewhat in the top-tier markets as institutional and foreign buyers look to acquire prime assets, keeping prices from free fall—cap rates in these cities rise close to or above historic norms from unsustainably low levels.

"Recession-proof" Washington, D.C., regains the survey's top position, but San Francisco, Boston, and New York maintain reasonably positive long-term outlooks despite carnage to key employers, especially in the financial industry. Other California markets, including Los Angeles and San Diego, lose some luster over concerns about government budget deficits, high costs, and increasing tax burdens. Texas metropolitan areas gain in relative standing—interviewees like their business-friendly environments and sustained population growth, and housing prices avoided sharp swings. Florida markets and Southwest desert citadels—Phoenix and Las Vegas—take it on the chin from housing meltdowns and condo/resort overbuilding. Sadly, ratings drop to new lows for many cities in the country's manufacturing belt—auto manufacturer woes amount to piling on.

Canada's "boring" real estate markets elude direct impacts of the U.S. credit market collapse, but can't escape fallout from lowered demand and global recession. Conservative banking practices and stricter regulation kept lending in better check and most investors were saved from overleveraging. Only hot-growth Calgary looks overbuilt—other major cities suffer rising vacancies and flattening rents, but sidestep significant distress. Total value losses will be manageable—10 to 20 percent off highs. Markets should enter a slow recovery phase by year-end 2010, but interviewees see better investment opportunities eventually in top U.S. and European cities, which could rebound more sharply after steeper declines. In the meantime, Canadians worry about suffering more economic shocks, if their primary trading partner south of the border can't get its financial house in order more quickly.

Latin American investment opportunities center on Brazil, a rising global economic power. Mexico's fortunes decline in lockstep with its U.S.-centric economy.

Preface

Emerging Trends in Real Estate® is a trends and forecast publication now in its 31st edition, and is the most highly regarded and widely read forecast report in the real estate industry. *Emerging Trends in Real Estate®*, undertaken jointly by the Urban Land Institute and PricewaterhouseCoopers, provides an outlook on U.S., Canadian, and Latin American investment and development trends, real estate finance and capital markets, property sectors, metropolitan areas, and other real estate issues.

Emerging Trends in Real Estate® 2010 reflects the views of more than 900 individuals who completed surveys or were interviewed as a part of the research process for this report. Interviewees and survey participants represent a wide range of industry experts—investors, developers, property companies, lenders, brokers, and consultants. ULI and PricewaterhouseCoopers researchers personally interviewed over 275 individuals and survey responses were received from 710 individuals whose company affiliations are broken down as follows:

Private Property Company or Developer	55.8%
Institutional/Equity Investor or Investment Manager	13.0%
Real Estate Service Firm	9.1%
Homebuilder or Residential Land Developer	7.2%
Bank, Lender, or Securitized Lender	6.90%
Publicly Listed Property Company or REIT	4.6%
Other	3.3%

A list of the interview participants in this year's study appears at the end of this report. To all who helped, the Urban Land Institute and PricewaterhouseCoopers extend sincere thanks for sharing valuable time and expertise. Without the involvement of these many individuals, this report would not have been possible.

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Timing Play

"Coping with pain."

More investors recognize massive losses—value declines will eventually total "40 to 50 percent" off market highs, propelled by lagging impacts of the deep recession. Concussed lenders increase writedowns in riddled portfolios, and many overleveraged owners finally get wiped out, either in foreclosures or by turning back keys to banks. The inevitable borrower capitulation follows in the wake of high unemployment and faltering demand for space—property cash flows won't improve fast enough to offer rescues from negative leverage purgatory. Constricted credit channels—hobbled lenders and a comatose CMBS market—leave more responsible and equity-rich investors without reliable refinancing options. Government loan supports and guarantees probably will be necessary to avoid greater carnage—even some of the most sophisticated and highly respected property players need lifelines.

Not surprisingly, the overwhelming sentiment of *Emerging Trends* interviewees remains decidedly negative, colored by impending doom and distress over prospects for an extended period of anemic demand and costly deleveraging. As we said last year: "There's no quick fix." Vacancies will continue to increase and rents will keep on decreasing across all property sectors before markets hit bottom sometime during 2010. Once a property market recovery begins and gains traction, probably before 2012, any rebound will be restrained by a lackluster economy and rising interest rates.

Despite this enveloping gloom and the dramatic fallout from the unprecedented early-2000s credit binge, 2010 and 2011 could be "the opportunity of a lifetime," a limited window to cash in on one of the best acquisition environments ever. "The overall negativity paves the way for winners playing against overall sentiment." A sense of nervous euphoria grows among liquid investors who can make all-cash purchases. If "patient," "daring," and "selective," they could score generational bargains on premium properties, once owners "cry uncle" and banks start to clear the decks of their rapidly expanding and unwanted bad loan and real estate–owned (REO) portfolios. Among real estate investors, the worst of times ultimately generate the biggest gains for savvy investors in what has become an increasingly cyclical, market-timing business. "Whoever's left standing will be in a great position."

In the midst of severe market impairment and dislocation, the prospects for outsized buy-low rewards highlight the importance of effectively playing the real estate market cycle and subordinating asset allocation models and risk-adjusted return strategies. Sandwiched between mammoth value busts—the early-1990s industry depression and today's "even worse" debacle—an unprecedented boom in real estate values produced huge gains for investors who cashed out early enough and used leverage wisely. But later entrants were savaged, especially when they overborrowed. "Those who play the cycle wrong lose every time," says a leading researcher. "Asset allocation analysis is great for looking at history, but can't stand up to the cycle."

Real estate's touted attributes—low volatility and steady income—require "reevaluation," says a top investment manager. "Over the past nearly 20 years, real estate has been highly volatile and the next several years will likely show compromised income flows. We sold the stability and the income, then got caught up in growth and opportunistic gains. Now all bets are off in the losses."

Leverage and easy credit arguably distorted real estate's risk/return profile. The flood of Wall Street capital, particularly from public debt markets, helped transform real estate into a commodity. "It became a trading game," dominated by momentum investors who transacted among themselves and bid up prices. If managed conservatively, real estate can retain its bond-plus risk/return elements, but that means buy, hold, and keep leverage manageable, and even then conservative core investors have suffered extensive losses, dragged down by the overall market. "Let's face it," says a veteran analyst, "without leverage, the asset class doesn't provide much opportunity for big upside. The difference in returns for core, value-add, and opportunity type funds is largely determined by how much leverage you put on, not particular property acumen unless you get into development."

Even those investors poised to jump in at the approaching market bottom guard against inflating expectations. "Real estate doesn't do 20 percent [annualized returns] real well," says a chastened public pension fund executive, and credit gridlock removes any near-term chance to use much leverage. Playing this up-cycle profitably will depend on buying right and operations—managing and leasing effectively.

Prepare for a monumental timing play.

Survival of the Fittest

In retrospect, the commercial real estate markets existed in a deeply unsettling suspended animation through 2009. For industry players, the year was all about "muddling through," waiting for a market bottom, putting off hard choices, and desperately praying for a sharp economic rebound. Banks and special servicers delayed dropping the hammer on flailing borrowers and recognizing their loan losses in order to shore up depleted reserves with the help of low-interest government funds and other federal bailout programs. Stricken borrowers grasped at "pretend and extend" offers from bankers, but only put off their day of reckoning. Deal markets froze and developers hibernated.

Time Runs Out Now. "Getting through 2010 will be the test" for who can survive. "Inertia starts to give way, the catalyst is simply time." "Underwater" borrowers will start making hard decisions about walking away or selling at big losses—they can't continue to incur capital costs while cash flows diminish from lowered rents. "Waiting is a bridge to nowhere since fundamentals won't come back fast enough." Banks will finally start to clear out bad loan portfolios and "take control of wasting assets to maximize proceeds." The Federal Deposit Insurance Corporation (FDIC) will step up disposition of loan portfolios from failed banks, using various government guarantees to entice buyers. A market bottom will form and sidelined equity capital will begin to reenter the markets, in some cases joint-venturing with banks to manage asset pools. In the meantime, values go down, fundamentals won't provide bumps in rents, and cap rates will stabilize or go up—"they're not coming down."

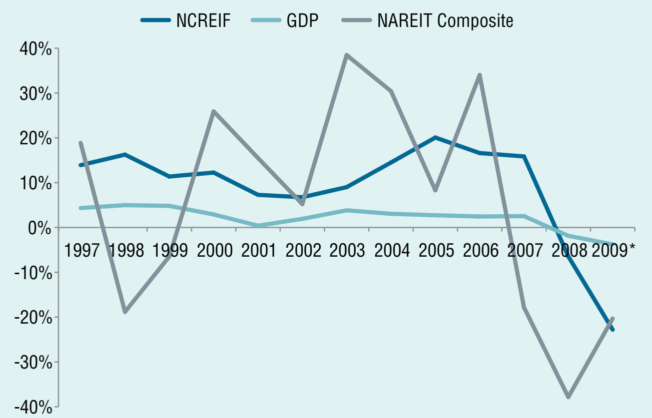
Dum-Da-Dum-Dum. Put another way—2010 looks like an unavoidable bloodbath for a multitude of "zombie" borrowers, investors, and lenders. Given the looming "train wreck" of escalating commercial mortgage–backed securities (CMBS) rollovers ($250 billion to $300 billion annually through 2015), the shakeout period may extend "several years" as even some conservative owners with well-underwritten loans from the early 2000s see their equity destroyed. "It's not just the unavailability of capital from damaged credit markets, it's also the decline in tenant demand—rising vacancies and declining rents."

Another Bailout. The refi bogeyman—"a doomsday without refinancing"—understandably sends chills through the industry. But well-placed banker interviewees expect the U.S. government "to put mechanisms in place" and help resuscitate securitization markets, "avoiding a fiasco." Their rationale is: after stanching big bank collapses and saving automakers, the government won't blow it all and let the economy tank from a total commercial real estate meltdown. Even with government intervention, the CMBS labyrinth traps borrowers and bondholders "in a limbo without good outcomes." Excessively complicated structures—multiple lenders, equity partners, mezzanine pieces, and securitized tranches—"could take years to resolve" in litigation nightmares and complex, not to mention costly, workout scenarios. And a government bailout inevitably entails short-term remedies that hamper longer-term economic soundness, potentially leading to larger federal deficits, more taxpayer stress, and rising interest rates.

Indeed, prospects for a tepid economic rebound now concern *Emerging Trends* interviewees as much as the ongoing credit market turmoil. "Real estate will be on the tail of any recovery, the longer the economy takes the tougher for us."

EXHIBIT 1-1

U.S. Real Estate Returns and Economic Growth



Sources: NCREIF, NAREIT, Moody's Economy.com.

* 2009 data annualized from second-quarter 2008 to second-quarter 2009.

The Economy: "A Big Hurt"

By late 2009, the U.S. economy may have entered a "statistical" recovery, but lingering high unemployment and massive deleveraging hamstring growth outlooks. For starters, the nation's consumer engine sputters under mountains of household debt—mortgage, credit card, car, and student loans—and the harsh reality depresses Americans at all income strata. Large and expensive lifestyles—McMansions, second homes, plush furnishings, SUVs, big-screen TVs, and shopping sprees—were mostly financed and now the sizable bills come due just as job security and confidence in future prosperity waver. Economic mainstays—financial services, homebuilding, and auto manufacturing—take direct headshots. With credit gone and people in savings mode, these jobs generators retrench, offering limited prospects for a quick resurgence. Lawyers, brokers, and other previously well-compensated transaction middlemen feel the bite, too.

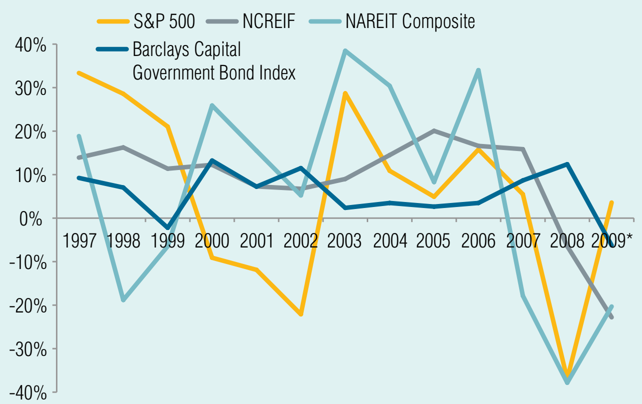
Everybody Borrowed Too Much. Consumers are just part of the debt cataclysm. While the Federal Reserve kept interest rates low and set off the credit bomb, government spending largesse coupled with tax cuts ballooned government deficits. The severe recession forced leaders to double down on government spending and leaves taxpayers with a gaping hole to fill. Printing money for various industry lifelines sets the stage for ramped-up inflation and higher interest rates—foreign T-bill buyers will want higher yields for taking on greater risk. And higher interest rates could deter business growth. "It all feels like a dead-cat bounce," says an investment manager. "We're past the panic stage thankfully, but the long-term impact of colossal government spending and national debt has yet to be felt."

"Not a Pretty Picture." Hovering over interviewees are big fears about a jobless recovery—"interest rates go up and the economy can't pick up fast enough to produce jobs that fill buildings." Recent experience on the employment front doesn't bode well—"we've had fake growth." The last two recessions effectively wiped out any income gains, the Internet and finance booms turned out to be bubbles, and Internet disintermediation shrinks media companies and starts to hit retail distribution. Manufacturing continues to migrate to cheaper offshore locations and now various service, financial analyst, and high-tech jobs can be poached by global competitors or transferred by U.S. companies operating overseas. Shockingly, America's standard of living may have begun to fall—wages quiver, health benefits shrink, and companies slash pension plans. Can anybody depend on their 401K for retirement? Everyone in our survey struggles to identify new high-paying employment incubators that will spur recovery and tenant demand, finding consensus in a few sectors:

- **Technology:** Engineers and scientists will be highly coveted to develop novel computer software and green energy systems, and revamp dated infrastructure. New high-tech products can increase U.S. exports to burgeoning global markets.
- **Health care:** An aging population will need more medical services from doctors, nurses, therapists, and caregivers. Biotech and drug companies benefit from increased demand for remedies and cures.
- **Education:** The country desperately needs more teachers to help educate engineers, scientists, and physicians for high-paying brainpower jobs that can lead to industry breakthroughs and innovation.
- **Housing:** Homebuilders will recover eventually—the U.S. population grows by 3 million annually and all these people need places to live.
- **Wealth management:** Everyone learns lessons about the need to save, but first we must pay off bills from all our borrowing.

EXHIBIT 1-2

Index Returns: Real Estate vs. Stocks/Bonds



Sources: NCREIF, NAREIT, S&P, Barclays Group.

* 2009 data annualized from second-quarter 2008 to second-quarter 2009.

The overall outlook doesn't suggest a wellspring of employment opportunity, particularly for many debt-strapped middle-class Americans, who had depended on well-paying blue-collar factory jobs. Some interviewees, meanwhile, grumble that "health care and teachers won't fill space on Park Avenue" and productivity gains by large U.S. multinational firms may boost their stock prices, but often come at the expense of domestic operations.

As the federal government tries to pick up the slack with stimulus, unprecedented deficits will constrain future spending unless taxpayers shell out more, a treacherous political prospect that cuts into consumer buying and business expansion. Alternatively, if the government really gets serious about cost cutting, many private sector jobs would be in the cross hairs. Federal contracts, including those for defense, could be curtailed and needed infrastructure improvements would be postponed. Budget-busted state and local governments confront reducing public employee workforces and benefits. Even the most optimistic, well-reasoned interviewees, who point to "overdone gloom," couch any enthusiasm and predict a "prolonged," "not very robust" U-shaped recovery.

The Long Road Back

Under any circumstances, real estate players resignedly steel themselves for a "difficult," "much-slower-than-normal" comeback, tracking behind the problematic economy. "We're only in the early innings and 2009 has been a rain delay." Here's how interviewees see the obstacles and map out the "hard slog":

Housing Leads. The peak-to-trough drop for housing took a painful three years, finally reaching its nadir in 2009. Bargain hunters ignite an uptick in home sales, but an absence of easy credit, the household debt overhang, and weak economic turnaround limit buyer appetites. At least the tailspin stops.

Huge Writedowns. Banks need to recognize losses on commercial real estate and overleveraged borrowers must lose their shirts. "Only then will we reach market bottom." Bankers have been dealing with housing, next comes credit cards, and then upper-tier lending platform problems like commercial paper and commercial real estate. Unfortunately, "the problems get bigger with larger consequences."

Government Intervention. In order to pave the way for rationalizing balance sheets, the feds will give more time for banks to build up loss reserves and provide some form of credit support for commercial properties, including TALF. "It's the only way out." Regulators must take steps to reform and resuscitate moribund CMBS, helping restore confidence in the bond markets. "Without capital from securitizations, real estate won't recover."

Cash Buyers. Liquid investors rule the real estate world in coming years, enjoying pricing power. Real estate investment trusts (REITs), equity funds, and high-net-worth individuals with dry powder will reenter at perceived market bottom, focusing on vulture deals for trophy properties in top markets, shoring up troubled borrowers who own prime assets in return for big equity stakes, and purchasing troubled loan portfolios at cents on the dollar. They try to sidestep the "dreck" in secondary and tertiary locations.

IPOs. Investment bankers pull out their early-1990s playbook to get back in the game. They structure public offerings to rescue failing equity funds and private real estate companies, and naturally they'll take big fees and a piece of the action along the way.

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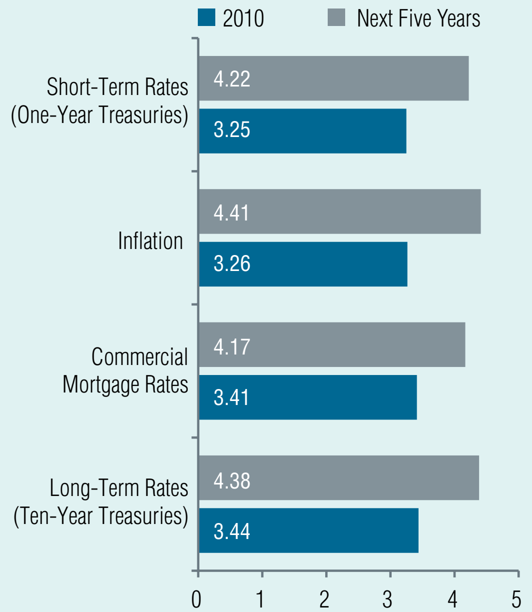
EXHIBIT 1-3

Inflation and Interest Rate Changes



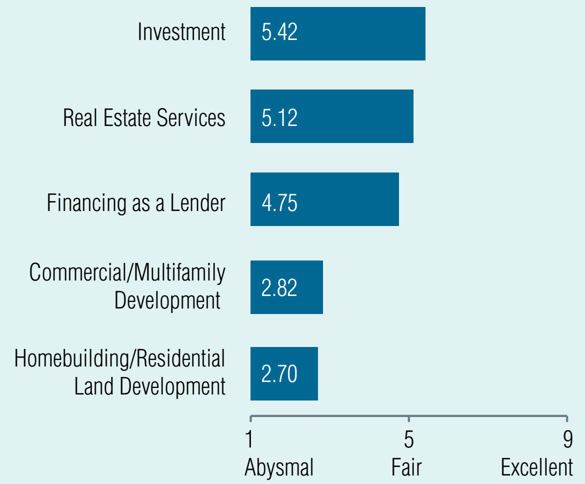
1 = fall substantially, 2 = fall moderately, 3 = remain stable at current levels, 4 = increase moderately, 5 = increase substantially.

Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

EXHIBIT 1-4

Real Estate Business Activity Prospects in 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

Litigation Mess. Workout specialists and lawyers enter a *Bleak House* of contention and confusion in trying to unwind "incomprehensible" CMBS and collateralized debt obligation (CDO) structures. Figuring out who owns what could take "an eternity" to resolve. In the end, lower-rated tranche positions may be worthless anyway.

Rate Hurdles. The specter of rising inflation and higher interest rates presents huge obstacles, and many interviewees predict that "rates have nowhere to go but up" to tamp down inflationary pressures from all the government borrowing. (See Exhibit 1-3.) On the other hand, "the only way out of our debt problems is inflation" since it increases the value of depreciated, highly leveraged assets and can rescue underwater borrowers. Inflation also makes hard assets like real estate more valuable. But inflation would be anathema to the Chinese, Japanese, and other T-bill buyers who might demand sharply higher interest rates to protect them from a depreciating dollar. If these governments and other investors balk at buying Treasuries, the United States could be forced into an austerity mode, some combination of high taxes and severe spending cuts. And higher interest rates not only would put downward pressure on property values, but also could constrain business expansion and consumer spending, which would curtail job growth. In sum, "it's a tough path," whichever way the federal government implements monetary policy.

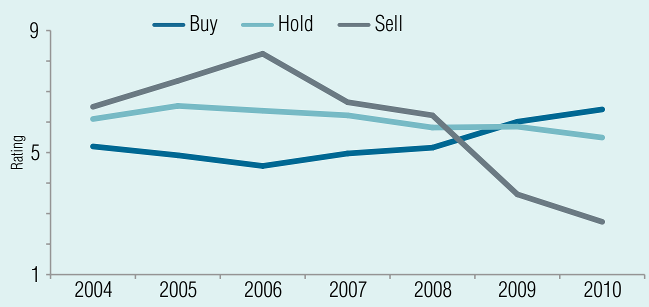
And it all means "any real estate recovery will be slow."

"Absolutely No Demand." Unlike 20 years ago, when massive overbuilding and a relatively mild recession combined to tip over commercial property markets, this time the absence of demand drivers has debilitated property owners who were counting on increasing cash flows to meet expensive debt service. Landlords, clenching mortgage statements, watch forlornly as tenants downsize and cut space costs to bolster their prospects coming out of the prolonged economic downturn:

- **Retailers** close weaker stores, concentrating on the strongest shopping centers.
- **Apartment renters** double up or move back in with parents or siblings.
- **Office tenants** look for productivity gains from lowering space-per-capita ratios and want big accommodations in rents and concessions.
- **Warehouses** suffer record vacancies—the consumer pullback and retail contagion constrict the goods distribution pipeline.

EXHIBIT 1-5

Emerging Trends Barometer 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

- **Hotels** endure plunging "below break-even" occupancies—eliminating travel is low-hanging fruit both for businesses and families struggling to check spending.

"We're in an extremely weak operating environment where tenants are unable to pay decent rents," says an interviewee. "New construction is not our issue—we need new demand."

Nobody holds their breath for 2010 in light of the less-than-robust economic outlook. "Employment growth always follows the economy, and real estate typically is the last to benefit from any improvement." Once companies' earnings increase from productivity gains and sales start to pick up, then businesses get more confidence to hire. This time, the ongoing credit crisis won't help the process: bankers shore up reserves instead of helping businesses recapitalize, chilling expansion plans. "We're in a box," says a veteran investor.

Development. "Largely dead." At least developers can avoid blame for the commercial market turmoil—"fortunately, nothing is overbuilt" (although let's not forget condos). But that's small consolation when recently completed projects careen immediately into defaults and opportunities for any new business may wait two or three years. "You can't be a developer today," says a longtime Texas builder. "The terminology just doesn't apply in this market." Given sharp value declines, the price of existing assets drops well below replacement cost, and the development pipeline dries up—"the smallest in history for all property types," according to a leading researcher. Why build anything when you can buy existing product much more cheaply? And in the highly unlikely event a developer finds a willing banker, any construction loans will come under stiff conditions and pricing, raising the stakes and risks. Longer term, inflation poses another challenge—ratcheting up construction costs for labor and material. "Right now, development is a joke!"

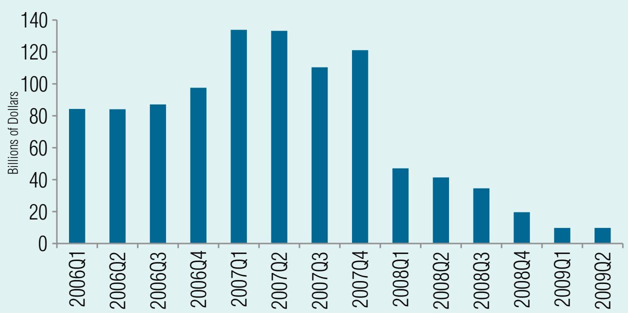
Facing "bleak" forecasts, a "Darwinian environment," and capital constraints, more "bulletproof names" will get shot down. Some players, who agreed to recourse construction loans in the recent lending mania, "may lose everything." Others "buy time" and "do what they can to survive," becoming workout specialists or asset managers, or taking receivership to complete somebody else's busted projects. If all else fails—"there's fishing and golf." Eventually, the construction shutdown leads to undersupply and helps speed recovery—any stepped-up demand can eat into vacancies more quickly. While they await the fallout, developers join a long line of other market victims.

Vultures Circle. Brokers and dealmakers also drop like flies in the unprecedented transaction freeze, but a thaw slowly materializes. Bid/ask gaps prepare to close—purchasers adopt traditional underwriting analysis using existing cash flows, while sellers "aren't there yet." And no wonder—the *Emerging Trends* transaction barometer signals the worst selling environment in report history. (See Exhibit 1-5.) Patient buyers can afford to hold out for some "fantastic opportunities." They won't rush to deal until they sense market bottom—maybe in late 2010, certainly by 2011, when motivated owners seek exits and banks finally start to clear their balance sheets. Wizened interviewees counsel against "moving too fast." Early deals may send prices lower—"some stuff will blow out at incredibly cheap prices." And first-to-market properties often are "the worst of the worst—stuff you shouldn't want." But others point out that "no one rings the bell at the low point, so move if you find a good deal."

In the meantime, anticipation steadily builds: "We're headed back to 1980s prices" and "a buy one get one free" market environment. FDIC-sponsored deals may lead the way—"a tidal wave of properties" heads into receivership from community and regional bank failures. The government eventually will also undertake portfolio sales of billions of dollars in bad loans under its control. In these deals, buyers can expect "generationally low prices" with federal guarantees. For all the giddy talk, cash investors should temper return expectations, especially in top markets where enough bidders will keep "more realistic floors" on prices for Class A

EXHIBIT 1-6

Sales of Large Commercial Properties

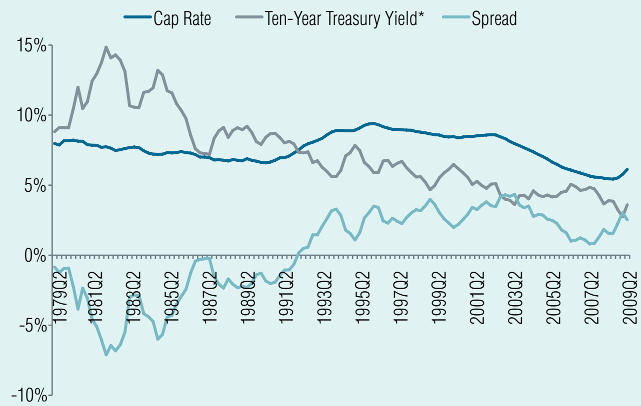


Source: Real Capital Analytics.

* Total through June 30, 2009. Limited to properties $5 million or greater.

EXHIBIT 1-7

NCREIF Cap Rates vs. U.S. Ten-Year Treasury Yields



Sources: NCREIF, Moody's Economy.com, Federal Reserve Board, PricewaterhouseCoopers LLP.

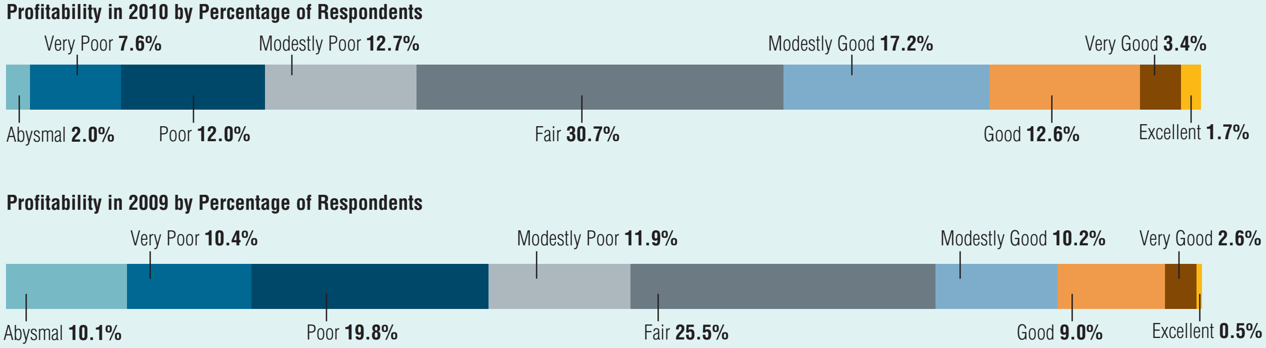
* Ten-year Treasury yields based on average of the quarter; 2009Q2 average as of August 21, 2009.

properties. Core yields will range in more traditional territory, the high single digits, while expected opportunistic yields for buying vacancy register in the mid to high teens. Forget 20 percent–plus unless you're still dreaming about 2006. The best deals may come under radar screens where compromised owners quietly restructure financing by taking preferred equity partners who garner attractive stakes in return for cash infusions. "I have plenty of new friends in the U.S. who want my capital," says an international pension executive. Many players just take comfort in the return of more normalized underwriting and analysis. "The old rules seem to be back; two years ago nothing made sense," says a portfolio manager. "Now I think I know what I'm doing again with my bearings back."

Cap Rate Bifurcation. Sadly, the 2000s turn into "a lost decade" for investors. Interviewees say they expect declines off peak 2007 values to total "40 to 50 percent," less for trophy assets, more for some B and C product. Extra dollops of leverage, which escalated returns in the rising market, now annihilate portfolios on the downside. After dropping into 5 percent–plus territory during 2006 and 2007, average cap rates for institutional-grade properties "will settle" in the 7.5 percent range, "a huge move" reflecting the depth of market declines. The consensus view shies away from underwriting "any growth in rents or decrease in cap rates for a long time." When interest rates increase, as expected, pushing up T-bill yields, cap rates could "go along for the ride." At the very least, "higher interest rates make it harder for cap rates to recover" even when property cash flows improve. Expect "huge spreads" between "higher-income-stream and low-to-no-income-stream properties" as transaction markets gear up. "Cap rates actually look more normalized for top core properties, back to income with small appreciation based on first-year cash flows [in-place tenants]—but there are no cap rates for distressed properties." Given the absence of recent deals, some investors choose to ignore cap rate analysis entirely, concentrating instead on occupancies, rents, and year-to-year cash flow changes. "That tells you more."

"We've All Laid Off at Least 20 Percent." Many real estate firms go into survival mode, attempting to convert lifeless acquisition, origination, and development platforms into asset management, special servicing, and workout businesses. "They keep the best talent and downsize the rest." But the transformation can be challenging given the dearth of knowledge and experience among personnel for unwinding deals and crafting settlements. "Anybody in the business since 1994 only knows from transactions and never anticipated this mess. They just don't have the necessary skills, and law firms are simply understaffed without the expertise." Demand intensifies for real estate executives who know property operations or who have strong tenant and client relationships. "Starving" brokerage companies rely on property management and corpo-

EXHIBIT 1-8
Firm Profitability Forecast



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

rate consulting to shore up bottom lines. “We shrink along with shrinking values.” More conservatively run firms (they limited corporate debt and expensive expansions) “can take advantage of the chaos,” picking up business from failing competitors “who had been more aggressive.” Investment managers anticipate a shakeout—top performers with solid institutional backing and staying power take business from smaller “entrepreneurial” firms and underperformers. Pension plan sponsors start to consolidate separate accounts among their most favored advisers with strong asset management capabilities. Some limited partners in struggling opportunity funds cut deals to keep general partners in place when promotes evaporate, while other GPs are jettisoned or abandon their funds. “Compensation is a jump ball.” For now, competitor practices and HR salary studies don’t matter to CEOs and CFOs. “The only relevant metric is: did the firm make any money and how much can they afford to pay?”

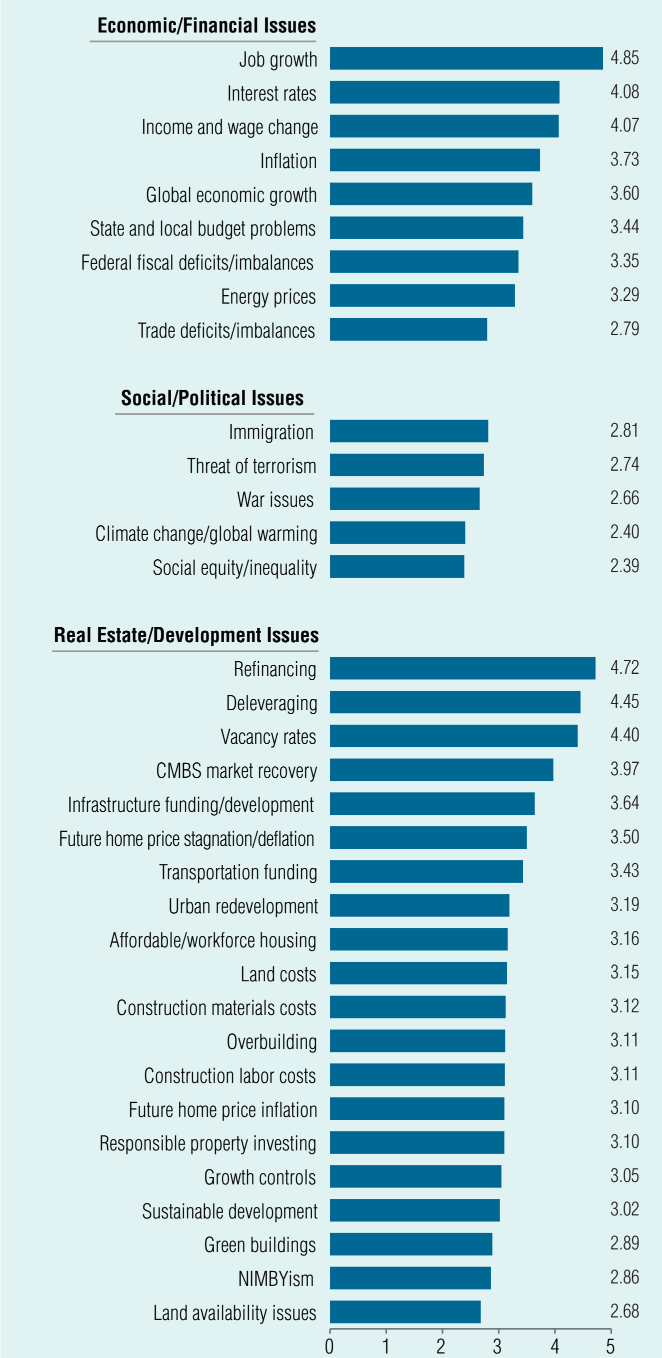
Ever hopeful, *Emerging Trends* respondents peg 2009 as the low point for real estate firm profitability, expecting modest improvement for 2010. (See Exhibit 1-8.) Not surprisingly, they forecast better prospects for investment and service companies and poor to abysmal outlooks for developers. Overriding concerns about the economy, particularly job growth, and industry deleveraging crowd out much consideration of sociopolitical problems—climate change and green buildings get short shrift in this year’s survey. (See Exhibit 1-9.)

Starting Over. In the midst of dislocation, income destruction, and performance disasters, a paradoxical tension develops among real estate players. Interviewees talk about lessons learned and how survivors “will be more cautious and conservative.” Real estate, they say, is “a good business for B students who work hard, not for PhDs with computer models.” They perfunctorily reject the private equity paradigm based on leverage and promotes, which precipitated the downfall. But then in the next breath they say they want to make up the losses as quickly as possible. Nobody mentions investing in neighborhoods or place making for future generations anymore. Relationships among far-flung owners, lenders, tenants, and communities have disaggregated. “We used to talk about real estate as a local business,” says an industry graybeard. “But it’s not a local industry when borrowers don’t know their lenders, and owners don’t have a long-term stake in the places where they invest.” Despite the ongoing havoc from overdone wheeling and dealing, the investor mind-set skews back reflexively to trading and maximizing short-term profits. “When leverage comes back into the markets, you should take out your equity.” Flipping won’t return anytime soon, because of the economy, but the principal cements—commercial real estate is viewed by many as a highly fungible commodity. What happens after you sell it is somebody else’s problem.

For 2010, enormous problems will begin to morph into unique opportunities. It’s all about timing the cycle.

EXHIBIT 1-9

Importance of Various Trends/Issues/Problems for Real Estate Investment and Development 2010



Source: *Emerging Trends in Real Estate 2010* survey.

1 = no importance, 2 = little importance, 3 = moderate importance, 4 = considerable importance, 5 = great importance.

Best Bets 2010

Investment

Deal with Cash. Over the past three years, *Emerging Trends* has counseled to “keep powder dry” and wait for a correction. Now you know why. “Cash is the only way to operate” and “only the most liquid” can take advantage “of the ton of emerging opportunities.” Add leverage “for a bonus” once credit markets resuscitate.

