

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING THE	)	
DISTRIBUTION OF THE POPULATION	)	Ordinance No. 12-1292A
AND EMPLOYMENT GROWTH TO YEAR	)	
2035 TO TRAFFIC ANALYSIS ZONES IN	)	Introduced by Councilor Kathryn
THE REGION CONSISTENT WITH THE	)	Harrington
FORECAST ADOPTED BY ORDINANCE	)	
NO. 11-1264B IN FULFILLMENT OF	)	
METRO'S POPULATION COORDINATION	)	
RESPONSIBILITY UNDER ORS 195.036	)	

WHEREAS, ORS 195.025 designates Metro as the local government responsible for coordination of planning activities within the Metro district; and

WHEREAS, ORS 195.036 requires the designated local government responsible for coordination of planning activities in a region to establish and maintain a population forecast for the area within its boundary and to coordinate the forecast with the other local governments within the boundary; and

WHEREAS, the Metro Council adopted a population and employment forecast for the region by Ordinance No. 11-1264B ("For the Purpose of Expanding the Urban Growth Boundary to Provide Capacity for Housing and Employment to the year 2030 and Amending the Metro Code to Conform") on October 20, 2011; and

WHEREAS, the distribution to specific zones within the region of forecasted population and employment adopted by this ordinance reflects prior policy decisions made by the Metro Council to: (1) use land inside the UGB more efficiently in Ordinance No. 10-1244B, and (2) add land to the UGB in Ordinance No. 11-1264B; and

WHEREAS, Metro began the process of distribution of the forecasted population and employment in October 2010, by coordinating the distribution with the 25 cities and three counties portions of which lie within the Metro district; in the course of 24 months, Metro held 15 coordination meetings with local governments, by county; more than 25 meetings with individual cities and counties; and four meetings with the city of Vancouver and Clark County to share the results of preliminary distributions and to seek comments and suggestions to improve the accuracy of the distributions; and

WHEREAS, Metro staff made presentations to its advisory committees (MPAC, MTAC, TPAC and JPACT) regarding the distribution and coordination with local governments; and

WHEREAS, Metro incorporated many of the comments and suggestions to refine the distribution and published a final distribution on November 15, 2012; and

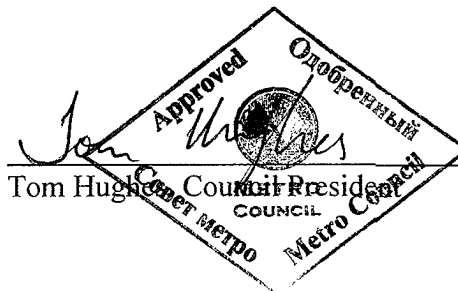
WHEREAS, the regional forecast described on the attached Exhibit A is expressed in terms of households, which is the basis for Metro's capacity analysis, and those household figures are converted to population in Attachments 2 and 3 to the Staff Report dated November 15, 2012; and

WHEREAS, The Metro Council will work with MPAC and JPACT to develop, fund, and implement a research agenda in conjunction with the next Urban Growth Report, which will identify key policy and technical issues and a process, timeline, budget and resources to address key research topics that may include future housing preference, redevelopment assumptions, housing and transportation costs, which work would be prioritized with other needs and resource availability; now, therefore,

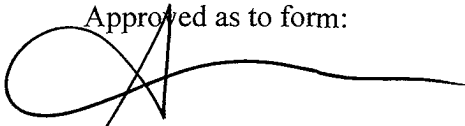
THE METRO COUNCIL ORDAINS AS FOLLOWS:

1. The distribution made to traffic analysis zones, described in Exhibits A and B to this Ordinance and in the Staff Report dated November 15, 2012, of the regional population and employment forecast adopted by the Council in Ordinance No. 11-1264B, is accepted and adopted as fulfillment of Metro's responsibilities regarding coordination of population forecasts under ORS 195.025 and 195.036 and is endorsed for use by the 25 cities and three counties as their own population and employment forecasts for their planning activities.
2. The Chief Operating Officer shall make the distribution of population and employment available to each city and county in the district.
3. The Metro Council adopts the Findings of Fact and Conclusions of Law set forth in Exhibit C to this Ordinance regarding compliance with relevant Statewide Planning Goals.

ADOPTED by the Metro Council this 29 day of November, 2012.



Approved as to form:

  
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Alison Kean Campbell, Metro Attorney

# EXHIBIT A (Ordinance No. 1292A)

## 2035 Reviewed Household Forecast Distribution by Jurisdiction MetroScope "Gamma" TAZ Forecast

Revised Draft 11/15/2012

(source: Scen #1221)

Note: Jurisdiction geographies are approximate, and based on TAZs.

Urban Reserves are considered outside the UGB.

Inside UGB:	2010 Reviewed HH			2035 Reviewed HH			2010-2035 Change		
	SF	MF	Total	SF	MF	Total	SF	MF	Total
Beaverton	18,128	21,953	40,081	20,038	30,479	50,517	1,910	8,526	10,436
Cornelius	2,467	1,051	3,518	3,428	2,085	5,513	961	1,034	1,995
Damascus	3,322	205	3,527	11,700	217	11,916	8,378	12	8,389
Durham	350	8	358	410	26	436	60	18	78
Fairview	1,677	1,954	3,631	1,927	2,076	4,003	250	122	372
Forest Grove	4,775	2,717	7,492	6,999	3,380	10,379	2,224	663	2,887
Gladstone	2,831	1,356	4,187	3,097	1,779	4,876	266	423	689
Gresham	19,781	18,243	38,024	25,394	25,656	51,051	5,613	7,413	13,027
Happy Valley	4,162	273	4,435	9,898	512	10,410	5,736	239	5,975
Hillsboro	18,575	14,251	32,826	21,762	23,211	44,973	3,187	8,960	12,147
Johnson City	268	0	268	268	0	268	0	0	0
King City	572	383	955	590	379	969	18	-4	14
Lake Oswego	10,887	5,180	16,067	12,307	6,984	19,291	1,420	1,804	3,224
Maywood Park	282	18	300	288	18	306	6	0	6
Milwaukie	5,934	2,307	8,241	7,166	2,574	9,740	1,232	267	1,499
Oregon City	8,463	3,511	11,974	12,186	4,861	17,047	3,723	1,350	5,073
Portland	143,519	104,897	248,416	165,348	204,050	369,398	21,829	99,153	120,982
Rivergrove	123	0	123	124	0	124	1	0	1
Sherwood	4,971	1,505	6,476	5,553	1,716	7,269	582	211	793
Tigard	12,035	6,632	18,667	15,120	10,877	25,997	3,085	4,245	7,330
Troutdale	3,981	1,806	5,787	4,506	2,126	6,632	525	320	845
Tualatin	5,391	4,847	10,238	5,980	5,190	11,170	589	343	932
West Linn	7,670	2,582	10,252	9,237	2,751	11,988	1,567	169	1,736
Wilsonville	3,471	4,509	7,980	5,625	5,883	11,508	2,154	1,374	3,528
Wood Village	458	1,081	1,539	488	1,121	1,609	30	40	70
Uninc. Clackamas Co.	21,106	13,559	34,665	28,424	16,650	45,074	7,318	3,091	10,409
Uninc. Multnomah Co.	1,715	314	2,029	3,260	847	4,107	1,545	533	2,078
Uninc. Washington Co.	50,176	21,204	71,380	71,698	28,778	100,476	21,522	7,574	29,096
Inside UGB Total	357,090	236,346	593,436	452,823	384,225	837,048	95,733	147,879	243,612
Outside UGB:									
Clackamas County	40,749	4,202	44,951	60,792	5,600	66,392	20,043	1,398	21,441
Multnomah County	3,776	97	3,873	4,243	122	4,365	467	25	492
Washington County	11,259	101	11,360	27,369	5,401	32,770	16,110	5,300	21,410
Clark County	114,638	43,472	158,110	164,207	64,185	228,392	49,569	20,713	70,282
Outside UGB Total	170,422	47,872	218,294	256,610	75,309	331,919	86,188	27,437	113,625
Tri-County Total	412,874	240,746	653,620	545,226	395,348	940,575	132,352	154,602	286,955
Four-County Total	527,512	284,218	811,730	709,433	459,534	1,168,967	181,921	175,316	357,237

**EXHIBIT B (Ordinance No. 12-1292A)**  
**2035 Reviewed Employment Forecast Distribution by Jurisdiction**  
**MetroScope Gamma TAZ Forecast**

Final Draft 9/19/2012

Notes: Jurisdiction geographies are approximate, and based on TAZs. Urban Reserves are considered to be outside the UGB.

Inside UGB:	2010 Employment Geocode				2035 Jurisdiction Review				2010 - 2035 Change			
	Retail	Service	Other	Total	Retail	Service	Other	Total	Retail	Service	Other	Total
Beaverton	11,041	19,261	21,539	51,841	14,254	33,282	27,822	75,358	3,213	14,021	6,283	23,517
Cornelius	693	711	1,680	3,084	1,611	1,880	4,440	7,931	918	1,169	2,760	4,847
Damascus	260	357	908	1,525	902	1,613	1,894	4,409	642	1,256	986	2,884
Durham	1	213	318	532	1	307	458	766	0	94	140	234
Fairview	236	497	1,878	2,611	558	3,293	3,724	7,575	322	2,796	1,846	4,964
Forest Grove	882	2,018	2,617	5,517	1,747	3,455	5,343	10,545	865	1,437	2,726	5,028
Gladstone	702	546	883	2,131	903	1,040	1,092	3,035	201	494	209	904
Gresham	7,353	8,871	16,408	32,632	12,334	20,154	26,079	58,567	4,981	11,283	9,671	25,935
Happy Valley	241	256	621	1,118	789	1,842	1,616	4,247	548	1,586	995	3,129
Hillsboro	9,584	14,449	34,227	58,260	12,152	25,518	55,733	93,403	2,568	11,069	21,506	35,143
King City	137	269	64	470	173	511	137	821	36	242	73	351
Lake Oswego	2,553	7,024	8,670	18,247	2,323	11,584	8,879	22,786	-230	4,560	209	4,539
Milwaukie	1,403	3,527	6,658	11,588	1,944	5,751	7,712	15,407	541	2,224	1,054	3,819
Oregon City	3,081	3,727	7,580	14,388	5,418	6,990	10,077	22,485	2,337	3,263	2,497	8,097
Portland	65,150	139,116	170,076	374,342	76,134	218,147	214,199	508,482	10,984	79,031	44,123	134,140
Sherwood	1,103	1,206	1,907	4,216	1,643	2,604	5,005	9,252	540	1,398	3,098	5,036
Tigard	9,072	11,901	16,196	37,169	10,764	23,818	19,650	54,232	1,692	11,917	3,454	17,063
Troutdale	1,272	493	2,361	4,126	2,039	2,357	5,615	10,011	767	1,864	3,254	5,885
Tualatin	4,372	6,140	12,460	22,972	5,066	8,868	21,305	35,239	694	2,728	8,845	12,267
West Linn	966	1,593	1,693	4,252	1,517	2,683	2,331	6,531	551	1,090	638	2,279
Wilsonville	2,480	4,839	9,754	17,073	3,536	9,733	14,150	27,419	1,056	4,894	4,396	10,346
Wood Village	1,261	242	531	2,034	1,783	1,158	1,489	4,430	522	916	958	2,396
Uninc. Clackamas Co.	11,506	13,302	20,344	45,152	15,519	26,628	25,775	67,922	4,013	13,326	5,431	22,770
Uninc. Multnomah Co.	109	377	396	882	749	1,658	2,367	4,774	640	1,281	1,971	3,892
Uninc. Washington Co.	5,929	13,844	17,097	36,870	8,659	23,012	31,142	62,813	2,730	9,168	14,045	25,943
<b>Inside UGB Total</b>	<b>141,387</b>	<b>254,779</b>	<b>356,866</b>	<b>753,032</b>	<b>182,518</b>	<b>437,886</b>	<b>498,034</b>	<b>1,118,440</b>	<b>41,131</b>	<b>183,107</b>	<b>141,168</b>	<b>365,408</b>
<b>Outside UGB:</b>												
Clackamas County	4,803	5,218	15,348	25,369	8,182	11,295	22,359	41,836	3,379	6,077	7,011	16,467
Multnomah County	361	479	1,513	2,353	384	876	1,945	3,205	23	397	432	852
Washington County	854	1,640	5,881	8,375	2,363	6,659	18,084	27,106	1,509	5,019	12,203	18,731
Clark County	25,375	42,061	59,831	127,267	40,864	80,963	100,193	222,020	15,489	38,902	40,362	94,753
<b>Outside UGB Total</b>	<b>31,393</b>	<b>49,398</b>	<b>82,573</b>	<b>163,364</b>	<b>51,793</b>	<b>99,793</b>	<b>142,581</b>	<b>294,167</b>	<b>20,400</b>	<b>50,395</b>	<b>60,008</b>	<b>130,803</b>
<b>Four-County Total</b>	<b>172,780</b>	<b>304,177</b>	<b>439,439</b>	<b>916,396</b>	<b>234,311</b>	<b>537,679</b>	<b>640,615</b>	<b>1,412,607</b>	<b>61,531</b>	<b>233,502</b>	<b>201,176</b>	<b>496,211</b>



**Exhibit C to Ordinance No. 12-1292A**  
**Findings of Fact and Conclusions of Law**  
**Regarding Compliance With Statewide Planning Goals**

Ordinance No. 12-1292A adopts the distribution of forecasted population and employment growth to year 2035 to specific zones within the Metro district, consistent with Metro's obligations under ORS 195.036 to coordinate the region-wide forecast with other local governments within the Metro district boundary.

A detailed explanation of the background regarding Metro's extensive coordination with local governments and the process associated with the generation of the population forecast figures is provided in the staff report to the Metro Council dated November 15, 2012, which is hereby adopted and incorporated by reference into these findings.

These findings address compliance with the following potentially applicable Statewide Planning Goals:

Goal 1 (Citizen Involvement): Metro followed the provisions in its charter for adoption of ordinances and coordinated extensively with affected local governments. The Council concludes that adoption of Ordinance No. 12-1292A complies with Goal 1.

Goal 2 (Adequate Factual Base): The Metro Council concludes that the Staff Report and the information upon which the forecast is based provide an adequate factual base for these findings. Metro coordinated the adoption of these forecasts with all cities and counties in the region. The Council concludes that adoption of Ordinance No. 12-1292A complies with Goal 2.

Goal 10 (Housing): The Metro Council adopted a population and employment forecast for the entire Metro region on October 20, 2011 as part of its decision in Ordinance No. 11-1264B to expand the urban growth boundary in order to accommodate the need for housing through the year 2030. The current ordinance merely distributes the forecast figures adopted in 2011 to individual traffic analysis zones and corresponding local governments in order to fulfill Metro's forecast coordination obligations under ORS 195.036. The Metro Council concludes that this distribution decision implements Goal 10 and related statutory requirements, and is consistent with Goal 10.

Goal 14 (Urbanization): Goal 14 directs local governments to accommodate urban population and employment inside urban growth boundaries, ensure the efficient use of land, and provide for livable communities. The adoption of Ordinance No. 12-1292A is consistent with Goal 14 because it enables local governments within the Metro region to undertake their planning responsibilities based on a coordinated region-wide population and employment forecast that provides information that is necessary to plan for future urban growth and to meet the objectives of Goal 14. The Metro Council concludes that the distribution of regional population and employment forecast figures to local governments complies with the requirements of state law and the objectives of Goal 14.

## STAFF REPORT (Revised)

IN CONSIDERATION OF ORDINANCE NO. 12-1292<sup>A</sup>, FOR THE PURPOSE OF ADOPTING THE DISTRIBUTION OF THE POPULATION AND EMPLOYMENT GROWTH TO YEAR 2035 TO TRAFFIC ANALYSIS ZONES IN THE REGION CONSISTENT WITH THE FORECAST ADOPTED BY ORDINANCE NO. 11-1264B IN FULFILLMENT OF METRO'S POPULATION COORDINATION RESPONSIBILITY UNDER ORS 195.036

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Date: November 15, 2012

Prepared by: Gerry Uba, x1737

### BACKGROUND

Oregon land use law (ORS 195.036; 195.025) requires Metro to coordinate its regional population forecasts with local governments inside the urban growth boundary for use in updating their comprehensive plans, land use regulations and other related policies. In 2009, Metro created a population and employment growth forecast for the seven-county region<sup>1</sup> for the next 50 years. One of the ways Metro coordinates the population and employment forecast is to conduct a localized distribution of the 2009 forecast after an urban growth boundary decision cycle is completed.

Metro has been preparing localized-level analyses every five years for over 20 years. The current distribution is the most advanced analysis yet. The experience gained from previous distributions has helped Metro and local governments to improve the methodology and the information that is produced. To accommodate various local and regional planning needs, the localized growth forecast distribution was produced for the years 2025, 2035 and 2040. Local government staff expressed interest in the 2035 distributions as more relevant for their 20-year growth planning.

The distribution information is essential for local and regional planning, such as updating local comprehensive plans (through periodic review), local transportation system plans, and the Regional Transportation Plan. The information is also used for corridor planning and special districts planning. Many cities in the region currently undergoing periodic review are coordinating their forecast with Metro as they are updating their comprehensive plans. Although there is no legal requirement for school districts and special districts to coordinate their forecast with Metro, the distribution information will be useful to school districts for enrolment forecasting and facility planning, and to special districts in the region, such as water, sewer and fire districts, in updating their facility plans and emergency preparedness plans. The information is also helpful to TriMet in forecasting future ridership and mapping travel patterns, enabling the agency to better plan for frequency of MAX and bus service and future routes.

#### Methodology of the growth forecast distribution

The growth forecast distribution is based on policy and investment decisions and assumptions that local elected leaders and the Metro Council have already adopted, including the seven-county forecast,

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<sup>1</sup> Clark, Clackamas, Columbia, Multnomah, Skamania, Washington, and Yamhill counties

existing zoning, adopted plans, the most recently adopted Regional Transportation Plan, and urban and rural reserves. The regional coordination of the forecast distribution is a two stage process.

The first stage of the coordination process involves Metro and local government staff working together to refine the buildable land inventory (BLI) methodology to ensure the accuracy of zoning and growth capacity assumptions. Attachment 1 contains names of local jurisdiction staff involved in the population and employment coordination. The methodology takes into account land that cannot be built on due to environmental constraints and right of way, as well as capacity from vacant buildable lands, new urban areas<sup>2</sup>, prospective urban growth boundary expansions into designated urban reserves, redevelopment and infill. As a result of this exercise, the region now has an updated 30-year capacity estimate that reflects the input and review from local government staff. This coordinated buildable land inventory reflects the increasing importance of redevelopment as a key part of the land supply in this region.

The geography used for this analysis is the Traffic Analysis Zone (TAZ). To provide more detail than the previous growth distribution, the number of TAZs used was increased from 2,013 to 2,162. The TAZ is the geographic unit that serves as the building block of Metro's primary forecasting tools (the travel demand model and MetroScope). By dividing the region into 2,162 TAZs, the accuracy of the travel demand model as well as all other aspects of transportation planning are improved. The TAZ-level data also assist land use planners in updating comprehensive plans and zoning, and conducting other types of land use analysis, including neighborhood level analysis.

In the second stage of the distribution coordination process, land use and transportation models are used to match demand (the seven-county forecast) with supply (the BLI). After extensive review of Metro's initial distributions with local governments' staff, the final product is the 2025, 2035 and 2040 distributions of forecast households and jobs to TAZs, cities and unincorporated areas in the region.

Further analyses of the distribution data reveal future trends that regional and local planners should bring to the attention of their decision makers.

#### Regional Planning Directors Involvement

The coordination of population and employment forecast was kicked off with a meeting of the Regional Planning Directors in October 2010, endorsing roles and responsibilities of local governments and Metro. The directors met again in July 2011 to review, discuss and reach agreement on the outcome of the first stage of the process – the BLI methodology, urban reserve urbanization assumptions, redevelopment assumptions, and the capacity of residential and employment land. At the July meeting, Washington County and the City of Beaverton emphasized the need for a better understanding of residential housing demand and preferences and redevelopment. In response, Metro staff has identified future research on: a) residential choice study enhanced with market segmentation; b) redevelopment supply assumption refinement, depending on funding availability. This research could inform the next Urban Growth Report and forecast distribution.

The last meeting of directors was in September 2012 to review and comment specifically on the 2035 distribution of households and employment. The 2035 household and employment distribution by local jurisdiction are shown in Exhibits A and B of the ordinance. Attachments 2 and 3 contain the 2035

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<sup>2</sup> Areas added to the urban growth boundary that does not yet have urban zoning.

forecast distribution by local jurisdiction. Other related information that has been produced are the 2010 population by local jurisdiction in Attachment 2, the 2035 population forecast by local jurisdiction in Attachment 3, and the forecast distribution profiles by city and county in Attachment 4.

#### Metro advisory committee involvement

The outcome of the first stage of the process (BLI methodology, urban reserve urbanization assumptions, redevelopment assumptions, and capacity of residential and employment land) was presented to the Metro Technical Advisory Committee (MTAC), and Transportation Policy Alternatives Committee (TPAC) in January 2012, and to the Metro Policy Advisory Committee (MPAC) in February 2012 for discussion and comment. The 2035 distribution of households and employment was presented to TPAC in September 2012, and to MTAC, MPAC and the Joint Policy Advisory Committee on Transportation in October 2012.

#### Additional outreach and information

Staff updated the Oregon Land Conservation and Development Commission in June 2011 on how Metro is coordinating its regional forecast with the forecasts of local governments in the region, including other ways Metro coordinates with local governments -- urban growth report, capacity ordinance, and growth management decisions.

An Executive summary describing the extent of the distribution between Metro and local governments is included as Attachment 5. The description of the project methodology, tools, assumptions for estimating land supply and matching the demand (households and employment forecast) with the land supply is in Attachment 6. The coordination meeting agendas and comments of local governments on the mid-term (2025) and long-term (2035/2040) forecast distribution are in Attachment 7.

### **ANALYSIS/INFORMATION**

#### **1. Known Opposition**

Washington County and the City of Beaverton provided written comments emphasizing the need for a better understanding of residential housing demand and preferences and redevelopment. In response, Metro staff has identified additional research possibilities. Depending on funding availability, this research could inform the next Urban Growth Report and forecast distribution.

#### **2. Legal Antecedents**

The distribution of the growth forecast satisfies Metro's coordination obligations under ORS 195.025 and 195.036. As requested by DLCD, staff is proposing that the Metro Council adopt the forecast distribution by an ordinance that will be acknowledged by DLCD as part of Metro's planning documents in order to support future planning decisions by local governments that rely upon the population forecasts. State law requires cities and counties to adopt coordinated forecasts as part of their comprehensive plans.

#### **3. Anticipated Effects**

Adoption of the distribution of population and employment forecast at a localized-level will encourage local governments to use distribution information to conform their land use and transportation plans to recent regional policies adopted by the Metro Council. The TAZ-level

distributions would also inform the next Regional Transportation Plan. Delay of the adoption would delay some local government activities that would be accomplished with the forecast distribution information.

#### 4. Budget Impacts

The FY 2010/2011 and FY 2011/2012 budgets included resources for staff in the Research Center and the Planning and Development Department to work on this project. In the current FY 2012/2013 budget there are sufficient funds to package and post the forecast distribution in electronic platforms that will make the data accessible to local governments and school and special districts in the region.

#### RECOMMENDED ACTION

Staff recommends that the Metro Council accept and adopt the distribution of the 2009 population and employment forecast as fulfillment of Metro's responsibilities on population coordination with local governments in the region

#### ATTACHMENTS

1. Forecast Distribution Process Local Government and Agency Staff
2. ~~2010~~<sup>2035</sup> ~~Reviewed Household Forecast Distribution~~ Population by Jurisdiction
3. ~~2035 Reviewed Employment~~ Population Forecast Distribution by Jurisdiction
4. Metro Gamma Forecast Distribution Profiles by City and County – 2025/2035/2040
5. Regional 2035 Forecast Distribution: Executive Summary
6. Technical Documentation; ~~of the Project (i.e., The Technical Report)~~ Regional Forecast Distribution Methodology and Assumptions; Population and Employment
7. ~~Local Governments' Comments on the 2025 and 2035 Forecast Distributions and Metro Response.~~ Metro Regional Forecast Distribution Coordination Meetings and Discussions

**ATTACHMENT 1 (Staff Report to Ordinance No. 1292A)**  
**2035 FORECAST DISTRIBUTION PROCESS: LOCAL GOVERNMENT AND AGENCY STAFF**

<b>Cities</b>	<b>Staff</b>
City of Beaverton	Laura Kelly, Robert McCracken, Jeff Salvon, Steven Sparks, Doug Taylor
City of Cornelius	Dick Reynolds
City of Damascus	Steve Gaschler, John Morgan, Erika Palmer, Bob Short
City of Durham	
City of Fairview	Lindsey Nesbitt
City of Forest Grove	Jon Holan, Dan Riordan
City of Gladstone	Larry Conrad
City of Gresham	Erin Aigner, Jonathan Harker, Brian Martin, Ann Pytynia
City of Happy Valley	Jason Tuck, Michael Walter
City of Hillsboro	Colin Cooper, Doug Miller, Don Odermott, Pat Ribellia, Alwin Turiel
City of Johnson City	
City of King City	Keith Liden
City of Lake Oswego	Denny Egner, Erica Rooney, Sarah Selden
City of Maywood Park	
City of Milwaukie	Li Alligood, Kenny Asher, Katie Mangle
City of Oregon City	Tony Konkol, Christina Roberts-Gardner, Laura Terway
City of Portland	Tom Armstrong
City of Rivergrove	
City of Sherwood	Julia Hajduk, Michelle Miller
City of Tigard	Darren Wyss
City of Troutdale	Rich Faith, Elizabeth McCallum
City of Tualatin	Colin Cortes, Cindy Hahn, Aquilla Hurd-Ravich, Alice Rouyer
City of West Linn	Sara Javronok, Chris Kerr, John Sonnen
City of Wilsonville	Chris Neamtzu, Stephan Lashbrook, Daniel Pauly, Dan Stark
City of Wood Village	Bill Peterson
<b>Counties</b>	<b>Staff</b>
Clackamas County	Sarah Abbott, Larry Conrad, Martha Fritzie, Shari Gilevich, Clay Glasgow, Cindy Hagen, Scott Hoelscher, Diedre Landon, Mike McAllister, Simone Rede, Michael D. Walden
Multnomah County	Chuck Beasley
Washington County	Andy Back, Steve D. Kelley
<b>Agencies</b>	<b>Staff</b>
Oregon Employment Dept.	Lynn Wallis
Dept. of Land Conservation & Development	Anne Debbaut, Jennifer Donnelly, Darren Nichols, Lynn Wallis
Oregon Dept. of Transportation	Mai Chi, Kirsten Pennington, Lidwien Rahman, Lainie Smith
Port of Portland	John Boren, Tom Bouillion
Metro	Roger Alfred, Sonny Conder, Jim Cser, Chris Deffebach, Mike Hoglund, Robin McArthur, Cindy Pederson, Ted Reid, Maribeth Todd, Gerry Uba, John Williams, Dennis Yee
<b>Neighboring Cities<sup>1</sup></b>	
Canby	Bryan Brown, Matilda Deas
Sandy	Tracy Brown

<sup>1</sup> Consultation / information exchange with SW Washington Regional Transportation Council, City of Vancouver and Clark County, Washington.



## ATTACHMENT 2 (Staff Report to Ordinance No. 1292A)

### 2010 Census of Population by City and County

(source: U.S. Census, 2010 Demographic Profiles)

Note: Jurisdiction geographies are based on the city limits from Census definitions

Inside UGB:	CENSUS	CENSUS	(Estimate)	CENSUS	CENSUS
	2010	2010	Persons	2010	2010
	Population	Households	Per Household	Dwelling Units	Vacancy %
Beaverton	89,803	37,213	2.41	39,500	5.8%
Cornelius	11,869	3,339	3.55	3,499	4.6%
Damascus	10,539	3,621	2.91	3,769	3.9%
Durham	1,351	545	2.48	561	2.9%
Fairview	8,920	3,544	2.52	3,786	6.4%
Forest Grove	21,083	7,385	2.85	7,845	5.9%
Gladstone	11,497	4,540	2.53	4,779	5.0%
Gresham	105,594	38,704	2.73	41,015	5.6%
Happy Valley	13,903	4,408	3.15	4,708	6.4%
Hillsboro	91,611	33,289	2.75	35,487	6.2%
Johnson City	566	268	2.11	278	3.6%
King City	3,111	1,735	1.79	1,920	9.6%
Lake Oswego	36,619	15,893	2.30	16,995	6.5%
Maywood Park	752	300	2.51	312	3.8%
Milwaukie	20,291	8,667	2.34	9,138	5.2%
Oregon City	31,859	11,973	2.66	12,900	7.2%
Portland	583,776	248,546	2.35	265,439	6.4%
Rivergrove	289	123	2.35	133	7.5%
Sherwood	18,194	6,316	2.88	6,569	3.9%
Tigard	48,035	19,157	2.51	20,068	4.5%
Troutdale	15,962	5,671	2.81	5,907	4.0%
Tualatin	26,054	10,000	2.61	10,528	5.0%
West Linn	25,109	9,523	2.64	10,035	5.1%
Wilsonville	19,509	7,859	2.48	8,487	7.4%
Wood Village	3,878	1,226	3.16	1,289	4.9%
Uninc. Clackamas Co.*	89,611	34,360	2.61	37,324	7.9%
Uninc. Multnomah Co.*	5,656	2,251	2.51	2,435	7.6%
Uninc. Washington Co.*	188,586	70,703	2.67	74,600	5.2%
Inside UGB Total	1,484,026	591,159	2.51	629,307	6.1%
Outside UGB:					
Clackamas County	116,200	44,555	2.61	48,399	7.9%
Multnomah County	10,796	4,298	2.51	4,649	7.6%
Washington County	30,013	11,252	2.67	11,873	5.2%
Clark County	425,363	158,099	2.69	167,413	5.6%
Outside UGB Total	582,373	218,204	2.67	232,333	6.1%
Tri-County Total	1,641,036	651,264	2.52	694,227	6.2%
Four-County Total	2,066,399	809,363	2.55	861,640	6.1%

(\* Note: derived as proportional estimate from the total county unincorporated)

### ATTACHMENT 3 (Staff Report to Ordinance No. 1292A) 2035 MetroScope "Gamma" Population Forecast

Revised Draft 11/15/2012

(source: Scen #1221)

Note: Jurisdiction geographies are approximate, and based on TAZs.

Jurisdiction	(TAZ-based) 2035 Population	(TAZ-based) 2035 Households	2035 Persons Per Household	Population Growth 2010 to 2035		
				APR %	% change	change
Beaverton	113,174	50,517	2.24	0.9%	26%	23,371
Cornelius	18,193	5,513	3.30	1.7%	53%	6,324
Damascus	35,654	11,916	2.99	5.0%	238%	25,115
Durham	1,003	436	2.30	-1.2%	-26%	-348
Fairview	9,196	4,003	2.30	0.1%	3%	276
Forest Grove	27,507	10,379	2.65	1.1%	30%	6,424
Gladstone	12,694	4,876	2.60	0.4%	10%	1,197
Gresham	127,124	51,051	2.49	0.7%	20%	21,530
Happy Valley	33,753	10,410	3.24	3.6%	143%	19,850
Hillsboro	114,898	44,973	2.55	0.9%	25%	23,287
Johnson City	566	268	2.11	0.0%	0%	0
King City	1,613	969	1.66	-2.6%	-48%	-1,498
Lake Oswego	45,693	19,291	2.37	0.9%	25%	9,074
Maywood Park	767	306	2.51	0.1%	2%	15
Milwaukie	23,441	9,740	2.41	0.6%	16%	3,150
Oregon City	46,630	17,047	2.74	1.5%	46%	14,771
Portland	791,908	369,398	2.14	1.2%	36%	208,132
Rivergrove	291	124	2.35	0.0%	1%	2
Sherwood	19,439	7,269	2.67	0.3%	7%	1,245
Tigard	60,515	25,997	2.33	0.9%	26%	12,480
Troutdale	17,038	6,632	2.57	0.3%	7%	1,076
Tualatin	27,017	11,170	2.42	0.1%	4%	963
West Linn	32,493	11,988	2.71	1.0%	29%	7,384
Wilsonville	29,367	11,508	2.55	1.6%	51%	9,858
Wood Village	4,645	1,609	2.89	0.7%	20%	767
Uninc. Clackamas Co.*	120,846	45,074	2.68	1.2%	35%	31,235
Uninc. Multnomah Co.*	9,417	4,107	2.29	2.1%	66%	3,761
Uninc. Washington Co.*	248,799	100,476	2.48	1.1%	32%	60,213
<b>Inside UGB Total</b>	<b>1,973,681</b>	<b>837,048</b>	<b>2.36</b>	<b>1.1%</b>	<b>33%</b>	<b>489,655</b>
<b>Outside UGB:</b>						
Clackamas County **	177,998	66,392	2.68	1.7%	53%	61,798
Multnomah County	10,008	4,365	2.29	-0.3%	-7%	-788
Washington County **	81,145	32,770	2.48	4.1%	170%	51,131
Clark County	612,027	228,392	2.68	1.5%	44%	186,664
<b>Outside UGB Total</b>	<b>881,179</b>	<b>331,919</b>	<b>2.65</b>	<b>1.7%</b>	<b>51%</b>	<b>298,806</b>
<b>Tri-County Total</b>	<b>2,242,833</b>	<b>940,575</b>	<b>2.38</b>	<b>1.3%</b>	<b>37%</b>	<b>601,797</b>
<b>Four-County Total</b>	<b>2,854,860</b>	<b>1,168,967</b>	<b>2.44</b>	<b>1.3%</b>	<b>38%</b>	<b>788,461</b>

Population estimates derived from the "2035 Reviewed TAZ Forecast Distribution" (MetroScope GAMMA HH Forecas

(\* Note: derived as proportional estimate from the total county unincorporated)

(\*\* Note: urban reserves are tabulated outside the UGB)

**Attachment 4 (Staff Report to Ordinance No. 12-1292A)**

**METRO 'GAMMA' FORECAST DISTRIBUTION  
PROFILES BY CITY AND COUNTY  
2025 / 2035 / 2040**

**JURISDICTION REVIEWED HOUSEHOLDS AND EMPLOYMENT**

**Published 11/15/2012    Metro Economic and Land Use Forecasting**



# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

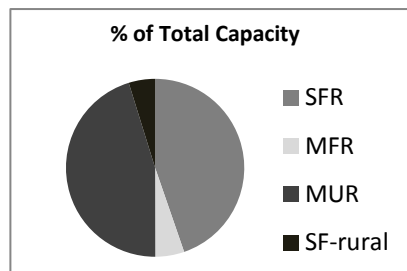
## County Summary for **Clackamas**

Household Forecast				
Year	SF	MF	Total	%APR
2010	109,231	37,093	146,324	
2025	146,808	41,341	188,149	1.7%
2035	161,217	47,220	208,437	1.0%
2040	167,598	51,814	219,412	1.0%

Households Change from 2010			
Year	SF	MF	Total
2025	37,577	4,248	41,825
2035	51,986	10,127	62,113
2040	58,367	14,721	73,088

2010-2045 Capacity Used			
Year	SF	MF	Total
2025	49%	5%	27%
2035	68%	13%	40%
2040	76%	19%	47%

2010-2045 Household Capacity by Type							
	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	69,435	8,172	70,254	7,446	76,881	78,426	155,307
% of Total	45%	5%	45%	5%	50%	50%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

Employment Forecast				
Year	Retail	Service	Other	Total
2010	27,114	40,035	70,797	137,946
2025	34,770	62,517	85,943	183,230
2035	39,943	77,957	92,544	210,444
2040	43,177	85,402	98,874	227,453

2010-2045 Employment Cap.		
	IND	COM
Acres	3,819	2,255
% of Total	63%	37%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

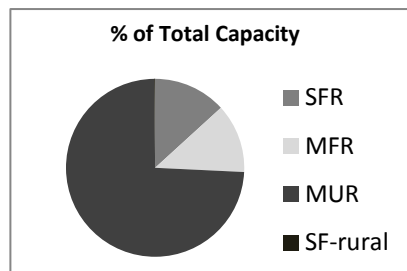
## County Summary for **Multnomah**

Household Forecast				
Year	SF	MF	Total	%APR
2010	175,690	128,959	304,649	
2025	203,261	191,394	394,655	1.7%
2035	205,977	236,569	442,546	1.2%
2040	210,367	257,474	467,841	1.1%

Households Change from 2010			
Year	SF	MF	Total
2025	27,571	62,435	90,006
2035	30,287	107,610	137,897
2040	34,677	128,515	163,192

2010-2045 Capacity Used			
Year	SF	MF	Total
2025	87%	30%	38%
2035	96%	53%	58%
2040	100%	63%	69%

2010-2045 Household Capacity by Type							
	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	31,279	29,606	175,105	390	31,669	204,711	236,380
% of Total	13%	13%	74%	0%	13%	87%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

Employment Forecast				
Year	Retail	Service	Other	Total
2010	75,771	150,159	193,234	419,164
2025	87,169	210,137	236,512	533,818
2035	94,007	247,772	255,550	597,331
2040	97,733	262,650	266,346	626,733

2010-2045 Employment Cap.		
	IND	COM
Acres	3,662	1,605
% of Total	70%	30%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

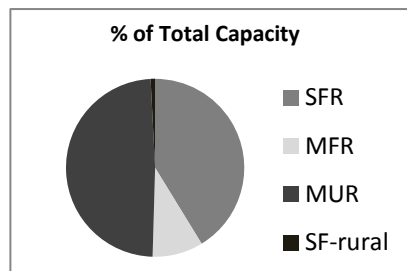
## County Summary for **Washington**

Household Forecast				
Year	SF	MF	Total	%APR
2010	127,953	74,694	202,647	
2025	163,533	90,317	253,850	1.5%
2035	178,033	111,560	289,592	1.3%
2040	181,557	123,434	304,991	1.0%

Households Change from 2010			
Year	SF	MF	Total
2025	35,580	15,623	51,203
2035	50,080	36,866	86,945
2040	53,604	48,740	102,344

2010-2045 Capacity Used			
Year	SF	MF	Total
2025	51%	16%	31%
2035	72%	38%	53%
2040	77%	51%	62%

2010-2045 Household Capacity by Type							
	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	68,258	15,236	80,647	1,344	69,601	95,883	165,485
% of Total	41%	9%	49%	1%	42%	58%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

Employment Forecast				
Year	Retail	Service	Other	Total
2010	44,520	71,922	115,577	232,019
2025	54,561	105,717	165,064	325,342
2035	59,497	130,987	192,328	382,812
2040	62,747	143,327	210,762	416,836

2010-2045 Employment Cap.		
	IND	COM
Acres	6,748	2,159
% of Total	76%	24%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Banks**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	1,320	0	1,320	
2025	2,251	11	2,262	3.7%
2035	2,955	6	2,961	2.7%
2040	2,964	6	2,970	0.1%

## Households Change from 2010

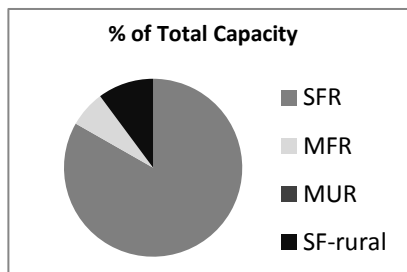
Year	SF	MF	Total
2025	931	11	942
2035	1,635	6	1,641
2040	1,644	6	1,650

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	66%	11%	62%
2035	100%	6%	100%
2040	100%	6%	100%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	1,261	100	0	154	1,415	100	1,515
% of Total	83%	7%	0%	10%	93%	7%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	159	92	484	735
2025	199	128	691	1,018
2035	225	150	808	1,183
2040	252	165	918	1,335

## 2010-2045 Employment Cap.

	IND	COM
Acres	0	0
% of Total	0%	0%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Beaverton**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	18,128	21,953	40,081	
2025	19,733	26,667	46,400	1.0%
2035	20,038	30,479	50,517	0.9%
2040	20,158	31,428	51,587	0.4%

## Households Change from 2010

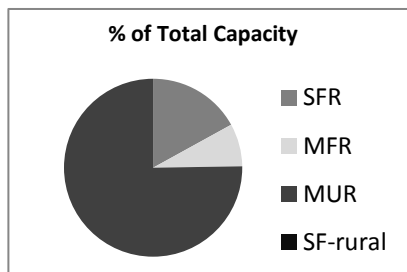
Year	SF	MF	Total
2025	1,605	4,714	6,319
2035	1,910	8,526	10,436
2040	2,030	9,475	11,506

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	74%	45%	50%
2035	88%	81%	82%
2040	94%	89%	90%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	2,166	990	9,598	0	2,166	10,589	12,755
% of Total	17%	8%	75%	0%	17%	83%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	11,041	19,261	21,539	51,841
2025	13,463	27,150	27,108	67,721
2035	14,254	33,282	27,822	75,358
2040	14,640	36,377	28,634	79,651

## 2010-2045 Employment Cap.

	IND	COM
Acres	103	450
% of Total	19%	81%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Canby**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	5,115	1,513	6,628	
2025	9,069	1,593	10,662	3.2%
2035	9,796	1,783	11,579	0.8%
2040	9,816	1,895	11,712	0.2%

## Households Change from 2010

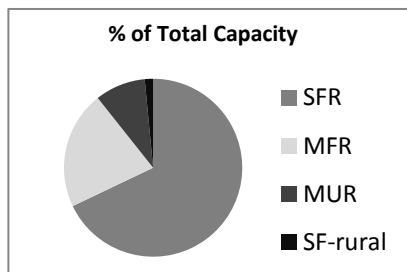
Year	SF	MF	Total
2025	3,954	80	4,034
2035	4,681	270	4,951
2040	4,701	382	5,084

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	87%	4%	62%
2035	100%	14%	76%
2040	100%	19%	78%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	4,442	1,400	600	99	4,541	2,000	6,541
% of Total	68%	21%	9%	2%	69%	31%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	1,127	1,012	3,453	5,592
2025	1,227	1,356	3,560	6,143
2035	1,929	2,110	5,043	9,082
2040	2,218	2,461	5,519	10,198

## 2010-2045 Employment Cap.

	IND	COM
Acres	200	104
% of Total	66%	34%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Cornelius**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	2,467	1,051	3,518	
2025	3,918	1,451	5,369	2.9%
2035	3,428	2,085	5,513	0.3%
2040	3,489	2,316	5,805	1.0%

## Households Change from 2010

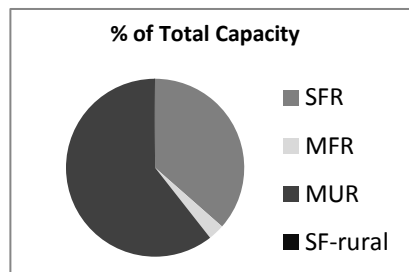
Year	SF	MF	Total
2025	1,451	400	1,851
2035	961	1,034	1,995
2040	1,022	1,265	2,287

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	100%	16%	47%
2035	67%	41%	51%
2040	71%	51%	58%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	1,437	116	2,381	6	1,443	2,497	3,940
% of Total	36%	3%	60%	0%	37%	63%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	693	711	1,680	3,084
2025	1,287	1,397	3,377	6,061
2035	1,611	1,880	4,440	7,931
2040	1,767	2,086	4,958	8,811

## 2010-2045 Employment Cap.

	IND	COM
Acres	117	95
% of Total	55%	45%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Damascus**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	3,322	205	3,527	
2025	9,087	164	9,251	6.6%
2035	11,700	217	11,916	2.6%
2040	12,969	280	13,249	2.1%

## Households Change from 2010

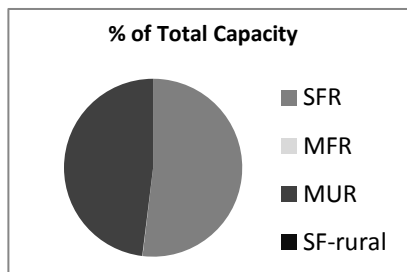
Year	SF	MF	Total
2025	5,765	-41	5,724
2035	8,378	12	8,389
2040	9,647	75	9,722

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	52%	0%	27%
2035	75%	0%	39%
2040	86%	1%	45%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	11,185	12	10,351	1	11,187	10,363	21,550
% of Total	52%	0%	48%	0%	52%	48%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	260	357	908	1,525
2025	510	822	1,418	2,750
2035	902	1,613	1,894	4,409
2040	1,378	2,252	3,107	6,737

## 2010-2045 Employment Cap.

	IND	COM
Acres	597	366
% of Total	62%	38%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Durham**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	350	8	358	
2025	389	15	404	0.8%
2035	410	26	436	0.8%
2040	412	28	440	0.2%

## Households Change from 2010

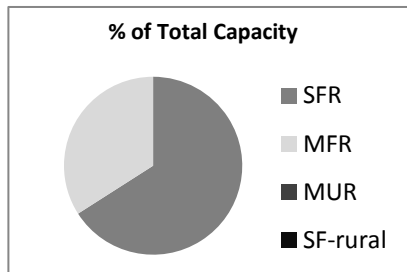
Year	SF	MF	Total
2025	39	7	46
2035	60	18	78
2040	62	20	82

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	97%	34%	75%
2035	100%	84%	100%
2040	100%	95%	100%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	40	21	0	0	40	21	61
% of Total	66%	34%	0%	0%	66%	34%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	1	213	318	532
2025	1	269	413	683
2035	1	307	458	766
2040	1	327	484	812

## 2010-2045 Employment Cap.

	IND	COM
Acres	0	0
% of Total	0%	0%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.



# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Estacada**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	1,343	315	1,658	
2025	1,832	330	2,162	1.8%
2035	2,258	324	2,582	1.8%
2040	2,350	350	2,700	0.9%

## Households Change from 2010

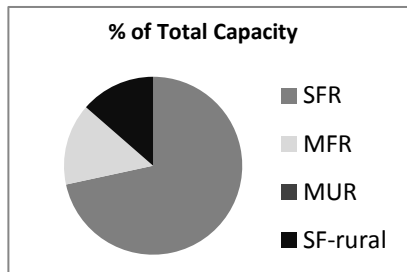
Year	SF	MF	Total
2025	489	15	504
2035	915	9	924
2040	1,007	35	1,042

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	42%	8%	37%
2035	79%	4%	68%
2040	87%	18%	77%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	968	200	0	184	1,152	200	1,352
% of Total	72%	15%	0%	14%	85%	15%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	290	284	853	1,427
2025	541	664	1,365	2,570
2035	696	901	1,514	3,111
2040	772	1,008	1,574	3,354

## 2010-2045 Employment Cap.

	IND	COM
Acres	25	89
% of Total	22%	78%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Fairview**

County **Multnomah**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	1,677	1,954	3,631	
2025	1,968	1,998	3,966	0.6%
2035	1,927	2,076	4,003	0.1%
2040	1,932	2,099	4,031	0.1%

## Households Change from 2010

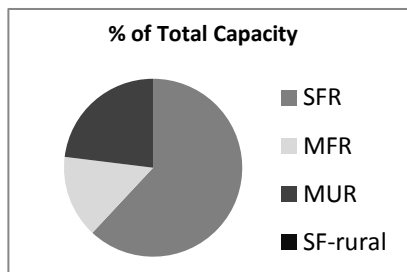
Year	SF	MF	Total
2025	291	44	335
2035	250	122	372
2040	255	145	400

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	95%	23%	68%
2035	81%	65%	75%
2040	83%	77%	81%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	307	74	114	0	307	189	496
% of Total	62%	15%	23%	0%	62%	38%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	236	497	1,878	2,611
2025	437	2,317	3,074	5,828
2035	558	3,293	3,724	7,575
2040	613	3,655	4,045	8,313

## 2010-2045 Employment Cap.

	IND	COM
Acres	222	81
% of Total	73%	27%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Forest Grove**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	4,775	2,717	7,492	
2025	6,949	2,864	9,813	1.8%
2035	6,999	3,380	10,379	0.6%
2040	7,221	3,849	11,070	1.3%

## Households Change from 2010

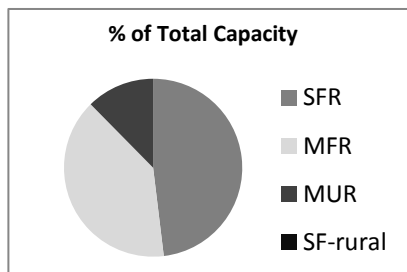
Year	SF	MF	Total
2025	2,174	147	2,321
2035	2,224	663	2,887
2040	2,446	1,132	3,578

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	93%	6%	48%
2035	95%	26%	60%
2040	100%	45%	74%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	2,332	1,918	601	0	2,332	2,518	4,850
% of Total	48%	40%	12%	0%	48%	52%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	882	2,018	2,617	5,517
2025	1,444	2,851	4,316	8,611
2035	1,747	3,455	5,343	10,545
2040	1,900	3,729	5,823	11,452

## 2010-2045 Employment Cap.

	IND	COM
Acres	228	54
% of Total	81%	19%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Gladstone**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	2,831	1,356	4,187	
2025	3,094	1,469	4,563	0.6%
2035	3,097	1,779	4,876	0.7%
2040	3,100	1,930	5,030	0.6%

## Households Change from 2010

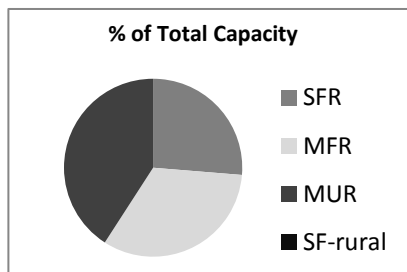
Year	SF	MF	Total
2025	263	113	376
2035	266	423	689
2040	269	574	843

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	95%	15%	36%
2035	96%	55%	65%
2040	97%	74%	80%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	277	346	430	0	277	776	1,052
% of Total	26%	33%	41%	0%	26%	74%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	702	546	883	2,131
2025	835	854	1,032	2,721
2035	903	1,040	1,092	3,035
2040	927	1,119	1,134	3,180

## 2010-2045 Employment Cap.

	IND	COM
Acres	3	20
% of Total	15%	85%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Gresham**

County **Multnomah**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	19,781	18,243	38,024	
2025	24,879	21,694	46,573	1.4%
2035	25,394	25,656	51,051	0.9%
2040	25,995	27,429	53,424	0.9%

## Households Change from 2010

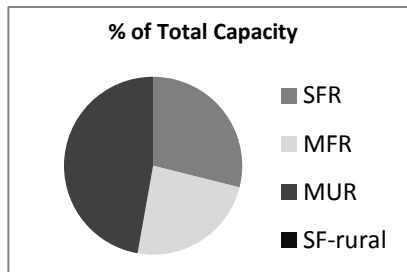
Year	SF	MF	Total
2025	5,098	3,451	8,549
2035	5,613	7,413	13,027
2040	6,214	9,186	15,400

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	85%	23%	41%
2035	94%	50%	63%
2040	100%	62%	74%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	6,001	4,960	9,797	0	6,001	14,757	20,758
% of Total	29%	24%	47%	0%	29%	71%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	7,353	8,871	16,408	32,632
2025	10,877	16,132	23,602	50,611
2035	12,334	20,154	26,079	58,567
2040	13,134	21,737	27,331	62,202

## 2010-2045 Employment Cap.

	IND	COM
Acres	885	335
% of Total	73%	27%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Happy Valley**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	4,162	273	4,435	
2025	9,498	400	9,898	5.5%
2035	9,898	512	10,410	0.5%
2040	9,894	583	10,477	0.1%

## Households Change from 2010

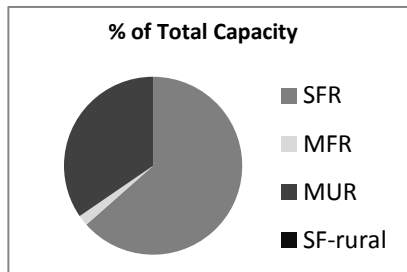
Year	SF	MF	Total
2025	5,336	127	5,463
2035	5,736	239	5,975
2040	5,732	310	6,042

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	100%	4%	68%
2035	100%	8%	74%
2040	100%	11%	75%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	5,120	156	2,787	0	5,120	2,944	8,064
% of Total	63%	2%	35%	0%	63%	37%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	241	256	621	1,118
2025	614	1,266	1,351	3,231
2035	789	1,842	1,616	4,247
2040	918	2,164	1,982	5,064

## 2010-2045 Employment Cap.

	IND	COM
Acres	228	132
% of Total	63%	37%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Hillsboro**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	18,575	14,251	32,826	
2025	21,240	19,427	40,667	1.4%
2035	21,762	23,211	44,973	1.0%
2040	21,849	25,301	47,150	0.9%

## Households Change from 2010

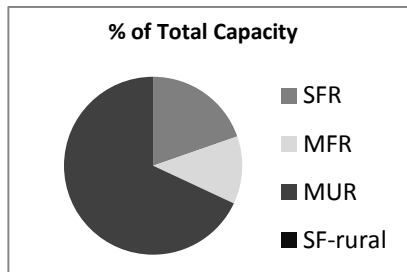
Year	SF	MF	Total
2025	2,665	5,176	7,841
2035	3,187	8,960	12,147
2040	3,274	11,050	14,324

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	83%	39%	48%
2035	99%	68%	74%
2040	100%	84%	87%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	3,223	2,014	11,151	0	3,223	13,165	16,387
% of Total	20%	12%	68%	0%	20%	80%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	9,584	14,449	34,227	58,260
2025	11,186	21,367	50,748	83,301
2035	12,152	25,518	55,733	93,403
2040	12,725	27,459	59,452	99,636

## 2010-2045 Employment Cap.

	IND	COM
Acres	1,194	365
% of Total	77%	23%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **King City**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	572	383	955	
2025	582	373	955	0.0%
2035	590	379	969	0.1%
2040	590	381	970	0.0%

## Households Change from 2010

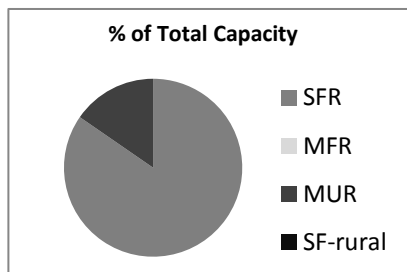
Year	SF	MF	Total
2025	10	-10	0
2035	18	-4	14
2040	18	-2	15

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	36%	-196%	0%
2035	62%	-69%	42%
2040	63%	-46%	46%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	28	0	5	0	28	5	33
% of Total	85%	0%	15%	0%	85%	15%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	137	269	64	470
2025	160	417	113	690
2035	173	511	137	821
2040	175	555	152	882

## 2010-2045 Employment Cap.

	IND	COM
Acres	0	7
% of Total	0%	100%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Lake Oswego**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	10,887	5,180	16,067	
2025	12,215	6,117	18,332	0.9%
2035	12,307	6,984	19,291	0.5%
2040	12,888	7,586	20,474	1.2%

## Households Change from 2010

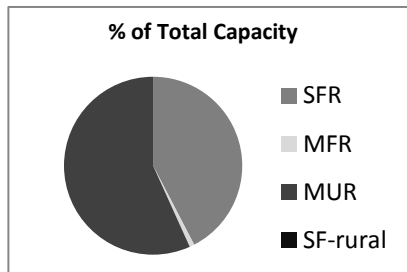
Year	SF	MF	Total
2025	1,328	937	2,265
2035	1,420	1,804	3,224
2040	2,001	2,406	4,407

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	74%	39%	54%
2035	80%	74%	77%
2040	100%	99%	100%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	1,785	37	2,391	0	1,785	2,428	4,213
% of Total	42%	1%	57%	0%	42%	58%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	2,553	7,024	8,670	18,247
2025	2,285	11,188	8,822	22,295
2035	2,323	11,584	8,879	22,786
2040	2,260	12,388	9,191	23,839

## 2010-2045 Employment Cap.

	IND	COM
Acres	19	198
% of Total	9%	91%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Milwaukie**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	5,934	2,307	8,241	
2025	6,934	2,426	9,360	0.9%
2035	7,166	2,574	9,740	0.4%
2040	7,178	2,624	9,802	0.1%

## Households Change from 2010

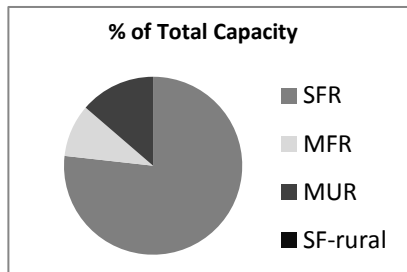
Year	SF	MF	Total
2025	1,000	119	1,119
2035	1,232	267	1,499
2040	1,244	317	1,561

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	76%	30%	65%
2035	93%	67%	87%
2040	94%	79%	91%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	1,320	164	235	0	1,320	399	1,719
% of Total	77%	10%	14%	0%	77%	23%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	1,403	3,527	6,658	11,588
2025	1,737	4,860	7,538	14,135
2035	1,944	5,751	7,712	15,407
2040	2,031	6,096	7,728	15,855

## 2010-2045 Employment Cap.

	IND	COM
Acres	44	26
% of Total	63%	37%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Molalla**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	3,539	204	3,743	
2025	4,145	238	4,383	1.1%
2035	5,020	239	5,259	1.8%
2040	5,236	242	5,477	0.8%

## Households Change from 2010

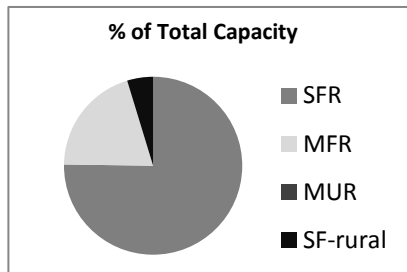
Year	SF	MF	Total
2025	606	34	640
2035	1,481	35	1,516
2040	1,697	38	1,734

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	30%	7%	26%
2035	74%	7%	61%
2040	85%	8%	70%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	1,875	500	0	118	1,992	500	2,492
% of Total	75%	20%	0%	5%	80%	20%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	639	416	1,628	2,683
2025	926	891	2,253	4,070
2035	1,118	1,216	2,515	4,849
2040	1,234	1,413	2,734	5,381

## 2010-2045 Employment Cap.

	IND	COM
Acres	25	90
% of Total	22%	78%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **North Plains**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	776	0	776	
2025	1,045	47	1,092	2.3%
2035	1,032	198	1,230	1.2%
2040	1,202	470	1,672	6.3%

## Households Change from 2010

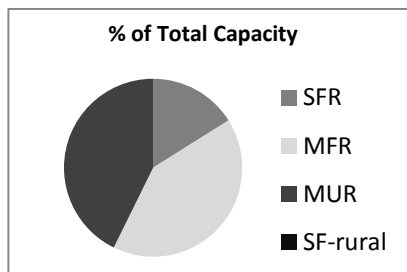
Year	SF	MF	Total
2025	269	47	316
2035	256	198	454
2040	426	470	896

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	48%	2%	9%
2035	45%	7%	13%
2040	76%	16%	26%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	563	1,442	1,495	0	563	2,937	3,500
% of Total	16%	41%	43%	0%	16%	84%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	84	125	643	852
2025	184	461	1,510	2,155
2035	244	662	1,919	2,825
2040	305	806	2,458	3,569

## 2010-2045 Employment Cap.

	IND	COM
Acres	224	66
% of Total	77%	23%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Oregon City**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	8,463	3,511	11,974	
2025	11,378	4,136	15,514	1.7%
2035	12,186	4,861	17,047	0.9%
2040	12,192	5,340	17,533	0.6%

## Households Change from 2010

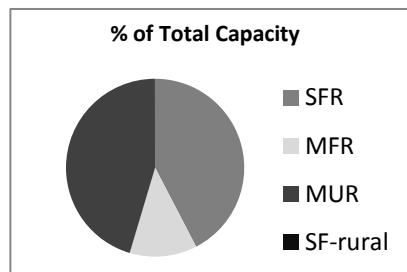
Year	SF	MF	Total
2025	2,915	625	3,540
2035	3,723	1,350	5,073
2040	3,729	1,829	5,559

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	91%	14%	47%
2035	100%	31%	67%
2040	100%	42%	74%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	3,187	921	3,410	4	3,191	4,331	7,522
% of Total	42%	12%	45%	0%	42%	58%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	3,081	3,727	7,580	14,388
2025	4,584	5,657	9,246	19,487
2035	5,418	6,990	10,077	22,485
2040	5,754	7,481	10,429	23,664

## 2010-2045 Employment Cap.

	IND	COM
Acres	86	189
% of Total	31%	69%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Portland**

County **Multnomah**

Note: Approximated by TAZ boundaries. Also includes Maywood Park.

## Household Forecast

Year	SF	MF	Total	%APR
2010	143,801	104,915	248,716	
2025	163,609	163,566	327,175	1.8%
2035	165,636	204,068	369,704	1.2%
2040	167,243	222,584	389,827	1.1%

## Households Change from 2010

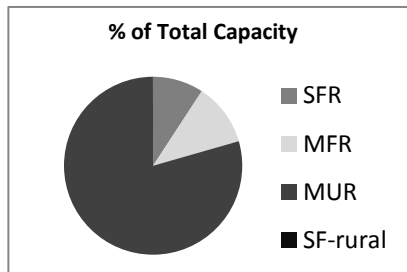
Year	SF	MF	Total
2025	19,808	58,651	78,459
2035	21,835	99,153	120,988
2040	23,442	117,669	141,111

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	100%	33%	40%
2035	100%	55%	61%
2040	100%	65%	71%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	18,235	22,491	157,289	78	18,313	179,780	198,093
% of Total	9%	11%	79%	0%	9%	91%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	65,150	139,116	170,076	374,342
2025	71,495	187,172	200,106	458,773
2035	76,134	218,147	214,199	508,482
2040	78,590	230,211	222,390	531,194

## 2010-2045 Employment Cap.

	IND	COM
Acres	1,608	983
% of Total	62%	38%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Sandy**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	3,809	516	4,325	
2025	5,138	553	5,691	1.8%
2035	6,954	681	7,635	3.0%
2040	8,748	746	9,494	4.5%

## Households Change from 2010

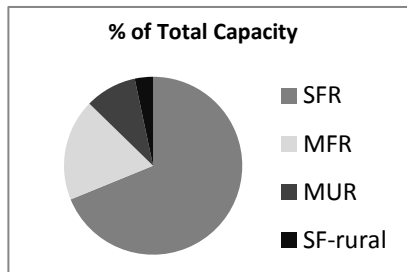
Year	SF	MF	Total
2025	1,329	37	1,366
2035	3,145	165	3,310
2040	4,939	230	5,169

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	29%	2%	21%
2035	68%	9%	52%
2040	100%	13%	81%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	4,399	1,180	600	213	4,612	1,780	6,392
% of Total	69%	18%	9%	3%	72%	28%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	1,195	684	1,302	3,181
2025	1,846	1,438	2,210	5,494
2035	2,194	1,907	2,530	6,631
2040	2,631	2,348	3,175	8,154

## 2010-2045 Employment Cap.

	IND	COM
Acres	83	285
% of Total	23%	77%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Sherwood**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	4,971	1,505	6,476	
2025	5,396	1,658	7,054	0.6%
2035	5,553	1,716	7,269	0.3%
2040	5,532	1,789	7,321	0.1%

## Households Change from 2010

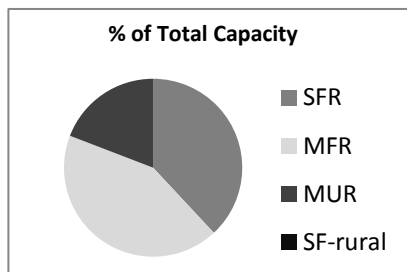
Year	SF	MF	Total
2025	425	153	578
2035	582	211	793
2040	561	284	845

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	84%	19%	43%
2035	100%	26%	59%
2040	100%	34%	63%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	507	571	255	0	507	826	1,333
% of Total	38%	43%	19%	0%	38%	62%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	1,103	1,206	1,907	4,216
2025	1,405	2,073	4,027	7,505
2035	1,643	2,604	5,005	9,252
2040	1,864	2,896	5,547	10,307

## 2010-2045 Employment Cap.

	IND	COM
Acres	322	70
% of Total	82%	18%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Tigard**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	12,035	6,632	18,667	
2025	14,290	8,630	22,920	1.4%
2035	15,120	10,877	25,997	1.3%
2040	15,307	11,809	27,116	0.8%

## Households Change from 2010

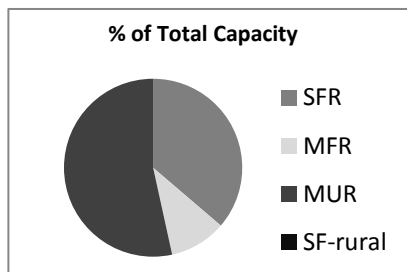
Year	SF	MF	Total
2025	2,255	1,998	4,253
2035	3,085	4,245	7,330
2040	3,272	5,177	8,449

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	69%	35%	47%
2035	94%	74%	81%
2040	100%	90%	94%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	3,266	928	4,814	0	3,266	5,742	9,008
% of Total	36%	10%	53%	0%	36%	64%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	9,072	11,901	16,196	37,169
2025	10,580	18,646	19,254	48,480
2035	10,764	23,818	19,650	54,232
2040	10,910	25,929	20,115	56,954

## 2010-2045 Employment Cap.

	IND	COM
Acres	94	304
% of Total	24%	76%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Troutdale**

County **Multnomah**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	3,981	1,806	5,787	
2025	4,430	1,954	6,384	0.7%
2035	4,506	2,126	6,632	0.4%
2040	4,585	2,211	6,796	0.5%

## Households Change from 2010

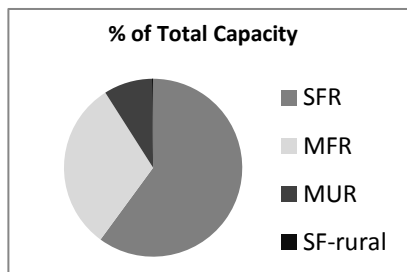
Year	SF	MF	Total
2025	449	148	597
2035	525	320	845
2040	604	405	1,009

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	59%	30%	47%
2035	69%	64%	67%
2040	80%	81%	80%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	755	389	111	3	758	500	1,257
% of Total	60%	31%	9%	0%	60%	40%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	1,272	493	2,361	4,126
2025	1,803	1,670	4,511	7,984
2035	2,039	2,357	5,615	10,011
2040	2,161	2,643	6,179	10,983

## 2010-2045 Employment Cap.

	IND	COM
Acres	494	79
% of Total	86%	14%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Tualatin**

County **Washington**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	5,391	4,847	10,238	
2025	5,919	5,100	11,019	0.5%
2035	5,980	5,190	11,170	0.1%
2040	6,078	5,215	11,293	0.2%

## Households Change from 2010

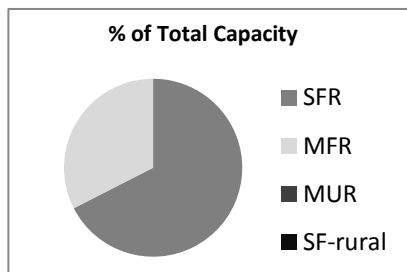
Year	SF	MF	Total
2025	528	253	781
2035	589	343	932
2040	687	368	1,055

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	94%	94%	94%
2035	100%	100%	100%
2040	100%	100%	100%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	559	269	0	0	559	269	828
% of Total	67%	33%	0%	0%	67%	33%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	4,372	6,140	12,460	22,972
2025	4,773	7,879	18,449	31,101
2035	5,066	8,868	21,305	35,239
2040	5,405	9,412	22,777	37,594

## 2010-2045 Employment Cap.

	IND	COM
Acres	434	26
% of Total	94%	6%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Unincorporated Clackamas County**

County **Clackamas**

Note: Approximated by TAZ boundaries. Also includes Johnson City and Rivergrove.

## Household Forecast

Year	SF	MF	Total	%APR
2010	48,440	15,213	63,653	
2025	59,480	16,364	75,844	1.2%
2035	65,580	19,224	84,803	1.1%
2040	67,498	21,884	89,382	1.1%

## Households Change from 2010

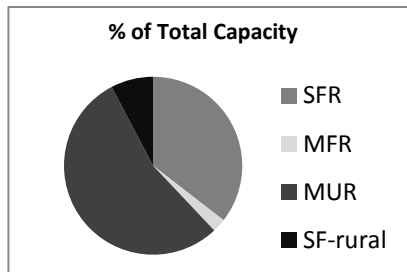
Year	SF	MF	Total
2025	11,040	1,151	12,191
2035	17,140	4,011	21,150
2040	19,058	6,671	25,729

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	29%	2%	14%
2035	45%	8%	24%
2040	50%	13%	29%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	31,357	2,187	48,018	6,828	38,184	50,205	88,389
% of Total	35%	2%	54%	8%	43%	57%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	13,058	16,124	28,456	57,638
2025	16,094	24,302	34,840	75,236
2035	17,764	31,789	36,532	86,085
2040	18,759	34,573	38,566	91,898

## 2010-2045 Employment Cap.

	IND	COM
Acres	2,258	558
% of Total	80%	20%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Unincorporated Multnomah County**

County **Multnomah**

Note: Approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	5,491	411	5,902	
2025	7,363	542	7,905	2.0%
2035	7,504	968	8,472	0.7%
2040	9,580	1,385	10,965	5.3%

## Households Change from 2010

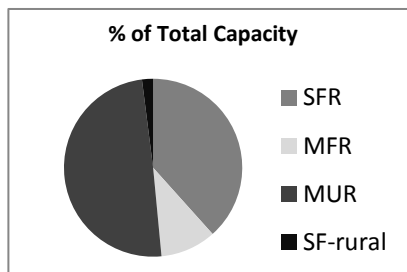
Year	SF	MF	Total
2025	1,872	131	2,003
2035	2,013	557	2,570
2040	4,089	974	5,063

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	30%	1%	13%
2035	32%	6%	17%
2040	66%	11%	33%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	5,922	1,565	7,642	310	6,232	9,207	15,439
% of Total	38%	10%	49%	2%	40%	60%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	470	856	1,909	3,235
2025	921	1,883	3,847	6,651
2035	1,133	2,534	4,312	7,979
2040	1,339	2,933	4,650	8,922

## 2010-2045 Employment Cap.

	IND	COM
Acres	430	83
% of Total	84%	16%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Unincorporated Washington County**

County **Washington**

Note: Approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	59,339	21,305	80,644	
2025	82,733	24,032	106,765	1.9%
2035	95,079	33,976	129,055	1.9%
2040	97,581	40,832	138,414	1.4%

## Households Change from 2010

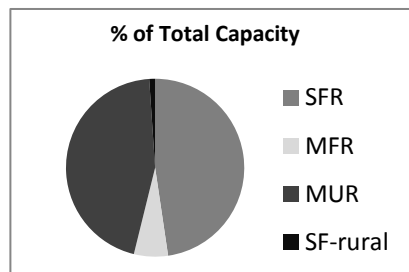
Year	SF	MF	Total
2025	23,394	2,727	26,121
2035	35,740	12,671	48,411
2040	38,242	19,527	57,770

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	43%	5%	24%
2035	66%	22%	44%
2040	71%	34%	52%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	52,925	6,868	50,059	1,184	54,108	56,927	111,035
% of Total	48%	6%	45%	1%	49%	51%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	6,540	15,267	21,851	43,658
2025	8,902	22,320	32,366	63,588
2035	10,553	28,859	46,499	85,911
2040	11,648	32,351	55,967	99,966

## 2010-2045 Employment Cap.

	IND	COM
Acres	3,956	708
% of Total	85%	15%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **West Linn**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	7,670	2,582	10,252	
2025	9,030	2,717	11,747	0.9%
2035	9,237	2,751	11,988	0.2%
2040	9,738	2,882	12,620	1.0%

## Households Change from 2010

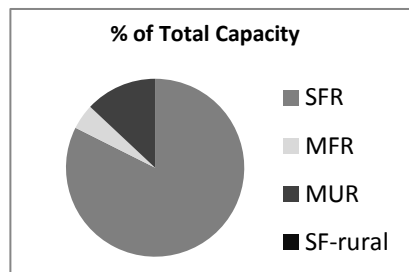
Year	SF	MF	Total
2025	1,360	135	1,495
2035	1,567	169	1,736
2040	2,068	300	2,368

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	80%	37%	72%
2035	92%	46%	84%
2040	100%	82%	100%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	1,709	95	270	0	1,709	365	2,074
% of Total	82%	5%	13%	0%	82%	18%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	966	1,593	1,693	4,252
2025	1,381	2,268	2,174	5,823
2035	1,517	2,683	2,331	6,531
2040	1,623	2,835	2,455	6,913

## 2010-2045 Employment Cap.

	IND	COM
Acres	9	43
% of Total	17%	83%

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# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Wilsonville**

County **Clackamas**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	3,471	4,509	7,980	
2025	5,516	5,428	10,944	2.1%
2035	5,625	5,883	11,508	0.5%
2040	5,708	6,058	11,765	0.4%

## Households Change from 2010

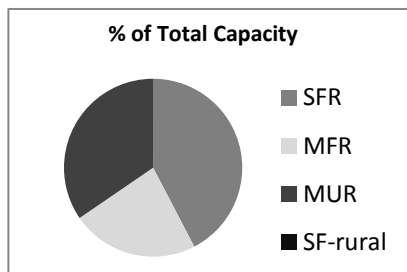
Year	SF	MF	Total
2025	2,045	919	2,964
2035	2,154	1,374	3,528
2040	2,237	1,549	3,785

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	100%	38%	70%
2035	100%	57%	84%
2040	100%	64%	90%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	1,783	973	1,454	1	1,785	2,427	4,212
% of Total	42%	23%	35%	0%	42%	58%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	2,480	4,839	9,754	17,073
2025	3,194	7,845	12,939	23,978
2035	3,536	9,733	14,150	27,419
2040	3,853	10,673	14,901	29,427

## 2010-2045 Employment Cap.

	IND	COM
Acres	316	172
% of Total	65%	35%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

# METRO TAZ 'GAMMA' FORECAST -- JURISDICTION PROFILES

Published 11/15/2012 Metro Economic and Land Use Forecasting

City **Wood Village**

County **Multnomah**

Note: City geographies are approximated by TAZ boundaries.

## Household Forecast

Year	SF	MF	Total	%APR
2010	458	1,081	1,539	
2025	492	1,088	1,580	0.2%
2035	488	1,121	1,609	0.2%
2040	489	1,192	1,680	0.9%

## Households Change from 2010

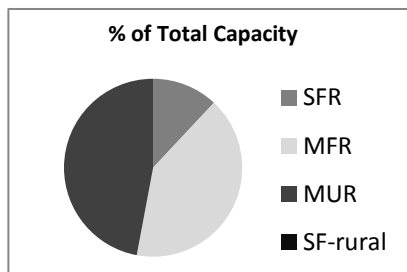
Year	SF	MF	Total
2025	34	7	41
2035	30	40	70
2040	31	111	141

## 2010-2045 Capacity Used

Year	SF	MF	Total
2025	91%	3%	13%
2035	81%	15%	22%
2040	82%	40%	45%

## 2010-2045 Household Capacity by Type

	SFR	MFR	MUR	SF-rural	All SF	All MF	Total
Capacity	37	128	146	0	37	274	311
% of Total	12%	41%	47%	0%	12%	88%	100%



SFR = Single Family Residential  
MFR = Multi-Family Residential  
MUR = Multi-Family, Mixed Use  
SF-rural = Rural Single Family

SF = SFR + SF-rural

MF = MFR + MUR

## Employment Forecast

Year	Retail	Service	Other	Total
2010	1,261	242	531	2,034
2025	1,609	828	1,259	3,696
2035	1,783	1,158	1,489	4,430
2040	1,870	1,298	1,607	4,775

## 2010-2045 Employment Cap.

	IND	COM
Acres	24	41
% of Total	37%	63%

**DISCLAIMER:** These data are for research purposes only, and do not reflect policy decisions by any jurisdictional authority.

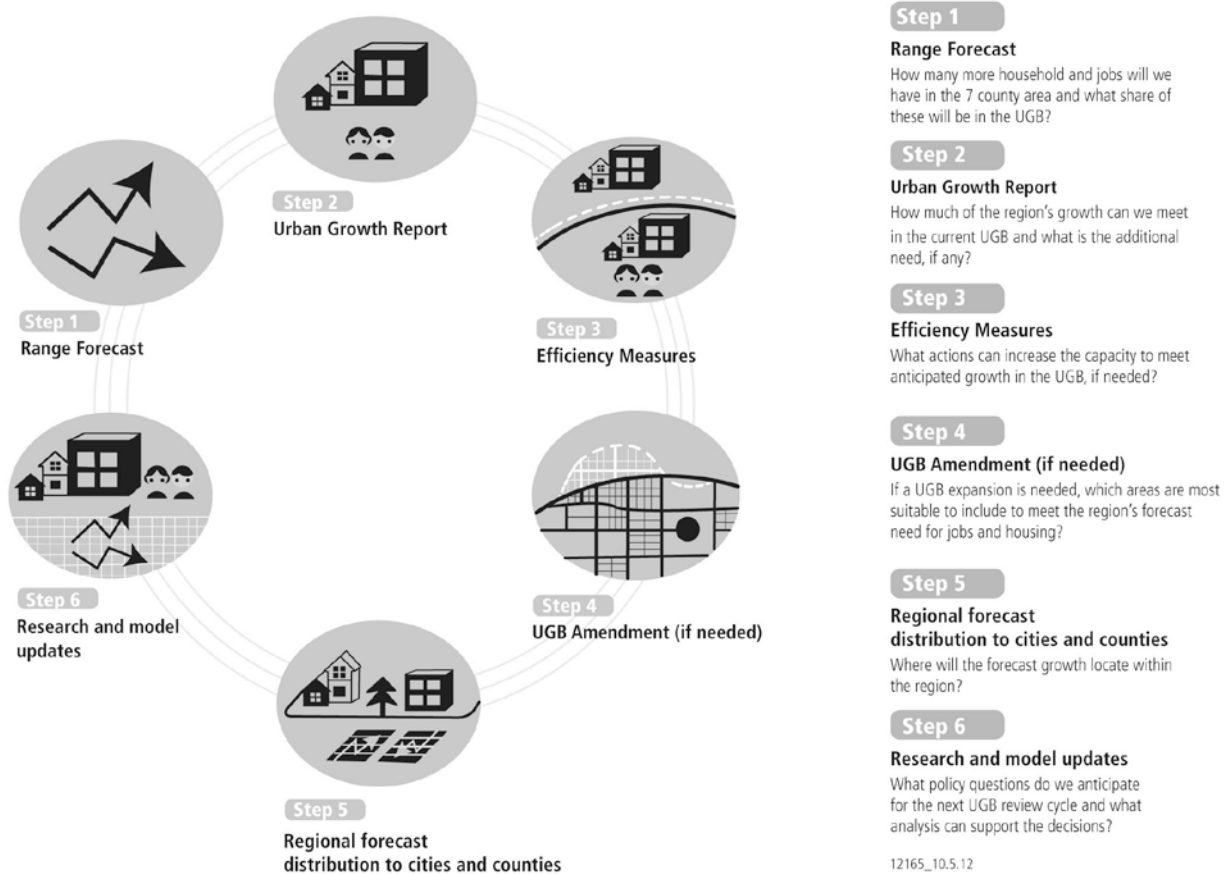
## REGIONAL 2035 FORECAST DISTRIBUTION: EXECUTIVE SUMMARY

### Purpose of this report

This Regional Growth Distribution report explains how Metro and local governments collaborated to forecast where population and employment forecast will be accommodated over the in 2035 based on current policies in zoning and adopted transportation plans, environmental regulations and development incentives. Planning for expected growth in population and jobs enable the region and local communities to make decisions that support good jobs, safe neighborhoods, protect farmland, and invest in public structures and services that enhance our quality of life.

Metro is required by Oregon law to forecast the population and employment growth that is expected for this region over the next 20 years. In 2009 Metro initiated its growth management decision process depicted in Figure 1. The first task in the process was the 2009 forecast of a range of 1.2 to 1.3 million households and 1.3 to 1.7 million jobs in the seven-county region (Clackamas, Clark, Columbia, Multnomah, Skamania, Yamhill, Washington) by 2030. Within the seven county total, Metro forecast the proportion expected to live and work within the Metro urban growth boundary (UGB).

**Figure 1: Growth Management and Population and Employment Coordination Process**



In 2010, the Metro Council adopted the capacity analysis which accounted for Regional Transportation Plan (RTP) investments and other actions that are likely to shape development patterns, and determined that some UGB expansion would likely be necessary. In 2011, the Metro Council made the urban growth boundary (UGB) decision based on investment policies and a point on the forecast range it picked.

The next step after the UGB decision, required by law, is the distribution of the forecast at smaller geographies to guide local and regional planning efforts as explained in this report. Oregon law (ORS 195.025; 195.036) requires Metro to coordinate a population forecast with local governments for planning purposes inside the UGB. Local governments that are scheduled to review and update their land use plans are expected by the Oregon Department of Land Conservation and Development to rely on the population and employment distribution information for their analysis. In addition to the state law, the Federal Clean Air Act requires Metro to use its forecast distributed at smaller geographies called traffic analysis zones (TAZ)<sup>1</sup> as the basis for its federally-required air quality conformity determination. This federal law requires Metro to show that the region will continue to meet the federal and state air quality regulations if the projects included in the RTP are built.

Metro has collaborated with local governments in the past to distribute the region's population and employment forecasts at the TAZ level. The last distribution, coordinated with local governments, was completed in 2006. The TAZ and city and county level distributions reflect adopted policies.

Metro Council adopted the household and employment forecast distributions by jurisdiction in November 2012 (Ordinance No. 12-1292) after the distributions were reviewed by Metro advisory committees – Metro Policy Advisory Committee, Joint Policy Advisory Committee on Transportation, Metro Technical Advisory Committee, Transportation Policy Alternatives Committee.



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<sup>1</sup> The TAZ is the standard unit containing data representing the building blocks of Metro's key forecasting tools

### How growth distribution information is used

Local governments and Metro rely on the population and employment forecast distribution to help build the future they want in the region and ensure that as jobs and population grow, they will be able to make wise investments that support economic development, safe neighborhoods and strong and vibrant communities, and minimize the burdens of growth.



The growth distribution information is useful for various entities:

Cities and Counties rely on the information to support their:

- Comprehensive plan update processes and address requirements for their periodic review of their land use plans
- Coordination of planning in areas outside Metro's jurisdictional boundary but within county boundaries.
- Planning of where to extend and upgrade pipes, roads and other essential public structures
- Identify needs necessary to update Transportation System Plan for consistency with the Regional Transportation Functional Plan and State Transportation Rule.

Schools and Special Districts can use the population and employment distribution for:

- Facility and financial planning
- Financial planning for facilities
- Parks planning
- Water and sewer system planning
- Sewer system planning
- Public school enrollment forecasting

Metro relies on the information to support:

- Updates to the Regional Transportation Plan
- Analysis of planning scenarios for the Climate Smart Communities Scenarios Project
- Transportation investments through the analysis of potential benefits of proposed projects within a half-mile radius of those projects

- Corridor planning such as the East Metro Connections Plan (EMCP) and Southwest Corridor Plan.



### How Metro and local governments coordinated on growth distribution

There are two key steps in the actual forecast distribution coordinated by Metro and local governments:

- Estimating regional land supply -- existing housing and employment capacity, including undeveloped land that is available for development, based on existing zoning)
- Distributing the regional household and employment growth forecast to the available land supply

*Land supply:* Current approach of calculating residential land supply across the region is the buildable land inventory (BLI). The calculation method varies from one local government to another. Metro and local planners coordinated to refine the regional BLI method. The BLI method relies on local zoning to estimate the capacity of residential and employment land (how many residential units and acres of employment land can be accommodated in any area). However, not all zoned capacity will get used everywhere. The capacity estimation takes into account environmental constraints, rights of way, and future UGB expansion into urban reserves.

Additional capacity is realized from the decisions and policies made by some cities to encourage redevelopment in certain areas through incentive programs, such as urban renewal, tax abatement, streetscape and infrastructure improvements, and other policies. The additional capacity is added on top of the capacity that is based on residential and employment land zoning.

*Distribution of the forecast:* At this step in the process, the goal is to match the demand (forecast population and employment) with the supply (capacity of residential and employment land). The demand of forecast population was based on household size, income brackets, and age of households. Factors used to match the demand with the supply include built space by zone, location of household and employment, tenure choice (own or rent), type of building, estimate of development density, prices and cost of land, travel activity levels by mode and road segment, travel times between TAZs by time of day, and cost perceived by travelers in getting from any TAZ to another.

### Summary of results

Figure 2 show the growth in households, displayed in housing units, captured inside the Metro UGB and the number of housing units captured by communities outside the Metro UGB. The forecast distribution indicates 4% decrease in the total number of single-family units captured by local governments inside the UGB (from 68% in 2010 to 64% in 2035), and slight (1%) increase in the number of multi-family units captured by local governments inside the UGB (from 83% in 2010 to 84% in 2035).

**Figure 2: Housing Units (for Household) Forecast**

Area	2010		2035		2010-2035 change	
	Single-Family	Multi-Family	Single-Family	Multi-Family	Single-Family	Multi-Family
Inside Metro UGB	357,090 (68%)	236,346 (83%)	452,823 (64%)	384,225 (84%)	95,733 (53%)	147,879 (84%)
Outside Metro UGB	170,422 (32%)	47,872 (17%)	256,610 (36%)	75,309 (16%)	86,188 (47%)	27,437 (16%)
Seven county PMSA	527,512 (100%)	284,218 (100%)	709,433 (100%)	459,534 (100%)	181,921 (100%)	175,316 (100%)

Figure 3 show the growth in jobs captured inside the Metro UGB and the number captured by communities outside the Metro UGB. The forecast distribution indicates a decrease in the total number of jobs units captured by local governments inside the UGB (from 82% in 2010 to 79% in 2035).