Don’t Rush. “Early is the new wrong.” Although seller and borrower capitulation approaches at a bumpy market bottom, economic uncertainty will hamper any recovery and the absence of ready refinancing in lifeless debt markets adds more risk. In this murky environment, patience will be rewarded. Transaction trigger points include improving jobs numbers, visibility to asset pricing, and stepped-up tenant deals. “Ignore theory, require empirical evidence.”

Focus on Quality and Be Selective. Buyers can be less cautious about timing when acquiring premium assets in the best markets where deal cap rates revert to the mean (or above) and values drop well below replacement cost. “Buy it, manage it, wait for recovery, and expect to hold for at least a five- to seven-year period, allowing fundamentals to slowly improve.” Seek irreplaceable Class A properties with debt maturity problems in places like New York, San Francisco, and Washington, D.C. Recapitalize borrowers for joint venture stakes and preferred equity and make deals at discounts with lenders. “Anything Class A can come back”—that may not be the case with lesser properties.

Stick to Global Gateways. The dominant, 24-hour markets, which were the favored places heading into the collapse, will recover more quickly in the aftermath. Coastal cities and the handful of interior markets with primary international airports link to global commercial centers and concentrate the nation’s business activity. These gateways will continue to attract a preponderance of high-paying jobs.

Buy Cash Flow and Real Yield. Anticipate creating value by filling vacancy and increasing rents over time. “Use a cash flow–driven model, not a leverage-driven model.” “Without leverage you’ll make money, just probably not as much as in the past.”

Buy Public REITs. These stocks “come off the mat with a long way to go back up.” Reequitizations dilute existing shareholders, but raise dollars to solidify balance sheets and enable accretive market-bottom acquisitions. “Public companies now gain a tremendous edge—their weighted cost of capital is well below private investors” and their perceived staying power will help retain and attract more tenants to their properties, augmenting cash flows. Stockholders, meanwhile, reap relatively attractive dividends and have liquidity. Index buyers gain instant diversity across property markets.

Provide Financing. While recap and lend-to-own gambits should score for equity investors, lenders can make “the best senior loans in their careers at relatively wide spreads, using very conservative assumptions.” Focus on “boring” well-leased real estate—infill shopping centers, B apartments, and well-located office—owned by capital-constrained borrowers. “Three- to five-year loans can deliver low-teen returns.”

Consider Distressed Debt. Eventually, the government will dispose of large loan pools from failed banks, providing guarantees or supports to lure investors. The collateral may be dregs and difficult to assess, but these should be classic cents-on-the-dollar transactions. Lenders will start to sell, too. Distressed CMBS packages will be extremely hard to value—legacy borrower and bondholder complications will make analysis “like unwinding balls of yarn.” Excitement wanes over the expected transaction complexity.

Implement Asset Management. Assess what’s worth protecting in portfolios and shed failing properties with insurmountable leverage problems—stop feeding losers. Focus capital and resources on retaining and attracting tenants in properties with better long-term value, and safeguard net operating incomes against tenant pirating by competitors.

Development

Write Off the Year, as Well as 2011 and Probably 2012. You can close up shop, hit the links, convert operations to asset and property management, or become a workout specialist like everyone else. Forget about construction financing—that’s a pipe dream. Some bigger players take over half-completed condos and stillborn office projects in receivership from defaulting competitors. A few build-to-suit opportunities present themselves. At least, prospects for homebuilders can only improve, but that’s not saying much.

Dream about the Future. Next-generation projects will orient to infill, urbanizing suburbs, and transit-oriented development. Smaller housing units—close to mass transit, work, and 24-hour amenities—gain favor over large houses on big lots at the suburban edge. People will continue to seek greater convenience and want to reduce energy expenses. Shorter commutes and smaller heating bills make up for higher infill real estate costs. “You’ll be stupid not to build green.” Operating efficiencies and competitive advantage will be more than worth “the minimal extra cost.”

Property Sectors

Buy or Hold Multifamily. “It’s the only place with a hint of hope, because of demographic demand.” Scarce construction sets the stage for a strong rebound in any economic turnaround. “There could be a shortage of apartments by 2012.” Pounce on cratered development deals and pick off stressed assets at "rock-bottom pricing," including busted Class A condos and infill B apartments. Locations near transit corridors are prime.

Buy Hotels. Totally slammed, the hospitality sector "has the most potential to recover sooner," especially higher-end business hotels in major markets. "They've been beaten to a pulp." Values plummet—they "overshot on the upside, now overcorrect on the downside." Distressed owners litter the landscape—myriad late up-cycle deals collapse under adjustable-rate mortgages. "You'll be able to steal good hotels."

Buy Distressed Condos, Second Homes. Concentrate on prime resort areas where developers overbuilt. Beachfront condominiums in south Florida always bounce back. Despite recent financial reversals, plenty of baby boomers retain ample resources for weekend getaway places and future retirement retreats. You won't get better deals until the next crash.

Buy Land. Home in on "infill sites in top markets," but be careful of fringe locations. "You must distinguish between good and bad." And be prepared to hold for five to ten years. Given the feeble development markets, new projects may take time to ramp up. "But land prices may not get much lower . . . ever."

Buy or Hold Industrial. As inventories rebuild, warehouses can recover quickly. Institutional owners, who struggle to assemble large warehouse portfolios, will hunt for product, bolstering values against free fall.

Hold Office. Hope long-term leases can bridge the downturn. Prime properties in 24-hour nodes will attract tenants from more problematic B and C properties in a flight to quality.

Triage Retail. Infill grocery-anchored strips and fortress regional malls will survive the retreat by debt-plagued consumers. Store chains and shoppers abandon weaker centers and concentrate activity in the strongest malls. Expect more retailer bankruptcies to empty big boxes at some power centers.

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Real Estate Capital Flows

"The key to **success** in real estate investing is to follow the capital flows, not the fundamentals. **Anticipate** what capital wants and be there."

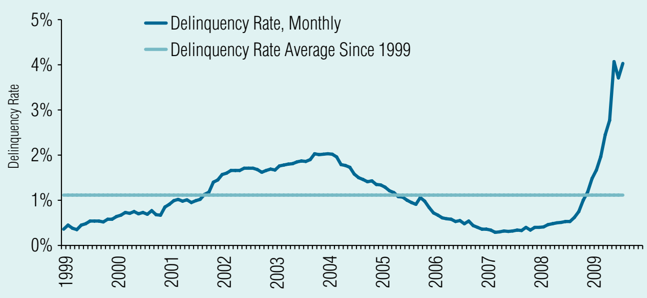
Slowly, capital will flow back into commercial real estate markets during 2010, led by all-cash investors "looking for pop" in quality assets owned by distressed borrowers or sold by lenders out of growing REO portfolios. Debt markets will start to resuscitate, too, but will remain "far from normalized" in the wake of unprecedented deleveraging. Federal government backstops and guarantees allow lenders to build enough reserves so they finally can embark on dealing more proactively with boatloads of bad real estate loans—estimated at $138 billion as of September 2009, according to Real Capital Analytics; this number is expected to increase substantially in the year ahead. Inevitable writedowns, foreclosures, and borrower givebacks will help markets bottom during the year. Any lending will be conservative, expensive, and extended only to most-favored relationships. Dry powder investors—REITs, private equity funds, and even refashioned mortgage REITs—will also provide loans to battered borrowers at a steep price. "It won't be a hot market, but borrowers can get financing if they recognize and resolve their losses."

Blinders Off

In 2010, consensus builds among U.S. government regulators, lenders, borrowers, and investors that "kick-the-can-down-the-road" policies reach the point of diminishing returns. The Fed and U.S. Treasury spun a chorus of PR rhetoric about stabilizing banks and reviving credit markets, while transfusing bailout funds into depleted lenders, hoping to give cover and buy time for an actual recovery to materialize. Policy makers and finance industry leaders realized that any straight talk about the dodgy condition of banks or precipitous reconciling of their balance sheets would likely send world investment markets back into a dangerous slide. And so the government winked when lenders provided extensions to underwater owners with maturing loans and loosened mark-to-market rules in a game of mutual survival. No one got too upset when banks failed to step up lending appreciably or charged huge spreads above the government funds rate for loans they did provide. In addition, with little fanfare, bank regulators gradually stepped up the shutdown of broken regional and community banks, spreading out the pain. At some point during 2010, the stabilization efforts should pay off. Surviving banks will regain enough footing to act like banks again—first resolving balance sheet problems and eventually financing economic growth and credit-starved real estate investors.

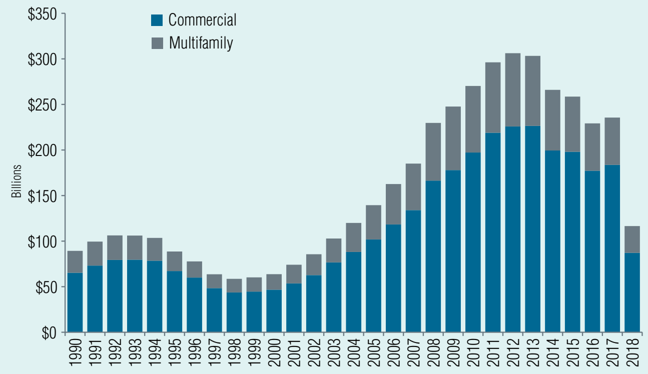
Inevitable Shakeout. As a result, anticipated capital destruction begins in earnest, culminating in bloodletting—ugly headlines about big-name developers flaming out, rising defaults and delinquencies, a spike in foreclosures, and recognition of the magnitude of losses everyone has been well conditioned to expect. More firms fail, some general partners collapse, workouts escalate, and lender REO portfolios mushroom. Once this pattern of failure gains momentum, hovering vulture investors will descend and property transaction markets can reformulate, providing pricing visibility and leading

EXHIBIT 2-1
CMBS Delinquency Rates



Delinquency rates are for fixed-rate, conduit CMBS transactions and include loans 30, 60, 90 days delinquent; performing and nonperforming matured loans; loans in foreclosure; and REO.
Source: Trepp LLC, September 1, 2009.

EXHIBIT 2-2
Commercial and Multifamily Mortgage Maturities



Sources: Federal Reserve Board, Foresight Analytics LLC.

to greater liquidity. "Forced sales will help heal the industry." The government will facilitate the process by offering guarantees to investors in distressed loan portfolios.

Frankenstein's Monster. Assuming banks mend enough to permit writedowns, the financial sector and real estate industry will face an enduring problem—what to do with their Frankenstein monster, the collapsed CMBS market, a classic example of a good idea gone horribly wrong. "Ironically, CMBS was a solution for recovering from the last real estate debacle, but got us caught in a worse trap because the structures became too complex." For the past decade, *Emerging Trends* interviewees wondered whether CMBS markets could self-regulate successfully and warned that if loans ever soured, the system could break down in a litigation maze of special servicers and multitranched borrowers. More recently, everyone watched as lenders of all stripes loosened underwriting standards and off-loaded risky loans into securities markets, which fueled transactions, pricing run-ups, and overborrowing. Now, the industry gropes for ways to refinance hundreds of billions of dollars of CMBS loans maturing over the next five years when savaged bond buyers, holding near-worthless paper, express zero confidence in the CMBS underwriting process, rating agency oversight, and (lack of) government regulation.

Government Rescue. Since banks and other lenders nurse their own extensive portfolio problems and equity investors cannot possibly fill the yawning "CMBS debt gap," interviewees hope and pray the government intervenes through some form of credit support for commercial properties to back-stop all the loans coming due. "Otherwise, values will drop further and postpone any chance of a real estate market recovery." Such credit facilities like TALF raise federal exposure to the commercial real estate loan markets after rescuing existing government-sponsored housing lenders (Fannie Mae and Freddie Mac) to the tune of $400 billion. But the feds have no choice. "They'll do something for sure," says a bank executive. "The immediate alternative is too dire."

CMBS Makeover. *Emerging Trends* respondents voice virtual unanimity in asserting that overall real estate industry revival depends on reforming and reconstituting the CMBS market. They generally expect a return to simpler, more stringent early CMBS structures with issuers—including originating banks and insurers—required to retain stakes from offerings and higher reserves on their books. Rating agency conflicts need resolution and government regulators must play a role (partly to oversee rating agencies) in "cleaning up sloppy practices" so "bondholders don't get left holding the bag." Securities buyers and analysts, meanwhile, must assume greater due diligence responsibility beyond hastily scanning bond ratings. CMBS "worked best at ten-year fixed-rate loans; straight-forward A/B loan structures and overall

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annual issuances in the $50 billion to $100 billion range," says a former conduit executive. "It got out of hand with floating rates, $6 billion deals, and leverage on top of leverage. When we were doing $230 billion annual volumes we thought we were bulletproof."

No Quick Fix. Reinventing a new detranched, "back-to-basics" CMBS model could take several years at least. Stricter underwriting standards "will have a negative impact on values" and loans will be more expensive. "The government may have to step in and offer guarantees for the AAA bonds to help rebuild confidence." Unwinding and working out legacy CMBS issues also may short-circuit attempts at a quick market resurrection. Complicated tranche structures result in chaotic disputes over who owns how much of whatever remains of any collateral. Special servicers, caught in the middle, are overwhelmed by the volume of problem loans and "paralyzed" by potential litigation tangles. "Nobody has control." Amid such turmoil, can anyone expect previously scorched bond buyers to rush back into the market?

Fannie and Freddie. Eventually, Congress and the president must confront what to do about Fannie Mae and Freddie Mac, the failed mortgage financing giants. Critics argue that these government-sponsored entities subsidized homebuyers to the point of effectively lowering mortgage rates below appropriate risk-adjusted levels—prices inflated unsustainably and helped shove the housing market into an abyss. Lawmakers were always a soft touch for these publicly owned companies, which effectively lobbied to lower their capital reserve requirements and keep precious federal guarantees in place. No congressman—or congresswoman—ever wanted to be accused of roadblocking the average American's path to homeownership. In 2009, Fannie and Freddie were practically the only financing game in town—helping prop up the multifamily market—thanks to emergency government intervention. Undoubtedly, recasting or restructuring these companies will take center stage in the government's attempts to reform fractured real estate securities markets, probably in 2010.

Debunking Myths. While scrambling to stay alive or grasping for government lifelines, investors absorb hard-learned capital markets' lessons from the ongoing debacle:

- Diversification doesn't overcome systemic risk.
- In the global marketplace, all regions and credit markets inextricably link.
- High credit ratings don't necessarily mean high-quality investments.
- Mathematical models cannot fully simulate or manage risk.
- Risk of borrowing short to invest in illiquid assets cannot be hedged.
- "Tails" on bell-shaped curves exist for a reason.

"When you justify a deal [based] on financial engineering, it's the kiss of death," says an interviewee. "The industry did leverage entirely wrong, putting increasing amounts of debt on riskier and riskier deals. For leverage to really work, you should put it on the least-risky deals in the early part of market cycles."

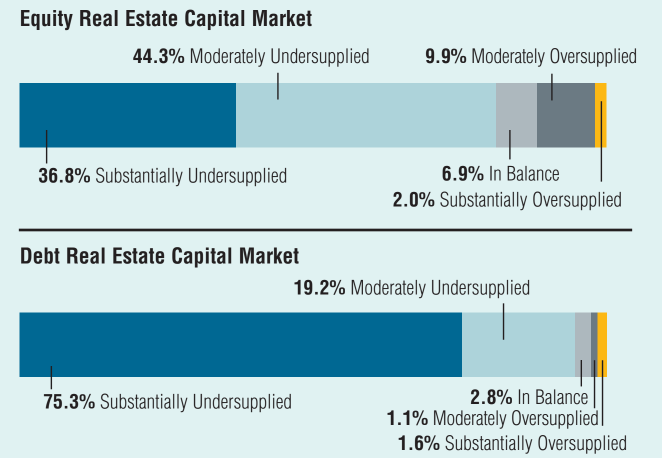
Condition Check. As noted in the past two *Emerging Trends* reports, the condition of various capital providers and investors depends on the amount of leverage in their portfolios and the timing of their investments.

- **On life support:** Owners who purchased late in the game (2005–2007) and used copious debt (75 percent–plus) are toast. Many developers and construction lenders for just-completed projects don't have a chance.
- **Critical:** CMBS bondholders on recent-vintage loans will experience major losses. Lower-credit CMBS tranches get wiped out. Lender REO portfolios swell from foreclosures and borrower give-backs.
- **Serious:** More conservative private equity owners—with well-leased portfolios and low leverage—suffer value declines, which mostly erase earlier heady advances. Refinancing constraints could set off capital crises for properties with maturing mortgages. But core-style investors with less debt exposure are better positioned to make tenant deals and sustain operating incomes. Property cash flows give them some traction in negotiating with lenders or special servicers.
- **Stabilizing:** Many public REITs avoided overleveraging and restrained acquisition activity in ripening markets. After huge stock market declines, they recapitalize and should lead a real estate recovery.

Capital Prospects. *Emerging Trends* surveys point to a continuing severe undersupply of capital, especially from debt sources, in 2010 (see Exhibit 2-3). Only opportunistic private equity investors step up activity, looking for vulture deals. Respondents expect the government will maintain its necessary role in supporting markets both on the debt and equity sides (see Exhibit 2-4). Interviewees puzzle over the

EXHIBIT 2-3

Real Estate Capital Market Balance Forecast for 2010

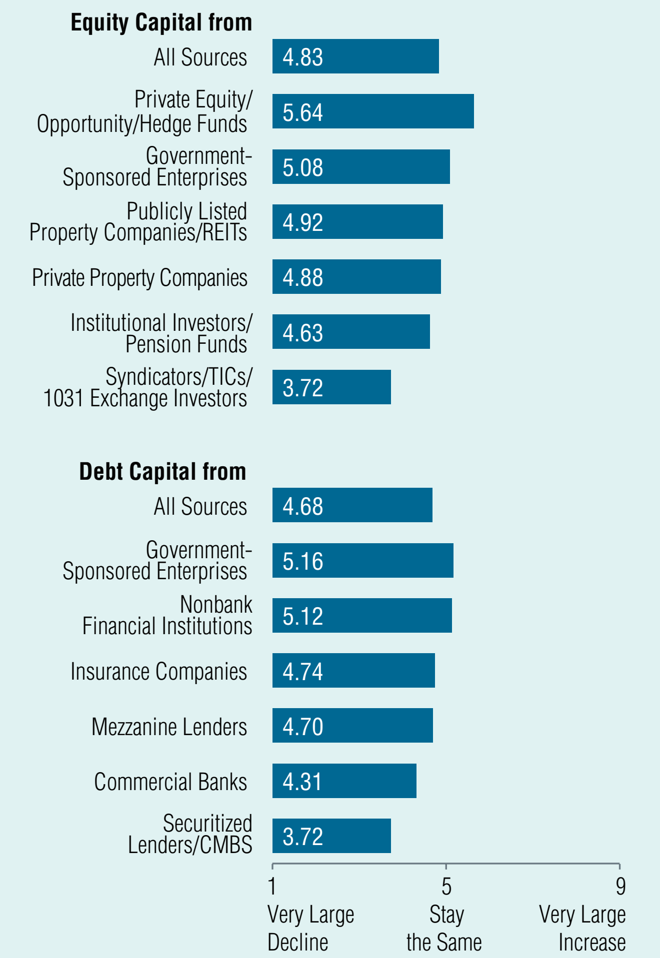


Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

EXHIBIT 2-4

Change in Availability of Capital for Real Estate in 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

dimension of capital in sidelined equity war chests, waiting for bargains. Opinions range from "a pile of money, though certainly not enough to make up for loss of debt" to "not as much as advertised." Many attractively priced investments in earlier correcting stock and bond markets potentially siphon off investments from the U.S. real estate arena. But stock market gains eliminate the denominator effect, giving room for pension funds to increase real estate holdings to meet allocation targets, and some "big state pension funds gear up." Then again, stories still reverberate about previously committed opportunity fund investors telling managers to hold off on capital calls. Many general partners and investment managers reel from fractured investments and losses, turning off clients to re-up. Don't expect a rush into acquisition markets from financial institutions, either—"they're still in too much of a hole." Many foreign investors already identify opportunities in more familiar home regions where markets have already begun to improve while "the U.S. continues to sink." In sum, everyone agrees that "capital forms to jump back into the market," but nobody really knows how much.

Wall Street Redux. In the wake of the mortgage securities market collapse and the demise of financial engineering strategies, Wall Street investment bankers "prime for re-creation" and try to figure out how to take advantage of the disaster they helped instigate. Investment houses must return to the more "boutique days" where they risk firm capital through balance sheet investing rather than maxing out on fees playing fast and loose with "other people's money." Interviewees agree that the currently "out-of-favor" private equity model—alignment of interests through promotes based on performance—can work and will return in "new and improved" opportunity funds. "What ruined it was overleveraging" and "losing sight of the market cycle." Bankers should find traction with managing IPOs to help recapitalize some private owners. Startup firms advise institutions and broken limited partnerships on workouts as well as raise money for distressed acquisitions. They offer small salaries "to keep the lights on" and "if you create value, you share in it." In the meantime, "everybody makes far less." Big asset managers likely will tap into America's newfound desire to save by marketing low-leverage syndication products, offering steady income. And once they protect their bonus prerogatives and ward off greater regulator intrusions, Wall Street powerbrokers will be front and center in government deliberations over recasting the CMBS markets, maximizing their piece of the action. What else is new?

Banks and Insurers

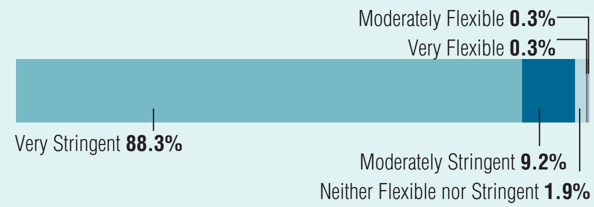
"Banks will become willing lenders and sellers only when they have more equity or more earnings." In the meantime, an increasing number of "zombie banks" shoulder "portfolios full of zombie properties." For 2010, "it's survival of the most liquid—hundreds of banks could fail," particularly regional and community banks with significant exposure to homebuilder, land, and construction loans. During 2010, bankers will continue to "rope-a-dope" and buy more time to build reserves, managing their losses "astutely." They extend and modify their best loans on properties with solid cash flows, including assuming cash flow mortgages, and begin to repossess more of "the less than best." As the FDIC increases sales of loans following bank takeovers, a transaction market should establish with pricing floors. Appraisers will record substantial declines in value from government dispositions, forcing surviving banks to mark down appropriately and move more bad assets off their books. Healthier banks with larger reserves can sustain greater writedowns and "may hold onto premium foreclosed properties" to cash in on any recovery. Also, expect more borrowers to capitulate and stop "feeding wasting assets," further bloating REO portfolios.

Life insurers also buy time, and manage writedowns in quarter-by-quarter chunks. Their whole-loan portfolios tend to concentrate in higher-quality, large commercial properties, owned by investors with sounder balance sheets. And they avoided exposure to housing and subprime lending. "But they won't get taken out in refis, either." Some large life companies were more aggressive lenders, spurred by investment banking and asset management operations—"they stand to lose more."

In a sliver of the market, borrowers can find loans, but at "expensive," back-to-the-future pricing—60 to 65 percent loan-to-value ratios, 7 to 7.25 percent interest rates, and 1.4 debt-service coverage. Interviewees expect stringent underwriting to limit transactions (see Exhibit 2-5). "Sponsorship" and longstanding, banker/borrower relationships hold sway—

EXHIBIT 2-5

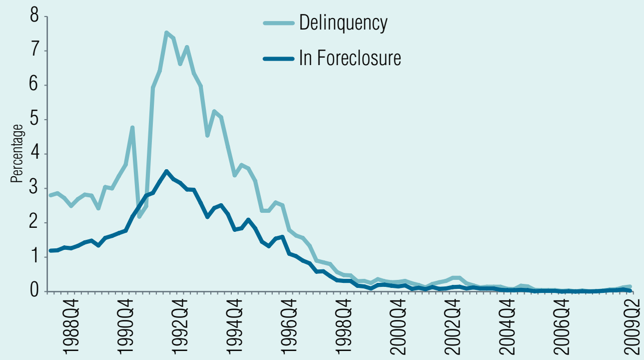
Underwriting Standards Forecast for the United States



Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

EXHIBIT 2-6

U.S. Life Insurance Company Mortgage Delinquency and In-Foreclosure Rates



Sources: Moody's Economy.com, American Council of Life Insurers.

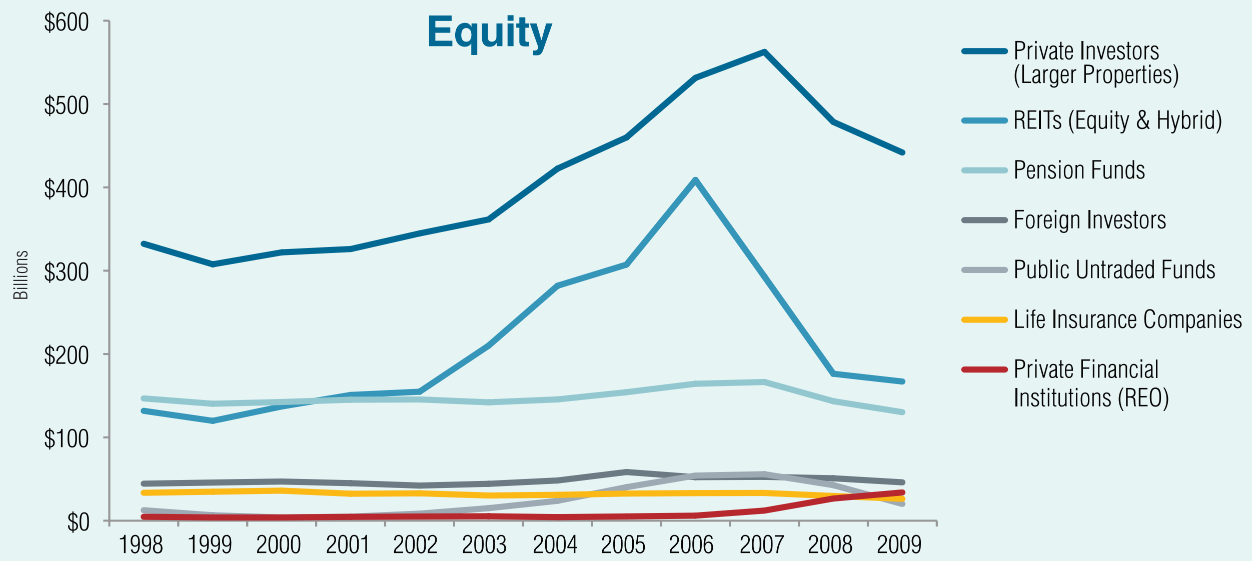
they "are as important as asset quality" in getting mortgages done. Interviewees just hope that five years from now "when we're past this mess," strict underwriting endures and "you still need at least 10 to 15 percent real equity on today's value, not value based on ten-year assumptions."

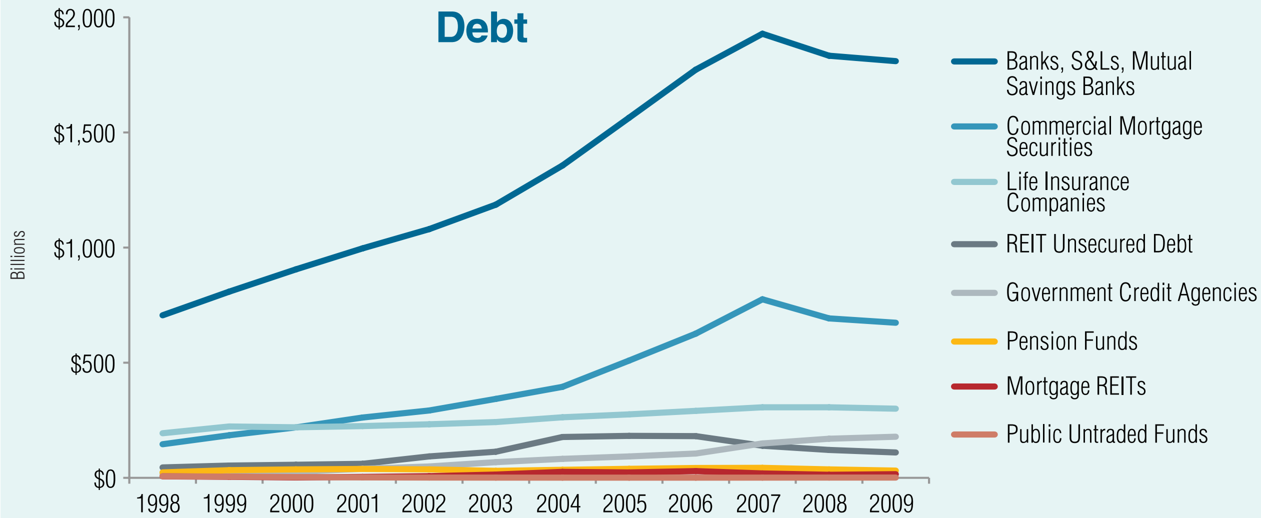
CMBS

A "huge time bomb" wrapped in a "ball of confusion," the CMBS markets could take years to unravel. The bulk of badly underwritten, recent-vintage securitized loans won't refinance until after 2014, "but many of these loans will go into monetary defaults before maturities because of borrower financial

U.S. Real Estate Capital Sources

EXHIBIT 2-7
U.S. Real Estate Capital Flows 1998–2009





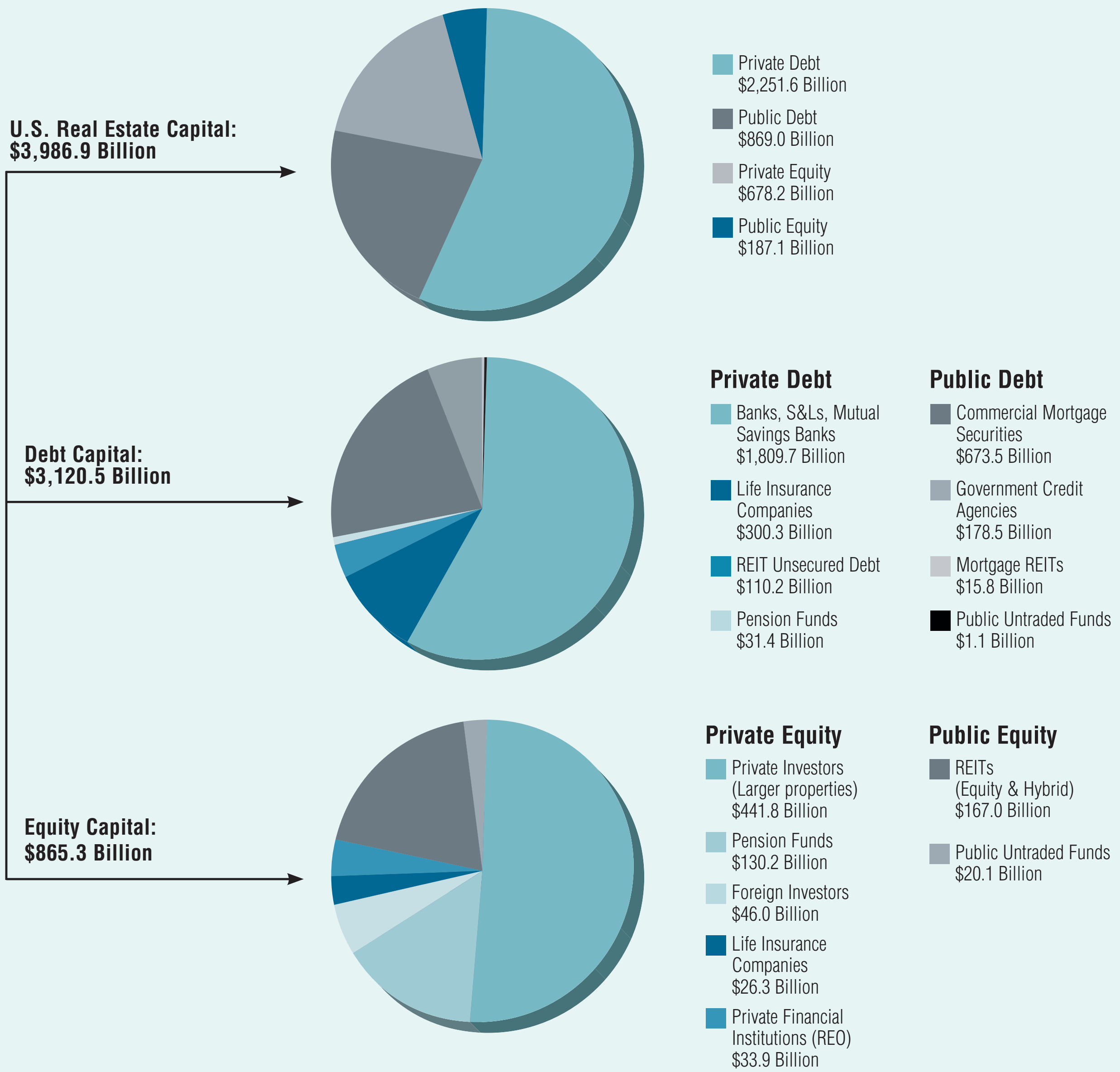
Sources: Roulac Global Places, from various sources, including American Council of Life Insurers, CMSA/Trepp Database, Commercial Mortgage Alert, Federal Reserve Board, FannieMae.com, IREI, NAREIT, PricewaterhouseCoopers, Real Capital Analytics, and Robert A. Stanger & Co.

Note: Excludes corporate, nonprofit, and government equity real estate holdings, as well as single-family and owner-occupied residences.

* 2009 figures are as of second quarter, or in some cases projected through second quarter.

EXHIBIT 2-8

U.S. Real Estate Capital Sources 2009

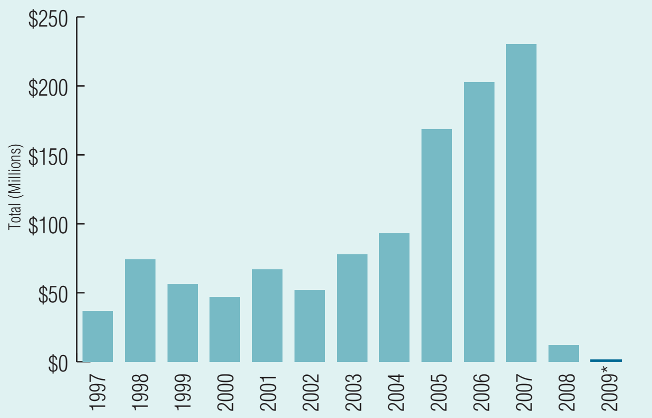


Sources: Roulac Global Places, from various sources, including American Council of Life Insurers, CMSA/Trepp Database, Commercial Mortgage Alert, Federal Reserves, FannieMae.com, IREI, NAREIT, PricewaterhouseCoopers, and Real Capital Analytics.

Note: Excludes corporate, nonprofit, and government equity real estate holdings, as well as single-family and owner-occupied residences.

* 2009 figures are as of second quarter, or in some cases projected through second quarter.

EXHIBIT 2-9
U.S. CMBS Issuance



Source: Commercial Mortgage Alert.

* Issuance total through August 24, 2009.

issues and lagging fundamentals." Earlier-vintage, better-underwritten CMBS loans set to mature in 2010, 2011, and 2012 also hit a wall of bad market timing—where properties and sponsors are strong, special servicers will try to extend maturities. That process could get complicated. A new tax rule allows borrowers to negotiate restructurings with special servicers prior to defaulting, but loan documents can impede the process. Then the special servicer has many masters—various layers of bondholders, each with their separate interests depending on level of exposure to losses. Mezzanine and preferred equity holders might also exercise their rights in potential litigation over particular collateral. "There are so many hands in every deal, you don't know where to begin to unwind," says a workout specialist. "No one has authority to make decisions without someone jumping in to block them. There will be a slugfest and the legal system can't handle it. In the end, all the parties will have no choice but to recognize their losses." Some special servicers get saddled with an additional conflict—they're owned by B-piece buyers with stakes in the deals—and many bondholders struggle just to figure out what collateral backs their securities. "No one knows who to talk to."

Mezzanine Debt

Most mezzanine debt lenders wring their hands—the downturn erases many investments, particularly from 2005–2007 transactions. "The market no longer exists," says an interviewee. "There's no such thing. 'Mezz' is gone. Today, the opportunity is senior debt—you can make big spreads and it's safer. We never should have leveraged the product and used CDO takeouts." In the new world order, mezz will reincarnate as a mid-tier product, at 400- to 500-basis-point spreads over equity "like it used to be."

Private Investors

Cloaked in secrecy behind walls of family offices, high-net-worth investors appear ready to form "old school" "jumbo syndicates to go after some great deals." "They'll move ahead of pension funds and form the leading edge of private investors coming back into the markets."

Fund managers have hit a brick wall, selling syndications or private REITs through broker dealers to small investors. Their target market reads in newspapers about how commercial real estate is "the next shoe to drop" and "stuffs money into their mattresses instead," says a portfolio manager. "It's one tough sell," especially since legacy fund returns suddenly show sharp declines after years of strong performance.

Opportunity managers try to retool fund strategies and gin up pro formas offering the usual giant returns without relying on as much leverage. The new opportunity model pays very low acquisition or recapitalization prices in cash and expects to lever up as much as possible when credit markets loosen. Holding periods necessarily lengthen to ride a recovery track—the buy-and-flip days are over (for now). Before new funds roll out, legacy portfolios present huge challenges for general partners as limited partners tally hideous losses. Forget the originally promised 20 percent–plus annualized returns—investors just hope to get principal back. Some GPs abandon ship—they have no chance to earn promotes—and limited partners jostle to take control and salvage something. New workout firms, often composed of laid-off bankers, step in as "white knights" to look after portfolios, which struggle under negative leverage and refinancing problems. "Undoing some of these ventures will be an arduous process."

Hedge funds head for the hills after their mistimed flirtation with real estate. Managed by financial engineer and deal guys, most of these shops don't have a clue about handling distressed properties, workouts, or asset management.

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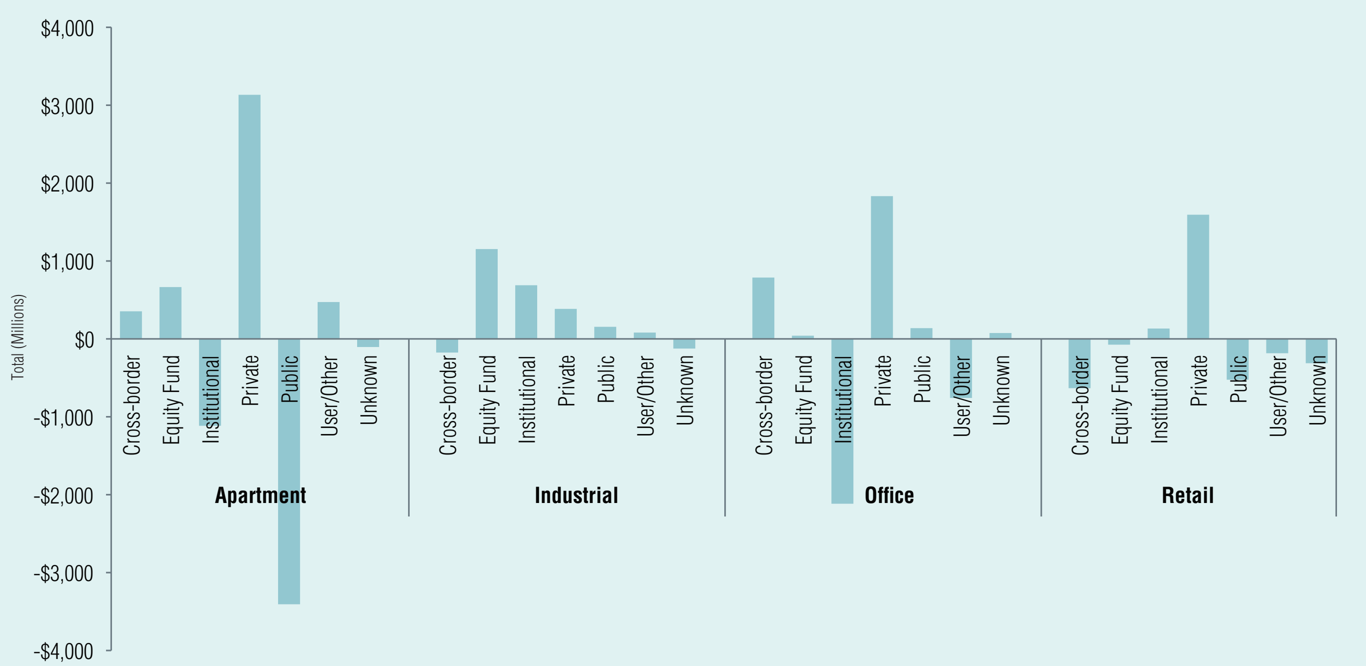
EXHIBIT 2-10

U.S. Buyers and Sellers: Net Capital Flows by Source and Property Sector



Source: Real Capital Analytics.

Note: Net capital flows from second-quarter 2008 through second-quarter 2009.

Many players attempt to raise capital for distressed debt funds from government bank takeovers. Interviewees expect the feds will push large portfolio sales to well-capitalized funds, controlled by major investment banks, in a virtuous circle of balance sheet cleansing. Smaller, less politically connected managers could have trouble competing in the market.

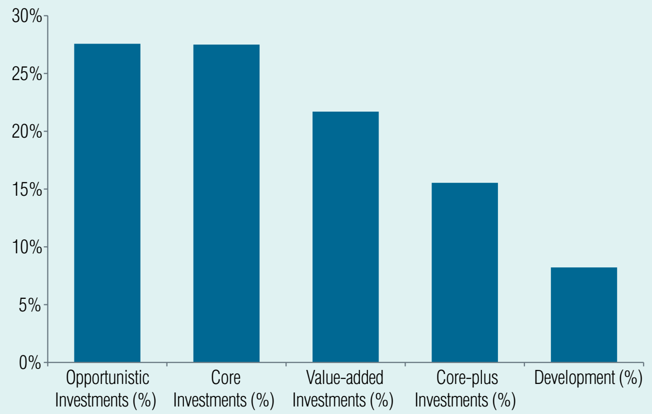
Pension Funds

Plan sponsors tread water in a sea of failed investments, punctured asset allocation models, and rising beneficiary payouts. "Their portfolios have been burned everywhere—real estate is just a small part of their problems." Pension funds that stuck to core and lower leverage do better, but many institutional investors caught the yield bug and "suffer the consequences" for venturing heavily into value-add and opportunity funds or saddling extra leverage on core portfolios.

Despite having a steady stream of new capital to invest, most plan sponsors characteristically turn "very conservative" about new allocations. They "recognize the timing for opportunity strategies, but don't have the moxie to pull the trigger" after taking large writedowns. Some major public funds talk about doubling down at market bottom and making up lost ground quickly. These plan sponsors "want to take revenge on the markets" and investment advisers shopping new funds "need to show alpha to rouse any interest." Core fund pitches get blank stares, although ultimately pension funds need steady, predictable income with less volatility and some appreciation. "They require cash flow for payouts to increasing numbers of baby boomer retirees." An adviser despairs: "We're really back to square one. They want real evidence we're at bottom before they invest. They don't want to be embarrassed again."

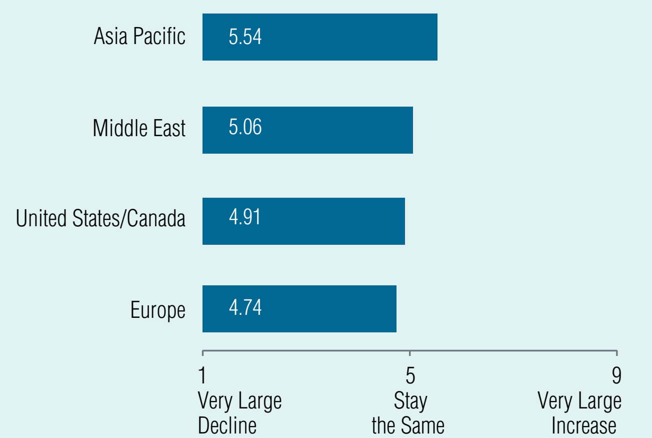
While interviewees expect frustrated plan sponsors to stay committed to the real estate asset class, goodwill will not extend to underperforming investment managers. A big shakeout comes in a looming consolidation. "Everyone is in the pen-

EXHIBIT 2-11
Strategic Investment Allocation Preferences for 2010



Source: *Emerging Trends in Real Estate 2010* survey.

EXHIBIT 2-12
Change in Availability of Capital for Real Estate by Source Location in 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

alty box." Separate accounts get transferred and new companies form to take over portfolios. "Only the top ten or 15 firms can be sure they'll survive, and some big boys could fall."

Given all the turmoil, pension funds actually stand in relatively good position. "They have cash and that's what everyone else needs." But then again, "they're always late to the party."

Public REITs

After REITs tripled in value from 2000 to 2006 and then precipitously lost 75 percent off market peaks, these volatile stocks appear fortified to sustain a rebound at the vanguard of any commercial real estate turnaround. Among interviewees, REIT executives certainly seem the most sanguine, a reversal from last year's ultra-pessimistic mood. "We took our lumps, we've deleveraged, and raised new capital in public offerings," says a CEO. "We can focus more on opportunities."

While acknowledging ongoing threats to markets from the refinancing wave and deteriorating fundamentals, stronger REITs prepare for cyclical-timing acquisitions and will take advantage of weakened borrowers and lenders. "We'll partner with banks to take stakes with promotes in foreclosed assets, assume operating control of troubled properties, and provide capital to distressed owners in return for equity."

Recent "reequitizations" through public offerings diluted existing shareholders, but build up reserves for acquisition sprees. Now, "REITs will emerge as bigger players." Ability to tap the public markets and reasonably leveraged balance sheets (50 percent or less) give many REITs a significant leg up on other investors distracted by mounting debt-service challenges and stymied by frozen credit markets. In fact, insurers and banks have enough confidence to renew REIT credit lines—"they didn't depend on the CMBS markets for financing." Overall, these companies also were net sellers before the crash and most did not try to compete for acquisitions late in the cycle against opportunity funds—"those that did got hammered." Some interviewees warn that REITs "are not out of the woods" since earnings could erode from lowered occupancies and rental rates. "They've got dividends and not much else" and their "catalyst for upside" is a coming attraction.

The REIT universe could expand. IPOs may provide rescues for drowning private equity funds, real estate operating companies, and developers. Similar Wall Street–engineered game plans worked in the early 1990s when many desperate developers gave up proprietary control of their companies to shareholders and exposed themselves to analyst scrutiny. "It's either go public or go broke."

Several billion dollars in new mortgage REITs raise headlines and may add some near-term liquidity to the markets. Previous iterations of these externally managed structures

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EXHIBIT 2-13

Foreign Net Real Estate Investments in the United States by Property Type

Source: Real Capital Analytics.

Note: Net capital flows from second-quarter 2008 through second-quarter 2009. All dollars in millions.

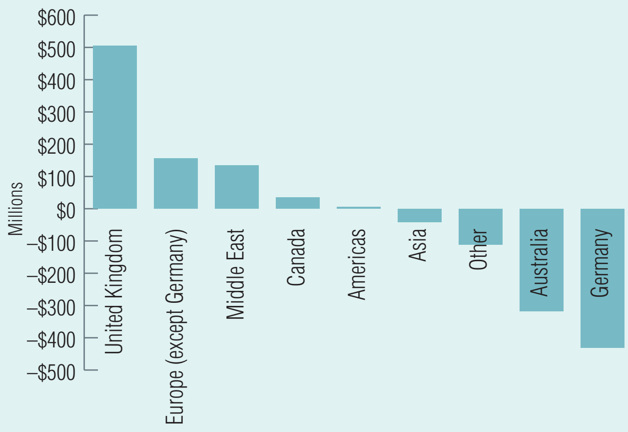
from the 1970s and 1990s "never turned out well." The verdict is out on their impact and performance, but they appear opportunistically positioned to invest at market lows.

Foreign Investors

Offshore players retreat to home regions while U.S. markets find a market floor. They suffer losses like everyone else and want to avoid a premature reentry. "Everyone's wary of new commitments after placing bad bets in 2005 to 2007," says an interviewee. Despite the hard licks, foreigners continue to view the United States as a safe haven, prefering high-profile coastal cities and urban centers over interior markets and suburban locations. "China and India are like riding a roller coaster; London got creamed more than New York; Portugal, Italy, Greece, and Spain are in tailspins; and eastern Europe is even worse." By the end of 2010 and into 2011, wealthy Asian and Middle Eastern buyers could be active bottom-fishers in 24-hour gateway cities like New York, looking for discounts and good core to core-plus returns. European investors have their hands full with backyard problems, and many Pacific players, notably Australians, view near-term investing as "all about China."

EXHIBIT 2-14

Foreign Net Real Estate Investments in the United States



Source: Real Capital Analytics.

Note: Net capital flows from second-quarter 2008 through second-quarter 2009.

Markets to Watch

"Not bullish on anywhere."

Dysfunctional global credit markets and a tottering U.S. economy subdue prospects for cities and suburbs from coast to coast in 2010. Job losses strike virtually every region and market. State and local governments suffer deficits—tax revenues decline sharply; expenses for unemployment, Medicaid, and other social welfare programs spike; and shortfalls in public pension funds require infusions. Officials strain to avoid cutbacks to police, mass transit, sanitation, teachers, and other essential services—they creatively attempt to use federal stimulus funds to plug budget holes temporarily. In "a flight to quality," *Emerging Trends* interviewees hunker down in familiar locations and don't anticipate major shifts in investment preferences or corporate real estate strategies, exiting the downturn. "Markets performing well before the crash will perform better coming out of it; markets lagging before will continue to lag."

Investors tend to favor the following:

- **Global gateway markets** on the East and West coasts—featuring international airports, ports, and major commercial centers.
- **Cities and urbanizing infill suburbs with 24-hour attributes**—upscale, pedestrian-friendly neighborhoods; convenient office, retail, entertainment, and recreation districts; mass transit alternatives to driving; good schools (public and/or private); and relatively safe streets.
- **Brainpower centers**—places that offer a dynamic combination of colleges and universities, high-paying industries—high tech, biotech, finance, and health care (medical centers, drug companies)—and government offices.
- **Barrier-to-entry markets** where geographic constraints—rivers, lakes, oceans, and mountains—limit development and help control overbuilding.

Often, the most coveted markets have most, if not all, of these elements. In this year's report, investors also showed a preference for some growth-oriented markets that did not get overheated or overpriced in recent years.

Investors shy away from:

- **Midwest manufacturing centers**—automaker travail deflates interest to new lows;
- **Secondary and tertiary cities**—anywhere you can't fly direct to from the global pathway centers;
- **Hot-growth bubble-burst markets**, which collapsed under plunging housing prices; and
- **Fringe areas**—the exurbs and places with long car commutes or where getting a quart of milk means taking a 15-minute drive.

Shuffling

Bulletproof. Not surprisingly, the country's preeminent recession-proof market, **Washington, D.C.**, regains the survey's number-one ranking in all investment and development categories, except for industrial properties. The nation's capital lacks a primary distribution center, but features all the other attributes investors want—plenty of government jobs that don't get cut in slowdowns, high-tech and biotech

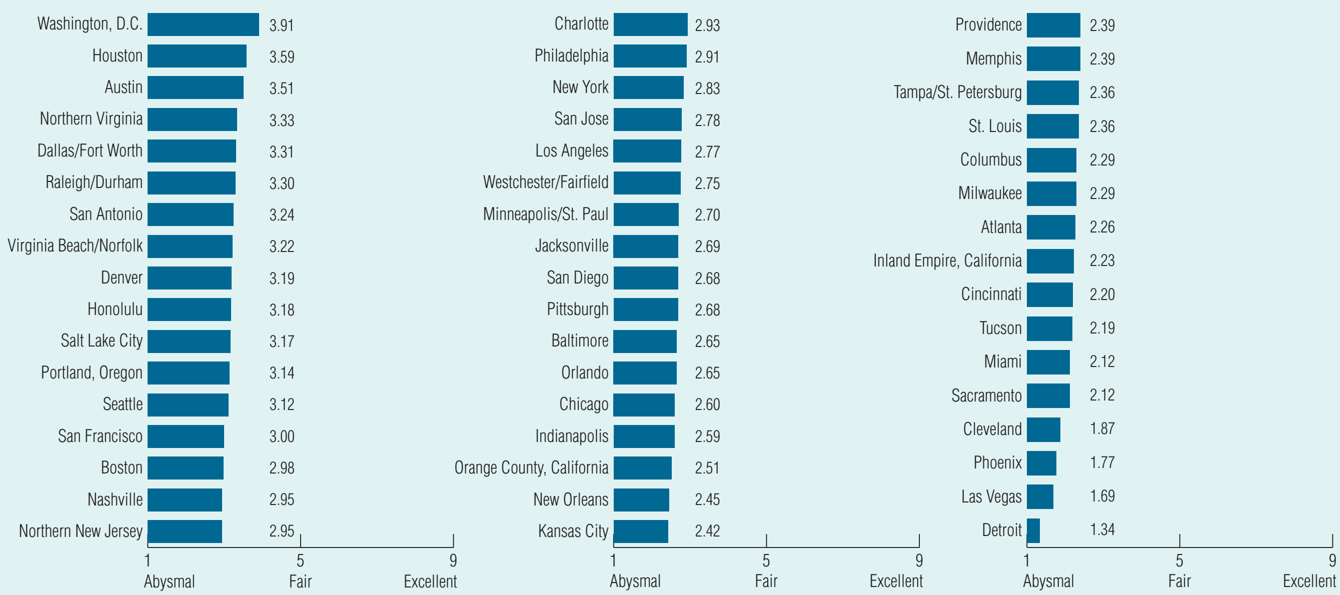
EXHIBIT 3-1

U.S. Markets to Watch: Commercial/Multifamily Investment

Source: *Emerging Trends in Real Estate 2010* survey.

EXHIBIT 3-2

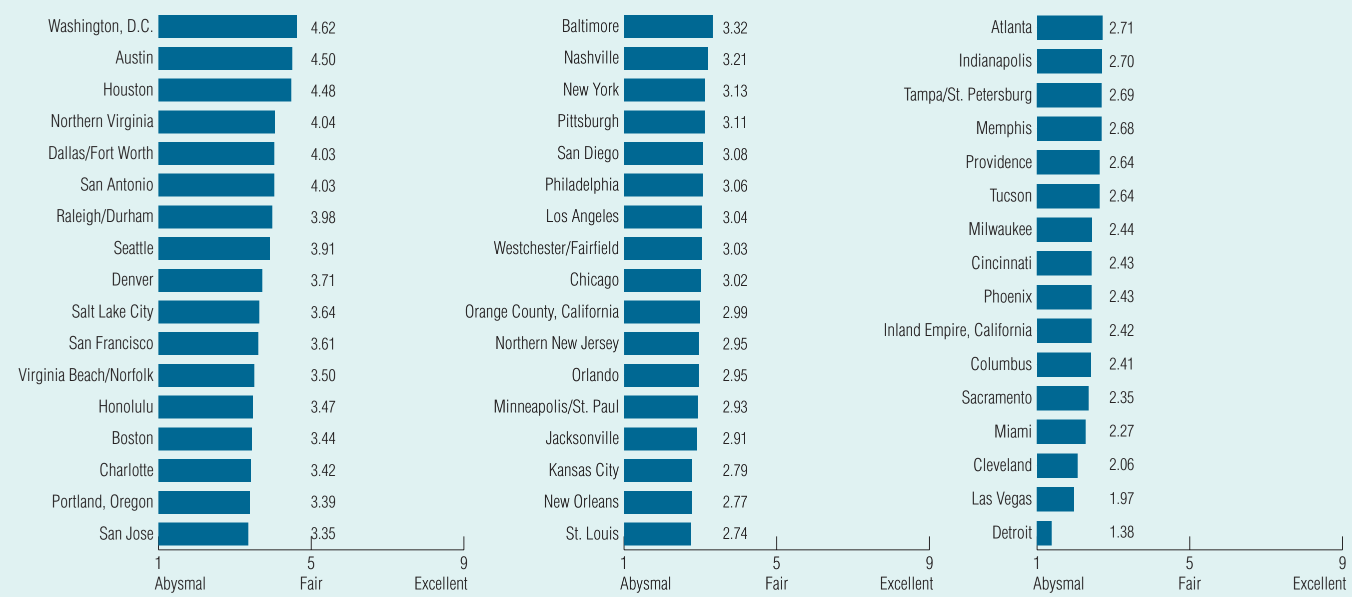
U.S. Markets to Watch: Commercial/Multifamily Development



Source: *Emerging Trends in Real Estate 2010* survey.

EXHIBIT 3-3

U.S. Markets to Watch: For-Sale Homebuilding



Source: *Emerging Trends in Real Estate 2010* survey.

industries that feed off government programs, a slew of area universities, and, most importantly, a diversified 24-hour center linked to other global capitals and national gateway cities by three major airports. No wonder it's one of the few markets to register even a slight ratings gain over last year's survey.

Resilient. Long-term confidence holds for three other stalwart gateways: **San Francisco**, **Boston**, and **New York**. These cities retain a wealth of 24-hour attributes, brainpower jobs, and global pathway connections. San Francisco's multifaceted environment, proximity to high-tech Silicon Valley, and history of bouncing back from corrections bolster investor outlooks. Boston's universities and intellectual capital "create a compelling story," and despite financial industry downsizing New York remains one of the world's preeminent locations—"it's a place where you want to be." And the wealth "concentrated in Northeast markets just makes them more resilient."

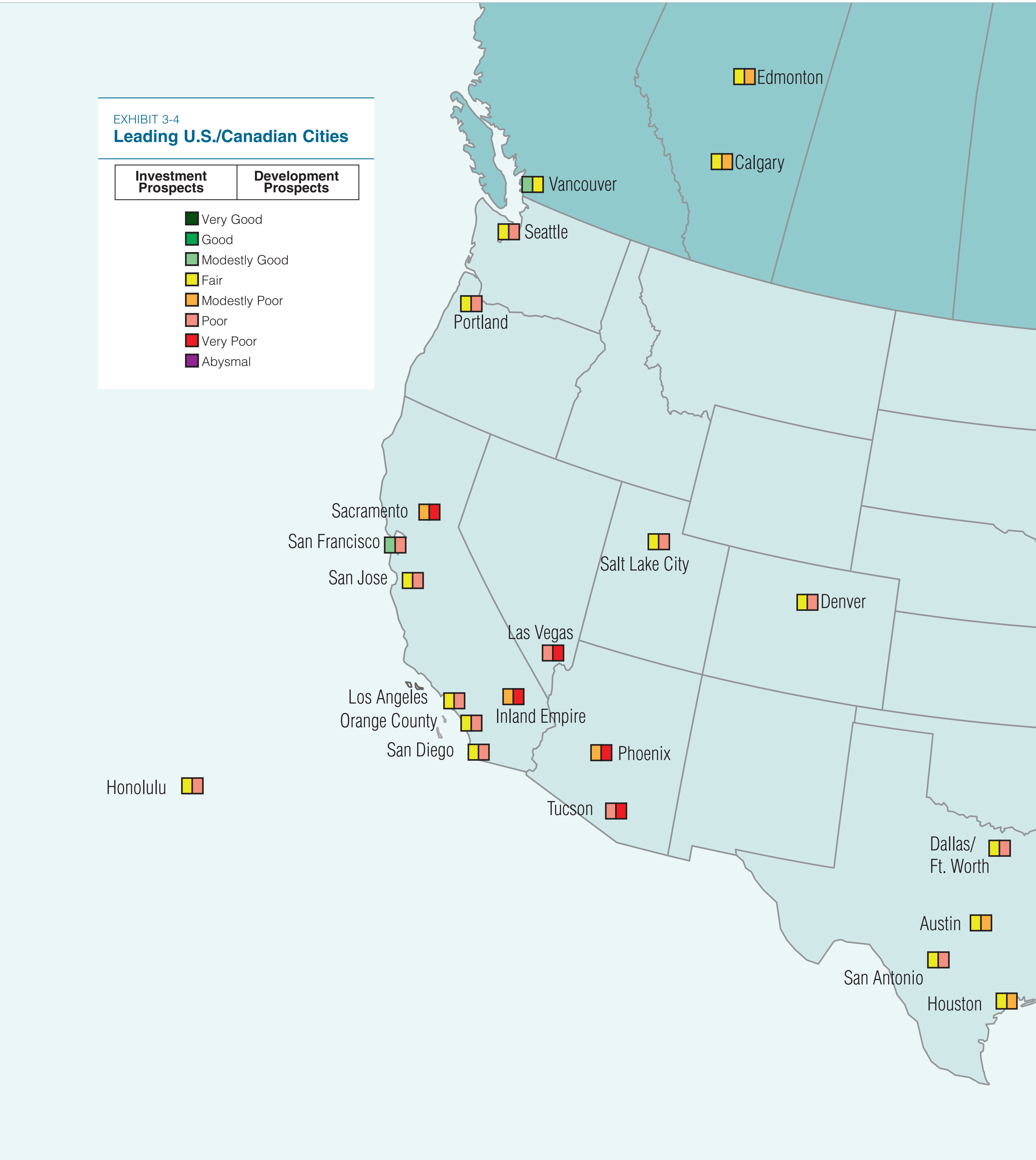
High Cost. Two other West Coast gateways—**Seattle** and **Los Angeles**—suffer bigger ratings declines than San Francisco, but remain among the survey's top ten major markets. Relative sentiment for California cities, including **San Diego** and **Sacramento**, falls over concerns about government gridlock, rising taxes, and an inhospitable business climate.

Growth Bastion. After years languishing in the survey basement, Texas markets continue to show strength. Interviewees say low state taxes and a pro-business environment ensure future growth and continuing corporate relocations. In contrast to California, "the state's stronger government revenue picture really helps" and property prices never overshot. Energy and health care buoy **Houston**, while **Dallas** benefits from its expansive international airport and distribution hub. **Austin** fits the "brainpower" model with its state capital, large state university, and offshoot tech and software businesses.

Busted Florida cities take it on the chin, clobbered by a severe housing downturn and curbed population inflows, which had fueled decades of supercharged development. Hot-growth desert cities—**Phoenix** and **Las Vegas**—also cool off dramatically in the housing bust. "The places to avoid are hot, humid, [or] sandy—or make cars."

Further Decline. And that brings up the long-forsaken manufacturing Rustbelt, stretching from western New York State into the Midwest heartland. Survey ratings score record lows for many markets in this region, registering concern about their future viability in the

EXHIBIT 3-4
Leading U.S./Canadian Cities




Halifax
Ottawa
Montreal
Minneapolis/ St. Paul
Toronto
Boston
Milwaukee
Detroit
Providence
Northern New Jersey
Cleveland
Chicago
New York City
Westchester/ Fairfield
Philadelphia
Indianapolis
Columbus
Pittsburgh
Baltimore
Kansas City
Washington, D.C.
Northern Virginia
Cincinnati
St. Louis
Virginia Beach/Norfolk
Charlotte
Raleigh/ Durham
Nashville
Memphis
Atlanta
Jacksonville
New Orleans
Orlando
Tampa/ St. Petersburg
Miami

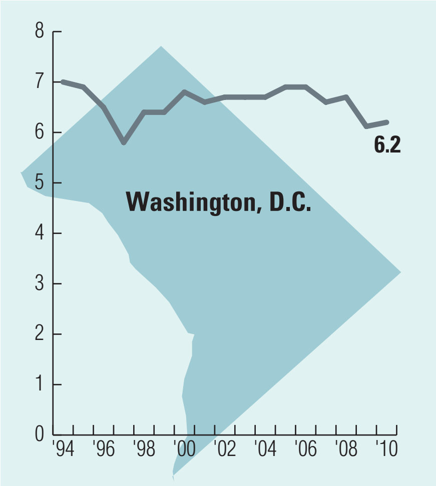
wake of automaker bankruptcies and widespread industry layoffs. **Chicago**, the region's diversified 24-hour citadel, can't escape a chill from the regional downdraft either. No one can sugarcoat how domestic manufacturers continue to relocate away from union-dominated areas in colder, northern interior locations and move to right-to-work, "more business friendly" states in the Southeast and Southwest.

Off the Beaten Track. Airline cutbacks to secondary cities hobble prospects and underscore investor concerns about the ability to link into the flows of global pathway commerce. Even fast-growing Sunbelt markets "can get cut off from global business strategies." The big corporations "don't have much reason to be there." **Charlotte** worries about retaining its banking center, while nearby **Raleigh-Durham** overcomes one-step-removed status by enhancing its research and development incubator. High-tech **San Jose** in Silicon Valley conveniently links to the nearby San Francisco gateway. Everywhere else wants to turn into a brainpower hotbed, but places that suffer through long winters without recreational resorts can't compete for intellectual talent against more temperate climes. In a tough economy, secondary markets also become more vulnerable to business contraction—if a big employer fails, the entire local economy "can take a head shot."

Infill vs. Suburbs. Road congestion, higher energy costs, and climate change concerns combine to alter people's thinking about where they decide to live and work. "It's a fundamental shift." The lifestyle cost-of-living equation starts to swing away more dramatically from bigger houses on bigger lots at the suburban edge to greater convenience and efficiencies gained from infill housing closer to work. These homes may be more expensive on a price-per-pound basis, but reduced driving costs and lower heating/cooling bills provide offsets. And time saved avoiding traffic hassles moderates stress and enhances productivity. "Two-hour commutes reach a tipping point with higher energy costs" and "near-in suburbs will do well especially if they link to business cores by mass transportation." Empty nesters and later-marrying echo boomers continue to flock to cities and urbanizing suburban areas. For aging baby boomers, infill apartment or townhouse living means less upkeep and proximity to cultural and entertainment attractions. The young singles crowd stays closer to the action, too—they don't need to worry about finding the right suburban school district for children. As 30-something couples have kids and consider schools, "more will orient to infill locations and less edge—increasing numbers of suburban school systems will lose advantages as tax bases falter."

Major Market Review

Washington, D.C. Count on it—the nation's capital always ranks number one in *Emerging Trends* market surveys during a recession. Its dominant employer—the federal government—never shrinks and often expands in bad times. "Love those buildings with government offices—they're the only credit tenants out there right now." A change in administrations hasn't hurt, either—"the GSA [Government Services Administration] searches for more space and lobbyists crawl around everywhere." Hard-pressed lenders pull back in most other cities but express long-term confidence in this market—major insurers and big banks actually provide financing for new deals. "All markets are not



created equal," and Washington stands above all others right now. But owners lose value here, too—"just not as much as everywhere else" and supply/demand fundamentals will weaken into 2010. Office vacancies already increased above 10 percent as nongovernment employers slash jobs and more than 6 million square feet of new space is under construction. More shadow sublease space crowds into the market, concessions increase, and rents decline. Bethesda, Maryland, home to the National Institutes of Health, should benefit from increased biomedical spending, and Virginia markets, inside the Beltway, suffer only modest erosion relative to past downturns. Suburban vacancies advance well into the high teens further out.

San Francisco. Despite its formidable barrier-to-entry attributes, this 24-hour gateway takes investors on a rock-and-roll ride of up-and-down pricing, occupancies, and rents. After a sudden run-up attributable to the late 1990s' Internet bubble, some financial district office rents approached $100 per square foot and then dropped precipitously by 2001. A solid recovery followed, but now the volatile pattern repeats itself. "Nominal office rates fall to 1982 levels." Interviewees expect another "quick" rebound—"the market

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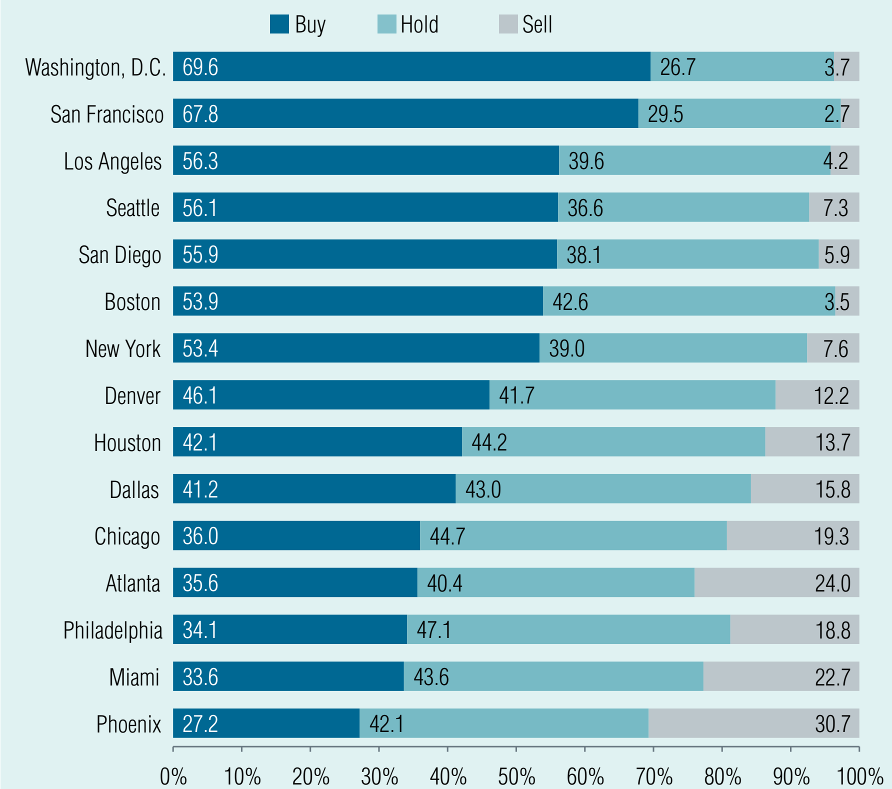
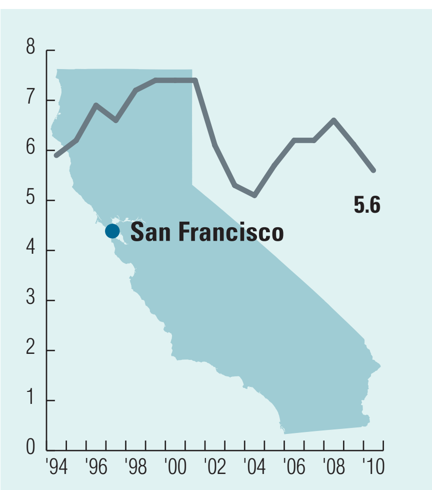
EXHIBIT 3-5

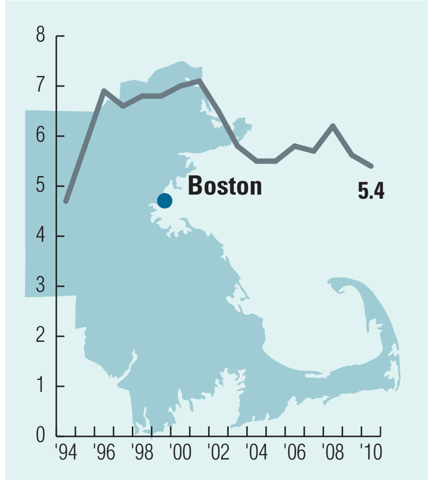
U.S. Apartment Buy/Hold/Sell Recommendations by Metro Area



Source: *Emerging Trends in Real Estate 2010* survey.



doesn't look good now, but what's not to like? It's diversified, compact, beautiful, and where people want to live." An expanding regional tech industry, fed by Silicon Valley, should help. Housing leads the recovery after dramatic price declines. *Emerging Trends* surveys rank the market as one of the top buys for apartments, warehouse, office, and hotels. Cash investors set their sights on properties owned by late-cycle buyers, who purchased at the top and suffer the consequences.



Boston. Locals express nervous optimism: "We're holding up better than most—it's not as bad as the last recession." Barriers to entry limit new supply in the financial district and office tenant demand falters only marginally. Recent negative absorption slows down—vacancies edge into the lower teens, "but that's no catastrophe." Asset management firms and mutual fund managers constitute most of the city's important investment-financial sector—these businesses dodged much of the fallout suffered by New York investment and money center banks. Compelling economic drivers—premier educational institutions, life science companies, and high-tech business—reinforce investors' long-term conviction. It's a solid core-hold market. Downtown apartment vacancy stays well under 10 percent and condo/house pricing "remains stiff." New residential development activity is dead in its tracks. Suburban markets characteristically soften more than downtown—they should fare better than they did during the early-2000s correction. "Even our regional and community banks look in decent shape."