**Figure 3: Employment Forecast**

Area	2010	2035	2010-2035 change
Inside Metro UGB	753,032 (82%)	1,118,440 (79%)	365,408 (74%)
Outside Metro UGB	163,364 (18%)	294,167 (21%)	130,803 (26%)
Seven county PMSA	916,396 (100%)	1,412,607 (100%)	496,211 (100%)

Further analysis of the forecast distribution data reveals the following takeaways:

The TAZ level forecast distribution reflects Metro 2040 program objectives

- 32% growth in Centers and 17% in Corridors (2010-2035)
- Strong redevelopment and infill
- Future residential density rises to 12.3 unit/acre
- Growth splits of 60% MF and 40% SF (2010-2035)

Monitoring Needs:

- Single-family housing prices – step rise from 2030 to 2035.
- Capture rate for single family residential
- Commute patterns: distribution “tails” for long distance commuters begin to rise

40% increase in UGB population and 10% land absorption (2010-2035)



**Future improvement of land supply estimation approach**

Comments from local governments during the estimation of regional land supply acknowledged improvements in the residential capacity methodology so as to match households and land supply correctly in the long-term. The comments emphasized areas where the methodology could be further improved, such as residential location choice, including quality-of-life factors that influences a person's preference for single- or multi-family housing, and generational shift. The comments also emphasized the need to consider the difference between housing preference and living preference. In response, Metro has identified future research on:

- Residential choice study enhanced with market segmentation
- Redevelopment supply assumption refinement

It is anticipated that the research would further refine the residential capacity assumptions and methodology, provide valuable insight into how people weigh transportation and housing costs when deciding where to live, and illustrate differentiation of the full range of housing needs in the region. Implementation of the research is dependent on funding availability.

**Sharing the information**

The forecast distribution data and other information can be found at the following FTP site.

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/FINAL\\_2035-2040\\_TAZforecast/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/FINAL_2035-2040_TAZforecast/)

# Technical Documentation

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## Regional Forecast Distribution Methodology & Assumptions

Population and Employment

2010-40 TAZ Forecast Distribution “gamma scenario”

Metro

Research Center and Planning and Development Department

November 2012

# Technical Document:

## 2010-2040 TAZ Forecast Distribution

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*(This report highlights major assumptions assumed by the TAZ forecast distribution.)*

### *Forecast Mandate*

A coordinated population forecast is mandated under state law<sup>1</sup>. Oregon regulations require Metro, as the coordinating body for the Portland metropolitan area<sup>2</sup>, to allocate population (and employment) forecasts to local area cities within the Metro urban growth boundary. A coordinated forecast is needed to facilitate periodic use planning. To carry out this role, Metro develops Traffic Analysis Zone<sup>3</sup> growth distributions for cities and counties in the region. The Traffic Analysis Zone (TAZ) is a joint forecast effort with cooperation of local governments<sup>4</sup> and serves the state requirement of having coordinated forecasts.

Metro also serves as the metropolitan planning organization<sup>5</sup> (MPO) designated under federal authority to plan for transportation needs for the Oregon portion of the Portland-Vancouver-Hillsboro, OR-WA urbanized area. Metro is required to conduct continuing, comprehensive and collaborative transportation planning that facilitates the efficient, economic movement of people and goods in the metropolitan area.<sup>6</sup> At minimum, the coordination of land use forecasting and transportation planning requires that the well-being of a region assess and evaluate the impact of land use decisions to access goods, services, resources and other opportunities. Coordinating (or integrating) land use and transportation is “smart growth”<sup>7</sup>. The Metro charter gives the agency the responsibility for regional

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<sup>1</sup> ORS 195.036 (Area population forecast)

<sup>2</sup> ORS 195.025 (Regional coordination of planning activities)

<sup>3</sup> Traffic Analysis Zones (TAZ for short) are travel / commuter sheds that represent areas of concentration of resident locations or commuter work locations. A TAZ is the unit of geography commonly used in Metro’s transportation planning models. Zone sizes vary and the number of zones is periodically updated to account for changes in development densities. The current Metro TAZ system has a total of 2162 zones in its urban, suburban and ex-urban setting. 2147 zones belong in the four-county metropolitan area and the remaining zones account for rural counties adjacent to the region. Typically ex-urban areas have larger zone sizes, while central business districts and densely populated residential areas have much smaller zones. Zones are created from census block information. Typically, these blocks provide the socio-economic data used in Metro’s transportation demand models. They are generally the size of census block groups, but have boundaries not related to census tracts or block group delineations nor do they generally coincide with streets or city limits. Metro’s TAZ boundaries are unique geographies designed around transportation “cut lines”.

<sup>4</sup> ORS 195.020 (Special district planning responsibilities)

<sup>5</sup> Metropolitan Planning Organizations are responsible for planning, programming and coordination of federal highway and transit investments in urbanized areas.

[http://www.bts.gov/external\\_links/government/metropolitan\\_planning\\_organizations.html](http://www.bts.gov/external_links/government/metropolitan_planning_organizations.html)

<sup>6</sup> <http://www.fhwa.dot.gov/planning/processes/statewide/>

<sup>7</sup> [http://www.fhwa.dot.gov/planning/processes/land\\_use/](http://www.fhwa.dot.gov/planning/processes/land_use/)

land use planning, and long-range transportation planning. The TAZ growth distribution forecast fulfills the call for an integrated land use and transportation planning effort required by federal regulations and Metro charter's land use planning provisions.

Metro's TAZ forecast process efficiently delivers a comprehensive and collaborative regional growth distribution that uses appropriate modeling and forecasting tools. Under MPO planning rules, Metro is required to maintain state of the art transportation and land use forecasting models and growth projections that are consistent with regulatory authorities. Metro operates a regional travel demand model based on a traditional 4-step model approach<sup>8</sup>, and a land use model we call MetroScope<sup>9</sup>. These represent state of the art transportation and land use forecasting methods – operating at TAZ level population and employment estimates. Federal and state transportation authorities annually assess and review the efficacy of Metro's forecasting and modeling, data and statistical methods<sup>10</sup>. Metro's regional forecasts and growth distributions are prepared under scrutiny of federal requirements that meet high levels of forecasting integrity and accuracy. The models incorporate the latest set of policy assumptions available at the time of the forecast. The TAZ forecast distribution process broadly supports the goal of providing reasonably accurate and reliable small area growth projections for land use and transportation studies and planning goals. The regional forecast and growth distribution process is transparent and collaborative, frequently consulting with Metro area local governments and stakeholders.

### *How often are Metro forecasts and growth distributions updated?*

About every 5 years, the Metro Research Center prepares employment and population forecast distributions by TAZ. The growth distribution update is the last step in Metro's periodic review process. The forecast distribution analyzes Metro's adopted regional forecast for population and employment and then geographically distributes the projected regional growth totals into smaller geographic subunits denoted by TAZ. The cycle of preparing a regional forecast occurs in concert with the state law requiring Metro to assess every 5-year its capacity to accommodate urban growth in the boundary<sup>11</sup>. A

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<sup>8</sup> Metro is in the middle of a development cycle to upgrade to a new activity-based transportation model (i.e., DASH) and dynamic traffic assignment models (i.e., Dynameq and DYNUST).

<sup>9</sup> MetroScope is an integrated land use-transportation modeling tool developed by Metro's Research Center. It is a very detailed representation of an urban land market, complete with methods to estimate supply, demand and equilibrium prices and to allocate development trends to specific locations throughout the greater Portland region. Both households and employment locations are allocated by the MetroScope model. The model is an economic simulation tool capable of assessing the economic well-being and potential policy impacts for various demographic groups and subareas of the region given alternative land use and transportation assumptions.

<sup>10</sup> A Unified Planning Work Program (UPWP) is developed annually by Metro. It is a federally-required document and includes a process known as self-certification to demonstrate that the Portland MPO (Metro) planning process is being conducted in accordance with all applicable federal planning requirements.

<sup>11</sup> ORS 197.296(3) and (1997) HB 2493 require Metro to complete 1) an inventory of the supply of buildable lands in the UGB; 2) performance measures including actual density and housing mix during the past 5 years; 3) an analysis of a 20-year housing need projection.

new TAZ forecast ensures that growth projections incorporate the latest policy assumptions endorsed by the Metro Council.

The regional forecast was the socio-economic basis for studies concerning land use and transportation, including this growth distribution. Recently, the regional forecast supported the 2010 Urban Reserves, 2010 Urban Growth Capacity decisions, and 2035 Regional Transportation Plan (RTP) update. Forecast-wise, the Metro Council selected a point inside the 2010-2060 regional range forecast for evaluating urban growth needs the last Urban Growth Report. Regional decision makers used forecast information to shape public policy and to plan for infrastructure investments the region needs in order to encourage economic vitality and to accommodate future land use and transportation needs of residents.

The precise role of the forecast was to project the level of economic and demographic growth expected of the region for the next 20 to 50 years. The regional forecast included a range and a baseline projection of how population and employment is expected to change over time. Growth distributions ensure that land management and transportation planning policies are incorporated into small area forecast distributions. In turn, the growth forecast distributions are completed in advance of so that the next 2040 Regional Transportation Plan (RTP) update integrates the latest growth management policy assumptions. The growth distributions then provide the socio-economic assumptions for travel demand planning. They also provide information that then informs the next cycle of regional forecasts, UGR and UGB decision. This cycle repeats itself beginning in 2014.

### *MetroScope - preparing a coordinated growth distribution*

The TAZ forecast distribution extends from 2010 to 2040<sup>12</sup>. The growth distribution relies on information from:

- An adopted regional forecast
- Land supply estimates and capacity assumptions
- Enacted land use policy regulations, and
- Transportation policy assumptions.

The MetroScope land use model was used to simulate and assess the socio-economic growth trends emerging from these assumptions. MetroScope produces a consistent, complete and comprehensive analysis of regional growth impacts.

The TAZ distribution is a joint forecast produced by Metro in cooperation with local government planning partners. The TAZ distribution is a forecast product derived for a 7-county region<sup>13</sup>. The

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<sup>12</sup> The forecast distribution can optionally be extended an additional 5 years to the year 2045. This extension has not been completed at this time.

<sup>13</sup> The Metro regional forecast is developed from a regional macro-econometric model. Projections from this model include population by age, householders by age, employment by industry (NAICS), wages and income. The regional forecast is an aggregate trend projection for the Portland-Vancouver-Hillsboro, OR-WA metropolitan

regional forecast gets spatially disaggregated to transportation analysis zones using Metro’s integrated land use and transportation demand model – MetroScope. The preliminary MetroScope TAZ forecast distribution is reviewed and fine tuned by local government land use experts before Metro Council accepts the growth distributions. Local governments may then adopt the growth distributions for their city, for example, as they update their own comprehensive plans or transportation system plans (TSP).

### *What is MetroScope?*

MetroScope is a land use allocation model. It is capable of forecasting over time the spatial distribution of employment and population. MetroScope is an urban econometric model based on applied real estate and mainstream economic theories. This means that it is a mathematical model patterned after behavior seen in real-world real estate markets; it has a supply, a demand and finds an equilibrium price that matches the two. The real estate supply market includes vacant buildable land, market-rate redevelopment and infill, and incentivized redevelopment capacity for the greater Portland area. Demand is characterized by household attributes and industry-detailed employment composition. MetroScope provides a complete and consistent assessment of regional real estate trends.

Demand for residential real estate depends on location factors, demographic characteristics of households, and economic trend projections. Construction costs and prices that businesses are willing to pay for commercial and industrial real estate are also factored into location choices. MetroScope is an equilibrium model, meaning it estimates prices for the cost of real estate construction and the price households are willing to pay for housing. It finds where people and businesses are willing to live and work at a stable equilibrium price in which supply and demand exactly match.

MetroScope projects where residents will want to live, at what density and by housing type. The model is capable of projecting residential and employment growth in centers, corridors and other locations. The result is an expectation of where in the region and what type of business and residential locations are most attractive given that there is a regional forecast, transportation and land use regulatory factors that shape future growth trends. MetroScope also capably allocates population and employment at market clearing prices for different development forms in different locations throughout the region according to given policy assumptions.

Census and other economic data from state and federal statistical sources provide base year land use, demographic and economic information that can influence the spatial growth trends in future years. Historical trend data are factors that add into future growth patterns. The amount of household (or employment) spatial change is formulated as behavioral expressions and as such respond to expected changes in:

- land use regulations (e.g., zoning, urban reserves, concept plans etc.),

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statistical area (MSA). The MSA includes 5 Oregon counties (Clackamas, Columbia, Multnomah, Washington and Yamhill) and 2 Washington counties (Clark and Skamania). The MetroScope model is later used to spatially disaggregate regionwide growth estimates to TAZ level estimates.

- development incentives (e.g., urban renewal)
- transportation policies (e.g., regional access to opportunities)
- demography (e.g., population growth, aging population, income, and migration)
- employment trends (e.g., less manufacturing and more services).

Spatial preferences need not be fixed. Sub-regional growth rates are expected to vary because the growth distributions will respond to regional growth projections that include anticipated shifts in the economic make up of the region (e.g., proportionally less manufacturing growth expected) and shifts in demographic structure (e.g., aging populations, migration and income bracket shifts). As these elements are accounted for in the forecast, we should see faster (or slower) growth across some residential areas depending upon how well capacity fits the innate residential housing demand.

The region is expected to add between 40 to 50% more residents by the year 2040. The median population age is expected to grow older. The composition of the population should grow more diverse, with a proportionally higher concentration of Latino and Asian residents. Economic disparity among residents is expected to be more unequal as the ranks of the middle class become proportionally thinner.

As the composition of the economy changes, industries will rise and fall. The emergence of new competitors and technological improvements will drive industrial change. High-technology industries are expected to gain ground while resource based industries such as forest products and metals are likely to diminish. The non-manufacturing sector will grow proportionally faster in the region, with health and business services ringing up robust growth.

MetroScope is also capable of assessing the economic impact of public policies. The region's land use and transportation policy developments leave very little slack capacity in the economy. Some of these policy assumptions provide ceilings for how much growth can be accommodated (e.g., zoning and growth concept plans). With residential capacity expected to be fairly tight, spatial growth distributions will pattern themselves based on wherever supplies permit. Other policies try to influence the market clearing prices (e.g., urban renewal assumptions) for residential development in centers and corridors. Still others will impact access to opportunities (e.g., RTP) that will affect the location choices of business and residents.

In summary, the TAZ forecast distribution that comes out of MetroScope represents a consistent and complete evaluation tool of both economic growth potential and the possible economic impact of how public land use and transportation policies might affect regional growth trends and regional outcomes. Using an economic equilibrium assessment model as we have for the TAZ forecast, further economic assessment of housing need information can identify which demographic segments in the region benefit most from land use and transportation policies enacted today and which segments suffer the greatest disutility from these same public policies. MetroScope can inform more than simple population coordination information. It can provide an assessment of economic outcomes of public policy actions.

## *Regional Forecast Overview*

### **Economy in Review**

Three years after the announced end of the Great Recession, economic growth remains torpid and choppy. The Great Recession slammed into the U.S. in December 2007 and curtailed U.S. economic activity, according to research published by the National Bureau of Economic Research<sup>14</sup>. During this period, nearly 8 million Americans became jobless. Economic growth stalled as it became apparent that financially strapped banking institutions could not meet financial obligations, thus causing a cascade of economic difficulties across all sectors of the U.S. economy. Especially hard hit were the construction, finance and real estate sectors. The contagion spread quickly and no part of the U.S. was immune. U.S. Gross Domestic Product – a measure of total economic growth and output – fell 6 straight quarters while trimming away in excess of \$625 billion (inflation adjusted) of U.S. GDP (peak to trough). Slumping growth induced the U.S. unemployment rate to soar above 10% and it still remains stubbornly high (June 2012, 8.4%).

Regional employment began slowing at the onset of the U.S. recession, but didn't actually go negative until half a year later. The first industries in the region to hit the skids were finance and real estate firms, durable manufacturers and resource producers. The economic malaise eventually spread to the Portland region, carrying with it widespread workforce reductions and slower growth in every industry save health care. But even the health care industry has recently seen year-over-year job growth diminish to nearly zero. The region's overall unemployment rate topped 11 percent at its economic trough, but has been stuck near 8%, down from 9% a year ago. Tepid regional economic growth persists and employment growth remains mired well below full employment while cautious employers remain sidelined worried that economic conditions could quickly sour again.

### **2010 to 2040 Forecast Summary**

The initial regional forecast was prepared in late 2007 – just before the onset of the Great Recession. The adopted regional forecast totals for population and employment are in the *20 and 50 Year Regional Population and Employment Range Forecasts*<sup>15</sup>. This included a medium growth baseline and a companion set of high and low growth scenarios. This growth band was developed as two standard deviation margin of error around the medium growth baseline. Subsequently, a one standard deviation interval was prepared for Metro Council deliberation – the so-called “middle-third” growth scenario

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<sup>14</sup> National Bureau of Economic Research, <http://www.nber.org/cycles.html>, Founded in 1920, the National Bureau of Economic Research is a private, nonprofit, nonpartisan research organization dedicated to promoting a greater understanding of how the economy works. The NBER is committed to undertaking and disseminating unbiased economic research among public policymakers, business professionals, and the academic community. The Bureau concentrates on 4 types of empirical research: 1) developing new statistical measurements, 2) estimating quantitative models of economic behavior, 3) assessing the effects of public policies, and 4) projecting the effects of alternative policy proposals.

<sup>15</sup> Metro Ordinance No. 11-1264B



alternatives<sup>16</sup>. The Metro Council – realizing regional growth rates would be subdued – adopted a “lower middle-third” point in the forecast range.

However, more recent economic data suggests growth will be slower than previously anticipated. The adopted regional forecast is now almost 3 years old. Regional conditions have fallen short and in fact are worse than expected at this stage of the recovery. U.S. macro-economic conditions have yet to recover to pre-recession levels. This includes a much slower rebound in employment across all sectors, which has dampened population and employment prospects regionally. Monetary (i.e., lower interest rates and quantitative easing measures) and fiscal policies (e.g., industry bailouts and “cash for clunkers”) have been largely ineffective in spurring a stronger economic rebound. The economy instead has been stuck in low gear since the end of the recession.

Consequently, a minor technical adjustment has been made to the adopted lower middle-third regional totals in order to reflect the sluggish recovery and a plodding recovery for the foreseeable near term. Regional growth totals have been revised down for employment and population. Details for each have been proportionally ratcheted down in keeping with the revised regional totals. This is merely a technical correction to realign the Metro Council adopted forecast decree with the best available information nowadays. Data for this correction were from the Census Bureau and Portland State University intercensal population estimates, and Bureau of Labor Statistics and Oregon employment department monthly employment estimates.

The Metro Council, in fact, only adopts regional control totals for employment and population. Forecast details, such as the:

- industry employment forecast (by NAICS)
- household demographics (including population age and household size)
- income brackets of households.

These are technical details left to Metro research center staff to determine<sup>17</sup>. A regional econometric model produces the forecast details needed for transportation and land use forecast model analysis. An HIA model disaggregates population data into a joint distribution of households differentiated by household size, income bracket and householder age. The regional forecast details are post-processed and proportionally rescaled to sum up to the adjusted “lower middle-third” forecast values. Rescaled model input details (i.e., HIA and industry employment forecasts) are available in the report **Appendix 1**. The rescaled values represent the regional forecast assumptions going into this growth distribution.

### **TAZ gamma growth distribution regional control totals**

The adopted lower middle-third regional forecast totals are compared to the adjusted value, which reflect a downgrade in growth expectations in the long-run.

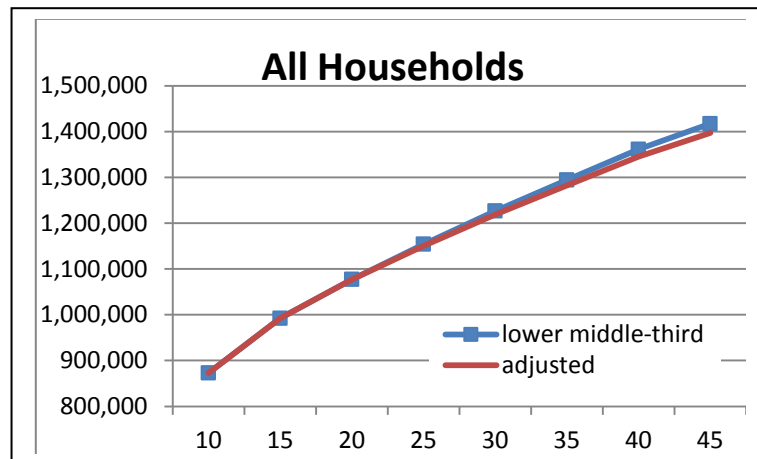
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<sup>16</sup> The “lower middle-third” was designated at minus 1 standard deviation from the medium growth baseline, while the “upper middle-third” represented a plus 1 standard deviation from the baseline.

<sup>17</sup> Metro, “20 and 50 year Regional Population and Employment Range Forecast”, <http://www.oregonmetro.gov/index.cfm/go/by.web/id=29836>, Oct. 4, 2012

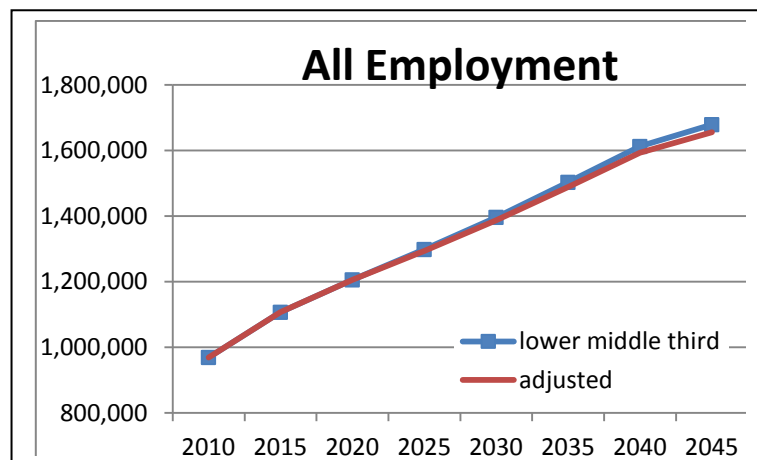
### Total Households: 2010 -2045 Regional Forecast (7-county MSA)

	Lower middle- third	adjusted
<b>2010</b>		873,052
<b>2015</b>	992,400	992,400
<b>2020</b>	1,077,500	1,077,500
<b>2025</b>	1,154,400	1,154,400
<b>2030</b>	1,226,900	1,221,900
<b>2035</b>	1,294,600	1,284,600
<b>2040</b>	1,361,600	1,346,600
<b>2045</b>	1,417,500	1,397,500



### Total Employment: 2010 -2045 Regional Forecast (7-county MSA)

	Lower middle- third	adjusted
<b>2010</b>		968,800
<b>2015</b>	1,106,600	1,107,000
<b>2020</b>	1,205,400	1,205,400
<b>2025</b>	1,297,900	1,293,400
<b>2030</b>	1,396,000	1,386,900
<b>2035</b>	1,502,700	1,488,800
<b>2040</b>	1,611,900	1,593,000
<b>2045</b>	1,678,600	1,654,900



**Figure 1: 2010-40 Regional Growth Distribution Forecast Totals (7-county MSA)**

The adjusted regional forecast projects over 473,000 more households and growth of 686,100 jobs adding to the MSA region between 2010 and 2040.

### Growth Distribution Overview

The regional forecast totals were first distributed to TAZ's using the MetroScope land use model. Second, local jurisdictions scrutinized and revised the TAZ household and employment forecasts. Third, Metro took the revisions and where necessary rebalanced the forecast to preserve the regional forecast totals. Each jurisdictions was given instructions during the review to be mindful of its given city forecast totals. They were to maintain the city totals if they wanted to revise the TAZ distributions. In the rare instance where cities wanted to reduce or increase the given city total (either for households or employment), the county and Metro stepped-in to broker re-allocation amounts between jurisdictions.

In the final analysis, local revisions sharpened the accuracy of TAZ growth forecasts and Metro and the counties were able to successfully coordinate population.

But before undertaking the forecast distribution, there needed to be general agreement concerning the assumptions making up the regional supply. The supply data or buildable land inventory for the region had to be reviewed, cleaned and accepted by local area planning directors.

### **Recapping Regionwide Supply / Capacity Assumptions**

This section highlights the major supply assumptions and capacity declarations relating to the 2010-2040 TAZ “gamma” growth distribution forecast. Supply is divided into parts by major geographic divisions. Where and how much capacity exists in the region depended on actual counts, survey data, and statistical estimation techniques. Since the regional supply was partly derived from iffier assumptions, some parts were judged to be more accurate than other items in the supply data.<sup>18</sup> To improve the accuracy of the supply data, a lengthy review process cleaned up major estimation and counting errors. A margin of error for this is unknown, but the regional supply was finalized and a general consensus of its suitability was settled before any data was used for the forecast distribution.

The regional supply has been variously described to accommodate up to 50 years. This syncs up with planning studies that have a need for long-term forecasts up to 2040<sup>19</sup>. The supply information therefore has to have capacity up to 2060 (or 50 years). This is in keeping with realistically trying to model development trends with ORS 197.296(3) and (1997) HB 2493 requiring Metro to maintain a 20-year housing need by type. The purpose of the 20 year supply was to provide the urban land market with sufficient flexibility to accommodate market choices. State law has required periodic update of the Metro UGB inventory every 5 years. Hence, as a practical matter of forecasting, the supply data for the model maintains an estimate of residential inventory that accommodates growth up to 2060 for a 2040 forecast end year.

The details of the growth distribution rely on several essential ingredients related to a buildable land inventory that meets rules set forth by state law and growth management planning directives:

1. Land supply (or capacity) information<sup>20</sup>
  - a. Current zoning, comprehensive plans or concept plans (with zoning trumping comp plans trumping concept plans or hypothetical zone designations depending data availability)

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<sup>18</sup> Although a general consensus was achieved, there remained lingering doubts concerning the residential redevelopment assumptions and the parameter estimates for residential preferences. Suburban jurisdictions feared that redevelopment assumptions were too robust in urban areas and may thus skew residential location choices causing biased residential location choice in the distribution. A second concern focused on specified model parameters estimates that were said to fix future preferences on the past, perhaps implying the need for replacing parameters with ones based on stated preference data.

<sup>19</sup> An upcoming RTP update sets the forecast horizon to be 2010 to 2040. The forecast distribution can optionally be extended an additional 5 years to the year 2045. This extension has not been completed at this time.

<sup>20</sup> To read more about Metro’s capacity ordinance, see:

<http://www.oregonmetro.gov/index.cfm/go/by.web/id=34527>

- b. Buildable land inventory (including Metro UGB, Clark county, rural areas and neighbor cities and adjacent counties)
- 2. Growth management policy assumptions
  - a. Transportation policies
  - b. New urban areas (i.e., assign hypothetical zoning if still rurally zoned)
  - c. Other economic development policies
  - d. Urban reserves (i.e., assign hypothetical zoning to supersede rural zoning at time each is added as prospective UGB adds)
  - e. Subsidized redevelopment (i.e., estimate economic impact of urban renewal district)

The growth allocation integrated land supply details that include capacity information for multiple geographies in the region. Capacity is calculated from current zoning or current comprehensive plan data (and sometimes concept plans when there isn't any urban zoning or comp plan in place). The buildable land inventory (i.e., the BLI includes vacant, infill and redevelopment expectations) for the Metro UGB and Clark and its cities are based on a 2008 vacant land survey data that was subsequently revised to represent 2010 capacity. Also added to the BLI analysis are rough capacity estimates for rural areas, neighboring counties and cities. Estimates of additional residential capacity from public development subsidies (e.g., urban renewal districts) were also tallied into the regional land supply. Supply data is very important in the modeling process as it provides information on regulatory densities and details on the whereabouts future development may be accommodated. Capacity data in the modeling process is not endogenous, but is fixed information that's needed for land development forecasting.

Growth management policy assumptions impact growth. As such, they too are integrated into the forecast distribution. Access to job opportunities and the locations of existing housing are variables considered in projecting residential and employment location. Transportation behaviors are factored into the forecast distribution. Economic development policies – in the form of urban renewal initiatives – are factored into the land supply / capacity assumptions. Land use policies – notably urban reserve designations – represent growth policy assumptions are also included in the distribution. There are other policy assumptions including regional and municipal land use concept plans, environmental measures for wildlife and water quality protection, and parks and open space provisions that put development off limits and thus impose development constraints that prohibit growth distributions applied to these places. Growth distributions are more accurate in places where land use details are more specifically detailed out. The modeling process factors in a host of growth management policies and weighs the potential impact on the distribution of employment and household growth across the region.

#### **Key Steps of the Population and Forecast Coordination Effort:**

1. Prepare a 7-county Regional Forecast with employment, economics and population details (medium growth scenario) – (2007)
2. Estimate a Range Forecast for total population / households and total employment – (2008)
3. Estimate a narrower Range Forecast – so called “middle third” – (2009)

4. Regional Forecast and “middle-third” forecast used in determining policy objectives in the Urban Growth Report – (2009)
5. Metro Council selects the “lower middle-third” of the range forecast as its “point forecast” in which land use and transportation policies will hinge on in subsequent policy decisions, including the UGB decision and RTP Forecast. – (2010)
  - a. Subsequently regional forecast totals adjusted lower due to slower than expected regional recovery. – (2012)
6. Agree with local governments on growth distribution methodology – (2011-12)
  - a. Prepare preliminary model inputs and assumptions for local review
  - b. Review local zoning to regional zone class crosswalk
  - c. Revise to TAZ 2162 system
  - d. Review Buildable Land Inventory and verify assumptions with local governments
    - i. Metro UGB vacant BLI capacity assumptions
    - ii. Metro UGB redevelopment (and infill) BLI capacity assumptions
    - iii. Subsidized redevelopment assumptions (i.e., urban renewal)
    - iv. New urban area urbanization assumptions (i.e., post-1997 expansion areas)
    - v. Urban reserve urbanization assumptions
    - vi. Clark county BLI / capacity assumptions
    - vii. Ex-urban area neighbor capacity assumptions (e.g., Banks, Canby and Sandy, Columbia, Marion and Yamhill counties)
    - viii. Residential development from Measure-49 claims
    - ix. Residential development capacity from rural unincorporated areas in the tri-county, but outside the Metro UGB
7. Run in 5-year increments MetroScope TAZ scenario with full transportation demand model – (2012)
8. Review TAZ forecast distributions for years 2025, 2035, 2040 with local governments – (2012)
9. Conduct detailed city and county engagement to amend TAZ distributions for total households and employment by retail, service and other (2012)
10. Finalize and Adopt TAZ growth forecast distribution (2012)
  - a. mandated population coordination with local governments
  - b. RTP and other corridor transportation projects

MetroScope Model update: none (deployed MetroScope Generation 3 version)

MetroScope Socio-economic Data updates:

- Base year population updated to 2010 Census<sup>21</sup> consistent with TAZ 2162 geographies
- Base year 2010 employment estimates from the Bureau of Labor Statistics (BLS) and the state Quarterly Census of Employment and Wages (QCEW) consistent with TAZ 2162
- Updated other economic and demographic forecast drivers and variables per Census, BLS, BEA (Bureau of Economic Analysis), various state data sources

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<sup>21</sup> Demographic data updated to 2010 Census, but MetroScope zone system still at 2000 Census residential zones.

- 2010 calibration of model (i.e., real estate prices)
- Revised hedonic neighborhood scores as needed
- Transportation network updated to a 2010 base year consistent with new TAZ 2162

**Local Review Regional Density Assumptions help to verify BLI capacity estimates.**

Local jurisdictions fine tuned the following land supply assumptions:

- Regional zone classes (an updating of the crosswalk table that translates local zoning ordinances to standardized regional zone categories without materially changing allowed zone densities)
- TAZ 2162 (an updating of the traffic analysis zones to 2,162 polygons – 2,147 are inside the Metro UGB and Clark county)
- Buildable Land Inventory – vacant, part vacant, and redevelopment assumptions (a review and acceptance of both residential and employment supply assumptions – confirms residential acres and dwelling unit capacity in Metro UGB, employment supply acres by industrial and commercial districts)
- Clark County Buildable Land Inventory<sup>22</sup>
- Subsidized Residential Redevelopment Assumption<sup>23</sup>
- New Urban Area Assumption (post-1997 UGB amendments)
- Urban Reserve urbanization assumptions (i.e., buildable land inventory measures, timing of UGB expansions and urban density assumptions)
- Ex-urban residential and non-residential capacity assumptions

Over 600 local zoning districts exist in the region. However, zoning districts generally share common themes, permit only types of development and have common allowable development densities. These common zoning traits allow normalization and each one to be classified into 1 of 48 regional zone class designations. Residential zoning districts are matched up with an appropriate regional zone class designation based on the maximum dwelling unit density allowed and per zone district by the dominant single family, multi-family or mixed use residential entitlement. The commercial and industrial crosswalks were more simply based on the entitlement description for each zoning district. In all, zoning districts were cross-walked for all 25 cities and counties in the Metro UGB and including Clark county and ex-urban rural cities.

The Metro Research Center each quarter updates the data layer in its Regional Land Information System GIS database when new zone districts are created (or amended). Additionally, the entire RLIS zone class data layer went through a careful jurisdiction by jurisdiction review with each participating city and county in the region to verify the accurate crosswalk of local zoning districts to the proper RLIS regional zone class designation. Corrections from city planners were incorporated into the final supply dataset.

<sup>22</sup> Only Clark County and City of Vancouver participated in the review and subsequent revision of BLI capacity assumptions. The RTC participated but made no recommendations to change capacity assumptions.

<sup>23</sup> There is no comparable assumption for non-residential growth distributions. MetroScope modeling and forecasting does not assert any subsidies for employment lands.

To see the list of standardized regional zone classes, please see [Appendix 2](#). Detailed zone class maps may be downloaded from Metro's FTP server:

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22\\_meeting/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22_meeting/)

ZoningClackCo\_map.pdf

ZoningMultCo\_map.pdf

ZoningWashCo\_map.pdf

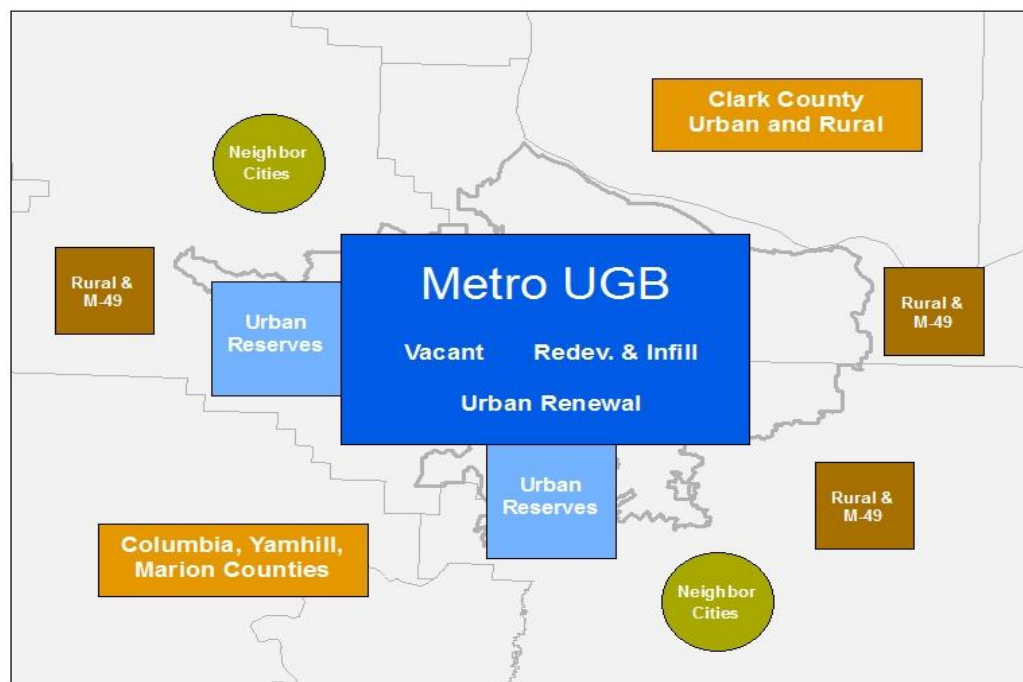
ZoningRegional\_map.pdf

### **Refining Transportation Analysis Zones: TAZ 2162 to meet new planning challenges.**

At the same time that supply and capacity assumptions were being reviewed and refined, Metro's Transportation Research and Modeling staff (TRMS) underwent a parallel process of reviewing and splitting TAZ boundaries as needed to meet individual municipal transportation planning needs. This task was completed and what emerged is the new TAZ 2162 system. The system has 2,147 zones inside the four-county metropolitan region (the coverage includes the full geographic extent of Clackamas, Multnomah and Washington counties in Oregon and Clark County, WA). The remaining zones represent external (or halo) zones not usually associated with Metro's travel demand model. However, some transportation and land use applications may reserve the need to study the travel distance behaviors and economic impacts of long distance commuters into adjacent zones in Columbia, Marion and Yamhill.

For an illustration of the TAZ 2162, please see [Appendix 3](#). A printable map can be downloaded from Metro's FTP server: [ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22\\_meeting/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22_meeting/)

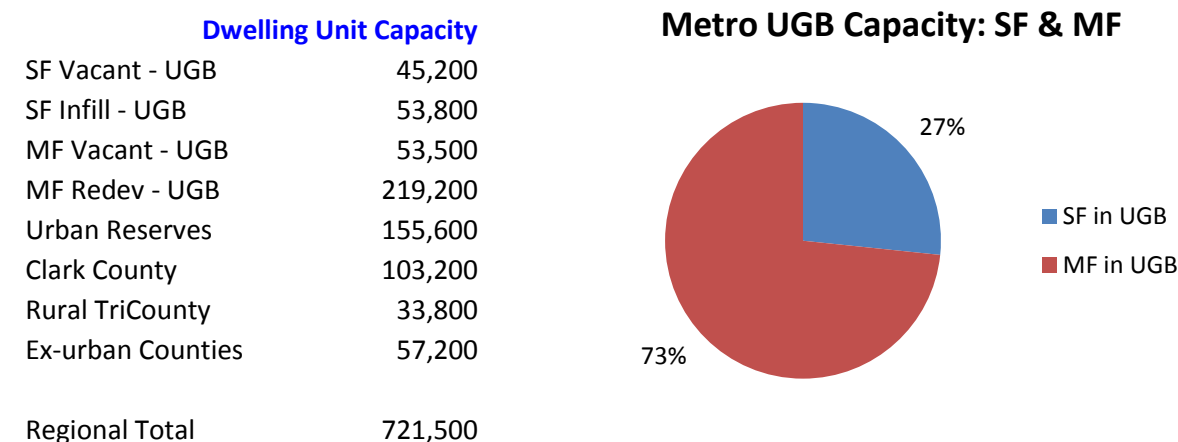
MetroScope\_zones\_taz2162.pdf.



**Figure 1: Supply Data – MetroScope Capacity Concept areas**

## Residential Capacity Estimates derive from many sources.

Regional supply assumptions stretch across multiple counties. This information is necessary to include in the modeling process because regional residents have the choice to reside anywhere in the greater metropolitan area. There are no borders that restrict where people can live, nor where businesses can set up shop. The opportunity to live or work outside the Metro UGB is a practical alternative for some population segments. MetroScope is capable of projecting residential location choice based on behavioral characteristics unique to household of varying life cycle and income bracket. In order to assess the rational economic choices of households, the analysis of where to live and where to work has to encompass the socio-economic influence area of the region as a whole. Clark county, rural unincorporated areas adjacent to the Metro UGB, rural cities and counties are included in the forecast distribution with that of the Metro UGB. The illustration in Figure 1 depicts the major sources of residential (and employment) capacity available for modeling and forecasting future development in the region.

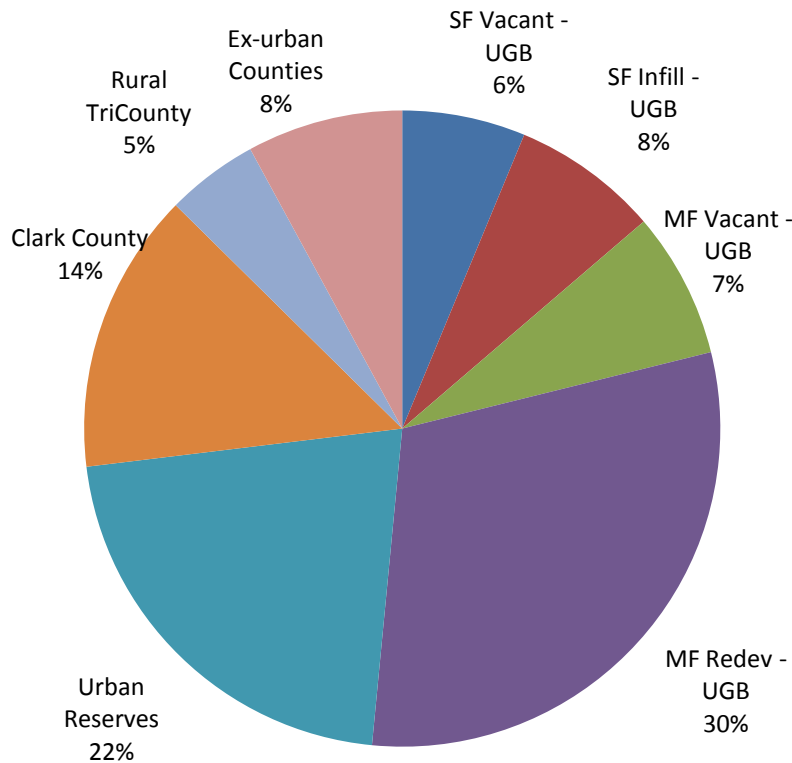


**Table 1: Residential Dwelling Unit Capacity (Supply) – 7 county MSA**

The overall regional capacity for the 7-county area summed to 721,500 units. Residential capacity – measured in dwelling units – in the Metro UGB totaled 371,700 units. Multifamily redevelopment represents the largest single source of potential development capacity during the forecast period. Urban Reserves accounts for over one-fifth of residential capacity going forward, but is subject to change when actual zoning densities and closer assessment of buildable land inventories are conducted. Current assumptions on urban reserve capacities are derived from a conjectural set of density assumptions centered on achieving 15 DU / net acre. These capacity estimates represent a best approximation of future development capacity through at least 2045 and up to year 2060 when urban reserves are folded into the total. The forecast distribution assigned future households to the residential capacity outlined in table 1.



## Dwelling Unit Capacity by Source



**Figure 2: Supply Data – Residential Capacity all Sources (7 county MSA)**

There was a major shift in the makeup of residential capacity. Future development trends are expected to conform to the shift. Capacity estimates going forward from today for the region indicate a regulatory mandated change in direction that reverses the post-World War II development trend. Specifically, the residential composition is changing by location, by development form and by vacant vs. redevelopment. The bulk of residential capacity is no longer in the suburbs but in close-in more urban settings. Allowable development forms (i.e., building type) is expected to flip-flop, going from mostly single family to apartments and development of multifamily products. In the post modern era, government incentives promoted single family housing development in suburbs at the rate of about 70% SF vs. 30% MF. More recently, the Metropolitan Housing Rule and Metro's 2040 Growth Concept Plan and Regional Framework have bolstered multifamily development. The ratio of development since 1995 has shifted to 60% SF and 40% MF – a trend consistent with the region's growth management edicts. Future ratio of SF and MF development is expected to reverse from historical patterns to where the ratio becomes 40% SF and 60% MF. At the very end of the forecast in 2040, the ratio becomes 10% SF and 90% MF, reflecting the eventual absorption of nearly all available SF capacity inside the Metro UGB.

Redevelopment will mark a major shift in residential capacity. Redevelopment is defined as the net increase in development density, meaning that an older dwelling unit is torn down and a newer structure replaces it with more housing units. Infill is the addition of more dwelling units to a site that already has an existing home or development. Infill capacity is measured from indentifying how many

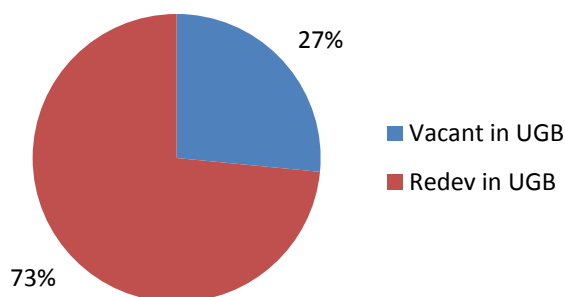
over-sized tax lots (relative to minimum lot size regulations on current zoning) and how many additional unit(s) could physically fit on the undeveloped portion of the site. The capacity estimates going forward will rely heavily on demolishing older depreciated home sites and redeveloping them at higher densities.

Estimates of residential capacity for just the existing Metro UGB (excluding urban reserves which will be discussed in another section) show three-fourths of the real estate supply will derive from potential redevelopment and infill. The supply data indicate the shift in capacity favoring more multifamily, i.e., apartments, mixed use residential condos and for rent apartments, and higher density attached development forms generally greater than 20 units per net acre. The table below documents this marginal change expected in residential capacity.

#### Dwelling Unit Capacity in Metro UGB

SF Vacant	45,200	12%
MF Vacant	14,800	4%
MUR Vacant	38,700	10%
SF Infill	53,800	14%
MF Redev	33,900	9%
MUR Redev	185,300	50%
<b>Total in UGB</b>	<b>371,700</b>	<b>100%</b>
Single Family	99,000	27%
Multifamily	272,700	73%
<b>Total in UGB</b>	<b>371,700</b>	<b>100%</b>
Vacant Capacity	98,700	27%
Redev + Infill Cap.	273,000	73%
<b>Total in UGB</b>	<b>371,700</b>	<b>100%</b>

#### Metro UGB Capacity: Vacant & Redevelopment



**Table 2: Residential Dwelling Unit Capacity (Supply) – Metro UGB (no urban reserves)**

From a growth capacity standpoint, the growth distribution increases marginal (i.e., 2010 to 2040) development densities in keeping with growing up and not out. Roughly 40% more residents are accommodated in under 10% expansion of the UGB. Consistent with raising marginal densities, redevelopment rates reach almost 75%. This matches closely with the ratio of 27% vacant capacity and 73% redevelopment and infill.

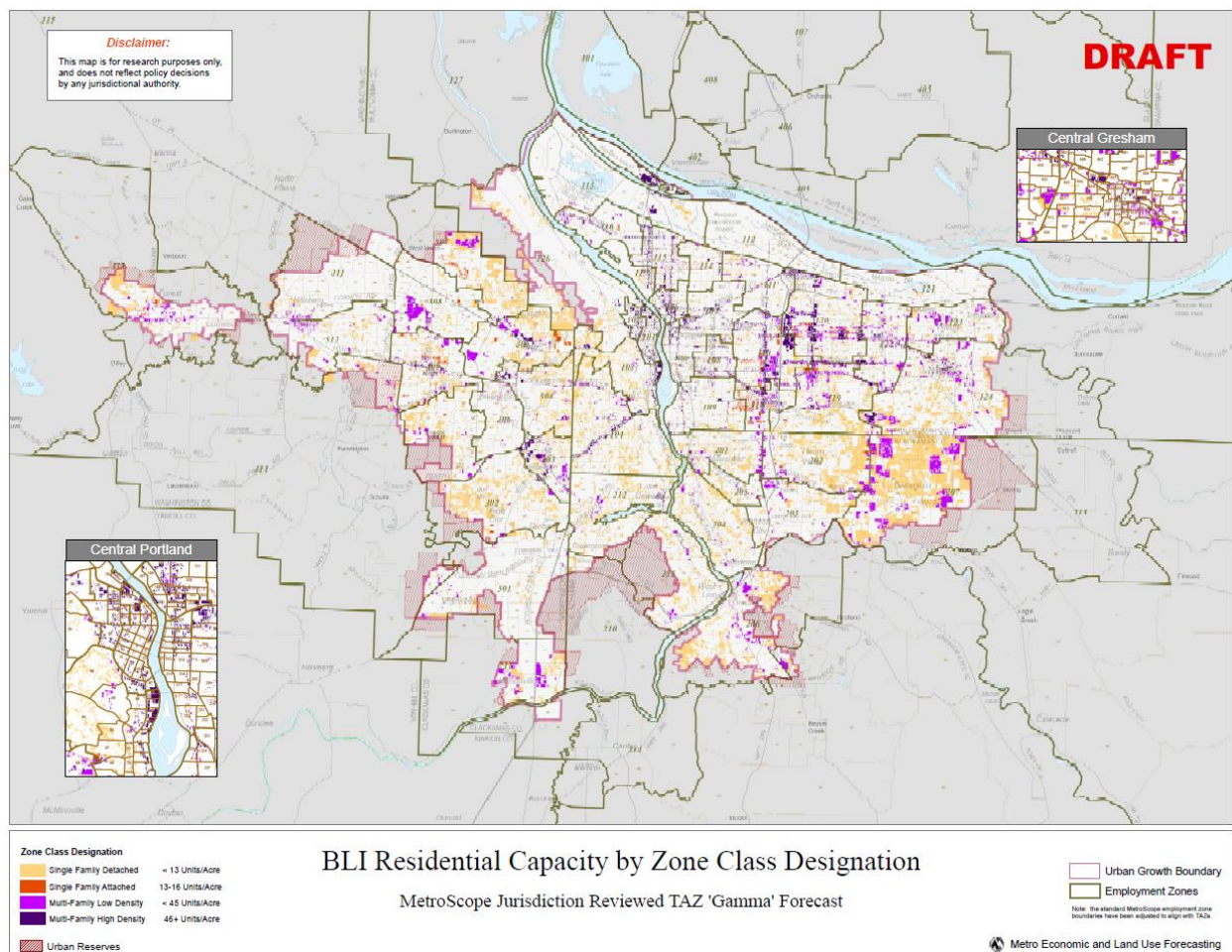
In summary, the supply data, independent of the forecast and growth distribution, indicate the Metro UGB capacity shifting sharply between SF and MF densities. The ratio between single and multifamily capacity for the entire MSA region is estimated to be 40% SF and 60% MF. In contrast, since World War II, development splits between SF and MF were about 70% / 30%. More recently, the Metro region has seen development splits closer to 60% / 40%. As a result, the region should see a significant shift in

regional development patterns. The growth pattern for this forecast distribution represents the most consistent treatment and outcome of the 2040 Growth Concept Plan.

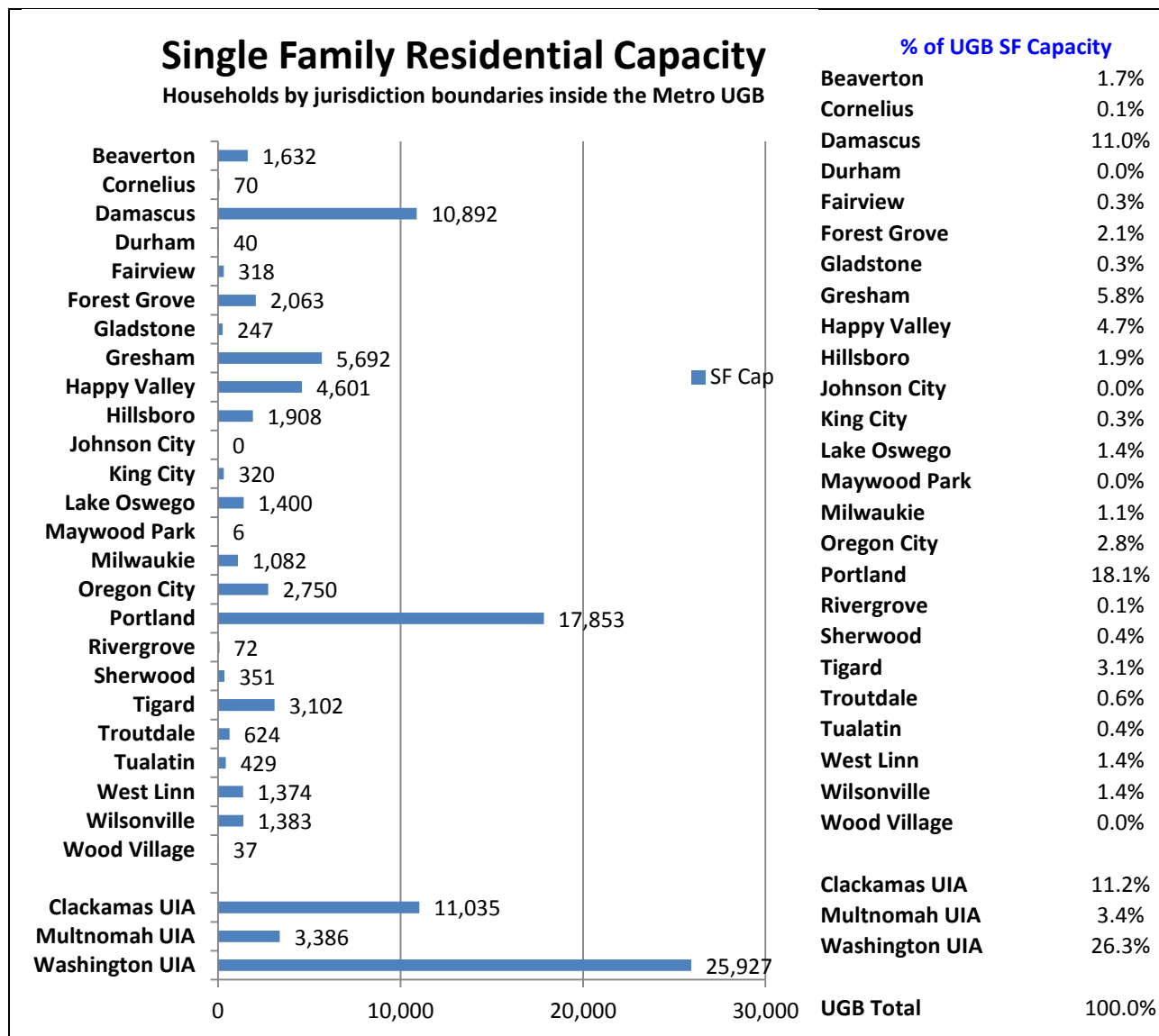
	<u>Post WWII</u>	<u>1995 to present</u>	<u>2010 to 2040</u>	<u>2040</u>
Single Family %	70%	60%	40%	10%
Mult-family %	30%	40%	60%	90%

**Table 3: Illustration of Historical Development Trends and Future Capacity Estimates**

From a subregional standpoint, the city of Portland represents the lion's share of residential capacity for the Metro UGB. The vast majority of the region's redevelopment capacity is expected to be delivered in the city of Portland. The city's estimated redevelopment capacity is about 137,000 units (7% SF infill and 93% MF redevelopment units – not including an additional 47,200 units from urban renewal). Portland capacity from all sources totals to about 199,000 dwelling units (with urban renewal). This capacity is largely located in the city's designated centers, corridors and main streets. Portland city redevelopment accounts for about two-thirds of the potential residential redevelopment supply estimated for the Metro UGB. Subsequent tables list out single family and multifamily residential capacity for each city inside the Metro UGB.

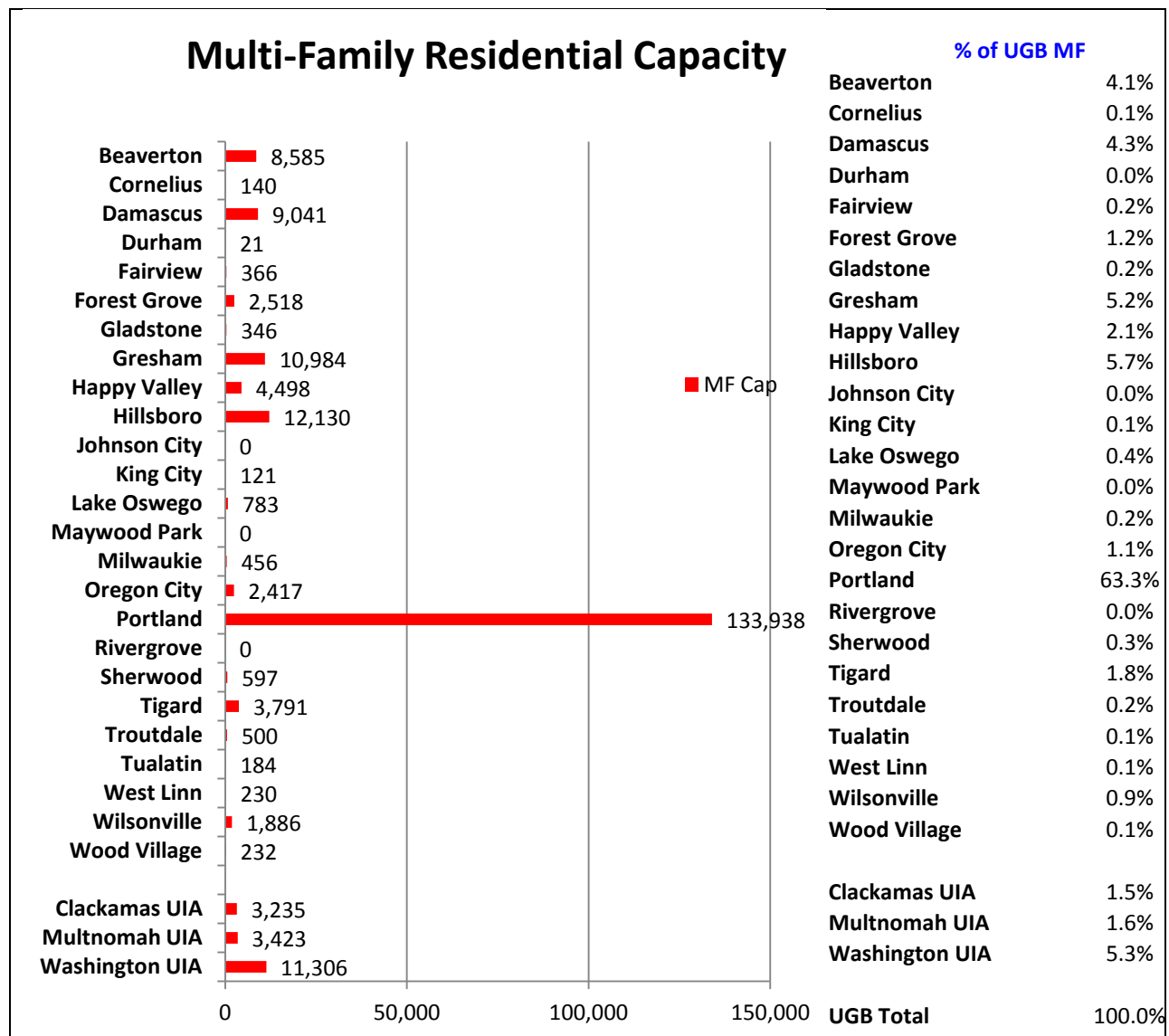


**Map 1: Supply Data – Residential Capacity (Metro UGB)**



**Table 4: SF Residential Capacity in the Metro UGB** (tabulated by city boundary – not TAZ)

Unincorporated Washington County represents the largest single jurisdiction for single family residential capacity in the Metro UGB, followed by city of Portland and unincorporated Clackamas County and the city Damascus. These SF and MF estimates are based on GIS data derived by tabulating up capacity for each local jurisdiction's city limits (no urban service areas used in calculating capacity totals) as of year 2010. In other tabulations, capacity estimates by city may differ due to an alternative accounting system based on summing together TAZ's that have been assigned to approximate the city or jurisdictional boundaries. Note TAZ delineations are unique and boundaries do not necessarily reflect recognized political boundaries, streets, or census geographies.



**Table 5: MF (includes mixed use residential) Residential Capacity in the Metro UGB** (tabulated by city boundary – not TAZ)

In the case of Damascus, capacity estimates are more subject to variance than other jurisdictions for the mere fact that the city has yet to adopt zoning or comprehensive plans for urbanization. Instead, the best available data on hand from a year ago was the city's proposed concept plan. Metro staff with help from city planning officials estimated the residential and employment capacity using the concept plan and Metro's own buildable land inventory of the city. A greater variance may exist for Damascus as the city strives to refine its own BLI estimate and adopts official urban zoning regulations.

It should be noted that during the capacity review phase of the distribution process, several jurisdictions raised these concerns:

1. The amount / proportion of residential redevelopment supply assumed for the forecast distribution

2. Equity concerns arising from housing affordability after 2025
3. Residential location preferences assumed in the model
4. Ability of the model to forecast shifting preferences for building types – vis-à-vis aging demographics for example
5. The significant proportional shift in overall SF and MF capacity for the region
6. Urban renewal subsidy amounts
7. Rural development capacity / density assumptions

These issues will be dealt with as research items going into the next UGR. Two principle research objectives have been identified by planning directors:

1. Review of the BLI for next UGR – in particular the redevelopment assumption
2. Undertake a stated preference residential location choice study.

The first research item will verify BLI data for the region, including redevelopment supplies in the UGB, residential subsidy assumptions, supply of single and multifamily units and rural density assumptions. The second item will depend largely on funding needed to properly carry out a scientifically valid survey and research.

For a more detailed discussion of the current BLI methods and capacity calculation approach for the Metro UGB single and multifamily capacity estimates, please reference Metro's "Methodology for Computing Res. & Empl. Capacity report".

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22\\_meeting/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22_meeting/)

### **New Urban Areas...delaying the start of urban development until 2020.**

Metro amended its UGB in 1997 to add Pleasant Valley and Bethany areas, and Damascus in 2002. It still remains unclear when urban development will actually begin, however. Governance of these areas has seemed to mostly been resolved. The city of Damascus was incorporated in 2004 to oversee planning for the new area with Happy Valley plans contributing to the west end. Gresham had taken the lead in planning with other adjacent municipalities to direct planning for Pleasant Valley. Beaverton and Washington County share in planning for Bethany. Still impeding urban development in Bethany and Pleasant Valley has been the lack of public funds to carry out infrastructure construction. Also large parts of the Pleasant Valley are still zoned rural residential and not ready for urbanization. Damascus has had setbacks that have stalled progress in enacting comprehensive plans. Urbanization plans for the new urban areas have been held up by planning disagreements and infrastructure funding questions.

It will only be a matter of time before these areas become ripe to receive urban densities. For modeling and forecasting purposes, we expect the new urban areas will eventually become urbanizable within the next 25 to 30 years, with build-out taking longer. As a matter of practical supposition, the forecast distribution anticipates urban development will be forestalled until 2020 – assuming a 10 year delay before these areas are able to overcome initial development barriers. At 2020, the assumption is to hypothetically up-zone rural new urban areas to 10 dwelling units per net buildable acre.



### **Industrial and Commercial Employment Capacity appears sufficient for the 2010 to 2040 horizon**

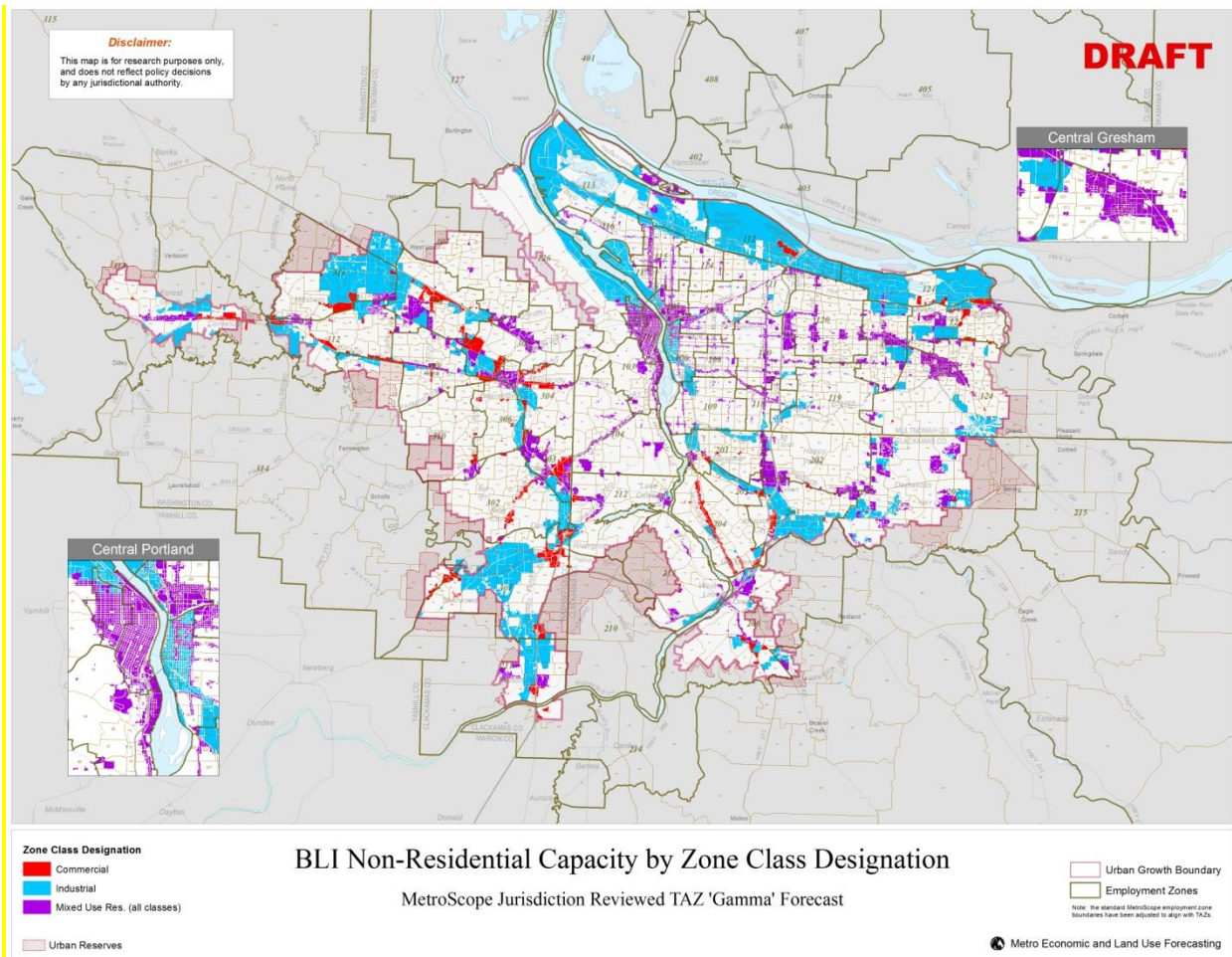
In aggregate, employment capacity includes vacant and redevelopment as shown in Table 5. Like the residential BLI, the non-residential supplies are represented in a GIS data base and stored as net buildable acres. Potentially redevelopable employment sites are tabulated with vacant buildable sites in the overall inventory. The redevelopment supplies also include brownfields, but it is uncertain that the brownfield estimates are 100% accurate. Unbuildable sites and areas such as resource lands, environmentally protected zones and public right of ways are excluded from buildable lands much in the same way as for residential supplies.

Statistical estimation methods were employed to estimate the amount of nonresidential redevelopment supply. As such there exists a margin of error on this redevelopment capacity that is unknown. Undoubtedly, the margin of error found in the redevelopment estimates is going to be larger than the vacant tabulations. Before the redevelopment (and vacant) capacity was accepted into the modeling and forecasting, all non-residential capacity underwent a review by local jurisdictions. The initial estimate for the redevelopment supply was determined from a set of redevelopment filters based on zoning, site size, value of the lot and improvement. The values were given by recent county assessment information and lot size by Metro's RLIS tax lot layer file.

	<u>Industrial</u>	<u>Commercial</u>
<b>Clackamas</b>	3,819	2,255
<b>Multnomah</b>	3,662	1,605
<b>Washington</b>	6,748	2,159
<b>Clark</b>	3,237	1,785
<b>Total</b>	17,466	7,804

**Table 6: Supply Data –Employment Capacity (in net acres)**

Additional information concerning employment capacity, the redevelopment filters, assumptions and other capacity assumptions are included in the report "Methodology for Computing Res. & Empl. Capacity report". [http://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22\\_meeting/](http://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22_meeting/).



**Map 2: Supply Data – Employment Capacity (Metro UGB)**

**Subsidized Redevelopment (i.e., urban renewal assumptions) – a policy assumption adding to the Regional Residential Capacity.**

The subsidized residential redevelopment capacity assumptions represent specific areas in which local governments are attempting to revitalize with urban renewal. These modeling and forecasting assumptions are an attempt to model the potential impact of implementing the Region 2040 framework plan and the resulting economic influences of local government interventions in the private real estate market. The subsidies are applied only to areas in the region defined with an operating urban renewal as of July 2011.

The nature of the subsidy for modeling and forecasting purposes is to make the units more affordable for development and homeowners (or renters). Many of the subsidized redevelopment areas are in the central city, regional centers, town centers, and corridors that carry higher residential price tags. The impact of the subsidy is such that prospective homeowners (or renters) are more likely to locate in the urban renewal area – other things being equal – because rents should be lower with the housing subsidy than otherwise.



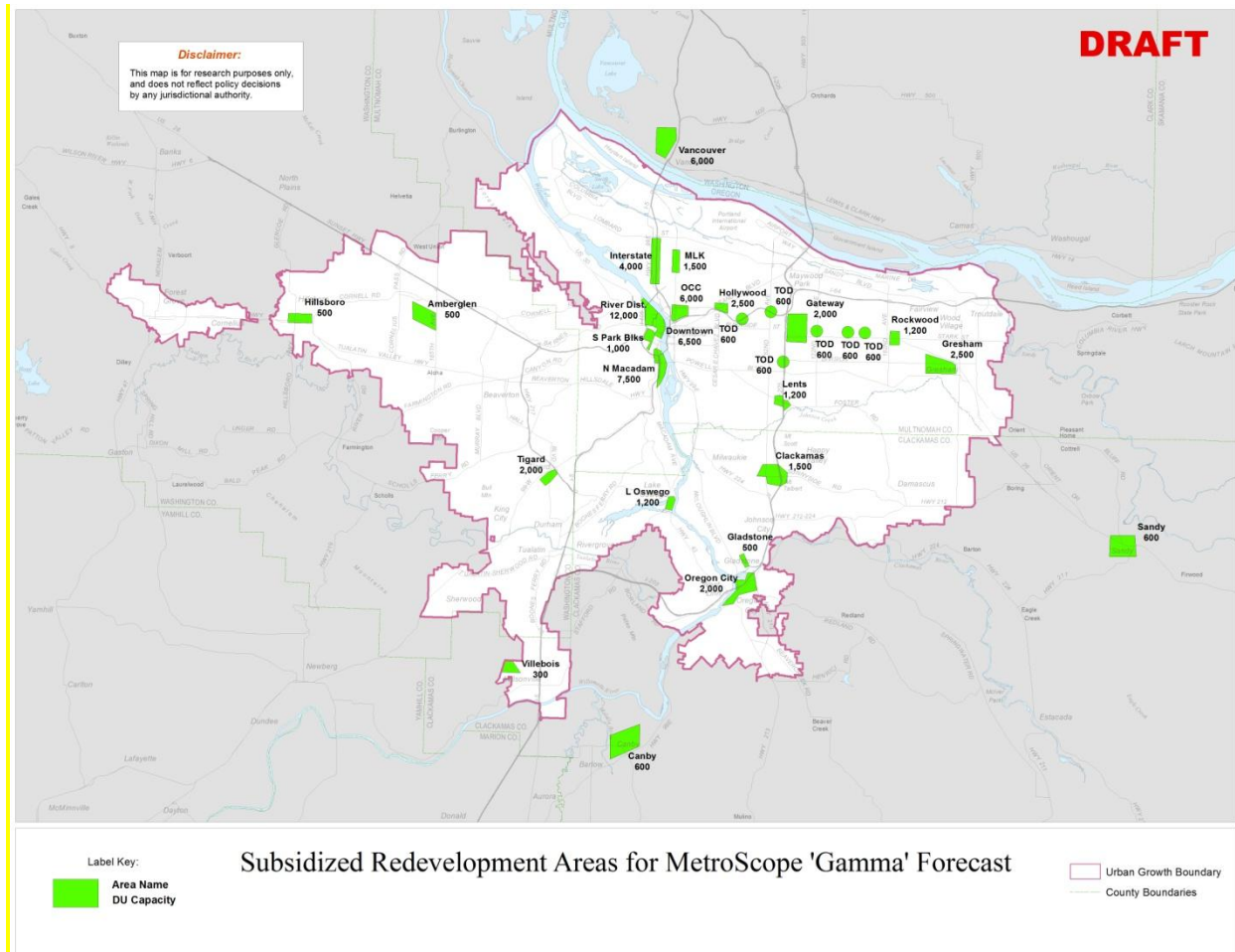
On the other hand, the forecast distribution anticipates that “other things are not equal” because neighborhood amenities from place to place are not the same. Differences in travel time/distance to work, recreation, shopping and entertainment opportunities will override subsidy preferences. Although residential subsidies tend to give an advantage to these units, they still must compete with other residential real estate products. In many cases, the subsidies are still enough to tip the scales of development. Development factors in other areas (and outside the region too) still maintain an edge over the subsidized units. Sometimes the differences come down to price advantages, but many other times it’s differences in amenities and the tradeoffs that households have to make in balancing work location, transit availability, proximity to parks, schools and stores that decide where residents choose to live.

The old adage in real estate sales “location, location, location” holds true in the modeling and forecasting of residential location choice. Location very much matters, so urban renewal areas compete against all other residential opportunities. Moreover, characteristics of one household to another vary and the number of households with willingness to pay for residential location in highly dense and urban locations is not unlimited. Residential preferences have to also respond to a household’s actual income bracket, life-style and life-cycle. In many cases, the innate residential preferences will outweigh the attraction of subsidized units. Competitive forces will drive some households to locate in subsidized areas, but for a large segment of regional residents other residential locations are preferable. Therefore, given limited demand and many competing real estate markets, MetroScope predicts about 89% of subsidized residential capacity consumed during the next 25 to 30 years. This works out to roughly 50,000 households (from a total of 250,000) that is expected to find the subsidized residential units to be an attractive option.

- 25 subsidized locations (each area corresponds to an identified urban renewal area as confirmed by local jurisdictions as of July 2011)
- Number of subsidized units vary (number of units subsidized varies according to the size of the urban renewal and the designated 2040 area type; number of subsidized units does not exceed allowed zoning or comp plan densities)
- Density assumption of redevelopment units (for determining variable cost of construction) varies with downtown Portland locations set at MUR 9 (100 to 125 DU/ acre) densities and suburban locations set at MUR 4 (25 to 30 DU/ acre) densities
- Value of subsidy amount vary between \$10,000 per dwelling unit up to \$50,000 per unit (central city locations assume the higher amount while ex-urban and suburban locations assume the lower amount, a \$25,000 amount is assumed mainly in regional centers and few town centers)
- Subsidy amounts are metered in between 2015 and 2045 in 5 year increments (the actual assumptions are listed in an appendix table) so as not to “flood the market” with unrealistic subsidies whose beneficial economic impacts are generally not felt immediately and do tend to be phased in over time

**Exhibit 1: Urban Renewal Capacity Assumptions**

The subsidies are applied to new development in 25 identified areas. The total amount of initial subsidized redevelopment capacity assumed in this forecast distribution calls for a total of 69,300 dwelling units (60,000 dwelling units are in places designated inside the Metro UGB) and a monetized value totaling \$2.5 billion over 35 years. For a list of these areas and the detailed tabular forecast assumptions, please reference the subsidized redevelopment portion of the appendix in this report. A map nearby illustrates where these residential locations are assumed for modeling and forecasting purposes. The number adjacent to each site indicates the additional redevelopment capacity added to total residential capacity<sup>24</sup>.



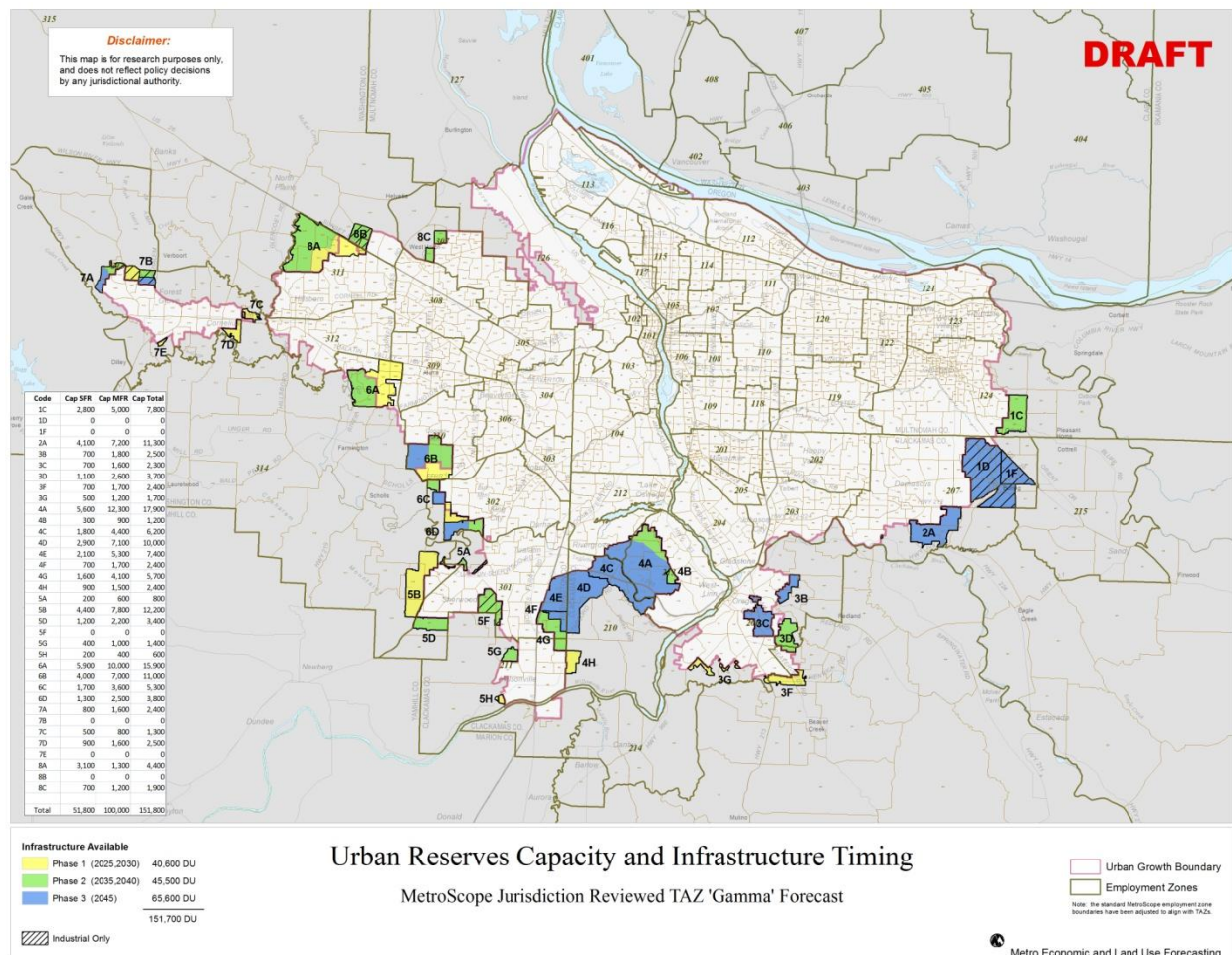
**Map 2: Residential Urban Renewal Subsidy Assumption**

**Metro Urban Reserves Capacity – additional capacity to accommodate regional growth 20 or more years into the future**

For modeling and forecasting purposes only – i.e., this assumption is not included in any Urban Growth Report of Metro Capacity Ordinance – the TAZ forecast distribution incorporates an assumption for

<sup>24</sup> The subsidy only applies to residential. There are no promotional development subsidies assumed for employment. There are a number of economic development initiatives underway in the region, but MetroScope is at this time unable to characterize the locational subsidies that would incentivize development.

residential capacity that implements local government efforts to promote 2040 Growth Concept development forms in centers, corridors and light rail station areas.



- A crude estimate of environmental resource land acreage
- Directed to assume 15 DU / net acre

This still leaves out some important information needed for future forecasts. The map above illustrates embodies the actual assumptions made concerning governance, financing and infrastructure development. These assumptions are modeled into the forecast in terms of:

- Timing of reserves (when it enters the UGB and when we can expect urbanization to start)
- Residential capacity (expected supply of SF and MF dwelling units)
- Industrial capacity (expected number of net acres)
- Commercial employment capacity (expected number of net acres)

Local governments were consulted and their comments folded into the governance assumptions and infrastructure financing and urbanization timing of each urban reserve. Here's the basics:

1. Urban reserves were divided into 3 phases by local governments. These phases represent the most likely ability of the nearest local government to provide infrastructure financing and governance in terms of spelling zoning and other urbanization factors
2. Each phase was subdivided roughly in half to coincide with the 5 year growth forecast increments
3. A 10 year delay was assumed before an urban reserve site would begin to have urban densities assigned. This represents a crude approximation of the infrastructure delay or about the time expected to make the site development ready.
4. Sites that were designated in the urban reserve process as industrial remained wholly industrial for modeling purposes unless the nearby city proposed concept plans which offered more precise reckoning of future zoning districts
5. Other sites were designated as residential and neighborhood commercial. These sites were given a crude capacity concept based on 15 DU / net acre. 70% of the BLI in each site was given to single family densities; 24% to multifamily density and 6% of the BLI for neighborhood commercial development. SF densities were either set at SFR5, SFR6 or SFR7 depending on existing single family zoning in nearby TAZ inside the UGB. The MF density was set to whatever density would allow the urban reserve site to average the required 15 DU / net acre.
6. Otherwise, if local jurisdictions had on hand their own concept plans for an urban reserve, the TAZ forecast replaced the crude Metro assumptions with the local concept plan.

**Exhibit 2: Urban Reserve Density Assumptions.**

The urban reserve capacities are hypothetical assumptions deriving from recommendations provided to the Metro Research Center by local government officials. They are technical assumptions and should not be construed as plans for future decisions by the current or any future Metro Council. The urban reserve assumptions are non-binding and intended for research purposes only. They merely represent a subset of capacity assumptions included among a broader set of other technical assumptions necessary for simulating future population and employment growth patterns. The urban reserve assumptions are

solely the responsibility of the Metro Research Center and intended for informational and technical research purposes.

In the context of distributing the regional forecast to specific neighborhoods and locations in the region, urban reserves represent additional areas that can be provisionally added to the Metro UGB in later forecast years. As population and employment in the region grows, residents and businesses need room to grow. A portion of this growth may be accommodated within the existing UGB and others may spill out to Clark county, rural areas in the region, or counties adjacent to Metro. Metro urban reserves provide an identified reservoir of development capacity that can be drawn on in future years to augment the capacity of the Metro UGB to accommodate future growth pressures. Urban reserves provide planning certainty and are intended to help maintain a compact urban form while protecting and sustaining valuable agricultural resources adjacent to the UGB.

As on-going economic development and residential need is absorbed into the Metro UGB, every 5 years Metro is required to take stock of its capacity and replenish the amount of capacity absorbed such that there will be enough capacity on hand for the next 20 years. Urban reserves represent an available choice in which future markets are likely to see growth happen and future Metro Councils will likely decide expansion of the Metro UGB into all or parts of designated urban reserves as a possible solution to meet growth demands.

In order to simulate this cycle of 5 year capacity review and replenishment of the Metro UGB capacity, the Metro Research Center in consultation with local governments has devised a hypothetical schedule for metering in the expansion of the Metro UGB into designated urban reserve locations. Reserves are a fact. Ignoring the likelihood that urban reserves would go untouched in the foreseeable 25 to 60 year time horizon would significantly skew growth distribution results in the Metro UGB. Ignoring periodic inclusion of urban reserves would hamper the growth distribution forecast and severely skew results. The better forecast alternative is to assume a hypothetical schedule of UGB amendments equal to a hypothetical replenishment rate. Even if the timing, location and capacity assumption are less accurate, the inclusion of urban reserves into the forecast distribution limits forecast biases and geographic distribution errors to the urban reserves areas and immediate adjacent zones.

The only piece of information we have about urban reserves are its geographic boundaries. In order to make use of urban reserves, the Metro Research Center has had to impute certain attributes for each designated urban reserve area. Synthetic land use information had to be constructed in order to approximate urban densities, land use capacity to accommodate residential, industrial or commercial development for each urban reserve area.

1. UGB / urban reserve timing: There is – as a point of fact – no schedule for adding urban reserve areas to the Metro UGB. The regional forecast distribution does not actually make any assumptions concerning when any individual or set of urban reserve areas are to be added to the Metro UGB. We skirt this issue of UGB expansion timing instead by assuming when infrastructure might be brought into the area at some future date.

2. Infrastructure timing: A timing-delay function is assumed into the growth distribution to represent when each urban reserve area can start to receive residential (or employment) growth allocations. We have seen abundant evidence from post-1997 Metro UGB expansions that dictate growth will not happen until questions about governance, financing, and infrastructure development actually get resolved. Urban-style growth densities and development are not likely to materialize in any designated urban reserve until these concerns are addressed. We assume a timing delay for modeling and forecasting purposes for each urban reserve area that ranks each by its likelihood toward development readiness.

Reserves are divided into 3 phases and then assigned a 5-year period in which urban development densities and growth may begin. The delay function starts with reserves identified in the phase 1 and assigning new growth in either 2025 or 2030. Phases 2 and 3 stretch out development in the reserves through year 2045. A reserve area is not likely to reach build-out during its initial phase of inclusion to the UGB; it takes several development cycles for that to occur. How quickly a reserve may reach its development build-out depends on a number of demand factors, competing supply choices and real estate prices. A specific reserve area is more likely to see more growth allocated to it if it was added to the UGB capacity in an earlier year.

Buildable land inventory: Development in the reserves can only occur on buildable land<sup>25</sup>. The buildable land inventory is defined by Metro's vacant land inventory and "modeled" Title 3 and Title 13 environmental data layers. Since the buildable land inventory was derived from modeled data instead of actual surveys and measurements, it is conceivable that later refinements to this data may vary widely from the Metro Research Center BLI estimates in this report. After the mid-term review, Beaverton and Hillsboro provided more detailed capacity estimates (i.e., residential and employment) for the Northern Hillsboro, Southern Hillsboro and Cooper Mountain urban reserve sites. These revisions were incorporated into subsequent growth years. A table listing the Urban Reserve BLI estimates is shown in the appendix.