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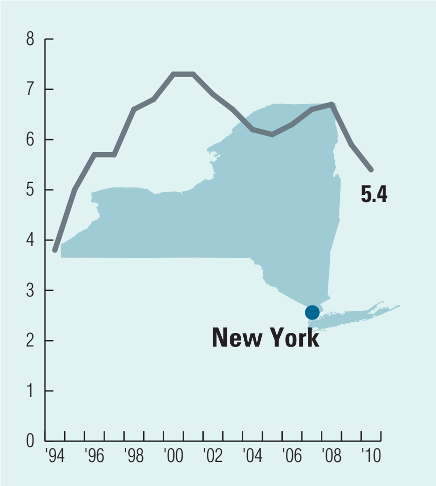
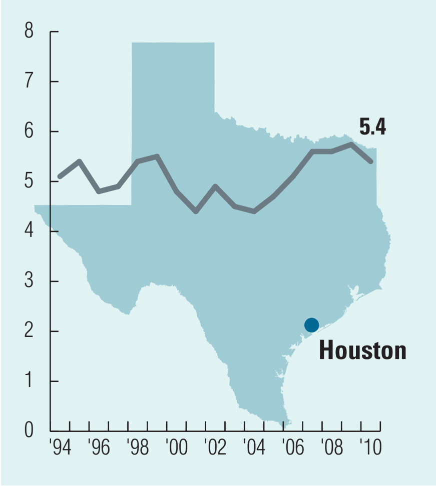


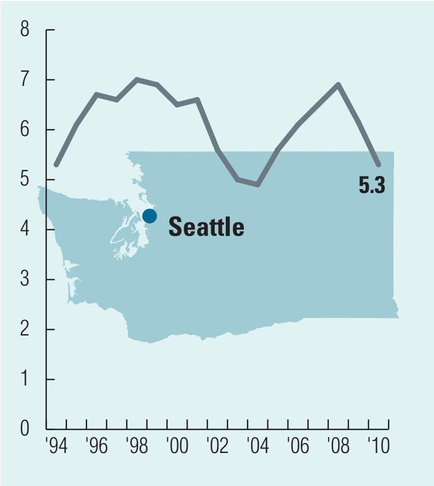
New York. As ground zero for the world credit cataclysm, the market "gets crushed." No, make that "crunched." About 250,000 jobs go *poof*, and the number of unemployed hits record highs. Midtown availability rates skyrocket from mid–single digits into the mid-teens and office rents plummet 40 percent or more. Co-op pricing sinks 25 percent, empty storefronts mar Madison Avenue's posh high-fashion streetscape, and tourists can book luxury hotel rooms for under $300 a night. The widespread value erosion drops prices from obscenely out of sight to merely expensive. Savvy investors see nothing but opportunity and more affordable costs—"the city is fantastic long term, everyone wants to be there, it's the place to play." Hundred-dollar-plus office rents and sub-4 cap rate transactions were ridiculous anyway. "Deals will feel better—we can get good yields again." A shakeout continues among condo developers who built million-dollar-plus apartments in fringe districts—unit sales won't close without substantial markdowns. City and state officials dance around redeveloping the World Trade Center site—market demand sags for any new space and why should taxpayers subsidize new construction when government budgets bleed red ink? The pace of market recovery depends on the hammered banking industry—"How long will it take for Wall Street to reinvent itself?" Already, some investment firms step up hiring. New York has fallen and risen before.

Houston. This hot-growth energy bastion and mega-suburban agglomeration achieves its highest ranking since the early 1980s, although its rating drops from last year. Whether the market maintains momentum largely depends on oil and gas prices—the higher they



go, the better its fortunes. "The city is all about energy and good timing, no matter what anybody says." Propelled by a surge in worldwide oil markets in 2007 and 2008, Texas skirted direct recessionary blows—unemployment remains well below the national average. But skittish energy markets take the edge off the local economy, and job losses accelerated in 2009. Except for retail where tenants consolidate, property sectors show reasonably good supply/demand balance. Values and rents fall "though not as bad as other places." Consistently strong population growth always makes Houston a leading market for apartment developers and homebuilders. The city now banks on a global economic recovery pushing up energy demand.

Seattle. Recession and bank woes harpoon Seattle, last year's number-one market. Washington Mutual's demise walloped the office sector and three late-in-the-cycle projects could send downtown vacancies above 20 percent. "Those office developers will be in a world of hurt." The city's diverse group of major employers—Microsoft, Boeing, Costco, Starbucks,



and Amazon—stabilize after layoffs and cost cutting, but offer no expansion plans. "There's just no demand." "Wolves lick their chops for bargains" in office and condos, where projects also missed the market. "Strong interest from institutions could cushion value declines." Apartments stand out as a relative bright spot—vacancy increases modestly, rents soften, and development has shut down. Slowed import-export traffic sends industrial vacancy

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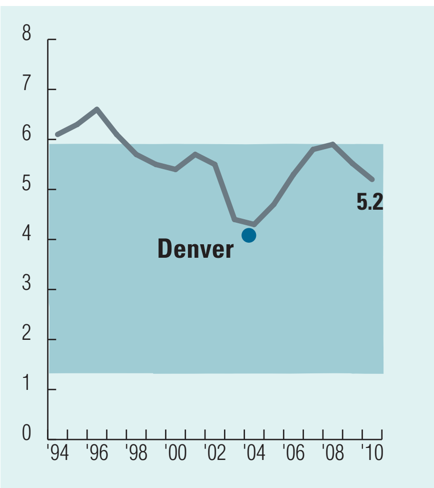
above 5 percent, high historically in this key West Coast port. Global pathway positioning should accelerate a market bounce back once the U.S. economy resuscitates. "We're down, but not out."

Denver. Not a barrier-to-entry market or a global pathway destination, Denver marshals its attractive Rocky Mountain lifestyle attributes and works hard to fortify its downtown core into a multifaceted, 24-hour commercial center. While avoiding financial industry implosions, the local economy gets a boost from green initiatives—the city is a national hub for companies in alternative energy, wind-farm manufacturing, and

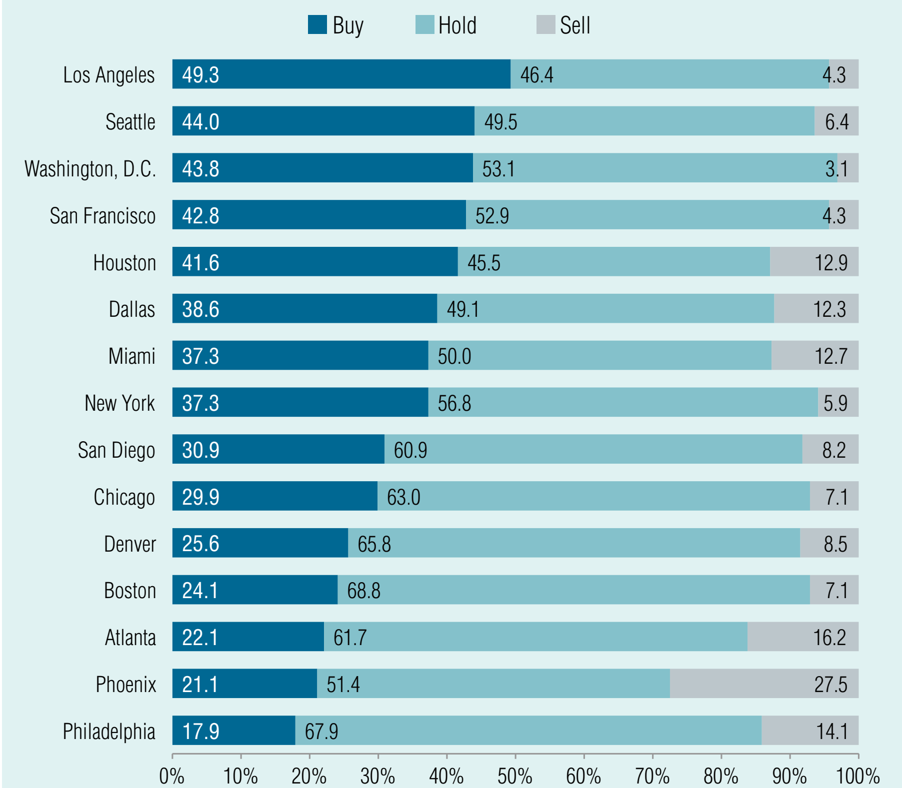


natural gas. All property sectors soften modestly. The metro area wins points for building out its light-rail network, encouraging transit-oriented mixed-use projects around stations.

Los Angeles. California's fiscal straitjacket, housing debacle, slowed import traffic, and the financial industry crash clobber the West Coast's predominant Pacific gateway—unemployment hits double digits, above the national average. Even Hollywood stars wonder about the future of multimillion-dollar-per-picture

EXHIBIT 3-6

U.S. Industrial/Distribution Property Buy/Hold/Sell Recommendations by Metro Area



Source: *Emerging Trends in Real Estate 2010* survey.

deals. Investors will think twice until the state government reins in scary budget deficits and reorients tax burdens. Political gridlock and blowback discourage business expansion and relocations. More companies threaten to move east to cheaper desert states—"the caravan is leaving." Office vacancies head into the mid-teens, not counting a mountain of sublease space on the market, and "tenants take control" negotiating rents down. Overbuilt Orange County and Riverside/San Bernardino office markets look worse. The formerly "white hot" warehouse sector turns lukewarm after an Inland Empire building binge and the recession flatten resort hotels. Once-stratospheric housing prices have

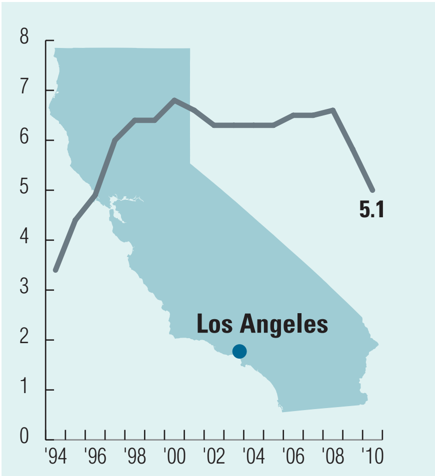
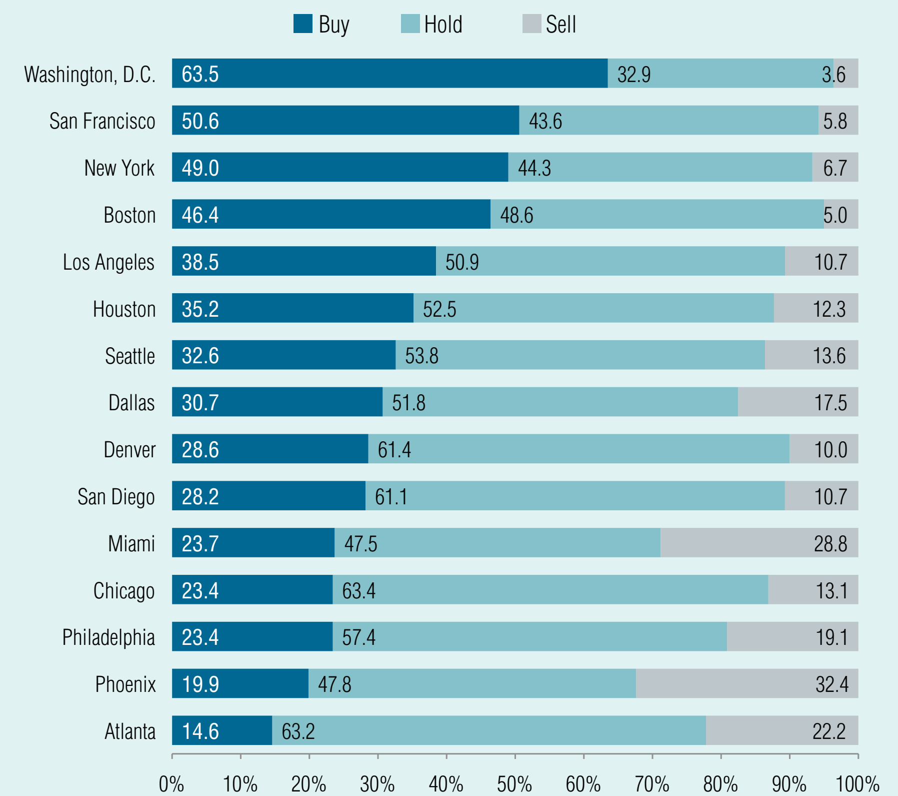


EXHIBIT 3-7

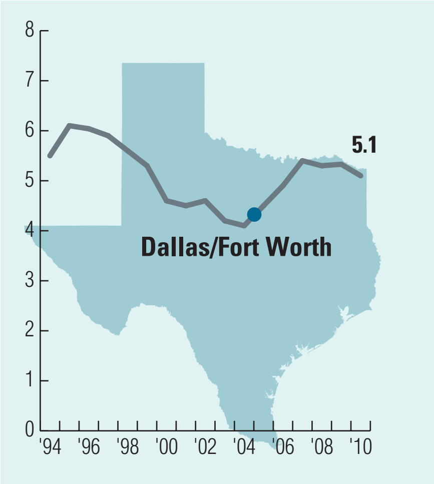
U.S. Office Property Buy/Hold/Sell Recommendations by Metro Area



Source: *Emerging Trends in Real Estate 2010* survey.

hurtled back to more rational levels, and new homebuyers can make "great deals" among all the foreclosures—residential markets actually edge off bottom. Southern California looks like a developing opportunity play. Slowly, demand will rebound for premium assets, across all property types, especially in the top submarkets adjacent to the coast and near executive housing around desirable hillside valleys. For warehouse investors, the L.A.–Long Beach deepwater port and expansive regional distribution hub remains the number-one U.S. target. Homebuyers and businesses always will pay more for strategic commercial locations, Pacific vistas, and Mediterranean climate. At the end of the day (those gorgeous ocean sunsets), L.A. retains its considerable attractions. Inland Empire office and residential as well as other off-coast locations present another story—these desert areas won't bounce back nearly as quickly. Many debt-burdened middle-income residents face the double whammy of cratered housing prices and increased tax burdens. These folks may have no choice but to move out of state.

Dallas. "It may be better here, but it's still awful." Low cost of living and low taxes attract growth and limit downside. "We avoided the pricing boom, so we didn't suffer a pricing bust." Between a powerful congressional delegation and the last administration, federal dollars pour into the Metroplex. "A major gas field under Fort Worth doesn't hurt, either." The credit crisis shuts down hyperactive developers—"our equilibrium is 20 percent vacancy"—and continuing population inflows should make "for a great building environment after the current pause." This market offers "a pure timing play and timing will be good in the next few years." But you may have to hold to 2015 or later to realize any value.



San Diego. Without a major commercial harbor and lacking a gateway international airport, San Diego suffers more than other West Coast cities in the downturn. Although the area features an incredible year-round, balmy, blue-sky climate and attracts talent for high-tech and biotech jobs, the cost of living is California expensive and corporations don't get the advantages of proximity

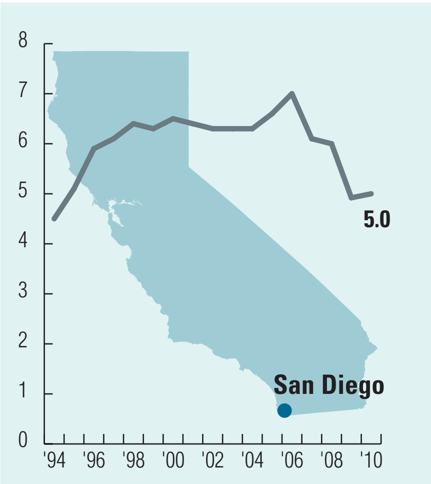
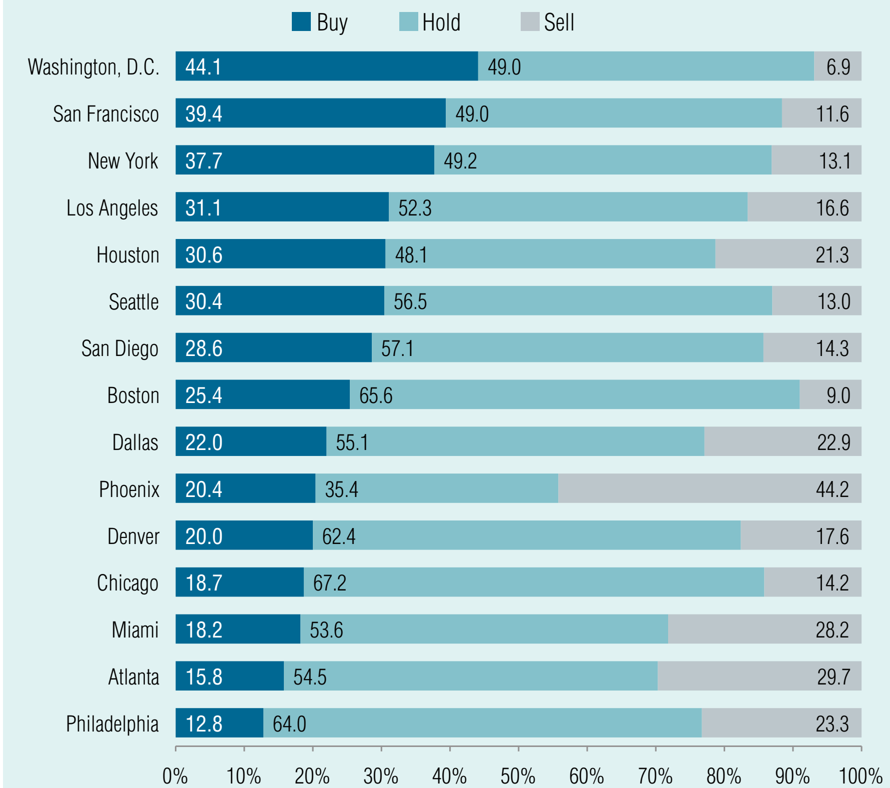


EXHIBIT 3-8

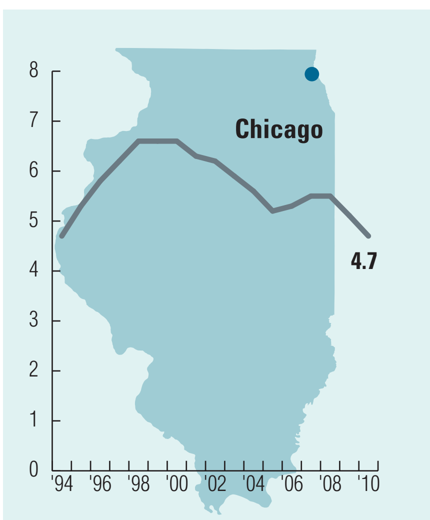
U.S. Retail Property Buy/Hold/Sell Recommendations by Metro Area

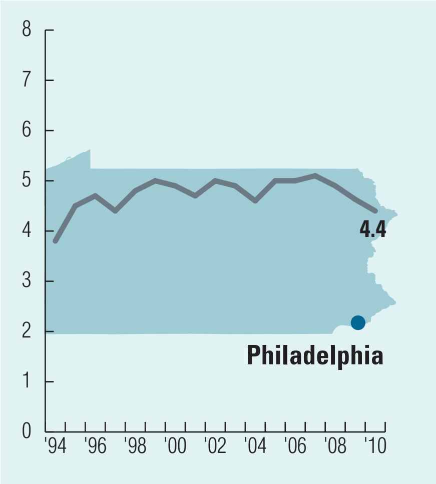


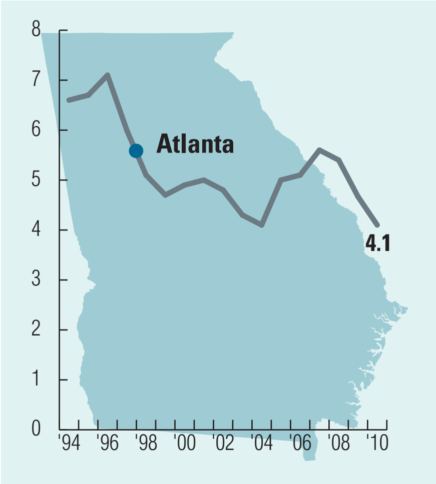
Source: *Emerging Trends in Real Estate 2010* survey.

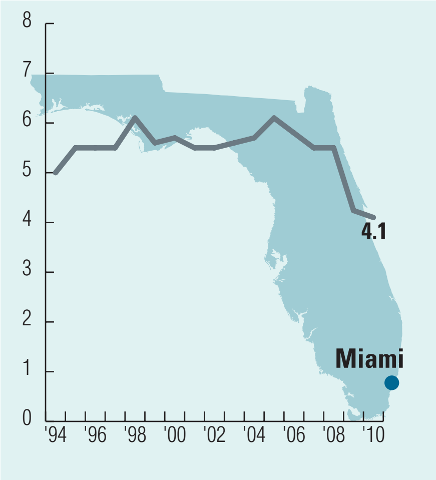
to international transportation hubs like L.A.'s or San Francisco's. Office vacancies approach 15-year highs at 20 percent. The housing swoon and homebuilding collapse knock local retail markets especially hard. But new homebuyers find great buys in neighborhoods that most couldn't touch three years ago, and commercial investors expect similar opportunities to percolate in their markets by 2011 or 2012. For 2010, the market is a pure hold.

Chicago. Downtown office actually "looks healthy"—new projects lease up and the development pipeline runs dry. Twenty-four-hour amenities—particularly mass transit advantages—attract businesses to the Loop and North Michigan Avenue over suburban markets "where a bloodbath occurs" and "everything is under stress." But "disastrous" condo overbuilding traps downtown developers, who thought high-rise lakefront views would command an endless stream of buyers willing to pay large six-figure and million-dollar prices. Now, the shadow condo market softens rental apartments. Locals worry that Midwest malaise will stifle demand on all fronts. Deflated tourist and convention business nails hotels and the O'Hare industrial market suffers from shipping slowdowns. The dysfunctional state political system heightens the dread. "There's not much good to say."









Philadelphia. This perpetually low-growth market suffers typical recessionary demand erosion, cushioned by the absence of any new construction. "We're holding up comparatively; that's better than the Sunbelt." Suburban office vacancy (20 percent–plus) increases ahead of Center City (mid-teens). Real high-speed rail lines (with trains that actually go 180 miles per hour) connecting 30th Street Station to New York and Washington, D.C., gateways might eventually boost Philly's prospects. Many survey respondents put it solidly in the "hold" category.

Atlanta. Urbanization and infill development will highlight future growth—after losing residents for decades, the city registers the largest percentage population gain of any surrounding regional county. Demographic trends take hold—young career-builders and empty nesters move closer to urban nodes. Apartment and townhouse living gains traction in a market reaching its sprawl limits. Midtown solidifies its healthy core around a 24-hour street grid of skyscraper offices, residences, and hotels. But once again, local developers go overboard and rush well ahead of market demand for infill space. "Disaster" strikes uptown Buckhead—now probably the nation's worst office submarket. Four speculative office buildings open with minimal leasing interest just as unemployment reaches quarter-century peaks. Condo projects stand mostly empty up and down Peachtree Road. "Everybody is always building and counting on growth to fill space," explains an interviewee. "Office tenants have hundreds of opportunities to find Class A space at rent levels of 20 years ago." Condo unit buyers can almost name their price. Ironically, outer suburban districts face fewer problems—developers all bought the infill story and slowed projects beyond the Perimeter. Interviewees complain about state government favoring rural interests and balking at expanding mass transit to support urban growth and reduce mounting road congestion. But in the next breath they stay bullish, pointing to continuing corporate relocations—"NCR is moving here." That's all the more reason to keep on building.

Miami. If you always wanted that South Beach condominium, looking onto the sparkling, blue Atlantic, start hunting for generational bargains in 2010. Winnowing down all the alternatives from among the scores of failed projects presents buyers with their greatest challenge. Historically in Miami, prime oceanfront and Biscayne Bay apartments escalate in value once demand finally absorbs oversupply from out-of-hand building booms. And this boom probably rates as the most overdone ever. Lenders not only tally all their botched condo construction loans, but also drown in a growing pool of failed hotel acquisition and redevelopment financings. Overleveraged resort owners bleed red ink—occupancies and room rates shrivel just when they needed a cash flow surge to pay for glitzy redesigns. Office and industrial investors do better—these sectors stay in relative balance thanks to more restrained development.

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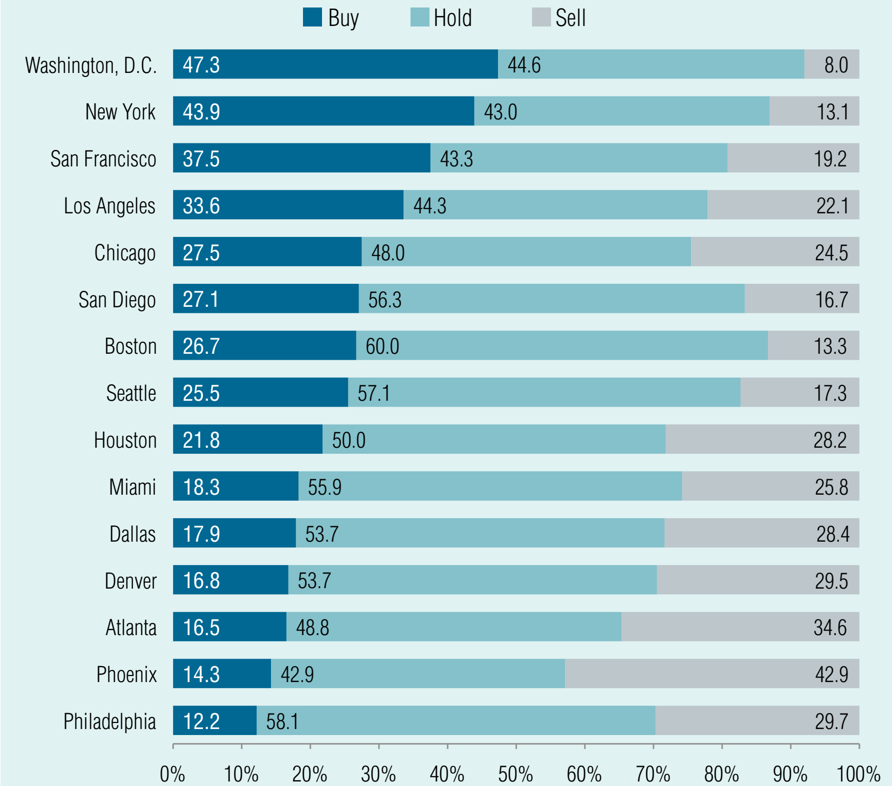
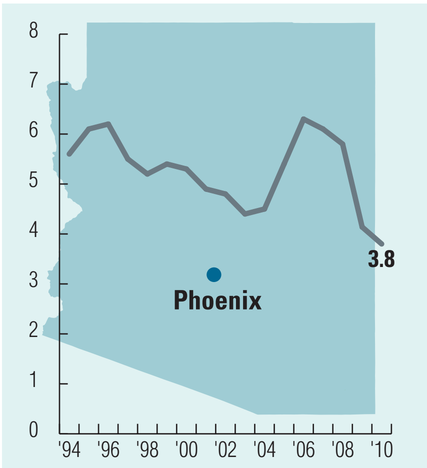
EXHIBIT 3-9

U.S. Hotel Buy/Hold/Sell Recommendations by Metro Area



Source: *Emerging Trends in Real Estate 2010* survey.

Phoenix. So much building and suddenly so little demand—Phoenix is the poster child for run-amok housing development hitting the wall when cheap mortgage financing evaporated. Once the building engine stopped, unemployment jumped, retail sales careened, property values dwindled, and new projects were dead on arrival when they opened. The important hotel and golf resort business also nosedives in the recession. "The best you can say is the population is still growing." Cycle timers will jump back in over the next couple of years, but there's no hurry.



Smaller Market Prospects

San Antonio benefits from Texas's good spin . . . . **Portland** plays second fiddle to Seattle, growth controls keep the market in reasonable supply-demand balance and help foster a 24-hour, urban environment . . . . **Nashville** office rates "steady" performance, boosted by the country music scene . . . . **Honolulu** drops with declining tourist demand . . . . **Minneapolis** boasts a diversified commercial sector, which buffers the city against the Midwest manufacturing depression . . . . Florida markets—**Orlando**, **Jacksonville**, and **Tampa**—can't get much worse. They should start to experience some uptick in housing activity after hitting bottom . . . . **Salt Lake City** always gains when people leave California in search of more affordable cost of living . . . . **Sacramento** sinks in lockstep with the standing of state politicos . . . . **Las Vegas** will suffer a long hangover after overplaying its development hand, building too much of everything just as American consumers and homebuyers tank . . . . Institutional investors effectively write off much of the low-to-no-growth Midwest manufacturing zone . . . . **New Orleans** rebuilds its tourist business, but corporations steer clear.

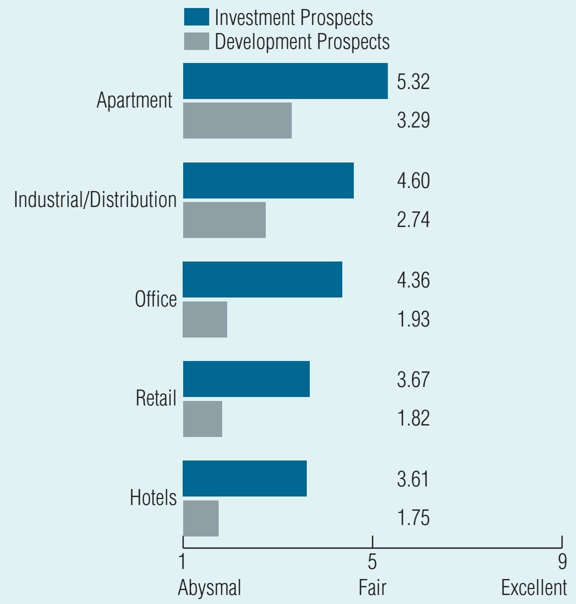
Property Types in Perspective

For 2010, investment outlooks dampen across all property sectors. Most markets approach a treacherous cyclical bottom where owner-borrowers and lenders digest widespread value losses and defaults, as well as confront problematic tenant demand and flagging net operating incomes. Landlords struggle to maintain occupancies and cash flows, as well as "wonder what good tenant credit means." Tenants nevertheless have the upper hand, seeking rent concessions and improvement capital, but they express angst over their landlords' financial viability—will properties go back to lenders or will new leases get hung up in special servicing tranche warfare? Deteriorating balance sheets may force the issue—underwater borrowers will give up feeding properties and better-capitalized owners will poach tenants. "The only way to secure value will be leasing the building so you do whatever you can to keep from losing tenants, then you try to deleverage and recapitalize." Interviewees expect many owners to curtail tenant services and wear-and-tear repairs. Property stock turns shabby from neglect—"landlords will let things go."

Emerging Trends surveys highlight the dismal state of play. They show declines in investment sentiment to record or near-record lows for most property types. Only rental apartments register fair prospects—all other categories sink into the fair-to-poor range. Hotel and retail record the most precipitous falls (see Exhibit 4-1). Development prospects, meanwhile, drop to new depths—close to "abysmal" levels for office, retail, and hotels. Warehouse and apartments score only marginally better at "modestly poor." No wonder developers close up shop.

EXHIBIT 4-1

Prospects for Major Commercial/Multifamily Property Types in 2010

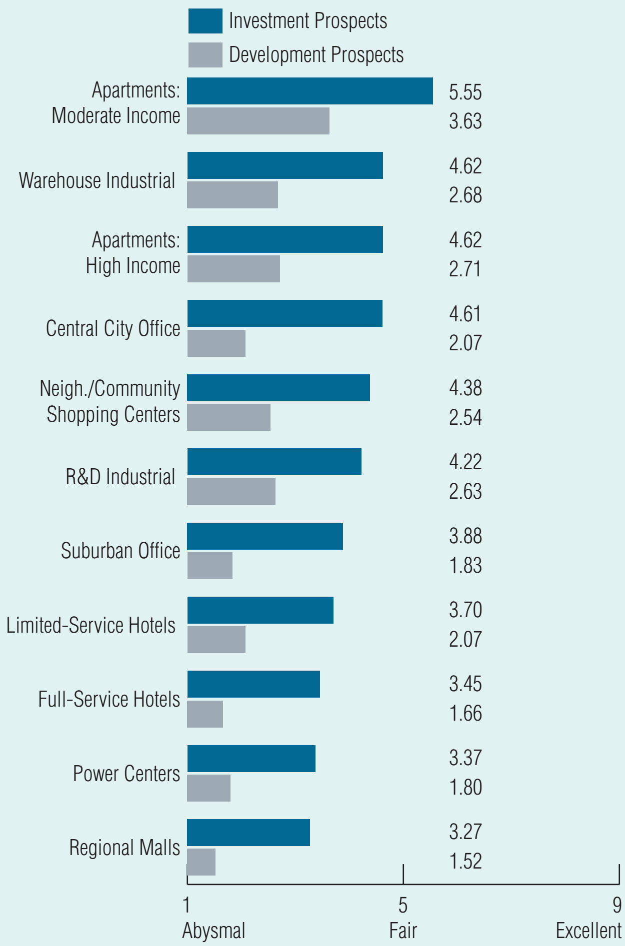


Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

EXHIBIT 4-2

Prospects for Commercial/Multifamily Subsectors in 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

■ **Apartments** show flickers of life. Fannie Mae and Freddie Mac provide a source of financing, buffering some borrowers and facilitating transactions. Interviewees figure that any improvements in the employment outlook will help leasing and stop rent declines. They count on increasing numbers of young adult echo boomers to help accelerate leasing demand and values in a recovery.

■ **Industrial/distribution** properties endure historically high vacancies and rent deflation. Any recovery waits for a pickup in consumer spending, resumed homebuilding, and restocked manufacturer inventories. Nobody expects sudden improvement, and certainly not in 2010.

■ **Office** markets head into an unsettled period of owner defaults and tenant musical chairs. Landlords juggle to keep face rents up and limit tenant improvements, while holding lenders at bay. But tenants have the upper hand in a flight to quality away from Class B and C properties. Twenty-four-hour infill markets generally outperform suburban districts.

■ **Shopping center** owners hang on for dear life. A likely cheerless 2009 Christmas season could doom additional chain stores and local mom-and-pops, creating more vacancies, especially in second- and third-tier properties. Debt-burdened shoppers scissor their maxed-out credit cards and spend less on more-sporadic mall trips.

■ **Hotels** hit bottom first among the commercial sectors. The good news is that "fundamentals really can't get any worse." Luxury resort properties "are the worst of the worst." Rates plunge to attract any business, but fading cash flows can't support the overheads for staffs and attention to guests' hoity-toity needs. Values spiral downward at full-service hotels suffering from slumping room revenues, and many overleveraged borrowers will just give up. Lower expense-side, limited-service hotels may weather the storm better.

■ **Housing** reaches cyclical lows. It's time to buy. Bottom-feeders move in—sales pick up marginally in the worst-hit markets with escalating foreclosures and bank sales. Lack of credit hurts activity in more affluent neighborhoods. Buyers need significant cash stakes to obtain any financing, and all income strata struggle without easy credit. Comatose homebuilders need to hang on until activity picks up, probably by 2012.

Top Buys/Sells/Holds. As markets regain footing at cyclical lows, don't sell anything in 2010 unless you have no other choice. *Emerging Trends* surveys also advise delaying purchases—at least until market visibility improves. Hold-and-pray strategies seem the order of the times—only moderate-income apartments score a fervent buy recommendation and

EXHIBIT 4-3
Prospects for Capitalization Rates

	Cap Rate August 2009 (Percent)	Expected Cap Rate December 2010 (Percent)	Expected Cap Rate Shift (Basis Points)
Full-Service Hotels	9.59	10.08	+49
Limited-Service Hotels	9.71	10.15	+45
Power Centers	8.66	9.11	+45
Regional Malls	8.25	8.70	+45
Suburban Office	8.85	9.28	+44
Neighborhood/Community Shopping Centers	8.32	8.72	+39
Apartments: High Income	7.54	7.91	+36
Central City Office	8.03	8.39	+36
R&D Industrial	8.70	9.03	+33
Apartments: Moderate Income	7.64	7.90	+26
Warehouse Industrial	8.30	8.54	+24

Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

institutional investors might go after big-box warehouses or 24-hour office at the right price. For now, buyers know their time approaches and owners just hope they won't be forced into dispositions.

Cap Rates Spike. Overall, cap rates will continue to shoot up across all property categories from mid-2009 to year-end 2010, led by average increases of 45 basis points in the least-favored hotel and retail sectors, according to our survey. By year-end 2010, average cap rates will range from about 8 percent for moderate-income apartments to more than 10 percent for hotels. (See Exhibit 4-3.) These figures contrast with an approximate 7 to 9 percent spread in rates forecast for year-end 2009 in last year's report, revised upward to 7.5 to 9.6 percent in this year's survey. Interviewees suggest that cap rates for higher-quality institutional properties will settle in the 7.5 percent range, a sizable 200-basis-point jump from 2007 lows. Buyers will demand much higher yields from properties located in secondary and tertiary markets and for B- and C-quality product.

Green Buildings. Since the industry tailspin ices most development activity, momentum for eco-friendly, energy-saving buildings stalls. "Green has been tabled for now," says a leading institutional investor. "The recession makes it less of a priority and nobody has extra money to spend retrofitting." Most interviewees expect developers to seek LEED certification for any future projects. "Tenants want reductions in energy costs and big companies need cover for their corporate responsibility statements." Investors realize that "a green story" helps lease space faster even if "tenants won't pay more for it." They expect that "when they go and sell a property in five or ten years they can fetch a bigger price" than comparable space without green features. Climate change issues aside, office tenants gravitate to buildings with heating and cooling systems that provide healthier air flows and help create better work environments, especially when they cram more employees into tighter quarters. "Tenants will demand these systems once they experience the difference." Costs can be prohibitive for retooling and greening mechanical systems in older space and over time brown buildings risk obsolescence. At the very least, "owners can find savings and gain good PR by instituting recycling programs and entering performance contracts with lighting suppliers to share in energy reduction costs." A minority view holds that green amounts to "trendy," "overblown marketing": "Just be efficient managing your operations, the rest is BS."

Apartments

Strengths

Pent-up demand grows for apartments. Twenty-somethings, who moved back in out of necessity, want out of parents' homes as soon as their employment prospects improve. The roommate thing also gets stale for people who had their own space until the recession struck. A huge generation Y cohort of young adults should be avid renters—they delay marriage and kids to build careers and many won't think about buying suburban houses until they have families. Lack of available mortgage financing and requirements for larger cash downpayments "take the bloom off housebuying" anyway. Demand for apartments should ramp up with the first signs of increased hiring, "especially in underserved markets." Access to Freddie/Fannie financing cushions apartment owners and enables transactions—values slide, "but it could be much worse." On the supply side, the apartment development pipeline runs dry.

EXHIBIT 4-4
U.S. Moderate-Income Apartments

2010	Prospects	Rating	Ranking
Investment Prospects	Modestly Good	5.55	1st
Development Prospects	Modestly Poor	3.63	1st
Expected Capitalization Rate, December 2010		7.9%	

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

EXHIBIT 4-5
U.S. High-Income Apartments

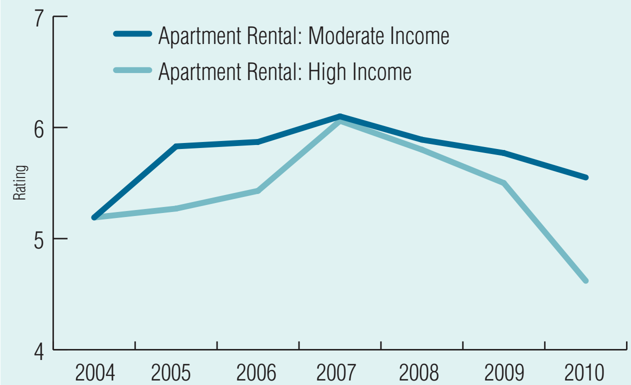
2010	Prospects	Rating	Ranking
Investment Prospects	Fair	4.62	3rd
Development Prospects	Poor	2.71	2nd
Expected Capitalization Rate, December 2010		7.9%	

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

Weaknesses
The jobs outlook hardly looks bright, delaying a pickup in renter demand. Shadow condos flood some multifamily markets with new supply, hurting occupancies and dropping rents, especially for upper-income apartments. National vacancy rates climb to record highs. Late-in-the-game buyers and developers must face the music—softened rents and a 150-basis-point rise in cap rates strikes a one-two punch.

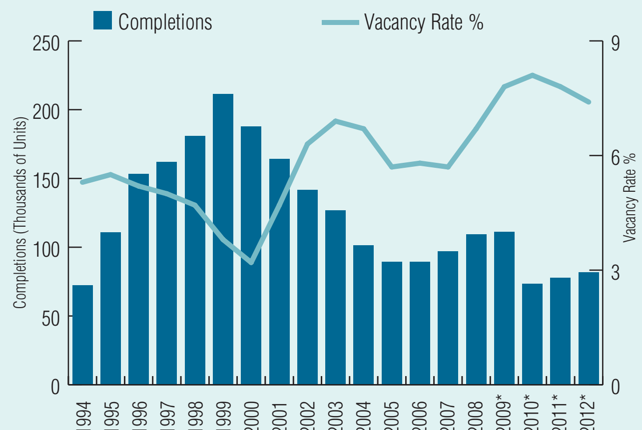
Best Bets
Early buying opportunities may appear in higher-density infill markets convenient to commercial districts and mass transit. Concentrate on B and C "entry-level" product with opportunity for cosmetic upgrades and modest fix-ups. When increasing demand kicks in, short lease terms enable quick boosts to cash flows by raising rents.

EXHIBIT 4-6
U.S. Apartment Investment Prospect Trends



4 = modestly poor, 5 = fair, 6 = modestly good, 7 = good.
Source: *Emerging Trends in Real Estate* surveys.

EXHIBIT 4-7
U.S. Multifamily Completions and Vacancy Rates

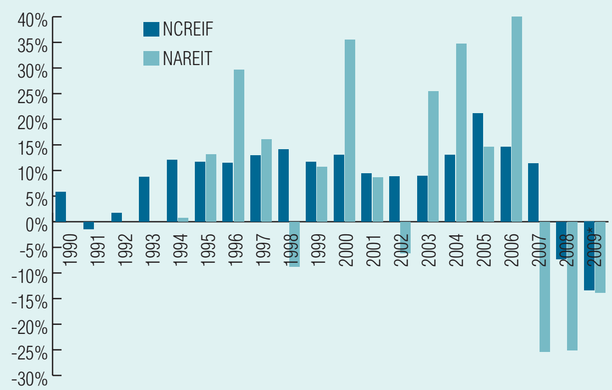


Source: REIS.
* Forecast.

Avoid
Avoid formerly hot-growth housing bust metro areas, particularly where developers overbuilt condominium projects. Until the for-sale residential market improves, owners and lenders will try to rent empty houses and condo units, further softening multifamily leasing and weakening property cash flows.

EXHIBIT 4-8

U.S. Apartment Property Total Returns



Sources: NCREIF, NAREIT.

* Data as of June 30, 2009.

Development

Building could resume "quickly" in underserved, urban infill markets once employment growth returns. It will be the first sector to come back for new construction—"maybe by late 2011." Projects may feature larger common areas—recreation and laundry rooms—and smaller units—people take less space in return for more building amenities.

Outlook

Multifamily investments historically provide the best risk-adjusted returns among property types—and current market experience reinforces investor views of the sector's relative resiliency. The expected early rebound in demand trends, supply constraints in many markets, and institutional investor appetite for income-producing properties add up to a solid, albeit not immediate, recovery track.

Industrial

Strengths

"The worst is over." Government statistics point to economic growth—import and export activity can't get any lower, and businesses build inventories again . . . finally. "Any increase in global trade will help." Tenants "begin locking in lease deals," a sign of markets finding a floor. Credit markets resume trade financing, which helps move more goods in and out of the country. Pension funds love the income from warehouse distribution properties in the top port and interior gateway-hub markets, bolstering prices. The big institutions will augment holdings in this sector once they get comfortable about markets bottoming.

EXHIBIT 4-9

U.S. Warehouse/Industrial

2010	Prospects	Rating	Ranking
Investment Prospects	Fair	4.62	2nd
Development Prospects	Poor	2.68	3rd
Expected Capitalization Rate, December 2010		8.5%	

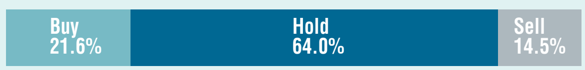
Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

EXHIBIT 4-10

U.S. R&D Industrial

2010	Prospects	Rating	Ranking
Investment Prospects	Modestly Poor	4.22	6th
Development Prospects	Poor	2.63	4th
Expected Capitalization Rate, December 2010		9.0%	



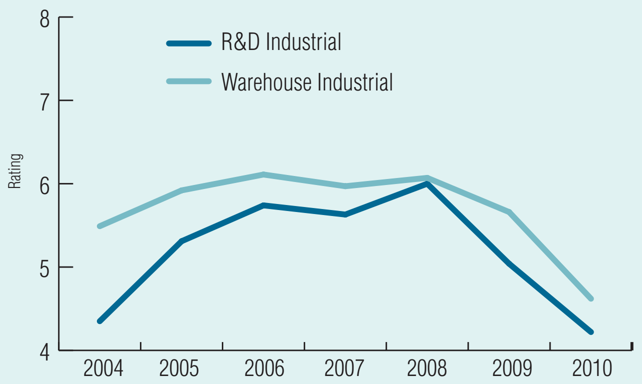
Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on U.S. respondents only.

Weaknesses

Ugh . . . . This highly economic-sensitive property type "gets slammed" by the worst recession since the Great Depression. Availability levels rise to record highs from "lack of imports," the "consumer deep freeze," and "dead housing" markets. Rents suffer "unprecedented declines" as demand "turns incredibly soft." Some key markets overbuilt—the Inland Empire, Chicago O'Hare, Atlanta, and Dallas. Beware of shadow space—"there's a lot of it." Manufacturing areas (the industrial Midwest again) simply tank. Until consumers start buying more and homebuilding resumes, warehouse markets will struggle. "Employment growth is essential."

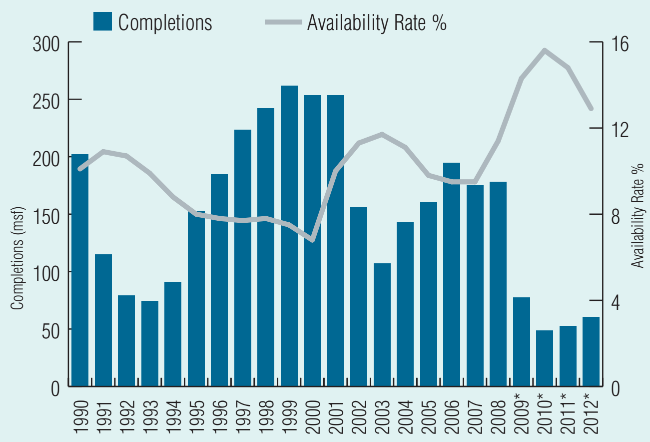
EXHIBIT 4-11
U.S. Industrial/Distribution Investment Prospect Trends



4 = modestly poor, 5 = fair, 6 = modestly good, 7 = good.

Source: *Emerging Trends in Real Estate* surveys.

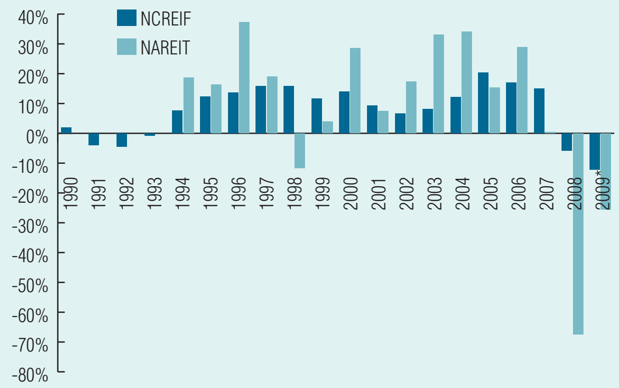
EXHIBIT 4-12
U.S. Industrial Completions and Availability Rates



Source: Torto Wheaton Research.

* Forecasts.

EXHIBIT 4-13
U.S. Industrial Property Total Returns



Sources: NCREIF, NAREIT.

* Data as of June 30, 2009.

Best Bets

Investors should continue to focus on gateway ports, the key entry points for global trade—L.A.–Long Beach, San Francisco, Seattle, and New York–New Jersey. "That's where the action will be." Savannah may pick up some market share, too. Investors need to understand and accommodate supply-chain logistics strategies built around getting goods to market faster and keeping lean inventories. Properties require greater pass-through capacity for quick distribution and pads to accommodate larger trucks.

Avoid

Avoid smaller markets, which shippers could remove from streamlined distribution routes. Older storage-oriented warehouse properties increasingly look obsolete to tenants interested in distribution. As noted in past reports, "warehouse" slowly becomes an anachronism in major distribution centers.

Development

An absolute nonstarter! For the future, green initiatives, pioneered in Europe and Asia, allow for more warehousing closer to ports and within cities. These concepts may finally gain traction at severely site-constrained U.S. global gateways. Stacked warehouses, multiple levels as opposed to sprawl configurations, can accommodate four to five times more capacity on

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sites at or near ports in contrast to single-story facilities 50 to 100 miles away from entry points (like the Inland Empire). Stacked configurations require less trucking, cause less pollution, and improve distribution efficiencies. Proponents argue that "it's an industrial extension of smart growth." But budget-stressed local governments must rethink zoning and infrastructure needs—residents and many businesses in infill areas resist warehouses close to neighborhoods and these buildings don't produce coveted sales tax revenues.

Outlook

Shipper logistics and pipeline controls (inventory tracking, consumption pattern analysis) anticipated the recession and led to rapid deceleration in tenant demand. "That never happened before—we always lagged." Once the economy improves, "trade can react more quickly to meet increased business and consumer demand and pick up faster." Warehouses could have "an above-average recovery," starting in late 2010 or 2011. New distribution systems will change and streamline goods delivery, slowing growth in demand for space and making certain locations and facilities obsolete. Rail freight should increase its market share as trucking costs (gas, tolls, user fees) increase—new interior railroad hubs may develop into key regional distribution centers. Increased Internet retailing also requires a different take on locating and organizing fulfillment centers. "Five years ago, you had multiple links in distribution chains—manufacturer, master distributor, regional wholesaler, and retailers," says an interviewee. "Now, when you order online, you can pay less, eliminating distribution costs. Up to three links don't need to be there and middlemen get eliminated."

Research and Development

Traditionally, high-tech areas exhibit sharp swings in vacancies and investment performance. Research and development (R&D) markets tend to overbuild in economic expansions and many failed startup company tenants are tough to replace in down times. Indeed, values plunged after the Internet bubble burst in 2000. But software- and tech-related businesses didn't overheat entering this recession and layoffs have been more restrained. Rising expectations for resumed economic growth around science and technology enterprises bode well for increased demand in this sector. Notably, important R&D markets—San Jose, Austin, and Raleigh-Durham—score relatively high ratings in *Emerging Trends* surveys. R&D also buoys outlooks for Boston, Seattle, and San Diego.

Office

Strengths

Well-leased, multitenant buildings with staggered lease rollovers "help smooth investor pain" despite overall rent and occupancy declines. Owners with low leverage have more options to maintain cash flows and can take full advantage of distressed competitors. They can bargain to hold or pirate higher-credit tenants, looking for landlords with staying power. Unlike in past cycles, most markets did not overbuild—"new supply is not our problem."

EXHIBIT 4-14

U.S. Central City Office

2010	Prospects	Rating	Ranking
Investment Prospects	Fair	4.61	4th
Development Prospects	Very Poor	2.07	6th
Expected Capitalization Rate, December 2010		8.4%	

Buy	Hold	Sell
34.3%	59.4%	6.3%

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

EXHIBIT 4-15

U.S. Suburban Office

2010	Prospects	Rating	Ranking
Investment Prospects	Modestly Poor	3.88	7th
Development Prospects	Very Poor	1.83	8th
Expected Capitalization Rate, December 2010		9.3%	

Buy	Hold	Sell
17.2%	60.9%	21.9%

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

Weaknesses

"It's never been so bad—there's just no demand." Many overleveraged properties head for foreclosure—borrowers give up as high contract rents roll off into a tenant's market and shrinking revenues make servicing debt undesirable or impossible. Increasingly, landlords can't afford tenant improvements to stay in the leasing game and risk losing even more occupancy. Property managers "don't see any internal growth from tenants for expansion, maybe some musical chairs between buildings and shopping for better rents at or near market bottom." Tenants have their own credit issues—unoccupied shadow space grows from all the layoffs and huge amounts of sublease space enter the market. Interviewees "don't like office anywhere" and their views grow less favorable about the sector's long-term risk-return profile: "Office is not a core investment." Returns are highly volatile—"not nearly as steady and solid as advertised." If a big tenant fails or moves out, "you're cooked." Suburban markets deteriorate more quickly than central business districts.

Best Bets

For cash investors, prepare to buy "the best product in top [24-hour] markets" like D.C., New York, and San Francisco by late 2010. "They will enjoy substantial gains over the next cycle." Demand may be "slow to come back, but it will." "Be contrarian and countercyclical—it's the only way to win in office."

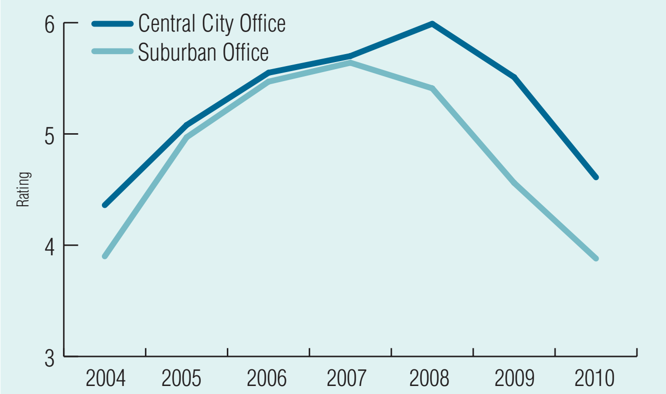
Tenants shouldn't sign new leases unless they extract healthy concessions on longer terms, and should steer clear of negotiations, if owners look like default candidates. Landlords may preserve cash flows through new leases at lower rates, but could impair properties' long-term value. In some cases, they'll do better standing pat.

Avoid

Avoid suburban markets. Urban and infill areas should benefit from demographics changes and economic shifts working against many suburbs. The "move back in" by echo boomers and empty nester baby boomers continues, and office tenants migrate toward suburban nodes with more urban amenities. Rising car-related costs (gas, insurance, user fees, loans) and increased congestion don't help the suburban office story, either. In particular, obsolescence threatens older office parks.

EXHIBIT 4-16

U.S. Office Investment Prospect Trends

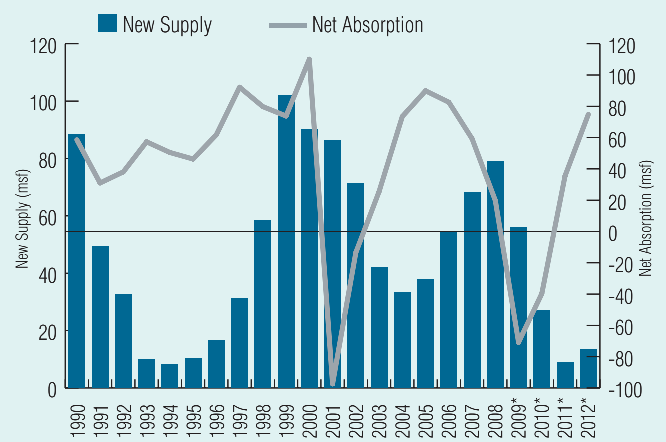


3 = poor, 4 = modestly poor, 5 = fair, 6 = modestly good, 7 = good.

Source: *Emerging Trends in Real Estate* surveys.

EXHIBIT 4-17

U.S. Office New Supply and Net Absorption



Source: Torto Wheaton Research.

* Forecast.

Development

Builders can leave on long sabbaticals. Replacement costs won't justify new projects for four or five years in many markets unless job growth accelerates beyond forecasts to sop up excess supply. "The reality is only a brief window exists where rents justify new office construction during any cycle," says a developer. And that window is firmly shut.

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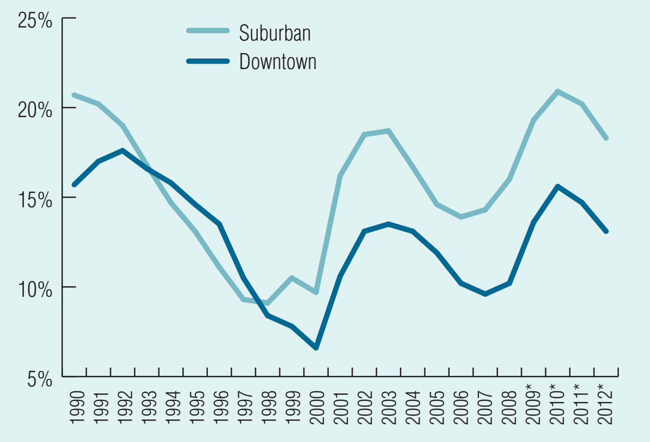
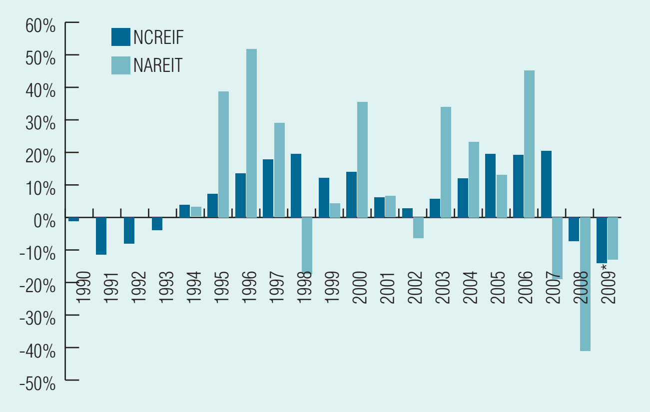
EXHIBIT 4-18
U.S. Office Vacancy Rates



Source: Torto Wheaton Research.
* Forecast.

EXHIBIT 4-19
U.S. Office Property Total Returns



Sources: NCREIF, NAREIT.
* Data as of June 30, 2009.

Outlook

Don't expect any spikes in this recovery given the dearth of employment generators and rising vacancies. New demand could stall well into 2011 or even 2012. Employers continue to seek outsourcing and productivity gains, especially in the financial industry. Big companies pursue various options to reduce costs, use space more efficiently, and increase "people-per-seat metrics." "They count on young employees to adapt to paperless environments as well as more work-at-home and open space hoteling strategies." These secular trends could "mitigate any office rebound."

Retail

Strengths

Top-tier fortress malls and infill grocery-anchored shopping centers attract prime retailers, consolidating space in the best centers. Long durations in leases signed with national chain stores also help insulate mall owners. Outlet centers and dollar stores outperform—value-driven shoppers seek to stretch their dollars. Optimistic mall owners count on the demographic bubble of young people to jump-start consumption eventually—"these kids haven't been brought up on denial." Household formation, driven by echo boomers and immigrants, certainly should help reinvigorate store sales at some point—the U.S. population increases by about 3 million annually . . . . Admittedly, we're groping to find any near-term positives.

Weaknesses

"Worse than office"—ouch, that's bad! Shopping center owners operate in Darwinian mode. "We're seeing triage among the B and C properties" trying to retain tenants. "It's back to the early 1990s when stores abandon weak centers" and investors have

EXHIBIT 4-20
U.S. Neighborhood/Community Centers

2010	Prospects	Rating	Ranking
Investment Prospects	Modestly Poor	4.38	5th
Development Prospects	Poor	2.54	5th
Expected Capitalization Rate, December 2010		8.7%	

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

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EXHIBIT 4-21
U.S. Power Centers

2010	Prospects	Rating	Ranking
Investment Prospects	Poor	3.37	10th
Development Prospects	Very Poor	1.80	9th
Expected Capitalization Rate, December 2010		9.1%	

Buy	Hold	Sell
11.0%	63.2%	25.8%

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

EXHIBIT 4-22
U.S. Regional Malls

2010	Prospects	Rating	Ranking
Investment Prospects	Poor	3.27	11th
Development Prospects	Very Poor	1.52	11th
Expected Capitalization Rate, December 2010		8.7%	

Buy	Hold	Sell
8.9%	64.8%	26.4%

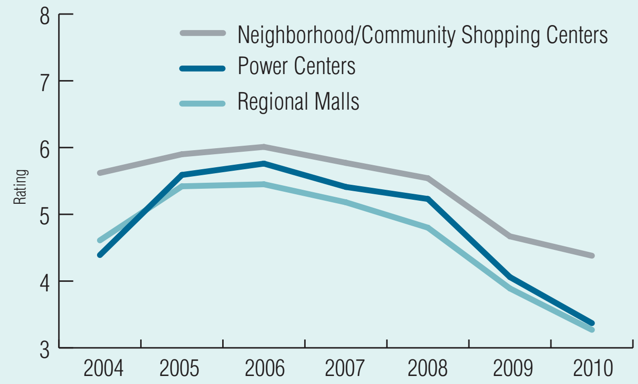
Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

limited options. "Back then, you could dump properties; today, there's no sales market without financing available, although you see some seller-financed mortgages." Everything heads lower, "much lower"—values, occupancies, and rents. Some centers "in secondary and tertiary markets will be worthless soon." Malls struggle to replace anchors—"department stores are a disaster, only a relative handful are left to serve some markets." Upscale centers have limited options—"you can't replace a Saks or a Neiman Marcus with a TJ Maxx or a Target." Local mom-and-pop retailers close when they can't get credit to buy inventories. We could go on and on . . . .

Best Bets

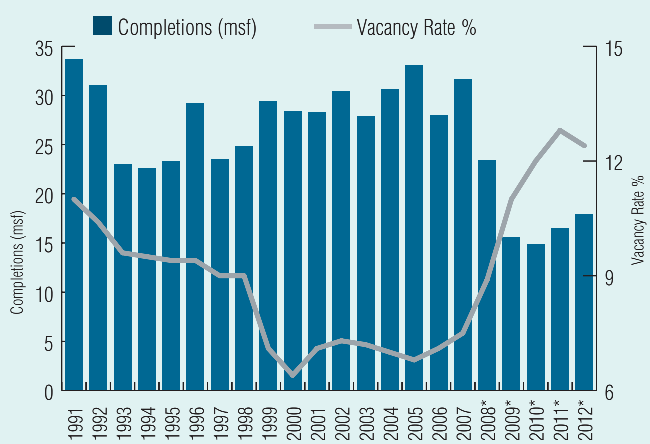
Neighborhood retail strips anchored by dominant supermarkets and drug chains attract necessity shoppers in established suburban districts. The big mall REITs own most fortress regional centers—they'll be left standing, too.

EXHIBIT 4-23
U.S. Retail Investment Prospect Trends



3 = poor, 4 = modestly poor, 5 = fair, 6 = modestly good, 7 = good.
Source: *Emerging Trends in Real Estate* surveys.

EXHIBIT 4-24
U.S. Retail Completions and Vacancy Rates: Top 50 Markets



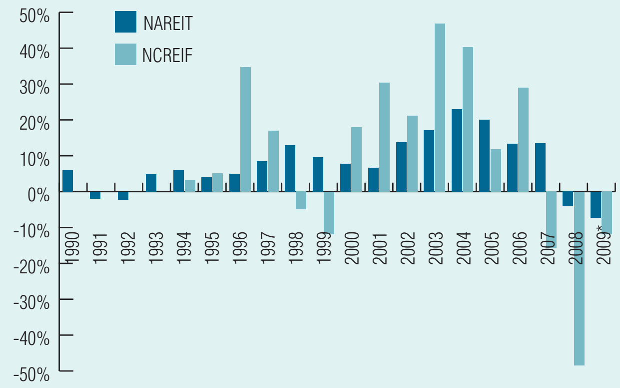
Source: REIS.
* Forecasts.

Avoid

Avoid C-malls abandoned by anchor retailers—"they're scarier than ever and unsafe at any speed." Power centers may endure another round of "big box" failures after Christmas and owners can't "backfill" with other tenants, who "don't exist." Forget about grocery retail in housing bubble markets where half-empty strip malls serve half-empty new subdivisions. Wealth destruction has pushed lifestyle centers out of fashion.

EXHIBIT 4-25

U.S. Retail Property Total Returns



Sources: NCREIF, NAREIT.
* Data as of June 30, 2009.

Development

Two decades of consumer bingeing on easy credit fostered an overstored America—malls, strips, big boxes, and leisure centers crowd together along every major suburban road. Does anybody know a market that needs any more retail space? Developers regroup to focus on reuse strategies—many malls and strip centers will be bulldozed for new town center projects and mixed-use development. Closed car dealer lots also provide fertile opportunities for more productive neighborhood planning. These projects will take years to conceive and construct. In the meantime, "It's Deadsville."

Outlook

Retail markets won't heal quickly. Even when jobs come back and wages increase, the American consumer will face new realities—tighter credit, leftover debt, and imploded house values. "They can't count on pulling dollars out of homes anymore through equity lines." Savings rates and taxes are bound to increase, eating into shopping budgets. New distribution systems and inventory controls mean retailers won't store as much merchandise on site—they can lease less space. The Internet slowly and inexorably takes market share from bricks-and-mortar retailers. Tech-oriented younger shoppers and time-constrained moms do more online purchasing. Shopping centers won't disappear—we just need fewer stores per capita and a wrenching shakeout ensues.

Hotels

Strengths

As usual, the lodging sector hit the skids early in the recession, and interviewees anticipate hotels to lead the commercial real estate industry in recovery. Economic improvement should produce better year-over-year performance numbers in 2010—occupancies and room rates will increase from "unnerving" lows. Although new supply added to overall market distress in 2009, construction activity effectively shuts down in 2010. Limited-service hotels should hold rates better and suffer less occupancy erosion despite cannibalizing competition from upper-end properties. "Even if the luxury brand drops its rates, I don't want my CFO breathing down my neck for staying in a ritzy place."

EXHIBIT 4-26

U.S. Hotels: Limited Service

2010	Prospects	Rating	Ranking
Investment Prospects	Modestly Poor	3.70	8th
Development Prospects	Very Poor	2.07	7th
Expected Capitalization Rate, December 2010		10.2%	

Buy	Hold	Sell
19.4%	58.0%	22.6%

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

EXHIBIT 4-27

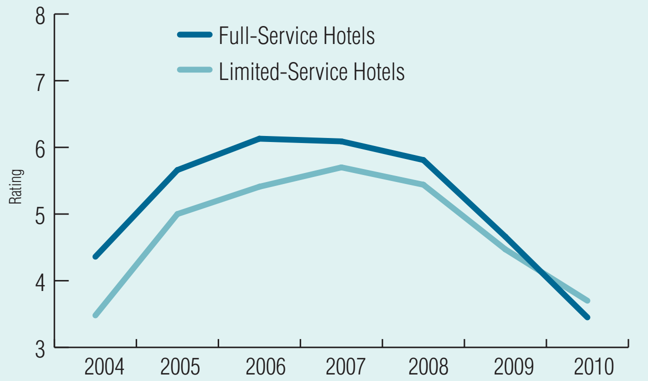
U.S. Hotels: Full Service

2010	Prospects	Rating	Ranking
Investment Prospects	Poor	3.45	9th
Development Prospects	Very Poor	1.66	10th
Expected Capitalization Rate, December 2010		10.1%	

Buy	Hold	Sell
19.9%	51.1%	29.0%

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

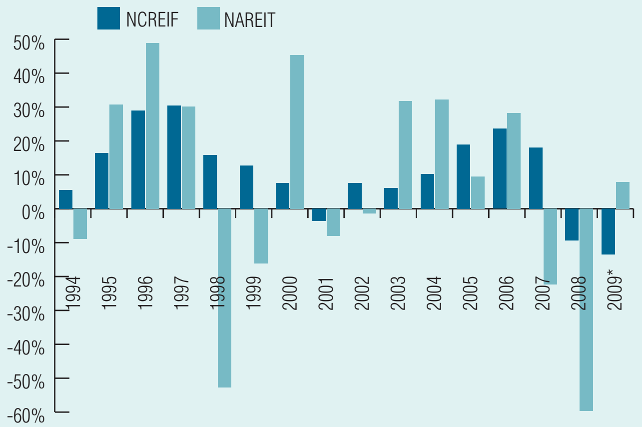
EXHIBIT 4-28
U.S. Hotel Investment Prospect Trends



3 = poor, 4 = modestly poor, 5 = fair, 6 = modestly good, 7 = good.

Source: *Emerging Trends in Real Estate* surveys.

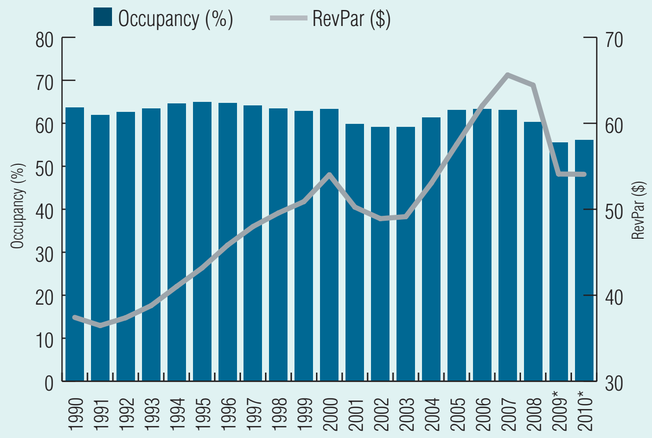
EXHIBIT 4-29
U.S. Hotel/Lodging Property Total Returns



Sources: NCREIF, NAREIT.

* Data as of June 30, 2009.

EXHIBIT 4-30
U.S. Hotel Occupancy Rates and RevPAR



Sources: Smith Travel Research (1987 to 2008), PricewaterhouseCoopers LLP (2009 and 2010).

* Forecast.

Weaknesses

Companies slash travel budgets and just about everybody postpones vacation plans. Industry-wide occupancies sink close to the 55 percent break-even point, and many recent buyers who overpaid near the market zenith live on borrowed time with large adjustable-rate mortgages. Developers and renovating owners, who finish projects started before the Lehman collapse, come to market at the worst possible time. Red ink steadily increases up the hotel service scale. Full-service and luxury brands suffer the biggest falloff in business. “High-end hotels turn into bottomless pits—they’re labor intensive with huge debt service and nobody can afford to stay in them.” Businesses also drastically curtail convention and group meetings, many of these hotels’ bread and butter. Some operators skimp on upgrades and maintenance, threatening brand reputations, but what choice do they have?

Best Bets

Opportunities loom for investors to pick off prime downtown full-service hotels in gateway markets at basement pricing. When the economy perks up, property revenues can soar. Hotels present another “pure timing play.” Always prepare to sell before the cycle gets too frothy.

Avoid
Pessimism clouds prospects for "love-to-look-at-them" luxury resort properties. "As wallpaper peels and pool tiles crack, RevPAR and occupancies will continue to decline. Tons of new capital will be needed to refurbish them."

Development
Huh?

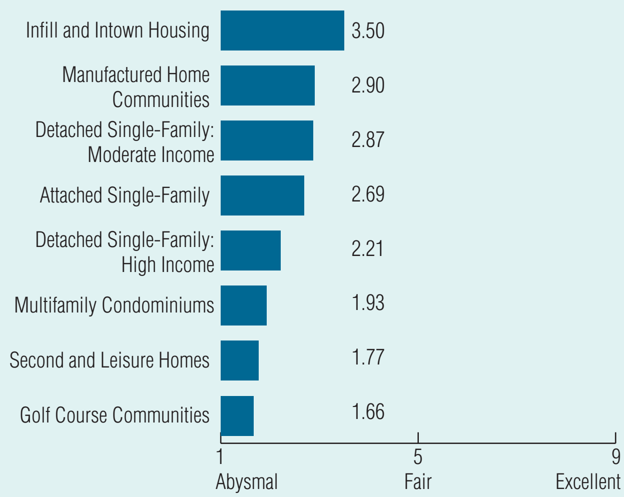
Outlook
More properties head into lender REO portfolios just as property cash flows stabilize and improve marginally. Any revenue increases won't be enough to ameliorate widespread borrower distress. "More hotels will change hands than any other property type." The pace of recovery in occupancies and rates depends entirely on how fast the overall economy advances—corporate bottom lines, employment growth, and consumer spending. Expect special weekend rates and generous discounts to continue through 2010.

Housing

Strengths
Housing markets hit bottom in most markets—bargain hunters with enough cash score deals, mostly on foreclosed properties in fringe neighborhoods and on new homes—builders' heavily discounted inventories steadily decline. Low interest rates and government incentives help some buyers—"it's ironic that's how we got into this mess." Homeowners won't sell unless they must. Over the next decade, the bubble of baby boomer progeny will start families and steadily drive demand.

Weaknesses
"Credit restrictions," problematic employment trends, and existing household debt loads slow sales and impede recovery. ARM balloon payment stipulations trigger more borrower defaults and foreclosures. Mortgage lenders stringently underwrite new loans at healthy spreads above the Fed Funds rate and require buyers to have ample equity stakes (at least 10 percent down on fixed-rate loans). Distress and foreclosures extend from subprime and lower-income neighborhoods into more affluent areas where the McMansion phenomenon—oversized houses purchased using jumbo-sized mortgages—"runs out of gas." "Many private homebuilders face bankruptcy or close down"—their inventoried land goes back to lenders, worth a small fraction of the prices they paid. Condo markets are simply "awful" unless you're a cash buyer.