3. Zoning and residential density: Urban-style density assumptions were not given as part of the urban reserve decision. The only guidance given was a recommendation by Metro Council that each piece of urban reserve should plan for a minimum density of 15 dwelling units per net acre. Therefore, the Metro Research Center devised hypothetical density concept assumptions for each designated urban reserve area<sup>26</sup>. Formulation of the dwelling unit capacity assumption in each urban reserve area follows this basic approach:
  - a. Single family dwelling unit capacity = 70% of BLI \* SFR units/acre, where the SFR density is determined based on observed single family zoning densities in nearby zoning

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<sup>25</sup> The reserve areas are expected to be sparsely developed and any redevelopment potential is assumed to be minimal and therefore will not add material capacity. All development capacity is assumed to derive from vacant buildable sources.

<sup>26</sup> Cities of Beaverton and Hillsboro provided more detailed estimates of buildable capacity in urban reserve areas likely to be annexed by the cities. Planning data concerning the residential development capacities for northern Hillsboro (NOHI) and southern Hillsboro (SOHI) and Cooper Mountain urban reserves were substituted in lieu of Metro's standardized capacity estimates.



districts. This seemed to be a reasonable assertion given that very few urban reserves had detailed site plans or capacity concept plans in place. The forecast assumed a 70% rate of SF development largely in keeping with the development mix that has been the case over the last couple decades. For modeling and forecasting, it seemed prudent to generally duplicate similar development mix of adjacent residential subdivisions.

- b. Multifamily dwelling unit capacity = 24% of BLI \* MFR units/acre, where the MFR density is determined based on the density needed to achieve approximately 15 dwelling units per acre after considering the density assumed for single family. In order to achieve 15 units an acre, there would have to be a significant MF component. Generally the density required to meet the target density was between 45 and 65 units per net acre.
- c. Commercial capacity = 6% of BLI. Commercial capacity was aside to accommodate a mix of neighborhood retail and low-scale office employment to meet the needs of area residents. This capacity is not for industrial uses per se.
- d. Industrial capacity = 100% of BLI but only in urban reserve areas designated for industrial development. Industrial capacity is not assumed in non-designated industrial reserves.

Future concept planning and comprehensive plan reviews may yield different assumptions, but in so far as urban reserve areas are devoid of urban density assumptions, this is the density assumption template imposed for each designated urban reserve area.

The only salient disagreement over the urban reserve timing assumptions is the Stafford area site. The cities making up the Stafford triangle have stated clearly that urbanization should be delayed until after 2040. This is what is assumed in the modeling and forecasting. On the other hand, Clackamas county has suggested that the Stafford area should come into the UGB sooner.

### **Capacity Assumptions beyond the Metro jurisdiction.**

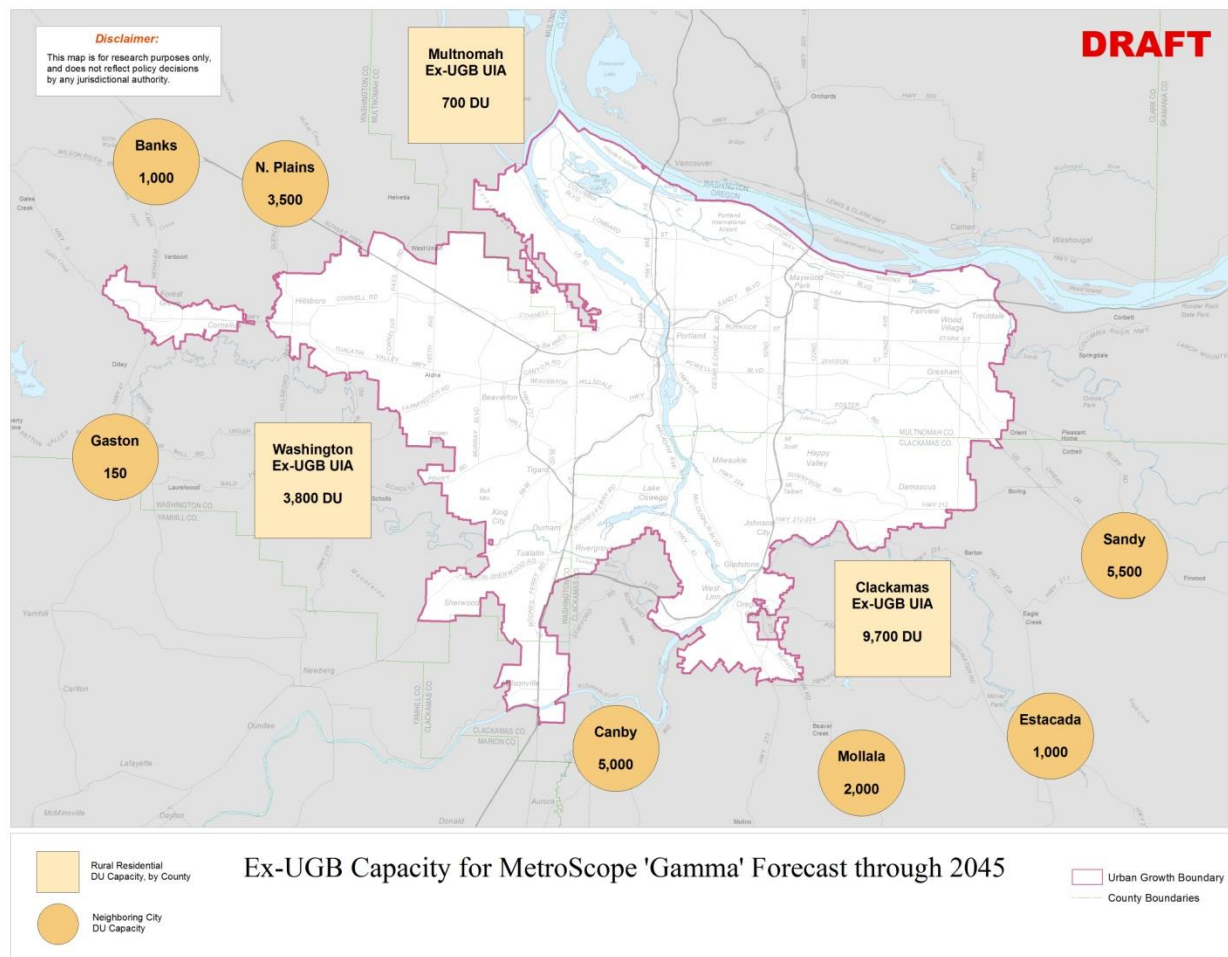
Let's now turn to capacity that's outside the Metro boundary. For complete and consistent accounting of regional development, the modeling and forecasting of land use futures requires estimates of residential and employment capacity in outlying areas that fall in the shadow of the Portland socio-economic influence. These areas are

- the rural county unincorporated areas outside the Metro UGB
- neighboring cities in Clackamas County
- neighboring cities in Washington County
- Clark county (in its entirety).

Generally, capacity estimates for these areas are significantly coarser and may not actually reflect capacity estimates of local governments. Neighboring cities were invited to participate in the forecast distribution and capacity reviews. North Plains and Sandy provided some residential capacity information, but the modeling efforts were ultimately unable to secure capacity estimates that would be compatible with the forecast for the other rural cities. Consequently, Metro staff assumed that future rural city capacities (as noted in the map below) would mimic similar development trends as seen

historically. Manual capacity estimates were eyeballed from 2000 Census data that assumed each neighbor city might practicably double its size during the next 20 to 30 year time horizon.

The residential capacity in the rural tri-county area approximated the combined capacity of Measure-49 claims and a hypothetical estimate of potential farmhouse development. Measure 49 data came from the state. The growth distribution forecast assumed the right to build 3 houses per claim.



**Map 4: Residential Capacity estimates for the rural tri-county area, neighboring cities and rural counties**

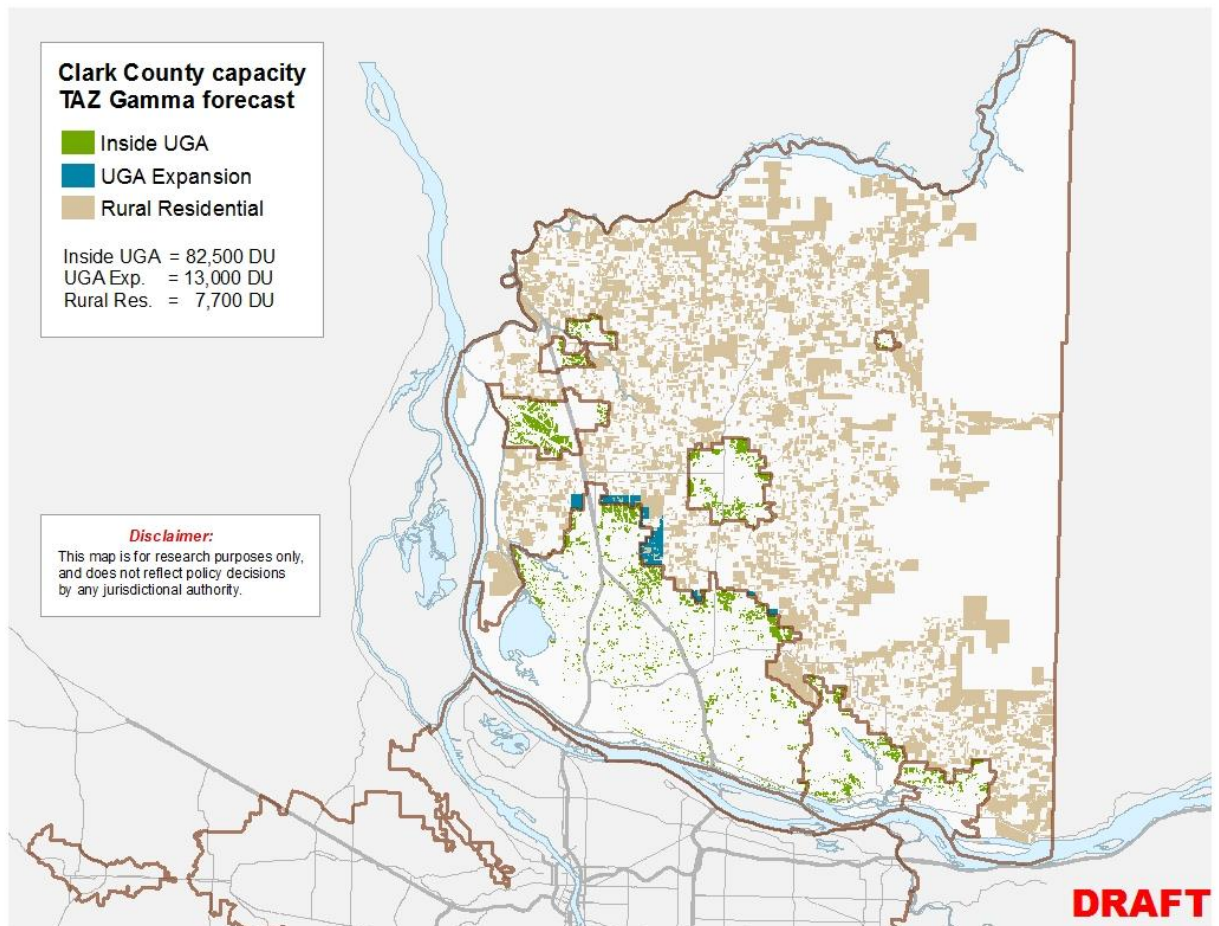
Additional rural development capacity was computed from exception land information. For all 3 counties, Metro generated an initial rural residential capacity estimate. The initial estimates in each county relied on assuming 4 dwelling units per 5 acres of exception land. This proved inaccurate and later revised. Each county during the capacity review phase overrode and reduced the amount of rural development capacity according to local knowledge and data trends spotted in recent years. MetroScope was designed with the intent of providing a complete analysis of regional growth which includes economic, transportation and land use interactions with adjacent counties. These adjacent areas are often called economic halo regions because there exists significant cross border commuting, economic trade between adjacent counties, and thriving social interactions among the urban counties, suburban counties and ex-urban counties. These socio-economic ties are difficult to disentangle and as a



consequence any exclusions of these counties would severely distort econometric models designed to analyze, forecast and assess the economic conditions of the Portland economic region.

From a Metro-centric perspective, the halo areas in this region include Clark County, Washington, Columbia, Marion and Yamhill counties in Oregon. Additionally, ex-urban areas outside the Metro UGB including neighboring cities (Barlow, Canby, Estacada, Molalla, Sandy in Clackamas County and Banks, Gaston and North Plains in Washington County) and rural unincorporated county areas outside the Metro UGB in Clackamas, Multnomah and Washington counties are included as halo areas.

Because of the close proximity of halo area economies, they provide a pressure release for development both in the model and in reality to excess demand that may form in the Metro UGB. For example, as growth pressures tighten the supply or capacity inside the Metro UGB for residential (or employment) need, the halo areas may provide alternative housing options for residents and businesses in the future. As a market equilibrium model, MetroScope mimics economic choices and conditions. A choice for some residents (and businesses / employees) may be to live in single family housing beyond the UGB if price and availability make it unaffordable. This choice necessarily includes the choice to locate either inside the UGB or outside the UGB. Of course having supply (or capacity) is necessary but not sufficient if there is not the sufficient market demand to want to choose to locate outside the UGB. Where the growth distribution lands depends on many critical factors, one of which is the amount of residential (and employment) capacity available to accommodate regional growth.

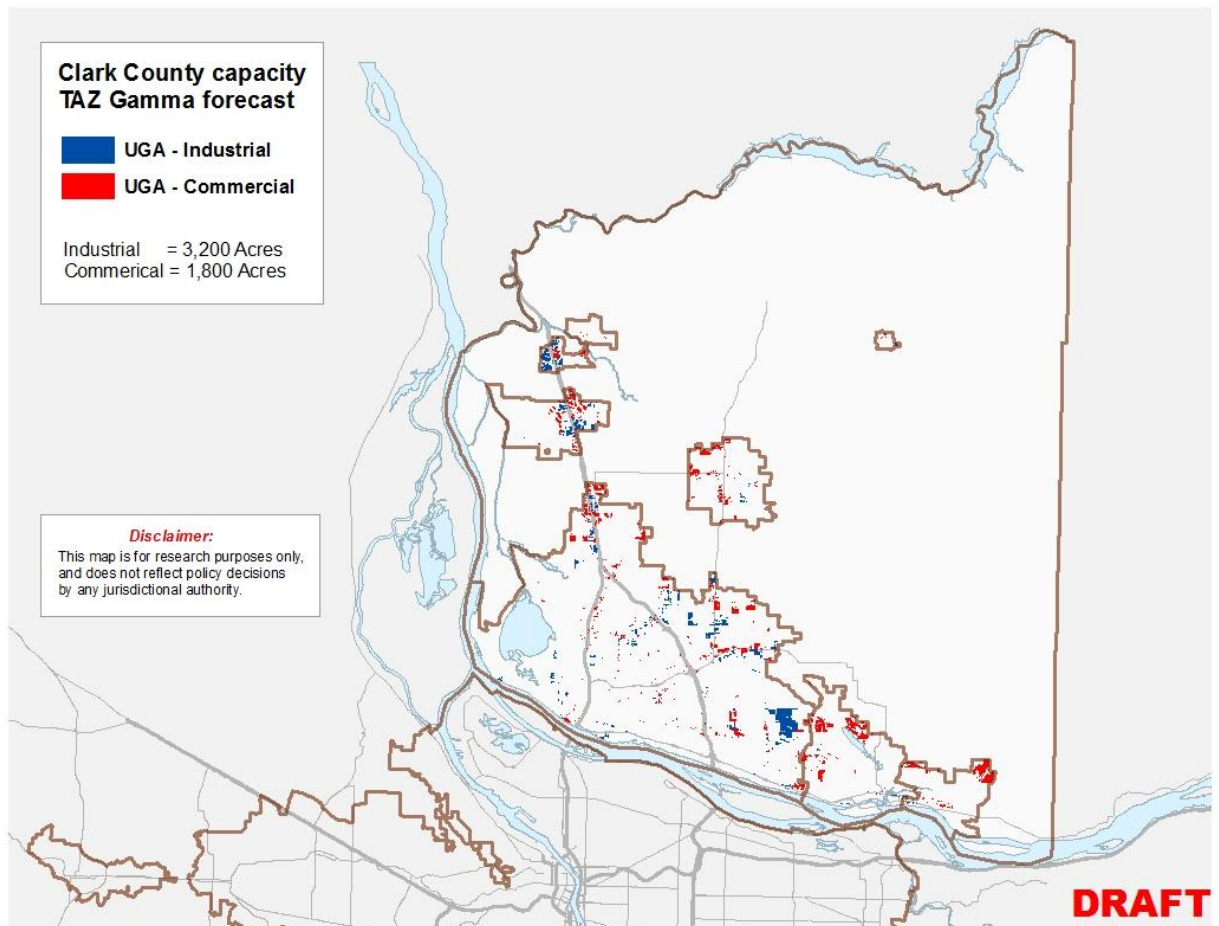


**Map 5: Cities and Clark County Residential Capacity**

### Clark county BLI

The buildable land inventory for Clark County and its cities were given by the county's Vacant Buildable Land Model. Responsibility for this inventory is the county's own GIS and Assessment Department. The BLI includes both vacant and redevelopment supply estimates. The capacity includes data for both residential and non-residential sources. Non-residential capacity was divided into commercial and industrial sources according to zoning. The residential capacity was sorted into same categories of single family, multifamily and mixed used residential sources based on a cross-walk of city and county zoning ordinances to Metro's own standardized zone classification.

The capacity estimates for Clark County and its cities was essentially unchanged and directly inserted into the overall regional growth distribution forecast.



**Map 6: Illustration of Cities and Clark County Employment Capacity**

### Other policy and infrastructure assumptions

In order to accurately assess future development patterns for employment and residential need, the TAZ forecast incorporates detailed Regional Transportation Plan (RTP) assumptions into the final forecast distribution. This includes travel time forecast information from zone pairs, auto occupancy assumptions, existing network assumptions and future network infrastructure investments.

There are 4 separate RTP assumptions used in preparing the final 2010 to 2040 TAZ forecast distributions. Since MetroScope is time path dependent and operates in 5-year growth increments, but the travel demand model has only 4 different networks corresponding to the MetroScope growth forecast years.

#### **MetroScope Growth Forecast Year**

2010 and 2015  
2020 and 2025  
2030 and 2035  
2040 and 2045

#### **Transportation Network**

Existing 2010 base year  
2017 Air Quality Conformity  
2035 Financially Constrained (Federal network)  
2035 Strategic (State network)

A map of the projects included in the 2035 State and Federal transportation networks is included in the appendix of this report.

- Federal and state regulations require that the region assess the air quality consequences of proposed transportation improvements. Current laws mean that the region must assess the carbon monoxide emissions from surface transportation sources to meet the Clean Air Act. Metro has prepared an air quality conformity transportation network as part of its determination for the federal component of the 2035 RTP and 2010-13 Metropolitan Transportation Improvement Program as required by state and federal law. For further information concerning the description and technical details of the 2017 air quality conformity network assumptions, please refer to the official air quality conformity determination documents.
- The federal component of the 2035 RTP represents a step toward improved implementation of the 2040 Growth Concept, the region's long-range plan for addressing expected growth while preserving our region's livability. The federal RTP meets federal timelines, fiscal requirements, and new requirements in the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This was approved by the U.S. Department of Transportation on Feb. 29, 2008. For further information concerning the Metro ordinance, amendments, technical appendix, system management and operation plans, freight plan, transit plans, and final project list, please follow this link:  
<http://www.oregonmetro.gov/index.cfm/go/by.web/id=25038>.
- The state component of the 2035 RTP was a second step toward fulfilling the vision of Metro's 2040 Growth Concept. The second step has produced a final RTP that meets regional and state as well as federal planning requirements. The final RTP includes:
  - the first high-capacity transit plan since the early 1980s, which outlines priorities for future investments in an expanded light-rail network, bus rapid transit and other high-capacity transit corridors
  - a regional freight plan that looks at how freight can move more efficiently through the region's transportation system
  - the first comprehensive plan for transportation systems management and operations to make the most of investments already made in the transportation network
  - the first climate change action plan to address how an integrated set of transportation investments, land use policies and other strategies can most effectively reduce greenhouse gases
  - performance measures to link transportation investments to reducing the region's carbon footprint, job creation, protecting the urban growth boundary and enhancing travel options for everyone.

Additional details and file documents can be found at this link:

<http://www.oregonmetro.gov/index.cfm/go/by.web/id=25038>

## **Growth Forecast Distribution Summary Guide**

Appendix 8 of this report summarizes the primary demand and supply assumptions utilized in the “gamma” growth forecast distribution. The gamma forecast represents a third refinement of the growth distribution. There were earlier versions – alpha and beta – generated on an as needed temporary basis. Both alpha and beta were interim forecasts which are now superseded by the gamma forecast. The alpha distribution was rejected outright and improved beta versions were developed for use in

- GHG modeling and forecast development (beta 1 version)
- Southwest corridor project analysis (beta 1 version)
- East Metro corridor planning (beta 1 version)
- City of Portland Plan (beta 2 version)

Neither alpha nor beta versions are to be used going forward.

## **Appendix 1: Adjusted “lower middle-third” forecast details (7-county totals)**

Household Forecast by Income Bracket

Household Forecast by Age Bracket

Household Forecast by Persons per Household

Industry Employment Forecast

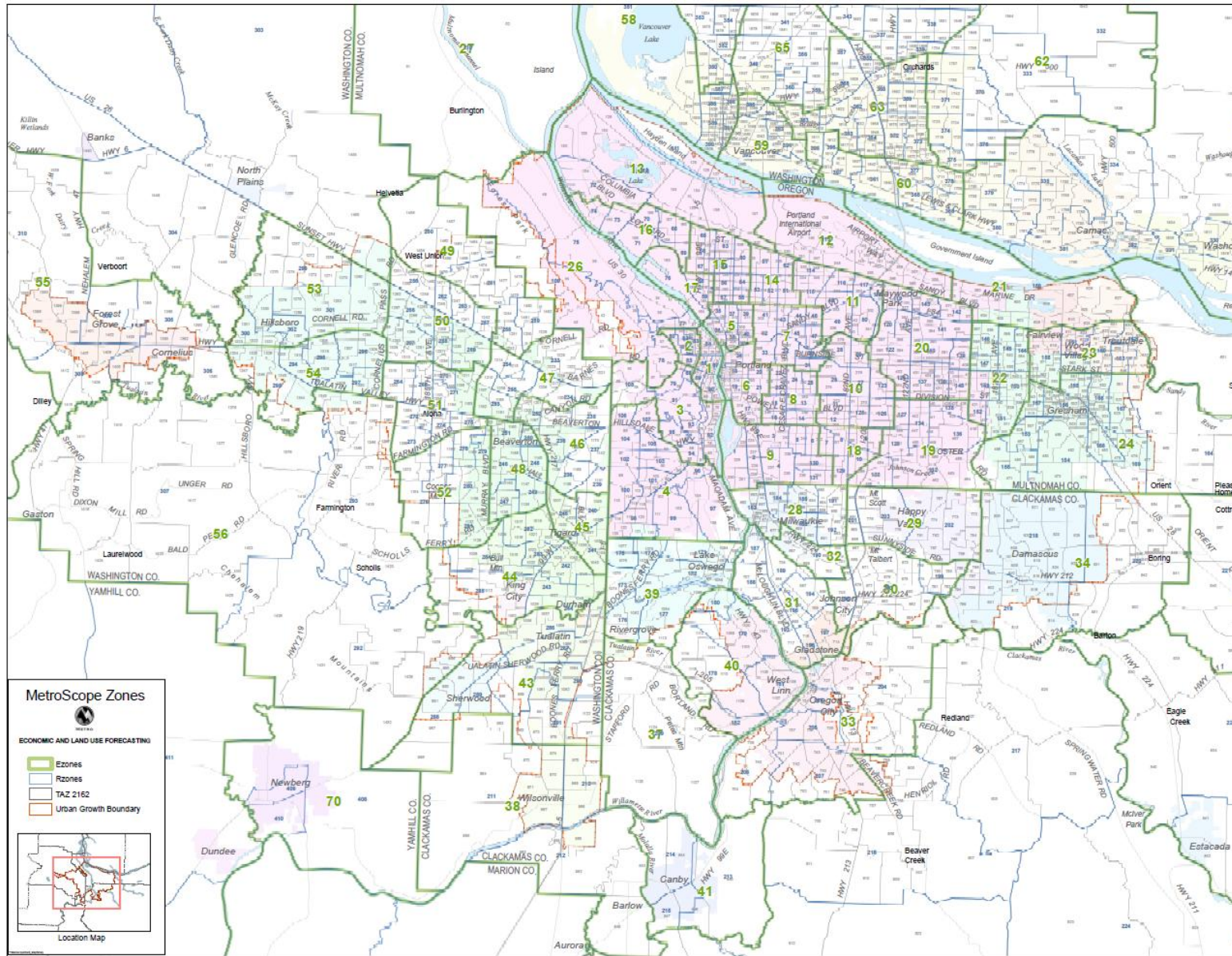
**Appendix 2: RLIS Standardized Regional Zone Class and Dwelling Unit Density Crosswalk Table**

#	Standardized Regional Zones	Zone Class	Residential Lot Size		Maximum Units Allowed (Dwelling Units / Net Acre)			Zone Class
			Min	Max	Min	Max	Avg. Range Density	
1	Single Family 1 acre tax lot	SFR1	35,000	43,560	0	1	1	SFR1
2	Single Family 1/2 acre tax lot	SFR2	15,000	35,000	1.1	2	2	SFR2
3	Single Family 10,000 sq. ft. lot	SFR3	10,000	15,000	2.1	3	3	SFR3
4	Single Family 9,000 sq. ft. lot	SFR4	9,000	10,000	3.1	4	4	SFR4
5	Single Family 7,000 sq. ft. lot	SFR5	7,000	9,000	4.1	5	5	SFR5
6	Single Family 6,000 sq. ft. lot	SFR6	6,000	7,000	5.1	6	6	SFR6
7	Single Family 5,000 sq. ft. lot	SFR7	5,000	6,000	6.1	7	7	SFR7
8	Single Family 4,500 sq. ft. lot	SFR8	4,500	5,000	7.1	8	8	SFR8
9	Single Family 4,000 sq. ft. lot	SFR9	4,000	4,500	8.1	9	9	SFR9
10	Single Family 3,500 sq. ft. lot	SFR10	3,500	4,000	9.1	10	10	SFR10
11	Single Family 3,000 sq. ft. lot	SFR11	3,000	3,500	10.1	11	11	SFR11
12	Single Family 2,900 sq. ft. lot	SFR12	2,900	3,000	11.1	12	12	SFR12
13	Single Family 2,700 sq. ft. lot	SFR13	2,700	2,900	12.1	13	13	SFR13
14	Single Family 2,500 sq. ft. lot	SFR14	2,500	2,700	13.1	14	14	SFR14
15	Single Family 2,300 sq. ft. lot	SFR15	2,300	2,500	14.1	15	15	SFR15
16	Single Family 2,000 sq. ft. lot	SFR16	2,000	2,300	15.1	16	16	SFR16
17	Multi-family-Very Low Density	MFR1	Approx. FAR = 0.4		4	15	12.3	MFR1
18	Multi-family-Low Density	MFR2	Approx. FAR = 0.5		16	20	17.8	MFR2
19	Multi-family-Moderate Density	MFR3	Approx. FAR = 0.7		21	25	23.3	MFR3
20	Multi-family-Medium Density	MFR4	Approx. FAR = 0.8		26	30	29.4	MFR4
21	Multi-family-Med. High Density	MFR5	Approx. FAR = 1		31	35	33.4	MFR5
22	Multi-family-High Density	MFR6	Approx. FAR = 1.1		36	45	40.0	MFR6
23	Multi-family-Very High Density	MFR7	Approx. FAR = 2.1		46	85	73.1	MFR7
24	Mixed-Use Comm. & Res.	MUR1	Approx. FAR = 0.3		4	15	11.2	MUR1
25	Mixed-Use Comm. & Res.	MUR2	Approx. FAR = 0.5		16	20	18.2	MUR2
26	Mixed-Use Comm. & Res.	MUR3	Approx. FAR = 0.7		21	25	23.1	MUR3
27	Mixed-Use Comm. & Res.	MUR4	Approx. FAR = 0.8		26	30	29.1	MUR4
28	Mixed-Use Comm. & Res.	MUR5	Approx. FAR = 1		31	35	34.6	MUR5
29	Mixed-Use Comm. & Res.	MUR6	Approx. FAR = 1.1		36	45	40.1	MUR6
30	Mixed-Use Comm. & Res.	MUR7	Approx. FAR = 1.6		46	65	54.6	MUR7
31	Mixed-Use Comm. & Res.	MUR8	Approx. FAR = 2.2		66	100	75.5	MUR8
32	Mixed-Use Comm. & Res.	MUR9	Approx. FAR = 3.2		101	125	110.5	MUR9
33	Mixed-Use Comm. & Res.	MUR10	Approx. FAR = 6.4		126	700	222.5	MUR10
34	Future Urban Development	FUD					10	FUD
	Standardized Regional Zones	Zoning						Zoning
35	Commercial - Central	CC						CC
36	Commercial - General	CG						CG
37	Commercial - Neighborhood	CN						CN
38	Commercial - Office	CO						CO
39	Public & semi-public Uses	PF						PF
40	Industrial Campus	IC						IC
41	Industrial Office	IO						IO
42	Industrial - Light	IL						IL
43	Industrial - Heavy	IH						IH
44	Parks & Open Space	POS						POS
45	Exclusive Farm Use	EFU						EFU
46	Rural Residential	RRFU						RRFU
47	Rural Commercial	RC						RC
48	Rural Industrial	RI						RI

[http://rlismetadata.oregonmetro.gov/display\\_rl.cfm?Meta\\_layer\\_id=416&Db\\_type=rlisite](http://rlismetadata.oregonmetro.gov/display_rl.cfm?Meta_layer_id=416&Db_type=rlisite)



### Appendix 3: MetroScope\_zones\_taz2162.pdf



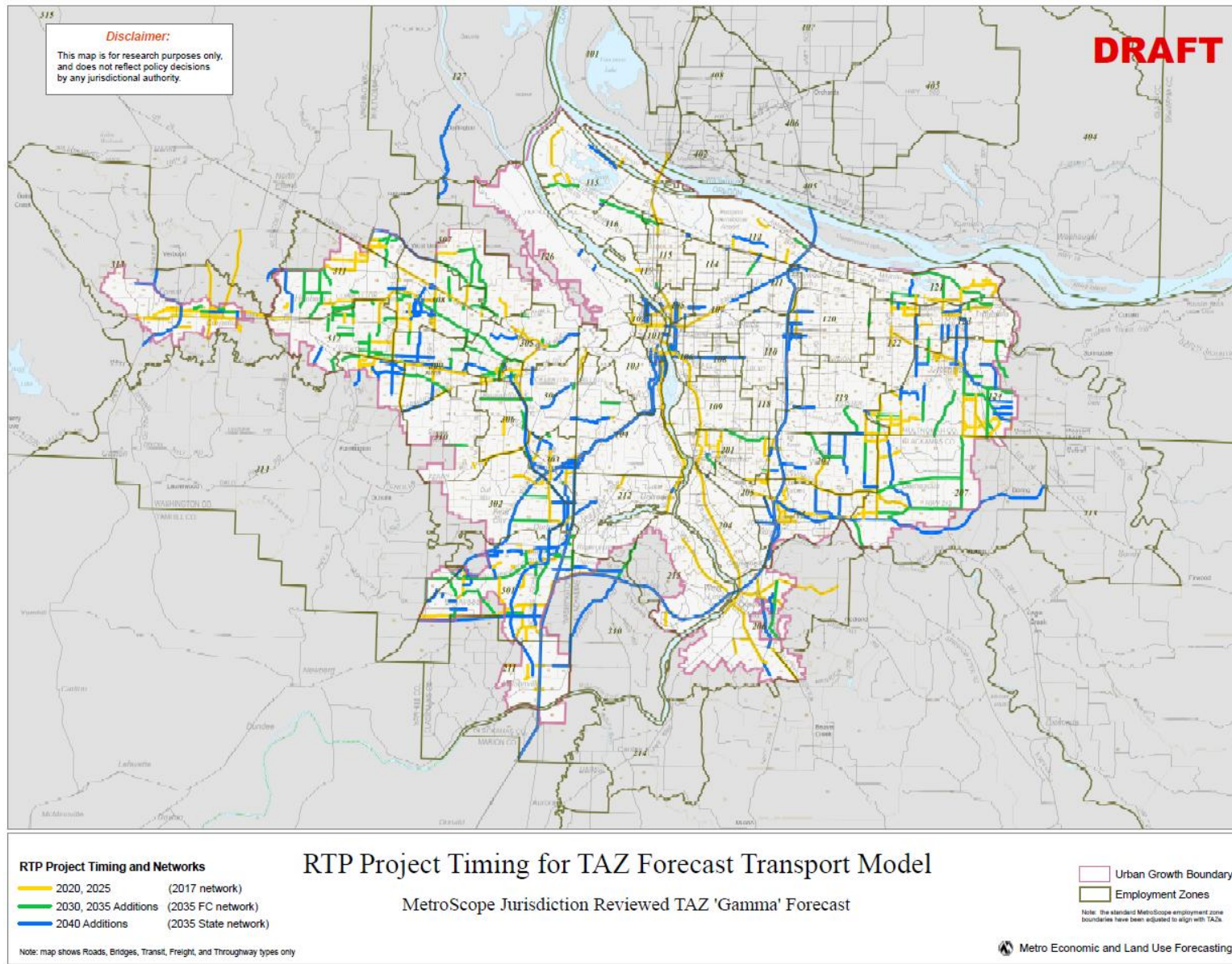
[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22\\_meeting/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/July22_meeting/)



## Appendix 4: Metro UGB Residential Capacity Assumption – Jurisdiction Reviewed (DRAFT: 9/19/2012)

Local Government	TOTAL	Single Family (SF)		Low Density Multi-family (MF)		High Density Multi-family (MF)		New Urban		Urban Renewal Areas	Jurisdiction Capacity by Building Type		Percent of Jurisdiction Capacity by Building Type					
		Vacant	Infill	Vacant	Redev.	Vacant	Redev.	SF	MF		SF	MF	Percent of Total Capacity				Vacant %Hi-MF	Redev. %Hi-MF
													%SF	%MF	%Lo-MF	%Hi-MF		
Clackamas Total	63,228	5,578	11,906	2,241	6,020	23	489	17,353	14,117		34,837	22,891	55%	45%	13.1%	0.8%	0.0%	0.8%
Damascus	19,932	0	0	0	0	0	0	10,892	9,041	0	10,892	9,041	55%	45%				
Gladstone	1,093	38	210	34	312	0	0	0	0	500	247	346	23%	77%	31.6%			
Happy Valley	9,099	1,184	1,403	690	147	0	0	2,013	3,662	0	4,601	4,498	51%	49%	9.2%			
Johnson City	0	0	0	0	0	0	0	0	0	0	0	0						
Lake Oswego	3,383	275	1,125	94	280	22	387	0	0	1,200	1,400	783	41%	59%	11.0%	12.1%	0.7%	11.4%
Milwaukie	1,538	185	897	128	225	1	102	0	0		1,082	456	70%	30%	22.9%	6.7%	0.1%	6.7%
Oregon City	7,167	846	1,726	471	1,488	0	0	178	457	2,000	2,750	2,417	38%	62%	27.3%			
Rivergrove	72	48	25	0	0	0	0	0	0		72	0	100%					
West Linn	1,603	607	766	44	185	0	0	0	0		1,374	230	86%	14%	14.3%			
Wilsonville	3,570	377	614	337	1,064	0	0	392	485	300	1,383	1,886	39%	61%	39.3%			
Clackamas UIA	15,770	2,017	5,141	443	2,319	0	0	3,878	473	1,500	11,035	3,235	70%	30%	17.5%			
Multnomah Total	228,859	7,174	18,063	4,509	32,844	8,289	99,000	2,679	4,801		27,916	149,443	12%	88%	16.3%	46.9%	3.6%	43.3%
Fairview	684	104	214	103	263	0	0	0	0		318	366	46%	54%	53.5%			
Gresham	20,976	1,242	3,463	1,087	6,821	269	1,429	987	1,378	4,300	5,692	10,984	27%	73%	37.7%	8.1%	1.3%	6.8%
Maywood Park	6	5	1	0	0	0	0	0	0		6	0	100%					
Portland	198,991	5,256	12,597	3,228	25,119	8,020	97,571	0	0	47,200	17,853	133,938	9%	91%	14.2%	53.1%	4.0%	49.0%
Troutdale	1,124	98	527	80	420	0	0	0	0		624	500	56%	44%	44.4%			
Wood Village	270	17	20	11	222	0	0	0	0		37	232	14%	86%	86.2%			
Multnomah UIA	6,808	453	1,240	0	0	0	0	1,693	3,423		3,386	3,423	50%	50%				
Washington Total	78,236	6,600	23,786	9,579	20,373	981	4,215	5,456	4,245		35,843	39,393	46%	54%	38.3%	6.6%	1.3%	5.4%
Beaverton	10,217	296	1,300	2,077	5,480	303	725	36	0		1,632	8,585	16%	84%	74.0%	10.1%	3.0%	7.1%
Cornelius	209	22	47	17	122	0	0	0	0		70	140	33%	67%	66.8%			
Durham	61	15	25	0	21	0	0	0	0		40	21	66%	34%	34.0%			
Forest Grove	4,581	879	1,184	545	1,973	0	0	0	0		2,063	2,518	45%	55%	55.0%			
Hillsboro	15,038	910	984	4,816	7,283	27	3	14	0	1,000	1,908	12,130	13%	87%	80.5%	0.2%	0.2%	0.0%
King City	442	231	90	110	11	0	0	0	0		320	121	73%	27%	27.4%			
Sherwood	949	50	248	111	317	0	0	53	169		351	597	37%	63%	45.1%			
Tigard	8,893	640	2,461	1,270	1,811	3	707	0	0	2,000	3,102	3,791	35%	65%	34.7%	8.0%	0.0%	7.9%
Tualatin	613	84	345	86	98	0	0	0	0		429	184	70%	30%	30.1%			
Washington UIA	37,233	3,473	17,101	546	3,256	648	2,780	5,353	4,076		25,927	11,306	70%	30%	10.2%	9.2%	1.7%	7.5%
UGB TOTAL	370,324	19,352	53,755	16,329	59,237	9,294	103,704	25,489	23,163	60,000	98,596	211,728	27%	73%	20.4%	30.5%	2.5%	28.0%
	MF category includes capacity in MFR and MUR zone classes							New Urban = post-1997 UGB amendments						Low density MF < 75 units per acre				
	UIA = unincorporated county areas inside Metro UGB							Cities are defined by 2010 RLIS boundaries						High density MF > 75 units per acre				

## Appendix 5: Illustration of the Timing of Transportation Projects and Investments



[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/FINAL\\_2035-2040\\_TAZforecast/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/FINAL_2035-2040_TAZforecast/)

Appendix 7: Subsidized Redevelopment Supply Assumptions (8/24/2011)

							Percent of dwelling units with incentive available (timing)							
Location	2040 Design Type	Subsidized Capacity DU	Mscope Zone Class	DU per net acre	Subsidy per Unit	Estimated Subsidy Assumption	2015	2020	2025	2030	2035	2040	2045	Total
Downtown	CC	6,500	MUR9	125	\$50,000	\$325,000,000	20%	40%	40%					100%
North Macadam	CC	7,500	MUR9	125	\$50,000	\$375,000,000	33%	33%	33%					100%
Oregon Conv. Center	CC	6,000	MUR9	125	\$50,000	\$300,000,000	33%	33%	33%					100%
River District	CC	12,000	MUR9	125	\$50,000	\$600,000,000	25%	25%	25%	25%				100%
South Park Blocks	CC	1,000	MUR9	125	\$50,000	\$50,000,000	25%	25%	25%	25%				100%
Amberglen/Tanasbourne	Reg. Ctr.	500	MUR4	30	\$25,000	\$12,500,000	25%	25%	25%	25%				100%
Clackamas Town Center	Reg. Ctr.	1,500	MUR4	30	\$25,000	\$37,500,000	25%	25%	25%	25%				100%
Gateway	Reg. Ctr.	2,000	MUR4	30	\$25,000	\$50,000,000	25%	25%	25%	25%				100%
Gresham	Reg. Ctr.	2,500	MUR4	30	\$25,000	\$62,500,000	33%	33%	33%					100%
Hillsboro	Reg. Ctr.	500	MUR4	30	\$25,000	\$12,500,000		20%	20%	20%	20%	20%		100%
Oregon City	Reg. Ctr.	2,000	MUR4	30	\$10,000	\$20,000,000	33%	33%	33%					100%
Vancouver	Reg. Ctr.	6,000	MUR4	30	\$25,000	\$150,000,000	20%	20%	20%	20%	20%			100%
Gladstone	Town Ctr.	500	MUR4	30	\$10,000	\$5,000,000	20%	20%	20%	20%	20%			100%
Hollywood	Town Ctr.	2,500	MUR4	30	\$10,000	\$25,000,000	25%	25%	25%	25%				100%
Lake Oswego	Town Ctr.	1,200	MUR4	30	\$25,000	\$30,000,000		20%	20%	20%	20%	20%		100%
Lents	Town Ctr.	1,200	MUR4	30	\$25,000	\$30,000,000		20%	20%	20%	20%	20%		100%
Rockwood (Gresham)	Town Ctr.	1,200	MUR4	30	\$25,000	\$30,000,000	20%	20%	20%	20%	20%			100%
Tigard	Town Ctr.	2,000	MUR4	30	\$10,000	\$20,000,000		20%	20%	20%	20%	20%		100%
Interstate	Non-Ctr. UR	4,000	MUR4	30	\$50,000	\$200,000,000	25%	25%	25%	25%				100%
MLK	Non-Ctr. UR	1,500	MUR4	30	\$50,000	\$75,000,000	20%	20%	20%	20%	20%			100%
Villebois (Wilsonville)	Non-Ctr UR	300	MUR4	30	\$10,000	\$3,000,000	33%	33%	33%					100%
NE 60th Ave MAX Station	Portland TOD*	600	MUR4	30	\$10,000	\$6,000,000	25%	25%	25%	25%				100%
NE 82nd Ave MAX Station	Portland TOD*	600	MUR4	30	\$10,000	\$6,000,000	25%	25%	25%	25%				100%
E 148th Ave MAX Station	Portland TOD*	600	MUR4	30	\$10,000	\$6,000,000	25%	25%	25%	25%				100%
E 162nd Ave MAX Station	Gresham TOD*	600	MUR4	30	\$10,000	\$6,000,000	25%	25%	25%	25%				100%
E 122nd Ave MAX Station	Portland TOD*	600	MUR4	30	\$10,000	\$6,000,000	25%	25%	25%	25%				100%
SE Division St.	Portland TOD*	600	MUR4	30	\$10,000	\$6,000,000	25%	25%	25%	25%				100%
Canby	rural City	600	MUR4	30	\$10,000	\$6,000,000			20%	20%	20%	20%	20%	100%
Sandy	rural City	600	MUR4	30	\$10,000	\$6,000,000			20%	20%	20%	20%	20%	100%

REGION TOTAL:67,200units

Metro UGB Total:60,000units

Portland subtotal:47,200units

\* 1/4 mile radius around MAX stations at NE 60th, NE 82nd, 122nd, 148th, SE Division, Portland portion of 162nd

Note: updated from 7/27/11

Appendix 7: Urban Reserve Capacity Assumptions

Urban Reserve Name	Code	Subarea	Year Avail.	SF acres	MF acres	SF Cap	MF Cap	Total Cap	IND acres	COM acres
Gresham East	1C		2040	323	111	2,815	4,986	7,801	0	28
Boring	1D		2045	0	0	0	0	0	1,159	0
Boring	1F		2045	0	0	0	0	0	492	0
Damascus	2A		2045	466	160	4,064	7,197	11,261	0	40
Holcomb	3B		2045	115	39	713	1,767	2,479	0	10
Holly Ln/Newell Ck Canyon	3C		2045	106	36	658	1,631	2,289	0	9
Maplelane	3D		2035	169	58	1,052	2,608	3,661	0	14
Henrici	3F		2030	110	38	685	1,699	2,384	0	9
Beaver Creek Bluffs	3G		2030	77	26	479	1,187	1,666	0	7
Stafford	4A									
		4A-N	2040	208	71	1,293	3,205	4,497	0	18
		4A-S	2045	590	202	4,282	9,099	13,381	0	51
Rosemont	4B		2040	55	19	343	851	1,195	0	5
Borland	4C		2045	288	99	1,790	4,439	6,229	0	25
Norwood	4D		2045	460	158	2,863	7,098	9,960	0	39
I-5 East – Washington Co	4E		2045	343	117	2,132	5,285	7,417	0	29
I-5 East – Washington Co	4F		2045	112	38	694	1,720	2,414	0	10
I-5 East – Washington Co	4G		2040	264	91	1,643	4,073	5,716	0	23
Advance	4H		2025	98	34	949	1,513	2,462	0	8
Sherwood North	5A		2035	40	14	247	612	859	0	3
Sherwood West	5B		2030	506	173	4,405	7,801	12,206	0	43
Sherwood South	5D		2035	140	48	1,223	2,165	3,388	0	12
Tonquin	5F		2035	0	0	0	0	0	257	0
Grahams Ferry	5G		2035	65	22	403	998	1,401	0	6
Wilsonville Southwest	5H		2030	25	8	239	381	620	0	2
South Hillsboro	6A									
		6A-E	2025	403	138	3,509	6,214	9,723	0	60
		6A-W	2035	245	84	2,369	3,776	6,145	0	21
South Cooper Mountain	6B									
		6B-i	2025	225	77	1,455	2,554	4,009	0	19
		6B-ii	2035	212	73	1,371	2,406	3,777	0	18
		6B-iii	2035	92	31	593	1,041	1,634	0	8
		6B-iv	2045	92	32	597	1,048	1,645	0	8
Roy Rogers West	6C									
		6C-i	2030	117	40	852	1,811	2,662	0	10
		6C-ii	2035	60	20	433	921	1,354	0	5
		6C-iii	2045	59	20	429	913	1,342	0	5
Beef Bend South	6D									
		6D-E	2035	51	18	445	788	1,233	0	4
		6D-W	2045	112	38	815	1,732	2,547	0	10
David Hill	7A									
		7A-i	2040	43	15	309	657	966	0	4
		7A-ii	2045	63	22	456	970	1,426	0	5
Forest Grove North	7B									
		7B-i	2025	0	0	0	0	0	189	0
		7B-ii	2035	0	0	0	0	0	84	0
		7B-iii	2045	0	0	0	0	0	146	0
Cornelius East	7C		2025	53	18	462	819	1,281	0	5
Cornelius South	7D		2025	101	35	878	1,555	2,432	0	9
Forest Grove South	7E		2025	0	0	0	0	0	36	0
North Hillsboro	8A									
		8A-E	2025	168	0	1,120	0	1,120	629	0
		8A-W	2035	339	29	1,933	1,301	3,234	893	172
Shute Road Interchange	8B									
		8B-i	2035	0	0	0	0	0	61	0
		8B-ii	2035	0	0	0	0	0	304	0
Bethany West	8C		2035	76	26	663	1,174	1,837	0	7
Urban Reserves Total				7,068	2,278	51,662	99,995	151,657	4,250	760
				MF acres		SF Cap	MF Cap	Total Cap	IND acres	COM acres
2025										
Total				1,048		8,374	12,654	21,028	854	101
2030										
Total				835		6,660	12,879	19,539	0	72
2035										
Total				1,488		10,732	17,790	28,522	1,599	270
2040										
Total				893		6,403	13,772	20,176	0	77
2045										
				2,805		19,493	42,900	62,393	1,797	240

Total							
	7,068	2,278	51,662	99,995	151,657	4,250	760



Appendix 8: 2010-40 TAZ Forecast: MetroScope “Gamma” version land use scenario assumptions

November 2012

Metro Research Center

Theme	Major category	Subcategory	Scenario Assumption
DEMAND	Forecast control totals Portland-Hillsboro-Vancouver, OR-WA, PMSA (7 counties) Source: middle-thrid.xls	Household	Use 2010-35 adjusted lower middle-third forecast 2010: 873,100 (Census 2010) 2040: 1,346,600 2010-35: 473,500      %APR: 1.45%
		Employment	Use 2010-40 adjusted lower middle-third forecast 2010: 968,800 (BLS 2010 estimate) 2040: 1,593,000 2010-35: 624,200      %APR: 1.67%
SUPPLY (CAPACITY)	Metro UGB capacity	Zoned capacity	Tri-county (Clackamas, Multnomah, Washington): updated 2010 zone class
		Vacant land	2008 vacant land based on aerial photography, permit data, and assessor records and amended by local review
		Buildable land	2008 inventory (less environmental constraints based on latest 2010 data, also deduct major known utility easements)
		Redev. capacity	Reviewed by local jurisdictions (see: Metro Research Center capacity white paper)
		Prospective UGB expansions	See separate map (expansion locations based on designated Urban Reserves; expansion timing assumptions informed by local jurisdiction review)
		Recent UGB expansions	Urban zoning assumptions for new urban areas (i.e., post-1997 expansions)and future urban reserves are delayed to account for lags in infrastructure development
	Clark County capacity	Zoning	2010 zoning
		Vacant, buildable land	2010 VBLM - provided by Clark County, using Clark County methodology (i.e. different than Metro’s methodology for vacant / buildable)
		Redev. capacity	2010 VBLM
		Urban Growth Area expansions	Clark Co. urban reserve areas in effect in 2009 (incorporates latest court decision that added in ~19 sq. miles) metered in roughly equal proportions [reflects court overturning selected areas] Zoning is based on latest comp plans
	Neighbor city capacity	Zoning	Zoned capacity is assumed equal to twice year 2000 Census number of households
		UGB expansions	Implicitly calculated from zoned capacity amount
	Tri-county rural residential capacity	M-49 and RRFU capacity	Assume 3 dwelling units per Measure 37 claims
	Ex-urban rural county capacity	Columbia, Yamhill & Marion (part)	Zoned capacity is assumed equal to twice year 2000 Census number of households
Other forecast variables	Construction costs	SDC	Assume added \$25,000 per new dwelling unit in all locations to per unit construction costs
	exogenous Consumer preference assumptions	Residential subsidized redevelopment	Refer to separate schedule of investments (3 tiers of subsidies: \$50,000, \$25,000, \$10,000 per new redev. unit); e.g., reflects either active urban renewal or other incentive such as a vertical housing tax credit.
		Neighborhood score	Neighborhood score is an input that describes the relative (historic) desirability of different neighborhoods (based on a statistical analysis of historic residential sales data that controls for residence size, lot size, 3 of bedrooms, etc.)
	Accessibility	Transportation Travel times	Use 3 network years: 2010, 2017 and 2035 2010 network of existing conditions (2010-15 forecast years) 2017 network (2020-25 forecast years) 2035 network of federal financially constrained RTP assumptions (2020-25 forecast years) 2035 network state RTP assumptions (2040 and 2045 forecast years)

**Appendix 9: Ordinance No. 12-1292 Exhibits A****2035 Reviewed Household Forecast Distribution by Jurisdiction  
MetroScope Gamma TAZ Forecast****Final Draft 9/19/2012**

Notes: Jurisdiction geographies are approximate, and based on TAZs. Urban Reserves are considered to be outside the UGB.

Inside UGB:	2010 Reviewed HH			2035 Reviewed HH			2010-2035 Change		
	SF	MF	Total	SF	MF	Total	SF	MF	Total
<b>Beaverton</b>	18,128	21,953	40,081	20,038	30,479	50,517	1,910	8,526	10,436
<b>Cornelius</b>	2,467	1,051	3,518	3,428	2,085	5,513	961	1,034	1,995
<b>Damascus</b>	3,322	205	3,527	11,700	217	11,916	8,378	12	8,389
<b>Durham</b>	350	8	358	410	26	436	60	18	78
<b>Fairview</b>	1,677	1,954	3,631	1,927	2,076	4,003	250	122	372
<b>Forest Grove</b>	4,775	2,717	7,492	6,999	3,380	10,379	2,224	663	2,887
<b>Gladstone</b>	2,831	1,356	4,187	3,097	1,779	4,876	266	423	689
<b>Gresham</b>	19,781	18,243	38,024	25,394	25,656	51,051	5,613	7,413	13,027
<b>Happy Valley</b>	4,162	273	4,435	9,898	512	10,410	5,736	239	5,975
<b>Hillsboro</b>	18,575	14,251	32,826	21,762	23,211	44,973	3,187	8,960	12,147
<b>King City</b>	572	383	955	590	379	969	18	-4	14
<b>Lake Oswego</b>	10,887	5,180	16,067	12,307	6,984	19,291	1,420	1,804	3,224
<b>Milwaukie</b>	5,934	2,307	8,241	7,166	2,574	9,740	1,232	267	1,499
<b>Oregon City</b>	8,463	3,511	11,974	12,186	4,861	17,047	3,723	1,350	5,073
<b>Portland</b>	143,801	104,915	248,716	165,636	204,068	369,704	21,835	99,153	120,988
<b>Sherwood</b>	4,971	1,505	6,476	5,553	1,716	7,269	582	211	793
<b>Tigard</b>	12,035	6,632	18,667	15,120	10,877	25,997	3,085	4,245	7,330
<b>Troutdale</b>	3,981	1,806	5,787	4,506	2,126	6,632	525	320	845
<b>Tualatin</b>	5,391	4,847	10,238	5,980	5,190	11,170	589	343	932
<b>West Linn</b>	7,670	2,582	10,252	9,237	2,751	11,988	1,567	169	1,736
<b>Wilsonville</b>	3,471	4,509	7,980	5,625	5,883	11,508	2,154	1,374	3,528
<b>Wood Village</b>	458	1,081	1,539	488	1,121	1,609	30	40	70
<b>Uninc. Clackamas Co.</b>	21,497	13,559	35,056	28,816	16,650	45,466	7,319	3,091	10,410
<b>Uninc. Multnomah Co.</b>	1,715	314	2,029	3,260	847	4,107	1,545	533	2,078
<b>Uninc. Washington Co.</b>	50,176	21,204	71,380	71,698	28,778	100,476	21,522	7,574	29,096
<b>Inside UGB Total</b>	357,090	236,346	593,436	452,823	384,225	837,048	95,733	147,879	243,612
<b>Outside UGB:</b>									
<b>Clackamas County</b>	40,749	4,202	44,951	60,792	5,600	66,392	20,043	1,398	21,441
<b>Multnomah County</b>	3,776	97	3,873	4,243	122	4,365	467	25	492
<b>Washington County</b>	11,259	101	11,360	27,369	5,401	32,770	16,110	5,300	21,410
<b>Clark County</b>	114,638	114,638	158,110	164,207	64,185	228,392	49,569	20,713	70,282
<b>Outside UGB Total</b>	170,422	119,038	218,294	256,610	75,309	331,919	86,188	27,437	113,625
<b>Four-County Total</b>	527,512	284,218	811,730	709,433	459,534	1,168,967	181,921	175,316	357,237

**Appendix 8: Ordinance No. 12-1292 Exhibits B**

**2035 Reviewed Employment Forecast Distribution by Jurisdiction  
MetroScope Gamma TAZ Forecast**

**Final Draft 9/19/2012**

Notes: Jurisdiction geographies are approximate, and based on TAZs. Urban Reserves are considered to be outside the UGB.

	2010 Employment Geocode				2035 Jurisdiction Review				2010 - 2035 Change			
	Retail	Service	Other	Total	Retail	Service	Other	Total	Retail	Service	Other	Total
<b>Inside UGB:</b>												
Beaverton	11,041	19,261	21,539	51,841	14,254	33,282	27,822	75,358	3,213	14,021	6,283	23,517
Cornelius	693	711	1,680	3,084	1,611	1,880	4,440	7,931	918	1,169	2,760	4,847
Damascus	260	357	908	1,525	902	1,613	1,894	4,409	642	1,256	986	2,884
Durham	1	213	318	532	1	307	458	766	0	94	140	234
Fairview	236	497	1,878	2,611	558	3,293	3,724	7,575	322	2,796	1,846	4,964
Forest Grove	882	2,018	2,617	5,517	1,747	3,455	5,343	10,545	865	1,437	2,726	5,028
Gladstone	702	546	883	2,131	903	1,040	1,092	3,035	201	494	209	904
Gresham	7,353	8,871	16,408	32,632	12,334	20,154	26,079	58,567	4,981	11,283	9,671	25,935
Happy Valley	241	256	621	1,118	789	1,842	1,616	4,247	548	1,586	995	3,129
Hillsboro	9,584	14,449	34,227	58,260	12,152	25,518	55,733	93,403	2,568	11,069	21,506	35,143
King City	137	269	64	470	173	511	137	821	36	242	73	351
Lake Oswego	2,553	7,024	8,670	18,247	2,323	11,584	8,879	22,786	-230	4,560	209	4,539
Milwaukie	1,403	3,527	6,658	11,588	1,944	5,751	7,712	15,407	541	2,224	1,054	3,819
Oregon City	3,081	3,727	7,580	14,388	5,418	6,990	10,077	22,485	2,337	3,263	2,497	8,097
Portland	65,150	139,116	170,076	374,342	76,134	218,147	214,199	508,482	10,984	79,031	44,123	134,140
Sherwood	1,103	1,206	1,907	4,216	1,643	2,604	5,005	9,252	540	1,398	3,098	5,036
Tigard	9,072	11,901	16,196	37,169	10,764	23,818	19,650	54,232	1,692	11,917	3,454	17,063
Troutdale	1,272	493	2,361	4,126	2,039	2,357	5,615	10,011	767	1,864	3,254	5,885
Tualatin	4,372	6,140	12,460	22,972	5,066	8,868	21,305	35,239	694	2,728	8,845	12,267
West Linn	966	1,593	1,693	4,252	1,517	2,683	2,331	6,531	551	1,090	638	2,279
Wilsonville	2,480	4,839	9,754	17,073	3,536	9,733	14,150	27,419	1,056	4,894	4,396	10,346
Wood Village	1,261	242	531	2,034	1,783	1,158	1,489	4,430	522	916	958	2,396
Uninc. Clackamas Co.	11,506	13,302	20,344	45,152	15,519	26,628	25,775	67,922	4,013	13,326	5,431	22,770
Uninc. Multnomah Co.	109	377	396	882	749	1,658	2,367	4,774	640	1,281	1,971	3,892
Uninc. Washington Co.	5,929	13,844	17,097	36,870	8,659	23,012	31,142	62,813	2,730	9,168	14,045	25,943
<b>Inside UGB Total</b>	<b>141,387</b>	<b>254,779</b>	<b>356,866</b>	<b>753,032</b>	<b>182,518</b>	<b>437,886</b>	<b>498,034</b>	<b>1,118,440</b>	<b>41,131</b>	<b>183,107</b>	<b>141,168</b>	<b>365,408</b>



Outside UGB:	2010 Employment Geocode				2035 Jurisdiction Review				2010 - 2035 Change			
	Retail	Service	Other	Total	Retail	Service	Other	Total	Retail	Service	Other	Total
Clackamas County	4,803	5,218	15,348	25,369	8,182	11,295	22,359	41,836	3,379	6,077	7,011	16,467
Multnomah County	361	479	1,513	2,353	384	876	1,945	3,205	23	397	432	852
Washington County	854	1,640	5,881	8,375	2,363	6,659	18,084	27,106	1,509	5,019	12,203	18,731
Clark County	25,375	42,061	59,831	127,267	40,864	80,963	100,193	222,020	15,489	38,902	40,362	94,753
Outside UGB Total	31,393	49,398	82,573	163,364	51,793	99,793	142,581	294,167	20,400	50,395	60,008	130,803
Four-County Total	172,780	304,177	439,439	916,396	234,311	537,679	640,615	1,412,607	61,531	233,502	201,176	496,211

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/FINAL\\_2035-2040\\_TAZforecast/2035](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/FINAL_2035-2040_TAZforecast/2035) Reviewed Forecast Distribution by Jurisdiction.xlsx

## **Appendix 9: 2010, 2025, 2035, 2040 TAZ Growth Distribution**

(forthcoming)

# **Metro Regional Forecast Distribution Coordination Meetings and Discussions**

- **Regional Planning Directors' Meetings**
- **County Coordination Meetings**
- **Local Governments' Comments and  
Metro Response on the 2025 mid-  
term and 2035/2040 long-term  
distributions**

Metro

Research Center and Planning and Development Department

November 2012

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# Regional Planning Directors meeting invitations and agendas

## Purpose: Project kick-off meeting –October 2010

**From:** Paulette Copperstone  
**Sent:** Thursday, September 30, 2010 4:27 PM  
**To:** Paulette Copperstone  
**Subject:** FW: email for planning director meeting

Planning Directors,

Please find, attached, the agenda for the Household and Employment forecast kick off meeting for October 8, 10:30 – noon at Metro Council Chamber. The purpose of this meeting is to clarify the schedule, input needs and local review for the distribution of household and employment forecasts at the TAZ level.

We realize that many of you are anxiously awaiting new TAZ level data that is consistent with Metro's updated regional forecast and growth management decisions for use in TSPs, Comprehensive Plan Updates, Corridor studies and more. After Metro Council action on 20-year household and employment needs scheduled for this December, we will have the policy direction we need as staff to begin the process of updating the TAZ level data.

The last time we completed the TAZ allocation, in 2002 or 2003, the process took over two years. Based on the needs we all have for an updated TAZ allocation, we are proposing to complete the process in one year, by the end of 2011. We expect to be able to meet this schedule if we take the time now to identify the inputs we will need from you in the next few months and the process for reviewing the draft TAZ allocations in 2011. We would like to hear from you about the feasibility of this schedule and on the proposed review process.

I hope you or your staff will be able to join us next Friday, October 8. If you have questions, please call Gerry Uba at 503-797-1737.

Chris Deffebach

## Metro | Agenda

Meeting: Household & Employment Forecast Kick-off

Date: Friday, October 8, 2010

Time: 10:30 a.m. to noon

Place: Council Chamber

Objectives:

- Clarify key assumptions and modeling process for distributing household and employment forecasts at the TAZ level
- Identify most efficient method for local review
- Clarify schedule input needs and local review for distribution of household and employment forecasts at TAZ level

Time	Agenda Item	Presenter(s)
10:30 a.m.	<b>1. Welcome and Introductions</b>	John Williams
10:35 a.m.	<b>2. Background and Purpose of Meeting</b> <ul style="list-style-type: none"><li>• Uses of household and employment distributions</li><li>• Metro's role in regional coordination</li></ul>	Chris Deffebach
10:45 a.m.	<b>3. Proposed 2011 Allocation Work Plan and Need for Local Review</b> <ul style="list-style-type: none"><li>• Key assumptions, review and confirmation</li><li>• Base and forecast years</li><li>• Data format and level of aggregation</li><li>• Nature of comments needed at TAZ level</li></ul>	Dennis Yee Gerry Uba
11:30 a.m.	<b>4. Comments on Facilitating Local Review Process</b> <ul style="list-style-type: none"><li>• How to make reviews and comments efficient and effective</li></ul>	Gerry Uba
11:45 a.m.	<b>5. Near Term Availability of Household and Employment Data</b>	Ted Reid
11:50 a.m.	<b>6. Summary and Next Steps</b> <ul style="list-style-type: none"><li>• Planning Director input on assumptions</li><li>• Future meetings</li></ul>	
Noon	Adjourn	

## Purpose: Review and Comments on Land Supply/Capacity Assumptions and Methods

**From:** Paulette Copperstone

**Sent:** Friday, June 17, 2011 4:40 PM

**To:** dmazziotti@beavertonoregon.gov; rreynolds@ci.cornelius.or.us; rmeyer@ci.cornelius.or.us; ayap@ci.damascus.or.us; cityofdurham@comcast.net; jholan@forestgrove-or.gov; boyce@ci.gladstone.or.us; michaelw@ci.happy-valley.or.us; jasont@ci.happy-valley.or.us; patrickr@ci.hillsboro.or.us; johnson.city@hotmail.com; ronshay@buzzworm.com; degner@ci.oswego.or.us; dfrisbee@ci.oswego.or.us; mayorhardie@aol.com; manglek@ci.milwaukie.or.us; asherk@ci.milwaukie.or.us; tkonkol@city.org; susan.anderson@portlandoregon.gov; hajdukj@ci.sherwood.or.us; ron@tigard-or.gov; rfaith@ci.troutdale.or.us; ahurd-ravich@ci.tualatin.or.us; arouyer@ci.tualatin.or.us; jsonnen@westlinnoregon.gov; neamtzu@ci.wilsonville.or.us; billp@ci.wood-village.or.us; scottpem@co.clackamas.or.us; lindap@co.clackamas.or.us; ann.pytynia@greshamoregon.gov; camgil@co.clackamas.or.us; jennifer.donnelly@state.or.us; anne.debbaut@state.or.us; John Williams; Robin McArthur; Mike Hoglund; karen.c.schilling@co.multnomah.or.us; darren.nichols@state.or.us; brent\_curtis@co.washington.or.us; andrew\_singelakis@co.washington.or.us; Paulette Copperstone  
**Cc:** connellpc@comcast.net; tom.armstrong@portlandoregon.gov; dtaylor@beavertonoregon.gov; molly.vogt@greshamoregon.gov; kaha@westlinnoregon.gov; randygra@co.clackamas.or.us; jsalvon@beavertonoregon.com; rmeyer@ci.cornelius.or.us; tfranz@ci.cornelius.or.us; epalmer@ci.damascus.or.us; driordan@forestgrove-or.gov; jonathan.harker@greshamoregon.gov; brian.martin@greshamoregon.gov; michaelw@ci.happy-valley.or.us; dougm@ci.hillsboro.or.us; vickiew@ci.hillsboro.or.us; dono@ci.hillsboro.or.us; degner@ci.oswego.or.us; rososnk@ci.milwaukie.or.us; manglek@ci.milwaukie.or.us; cdunlop@ci.oregon-city.or.us; gary.odenthal@portlandoregon.gov; ortizp@ci.sherwood.or.us; preston@tigard-or.gov; emccallum@ci.troutdale.or.us; camedzake@ci.troutdale.or.us; chahn@ci.tualatin.or.us; tscott@ci.tualatin.or.us; jsonnen@westlinnoregon.gov; ckerr@westlinnoregon.gov; stark@ci.wilsonville.or.us; neamtzu@ci.wilsonville.or.us; billp@ci.wood-village.or.us; larrycon@co.clackamas.or.us; karenb@co.clackamas.or.us; jose.alvarez@clark.wa.gov; jennifer.donnelly@state.or.us; anne.debbaut@state.or.us; Dennis Yee; charles.beasley@multco.us; Cindy Pederson; Gerry Uba; Christina Deffebach; adam.t.barber@multco.us; chi.mai@odot.state.or.us; elaine.smith@odot.state.or.us; tom.bouillion@portofportland.com; steve.iwata@portlandoregon.gov; steve\_kelley@co.washington.or.us; Jim Cser; Maribeth Todd; Sonny Conder; lidwien.rahman@odot.state.or.us; Tom Kloster; Kim Ellis; 'Fritzie, Martha'; Jessica Martin  
**Subject:** New Date for Regional Planning Directors Meeting -July 22, 2011

Dear Regional Planning Directors,

The regional planning directors' meeting has been postponed for the last time to July 22, 2011 (from the last previously scheduled date – June 24). Please replace that date with this new date. We are sorry for the inconvenience in your calendar.

The recent "one-on-one" meetings we had with you and/or your staff to review the draft capacity estimates were very successful. However, we have not received comments from all of you as promised. We would not like to proceed to process the capacity data with a combination of comments from some local governments and Metro staff assumptions – rather – our goal is 100 percent return on comments.

As stated in my previous email, we know that all of you are waiting for and depending on these new allocations for multiple land use and transportation planning purposes. We are therefore looking forward to receiving the rest of the comments. We cannot afford to postpone the rescheduled meeting.

Thank you for your understanding and for your efforts towards the regional coordination of the growth allocation. We are looking forward to seeing you on Friday, July 22, 2011 at the Regional Planning Directors meeting.

Gerry Uba  
Metro Regional Growth Allocation Project Coordinator  
[Gerry.uba@oregonmetro.dst.or.us](mailto:Gerry.uba@oregonmetro.dst.or.us)  
503-797-1737

---

**From:** Paulette Copperstone

**Sent:** Friday, April 29, 2011 4:58 PM

**To:** [dmazziotti@beavertonoregon.gov](mailto:dmazziotti@beavertonoregon.gov); [rreynolds@ci.cornelius.or.us](mailto:rreynolds@ci.cornelius.or.us); [rmeyer@ci.cornelius.or.us](mailto:rmeyer@ci.cornelius.or.us); [ayap@ci.damascus.or.us](mailto:ayap@ci.damascus.or.us); [cityofdurham@comcast.net](mailto:cityofdurham@comcast.net); [jholan@forestgrove-or.gov](mailto:jholan@forestgrove-or.gov); [boyce@ci.gladstone.or.us](mailto:boyce@ci.gladstone.or.us); [michaelw@ci.happy-valley.or.us](mailto:michaelw@ci.happy-valley.or.us); [jasont@ci.happy-valley.or.us](mailto:jasont@ci.happy-valley.or.us); [patrickr@ci.hillsboro.or.us](mailto:patrickr@ci.hillsboro.or.us); [johnson.city@hotmail.com](mailto:johnson.city@hotmail.com); [ronshay@buzzworm.com](mailto:ronshay@buzzworm.com); [degner@ci.oswego.or.us](mailto:degner@ci.oswego.or.us); [dfrisbee@ci.oswego.or.us](mailto:dfrisbee@ci.oswego.or.us); [mayorhardie@aol.com](mailto:mayorhardie@aol.com); [manglek@ci.milwaukie.or.us](mailto:manglek@ci.milwaukie.or.us); [asherk@ci.milwaukie.or.us](mailto:asherk@ci.milwaukie.or.us); [tkonkol@orcify.org](mailto:tkonkol@orcify.org); [susan.anderson@portlandoregon.gov](mailto:susan.anderson@portlandoregon.gov); [hajdukj@ci.sherwood.or.us](mailto:hajdukj@ci.sherwood.or.us); [ron@tigard-or.gov](mailto:ron@tigard-or.gov); [rfaith@ci.troutdale.or.us](mailto:rfaith@ci.troutdale.or.us); [ahurd-ravich@ci.tualatin.or.us](mailto:ahurd-ravich@ci.tualatin.or.us); [arouyer@ci.tualatin.or.us](mailto:arouyer@ci.tualatin.or.us); [jsonnen@westlinnoregon.gov](mailto:jsonnen@westlinnoregon.gov); [neamtzu@ci.wilsonville.or.us](mailto:neamtzu@ci.wilsonville.or.us); [billp@ci.wood-village.or.us](mailto:billp@ci.wood-village.or.us); [scottpem@co.clackamas.or.us](mailto:scottpem@co.clackamas.or.us); [lindap@co.clackamas.or.us](mailto:lindap@co.clackamas.or.us); [camgil@co.clackamas.or.us](mailto:camgil@co.clackamas.or.us); [jennifer.donnelly@state.or.us](mailto:jennifer.donnelly@state.or.us); [anne.debbaut@state.or.us](mailto:anne.debbaut@state.or.us); Paulette Copperstone; John Williams; Robin McArthur; Mike Hoglund; [karen.c.schilling@co.multnomah.or.us](mailto:karen.c.schilling@co.multnomah.or.us); [darren.nichols@state.or.us](mailto:darren.nichols@state.or.us); [brent\\_curtis@co.washington.or.us](mailto:brent_curtis@co.washington.or.us); [andrew\\_singelakis@co.washington.or.us](mailto:andrew_singelakis@co.washington.or.us)

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**Subject:** Regional Planning Directors Meeting - June 3, 2011

Dear Planning Directors,



You are invited to a Regional Planning Directors meeting scheduled on Friday, June 3, 2011, from 9 a.m. to noon at Metro Regional Center to finalize the capacity assumptions for use in allocating forecasted household and employment growth. These capacity assumptions are the result of several months of work by local jurisdiction staff who have used their knowledge and experience to refine the regional capacity assumptions.

Metro is in the process of preparing new TAZ allocations of households and employment that reflect the capacity of residential and employment land, as well as the urban and rural reserves designations, transportation investments adopted as part of the Regional Transportation Plan, and the growth forecast adopted in 2009 for the urban growth report. On October 8, 2010 you or your alternate participated in the allocation process kick-off meeting at Metro. Following your review and finalization of the capacity assumptions, you will have the opportunity to review the future allocations beginning in late summer for mid-term allocations (2015, 2020, 2025, 2025) and in the fall for long term allocations (2030, 2035, 2040, 2045).

Please add the June 3 meeting to your calendar. I will send additional meeting information prior to June 3.

Best regards,

Gerry

.....  
O. Gerald Uba, PhD  
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## Meeting Agenda

Meeting: Regional Planning Directors Meeting (#2)

Date: Friday, July 22, 2011

Time: 9:00 a.m. to noon

Place: Council Chamber

Outcome: Regional agreement on growth allocation assumptions and land capacity methods

**A. Welcome and Introductions [15 minutes]** Hoglund/All

**B. Overview of Meeting Materials and Agenda [5 minutes]** Hoglund  
Regional Zoning Map /TAZ Map & Table /2010 Base Year data/etc.

**C. Completion of Basic Data Sets [20 minutes]**

- |  |     |
|--|-----|
| 1. Local to Regional Zoning: Highlights of local governments' comments | Yee |
| 2. TAZ Boundary Adjustments: Changes requested and made                | Uba |
| 3. Base Year (2010) Household Estimates                                | Yee |
| 4. Base Year (2010) Jobs Estimates                                     | Yee |

### **BREAK - (5 minutes)**

**Ⓢ Presentation format and guidelines** Hoglund  
Questions for agenda item D will be answered during the  
Presentation of agenda item E

**D. Buildable Land and Capacity Results [60 minutes]**

- |  |     |
|--|-----|
| 1. <b>Single family capacity</b>   | Yee |
| Vacant and Developed land capacity/ Redevelopment capacity filters   |     |
| 2. <b>Multifamily and Mixed use residential capacity</b>   | Yee |
| Vacant and Developed land capacity / Redevelopment capacity filters /<br>Mixed use capacity (residential and commercial split / Subsidized<br>redevelopment method |     |
| 3. <b>Employment (Commercial &amp; Industrial) Land Capacity</b>   | Yee |

**E. Overview of Revised Regional Methods for BLI and Capacity [50 minutes]**

*(explanation of why the new methods are better)*

- |  |      |
|--|------|
| 1. Vacant land identification by zoning (or comp plan)<br>(fully vacant / partially vacant) (New urban areas assumptions<br>capacity assumptions method) | Yee  |
| 2. Exempt tax lots (zero capacity land) identification: Exceptions<br>Todd/Kelley  |      |
| 3. Environmentally constrained land identification<br>Mensher<br>(Title 3/Title 13/floodway/utility easement)  |      |
| 4. Single family vacant and redevelopment land capacity method<br>Kelley/Todd<br>(including density transfer calculation)                                |      |
| 5. MFR and MUR vacant land and redevelopment capacity<br>Armstrong/Conrad<br>(including density transfer calculation)                                    |      |
| 6. Employment (Commercial and Industrial) vacant and<br>redevelopment land capacity method   | Todd |
| 7. Urban reserve areas urbanization/capacity assumptions method  | Uba  |
| 8. Ex-urban city / county supply assumptions   | Cser |

**F. Determine Value from Forecast Range [10 minutes]**

Reid

**G. Next Steps [10 minutes]**

Uba

- a) Tandem operation: Transportation and MetroScope models calibration
- b) Mid-term and Long-term allocations: Release and Comments
- c) Reports: Documentation of methods, etc
- d) MTAC review and comment on forecast allocation
- e) MPAC on forecast allocation coordination
- f) Metro Council adoption

**H. Closing Remarks/Adjourn [5 minutes]**

Hoglund

## Purpose: Review and Comments on 2035/2040 Forecast Distributions

**From:** Alexandra Eldridge **On Behalf Of** Robin McArthur  
**Sent:** Friday, September 07, 2012 2:29 PM  
**To:** Alexandra Eldridge  
**Subject:** Meeting Confirmation: 9/19/12 Regional Planning Directors meeting

Dear Regional Planning Directors,

The purpose of this email is to inform you of the change in the date of the meeting of the Regional Planning Directors meeting to discuss the final results of the distribution of population and employment growth out to 2040 and to the Transportation Analysis Zone (TAZ) level. We moved the meeting from September 12 to September 19 after allowing for additional local government review and comment.

The meeting is now scheduled for **Wednesday, September 19, 2012, from 2:30 p.m. to 4:30 p.m. at Metro Regional Center, in Room 370 A & B.** Please put this new meeting date on your calendar. The meeting agenda will include an overview of previous accomplishments and the discussion of the short-term (2025) and long-term (2035, 2040) distributions of population and employment growth. A detailed meeting agenda will be sent to you next week. The meeting will be chaired by Mike Hoglund, Director of Metro's Research Center and Metro project staff will be available to present results and answer questions.

You and other staff in your jurisdictions played major role in the effort leading up to this meeting. It has been a truly coordinated effort between Metro and local governments in the Portland metropolitan area. I am aware that many of you are looking forward to using the final allocation information for various projects and we are anxious to complete this project this November.

Please do not hesitate to contact the project coordinator, Gerry Uba, at 503-797-1737 or [Gerry.uba@oregonmetro.dst.or.us](mailto:Gerry.uba@oregonmetro.dst.or.us) if you have questions.

Thank you,

Robin McArthur, AICP  
Director  
Planning and Development Department  
Metro  
503-797-1714  
[www.oregonmetro.gov](http://www.oregonmetro.gov)

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## **Meeting Agenda**

Meeting: Regional Planning Directors Meeting (#3)  
Date: September 19, 2012  
Time: 2:30 p.m. to 4:30 p.m.  
Place: Room 370 A & B  
Outcome: Update planning directors on growth distribution and key steps and remaining deliverables  
General agreement on the distribution of population and employment growth

**I. Welcome and Introductions [10 minutes]** Hoglund/All  
• Overview of the Agenda

**J. Review of Meeting Materials [5 minutes]** Uba

**K. Overview of Previous Accomplishments [20 minutes]** Hoglund / et al.  
5. Regional planning directors meetings – October 2010; July 2011  
6. Key issues of concerns –Refer to the flip chart  
7. Agreement reached on:  
a) Basic data sets (base year, zoning, TAZ boundary)  
b) Land supply assumptions (single family, multifamily and mixed use, employment, redevelopment, urban reserve urbanization and supply, and neighboring communities)

**L. Distribution of Population and Employment [70 minutes]** Yee / et al.  
Focus is on the 2035 forecast distribution

**M. Next Steps /Overview of schedule [10 minutes]** Uba  
g) Presentations to Metro Committees  
MPAC / JPACT ---for comment on the distribution  
TPAC / MTAC --- on distribution coordination and results  
h) Metro Council adoption

**N. Closing Remarks/Adjourn [5 minutes]** Hoglund

**O.** Metro staff will stay to answer questions related to the maps on the walls

# County Coordination and other key meetings

**A. TAZ Subgroup<sup>1</sup>:** Growth Allocation: Base Year 2010 Capacity Methodologies

- March 9, 2011
- March 16, 2011
- March 29, 2011
- April 12, 2011

**B. County Coordination** (for cites in each county): Review and comments on Refill capacity methods and coarse refill supply data

- Washington County – April 26, 2011
- Clackamas County – April 28, 2011
- Multnomah County – April 29, 2012

**C. Urban Reserve Local Governments' Staff Group:** Criteria (final) for sequencing urbanization of urban reserves and zoning assumptions and make recommendations

- May 19, 2011

**D. County Coordination** (for cites in each county): Review and comments on further refinement of the methodologies for estimating regional growth capacity

- Clackamas County – September 29, 2011
- Multnomah County – September 30, 2011
- Washington County – October 6, 2011

**E. County Coordination** (for cites in each county): Review and comments on mid-term 2025 Forecast Distribution

- Clackamas County – February 9, 2012
- Multnomah County – February 10, 2012
- Washington County – February 15, 2012

**F. County Coordination** (for cites in each county): Review and comments on long-term 2035-2040 Forecast Distribution

- Multnomah County – July 10, 2012
- Clackamas County – July 11, 2012
- Washington County – July 19, 2012

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<sup>1</sup> The three counties, and cities of Beaverton, Gresham, Hillsboro, Lake Oswego, Milwaukie and Portland

# 2025 comments and responses

Feb. 9 to May 14, 2012

## **2025 TAZ Forecast Distribution Review Background, Key comments and adjustments**

The forecast distribution predicts small area estimates of population (i.e. households) and employment trends for the Portland metro area. These predicted estimates were generated from MetroScope using regional capacity estimates and the Metro Regional Forecast as the broad economic basis for the forecast distribution. Local jurisdictions were asked to review the 2025 TAZ forecast distribution as a prelude to final 2035/2040 TAZ forecast. In July, local jurisdictions will be afforded a final opportunity to challenge the forecast distributions before they go before the Metro Council for final adoption. The 2025 forecast review has served as a check-in with local jurisdictions and provided valuable input to the forthcoming 2035/2040 forecast distribution.

The 2025 forecast review represented a first for Metro in its population coordination for its transparency, meticulous detail and collaboration with local jurisdictions. Metro provided local jurisdictions unprecedented opportunities to participate in the challenge and review process. This process included supply changes and reassignment of predicted growth patterns for jobs and housing as local jurisdictions were given opportunities to justify changes to the 2025 TAZ forecast distribution. Local jurisdictions continued participation in on-going efforts to clean up the capacity assumptions based on their more detailed local knowledge, assisted Metro in developing economic filters to identify residential redevelopment capacity, contributed in refining environmental set aside assumptions and generally improved the regional Buildable Land Inventory (BLI).

Still with all these adjustments and contributions, local jurisdictions were afforded a formal check-in point to review and comment towards the on-going forecast process. The 2025 forecast review was another in a series of planned formal opportunities for Metro to engage and solicit local jurisdiction in helping refine and finalizing TAZ estimates that regional planners could rely on. The proceedings herein summarize and reflect the formal comments received from local jurisdictions during the 2025 review. The following points largely describe two types of adjustments: 1) supply capacity adjustments in the existing UGB, particularly in 2040 design centers; adjustments in urban reserves in which concept plans have become available to inform long term capacity expectations, and 2) re-assignment of employment (or household) growth from one TAZ to another set of TAZ in order to reflect a local jurisdictions assessment of the pace at which the given BLI capacity is likely to be absorbed.

### **Supply Changes**

#### **Cities**

1. Hillsboro – Hillsboro’s requested changes were accepted to the residential capacity in the Amberglen and Orenco Station areas. Hillsboro initially provided capacity estimates to revise and to update the Metro BLI. However, the capacity information was interpreted as gross unit data instead of net, and therefore a gross-to-net reduction had been incorrectly applied. This

problem has now been corrected. In addition, while correcting this problem, Hillsboro determined that additional capacity should be added to the Amberglen area on top of what they requested in their initial capacity estimates. This mistake should have no material impact going forward as capacity to accommodate more growth is now anticipated in the BLI.

2. Beaverton – Beaverton was not able to thoroughly examine the tax lot level supply files that were sent to them for review before the modeling began. Upon reviewing the 2025 allocation and supply, they determined that several changes should be made to the residential supply. The first change involved the zoning crosswalk. Beaverton requested that we change the zoning crosswalk for some of their local mixed use zones to reflect a slightly higher density, so the capacity with these zoning designations was accordingly also increased. This mostly impacted the downtown Beaverton area. Second, several large buildable Peterkort properties had been excluded from the supply so we added additional capacity along Highway 26 to account for this oversight. In both cases, we introduced additional supply capacity according to the number of dwelling units requested by Beaverton.
3. Canby – Canby supplied Metro with its latest Transportation System Plan (TSP) which included aggregate estimates of projected employment and population growth plus recent capacity estimates for residential and non-residential real estate. Metro adapted this TSP data to the TAZ forecast by adjusting shortfalls in commercial and industrial capacity identified in the TSP but not registered in Metro’s Buildable Land Inventory (BLI) for the Canby city area. This adjustment, though not reflected in the 2025 TAZ forecast distribution has now been incorporated into the BLI data going forward for the later forecast distribution years. 200 industrial acres and 100 commercial acres were added factored into the future BLI.

### Rural

The county coordinators are of the opinion that rural residential capacity was overestimated throughout the region. This capacity was reduced in all four counties, with each county varying in how the removed rural units were accommodated elsewhere.

1. Washington County – Washington County requested that we reduce the supply and household allocation in rural areas in 2025 and beyond. These households were accommodated by shifting them into the centers in Hillsboro and Beaverton where additional capacity and households were requested. However, there is a disconnect between the types of households (HIAK) that would choose these two different types of housing (rural SFR vs. urban MFR) that is introduced by making this change.
2. Clackamas County – Clackamas County requested that we reduce the supply and household allocation in rural areas in 2025 and beyond. The cities in Clackamas County that are outside of the Metro UGB wanted to see additional capacity and households, so these rural households will be shifted into Canby and other areas as needed in additional reviews.
3. Multnomah County – Multnomah County requested that we reduce the supply and household allocation in rural areas in 2025 and beyond. Multnomah County rural capacity represents a small fraction of the regional supply and therefore there were not many units to absorb from this change. An adjustment in capacity will occur going forward to align the Metro BLI with expectations given for rural Multnomah County. The 2025 growth allocation was generally re-



assigned to many other TAZ's throughout the region with no material impacts recognized in this change.

4. Clark County – Clark County rural residential capacity was grossly overestimated because the current level of development and use on the properties was not considered in estimating additional residential capacity. To correct this, we received a shapefile from Clark County with their estimates of rural capacity and substituted this in place of the Metro capacity analysis. This created a large number of displaced households in 2025, so we re-ran the model from 2010 to 2025 with the lower Clark County rural capacity to determine what the impacts of the change would be. Since we had no detailed jurisdiction review for Clark County, the outcome of this test run in Clark County was merged with the jurisdiction review on the Oregon side of the river to establish the 2025 base to which additional growth would be assigned for 2030 and beyond.

#### Reserves

1. All urban reserves – Due to some concerns about the capacity estimates and forecast allocations, the urban reserves capacity was re-estimated to correct errors in how that capacity was initially calculated. The new version properly deducts rights of way, and environmental and utility constraints in the reserve areas, and makes some attempt to account for existing development and parcelization. The capacity in urban reserve areas was reduced and its impact on the growth distribution will be felt in years after 2025.
2. North Hillsboro / South Hillsboro – Additional planning has been completed since we began this forecast process so more detailed assumptions are now available for some of the reserve areas. Hillsboro requested that the forecast should utilize the urban reserve concept plans for the North Hillsboro and South Hillsboro urban reserve areas. Our previous assumption for North Hillsboro was that it would be all industrial capacity, but Hillsboro's plans now include a mix of residential and employment land in that area. We used a map and capacity numbers that were provided by Hillsboro to assign this capacity to regional zone classes for modeling purposes. For South Hillsboro, the city provided residential capacity estimates at the TAZ level in the 2025 review, so these supply estimates are to be modeled into 2030 and beyond.
3. South Cooper Mountain – As part of a larger correction of capacity assumed for urban reserve areas, the south Cooper Mountain reserve area drew our attention to a systemic error in calculating residential and commercial capacity for all urban reserves. Definitions for environmental no build areas were found to be misinterpreted in the initial capacity estimate. Too much capacity had been assigned to environmental set asides in all the urban reserve areas. This has now been corrected in the 2025 TAZ forecast and for the forecast going forward.

#### **2025 TAZ Allocation changes**

As described above, the supply changes also imply changes to the 2025 household and employment allocations. In addition, several jurisdictions requested allocation changes with no adjustments to the supply data. These requests are outlined below.

#### Cities

1. Portland – Portland requested a number of TAZ's to be reduced in its 2025 forecast distribution due to too-high capacity estimates in Metro' BLI. Correspondingly, other TAZ increases in TAZ growth distributions in other TAZ for a zero sum change. In locations where allocations were

reassigned to higher figures, capacity was deemed insufficient so additional growth was moved to these TAZ, but supplies were unchanged for modeling purposes for future years.

2. Happy Valley / Damascus – There was an issue with the initial conditions from calibration in Happy Valley and Damascus. Property values appeared to be much higher in Happy Valley than in Damascus in the base year, which carried through in the forecast to continuing higher housing prices in Happy Valley. This made Damascus relatively more attractive than Happy Valley because Damascus had lower housing costs, so many more households were assigned to Damascus than Happy Valley. Due to issues of governance and infrastructure, the opposite is more likely to happen, with Happy Valley developing sooner than Damascus, so we manually changed the 2025 allocation. In addition, we adjusted the calibration price for Happy Valley so that the model will maintain this pattern.
3. The growth distributions were rebalanced for a number of cities. These adjustments were not materially large from a regional perspective, but significant for the city in general. All recommended 2025 TAZ growth distribution adjustments were accepted for Beaverton, Forest Grove, Gresham, Hillsboro, King City, Lake Oswego, Sherwood, Tigard, Troutdale, Tualatin, and Wilsonville. The TAZ growth distributions in each of the listed cities were redistributed to balance out expected faster growing TAZ's while other TAZ's which had too much capacity estimated to begin with were reduced. No adjustments were made to the supply capacity in these TAZ's as the adjustments were not materially large.

### 2025 comments and response

#	Local Government	Comment and response completed
1	Beaverton	Yes
2	Cornelius	Yes
3	Damascus	Yes
4	Durham	No comment/No TAZ staff
5	Fairview	No comment/No TAZ staff
6	Forest Grove	Yes
7	Gladstone	Yes
8	Gresham	Yes
9	Happy Valley	Yes
10	Hillsboro	Yes
11	Johnson City	No comment/No TAZ staff
12	King City	Yes
13	Lake Oswego	Yes
14	Maywood Park	No comment/No TAZ staff
15	Milwaukie	Yes
16	Oregon City	Yes
17	Portland (& POP)	Yes
18	Rivergrove	No comment/No TAZ staff
19	Sherwood	Yes
20	Tigard	Yes
21	Troutdale	Yes
22	Tualatin	Yes
23	West Linn	Yes
24	Wilsonville	Yes
25	Wood Village	Yes
26	Clackamas County	Yes
27	Multnomah County	Yes
28	Washington County	Yes

Following are the actual correspondences between local governments and Metro leading up to the completion of the comments and response.

## CITY OF BEAVERTON

### Distribution Review and Adjustments Completed (May 14, 2012)

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**From:** Laura Kelly [<mailto:lkelly@beavertonoregon.gov>]  
**Sent:** Monday, May 14, 2012 4:32 PM  
**To:** Dennis Yee; Jeff Salvon  
**Cc:** [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us); Robert McCracken; Maribeth Todd; Gerry Uba  
**Subject:** RE: 2025 Final TAZ Allocations

Thanks Dennis!

*Laura*

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**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Monday, May 14, 2012 2:58 PM  
**To:** Jeff Salvon  
**Cc:** [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us); Laura Kelly; Robert McCracken; Maribeth Todd; Gerry Uba  
**Subject:** RE: 2025 Final TAZ Allocations

Jeff:

We will be making corrections per your instructions shown below. Thanks for the heads up on this. This will be reflected in the final final 2025 and subsequent TAZ allocations for years 2030 through 2045.

Maribeth will follow up with a confirmation. This should not be any problem.

(Not bad...only one miscue given the many different formatted comments that we received from everyone! Sorry it was Beaverton.)

Regards

Dennis

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**From:** Jeff Salvon [<mailto:jsalvon@beavertonoregon.gov>]  
**Sent:** Tuesday, May 08, 2012 4:37 PM  
**To:** Dennis Yee  
**Cc:** [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us); Laura Kelly; Robert McCracken  
**Subject:** 2025 Final TAZ Allocations

Dennis:

We've reviewed the final 2025 household and employment numbers you distributed last week and concluded that in general, the projections are reasonable and make sense - with a few key exceptions. Our concern focusses mainly on Reserve Area 6B and Cooper Mountain.

As evidenced from the table below, it appears that Metro has altered our recommendations for TAZ #s 1152, 1153, and 1154 significantly. From various calculations derived from the area prospectus and numerous field observations, we regard the revised 2025 job projections specific to Area 6B and Cooper Mountain to be unrealistic.

TAZ #s	Beaverton Recommended Allocation			Metro Allocation		
	<u>Retail</u>	<u>Service</u>	<u>Other</u>	<u>Retail</u>	<u>Service</u>	<u>Other</u>
1152	1	13	389	0	0	0
1153	0	0	13	7	34	889
1154	0	10	40	14	126	899

In our meeting with you last month, we indicated that the numbers we recommended for this area were derived from the City's 6B Concept Prospectus submitted to Metro as part of the urban reserves process. In this study, we projected that the majority of employment in 6B will occur in TAZ# 1152 with very little occurring in TAZ #1153. Additionally, as TAZ # 1152 comprises a majority of the proposed 2011 UGB expansion phase, we believe it more likely that any new jobs attributed to 6B will land in this area within the 2025 timeframe. Although we acknowledge that this prospectus is conceptual in nature, we regard it to be the most legitimate source to date for information specific to future growth the area.

As for TAZ #1154 (Cooper Mountain), staff made a fairly detailed examination of the area and found that the entire area is occupied by large lot delux homes. This was a topic of some discussion in our meeting in April. If memory serves, we came to the conclusion that any prospect that these properties either redevelop or subdivide to support commercial enterprises was fairly remote.

Based upon these findings, we recommend that Metro revise their employment projections to reflect the City's recommended allocations that were submitted in April.

Thanks for your consideration and we look forward to your response.

---

**Jeff P Salvon, AICP**

Associate Planner | Community Development Department  
City of Beaverton | PO Box 4755 | Beaverton OR 97076-4755  
p: 503.526.3725 | f: 503.526.3720 | [www.beavertonoregon.gov](http://www.beavertonoregon.gov)

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**From:** Laura Kelly [mailto:lkelly@beavertonoregon.gov]

**Sent:** Wednesday, April 11, 2012 4:31 PM

**To:** Dennis Yee; Jeff Salvon

**Cc:** Robert McCracken; steve\_kelley@co.washington.or.us; Gerry Uba; Maribeth Todd; Steven Sparks

**Subject:** RE: Beaverton response to Metro TAZ comments 4/3/2012

Hi Dennis,

This is a follow up to our conversation last week about South Cooper Mountain capacity and allocation assumptions. It is my understanding that you will be receiving information from your GIS team about the buildable land assumptions that went into the Gamma forecast, and we look forward to reviewing those numbers. However, it should be noted that the buildable net acreage for this area has been professionally evaluated and determined to be approximately 700 net acres. Net acreage is calculated by taking gross site acreage (1,776ac), subtracting natural and infrastructure constraints (817ac) to obtain a gross developable area of 959 acres. The gross acreage is multiplied by the standard calculation for net acreage (removing 23%), for a total net of 700 acres. Please see the analysis from last year's UGB expansion decision (*South Cooper Mountain Prospectus*) for additional information about net acreage. With that in mind, we again request that the capacity and allocation numbers in the Metro model be revised to reflect both the accepted net acreage for the area and Metro Council's density assumptions.

**TAZ 1155, 1153, 1152 (mix of Cooper Mtn and South Cooper Mountain):**

The current zoning for all parcels within the portion of TAZ 1155 that is currently within the UGB is R-9 (7-9 units per acre). Metro assumed capacity for these parcels is 197 households. This appears to be consistent with zoning for that area. The remaining portion of the parcel is part of the 6b Urban Reserve area (South Cooper Mountain). Development scenarios for the entirety of this area (which extends into TAZ 1152 and 1153) show a net developable area of 700 acres. At 15 du/net acre, the total capacity for the entirety of Area 6B (within TAZ 1155, 1153, and 1152) is 10,500 households. The 2025 allocation should be consistent with the urbanization schedule for this Urban Reserve. Thus, the 2025 allocation should provide for some HH in all three TAZs, as it should assume development of 6B Phase 1 (in TAZ 1152 and 1153) and some development in the non-6B portion of TAZ 1155.

Capacity

Metro's capacity number for South Cooper Mountain is 20,663hh, or approximately 29.5 du/net acre. (20,663hh/700 net acres). This is approximately **double the density** required by Metro Council (15 du/net ac). Thus, the capacity numbers for SCM need to be reduced to reflect the 15du/net acre requirement. This totals 10,558hh (including 58 units allocated to the non-SCM parcels at the extreme southeastern edge of TAZ 1152), which we propose to split between TAZ 1152 and 1153 as follows: TAZ 1152: 7,588hh and TAZ 1153: 3,080hh.

As noted above, capacity for TAZ 1155 should be reduced to approximately 197hh, as only the portion of the TAZ that is currently within the UGB (i.e. the non-6b portion) is expected to have any significant capacity. Further, the total 6b capacity (10,500hh) will be split between TAZ 1152 and 1153 per Beaverton's request.

2025 Allocation

Metro's 2025 allocation number for South Cooper Mountain (TAZ 1152 and 1153) is 1,579hh. We find this to be a reasonable estimate and have not proposed any changes to allocation in TAZs 1152 and 1153.

Thanks again for meeting with us last week. We found it very helpful to go through these issues in person.

**Laura Kelly**

Senior Planner| Community and Economic Development Department



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**From:** Dennis Yee  
**Sent:** Tuesday, April 03, 2012 1:31 PM  
**To:** Jeff Salvon  
**Cc:** Laura Kelly; Robert McCracken; [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us); Gerry Uba; Maribeth Todd  
**Subject:** RE: Beaverton response to Metro TAZ comments 4/3/2012

Thank you Jeff.

I am not yet able to respond officially, but you have done a very good job of summarizing our telephone conversation today regarding the residential feedback.

I cannot fully agree to the "resolution" stated for each item below, particularly with respect to the Reserves, the Cooper Mtn areas inside today's UGB, the Peterkort area, downtown Beaverton and TAZ's in the western edge of Beaverton. In order to maintain county control totals, there may not be enough "extra" households to attain the city's recommended household counts for these areas for year 2025. Your comments do not reflect what I suggested was to "ration" overages identified in rural Washington county and to relocate them to these areas and also the "resolutions" do not reflect the model results which do not indicate that the areas around Peterkort and downtown are not even absorbing all of the current capacity assumed in MetroScope. This suggests to us that the market is not yet ripe enough in 2025 to absorb all the capacity suggested by your revised TAZ household allocations.

We will finalize the TAZ figures in coordination with Beaverton staff and Washington county planning. Stay tuned as I try to get a more complete picture of all jurisdiction review comments.

Regards,

Dennis Yee  
Metro Economist

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**From:** Jeff Salvon [<mailto:jsalvon@beavertonoregon.gov>]  
**Sent:** Tuesday, April 03, 2012 12:48 PM  
**To:** Dennis Yee  
**Cc:** Laura Kelly; Robert McCracken; [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us)  
**Subject:** FW: Beaverton response to Metro TAZ comments 4/3/2012

Dennis:

We've had a chance to discuss the issues you brought up over the phone within the last hour. Assuming I understood your issues correctly, we would like to submit the following comments.

We look forward to your response.

Thanks.

Jeff

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**From:** Laura Kelly  
**Sent:** Tuesday, April 03, 2012 12:33 PM  
**To:** Jeff Salvon  
**Subject:** Beaverton response to Metro TAZ comments 4/3/2012

Dennis,

Beaverton received your comments on five issue areas related to our 3/29/2012 comments on the TAZ Allocations Gamma Forecast. Please find below a brief summary of our understanding of Metro's comments along with our corresponding response. There appear to be questions related to both capacity assumptions and allocation assumptions and have attempted to separate those issues in our response below.

We dedicated a substantial number of person hours to this review and sincerely hope to hear back from you if there are any lingering questions or concerns with Beaverton's allocations; otherwise, we assume that our comments have been accepted. Should you require any additional information about our review or if you would like to set up a meeting time to discuss with the work group who compiled our comments, please don't hesitate to contact me.

1. Cooper Mountain and South Cooper Mountain  
Metro Issue: Jurisdiction capacity numbers must reflect the 15du/net acre requirement for UGB expansion areas  
Beaverton Response: Capacity numbers were not changed in jurisdiction review. Metro capacity assumptions appear much higher (2x) than needed to produce 15 du/net acre. Allocations were modified based on urbanization schedule.  
Resolution: Accept jurisdiction 2025 allocations or indicate whether there are additional questions on this subject. Work w/ jurisdiction to resolve capacity discrepancies.
2. Murrayhill  
Metro Issue: None  
Beaverton Response: None  
Resolution: Accept jurisdiction 2025 allocations
3. Sunset Transit Center  
Metro Issue: Jurisdiction reviewed capacity numbers and 2025 allocations acceptable in part  
Beaverton Response: Capacity numbers have been changed based on recent zone changes in area (Peterkort). Allocations based on known master plans expected to be completed by 2025 (Timberland and Peterkort).



Resolution: Accept jurisdiction 2025 allocations or indicate whether there are additional questions on this subject.

4. Downtown Areas

Metro Issue: MUR 9 not appropriate for RC-TO zoned properties. Revise to MUR 8

Beaverton Response: MUR 9 is the closest approximation of RC-OT zoning, which has a 120' max height and no maximum FAR

Resolution: Accept jurisdiction 2025 allocations or indicate whether there are additional questions on this subject.

5. TAZ 1196, 1196, 1211

Metro Issue: What is intended by comment to "Projected growth exceeds gamma capacity. Zoning maximums allow for excess. Capacity changes needed"

Beaverton Response: MUR 8 is closest approximation of SC-HDR zoning, which has a which has a 60-100' max height and no maximum FAR.

Resolution: Accept jurisdiction 2025 allocations or indicate whether there are additional questions on this subject.

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**From:** Maribeth Todd  
**Sent:** Friday, March 16, 2012 2:34 PM  
**To:** Laura Kelly; Jim Cser  
**Cc:** Jeff Salvon; Gerry Uba; Dennis Yee  
**Subject:** RE: Revised Land Capacity Data for TAZ Allocation

Hi Laura,

Her nb nbe is my somewhat long explanation that may not quite answer your questions, but I hope it helps.

The employment allocation is a MetroScope model output, so it's not a direct conversion of jobs/acre. Every employment sector is allowed to shift across various nonresidential real estate types and adjust density in terms of FAR and square feet per employee, with varying amounts of flexibility depending on the sector. Within the same employment sector, locations that are projected to be in high demand and allow construction of buildings with higher FAR will generally show more employment allocated and higher densities than other areas. The resulting allocation will be different in every forecast year.

There is another step involved in the TAZ outputs that you're looking at, the mapback process, which takes the model outputs from the large ezones down to the TAZ level. In that process, I allocated half of the employment change from 2010 to 2025 to locations with existing employment and half to areas

identified as capacity for additional employment. This helps in dealing with employment sectors that are projected to decline in a particular ezone as well as smoothing out the future employment distribution, but could lead to some counter-intuitive results depending on the balance between current employment and additional capacity in a zone.

Let me know if you still have questions.

Maribeth

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**From:** Laura Kelly [mailto:lkelly@beavertonoregon.gov]  
**Sent:** Friday, March 16, 2012 1:57 PM  
**To:** Maribeth Todd; Jim Cser  
**Cc:** Jeff Salvon; Gerry Uba; Dennis Yee  
**Subject:** RE: Revised Land Capacity Data for TAZ Allocation

Hi Maribeth,  
Can you tell us about the jobs conversion used in the 2025 forecast? All the information we have about the 2010 base year is in acres. What is the conversion you used to get to jobs/acre and is it different for different employment types? Is it different for different forecast years?  
Thanks,

*Laura*

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**From:** Laura Kelly [mailto:lkelly@beavertonoregon.gov]  
**Sent:** Friday, March 16, 2012 8:18 AM  
**To:** Maribeth Todd; Jim Cser  
**Cc:** Jeff Salvon; Gerry Uba; Dennis Yee  
**Subject:** RE: Revised Land Capacity Data for TAZ Allocation

Yes, thank you Maribeth. I didn't realize you'd already sent it.  
We appreciate it.

*Laura*

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**From:** Maribeth Todd  
**Sent:** Thursday, March 15, 2012 1:40 PM  
**To:** Jim Cser; Laura Kelly  
**Cc:** Jeff Salvon; Gerry Uba; Dennis Yee  
**Subject:** RE: Revised Land Capacity Data for TAZ Allocation

Hi Laura,

Are you looking for the final supply data (where future growth is allocated) or the 2010 households (i.e. Census data)? I posted the final supply files on ftp for Jeff Salvon a couple of weeks ago so he may have them. If not, it looks like they are still available at: <ftp://ftp.oregonmetro.gov/pub/gm/drc/todd/>

It's not the easiest mess of files to work with so here's the explanation I gave Jeff:

I think the only two data files that you'll be interested in are "CombinedUGBTaxlots\_Frego" and "MF\_db\_refill\_supply\_Frego" (so named because I cleaned these files up a bit so that I could share them with Fregonese Assoc for another project). The final capacity numbers are in the far right columns in both files with "Fin" (final) in the name:

NetUnitFin – final estimate of net units

NetAcreFin – final estimate of residential acres (for modeling purposes, we use acres instead of units)

COMAcreFin – final estimate of commercial acres

INDAcreFin – final estimate of industrial acres

Many records will have 0 in all of these columns, indicating that there is no capacity for additional growth on those lots.

There are two zoning fields showing what type of capacity these numbers represent:

FutZoneCla – future zoning class (typically the current zoning, could also be comp plan, concept plan or some other source if there is no urban zoning)

FutZoneGen – general category of future zoning

I hope you are able to interpret the data in these files, let me know if you have any questions.

Maribeth

Maribeth Todd  
Research Center  
Metro

---

**From:** Jim Cser  
**Sent:** Thursday, March 15, 2012 12:08 PM  
**To:** Laura Kelly  
**Cc:** Maribeth Todd; Jeff Salvon; Gerry Uba; Dennis Yee  
**Subject:** RE: Revised Land Capacity Data for TAZ Allocation

Laura,  
Sorry, I misunderstood. We'll get back to you.  
-Jim

---

**From:** Laura Kelly [mailto:lkelly@beavertonoregon.gov]  
**Sent:** Thursday, March 15, 2012 12:03 PM  
**To:** Jim Cser  
**Cc:** Maribeth Todd; Jeff Salvon; Gerry Uba; Dennis Yee  
**Subject:** RE: Revised Land Capacity Data for TAZ Allocation

Thanks Jim. We're looking for the final 2010 base year shapefile so we can look at the final numbers on a parcel level. Any way you could send over that shapefile?

Thanks.

Laura

---

**From:** Jim Cser [mailto:Jim.Cser@oregonmetro.gov]  
**Sent:** Thursday, March 15, 2012 12:01 PM  
**To:** Laura Kelly  
**Cc:** Maribeth Todd; Jeff Salvon; Gerry Uba; Dennis Yee  
**Subject:** RE: Revised Land Capacity Data for TAZ Allocation

Hi Laura,  
The 2025 shapefile contains the reviewed 2010 households, in the field "HH2010".

Regards,  
Jim Cser

---

**From:** Gerry Uba  
**Sent:** Thursday, March 15, 2012 11:50 AM  
**To:** Dennis Yee  
**Cc:** Jim Cser; Maribeth Todd; Laura Kelly; 'Jeff Salvon'  
**Subject:** FW: Revised Land Capacity Data for TAZ Allocation

Hello Dennis,

Please see and take care of this request from Laura. Thanks

Gerry

---

**From:** Laura Kelly [mailto:lkelly@beavertonoregon.gov]  
**Sent:** Wednesday, March 14, 2012 8:25 AM  
**To:** Gerry Uba; Jeff Salvon  
**Subject:** RE: Revised Land Capacity Data for TAZ Allocation

Hi Gerry,  
We've been reviewing the 2025 allocations and would like to overlay the 2025 shapefile with the 2010 base year shapefile. On the ftp site, we can find the initial 2010 base shapefile (pre-jurisdiction review), but not the final base year shapefile modified to reflect jurisdiction comments. We do see the pdfs of those, but not the shapefile. Is there any way to send us that shapefile or post it on the ftp site?  
Thanks!

**Laura Kelly**  
Senior Planner | Community and Economic Development Department  
City of Beaverton | P.O. Box 4755 | Beaverton, OR 97076  
503.526.2548 | [lkelly@BeavertonOregon.gov](mailto:lkelly@BeavertonOregon.gov)



---

**From:** Gerry Uba [<mailto:Gerry.Uba@oregonmetro.gov>]  
**Sent:** Wednesday, December 28, 2011 1:56 PM  
**To:** Jeff Salvon  
**Cc:** Laura Kelly; Steven Sparks; Dennis Yee; Maribeth Todd; Jim Cser; Christina Deffebach  
**Subject:** FW: Revised Land Capacity Data for TAZ Allocation

Hello Jeff,

In response to the second part of your email to me earlier today about the base year data, I am forwarding the email I sent on May 16, 2011 to all local government staff involved in the TAZ project, providing the link to the FTP site containing the 2010 base year population and employment data. Please do not hesitate to let me know if you have problem accessing the data.

Best regards,

Gerry

---

**From:** Gerry Uba  
**Sent:** Monday, May 16, 2011 1:28 PM  
**To:** [connellpc@comcast.net](mailto:connellpc@comcast.net); [dmazziotti@ci.beaverton.or.us](mailto:dmazziotti@ci.beaverton.or.us); [rreynolds@ci.cornelius.or.us](mailto:rreynolds@ci.cornelius.or.us); [rmeyer@ci.cornelius.or.us](mailto:rmeyer@ci.cornelius.or.us); [ayap@ci.damascus.or.us](mailto:ayap@ci.damascus.or.us); [cityofdurham@comcast.net](mailto:cityofdurham@comcast.net); [gessnerj@ci.fairview.or.us](mailto:gessnerj@ci.fairview.or.us); [jholan@forestgrove-or.gov](mailto:jholan@forestgrove-or.gov); [boyce@ci.gladstone.or.us](mailto:boyce@ci.gladstone.or.us); [mike.abbate@greshamoregon.gov](mailto:mike.abbate@greshamoregon.gov); [michaelw@ci.happy-valley.or.us](mailto:michaelw@ci.happy-valley.or.us); [jasont@ci.happy-valley.or.us](mailto:jasont@ci.happy-valley.or.us); [patrickr@ci.hillsboro.or.us](mailto:patrickr@ci.hillsboro.or.us); [johnson.city@hotmail.com](mailto:johnson.city@hotmail.com); [dwells@ci.king-city.or.us](mailto:dwells@ci.king-city.or.us); [degner@ci.oswego.or.us](mailto:degner@ci.oswego.or.us); [dfrisbee@ci.oswego.or.us](mailto:dfrisbee@ci.oswego.or.us); [mayorhardie@aol.com](mailto:mayorhardie@aol.com); [asherk@ci.milwaukie.or.us](mailto:asherk@ci.milwaukie.or.us); [manglek@ci.milwaukie.or.us](mailto:manglek@ci.milwaukie.or.us); [tkonkol@orcify.org](mailto:tkonkol@orcify.org); [susan.anderson@portlandoregon.gov](mailto:susan.anderson@portlandoregon.gov); [hajdukj@ci.sherwood.or.us](mailto:hajdukj@ci.sherwood.or.us); [ron@tigard-or.gov](mailto:ron@tigard-or.gov); [susanh@tigard-or.gov](mailto:susanh@tigard-or.gov); [rfaith@ci.troutdale.or.us](mailto:rfaith@ci.troutdale.or.us); [ahurd-ravich@ci.tualatin.or.us](mailto:ahurd-ravich@ci.tualatin.or.us); [jsonnen@westlinnoregon.gov](mailto:jsonnen@westlinnoregon.gov); [neamtzu@ci.wilsonville.or.us](mailto:neamtzu@ci.wilsonville.or.us); [ritz@ci.wood-village.or.us](mailto:ritz@ci.wood-village.or.us); [prestonp@ci.wood-village.or.us](mailto:prestonp@ci.wood-village.or.us); [lindap@co.clackamas.or.us](mailto:lindap@co.clackamas.or.us); [scottpem@co.clackamas.or.us](mailto:scottpem@co.clackamas.or.us); [karen.c.schilling@co.multnomah.or.us](mailto:karen.c.schilling@co.multnomah.or.us); [brent\\_curtis@co.washington.or.us](mailto:brent_curtis@co.washington.or.us); [andrew\\_singelakis@co.washington.or.us](mailto:andrew_singelakis@co.washington.or.us); [tom.armstrong@portlandoregon.gov](mailto:tom.armstrong@portlandoregon.gov); [jsalvon@ci.beaverton.or.us](mailto:jsalvon@ci.beaverton.or.us); [dtaylor@ci.beaverton.or.us](mailto:dtaylor@ci.beaverton.or.us); [tfranz@ci.cornelius.or.us](mailto:tfranz@ci.cornelius.or.us); [rmeyer@ci.cornelius.or.us](mailto:rmeyer@ci.cornelius.or.us); [epalmer@ci.damascus.or.us](mailto:epalmer@ci.damascus.or.us); [driordan@forestgrove-or.gov](mailto:driordan@forestgrove-or.gov); [jonathan.harker@greshamoregon.gov](mailto:jonathan.harker@greshamoregon.gov); [molly.vogt@greshamoregon.gov](mailto:molly.vogt@greshamoregon.gov); [michaelw@ci.happy-valley.or.us](mailto:michaelw@ci.happy-valley.or.us); [dougmg@ci.hillsboro.or.us](mailto:dougmg@ci.hillsboro.or.us); [dono@ci.hillsboro.or.us](mailto:dono@ci.hillsboro.or.us); [vickiew@ci.hillsboro.or.us](mailto:vickiew@ci.hillsboro.or.us); [degner@ci.oswego.or.us](mailto:degner@ci.oswego.or.us); [manglek@ci.milwaukie.or.us](mailto:manglek@ci.milwaukie.or.us); [rossonk@ci.milwaukie.or.us](mailto:rossonk@ci.milwaukie.or.us); [cdunlop@ci.oregon-city.or.us](mailto:cdunlop@ci.oregon-city.or.us); [gary.odenthal@portlandoregon.gov](mailto:gary.odenthal@portlandoregon.gov); [ortizp@ci.sherwood.or.us](mailto:ortizp@ci.sherwood.or.us); [preston@tigard-or.gov](mailto:preston@tigard-or.gov); [camedzake@ci.troutdale.or.us](mailto:camedzake@ci.troutdale.or.us); [emccallum@ci.troutdale.or.us](mailto:emccallum@ci.troutdale.or.us); [chahn@ci.tualatin.or.us](mailto:chahn@ci.tualatin.or.us); [tscott@ci.tualatin.or.us](mailto:tscott@ci.tualatin.or.us); [kaha@westlinnoregon.gov](mailto:kaha@westlinnoregon.gov); [ckerr@westlinnoregon.gov](mailto:ckerr@westlinnoregon.gov); [jsonnen@westlinnoregon.gov](mailto:jsonnen@westlinnoregon.gov); [neamtzu@ci.wilsonville.or.us](mailto:neamtzu@ci.wilsonville.or.us); [stark@ci.wilsonville.or.us](mailto:stark@ci.wilsonville.or.us); [prestonp@ci.wood-village.or.us](mailto:prestonp@ci.wood-village.or.us); [karenb@co.clackamas.or.us](mailto:karenb@co.clackamas.or.us); [larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us); [randygra@co.clackamas.or.us](mailto:randygra@co.clackamas.or.us); [jose.alvarez@clark.wa.gov](mailto:jose.alvarez@clark.wa.gov); [jharmon@ci.oswego.or.us](mailto:jharmon@ci.oswego.or.us); [charles.beasley@multco.us](mailto:charles.beasley@multco.us); [adam.t.barber@multco.us](mailto:adam.t.barber@multco.us); [tom.bouillion@portofportland.com](mailto:tom.bouillion@portofportland.com); [steve.iwata@portlandoregon.gov](mailto:steve.iwata@portlandoregon.gov); [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us); [nels\\_mickaelson@co.washington.or.us](mailto:nels_mickaelson@co.washington.or.us); [connellpc@comcast.net](mailto:connellpc@comcast.net)

**Cc:** Sonny Conder; Maribeth Todd; Jim Cser; Dennis Yee; Christina Deffebach; Paulette Copperstone  
**Subject:** Revised Land Capacity Data for TAZ Allocation

Dear TAZ Allocation Planners,

A set of eight data files has been posted on the Metro FTP site for your review and comments. The files include:

- Base year 2010 household estimates
- Base year employment estimates
- Land capacity files [The data in these files were based on the refined regional methodology for calculating capacity that some of you helped to refine and were discussed with you at the County coordination meetings during the last week of April.]

The link to these files is: [ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Forecast\\_Inputs/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Forecast_Inputs/)

Two additional data files will be posted on the FTP site soon (Subsidized redevelopment data file and New urban area data file). The first file on the above FTP site contains some background information and instructions for reviewing the data files.

**We would like to have your comments on all these data files by Tuesday, May 31, 2010.**

The FTP site for dropping off the reviewed files (your comments) is:

<ftp://ftp.oregonmetro.gov/incoming/>

This FTP folder is a “blind” box. You can write to the folder, but cannot see what is inside the folder. Any uploaded files to the site will be deleted after three days. **Please send us an e-mail ( [jim.cser@oregonmetro.gov](mailto:jim.cser@oregonmetro.gov) ) after you have transferred any files to the “blind” box.**

If you have questions, please do not hesitate to contact Dennis Yee (503-797-1578) or me. Thanks very much for your time, assistance and contribution towards developing credible databases for the TAZ allocation.

Gerry

.....  
O. Gerald Uba, PhD  
Planning and Development Department  
Metro

## CITY OF CORNELIUS

### Distribution Review and Adjustments Completed (February 28, 2012)

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**From:** Dennis Yee  
**Sent:** Tuesday, February 28, 2012 3:54 PM  
**To:** Gerry Uba  
**Subject:** RE: Cornelius Growth Projections

Done...working on it...Maribeth is handling it very well.

**From:** Gerry Uba  
**Sent:** Tuesday, February 28, 2012 3:41 PM  
**To:** Dennis Yee  
**Subject:** FW: Cornelius Growth Projections

I assume you will take care of this one. Thanks

---

**From:** Reynolds, Dick [mailto:rreynolds@ci.cornelius.or.us]  
**Sent:** Monday, February 27, 2012 3:10 PM  
**To:** Gerry Uba  
**Cc:** Dennis Yee; Meyer, Richard  
**Subject:** Cornelius Growth Projections

Hi Dennis & Gerry,

After attending the presentation (2/15) about the TAZ level Regional Growth Allocations hosted by Washington County I thought you stated that the allocations were based on land inside the UGB? If that is still the case I would like to state again my concerns about your projections for TAZ 1386 and 1381?

METRO HOUSING ALLOCATIONS: TAZ 1381 = 673 dwelling units This number seems very high for net dwelling units inside the UGB? There is no residential land inside the UGB in this TAZ that is currently vacant(?). So, where are these numbers from?

TAZ 1386 = 1026 dwelling units There is approximately 3 acres inside the UGB that is vacant and another 10 acres that is redevelopable in 1386 .....even at Mayor Sam's density levels that does not add up to 1026 d.u.'s??

METRO EMPLOYMENT ALLOCATIONS: TAZ 1381 = 215 Jobs This seems to accurately represent the vacant Commercially zoned property in this TAZ

TAZ 1386 = 111 Jobs This land is zoned Residential and I am not sure how you guys are forecasting 111 jobs in this residential area inside the UGB?

Did you mistakenly happen to include the Urban Reserves area as part of the projections in these TAZ's? Explanation, please?

Dick Reynolds  
Planning Manager  
City of Cornelius



## CITY OF DAMASCUS (and Happy Valley)

Distribution Review and Adjustments Completed (April 3, 2012)

---

**From:** Dennis Yee  
**Sent:** Tuesday, April 03, 2012 1:58 PM  
**To:** Erika Palmer; Steve Gaschler; John Morgan  
**Cc:** Gerry Uba; Maribeth Todd; Conrad, Larry  
**Subject:** RE: 2025 TAZ review

Thanks Erika, I think we are good to go with respect to Damascus' feedback.

---

**From:** Erika Palmer [mailto:epalmer@damascusoregon.gov]  
**Sent:** Tuesday, April 03, 2012 1:56 PM  
**To:** Dennis Yee; Steve Gaschler; John Morgan  
**Cc:** Gerry Uba; Maribeth Todd; Conrad, Larry  
**Subject:** FW: 2025 TAZ review

**Attachment:** Revised 2025 TAZ HH & Jobs for Damascus and Happy Valley.xlsx (31KB)

Dennis,

Yes, the attached TAZ allocations are acceptable. Let me know if you need any additional information.  
Thanks!

Best Regards,

*Erika Palmer*  
Senior Planner

### City of Damascus

19920 SE Highway 212  
Damascus, OR 97089

---

**From:** Dennis Yee  
**Sent:** Tuesday, April 03, 2012 1:49 PM  
**To:** Erika Palmer (epalmer@ci.damascus.or.us)  
**Cc:** Gerry Uba; Maribeth Todd; Conrad, Larry  
**Subject:** 2025 TAZ review

Hi Erika,

I am in receipt of your letter dated 3/26 regarding the necessary TAZ adjustments as discussed. I've attached your letter as reference.

Also attached are the TAZ level changes I implemented as a result of agreed upon actions Metro will take to correct the TAZ distributions. Accordingly, we assume that you are satisfied with the draft 2025 TAZ allocations for total households and employment. I am attaching these results again as reference. This information was sent to you in early March.

We would like at this time to confirm again that the attached TAZ revisions are acceptable. Please reply as soon as possible and if you need an extra few days, please let me know ahead now.

Regards,

Dennis Yee  
Metro Chief Economist

Metro  
600 NE Grand Av.  
Portland, OR 97232-2736

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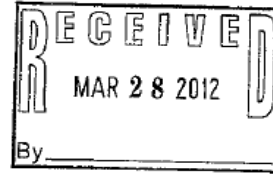
**[See Erik Palmer's letter to Dennis Yee next page]**



# City of Damascus

19920 SE Highway 212  
Damascus, OR 97089

[www.ci.damascus.or.us](http://www.ci.damascus.or.us)



Phone: 503-658-8545  
Fax: 503-658-5786

March 26, 2012

Metro  
Attn: Dennis Yee, Metro Economist  
600 NE Grand Avenue  
Portland, OR 97232-2736

RE: 2025 TAZ Forecast Distributions Comments

Dear Mr. Yee,

Thank you for giving us the opportunity to comment on the 2025 TAZ Forecast Distribution. When the Gamma 2025 TAZ Forecast was distributed for review earlier this year it was realized that the forecast shifted +4,000 more households out of Happy Valley TAZs and into Damascus. This forecast showed that 45% of Damascus' development capacity used by 2025, which, we believe, will not be case. It was an error that needed to be corrected between Metro, Clackamas County, Happy Valley and Damascus.

Staff from Metro, Clackamas County, Happy Valley, Damascus, and the Department of Land Conservation and Development met on February 21, 2012 to discuss a solution.

The solution that all agreed upon was to shift the Household TAZ forecast for the two cities. This means adding 4,000 more households into Happy Valley TAZ's and a corresponding drop of 4,000 households from Damascus' set of TAZ's, for a net difference of zero. The Employment TAZ forecast has also been changed, reflecting a decrease of -1,500 jobs out of Damascus.

We look forward to reviewing the next 2035 TAZ Forecast Distribution.

Best regards,

  
Erika Palmer  
Senior Planner

- Incorporated 2004 -

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Phone: 503-658-8545 • Fax 503-658-5786 • [www.ci.damascus.or.us](http://www.ci.damascus.or.us)

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**From:** Dennis Yee  
**Sent:** Thursday, March 22, 2012 10:42 AM  
**To:** Gerry Uba  
**Cc:** Maribeth Todd; Sonny Conder  
**Subject:** FW: Damascus TSP

Gerry: Please add this to the record. The failure of ODOT to fund any Damascus TSP tasks seriously endangers the viability or believability of the TAZ forecast assigned to Damascus.

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Thursday, March 22, 2012 10:31 AM  
**To:** Dennis Yee; Gerry Uba  
**Subject:** FW: Damascus TSP (Attachment)

*LARRY CONRAD*  
*PRINCIPAL TRANSPORTATION PLANNER*

[ATTACHMENT IS IN FILE]

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# Oregon

John A. Kitzhaber, MD, Governor

## Department of Transportation

Region 1 Headquarters  
123 NW Flanders Street  
Portland, OR 97209  
(503) 731.8200  
FAX (503) 731.8531

March 20, 2012

Mayor Spinnett and Damascus City Council Members,

In June 2011, following a public vote that rejected a comprehensive land use plan the Damascus City Council had previously adopted, ODOT requested that the City postpone further work and spending of federal funds on the City's Transportation System Plan (TSP) until consensus could be reached among community leaders on a working land use map to be the basis for further comprehensive plan efforts. It was hoped a decision from the City Council could provide the necessary assurance that funding would not be spent developing a TSP for a comprehensive plan that would later change, requiring additional funds be spent revising the TSP.

ODOT very much appreciates efforts by the City Council and city staff (e.g. Steve Gaschler) to give ODOT the assurances requested (Resolution No. 12-295). However, with recent passage of a voter initiative in Damascus requiring voter approval of all comprehensive plan and zoning actions submitted to the Department of Land Conservation and Development and Metro, it is unclear that the assurances as previously envisioned are sufficient for moving ahead to spend federal funds on planning work at this time. Over the next few weeks, with further consultation from the City, we will need to take some time to review our options. In the meantime, I'm afraid we need to put a hold on further development of the City's TSP.

ODOT looks forward to meeting with your staff over the next few weeks to lay out a plan for working through this new issue. Ross Kevlin, Region 1 Planner, will be in touch with your staff to schedule a meeting.

Regards,

Kirsten Pennington  
ODOT Region 1 Planning Manager

CC: Dan O'Dell, Damascus City Manager  
Steve Gaschler, Damascus Community Services Director  
Penny Morrison, Damascus City Recorder  
Rian Windsheimer, ODOT Region 1 Policy & Development Manager  
Ross Kevlin, ODOT Region 1 Planner  
Kelly Brooks, ODOT Region 1 Governmental Liaison

---

**From:** Dennis Yee  
**Sent:** Monday, March 05, 2012 3:56 PM  
**To:** Michael Walter, AICP Happy Valley; Erika Palmer  
**Cc:** Gerry Uba; Maribeth Todd; Jim Cser; Conrad, Larry  
**Subject:** REVISED Provisional 2025 TAZ Forecast Distributions - Happy Valley and Damascus only

All:

I have made the revisions to the TAZ allocations for jobs and households for Happy Valley and Damascus.

The Household (HH) TAZ forecast for the two cities reflects +4,000 more households sprinkled into Happy Valley TAZ's and a corresponding drop of 4,000 households from Damascus' set of TAZ's, for a net difference of zero

The Employment TAZ forecast has also been changed, reflecting a decrease of -1,500 jobs out of Damascus. These jobs are left unallocated and some fraction (or all) can be re-assigned to Happy Valley or elsewhere in the region. I did not re-assign the jobs to Happy Valley, although I am aware that some of these jobs may be expected to be redistributed to the TAZ with the Providence site. Happy Valley should feel free to add a few more jobs to go along with the added households as you see fit.

Finally, these new TAZ household (and job) allocations are still PROVISIONAL. I look forward to Happy Valley and Damascus in reviewing / editing the allocation and then returning your final estimates to Metro for us to incorporate into the next set of forecast years (2035/2045).

I will sending this info under separate email. If you do not receive the second email with the attachment, I am also placing a temporary file on the following ftp server location:  
<ftp://ftp.oregonmetro.gov/pub/gm/drc/dennis/TAZAllocation/2025%20TAZ%20Forecast/>. The file is named: Revised GAMMA TAZ for HV & Damascus.xlsx. Please download the ftp file within the next 24 hours.

Regards,

Dennis Yee  
Metro Chief Economist

Metro  
600 NE Grand Av.  
Portland, OR 97232-2736  
(503) 797-1578  
(503) 797-1909 (FAX)  
dennis.yee@oregonmetro.gov

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**Meeting Summary: Damascus and Happy Valley 2025 TAZ Forecast Distribution Reconciliation  
February 21, 2012**

Attendees: Steve Gaschler and Erika Palmer (Damascus); Matt Hastie (Damascus consultant); Mike Walter (Happy Valley); Larry Conrad (Clackamas County); Jennifer Donnelley (DLCD); Dennis Yee and Gerry Uba (Metro)

**2025 Household Projections for Review/Discussion**

Metro proposed shifting the household 2025 allocation to correct an error discovered in the TAZ modeling and forecasting assumption for Happy Valley. The final settlement between Metro, the county, and the cities was to shift/re-distribute 4,000 households in year 2025 from Damascus to Happy Valley. This re-distribution would carry forward through 2035/45 in addition to the continuance of future growth trends anticipated after 2025 using the adjusted lower base in Damascus and the higher adjusted base for Happy Valley.

Jurisdiction	Households	Suggestion/Decision
South Stafford	1,126	Move 500 out, and into Villebois
Canby	3,000	No change (defended by Larry )
Damascus	9,700	Move out 4,000 out, and into Happy Valley
S. Hillsboro (St. Mary's)	2,000	No action
Clackamas Co. - unallocated	1,500	TBD
Happy Valley		Put the 4,000 from Damascus

**2025 Employment Projections for Review/Discussion**

As a result of shifts in households, it was determined that the reduction of households out of Damascus would pull jobs out Damascus too. The rationale was that some fraction of jobs (i.e., 1500 total jobs) would not materialize as jobs with high affinity with household location choice would not locate in Damascus given the adjustment to a fewer number of households in 2025. The primary justification for both the shift in households and employment was that Damascus felt that the delay function assumed for infrastructure development was too optimistic in the model forecast. It was felt that infrastructure development would come later and stunting the 2025 growths for Damascus.

Jurisdiction	Employment	Suggestion/Decision
Damascus		Option 1: Move jobs from Damascus TAZs 827 and 831 to Happy Valley TAZs 801, 799 and 881  Option 2: Move 1500 jobs from Damascus to other

		TAZs in the region, such as the TAZs in Hillsboro
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Next Step:

- 1) Metro will use the suggestions above to reallocate year 2025 households and employment
- 2) Metro will send the re-allocation result to County TAZ Forecast coordinator and Damascus and Happy Valley staff for review and final comment
- 3) County coordinator will meet with Damascus and Happy Valley staff to review the re-allocation
- 4) Damascus, Happy Valley and County will send their final comments to Metro
- 5) Damascus will use the 2011 Beta Forecast data as provisional/interim forecast for its planning work (BLI, TSP and Facility planning). They will update their analysis later this year when the revised 2035/45 Gamma TAZ forecast data becomes available.

---

**From:** Dennis Yee

**Sent:** Friday, February 17, 2012 11:45 AM

**To:** Matt Hastie; Gerry Uba; Ray Valone; Donnelly, Jennifer; 'Conrad, Larry (LarryC@co.clackamas.or.us)'; 'John Morgan (john@morgancps.com)'; 'Steve Gaschler (sgaschler@damascusoregon.gov)'

**Subject:** RE: Damascus Population discussion

The TAZ information is found at this ftp server:

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Midterm\\_review/TAZ\\_2025/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Midterm_review/TAZ_2025/)

no passwords or logins needed. Just use your favorite browser to navigate to the location above and download the files.

Regards,

Dennis Yee  
Metro Economist  
503-797-1578

---

**From:** Matt Hastie [mailto:mhastie@angeloplanning.com]

**Sent:** Friday, February 17, 2012 9:15 AM

**To:** Gerry Uba; Ray Valone; Donnelly, Jennifer; 'Conrad, Larry (LarryC@co.clackamas.or.us)'; Dennis Yee; 'John Morgan (john@morgancps.com)'; 'Steve Gaschler (sgaschler@damascusoregon.gov)'

**Subject:** RE: Damascus Population discussion

I'm available from about 1:30 until 3 that afternoon if you want me to attend part of that meeting. Would that work? And in advance of the meeting would someone be able to send me whatever information you have that describes the current 20-year population forecast you are currently assuming? Thanks!



Matt

---

**From:** John Morgan [mailto:john@morgancps.com]  
**Sent:** Thursday, February 16, 2012 8:18 PM  
**To:** Gerry Uba  
**Cc:** Ray Valone; Donnelly, Jennifer; Conrad, Larry (LarryC@co.clackamas.or.us); Dennis Yee; Steve Gaschler (sgaschler@damascusoregon.gov); Matt Hastie; Erika Palmer  
**Subject:** Re: Damascus Population discussion

I will not be with you Tuesday as I'll be leading a training for the Eugene Planning Commission that day. You may have more fun.

Do well.

John

Sent from my iPhone

---

**From:** Gerry Uba [mailto:Gerry.Uba@oregonmetro.gov]  
**Sent:** Thursday, February 16, 2012 5:41 PM  
**To:** Ray Valone; Donnelly, Jennifer; 'Conrad, Larry (LarryC@co.clackamas.or.us)'; Dennis Yee; 'John Morgan (john@morgancps.com)'; 'Steve Gaschler (sgaschler@damascusoregon.gov)'; Matt Hastie  
**Subject:** RE: Damascus Population discussion

That's right. We can use the same meeting to discuss all key concerns about the forecast distribution. Following is the meeting information:

February 21<sup>st</sup>  
1:30 PM to 3:30 PM  
Happy Valley City Hall offices

I will see you all next week.

Gerry

---

**From:** Ray Valone  
**Sent:** Thursday, February 16, 2012 3:40 PM  
**To:** Donnelly, Jennifer; 'Conrad, Larry (LarryC@co.clackamas.or.us)'; Dennis Yee; 'John Morgan (john@morgancps.com)'; 'Steve Gaschler (sgaschler@damascusoregon.gov)'; 'Matt Hastie'  
**Cc:** Gerry Uba  
**Subject:** RE: Damascus Population discussion  
**Importance:** High

I just found out from Gerry Uba of our office – he is coordinating Metro's allocation of population – that there is a meeting scheduled for next Tuesday at 1:00 in Happy Valley for the both cities to iron out the final numbers. Invited attendees include Michael Walter, Larry Conrad, John Morgan, Steve Gaschler,

Erika Palmer, Dennis Yee and Gerry. So, I suggest that Jennifer attend that meeting and we kill the two proverbial birds (in this case, I think it is one bird) with one meeting.

Gerry said he would have no problem with having Matt there as well and, if needed, maybe extend the meeting 30 minutes to work out the issues.

Ray

---

**From:** Michael Walter [mailto:MichaelW@ci.happy-valley.or.us]  
**Sent:** Thursday, February 16, 2012 11:22 AM  
**To:** Dennis Yee; Conrad, Larry  
**Cc:** Gerry Uba; Maribeth Todd; John Morgan; Steve Gaschler; Erika Palmer  
**Subject:** RE: Meeting to resolve TAZ allocation between Damascus and Happy Valley

When this was distributed and discussed at the previous meeting at the County, the numbers for Damascus/Happy Valley were described as “flubbed” and “wet clay”. I’d hoped to see these tables with the “non-flubbed” numbers that we are supposed to make comments on.

Thanks for all your work on this “Hulkian” project (Gamma forecast—gamma rays – Bruce Banner – the Hulk). Ok, sorry, it’s been a long week...

Regards,

*Michael D. Walter, AICP*

ECONOMIC & COMMUNITY DEVELOPMENT DIRECTOR  
503-783-3839  
MICHAELW@CI.HAPPY-VALLEY.OR.US  
*Preserve. Serve. Enrich.*

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---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Thursday, February 16, 2012 8:20 AM  
**To:** Dennis Yee; Erika Palmer; Michael Walter, AICP Happy Valley  
**Cc:** Gerry Uba; Maribeth Todd; John Morgan; Steve Gaschler; Buehrig, Karen; Fritzie, Martha  
**Subject:** RE: Meeting to resolve TAZ allocation between Damascus and Happy Valley  
**Importance:** High

Good Morning –

Just a quick thought on this approach --

I am reluctant to move anything from Canby at this time – the county is starting a separate but parallel population coordination process with the 5 rural cities and this change would be premature without further discussion with the rural cities.

I think that between the 1400 unallocated households, some shifts from Damascus (which I assume they want to occur) and from Pete's Mountain -- we can make the 2500 fairly easily.

LARRY CONRAD

PRINCIPAL TRANSPORTATION PLANNER

(v) 503.742.4539

[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

.....

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Wednesday, February 15, 2012 10:45 AM  
**To:** Erika Palmer; Conrad, Larry; Michael Walter  
**Cc:** Gerry Uba; Maribeth Todd; John Morgan; Steve Gaschler  
**Subject:** RE: Meeting to resolve TAZ allocation between Damascus and Happy Valley

Mike: You mentioned earlier that you wanting more information about a secondary scenario. I have laid out a recommendation (please see email thread below) on how we might agree to shift household TAZ distributions into Happy Valley. Is what I sent out (see my message below) sufficient information or were you thinking about something more specific to help with discussions?

All: I'm trying to think about what info might be useful, so please send me your questions or request for info and I'll do my best to prepare the data ahead of the meeting on the 21<sup>st</sup>.

Update: I spoke at length with Hillsboro about shifting a few hundred households from South Hillsboro (aka St. Mary's properties) into Happy Valley. I think I want to nix that suggestion and go with shifting the approximate 1,400 "unallocated households" in Clackamas county all into Happy Valley in addition to some of the other suggestions.

Regards,

Dennis Yee  
Metro Economist  
503-612-9532

.....

**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Tuesday, February 14, 2012 1:21 PM  
**To:** Erika Palmer; Conrad, Larry; Michael Walter, AICP Happy Valley  
**Cc:** Gerry Uba; Maribeth Todd; John Morgan; Steve Gaschler  
**Subject:** RE: Meeting to resolve TAZ allocation between Damascus and Happy Valley

All:

I haven't heard from everyone regarding availability, but February 21<sup>st</sup> seems like a good day for all who have replied.

Tentatively let's plan to meet:

February 21<sup>st</sup>  
1:30 PM to 3 PM  
Happy Valley City Hall offices

The agenda will be to agree on an adjustment algorithm for fixing the Happy Valley TAZ distribution.

After correcting for an incorrect initial construction costs for Happy Valley, the corrected scenario suggests the following shift of households from around the region for the year 2025 TAZ distribution. In this correction, Happy Valley grows more rapidly – at least through year 2025.

My proposal is to:

Add/distribute +2,500 more households to Happy Valley TAZ's

Subtract:

-500 from Canby

-500 from area below Stafford/I 205/east of Wilsonville outside city limits

-1,000 from Damascus area TAZ's

-500 from St. Mary's/south Hillsboro expansion area (will have to coordinate with Hillsboro too or forgo this and assign from the unallocated households in Clackamas, which totals to about 1,000 households)

The model actually shifts households from practically everywhere around the region, but the above listed locations are where the model seems to estimate the highest places where the changes should happen from.

Regards,

Dennis

.....

**From:** Dennis Yee  
**Sent:** Monday, February 13, 2012 2:33 PM  
**To:** Conrad, Larry; Erika Palmer ([epalmer@ci.damascus.or.us](mailto:epalmer@ci.damascus.or.us)); Michael Walter, AICP Happy Valley  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** Meeting to resolve TAZ allocation between Damascus and Happy Valley

All:

Here's a few potential meeting dates to discuss and resolve issues. . .please invite anyone else from your city that should participate.

I propose meeting in Happy Valley city hall for about an hour to 90 minutes on this matter.

Here' my availability. Will any of these times work for you all? Please indicate your availability.

Thursday 16<sup>th</sup> 9 to 5

Friday 17<sup>th</sup> 9 to 5

Monday 20<sup>th</sup> 9 to noon

Tuesday 21<sup>st</sup> 9 to 5

Wednesday 22<sup>nd</sup> 2 to 5

Thursday 23<sup>rd</sup> 3 to 5

Friday 24<sup>th</sup> 2 to 5

Mike: okay to meet at city hall?

Dennis Yee

## CITY OF FOREST GROVE

### Distribution Review and Adjustments Completed (April 3, 2012)

---

**From:** Dennis Yee  
**Sent:** Tuesday, April 03, 2012 1:53 PM  
**To:** Daniel Riordan; Gerry Uba  
**Cc:** Paulette Copperstone; Steve Kelley; Maribeth Todd  
**Subject:** RE: Forest Grove Review Comments on TAZ Gamma Forecast

Hi Dan:

This email acknowledges receipt of the city's 2025 TAZ review feedback. We thank you for your assistance and appreciate what you have done in participating. If I have questions, I will get back in touch with you. I am presently melding together local feedback into one coherent county and regional TAZ distribution.

Regards,

Dennis Yee  
Metro Economist.

---

**From:** Dennis Yee  
**Sent:** Monday, April 02, 2012 9:24 AM  
**To:** Daniel Riordan; Gerry Uba  
**Cc:** Paulette Copperstone; Steve Kelley; Maribeth Todd  
**Subject:** RE: Forest Grove Review Comments on TAZ Gamma Forecast

Thank you Dan. We will adjust the TAZ 2025 figures to consider your suggested edits.

Regards,

Dennis Yee

.....

**From:** Daniel Riordan [mailto:driordan@forestgrove-or.gov]  
**Sent:** Friday, March 30, 2012 4:37 PM  
**To:** Gerry Uba  
**Cc:** Paulette Copperstone; Dennis Yee; Steve Kelley  
**Subject:** Forest Grove Review Comments on TAZ Gamma Forecast

**Attachment:** TAZ Gamma Review Forest Grove. Xls (25KB)

Hi Gerry,

Please find attached an Excel file with revisions to the TAZ level Gamma household projections for Year 2025. Our changes are based on development patterns in the community and where we feel growth will most likely occur. We did not change the total forecasted household numbers for TAZs in Forest Grove (a total of 2,544 households). We simply reallocated households from one TAZ to another to better reflect expected development patterns.

Please let me know if you have any questions or comments regarding the revisions. Thank you for the opportunity to review.

Best Regards,

Dan

Dan Riordan  
Senior Planner  
City of Forest Grove

## CITY OF GRESAHM

### Distribution Review and Adjustments Completed (March 7, 2012)

---

**From:** Dennis Yee  
**Sent:** Wednesday, March 07, 2012 1:37 PM  
**To:** Martin, Brian; Gerry Uba; Maribeth Todd  
**Cc:** Harker, Jonathan; Randel, Emily; Charles BEASLEY (charles.beasley@multco.us)  
**Subject:** RE: Gresham comments

Thanks Brian.

This is the type of conversation that I had hoped for with city officials for this project. Your comments throughout the process have been extremely constructive. We will record your feedback and incorporate your review into the final 2025 TAZ distributions after we get all the other reviews returned from other cities. Thank you.

I'll let you know what we end up doing with the former LSI site.

Regards,

Dennis Yee  
Metro Economist

---

**From:** Martin, Brian [mailto:Brian.Martin@greshamoregon.gov]  
**Sent:** Wednesday, March 07, 2012 1:20 PM  
**To:** Dennis Yee; Gerry Uba; Maribeth Todd  
**Cc:** Harker, Jonathan; Randel, Emily; Charles BEASLEY (charles.beasley@multco.us)  
**Subject:** Gresham comments

Hello.

Attached please find Gresham's comments regarding the housing and employment forecasts on a TAZ level.

In the fields, I put what I think the household or employment change should be for 2025 (except for TAZ 606 for employment – there I put a large number just to draw your attention to the comment). In the comments field, I described how the numbers I inserted are different from the Gamma forecast and the reason for the change.

Regarding the former LSI site, I added 1,800 jobs to the site. If you only add 1,500, that should be close enough. I think either of those numbers will reflect what is likely to happen there in the next 13 years or so.

Please let me know if you have any questions.



Thanks for asking for our input and for your help along the way.

**Brian Martin, AICP, LEED AP**

Associate Planner  
Comprehensive Planning  
City of Gresham  
1333 N.W. Eastman Parkway, Second Floor  
Gresham, OR 97030

v 503-618-2266

f 503-669-1376

[brian.martin@GreshamOregon.gov](mailto:brian.martin@GreshamOregon.gov)

[www.greshamoregon.gov](http://www.greshamoregon.gov)

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]

**Sent:** Wednesday, March 07, 2012 10:14 AM

**To:** Martin, Brian; Armstrong, Tom; Tom Bouillion AICP; Charles BEASLEY

**Cc:** Maribeth Todd; Gerry Uba; Steve Kelley; Conrad, Larry; Erika Palmer (epalmer@ci.damascus.or.us); Gerry Uba

**Subject:** RE: Former LSI property TAZ forecasts

Brian:

Yes. It's in my lap to suggest a means of devising a mechanical means of reassigning part of Portland empl data to the LSI site. Tom is not in a position to suggest a shift. Brian, go ahead and assume an added allocation to the site and I'll work on subtracting an amount from Portland area TAZ's after I see what number you decide.

Also, I have a mix of "other" and "service" sector jobs which I have reassigned out of Damascus for a total of 1500 jobs. I'd like to assign these to your LSI site. I think this leaves Gresham still short about 300 industrial jobs?

I've copied the other county leads and Damascus so they are aware of this cross county adjustment. This I believe finishes up my piece on adjusting the Happy Valley and Damascus problem which I've alerted everyone about at the last TAZ GAMMA distribution county meetings.

Dennis

---

**From:** Martin, Brian [mailto:Brian.Martin@greshamoregon.gov]

**Sent:** Wednesday, March 07, 2012 8:28 AM

**To:** Dennis Yee

**Subject:** RE: Former LSI property TAZ forecasts

Heard anything from Portland?

**Brian Martin, AICP, LEED AP**

Associate Planner  
Comprehensive Planning  
City of Gresham

1333 N.W. Eastman Parkway, Second Floor  
Gresham, OR 97030

v 503-618-2266

f 503-669-1376

[brian.martin@GreshamOregon.gov](mailto:brian.martin@GreshamOregon.gov)

[www.greshamoregon.gov](http://www.greshamoregon.gov)

---

**From:** Dennis Yee

**Sent:** Friday, March 02, 2012 9:00 AM

**To:** Martin, Brian

**Cc:** Tom Bouillion AICP; Harker, Jonathan; Randel, Emily; Armstrong, Tom; 'Charles BEASLEY'; Gerry Uba

**Subject:** RE: Former LSI property TAZ forecasts

Brian,

Thanks for the heads up concerning the former LSI Logic site. I think it makes sense to see if there are other jurisdictions that may want to redistribute excess employment allocations, perhaps Portland is a likely donor for a couple thousand industrial and or service jobs which could be relocated to the former LSI site. At this point, we will need to confer with Tom and check in also with Chuck regarding this issue.

I am copying both Chuck and Tom Armstrong to inform them of this proposal. I'd like to hear from Portland or any other city that seems to be struggling with an excess allocation. I seem to remember Tom saying that perhaps the MetroScope machine allocation may be a bit aggressive in allocating too many jobs into some Portland TAZ's. Tom could you chime in on this topic?

Dennis Yee

Metro Economist

**From:** Martin, Brian [mailto:Brian.Martin@greshamoregon.gov]

**Sent:** Thursday, March 01, 2012 4:47 PM

**To:** Dennis Yee

**Cc:** Tom Bouillion AICP; Harker, Jonathan; Randel, Emily; Armstrong, Tom; 'Charles BEASLEY'; Gerry Uba

**Subject:** Former LSI property TAZ forecasts

Dennis,

The City of Gresham has identified a potential employment forecast adjustment needed for TAZ 559 and TAZ 560. This is the former LSI site now owned by the Port of Portland and referred to as the Vista Business Park.

The current GAMMA forecast shows a total of 886 “other” and “service” jobs on the two TAZs. The Port of Portland has estimated that an additional 2,768 direct jobs will be developed on the property by 2025.

Because that is a difference of about 1,800 jobs, it seems the two TAZs should have higher employment numbers, and the higher numbers would be difficult to achieve by just moving employment projections within Gresham’s boundaries.

I hope we can all work together to improve the forecast. Let me know if you have any questions or need more information.

Thanks.

**Brian Martin, AICP, LEED AP**

Associate Planner  
Comprehensive Planning  
City of Gresham

1333 N.W. Eastman Parkway, Second Floor  
Gresham, OR 97030

v 503-618-2266

f 503-669-1376

[brian.martin@GreshamOregon.gov](mailto:brian.martin@GreshamOregon.gov)

[www.greshamoregon.gov](http://www.greshamoregon.gov)

## CITY OF HAPPY VALLEY (and Damascus)

Distribution Review and Adjustments Completed (April 5, 2012)

---

**From:** Dennis Yee  
**Sent:** Thursday, April 05, 2012 1:47 PM  
**To:** Michael Walter  
**Cc:** Gerry Uba; Conrad, Larry  
**Subject:** RE: Happy Valley 2025 land use review

I have received the email....will be working on it today to incorporate in a final TAZ tally.

Thanks

Dennis

---

**From:** Michael Walter [mailto:MichaelW@ci.happy-valley.or.us]  
**Sent:** Thursday, April 05, 2012 1:45 PM  
**To:** Dennis Yee  
**Cc:** Conrad, Larry; Gerry Uba  
**Subject:** RE: Happy Valley 2025 land use review

Please confirm receipt of these materials...

*Michael D. Walter, AICP*

ECONOMIC & COMMUNITY DEVELOPMENT DIRECTOR  
503-783-3839  
MICHAELW@CI.HAPPY-VALLEY.OR.US  
*Preserve. Serve. Enrich.*

---

**From:** Reah Flisakowski [mailto:rlf@dksassociates.com]  
**Sent:** Thursday, April 05, 2012 12:22 PM  
**To:** Dennis Yee  
**Cc:** Michael Walter; Larry Conrad; gerry.uba@oregonmetro.gov  
**Subject:** Re: Happy Valley 2025 land use review

This email is a resend of the email below with a much smaller attachment. The revisions are no longer comments in the table but shown in a new column.

Let me know if you have questions.

Dennis,

The proposed revisions to the 2025 land use for Happy Valley are attached. The household revisions are shown with comments in columns Q and W on the first tab. The employment revisions are shown with a comment in column I on the second tab.

Please let me know if you have any questions.

Thanks, Reah

--

### **WE ARE MOVING!**

On April 2nd 2012 DKS Portland will be operating out of our new location at 720 SW Washington Street, Suite 500, Portland, OR 97205

Reah Flisakowski, PE

**DKS Associates**

P: [503.243.3500](tel:503.243.3500) | C: [503.473.3362](tel:503.473.3362)

[rlf@dksassociates.com](mailto:rlf@dksassociates.com)

---

**From:** Dennis Yee

**Sent:** Monday, March 05, 2012 3:56 PM

**To:** Michael Walter, AICP Happy Valley; Erika Palmer

**Cc:** Gerry Uba; Maribeth Todd; Jim Cser; Conrad, Larry

**Subject:** REVISED Provisional 2025 TAZ Forecast Distributions - Happy Valley and Damascus only

All:

I have made the revisions to the TAZ allocations for jobs and households for Happy Valley and Damascus.

The Household (HH) TAZ forecast for the two cities reflects +4,000 more households sprinkled into Happy Valley TAZ's and a corresponding drop of 4,000 households from Damascus' set of TAZ's, for a net difference of zero

The Employment TAZ forecast has also been changed, reflecting a decrease of -1,500 jobs out of Damascus. These jobs are left unallocated and some fraction (or all) can be re-assigned to Happy Valley or elsewhere in the region. I did not re-assign the jobs to Happy Valley, although I am aware that some of these jobs may be expected to be redistributed to the TAZ with the Providence site. Happy Valley should feel free to add a few more jobs to go along with the added households as you see fit.

Finally, these new TAZ household (and job) allocations are still PROVISIONAL. I look forward to Happy Valley and Damascus in reviewing / editing the allocation and then returning your final estimates to Metro for us to incorporate into the next set of forecast years (2035/2045).

I will sending this info under separate email. If you do not receive the second email with the attachment, I am also placing a temporary file on the following ftp server location:

<ftp://ftp.oregonmetro.gov/pub/gm/drc/dennis/TAZAllocation/2025%20TAZ%20Forecast/>. The file is

named: Revised GAMMA TAZ for HV & Damascus.xlsx. Please download the ftp file within the next 24 hours.

Regards,

Dennis Yee  
Metro Chief Economist

Metro  
600 NE Grand Av.  
Portland, OR 97232-2736  
(503) 797-1578  
(503) 797-1909 (FAX)  
dennis.yee@oregonmetro.gov

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**Meeting Summary: Damascus and Happy Valley 2025 TAZ Forecast Distribution Reconciliation  
February 21, 2012**

Attendees: Steve Gaschler and Erika Palmer (Damascus); Matt Hastie (Damascus consultant); Mike Walter (Happy Valley); Larry Conrad (Clackamas County); Jennifer Donnelley (DLCD); Dennis Yee and Gerry Uba (Metro)

**2025 Household Projections for Review/Discussion**

Metro proposed shifting the household 2025 allocation to correct an error discovered in the TAZ modeling and forecasting assumption for Happy Valley. The final settlement between Metro, the county, and the cities was to shift/re-distribute 4,000 households in year 2025 from Damascus to Happy Valley. This re-distribution would carry forward through 2035/45 in addition to the continuance of future growth trends anticipated after 2025 using the adjusted lower base in Damascus and the higher adjusted base for Happy Valley.

Jurisdiction	Households	Suggestion/Decision
South Stafford	1,126	Move 500 out, and into Villebois
Canby	3,000	No change (defended by Larry )
Damascus	9,700	Move out 4,000 out, and into Happy Valley
S. Hillsboro (St. Mary's)	2,000	No action
Clackamas Co. - unallocated	1,500	TBD
Happy Valley		Put the 4,000 from Damascus

## 2025 Employment Projections for Review/Discussion

As a result of shifts in households, it was determined that the reduction of households out of Damascus would pull jobs out Damascus too. The rationale was that some fraction of jobs (i.e., 1500 total jobs) would not materialize as jobs with high affinity with household location choice would not locate in Damascus given the adjustment to a fewer number of households in 2025. The primary justification for both the shift in households and employment was that Damascus felt that the delay function assumed for infrastructure development was too optimistic in the model forecast. It was felt that infrastructure development would come later and stunting the 2025 growths for Damascus.

Jurisdiction	Employment	Suggestion/Decision
Damascus		Option 1: Move jobs from Damascus TAZs 827 and 831 to Happy Valley TAZs 801, 799 and 881  Option 2: Move 1500 jobs from Damascus to other TAZs in the region, such as the TAZs in Hillsboro

### Next Step:

- 1) Metro will use the suggestions above to reallocate year 2025 households and employment
- 2) Metro will send the re-allocation result to County TAZ Forecast coordinator and Damascus and Happy Valley staff for review and final comment
- 3) County coordinator will meet with Damascus and Happy Valley staff to review the re-allocation
- 4) Damascus, Happy Valley and County will send their final comments to Metro
- 5) Damascus will use the 2011 Beta Forecast data as provisional/interim forecast for its planning work (BLI, TSP and Facility planning). They will update their analysis later this year when the revised 2035/45 Gamma TAZ forecast data becomes available.

---

**From:** Dennis Yee

**Sent:** Friday, February 17, 2012 11:45 AM

**To:** Matt Hastie; Gerry Uba; Ray Valone; Donnelly, Jennifer; 'Conrad, Larry (LarryC@co.clackamas.or.us)'; 'John Morgan (john@morgancps.com)'; 'Steve Gaschler (sgaschler@damascusoregon.gov)'

**Subject:** RE: Damascus Population discussion

The TAZ information is found at this ftp server:

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Midterm\\_review/TAZ\\_2025/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Midterm_review/TAZ_2025/)

no passwords or logins needed. Just use your favorite browser to navigate to the location above and download the files.

Regards,

Dennis Yee

Metro Economist  
503-797-1578

---

**From:** Matt Hastie [mailto:mhastie@angeloplanning.com]  
**Sent:** Friday, February 17, 2012 9:15 AM  
**To:** Gerry Uba; Ray Valone; Donnelly, Jennifer; 'Conrad, Larry (LarryC@co.clackamas.or.us)'; Dennis Yee; 'John Morgan (john@morgancps.com)'; 'Steve Gaschler (sgaschler@damascusoregon.gov)'  
**Subject:** RE: Damascus Population discussion

I'm available from about 1:30 until 3 that afternoon if you want me to attend part of that meeting. Would that work? And in advance of the meeting would someone be able to send me whatever information you have that describes the current 20-year population forecast you are currently assuming? Thanks!

Matt

---

**From:** John Morgan [mailto:john@morgancps.com]  
**Sent:** Thursday, February 16, 2012 8:18 PM  
**To:** Gerry Uba  
**Cc:** Ray Valone; Donnelly, Jennifer; Conrad, Larry(LarryC@co.clackamas.or.us); Dennis Yee; Steve Gaschler (sgaschler@damascusoregon.gov); Matt Hastie; Erika Palmer  
**Subject:** Re: Damascus Population discussion

I will not be with you Tuesday as I'll be leading a training for the Eugene Planning Commission that day. You may have more fun.

Do well.

John

Sent from my iPhone

---

**From:** Gerry Uba [mailto:Gerry.Uba@oregonmetro.gov]  
**Sent:** Thursday, February 16, 2012 5:41 PM  
**To:** Ray Valone; Donnelly, Jennifer; 'Conrad, Larry (LarryC@co.clackamas.or.us)'; Dennis Yee; 'John Morgan (john@morgancps.com)'; 'Steve Gaschler (sgaschler@damascusoregon.gov)'; Matt Hastie  
**Subject:** RE: Damascus Population discussion

That's right. We can use the same meeting to discuss all key concerns about the forecast distribution. Following is the meeting information:

February 21<sup>st</sup>  
1:30 PM to 3:30 PM  
Happy Valley City Hall offices

I will see you all next week.



Gerry

---

**From:** Ray Valone  
**Sent:** Thursday, February 16, 2012 3:40 PM  
**To:** Donnelly, Jennifer; 'Conrad, Larry (LarryC@co.clackamas.or.us)'; Dennis Yee; 'John Morgan (john@morgancps.com)'; 'Steve Gaschler (sgaschler@damascusoregon.gov)'; 'Matt Hastie'  
**Cc:** Gerry Uba  
**Subject:** RE: Damascus Population discussion  
**Importance:** High

I just found out from Gerry Uba of our office – he is coordinating Metro’s allocation of population – that there is a meeting scheduled for next Tuesday at 1:00 in Happy Valley for the both cities to iron out the final numbers. Invited attendees include Michael Walter, Larry Conrad, John Morgan, Steve Gaschler, Erika Palmer, Dennis Yee and Gerry. So, I suggest that Jennifer attend that meeting and we kill the two proverbial birds (in this case, I think it is one bird) with one meeting.

Gerry said he would have no problem with having Matt there as well and, if needed, maybe extend the meeting 30 minutes to work out the issues.

Ray

---

**From:** Michael Walter [mailto:MichaelW@ci.happy-valley.or.us]  
**Sent:** Thursday, February 16, 2012 11:22 AM  
**To:** Dennis Yee; Conrad, Larry  
**Cc:** Gerry Uba; Maribeth Todd; John Morgan; Steve Gaschler; Erika Palmer  
**Subject:** RE: Meeting to resolve TAZ allocation between Damascus and Happy Valley

When this was distributed and discussed at the previous meeting at the County, the numbers for Damascus/Happy Valley were described as “flubbed” and “wet clay”. I’d hoped to see these tables with the “non-flubbed” numbers that we are supposed to make comments on.

Thanks for all your work on this “Hulkian” project (Gamma forecast—gamma rays – Bruce Banner – the Hulk). Ok, sorry, it’s been a long week...

Regards,

*Michael D. Walter, AICP*

ECONOMIC & COMMUNITY DEVELOPMENT DIRECTOR  
503-783-3839  
MICHAELW@CI.HAPPY-VALLEY.OR.US  
*Preserve. Serve. Enrich.*

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Thursday, February 16, 2012 8:20 AM  
**To:** Dennis Yee; Erika Palmer; Michael Walter, AICP Happy Valley  
**Cc:** Gerry Uba; Maribeth Todd; John Morgan; Steve Gaschler; Buehrig, Karen; Fritzie, Martha  
**Subject:** RE: Meeting to resolve TAZ allocation between Damascus and Happy Valley  
**Importance:** High

Good Morning –

Just a quick thought on this approach --

I am reluctant to move anything from Canby at this time – the county is starting a separate but parallel population coordination process with the 5 rural cities and this change would be premature without further discussion with the rural cities.

I think that between the 1400 unallocated households, some shifts from Damascus (which I assume they want to occur) and from Pete's Mountain -- we can make the 2500 fairly easily.

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

*(v) 503.742.4539*

[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Wednesday, February 15, 2012 10:45 AM  
**To:** Erika Palmer; Conrad, Larry; Michael Walter  
**Cc:** Gerry Uba; Maribeth Todd; John Morgan; Steve Gaschler  
**Subject:** RE: Meeting to resolve TAZ allocation between Damascus and Happy Valley

Mike: You mentioned earlier that you wanting more information about a secondary scenario. I have laid out a recommendation (please see email thread below) on how we might agree to shift household TAZ distributions into Happy Valley. Is what I sent out (see my message below) sufficient information or were you thinking about something more specific to help with discussions?

All: I'm trying to think about what info might be useful, so please send me your questions or request for info and I'll do my best to prepare the data ahead of the meeting on the 21<sup>st</sup>.

Update: I spoke at length with Hillsboro about shifting a few hundred households from South Hillsboro (aka St. Mary's properties) into Happy Valley. I think I want to nix that suggestion and go with shifting the approximate 1,400 "unallocated households" in Clackamas county all into Happy Valley in addition to some of the other suggestions.

Regards,

Dennis Yee  
Metro Economist  
503-612-9532

.....  
**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Tuesday, February 14, 2012 1:21 PM  
**To:** Erika Palmer; Conrad, Larry; Michael Walter, AICP Happy Valley  
**Cc:** Gerry Uba; Maribeth Todd; John Morgan; Steve Gaschler  
**Subject:** RE: Meeting to resolve TAZ allocation between Damascus and Happy Valley

All:

I haven't heard from everyone regarding availability, but February 21<sup>st</sup> seems like a good day for all who have replied.

Tentatively let's plan to meet:

February 21<sup>st</sup>  
1:30 PM to 3 PM  
Happy Valley City Hall offices

The agenda will be to agree on an adjustment algorithm for fixing the Happy Valley TAZ distribution.

After correcting for an incorrect initial construction costs for Happy Valley, the corrected scenario suggests the following shift of households from around the region for the year 2025 TAZ distribution. In this correction, Happy Valley grows more rapidly – at least through year 2025.

My proposal is to:

Add/distribute +2,500 more households to Happy Valley TAZ's

Subtract:

-500 from Canby

-500 from area below Stafford/I 205/east of Wilsonville outside city limits

-1,000 from Damascus area TAZ's

-500 from St. Mary's/south Hillsboro expansion area (will have to coordinate with Hillsboro too or forgo this and assign from the unallocated households in Clackamas, which totals to about 1,000 households)

The model actually shifts households from practically everywhere around the region, but the above listed locations are where the model seems to estimate the highest places where the changes should happen from.

Regards,

Dennis

.....

**From:** Dennis Yee

**Sent:** Monday, February 13, 2012 2:33 PM

**To:** Conrad, Larry; Erika Palmer (epalmer@ci.damascus.or.us); Michael Walter, AICP Happy Valley

**Cc:** Gerry Uba; Maribeth Todd

**Subject:** Meeting to resolve TAZ allocation between Damascus and Happy Valley

All:

Here's a few potential meeting dates to discuss and resolve issues. . .please invite anyone else from your city that should participate.

I propose meeting in Happy Valley city hall for about an hour to 90 minutes on this matter.

Here' my availability. Will any of these times work for you all? Please indicate your availability.

Thursday 16<sup>th</sup> 9 to 5

Friday 17<sup>th</sup> 9 to 5

Monday 20<sup>th</sup> 9 to noon

Tuesday 21<sup>st</sup> 9 to 5

Wednesday 22<sup>nd</sup> 2 to 5

Thursday 23<sup>rd</sup> 3 to 5

Friday 24<sup>th</sup> 2 to 5

Mike: okay to meet at city hall?

Dennis Yee

## CITY OF HILLSBORO

### Distribution Review and Adjustments Completed (April 18, 2012)

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**From:** Doug Miller [mailto:dougm@ci.hillsboro.or.us]  
**Sent:** Wednesday, April 18, 2012 1:10 PM  
**To:** Dennis Yee  
**Subject:** RE: TAZ Allocations

Perfect – thanks!

Doug

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Wednesday, April 18, 2012 1:06 PM  
**To:** Doug Miller  
**Subject:** RE: TAZ Allocations

I think we are good to go. We are adding 797 more units to the total cap. This was per your data.

d

---

**From:** Doug Miller [mailto:dougm@ci.hillsboro.or.us]  
**Sent:** Wednesday, April 18, 2012 11:33 AM  
**To:** Dennis Yee  
**Subject:** TAZ Allocations

Hi Dennis,

Ali mentioned that you had called her last Friday to ask about the additional capacity for the upzone in the Orenco Station area. Can you tell me what figure she provided so that I can make sure it ties to my data?

Doug

---

**From:** Doug Miller [mailto:dougm@ci.hillsboro.or.us]  
**Sent:** Tuesday, April 17, 2012 4:20 PM  
**To:** Dennis Yee  
**Subject:** 2045 Capacity Adjustments

**Attachments:** 2045 Adjustments to Metro\_Final\_updates\_41712.xlsx; 2010 TAZ with NoHi Concept Plan\_Traffic\_Modeling.pdf

Hi Dennis,

The adjustment to the 2045 capacity for TAZ 1275 I sent you last week was not correct. Per the attached Urban Reserves pre-concept plan, the capacity for #1275 should be 1025 DUs which would require an adjustment of 1020 DUs. In addition, TAZ #1275 has a 2045 capacity of 2291 per the pre-concept plan, requiring an adjustment of 2291 DUs.

Doug

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Thursday, April 05, 2012 12:59 PM  
**To:** Doug Miller  
**Cc:** Steve Kelley  
**Subject:** RE: TAZ Allocation Meeting

Doug: Let me sync up with Steve's availability first.

Steve: What's your availability?

Tuesday or Wednesday look good. I can take the train out to your place.

Dennis

---

**From:** Doug Miller [mailto:doug@ci.hillsboro.or.us]  
**Sent:** Thursday, April 05, 2012 12:33 PM  
**To:** Dennis Yee  
**Subject:** TAZ Allocation Meeting

Hi Dennis,

I just left a phone message that I will not be able to make it to the meeting in Beaverton tomorrow afternoon. We need to reschedule for next week to meet for a discussion on this matter between Metro and the City of Hillsboro alone. We could meet at the Metro office or you can come to our office. Let me know which you prefer.

Doug Miller  
Urban Planner II - GIS  
City of Hillsboro  
503-681-6231

---

**From:** Doug Miller [mailto:doug@ci.hillsboro.or.us]  
**Sent:** Thursday, March 29, 2012 4:51 PM  
**To:** Dennis Yee  
**Cc:** Steve Kelley; Gerry Uba  
**Subject:** 2025 TAZ Allocation Adjustments

**Attachment:** Hillsboro Final Gamma Adjustments to Metro.xlsx (22kb)

Hi Dennis,

Attached is out adjustments to the 2025 TAZ jobs and HH allocations in Hillsboro and our current UGB and Urban Reserves. The spreadsheet has separate tabs for jobs and HHs. We allocated jobs between TAZs and kept to the control total. However, on the HH side, we came up short by 5,811 households. Steve Kelley at Washington County told me he thinks that he has over-allocated unincorporated areas TAZs with enough households to fill our gap.

Doug Miller  
Urban Planner II - GIS  
City of Hillsboro  
503-681-6231

---

**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Tuesday, February 21, 2012 11:59 AM  
**To:** Dennis Yee; Doug Miller; Alwin Turiel  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** RE: Amberglen 2025 HH distribution

Dennis & Ali:

I'm OK with shifting jobs from the unincorporated areas to our Centers, but only in cases where the unincorp. TAZ's seem high for the allocated timeframe.

It would not make much sense to shift growth among TAZ's within a given Employment Zone if the collective growth of the entire zone appears too low.

At the next level, we could be shifting between Employment Zones (EZ's) within Wash. Co., as long as such shifts would not be under-allocating the 'donor' EZ.

As we work toward a final set of allocations for 2025, we may see a variety of areas requiring some level of 'adjustment'. Again, I'm comfortable with any adjustments that make sense based upon historic and recent development trends and remaining zoned capacities.

Given that we are only at 2025, and Washington County seems to have ample jobs capacity to a point well beyond that time, we should not need to worry about our employment allocations. On the other hand, I am concerned about our housing capacities (especially single family) - even for the mid-term allocations.

Steve

---

**From:** Richard Walker  
**Sent:** Sunday, February 19, 2012 10:06 PM  
**To:** Alwin Turiel; Dennis Yee; Doug Miller; Steve Kelley; Gerry Uba  
**Cc:** Don Odermott; Patrick Ribellia  
**Subject:** RE: Hillsboro Jobs Base Estimate

alwin .....

I can explain this to you more effectively via phone. Time does not permit a detailed written response. Are you available tuesday morning for a chat?

But for now, I guarantee that this characteristic does not affect the number of trips.

.....dick w

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**From:** Alwin Turiel [alwint@ci.hillsboro.or.us]  
**Sent:** Friday, February 17, 2012 5:15 PM  
**To:** Richard Walker; Dennis Yee; Doug Miller; Steve Kelley; Gerry Uba  
**Cc:** Don Odermott; Patrick Ribellia  
**Subject:** RE: Hillsboro Jobs Base Estimate

Dick – When you explain that “*employment serves as a “size variable” to rate the relative attractiveness of potential destinations*” does that mean a kind of gravity modeling is being used to attract employment trips from origins (e.g., household locations)? If I understood that correctly, then would 1,500 to 1,700 fewer jobs in an area significantly affect the traffic generation for that area (multiple TAZs, but in proximity to each other)? That’s the order of magnitude I’m concerned about.

Per the information our folks plugged into the data sent back to you, Intel had 12,709 total employees in Hillsboro in 2011 – YET IN THE SAME YEAR INTEL’s EcoNW report cited the company’s employment as 15,150 in Washington County. Subtracting the reported 775 employees at the Aloha plant, that would be 14,375 in the city of Hillsboro – or 1,666 MORE than the total reported based on the survey work city staff did. I did a little cross checking this afternoon and am confident Intel employment has not declined over the past three years.

Thanks for your patience in explaining this to me Dick and Dennis!  
Ali Turiel

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**From:** Alwin Turiel [mailto:alwint@ci.hillsboro.or.us]  
**Sent:** Friday, February 17, 2012 4:52 PM  
**To:** Dennis Yee; Doug Miller; Steve Kelley; Gerry Uba  
**Cc:** Don Odermott; Patrick Ribellia; Richard Walker  
**Subject:** RE: Hillsboro Jobs Base Estimate

Thanks for the explanation Dennis. It’s helpful to understand the inputs more thoroughly. While I understand the dilemma this presents for the model structure, the bottom line question remains. Are we somehow undercounting the actual (real) number of employees in our industrial areas, and if we are, what does that mean for base year trip generation as well as future estimates of employment growth in our industrial area (which build off the base year)?

Have a good three-day weekend.  
Ali

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**From:** Dennis Yee  
**Sent:** Friday, February 17, 2012 3:15 PM  
**To:** Doug Miller; Alwin Turiel; Steve Kelley  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** Amberglen 2025 HH distribution

All:



Depending on the perception of how “light” the allocation is for the TAZ’s that approximate Amberglen, my suggestion is to assign part of the “unallocated dwelling units” in UIA Washington county (please reference Gamma\_TAZ Forecast\_report\_2025.xlsx, tab sheet 2025 HH by City) to TAZ’s 1288 to 1292.