EXHIBIT 4-31
Development Prospects for For-Sale Housing in 2010



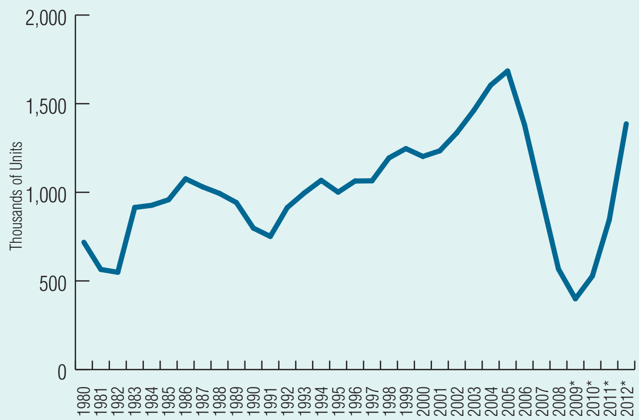
Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

Best Bets
If you can marshal the dough, it's definitely time to house hunt in a classic buy-low market . . . . Resort-area condos could be prime targets—acquire that dream ocean-view apartment or comfy ski hill chalet at a fraction of 2007 prices . . . . Infill land sites present alluring opportunities, too—hold until demand rebuilds and then resell or develop . . . . Better-capitalized homebuilders can acquire damaged competitors—"they're ripe for the pickings."

Avoid
Avoid neighborhoods wracked by foreclosures, especially in outer suburbs—these places may have no staying power.

EXHIBIT 4-32

U.S. Single-Family Building Permits

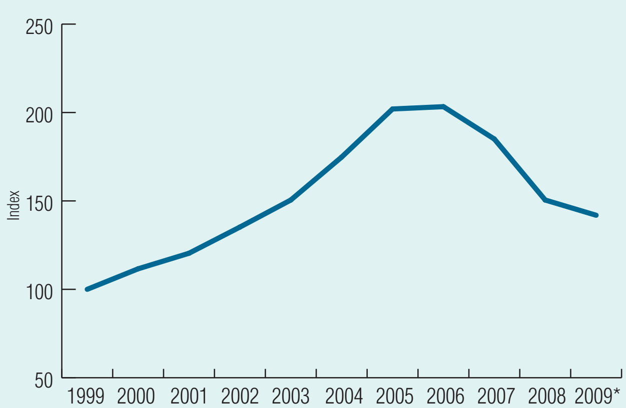


Source: Moody's Economy.com.

* Forecast.

EXHIBIT 4-33

The S&P/Case-Shiller Home Price Index



Source: Standard & Poor's.

* Data as of June 30, 2009.

Development

When homebuilding does finally resume, housing and development patterns will become more urban focused—incorporating smaller lots, townhouses, and town-center mixed-use projects, which include single-family housing and condominium buildings. Developers also will construct more affordable housing options—European-scale layouts with smaller kitchens and bathrooms (no more whirlpools). More-frugal Americans realize they don't need all that space, especially if it saves on energy and taxes. "The extra bedroom, family room, recreation room, and three-car garage go by the boards."

Outlook

In 2006, the American dream collided with reality. Now, many homeowners and homeowner wannabes understand that "not everybody can afford or should own a home," and a bigger house isn't necessarily a better house to buy, especially if you're overextending on debt. Markets will take several years to clear, and many Americans must deleverage before they regain their appetite to buy houses again. Banks and regulators also need to recalibrate underwriting and reserve requirements to check out-of-hand lending practices. The Fannie/Freddie concept must undergo revamping, too—ample credit and market liquidity have their limits, especially when based on government guarantees.

Niche Sectors

Niche real estate sectors generally drop from investor and developer radar screens—they have too many overwhelming problems in the primary property "food groups" and emerging buy-low opportunities in the major property types will draw most attention (see Exhibit 4-34). Complicated mixed-use and master-planned development projects, including town centers, get tabled or shelved entirely in the current inhospitable environment. All distractions aside, the following four niche categories retain significant long-term appeal driven by changes in demographics:

Medical Office. A steadily aging population will require more doctoring and health care—at least we learned something from the recent policy debate. Demand will grow for more physician, therapist, and hospital-related facilities, especially in gateway cities and regions where the elderly settle—the Southeast and Southwest in particular.

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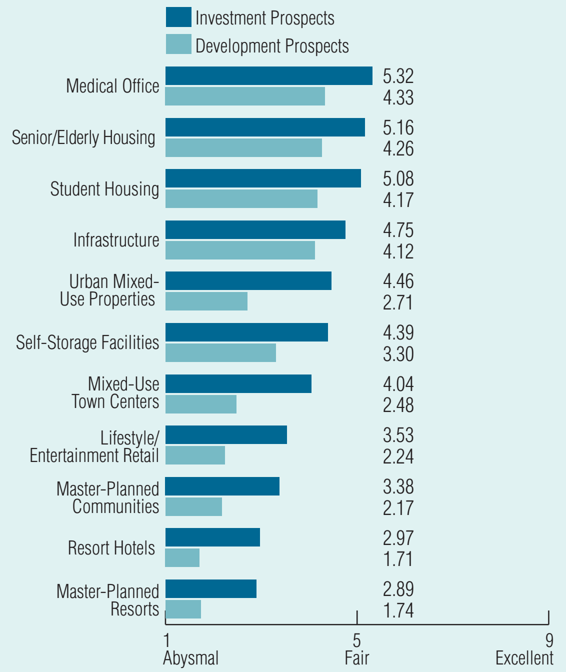
EXHIBIT 4-34
Prospects for U.S. Niche and Multiuse Property Types



Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on U.S. respondents only.

Housing for Seniors. The same graying baby boomer population cohort, which pops more pills and suffers through more aches and pains, drives demand for over-55 residences, assisted living communities, and ultimately nursing homes. The country's 60-plus population more than doubles over the next 30 years—that blossoming demand translates into huge opportunities for investors and developers.

Student Housing. For the next decade, echo boomers will flock to university campuses in record or near-record numbers, augmenting demand for housing.

Infrastructure Needs. The United States desperately needs more private/public financing of outmoded and dilapidated infrastructure—transportation systems, water/sewage systems, dams, and electric grids. Federal, state, and local governments have failed to enact formulas, incentives, and procedures to attract greater private investment. But government budget shortfalls and trillion-dollar funding gaps should force solutions out of necessity. A federal infrastructure bank would help.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Emerging Trends in Canada

"The U.S. and Canada will be like night and day, and [the latter's] property markets will perform much better."

The United States could learn from Canada. The government has kept a lid on spending and slowly recovered from huge early-1990s budget deficits. Higher taxes help pay for health care and infrastructure improvements, and regulators clamp down on banks, discouraging high-risk lending. A wealth of natural resources—gas, oil, and water—helps buttress the nation's economy, too. The conservative, careful approach to managing government and markets pays dividends now for Canadian real estate players. Sideswiped by U.S. fallout, they experience a manageable market correction mostly from slackened tenant demand rather than a full-blown credit crisis–precipitated market meltdown. "Canada's problems are like Bud Lite compared to the United States."

Investment Prospects

Mild Recovery. Canadian interviewees exhibit little smugness about the relative lack of distress in their regions since some suffer big losses in U.S. real estate investments—pension funds in particular bought into the south-of-the-border froth. But Canadians take comfort and satisfaction "in steady as she goes" local markets, even if they are "boring, incestuous, and parochial, with lending activity governed by cautious bank credit departments and little trading of prime properties even in the best of times." For 2010, expect "flat to modestly improved" operating performance, after top-to-bottom value declines ranging from 10 to 20 percent for most investors. Softened markets generally avoid distress, except for "small pockets of condos," built by undercapitalized developers.

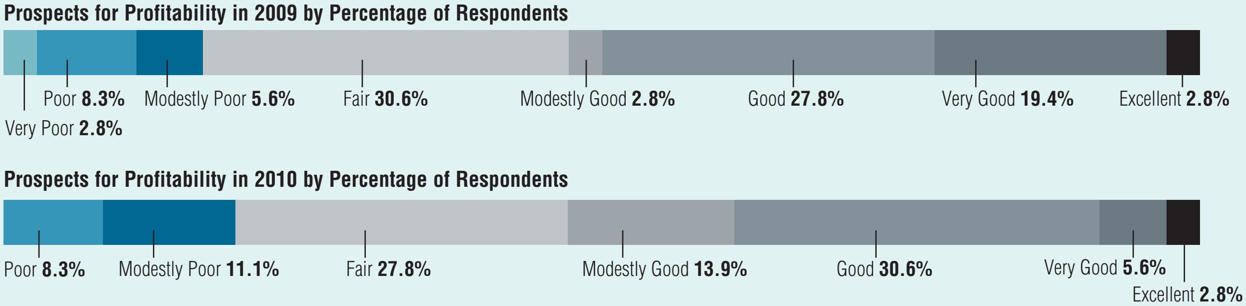
Little Opportunity. Relative market stability in Canada's "safe haven" removes the opportunity for most timing play bets in a moderate—"okay, not stellar"—cyclical upswing, which should get underway before 2011. Canada's dominant institutional investors implement core-style, buy-and-hold strategies, controlling most Class A downtown office buildings and fortress regional malls. This "handful" of companies and pension funds prizes income over short-term buy-appreciate-and-sell gambits. "Real estate retains its attributes; it's not commoditized like in the U.S." Canadian investors seek portfolio pop the old-fashioned way by developing projects or heading into foreign markets—Brazil and India are current favorites. "It's too soon to go back into the U.S."

Minor Distress. Most owners rest easy—"they won't face negative leverage" and major markets entered the downturn with record-low vacancies and limited new supply (except in Alberta). Defaults and foreclosures will concentrate in smaller properties in secondary markets and outer suburban districts—that's where any vulture investors congregate. "There won't be forced sales in primary markets."

Cross-border Concerns. Interviewees raise cautionary signals about the parlous state of the economy in the United States, Canada's principal trading partner: "We may look good by comparison, but we're very dependent on U.S. markets for our job growth." The auto industry collapse bleeds into Ontario's important manufacturing sector and lower demand for energy products knifes at western Canada's gas and

EXHIBIT 5-1

Firm Profitability Forecast

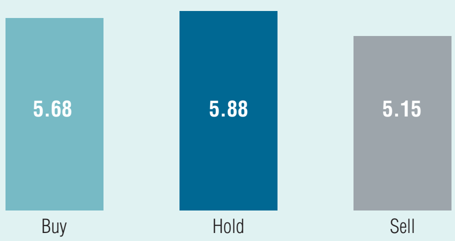


Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

EXHIBIT 5-2

Emerging Trends Barometer 2010



5 = fair, 6 = modestly good, 7 = good.

Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

energy centers. "We can catch U.S. pneumonia very easily." Sound federal and provincial government fiscal outlooks and stable financial institutions form the cornerstone of recovery. "We have minor government deficits compared to the U.S.—it helps not paying for wars." The big Canadian banks grow North American market shares and avoid any need for bailouts while the country's natural resource bounty hedges against higher commodity prices. The potential for rising interest rates, triggered by U.S. fiscal problems, "could stall out our recovery, but that's not all bad for real estate since higher rates place a governor on development and new supply. That's what usually gets us in trouble."

EXHIBIT 5-3

Prospects for Capitalization Rates

	Cap Rate August 2009 (Percent)	Expected Cap Rate December 2009 (Percent)	Expected Cap Rate Shift (Basis Points)
Power Centers	7.87	8.37	+50
Central City Office	7.11	7.56	+44
Suburban Office	8.14	8.51	+38
Apartments: Moderate Income	6.78	7.11	+33
R&D Industrial	8.10	8.43	+33
Warehouse Industrial	8.04	8.32	+28
Apartments: High Income	7.32	7.54	+22
Full-Service Hotels	9.52	9.70	+19
Regional Malls	7.48	7.66	+17
Neighborhood/Community Shopping Centers	7.74	7.88	+14
Limited-Service Hotels	9.47	9.42	-5

Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

Improving Mood. The *Emerging Trends* 2010 investment barometer forecasts a relatively stable transaction market, slightly better for buyers than sellers (see Exhibit 5-2). According to surveys, average cap rates will increase modestly by year-end 2010, ranging from about 7 percent for moderate-income apartments to 9.5 percent–plus for hotels. Power centers and central city office will register the sharpest increases. Hotels, malls, and neighborhood shopping centers will record the smallest bumps. "Nothing comes cheap—we

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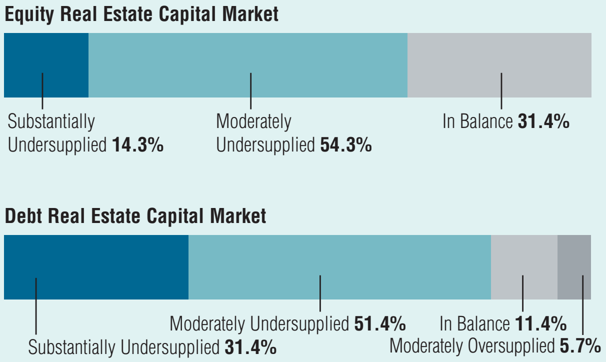
EXHIBIT 5-4

Real Estate Capital Market Balance Forecast for 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

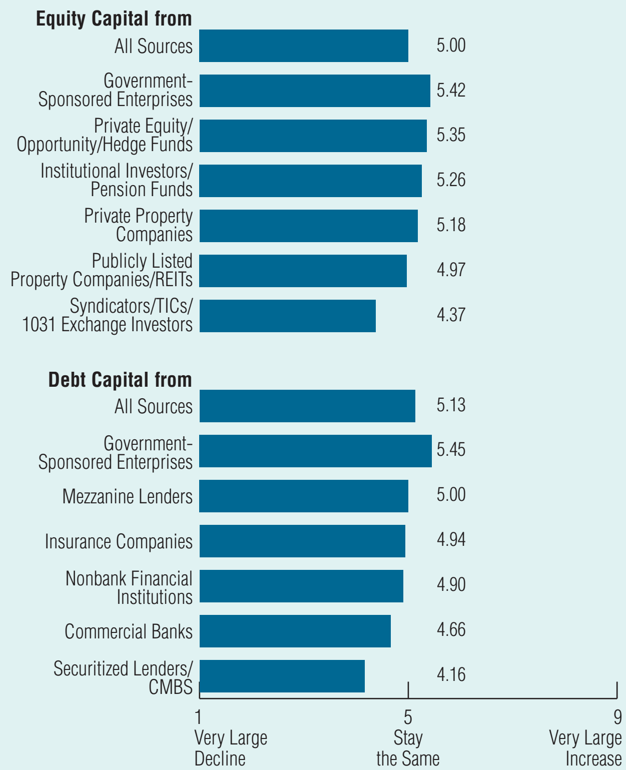
should see value increases by the end of the year after a period of slowing declines." Hotels and secondary retail suffer the biggest depreciation—off as much as 30 percent—while Toronto office loses 10 percent from peaks. A sizable bid/ask spread should narrow, if tenant demand picks up as expected and nervous banks increase financing to buyers. "A growing confidence lifts the market psyche"—some borrowers can obtain more credit, REITs have raised capital, owners aren't distressed, and the number of bids on deals shows slow improvement.

Construction Time-out. Developers must curb activity in light of softened demand as bankers rein in construction loans. Condo projects stall out until residential prices firm up in Vancouver and Toronto. Concern grows about Calgary office builders—a supply splurge meets waning demand from deflated energy companies. "Developers got ahead of themselves in Edmonton, too, stockpiling land for inventory." In Toronto, where some smaller developers got in over their heads in residential construction, bigger players with more experience and lender relationships take over struggling projects.

Capital Reticence. Banks and large pension funds took their licks in the world economic crisis, but remain solvent and well capitalized. Real estate lenders pull back out of caution and *Emerging Trends* surveys anticipate that debt markets will remain undersupplied in 2010 (see Exhibit 5-4). Bankers favor established borrower relationships—refinancing

EXHIBIT 5-5

Change in Availability of Capital for Real Estate in 2010



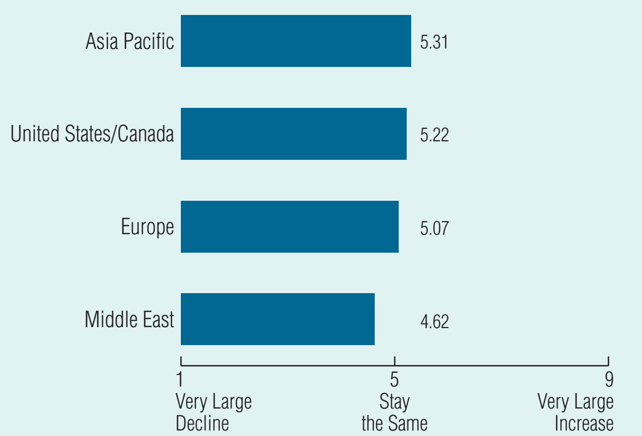
Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

should not be a problem. But they temporarily shut doors on developers and unproven investors. "Healthy" life insurers maintain their whole-loan business, somewhat offsetting the loss of securitization markets. Equity markets retain their share of reasonably capitalized and cash-rich investors. REITs "got whacked, now bounce back"—they will be early cash buyers, followed by "in-for-the-long-haul" pension funds. Plan sponsors may suffer value declines on their prime holdings, but will ride out the rough spots since "they're not

EXHIBIT 5-6

Change in Availability of Capital for Real Estate by Source Location in 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

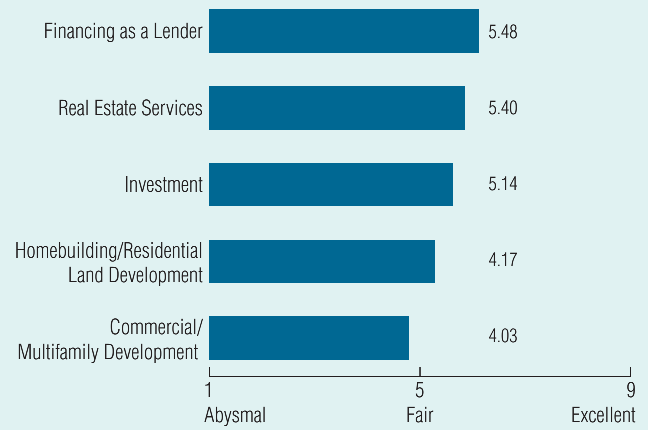
interested in selling." High-net-worth families, buttressed by lender ties, will focus on acquiring "workout product" in secondary markets. But "disappointed" foreign investors may shy away. "They don't see enough big gains"—a 5 percent return with low risk isn't compelling enough compared to what's coming in the United States and the U.K. The big Canadian institutions prepare to increase foreign allocations, too. "Canada isn't as attractive even to Canadians—we'll find better returns elsewhere" in recovery. "Why buy Vancouver at a 6 cap when you can buy in London at a higher rate?"

Markets to Watch

After a hot-growth wave, western Canada—especially Calgary—cools down. Plummeting natural gas prices take a "brutal" toll. Eastern Canada girds for more potential fallout from manufacturing woes—automaker bankruptcies and slack U.S. consumer demand inflict pain in Ontario, "the real engine

EXHIBIT 5-7

Real Estate Business Activity Prospects in 2010



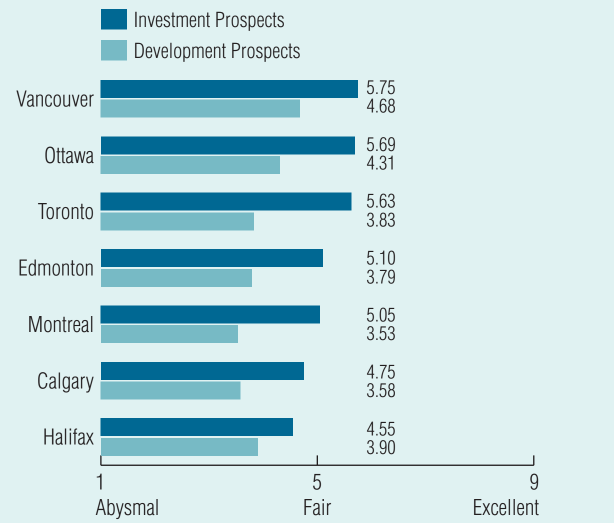
Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

EXHIBIT 5-8

Canadian Markets to Watch

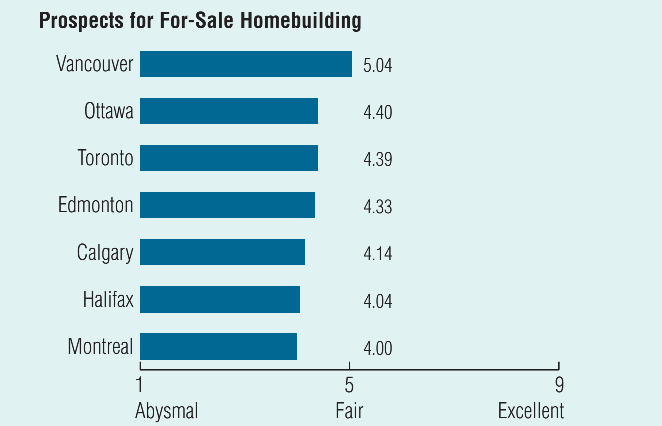
Prospects for Commercial/Multifamily Investment and Development



Source: *Emerging Trends in Real Estate 2010* survey.

EXHIBIT 5-9

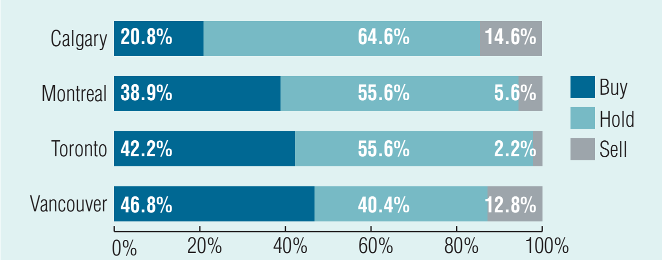
Canadian Markets to Watch



Source: *Emerging Trends in Real Estate 2010* survey.

EXHIBIT 5-10

Canadian Apartment Buy/Hold/Sell Recommendations by Metropolitan Area



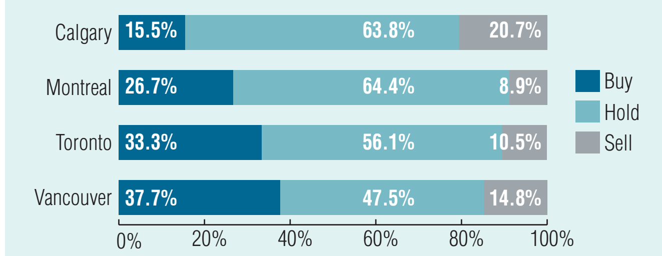
Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

of the country." Development prospects drop from coast to coast, although most markets stay in relative equilibrium—vacancies increase from low levels and rents continue to soften, especially in office and industrial.

Vancouver. A classic barriers-to-entry story, this metro area's constrained property market always trades at "surprisingly" high price points, "defying gravity." Cap rates for prime properties "stay in [the] mid 6s" when "everywhere else is 7.5 percent." Interviewees wonder what happens after

EXHIBIT 5-11

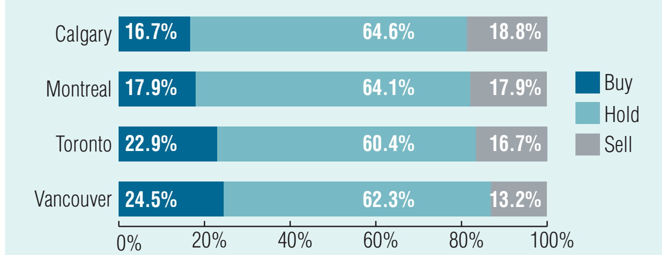
Canadian Office Property Buy/Hold/Sell Recommendations by Metropolitan Area



Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

EXHIBIT 5-12

Canadian Retail Property Buy/Hold/Sell Recommendations by Metropolitan Area

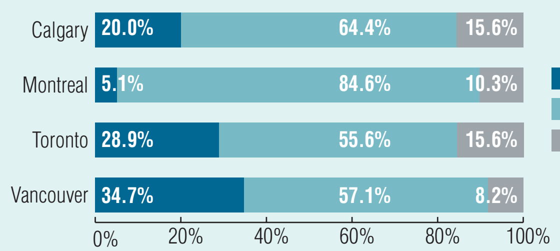


Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

the Olympics—will the city take on "global darling" status or endure "a big sucking sound?" Don't bet against the market—"It does bloody well under any circumstances." Condo development decelerates—banks and developers anticipate a demand slowdown after the games. Prohibitive replacement costs and few land sites shut down office development. Most institutionally owned properties don't trade and outsiders can't find many investment opportunities.

EXHIBIT 5-13

Canadian Industrial/Distribution Property Buy/Hold/Sell Recommendations by Metropolitan Area

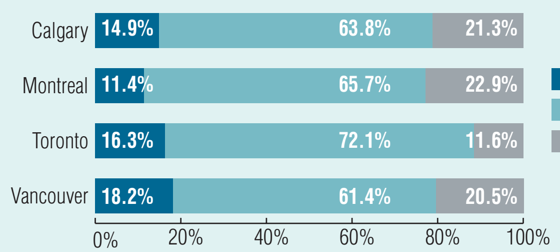


Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

EXHIBIT 5-14

Canadian Hotel Property Buy/Hold/Sell Recommendations by Metropolitan Area



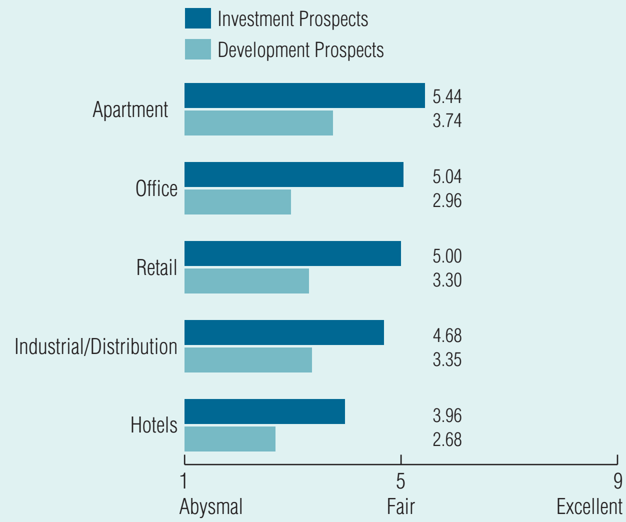
Source: *Emerging Trends in Real Estate 2010* survey.

Ottawa. Sentiment improves for this low-key national capital. Like Washington, D.C.—when recessions strike, investors seek refuge in government centers. Unlike Washington, a thin market doesn't offer much cover or opportunity. But at least owners of existing property won't notice much turbulence.

Toronto. Canada's global gateway is the country's "place that matters." Glistening new condominium high rises and office tower projects adorn downtown streetscapes, raising concerns about too much construction in a problematic economy. More than 4 million square feet of new Class A office space will spike downtown vacancies from comfortable 5 percent levels. "Tenants in older Class A space will move into new projects, leaving hard-to-fill holes." Affected institutional owners sport "deep pockets, can ring-fence issues, upgrade,

EXHIBIT 5-15

Prospects for Major Commercial/Multifamily Property Types in 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

and get by." Over the past decade, the city grows into North America's biggest condominium market. Now, banks wisely pull back funding on larger projects—"they see too many cranes." Weather—"people don't like shoveling snow," and driving-related costs—gasoline, time lost in congestion—spur more vertical, intown living. An immigrant influx—about 100,000 annually—helps keep apartments full. Single-family home and condo buyers surge to make deals before a new harmonized sales tax (HST) takes effect on July 1, and developers fear a demand drop-off afterward. The HST will add 8 percent to the purchase price of a new home to the extent it exceeds $400,000, and will not apply to resale homes; this perhaps will create a market bias in favor of smaller, lower-priced new homes, and provide a boost to the resale market. Warehouse markets stumble—rents decline 25 to 30 percent. Blame the U.S. car companies. "It's not Ontario's finest hour" and "a really tough leasing market." Watch for "further weakening on the demand side."

Edmonton. The provincial capital of Alberta dips with declining energy business fortunes—you can squeeze only so much out of oil sands and from gas extraction when volatile prices turn down. Developers didn't go overboard, so the demand drop won't hurt dramatically. "It's more steady as she goes and boring"—not so bad.

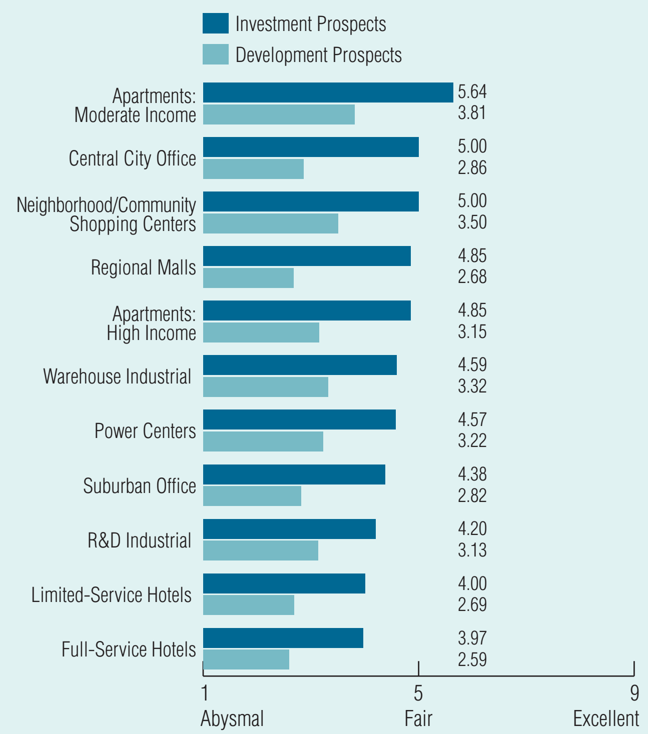
Montreal. Built up and around the mighty St. Lawrence River, Montreal stands out as one of North America's most beautiful cities, but companies find "no particular reason to be here." The real estate market sleepwalks through a boring equilibrium—measured development and limited demand growth. "It's a good place to live, but nothing's happening."

Calgary. Alberta's largest city suffers the biggest rating decline for any North American market in *Emerging Trends* surveys. About 6 million square feet of mostly speculative office comes online at just the wrong time. Condos and housing are overbuilt, too. Only higher natural gas prices can bail out developers. "It's a boom/bust market in a bit of bust phase, but good for the long term." Time to buy land—prices slip.

Halifax. Local developers and owners do well, especially in multifamily markets, but the Maritimes stand well off the beaten track and don't attract much interest from institutional investors.

EXHIBIT 5-16

Prospects for Commercial/Multifamily Subsectors in 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

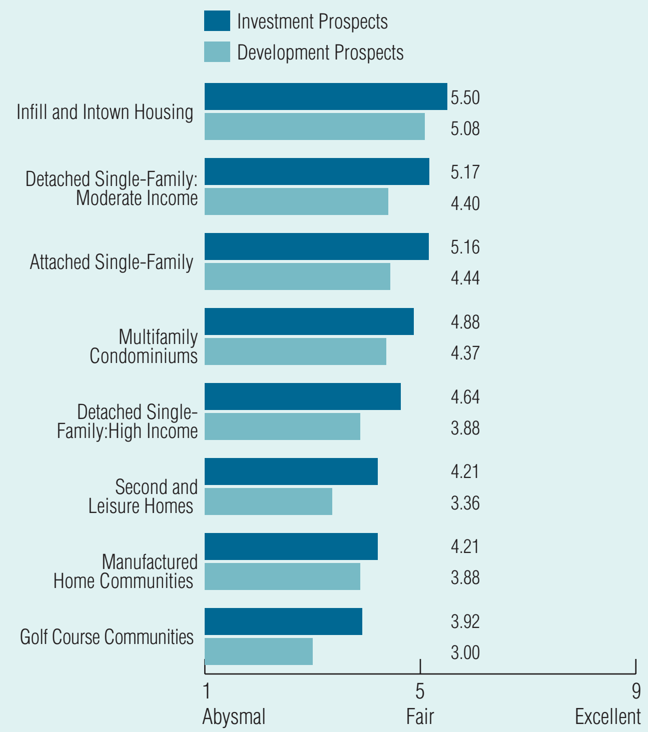
Other Markets. Saskatchewan and Manitoba sustain housing booms . . . . Detroit's problems infect the adjacent Windsor industrial corridor—"it's hard to see a comeback." Quebec City doesn't register much interest.

Property Types in Perspective

For 2010, *Emerging Trends* surveys rate only fair investment outlooks for most property types and predict generally poor conditions for development. Limp demand threatens to soften property cash flows across all sectors and most markets. "Fundamentals will get worse before they get better, people shouldn't be fooled."

EXHIBIT 5-17

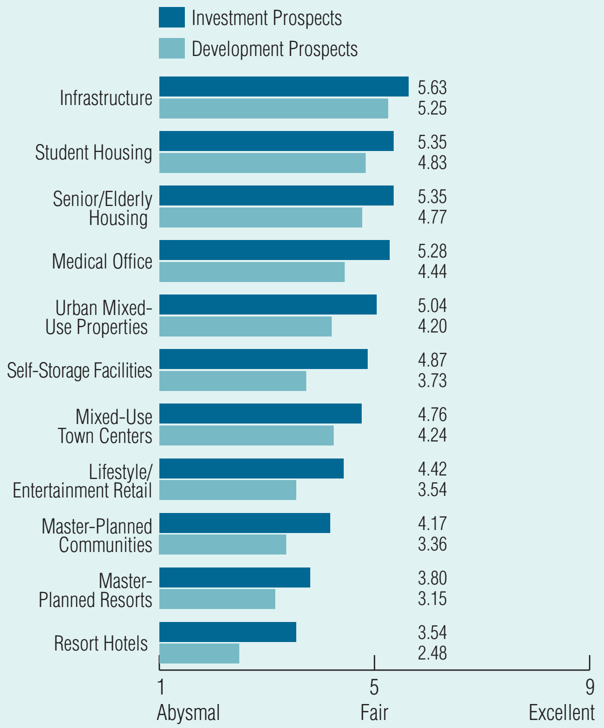
Prospects for For-Sale Housing in 2010



Source: *Emerging Trends in Real Estate 2010* survey.

Note: Based on Canadian respondents only.

EXHIBIT 5-18
Prospects for Niche and Multiuse Property Types in 2010



Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

EXHIBIT 5-19
Canadian Apartments

2010	Prospects	Rating	Ranking
Investment Prospects	Fair	5.44	1st
Development Prospects	Modestly Poor	3.74	1st
Expected Capitalization Rate, December 2010		7.0%	

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

EXHIBIT 5-20
Canadian Office

2010	Prospects	Rating	Ranking
Investment Prospects	Fair	5.04	2nd
Development Prospects	Poor	2.96	4th
Expected Capitalization Rate, December 2010		8.1%	

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

Apartments. Steady immigration and move-back-in trends bolster moderate-income multifamily properties located in or near metro cores. Properties close to mass transit lines almost can't miss. Condo building in most major cities takes the edge off higher-income apartment product.

Office. Stick to the prime downtowns and avoid the suburbs. People and business favor urban cores for convenience and multidimensional environments. Vast underground passages, which link to subway stations, help workers avoid dealing with too much winter chill. New construction dampens rental rates in downtown Toronto and could plaster Calgary. Confronting weak demand, landlords will prefer to keep face rents high and maintain income streams, making capital concessions like tenant improvements to retain tenants.

Retail. Consumers didn't overload their credit cards, so retail spending "never got frothy." Overbuilding and overstoring aren't problems, but slackening demand arouses concerns among shopping center owners and developers back off. So far, sales slow (off 5 to 10 percent) to levels "better than imagined." Steer clear of "malls in secondary cities with shrinking, aging demographics." Sound familiar? Shopping activity will concentrate in infill areas in major urban markets. Grocery-anchored retail is pretty stable, but power centers could be a weak spot if any more U.S. big-box chains go belly up.

Industrial. Problems center in Ontario, where rental rates "drop like rocks on rollovers." Some property values "could lose 30 to 40 percent." But "well-capitalized" owners should weather the downturn. "Quebec must be happy since the province doesn't have as much auto exposure as it used to."

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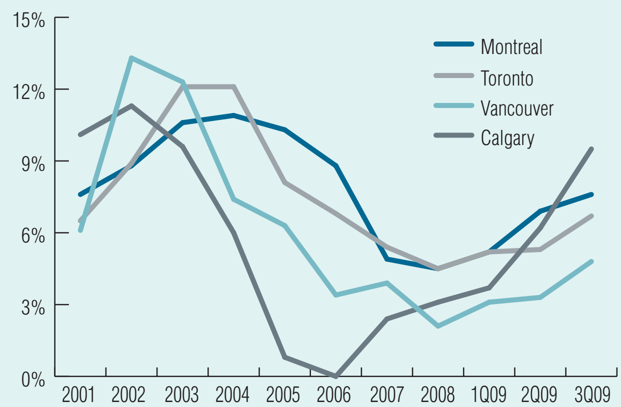
EXHIBIT 5-21
Canada: Downtown Office Vacancy—Class A Properties



Source: CB Richard Ellis.

EXHIBIT 5-22
Canadian Retail

2010	Prospects	Rating	Ranking
Investment Prospects	Fair	5.00	3rd
Development Prospects	Poor	3.30	3rd
Expected Capitalization Rate, December 2010		7.9%	

Buy	Hold	Sell
21.1%	78.9%	0.0%

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

Hotels. Travel from U.S. tourists and business goes south. High-end hotels suffer the most—"their profits are way off." Sellers can't find takers, but most owners don't have leverage problems—they can manage through the tough times.