Presently, the 2025 TAZ spreadsheet shows an average absorption rate of 8.5 percent utilized in the Amberglen TAZ’s. Assigning 1,000 or so more units (from the Washington UIA + Hillsboro’s unallocated of 255 units) into the Amberglen TAZ’s brings the absorption rate up to 25%. This would reflect the increase in development posited by two developers who have indicated a desire to develop the area in the near term.

Also, assigning 1,000 more units would raise the overall Hillsboro city 2025 absorption rate to 41% from 33%. All-in-all, this would be my suggestion.

After you all have had a chance to further review the data, all parties concerned should convene to hammer out the details before the end of March 30<sup>th</sup>. I look forward to your future review comments.

Thanks all for working on this issue.

Regards,

Dennis Yee  
Metro Chief Economist

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**From:** Richard Walker  
**Sent:** Friday, February 17, 2012 1:12 PM  
**To:** Dennis Yee; Doug Miller; Alwin Turiel; Steve Kelley; Gerry Uba  
**Cc:** Don Odermott; Patrick Ribellia  
**Subject:** RE: Hillsboro Jobs Base Estimate

I wish to add a few comments regarding the impact of employment in the travel demand model. But first, be assured that **trips are not reduced due to the BEA to BLS relationship.**

The number of trips made in the region are linked to the attributes of households (number of workers, HH size, income, presence of children, etc.). Given these number of trips, employment serves as a “size variable” to rate the relative attractiveness of potential destinations. Since all employment is expressed in BLS terms, the relativity of the attractiveness remains somewhat consistent.

.....dick walker, manager of modeling and forecasting

**From:** Dennis Yee  
**Sent:** Friday, February 17, 2012 12:55 PM  
**To:** Doug Miller; Alwin Turiel; Steve Kelley; Gerry Uba  
**Cc:** Don Odermott; Patrick Ribellia; Richard Walker  
**Subject:** RE: Hillsboro Jobs Base Estimate

Alwin:

Per our conversation, allow me to summarize the current position on Metro's TAZ employment data/forecast.

1. The 2010 employment data is derived from covered nonfarm wage and salary data (aka QCEW or aka ES202)
2. Metro geocodes / maps the QCEW employment data to individual tax lots and zonal sums the employment data to city level for tabular display purposes. We feel that the geocoding of the QCEW data we receive from the state is the most accurate and consistent data source of this type.
3. Covered means employees/employers who pay into unemployment insurance for the worker
4. Cities (including Hillsboro) have reviewed and acknowledged the 2010 base year data (reviews were completed early 2011); we are now using this data for TAZ modeling and forecasting purposes
5. The 2010 TAZ employment forecast data is wage and salary establishment jobs only – meaning they **exclude** from the count such workers as proprietors, (i.e. self employment which include some consultants), unpaid workers, farm workers, workers who are headquartered elsewhere but commute to Hillsboro to work sometimes.
6. Metro's transportation demand model is calibrated to accept QCEW employment data for TAZ forecasting, QCEW data is distinguished as not CENSUS worker data (which is based on residency), nor is the travel demand model calibrated anymore to BEA employment (place of work data, which includes a self employment component).
7. BEA data is difficult to use because the smallest geographic unit for BEA employment data is county-level. Moreover, BEA employment data does not divide the self employment by industry, it is all lumped together as one undifferentiated employment category.
8. We could not easily switch to another employment definition at this time for the TAZ forecast as we would not have the resources to adjust our models quickly and effectively. Any switch in employment definitions would include a much longer conversation to weigh the pros and cons of switching.
9. Going forward, Metro will take care to label any table, spreadsheet, map, or chart characterizing the employment data as nonfarm wage and salary employment, excludes self employment
10. I have copied Richard "Dick" Walker as he may have additional comments regarding the behavioral characteristics of employment and the transportation demand model

Regards,

Dennis Yee  
Metro Economist

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**From:** Doug Miller [mailto:dougm@ci.hillsboro.or.us]

**Sent:** Thursday, February 16, 2012 4:56 PM

**To:** Alwin Turiel; Dennis Yee; Steve Kelley; Gerry Uba  
**Cc:** Don Odermott; Patrick Ribellia  
**Subject:** RE: Hillsboro Jobs Base Estimate

Just to clarify, the City of Hillsboro employment numbers that were submitted to Metro for the 2010 TAZ base year update included adjustments for the actual number of employees by site, including temp and contract employees. We got a great response to our request for accurate employment figures from our top employers. Most of them are in hi-tech industries.

Doug Miller  
Urban Planner II - GIS  
City of Hillsboro  
503-681-6231

**From:** Alwin Turiel  
**Sent:** Thursday, February 16, 2012 4:09 PM  
**To:** Dennis Yee; Steve Kelley; Gerry Uba  
**Cc:** Doug Miller; Don Odermott; Patrick Ribellia  
**Subject:** Hillsboro Jobs Base Estimate

Hello gentlemen,  
Please see the email string below regarding the difference between Metro base year jobs allocations by city and the estimates found in the city of Hillsboro's draft Economic Opportunities Analysis (circa 2008). This is the issue I spoke with Dennis about after the Washington County allocations meeting yesterday.

Is there something we can do about this issue in the employment data (either now for the RTP work or later when DRC "refines" the data further for the next urban growth report)? I am a bit troubled that whatever coefficients Metro may be using to account for non-covered jobs in the region may not reflect the real picture in some of our high-tech oriented industrial areas (e.g., Hillsboro, Wilsonville, Tualatin).

If there is someone else at Metro I should contact about this could you please let me know?

Thanks!  
Ali Turiel  
City of Hillsboro  
503.681.6156

**From:** wer@johnson-reid.com [mailto:wer@johnson-reid.com]  
**Sent:** Friday, September 30, 2011 10:51 AM  
**To:** Alwin Turiel  
**Cc:** Colin Cooper  
**Subject:** Re: Employees vs. jobs in Hillsboro

Hi Ali.

Indeed, Washington County has an unusually high rate of total employment to covered for the reason you cited: Intel and other high-tech that are R&D project-based rather than sustained assembly line jobs. But in Beaverton for instance, Nike/athletic wear does the same basic thing

with their R&D, design.

Thank you and enjoy your weekend!

Bill

Sent via BlackBerry from T-Mobile

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**From:** Alwin Turiel <alwint@ci.hillsboro.or.us>  
**Date:** Fri, 30 Sep 2011 10:20:21 -0700  
**To:** wer@johnson-reid.com<wer@johnson-reid.com>  
**Cc:** Brad Choi<bradc@ci.hillsboro.or.us>; Doug Miller<doug@ci.hillsboro.or.us>; Colin Cooper<colinc@ci.hillsboro.or.us>  
**Subject:** RE: Employees vs. jobs in Hillsboro

Thanks Bill!

That will give us a ballpark for now. I must admit I was surprised back in 2008 when I saw the original calculations in the draft EOA that the city's non-covered employment was estimated to **be 16% of the total jobs base**. Riffing off your comment about different industries having different ratios of sole proprietor/self-employed workers, does the 16% include Intel's "green badge" workers (contractors)? Given national trends, it would be interesting to know at some point whether non-covered employment has increased in Hillsboro and Washington County during the Great Recession (aka, Jobless Recovery).

Hope you have a lovely weekend,  
Ali

Hi Ali.

It turns out the easiest answer is to multiply the City's average "total" jobs adjustment by the 2010 number from Metro.

That is to say:

$$58578 \times (71212 \div 60884) = 68511$$

That is a rough estimate of course. When we calc'd Hillsboro's total employment by adjusting each broad industry ES202 employment number by a sole proprietor/self-employed/total employment factor. What I just did was rather blunt compared to our original analysis.

Without seeing the Metro numbers, it would be difficult to assess industry-specific adjustment of course. It would be interesting though because each industry has adjusted to this terrible economy differently. That means the "total employment" adjustment will have changed.

I hope that helps you Ali. If we had the detailed industry numbers and knew Metro's own adjustments we could do a better but fairly fast adjustment.

Thanks,

Bill

Sent via BlackBerry from T-Mobile

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**From:** Alwin Turiel <[alwint@ci.hillsboro.or.us](mailto:alwint@ci.hillsboro.or.us)>  
**Date:** Wed, 28 Sep 2011 13:24:06 -0700  
**To:** [wer@johnson-reid.com](mailto:wer@johnson-reid.com)<[wer@johnson-reid.com](mailto:wer@johnson-reid.com)>  
**Cc:** Doug Miller<[doug@ci.hillsboro.or.us](mailto:doug@ci.hillsboro.or.us)>  
**Subject:** Employees vs. jobs in Hillsboro

Hi Bill,

Hope things are going well for you these days. I was wondering if you could answer a question that's come up regarding the Hillsboro jobs count found in the 2009 EOA you guys did for us and recent employees working in the city numbers being used by Metro and our staff for transportation modeling, etc. The Metro data is ES202 based (with some Metro adjustments apparently) and establishes 58,578 employees working in the city for the 2010 base year. Doug Miller has confirmed the "employees" number is NOT the census based employed persons number for the city 2010 census area.

The 2009 EOA lists the 2006 base year "total employment" in the city as 71,212 (page 31) and cites ES 202 data as the source of 60,884 of those employee jobs. Can you help us understand how this gap might translate to a comparable "total jobs" now in the city?

Thanks!  
Ali  
681.6156

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*"What lies behind us, and what lies before us, are tiny matters compared to what lies within us."*  
— Oliver Wendell Holmes



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## CITY OF KING CITY

### Distribution Review and Adjustments Completed (April 5, 2012)

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**From:** Dennis Yee  
**Sent:** Thursday, April 05, 2012 3:18 PM  
**To:** Liden, Keith S.  
**Cc:** Dave Wells; Gerry Uba; Steve Kelley  
**Subject:** RE: King City TAZ Allocations

Keith:

I will take the 10% into advisement and adjust accordingly.

With respect to 1050, we implemented a new redevelopment model aided by comments and other reviewers which set a very aggressive approach for estimating potential infill or redevelopment capacity, hence the 33 units. We will scale back this figure to zero capacity.

With 1051, straddles part of the city and unincorporated Washington county both partly inside and outside the UGB, which is why we carry so much capacity in this TAZ. The city if it does not annex in coming years the entirety of the UGB reserve in this TAZ will of course yield much lower capacity estimates. We are comfortable with this estimate as of now, but will consult Washington County for the long term forecast, in which this area will be added to the UGB and accordingly receive greater development density.

With 1052, we will scale back capacity and housing unit growth by 10%.

Thanks for your input at this time for the midterm 2025 TAZ distributions.

Regards,

Dennis Yee  
Metro Economist

---

**From:** Liden, Keith S. [mailto:Liden@pbworld.com]  
**Sent:** Thursday, April 05, 2012 3:04 PM  
**To:** Dennis Yee  
**Cc:** Dave Wells; Gerry Uba; Steve Kelley  
**Subject:** RE: King City TAZ Allocations

Dennis,

I've discussed your TAZ household estimates with Dave Wells. We're comfortable with your general approach and overall, the numbers look reasonable. We believe that you really need to consider TAZ 1051 and 1052 as part of KC because TAZ 1050 only represents about 50% of the city's current land area. Our comments by TAZ for HH by 2025:

- **1050** – 33 would be high without any changes in zoning, because all residential land in this TAZ is currently developed. However, if Metro and the city decide to get serious about implementing the Metro 2040 town center concept with higher densities and mixed-use near 99W in what is our LC (Limited Commercial) zone, then 33 units would be pretty low.
- **1051** – 376 would be a little high if no annexation occurs. We estimate this area has another 250± lots, which are either platted or pending. With development of remaining underdeveloped parcels and a modest amount of annexation, 376 could be a very reasonable assumption. While the city has no immediate interest in annexing west of 137<sup>th</sup> Avenue, modest adjustment of the UGB and annexation beyond 137<sup>th</sup> is something the city would like the ability to entertain prior to 2025 should the need arise. Though we're not focused on this now, your estimate of 2,618 after 2035 for this TAZ seems high. The city's concept plan (in coordination with Washington County) for the area bounded by 137<sup>th</sup>, Beef Bend Rd., Roy Rogers Rd. and the Tualatin R. flood plain/wildlife refuge arrived at an estimate of 3,180 units assuming 10 du/ac). 2,618 for ½ of that area appears pretty high.
- **1052** - 189 seems high. There is only one significant undeveloped property in this TAZ, and the current multi-family zoning would allow 130-140 units (Lindquist property on the east side of the TAZ). Tualatin River flood plain, wetlands, and ODOT access issues will probably continue to limit future development potential. The properties in the western half of the TAZ are in Washington County and are mostly developed.

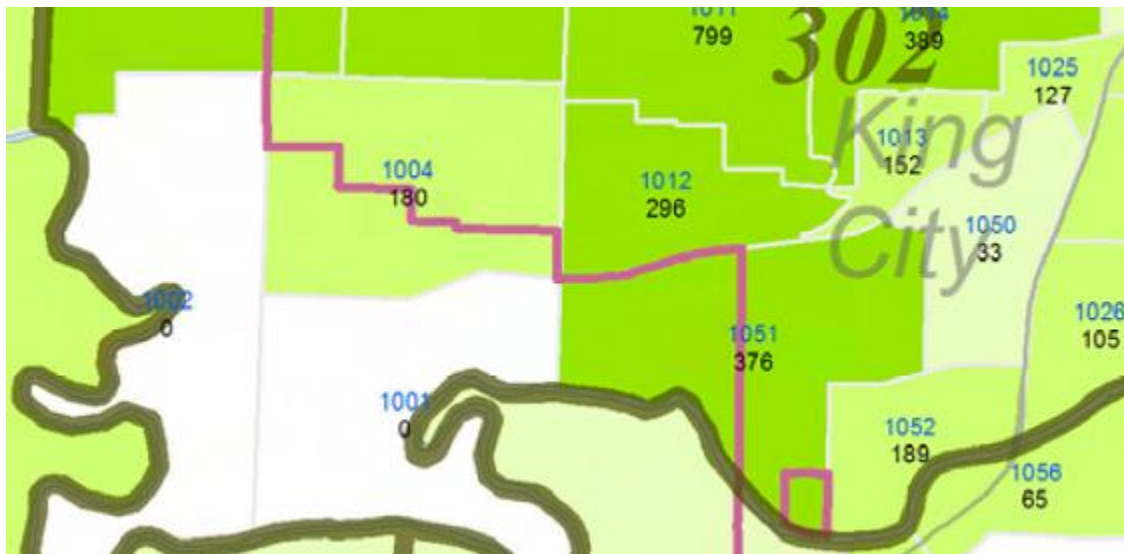
In summary, we agree with your household estimates for 2025 if they are intended to reflect maximum development possible. Given the considerations noted above and our feeling that we can't expect 100% of available properties to develop, we recommend reducing the King City household estimate by approximately 10%.

Please feel free to contact me if you need any further clarification. Thanks.

**Keith S. Liden, AICP**  
Lead Planner, PlaceMaking

***Parsons Brinckerhoff***

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**From:** Liden, Keith S. [mailto:Liden@pbworld.com]  
**Sent:** Thursday, April 05, 2012 1:37 PM  
**To:** Dennis Yee  
**Cc:** Gerry Uba  
**Subject:** RE: King City TAZ Allocations

Thanks, Dennis. I'll discuss this with Dave Wells, City Manager, and get back to you within the next couple of days.

**Keith S. Liden**, AICP  
Lead Planner, PlaceMaking

**Parsons Brinckerhoff**

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**From:** Dennis Yee  
**Sent:** Thursday, April 05, 2012 12:17 PM  
**To:** Gerry Uba; Liden, Keith S.  
**Cc:** Dave Wells; Gerry Uba  
**Subject:** RE: King City TAZ Allocations

Hi Keith:

For the midterm 2025 distribution of households in the TAZ adjacent to King City and in the reserves that's just west of the city, it's not surprising that you see a "lower" number of expected household units assigned. It is because the reserve has yet to be assigned into the UGB by the year 2025. We assume a later year for the urban reserve to enter and get developed, so the timing is a bit delayed for this TAZ due to the delay in the reserves capacity. Parts of TAZ 1051 lie inside and outside the Metro UGB. When the Reserve enters the UGB by 2035, we should see more growth assigned, but not yet in year 2025. As the model projects growth in 5 year increments, it's very likely that full build out won't appear in the TAZ's that intersect with the reserves until 2040 or later.

Lastly, we've generally assigned TAZ 1050 to approximate King City, but Steve Kelley with Washington county and you may look at additional adjacent TAZ's. Anyhow, TAZ 1050 shows little capacity (33 units), in which the 2025 TAZ forecast shows 2010 HH = 955 and 2025 HH = 988, 100% of estimated units built out.

Here's what we are seeing for adjacent TAZ's to King City:

	<b>2010 HH</b>	<b>2025HH</b>	<b>2025 DU Capacity assumed</b>
1050	955	988	33
1051	1091	1467	376 (capacity jumps to 2,618 units after 2035 when the reserves is added to the UGB)
1052	700	889	224

Does this household forecast look acceptable? You mentioned it might be a bit aggressive for King City. If so, how much would you like to reduce it by? 10%, 20%?



Regards,

Dennis Yee  
Metro Economist

---

**From:** Gerry Uba  
**Sent:** Thursday, April 05, 2012 11:15 AM  
**To:** Dennis Yee  
**Subject:** FW: King City TAZ Allocations  
**Importance:** High

Hello Dennis,

Per my email to Keith that I copied you, please call Keith to discuss and wrap up King City's TAZ distribution. See also the attached map he sent. Thanks

Gerry

---

**From:** Gerry Uba  
**Sent:** Thursday, April 05, 2012 11:12 AM  
**To:** 'Liden, Keith S.'  
**Cc:** Dave Wells; Dennis Yee  
**Subject:** RE: King City TAZ Allocations

Hello Keith,

Thanks for getting back to me quickly. I'm happy that you are consulting with Dave on this subject and has shared your thoughts with Steve. I am copying our Chief Economist, Dennis Yee, on this email. Since we are running behind on the project schedule (local governments comments deadline was March 30), Dennis will call you soon to discuss any concerns that you and Dave may have on the 2025 mid-term forecast distribution so as to wrap up King City numbers. Thanks again.

Gerry

Regional Growth Distribution Coordinator  
Metro  
[gerry.uba@oregonmetro.gov](mailto:gerry.uba@oregonmetro.gov)

---

**From:** Liden, Keith S. [mailto:Liden@pbworld.com]  
**Sent:** Thursday, April 05, 2012 8:26 AM  
**To:** Gerry Uba

**Cc:** Dave Wells  
**Subject:** King City TAZ Allocations

Gerry,

Thanks for your message about King City's reaction to the TAZ allocations. Dave Wells, City Manager, and I have reviewed this map (attached). As I read the map, Metro appears to be estimating an additional 598 dwelling units for the city and unincorporated area between 99W and around 150<sup>th</sup>. The amount for the area east of 131<sup>st</sup> may be a bit high, but the development in the UR area to the west may be on the low side based on what the city estimated as part of a concept planning exercise we undertook in coordination with Washington County. I indicated to Dave that for general planning purposes, these numbers look reasonable to me. I passed this sentiment on to Steve Kelly at Washington Co. DLUT. However, we have not expressed an "official" city position regarding the estimates.

I'll give you a call a little later this morning, so I can have a better understanding about the estimates and what they potentially mean for the city. Thanks.

**Keith S. Liden**, AICP  
Lead Planner, PlaceMaking

**Parsons Brinckerhoff**  
400 SW 6th Avenue, Suite 802, Portland, OR 97204  
Direct: 503.478.2348/ Office: 503.274.8772  
[www.pbworld.com/pbplacemaking](http://www.pbworld.com/pbplacemaking)

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## CITY OF LAKE OSWEGO

### Distribution Review and Adjustments Completed (April 25, 2012)

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**From:** Egner, Dennis [mailto:degner@ci.oswego.or.us]  
**Sent:** Wednesday, April 25, 2012 11:37 AM  
**To:** Dennis Yee  
**Cc:** Maribeth Todd; Gerry Uba  
**Subject:** RE: Gamma Timing

Perfect – thank you

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Wednesday, April 25, 2012 9:25 AM  
**To:** Egner, Dennis  
**Cc:** Maribeth Todd; Gerry Uba  
**Subject:** RE: Gamma Timing

Denny:

Here's the final disposition of your requested change by TAZ.

#### 2025 TAZ EMPLOYMENT

	RET	SER	OTH	TOTAL
1073	120	1165	1031	2316
1087	130	920	714	1764

I will be sending out final spreadsheets numbers for all regional TAZ's in coming days.

Regards,

Dennis

---

**From:** Dennis Yee  
**Sent:** Thursday, April 05, 2012 2:04 PM  
**To:** Egner, Dennis  
**Cc:** Conrad, Larry; Gerry Uba  
**Subject:** RE: LO staff comments on 2025 Forecasts and TAZ allocations

Denny:

Thank you for your comments on households and employment. We will make the adjustments of household units that you have recommended in your memo to Metro. We concur with your assessment that the city is largely built out especially in the SF urban neighborhoods, but as you may recall, the TAZ subcommittee opted for fairly aggressive capacity assumptions in an effort to eke out as much SF redevelopment (based on the oversize lot approach and the recalculation to eke out even more capacity

from tax lots with environmental constraints) supplies as might exist in the region. I'm noticing that our aggressive attempt at estimating SF capacity in region may be backfiring on the actual capacity estimates cities are comfortable with assuming as many suburban cities are finding our assumptions too high.

On the matter of jobs in LO, I see 2 edits to the 2025 TAZ allocations:

- 1) Add 200 more jobs to #1073 near the freeway on Boones Ferry
- 2) Subtract 500 jobs from the Marylhurst commercial area as listed in your memo to us. (I will work with other cities to re-assign the "overage".... Into Happy Valley)

Thanks for your help.

Regards,

Dennis Yee  
Metro Economist

---

**From:** Egner, Dennis [mailto:degner@ci.oswego.or.us]  
**Sent:** Tuesday, March 27, 2012 4:16 PM  
**To:** Dennis Yee  
**Cc:** Conrad, Larry  
**Subject:** LO staff comments on 2025 Forecasts and TAZ allocations

Dennis – Here are the Lake Oswego comments on the TAZ forecasts for 2025. Let me know if you have any questions.

Denny

Dennis Egner, AICP  
Assistant Planning Director/Long Range Planning Manager  
City of Lake Oswego  
PO Box 369, Lake Oswego, 97034  
503-697-6576

## CITY OF MILWAUKIE

### Distribution Review and Adjustments Completed (April 5, 2012)

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**From:** Gerry Uba  
**Sent:** Thursday, April 05, 2012 11:48 AM  
**To:** 'Mangle, Katie'; Conrad, Larry  
**Cc:** Alligood, Li; Dennis Yee  
**Subject:** RE: 2035 Mid Term Forecast Comments Due March 30

Hello Katie,

Thanks very much for getting back to me with City of Milwaukie comment on the 2025 mid-term growth distribution at the TAZ level. We will contact you and other jurisdictions this summer to review and comment on the long-term (2030, 2035, 2040) distribution.

Best regards,

Gerry

Regional Growth Distribution Coordinator  
Metro  
[gerry.uba@oregonmetro.gov](mailto:gerry.uba@oregonmetro.gov)

---

**From:** Mangle, Katie [mailto:MangleK@ci.milwaukie.or.us]  
**Sent:** Thursday, April 05, 2012 10:05 AM  
**To:** Conrad, Larry  
**Cc:** Gerry Uba; Alligood, Li  
**Subject:** RE: 2035 Mid Term Forecast Comments Due March 30

Hi Larry and Gerry,

My apologies for not writing last week, but this is to confirm that the City does not have any comments to submit on the forecast. We reviewed the files and find the numbers for Milwaukie to be adequate. We are not interested in receiving any of the extra housing unit allocations.

Please let me know if you have any specific questions you need feedback on.

Take care,  
- Katie

Katie Mangle, Planning Director  
City of Milwaukie  
6101 SE Johnson Creek Blvd  
Milwaukie, OR 97206

## CITY OF OREGON CITY

### Distribution Review and Adjustments Completed (April 17, 2012)

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**From:** Dennis Yee  
**Sent:** Tuesday, April 17, 2012 4:57 PM  
**To:** Laura Terway  
**Cc:** Gerry Uba  
**Subject:** RE: Oregon City comments on 2025 Growth Distribution

Thank you Laura.

---

**From:** Laura Terway [mailto:literway@ci.oregon-city.or.us]  
**Sent:** Tuesday, April 17, 2012 4:50 PM  
**To:** Gerry Uba  
**Cc:** Conrad, Larry; Dennis Yee  
**Subject:** RE: Oregon City comments on 2025 Growth Distribution

Gerry,  
Oregon City does not have a significant concern with the data thus far. Thank you



**Laura Terway, AICP**  
**Planner**  
Planning Division  
PO Box 3040  
221 Molalla Avenue, Suite 200  
Oregon City, Oregon 97045  
**7:30am-6pm Monday-Thursday and  
by appointment on Friday**  
Phone: 503.496.1553  
Fax: 503.722.3880  
literway@orcity.org

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**From:** Laura Terway [mailto:literway@ci.oregon-city.or.us]  
**Sent:** Wednesday, April 11, 2012 12:07 PM  
**To:** Gerry Uba  
**Subject:** RE: Oregon City comments on 2025 Growth Distribution

Good afternoon,  
You are at the top of my list, I am just waiting for one more manager at the City to sign off on the findings before we send you anything in writing. This should happen today or tomorrow.  
-Laura

---

**From:** Gerry Uba  
**Sent:** Wednesday, April 11, 2012 12:00 PM

**To:** Laura Terway (Lterway@orcity.org)  
**Cc:** Tony Konkol (Tkonkol@orcity.org); Conrad, Larry; Dennis Yee  
**Subject:** Oregon City comments on 2025 Growth Distribution

Hello Laura,

I have left you messages about getting the City of Oregon City comment on the 2025 mid-term growth distributions (at TAZ level) that were presented and reviewed with local governments in Clackamas County on February 9, 2012. The distribution was posted on the following FTP site for your further review.

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Midterm\\_review/TAZ\\_2025](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Midterm_review/TAZ_2025)

As you know the deadline for comments was March 30, 2012. We received comments from more than 95% of local governments in the region.

If you are satisfied with the 2025 households and employment forecast distribution within your jurisdiction please email me to confirm to, otherwise email your concerns to me right away so we that we address them with the assistance of the county coordinator, Larry Conrad.

Thanks very much for your attention to this matter.

Gerry

Growth Distribution Project Coordinator  
503-797-1737  
[Gerry.uba@oregonmetro.gov](mailto:Gerry.uba@oregonmetro.gov)

## CITY OF PORTLAND

### Distribution Review and Adjustments Completed (April 6, 2012)

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**From:** Armstrong, Tom [mailto:Tom.Armstrong@portlandoregon.gov]  
**Sent:** Friday, April 06, 2012 3:10 PM  
**To:** Dennis Yee; Gerry Uba  
**Subject:** Portland 2025 TAZ adjustments

Thanks for your patience.

Here are some changes.

In general, Metroscope capacity is a little high in residential capacity in the Central City.

Also, have a residential and employment capacity issue up at the Sylvan/Zoo area.

Why is there is such a big decline in retail jobs in the Central City?

I shifted 400 jobs from TAZ 38 to TAZ 124 to account for the West Hayden Island jobs. Will add more jobs to West Hayden Island in 2035 to get to 650 jobs (total number we agreed with Port).

---

### Some TAZs

**From:** Dennis Yee  
**Sent:** Thursday, March 01, 2012 12:50 PM  
**To:** Armstrong, Tom; 'Charles BEASLEY'; Gerry Uba  
**Subject:** RE: TAZ ftp link

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Midterm\\_review/TAZ\\_2025/](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/Midterm_review/TAZ_2025/)

**From:** Armstrong, Tom [mailto:Tom.Armstrong@portlandoregon.gov]  
**Sent:** Thursday, March 01, 2012 12:48 PM  
**To:** 'Charles BEASLEY'; Dennis Yee; Gerry Uba  
**Subject:** TAZ ftp link

Please send me the link to ftp site with the 2025 data.

Thanks,  
Tom

Tom Armstrong  
Supervising Planner for Research and Analysis  
Bureau of Planning and Sustainability  
City of Portland  
1900 SW Fourth Ave, 7th Floor  
Portland, OR 97201  
(503) 823-3527 (direct)

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**From:** Dennis Yee  
**Sent:** Thursday, February 23, 2012 3:22 PM  
**To:** Armstrong, Tom  
**Cc:** Gerry Uba; Chuck Beasley (charles.beasley@multco.us)  
**Subject:** RE: 2025 allocation

Tom: I glanced at the HH TAZ allocations you list below.

Are your concerns a matter of estimating too much capacity and therefore the allocation is too high as a result of the apparent capacity assumption?

I see this particularly in TAZ 53, 54 and 96.

The redevelopment assumption for TAZ 296 seem aggressive. This was also noticed by Larry Conrad....4922 residential capacity seems steep. I suggest spreading the re-allocation to Ezones 106, 108 and 109?

Sellwood shows a lot of capacity and therefore, especially TAZ 230 receives a higher number of households due to available capacity.

It appears that Ezone 111 (Rocky Butte) doesn't receive much demand despite capacity available.

There's a bunch of capacity in St. John's, but overall very little demand seems to want to locate in this locale. Did we overestimate capacity?

There probably should be no housing capacity assigned to Swan Island (TAZ 163), but there seems to be a small sliver of MUR8 adjacent which is probably why we show small amount of res. capacity in TAZ 163. Those handful of household can be moved elsewhere within Ezone 117. Is it the same concern for TAZ 348 and 330? We show limited SF zoning which is probably why we assign a small amount of res. growth in these 2 TAZ's.

I will await your more detailed / in -depth explanation.

Dennis

**From:** Armstrong, Tom [mailto:Tom.Armstrong@portlandoregon.gov]  
**Sent:** Wednesday, February 22, 2012 4:09 PM  
**To:** Dennis Yee  
**Subject:** 2025 allocation

Dennis -

Here is a list of residential TAZs that give me some concern:

West Hills - 53, 54, 55, 56  
SW - 96  
Sandy Blvd - 296

Eastmoreland - 237, 238  
Sellwood - 230, 231  
Rocky Butte - 341, 352  
St. Johns - 155, 156, 159, 160 ,161  
Industrial areas - 163, 348, 330

Employment  
TAZs 55, 59, 127, 367

It will be next week before I can dig deep into what I think is going on with these TAZs.

Tom

Tom Armstrong  
Supervising Planner for Research and Analysis  
Bureau of Planning and Sustainability  
City of Portland  
1900 SW Fourth Ave, 7th Floor  
Portland, OR 97201  
(503) 823-3527 (direct)

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## **West Hayden Island**

**From:** Bouillion, Tom [mailto:Tom.Bouillion@portofportland.com]  
**Sent:** Tuesday, March 20, 2012 4:54 PM  
**To:** Dennis Yee  
**Cc:** 'Armstrong, Tom'; 'Martin, Brian'; Chuck Beasley (charles.beasley@multco.us); Gerry Uba; Maribeth Todd; 'Rich Faith'; 'nesbittl@ci.fairview.or.us'; Boren, John  
**Subject:** Port of Portland TAZ Comments-Multnomah Co.

Hi Dennis:

Please see the attached comments from the Port of Portland regarding the 2025 Gamma TAZ forecast.  
Please let me know if you have any questions.

Thanks,

Tom

**Tom Bouillion, AICP**  
*Planning Manager*  
*Marine & Industrial Development*  
*Port of Portland*  
*(503) 415-6615*

**From:** Bouillion, Tom [mailto:Tom.Bouillion@portofportland.com]  
**Sent:** Wednesday, February 22, 2012 5:13 PM  
**To:** 'Armstrong, Tom'; Dennis Yee; Chuck Beasley (charles.beasley@multco.us)  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** RE: West Hayden Island

The attached memo p.7 estimates 1,371 direct jobs, based on a development footprint of 350 acres. Since the current assumed development footprint is 300 acres, the pro-rated direct number of jobs by 2035 is estimated at 1,170.

This memo is also posted on the City of Portland Bureau of Planning and Sustainability website:

<http://www.portlandonline.com/bps/index.cfm?c=53715&>

it is called the Estimates of Port Costs and Development, memo by Port of Portland.

Let me know if you have questions or need additional information.

Thanks,

Tom

**Tom Bouillion, AICP**  
*Planning Manager*  
*Marine & Industrial Development*  
*Port of Portland*  
*(503) 415-6615*

---

**From:** Bouillion, Tom [mailto:Tom.Bouillion@portofportland.com]  
**Sent:** Friday, February 17, 2012 3:35 PM  
**To:** 'Armstrong, Tom'; Dennis Yee; Chuck Beasley (charles.beasley@multco.us)  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** RE: West Hayden Island

I should have an employment forecast available to distribute on Tuesday.

Thanks,

-Tom

**Tom Bouillion, AICP**  
*Planning Manager*  
*Marine & Industrial Development*  
*Port of Portland*  
*(503) 415-6615*

**From:** Dennis Yee  
**Sent:** Friday, February 17, 2012 3:35 PM  
**To:** Armstrong, Tom; Tom Bouillion; Chuck Beasley (charles.beasley@multco.us)  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** RE: West Hayden Island

I understand that, but I recall that for future year 2030, 35 and beyond, in order to get the “proper” allocation, we should show to the model , some amount of industrial capacity. I thought 300 per City Council recommendation would do the “trick” so to speak for future year allocations.

d

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**From:** Armstrong, Tom [mailto:Tom.Armstrong@portlandoregon.gov]  
**Sent:** Friday, February 17, 2012 3:33 PM  
**To:** Dennis Yee; Tom Bouillion; Chuck Beasley (charles.beasley@multco.us)  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** RE: West Hayden Island

No, we agreed to shift employment within the ezone, but not add capacity. Tom Bouillion is working on an employment estimate that I will incorporate into the 2025 TAZ distribution.

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Friday, February 17, 2012 3:31 PM  
**To:** Armstrong, Tom; Tom Bouillion; Chuck Beasley (charles.beasley@multco.us)  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** West Hayden Island

All:

I’m following up on our conversation concerning W. Hayden Island and to confirm agreement on what we should assume as a change to capacity for West Hayden Island.

As I recall, we will assume thru 2035 the following added capacity of 300 industrial acres and carry this assumption through the long term portion of the TAZ forecast.

Tom A: Please be sure to include this recommendation in the Portland review of TAZ numbers and coordinated with Tom B. and that it is ok with Chuck.

Thank you all for your assistance.

Regards,

Dennis Yee  
Metro Chief Economist

Metro  
600 NE Grand Av.

Portland, OR 97232-2736  
(503) 797-1578  
(503) 797-1909 (FAX)  
dennis.yee@oregonmetro.gov

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## PORT OF PORTLAND

Box 3529, Portland, Oregon 97208  
(503) 415-6615

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# MEMORANDUM from Planning

Date: March 20, 2012

To: Dennis Yee, Gerry Uba, Maribeth Todd, Brian Martin, Tom Armstrong, Charles Beasley, Lindsey Nesbitt, Rich Faith

From: Tom Bouillion and John Boren

Re: Port of Portland Comments on 2025 TAZ Gamma Forecast in Multnomah County

The following are comments from the Port of Portland regarding TAZ employment forecasts by Port operating area in Multnomah County.

### Portland International Airport (PDX)

The TAZs that mainly comprise PDX include 138-140, 142, 145 and 146, which Metro estimates to have 9,528 employees. This has been previously identified as understating actual numbers by approximately 1,000-2,000 employees. Metro projects total employment to be 10,168 in 2025, representing a modest growth of only 6%. Last year 13.6 million passengers came through PDX. The median (50<sup>th</sup> percentile) forecast for 2025 is 22.6 million passengers based upon aviation demand forecast data from the Airport Futures Master Plan Update.<sup>2</sup> This represents a growth of 66% from 2010 to 2025.

Using PDX passengers as a proxy for growth, and higher starting base employment of 10,000 to 11,000 employees, total employment should be approximately 16,000 to 18,000 in 2025.

---

<sup>2</sup>Aviation Demand Forecast, PDF page 72,  
[http://www.pdxairportfutures.com/Documents/PDX\\_Airport\\_Ftrs\\_Avtn\\_Dmnd\\_Frcst.pdf](http://www.pdxairportfutures.com/Documents/PDX_Airport_Ftrs_Avtn_Dmnd_Frcst.pdf)

\* TAZ 140 – Air Trans Center (741 total employment). Until recently the Horizon Maintenance Facility had over 1,000 employees. While Horizon announced the elimination of 100 positions in September 2010 due to reorganization with Alaska Air, the TAZ also includes FedEx, UPS and other air cargo related businesses. As a result, the total employment for TAZ 140 should be more than 741, likely over 1,000.

The 2025 total employment number of 748 represents no growth over a 15 year period which is not in line with cargo demand forecasts. Recent aviation demand forecasts show growth from approximately 280,000 tons of short tons of air cargo in 2010 to 560,000 tons in 2025 based upon the median (50<sup>th</sup> percentile) numbers.<sup>3</sup> This doubling of air cargo should result in a significant increase in employment, notwithstanding advances in automated cargo handling technology. Total employment in 2025 of about 1,500 would be more in line with the increased air cargo movement.

#### Portland International Center/Cascade Station (PIC/CS)

Overall the employment numbers for PIC/CS seem somewhat low given the current amount of retail activity. The TAZs that comprise PIC/CS include 143-144, and 147-152.

\* TAZ 144 – West of Cascade Station (464 total employment). Major uses on this TAZ include Embassy Suites, the Military Entrance Processing Station and a new FBI facility that will be completed in late 2012. In the next two to three years it is anticipated that a small hotel will also be built. The 2010 employment total is probably accurate however the 2025 employment total of 564 is too low given the estimated 400 employees that will eventually staff the FBI facility and new hotel staff. Thus, the 2025 employment total should be approximately 1,000 employees.

\* TAZ 147 – Cascade Station west of Mt. Hood Ave. (147 total employment including 58 retail). This site includes Target, Subway and the Residence Inn. Given that Target is a large format store of 130,000+ square feet there are likely more than 58 retail employees in this TAZ. Using the industry standard 470 square feet per employee in retail, there should be approximately 275 retail employees for Target alone now.<sup>4</sup> The total employment for the TAZ is probably closer to 300-400. Approximately 6500 sq ft of retail is anticipated to be developed in the next 18 months adding approximately 15 employees, so the 2025 employment figure of 280 is too low by about 100-200 employees.

\* TAZ 151 Subdistrict B south of Cascade Station, north of PDX employee parking lot (122 total employment). Except for the light rail station platform, this TAZ has no structures. There should be no employees within this TAZ for 2010. As it lies in the same Ezone, 112, as the other TAZs in PDX and PIC/CS, these numbers could be shifted over to the TAZs which have been identified as being low.

Though the TAZ is zoned for development, EG2hx and IG2hx, the forecasted total employment of 1,704 seems high. Nearby TAZs of similar size and zoning range from 600-800. This is also a good place to pull employment from in 2025 to make up for TAZs that are deemed to be too low.

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<sup>3</sup> Aviation Demand Forecast, PDF page 79,  
[http://www.pdxairportfutures.com/Documents/PDX\\_Airport\\_Ftrs\\_Avtn\\_Dmnd\\_Frcst.pdf](http://www.pdxairportfutures.com/Documents/PDX_Airport_Ftrs_Avtn_Dmnd_Frcst.pdf)

<sup>4</sup> Portland Plan Economic Opportunities Analysis PDF page 38,  
<http://www.portlandonline.com/portlandplan/index.cfm?&a=270872&c=51427>

\* TAZ 149- Cascade Station east of Mt. St. Helens Avenue (368 total employment). The major tenant is IKEA with approximately 400 employees in a 180,000 square foot building. However this TAZ also includes a substantial number of other retail stores including Golfsmith, Marshalls, Staples and Carhartt. As a result it seems likely there are over 600 employees in the TAZ.

The remaining undeveloped part of this TAZ is under either an Environmental Protection or Environmental Conservation overlay, limiting the amount of future development and employment. Thus, the 824 employees forecasted for 2025 may be reasonably accurate.

#### Troutdale Reynolds Industrial Park (TRIP)

The TAZs that comprise TRIP include 626-627 and 607.

\* TAZ 626 – West of Sundial Rd/North of BPA Substation (68 employees). Aside from an extension of the BPA substation, this TAZ is not currently developed. There should be no employees here and they could be moved over to TAZ 627 which is also within Ezone 121.

Phase II of TRIP will add three industrial lots totaling 42 acres to this TAZ which should be built out by 2025. Based upon a Port of Portland EI, there should be approximately 874 jobs as a result of this development. Thus the estimate of 209 jobs is far too low.

\* TAZ 627 – East of Sundial Road (107 total employees). This TAZ includes the 440,000 square foot FedEx Ground regional distribution hub which opened in August 2010. At the time of opening there were over 550 employees at the facility. In addition, other employers adjacent to TRIP but within the TAZ include Walsh Trucking, Schwann's Ice Cream and the City of Troutdale wastewater treatment facility. As a result, it seems likely that there were over 700 employees in this TAZ in 2010.

Phase II of the TRIP will add six lots for employment totaling 102 acres. Based upon a Port of Portland economic impact analysis, there should be approximately 2,123 jobs as a result of this development. Thus the total estimate including TRIP employment, FedEx, and other employers should be over 2,800.

#### West Hayden Island (WHI)

WHI is entirely within TAZ 124.

\* TAZ 124 (0 total employees). By 2025, WHI should be built out and thus employment will be greater than 0. The Portland Bureau of Transportation has estimated that there will be 650 onsite jobs as a result of their West Hayden Island Traffic Impact Assessment. As a result, 650 jobs is a reasonable estimate of total employment in 2025.

#### Gresham Vista Business Park (GVBP)

GVBP consists of TAZ 559-560.

The total employment figures for 2010 are 508, and for 2025 they are 1,497. Given that ON Semiconductor is the only major employer at present, the baseline employment figures are reasonably accurate.

A recent economic impact assessment assumes that all Port-owned properties will be sold by 2020 with full build out likely by 2025. The expected direct employment is 2,768 jobs – nearly double the existing estimate for TAZ 559-560.



## CITY OF SHERWOOD

### Distribution Review and Adjustments Completed (April 5, 2012)

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**From:** Gerry Uba  
**Sent:** Thursday, April 05, 2012 3:22 PM  
**To:** 'Michelle Miller'  
**Cc:** Dennis Yee  
**Subject:** RE: Growth Allocation for Sherwood 2025 numbers

Hello Michelle,

Thanks for getting back to me and expressing your concerns with the distribution in TAZ 992. I am copying our chief economist, Dennis Yee, on this email. Since we are running behind on the project schedule, Dennis will call you soon to discuss your concerns so that we can wrap up Sherwood's distribution numbers. Thanks again.

Gerry

Regional Growth Distribution Coordinator  
Metro  
[gerry.uba@oregonmetro.gov](mailto:gerry.uba@oregonmetro.gov)

---

**From:** Michelle Miller [mailto:MillerM@SherwoodOregon.gov]  
**Sent:** Thursday, April 05, 2012 2:27 PM  
**To:** Gerry Uba  
**Subject:** Growth Allocation for Sherwood 2025 numbers

Hi Gerry,

Sorry I did not get back to you sooner.

For the area within Sherwood:

TAZ 992 is the only one I am having heartburn with as far as a little low for 2025. I would likely add at least another 150 du to the capacity for that area.

The problem is I don't see any other place to pull the number from as the other TAZ shows limited growth potential.

Thanks for letting me comment.

**Michelle Miller, AICP**  
*Associate Planner*  
City of Sherwood  
[millerm@sherwoodoregon.gov](mailto:millerm@sherwoodoregon.gov)  
503.625.4242

## CITY OF TIGARD

### Distribution Review and Adjustments Completed (April 3, 2012)

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**From:** Dennis Yee  
**Sent:** Tuesday, April 03, 2012 1:33 PM  
**To:** Darren Wyss; Maribeth Todd  
**Cc:** Steve Kelley; Gerry Uba  
**Subject:** RE: Tigard 2025 TAZ Review

Darren:

Thank you for your submittal. In the next day or two, I will be incorporating your comments and blending them into a coherent county TAZ distribution. If we have questions, we will certainly confer with you and the county.

Regards,

Dennis Yee  
Metro Economist

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**From:** Darren Wyss [mailto:darren@tigard-or.gov]  
**Sent:** Tuesday, April 03, 2012 11:31 AM  
**To:** Maribeth Todd  
**Cc:** Steve Kelley; Dennis Yee  
**Subject:** Tigard 2025 TAZ Review

Maribeth,  
Attached is Tigard's review of the 2025 TAZ for households and employment. We supplied household recommendations for the unincorporated TAZs that are inside Tigard's urban planning area. We were also unable to maintain the control totals for retail, service, and other employment. The total employment is still the same, but we added some retail and reduced some service jobs in certain TAZ. Sorry it is a couple days late. Let me know if you have any questions.

Darren Wyss  
Senior Planner  
Community Planning  
City of Tigard  
503-718-2442

## CITY OF TROUTDALE

### **Distribution Review and Adjustments Completed (April 11, 2012)**

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**From:** Elizabeth McCallum [mailto:elizabeth.mccallum@troutdaleoregon.gov]  
**Sent:** Wednesday, April 11, 2012 11:27 AM  
**To:** Dennis Yee  
**Subject:** RE: correction of Troutdale 2010 household numbers

Thank you.

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**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Wednesday, April 11, 2012 11:26 AM  
**To:** Elizabeth McCallum  
**Cc:** Maribeth Todd; Jim Cser  
**Subject:** RE: correction of Troutdale 2010 household numbers

Thanks Elizabeth.

I will make these changes to the final TAZ spreadsheet for year 2010.

Regards,

Dennis

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**From:** Dennis Yee  
**Sent:** Tuesday, April 10, 2012 4:08 PM  
**To:** Elizabeth McCallum  
**Cc:** Rich Faith; Maribeth Todd; Gerry Uba; Charles BEASLEY  
**Subject:** correction of Troutdale 2010 household numbers

**Attachment:** Metro Research Center Estimates portion of May 2011 excel table.docx (19kb)

Hi Elizabeth,

Based your most recent feedback/input for the year 2025 TAZ distribution, your comments identified incorrect base year household estimates for the following TAZ's. You said this in the comment lines:  
**"Existing HH more than shown in 2010"**

Accordingly, we want to fix this problem. Based on the attachment you sent us, we figure that what the base year 2010 household number for these TAZ's should be this....

TAZ	Metro 2010 est	<u>Troutdale estimate</u>
635	59	168
639	197	197
640	515	552
646	442	598
649	366	452

I couldn't find exactly what Troutdale's responses were for year 2010, but I think I was able to back into an estimate from the attachment you sent me many months ago. If the "Troutdale estimate" I cite above are incorrect, can you please send me what you have as the actual count of households in 2010 that you would like for us to use.

Please send me an email confirming the numbers. Thanks.

Thanks

Dennis Yee  
Metro Chief Economist

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**From:** Dennis Yee  
**Sent:** Thursday, April 05, 2012 3:10 PM  
**To:** Elizabeth McCallum; Gerry Uba; Charles BEASLEY  
**Subject:** RE: Troutdale's Local Jurisdiction Review Comments and Edits to TAZ allocation Gamma\_TAZ Forecast\_report\_2025 City of Troutdale HH comments.xlsx

Hi Elizabeth:

I am reviewing the city 's feedback on the year 2025 TAZ household forecast distribution.

I want to confirm with you that what you sent in to Metro are the proposed household TAZ changes for year 2025 and are indeed for a midterm projection as compared to an end year 2035 longer term forecast. Your numbers seem to me to be closer to "build out" estimates and thus closer to year 2035 and not 2025.

Am I reading this right?

Regards,

Dennis Yee

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**From:** Dennis Yee  
**Sent:** Wednesday, March 14, 2012 9:10 AM  
**To:** Gerry Uba  
**Subject:** FW: 2025 TAZ Forecast Distributions (Troutdale)

Reply by Troutdale to my reply to their set of questions...please add to your record files.

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**From:** Elizabeth McCallum [mailto:elizabeth.mccallum@troutdaleoregon.gov]

**Sent:** Friday, March 09, 2012 3:11 PM

**To:** Dennis Yee

**Subject:** RE: 2025 TAZ Forecast Distributions (Troutdale)

I'm working on this.

Elizabeth

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**From:** Elizabeth McCallum [mailto:elizabeth.mccallum@troutdaleoregon.gov]

**Sent:** Friday, March 09, 2012 4:48 PM

**To:** Dennis Yee; Gerry Uba; Charles BEASLEY

**Subject:** Troutdale's Local Jurisdiction Review Comments and Edits to TAZ allocation Gamma\_TAZ Forecast\_report\_2025 City of Troutdale HH comments.xlsx

March 9, 2012

Chuck, Dennis, Gerry,

Troutdale has comments on HH.

Also, for Employment, TAZ 632, this site is being rezoned from Light Industrial to General Commercial in the City's Town Center. In the GC zone in the Town Center, permitted uses include the following:

TDC 4.720 Permitted and Conditional Uses. Permitted and conditional uses are the same as those listed in the underlying zoning districts with the following exceptions:

E. General Commercial (GC).

1. Additional permitted uses: Single-family detached dwellings (except manufactured homes), duplex, triplex, attached, and multiple-family dwellings, provided the residential use is located above or behind a permitted commercial use, whether within the same building as the commercial use or in a separate building; and public parking lots.
2. Eliminated permitted uses: Automotive repairs, including painting and incidental body and fender work; automotive service stations; lumber yards (retail sales only); and tire shops.
3. Eliminated conditional uses: Automobile and trailer sales area, heliport landings, off-street parking and storage of truck tractors and/or semi-trailers, outdoor stadiums and racetracks, wholesale distribution outlets, including warehousing.

TDC 4.730 Town Center Residential Densities.

- A. General Density Requirements. The residential density of the underlying zone shall apply except that the Central Business District (CBD) density standards shall apply in the CC and GC zoning districts and shall apply in the A-2 zoning district for duplex, triplex, and attached residential developments.

- B. Minimum Density. Residential development is required to be built at 80% or more of the maximum number of dwelling units per net acre. For purposes of this standard, in computing the maximum number of dwelling units, if the total contains a fraction, then the number shall be rounded down to the next lower whole number. For computing the minimum number of dwelling units, if the total contains a fraction, then the number shall be rounded down to the next lower whole number.

CBD density standards THAT will apply to the subject site:

TDC 3.134 Dimensional Standards.

D. Residential Density.

1. Maximum residential density when the dwellings are all on one lot shall be one dwelling unit per 1,500 square feet of net land area, otherwise the maximum density shall be determined on the basis of the minimum lot area standards as established in subsection (A)(2) of this section.
3. Residential development is required to be built at 80% or more of the maximum number of dwelling units per net acre. For purposes of this standard, in computing the maximum number of dwelling units, if the total contains a fraction, then the number shall be rounded down to the next lower whole number. For computing the minimum number of dwelling units, if the total contains a fraction, then the number shall be rounded down to the next lower whole number.

[Example: Computing maximum and minimum dwelling units for a 5,000 square foot parcel:

- Allowed density is 1 dwelling per 1,500 square feet.
  - A 5,000 square foot parcel yields 3.3 dwelling units; round down to 3 dwelling units for maximum number of units.
  - Eighty percent minimum density is 0.8x3 which yields 2.4 dwelling units; rounded down to 2 dwelling unit for minimum number of units.]
4. Apartment units built in conjunction with a commercial use are not subject to the above maximum and minimum density standards.

Underlying zoning permitted uses in the General Commercial (GC) zoning district even if not in the Town Center.

TDC 3.122 Permitted Uses. The following uses and their accessory uses are permitted in the GC district:

- A. Any use permitted in the NC or CC district except for single-family detached dwellings, duplex, triplex, attached, and multiple-family dwellings, and except that retail stores or businesses are not limited to 60,000 square feet of gross floor area.
- B. Amusement enterprises, including pool halls, bowling alleys, and boxing arenas, theaters, auditoriums, printing, lithographing, or publishing.
- C. The following uses, if conducted within a completely enclosed building with all outside storage of merchandise, supplies, or work areas screened from the public right-of-way and adjacent residential, apartment, and NC districts, are permitted: Automotive service stations, carpenter shops, cabinet shops, upholstery, plumbing shops, lumber yards (retail sales only), automotive repair, painting and

incidental body and fender work, sign painting shops, tire shops, animal hospitals, and boarding kennels.

- D. Accessory uses customarily incidental to any of the above uses when located on the same lot, provided that such uses, operations, or products are not objectionable due to odor, dust, smoke, noise, vibration, or similar causes.
- E. Utility facilities, minor.
- F. Other uses similar in nature to those listed above.

AND

TDC 3.103 Permitted Uses. The following uses and their accessory uses are permitted in the NC district, provided they are conducted wholly within a completely enclosed building, except off-street parking and loading:

- A. Retail establishments, not to exceed 60,000 square feet of gross floor area per building or business including, but not limited to, barber or beauty shops, shoe repair stores, dressmaking or tailoring shops, photography studios, florist shops, book or stationary stores, gift shops, and art supply stores.
- B. Restaurants (excluding drive-through service).
- C. Professional offices.
- D. Day care centers.
- E. Single-family detached dwellings (except manufactured homes), duplex, triplex, attached, and multiple-family dwellings.
- F. Utility facilities, minor.
- G. Other uses similar in nature to those listed above.

AND

3.113 Permitted Uses. The following uses and their accessory uses are permitted in the CC district:

- A. Any use permitted in the Neighborhood Commercial (NC) district except for single-family detached dwellings, duplex, triplex, attached, and multiple-family dwellings.
- B. Retail establishments, not to exceed 60,000 square feet of gross floor area per building or business including, but not limited to, barber or beauty shops, shoe repair stores, groceries, dressmaking or tailoring shops, photography studios, florist shops, book or stationary stores, gift shops, and art supply stores.
- C. Banks or savings and loan associations.
- D. Laundromat/dry cleaning establishments.
- E. Medical or dental clinics or laboratories.
- F. Motels or hotels.
- G. Newsstands.
- H. Restaurants (including drive-through) or taverns.
- I. Studios for art, dance, etc.
- J. Professional offices.
- K. Utility facilities, minor.
- L. Other uses similar in nature to those listed above.

**From:** Elizabeth McCallum [mailto:[elizabeth.mccallum@troutdaleoregon.gov](mailto:elizabeth.mccallum@troutdaleoregon.gov)]  
**Sent:** Tuesday, March 06, 2012 4:42 PM  
**To:** Charles BEASLEY; Dennis Yee  
**Cc:** Martin, Brian; Gerry Uba; Maribeth Todd  
**Subject:** RE: TAZ 632 Adjustments to HH and Empl

March 6, 2012

All,

The HH TAZ # is 636 east of the Sandy River within the City limits of Troutdale. TAZ 632 is the agreed to receiving zone based upon a requested zone change of the majority of the lots in TAZ 632 (see attached maps) from Light Industrial to General Commercial Town Center. GC Town Center is a mixed use zone allowing apartments above commercial/retail. If apartments are built above the commercial component there is *neither* a minimum nor maximum density so moving all the excess HH units from TAZ 636 to 632 is logical to the City of Troutdale.

The zone change is pending but is expected to be approved before June 2012. Development of the land in TAZ 632 is constrained by wetlands and Zone A Special Flood Hazard Area (see attachment 4 of the attached document).

Elizabeth A. McCallum, Senior Planner  
City of Troutdale  
104 SE Kibling Ave.  
Troutdale, OR 97060  
[elizabeth.mccallum@troutdaleoregon.gov](mailto:elizabeth.mccallum@troutdaleoregon.gov)  
phone: 503-674-7228  
fax 503-667-0524

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**From:** Charles BEASLEY [mailto:[charles.beasley@multco.us](mailto:charles.beasley@multco.us)]  
**Sent:** Tuesday, March 06, 2012 3:02 PM  
**To:** Dennis Yee  
**Cc:** Elizabeth McCallum; Martin, Brian; Gerry Uba; Maribeth Todd  
**Subject:** Re: TAZ 632 Adjustments to HH and Empl

Dennis,  
Getting back to this, please see my comments in red below.

On Fri, Mar 2, 2012 at 1:23 PM, Dennis Yee <[Dennis.Yee@oregonmetro.gov](mailto:Dennis.Yee@oregonmetro.gov)> wrote:

Chuck,



Could you please confirm check which TAZ's you are referring to in which household units should be moved from and to?

Well you might ask. I have no idea how I came up with these TAZ numbers.

I'm not seeing the same things you are at this point...I don't disagree with the words and sentiment, but just having trouble finding the right TAZ's in question.

For example, our zoning coverage indicates all of TAZ 632 as industrial, no housing capacity. I'm fine moving jobs into TAZ 632, but households?

In reference to the scenic area zoning, are you referring to TAZ 651 which shows 48 units assigned? If you want to redistribute the households in TAZ 651, I suggest moving these households into TAZ 633 and 648, which seem to have spare capacity in 2025 to accommodate more.

Regarding NSA zoned area, today I'm reading it as TAZ 636 with 71 units. Elizabeth suggested moving 63 units to TAZ 637.

In general, we tend to assume a more aggressive capacity assumption in the rural zoned areas. The zoning may say R-20, but for modeling purposes we have assumed that "minor subdivisions" would eventually occur due to urban pressures, and this density increases to about 1 unit per 4 acres....also if there are M-49/37 claims, we assume up to 4 units per claim. This latter assumption on M-49 isn't quite accurate due to the unforeseen introduction of "slivers" into our measure 49 database. This is another reason why we tend to show more development / capacity than otherwise implied by zoning.

Regarding the assumption that density will increase in rural areas over time due to pressure. Note that counties can't amend zoning regs to increase density in either urban or rural reserves. This is per OAR 660-027-0070, and county adopting plans. Nearly all land near the UGB in Multnomah County was designated as reserves. My view is that for modeling purposes, the assumption should be conservative, although the number of units we're talking about isn't much in the grand scheme of things.

I'm not sure about whether 4 M49 units is reasonable because the state lists 79 for Mult Co. with an average of 1.7 dwellings per claim. [http://www.oregon.gov/LCD/docs/publications/M49\\_2011-01-31.pdf](http://www.oregon.gov/LCD/docs/publications/M49_2011-01-31.pdf)

With regards to jobs, we can shift some of the over assigned number of jobs into the former LSI job site. (I recognize that it still is not enough to meet the requested increase by Gresham at the LSI site.)

I think moving the jobs there is ok with Mult Co as long as this works for Troutdale.

Dennis

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**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Monday, March 05, 2012 4:48 PM

**To:** Elizabeth McCallum  
**Cc:** BEASLEY Charles; Maribeth Todd; Gerry Uba  
**Subject:** RE: 2025 TAZ Forecast Distributions (Troutdale)

Elizabeth, thank you for your questions.

1. 2010 Jur Rev HH. What if this number disagrees with the actual HH count?

In theory, the “2010 Jur Rev HH” figure should not disagree with the Census estimate. However, it is conceivable that there may be errors in our computations of TAZ household 2010 estimates. We added together census blocks (year 2010 count) to arrive at the “2010 Jur Rev HH” estimate. We asked local jurisdictions to review and revise the TAZ number a year ago so that we can use the revised numbers for this TAZ forecast. Some jurisdictions did provide some changes because they claimed that the Census excluded some housing units from the basic census population count. We accepted those changes without question.

I would like to make additional changes even after that peer review. Is that possible? My two areas of concern are: errors in actual HH numbers (under or over counted) and errors in capacity: if all the lots are built there is no capacity—the City Council has stated to staff that it does not want to upzone any of the current residential zones to allow for more density.

2. 2010 Mscope HH. Is this figure suppose to be the maximum capacity? What if it is less than the actual HH count?

I think you mean “2025 Mscope HH”. This figure represents the TAZ forecast allocation of households in year 2025. It is what we think should be the household forecast in year 2025.

Yes and OK.

3. 2010-2025 HH Chg. Is this figure suppose to be the difference between 2010 Mscope HH and 2010 Jur Rev HH?

This figure is the difference (or household growth increment) between 2010 and 2025. It is the arithmetic difference between “2010 Jur Rev HH” and “2025 Mscope HH”.

OK.

4. Why is 2025 Capacity more than the difference for my question #3?

“2025 Capacity” is a projection we make in a 2010 base year regarding how much housing capacity exists (by our estimate) to accommodate the increment of growth between 2010 and 2025 (and beyond if the capacity is not totally exhausted in year 2025). You can think of it as the year 2025 build out capacity, but because over this period, we generally do not think that every last inch of capacity can or will fully develop, and therefore any difference between “2025 Capacity” and the figure “2025 Mscope HH” is due to the expectation that not all housing unit supplies will fully develop between 2010 and 2025. There may still be capacity left over in 2025. We differentiate housing capacity, whether it is denoted as 2025 or 2045 from projections of households which occupy the housing capacity. We believe that not all identified housing capacity will all get developed. Some of it may remain vacant but most of the undeveloped capacity remains vacant or has yet to redevelop. This brings us to our overall definition

of capacity which is composed of or derived from vacant buildable land inventories + residential (net) redevelopment + subsidized urban redevelopment capacity + urban reserves for the Metro UGB.

#### 5. Why is 2045 Capacity the same as the 2025 Capacity?

This may be confusing, but here the explanation. There two numbers are the same because from the perspective of looking at capacity nowadays, i.e., in year 2010, the capacity for additional housing is the same whether the future year is 2025 or 2045. Here's an example which may help.

Looking into the future from today (year 2010), suppose we estimate that TAZ 9999 has a capacity to accommodate 100 new homes. But, we make no assumption at this time about how many of those home sites will develop nor do we guess when those 100 home sites will become developed., then from this perspective, the capacity is the same whether our endpoint time frame is 2015, 2020, 2025 or even 2045.

In the rare instances that we did estimate 2045 capacity larger than 2025, what is assumed in these instances are more capacity that comes from assumed subsidized redevelopment as additional unit capacity when urban reinvestments are programmed in or TAZ which are adjacent to an urban reserve is added to the Metro UGB. In these 2 cases, the 2045 capacity will be larger than the 2025 number.

#### 6. Capacity used columns: again, why is there no different between 2025 and 2045?

The calculation of %Cap Used is based on dividing the "2010-25 HH Chg." number by the respective "Capacity" estimate. If the capacity estimates in 2025 and 2045 are the same, then the arithmetic for "%2025 Cap Used" and "%2045 Cap Used" are identical. Only in the smaller set of TAZ's that have urban reinvestment assumptions programmed into the forecast or the TAZ is adjacent to an urban reserve does these 2 set of numbers differ.

Thank you for your questions. Give me a call if any of this explanation is confusing or unclear. I'm sorry you weren't able to attend the county TAZ meeting in which we went over some of these cryptic labels. My apologies. Feel free to contact me anytime. I look forward to your edits and revisions no later than March 31, 2012. We greatly appreciate your past and present assistance in developing TAZ projections.

Regards,

Dennis Yee  
Metro Economist  
503-797-1578

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**From:** Dennis Yee  
**Sent:** Monday, March 05, 2012 4:48 PM  
**To:** Elizabeth McCallum  
**Cc:** BEASLEY Charles; Maribeth Todd; Gerry Uba  
**Subject:** RE: 2025 TAZ Forecast Distributions (Troutdale)

Elizabeth, thank you for your questions.

1. 2010 Jur Rev HH. What if this number disagrees with the actual HH count?

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Looking into the future from today (year 2010), suppose we estimate that TAZ 9999 has a capacity to accommodate 100 new homes. But, we make no assumption at this time about how many of those home sites will develop nor do we guess when those 100 home sites will become developed., then from

this perspective, the capacity is the same whether our endpoint time frame is 2015, 2020, 2025 or even 2045.

In the rare instances that we did estimate 2045 capacity larger than 2025, what is assumed in these instances are more capacity that comes from assumed subsidized redevelopment as additional unit capacity when urban reinvestments are programmed in or TAZ which are adjacent to an urban reserve is added to the Metro UGB. In these 2 cases, the 2045 capacity will be larger than the 2025 number.

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Thank you for your questions. Give me a call if any of this explanation is confusing or unclear. I'm sorry you weren't able to attend the county TAZ meeting in which we went over some of these cryptic labels. My apologies. Feel free to contact me anytime. I look forward to your edits and revisions no later than March 31, 2012. We greatly appreciate your past and present assistance in developing TAZ projections.

Regards,

Dennis Yee  
Metro Economist  
503-797-1578

---

**From:** Elizabeth McCallum [mailto:elizabeth.mccallum@troutdaleoregon.gov]  
**Sent:** Monday, March 05, 2012 3:03 PM  
**To:** Dennis Yee  
**Cc:** BEASLEY Charles  
**Subject:** January 2012 Gamma Taz

March 5, 2012

Dennis,

I'm beginning my review of the tables and have a couple of questions:

1. 2010 Jur Rev HH. What if this number disagrees with the actual HH count?
2. 2010 Mscope HH. Is this figure suppose to be the maximum capacity? What if it is less than the actual HH count?
3. 2010-2025 HH Chg. Is this figure suppose to be the difference between 2010 Mscope HH and 2010 Jur Rev HH?
4. Why is 2025 Capacity more than the difference for my question #3?
5. Why is 2045 Capacity the same as the 2025 Capacity?

6. Capacity used columns: again, why is there no different between 2025 and 2045?

Those are my questions for now.

Elizabeth A. McCallum, Senior Planner  
City of Troutdale  
104 SE Kibling Ave.  
Troutdale, OR 97060  
elizabeth.mccallum@troutdaleoregon.gov  
phone: 503-674-7228  
fax 503-667-0524

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**From:** Dennis Yee  
**Sent:** Friday, March 02, 2012 1:24 PM  
**To:** Charles BEASLEY  
**Cc:** Elizabeth McCallum; Martin, Brian; Gerry Uba; Maribeth Todd  
**Subject:** RE: TAZ 632 Adjustments to HH and Empl

Chuck,

Could you please confirm check which TAZ's you are referring to in which household units should be moved from and to?

I'm not seeing the same things you are at this point...I don't disagree with the words and sentiment, but just having trouble finding the right TAZ's in question.

For example, our zoning coverage indicates all of TAZ 632 as industrial, no housing capacity. I'm fine moving jobs into TAZ 632, but households?

In reference to the scenic area zoning, are you referring to TAZ 651 which shows 48 units assigned? If you want to redistribute the households in TAZ 651, I suggest moving these households into TAZ 633 and 648, which seem to have spare capacity in 2025 to accommodate more.

In general, we tend to assume a more aggressive capacity assumption in the rural zoned areas. The zoning may say R-20, but for modeling purposes we have assumed that "minor subdivisions" would eventually occur due to urban pressures, and this density increases to about 1 unit per 4 acres....also if there are M-49/37 claims, we assume up to 4 units per claim. This latter assumption on M-49 isn't quite accurate due to the unforeseen introduction of "slivers" into our measure 49 database. This is another reason why we tend to show more development / capacity than otherwise implied by zoning.

With regards to jobs, we can shift some of the over assigned number of jobs into the former LSI job site. (I recognize that it still is not enough to meet the requested increase by Gresham at the LSI site.)

Dennis

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**From:** Charles BEASLEY [mailto:[charles.beasley@multco.us](mailto:charles.beasley@multco.us)]  
**Sent:** Friday, March 02, 2012 11:53 AM  
**To:** Dennis Yee  
**Cc:** Elizabeth McCallum; Martin, Brian  
**Subject:** TAZ 632 Adjustments to HH and Empl

Dennis,

This TAZ is in City of Troutdale, but with National Scenic Area zoning. Neither Elizabeth nor I see any meaningful employment of any kind going into this area. I'm not sure where you want to put that.

Re households, Elizabeth had been assuming 34 units under then Troutdale zoning - R20. Under Gorge zoning, it is one unit per 2 acres. We both think that one quarter of the 34 units or 8 might show up out there, but even this is unclear. Elizabeth suggests moving the 63 units to TAZ 632.

Regarding TAZ 653, adjacent to Troutdale on the north and Gresham on the west, assume one unit is possible there. The zoning is 5 acre minimum, and the lots are bisected by Beaver Creek canyon.

Chuck Beasley, Senior Planner  
Multnomah County Land Use Planning  
1600 SE 190th Avenue, Suite 116  
Portland, Oregon 97233  
[charles.beasley@multco.us](mailto:charles.beasley@multco.us)

[503-988-3043](tel:503-988-3043) ext 22610

FAX [503-988-3389](tel:503-988-3389)

## CITY OF TUALATIN

### Distribution Review and Adjustments Completed (April 5, 2012)

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**From:** Dennis Yee

**Sent:** Thursday, April 05, 2012 4:44 PM

**To:** Colin Cortes

**Cc:** Conrad, Larry; Steve Kelley; AQUILLA HURD-RAVICH; Maribeth Todd; Gerry Uba

**Subject:** RE: Tualatin Comments on Metro 2025 Forecast

Hi Colin:

I refer to your memo (attached) regarding the review and feedback for the city of Tualatin TAZ year 2025 forecast of jobs and housing units. Thank you for your feedback. Enclosed are point-by-point answers to your concerns and our evaluations for the 2025 TAZ forecast.

#### Households in TAZ 999:

We presently show the following forecast details:

2010 HH = 3

2025 HH = 6

2010-25 HH growth = 3

2025 HH Capacity = 4

% capacity used = 75%

Resolution: concur with Tualatin opinion; change 2010-25 growth = 0; 2025 HH capacity = 0

#### Households in TAZ 1053

2010 HH = 227

2025 HH = 228

2010-25 HH growth = 1

2025 HH Capacity = 1

% capacity used = 100%

Resolution: concur with Tualatin opinion; change 2010-25 growth = 0; 2025 HH capacity = 0

#### **Additional Questions answered:**

*Why is there a difference between the city's BLI (843 units) and MetroScope modeled BLI (828)?*

There is a 15 unit difference in BLI figures because the city's BLI number's are based on your city limit estimate while Metro's estimates are TAZ based and our numbers are totaled up by TAZ whose boundaries are not co-terminus with the city limits.

*Why is there a difference between 2025 and 2045 capacity estimates.*



In some locations, the model recognizes the “metering in” of urban reinvestment capacity between forecast years. Therefore some TAZ’s with identified urban renewal areas, for example, get additional capacity in years subsequent to 2025 as the urban renewal action is assumed to stimulate redevelopment above and beyond expected market assumptions. In other words, public interventions are modeled through this term to simulate additional growth parameters in the future years.

In other locations, most notably in TAZ’s adjacent and intersecting with Urban Reserves, the capacity of reserves is also “metered in” at designated time intervals. This metering process is done for both employment and land for housing. Hence these are the 2 reasons why capacity estimates differ between 2025 and 2045. The perspective of capacity is based on the prospective amount we estimate as of 2010.

### **Employment in TAZ 1119**

According to our modeling data set, the following info was used in the 2025 MetroScope forecast:

2010 Total Jobs = 310; 23 retail, 91 service, 196 other jobs

2025 Total Jobs = 338

2010-25 growth = 28; projected increase of 34 service jobs, decrease of 6 other type of jobs

Note that the TAZ straddles Tualatin city limits in part and unincorporated Clackamas county. The figures model the entire TAZ, not just the city part. Regardless of agreements you have in place, the area also known as Wanker’s corner includes a tavern/diner, feed lot store, other retail establishment, schools, and church jobs, for example. Through normal 15 years of growth, we expect employment levels in these firms to rise (or fall). The increase in jobs is therefore attributed to normal build up over time. Overall, I would actually suggest that 28 seems very low over a 15 year span, but as you note the area has a nonurbanization agreement which would limit the buildup of employment.

Resolution: no adjustment of Metro TAZ forecast

Please call me if you have more questions.

Regards,

Dennis Yee  
Metro Economist.

---

**From:** Colin Cortes [mailto:CCortes@ci.tualatin.or.us]  
**Sent:** Friday, March 30, 2012 4:22 PM  
**To:** Dennis Yee  
**Cc:** Conrad, Larry; Steve Kelley; AQUILLA HURD-RAVICH  
**Subject:** Tualatin Comments on Metro 2025 Forecast

**Attachment:** Metro 2012-03-30 re Tualatin Comments on Metro 2025 Forecast with attachment.pdf (2MB)

Dear Dennis,

Please see the attached comments.

Sincerely,

**Colin Cortes, AICP, CNU-A**

Assistant Planner

City of Tualatin | [Planning](#)

503.691.3024 | Fax: 503.692.0147

## CITY OF WEST LINN

### Distribution review and Adjustments Completed (April 5, 2012)

---

**From:** Gerry Uba  
**Sent:** Thursday, April 05, 2012 2:30 PM  
**To:** 'Sonnen, John'  
**Cc:** Dennis Yee; Conrad, Larry  
**Subject:** RE: population allocation

Hello John,

Thanks very much for getting back to me with the City of West Linn comment on the 2025 mid-term growth distribution at the TAZ level. We will contact you and other jurisdictions later this summer to review and comment on the long-term (2030, 2035, 2040) distributions.

Best regards,

Gerry

Regional Growth Distribution Coordinator  
Metro  
[gerry.uba@oregonmetro.gov](mailto:gerry.uba@oregonmetro.gov)

---

**From:** Sonnen, John [mailto:[JSONNEN@westlinnoregon.gov](mailto:JSONNEN@westlinnoregon.gov)]  
**Sent:** Thursday, April 05, 2012 1:07 PM  
**To:** Gerry Uba  
**Subject:** population allocation

Hi Gerry. We are OK with the population allocation.

John

---

 John Sonnen  
[JSONNEN@westlinnoregon.gov](mailto:JSONNEN@westlinnoregon.gov)  
*Planning and Building Director*  
22500 Salamo Rd.  
West Linn, OR 97068  
P: (503) 723-2524  
F: (503) 656-4106  
Web: [westlinnoregon.gov](http://westlinnoregon.gov)

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## CITY OF WILSONVILLE

### Distribution Review and Adjustments Completed (April 2, 2012)

---

**From:** Pauly, Daniel [mailto:pauly@ci.wilsonville.or.us]  
**Sent:** Monday, April 02, 2012 7:22 PM  
**To:** Dennis Yee  
**Subject:** RE: Wilsonville 2025 Gamma Forecast Feedback-Employment, Clackamas County

Increase in TAZ 975- A big question for this TAZ is a 30+ acre RSIA site, which seemed a reasonable recipient of over allocation elsewhere in the E-zone.

Increase in TAZ 970- Local understanding of TAZ made it a reasonable recipient of some of the over allocation elsewhere in the E-zone, especially TAZ 971

Decrease in TAZ 966- Local understanding of redevelopment probability, especially in the Town Center, leads to lower numbers, especially considering the number of housing units that are forecasted to come into this TAZ.

Decrease in TAZ 967- A large concrete plant where many jobs could go in a redevelopment scenario not likely to redevelop by 2025.

Increase in TAZ 976- A moderate increase of jobs reflects the potential for neighborhood commercial and other services within future residential development.

Decrease in TAZ 971- Jobs over allocated to the Villebois development based on mixed use zoning, which according to the master plan is mostly residential.

Increase in TAZ 974- The 27 service jobs seemed low, based on local knowledge reasonable place to transfer a small number of jobs over allocated to other TAZ's in the E Zone.



Daniel Pauly, AICP  
Associate Planner

City of Wilsonville Planning Division  
503-682-4960  
pauly@ci.wilsonville.or.us

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Monday, April 02, 2012 1:55 PM

**To:** Pauly, Daniel

**Subject:** RE: Wilsonville 2025 Gamma Forecast Feedback-Employment, Clackamas County

Can you supply explanations for each change?

Thanks.

Dennis

---

**From:** Pauly, Daniel [mailto:pauly@ci.wilsonville.or.us]

**Sent:** Monday, March 26, 2012 2:23 PM

**To:** LarryC@co.clackamas.or.us; Dennis Yee

**Cc:** Gerry Uba; Neamtzu, Chris

**Subject:** Wilsonville 2025 Gamma Forecast Feedback-Employment, Clackamas County

Please see below

TAZ21 62	Retail Chg	JUR_Retai lChg	Service Chg	JUR_Servic eChg	Other Chg	JUR_other Chg	TotEmp Chg	JUR_TotEm pChg
1128	2	2	150	150	81	81	233	233
1123	0	0	6	6	0	0	6	
975	38	38	492	692	-74	325	456	1055
970	48	48	90	240	365	365	503	653
969	11	11	25	25	99	99	135	135
967	102	102	419	419	672	472	1193	993
966	279	259	778	678	601	401	1658	1338
965	6	6	156	156	21	21	183	183
972	5	5	30	30	26	26	61	61
976	0	20	3	50	1	102	4	172
971	91	91	465	118	321	221	877	430
968	1	1	9	9	4	4	14	14
974	33	33	27	77	188	188	248	298
985	0	0	5	5	9	9	14	14
984	0	0	10	10	15	15	25	25
	Increase							
	Decrease							



Daniel Pauly, AICP  
Associate Planner

**From:** Pauly, Daniel [mailto:pauly@ci.wilsonville.or.us]  
**Sent:** Monday, March 26, 2012 2:20 PM  
**To:** LarryC@co.clackamas.or.us; Dennis Yee  
**Cc:** Gerry Uba; Neamtzu, Chris  
**Subject:** Wilsonville 2025 Gamma Forecast Feedback-Households, Clackamas County

Please see below

TAZ2 162	HH201 0	HH20 25	JUR_HH 2025	HHc hg	JUR_H Hchg	HHCap2 025	HHCap2 045	NOTES
1128	178	1304	678	112 6	500	4026	4026	Our best guess for growth in UR 4H 50/50 MF-SF split
1123	198	250	250	52	52	52	5415	
975	557	582	582	25	25	36	36	
970	53	56	56	3	3	3	3	
969	459	1228	1228	769	769	769	769	
967	1655	2112	2112	457	457	646	646	
966	1945	2337	2317	392	372	392	392	
965	1570	1605	1605	35	35	68	68	
972	66	110	110	44	44	83	2130	
976	31	718	718	687	687	817	2635	
971	573	1423	1854	850	1281	1791	1791	331 HH from unallocated, 100 from 968 per 2/22/12 email
968	784	886	806	102	22	102	102	
974	0	0	0	0	0	0	0	
985	228	288	288	60	60	61	832	
984	299	385	385	86	86	87	87	
	Increase							
	Decrease							



Daniel Pauly, AICP  
Associate Planner

City of Wilsonville Planning Division

**From:** Pauly, Daniel [mailto:pauly@ci.wilsonville.or.us]  
**Sent:** Friday, March 23, 2012 10:15 AM  
**To:** Steve Kelley (Steve\_Kelley@co.washington.or.us)  
**Cc:** Dennis Yee; Gerry Uba; Neamtzu, Chris  
**Subject:** Wilsonville Washington County 2035 Gamma Forecast Feedback

Based on our review, we don't recommend changing the job allocation This feedback reflects Wilsonville's review of job growth in TAZ 982,973,979,978,977,1122,980, and 981.

Based on our review, we see no compelling reasons to change the job numbers for these TAZ's. Any questions let me know.



Daniel Pauly, AICP  
Associate Planner  
City of Wilsonville Planning Division

---

**From:** Pauly, Daniel [mailto:pauly@ci.wilsonville.or.us]  
**Sent:** Wednesday, February 22, 2012 3:37 PM  
**To:** Conrad, Larry; Dennis Yee  
**Cc:** Neamtzu, Chris  
**Subject:** RE: 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)

To answer your question as to where the 100 units for TAZ 971 (Villebois) are coming from within the City of Wilsonville. 80 from TAZ 968 and 20 from TAZ 966.



Daniel Pauly, AICP  
Associate Planner  
City of Wilsonville Planning Division  
503-682-4960  
pauly@ci.wilsonville.or.us

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Wednesday, February 22, 2012 3:02 PM  
**To:** Dennis Yee  
**Cc:** Pauly, Daniel; Neamtzu, Chris  
**Subject:** RE: 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)

Dennis –

It make sense to me that Villebois will complete its development in the Mid Term Forecast time frame –

Let combine 331 of the unallocated units with the 100 units identified by Wilsonville and complete the development of Villebois.

I am assuming the Wilsonville will supply the information on the additional edits to move the other 100 units to both you and I.

We will leave TAZ 1128 alone for now and see what other issue come up during the next couple of weeks.

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

*(V) 503.742.4539*

[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]

**Sent:** Wednesday, February 22, 2012 1:57 PM

**To:** Neamtzu, Chris

**Cc:** Conrad, Larry

**Subject:** RE: 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)

Hi Chris

I didn't mean to not directly answer Dan's questions, but rather defer to Larry Conrad as he is the county coordinator. He and I have talked about this matter and he has a good suggestion on what to do about Villebois and the reserves area east of the city.

He should be contacting you today.

Regards,

Dennis

**From:** Neamtzu, Chris [mailto:neamtzu@ci.wilsonville.or.us]

**Sent:** Wednesday, February 22, 2012 12:27 PM

**To:** Dennis Yee

**Subject:** RE: 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)

Good Afternoon Dennis,

I am wondering if you were going to answer Dan's question or give us some feedback on your thoughts about his comments.



Please let me know.

Thank you,

Chris Neamtzu, AICP  
Planning Director  
City of Wilsonville  
29799 SW Town Center Loop E  
Wilsonville, OR 97070  
503.570.1574  
[neamtzu@ci.wilsonville.or.us](mailto:neamtzu@ci.wilsonville.or.us)

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**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]

**Sent:** Friday, February 17, 2012 2:51 PM

**To:** Conrad, Larry; Pauly, Daniel

**Cc:** Neamtzu, Chris; Fritzie, Martha; Pollack, Kay; Gerry Uba

**Subject:** RE: 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)

All:

Here's the TOTAL net additional res. SUPPLY/CAPACITY (in net dwelling units) we model for TAZ 1128 per our land categories:

Urban Reserves:

1,530 SFR units

2,438 MFR units in mixed use zoning (forecast assertion since Reserves have no declared urban zoning yet)

Rural Capacity (from M-49 and limited development on farm land)

59 SFR units (our count of claims seems to slightly differ, but may also be due to the "density" we assume per claim)

Here's what we are forecasting as residential household DEMAND

Household forecast 1,304 (change = 1,126 from 2010 to 2025) modeled for TAZ 1128

895 SFR households

231 MFR households

////

Larry:

I think it is theoretically plausible to shift about 500 out of TAZ 1128 (urban reserve) as we may conclude that it is too aggressive to assert the number of households that the preliminary TAZ allocation suggest. With corrections to Happy Valley "construction costs" in the model, it is less apt that TAZ 1128 would

build up as quickly. We also show an increase of about 2,500 more households should get assigned to Happy Valley TAZ's. We ran a second scenario with the correction and we find that TAZ 1128 is a strong candidate to reallocate housing from.

Regards,

Dennis Yee  
Metro Economist  
503-797-1578

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Thursday, February 16, 2012 4:10 PM  
**To:** Pauly, Daniel; Dennis Yee  
**Cc:** Neamtzu, Chris; Fritzie, Martha; Pollack, Kay  
**Subject:** RE: 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)  
**Importance:** High

Thank you for the information –

The portion of TAZ 1128 located outside of Urban Reserve Area 4H is almost entirely zoned EFU by the County –

There are less than 20 Measure 49 claims in this area -- with an estimated maximum rural capacity of 40 additional units –it is difficult to site new residential units on EFU lands

It seems to me that almost all of the forecast growth in this TAZ should be located within the urban reserve.

*LARRY CONRAD*  
*PRINCIPAL TRANSPORTATION PLANNER*  
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[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

**From:** Pauly, Daniel [mailto:pauly@ci.wilsonville.or.us]  
**Sent:** Thursday, February 16, 2012 2:33 PM  
**To:** dennis.yee@oregonmetro.gov  
**Cc:** Neamtzu, Chris; Conrad, Larry  
**Subject:** 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)

Dennis

Thank you for discussing Villebois with me yesterday. This is what we know about housing in TAZ 971 (Villebois). The total unit capacity is good at 1791. Based on the adopted Master Plan and building permit data, this capacity should include 960 multi-family units and 831 single-family units. Based on

current development activity, availability of utilities, and general market demand shown in the 2025 gamma forecast for single family in and around Wilsonville (97.5% sf absorption rate) we would expect the vast majority, if not all of the 831 sf units in TAZ 971 to be absorbed by 2025. Assuming a similar mf absorption rate as the rest of the City, 46.8%, 450 of the 960 mf units would be absorbed by 2025. The total absorption rate for all units in TAZ 971 would be approximately 71.5% (1281 of 1791) rather than 47.5% (850 of 1791) currently shown. This is a difference of 431 units. A quick review of TAZ's around the City within the same EZone we can identify approximately 100 units to move to TAZ 971 (Villebois), still leaving Villebois short 331 units. It has been brought up in both county meetings that TAZ 1128 seems to have an over allocation. I am assuming that a vast majority of this allocation is to urban reserve area 4H, which is about 2 miles down the road from Villebois. It seems reasonable that units be transferred from TAZ 1128 to TAZ 971 before moving the over allocation elsewhere in the county.

In regards to TAZ 1128 (Urban Reserve Area 4H). Based on our knowledge of the planned school and infrastructure in the area Chris Neamtzu and my best guess by 2025 for this area is 500 units with a 50/50 sf, mf split.

Please note we haven't completed a complete housing review, but these are two items we wanted to raise right away as it likely plays into a broader discussion for Clackamas County.

Thanks for all your help understanding this data.

Regards



Daniel Pauly, AICP  
Associate Planner

City of Wilsonville Planning Division  
29799 SW Town Center Loop East  
Wilsonville OR 97070  
503-682-4960  
[pauly@ci.wilsonville.or.us](mailto:pauly@ci.wilsonville.or.us)

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

---

**From:** Dennis Yee  
**Sent:** Friday, February 17, 2012 2:51 PM  
**To:** Conrad, Larry; Pauly, Daniel  
**Cc:** Neamtzu, Chris; Fritzie, Martha; Pollack, Kay; Gerry Uba  
**Subject:** RE: 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)

All:

Here's the TOTAL net additional res. SUPPLY/CAPACITY (in net dwelling units) we model for TAZ 1128 per our land categories:

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Regards,

Dennis Yee  
Metro Economist  
503-797-1578

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Thursday, February 16, 2012 4:10 PM  
**To:** Pauly, Daniel; Dennis Yee  
**Cc:** Neamtzu, Chris; Fritzie, Martha; Pollack, Kay  
**Subject:** RE: 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)  
**Importance:** High

Thank you for the information –

The portion of TAZ 1128 located outside of Urban Reserve Area 4H is almost entirely zoned EFU by the County –

There are less than 20 Measure 49 claims in this area -- with an estimated maximum rural capacity of 40 additional units –it is difficult to site new residential units on EFU lands

It seems to me that almost all of the forecast growth in this TAZ should be located within the urban reserve.