Housing. While low mortgage rates help homebuilder sales, prices correct modestly as buyers turn cautious and bankers tighten already stringent underwriting. Financial industry regulators haven't been asleep at the switch and lenders couldn't adopt exotic U.S.-style mortgages. "We like downpayments here." Interviewees don't expect defaults and foreclosures to increase dramatically—"well-underwritten loans help most borrowers stay current." That Ontario sales tax could "hurt the high-end market" and the British Columbia government moves to follow suit with its own version of the HST.

EXHIBIT 5-23
Canadian Industrial/Distribution

2010	Prospects	Rating	Ranking
Investment Prospects	Fair	4.68	4th
Development Prospects	Poor	3.35	2nd
Expected Capitalization Rate, December 2010		8.3%	

Buy	Hold	Sell
18.2%	63.6%	18.2%

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

EXHIBIT 5-24
Canadian Hotels

2010	Prospects	Rating	Ranking
Investment Prospects	Modestly Poor	3.96	5th
Development Prospects	Poor	2.68	5th
Expected Capitalization Rate, December 2010		9.9%	

Buy	Hold	Sell
15.0%	60.0%	25.0%

Source: *Emerging Trends in Real Estate 2010* survey.
Note: Based on Canadian respondents only.

Best Bets

- Sell low-yielding Canadian assets, and buy in the United States when markets hit bottom.
- Prepare to buy distressed assets in secondary markets—"that's where you'll hear small owners and developers scream uncle" and then trade out in the up cycle. "No such opportunities exist in prime markets."
- Purchase new apartments near primary urban cores—"It's a good defensive play—you don't have capex issues and immigration flows help fill them up." Stable, secondary government/university markets like Halifax also make sense.
- Buy neighborhood shopping centers, anchored by state-of-the-art supermarkets in infill areas, for secure income streams.
- Grab full-service center city hotels at cyclical lows, but don't plan to hold forever.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Emerging Trends in Latin America

"Why go to emerging markets when you'll be able to get equally good yields at home?"

Historically, global recession and financial market turmoil would hammer weak South American economies dependent on exports and foreign investment. And usually, regional problems were homegrown—often the residue of corruption and financial mismanagement. This time, a world financial crisis reduces property values and rattles markets, but key countries emerge "relatively unscathed," particularly Brazil, the continent's fast-developing economic power. Now, major nations in the region—Chile, Colombia, and Peru—"have their financial houses in order" and show greater resiliency in responding to crisis. "Governments aren't overleveraged—they have significant reserves and strong local currencies."

Foreign investors see a checkered pattern of conditions and opportunities—growing middle classes, burgeoning populations, increasing demand for housing and shopping centers, as well as unpredictable governments, high crime, ever-changing rules, and advantaged local players. "Transparency issues have more ghosts than realities in major markets," claims an interviewee. "But you can't just parachute in, make investments, and have success without local partners. That's no different for an outsider coming into New York or London." Office presents slim opportunities—Class A product is limited to small districts in a few capital cities. Investors own apartment units scattered about different apartment houses, rather than entire buildings, so "it's hard to build scale." "Apartment managers are a new concept." Retail is understored throughout the region.

EXHIBIT 6-1
Latin America Economic Growth

	Percentage Real GDP Growth			
	2007	2008	2009*	2010*
Peru	8.9	9.8	3.5	4.5
Chile	4.7	3.2	0.1	3.0
Brazil	5.7	5.1	-1.3	2.2
Uruguay	7.6	8.9	1.3	2.0
Colombia	7.5	2.5	0.0	1.3
Mexico	3.3	1.3	-3.7	1.0
Ecuador	2.5	5.3	-2.0	1.0
Argentina	8.7	7.0	-1.5	0.7
Venezuela	8.4	4.8	-2.2	-0.5

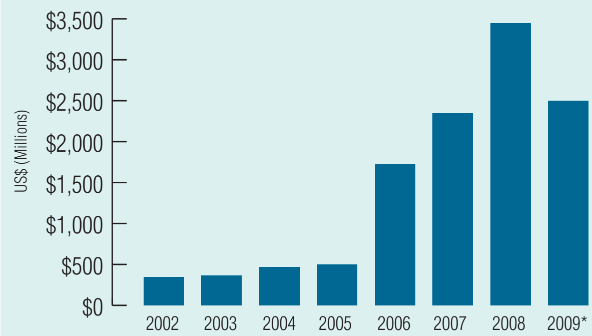
Sources: International Monetary Fund, World Economic Outlook Database, April 2009.
* Projections.

EXHIBIT 6-2
Latin America Inflation and Unemployment

	Unemployment	Inflation
Argentina	8.6%	7.2%
Brazil	7.6%	4.0%
Chile	7.8%	3.0%
Colombia	13.4%	3.6%
Ecuador	N/A	2.5%
Mexico	4.8%	3.1%
Peru	7.7%	2.0%
Uruguay	N/A	6.5%
Venezuela	8.7%	45.0%

Sources: International Monetary Fund, World Economic Outlook Database, April 2009, Moody's Economy.com.

EXHIBIT 6-3
Brazil: Foreign Direct Real Estate Investment



Sources: Central Bank of Brazil, Capright Property Advisers, LLC.
* Projection.

For now, most investors steer clear of Argentina, Ecuador, Venezuela, and Bolivia—they are not reliable and can change on a whim. Chile may be the continent's most stable and evolved economy, but small markets, controlled by local institutions and developers, restrict investment possibilities. Americans and Canadians concentrate their attention on Brazil and Mexico, countries with the biggest potential and divergent near-term outlooks.

Brazil "Powerhouse"

"If you want real estate value drivers—growing markets, an emerging middle class, expanding population, and rich resources—Brazil fits the bill." The country "understands free enterprise," "more people have more money to spend, and investors can make money now." As a bonus, corruption is less of a concern than in any of the other high-profile, emerging BRIC (also Russia, India, and China) nations. Brazil's economic managers "have a fixation" about tamping down inflation (which once reached 2,500 percent) after decades of runaway prices and a deflated currency. Investors find leverage in short supply, and homebuyers depend on cash—"Brazil had no credit crisis, because there is little debt." Fiscal discipline pays off starting with a sub–5 percent inflation rate. After a global finance crisis–caused hiatus, foreign investments pour back into the country and its currency, the *real*, turns into a dollar hedge. Investors like the diversified export-based economy (not dependent on U.S. markets) as well as food and energy self-sufficiency—nationally produced ethanol fuels cars and oil companies discover offshore reserves.

Housing. Interviewees tap housing development as investors' best bet—markets are underserved and the growing population desperately requires more apartments and single-family homes. The government wants a million new units built, and establishes subsidies and extends more leverage to middle- and lower-income homebuyers. "Demand is locked in," enabling 25 to 30 percent returns. "Developers almost have a certainty of success if they can keep costs under control and deliver on time."

Retail and Warehouse. Pent-up consumer demand also creates a need for more strip-style shopping centers and malls—only 400 exist (one per 500,000 people) in the entire country. Outsiders have trouble breaking into a market effectively controlled by an oligopoly of local mall companies. "They make it difficult to assemble land and get zoning." More shoppers and malls inevitably will lead to more warehouse and distribution center development.

Office. Multinational companies, hurt by recession, retrench in Sao Paulo, which suffers chronic overbuilding. Site-constrained Rio de Janeiro offers few opportunities to invest in prime properties. "Dangerous crime" plagues both cities, further diminishing investor appetites.

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Mexico Retreat

While Brazil turns into a magnet, investors turn away from Mexico. The latter's economy is too U.S. centric—in the wake of the recession, Mexican immigrants send less money to families back home and U.S. consumers buy fewer Mexican manufactured goods. Stepped-up drug violence and economic woes combine to deter U.S. tourists and business investments. After pouring "a ton of dollars" south of the border in 2006 and 2007, "nobody touches Mexico now—everybody pulled the plug."

Real estate markets try to find their floor—values drop 30 to 40 percent. Industrial parks tied to U.S. auto manufacturers struggle, newly completed facilities sit empty, and "build-to-suits are dead." Mexico hopes restructured automakers and other U.S. manufacturers transfer more plants south of the border to cheaper sites. Plunging consumer spending hobbles retailers and mall owners, who offer huge rent discounts in a "zero leasing" environment. Mexico City and Monterey offer the only office plays, but not much prime product. Avoid hotels and second-home development—drug gang warfare "doesn't impact tourist areas," but many Americans "put off that trip to Cancun" anyway. Demand holds up well for entry-level residential—both rental apartments and for-sale housing.

Other Markets

Argentina fails to rectify political gridlock and high inflation, or cure anemic internal demand. Potential investors find "a lack of transparency."

Chile matures beyond emerging-market status. Domestic institutions own-to-hold most prime properties, keeping prices high. Despite the closed market, outside investors can benefit from ties to Chile's players, who have strong relationships in other countries like Colombia and Peru. Relatively strong GDP growth is projected for 2010.

Colombia's drug cartel reputation belies a "Brazil-style economic dynamic," tracking "five to ten years behind" its neighbor. Most investors want more progress before testing the market.

Peru experiences strong expansion of GDP. For 2010, growth is projected at 4.5 percent, the highest rate among major countries in Latin America.

Venezuela is a definite no-go. "Hugo Chavez."

Interviewees

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ISBN: 978-0-87420-138-3

ISBN 978-0-87420-138-3

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Residential Construction Trends in America's Metropolitan Regions

2010 Edition

Development, Community, and Environment Division
U.S. Environmental Protection Agency
January, 2010

Acknowledgements

This working paper grew out of the effort to update another EPA publication, *Our Built and Natural Environments* (EPA 231-R-01-002). It was reviewed by Rolf Pendall, from Cornell University, Arthur C. Nelson from the University of Utah, and John Carruthers from the Office of Policy Development and Research at the U.S. Department of Housing and Urban Development. In EPA's Development, Community, and Environment Division, John Thomas was the principle author with Mara D'Angelo, Stephanie Bertaina, and Rachel Friedman each playing a role in compiling the dataset. Thanks also goes to David Goldberg from Smart Growth America for posing the question that motivated this detailed examination of metropolitan construction trends.

Note on the 2010 Update

In June of each year, the Census Manufacturing and Construction Division releases summary data on building permits issued during the pervious calendar year. This update incorporates more current data from 2008. Therefore, it provides a better picture of how the trend toward more residential construction in core areas has held up during the steep downturn in the real estate market and the U.S. economy as a whole.

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Introduction

Across the country, many urban neighborhoods are experiencing dramatic transformations. Parking lots, underutilized commercial properties, and former industrial sites are being replaced with condos, apartments, and townhouses. In spite of the many impressive projects, a central question remains: *Do such examples add up to a fundamental shift in the geography of residential construction?*

To answer this question, US Census residential building permit data for the 50 largest metropolitan regions was examined over a 19 year period (1990 to 2008). Specifically, the amount of permits issued by central cities and core suburban communities was compared to the amount issued by suburban and exurban communities. The main goal was to clarify: 1) if there has been a shift toward redevelopment; and 2) in which regions the shift has been most significant.

The permit data showed that, in several regions, there has been a dramatic increase in the share of new construction built in central cities and older suburbs. Specifically, in roughly half of the metropolitan areas examined, urban core communities dramatically increased their share of new residential building permits. For example:

- In fifteen regions, the central city more than doubled its share of permits.
  - In the early 1990's, New York City issued 15 percent of the residential building permits in the region. Over the past six years it has averaged 48 percent.
  - The City of Chicago saw its share of regional permits rise from 7 to 27 percent over the same period.
  - Portland, Oregon went from 9 to 26 percent.
  - Atlanta, Georgia went from 4 to 14 percent.
- The increase has been particularly dramatic over the past five years.
- Data from 2008 show the inward shift continuing in the wake of the real estate market downturn even though the overall number of permits is down in nearly all jurisdictions.

This acceleration of residential construction in urban neighborhoods reflects a fundamental shift in the real estate market. Lower crime rates in central cities and changing demographics are often cited as forces driving this change. The increased demand for homes in walkable communities close to high-paying jobs has also been documented by a number of studies (Leinberger 2007, Nelson 2007, ULI 2006). For example, the 2007 edition of the annual *Emerging Trends in Real Estate* report singles out infill and mixed-use development as "best bets":

> "Energy costs add fuel to the fire—people want greater convenience in their time-constrained lives. Far-flung greenfield homes may cost less, but filling the gas tank burns holes in wallets. Both empty nesters and their young adult offspring gravitate to live in more exciting and sophisticated 24-hour places—whether urban or suburban—with pedestrian-accessible retail, restaurants, parks, supermarkets, and offices. Transit-oriented development at subway or light-rail stations almost cannot miss." (ULI 2006, p. 14)

However, even with solid economic fundamentals, many large-scale redevelopment projects still require changes in local regulations or public infrastructure investments to be move forward. For example, transit-oriented development often requires updates to zoning codes, more flexible parking regulations, assistance with land assembly, or improvements to upgrade water, sewer and local streets (TCRP 2004). A recent national survey provides an indication of just how common infrastructure adequacy and inflexible parking regulations are as a barrier to redevelopment. Sixty percent of developers stated that projects are constrained by a lack of infrastructure and seventy percent consider minimum parking requirements a significant burden on their typical development projects (ULI 2009). Additionally, some potentially viable redevelopment sites face the burden of real or perceived contamination and need assistance to evaluate conditions and conduct any necessary clean up .

The clear trend toward more redevelopment has a couple key implications for smart growth. First, regions often cited as leaders in promoting growth management and redevelopment (Portland, Denver, Sacramento and Atlanta) are among the medium sized cities where the shift inward has been most dramatic. Second, in metropolitan regions with large and diverse central cities with strong ties to the global economy (New York, Chicago, Boston, Miami, Los Angeles) the market fundamentals are shifting toward redevelopment even in the absence of formal policies and programs at the regional level.

The following sections of this report cover the trends in more detail. First, a brief description is provided to clarify how the data was organized, the types of redevelopment included, and other significant limitations of the analysis. Next, the trends for central cities and core suburban communities across the 50 regions are described and summarized in a set of tables. Tables and charts with sub-regional detail are also provided for the seven regions with the strongest shift toward redevelopment. Finally, the trends are placed in a national context and key future research questions are identified.

Assembling the Data

The first step in answering the basic question of how much residential development might be shifting inward was to assemble Census Bureau residential building permit data for the 50 largest U.S. metropolitan regions.[1] County-level summary files provided totals for suburban counties.[2] However, since many urban core counties include both developed and undeveloped land, it was important to reach below the county level. Therefore, the "permit issuing place" files were organized by region to assemble permit data for each individual jurisdiction within urban core counties. Two kinds of jurisdictions were of particular importance: ***central cities*** and ***urban core suburbs***.

The latter group is important since many larger metropolitan regions do have suburban communities that are essentially built out. Therefore, increased construction activity in these places primarily consists of redevelopment. Two criteria were used to identify such communities: 1) the land area of the jurisdiction did not significantly increase between the 1990 and 2000 Censuses[3]; and 2) the community was within 5 miles of the central city or within a clear regional boundary, such as a beltway interstate, separating expanding suburbs from hemmed-in urban core suburbs.[4]

Urban Infill and Smart Growth Not Captured by This Definition

In this analysis, urban core places were defined in a way that excludes some types of redevelopment. Since the Census data are provided at the jurisdiction level, it is not possible to determine where in a permit-issuing city or county the residential units are being built. Therefore, communities in which development is taking place on both undeveloped and previously developed land are grouped into the expanding suburb category. As a result, regional shares reported in the tables and charts below underestimate the level of infill-oriented residential construction that is actually taking place in many regions.

For example, Montgomery County, Maryland, a county with nearly one million people, is a single building permit issuing jurisdiction in this dataset. However, residential building permits issued by the county include high-rise apartments and condos near Metrorail stations, as well as detached single-family homes built on exurban farmland. Since there was no way to make such distinctions in this dataset, Montgomery County was classified as an expanding suburban community. In other regions suburban cities such as Pleasant Hill, California, are also expanding onto vacant land as well as issuing permits for infill development near major rail transit facilities.

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[1] Annual summary files for 1990 through 2006 were provided by the Census Manufacturing and Construction Division covering building permits for new residential units. http://censtats.census.gov/bldg/bldgprmt.shtml

[2] The December 2006 definition of Metropolitan Statistical Areas was used as the basis for deciding which counties were associated with a particular region.

[3] Significant expansion is an indicator of annexation of undeveloped land.

[4] In most cases, an inner "beltway" freeway or a group of key intersecting freeways separated built-out urban core suburbs from expanding suburbs. See appendix for the boundaries used for each region.

In 13 of the largest metro areas, it is difficult to make any distinctions between redevelopment and suburban expansion with this dataset. In some cases, the central city has annexed substantial amounts of undeveloped land. In other cases, the central city is part of a consolidated city/county government and does not separately report building permits issued within the core urban area from those issued in rural areas.

Finally, building permits associated with transit-oriented neighborhoods developed on greenfield[5] sites are categorized as construction in expanding suburban areas. Therefore, although major development projects such as Orenco Station in Hillsboro, Oregon, and King Farm in Gaithersburg, Maryland, are often considered examples of smart growth, they are not counted as urban core development in this analysis.

Other Limitations of the Analysis

The geographic distribution of commercial development was also outside the scope of this analysis. There are reasons to expect that office development in many regions would be more concentrated than residential development. Retail patterns would be more complex, but probably follow residential trends. Manufacturing, wholesale, and distribution center development, on the other hand, will tend to be more dispersed than residential development in most regions. However, since the Census stopped gathering commercial building permit data in 1995, such analysis would require an entirely different data source, such as the zip code business patterns data or employment data from a private data provider.

Finally, an increase in residential construction in urban core neighborhoods translates only indirectly into increased density. Invariably, some shares of the permits are simply replacing old housing units with new units at similar density. This is most likely a small share of the permits in central cities, but it might be a significant share in some suburban communities where older single-family homes are torn down and replaced with larger single-family homes.

Central City Trends

Across the 50 largest metropolitan regions, the increased amount of new residential development taking place in many central cities is striking. Given the fluctuations in building activity from year to year, examining total building permits presents only part of the story. Looking at the average share over multiple years also helps to clarify the nature of the trends. Comparing the early 1990s to the early 2000s is another way to look beyond some of the variation from year to year. In 26 cities, the share has doubled or tripled since 2000. In many cases, 2006 also represented the highest annual share over the past 17 years (1990 to 2006). Generally, cities can be grouped into four categories:

[5] The term “greenfield” means land that was previously undeveloped.

- Saw a substantial increase, and account for a significant share of new construction in the region (Figure 1).
- Saw a substantial increase, but still account for a modest share of new construction (Figure 2).
- Small changes or declines in the central city share of regional construction (Figure 3).
- Trend is unclear due to central city expansion or consolidated city / county government (Table 1a).

Figure 1

Central City Share of Residential Construction
(Substantial increase and a significant share of regional construciton)

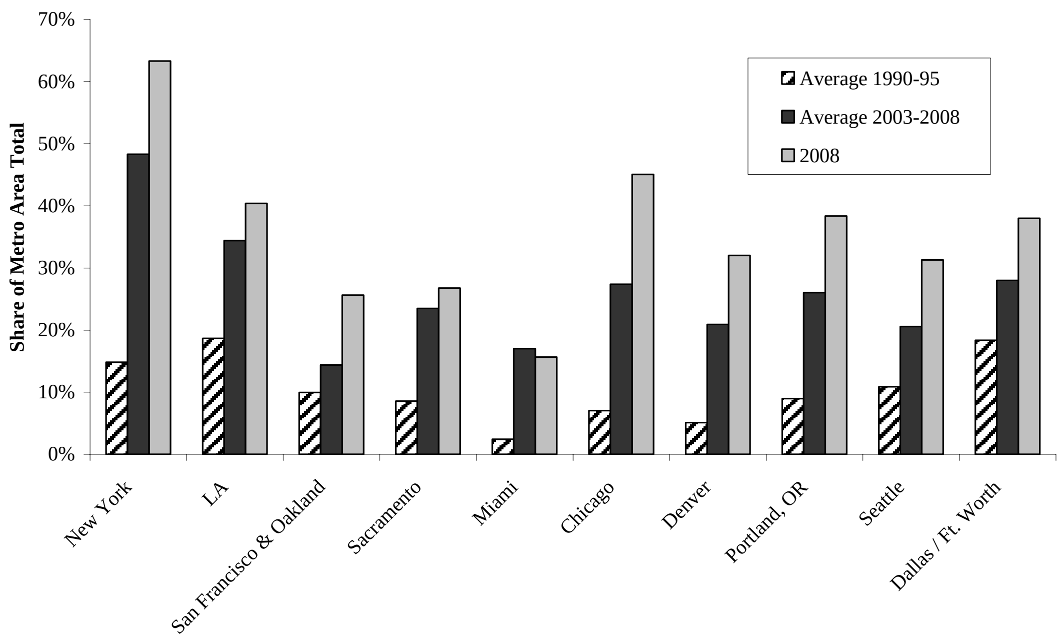


Figure 2

Central City Share of Residential Construction
(Substantial increase, but less than a fifth of regional permits)

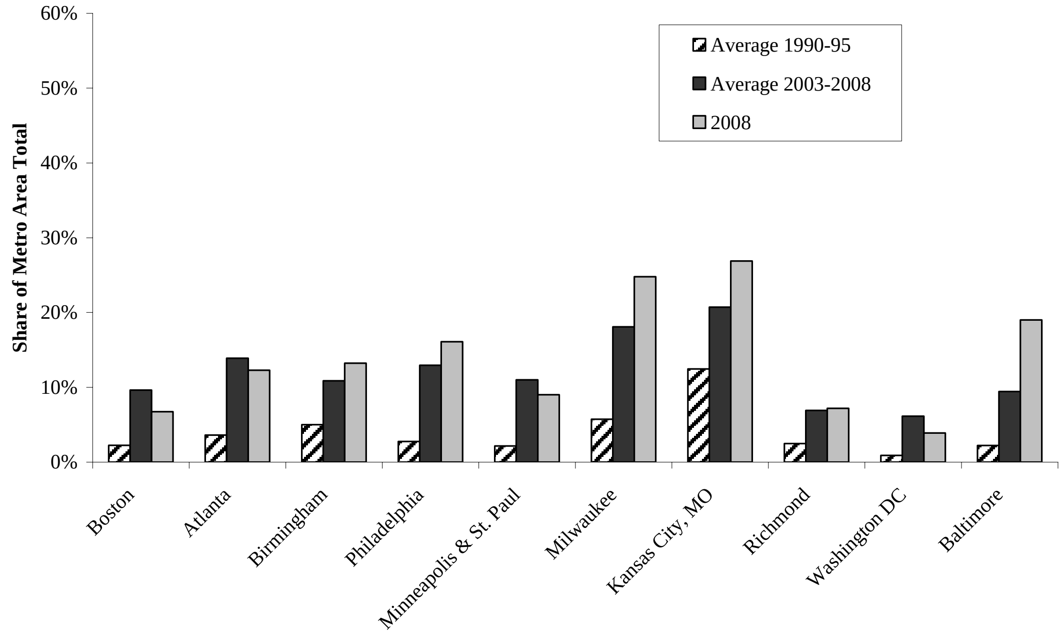


Figure 3

Central City Share of Residential Construction
(Minimal change or a decreased share)

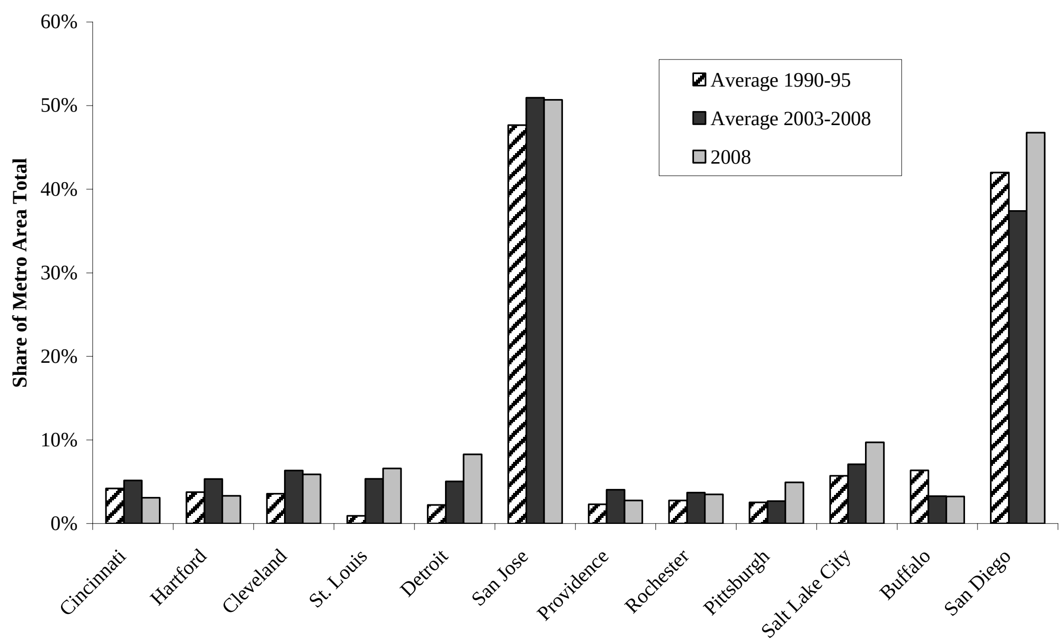


Table 1 - Central City Share of Metropolitan Residential Building Permits

	Average Share		
	1990-95	**2003-08**	**2008**
New York City*	15%	48%	63%
San Diego	42%	37%	47%
Chicago	7%	27%	45%
Portland	9%	26%	38%
Sacramento	9%	23%	27%
Denver	5%	21%	32%
Kansas City, MO	12%	21%	27%
Seattle	11%	21%	31%
Milwaukee	6%	18%	25%
Miami	2%	17%	16%
*Los Angeles***	11%	17%	25%
Dallas / Ft. Worth			
Dallas	13%	12%	22%
Ft. Worth	5%	16%	16%
Atlanta	4%	14%	12%
Philadelphia	3%	13%	16%
San Francisco / Oakland / San Jose			
San Francisco	5%	11%	18%
San Jose	11%	12%	14%
Oakland	3%	6%	5%
Birmingham	5%	11%	13%
Boston	2%	10%	7%
Baltimore	2%	9%	19%
Minneapolis / St. Paul			
Minneapolis	2%	7%	6%
St. Paul	1%	4%	3%
Salt Lake City	6%	7%	10%
Richmond	2%	7%	7%
Cleveland	4%	6%	6%
Washington DC	1%	6%	4%
St. Louis	1%	5%	7%
Hartford	4%	5%	3%
Cincinnati	4%	5%	3%
Detroit	2%	5%	8%

* Manhattan, Brooklyn, Queens, Bronx Boroughs only - excludes Staten Island
** Share includes Riverside and San Bernardino Counties

Table 1a - Difficult to Distinguish Redevelopment From Construction on Greenfield Sites

	Average Share		
	1990-95	**2003-08**	**2008**
Houston *	20%	23%	23%
Phoenix *	28%	25%	22%
Orlando, FL *	9%	14%	21%
San Antonio *	63%	62%	62%
Columbus, OH *	38%	38%	45%
Austin, TX *	48%	36%	37%
Las Vegas *	40%	19%	22%
Tampa, FL *	8%	15%	17%
Raleigh, NC *	30%	39%	42%
Oklahoma City **	43%	46%	41%
Nashville, TN ***	26%	31%	28%
Jacksonville, FL ***	58%	54%	57%
Memphis, TN ***	66%	53%	50%
Louisville, KY ***	60%	57%	66%
Indianapolis ***	36%	27%	26%
Charlotte, NC ***	60%	53%	56%

* Land area increased substantially in the 1990s through annexation.

** Substantial undeveloped land within city boundaries.

*** Consolidated city/county government, central city permit data not reported separately.

Core Suburban Community Trends

Urban redevelopment extends beyond the boundaries of major central cities. Many older suburbs near central cities have been built out for some time, and new residential units are almost entirely built upon previously developed sites. When these communities are added to the mix, redevelopment's share changes significantly in a few regions. Specifically, in eight metropolitan areas, urban core suburbs have significantly increased their share of regional housing starts.

Table 2 - Core Suburban Communities' Share of Residential Building Permits

	Average Share		
	1990-95	**2003-08**	**2008**
New York MSA			
Core Suburbs in Bergen County, NJ	4%	6%	3%
Washington, D.C. MSA			
Arlington County, VA	2%	6%	9%
Alexandria, VA	1%	2%	3%
Boston MSA			
Core Suburbs in Middlesex County, MA	6%	10%	8%
Miami MSA			
Core Suburbs in Broward County, FL	5%	11%	11%
San Francisco / San Jose CMSA			
Core Suburbs in Alameda, Contra Costa, and San Mateo Counties, CA	6%	9%	12%
Core Suburbs in Santa Clara County, CA	4%	6%	8%
San Diego MSA			
Core Suburbs in San Diego County, CA	2%	5%	10%
Minneapolis MSA			
Core Suburbs in Hennepin County, MN	1%	3%	5%

The method for identifying these communities was described above. However, Figures 6-10 provide a visual illustration of urban core suburbs in three regions. The table in Appendix B also provides definitions for each region.

Table 3 - Central City + Core Suburban Community Share

	Average Share		
	1990-1995	2003-08	2008
New York-Northern New Jersey-Long Island, NY-NJ-PA	18%	54%	67%
San Francisco-Oakland-San Jose, CA **	29%	43%	57%
San Francisco-Oakland-Fremont, CA *	14%	33%	49%
San Jose, CA *	66%	76%	80%
Miami-Fort Lauderdale-Pompano Beach, FL	15%	35%	36%
San Diego-Carlsbad-San Marcos, CA	44%	42%	57%
Dallas-Fort Worth-Arlington, TX	30%	32%	42%
Sacramento--Arden-Arcade--Roseville, CA	9%	23%	27%
Kansas City, MO-KS	14%	24%	29%
Los Angeles-Santa Ana-Riverside-San Bernardino **	23%	26%	34%
Los Angeles-Long Beach-Santa Ana, CA *	35%	51%	59%
Riverside-San Bernardino-Ontario, CA *	6%	4%	3%
Chicago-Naperville-Joliet, IL-IN-WI	11%	33%	51%
Boston-Cambridge-Quincy, MA-NH	8%	19%	15%
Seattle-Tacoma-Bellevue, WA	13%	23%	34%
Portland-Vancouver-Beaverton, OR-WA	13%	29%	41%
Washington-Arlington-Alexandria, DC-VA-MD-WV	4%	14%	16%
Minneapolis-St. Paul-Bloomington, MN-WI	7%	16%	16%
Denver-Aurora, CO	5%	21%	32%
Hartford-West Hartford-East Hartford, CT	10%	13%	17%
Milwaukee-Waukesha-West Allis, WI	12%	22%	34%
Birmingham-Hoover, AL	5%	11%	13%
Tampa-St. Petersburg-Clearwater, FL	12%	18%	18%
Atlanta-Sandy Springs-Marietta, GA	4%	15%	14%
Providence-New Bedford-Fall River, RI-MA	9%	10%	7%
Virginia Beach-Norfolk-Newport News, VA-NC	12%	37%	42%
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	3%	13%	16%
Cleveland-Elyria-Mentor, OH	8%	11%	12%
Cincinnati-Middletown, OH-KY-IN	7%	6%	4%
Buffalo-Niagara Falls, NY	20%	19%	17%
Richmond, VA	2%	7%	7%
Baltimore-Towson, MD	2%	9%	19%
Detroit-Warren-Livonia, MI	4%	7%	12%
Salt Lake City, UT	6%	7%	10%
St. Louis, MO-IL	1%	5%	7%
Rochester, NY	3%	4%	3%
Pittsburgh, PA	3%	3%	5%

* Share with MSA defined as Los Angeles and Orange Counties

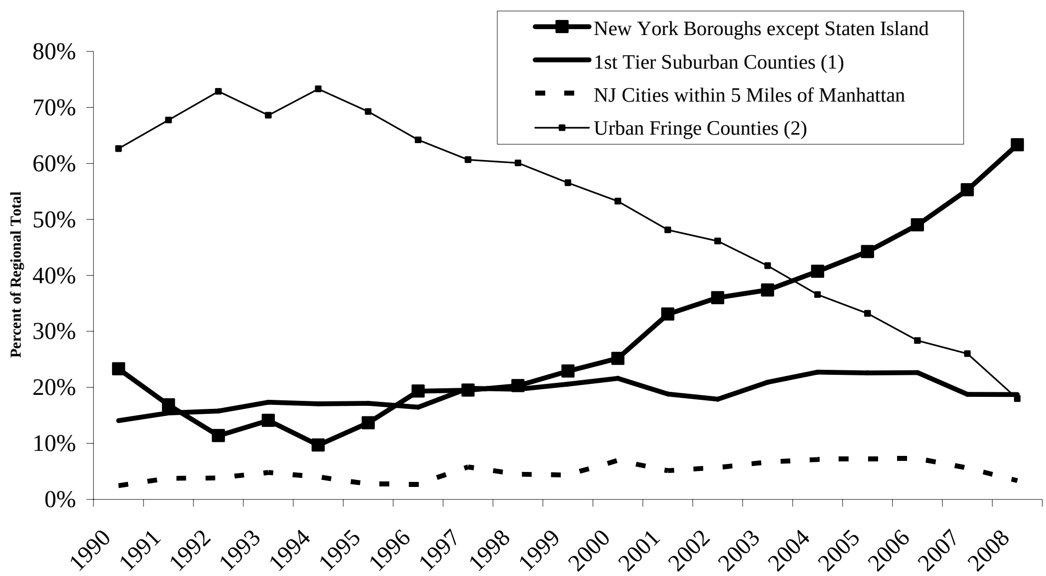
** Share with larger CMSA definition. Includes Los Angeles, Orange, San Bernardino, Riverside and Ventura Counties.

Key Regions

New York-Northern New Jersey-Long Island MSA

	Average Share		
	1990-95	**2003-08**	**2008**
Core Boroughs (without Staten Island)	15%	48%	63%
Manhattan Borough	4%	12%	14%
Queens Borough	2%	11%	12%
Brooklyn Borough	4%	14%	15%
Bronx Borough	4%	7%	8%
1st Tier Suburban Counties (1)	16%	21%	19%
NJ cities within 5 miles of Manhattan	4%	6%	3%
Urban Fringe Counties (2)	69%	31%	18%

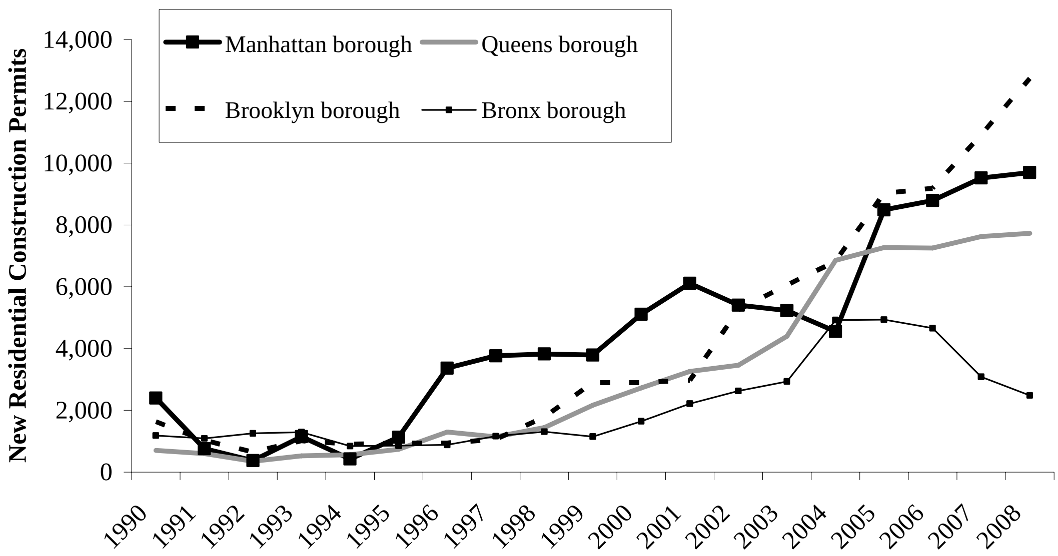
Share of New Housing Starts by County
(New York MSA)



Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

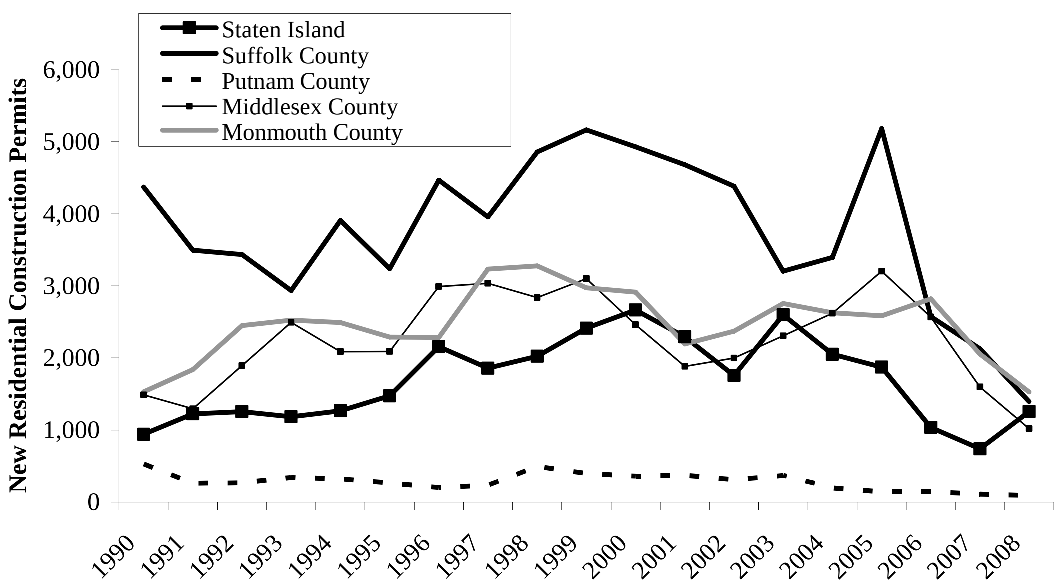
(1) 1st Tier Suburban Counties - Nassau and Richmond Counties, NY; Essex, Union, Bergen, and Hudson Counties, NJ.
(2) Urban Fringe Counties - Rockland, Westchester, Putnam, and Suffolk Counties, NY; Middlesex, Monmouth, Ocean, Hunterdon, Morris, Sussex, and Passaic Counties, NJ; Pike County, PA.