LARRY CONRAD

PRINCIPAL TRANSPORTATION PLANNER

(v) 503.742.4539

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"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

**From:** Pauly, Daniel [mailto:pauly@ci.wilsonville.or.us]

**Sent:** Thursday, February 16, 2012 2:33 PM

**To:** dennis.yee@oregonmetro.gov

**Cc:** Neamtzu, Chris; Conrad, Larry

**Subject:** 2025 Households for Villebois (TAZ 971) and Advance (TAZ 1128)

Dennis

Thank you for discussing Villebois with me yesterday. This is what we know about housing in TAZ 971 (Villebois). The total unit capacity is good at 1791. Based on the adopted Master Plan and building permit data, this capacity should include 960 multi-family units and 831 single-family units. Based on current development activity, availability of utilities, and general market demand shown in the 2025 gamma forecast for single family in and around Wilsonville (97.5% sf absorption rate) we would expect the vast majority, if not all of the 831 sf units in TAZ 971 to be absorbed by 2025. Assuming a similar mf absorption rate as the rest of the City, 46.8%, 450 of the 960 mf units would be absorbed by 2025. The total absorption rate for all units in TAZ 971 would be approximately 71.5% (1281 of 1791) rather than 47.5% (850 of 1791) currently shown. This is a difference of 431 units. A quick review of TAZ's around the City within the same EZone we can identify approximately 100 units to move to TAZ 971 (Villebois), still leaving Villebois short 331 units. It has been brought up in both county meetings that TAZ 1128 seems to have an over allocation. I am assuming that a vast majority of this allocation is to urban reserve area 4H, which is about 2 miles down the road from Villebois. It seems reasonable that units be transferred from TAZ 1128 to TAZ 971 before moving the over allocation elsewhere in the county.

In regards to TAZ 1128 (Urban Reserve Area 4H). Based on our knowledge of the planned school and infrastructure in the area Chris Neamtzu and my best guess by 2025 for this area is 500 units with a 50/50 sf, mf split.

Please note we haven't completed are complete housing review, but these are two items we wanted to raise right away as it likely plays into a broader discussion for Clackamas County.

Thanks for all your help understanding this data.

Regards



Daniel Pauly, AICP  
Associate Planner

City of Wilsonville Planning Division  
29799 SW Town Center Loop East  
Wilsonville OR 97070  
503-682-4960  
pauly@ci.wilsonville.or.us

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

---

**From:** Pauly, Daniel [mailto:pauly@ci.wilsonville.or.us]  
**Sent:** Monday, February 13, 2012 4:08 PM  
**To:** Dennis Yee  
**Cc:** Gerry Uba; Neamtzu, Chris  
**Subject:** 2025 Gamma Forecast, Housing Types in Mixed Housing Zones

Dennis

All of Wilsonville's residential zones are mixed residential zones, no exclusive multi-family and single-family districts. When doing the zoning cross walk, we were told to put the zones into SF and MF based on density. That worked fine for estimating the total household capacity, but when applying the different market demand for SF and MF over time we feel it is not accounting for mixed housing types in these zones, especially the higher density zones, significantly underestimates the number of small lot single family homes. In addition in the Villebois URA, which has the standardized zoning, MUR-1 we are also concerned the model assumed much more MF, while the Master Plan calls for mostly SF, attached and detached. Am I correct that there may be an underestimation of single family growth in these higher density area, or is this something already built into the model?

Thanks



Daniel Pauly, AICP  
Associate Planner

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Wilsonville OR 97070  
503-682-4960  
pauly@ci.wilsonville.or.us

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

**From:** Dennis Yee  
**Sent:** Monday, February 13, 2012 5:55 PM  
**To:** Pauly, Daniel

**Cc:** Gerry Uba; Neamtzu, Chris

**Subject:** RE: 2025 Gamma Forecast, Housing Types in Mixed Housing Zones

Hi Daniel:

For a city of Wilsonville's size, we show the following capacity in our modeling process:

Capacity based on city limits calculation using GIS parcel data.

SF: 1,383

MF: 1,887

Capacity tabulated based on TAZ (which don't match up precisely with city boundaries)

SF: 1,668

MF: 2,139

The capacity estimates are derived from the zone class cross walk and BLI datasets. The capacity data doesn't seem to be remarkably different as compared to other suburban cities. I refer to the spreadsheet handout titled MetroScope Residential Capacity Assumptions (attached file).

The capacity for Wilsonville is based in the review of zone classes (i.e., the crosswalk) and review of the Buildable Land Inventory. Here's what we have assumed as a crosswalk by zone class for Wilsonville:

				Local zone	Metro Zone
Class					
Wilsonville	1233	Residential agricultural - holding	RA-H	FUD	FUD
Wilsonville	1233	Planned development residential	PDR	SFR	SFR10
Wilsonville	1233	Planned development residential	PDR-1	SFR	SFR2
Wilsonville	1233	Planned development residential	PDR-2	SFR	SFR5
Wilsonville	1233	Planned development residential	PDR-3	SFR	SFR8
Wilsonville	1233	Planned development residential	PDR-4	SFR	SFR10
Wilsonville	1233	Planned development residential	PDR-5	MFR	MFR1
Wilsonville	1233	Planned development residential	PDR-6	MFR	MFR2
Wilsonville	1233	Planned development residential	PDR-7	MFR	MFR4
Wilsonville	1233	Village	V	MUR	MUR1
Wilsonville	1233	Planned development commercial	PDC	COM	GC
Wilsonville	1233	Town center commercial	PDC-TC	MUR	MUR2
Wilsonville	1233	Planned development industrial	PDI	IND	IL
Wilsonville	1233	Public facility	PF	COM	PF
Wilsonville	1233	Public facility - corrections	PF-C	COM	PF
Wilsonville	1233	Residential	R	SFR	SFR8

The highlighted zones were ones we changed after your feedback to us.

As you say, "[t]hat worked fine for estimating the total household capacity", consequently we assume that the allocation of households to capacity would respect the SF and MF capacity estimates. When we use the model to assign households to SF or MF dwelling unit types, it is the interaction between market demand and the supply capacity across the whole region that competes for the growth assigned to the TAZ allocations of which Wilsonville is a part of the regional market.

According to our forecast table, Wilsonville gets allocated 2,633 units in the city and absorbs a corresponding amount of dwelling capacity up to 69% of capacity in 2025. Wilsonville gets a further bump in capacity thru 2045 due to some part of urban reserves that makes its way into the UGB.

**Wilsonville summary TAZ forecast allocation**

SF growth assigned to TAZ = 1,627 households absorbed out of DU capacity of 1,668

MF growth assigned to TAZ = 1,001 households absorbed out of DU capacity of 2,139

Having outlined the household forecast for Wilsonville, I am confident that we have a reasonable assignment of households to dwelling unit. As far as I can determine, the amount of dwelling capacity split between SF and MF seems reasonable, and the amount of household growth assigned / absorbed to the SF and MF units doesn't exceed capacity.

Therefore, I am not seeing any underestimation of household growth assigned to the SF dwelling capacity for the city.

Please give me a call to discuss if you have more questions. I am scheduled to coordinate with Washington county jurisdictions this Wednesday, if you plan on also attending this meeting, we can talk about this information some more then.

Regards,

Dennis



## WOOD VILLAGE

### Distribution review and Adjustments Completed (march 22, 2012)

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**From:** Dennis Yee  
**Sent:** Thursday, March 22, 2012 11:40 AM  
**To:** Charles BEASLEY  
**Cc:** Gerry Uba  
**Subject:** FW: Reminder: March 30 Deadline for Comment on the Mid-term Growth Distribution

Confirmation that Wood Village is satisfied with the 2025 TAZ allocation.

**From:** Paulette Copperstone  
**Sent:** Thursday, March 22, 2012 11:39 AM  
**To:** Gerry Uba; Dennis Yee  
**Subject:** FW: Reminder: March 30 Deadline for Comment on the Mid-term Growth Distribution

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**From:** Bill Peterson [mailto:billp@ci.wood-village.or.us]  
**Sent:** Wednesday, March 21, 2012 4:47 PM  
**To:** Paulette Copperstone  
**Subject:** RE: Reminder: March 30 Deadline for Comment on the Mid-term Growth Distribution

Gerry;

Our initial reviews do not indicate any predicted deviations from the forecasts.

Bill Peterson  
Wood Village

---

**From:** Bill Peterson [mailto:billp@ci.wood-village.or.us]  
**To:** Paulette Copperstone  
**Subject:** RE: Reminder: March 30 Deadline for Comment on the Mid-term Growth Distribution

Gerry;

Our initial reviews do not indicate any predicted deviations from the forecasts.

Bill Peterson  
Wood Village

## CLACKAMAS COUNTY

### Distribution Review and Adjustments Completed (April 12, 2012)

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]

**Sent:** Thursday, April 12, 2012 8:21 AM

**To:** Dennis Yee; Gerry Uba

**Cc:** Fritzie, Martha; Gilevich, Shari; Hughes, Jennifer; McCallister, Mike

**Subject:** 2025 Mid Term Forecast Problems

**Importance:** High

At this point in time we believe that the problems with the forecast in the unincorporated portion of the County have been address. This is based on the following information –

- The forecast population was based allocation of growth using the land supply methodology the was developed Metro and the local jurisdictions.
- There were some localized allocation problems which have been largely resolved.
  - The largest of these problems involved household allocations Happy Valley and Damascus.
  - There were also problems with the land supply assumption for the 5 rural cities in Clackamas County. Additional information was provide to Metro on this issue. The Canby land supply for employment was substantially underestimated. It is our understanding that Metro is working on a solution for this problem.
  - The rural household growth assumptions regarding Measure 49 claims were too high. This growth was reallocated to adjoining cities.
  - There was an assumption of some zoning changes on rural lands based on “development pressures” which were incorrect based on state land use regulations. This growth was reallocated to adjoining cities.

We anticipate that the larger scale policy issues related to the forecast will surface during the next round of forecast review – i.e. the 2035 forecast. We anticipate that these policy issues will general resolve around the following topics:

- Assumed growth in urban reserves in light of a substantially reduced assumptions for growth in Damascus by 2035.
- Assumed late addition (post 2040) to the regional land supply of any lands in the 5 Stafford area urban reserves.

It is noteworthy that these 2 issues have opposing impacts on the regions ability to meet the forecast need for future housing.

If you have any other questions please give me a call.

Lawrence M Conrad  
Principal Transportation Planner  
Department of Transportation and Development  
Clackamas County

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Wednesday, April 11, 2012 1:45 PM  
**To:** Gerry Uba  
**Cc:** Dennis Yee  
**Subject:** Re: Clackamas County Comment on 2025 Mid-tern Distribution

I do not represent Gladstone Contact Clay Glasgow at Clackamas county

Last time I talked to him, he indicated that he did not have a problem with the forecast

Larry -

Sent from my iPhone

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**From:** Gerry Uba  
**Sent:** Wednesday, April 11, 2012 12:56 PM  
**To:** 'Conrad, Larry'  
**Cc:** Dennis Yee  
**Subject:** Clackamas County Comment on 2025 Mid-tern Distribution

Hello Larry,

We discussed and addressed your concerns on the 2025 mid-term growth distribution in the unincorporated areas of Clackamas County. But, we need your email confirming that you are satisfied with the final outcome of the discussions and distributions so we can start working on the long-term distribution.

Please confirm also that the distribution in the City of Gladstone is satisfactory to you and the city.

I am looking forward to your email soon. Thanks very much.

Gerry

Growth Distribution Project Coordinator  
503-797-1737  
[Gerry.uba@oregonmetro.gov](mailto:Gerry.uba@oregonmetro.gov)

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**From:** Dennis Yee  
**Sent:** Thursday, March 22, 2012 10:42 AM

**To:** Gerry Uba  
**Cc:** Maribeth Todd; Sonny Conder  
**Subject:** FW: Damascus TSP

Gerry: Please add this to the record. The failure of ODOT to fund any Damascus TSP tasks seriously endangers the viability or believability of the TAZ forecast assigned to Damascus.

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Thursday, March 22, 2012 10:31 AM  
**To:** Dennis Yee; Gerry Uba  
**Subject:** FW: Damascus TSP (Attachment)

*LARRY CONRAD*  
*PRINCIPAL TRANSPORTATION PLANNER*

[ATTACHMENT IS IN FILE]



# Oregon

John A. Kitzhaber, MD, Governor

## Department of Transportation

Region 1 Headquarters  
123 NW Flanders Street  
Portland, OR 97209  
(503) 731.8200  
FAX (503) 731.8531

March 20, 2012

Mayor Spinnett and Damascus City Council Members,

In June 2011, following a public vote that rejected a comprehensive land use plan the Damascus City Council had previously adopted, ODOT requested that the City postpone further work and spending of federal funds on the City's Transportation System Plan (TSP) until consensus could be reached among community leaders on a working land use map to be the basis for further comprehensive plan efforts. It was hoped a decision from the City Council could provide the necessary assurance that funding would not be spent developing a TSP for a comprehensive plan that would later change, requiring additional funds be spent revising the TSP.

ODOT very much appreciates efforts by the City Council and city staff (e.g. Steve Gaschler) to give ODOT the assurances requested (Resolution No. 12-295). However, with recent passage of a voter initiative in Damascus requiring voter approval of all comprehensive plan and zoning actions submitted to the Department of Land Conservation and Development and Metro, it is unclear that the assurances as previously envisioned are sufficient for moving ahead to spend federal funds on planning work at this time. Over the next few weeks, with further consultation from the City, we will need to take some time to review our options. In the meantime, I'm afraid we need to put a hold on further development of the City's TSP.

ODOT looks forward to meeting with your staff over the next few weeks to lay out a plan for working through this new issue. Ross Kevlin, Region 1 Planner, will be in touch with your staff to schedule a meeting.

Regards,

Kirsten Pennington  
ODOT Region 1 Planning Manager

CC: Dan O'Dell, Damascus City Manager  
Steve Gaschler, Damascus Community Services Director  
Penny Morrison, Damascus City Recorder  
Rian Windsheimer, ODOT Region 1 Policy & Development Manager  
Ross Kevlin, ODOT Region 1 Planner  
Kelly Brooks, ODOT Region 1 Governmental Liaison

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]

**Sent:** Thursday, March 22, 2012 9:50 AM

**To:** Brian Brown; Fritzie, Martha; Glasgow, Clay; Hoelscher, Scott; Tracy Brown; Abbott, Sarah; AQUILLA HURD-RAVICH; Barth, Gary; Buehrig, Karen; Chris Neamtzu; Colin Cortes; Comer, Catherine; Egner, Dennis; Erica Rooney; Erika Palmer (epalmer@ci.damascus.or.us); Gilevich, Shari; Hughes, Jennifer; John Morgan; Kay Mordock; Kerr, Chris; Laura Terway; Li Alligood; manglek@ci.milwaukie.or.us; McCallister, Mike; Michael Walter; Pauly, Daniel; Pollack, Kay; Sonnen, John; Stephan Lashbrook; Steve Gaschler

**Cc:** Dennis Yee; Gerry Uba

**Subject:** 2035 Mid Term Forecast Comments Due March 30

Good Morning

Just a quick reminder that comments on the 2035 Mid Term Forecast are due to Metro next Friday.

We have one general issue that needs to be addressed – there are approximately 1,000 housing units that have not been allocated to individual TAZ.

If you have any suggested locations for a portion of this allocation please give me a call – if not I will work out an allocation plan for these units.

Please CC me on any comments

Thanks

Lawrence M Conrad  
Principal Transportation Planner  
Department of Transportation and Development  
Clackamas County

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**From:** Dennis Yee

**Sent:** Tuesday, March 20, 2012 3:27 PM

**To:** Conrad, Larry; Gerry Uba

**Cc:** Maribeth Todd

**Subject:** RE: Review of Mid-term Forecast Distribution

Do any of the cities in the UGB that I've yet to hear from (excludes Damascus, Happy Valley, and Wilsonville) have desire for added housing units? 1,000 is very much so we can "ignore" these as you see fit.

Regards,

Dennis

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]

**Sent:** Tuesday, March 20, 2012 2:02 PM

**To:** Gerry Uba

**Cc:** Christina Deffebach; Dennis Yee; Maribeth Todd; Jim Cser  
**Subject:** RE: Review of Mid-term Forecast Distribution

I think that the County's major unresolved issue is a unallocated 1000 housing units

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

*(v) 503.742.4539*

[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]

**Sent:** Wednesday, March 14, 2012 10:31 AM

**To:** Dennis Yee; Gerry Uba

**Cc:** Jim Cser; Maribeth Todd; Fritzie, Martha; Brian Brown; Tracy Brown; Hoelscher, Scott; Glasgow, Clay; Neamtzu, Chris; Erika Palmer (epalmer@ci.damascus.or.us); Steve Gaschler; Pauly, Daniel; (lterway@ci.oregon-city.or.us); Nancy Kraushaar

**Subject:** Excess Rural Forecast Reallocation

**Importance:** High

Dennis –

We looked at the Mid Term forecast for the rural areas (outside Metro UGB or Urban Reserves) and suggest the following changes to the rural portion of the forecast:

### 2025 Mid Term Forecast – Excess Rural Allocations

Reallocation of the excess “rural” household forecasts for 2025 should result in household be shifted to urban TAZs in adjoining cities as listed below.

This correct the initial excess allocation that resulted from the following --

- A high forecast for the number of Measure 49 related new housing units and
- “Up Zoning” due to Urban Pressure resulting in additional new housing units,

This does not include any reallocations from urban reserves within a give TAZ that are assumed to be within the mid term forecast allocation.

**In some cases where the “excess” rural allocation is small, less that 5 units in a TAZ, it will not be necessary to shift units to other TAZ's .**

Source - Rural TAZ	Destination – Urban Area	City or Area
963, 964, 972, 976, 983, 984, 985, 988, 1123, 1124, and 1128	Wilsonville	Wilsonville or Wilsonville UR
1125, 1126, 1127	Stafford Urban Reserves ?	
848, 962, 911, 912, 914, and 915	Canby	Canby
722, 723, 724, 751, 752, 753,	Oregon City	Oregon City or Oregon City UR

754, 755, 756, 757, 758, 902, 903, 904, 905, 906. 907 and 927		
913, 916, 917, 918, 919, 920, 921 and 922	Molalla	Molalla
924, 929, 930, 934, 935, 936, 937 and	Estacada	Estacada
933, 938, 939, 940 957, 958, and 959	Sandy	Sandy
960 and 961	Mt Hood Corridor / Welches	
931, 932, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, and 956	Boring Urban Reserves?	?
813, 814, 826, 899, 900, 901, and 928	Damascus	Damascus

The remain question is what to do with the excess rural forecast to the south of the Stafford Urban Reserves and in the Boring Urban reserves – I think that we need to see a estimate of how large this excess is before we can suggest a solution.

I would also like to see and estimate for the Mt Hood Corridor.

Lawrence M Conrad  
Principal Transportation Planner  
Department of Transportation and Development

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**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Wednesday, March 07, 2012 1:22 PM  
**To:** Charles BEASLEY; LarryC@co.clackamas.or.us  
**Cc:** Dennis Yee  
**Subject:** RE: Assumptions for Rural Areas

Chuck;

I agree with your message below.

For modeling purposes within either Urban or Rural Reserve areas, we should only assume what is allowed today under OAR-660-027 --- for lands outside of designated Reserve lands, we can assume buildout of whatever is permitted on those lands under current plan policies - unfortunately, at least within Washington County, the majority of those lands are Resource Lands and are restricted accordingly - (typically one dwelling unit (or less) per existing legal tax lot with limited exceptions).

===

That said, I don't think I am going to fuss over a few extra units in the Rural TAZ's (meaning if the technical capacity under today's rules would only allow an additional 3 units in the TAZ and the allocation shows 6, I will likely ignore it). However, if an allocation exceeds estimated capacity by 10 or more units, I will likely recommend an adjustment - especially in our Resource Districts.

Steve



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**From:** Charles BEASLEY [mailto:charles.beasley@multco.us]  
**Sent:** Wednesday, March 07, 2012 10:25 AM  
**To:** Steve Kelley; LarryC@co.clackamas.or.us  
**Cc:** Dennis Yee  
**Subject:** Assumptions for Rural Areas

Larry, Steve, and Dennis,

I realize that I should have pulled both Washington and Clackamas counties in to this thread, and want to do so now. It seems the counties should all be on the same page with assumptions for rural areas because our rural lands are under similar legal limitations that affect change in households in the future, and our ability to change rural zoning to increase the number of lots in those areas. So please let me know if I've missed something here. Dennis included his capacity assumption for rural lands below, and it helps me understand where some of what I believe are high change in HH numbers in some rural TAZ are coming from. The blue language is from Dennis, the red is me.

Note that I generally try to not advance "reserves" as the reason for all things good and bad. Density in rural areas is already quite encumbered by state law, and reserves just further limits our ability to make changes should state rules become more flexible over the next 50 years.

In general, we tend to assume a more aggressive capacity assumption in the rural zoned areas. The zoning may say R-20, but for modeling purposes we have assumed that "minor subdivisions" would eventually occur due to urban pressures, and this density increases to about 1 unit per 4 acres....also if there are M-49/37 claims, we assume up to 4 units per claim. This latter assumption on M-49 isn't quite accurate due to the unforeseen introduction of "slivers" into our measure 49 database. This is another reason why we tend to show more development / capacity than otherwise implied by zoning.

Regarding the assumption that density will increase in rural areas over time due to pressure. Note that counties can't amend zoning regs to increase density in either urban or rural reserves. This is per OAR 660-027-0070, and county adopting plans. Nearly all land near the UGB in Multnomah County was designated as reserves. My view is that for modeling purposes, the assumption should be conservative, although the number of units we're talking about isn't much in the grand scheme of things.

I'm not sure about whether 4 M49 units is reasonable because the state lists 79 for Mult Co. with an average of 1.7 dwellings per claim. [http://www.oregon.gov/LCD/docs/publications/M49\\_2011-01-31.pdf](http://www.oregon.gov/LCD/docs/publications/M49_2011-01-31.pdf)

regards,

--

Chuck Beasley, Senior Planner  
Multnomah County Land Use Planning  
1600 SE 190th Avenue, Suite 116  
Portland, Oregon 97233  
[charles.beasley@multco.us](mailto:charles.beasley@multco.us)  
503-988-3043 ext 22610  
FAX 503-988-3389

## **Stafford**

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**From:** Dennis Yee  
**Sent:** Monday, April 02, 2012 9:36 AM  
**To:** Conrad, Larry; Colin Cortes; Neamtzu, Chris; AQUILLA HURD-RAVICH; Egner, Dennis; Erica Rooney; Kerr, Chris  
**Cc:** Donnelly, Jennifer; Gerry Uba; McCallister, Mike; Chandler, Daniel; CINDY HAHN; Pauly, Daniel; Dennis Wright; Gerry Uba  
**Subject:** RE: Metro Forecast Single Family Issue

All:

Metro will NOT change the TAZ forecast assumptions for 2025 or later years with respect to the timing and capacity we have already outlined for urban reserves. We concur with Larry's statement: "to see what results come out of the 2035 forecast before making a recommendation" at this time.

The assumption on how we will treat urban reserves for purposes of the TAZ forecast was outlined and described at our last set of county TAZ forecast meetings.

Regards,

Dennis Yee

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Monday, April 02, 2012 8:21 AM  
**To:** Colin Cortes; Neamtzu, Chris; AQUILLA HURD-RAVICH; Egner, Dennis; Erica Rooney; Kerr, Chris  
**Cc:** Donnelly, Jennifer; Dennis Yee; Gerry Uba; McCallister, Mike; Chandler, Daniel; CINDY HAHN; Pauly, Daniel; Dennis Wright  
**Subject:** RE: Metro Forecast Single Family Issue

Thank you for your comments on this issue –

I will not be pursuing this issue any farther at this point in time –

Instead I will wait to see what results come out of the 2035 forecast before making a recommendation to the County as to what course of action the County should pursue.

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

*(V) 503.742.4539*

[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

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**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Monday, April 02, 2012 8:13 AM  
**To:** Dennis Yee; Gerry Uba

**Cc:** Donnelly, Jennifer  
**Subject:** FW: Metro Forecast Single Family Issue

Dennis and Gerry

While I still think that there is a problem with the current assumptions for the Stafford Area Urban Reserves – I will wait until I see the results of the 2035 forecast before deciding what course of action to recommend to the County.

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

*(V) 503.742.4539*

[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

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**From:** Colin Cortes [mailto:CCortes@ci.tualatin.or.us]  
**Sent:** Friday, March 30, 2012 9:38 AM  
**To:** Conrad, Larry; Neamtzu, Chris; AQUILLA HURD-RAVICH; Egner, Dennis; Erica Rooney; Kerr, Chris  
**Cc:** Donnelly, Jennifer; Dennis Yee; Gerry Uba; McCallister, Mike; Chandler, Daniel; CINDY HAHN; Pauly, Daniel; Dennis Wright  
**Subject:** RE: Metro Forecast Single Family Issue

Dear Mr. Conrad:

The City of Tualatin disagrees with the idea of the Stafford Borland area urban reserves (4A South and 4C through 4F) entering the urban land supply prior to 2045.

**Colin Cortes, AICP, CNU-A**

Assistant Planner  
City of Tualatin | [Planning](#)  
503.691.3024 | Fax: 503.692.0147

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**From:** Dennis Yee  
**Sent:** Thursday, February 23, 2012 2:15 PM  
**To:** Mike Hoglund  
**Cc:** Gerry Uba  
**Subject:** FW: Metro Forecast Single Family Issue  
**Importance:** High

Mike: this email summarizes a conversation I had with Larry Conrad concerning the Stafford Reserves. As you can see, Larry is broaching the topic with local jurisdictions to feel out their acceptance of this idea. It is fortuitous that we stopped midstream in the allocation to allow reviewers to comment on the forecast before we complete 2035/45. This may be the accommodating assumption we need to satisfy forecast concerns, i.e., push out the problem to the next forecast cycle.

Dennis

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]

**Sent:** Wednesday, February 22, 2012 4:24 PM

**To:** Neamtzu, Chris; AQUILLA HURD-RAVICH; Egner, Dennis; Erica Rooney; Kerr, Chris

**Cc:** Donnelly, Jennifer; Dennis Yee; Gerry Uba; McCallister, Mike; Chandler, Daniel; chahn@ci.tualatin.or.us; Colin Cortes; Pauly, Daniel; Dennis Wright

**Subject:** Metro Forecast Single Family Issue

**Importance:** High

Good Afternoon

As part of the presentation on the Metro Midterm Forecast (2025) – see attached, a problem was identified with the supply of single family housing which is expected to substantially increase cost of single family housing in the Metro region.

This problem is at least in part related to the supply of single family land at the regional level.

I suggest that an adjustment of one of the main assumptions of the Metroscope model could partially mitigate this problem.

This change would be as follows:

- Presently the Stafford Borland area urban reserves (4A South and 4C through 4F) are not assumed to enter the urban land supply prior to 2045.
- If portions of this area were assumed to begin entering this land market starting in 2030 and continuing to enter the market every 5 year until they were completely included by 2045, some the supply problems could be partially mitigated.

I would like to talk to about the acceptability of this approach to the issue of rapidly increasing SF housing prices at the regional level.

I will be giving you a call in a couple of days to see what you think of this idea.

If you have any questions – please feel free to give me a call

Lawrence M Conrad  
Principal Transportation Planner  
Department of Transportation and Development  
Clackamas County

## **Canby**

**From:** Matilda Deas [mailto:DeasM@ci.canby.or.us]  
**Sent:** Tuesday, April 03, 2012 2:09 PM  
**To:** Dennis Yee; Bryan Brown  
**Cc:** Conrad, Larry; Fritzie, Martha; Maribeth Todd; Gerry Uba; Jim Cser  
**Subject:** RE: Canby employment information

Thank you Dennis.

---

**From:** Dennis Yee  
**Sent:** Tuesday, April 03, 2012 1:13 PM  
**To:** Matilda Deas; Bryan Brown (brownb@ci.canby.or.us)  
**Cc:** Conrad, Larry; Fritzie, Martha; Maribeth Todd; Gerry Uba; Jim Cser  
**Subject:** RE: Canby employment information

Matilda:

Thank you for the TSP information. I am comparing the new information we received from you with the Canby TSP report (particularly Table 1) and Metro's 2025 TAZ "GAMMA" Forecast Distribution. I realize our TAZ's are not the same as your TAZ's. Nevertheless, the household land use totals/ assumptions between Metro's 2025 figure of 4,034 household unit growth appears comparable to the city's 4,403 projected growth to 2030. The base years seem reasonably comparable too.

You've identified where we differ the greatest and that appears to be in the assumption of commercial and industrial land capacity. As a result of the difference in buildable land capacity, there is a significant difference between the TSP's projected growth of 8,588 jobs through 2030 versus Metro's estimate of 551 job growth. You are correct in noting that we show less than 1 acre of commercial land in 2025 and under 4 acres of commercial land supply through 2045 for the city. And zero industrial land capacity.

Our estimate of Canby employment capacity is apparently based on outdated assumptions in light of the TSP information. We will confer with Clackamas county on what approach they would like to take to rectify a change in the TAZ employment forecast. Please stay tuned.

Regards,

Dennis Yee  
Metro Economist

---

**From:** Matilda Deas [mailto:DeasM@ci.canby.or.us]  
**Sent:** Tuesday, March 27, 2012 11:11 AM  
**To:** Dennis Yee  
**Subject:** Canby employment information

Hello Dennis,

Our Planning Director, Bryan Brown, has asked me to be involved in the 2012 coordinated population forecasting project. Larry Conrad noted that we should send you any information which we think pertinent to project. I was looking on the FTP site at the city employment projections and am not sure I understand the employment capacity acres column. You list 0 acres for canby except for 2 commercial acres in 2045. I have attached the future forecasting memo from our adopted 2010 TSP. It may be easier for me to chat with you via phone to better understand the commercial/industrial employment capacity columns. Just want to make sure we are understanding your numbers. Thanks Dennis.

Matilda Deas, AICP, Senior Planner  
City of Canby Planning and Development  
111 NW 2nd Ave  
Canby, OR 97013  
p 503-266-7001 x223  
F 503-266-1574  
deasm@ci.canby.or.us

## **MULTNOMAH COUNTY**

### **Distribution Review and Adjustments Completed (March 28, 2012)**

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**From:** Charles BEASLEY [mailto:charles.beasley@multco.us]  
**Sent:** Wednesday, March 28, 2012 11:51 AM  
**To:** Maribeth Todd  
**Cc:** Dennis Yee  
**Subject:** Re: revised rural Multnomah capacity estimates

Maribeth,

Re rural employment, I don't see large changes because the uses are primarily resource based, eg. forest management and farming. Largest potential is on the farm side, and I think that would be due to any changes in ag labor needs in the future. The other possibility for increase is home occupations. The potential for increase in those is why I think it is ok to keep most of the rural employment numbers as you have them. I've made a change in the employment number for one ezone on the east side.

Ezone 124 - includes Springwater RSIA, Pleasant Valley, and SE Gresham as well as rural land out to Sandy River. Defer to Gresham re employment change by taz within the urban and urbanizable areas of this ezone. Re rural taz 660, I can't see a 56% increase here since it is primarily developed farmland, plus Camp Collins and Oxbow Park. Neither of those are large employment uses, and fairly seasonal as well.

The other taz employment increases are in the 20%, so adjusting 660 down closer to that level is appropriate. Also, taz 656 includes Orient Rural Center which has jobs zoning, and two schools, and that increase is showing 44%. Taz 660 should be substantially less than that. See the table attached.

thanks much for your help explaining how the model works!

Chuck

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On Fri, Mar 23, 2012 at 12:47 PM, Maribeth Todd <[Maribeth.Todd@oregonmetro.gov](mailto:Maribeth.Todd@oregonmetro.gov)> wrote:

Hi Chuck,

In order to get model results at the TAZ level from MetroScope, we have to apply a mapback routine that takes the model outputs from the larger ezone level down to the TAZ level. The method that we settled on for the employment mapback takes the growth increment in employment by sector (which could be negative) and assigns half of it to where existing employment is located and half of it to where estimated new capacity exists. This split helps account for areas and sectors where employment is declining and reduces the chances for radical shifts in the employment distribution within an ezone.

We don't actually have any additional employment capacity going into the model in rural Multnomah County, but I think there are two reasons for the growth that you're seeing out there. The first reason, which I think applies in the northwestern portion of the county (TAZ 51 & 52) is intensification of employment in existing locations. We may or may not think this is reasonable but the model seems to think this area would be attractive for employment, and it is pretty accessible and close to downtown. It's also not a huge change in employment.

The second reason is the overlap of ezones across the urban and rural portions of the region. I think this is the case for ezone 124 on the eastern edge of the UGB. The ezone is showing employment growth and we're distributing half of that growth across the TAZs to where existing employment is, so that's why you're seeing growth in TAZs 656 and 660. You will see variation in the % change because the assignment also takes into consideration the employment sector. If you have concerns about the employment growth in that area, I think it would be reasonable to shift some of that growth to TAZs inside the UGB in ezone 124.

I hope that helps rather than confuses the situation even more! Let me know if you still have questions or concerns, and do let us know if you decide you want to adjust some of that employment.

Maribeth

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**From:** Charles BEASLEY [mailto:[charles.beasley@multco.us](mailto:charles.beasley@multco.us)]  
**Sent:** Friday, March 23, 2012 11:55 AM  
**To:** Maribeth Todd

**Subject:** Re: revised rural Multnomah capacity estimates

Maribeth,

Just sent my employment reply. I see quite a bit of variance between % increase in employment by 2025. The zoning doesn't vary much, so I don't understand what is driving the difference. But I'm not saying it necessarily should be reduced. As with the households, we are not talking about that much impact.

thanks

C.

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On Fri, Mar 23, 2012 at 11:48 AM, Maribeth Todd <[Maribeth.Todd@oregonmetro.gov](mailto:Maribeth.Todd@oregonmetro.gov)> wrote:

Hi Chuck,

Dennis mentioned that you may have some questions or concerns about the employment projections in Multnomah County. I'm happy to look at the data with you if there's anything that you'd like to talk about. I should be at my desk for most of the afternoon if you want to give me a call, or we can set something up for next week.

Maribeth

Maribeth Todd



Research Center

Metro

---

**From:** Gerry Uba  
**Sent:** Wednesday, April 04, 2012 11:50 AM  
**To:** Maribeth Todd  
**Cc:** Dennis Yee  
**Subject:** FW: revised rural Multnomah capacity estimates

Hello Maribeth,

Please forward your response to Chuck as Dennis requested so I can add it to our records. Thanks

Gerry

---

**From:** Dennis Yee  
**Sent:** Friday, March 23, 2012 11:52 AM  
**To:** Charles BEASLEY  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** RE: revised rural Multnomah capacity estimates

Maribeth:

Can you follow up with Chuck as to the quantity of employment BLI we are showing the model? That ought to explain what's going on in the rural areas.

Thanks

Dennis

---

**From:** Charles BEASLEY [mailto:charles.beasley@multco.us]  
**Sent:** Friday, March 23, 2012 11:51 AM  
**To:** Dennis Yee  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** Re: revised rural Multnomah capacity estimates

Dennis,

This email regarding rural employment follows my response of 3/21 re households. I don't recall what assumptions for rural employment went into the Metroscope model. I don't understand how the rural areas will generate 60% increase in the number of jobs, but I don't have a method to refine those estimates.

Regarding TAZ 46, I think you can add employment based on that area being developed by 2025. While we have an approved 10 year extension from Metro to Title 11 planning, it is possible for this area to be developed by that time.

The draft plan for the urban portion of TAZ 46 indicates a .5 acre neighborhood employment area. Not many jobs, but perhaps more change than presently indicated for this TAZ.

Chuck

.....  
On Thu, Mar 8, 2012 at 3:53 PM, Dennis Yee <[Dennis.Yee@oregonmetro.gov](mailto:Dennis.Yee@oregonmetro.gov)> wrote:

Hi Chuck:

As promised, here is a table outlining the revised capacity we are recommending for rural part of the TAZ's in the county. Also, please see attached maps illustrating the GIS location of the capacity shown in the table below. This table clears up the GIS sliver problems, gross to net and oversize lots method that yielded in the prior capacity assessment. The "RRFU Add Lots" correspond to the green polygons in the attached pdf maps and are calculated based on the minimum lot size allowed per actual Multnomah county zoning (not the zone class crosswalks).

Please note, we continue to assume for the M-49 assumption the calculation of 3 units per claim. We would like to maintain the 3 unit assumption to be consistent with the other 2 counties. I consulted with Dick Benner, Metro Legal Counsel, and he feels that 3 units is legally justifiable.

So here's a summary table of what we currently have in the rural residential supply for Multnomah County:

TAZ2162	Total RRFU Add Lots	Total M49 Add Lots	Current total supply
42		3	3
44	11		11
45	5	6	11
46	26		26
47		3	3
48		3	3
49	46	3	49
50	3	12	15
51	132	54	186
52		30	30
649	2		2
651	17	21	38
652	3		3
653	11		11
654	1		1
656		9	9
657		3	3
658		3	3
659	18	6	24
660	4	9	13

661	33	21	54
Grand Total	312	186	498

I hope this computation fits more in line with your own capacity assessments.

Dennis Yee

Metro Chief Economist

---

**From:** Charles BEASLEY [mailto:charles.beasley@multco.us]  
**Sent:** Wednesday, March 21, 2012 9:04 AM  
**To:** Dennis Yee  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** Re: revised rural Multnomah capacity estimates

Dennis,

Thanks to you and Maribeth for putting this together, and for the maps. I've attached the Gamma\_2025 file with my revisions to HH, and copies of the maps with my mark up showing where I've made adjustments. In the table, I just filled in the change based on the adjusted numbers in your email of 3.8.12. The net effect is a reduction of 46 HH from your 312 total of non M49 HH capacity. Not a big deal. I continue to think that you should use the actual number of approved M49 lots instead of the 3 that the legislation would have allowed. It seems this is just more accurate. Multnomah County has 79 approved claims, and I think you could allocate these by TAZ.

I used the TAZ layers you sent, the revised rural capacity maps you sent, county tax lot data, and aerial photos to make these adjustments.

I assumed all RRFU lots were both lawful parcels and buildable except for 3 or 4. That said, the lots that are irregular shape and less than an acre are questionable due to need for on-site sanitation, uncertain legality, and access, but I think we should include them because there are likely to be a handful of new dwellings on farm/forest lands.

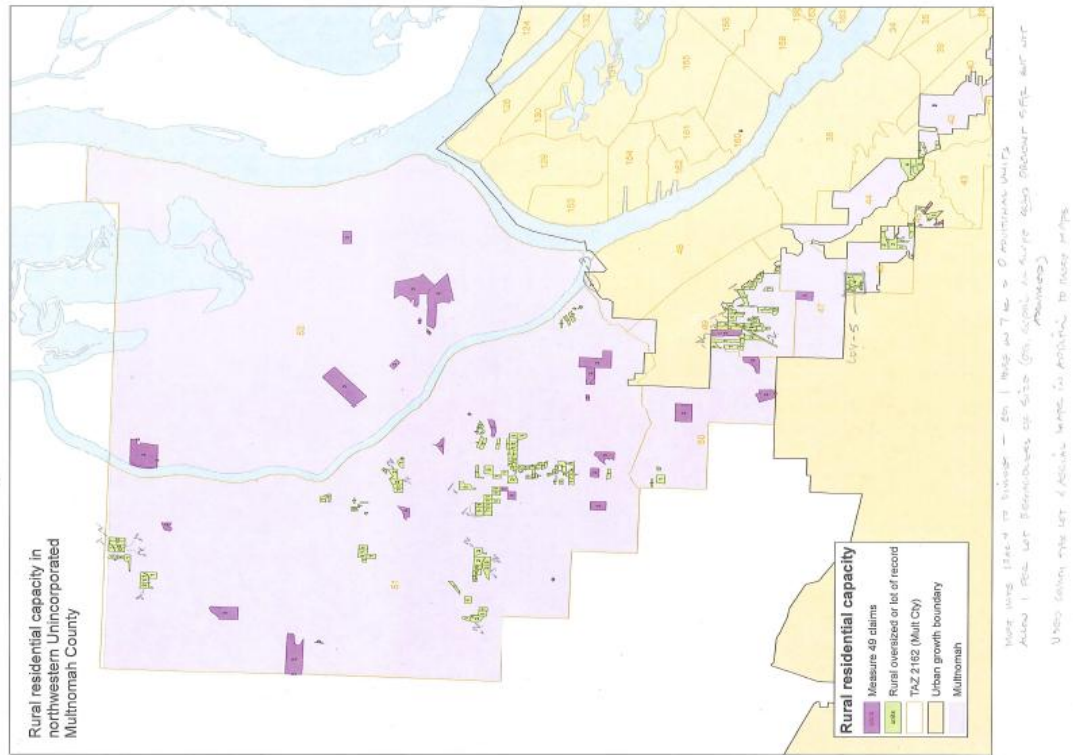
A parcel needs to be twice the size of the minimum acreage in order to divide - we don't have a lot size variance.

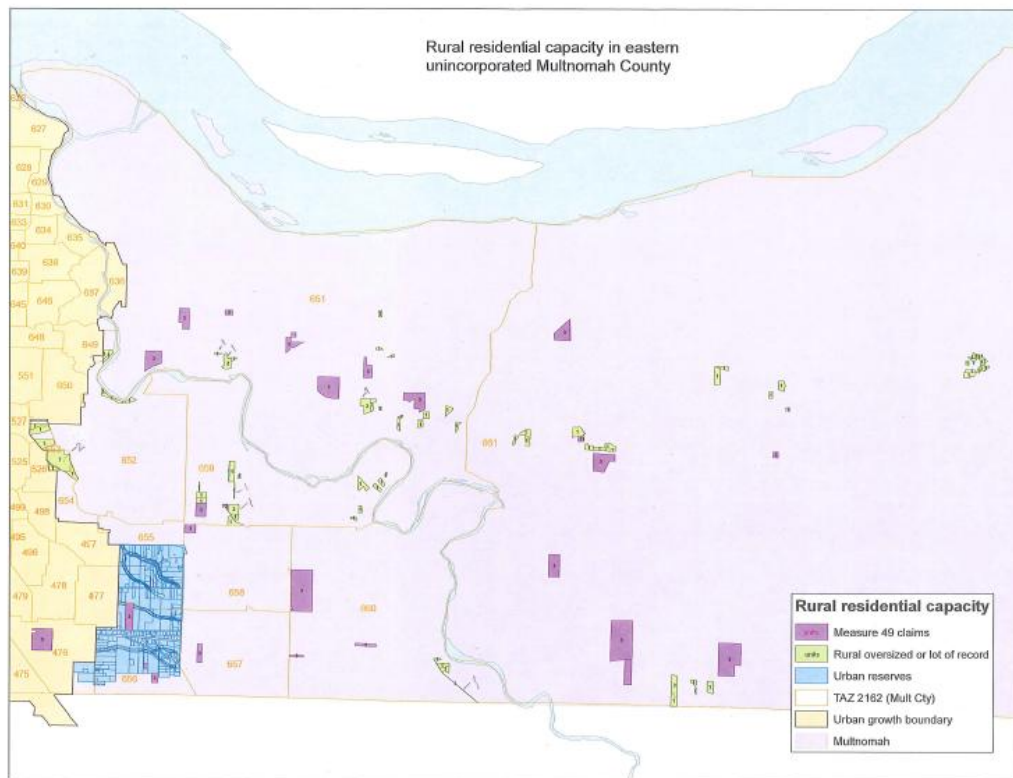
Including all RRFU lots for the 2025 allocation means that the rural capacity in Multnomah County is all committed by that time. You could also use the lower number I provided earlier for 2025 and the balance in the final allocation if you want.

I will look at the employment asap and reply to you by separate email.

thanks again for your efforts to get this right.

C.





**From:** Dennis Yee  
**Sent:** Thursday, March 08, 2012 3:54 PM  
**To:** Charles BEASLEY  
**Cc:** Gerry Uba; Maribeth Todd  
**Subject:** revised rural Multnomah capacity estimates

Hi Chuck:

As promised, here is a table outlining the revised capacity we are recommending for rural part of the TAZ's in the county. Also, please see attached maps illustrating the GIS location of the capacity shown in the table below. This table clears up the GIS sliver problems, gross to net and oversize lots method that yielded in the prior capacity assessment. The "RRFU Add Lots" correspond to the green polygons in the attached pdf maps and are calculated based on the minimum lot size allowed per actual Multnomah county zoning (not the zone class crosswalks).

Please note, we continue to assume for the M-49 assumption the calculation of 3 units per claim. We would like to maintain the 3 unit assumption to be consistent with the other 2 counties. I consulted with Dick Benner, Metro Legal Counsel, and he feels that 3 units is legally justifiable.

So here's a summary table of what we currently have in the rural residential supply for Multnomah County:

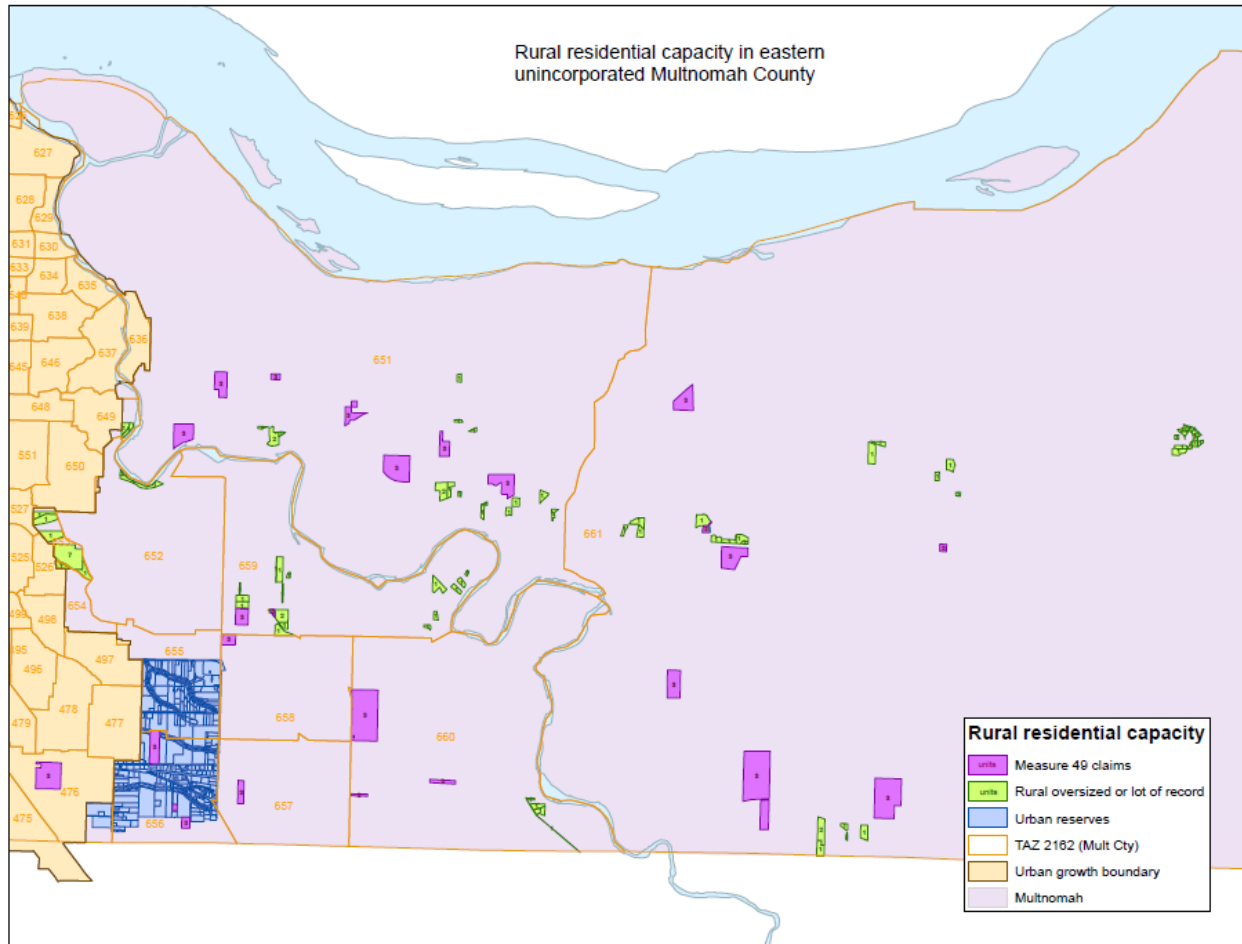
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Grand Total	312	186	498

I hope this computation fits more in line with your own capacity assessments.

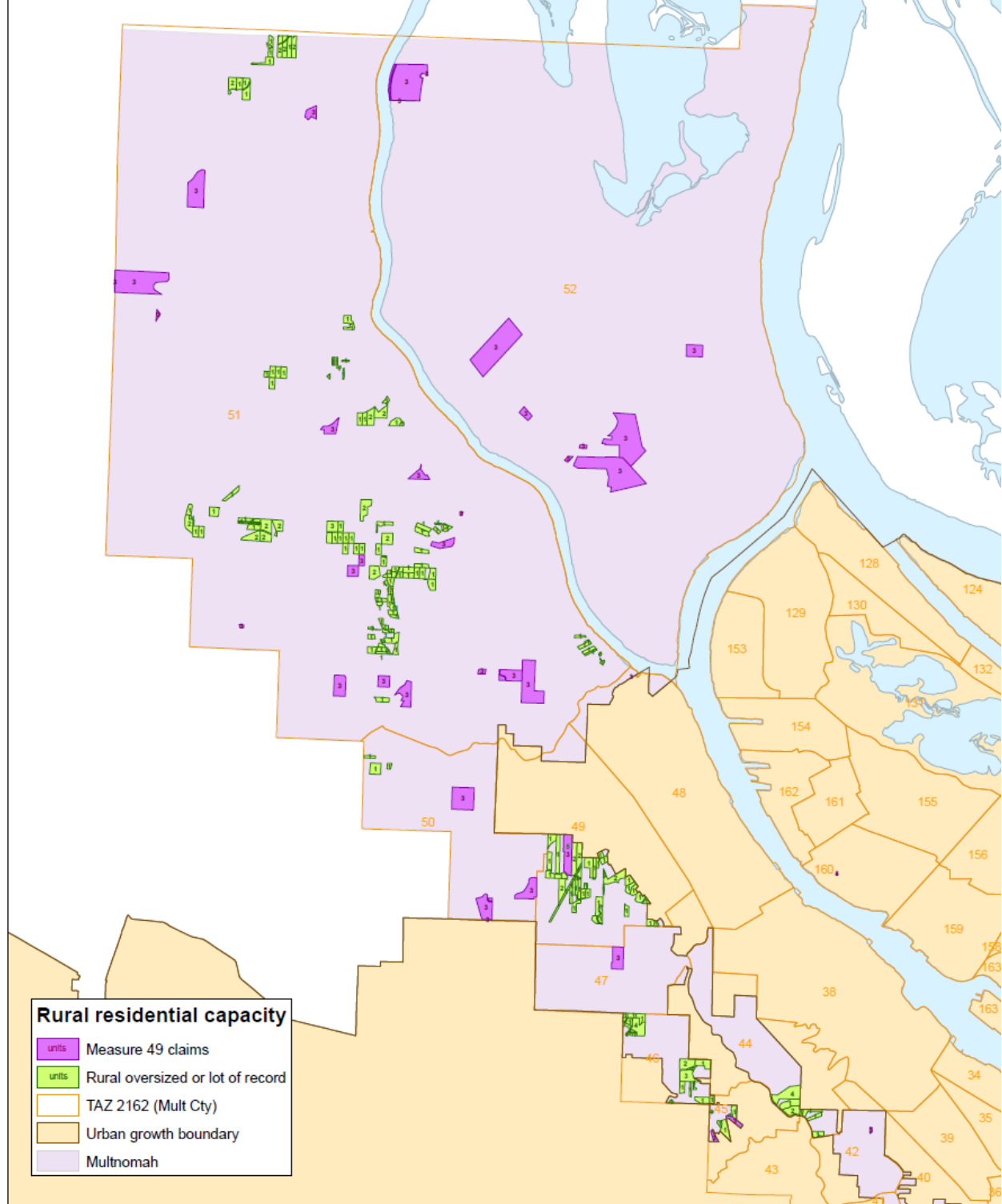
Dennis Yee  
Metro Chief Economist

Metro  
600 NE Grand Av.

.....



Rural residential capacity in  
northwestern Unincorporated  
Multnomah County





---

**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Wednesday, March 07, 2012 1:22 PM  
**To:** Charles BEASLEY; LarryC@co.clackamas.or.us  
**Cc:** Dennis Yee  
**Subject:** RE: Assumptions for Rural Areas

Chuck;

I agree with your message below.

For modeling purposes within either Urban or Rural Reserve areas, we should only assume what is allowed today under OAR-660-027 --- for lands outside of designated Reserve lands, we can assume buildout of whatever is permitted on those lands under current plan policies - unfortunately, at least within Washington County, the majority of those lands are Resource Lands and are restricted accordingly - (typically one dwelling unit (or less) per existing legal tax lot with limited exceptions).

===

That said, I don't think I am going to fuss over a few extra units in the Rural TAZ's (meaning if the technical capacity under today's rules would only allow an additional 3 units in the TAZ and the allocation shows 6, I will likely ignore it). However, if an allocation exceeds estimated capacity by 10 or more units, I will likely recommend an adjustment - especially in our Resource Districts.

Steve

---

**From:** Charles BEASLEY [mailto:charles.beasley@multco.us]  
**Sent:** Wednesday, March 07, 2012 10:25 AM  
**To:** Steve Kelley; LarryC@co.clackamas.or.us  
**Cc:** Dennis Yee  
**Subject:** Assumptions for Rural Areas

Larry, Steve, and Dennis,

I realize that I should have pulled both Washington and Clackamas counties in to this thread, and want to do so now. It seems the counties should all be on the same page with assumptions for rural areas because our rural lands are under similar legal limitations that affect change in households in the future, and our ability to change rural zoning to increase the number of lots in those areas. So please let me know if I've missed something here. Dennis included his capacity assumption for rural lands below, and it helps me understand where some of what I believe are high change in HH numbers in some rural TAZ are coming from. The blue language is from Dennis, the red is me.

Note that I generally try to not advance "reserves" as the reason for all things good and bad. Density in rural areas is already quite encumbered by state law, and reserves just further limits our ability to make changes should state rules become more flexible over the next 50 years.

In general, we tend to assume a more aggressive capacity assumption in the rural zoned areas. The zoning may say R-20, but for modeling purposes we have assumed that “minor subdivisions” would eventually occur due to urban pressures, and this density increases to about 1 unit per 4 acres....also if there are M-49/37 claims, we assume up to 4 units per claim. This latter assumption on M-49 isn't quite accurate due to the unforeseen introduction of “slivers” into our measure 49 database. This is another reason why we tend to show more development / capacity than otherwise implied by zoning.

Regarding the assumption that density will increase in rural areas over time due to pressure. Note that counties can't amend zoning regs to increase density in either urban or rural reserves. This is per OAR 660-027-0070, and county adopting plans. Nearly all land near the UGB in Multnomah County was designated as reserves. My view is that for modeling purposes, the assumption should be conservative, although the number of units we're talking about isn't much in the grand scheme of things.

I'm not sure about whether 4 M49 units is reasonable because the state lists 79 for Mult Co. with an average of 1.7 dwellings per claim. [http://www.oregon.gov/LCD/docs/publications/M49\\_2011-01-31.pdf](http://www.oregon.gov/LCD/docs/publications/M49_2011-01-31.pdf)

regards,

--

Chuck Beasley, Senior Planner  
Multnomah County Land Use Planning  
1600 SE 190th Avenue, Suite 116  
Portland, Oregon 97233  
[charles.beasley@multco.us](mailto:charles.beasley@multco.us)  
503-988-3043 ext 22610  
FAX 503-988-3389

---

**From:** Dennis Yee  
**Sent:** Friday, March 02, 2012 2:41 PM  
**To:** Charles BEASLEY  
**Cc:** Armstrong, Tom; Maribeth Todd; Gerry Uba  
**Subject:** RE: TAZ Mult Co Rural

Chuck,

I understand your capacity claims, so whatever capacity is reduced, the assigned households need to be re-assigned elsewhere. We'll need to come to some final conclusions as what the capacities should be for each TAZ to limit how much growth can be assigned to these in the future.. I've included a couple of maps Maribeth prepared for the two areas in question.

Please go ahead and prepare final numbers for us and we will fix those numbers to the TAZ projections in the rural areas, and so, if you can work with Steve Kelley and others to relocate the household units elsewhere, I will go along with the collective wisdom of the group.

Also, see comments below:

Regards,

Dennis

**NOTE: SEE MAPS IN FILE**

1. *Rural residential capacity in northwestern unincorporated Multnomah County*
2. *Rural residential capacity in eastern unincorporated Multnomah County*

---

**From:** Charles BEASLEY [mailto:charles.beasley@multco.us]

**Sent:** Friday, March 02, 2012 1:34 PM

**To:** Dennis Yee

**Cc:** Armstrong, Tom

**Subject:** TAZ Mult Co Rural

Dennis,

Looking at the rural TAZ, my general comment is that the 2010 - 2025 number of new dwellings should be closer to 100 vs the 423 currently in the TAZ zones. In the rural areas, include Measure 49 claims in overall capacity, but do not assume one dwelling per tax lot. Ownership as a unit of land for dwelling purposes is a better fit.

I would agree with your assessment if we mutually decide that Metro's estimate of rural capacity (including M-49 claims) is too aggressive an assumption. I can concede the logic of your request if we can figure out where to re-assign the displaced household units in the various rural TAZ areas.

I spoke with Maribeth re TAZ 51 which has 225 HH. She agreed to look at it again, and we'll adjust it downward.

Yes, I have seen Maribeth's new maps that adjust down the capacity in the rural areas. There appear to be the following number of M-49 claims on the east side based on "ownership as a unit of land":

TAZ 651 = 7 claims

TAZ 657 = 4 claims

TAZ 658 = 1 claim

TAZ 659 = 2 claims

TAZ 660 = 3 claims

TAZ 661 = 7 claims

This list isn't exhaustive, but I think it verifies your request regarding too much capacity assigned to rural areas. I'm attaching some maps, but please ignore the numbers inside as they are based on our assumption of units.

I've talked with Steve Kelley, and those units might be able to go to him - but need to circle back with him on this.

This is ok and makes sense if the household units assigned near Forest Park / west side suffer from a similarly aggressive capacity assumption. Again, as you note the overage should be re-assigned to other TAZ in Washington County.

On the east side of the county, TAZ 659 and 651 appear to be high unless most of those are M49 claims.

There is really very little capacity if we constrain it to “ownership as a unit of land”. See list of TAZ’s above.

Along Skyline, TAZ 42 and 44 look high for HH. Roughly 2/3 of TAZ 42 is in rural reserve, so there should not be anything except M49 claims reflected there.

Again, if we clamp down on M-49 capacity by using “ownership as unit of land” to measure capacity and also throw out any capacity from rural non-M-49 land, we get very little in the way of residential capacity in the greater Skyline rural area. I’ve attached Maribeth’s pdf maps showing the polygons that have been identified. Again ignore the number inside each tax lot as that’s our estimate of capacity.

I’m not seeing the boundary between TAZ 44, 47, and 49. But note that the south part of 44 is also rural reserve. HH can be moved to TAZ 212.

Since it’s rural reserve, does that mean the number of units we estimated in TAZ 44, 47 and 49 cannot have capacity assigned until the rural reserve designation is lifted?

--

Chuck Beasley, Senior Planner  
Multnomah County Land Use Planning

## WASHINGTON COUNTY

### Distribution Review and Adjustments Completed (May 2, 2012)

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**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Wednesday, May 02, 2012 1:04 PM  
**To:** Dennis Yee  
**Subject:** RE: ftp location of 2025 gamma spreadsheet

yes !!!  
Thanks ---- again!!!

[Also note that the opportunity to whine about our ancient software (with a specific example) was good for me.]

Steve

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Wednesday, May 02, 2012 12:51 PM  
**To:** Steve Kelley  
**Subject:** RE: ftp location of 2025 gamma spreadsheet

Can you read the clean version I just sent out?

---

**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Wednesday, May 02, 2012 12:50 PM  
**To:** Dennis Yee  
**Cc:** Andy Back; Brian Hanes  
**Subject:** RE: ftp location of 2025 gamma spreadsheet

Dennis;

Thanks for trying to get the final allocations distribution file to me !

Unfortunately, my work version of Excel (2003) is forced to convert xlsx files and (from both distributions you sent) this 'conversion' process results in the following error message:

\* This file was created with a newer version of Microsoft Excel, The file has been converted to a format you can work with, but the following issues were encountered. The file has been opened in read-only mode to protect the original file.

- This workbook uses more rows and/or columns than are supported in this version of Excel. Any data outside 256 columns by 65,536 rows will not be opened. Any formula references to data in this region will return #Ref! errors.
- Some cells have more conditional formats that are allowed in this version of Excel. Only the first three conditions will be displayed.
- Some cells contain multiple conditional formatting rules that should all be evaluated and shown. This version of Excel does not have this option and will stop evaluation after the first true condition.

The end product that I see after opening the file is a blank Excel window (no worksheet elements).

Although we are often confronted with a 'Version' issue in Excel, this is the first time I have not been able to at least 'view' a worksheet.

My best option at this point will likely be to download the file and review it at home.

Steve

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Wednesday, May 02, 2012 11:44 AM  
**To:** Steve Kelley  
**Subject:** ftp location of 2025 gamma spreadsheet

<ftp://ftp.oregonmetro.gov/pub/gm/drc/dennis/forSteveKelley/>

Dennis Yee  
Metro Chief Economist

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(503) 797-1909 (FAX)  
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**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Tuesday, April 10, 2012 9:52 AM  
**To:** Dennis Yee  
**Cc:** Doug Miller; Brian Hanes; Gerry Uba  
**Subject:** RE: TAZ Allocation Meeting

Dennis;

Attached is an updated version of the Household Allocations Review Table (filtered) for unincorporated Washington County.

As discussed with Beaverton last week, I will wait until we talk with Hillsboro tomorrow before I begin redistribution of over-allocated households to TAZ's with remaining capacity for 2025.

I remain concerned about the 2045 capacity estimates for many areas of Washington County - especially Urban Reserves. In many cases, there are significant amounts of unbuildable lands and averaging 15 units per acre in some of these areas simply does not make sense. Even so, I used 15 in conjunction with a reasonable estimate of 'net buildable' in all of my estimates - which may therefore still be too high.

See you tomorrow here in Hillsboro;

Give me a call if you wish to discuss ongoing housing capacity issues before our meeting

Steve

*Steven D. Kelley, Senior Planner  
Washington County - Dept. of Land Use and Transportation  
155 N. First Ave. - Suite 350-14  
Hillsboro, OR. 97124  
Phone: (503) 846-3593  
E-Mail: [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us)*

---

**From:** Steve Kelley [[mailto:Steve\\_Kelley@co.washington.or.us](mailto:Steve_Kelley@co.washington.or.us)]  
**Sent:** Friday, April 06, 2012 10:58 AM  
**To:** Dennis Yee; Gerry Uba  
**Subject:** FW: REGIONAL GROWTH ALLOCATIONS

Dennis & Gerry;

Last Thursday, I sent the e-mail below along with the attached file to the Washington County Allocations Review Team (reps from each city).

As you will note in this table, I have recommended a reduction in housing capacity for a significant percentage of the unincorporated area TAZ's (just over 50%). As well, there are a number of TAZ's where total capacity was underestimated and I have recommended increases. For 2025 the net difference may not be important, however, the key message may be that for subsequent model runs, unincorporated Washington County could hit a housing capacity threshold much sooner than expected.

There are still a few outstanding issues to resolve prior to finalizing this table and summarizing final household allocations to Washington County TAZ's:

- 1) Discussions with the City of Beaverton re: request for increased allocations; (Mtg. scheduled for today at 2:00 pm)
- 2) Discussions with the City of Hillsboro re: request for increased allocations to the Tanasbourne / Amberglen Regional Center and South Hillsboro planning areas; (Mtg. scheduled for Wednesday, April 11th)
- 3) Following discussions with Beaverton and Hillsboro, (if feasible) redistribute remaining households from over allocated TAZ's in unincorporated area to TAZ's with adequate remaining capacity. <- this step may need to be coordinated with potentially affected cities.

Steve

---

**From:** Steve Kelley  
**Sent:** Thursday, March 29, 2012 4:58 PM  
**To:** Ali Turiel; Chris Neamtzu - City of Wilsonville; Cindy Hahn - City of Tualatin; Colin Cortes - City of

Tualatin; Dan Pauly - City of Wilsonville; Dan Riordan - Forest Grove; Darren Wyss - City of Tigard; David Wells - King City; 'Dick Reynolds - Cornelius'; Don Odermott - City of Hillsboro; Doug Miller - City of Hillsboro; Hal Bergsma (hbergsma@thprd.org); Jeff Salvon; John Floyd - City of Tigard; Michelle Miller - City of Sherwood; Steven Sparks

**Subject:** REGIONAL GROWTH ALLOCATIONS

TO: Washington County Growth Allocations Review Team  
Metro Allocations Project Staff

From: Steve Kelley, Senior Planner

Subject: **Completing Review of 2025 Growth Allocations / TAZ housing capacity  
- I need your help -**

As you know, Metro has requested completion of the mid-term (2025) allocations review by Friday, March 30th (tomorrow). Based upon recent conversations with many of you, I believe that most cities in Washington County will have completed that review and submitted comments and recommendations to Metro by this deadline. Please forward a copy of your submittal to me as well - - at some point, I want to make sure that we have a well coordinated final county-wide product that will become a valuable product for future analyses.

That said, please note that there are 225 TAZ's in unincorporated Washington County and completing a detailed review of remaining capacity for just the housing allocations in these TAZ's has been a daunting task (still not quite complete).

As mentioned at our project coordination meeting with Metro on February 15th, many unincorporated TAZ's lie within existing or future city service areas and it is logical that the respective cities review both the Metro and County capacity estimates in those TAZ's. I have completed a 'County' review of remaining housing capacity in most of these areas and it would be great to have comments and recommended changes from applicable cities prior to submitting them to Metro early next week (yes, a few days late but I would like to be comfortable with the entire end product before 'we' deliver final capacity estimates). I will only be 'comfortable' with this table when each affected city either agrees with or makes adjustments to the capacity estimates in each TAZ within their respective future service areas.

[Many of you will already have completed an analysis of your surrounding Urban Unincorporated TAZ's shown in this table; others (with the exception of Beaverton and Hillsboro) will only have a few / small handful of TAZ's to review]

Please (if possible) provide your comments in the CITY COMMENTS field (orange headers) in the attached table and include any recommendations you may have for adjustments to the estimates shown in the 'County Comments' field and the respective 'County Capacity Estimates' fields for 2025 and 2045.

**Hopefully, you can insert your comments and return a copy to me by next Tuesday (April 3rd).**

Finally; typical findings for a majority of the unincorporated TAZ's indicate that overall housing capacity in unincorporated Washington County may be significantly lower than shown in the Metro estimates. Once I have received final comments from each of you, I will be able to run a final summary of housing capacity to determine where we stand county-wide with respect to overall housing capacity.

**THANKS VERY MUCH FOR YOUR PARTICIPATION AND ASSISTANCE WITH THIS PROJECT !**

Please don't hesitate to call if you have any questions about this e-mail or the attached data table.



Steve

*Steven D. Kelley, Senior Planner  
Washington County - Dept. of Land Use and Transportation  
155 N. First Ave. - Suite 350-14  
Hillsboro, OR. 97124*

**Phone: (503) 846-3593**

**E-Mail: [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us)**

---

**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]

**Sent:** Wednesday, March 07, 2012 1:22 PM

**To:** Charles BEASLEY; LarryC@co.clackamas.or.us

**Cc:** Dennis Yee

**Subject:** RE: Assumptions for Rural Areas

Chuck;

I agree with your message below.

For modeling purposes within either Urban or Rural Reserve areas, we should only assume what is allowed today under OAR-660-027 --- for lands outside of designated Reserve lands, we can assume buildout of whatever is permitted on those lands under current plan policies - unfortunately, at least within Washington County, the majority of those lands are Resource Lands and are restricted accordingly - (typically one dwelling unit (or less) per existing legal tax lot with limited exceptions).

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That said, I don't think I am going to fuss over a few extra units in the Rural TAZ's (meaning if the technical capacity under today's rules would only allow an additional 3 units in the TAZ and the allocation shows 6, I will likely ignore it). However, if an allocation exceeds estimated capacity by 10 or more units, I will likely recommend an adjustment - especially in our Resource Districts.

Steve

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**From:** Charles BEASLEY [mailto:charles.beasley@multco.us]

**Sent:** Wednesday, March 07, 2012 10:25 AM

**To:** Steve Kelley; LarryC@co.clackamas.or.us

**Cc:** Dennis Yee

**Subject:** Assumptions for Rural Areas

Larry, Steve, and Dennis,

I realize that I should have pulled both Washington and Clackamas counties in to this thread, and want to do so now. It seems the counties should all be on the same page with assumptions for rural areas because our rural lands are under similar legal limitations that affect change in households in the future, and our ability to change rural zoning to increase the number of lots in those areas. So please let me know if I've missed something here. Dennis included his capacity assumption for rural lands below, and it helps me understand where some of what I believe are high change in HH numbers in some rural TAZ are coming from. The blue language is from Dennis, the red is me.

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In general, we tend to assume a more aggressive capacity assumption in the rural zoned areas. The zoning may say R-20, but for modeling purposes we have assumed that "minor subdivisions" would eventually occur due to urban pressures, and this density increases to about 1 unit per 4 acres....also if there are M-49/37 claims, we assume up to 4 units per claim. This latter assumption on M-49 isn't quite accurate due to the unforeseen introduction of "slivers" into our measure 49 database. This is another reason why we tend to show more development / capacity than otherwise implied by zoning.

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regards,

--

Chuck Beasley, Senior Planner  
Multnomah County Land Use Planning  
1600 SE 190th Avenue, Suite 116  
Portland, Oregon 97233  
[charles.beasley@multco.us](mailto:charles.beasley@multco.us)  
503-988-3043 ext 22610  
FAX 503-988-3389

---

**From:** Gerry Uba  
**Sent:** Tuesday, February 21, 2012 5:05 PM  
**To:** Mike Hogle; John Williams; Christina Deffebach  
**Cc:** Dennis Yee; Maribeth Todd; Ted Reid; Richard Benner  
**Subject:** FW: Review of Mid-term Forecast Distribution

Hello All,

I am forwarding this email from Steve Kelley for your information. Attached is the document he distributed at last week's Washington County coordination meeting on 2025 TAZ forecast. I expect him/them to be active participants in the fall meetings of MTAC, MPAC and Metro Council on growth distribution adoption.

Gerry

.....

**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Wednesday, February 15, 2012 1:34 PM  
**To:** Gerry Uba  
**Cc:** Dennis Yee; Andy Back; Brian Hanes  
**Subject:** RE: Review of Mid-term Forecast Distribution

Gerry;

Thanks for the response !

---Please note that since a number of unresolved issues related to the allocations process still remain, I am concerned that the long-term allocations review schedule may slip.

As you will recall from our ongoing conversations over the past year+, I firmly believe that the main goal of our current efforts to distribute forecast growth should be to ASSURE that the end products: REASONABLY REFLECT LIKELY REALITIES OF THIS REGION'S FUTURE REAL ESTATE MARKETPLACE. We cannot simply assume that areas of this region that currently lack urban services (i.e. Damascus and surrounding Urban Reserve lands), will have those services 'magically appear'. Further, we cannot assume that broad scale redevelopment in the City of Portland can compete in the marketplace with buildable lands in Washington County, Clackamas County, Marion County, Clark County, Skamania County ...etc.

--- (How will CRC construction affect business development north of the River, and, in turn, how will that development affect demand for housing in Portland?).

As the Growth Allocations effort progresses, further analysis needs to be done to determine the financial feasibility of and likely demand for high density housing. As well, this region needs to be fully engaged in discussions about the likelihood of future growth scenarios and whether or not the assumptions in those scenarios "REASONABLY REFLECT .....". I think that these discussions could easily lead to delays in the allocations sanctioning process.

Steve

---

**From:** Gerry Uba [mailto:Gerry.Uba@oregonmetro.gov]  
**Sent:** Wednesday, February 15, 2012 11:13 AM  
**To:** Steve Kelley  
**Cc:** Dennis Yee; Andy Back  
**Subject:** RE: Review of Mid-term Forecast Distribution

Good morning Steve,

As I told you on the phone, I could not answer your schedule-related questions until we fixed the code problem in MetroScope and completed the distribution operation. I am in a better position now to respond to your request, as follows:

a) How was the 'August 2012' Council Adoption schedule determined and are there related critical deadlines that would prohibit moving that adoption date toward December?

My response: The Metro Council adoption date has changed. It will happen in the fall (see attached updated draft schedule). By the way, the date is based on completion of the review and comments by local governments' TAZ staff, Planning Directors, MTAC, and MPAC.

b) The original schedule discussed and distributed by Metro has been delayed by approximately 3 weeks. Given that city and county staff is typically 'buried' in ongoing local work program activities and may therefore have difficulty scheduling adequate resources to the Allocations Review process, Metro should add an additional 3 weeks to the project schedule.

My response: In the “original schedule” you mentioned, we budgeted two weeks for local governments’ review and comments on three 5-years mid-term data (2015, 2020, 2025). As you know and agreed to (among others), the mid-term data has been scaled down to only 2025. Despite the scaling down, we have budgeted about six weeks for local governments to review the mid-term data. The reason for extending the review and comment time was based on our feeling that you and others, especially local staff new to this process, need this time to familiarize yourselves with the TAZ forecast distribution data format, the instructions and “ground rules” for reviewing the data and submitting comments. The familiarization will shorten the review and comments period for the long-term distribution.

c) Brent would like a letter from Metro :

- Explaining the delay of the allocations distribution;
- Recommending that the review timeframe be adjusted to reflect the time lost to the delay; and
- Agreeing to future schedule adjustments to address unforeseen delays.

My response: Please accept this email as the letter. As I stated above and shown in the attached draft schedule, we feel that with your cooperation and the cooperation of other jurisdictions, the deadlines in the draft schedule can be accomplished by the region.

Thanks very much for all your support and leadership. Denis, Maribeth and I are available anytime between this week and middle of next month (March) to answers questions you may have that will help you provide your comments to us before or by the March deadline.

Gerry  
Regional Growth Distribution Project Coordinator  
[Gerry.uba@oregonmetro.gov](mailto:Gerry.uba@oregonmetro.gov)  
503-797-1737

**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Wednesday, January 25, 2012 7:49 PM  
**To:** Gerry Uba  
**Cc:** Dennis Yee; Andy Back  
**Subject:** RE: Review of Mid-term Forecast Distribution

Gerry:

I met this afternoon with Brent, Andy Back and our GIS staff lead - Brian Hanes, to discuss our draft work program (attached) for a County level coordinated review of the regional Forecast Growth Allocations. Our discussions at this meeting led to the following conclusions and related requests:  
a) How was the 'August 2012' Council Adoption schedule determined and are there related critical deadlines that would prohibit moving that adoption date toward December?

b) The original schedule discussed and distributed by Metro has been delayed by approximately 3 weeks. Given that city and county staff is typically 'buried' in ongoing local work program activities and may therefore have difficulty scheduling adequate resources to the Allocations Review process, Metro should add an additional 3 weeks to the project schedule.

c) Brent would like a letter from Metro :

- Explaining the delay of the allocations distribution;
- Recommending that the review timeframe be adjusted to reflect the time lost to the delay; and
- Agreeing to future schedule adjustments to address unforeseen delays.

(I think this letter should be sent to the County leads on the Allocations Review work)

**Thanks** for your ongoing support on this project - it's one of the more valuable activities this region gets engaged in!

Steve

*Steven D. Kelley, Senior Planner  
Washington County - Dept. of Land Use and Transportation  
155 N. First Ave. - Suite 350-14  
Hillsboro, OR. 97124  
Phone: (503) 846-3593  
E-Mail: [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us)*

## NEIGHBORING CITIES IN OREGON

### City of Canby:

**From:** Dennis Yee

**Sent:** Wednesday, February 29, 2012 10:29 AM

**To:** Conrad, Larry

**Cc:** Jim Cser; Gerry Uba; Fritzie, Martha; Maribeth Todd

**Subject:** RE: City Forecast Capacity

Larry, et al:

I have traced out our capacity assumptions/assertion for the external Clackamas cities. The first problem is the TAZ boundaries don't match up very closely with the cities of Sandy, Estacada, Molalla and Canby. But the imputed GIS numbers (highlighted in yellow) are closer for each city by ignoring TAZ boundaries.

In the Metro spreadsheet, I retabulated the uninc. Clack county TAZ estimates to include missing cities in my earlier city table using TAZ totals. See attached. These numbers are expressed in columns #4 and #6.

I used LC's email info as guidance to estimate residential capacity from the TSP reports, displayed in column #1

Here's what we summarize as residential DU capacity:

#### RESIDENTIAL CAPACITY ASSUMPTIONS

	(1)	(2)	(3)	(4)	(5)	(6)
	per Larry Conrad email	Dennis' 2045 cap assertion	2025/35 Mscope GIS	2025/35 Mscope by TAZ	2045+ Mscope GIS	2045+ Mscope by TAZ
Canby	4400	5000	2878	6061	5756	6541
Estacada	700	1000	584	1352	1168	1352
Molalla	450	2000	1158	2491	2315	2491
Sandy	3114	N/A	2768	3151	5535	6392

(1) This is my estimate of the capacity/forecast data sent to me by Larry Conrad per city TSP info

(2) This is the rough 2045+ estimate / guide given as potential capacity asserted by Dennis for each city

- (3) This is the GIS interpretation of Dennis' 2035 capacity assertion. (I start with a round number and Jim tries to generate GIS capacity points that approximate my given assertion.)
- (4) This is the 2035 estimate of capacity by summing together TAZ's that were assigned by Dennis to each city for general review purposes. Comingled in this capacity figure are the city capacity estimates, outside city capacity (i.e., rural and measure 49 capacity estimates by Metro)
- (5) This is the 2045+ GIS interpretation of Dennis' capacity assertion found in column #2
- (6) This is the 2045 estimate of the capacity by summing together TAZ's assigned to each city

Canby Cap Conclusion: looks a bit short through 2035, but bracketed by the 2025/35 capacity and Metro's 2045+ capacity assertions.

Estacada Cap Conclusion: looks a bit light through 2035, but again we bracket the city's capacity with our Metro 2025/35 and 2045+ capacity assertions.

Molalla Cap Conclusion: looks like we are too aggressive in assessing capacity estimates per the city's TSP info

Sandy Cap Conclusion: looks like we are a tad light through 2035, but again bracket the capacity through our Metro 2045 cap estimate.

It's not like we can't change the TAZ allocation/residential distribution around a bit, but for guesses going into the forecast, I think we are doing reasonably well and leave it to Clackamas county to re-distribute the TAZ allocations as you see fit. I think whatever the final forecasts in 2035 and 2045 may be, there will be sufficient allocation for you all to make re-distributions in 2045, but 2035 may be a bit constrained due to the lower cap estimates going into the 2035 TAZ distributions.

That's all for now. Hopefully not too confusing, but is helpful.

[ATTACHMENT: Gamma\_TAZ Forecast\_report\_2025.xlsx (1 MB)]

Dennis  
Metro Economist

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Wednesday, February 29, 2012 8:04 AM  
**To:** Dennis Yee  
**Cc:** Jim Cser; Gerry Uba; Fritzie, Martha  
**Subject:** RE: City Forecast Capacity

Thanks for the update –

Please keep us informed

*LARRY CONRAD*

**From:** Dennis Yee  
**Sent:** Tuesday, February 28, 2012 3:30 PM  
**To:** Conrad, Larry  
**Cc:** Jim Cser; Gerry Uba  
**Subject:** RE: City Forecast Capacity

Thanks Larry.

We will get back to you in regards to how this data compare. We got something potentially squirrely going with ex-urban city capacity assumption. We are investigating.

Dennis

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Tuesday, February 28, 2012 3:06 PM  
**To:** Dennis Yee; Gerry Uba  
**Cc:** Fritzie, Martha  
**Subject:** City Forecast Capacity

Here is an update of this table

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

## City Forecast Capacity

### Canby – Canby TSP Dec 2010

Table 4-1: Canby UGB Land Use Summary			
Land Use	Existing 2009 Land Use	Projected Growth from 2009 to 2030	Projected 2030 Land Use
<i>Households</i>			
<b>Total Households</b>	<b>6,127</b>	<b>4,403 (+72%)</b>	<b>10,530</b>
<i>Employees</i>			
Retail Employees	624	715 (+115%)	1,339
Service Employees	1,004	644 (+64%)	1,648
Educational Employees	409	257 (+63%)	666



Other Employees	1,928	3,007 (+156%)	4,935
<b>Total Employees</b>	<b>3,965</b>	<b>4,623 (+117%)</b>	<b>8,588</b>
The Future Forecasting Memorandum (see Appendix G)			

#### From - Canby TSP Dec 2010

*An existing 2009 land use inventory and a future 2030 land use projection were performed for every parcel within the Canby UGB and aggregated into each of the 72 transportation analysis zones (TAZs), which represent the sources of vehicle trip generation within the city. A map of the Canby TAZs is provided in the Future Forecasting Memorandum (see Appendix G).*

*The existing 2009 land use inventory approximated the number of households and the amount of retail employment, service employment, educational employment, and other employment that currently exist in each TAZ. These land uses correspond to a population of approximately 15,165 residents.*

*The future 2030 land use projection is an estimate of the amount of development each parcel could accommodate at expected build-out of vacant or underdeveloped lands assuming Comprehensive Plan zoning (shown in Figure 4-1). The one exception is within the Northeast Canby Concept Plan area, which is located in northeast Canby between OR 99E, Territorial Road, Haines Road, and SE 1<sup>st</sup> Avenue, where land uses consistent with the Northeast Canby Concept Plan<sup>22</sup> were assumed.*

#### City of Sandy – Urbanization Study, 2009

Sandy has an estimate surplus of capacity of 1,952 Dwelling Units (beyond their safe harbor forecast) or a **total residential capacity inside their UGB of 3,114 Units**

Table S- 1. Population and employment forecasts Sandy UGB, 2009-2029,			
Year	Population	Employment	Pop/Emp
2009	8,034	4,394	1.83
2014	8,718	4,757	1.83
2019	9,451	5,150	1.84
2024	10,228	5,575	1.83
2029	11,023	6,036	1.83
Change 2007-2027	2,989	1,642	
Percent Change	37%	37%	
AAGR	1.6%	1.6%	
Source: City of Sandy; ECONorthwest			

Table S- 4. Residential capacity for needed dwelling units by plan designation, Sandy UGB, 2009-2029				
		Capacity	Surplus	Gross Acres

Plan		(Dwelling	Needed	(Deficit)	Surplus
Designation	Title	Units)	Units	DU	(Deficit)
LDR	Low Density Residential	1,311	416	895	179.7
MDR	Medium Density Residential	316	220	96	16.6
HDR	High Density Residential	388	196	192	19.1
V	Village	1,099	324		
	Village - R-1	889	167	722	144.9
	Village - R-2	143	39	104	18.0
	Village - R-3	61	118	(57)	(5.7)
<b>Total</b>		<b>3,114</b>	<b>1,156</b>	<b>1,952</b>	<b>372.6</b>
Source: ECONorthwest					

Table S-5. Forecast of land needed for employment, Sandy UGB, 2009-2029 (gross acres) Land Supply Surplus			
Plan Designation	Demand	2007 Supply	Surplus or (deficit)
Village Commercial	9.4	10.4	1.0
Commercial	84.6	134.2	49.6
Industrial	14.4	83.6	69.2
<b>Total</b>	<b>108.4</b>	<b>228.2</b>	<b>119.8</b>
Source: ECONorthwest			

### Molalla -- Buildable Lands Inventory - 2008

Residential	Lots	Total Acres	Developed Acres	Nat Constraints Acres	Vacant Acres	Infill Acres Acres	Gross Buildable Acres
R-1	1387	436	361	22	20	34	53
R-2	264	66	58	2	3	2	5
R-3	648	187	171	4	4	9	13
Total	2299	690	590	28	26	45	71
Commercial	Lots	Total Acres	Developed Acres	Nat Constraints Acres	Vacant Acres	Infill Acres Acres	Gross Buildable Acres
C-1	196	55	52	0	2	1	3
C-2	75	127	74	5	27	21	48
Total	271	182	126	5	29	23	52
Industrial	Lots	Total Acres	Developed Acres	Nat Constraints Acres	Vacant Acres	Infill Acres Acres	Gross Buildable Acres

M-1	45	159	104	5	<b>22</b>	<b>29</b>	<b>51</b>
M-2	87	329	147	73	<b>79</b>	<b>30</b>	<b>109</b>
Total	132	488	251	78	<b>101</b>	<b>59</b>	<b>160</b>

## Estacada – Economic Opportunities Analysis - 2009

Safe Harbor	POPULATION PROJECTIONS Through 2029					
	City of Estacada and Clackamas County					
	2007 Est. Population	2020 Est. Population	2029 Est. Population	Average Annual Growth Rate		
City of Estacada	2,695	3,332	3,826	1.91%		
Clackamas County	372,270	460,323	528,484	1.91%		
Estacada Share of Clackamas	0.72%	0.72%	0.72%			
Source: PSU Population Research Center; Oregon Office of Economic Analysis						

Estimated at 450 new households – however this is substantially less than the estimated capacity – per city staff

**Table 13**  
**Adjusted Gross Inventory of Buildable Industrial and Commercial Lands in Estacada**

	Industrial		Commercial		Total	
	Parcels	Acres	Parcels	Acres	Parcels	Acres
Vacant	54	211.14	38	59.81	92	270.95
Potential Infill	14	62.67	24	26.43	38	89.10
Potentially Redevelopable	18	55.56	57	29.98	75	85.54
Total	86	329.36	119	116.23	205	445.59

**From:** Dennis Yee  
**Sent:** Wednesday, February 22, 2012 1:47 PM  
**To:** Conrad, Larry; Gerry Uba  
**Cc:** Donnelly, Jennifer; Maribeth Todd; Jim Cser  
**Subject:** RE: City Forecast Capacity

For Canby TAZ modeling purposes, we assumed a residential capacity of 3,445 by 2025 and 3,685 by 2045 (refer to MetroScope Gamma 2025 Forecast – CITY control totals handout).