New Housing Starts by County
(New York MSA)



Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

New Housing Starts by County
(New York MSA)

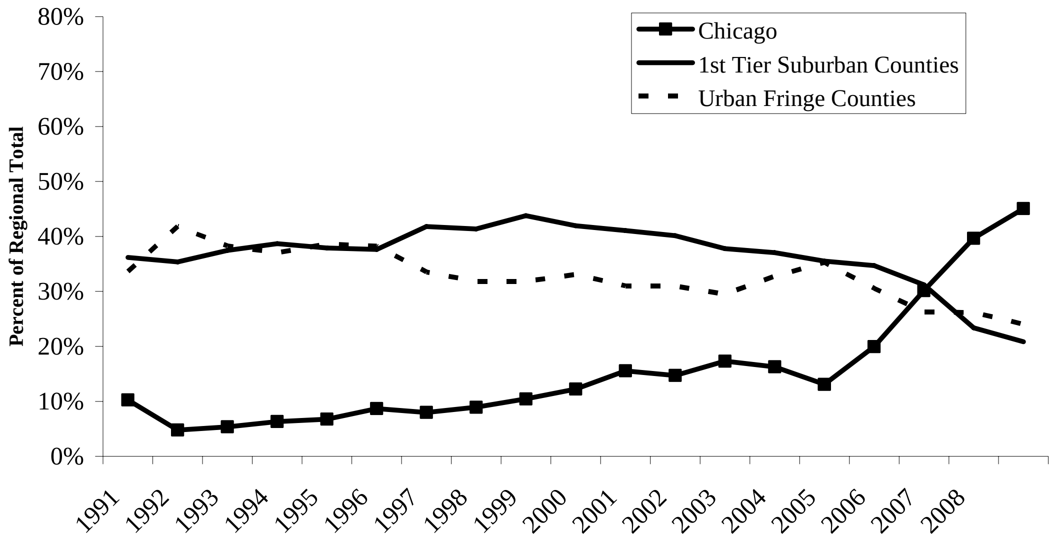


Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

Chicago-Naperville-Joliet MSA

	Average Share		
	1990-95	2003-08	2008
Cook County	25%	40%	55%
Chicago	7%	27%	45%
Core suburban cities	4%	6%	6%
1st Tier Suburban Counties (1)	37%	30%	21%
Urban Fringe Counties (2)	38%	29%	24%

Share of New Housing Starts by County
(Chicago MSA)



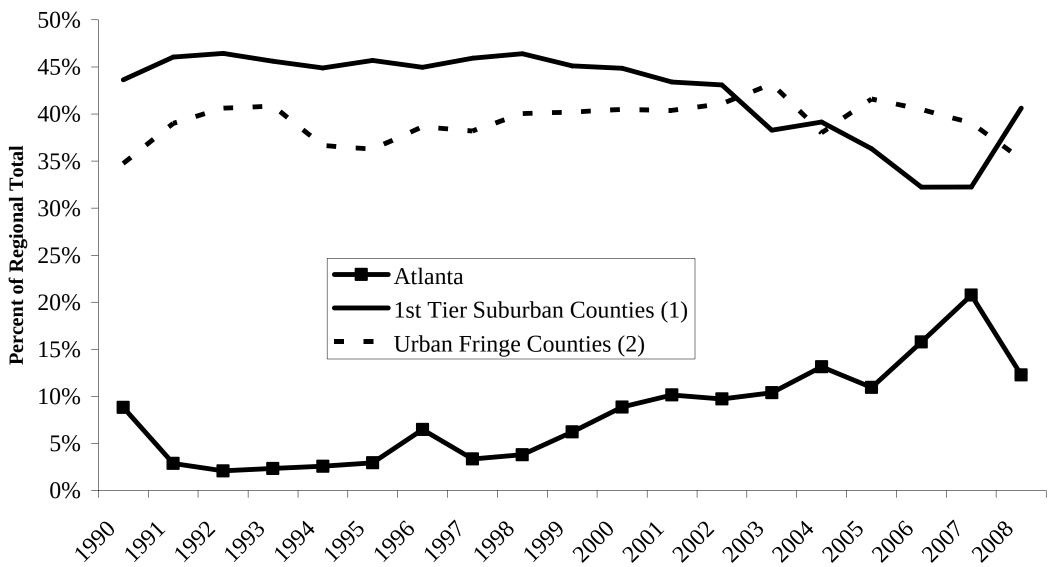
Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

(1) 1st Tier Suburban Counties - DuPage, Kane, Lake, and Will Counties, IL.
(2) Urban Fringe Counties - DeKalb, Grundy, Kendall, and McHenry Counties, IN; Japser, Lake, Newton, and Porter Counties, WI; Kenosha.

Atlanta-Sandy Springs-Marietta MSA

	Average Share		
	1990-95	**2003-08**	**2008**
Fulton County	17%	23%	22%
Atlanta	4%	14%	12%
1st Tier Suburban Counties (1)	45%	36%	41%
Urban Fringe Counties (2)	38%	40%	35%

Share of New Housing Starts by County
(Atlanta MSA)



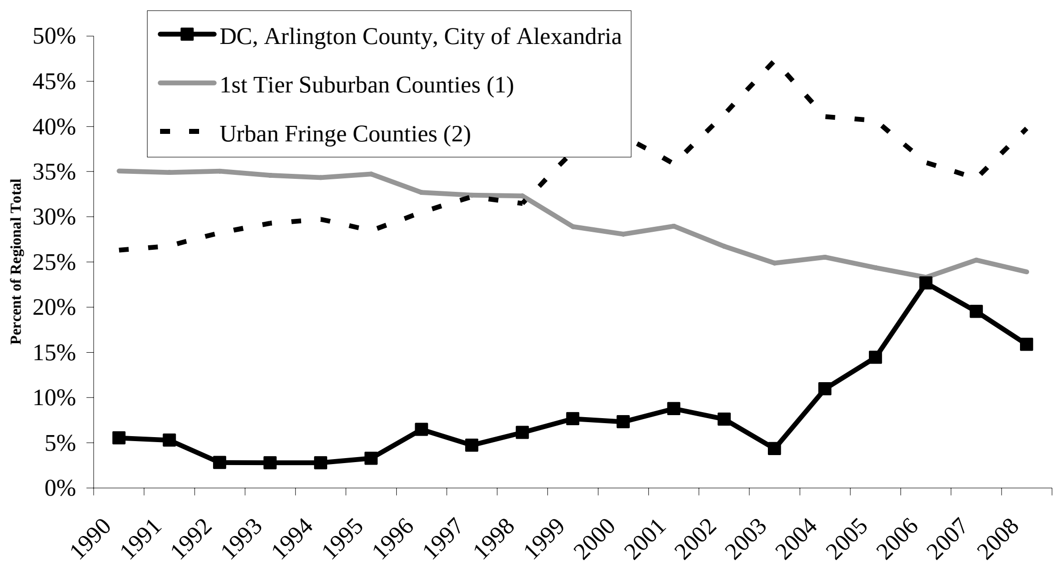
Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

(1) 1st Tier Suburban Counties - DeKalb, Cobb, Clayton, Douglas, and Gwinnett Counties, GA.
(2) Urban Fringe Counties - Barrow, Bartow, Butts, Carrol, Cherokee, Coweta, Dawson, Fayette, Forsyth, Haralson, Heard, Henry, Jasper, Lamar, Merriwether, Newton, Paulding, Pickens, Pike, Rockdale, Spaulding, and Walton Counties, GA.

Washington-Arlington-Alexandria MSA

	Average Share		
	1990-95	**2003-08**	**2008**
DC, Arlington, Alexandria	4%	14%	16%
Washington, D.C.	1%	6%	4%
Arlington County	2%	6%	9%
City of Alexandria	1%	2%	3%
1st Tier Suburban Counties (1)	52%	31%	31%
Urban Fringe Counties (2)	44%	54%	54%

Share of New Housing Starts by County
(Washington, DC MSA)



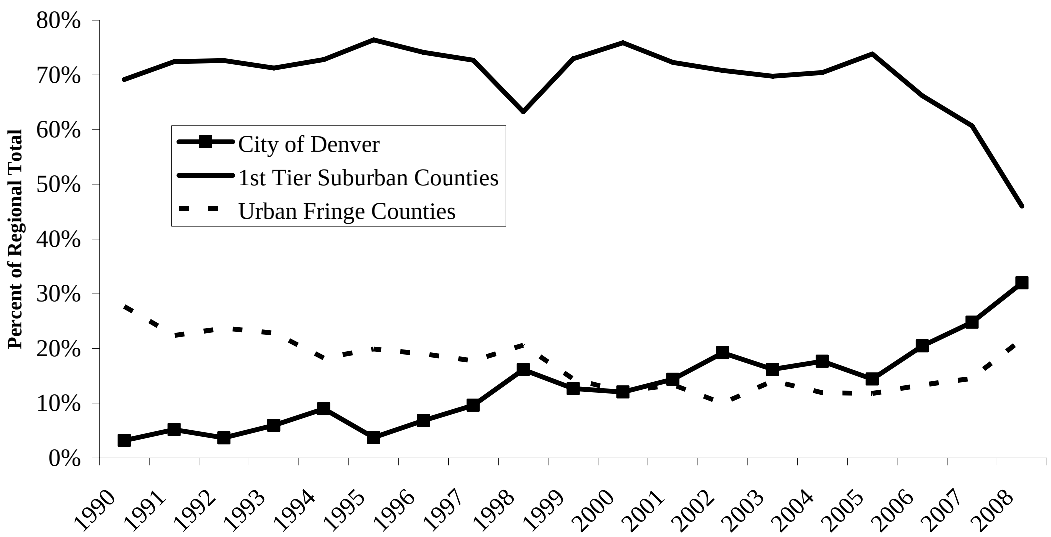
Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

(1) 1st Tier Suburban Counties - Montgomery and Prince Georges Counties, MD; Fairfax County, VA.
(2) Urban Fringe Counties - Calvert, Charles, and Frederick Counties, MD; Fauquier, Loudoun, Prince William, Spotsylvania, and Stafford Counties, VA.

Denver-Aurora MSA

	Average Share		
	1990-95	2003-08	2008
City and County of Denver	5%	21%	32%
1st Tier Suburban Counties (1)	72%	64%	46%
Urban Fringe Counties (2)	22%	15%	22%

Share of New Housing Starts by County
(Denver MSA)



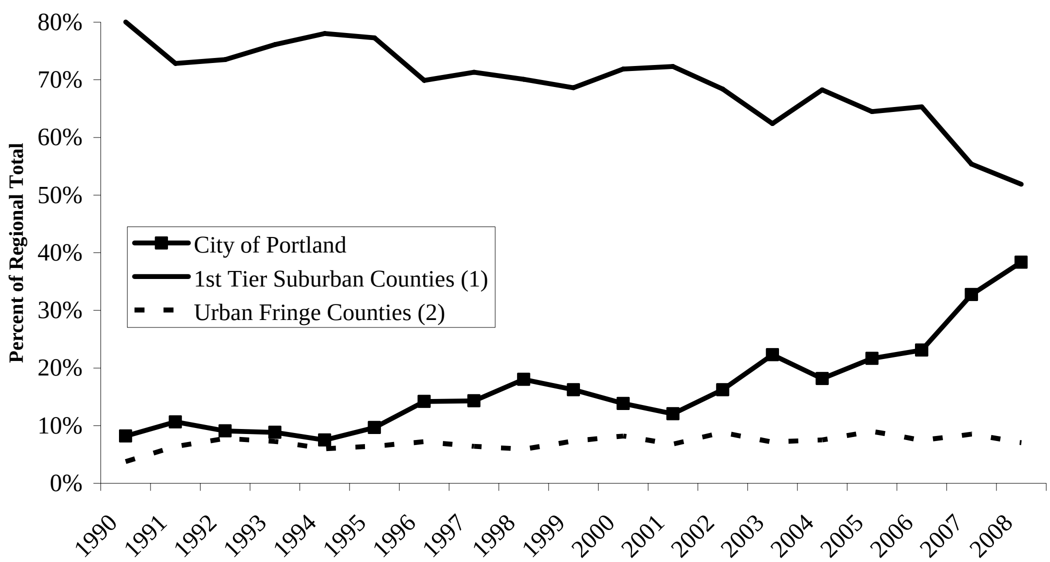
Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

(1) 1st Tier Suburban Counties - Adams, Arapahoe, Douglas, and Jefferson Counties, CO.
(2) Urban Fringe Counties - Boulder, Broomfield, Clear Creek, Elbert, Gilpin, and Park Counties, CO.

Portland-Vancouver-Beaverton MSA

	Average Share		
	1990-95	2003-08	2008
Multnomah County	17%	31%	41%
Portland	9%	26%	38%
Gresham	4%	3%	2%
Suburban Counties (1)	76%	69%	59%

Share of New Housing Starts by County
(Portland MSA)

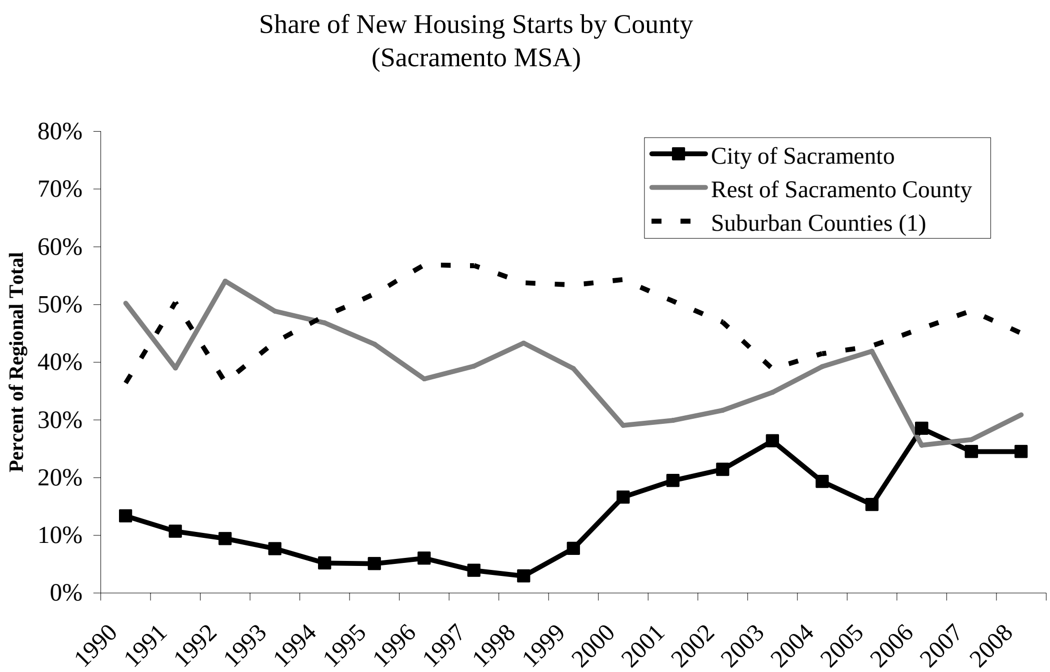


Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

(1) 1st Tier Suburban Counties – Clackamas and Washington Counties, OR; Clark County, WA.
(2) Urban Fringe Counties - Columbia and Yamhill Counties, OR; Skamania County, WA.

Sacramento--Arden-Arcade--Roseville MSA

	Average Share		
	1990-95	2003-08	2008
Sacramento County	56%	56%	55%
City of Sacramento	9%	23%	27%
Suburban Counties	44%	44%	45%



Source: New Residential Building Permits, U.S. Census Bureau, Manufacturing and Construction Division

(1) Suburban Counties - El Dorado, Placer, and Yolo Counties, CA.

The National Context

Examining the national trends over the past few years helps place these regional trends in context. Between 2001 and 2005, the number of residential units built each year grew dramatically across all categories and regions. In 2006 and 2007, there was a sharp decline. However, it has been uneven across the housing market:

- Single family units have declined most rapidly, while the construction of multifamily units has fallen more modestly.
    - The number of new high-density residential units has not declined from the 200,000 units per year level produced at the height of the real estate boom.
    - Construction of rental units is actually up slightly in 2007, while condos have declined at a rate similar to single-family detached units.

Table 4 Housing Starts by Unit Type - National Total 2001-2008 (in Thousands)

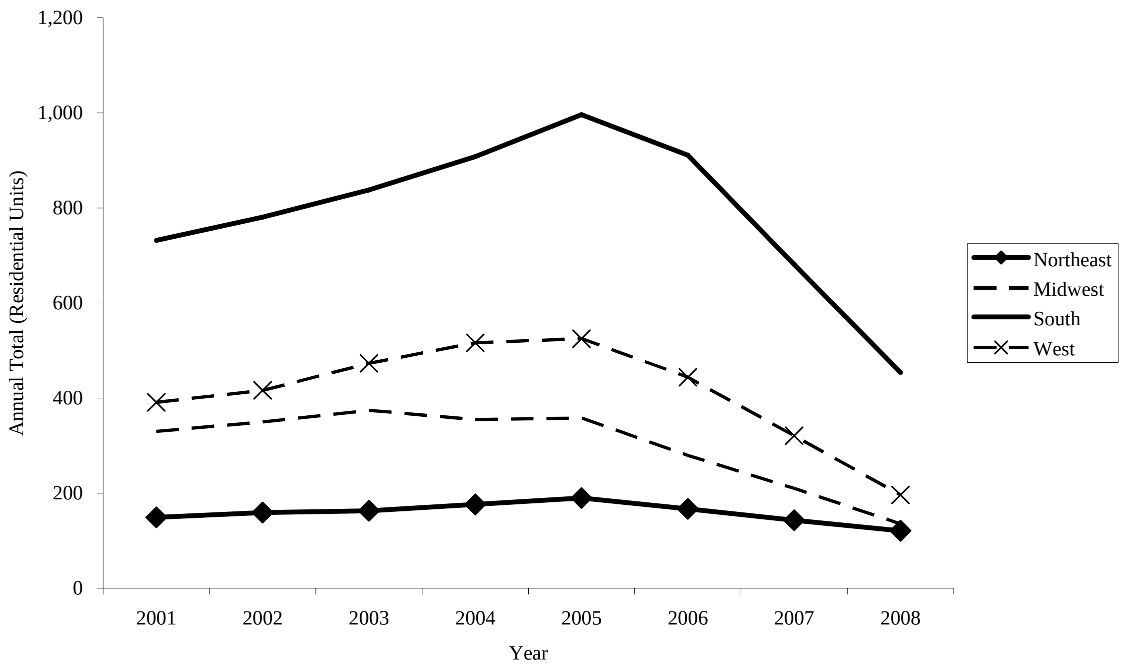
Year	Total	Single Family		Multifamily			
		Detached	Attached	Total Multifamily Units	For Sale Units	Rental Units	Units in Large Buildings (20+ units)
2001	1,602	1,133	140	329	71	258	178
2002	1,705	1,198	160	346	71	275	183
2003	1,848	1,309	190	349	87	262	196
2004	1,956	1,397	213	345	120	225	192
2005	2,068	1,494	222	352	150	203	208
2006	1,801	1,264	201	336	151	185	206
2007	1,355	900	146	309	115	194	207
2008	906	535	87	284	64	220	209

Table 5 Share by Unit Type

Year	Detached Single Family	Townhouses	Condos	Rental Apartments	Large Multifamily Buildings
2001	71%	9%	4%	16%	11%
2002	70%	9%	4%	16%	11%
2003	71%	10%	5%	14%	11%
2004	71%	11%	6%	12%	10%
2005	72%	11%	7%	10%	10%
2006	70%	11%	8%	10%	11%
2007	66%	11%	8%	14%	15%
2008	59%	10%	7%	24%	23%

Source: U.S. Census Bureau, Residential Construction Branch, Table Q1 "New Privately Owned Housing Units Started in the United States by Purpose and Design."

Residential Housing Starts by Census Region



Insights and Suggested Research Questions

While these trends reveal a substantial shift in residential construction patterns, they also suggest that the change is not yet reshaping the face of urban America as a whole. A large share of new residential construction still takes place on previously undeveloped land at the urban fringe. In some regions there has been little change in the share of new construction taking place in central cities. In other regions, central cities have increased their relative share of building permits, but still account for a small overall share at the regional level. Although urban core neighborhoods have doubled or tripled their share of residential construction since the early 1990s, they still account for less than half of all new residential units in most regions. The "urban infill" share would be larger if redevelopment in growing suburbs was also considered, but it would still not likely represent a majority of new construction in more than a handful of regions.

Additionally, evaluating residential construction based on the Census building permit data provides less geographic detail than could be achieved by studying a single region. Previous studies have examined patterns within particular regions (Knaap Song 2004). With the increased availability of GIS-based parcel data in many regions, it is possible to evaluate residential construction patterns within jurisdictions and answer more precise questions, such as:

- What percent of residential units are being built upon previously developed parcels, and how has that share changed over time?
- How much has average residential density increased in various regions?
- What percent of new housing units are being built in walkable / transit-accessible places?

Although this analysis does not directly address these questions, it does provide a broad picture of the magnitude and direction of residential construction trends across the country. The results of this analysis raise a set of important research questions for subsequent work:

- To what extent are these trends driven by real estate market fundamentals versus public sector policies?
    - Land use regulations, infrastructure provision, and incentive programs.
- In regions where urban core communities' share of new construction has increased, what kinds of projects are driving the trend?
    - Transit-oriented development, high-rise buildings in prime waterfront or downtown locations, redevelopment of former industrial sites, redevelopment of strip commercial parcels, or large underutilized parking lots.
- In regions where urban fringe development is still increasing its share, what is behind such trends?
    - Continued decentralization of employment, a weak overall housing market, deficiencies in urban core infrastructure.

Resolving these questions will provide a more complete picture of the policy implications of these trends. First, it could further clarify the approaches that most effectively increased the overall rate of redevelopment. Second, it could also identify specific policies and strategies that state and local governments can put in place to capitalize on these trends.

Finally, continued research will also be needed to shed light on the right mix of policies as we emerge from the current real estate market turmoil. The data suggest that the shift toward redevelopment continued in 2008 even as the real estate market weakened. Although the number of building permits in urban core areas slowed, the declines were more precipitous in outlying areas. However, redevelopment projects are often capital intensive and constraints on developer's access to credit and cities access to municipal bonds financing may begin to substantially reduce the pace of redevelopment.

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Appendix A –Regional Summary Table

Share of Metro Region's New Residential Building Permits

	Average Share		
New York-Northern New Jersey-Long Island, NY-NJ-PA	**1990-95**	**2003-08**	**2008**
Core Boroughs (w/out Staten Island)	15%	48%	63%
Manhattan borough	4%	12%	14%
Queens borough	2%	11%	12%
Brooklyn borough	4%	14%	15%
Bronx borough	4%	7%	8%
Core Suburban Counties	16%	21%	19%
NJ Cities w/in 5 Miles of Manhattan	4%	6%	3%
Fringe Suburban Counties	69%	31%	18%
Los Angeles-Long Beach-Santa Ana, CA	**1990-95**	**2003-08**	**2008**
Los Angeles County	58%	40%	55%
Los Angeles	19%	27%	45%
Core Suburbs	11%	8%	9%
Orange County	42%	26%	22%
Urban Core Suburbs	5%	5%	4%
Chicago-Naperville-Joliet, IL-IN-WI	**1990-95**	**2003-08**	**2008**
Cook County	18%	40%	55%
Chicago	5%	27%	45%
Core Suburbs	3%	6%	6%
1st Tier Suburban Counties	27%	30%	21%
Urban Fringe Counties	28%	29%	24%
Dallas-Fort Worth-Arlington, TX	**1990-95**	**2003-08**	**2008**
Dallas County	39%	25%	33%
City of Dallas	13%	12%	22%
Core Suburbs	6%	2%	3%
Tarrant County	22%	25%	21%
City of Ft. Worth	5%	16%	16%
Core Suburbs	5%	2%	1%
Suburban Counties	33%	34%	30%
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	**1990-95**	**2003-08**	**2008**
City and County of Philadelphia	3%	13%	16%
1st Tier Suburban Counties	52%	47%	44%
Urban Fringe Counties	45%	40%	40%
Miami-Fort Lauderdale-Pompano Beach, FL	**1990-95**	**2003-08**	**2008**
Dade County	33%	50%	44%
Miami	2%	17%	16%
Core Suburbs	5%	4%	5%
Broward County	36%	21%	28%
Core Suburbs	5%	11%	11%
Palm Beach County	31%	29%	28%
Core Suburbs	3%	3%	4%

Share of Metro Region's New Residential Building Permits

	Average Share		
Washington-Arlington-Alexandria, DC-VA-MD-WV	**1990-95**	**2003-08**	**2008**
DC, Arlington, Alexandria	4%	14%	16%
Washington DC	1%	6%	4%
Arlington County	2%	6%	9%
City of Alexandria	1%	2%	3%
1st Tier Suburban Counties (1)	52%	31%	31%
Urban Fringe Counties (2)	44%	54%	54%
Atlanta-Sandy Springs-Marietta, GA	**1990-95**	**2003-08**	**2008**
Fulton County	17%	23%	22%
Atlanta	4%	14%	12%
1st Tier Suburban Counties (1)	45%	36%	41%
Urban Fringe Counties (2)	38%	40%	35%
Boston-Cambridge-Quincy, MA-NH	**1990-95**	**2003-08**	**2008**
Suffolk County	3%	12%	10%
Boston	2%	10%	7%
Middlesex County	31%	29%	26%
Core Suburbs	6%	10%	8%
1st Tier Suburban Counties	50%	45%	49%
Urban Fringe Counties	16%	15%	14%
Detroit-Warren-Livonia, MI	**1990-95**	**2003-08**	**2008**
Wayne County	21%	29%	37%
Detroit	2%	5%	8%
Core Suburbs	1%	2%	3%
1st Tier Suburban Counties	62%	55%	49%
Urban Fringe Counties	18%	16%	14%
San Francisco-Oakland-Fremont, CA	**1990-95**	**2003-08**	**2008**
San Francisco (City / County)	6%	14%	26%
San Mateo County	7%	6%	11%
Core Suburbs	4%	4%	7%
Alameda County	21%	25%	22%
Oakland	3%	8%	7%
Core Suburbs	1%	4%	6%
Contra Costa County	29%	28%	23%
Core Suburbs	2%	3%	2%
Urban Fringe Counties	37%	27%	19%
Riverside-San Bernardino-Ontario, CA	**1990-95**	**2003-08**	**2008**
Riverside County	58%	66%	64%
City of Riverside	4%	4%	3%
San Bernardino County	42%	34%	36%
City of San Bernardino	3%	1%	0%

Share of Metro Region's New Residential Building Permits

	Average Share		
Seattle-Tacoma-Bellevue, WA	**1990-95**	**2003-08**	**2008**
King County	48%	55%	67%
Seattle	11%	21%	31%
Core Suburbs	2%	2%	2%
Pierce County	27%	23%	15%
Snohomish County	25%	23%	17%
Minneapolis-St. Paul-Bloomington, MN-WI	**1990-95**	**2003-08**	**2008**
Hennepin County	21%	24%	27%
Minneapolis	2%	7%	6%
Core Suburbs	1%	3%	5%
Ramsey County	7%	7%	6%
St. Paul	1%	4%	3%
Core Suburbs	3%	2%	2%
1st Tier Suburban Counties	64%	60%	59%
Urban Fringe Counties	8%	10%	8%
San Diego-Carlsbad-San Marcos, CA	**1990-95**	**2003-08**	**2008**
City of San Diego	42%	37%	47%
Core Suburbs	2%	5%	10%
Expanding Suburban Cities	40%	41%	24%
Unincorporated San Diego County	16%	17%	19%
St. Louis, MO-IL	**1990-95**	**2003-08**	**2008**
City of St. Louis	1%	5%	7%
1st Tier Suburban Counties	78%	67%	66%
Urban Fringe Counties	21%	28%	28%
Tampa-St. Petersburg-Clearwater, FL	**1990-95**	**2003-08**	**2008**
Hillsborough County	45%	54%	64%
Tampa	8%	15%	17%
Pinellas County	29%	10%	7%
St. Petersburg	3%	3%	1%
Suburban Counties	26%	36%	29%
Baltimore-Towson, MD	**1990-95**	**2003-08**	**2008**
City of Baltimore	2%	9%	19%
1st Tier Suburban Counties	55%	46%	45%
Urban Fringe Counties	43%	46%	35%
Denver-Aurora, CO	**1990-95**	**2003-08**	**2008**
City of Denver	5%	21%	32%
1st Tier Suburban Counties	72%	64%	46%
Urban Fringe Counties	22%	15%	22%
Pittsburgh, PA	**1990-95**	**2003-08**	**2008**
Allegheny County	39%	37%	39%
Pittsburgh	3%	3%	5%
Suburban Counties	61%	63%	61%

Share of Metro Region's New Residential Building Permits

	Average Share		
Portland-Vancouver-Beaverton, OR-WA	**1990-95**	**2003-08**	**2008**
Multnomah County	17%	31%	41%
Portland	9%	26%	38%
Gresham	4%	3%	2%
1st Tier Suburban Counties (1)	76%	69%	59%
Urban Fringe Counties (2)	6%		
Cincinnati-Middletown, OH-KY-IN	**1990-95**	**2003-08**	**2008**
Hamilton County	25%	17%	15%
Cincinnati	4%	5%	3%
Core Suburban Cities	3%	1%	1%
Suburban Counties	75%	83%	85%
Cleveland-Elyria-Mentor, OH	**1990-95**	**2003-08**	**2008**
Cuyahoga County	40%	29%	28%
Cleveland	4%	6%	6%
Core Suburban Cities	4%	5%	6%
Suburban Counties	60%	71%	72%
Sacramento--Arden-Arcade--Roseville, CA	**1990-95**	**2003-08**	**2008**
Sacramento County	56%	56%	55%
City of Sacramento	9%	23%	27%
Suburban Counties	44%	44%	45%
Kansas City, MO-KS	**1990-95**	**2003-08**	**2008**
Wyandotte County	2%	4%	3%
Kansas City, KS	1%	3%	3%
Jackson County	35%	39%	37%
Kansas City, MO	12%	21%	27%
Suburban Counties	64%	58%	60%
San Jose-Sunnyvale-Santa Clara, CA	**1990-95**	**2003-08**	**2008**
Santa Clara County	91%	99%	99%
San Jose	48%	51%	51%
Core Suburban Cities	18%	25%	29%
San Benito County	9%	1%	1%
Virginia Beach-Norfolk-Newport News, VA-NC	**1990-95**	**2003-08**	**2008**
Core Cities (Norfolk, Portsmouth, Hampton)	35%	37%	42%
1st Tier Suburban Counties	52%	44%	43%
Urban Fringe Counties	13%	19%	15%
Providence-New Bedford-Fall River, RI-MA	**1990-95**	**2003-08**	**2008**
Providence County	24%	25%	20%
City of Providence	2%	4%	3%
Core Central Cities	6%	6%	4%
1st Tier Suburban Counties	54%	52%	50%
Urban Fringe Counties	22%	23%	29%

Appendix B –Core Suburban Community Definitions

MSA	Core Suburban Community Definition (No Change in Land Area 1990-2000, and…)
New York-Northern New Jersey-Long Island, NY-NJ-PA	Bergen County, NJ within 5 miles of Manhattan
Los Angeles-Long Beach-Santa Ana, CA	LA County West of I-605, South of I-210 / Hollywood Hills Orange County South of Imperial Hwy (SR 91) West of Costa Mesa Freeway (SR 55)
Riverside San Bernardino	City of Riverside, City of San Bernardino
Chicago-Naperville-Joliet, IL-IN-WI	Inside I-294
Dallas-Fort Worth-Arlington, TX	Dallas County Inside I-635 Tarrant County, Between Ft. Worth and Dallas Ft Worth Airport or wtihinin 5 miles of the Ft. Worth Central Business District
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	None Identified
Houston-Sugar Land-Baytown, TX	None Identified
Miami-Fort Lauderdale-Pompano Beach, FL	Dade County West of Palmetto Expressway
	Broward County West of Florida's Turnpike
	Palm Beach County West of I-95
Washington-Arlington-Alexandria, DC-VA-MD-WV	Arlington County and City of Alexandria
Atlanta-Sandy Springs-Marietta, GA	Inside I-285
Boston-Cambridge-Quincy, MA-NH	Inside I-95
Detroit-Warren-Livonia, MI	Within 5 miles of CBD
San Francisco-Oakland-Fremont, CA	Alameda County West of East Bay Hills, North of I-238
	Contra Costa County West of East Bay Hills
	San Mateo County East of I-280 / Foothill Expressway
San Jose-Sunnyvale-Santa Clara, CA	Santa Clara County West of I-280
Phoenix-Mesa-Scottsdale, AZ,	None Identified
Seattle-Tacoma-Bellevue, WA	West of I-405 Loop
Minneapolis-St. Paul-Bloomington, MN-WI	Inside I-494 I-694 loop
San Diego-Carlsbad-San Marcos, CA	South of I-8, West of SR-125, North of South Bay Freeway
St. Louis, MO-IL	None Identified
Tampa-St. Petersburg-Clearwater, FL	City of Clearwater
Baltimore-Towson, MD	None Identified
Denver-Aurora, CO	None Identified
Pittsburgh, PA	None Identified
Portland-Vancouver-Beaverton, OR-WA	None Identified
Cincinnati-Middletown, OH-KY-IN	Inside I-275 E of Hwy 264
Cleveland-Elyria-Mentor, OH	North of I-480 West of I-271 East of the Cleveland Airport
Sacramento--Arden-Arcade--Roseville, CA	None Identified
Orlando-Kissimmee, FL	None Identified
San Antonio, TX	None Identified
Kansas City, MO-KS	None Identified
Las Vegas-Paradise, NV	None Identified
Columbus, OH	Inside I-270 Loop
Indianapolis-Carmel, IN	None Identified
Virginia Beach-Norfolk-Newport News, VA-NC	Within 5 Miles of Norfolk CBD
Charlotte-Gastonia-Concord, NC-SC	None Identified
Providence-New Bedford-Fall River, RI-MA	Within 5 Miles of CBD
Austin-Round Rock, TX	None Identified
Milwaukee-Waukesha-West Allis, WI	Inside I-894 Loop
Nashville-Davidson--Murfreesboro--Franklin, TN	None Identified
Jacksonville, FL	None Identified

MSA	Core Suburban Community Definition (No Change in Land Area 1990-2000, and…)
Memphis, TN-MS-AR	None Identified
Louisville/Jefferson County, KY-IN	None Identified
Richmond, VA	None Identified
Oklahoma City, OK	None Identified
Hartford-West Hartford-East Hartford, CT	Within 5 miles of CBD
Buffalo-Niagara Falls, NY	Inside I-290
Birmingham-Hoover, AL	None Identified
Salt Lake City, UT	None Identified
Raleigh-Cary, NC	None Identified
Rochester, NY	None Identified