I would argue that this is close enough for modeling purposes, but if we need to add more we can.

The provisional 2025 TAZ forecast calls for a growth of 2,409 households from 2010 to 2025, an absorption rate of 70% for Canby through 2025 based on our data. Therefore, it looks like the Canby household forecast is in line with the Canby TSP capacity estimates through 2030.

There probably, then, not much need to shift growth out of the Canby TAZ's. I rescind my earlier suggests to lower the Canby forecast in light of confirmation that Canby has much more capacity (ie up to 4400 units) than expected.

Regards,

Dennis

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Wednesday, February 22, 2012 9:07 AM  
**To:** Dennis Yee; Gerry Uba  
**Cc:** Donnelly, Jennifer  
**Subject:** City Forecast Capacity

We were talking about the capacity of Canby yesterday –

Their capacity estimate for 2030 from the Canby TSP is **4,400 new housing units and 4500 new employees** based on current zoning – see attached

*LARRY CONRAD*  
*PRINCIPAL TRANSPORTATION PLANNER*  
*(V) 503.742.4539*  
[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

## CLARK COUNTY

---

**From:** Dennis Yee  
**Sent:** Thursday, March 22, 2012 11:25 AM  
**To:** Michael.Mabrey@clark.wa.gov; Orjiako, Oliver; Snodgrass, Bryan  
**Cc:** Harrington, Mark (RTC); Pearrow, Ken; Gerry Uba  
**Subject:** Metro TAZ forecast

We are planning to re-run the TAZ forecast to get new growth allocations from MetroScope based on revised rural residential capacity for Clark county. This will reduce the household allocations in rural unincorporated Clark county by several thousand for the 2025 distributions.

Before we begin finalizing 2025 TAZ figures, are you seeing anything else that might cause technical concerns for the cities? We would like to incorporate anything else at the same time as we correct for the rural piece.

Regards,

Dennis Yee  
Metro Chief Economist

Metro

---

**From:** Mabrey, Michael [mailto:Michael.Mabrey@clark.wa.gov]  
**Sent:** Friday, March 23, 2012 1:07 PM  
**To:** Dennis Yee; Orjiako, Oliver; Snodgrass, Bryan  
**Cc:** Harrington, Mark (RTC); Pearrow, Ken; Gerry Uba  
**Subject:** RE: Metro TAZ forecast

Dennis -

I am not aware of any other changes that need to be made. We have several sub-area plans that are still in process, so they won't be final until the end of the year.

Mike Mabrey  
Clark County  
Community Planner III  
360-397-2280 x4343

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Thursday, March 22, 2012 11:25 AM  
**To:** Mabrey, Michael; Orjiako, Oliver; Snodgrass, Bryan  
**Cc:** Harrington, Mark (RTC); Pearrow, Ken; Gerry Uba  
**Subject:** Metro TAZ forecast

We are planning to re-run the TAZ forecast to get new growth allocations from MetroScope based on revised rural residential capacity for Clark county. This will reduce the household allocations in rural unincorporated Clark county by several thousand for the 2025 distributions.

Before we begin finalizing 2025 TAZ figures, are you seeing anything else that might cause technical concerns for the cities? We would like to incorporate anything else at the same time as we correct for the rural piece.

Regards,

Dennis Yee

---

**From:** Dennis Yee  
**Sent:** Wednesday, March 21, 2012 10:17 AM  
**To:** Pearrow, Ken  
**Cc:** Jim Cser; Maribeth Todd; Orjiako, Oliver; Gerry Uba  
**Subject:** RE: RE: Clark County Rural Residential Capacity

Tomorrow would be great! A shapefile with parcel level detail of rural capacity is best. We can then summarize as we need into census geographies.

Regards,

Dennis

---

**From:** Pearrow, Ken [mailto:Ken.Pearrow@clark.wa.gov]  
**Sent:** Wednesday, March 21, 2012 7:48 AM  
**To:** Dennis Yee  
**Cc:** Jim Cser; Maribeth Todd; Orjiako, Oliver; Gerry Uba  
**Subject:** RE: RE: Clark County Rural Residential Capacity

Dennis,

I did a quick review of the numbers and it would probably be best for me to send the numbers we have by TAZ along with a data layer with the numbers by parcel.

I am pretty booked today and will try to get the data to you by tomorrow.

Thanks,

Ken

---

**From:** Dennis Yee  
**Sent:** Tuesday, March 20, 2012 1:48 PM  
**To:** Pearrow, Ken

**Cc:** Jim Cser; Maribeth Todd; Orjiako, Oliver; Gerry Uba  
**Subject:** FW: RE: Clark County Rural Residential Capacity

Hi Ken:

As I said in my voice mail, I'd like to get a final confirmation from Clark county as to the disposition of rural residential capacity. We'll need this information so we can reset MetroScope to figure out what the allocations for future years. I've attached Jim's spreadsheet which show the change and our provisional estimates of rural residential capacity by TAZ.

I glanced at these numbers and the total adds up to just under 8,000 dwelling units. This seems to comport with our last face-to-face discussion of this matter. We don't have a thorough handle on Clark capacity, so we're seeking your final approval.

Can you confirm with us regarding the totals and by TAZ are good enough for representing Clark's rural capacity and if not, please send us at the soonest a shapefile with appropriate capacity estimates.

Thanks,

Dennis Yee

---

**From:** Jim Cser  
**Sent:** Tuesday, March 20, 2012 1:38 PM  
**To:** Maribeth Todd; Dennis Yee  
**Subject:** RE: Clark County Rural Residential Capacity

Attached is my accounting for changing the Clark County rural residential capacity by TAZ. After the TAZ changes are rounded, the total capacity goes down from 21,559 to 7,694 , a decrease of 13,865. Most individual zones go down, but a few go up. These numbers do not take into account any other residential capacity from other sources.

My determination of the new capacity is as follows: from Ken Pearrow I received their criteria for determining residential capacity, as well as an out-of-date shapefile of which lands to exclude. I applied these rules to the latest version of the Clark County taxlots as best I could, and came up with 6,893. I have asked Ken for a shapefile of the capacity, but have not heard from him. To move ahead, I scaled up the capacity for each parcel so that the total matched the previously quoted Clark County number of 7,700. This means that each parcel has a non-integer capacity, with the assumption that the TAZ aggregations would be reasonable accurate.

---

**From:** Jim Cser  
**Sent:** Thursday, March 15, 2012 4:44 PM  
**To:** Pearrow, Ken  
**Cc:** Dennis Yee; Gerry Uba  
**Subject:** RE: Clark County Rural Residential Capacity

Hi Ken,  
Thanks for clarifying. Please send us your custom layer, too.  
-Jim

---

**From:** Pearrow, Ken [mailto:Ken.Pearrow@clark.wa.gov]  
**Sent:** Thursday, March 15, 2012 3:52 PM  
**To:** Jim Cser  
**Subject:** RE: Clark County Rural Residential Capacity

Jim,

We use a custom layer for identifying parcels to exclude. The custom layer includes public lands from a number of sources and protected forest lands. It is probably a little out of date. Using the exempt status ("X" in TXSTAT field in our taxlots layer) would probably work for public lands or I could send the custom layer. Exempt properties will also exclude churches and other nonprofit parcels.

Just to clarify, we do all of our calculations at the parcel level.

$\text{Vacant (} > \text{min. lot area)} = \text{int}(\text{lot area} / \text{min. lot area}) - \# \text{ of existing units}$  - note: We define vacant as having a building value less than \$13,000 and assume there are no built residential structures.  $\text{Vacant (} > \text{min. lot area)} = \text{int}(\text{lot area} / \text{min. lot area})$

$\text{Vacant (} < \text{min. lot area)} = 1$ , or 0 if it had existing units - Note: Vacant lots < 4 acres are excluded (calculated to 0) with the **exception** of parcels with rural center designations they have a 1 acre minimum.  $\text{Vacant (} > 4 \text{ acres and } < \text{min. lot area)} = 1$

$\text{Underutilized} = \text{int}(\text{lot area} / \text{min. lot area}) - \# \text{ of existing units}$  - Note:  $\text{int}(\text{lot area} / \text{min. lot area}) - 1$  would match our methodology (again at the parcel level).

Hope this helps. Let me know if you have any further questions.

Ken

---

**From:** Jim Cser [mailto:Jim.Cser@oregonmetro.gov]  
**Sent:** Tuesday, March 13, 2012 2:09 PM  
**To:** Pearrow, Ken  
**Subject:** RE: Clark County Rural Residential Capacity

Hi Ken,  
Just to follow up- I applied the criteria that you sent on the March 2012 Clark County taxlots, and got a result of 8,150 units, which seems pretty close. However, there are a couple of things I wasn't sure of, so I wanted to check to see if I replicated your methodology.

First, for the Public Land categories, I chose:



'Clark County Owned (Exclude Roads)'  
'Roads (County)'  
'Roads (County)'  
State Owned (Exclude Roads)'  
'Washougal Owned'  
'Water'

Also, once I had my taxlot selection, I calculated the units of capacity for each taxlot as follows:

Vacant ( > min. lot area) =  $\text{int}(\text{lot area} / \text{min. lot area}) - \# \text{ of existing units}$   
Vacant ( < min. lot area) = 1 , or 0 if it had existing units  
Underutilized =  $\text{int}(\text{lot area} / \text{min. lot area}) - \# \text{ of existing units}$

Are these steps correct?

Thanks,  
Jim

---

**From:** Jim Cser  
**Sent:** Monday, March 12, 2012 9:42 AM  
**To:** 'Pearrow, Ken'  
**Subject:** RE: Clark County Rural Residential Capacity

Hi Ken,  
Thanks. I'll apply it to the taxlots I have and see if I get the same capacity. Would you have an "official" shapefile, just in case?

Jim

---

**From:** Pearrow, Ken [mailto:Ken.Pearrow@clark.wa.gov]  
**Sent:** Friday, March 09, 2012 2:26 PM  
**To:** Jim Cser  
**Cc:** Dennis Yee; Maribeth Todd; Orjiako, Oliver  
**Subject:** RE: Clark County Rural Residential Capacity

Hi Jim,

Clark County's rural lands residential capacity is approximately 7,700 based on our current model run. The attached document provides an explanation of our methodology.

Let me know if you need anything else or if you need further clarification on our methodology.

Thanks,

Ken

## **Draft**

# **Process for Estimating Rural Land Capacity Clark County, Washington**

A formal Vacant Buildable Lands Model (VBLM) for determining future urban residential and employment land use capacity has been in place since the beginning of Clark County's Growth Management Planning process. However, the VBLM excludes rural areas outside of urban growth areas. Since rural capacity is a component of the overall capacity a simplified less formal process has been created to account for rural capacity. The rural process is run separate from the urban VBLM and has not been incorporated into the main model at this time. There are some similarities in determining land capacity in the urban and rural areas but there are also many differences between them. This document provides a description of the rural land capacity process. A description of the urban VBLM is available at: <http://gis.clark.wa.gov/applications/gishome/reports/?pid=vblm>

Rural land uses allow for less dense larger residential lot sizes with an emphasis on resource lands while urban lands allow for higher density smaller residential lot sizes and locating of intensive job producing lands. Due to the differences in development intensity the rural model is less complex than the urban model.

## **Rural Vacant Lands Process**

### **Residential**

Rural residential lands have minimum lot sizes of 5 acres or more with the exception of rural centers which have minimum lot sizes of 1 acre. Rural residential and resource lands are classified as built, vacant, or underutilized lands.

Classifications are based on the following criteria:

- Residential vacant lands are defined as having a building value less than \$13,000 in the current year Assessor's database. (same as urban model)
- Underutilized is defined as having a building value of \$13,000 or more and sufficient land to be further divided based on minimum lot sizes determined by land use designations.
- Known public lands (Federal, State, and local) and Western Forest Protected Lands are excluded.
- Vacant lots 4 acres or larger but less than minimum lot area are considered buildable. This is based on the potential of lots qualifying for legal lot determinations.
- No reductions for critical areas. It is assumed that a building envelope would be available on larger rural lots.
- Land use based on comprehensive plan designations and densities considered in the residential analysis include:

COMPLAN	DESCRIPTION	Minimum Lot Area (Acres)
16	Urban Reserve	10
18	Rural-5	5
19	Forest Tier 1	80
20	Forest Tier 2	40
21	Agriculture	20
23	Agri-Wildlife	160
49	Rural-10	10
50	Rural-20	20
60	Gorge SMA Agriculture	20
61	Gorge SMA Non-federal Forest	10
66	Gorge Large-scale Ag 80	80
67	Gorge Large-scale Ag 40	40
68	Gorge Small-scale Agriculture	20
69	Gorge Small Woodland 40	40
70	Gorge Small Woodland 20	20
71	Gorge Residential 5	5
72	Gorge Residential 10	10
91	Rural Center Residential	1

### Commercial and Industrial

There are very few commercial and industrial designated lands in the rural area. Most are located within rural centers. Jobs producing lands are classified based on the below criteria.

- Commercial and Industrial vacant lands are defined as having a building value less than \$67,500 in the current year Assessor's database.
- Commercial underutilized lands are defined as having a building value of \$67,500 or higher and the land value is a minimum four times higher than the building value in the current year Assessor's database.
- Industrial underutilized lands are defined as having a building value of \$67,500 or higher in the current year Assessor's database.
- No exclusions for critical lands
- Tax Exempt properties are excluded
- Rural Commercial and Industrial Comprehensive Plan Designations and employees per acre

COMPLAN	DESCRIPTION	Employee per Acre Factor
35	Rural Commercial	20
25	Rural Industrial	1

This process outputs an estimated rural vacant and underutilized lands housing and employment capacity based on adopted or proposed UGA's for determining overall capacity.

---

**From:** Jim Cser [mailto:Jim.Cser@oregonmetro.gov]  
**Sent:** Monday, March 05, 2012 4:22 PM  
**To:** Pearrow, Ken  
**Cc:** Dennis Yee; Maribeth Todd  
**Subject:** RE: Clark County Rural Residential Capacity

Hi Ken,  
That would be fine, thank you.  
-Jim

---

**From:** Pearrow, Ken [mailto:Ken.Pearrow@clark.wa.gov]  
**Sent:** Monday, March 05, 2012 4:20 PM  
**To:** Jim Cser  
**Cc:** Dennis Yee; Maribeth Todd  
**Subject:** RE: Clark County Rural Residential Capacity

Jim,

I will provide you with the details for our methodology and our current rural capacity numbers. I am currently working on a 2012 rural capacity number and will forward it to you when it is complete and has been reviewed by our planning staff.

Rural capacity numbers should be ready by the end of this week. Does that work?

Thanks,

Ken Pearrow  
GIS Coordinator  
Clark County GIS  
PO Box 5000  
Vancouver, WA 98666-5000  
tel: (360) 397-2002 x.4937  
fax: (360) 397-2046  
[www.clark.wa.gov](http://www.clark.wa.gov)



Please consider the environment before printing this email

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**From:** Jim Cser [mailto:Jim.Cser@oregonmetro.gov]  
**Sent:** Monday, March 05, 2012 4:12 PM  
**To:** Pearrow, Ken  
**Cc:** Dennis Yee; Maribeth Todd  
**Subject:** Clark County Rural Residential Capacity

Hello Ken,  
For our current TAZ forecast, we need to determine the Clark County rural residential capacity. Do you have any GIS data or methodology that you can share? Our original estimate started with selecting the

taxlots that fell into the rural residential designations of the comp plan, but then it was difficult to determine how many of those acres were buildable or how to convert buildable acres to capacity.

Thanks,  
Jim

This e-mail and related attachments and any response may be subject to public disclosure under state law.

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---

**From:** Dennis Yee  
**Sent:** Friday, March 02, 2012 1:47 PM  
**To:** Harrington, Mark (RTC); Orjiako, Oliver; Snodgrass, Bryan  
**Cc:** Maribeth Todd; Gerry Uba  
**Subject:** RE: Clark County forecast

As follow-up to our discussion yesterday, I thought it germane to have the different set of forecasts compared side-by-side. Here's what we have. Do you concur?

We compare 3 forecasts:

1. MetroScope Scenario #1203 (the GAMMA TAZ forecast of reflecting Metro council's "lower-middle third forecast")
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The problem seems to be how to try and reconcile aggressive employment projections in light of known economic weakness that we expect will persist up through 2015 and perhaps later as some economic pundits have claimed.

Have I framed this properly?

Regards,

Dennis Yee  
Metro Economist

---

**From:** Dennis Yee  
**Sent:** Thursday, March 01, 2012 3:28 PM  
**To:** Orjiako, Oliver; Pearrow, Ken; Harrington, Mark (RTC); Snodgrass, Bryan; Wuest, Phil  
**Cc:** Gerry Uba; Jim Cser; Maribeth Todd  
**Subject:** RE: TAZ 2025 Forecast Allocation

All:

We will be posting to our ftp server the following information (probably by Monday or Tuesday):

- All pdf maps discussed today. (it will take a day or 2 before our IT department uploads the files to our ftp server – I'll send out a new email with the ftp link soon)
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- Map showing the timing of Clark county urban reserves (and zoning and capacity assumptions for each urban reserve) as assumed for modeling and forecasting purposes.

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Mark: will you need to see gamma 2020 numbers so you can eyeball some sort of interpolation for year 2024? Let Maribeth or I know of your needs.

I think this summarizes Metro's to do list after the meeting today.

Regards,

Dennis Yee  
Metro Economist

---

**From:** Orjiako, Oliver [mailto:Oliver.Orjiako@clark.wa.gov]  
**Sent:** Thursday, March 01, 2012 3:00 PM  
**To:** Dennis Yee; Harrington, Mark (RTC); Pearrow, Ken  
**Cc:** Bill Stein; Gerry Uba; Maribeth Todd  
**Subject:** RE: Clark county QCEW dataset

Hello Dennis:

Thank you.

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Thursday, March 01, 2012 1:32 PM  
**To:** Harrington, Mark (RTC); Orjiako, Oliver; Pearrow, Ken  
**Cc:** Bill Stein; Gerry Uba; Maribeth Todd  
**Subject:** Clark county QCEW dataset

Mark, Oliver and Ken:

Thanks for a very informative meeting today.

Here's the reply I received today from Baba Moussa regarding the covered employment data:

...I will reply to him by citing that we want to be able to have Clark county GIS department share its employment geocode with us for modeling and forecasting...limiting access to 3 people (myself, Maribeth and TBD person in TRMS).

Ken, was there some specific description you used in referring to the data you got from ESD? I'll use that in reply to Baba if you have it handy and can send it to me.

Thanks

Dennis

---

From: "Moussa, Baba (ESD)" <[BMoussa@esd.wa.gov](mailto:BMoussa@esd.wa.gov)>  
To: "Thomas Yee" <[Thomas.Yee@oregonmetro.gov](mailto:Thomas.Yee@oregonmetro.gov)>  
Cc: "Forbord, Tim (ESD)" <[TForbord@ESD.WA.GOV](mailto:TForbord@ESD.WA.GOV)>  
Subject: request QCEW data for 2009  
Date: Thu, Mar 1, 2012 09:36

Good morning Yee:

My name is Baba Moussa and I manage data sharing agreements for the labor market and economic analysis branch of WA ESD. I am writing to confirm that your email has been received and I will be getting back to you soon for more questions and details. From your email, my understanding regarding what your needs is:

"we seek 2009 employment point data for Clark County, Washington.

We seek authority for Clark County GIS to provide Metro and Resource Systems Group with employment data for Clark County which include number of employees in each employment parcel by employment type (retail, service, total)". Is this correct? Could you give us additional details if possible?

Could you also elaborate on how many employees will have access to the data, where these employees work, how long will metro need the data?

Thank you.

[Tihamiyou Baba Moussa](#)

Economic Analyst

[WA Employment Security Department](#)

[Labor market and economic analysis](#)

(360) 407 4594

Here's the email I sent yesterday to T. Forbord at ESD:

Mr. Forbord,

I am writing you to request access to QCEW employer payroll records for use in the region's economic/land use and transportation modeling development & forecasting. These modeling & forecasting requirements are rooted in federal transportation mandates and state land use and transportation rules which both Metro and Clark County/Regional Transportation Council adhere to. We have had the need in the past to work with Oregon and Washington confidential covered employment datasets. Confidential employment data provides local government planners and policymakers the accurate information needed for planning urban growth areas and building roads and bridges. Metro's efforts to update and revise regional forecasts serve the interests of both Oregon and Washington residents.

Metro is the regional government with statutory jurisdiction over Clackamas, Multnomah, and Washington counties in Oregon. Metro's land use and travel modelers have a long standing (over 25 year) collaboration with Clark County, Washington and the Southwest Washington Regional Transportation Council (RTC) built upon data and model sharing. In fact, Metro and RTC planners routinely share forecast information, historical data, and model developments.

Clark County, Washington is an integrated part of the Portland-Vancouver-Hillsboro Metropolitan Statistical Area. The county shares close economic and social ties with the Portland area economy, which is reflected in our economic planning and transportation models.



Metro and RTC travel modelers apply land use data from Oregon and Washington to bi-state transportation networks to provide technical analysis for transportation decision makers. Metro's suite of recent model enhancements (which include airport passenger demand, bicycle modeling tools, dynamic traffic assignment, park-and-ride lot choice, household survey design, and transit traveler preferences) are being shared with RTC, so that Clark County has the same modeling capabilities as the areas under Metro's jurisdiction. These bi-state models rely on employment data from both Oregon and Washington to operate correctly.

The impetus for our current employment data request is the development of our new activity-based model, the Dynamic Activity Simulator for Households (DASH), which is led by our consultant Dr. John Gliebe of Resource Systems Group in Vermont. Dr. Gliebe has expressed a desire to test the statistical significance to auto ownership, mode choice, and/or park-and-ride lot choice, of ¼ mile and ½ mile employment buffers around transit stops. We have 2009 employment point data for Oregon, and we seek 2009 employment point data for Clark County, Washington.

We seek authority for Clark County GIS to provide Metro and Resource Systems Group with employment data for Clark County which include number of employees in each employment parcel by employment type (retail, service, total ).

Please let us know what you need from us to move ahead with acquiring the needed covered employment data. I look forward to hearing from you soon.

Dennis Yee  
Metro Chief Economist

Metro  
600 NE Grand Av.  
Portland, OR 97232-2736  
(503) 797-1578  
(503) 797-1909 (FAX)  
[dennis.yee@oregonmetro.gov](mailto:dennis.yee@oregonmetro.gov)

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[www.oregonmetro.gov/connect](http://www.oregonmetro.gov/connect)

This e-mail and related attachments and any response may be subject to

## CITY OF VANCOUVER, WASHINGTON

---

**From:** Dennis Yee  
**Sent:** Thursday, March 22, 2012 11:25 AM  
**To:** Michael.Mabrey@clark.wa.gov; Orjiako, Oliver; Snodgrass, Bryan  
**Cc:** Harrington, Mark (RTC); Pearrow, Ken; Gerry Uba  
**Subject:** Metro TAZ forecast

We are planning to re-run the TAZ forecast to get new growth allocations from MetroScope based on revised rural residential capacity for Clark county. This will reduce the household allocations in rural unincorporated Clark county by several thousand for the 2025 distributions.

Before we begin finalizing 2025 TAZ figures, are you seeing anything else that might cause technical concerns for the cities? We would like to incorporate anything else at the same time as we correct for the rural piece.

Regards,

Dennis Yee  
Metro Chief Economist

Metro

---

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**Sent:** Friday, March 02, 2012 1:47 PM  
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**Cc:** Maribeth Todd; Gerry Uba  
**Subject:** RE: Clark County forecast

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Have I framed this properly?

Regards,

Dennis Yee  
Metro Economist

---

**From:** Dennis Yee

**Sent:** Thursday, March 01, 2012 3:28 PM

**To:** Orjiako, Oliver; Pearrow, Ken; Harrington, Mark (RTC); Snodgrass, Bryan; Wuest, Phil

**Cc:** Gerry Uba; Jim Cser; Maribeth Todd

**Subject:** RE: TAZ 2025 Forecast Allocation

All:

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Metro Economist

## SW WASHINGTON REGIONAL TRANSPORTATION COUNCIL (RTC)

---

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Regards,

Dennis Yee  
Metro Chief Economist

Metro

---

**From:** Harrington, Mark (RTC) [mailto:Mark.Harrington@rtc.wa.gov]

**Sent:** Wednesday, March 14, 2012 10:56 AM

**To:** Dennis Yee

**Subject:** RE: Clark County forecast

Sorry for the delayed response, but yes Dennis, I think you have framed it appropriately. I knew you would.

Mark

---

**From:** Dennis Yee

**Sent:** Friday, March 02, 2012 1:47 PM

**To:** Harrington, Mark (RTC); Orjiako, Oliver; Snodgrass, Bryan

**Cc:** Maribeth Todd; Gerry Uba

**Subject:** RE: Clark County forecast

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I think this summarizes Metro's to do list after the meeting today.

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Dennis Yee  
Metro Economist

# 2035 comments and responses

August 1 to August 31, 2012

## 2035/2040 TAZ Forecast Distribution Review, Key comments and Accepted Adjustments

### Introduction

Metro is required to coordinate population forecasts with local jurisdictions within the Metro UGB. This requirement is carried out by Metro's Research Center and Planning & Development Departments. The process for completing the coordination of population is necessarily a joint effort among Metro and local governments of this region. The process has been collaborative and mutually agreeable, but at times, there have been key forecast issues that the region has not fully come to an agreement. These forecast concerns have been "tabled" and listed as additional research items that will be tackled in coming research projects for the next Urban Growth Report cycle.

The forecast distribution comes to its conclusion with the completion of jurisdiction reviews of the year 2035 and 2040 TAZ distributions for households and employment. The growth distributions derive from the MetroScope growth allocation model, but undergo revisions from local input. The process of coordinating population and growth in the region included a planned series of official opportunities to review the forecast distributions, make comments, and accept local review adjustments to the TAZ projections and amend capacity assumptions. Metro Council will move to adopt the forecast distribution in late-2012. This review of 2035 and 2040 TAZ distributions marks the last stage of technical challenges and revisions that can be made to the forecast distribution.

At the beginning (2 years ago), local governments were solicited for their feedback of the population coordination process and afforded the chance to review and revise the technical assumptions that would materially impact the growth distribution. Here is a short list of these key forecast factors:

- Base year 2010 employment and population (i.e., households) estimates
- Contribute in defining procedures and methods to account for the buildable land inventory
- Review and amend the buildable land inventory and capacity estimates for housing and employment needs
- Revise the crosswalk table between local zoning and the RLIS standardized zone class designations
- Revise TAZ boundaries
- Provide direction and input into key land use, capacity, and policy assumptions (e.g., urban reserves, urban reinvestment subsidies – urban renewal, economic-based redevelopment filter factors, mixed-use residential development factor rates, etc.)



Metro staff consulted with local jurisdictions concerning land development policies and growth projections. These consults were to solicit feedback from local jurisdictions. The feedback provided information that ultimately improved the forecast distribution. Meetings with local governments helped to coordinate the population distribution analysis in accord with state mandates.

At a halfway point, local reviewers were asked to assess the mid-term TAZ forecast, so as to provide a critical time-path dependent assessment for the growth distribution. This review was completed for the year 2025 growth distributions and review comments incorporated into the long-term growth distribution forecast.

The long-term growth projections reflects the local review inputs for 2025. For the mid-term growth distributions, local governments provided feedback on 1) adjusting the 2025 household demand distributions (or employment) and 2) amending the long-term supply / capacity assumptions. These mid-term adjustments were folded into the 2035 and 2040 growth distributions and therefore should be consistent with capacity estimates and any mid-course adjustments to household and employment projections in the long-term.

### **2035 and 2040 TAZ Distribution Adjustments**

The general nature of the final review for the TAZ growth distribution were fairly routine adjustments that redistributed growth projections from one TAZ to another TAZ, mainly within the same city.

No major shifts in employment growth were provided. Many of the shifts that would have happened occurred in 2025 and shifting in growth trends carried forward into 2035 and 2040, negating any need to make adjustments in the long-term.

- A few thousand jobs were traded from TAZ's located in Lake Oswego and reassigned to unincorporated Clackamas county
- City of Portland adjusted some of its TAZ allocations to reflect focus on corridors and main street development consistent with the Portland Plan. These amendments were entirely within the city and therefore did not affect the county total or other cities' growth distributions.

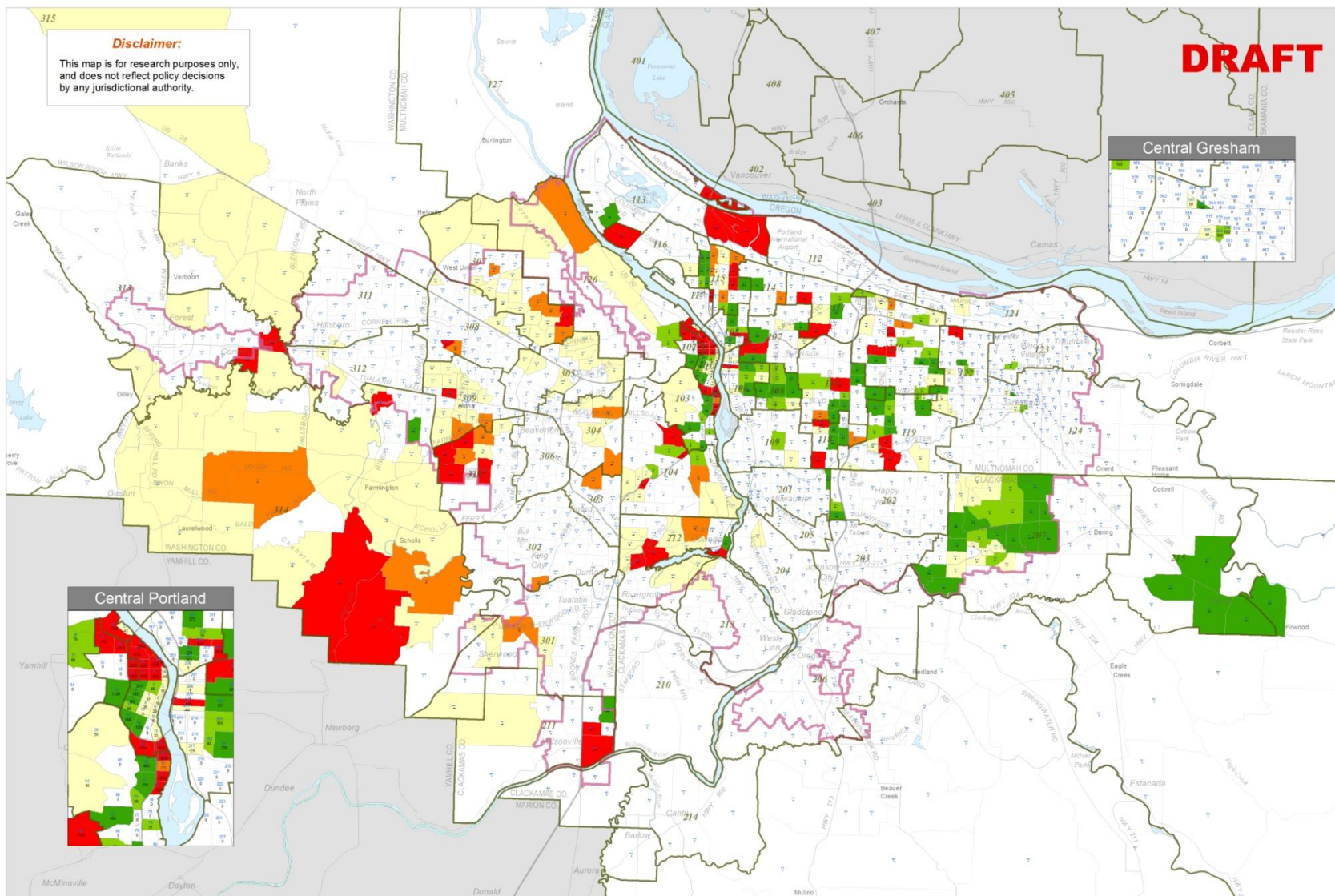
The local review for the 2035 and 2040 household distributions yielded more changes, but again the amount of revisions were less than the mid-term review. This reflects the completeness of the review undertaken by local jurisdictions for the 2025 mid-term review. A few jurisdictions had changes to offer, but were not very significant. A map illustrating the changes in household distributions recommended by local jurisdictions is attached.

- Portland remapped its TAZ household growth projections to forecast relatively more growth (as compared to the MetroScope pre-review allocation estimates) in corridors and main streets found in the inner and outer southeast portions of the city. These adjustments were accepted without challenge because the redistributions did not impact the county total or other cities' growth distributions.
- Washington county requested (and accepted) a reduction in household growth assigned to rural unincorporated areas of the county (outside the Metro UGB). Upon more review, it was determined that the residential capacity county for rural Washington county had supply assumptions that were too aggressive. Several thousand households were redistributed to elsewhere in the region (see Damascus).

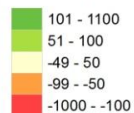
- Due to the initial rural nature of the city of Damascus, the 2025 mid-term residential growth rate projections were deemed too aggressive and were thus reduced in the 2025 mid-term growth distributions in accord with the Damascus review comments. By 2035, the residential growth that had been shifted out of Damascus (about 2,500 units) was shifted back into Damascus in the 2035 allocations. This effectively delays for 10 years the 2025 growth projection for Damascus to year 2035. We estimate marginal capacity (based on a now defunct Damascus concept plan) for the city of about 11,000 more SF unit capacity and 10,000 more MF unit capacity. Total absorption between 2010 and 2035 of about 8,400 units – mostly SF and virtually no MF development. After 2040, we estimate 9,700 units of SF absorbed, leaving about 1,300 SF units of capacity remaining.

#### **Damascus Household Forecast Summary**

	TAZ allocation	Growth	APR%
2010	3,527		
2025	9,251	5,724	6.6%
2035	11,916	2,665	2.4%



#### Household Adjustment



**TAZ Labels:**  
42 - TAZ 2162  
238 - Households

White areas had no adjustments.

## Reviewed Total Household Adjustments for 2035

MetroScope Jurisdiction Reviewed TAZ 'Gamma' Forecast

Urban Growth Boundary  
Employment Zones

Note: the standard MetroScope employment zone boundaries have been adjusted to align with TAZs.

## 2035 comments and responses

#	Local Government	Comment and response completed
1	Beaverton	Yes
2	Cornelius	No comment/No TAZ staff
3	Damascus	Yes
4	Durham	No comment
5	Fairview	No comment/No TAZ staff
6	Forest Grove	Yes
7	Gladstone	No comment/No TAZ staff
8	Gresham	Yes
9	Happy Valley	Yes
10	Hillsboro	Yes
11	Johnson City	No comment/No TAZ staff
12	King City	Yes
13	Lake Oswego	Yes
14	Maywood Park	No comment/No TAZ staff
15	Milwaukie	No comment
16	Oregon City	No comment
17	Portland (& POP)	Yes
18	Rivergrove	No comment/No TAZ staff
19	Sherwood	Yes
20	Tigard	Yes
21	Troutdale	Yes
22	Tualatin	Yes
23	West Linn	Yes
24	Wilsonville	Yes
25	Wood Village	Yes
26	Clackamas County	Yes
27	Multnomah County	Yes
28	Washington County	Yes

Following are the actual correspondences between local governments and Metro leading up to the completion of the comments and response.

## **CITY OF BEAVERTON**

**Distribution Adjustments completed (August 20, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Laura Kelly [mailto:lkelly@beavertonoregon.gov]  
**Sent:** Monday, August 20, 2012 3:39 PM  
**To:** Gerry Uba; Dennis Yee  
**Cc:** Jeff Salvon  
**Subject:** FW: 2025-2040ResidentialTAZReview7-27.xlsx

Hi Gerry,  
As far as I can tell, the comments we sent last week are our final comments. Please see Jeff's email below and attachment.  
Please let me know if there is anything else we need to do here.  
Thanks,

**Laura Kelly**  
Senior Planner | Community and Economic Development Department  
City of Beaverton | P.O. Box 4755 | Beaverton, OR 97076  
503.526.2548 | [lkelly@BeavertonOregon.gov](mailto:lkelly@BeavertonOregon.gov)



---

**From:** Jeff Salvon  
**Sent:** Tuesday, August 14, 2012 7:56 AM  
**To:** [yeed@metro.dst.or.us](mailto:yeed@metro.dst.or.us); [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us)  
**Cc:** Robert McCracken; Laura Kelly; Steven Sparks  
**Subject:** 2025-2040ResidentialTAZReview7-27.xlsx

Dennis and Steve.

Attached please find are our comments on the 2040 TAZ review.

In our review, we basically shifted some of the residential dwelling units around between TAZ areas as instructed to compensate for areas where growth exceeded the 2045 capacities highlighting areas where growth exceeded a certain margin. In doing so, we found that the 3 TAZ areas for 6b and Cooper Mountain were once again not in keeping with what we thought we had agreed upon. We indicated so in our comments and recommended adjustments accordingly.

Apart from that, we found the Employment numbers to be acceptable but recognized that we still fall short of our estimates by about 2,000 jobs. Given the constraints of our task there's not much we can

**FINAL DRAFT**

do about that except to advocate that should County surpluses exist within the proper control totals, we'd be happy to accept them.

Thanks again for helping us perform our review and call if you have any questions.

Jeff

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---

**From:** Dennis Yee  
**Sent:** Tuesday, August 14, 2012 8:52 AM  
**To:** Gerry Uba  
**Subject:** FW: 2025-2040ResidentialTAZReview7-27.xlsx

[For the record.](#)

---

**From:** Jeff Salvon [<mailto:jsalvon@beavertonoregon.gov>]  
**Sent:** Tuesday, August 14, 2012 7:56 AM  
**To:** Dennis Yee; [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us)  
**Cc:** Robert McCracken; Laura Kelly; Steven Sparks  
**Subject:** 2025-2040ResidentialTAZReview7-27.xlsx

Dennis and Steve.

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Jeff

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## **CITY OF DAMASCUS (and Happy Valley)**

**Distribution Adjustments completed (August 28, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

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*Metro and City staff meeting summary (September 19, 2012):* City staff expressed concern on the forecasted single family and multifamily residential split. Metro staff told city staff that the forecast split is an expression of how economic activity and zoning policy might deliver development by 2035.

---

**From:** Gerry Uba [<mailto:Gerry.Uba@oregonmetro.gov>]  
**Sent:** Tuesday, August 28, 2012 1:38 PM  
**To:** Erika Palmer  
**Cc:** Conrad, Larry; Dennis Yee; 'John Morgan ([john@morgancps.com](mailto:john@morgancps.com))'  
**Subject:** RE: 2035 Forecast Comments

Hello Erika,

I am aware that Robin is working on setting up a meeting to discuss related matter, and it is very likely that Larry may not be invited to that meeting. I requested the meeting with the County Coordinator, Larry, in line with the established process for discussing and resolving comments on the mid-term and long-term forecast distributions. You will recollect that we had County coordination meeting last spring with Larry, you, Steve Gaschler, Happy Valley staff and us during the 2025 mid-term distributions.

The County coordination meeting will inform the meeting that Robin is setting up. Please let me know your availability for the County coordination meeting. Thanks

Gerry

---

**From:** Erika Palmer [<mailto:epalmer@damascusoregon.gov>]  
**Sent:** Tuesday, August 28, 2012 8:02 AM  
**To:** Gerry Uba  
**Cc:** Conrad, Larry; Dennis Yee; 'John Morgan ([john@morgancps.com](mailto:john@morgancps.com))'  
**Subject:** RE: 2035 Forecast Comments

Hi Gerry,

I did talk to Larry about the numbers. I also know that Robin McAuthor is working on setting up a meeting with folks at Metro to discuss the pop/employment numbers. We are working on deadlines on this end and need to come to some sort of consensus on how to move forward with what we need for our planning work.

Thanks!

Best Regards,



## Erika Palmer

Senior Planner



**Address:** 19920 SE Highway 212 | Damascus, OR 97089

**Telephone:** 503.658.8545 • **Email:** [epalmer@damascusoregon.gov](mailto:epalmer@damascusoregon.gov)

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---

**From:** Gerry Uba [<mailto:Gerry.Uba@oregonmetro.gov>]

**Sent:** Monday, August 27, 2012 5:40 PM

**To:** Erika Palmer

**Cc:** Conrad, Larry; Dennis Yee; 'John Morgan ([john@morgancps.com](mailto:john@morgancps.com))'

**Subject:** RE: 2035 Forecast Comments

Hello Erika,

Thanks for your comments on the 2035 forecast distribution for your city –Damascus. Have you meet with Larry as you suggested in your email to him? If not, maybe you, Larry, Dennis and myself should have a teleconference, unless you prefer a face to face meeting.

Please let me know your preference and availability in the next two to three days and I will check with Larry and Dennis tomorrow.

Thanks

Gerry

---

**From:** Erika Palmer [<mailto:epalmer@damascusoregon.gov>]

**Sent:** Monday, August 20, 2012 4:43 PM

**To:** Gerry Uba

**Subject:** FW: 2035 Forecast Comments

Our comments, see below.

Best Regards,

**Erika Palmer**

Senior Planner



**Address:** 19920 SE Highway 212 | Damascus, OR 97089

**Telephone:** 503.658.8545 • **Email:** [epalmer@damascusoregon.gov](mailto:epalmer@damascusoregon.gov)

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---

**From:** Erika Palmer  
**Sent:** Thursday, August 16, 2012 11:14 AM  
**To:** Conrad, Larry  
**Cc:** Dennis Yee ([Dennis.Yee@oregonmetro.gov](mailto:Dennis.Yee@oregonmetro.gov)); John Morgan  
**Subject:** 2035 Forecast Comments

Thank you for giving us the opportunity to comment on the 2035 TAZ Gamma Forecast. In reviewing the distribution our planning staff have highlighted the following concern:

Between 2010 and 2025 there is a 5,724 increase in households for a total of 9,251 households. Between 2025 and 2035 there is an increase of 98 households for a total of 9,349 households. Between 2035 and 2040 the modeling projects only 86 new households between this five year period.

The numbers indicate a significant amount of new growth in the first fifteen years (until 2025) – 5,724 households. Three years has almost past and that means 5,724 new households in 12 years with no comp plan, no infrastructure and a down market without a clear sign of when recovery will begin.

Between 2025 and 2035 the model shows an increase of 98 households and between 2035 and 2040 and increase of 86 households. The model indicates a decrease in households as it projects into the future. The City at this time does not expect full adoption of a Comprehensive Plan and all its implementing ordinances completed until the fall of 2014. The increase in new growth in the short term (2025) is highly unlikely. The employment numbers also seem high especially if growth slows after 2025.

Dennis, let me know if you would like to meet and discuss concerns. Thank you.

Best Regards,

*Erika Palmer*

Senior Planner

**Address:** 19920 SE Highway 212 | Damascus, OR 97089

**Telephone:** 503.658.8545 • **Email:** [epalmer@damascusoregon.gov](mailto:epalmer@damascusoregon.gov)

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---

**From:** Conrad, Larry [<mailto:LarryC@co.clackamas.or.us>]  
**Sent:** Thursday, July 19, 2012 1:58 PM  
**To:** Brian Brown; Fritzie, Martha; Gilevich, Shari; Glasgow, Clay; Hoelscher, Scott; Tracy Brown; ([Iterway@ci.oregon-city.or.us](mailto:Iterway@ci.oregon-city.or.us)); Abbott, Sarah; AQUILLA HURD-RAVICH; Barth, Gary; Buehrig, Karen;

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Chris Neamtzu; Colin Cortes; Comer, Catherine; Egner, Dennis; Erica Rooney; Erika Palmer; Hughes, Jennifer; John Morgan; John Sonnen; Kay Mordock; Kelter, Brett; Marquardt, Ryan; McCallister, Mike; Michael Walter; Pauly, Daniel; Pollack, Kay; Stephan Lashbrook; Steve Gaschler; Will Harper

**Subject:** 2035 Forecast Comments

Good Afternoon --

Just a quick reminder that comments on the Metro 2035 / 2040 Gamma Forecast numbers are due to Metro on August 17<sup>th</sup>.

If you want your comment include in a consolidated set of comments please send them to me by August 10<sup>th</sup>.

I will be out of the office until August 6<sup>th</sup>.

If you have any questions or comments in the next two weeks -- please contact Martha Fritzie

Thanks

Lawrence M Conrad  
Principal Transportation Planner  
Department of Transportation and Development  
Clackamas County  
150 Beavercreek Road  
Oregon City, OR 97045

(v) 503.742.4539

[larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us)

In keeping with the County's sustainability goals our Department is open Monday – Thursday and is closed on Fridays.

---

**From:** Erika Palmer [<mailto:epalmer@damascusoregon.gov>]

**Sent:** Thursday, August 16, 2012 11:14 AM

**To:** Conrad, Larry

**Cc:** Dennis Yee; John Morgan

**Subject:** 2035 Forecast Comments

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Dennis, let me know if you would like to meet and discuss concerns. Thank you.

Best Regards,

*Erika Palmer*

Senior Planner

**Address:** 19920 SE Highway 212 | Damascus, OR 97089

**Telephone:** 503.658.8545 • **Email:** [epalmer@damascusoregon.gov](mailto:epalmer@damascusoregon.gov)

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**From:** Conrad, Larry [<mailto:LarryC@co.clackamas.or.us>]

**Sent:** Thursday, July 19, 2012 1:58 PM

**To:** Brian Brown; Fritzie, Martha; Gilevich, Shari; Glasgow, Clay; Hoelscher, Scott; Tracy Brown; ([Iterway@ci.oregon-city.or.us](mailto:Iterway@ci.oregon-city.or.us)); Abbott, Sarah; AQUILLA HURD-RAVICH; Barth, Gary; Buehrig, Karen; Chris Neamtzu; Colin Cortes; Comer, Catherine; Egner, Dennis; Erica Rooney; Erika Palmer; Hughes, Jennifer; John Morgan; John Sonnen; Kay Mordock; Kelter, Brett; Marquardt, Ryan; McCallister, Mike; Michael Walter; Pauly, Daniel; Pollack, Kay; Stephan Lashbrook; Steve Gaschler; Will Harper

**Subject:** 2035 Forecast Comments

Good Afternoon --

Just a quick reminder that comments on the Metro 2035 / 2040 Gamma Forecast numbers are due to Metro on August 17<sup>th</sup>.

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I will be out of the office until August 6<sup>th</sup>.

If you have any questions or comments in the next two weeks -- please contact Martha Fritzie

Thanks

Lawrence M Conrad

**FINAL DRAFT**

Principal Transportation Planner  
Department of Transportation and Development  
Clackamas County  
150 Beaver Creek Road  
Oregon City, OR 97045

(v) 503.742.4539

[larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us)

In keeping with the County's sustainability goals our Department is open Monday – Thursday and is closed on Fridays.

## **CITY OF FOREST GROVE**

**Distribution Adjustments completed (August 15, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Dennis Yee  
**Sent:** Wednesday, August 15, 2012 3:15 PM  
**To:** Daniel Riordan; Gerry Uba  
**Cc:** Paulette Copperstone; Steve Kelley  
**Subject:** RE: GAMMA TAZ Forecast Distribution

Message received. I want to thank you Dan for your assistance during this TAZ forecast process.

Best

Dennis

---

**From:** Daniel Riordan [<mailto:driordan@forestgrove-or.gov>]  
**Sent:** Wednesday, August 15, 2012 11:05 AM  
**To:** Dennis Yee; Gerry Uba  
**Cc:** Paulette Copperstone; Steve Kelley  
**Subject:** GAMMA TAZ Forecast Distribution

Hello All,

Thank you for the opportunity to review the latest household and employment forecast distribution. The long term TAZ allocations for 2035 -2040 seems fine. Forest Grove won't be recommending any changes to the TAZ allocations within our planning area.

Best Regards,

Dan

Dan Riordan  
Senior Planner  
City of Forest Grove

Phone: (503) 992-3226  
[www.forestgrove-or.gov](http://www.forestgrove-or.gov)

## CITY OF GRESAHM

**Distribution Adjustments completed (August 17, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Dennis Yee  
**Sent:** Friday, August 17, 2012 11:30 AM  
**To:** Martin, Brian  
**Cc:** Gerry Uba; Jim Cser  
**Subject:** RE: Gresham comments

Thanks Brian!

This sounds fine and I'll look at the actual re-distributions next week. If I have question then, I give you a ring.

Best,  
Dennis

---

**From:** Martin, Brian [<mailto:Brian.Martin@greshamoregon.gov>]  
**Sent:** Friday, August 17, 2012 9:54 AM  
**To:** Dennis Yee  
**Subject:** Gresham comments

Dennis:

I moved most of the units out of that TAZ we talked about and put them in our Regional Center and Town Center.

See attached.

Let me know if you have questions.

Thanks.

**Brian Martin, AICP, LEED AP**

Associate Planner - Comprehensive Planning  
City of Gresham  
1333 N.W. Eastman Parkway  
Gresham, OR 97030

v 503-618-2266  
f 503-669-1376  
[brian.martin@GreshamOregon.gov](mailto:brian.martin@GreshamOregon.gov)  
[www.greshamoregon.gov](http://www.greshamoregon.gov)

## **CITY OF HAPPY VALLEY (and Damascus)**

**Distribution Adjustments completed (August 29, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Dennis Yee  
**Sent:** Wednesday, August 29, 2012 8:30 AM  
**To:** Michael Walter; Gerry Uba; 'Conrad, Larry'  
**Subject:** RE: Reminder: August 17th Deadline for Comment on the Long-term Growth Distribution

Thanks Mike for your assistance and participation.

Best

Dennis

---

**From:** Michael Walter [mailto:MichaelW@ci.happy-valley.or.us]  
**Sent:** Tuesday, August 28, 2012 4:48 PM  
**To:** Gerry Uba; 'Conrad, Larry'  
**Cc:** Dennis Yee  
**Subject:** RE: Reminder: August 17th Deadline for Comment on the Long-term Growth Distribution

Sorry for the delay in our response – we are satisfied with the distribution information (for modeling purposes) and the process that has been followed for coordination with municipalities.

Thank you, for all of your hard work.

*Michael D. Walter, AICP*

ECONOMIC & COMMUNITY DEVELOPMENT DIRECTOR  
503-783-3839  
[MICHAELW@CI.HAPPY-VALLEY.OR.US](mailto:MICHAELW@CI.HAPPY-VALLEY.OR.US)  
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**From:** Paulette Copperstone [mailto:Paulette.Copperstone@oregonmetro.gov]  
**Sent:** Thursday, August 16, 2012 12:50 PM  
**To:** [tom.armstrong@portlandoregon.gov](mailto:tom.armstrong@portlandoregon.gov); [dtaylor@beavertonoregon.gov](mailto:dtaylor@beavertonoregon.gov);  
[erin.aigner@greshamoregon.gov](mailto:erin.aigner@greshamoregon.gov); [kaha@westlinnoregon.gov](mailto:kaha@westlinnoregon.gov); [randygra@co.clackamas.or.us](mailto:randygra@co.clackamas.or.us);



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[jsalvon@beavertonoregon.gov](mailto:jsalvon@beavertonoregon.gov); [lkelly@beavertonoregon.gov](mailto:lkelly@beavertonoregon.gov); [tfranz@ci.cornelius.or.us](mailto:tfranz@ci.cornelius.or.us); [epalmer@ci.damascus.or.us](mailto:epalmer@ci.damascus.or.us); [driordan@forestgrove-or.gov](mailto:driordan@forestgrove-or.gov); [jonathan.harker@greshamoregon.gov](mailto:jonathan.harker@greshamoregon.gov); [ann.pytynia@greshamoregon.gov](mailto:ann.pytynia@greshamoregon.gov); [brian.martin@greshamoregon.gov](mailto:brian.martin@greshamoregon.gov); Michael Walter; [vickiew@ci.hillsboro.or.us](mailto:vickiew@ci.hillsboro.or.us); [dono@ci.hillsboro.or.us](mailto:dono@ci.hillsboro.or.us); [doug@ci.hillsboro.or.us](mailto:doug@ci.hillsboro.or.us); [degner@ci.oswego.or.us](mailto:degner@ci.oswego.or.us); [rossonk@ci.milwaukie.or.us](mailto:rossonk@ci.milwaukie.or.us); [cdunlop@ci.oregon-city.or.us](mailto:cdunlop@ci.oregon-city.or.us); [kevin.martin@portlandoregon.gov](mailto:kevin.martin@portlandoregon.gov); [ortizp@ci.sherwood.or.us](mailto:ortizp@ci.sherwood.or.us); [preston@tigard-or.gov](mailto:preston@tigard-or.gov); [elizabeth.mccallum@troutdaleoregon.gov](mailto:elizabeth.mccallum@troutdaleoregon.gov); [camedzake@ci.troutdale.or.us](mailto:camedzake@ci.troutdale.or.us); [chahn@ci.tualatin.or.us](mailto:chahn@ci.tualatin.or.us); [tscott@ci.tualatin.or.us](mailto:tscott@ci.tualatin.or.us); [ckerr@westlinnoregon.gov](mailto:ckerr@westlinnoregon.gov); [jsonnen@westlinnoregon.gov](mailto:jsonnen@westlinnoregon.gov); [stark@ci.wilsonville.or.us](mailto:stark@ci.wilsonville.or.us); [pauly@ci.wilsonville.or.us](mailto:pauly@ci.wilsonville.or.us); [neamtzu@ci.wilsonville.or.us](mailto:neamtzu@ci.wilsonville.or.us); [mangle@ci.wilsonville.or.us](mailto:mangle@ci.wilsonville.or.us); [billp@ci.wood-village.or.us](mailto:billp@ci.wood-village.or.us); [mikem@co.clackamas.or.us](mailto:mikem@co.clackamas.or.us); [jenniferh@co.clackamas.or.us](mailto:jenniferh@co.clackamas.or.us); [larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us); [mfritzie@co.clackamas.or.us](mailto:mfritzie@co.clackamas.or.us); [jennifer.donnely@state.or.us](mailto:jennifer.donnely@state.or.us); [anne.debbaut@state.or.us](mailto:anne.debbaut@state.or.us); Richard Benner; Jim Cser; Dennis Yee; [charles.beasley@multco.us](mailto:charles.beasley@multco.us); Maribeth Todd; Paulette Copperstone; Gerry Uba; [tom.bouillion@portofportland.com](mailto:tom.bouillion@portofportland.com); [steve.iwata@portlandoregon.gov](mailto:steve.iwata@portlandoregon.gov); [mark@rtc.wa.gov](mailto:mark@rtc.wa.gov); [nels\\_mickaelson@co.washington.or.us](mailto:nels_mickaelson@co.washington.or.us); [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us); [ssparks@beavertonoregon.gov](mailto:ssparks@beavertonoregon.gov); [rreynolds@ci.cornelius.or.us](mailto:rreynolds@ci.cornelius.or.us); [darren@tigard-or.gov](mailto:darren@tigard-or.gov); Michelle Miller; [ahurd-ravich@ci.tualatin.or.us](mailto:ahurd-ravich@ci.tualatin.or.us); [ccortes@ci.tualatin.or.us](mailto:ccortes@ci.tualatin.or.us); [liden@pbworld.com](mailto:liden@pbworld.com); [bshort@damascusoregon.gov](mailto:bshort@damascusoregon.gov); [sjavoronok@westlinnoregon.gov](mailto:sjavoronok@westlinnoregon.gov)

**Cc:** John Williams; Mike Hoglund; Dennis Yee; Gerry Uba; Jim Cser; Maribeth Todd; Ken Ray

**Subject:** Reminder: August 17th Deadline for Comment on the Long-term Growth Distribution

**Importance:** High

Hello All,

The purpose of this e-mail is to remind you that the deadline for cities and counties to send their comments on the 2035 and 2040 long-term forecast distribution is tomorrow, August 17. Some local governments sent their comments and we talked with some to address their concerns on the data we posted on the Metro FTP site and on the information we presented at the county coordination meetings in Multnomah County on July 10, Clackamas County on July 11 and Washington County on July 19. Please contact Dennis Yee if you would like to discuss any concerns that may be holding you from finalizing your comments and sending them to us. Dennis can be reached at 503-797-1578 or [Dennis.Yee@oregonmetro.gov](mailto:Dennis.Yee@oregonmetro.gov). You may also call me.

We want to hear also from those of you who are satisfied with the distribution information posted on the Metro FTP site. It is important that we record your satisfaction with the coordination of the long-term distribution.

We are looking forward to receiving your comments by tomorrow's August 17 deadline. Thank you again for your cooperation and collaboration to produce this valuable information that will help our collective efforts to support good jobs and promote safe and healthy communities.

Gerry

Regional Growth Distribution Coordinator

Metro

[gerry.uba@oregonmetro.gov](mailto:gerry.uba@oregonmetro.gov)

## CITY OF HILLSBORO

**Distribution Adjustments completed (August 17, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Doug Miller [mailto:dougm@ci.hillsboro.or.us]  
**Sent:** Friday, August 17, 2012 3:05 PM  
**To:** Gerry Uba; Dennis Yee  
**Cc:** Steve Kelley (steve\_kelley@co.washington.or.us); Alwin Turiel  
**Subject:** 2040 Household Allocation Review Comments

Hi Gerry and Dennis,

Attached is Hillsboro's comments on the Metroscope Gamma 2.0 2040 Household allocations. I've completed the employment review and comments but I'd like to have a few key people review it before it goes out the door, so I'll get it to you early next week.

Doug Miller  
Urban Planner II - GIS  
City of Hillsboro  
503-681-6231

---

**From:** Doug Miller [mailto:dougm@ci.hillsboro.or.us]  
**Sent:** Wednesday, August 22, 2012 2:51 PM  
**To:** Gerry Uba; Dennis Yee  
**Cc:** 'Steve Kelley (steve\_kelley@co.washington.or.us)'  
**Subject:** 2040 Employment Allocation Review Comments

Hi Gerry and Dennis,

The attached spreadsheet has Hillsboro's changes and comments for the Metroscope Gamma 2.0 2040 Employment allocations. Let me know if you have any questions.

Doug Miller  
Urban Planner II - GIS  
City of Hillsboro  
503-681-6231

---

**From:** Dennis Yee  
**Sent:** Friday, August 17, 2012 3:07 PM  
**To:** Doug Miller; Gerry Uba  
**Cc:** Steve Kelley (steve\_kelley@co.washington.or.us); Alwin Turiel  
**Subject:** RE: 2040 Household Allocation Review Comments

Thanks Doug.

**FINAL DRAFT**

We will look forward to the final installment of employment comments early next week.

Best,

Dennis Yee  
Metro Economist

---

**From:** Doug Miller [<mailto:dougml@ci.hillsboro.or.us>]  
**Sent:** Friday, August 17, 2012 3:05 PM  
**To:** Gerry Uba; Dennis Yee  
**Cc:** Steve Kelley ([steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us)); Alwin Turiel  
**Subject:** 2040 Household Allocation Review Comments

Hi Gerry and Dennis,

Attached is Hillsboro's comments on the Metroscope Gamma 2.0 2040 Household allocations. I've completed the employment review and comments but I'd like to have a few key people review it before it goes out the door, so I'll get it to you early next week.

Doug Miller  
Urban Planner II - GIS  
City of Hillsboro  
503-681-6231

---

**From:** Doug Miller [<mailto:dougml@ci.hillsboro.or.us>]  
**Sent:** Wednesday, July 11, 2012 9:01 AM  
**To:** Dennis Yee  
**Cc:** Maribeth Todd; Jim Cser; Gerry Uba  
**Subject:** RE: Hillsboro 2040 Forecast Employment Review

OK – I understand.

Doug

---

**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Wednesday, July 11, 2012 8:56 AM  
**To:** Doug Miller  
**Cc:** Maribeth Todd; Jim Cser; Gerry Uba  
**Subject:** RE: Hillsboro 2040 Forecast Employment Review

No. For our internal accounting purposes, we prefer not to cross data streams so that we can track changes over time without confusing geographies. If we start changing city limits by asserting that the urban reserve areas will become the new city limits, this will be very confusing to track if changes owe to the new areas or to the existing city TAZ's. if you feel the need to present the data with them merged for your own display purposes, feel free.

**FINAL DRAFT**

Dennis

---

**From:** Doug Miller [<mailto:dougm@ci.hillsboro.or.us>]  
**Sent:** Tuesday, July 10, 2012 4:47 PM  
**To:** Dennis Yee  
**Subject:** Hillsboro 2040 Forecast Employment Review

Hi Dennis,

The "Emp by City" tab in the Gamma\_TAZ\_Forecast\_report\_2035-2040 workbook doesn't attribute all of the forecast employment with the Hillsboro Urban Reserves to Hillsboro. The attached spreadsheet shows the differences. I realize that most of it is currently outside the UGB, but shouldn't the forecasted jobs within our reserves be shown as Hillsboro's?

Doug Miller  
Urban Planner II - GIS  
City of Hillsboro  
503-681-6231

## CITY OF KING CITY

**Distribution Adjustments completed (August 16, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Liden, Keith S. [<mailto:Liden@pbworld.com>]  
**Sent:** Thursday, August 16, 2012 9:27 AM  
**To:** Gerry Uba; Dennis Yee; Steve Kelley  
**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Dave Wells  
**Subject:** RE: Metro 2035-2045 HH Forecast - King City Comments

We were hoping for funding assistance to update our comprehensive plan, but we can start with roses.

Keith

---

**From:** Dennis Yee  
**Sent:** Wednesday, August 15, 2012 3:42 PM  
**To:** Liden, Keith S.; Steve Kelley  
**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Gerry Uba; Dave Wells  
**Subject:** RE: Metro 2035-2045 HH Forecast - King City Comments

I'll coordinate with Steve regarding TAZ 1052, your comments will be considered with Washington county. Thanks....also my admin suggested I should send flowers in gratitude...so thank you!

---

**From:** Liden, Keith S. [<mailto:Liden@pbworld.com>]  
**Sent:** Wednesday, August 15, 2012 3:39 PM  
**To:** Dennis Yee; Steve Kelley  
**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Gerry Uba; Dave Wells  
**Subject:** RE: Metro 2035-2045 HH Forecast - King City Comments

Dennis,

A couple responses in **red**.

Thanks for working through this with us.

Keith

---

**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Wednesday, August 15, 2012 3:20 PM  
**To:** Liden, Keith S.; Steve Kelley  
**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Gerry Uba; Dave Wells  
**Subject:** RE: Metro 2035-2045 HH Forecast - King City Comments

## FINAL DRAFT

See comment below (in blue CAPS)

Best,

Dennis

---

**From:** Liden, Keith S. [<mailto:Liden@pbworld.com>]  
**Sent:** Wednesday, August 15, 2012 1:59 PM  
**To:** Dennis Yee; Steve Kelley  
**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Gerry Uba; Dave Wells  
**Subject:** Metro 2035-2045 HH Forecast - King City Comments

Dennis and Steve,

Dave Wells and I have reviewed the Metro HH and employment forecasts in the King City area. The TAZs, which are within the city limit, are: 1050 (completely), 1025, 1051, and 1052 (partially) TAZ 1001 is not within the city but it is within the urban reserve area for which King City prepared a concept plan as part of the Metro urban reserve planning/review process.

We have the following comments:

- Employment figures are difficult to predict, but they appear reasonable in residentially zoned areas with the understanding that they include persons claiming their residence as their business address (home occupations and self-employed people with no business office address).  
**UNDERSTANDABLE - OK**
- The household capacity figures appear to be somewhat optimistic, but not worth debating. **OUR ASSUMPTION ON CAPACITY TEND TO BE MORE AGGRESSIVE IN THE SUBURB LOCATIONS DUE TO PORTLAND AND OTHER MORE URBAN CITIES URGING METRO TO ASSUME MORE URBAN DENSITY IN ENVIRONMENTAL CONTRAINED AREAS, HIGHER REDEVELOPMENT POTENTIAL AND MORE INFILL ASSUMED. I SUSPECT THAT THE CAPACITY WE ESTIMATED FOR KING CITY MAY BE MORE AGGRESSIVE THAN RECENT EXPERIENCE MAY SUGGEST, BUT IF OK BY YOU WE WILL LEAVE IT UNCHANGED. Yes, that'll be fine.**
- TAZ 1052, with a 2045 residential capacity of 224 additional HH and 276 additional HH in 2035 (greater than the supposed capacity) should be corrected. This TAZ has only 2 properties having development potential with a theoretical capacity for 130± units. However, due to flood plain and ODOT access limitations, 80 units are more likely. Developed parcels in this TAZ are all relatively new and/or high density so redevelopment wouldn't yield many additional HH – certainly not enough to get to a total of 224 to 276 units. **I'M NOT SURE WE ARE ON THE SAME PAGE ON TAZ 1052 YET...SINCE THE CITY ONLY INTERSECTS WITH TAZ 1052 IN A VERY SMALL GEOGRAPHIC WAY, I'M GOING TO WAIT FOR STEVE KELLEY'S COMMENTS AS HE MAY HAVE A BIT MORE TO SAY ABOUT THE CAPACITY IN THIS LOCALE. The city probably includes around 30% of the land area of this TAZ. My comments about existing development were for the entire TAZ. Certainly appropriate to defer to Washington County regarding redevelopment potential of the unincorporated portion.**
- The assumption that urban development will not occur in TAZ 1001 until after 2035 is consistent with the city's expectations. **ACCORDING TO OUR MAPPING, TAZ 1001 IS DELAYED UNTIL 2045....I ASSUME THIS IS OK AND CONSISTENT? Yes. It's clearly a long way off.**

Attached is the Gamma TAZ spreadsheet with our comments .

Thanks for the opportunity to comment, and please feel free to contact me if you have any questions.

## FINAL DRAFT

**Keith S. Liden, AICP**  
Lead Planner, PlaceMaking

***Parsons Brinckerhoff***

400 SW 6th Avenue, Suite 802, Portland, OR 97204  
Direct: 503.478.2348/ Office: 503.274.8772  
[www.pbworld.com/pbplacemaking](http://www.pbworld.com/pbplacemaking)

---

**From:** Liden, Keith S. [mailto:Liden@pbworld.com]  
**Sent:** Wednesday, August 15, 2012 1:59 PM  
**To:** Dennis Yee; Steve Kelley  
**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Gerry Uba; Dave Wells  
**Subject:** Metro 2035-2045 HH Forecast - King City Comments

Dennis and Steve,

Dave Wells and I have reviewed the Metro HH and employment forecasts in the King City area. The TAZs, which are within the city limit, are: 1050 (completely), 1025, 1051, and 1052 (partially) TAZ 1001 is not within the city but it is within the urban reserve area for which King City prepared a concept plan as part of the Metro urban reserve planning/review process.

We have the following comments:

- Employment figures are difficult to predict, but they appear reasonable in residentially zoned areas with the understanding that they include persons claiming their residence as their business address (home occupations and self-employed people with no business office address).
- The household capacity figures appear to be somewhat optimistic, but not worth debating.
- TAZ 1052, with a 2045 residential capacity of 224 additional HH and 276 additional HH in 2035 (greater than the supposed capacity) should be corrected. This TAZ has only 2 properties having development potential with a theoretical capacity for 130± units. However, due to flood plain and ODOT access limitations, 80 units are more likely. Developed parcels in this TAZ are all relatively new and/or high density so redevelopment wouldn't yield many additional HH – certainly not enough to get to a total of 224 to 276 units.
- The assumption that urban development will not occur in TAZ 1001 until after 2035 is consistent with the city's expectations.

Attached is the Gamma TAZ spreadsheet with our comments .

Thanks for the opportunity to comment, and please feel free to contact me if you have any questions.

**Keith S. Liden, AICP**  
Lead Planner, PlaceMaking

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Direct: 503.478.2348/ Office: 503.274.8772  
[www.pbworld.com/pbplacemaking](http://www.pbworld.com/pbplacemaking)

---

**From:** Dennis Yee  
**Sent:** Monday, August 13, 2012 9:30 AM

**FINAL DRAFT**

**To:** Liden, Keith S.

**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Gerry Uba; Dave Wells; Steve Kelley

**Subject:** RE: Metro 2035 HH Forecast - Question - King City

Keith:

We did not include the SW Corridor project into the TAZ consideration. It is still way too speculative at this time, so if it's all right with the city, please don't factor that in at this time.

On the matter of the capacity estimates, I can, in part, agree that some areas we may have been too aggressive in anticipating redevelopment capacities and perhaps even vacant land capacity for residential development. The reason for this may be due to our "aggressive" assumptions on how much growth could be netted from areas with environmental constraints adjacent to vacant or redevelopment possibilities. If you are seeing that this is the case, please make a note of that in the comment sections in the review process....and of course anything else you see.

This is a very long-term forecast, so it's understandable that opinions will differ about growth potential.

Thanks for your assist in reviewing the information,

Best,

Dennis

---

**From:** Liden, Keith S. [<mailto:Liden@pbworld.com>]

**Sent:** Monday, August 13, 2012 9:15 AM

**To:** Dennis Yee

**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Gerry Uba; Dave Wells; Steve Kelley

**Subject:** Metro 2035 HH Forecast - Question - King City

Thanks Dennis. This clarifies the assumptions behind the numbers. I'll discuss with Dave Wells tomorrow. I assume he'll want the city to respond to the figures for all the TAZs, which are, or potentially could be, within the city. I'll coordinate with Steve Kelly. We'll have a response by the 17<sup>th</sup>. I can appreciate the complexities of running a region-wide model. However, the preliminary reaction by Dave and me is that some of the capacity and development figures are probably too high, given a variety of constraints.

Looking out this far is also very difficult due to potential changes that could occur. For example, if SW Corridor high-capacity does become a reality, the plan designations, zoning, and development potential could change drastically. However, now it's too early to tell.

Keith

---

**From:** Dennis Yee

**Sent:** Friday, August 10, 2012 11:29 AM

**To:** Gerry Uba



**FINAL DRAFT**

**Cc:** Dave Wells

**Subject:** RE: Metro 2035 HH Forecast - Question

Gerry:

This is what I sent Keith Liden, my apologies for lateness of reply as I was on vacation for a few days ...  
(and for not copying Dave Wells)

Dennis

\*\*\* message to Keith Liden begins below \*\*\*

Hi Keith:

Answers/ responses in red (see below).

Sorry for long explanation, but I would be happy to discuss one-on-one if any of this is confusing. I am meeting with Wilsonville one-on-one on Monday, so since I' out in the south metro area, I would be happy to swing by King city offices to discuss particulars. Please give me a ring.

Regards,

Dennis  
503-797-1578

---

**From:** Dennis Yee  
**Sent:** Friday, August 10, 2012 11:21 AM  
**To:** Liden, Keith S.  
**Cc:** Jim Cser; Maribeth Todd; Steve Erickson; Gerry Uba  
**Subject:** RE: Metro 2035 HH Forecast - Question

Hi Keith:

Answers/ responses in red (see below).

Sorry for long explanation, but I would be happy to discuss one-on-one if any of this is confusing. I am meeting with Wilsonville one-on-one on Monday, so since I' out in the south metro area, I would be happy to swing by King city offices to discuss particulars. Please give me a ring.

Regards,

Dennis  
503-797-1578

**From:** Liden, Keith S. [<mailto:Liden@pbworld.com>]  
**Sent:** Monday, August 06, 2012 8:25 AM  
**To:** Dennis Yee; Gerry Uba

## FINAL DRAFT

**Cc:** Dave Wells

**Subject:** Metro 2035 HH Forecast - Question

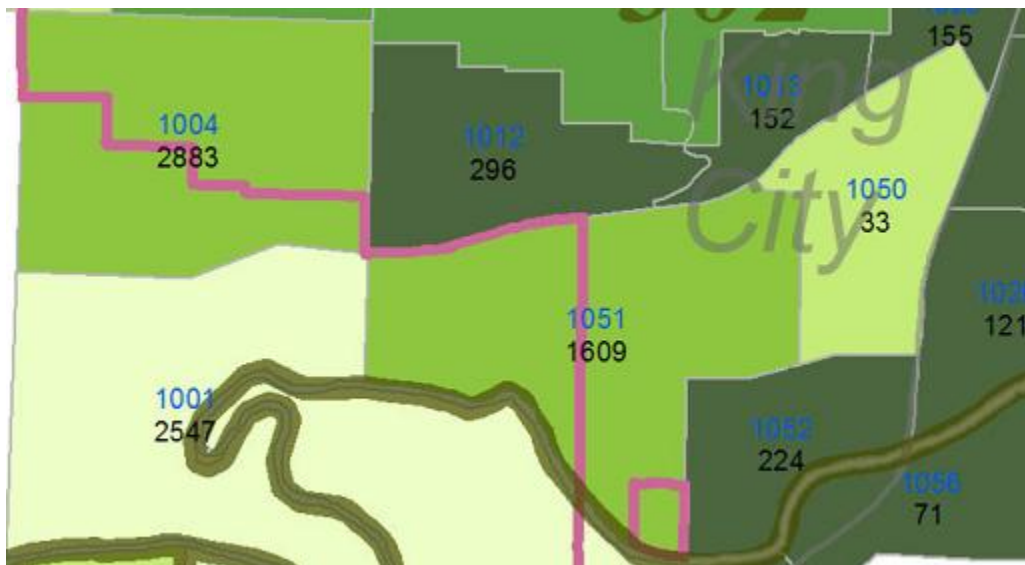
Dennis and Gerry,

I'm reviewing the Metro forecast information you presented in Hillsboro on July 19<sup>th</sup> for King City. I have a question about the map titled "Gamma TAZ 2010-2035 Total HH Change" and how it compares to the information on a related map "Gamma TAZ 2010-2035 % HH Capacity Used."

My understanding of the % HH Capacity Used map is that it shows the additional HH capacity anticipated over the 2010-2035 period.

Yes. The household capacity map depicts how many more dwelling units (or households) can be added between 2010 and 2045. The "blue" number is the TAZ and the "black" number indicates the available dwelling unit capacity we estimate with GIS data for the period up to 2045 (in theory). Additional unanticipated redevelopment could occur that might add to this capacity number.

For purposes of this review of year 2035 and 2040 TAZ projections of households (and employment), we have assigned TAZ 1050 for King City to review; however this isn't exactly precise so you might want to take a glance at adjacent TAZ's that the city limits intersect in a small way (or are part of the city's future vision / urban service area if you have one).

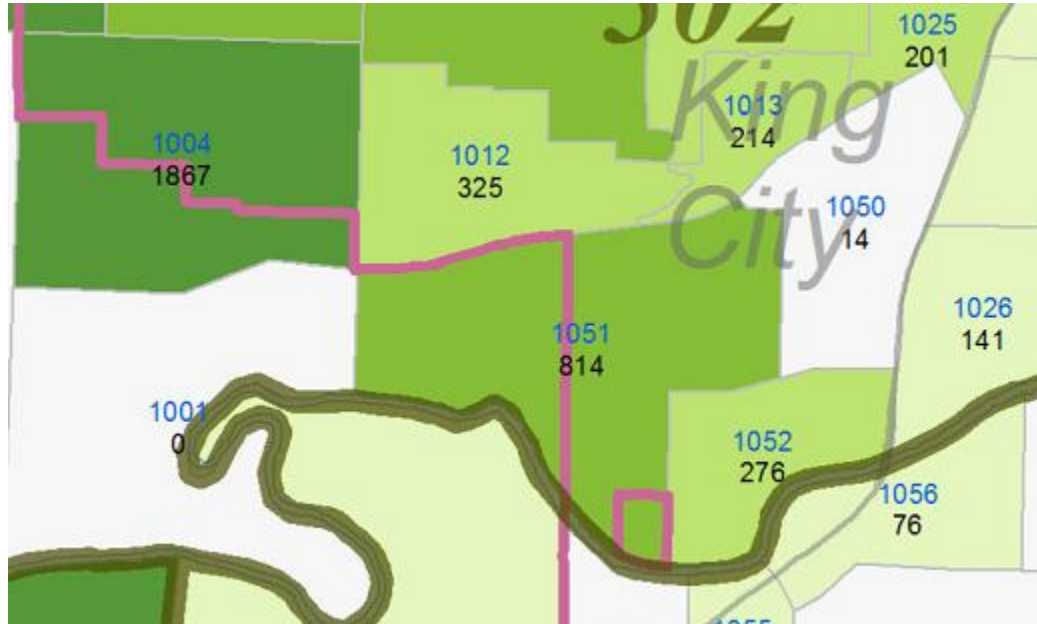


My question is regarding the meaning of the HH figures shown on Total HH Change map below. Are these figures indicating the anticipated number of units built/households accommodated by 2035? If so, it appears you're assuming that approximately ½ of the capacity in TAZs 1050 and 1051 (above map) would actually be used by 2035 and development of TAZ 1001 would occur sometime after 2035. This feels reasonable to me but TAZ 1052 does not with the number of new households appearing to exceed the capacity shown in the first map.

The map titled "Household Allocation Change from 2010 to 2035 by TAZ" shows the change / growth in households between years 2010 and 2035. The "blue number" is the TAZ designation and the "black" number is the number of households added to the TAZ between 2010 and 2035. In rare instances, the growth number in this map may exceed the dwelling unit capacity in the other map. This is due to the problem I explained at the county meeting in regard to the shortfall we predict in SF housing

## FINAL DRAFT

supplies/capacity throughout the region. Because the MetroScope model struggles to assign households to SF units when supplies run short, we get a mismatch in the total number of households that get assigned to any particular TAZ that is unresolved. What this means is that there is more demand for SF housing than practically exists based on our supply estimates for housing. The model is unable to resolve this conflict without more iterations (which we limit to 100 iterations due to the lengthy time it takes to complete one iteration) and therefore the number of households may exceed the supply of dwelling units in any TAZ.



Could you please clarify how comparisons between these two maps should be made? Thanks.

When I look at TAZ 1050, here's what I read from the data table for year 2035:

2010 HH = 955 dwelling units  
2025 HH = 955  
2035 HH = 969  
2010 to 2035 growth in HH = 14 more units / households  
2040 HH = 970 units  
2010 to 2040 growth in HH = 15  
HH Capacity through 2045 = 33 units  
% consumed of capacity by year 2035 =  $14/33 = 42\%$   
% consumed of capacity by year 2040 =  $15/33 = 47\%$

Other TAZ's you might want to review in addition to 1050 could be:

TAZ 1025 (a small part of King city overlaps into this TAZ – shared with Tigard)  
TAZ 1051 (ditto – also urban reserves begin to roll into the UGB in year 2035, so there will be subsequently more potential growth in this TAZ)  
TAZ 1052 (ditto – shared with uninc. Wash. co.)

I note that :

## FINAL DRAFT

TAZ 1025 has HH allocations in 2035 and 2040 that exceed 100% capacity – meaning more demand exists than allowable supply of housing stock to accommodate

TAZ 1051 consumes about half of the available capacity due in part to the assertion that urban reserves become available into the Metro UGB

TAZ 1052 allocations in 2035 and 2040 that exceed 100% capacity – meaning more demand exists than allowable supply of housing stock to accommodate

Not sure if you want to comment on all these suggested TAZ's, but recommend you talk to Steve Kelley. Finally if you all think that there is not a chance that (and I think that likely) that these two TAZ's (1025 and 1052) can exceed estimated dwelling capacity, I would like Steve to take custody of this overage and consider reassigning that capacity elsewhere in the county or other city in the county.

**Keith S. Liden**, AICP  
Lead Planner, PlaceMaking

### *Parsons Brinckerhoff*

400 SW 6th Avenue, Suite 802, Portland, OR 97204  
Direct: 503.478.2348/ Office: 503.274.8772  
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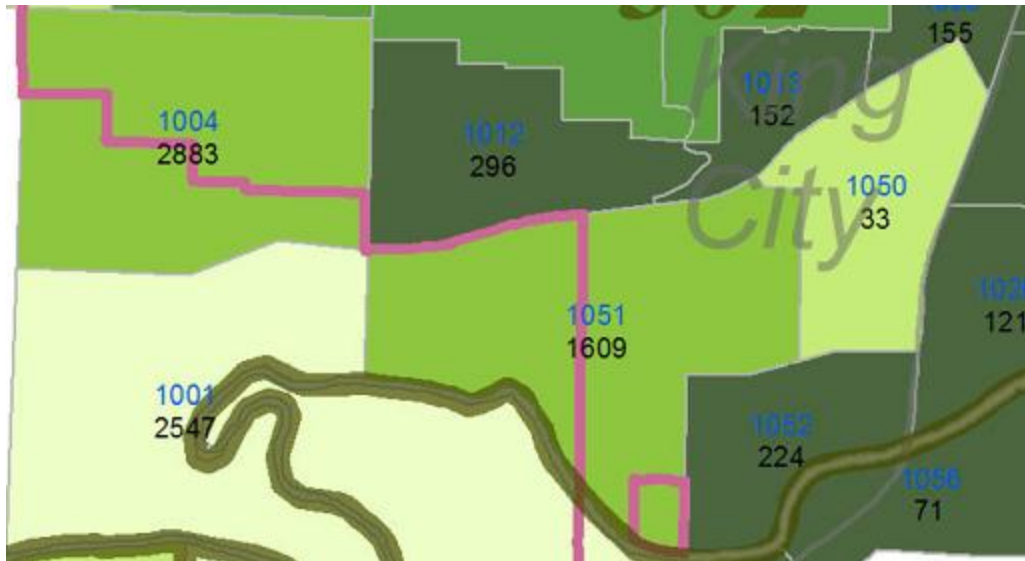
**From:** Liden, Keith S. [mailto:Liden@pbworld.com]  
**Sent:** Monday, August 06, 2012 8:25 AM  
**To:** Dennis Yee; Gerry Uba  
**Cc:** Dave Wells  
**Subject:** Metro 2035 HH Forecast - Question

Dennis and Gerry,

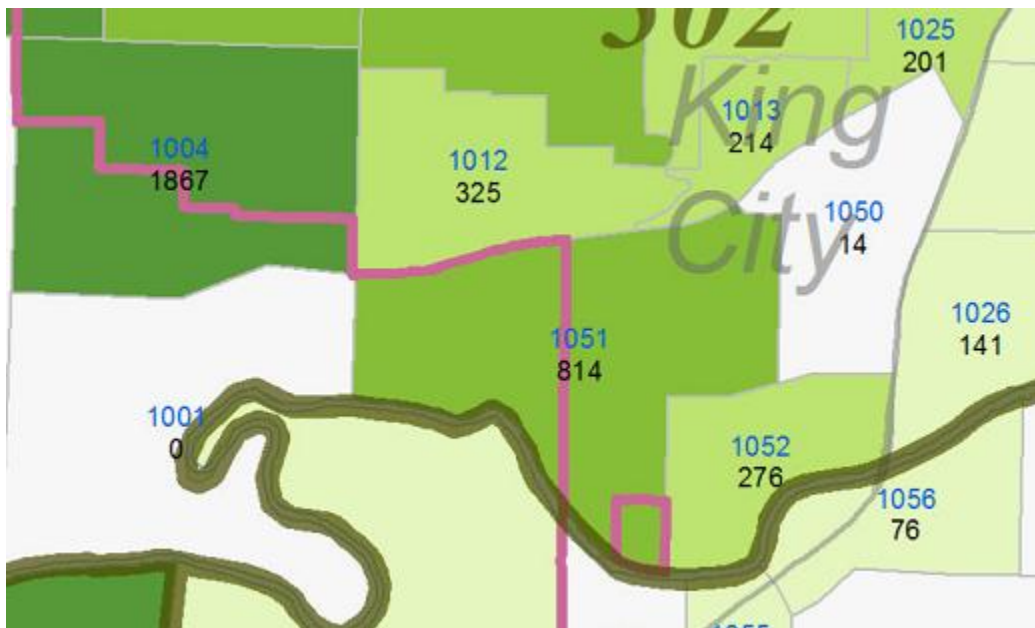
I'm reviewing the Metro forecast information you presented in Hillsboro on July 19<sup>th</sup> for King City. I have a question about the map titled "Gamma TAZ 2010-2035 Total HH Change" and how it compares to the information on a related map "Gamma TAZ 2010-2035 % HH Capacity Used."

My understanding of the % HH Capacity Used map is that it shows the additional HH capacity anticipated over the 2010-2035 period.

**FINAL DRAFT**



My question is regarding the meaning of the HH figures shown on Total HH Change map below. Are these figures indicating the anticipated number of units built/households accommodated by 2035? If so, it appears you're assuming that approximately ½ of the capacity in TAZs 1050 and 1051 (above map) would actually be used by 2035 and development of TAZ 1001 would occur sometime after 2035. This feels reasonable to me but TAZ 1052 does not with the number of new households appearing to exceed the capacity shown in the first map.



Could you please clarify how comparisons between these two maps should be made? Thanks.

**Keith S. Liden, AICP**  
Lead Planner, PlaceMaking

**Parsons Brinckerhoff**  
400 SW 6th Avenue, Suite 802, Portland, OR 97204  
Direct: 503.478.2348/ Office: 503.274.8772

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## CITY OF LAKE OSWEGO

**Distribution Adjustments completed (August 22, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Dennis Yee  
**Sent:** Wednesday, August 22, 2012 8:45 AM  
**To:** Conrad, Larry; Egner, Dennis; Gerry Uba  
**Subject:** RE: Lake Oswego 2035 Gamma Forecast Notes

Thanks Larry. This sounds fine by me.

Dennis

---

**From:** Conrad, Larry [<mailto:LarryC@co.clackamas.or.us>]  
**Sent:** Wednesday, August 22, 2012 8:33 AM  
**To:** Egner, Dennis; Dennis Yee; Gerry Uba  
**Subject:** RE: Lake Oswego 2035 Gamma Forecast Notes

We will move them to other areas by e-zone

Our comments will be forth coming by Monday

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

*(V) 503.742.4539*

[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

---

**From:** Egner, Dennis [<mailto:degner@ci.oswego.or.us>]  
**Sent:** Tuesday, August 21, 2012 12:13 PM  
**To:** Dennis Yee; Gerry Uba; Conrad, Larry  
**Subject:** Lake Oswego 2035 Gamma Forecast Notes

Dennis, Gerry, and Larry –

I've attached our proposed adjustments to the Gamma forecast. I focused on the 2035 forecast and did not make any adjustments for 2040. Please, let me know if you also need 2040 adjustments.

**FINAL DRAFT**

I'm assuming you guys can have these adjustments entered into your spread sheets. If I need to do it, please let me know.

Larry - The employment forecast includes adjustments that shift 2000 service jobs to Clackamas County.

Thanks,

Denny

Dennis Egner, AICP  
Assistant Planning Director/Long Range Planning Manager  
City of Lake Oswego  
PO Box 369, Lake Oswego, 97034  
503-697-6576



## CITY OF PORTLAND

**Distribution Adjustments completed (August 20, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Dennis Yee  
**Sent:** Monday, August 20, 2012 8:48 AM  
**To:** Armstrong, Tom; Jim Cser; Gerry Uba  
**Cc:** 'Charles BEASLEY'; Bouillion, Tom  
**Subject:** RE: Portland TAZ changes

Message received. If we have questions, we will follow up. Meanwhile, it will take some time to compile all comments.

One question, however, have these changes been coordinated with Tom Bouillion and Chuck?

Thanks

Dennis

---

**From:** Armstrong, Tom [<mailto:Tom.Armstrong@portlandoregon.gov>]  
**Sent:** Friday, August 17, 2012 3:46 PM  
**To:** Dennis Yee; Jim Cser; Gerry Uba  
**Subject:** Portland TAZ changes

Here are our changes. Let me know if you have questions.

Tom

---

**From:** Dennis Yee  
**Sent:** Wednesday, August 15, 2012 1:11 PM  
**To:** Armstrong, Tom; Gerry Uba; Jim Cser  
**Subject:** RE: 2035-2040 TAZ changes

Yes.

---

**From:** Armstrong, Tom [<mailto:Tom.Armstrong@portlandoregon.gov>]  
**Sent:** Wednesday, August 15, 2012 10:11 AM  
**To:** Gerry Uba; Dennis Yee; Jim Cser  
**Subject:** 2035-2040 TAZ changes

Still working on it - waiting for our Central City team's comments. When do you need these changes? Will Friday work?

---

**RE: West Hayden Island (Port of Portland)**

**From:** Bouillion, Tom [mailto:Tom.Bouillion@portofportland.com]  
**Sent:** Tuesday, August 21, 2012 4:07 PM  
**To:** Dennis Yee; Charles BEASLEY  
**Cc:** Gerry Uba  
**Subject:** RE: Portland TAZ changes

Thanks, I hadn't seen these. I'll take a look.

-Tom

**Tom Bouillion, AICP**  
*Planning Manager*  
*Marine & Industrial Development*  
*Port of Portland*  
*(503) 415-6615*

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Tuesday, August 21, 2012 4:04 PM  
**To:** Charles BEASLEY  
**Cc:** Bouillion, Tom; Gerry Uba  
**Subject:** FW: Portland TAZ changes

Here is the spreadsheet sent by Tom Armstrong. If you weren't tapped into these numbers/changes, please coordinate with me and Tom Armstrong.

Dennis

---

**From:** Armstrong, Tom [mailto:Tom.Armstrong@portlandoregon.gov]  
**Sent:** Friday, August 17, 2012 3:46 PM  
**To:** Dennis Yee; Jim Cser; Gerry Uba  
**Subject:** Portland TAZ changes

Here are our changes. Let me know if you have questions.

Tom

---

**From:** Bouillion, Tom [mailto:Tom.Bouillion@portofportland.com]  
**Sent:** Tuesday, July 10, 2012 5:00 PM  
**To:** 'Armstrong, Tom'; Dennis Yee; 'Charles BEASLEY'  
**Cc:** Gerry Uba  
**Subject:** RE: Multnomah County Cities TAZ Meeting July 10, 2012 - Long-term Forecast Distribution

**FINAL DRAFT**

Thanks, Tom and I will coordinate and get back to you Dennis.

-Tom

**Tom Bouillion, AICP**  
*Planning Manager*  
*Marine & Industrial Development*  
*Port of Portland*  
*(503) 415-6615*

---

**From:** Armstrong, Tom [<mailto:Tom.Armstrong@portlandoregon.gov>]  
**Sent:** Tuesday, July 10, 2012 4:24 PM  
**To:** 'Dennis Yee'; Bouillion, Tom; 'Charles BEASLEY'  
**Cc:** Gerry Uba  
**Subject:** RE: Multnomah County Cities TAZ Meeting July 10, 2012 - Long-term Forecast Distribution

I agree with WHI correction - and will submit change to bring it up to 600 in 2035. I will check on the PDX numbers and get back to Tom before submitting our changes.

---

**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Tuesday, July 10, 2012 4:15 PM  
**To:** Bouillion, Tom; 'Charles BEASLEY'; Armstrong, Tom  
**Cc:** Gerry Uba  
**Subject:** RE: Multnomah County Cities TAZ Meeting July 10, 2012 - Long-term Forecast Distribution

Gentlemen: When there is disagreement over TAZ estimates, it is preferable that the local government entities try to hash out differences. I thought in the 2025 TAZ distributions that the Port and Portland city had resolved differences. I don't initially want to pick one number over another suggested number and am hoping you all can come to a compromise position. Having said that, I am happy to participate in trying to work out something agreeable to all parties.

Thanks.

Dennis

---

**From:** Bouillion, Tom [<mailto:Tom.Bouillion@portofportland.com>]  
**Sent:** Tuesday, July 10, 2012 12:14 PM  
**To:** 'Charles BEASLEY'; Armstrong, Tom  
**Cc:** Gerry Uba; Dennis Yee  
**Subject:** RE: Multnomah County Cities TAZ Meeting July 10, 2012 - Long-term Forecast Distribution

Unfortunately I will be unable to attend this afternoon. I will provide more detailed comments at a later date for TAZs predominantly owned by the Port, but a couple areas stick out as being incorrect.

**PDX-** The TAZs that make up PDX include 138-140, 142, and 145-146. In aggregate, Metro shows the 2010 employment at **9,528**; 2025 employment at **10,168** and 2035 at **10,521**. We previously disagreed with the 2025 number, which was not changed, and we now disagree with the 2035 number.

**FINAL DRAFT**

The recently prepared PDX Master Plan includes a detailed forecast of enplaned passenger growth and is forecast to grow from 13.5 million in 2010 to over 27 million in 2035. These forecast numbers were prepared in consultation w/ Metro to incorporate regional population growth estimates. So while passenger growth is forecast to double by 2035, the employment growth should increase by at least 50-75%.

**WHI-** The TAZ for WHI is 124. Based on the traffic analysis for the WHI annexation process, we agreed with the City of Portland that 2025 should show 400 employees and 2035 and beyond should show 600 employees. The current Metro 2035 and 2040 forecast only shows 399 employees.

Let me know if you have questions-I'm happy to discuss further.

Thanks,

Tom

**Tom Bouillion, AICP**  
*Planning Manager*  
*Marine & Industrial Development*  
*Port of Portland*  
*(503) 415-6615*

---

**From:** Charles BEASLEY [<mailto:charles.beasley@multco.us>]  
**Sent:** Monday, July 09, 2012 11:25 AM  
**To:** Armstrong, Tom; Becky Gallien; Bill Peterson; Lindsey Nesbitt; Martin, Brian; [mayorhardie@aol.com](mailto:mayorhardie@aol.com); Rich Faith; Bouillion, Tom  
**Cc:** Gerry Uba; Dennis Yee  
**Subject:** Multnomah County Cities TAZ Meeting July 10, 2012 - Long-term Forecast Distribution

All,

Attached is the agenda for our meeting tomorrow afternoon. I hope to see you all then.

--

Chuck Beasley, Senior Planner  
Multnomah County Land Use Planning  
1600 SE 190th Avenue, Suite 116  
Portland, Oregon 97233  
[charles.beasley@multco.us](mailto:charles.beasley@multco.us)  
503-988-3043 ext 22610  
FAX 503-988-3389

## **CITY OF SHERWOOD**

**Distribution Adjustments completed (September 6, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

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**From:** Michelle Miller [mailto:MillerM@SherwoodOregon.gov]  
**Sent:** Thursday, September 06, 2012 10:44 AM  
**To:** Dennis Yee  
**Cc:** Julia Hajduk  
**Subject:** Sherwood Gamma TAZ comments.xlsx

Dennis,

Here are the comments we have on the 2045 numbers.

Thanks, Michelle

**Michelle Miller, AICP**

*Associate Planner*

City of Sherwood

[millerm@sherwoodoregon.gov](mailto:millerm@sherwoodoregon.gov)

503.625.4242

## CITY OF TIGARD

**Distribution Adjustments completed (August 5, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

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**From:** Dennis Yee  
**Sent:** Wednesday, September 05, 2012 4:29 PM  
**To:** Darren Wyss  
**Cc:** Gerry Uba; 'Steve Kelley'; 'Debbaut, Anne'; Tom McGuire  
**Subject:** RE: Metro gamma forecast numbers

Darren:

Thanks for your agreeable comments. I will review and incorporate your input into my master spreadsheet in which I am collecting and assessing comments from all jurisdictions.

Best,

Dennis

---

**From:** Darren Wyss [<mailto:darren@tigard-or.gov>]  
**Sent:** Wednesday, September 05, 2012 3:56 PM  
**To:** Dennis Yee  
**Cc:** Gerry Uba; 'Steve Kelley'; 'Debbaut, Anne'; Tom McGuire  
**Subject:** Metro gamma forecast numbers

Dennis,  
Tigard has finished its review of the 2035/2040 numbers and we are ok with the gamma forecast as presented. We are particularly happy with the household allocations in the Downtown Urban Renewal District (TAZ 1041 & 1042) and Tigard Triangle (TAZ 1038). However, we do expect to see more households in the Tigard Triangle once HCT decisions are finalized and this can be addressed in future models. As always, thanks for providing us ample time for review.

Darren Wyss  
Senior Planner  
Community Planning  
City of Tigard  
503-718-2442

## CITY OF TROUTDALE

**Distribution Adjustments completed (August 10, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

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**From:** Dennis Yee  
**Sent:** Friday, August 10, 2012 3:36 PM  
**To:** Elizabeth McCallum; Paulette Copperstone  
**Cc:** Gerry Uba; Rich Faith; 'Charles BEASLEY'  
**Subject:** RE: Final Gamma 2035-2040 Growth Distribution Files and Related Information

Thanks Elizabeth. Troutdale wins the prize for first city to register final comments into the 2035/2040 TAZ allocation. Congratulations and let me again reiterate my thanks for all of your hard work in assisting in this important work.

Dennis Yee  
Metro Economist

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**From:** Elizabeth McCallum [mailto:[elizabeth.mccallum@troutdaleoregon.gov](mailto:elizabeth.mccallum@troutdaleoregon.gov)]  
**Sent:** Friday, August 10, 2012 2:55 PM  
**To:** Paulette Copperstone  
**Cc:** Dennis Yee; Gerry Uba; Rich Faith  
**Subject:** RE: Final Gamma 2035-2040 Growth Distribution Files and Related Information

August 10, 2012

The City of Troutdale has no changes to suggest to HH or Employment.

Elizabeth A. McCallum, Senior Planner  
City of Troutdale  
Please make a note of the following:  
The new official mailing address is:  
**219 E. Historic Columbia River Hwy, Troutdale, OR 97060-2078**  
[elizabeth.mccallum@troutdaleoregon.gov](mailto:elizabeth.mccallum@troutdaleoregon.gov)  
phone: 503-674-7228  
fax 503-667-0524

**My office is located at:** 2200 SW 18th Way, Troutdale, OR 97060.

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**From:** Paulette Copperstone [mailto:[Paulette.Copperstone@oregonmetro.gov](mailto:Paulette.Copperstone@oregonmetro.gov)]  
**Sent:** Tuesday, July 03, 2012 12:12 PM

**FINAL DRAFT**

**To:** [kaha@westlinnoregon.gov](mailto:kaha@westlinnoregon.gov); [erin.aigner@greshamoregon.gov](mailto:erin.aigner@greshamoregon.gov); [jose.alvarez@clark.wa.gov](mailto:jose.alvarez@clark.wa.gov); Christine Amedzake; [susan.anderson@portlandoregon.gov](mailto:susan.anderson@portlandoregon.gov); [tom.armstrong@portlandoregon.gov](mailto:tom.armstrong@portlandoregon.gov); [asher@ci.milwaukie.or.us](mailto:asher@ci.milwaukie.or.us); [charles.beasley@multco.us](mailto:charles.beasley@multco.us); [preston@tigard-or.gov](mailto:preston@tigard-or.gov); Richard Benner; [adam.t.barber@multco.us](mailto:adam.t.barber@multco.us); [tom.bouillion@portofportland.com](mailto:tom.bouillion@portofportland.com); [boyce@ci.gladstone.or.us](mailto:boyce@ci.gladstone.or.us); [karenb@co.clackamas.or.us](mailto:karenb@co.clackamas.or.us); [ron@tigard-or.gov](mailto:ron@tigard-or.gov); Jim Cser; [campbella@ci.milwaukie.or.us](mailto:campbella@ci.milwaukie.or.us); [connellpc@comcast.net](mailto:connellpc@comcast.net); [larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us); Paulette Copperstone; [brent\\_curtis@co.washington.or.us](mailto:brent_curtis@co.washington.or.us); [anne.debbaut@state.or.us](mailto:anne.debbaut@state.or.us); Christina Deffebach; [jennifer.donnely@state.or.us](mailto:jennifer.donnely@state.or.us); [cdunlop@ci.oregon-city.or.us](mailto:cdunlop@ci.oregon-city.or.us); [degner@ci.oswego.or.us](mailto:degner@ci.oswego.or.us); Kim Ellis; Rich Faith; [tf Franz@ci.cornelius.or.us](mailto:tf Franz@ci.cornelius.or.us); [mfritzie@co.clackamas.or.us](mailto:mfritzie@co.clackamas.or.us); [randygra@co.clackamas.or.us](mailto:randygra@co.clackamas.or.us); [sgaschler@damascusoregon.gov](mailto:sgaschler@damascusoregon.gov); [camgil@co.clackamas.or.us](mailto:camgil@co.clackamas.or.us); [jharmon@ci.oswego.or.us](mailto:jharmon@ci.oswego.or.us); [mark@rtc.wa.gov](mailto:mark@rtc.wa.gov); [bob@rtc.wa.gov](mailto:bob@rtc.wa.gov); [chahn@ci.tualatin.or.us](mailto:chahn@ci.tualatin.or.us); [hajdukj@ci.sherwood.or.us](mailto:hajdukj@ci.sherwood.or.us); [mayorhardie@aol.com](mailto:mayorhardie@aol.com); [jonathan.harker@greshamoregon.gov](mailto:jonathan.harker@greshamoregon.gov); [susanh@tigard-or.gov](mailto:susanh@tigard-or.gov); [khofmann@ci.tualatin.or.us](mailto:khofmann@ci.tualatin.or.us); Mike Hoglund; [jholan@forestgrove-or.gov](mailto:jholan@forestgrove-or.gov); [jenniferh@co.clackamas.or.us](mailto:jenniferh@co.clackamas.or.us); [ahurd-ravich@ci.tualatin.or.us](mailto:ahurd-ravich@ci.tualatin.or.us); [steve.iwata@portlandoregon.gov](mailto:steve.iwata@portlandoregon.gov); [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us); [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us); [lkelly@beavertonoregon.gov](mailto:lkelly@beavertonoregon.gov); [ckerr@westlinnoregon.gov](mailto:ckerr@westlinnoregon.gov); [tkonkol@orc.org](mailto:tkonkol@orc.org); [nkraushaar@ci.oregon-city.or.us](mailto:nkraushaar@ci.oregon-city.or.us); [nels\\_mickaelson@co.washington.or.us](mailto:nels_mickaelson@co.washington.or.us); [chi.mai@odot.state.or.us](mailto:chi.mai@odot.state.or.us); [manglek@ci.milwaukie.or.us](mailto:manglek@ci.milwaukie.or.us); [brian.martin@greshamoregon.gov](mailto:brian.martin@greshamoregon.gov); [kevin.martin@portlandoregon.gov](mailto:kevin.martin@portlandoregon.gov); [ceddmail@beavertonoregon.gov](mailto:ceddmail@beavertonoregon.gov); Robin McArthur; [mikem@co.clackamas.or.us](mailto:mikem@co.clackamas.or.us); Elizabeth McCallum; [mikem@tigard-or.gov](mailto:mikem@tigard-or.gov); [rmeyer@ci.cornelius.or.us](mailto:rmeyer@ci.cornelius.or.us); [mmiddleton@beavertonoregon.gov](mailto:mmiddleton@beavertonoregon.gov); [dougmc@ci.hillsboro.or.us](mailto:dougmc@ci.hillsboro.or.us); [johnson.city@hotmail.com](mailto:johnson.city@hotmail.com); [neamtzu@ci.wilsonville.or.us](mailto:neamtzu@ci.wilsonville.or.us); [nesbittl@ci.fairview.or.us](mailto:nesbittl@ci.fairview.or.us); [darren.nichols@state.or.us](mailto:darren.nichols@state.or.us); [dono@ci.hillsboro.or.us](mailto:dono@ci.hillsboro.or.us); [oliver.orjiako@clark.wa.gov](mailto:oliver.orjiako@clark.wa.gov); [ortizp@ci.sherwood.or.us](mailto:ortizp@ci.sherwood.or.us); [epalmer@ci.damascus.or.us](mailto:epalmer@ci.damascus.or.us); Susan Patterson-Sale; [pauly@ci.wilsonville.or.us](mailto:pauly@ci.wilsonville.or.us); Cindy Pederson; [kirsten.pennington@odot.state.or.us](mailto:kirsten.pennington@odot.state.or.us); [billp@ci.wood-village.or.us](mailto:billp@ci.wood-village.or.us); [ann.pytynia@greshamoregon.gov](mailto:ann.pytynia@greshamoregon.gov); [lidwien.rahman@odot.state.or.us](mailto:lidwien.rahman@odot.state.or.us); [reynolds@ci.cornelius.or.us](mailto:reynolds@ci.cornelius.or.us); [patrickr@ci.hillsboro.or.us](mailto:patrickr@ci.hillsboro.or.us); [cityofrivergrove@yahoo.com](mailto:cityofrivergrove@yahoo.com); [driordan@forestgrove-or.gov](mailto:driordan@forestgrove-or.gov); [djrobbins@forestgrove-or.gov](mailto:djrobbins@forestgrove-or.gov); [rossonk@ci.milwaukie.or.us](mailto:rossonk@ci.milwaukie.or.us); [arouyer@ci.tualatin.or.us](mailto:arouyer@ci.tualatin.or.us); [jsalvon@beavertonoregon.gov](mailto:jsalvon@beavertonoregon.gov); [karen.c.schilling@multco.us](mailto:karen.c.schilling@multco.us); [tscott@ci.tualatin.or.us](mailto:tscott@ci.tualatin.or.us); [kia.selley@greshamoregon.gov](mailto:kia.selley@greshamoregon.gov); [ronshay@buzzworm.com](mailto:ronshay@buzzworm.com); [andrew\\_singelakis@co.washington.or.us](mailto:andrew_singelakis@co.washington.or.us); [elaine.smith@odot.state.or.us](mailto:elaine.smith@odot.state.or.us); [marty.snell@clark.wa.gov](mailto:marty.snell@clark.wa.gov); [jsonnen@westlinnoregon.gov](mailto:jsonnen@westlinnoregon.gov); [stark@ci.wilsonville.or.us](mailto:stark@ci.wilsonville.or.us); [dtaylor@beavertonoregon.gov](mailto:dtaylor@beavertonoregon.gov); Maribeth Todd; [jason@ci.happy-valley.or.us](mailto:jason@ci.happy-valley.or.us); Gerry Uba; Molly Vogt; [michaelw@ci.happy-valley.or.us](mailto:michaelw@ci.happy-valley.or.us); [vickiew@ci.hillsboro.or.us](mailto:vickiew@ci.hillsboro.or.us); John Williams; [cityofdurham@comcast.net](mailto:cityofdurham@comcast.net); Dennis Yee; [ningsheng.zhou@portlandoregon.gov](mailto:ningsheng.zhou@portlandoregon.gov)

**Cc:** Gerry Uba; Paulette Copperstone

**Subject:** Final Gamma 2035-2040 Growth Distribution Files and Related Information

Hello All,

The long-term (2035-2040) Gamma growth forecasts at the TAZ level have been completed and posted on the Metro FTP site for download and early review before the County coordination meetings scheduled this month. The FTP address is:

[ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/2035-2040\\_Review](ftp://ftp.oregonmetro.gov/dist/gm/TazAlloc2010/2035-2040_Review)

The information at the site includes Excel workbooks containing household and employment TAZ forecasts and several maps of TAZ level of household and employment forecasts. Metro staff will explain all of this information and answer your questions at the County coordination meetings. You will recall that we told you at the mid-term distribution meetings in February that four weeks had been allotted for local government comments on the long-term distributions.

The dates of the coordination meetings are:



**FINAL DRAFT**

- Multnomah County – Tuesday, July 10, 2012; 1:00 - 4:00 pm
- Clackamas County – Wednesday, July 11, 2012; 2:00 – 5:00 pm
- Washington County – Thursday, July 19, 2012; 2:00 – 5:00 pm

County coordinators (Chuck Beasley, Larry Conrad and Steve Kelley) will send you the meeting agendas and other details. Please mark your calendars with the dates above.

Thank you for your collaboration with Metro on the growth distribution project. This collaboration has resulted in many accomplishments including the comments of elected officials on the growth distribution process and land supply/capacity estimation method and assumptions, improved MetroScope land supply modules, and 2025 Gamma Growth Distribution.

Please do not hesitate to contact me or Dennis Yee (503-797-1578) at [dennis.yee@oregonmetro.gov](mailto:dennis.yee@oregonmetro.gov) if you have any questions. We look forward to seeing you over the next two weeks.

Thank you.

Gerry Uba

Metro  
Regional Growth Distribution Coordinator  
503-797-1737  
[gerry.uba@oregonmetro.gov](mailto:gerry.uba@oregonmetro.gov)

## **CITY OF TUALATIN**

**Distribution Adjustments completed (August 14, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

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**From:** Colin Cortes [mailto:CCortes@ci.tualatin.or.us]  
**Sent:** Tuesday, August 14, 2012 2:19 PM  
**To:** Dennis Yee  
**Cc:** AQUILLA HURD-RAVICH; Conrad, Larry; Steve Kelley  
**Subject:** Tualatin Comments on Metro 2035 Forecast

Dear Dennis,

Please see the attached comments.

Sincerely,

**Colin Cortes, AICP, CNU-A**  
Assistant Planner  
City of Tualatin | [Planning](#)  
503.691.3024 | Fax: 503.692.0147

## **CITY OF WEST LINN**

**Distribution Adjustments completed (September 10, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 10, 2012).

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**From:** Javoronok, Sara [<mailto:sjavoronok@westlinnoregon.gov>]  
**Sent:** Monday, September 10, 2012 10:46 AM  
**To:** Dennis Yee  
**Cc:** Sonnen, John  
**Subject:** TAZ 2035-2040

Dennis,

Thanks for your call. We've reviewed the forecasts and do not have changes to them. Please let me know if you have any additional questions.

Sara

---

 Sara Javoronok  
[sjavoronok@westlinnoregon.gov](mailto:sjavoronok@westlinnoregon.gov)  
*Associate Planner*  
22500 Salamo Rd  
West Linn, OR 97068  
P: (503) 722-5512  
F: (503) 656-4106  
Web: [westlinnoregon.gov](http://westlinnoregon.gov)

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Public Records Law Disclosure This e-mail is subject to the State Retention Schedule and may be made available to the public.

**FINAL DRAFT**

## **CITY OF WILSONVILLE**

**Distribution Adjustments completed (August 17, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

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**From:** Dennis Yee  
**Sent:** Friday, August 17, 2012 2:32 PM  
**To:** Pauly, Daniel  
**Cc:** Gerry Uba  
**Subject:** RE: 2035-2040 Gamma Forecast Comments from Wilsonville (Clack. Co.)

Got it thanks. If I have questions next week when I roll this together with others, I may give you a call.

Best

d

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**From:** Pauly, Daniel [<mailto:pauly@ci.wilsonville.or.us>]  
**Sent:** Friday, August 17, 2012 2:20 PM  
**To:** Dennis Yee  
**Subject:** RE: 2035-2040 Gamma Forecast Comments from Wilsonville (Clack. Co.)

Here you go. I made some modifications and extra columns, but, the feedback columns remain the same.



Daniel Pauly, AICP  
Associate Planner

City of Wilsonville Planning Division  
503-682-4960  
[pauly@ci.wilsonville.or.us](mailto:pauly@ci.wilsonville.or.us)

Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.

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**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Friday, August 17, 2012 2:16 PM  
**To:** Pauly, Daniel; [LarryC@co.clackamas.or.us](mailto:LarryC@co.clackamas.or.us)  
**Cc:** Neamtzu, Chris; Mangle, Katie; Gerry Uba  
**Subject:** RE: 2035-2040 Gamma Forecast Comments from Wilsonville (Clack. Co.)

Thanks Dan for turning in Wilsonville comments for the TAZ forecast. I review the details next week, but would you mind sending me the data in a spreadsheet? That would facilitate cutting and pasting into my main file.

## FINAL DRAFT

Best

Dennis Yee  
Metro Economist

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**From:** Pauly, Daniel [<mailto:pauly@ci.wilsonville.or.us>]  
**Sent:** Friday, August 17, 2012 2:13 PM  
**To:** [LarryC@co.clackamas.or.us](mailto:LarryC@co.clackamas.or.us)  
**Cc:** Neamtzu, Chris; Mangle, Katie; Dennis Yee; Gerry Uba  
**Subject:** 2035-2040 Gamma Forecast Comments from Wilsonville (Clack. Co.)

Larry

We have reviewed the 2035-2040 Gamma Forecast and had a good meeting with Dennis this last Monday to discuss some concerns.

While some of the jobs numbers seemed high at first glance, after comparison to regional totals and other similar sized jurisdictions as well as the available land we are comfortable with the total for the City. I have moved some numbers around within the Ezone that covers the majority of the City limits within Clackamas County, but as Dennis would say these are mainly “cosmetic”. We moved jobs out of Villebois (TAZ 971) where the mixed use zoning shows a lot more job capacity than the predominantly residential master plan calls for and the Town Center area (TAZ 966), where some of the numbers seemed unrealistically high. The jobs were moved to other nearby TAZ’s (974, 975) that seemed low on jobs or had additional capacity.

Our main topic of conversation when we met with Dennis on Monday was low HH numbers in urban reserves (mainly TAZ 985 and 1128) and the Frog Pond UGB Area (TAZ 976). Following the meeting with Dennis we are fine with the overall HH numbers. We have made some changes, which Dennis would again call “cosmetic”, by shifting most of the above capacity allotment from different TAZ’s within the Ezone to the TAZ 985 and 976. All of the 2035 over capacity allotment was shifted to Frog Pond (TAZ 976) representing a build out of the area currently within the UGB. While some of the 2040 over capacity allotment was left in the respective TAZ’s most of it was split between TAZ 985 and 976, realizing some of the additional growth indicated in 976 may actually be in TAZ 1128 across the street, but in a different Ezone.

T A Z 2 1 6 2		20 Re tai l	20 Ser vic e	20 Ot he r	20 To ta l	Please input your review comments or explanation for the change(s) below 2035 comments
9 6 5 9 6	1					
	2	1, 47	20 69	15 55	5, 10	job numbers seem

T A Z 2 1 6 2		20 Re tai l	20 Ser vic e	20 Ot he r	T o t a l	Please input your review comments or explanation for the change(s) below 2040 comments
9 6 5 9 6					0	
		15 79	22 02	15 84	5 3	job numbers seem somewhat high.

6	7			1	somewhat high. 152 other jobs transferred to TAZs 974 and 975, just north.	6				6	Jobs moved to TAZs 974 and 975, just north within same Ezone.
9						9					
6						6					
7	2					7				0	
9						9					
6						6					
8	2					8				0	
9						9					
6						6					
9	2					9				0	
9						9					
7						7					
0	2					0				0	
					more consistent with adopted Master Plan for Master Plan and assumed build out prior to 2035						more consistent with adopted Master Plan for Master Plan and assumed build out prior to 2040
9						9				6	
7		12	20	25	58	7	15	21	26	2	
1	2	8	3	0	1	1	6	3	0	9	
9						9					
7						7					
2	2					2				0	
9						9					
7						7					
3	3					3				0	
					Service jobs low, new number follows pattern of jurisdiction comments for 2025 forecast and variety of employment types allowed in zone						Service jobs low, new number follows pattern of jurisdiction comments for 2025 forecast and variety of employment types allowed in zone, moved from within Ezone
9						9				2	
7		14	32	17	2, 24	7	15	55	19	7	
4	2	1	9	75	5	4	2	8	95	0	
										5	Other jobs moved from elsewhere in Ezone as more likely location for
9					5,	9				6	
7			23	30	51	7		24	30	4	
5	2	69	50	96	5	5	88	90	71	9	

					likely location for jobs development					jobs development
9						9				
7						7				
6	2					6			0	
9						9				
7						7				
7	3					7			0	
9						9				
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7						7				
9	3					9			0	
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9						9				
8						8				
5	2					5			0	
1						1				
1						1				
2						2				
2	3					2			0	
1						1				
1						1				
2						2				
3	4					3			0	
1						1				
1						1				
2						2				
8	4					8			0	

TAZ 2162	Total HH 2035	Please input your review comments or explanation for the change
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965		
966	2,237	Reduce HH by 146 to bring to capacity and consider the unlikely further development of a FUD z
967		
968		
969	1,228	Reduce HH by 130 to bring to capacity, move within E Zone
970		
971		
972		
973		
974		
975		
976	1,022	Increase by 302 HH based on local knowledge of probable build out of area currently in UGB, HH
977		
978		
979		
980		
981		
982		
984	386	Reduce HH by 26 to capacity, move within Ezone
985		
1122		
1123		
1128		



Daniel Pauly, AICP  
Associate Planner

City of Wilsonville Planning Division  
29799 SW Town Center Loop East  
Wilsonville OR 97070  
503-682-4960  
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Disclosure: Messages to and from this E-mail address may be subject to Oregon Public Records Law.



## WOOD VILLAGE

**Distribution Adjustments completed (August 17, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Dennis Yee  
**Sent:** Friday, August 17, 2012 11:33 AM  
**To:** Carole Connell; 'Charles BEASLEY'; Gerry Uba  
**Cc:** Bill Peterson  
**Subject:** RE: Wood Village TAZ data

Thanks Carole

It was equally nice talking to you and getting your feedback concerning employment and household allocations settled for Wood Village.

Best,

Dennis Yee  
Metro Economist

---

**From:** Carole Connell [<mailto:connellpc@comcast.net>]  
**Sent:** Friday, August 17, 2012 10:19 AM  
**To:** 'Charles BEASLEY'; Dennis Yee; Gerry Uba  
**Cc:** Bill Peterson  
**Subject:** Wood Village TAZ data

Chuck:

As a follow up to our recent correspondence, I had a good conversation with Dennis Yee today regarding the TAZ forecast data for Wood Village. Dennis was able to clarify for me in detail the boundaries between the TAZ boundaries and the corresponding household and employment projections. I understand Bill Peterson, Wood Village City Administrator, has also worked closely with Dennis and Metro staff to review the projections. I can report with confidence that we're all in agreement with the Wood Village TAZ zone projections. Thanks to all for your cooperation and the good work!

*Carole Wells Connell, AICP*  
*Consulting Land Use Planner for Wood Village*  
4626 SW Hewett Blvd.  
Portland, OR 97221  
503-297-6660  
[connellpc@comcast.net](mailto:connellpc@comcast.net)

**FINAL DRAFT**

**From:** Charles BEASLEY [<mailto:charles.beasley@multco.us>]

**Sent:** Wednesday, July 18, 2012 2:01 PM

**To:** Carole Connell

**Subject:** Re: Mult Co 7/10/12 Cities Meet - Handouts

Carole,  
Metro wants to hear back by August 17. I've attached the updated project schedule here as well.

Let me know if you have further questions and I'll help sort them out.

C.

On Wed, Jul 18, 2012 at 10:40 AM, Carole Connell <[connellpc@comcast.net](mailto:connellpc@comcast.net)> wrote:

Chuck: I was able o get the Wood Village data broken out, and am wondering when comments are due back?

---

**From:** Charles BEASLEY [<mailto:charles.beasley@multco.us>]

**Sent:** Wednesday, July 11, 2012 8:45 AM

**To:** [connellpc@comcast.net](mailto:connellpc@comcast.net)

**Cc:** Bill Peterson

**Subject:** Mult Co 7/10/12 Cities Meet - Handouts

Carol,

Good to talk with you this morning, and thanks for looking into these numbers.

I've attached the two handouts from the meeting, a summary of the modeling procedure used by Metro, and the updated project schedule.

Please let me know if you have additional questions and I'll help you get the info you need.

regards,

--

Chuck Beasley, Senior Planner  
Multnomah County Land Use Planning  
1600 SE 190th Avenue, Suite 116  
Portland, Oregon 97233  
[charles.beasley@multco.us](mailto:charles.beasley@multco.us)

[503-988-3043](tel:503-988-3043) ext 22610

FAX [503-988-3389](tel:503-988-3389)

## CLACKAMAS COUNTY

**Distribution Adjustments completed (September 6, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Thursday, September 06, 2012 3:12 PM  
**To:** Dennis Yee; Gerry Uba  
**Cc:** Queener, David; Itel, Kenneth; Steve Gaschler; Erika Palmer; Brian Brown; Scott Lazenby; Tracy Brown; Hoelscher, Scott; Glasgow, Clay  
**Subject:** RE: Clackamas County - Partial Comments on 2035 Gamma Forecast

These are the only detail comments that we sent

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

*(v) 503.742.4539*

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"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

---

**From:** Dennis Yee [mailto:Dennis.Yee@oregonmetro.gov]  
**Sent:** Thursday, September 06, 2012 1:43 PM  
**To:** Conrad, Larry; Gerry Uba  
**Cc:** Queener, David; Itel, Kenneth; Steve Gaschler; Erika Palmer; Brian Brown; Scott Lazenby; Tracy Brown; Hoelscher, Scott; Glasgow, Clay  
**Subject:** RE: Clackamas County - Partial Comments on 2035 Gamma Forecast

Did you send other detailed comments for unincorporated Clackamas county under separate email? I am unable to find them in my inbox. Could you please resend?

Dennis

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Monday, August 27, 2012 12:10 PM  
**To:** Gerry Uba; Dennis Yee; Jim Cser  
**Cc:** Hughes, Jennifer; 'Jennifer Donnelly'; Rogalin, Ellen; Chandler, Daniel; Roth, Christine; Steve Kelley; Chuck Beasley (Charles.Beasley@co.multnomah.or.us); Fritzie, Martha; Gilevich, Shari; McCallister, Mike;

## FINAL DRAFT

Barth, Gary; Gilmour, Cam; Comer, Catherine; Rede, Simone; Johnson, Dan; Queener, David; Itel, Kenneth; Steve Gaschler; Erika Palmer; Brian Brown; Scott Lazenby; Tracy Brown; Hoelscher, Scott; Glasgow, Clay

**Subject:** Clackamas County - Partial Comments on 2035 Gamma Forecast

**Importance:** High

Clackamas County has been please to be involved in the review of the Metro 2035 / 2045 Forecast of Household and Employment, Gamma Version.

The process has been open and our comments have been addressed in a satisfactory manner. The County will only be commenting on the forecast through 2035 because that is our planning horizon and the amount of uncertainty in the forecast increases as the forecasting period lengthens.

### Specific Changes Recommended

#### *Mount Hood Corridor / Sandy Household forecast*

As a first step in the County Rural Population Coordination Process, the County recommends the shift 1000 units to Sandy from TAZ 961. This household will be allocated as follows :

TAZ	Area / City	2010 Households	2035 Households Gamma	<i>Household Growth 2010-2035</i>	<i>County Modified Growth Forecast</i>
834	Sandy	611	1,297	686	886
835	Sandy	386	451	65	65
836	Sandy	222	674	452	652
837	Sandy	1,436	1,749	313	513
838	Sandy	1,568	2,213	645	845
839	Sandy	102	251	149	349
961	Villages at Mt Hood / Government Camp	1,997	4,246	2,249	1,249

#### *Lake Oswego Service Employment Forecast Reallocation*

Lake Oswego has asked the County to reallocate 2000 service sector jobs. The County suggests the following reallocations.

E – Zone	Additional Service Jobs
201	300

202	500
203	500
204	400
206	300

### General Comments on 2035 Gamma Forecast

A initial review of the forecast for the LRT Station Areas raises a number of concerns including the low level of forecast household growth. The County's concerns on this issue will be outline in a forth coming set of general comments that are currently under review by County Staff.

LRT Station Area TAZ	New Housing Units	New Jobs
Park Avenue	283	580
Fuller Road	61	730
Clackamas Town Center	456	1,900
<b>LRT Station Area Totals</b>	<b>800</b>	<b>3,210</b>

### Rural Clackamas Forecasting Issues

Clackamas County is current working with the Rural Cities (Sandy, Estacada, Molalla, Canby and Barlow) to develop a Coordinated Population Forecast for Rural Clackamas County and the Rural City as required by ORS 197.

**Although Clackamas County has a number of concerns about the allocations assumed in the Metro Regional Forecast for rural Clackamas County and the Rural Cities, we will use 23,182 new household (2010 to 2035) and 14,425 new jobs (2010 to 2035) as the control total for Rural Clackamas County in our Coordinated Population Forecast process.**

The current Metro growth allocation in the Gamma Forecast appear to be influence by a weak understanding of the land supply conditions in Rural Clackamas County. For example, Metro's assumed capacity for Rural Unincorporated Clackamas County is higher than any previous rural residential capacity identified by the County. In addition the 2035 Gamma Forecast exceeds both of those numbers.

Fortunately, the Rural Cities have additional capacity within their existing UGB's and have the ability to expand their UGB's is a need is identified to meeting future demands such as those currently identified by this forecast.

<i>Rural Area Forecast by TAZ</i>	<i>New Housing Units</i>	<i>Metro Assumed Household</i>	<i>City Capacity Household Estimates</i>	<i>New Jobs</i>	<i>City Capacity Job Estimates</i>
<i>City / Unincorporated</i>					

Area		Capacity			
<i>Rural Cities – East County (Sandy and Estacada)</i>	<i>3,234</i>	<i>5,500 (S) 1,000 (E)</i>	<i>3,114 (S)* n/a (E)</i>	<i>5,131</i>	<i>≈3,400 (S)* ≈4,380 (E)**</i>
<i>Rural Cities – Southwest County (Canby, Molalla and Barlow)</i>	<i>6,007</i>	<i>5,500 (C) 2,000 (M) n/a (B)</i>	<i>4,403 (C) ≈500 (M)*** n/a (B)</i>	<i>5,432</i>	<i>4,623 (C) ≈2,060 (M)*** n/a (B)</i>
<b>Total for Rural City</b>	<b>9,241</b>	<b>13,500</b>		<b>10,563</b>	
<i>Rural Unincorporated East County</i>	<i>4,047</i>	---	---	<i>2,701</i>	---
<i>Rural Unincorporated Southwest County</i>	<i>7,395</i>	---	---	<i>2,919</i>	---
<i>Rural Unincorporated Northwest County</i>	<i>2,500</i>	---	---	<i>936</i>	---
<b>Total Rural Unincorporated Area</b>	<b>13,942</b>	<b>9,700</b>	<b>6,000- 8,000</b>	<b>3,863</b>	<b>n/a</b>
<b>Total Rural TAZ Clackamas County</b>	<b>23,183</b>	<b>23,200</b>		<b>14,425</b>	

\*Based on 2009 Urbanization Report (ECONorthwest)

\*\* 2009 EOA report (Cogen Owens Cogen) found 116.23 acres of buildable commercial land and 329.36 acres of buildable industrial land – assumes 15 empl/acre commercial and 8 empl/acre industrial.

\*\*\*2008 BLI found 71 acres of buildable residential land in the UGB. Assumes 7 units per acre (per OAR 660-024a table1 “safe harbor”) BLI found 52 acres of buildable commercial land and 160 acres of buildable industrial land – assumes 15 empl/acre commercial and 8 empl/acre industrial.

**The County will work with the Rural Cities over the next several months to revision the Rural Forecast and to produce a more reasonable rural growth allocation. The County will then send you the final version of these changes to the rural allocations for inclusion in your regional forecast.**

Additional comments on the household forecast are undergoing a review and will be sent to you later this week. This includes comments on the Stafford Basin Urban Reserve assumptions, the Damascus / Happy Valley Forecast and the assumptions used in the housing market allocations.

### **Employment Comments**

General employment forecast comments are undergoing a review and will be sent to you later this week. This includes comments on the Stafford Basin Urban Reserve assumptions.

I hope these comments are helpful.

Sorry for the delay in getting them to you.

Larry Conrad  
Principal Transportation Planner

(v) 503.742.4539

[larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us)

*"Our obligation is to not mistake slogans for solutions."*

Edward R Murrow

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Monday, August 20, 2012 9:04 AM  
**To:** Dennis Yee; Gerry Uba  
**Cc:** Fritzie, Martha; Gilevich, Shari; Barth, Gary; Rede, Simone  
**Subject:** Gamma Forecast Comments

Dennis

Our comment on the Gamma forecast will be to you by Thursday --

Larry Conrad  
Principal Transportation Planner

(v) 503.742.4539

[larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us)

*"Our obligation is to not mistake slogans for solutions."*

Edward R Murrow

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]  
**Sent:** Wednesday, August 15, 2012 9:05 AM  
**To:** Dennis Yee; Jim Cser; Gerry Uba  
**Subject:** FW: Comparison Metro 2035 Forecasts

FYI

*LARRY CONRAD*  
*PRINCIPAL TRANSPORTATION PLANNER*  
*(v) 503.742.4539*  
[LARRYCON@CO.CLACKAMAS.OR.US](mailto:LARRYCON@CO.CLACKAMAS.OR.US)

"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

**From:** Conrad, Larry  
**Sent:** Wednesday, August 15, 2012 8:28 AM  
**To:** Conrad, Larry; McCallister, Mike; Hughes, Jennifer; Fritzie, Martha; Gilevich, Shari; Barth, Gary; Comer, Catherine; Hagen, Cindy; Chandler, Daniel; Johnson, Dan; Hoelscher, Scott; Glasgow, Clay; Abbott, Sarah; Buehrig, Karen  
**Cc:** Gilmour, Cam; Bezner, Mike; Rogalin, Ellen; Roth, Christine; Marek, Joe; Itel, Kenneth; Queener, David; Marc Butorac; Erin Ferguson; Susan Wright  
**Subject:** RE: Comparison Metro 2035 Forecasts

Here is the change in the employment forecast between the Beta Forecast and the Gamma Forecast –

The Gamma Forecast **reduces the forecast employment** in the County by more than 137,000 jobs

*LARRY CONRAD*  
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"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

**From:** Conrad, Larry  
**Sent:** Tuesday, August 14, 2012 11:58 AM  
**To:** McCallister, Mike; Hughes, Jennifer; Fritzie, Martha; Gilevich, Shari; Barth, Gary; Comer, Catherine; Hagen, Cindy; Chandler, Daniel; Johnson, Dan; Hoelscher, Scott; Glasgow, Clay; Abbott, Sarah  
**Cc:** Gilmour, Cam; Bezner, Mike; Rogalin, Ellen; 'Roth, Christine ([christinerot@co.clackamas.or.us](mailto:christinerot@co.clackamas.or.us))'; Marek, Joe; Itel, Kenneth; Queener, David; Marc Butorac; Erin Ferguson; Susan Wright



**FINAL DRAFT**

**Subject:** Comparison Metro 2035 Forecasts

**Importance:** High

Just a quick bit of information for you –

The previous forecast – BETA was used for the RTP, the Urban reserve process and the first round of TSP update modeling (Low Build and Full Build) .

The 2035 BETA forecast for Clackamas County is larger than the 2035 Gamma Forecast. The difference is more than 14,000 housing units.

The 2035 Gamma Forecast is the one that we are currently reviewing.

Also here is a reminder that I need your comments on the Metro 2035 Gamma Forecast by the Thursday if at all possible.

Thanks

Larry Conrad  
Principal Transportation Planner

(v) 503.742.4539

[larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us)

*"Our obligation is to not mistake slogans for solutions."*

---

**From:** Conrad, Larry [mailto:LarryC@co.clackamas.or.us]

**Sent:** Wednesday, August 15, 2012 9:04 AM

**To:** Dennis Yee

**Cc:** Gerry Uba; Jim Cser; Buehrig, Karen

**Subject:** RE: Difference between Beta and Gamma

For those of us who are working on TSP updates - a number of cities and counties – the difference between these 2 forecasts is a very large issue

Many of us have been using the Beta forecast for our initial modeling runs – and expected to shift to Gamma forecast when it became available. There is a potentially large problem with our initial analysis.

LARRY CONRAD

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"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

---

**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Wednesday, August 15, 2012 8:53 AM  
**To:** Conrad, Larry  
**Cc:** Gerry Uba; Jim Cser  
**Subject:** RE: Difference between Beta and Gamma

I wouldn't compare to closely the "differences" between beta and gamma. There were significant changes that were recommended between the two distributions. Recall that beta was prepared prior to the July 22 summit with local planning directors. At the meeting, there was a wide call for us to take more time with review of the input assumptions, especially capacity estimates. We took several months more to hammer out differences in capacity assumptions, which got rolled into gamma, but not beta. Even though I don't recall substantive changes between beta and gamma for Clackamas county areas / cities, changes implemented in Portland and Washington county and its cities appear to be the prime cause for differences in allocations. MetroScope – as an equilibrium model – will rebalance the allocations according to the new supply and sometimes this rebalance will tip the scales significantly in unexpected dimensions.

I should have more details by tomorrow, but this is the general explanation for now.

Dennis

---

**From:** Conrad, Larry [<mailto:LarryC@co.clackamas.or.us>]  
**Sent:** Tuesday, August 14, 2012 5:46 PM  
**To:** Dennis Yee  
**Cc:** Jim Cser  
**Subject:** RE: Difference between Beta and Gamma

I will have final number in the morning but employment is a order of magnitude worse

*LARRY CONRAD*

*PRINCIPAL TRANSPORTATION PLANNER*

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"IT AIN'T WHAT YOU DON'T KNOW THAT GETS YOU INTO TROUBLE. IT'S WHAT YOU KNOW FOR SURE THAT JUST AIN'T SO."

MARK TWAIN

---

**From:** Dennis Yee [<mailto:Dennis.Yee@oregonmetro.gov>]  
**Sent:** Tuesday, August 14, 2012 4:21 PM  
**To:** Conrad, Larry  
**Cc:** Jim Cser  
**Subject:** RE: Difference between Beta and Gamma

**FINAL DRAFT**

We are researching it, but we have plausible explanations...more on this later in the week.

Thanks

Dennis

---

**From:** Conrad, Larry [<mailto:LarryC@co.clackamas.or.us>]

**Sent:** Tuesday, August 14, 2012 1:24 PM

**To:** Dennis Yee

**Subject:** Difference between Beta and Gamma

**Importance:** High

I am at a lost to explain this large of a change

Lawrence M Conrad  
Principal Transportation Planner  
Department of Transportation and Development  
Clackamas County  
150 Beavercreek Road  
Oregon City, OR 97045

(v) 503.742.4539

[larrycon@co.clackamas.or.us](mailto:larrycon@co.clackamas.or.us)

In keeping with the County's sustainability goals our Department is open Monday – Thursday and is closed on Fridays.

## **MULTNOMAH COUNTY**

**Distribution Adjustments completed (August 27, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Dennis Yee  
**Sent:** Monday, August 27, 2012 9:07 AM  
**To:** Charles BEASLEY  
**Cc:** Gerry Uba  
**Subject:** RE: Mult Co Rural TAZ

Will make the changes per your note concerning TAZ 660.

Thanks for your helping hands. The next major email will likely be a consolidated spreadsheet similar to the one you reviewed but with the final set of TAZ reviews for jobs and households. That should be the end of the technical portion of this project...and then switching over to the politics side of adoption by resolution or ordinance by Metro.

Dennis

---

**From:** Charles BEASLEY [<mailto:charles.beasley@multco.us>]  
**Sent:** Thursday, August 23, 2012 4:00 PM  
**To:** Dennis Yee  
**Subject:** Re: Mult Co Rural TAZ

Dennis,  
Re employment in these rural TAZ, it isn't clear what source of new jobs will occur in the future for areas outside of urban reserves since these areas are for the most part already developed with farm or forest related uses. There are other minor employment uses like parks, processing, and home occupations. The one TAZ that seems out of the range of increase in other TAZ is 660 showing increase from 2025 - 2040 of 50 total. I think an increase of 20 is more consistent with other areas nearby. Please make this change for us.

thanks

Chuck

---

**From:** Dennis Yee  
**Sent:** Tuesday, August 21, 2012 4:04 PM  
**To:** Charles BEASLEY  
**Cc:** Bouillion, Tom; Gerry Uba  
**Subject:** FW: Portland TAZ changes

Here is the spreadsheet sent by Tom Armstrong. If you weren't tapped into these numbers/changes, please coordinate with me and Tom Armstrong.

**FINAL DRAFT**

Dennis

---

**From:** Armstrong, Tom [<mailto:Tom.Armstrong@portlandoregon.gov>]  
**Sent:** Friday, August 17, 2012 3:46 PM  
**To:** Dennis Yee; Jim Cser; Gerry Uba  
**Subject:** Portland TAZ changes

Here are our changes. Let me know if you have questions.

Tom

---

**From:** Dennis Yee  
**Sent:** Tuesday, August 21, 2012 4:03 PM  
**To:** Charles BEASLEY  
**Cc:** Gerry Uba  
**Subject:** RE: Mult Co Rural TAZ

Already done so in my master spreadsheet. Will look forward to your job comments.

d

---

**From:** Charles BEASLEY [<mailto:charles.beasley@multco.us>]  
**Sent:** Tuesday, August 21, 2012 4:01 PM  
**To:** Dennis Yee  
**Subject:** Re: Mult Co Rural TAZ

Dennis,  
Thanks much for discussing the HH by TAZ data with me. Please go ahead and reduce the capacity to reflect that our March 8 reconciliation is total capacity for the taz.  
Re the declining percentages, we touched on several additional TAZ where this occurs. Thanks for looking in to this and revising these since they don't appear to be areas where capacity will increase.

I will review the employment data asap this week.

thanks

Chuck

On Thu, Aug 16, 2012 at 4:22 PM, Dennis Yee <[Dennis.Yee@oregonmetro.gov](mailto:Dennis.Yee@oregonmetro.gov)> wrote:  
[Let's talk Monday. Have a good weekend. Meanwhile I'll take a closer look at the TAZ you mentioned.](#)

---

**From:** Charles BEASLEY [<mailto:charles.beasley@multco.us>]  
**Sent:** Thursday, August 16, 2012 4:10 PM  
**To:** Dennis Yee  
**Subject:** Mult Co Rural TAZ

**FINAL DRAFT**

Dennis,

Why would %2045 capacity used by 2025 be higher than in subsequent time periods? I'm looking at TAZ 42. If 2045 capacity is 92% used by 2025, how can a lower amount, 77% be used by 2035?

Also, our reconciliation of HH back in March was intended on my end to reflect all additional capacity for the TAZ. I'm referring to the March 8 email. For example, TAZ 51 has total supply at 186. But the map is showing and additional 246 HH.

Since I'm out tomorrow, I can only pick this up again next Monday. I hope that doesn't delay the project too much.

--

Chuck Beasley, Senior Planner  
Multnomah County Land Use Planning  
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FAX [503-988-3389](tel:503-988-3389)

## WASHINGTON COUNTY

**Distribution Adjustments completed (September 3, 2012):** Add an explanation of the consensus that was reached by Metro and the local government during the comment and response period (August 15 – September 5, 2012).

---

**From:** Steve Kelley [mailto:Steve\_Kelley@co.washington.or.us]  
**Sent:** Monday, September 03, 2012 12:06 PM  
**To:** Dennis Yee  
**Cc:** Brian Hanes; Andy Back  
**Subject:** Regional Growth Allocations Review - Washington County Unincorporated TAZ's

Dennis;

In case you did not receive this last week (Brian attempted to get it to you but we were having Network & E-mail system problems Thursday & Friday -- hopefully, they are fixed )  
- I seem to have a long list of "Delivery Status Notifications" in my inbox.

**Here's the link to our TAZ Review file posted on our FTP server.**

<FTP://tbq5.co.washington.or.us/Metro>

There is a worksheet tab in the **Wash-Co 2045-Employ-Cap-by-TAZ June-2012.xls** workbook titled: **"Wash Co Review 2045"** - This table shows estimates of post 2040 capacity estimates (surplus / deficit) for both jobs and housing units. The purpose of this methodology is to allow you / MetroScope to determine the timing and amount of the allocations as long as they do not exceed estimated 2045 capacity.

(I think that the majority of the estimated 2045 capacities in Washington County could be achieved by 2030 if the demand existed - (all services with the possible exception of transportation could be provided by that time).

Give me a call if you have any questions or would like to continue our growth allocations discussion.

**Also note:**

- 1) I have an e-mail from Dick Reynolds in Cornelius - he apparently wants to discuss the allocations before responding to your questions to him. I will attempt to call him some time early this week.
- 2) **We remain concerned about the capacity estimates in Portland and plan to review the long-term allocations to currently developed lands in areas outside of downtown.**
- 3) **We would also like to see the transportation model outputs for 2030 to 2040. I don't think it makes much sense to sanction growth allocations that cannot 'reasonably' be accommodated by our transportation system.**

Steve

*Steven D. Kelley, Senior Planner  
Washington County - Dept. of Land Use and Transportation  
155 N. First Ave. - Suite 350-14  
Hillsboro, OR. 97124  
Phone: (503) 846-3593  
E-Mail: [steve\\_kelley@co.washington.or.us](mailto:steve_kelley@co.washington.or.us)*

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING THE	)	
DISTRIBUTION OF THE POPULATION	)	Ordinance No. 12-1292
AND EMPLOYMENT GROWTH TO YEAR	)	
2035 TO TRAFFIC ANALYSIS ZONES IN	)	Introduced by Councilor Kathryn
THE REGION CONSISTENT WITH THE	)	Harrington
FORECAST ADOPTED BY ORDINANCE	)	
NO. 11-1264B IN FULFILLMENT OF	)	
METRO'S POPULATION COORDINATION	)	
RESPONSIBILITY UNDER ORS 195.036	)	

WHEREAS, ORS 195.025 designates Metro as the local government responsible for coordination of planning activities within the Metro district; and

WHEREAS, ORS 195.036 requires the designated local government responsible for coordination of planning activities in a region to establish and maintain a population forecast for the area within its boundary and to coordinate the forecast with the other local governments within the boundary; and

WHEREAS, the Metro Council adopted a population and employment forecast for the region by Ordinance No. 11-1264B ("For the Purpose of Expanding the Urban Growth Boundary to Provide Capacity for Housing and Employment to the year 2030 and Amending the Metro Code to Conform") on October 20, 2011; and

WHEREAS, the distribution to specific zones within the region of forecasted population and employment adopted by this ordinance reflects prior policy decisions made by the Metro Council to: (1) use land inside the UGB more efficiently in Ordinance No. 10-1244B, and (2) add land to the UGB in Ordinance No. 11-1264B; and

WHEREAS, Metro began the process of distribution of the forecasted population and employment in October 2010, by coordinating the distribution with the 25 cities and three counties portions of which lie within the Metro district; in the course of 24 months, Metro held 15 coordination meetings with local governments, by county; more than 25 meetings with individual cities and counties; and four meetings with the city of Vancouver and Clark County to share the results of preliminary distributions and to seek comments and suggestions to improve the accuracy of the distributions; and

WHEREAS, Metro staff made presentations to its advisory committees (MPAC, MTAC, TPAC and JPACT) regarding the distribution and coordination with local governments; and



WHEREAS, Metro incorporated many of the comments and suggestions to refine the distribution and published a final distribution on \_\_\_\_\_, 2012; now, therefore,

THE METRO COUNCIL ORDAINS AS FOLLOWS:

1. The distribution made to traffic analysis zones, described in Exhibits A and B to this Ordinance and in the Staff Report dated October 2, 2012, of the regional population and employment forecast adopted by the Council in Ordinance No. 11-1264B, is accepted and adopted as fulfillment of Metro's responsibilities regarding coordination of population forecasts under ORS 195.025 and 195.036 and is endorsed for use by the 25 cities and three counties as their own population and employment forecasts for their planning activities.
2. The Chief Operating Officer shall make the distribution of population and employment available to each city and county in the district.

ADOPTED by the Metro Council this \_\_\_\_ day of November, 2012.

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Tom Hughes, Council President

Approved as to form:

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Alison Kean Campbell, Metro Attorney

**EXHIBIT A (Ordinance No. 12-1292)**  
**2035 Reviewed Household Forecast Distribution by Jurisdiction**  
**MetroScope Gamma TAZ Forecast**

Final Draft 9/19/2012

Notes: Jurisdiction geographies are approximate, and based on TAZs. Urban Reserves are considered to be outside the UGB.

	2010 Reviewed HH			2035 Reviewed HH			2010-2035 Change		
	SF	MF	Total	SF	MF	Total	SF	MF	Total
<b>Inside UGB:</b>									
Beaverton	18,128	21,953	40,081	20,038	30,479	50,517	1,910	8,526	10,436
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Damascus	3,322	205	3,527	11,700	217	11,916	8,378	12	8,389
Durham	350	8	358	410	26	436	60	18	78
Fairview	1,677	1,954	3,631	1,927	2,076	4,003	250	122	372
Forest Grove	4,775	2,717	7,492	6,999	3,380	10,379	2,224	663	2,887
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Gresham	19,781	18,243	38,024	25,394	25,656	51,051	5,613	7,413	13,027
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<b>Inside UGB Total</b>	<b>357,090</b>	<b>236,346</b>	<b>593,436</b>	<b>452,823</b>	<b>384,225</b>	<b>837,048</b>	<b>95,733</b>	<b>147,879</b>	<b>243,612</b>
<b>Outside UGB:</b>									
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Washington County	11,259	101	11,360	27,369	5,401	32,770	16,110	5,300	21,410
Clark County	114,638	114,638	158,110	164,207	64,185	228,392	49,569	20,713	70,282
<b>Outside UGB Total</b>	<b>170,422</b>	<b>119,038</b>	<b>218,294</b>	<b>256,610</b>	<b>75,309</b>	<b>331,919</b>	<b>86,188</b>	<b>27,437</b>	<b>113,625</b>
<b>Four-County Total</b>	<b>527,512</b>	<b>284,218</b>	<b>811,730</b>	<b>709,433</b>	<b>459,534</b>	<b>1,168,967</b>	<b>181,921</b>	<b>175,316</b>	<b>357,237</b>

**EXHIBIT B (Ordinance No. 12-1292)**

**2035 Reviewed Employment Forecast Distribution by Jurisdiction**

**MetroScope Gamma TAZ Forecast**

Final Draft 9/19/2012

Notes: Jurisdiction geographies are approximate, and based on TAZs. Urban Reserves are considered to be outside the UGB.

	2010 Employment Geocode				2035 Jurisdiction Review				2010 - 2035 Change			
	Retail	Service	Other	Total	Retail	Service	Other	Total	Retail	Service	Other	Total
<b>Inside UGB:</b>												
Beaverton	11,041	19,261	21,539	51,841	14,254	33,282	27,822	75,358	3,213	14,021	6,283	23,517
Cornelius	693	711	1,680	3,084	1,611	1,880	4,440	7,931	918	1,169	2,760	4,847
Damascus	260	357	908	1,525	902	1,613	1,894	4,409	642	1,256	986	2,884
Durham	1	213	318	532	1	307	458	766	0	94	140	234
Fairview	236	497	1,878	2,611	558	3,293	3,724	7,575	322	2,796	1,846	4,964
Forest Grove	882	2,018	2,617	5,517	1,747	3,455	5,343	10,545	865	1,437	2,726	5,028
Gladstone	702	546	883	2,131	903	1,040	1,092	3,035	201	494	209	904
Gresham	7,353	8,871	16,408	32,632	12,334	20,154	26,079	58,567	4,981	11,283	9,671	25,935
Happy Valley	241	256	621	1,118	789	1,842	1,616	4,247	548	1,586	995	3,129
Hillsboro	9,584	14,449	34,227	58,260	12,152	25,518	55,733	93,403	2,568	11,069	21,506	35,143
King City	137	269	64	470	173	511	137	821	36	242	73	351
Lake Oswego	2,553	7,024	8,670	18,247	2,323	11,584	8,879	22,786	-230	4,560	209	4,539
Milwaulkie	1,403	3,527	6,658	11,588	1,944	5,751	7,712	15,407	541	2,224	1,054	3,819
Oregon City	3,081	3,727	7,580	14,388	5,418	6,990	10,077	22,485	2,337	3,263	2,497	8,097
Portland	65,150	139,116	170,076	374,342	76,134	218,147	214,199	508,482	10,984	79,031	44,123	134,140
Sherwood	1,103	1,206	1,907	4,216	1,643	2,604	5,005	9,252	540	1,398	3,098	5,036
Tigard	9,072	11,901	16,196	37,169	10,764	23,818	19,650	54,232	1,692	11,917	3,454	17,063
Troutdale	1,272	493	2,361	4,126	2,039	2,357	5,615	10,011	767	1,864	3,254	5,885
Tualatin	4,372	6,140	12,460	22,972	5,066	8,868	21,305	35,239	694	2,728	8,845	12,267
West Linn	966	1,593	1,693	4,252	1,517	2,683	2,331	6,531	551	1,090	638	2,279
Wilsonville	2,480	4,839	9,754	17,073	3,536	9,733	14,150	27,419	1,056	4,894	4,396	10,346
Wood Village	1,261	242	531	2,034	1,783	1,158	1,489	4,430	522	916	958	2,396
Uninc. Clackamas Co.	11,506	13,302	20,344	45,152	15,519	26,628	25,775	67,922	4,013	13,326	5,431	22,770
Uninc. Multnomah Co.	109	377	396	882	749	1,658	2,367	4,774	640	1,281	1,971	3,892
Uninc. Washington Co.	5,929	13,844	17,097	36,870	8,659	23,012	31,142	62,813	2,730	9,168	14,045	25,943
<b>Inside UGB Total</b>	<b>141,387</b>	<b>254,779</b>	<b>356,866</b>	<b>753,032</b>	<b>182,518</b>	<b>437,886</b>	<b>498,034</b>	<b>1,118,440</b>	<b>41,131</b>	<b>183,107</b>	<b>141,168</b>	<b>365,408</b>
<b>Outside UGB:</b>												
Clackamas County	4,803	5,218	15,348	25,369	8,182	11,295	22,359	41,836	3,379	6,077	7,011	16,467
Multnomah County	361	479	1,513	2,353	384	876	1,945	3,205	23	397	432	852
Washington County	854	1,640	5,881	8,375	2,363	6,659	18,084	27,106	1,509	5,019	12,203	18,731
Clark County	25,375	42,061	59,831	127,267	40,864	80,963	100,193	222,020	15,489	38,902	40,362	94,753
<b>Outside UGB Total</b>	<b>31,393</b>	<b>49,398</b>	<b>82,573</b>	<b>163,364</b>	<b>51,793</b>	<b>99,793</b>	<b>142,581</b>	<b>294,167</b>	<b>20,400</b>	<b>50,395</b>	<b>60,008</b>	<b>130,803</b>
<b>Four-County Total</b>	<b>172,780</b>	<b>304,177</b>	<b>439,439</b>	<b>916,396</b>	<b>234,311</b>	<b>537,679</b>	<b>640,615</b>	<b>1,412,607</b>	<b>61,531</b>	<b>233,502</b>	<b>201,176</b>	<b>496,211</b>

## STAFF REPORT (Revised)

IN CONSIDERATION OF ORDINANCE NO. 12-1292, FOR THE PURPOSE OF ADOPTING THE DISTRIBUTION OF THE POPULATION AND EMPLOYMENT GROWTH TO YEAR 2035 TO TRAFFIC ANALYSIS ZONES IN THE REGION CONSISTENT WITH THE FORECAST ADOPTED BY ORDINANCE NO. 11-1264B IN FULFILLMENT OF METRO'S POPULATION COORDINATION RESPONSIBILITY UNDER ORS 195.036

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Date: October 9, 2012

Prepared by: Gerry Uba, x1737

### BACKGROUND

Oregon land use law (ORS 195.036; 195.025) requires Metro to coordinate its regional population forecasts with local governments inside the urban growth boundary for use in updating their comprehensive plans, land use regulations and other related policies. In 2009, Metro created a population and employment growth forecast for the seven-county region<sup>1</sup> for the next 50 years. One of the ways Metro coordinates the population and employment forecast is to conduct a localized distribution of the 2009 forecast after an urban growth boundary decision cycle is completed.

Metro has been preparing localized-level analyses every five years for over 20 years. The current distribution is the most advanced analysis yet. The experience gained from previous distributions has helped Metro and local governments to improve the methodology and the information that is produced. To accommodate various local and regional planning needs, the localized growth forecast distribution was produced for the years 2025, 2035 and 2040. Local government staff expressed interest in the 2035 distributions as more relevant for their 20-year growth planning.

The distribution information is essential for local and regional planning, such as updating local comprehensive plans (through periodic review), local transportation system plans, and the Regional Transportation Plan. The information is also used for corridor planning and special districts planning. Many cities in the region currently undergoing periodic review are coordinating their forecast with Metro as they are updating their comprehensive plans. Although there is no legal requirement for school districts and special districts to coordinate their forecast with Metro, the distribution information will be useful to school districts for enrolment forecasting and facility planning, and to special districts in the region, such as water, sewer and fire districts, in updating their facility plans and emergency preparedness plans. The information is also helpful to TriMet in forecasting future ridership and mapping travel patterns, enabling the agency to better plan for frequency of MAX and bus service and future routes.

#### Methodology of the growth forecast distribution

The growth forecast distribution is based on policy and investment decisions and assumptions that local elected leaders and the Metro Council have already adopted, including the seven-county forecast,

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<sup>1</sup> Clark, Clackamas, Columbia, Multnomah, Skamania, Washington, and Yamhill counties

existing zoning, adopted plans, the most recently adopted Regional Transportation Plan, and urban and rural reserves. The regional coordination of the forecast distribution is a two stage process.

The first stage of the coordination process involves Metro and local government staff working together to refine the buildable land inventory (BLI) methodology to ensure the accuracy of zoning and growth capacity assumptions. Attachment 1 contains names of local jurisdiction staff involved in the population and employment coordination. The methodology takes into account land that cannot be built on due to environmental constraints and right of way, as well as capacity from vacant buildable lands, new urban areas<sup>2</sup>, prospective urban growth boundary expansions into designated urban reserves, redevelopment and infill. As a result of this exercise, the region now has an updated 30-year capacity estimate that reflects the input and review from local government staff. This coordinated buildable land inventory reflects the increasing importance of redevelopment as a key part of the land supply in this region.

The geography used for this analysis is the Traffic Analysis Zone (TAZ). To provide more detail than the previous growth distribution, the number of TAZs used was increased from 2,013 to 2,162. The TAZ is the geographic unit that serves as the building block of Metro's primary forecasting tools (the travel demand model and MetroScope). By dividing the region into 2,162 TAZs, the accuracy of the travel demand model as well as all other aspects of transportation planning are improved. The TAZ-level data also assist land use planners in updating comprehensive plans and zoning, and conducting other types of land use analysis, including neighborhood level analysis.

In the second stage of the distribution coordination process, land use and transportation models are used to match demand (the seven-county forecast) with supply (the BLI). After extensive review of Metro's initial distributions with local governments' staff, the final product is the 2025, 2035 and 2040 distributions of forecast households and jobs to TAZs, cities and unincorporated areas in the region.

Further analyses of the distribution data reveal future trends that regional and local planners should bring to the attention of their decision makers.

#### Regional Planning Directors Involvement

The coordination of population and employment forecast was kicked off with a meeting of the Regional Planning Directors in October 2010, endorsing roles and responsibilities of local governments and Metro. The directors met again in July 2011 to review, discuss and reach agreement on the outcome of the first stage of the process – the BLI methodology, urban reserve urbanization assumptions, redevelopment assumptions, and the capacity of residential and employment land. The last meeting of directors was in September 2012 to review and comment specifically on the 2035 distribution of households and employment. Attachments 2 and 3 contain the 2035 forecast distribution by local jurisdiction.

#### Metro advisory committee involvement

The outcome of the first stage of the process (BLI methodology, urban reserve urbanization assumptions, redevelopment assumptions, and capacity of residential and employment land) was presented to the Metro Technical Advisory Committee (MTAC), and Transportation Policy Alternatives Committee (TPAC) in January 2012, and to the Metro Policy Advisory Committee (MPAC) in February 2012 for discussion and comment. The 2035 distribution of households and employment was presented

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<sup>2</sup> Areas added to the urban growth boundary that does not yet have urban zoning.

to TPAC in September 2012, and to MTAC, MPAC and the Joint Policy Advisory Committee on Transportation in October 2012.

#### Additional outreach

Staff updated the Oregon Land Conservation and Development Commission in June 2011 on how Metro is coordinating its regional forecast with the forecasts of local governments in the region, including other ways Metro coordinates with local governments -- urban growth report, capacity ordinance, and growth management decisions.

### **ANALYSIS/INFORMATION**

#### **1. Known Opposition**

Washington County and the City of Beaverton provided written comments emphasizing the need for a better understanding of residential housing demand and preferences and redevelopment. In response, Metro staff has identified additional research possibilities. Depending on funding availability, this research could inform the next Urban Growth Report and forecast distribution.

#### **2. Legal Antecedents**

The distribution of the growth forecast satisfies Metro's coordination obligations under ORS 195.025 and 195.036. As requested by DLCD, staff is proposing that the Metro Council adopt the forecast distribution by an ordinance that will be acknowledged by DLCD as part of Metro's planning documents in order to support future planning decisions by local governments that rely upon the population forecasts. State law requires cities and counties to adopt coordinated forecasts as part of their comprehensive plans.

#### **3. Anticipated Effects**

Adoption of the distribution of population and employment forecast at a localized-level will encourage local governments to use distribution information to conform their land use and transportation plans to recent regional policies adopted by the Metro Council. The TAZ-level distributions would also inform the next Regional Transportation Plan. Delay of the adoption would delay some local government activities that would be accomplished with the forecast distribution information.

#### **4. Budget Impacts**

The FY 2010/2011 and FY 2011/2012 budgets included resources for staff in the Research Center and the Planning and Development Department to work on this project. In the current FY 2012/2013 budget there are sufficient funds to package and post the forecast distribution in electronic platforms that will make the data accessible to local governments and school and special districts in the region.

**RECOMMENDED ACTION**

Staff recommends that the Metro Council accept and adopt the distribution of the 2009 population and employment forecast as fulfillment of Metro's responsibilities on population coordination with local governments in the region

**ATTACHMENTS**

1. Forecast Distribution Process Local Government and Agency Staff
2. 2035 Reviewed Household Forecast Distribution by Jurisdiction
3. 2035 Reviewed Employment Forecast Distribution by Jurisdiction
4. Regional 2035 Forecast Distribution: Executive Summary
5. Technical Documentation of the Project (i.e., The Technical Report)
6. Local Governments' Comments on the 2025 and 2035 Forecast Distributions and Metro Response

# Attachment 1

## 2035 FORECAST DISTRIBUTION PROCESS LOCAL GOVERNMENT AND AGENCY STAFF

Cities	Staff
City of Beaverton	Laura Kelly, Robert McCracken, Jeff Salvon, Steven Sparks, Doug Taylor
City of Cornelius	Dick Reynolds
City of Damascus	Steve Gaschler, John Morgan, Erika Palmer, Bob Short
City of Durham	
City of Fairview	Lindsey Nesbitt
City of Forest Grove	Jon Holan, Dan Riordan
City of Gladstone	Larry Conrad
City of Gresham	Erin Aigner, Jonathan Harker, Brian Martin, Ann Pytynia
City of Happy Valley	Jason Tuck, Michael Walter
City of Hillsboro	Colin Cooper, Doug Miller, Don Odermott, Pat Ribellia, Alwin Turiel
City of Johnson City	
City of King City	Keith Liden
City of Lake Oswego	Denny Egner, Erica Rooney, Sarah Selden
City of Maywood Park	
City of Milwaukie	Li Alligood, Kenny Asher, Katie Mangle
City of Oregon City	Tony Konkol, Christina Roberts-Gardner, Laura Terway
City of Portland	Tom Armstrong
City of Rivergrove	
City of Sherwood	Julia Hajduk, Michelle Miller
City of Tigard	Darren Wyss
City of Troutdale	Rich Faith, Elizabeth McCallum
City of Tualatin	Colin Cortes, Cindy Hahn, Aquilla Hurd-Ravich, Alice Rouyer
City of West Linn	Sara Javronok, Chris Kerr, John Sonnen
City of Wilsonville	Chris Neamtzu, Stephan Lashbrook, Daniel Pauly, Dan Stark
City of Wood Village	Bill Peterson
Counties	Staff
Clackamas County	Sarah Abbott, Larry Conrad, Martha Fritzie, Shari Gilevich, Clay Glasgow, Cindy Hagen, Scott Hoelscher, Diedre Landon, Mike McAllister, Simone Rede, Michael D. Walden
Multnomah County	Chuck Beasley
Washington County	Andy Back, Steve D. Kelley
Agencies	Staff
Oregon Employment Dept.	Lynn Wallis
Dept. of Land Conservation & Development	Anne Debbaut, Jennifer Donnelly, Darren Nichols, Lynn Wallis
Oregon Dept. of Transportation	Mai Chi, Kirsten Pennington, Lidwien Rahman, Lainie Smith
Port of Portland	John Boren, Tom Bouillion
Metro	Roger Alfred, Sonny Conder, Jim Cser, Chris Deffebach, Mike Hoglund, Robin McArthur, Cindy Pederson, Ted Reid, Maribeth Todd, Gerry Uba, John Williams, Dennis Yee
Neighboring Cities	
Canby	Bryan Brown, Matilda Deas
Sandy	Tracy Brown



**ATTACHMENT 2 (Staff Report to Ordinance No. 12-1292)**  
**2035 Reviewed Household Forecast Distribution by Jurisdiction**  
**MetroScope Gamma TAZ Forecast**

Final Draft 9/19/2012

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Washington County	11,259	101	11,360	27,369	5,401	32,770	16,110	5,300	21,410
Clark County	114,638	114,638	158,110	164,207	64,185	228,392	49,569	20,713	70,282
<b>Outside UGB Total</b>	<b>170,422</b>	<b>119,038</b>	<b>218,294</b>	<b>256,610</b>	<b>75,309</b>	<b>331,919</b>	<b>86,188</b>	<b>27,437</b>	<b>113,625</b>
<b>Four-County Total</b>	<b>527,512</b>	<b>284,218</b>	<b>811,730</b>	<b>709,433</b>	<b>459,534</b>	<b>1,168,967</b>	<b>181,921</b>	<b>175,316</b>	<b>357,237</b>

**ATTACHMENT 3 (Staff Report for Ordinance No. 12-1292)**  
**2035 Reviewed Employment Forecast Distribution by Jurisdiction**  
**MetroScope Gamma TAZ Forecast**

Final Draft 9/19/2012

Notes: Jurisdiction geographies are approximate, and based on TAZs. Urban Reserves are considered to be outside the UGB

	2010 Employment Geocode				2035 Jurisdiction Review				2010 - 2035 Change			
	Retail	Service	Other	Total	Retail	Service	Other	Total	Retail	Service	Other	Total
<b>Inside UGB:</b>												
Beaverton	11,041	19,261	21,539	51,841	14,254	33,282	27,822	75,358	3,213	14,021	6,283	23,517
Cornelius	693	711	1,680	3,084	1,611	1,880	4,440	7,931	918	1,169	2,760	4,847
Damascus	260	357	908	1,525	902	1,613	1,894	4,409	642	1,256	986	2,884
Durham	1	213	318	532	1	307	458	766	0	94	140	234
Fairview	236	497	1,878	2,611	558	3,293	3,724	7,575	322	2,796	1,846	4,964
Forest Grove	882	2,018	2,617	5,517	1,747	3,455	5,343	10,545	865	1,437	2,726	5,028
Gladstone	702	546	883	2,131	903	1,040	1,092	3,035	201	494	209	904
Gresham	7,353	8,871	16,408	32,632	12,334	20,154	26,079	58,567	4,981	11,283	9,671	25,935
Happy Valley	241	256	621	1,118	789	1,842	1,616	4,247	548	1,586	995	3,129
Hillsboro	9,584	14,449	34,227	58,260	12,152	25,518	55,733	93,403	2,568	11,069	21,506	35,143
King City	137	269	64	470	173	511	137	821	36	242	73	351
Lake Oswego	2,553	7,024	8,670	18,247	2,323	11,584	8,879	22,786	-230	4,560	209	4,539
Milwaukie	1,403	3,527	6,658	11,588	1,944	5,751	7,712	15,407	541	2,224	1,054	3,819
Oregon City	3,081	3,727	7,580	14,388	5,418	6,990	10,077	22,485	2,337	3,263	2,497	8,097
Portland	65,150	139,116	170,076	374,342	76,134	218,147	214,199	508,482	10,984	79,031	44,123	134,140
Sherwood	1,103	1,206	1,907	4,216	1,643	2,604	5,005	9,252	540	1,398	3,098	5,036
Tigard	9,072	11,901	16,196	37,169	10,764	23,818	19,650	54,232	1,692	11,917	3,454	17,063
Troutdale	1,272	493	2,361	4,126	2,039	2,357	5,615	10,011	767	1,864	3,254	5,885
Tualatin	4,372	6,140	12,460	22,972	5,066	8,868	21,305	35,239	694	2,728	8,845	12,267
West Linn	966	1,593	1,693	4,252	1,517	2,683	2,331	6,531	551	1,090	638	2,279
Wilsonville	2,480	4,839	9,754	17,073	3,536	9,733	14,150	27,419	1,056	4,894	4,396	10,346
Wood Village	1,261	242	531	2,034	1,783	1,158	1,489	4,430	522	916	958	2,396
Uninc. Clackamas Co.	11,506	13,302	20,344	45,152	15,519	26,628	25,775	67,922	4,013	13,326	5,431	22,770
Uninc. Multnomah Co.	109	377	396	882	749	1,658	2,367	4,774	640	1,281	1,971	3,892
Uninc. Washington Co.	5,929	13,844	17,097	36,870	8,659	23,012	31,142	62,813	2,730	9,168	14,045	25,943
<b>Inside UGB Total</b>	<b>141,387</b>	<b>254,779</b>	<b>356,866</b>	<b>753,032</b>	<b>182,518</b>	<b>437,886</b>	<b>498,034</b>	<b>1,118,440</b>	<b>41,131</b>	<b>183,107</b>	<b>141,168</b>	<b>365,408</b>
<b>Outside UGB:</b>												
Clackamas County	4,803	5,218	15,348	25,369	8,182	11,295	22,359	41,836	3,379	6,077	7,011	16,467
Multnomah County	361	479	1,513	2,353	384	876	1,945	3,205	23	397	432	852
Washington County	854	1,640	5,881	8,375	2,363	6,659	18,084	27,106	1,509	5,019	12,203	18,731
Clark County	25,375	42,061	59,831	127,267	40,864	80,963	100,193	222,020	15,489	38,902	40,362	94,753
<b>Outside UGB Total</b>	<b>31,393</b>	<b>49,398</b>	<b>82,573</b>	<b>163,364</b>	<b>51,793</b>	<b>99,793</b>	<b>142,581</b>	<b>294,167</b>	<b>20,400</b>	<b>50,395</b>	<b>60,008</b>	<b>130,803</b>
<b>Four-County Total</b>	<b>172,780</b>	<b>304,177</b>	<b>439,439</b>	<b>916,396</b>	<b>234,311</b>	<b>537,679</b>	<b>640,615</b>	<b>1,412,607</b>	<b>61,531</b>	<b>233,502</b>	<b>201,176</b>	<b>496,211</b>

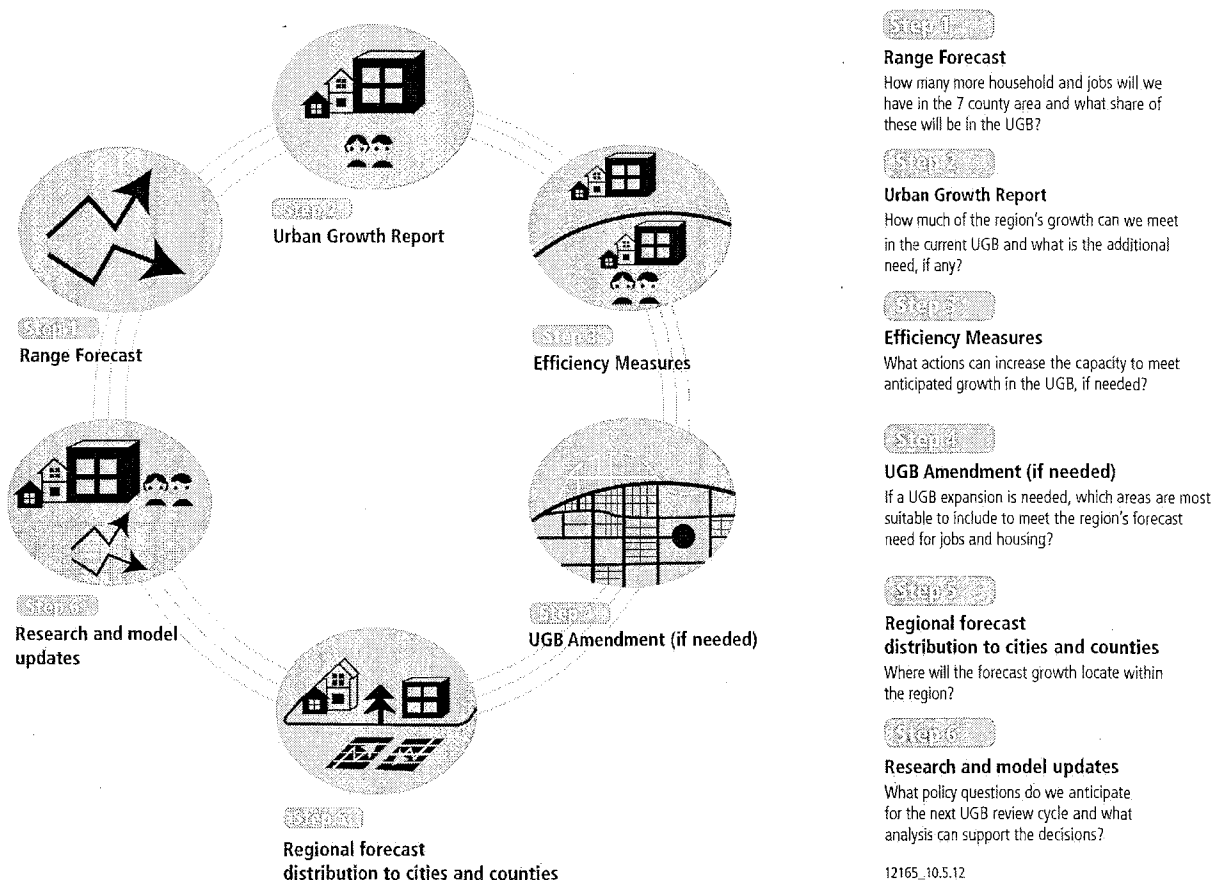
## REGIONAL 2035 FORECAST DISTRIBUTION: EXECUTIVE SUMMARY

### Purpose of this report

This Regional Growth Distribution report explains how Metro and local governments collaborated to forecast where population and employment forecast will be accommodated over the in 2035 based on current policies in zoning and adopted transportation plans, environmental regulations and development incentives. Planning for expected growth in population and jobs enable the region and local communities to make decisions that support good jobs, safe neighborhoods, protect farmland, and invest in public structures and services that enhance our quality of life.

Metro is required by Oregon law to forecast the population and employment growth that is expected for this region over the next 20 years. In 2009 Metro initiated its growth management decision process depicted in Figure 1. The first task in the process was the 2009 forecast of a range of 1.2 to 1.3 million households and 1.3 to 1.7 million jobs in the seven-county region (Clackamas, Clark, Columbia, Multnomah, Skamania, Yamhill, Washington) by 2030. Within the seven county total, Metro forecast the proportion expected to live and work within the Metro urban growth boundary (UGB).

**Figure 1: Growth Management and Population and Employment Coordination Process**

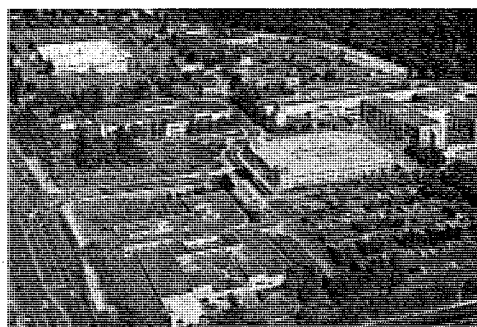


In 2010, the Metro Council adopted the capacity analysis which accounted for Regional Transportation Plan (RTP) investments and other actions that are likely to shape development patterns, and determined that some UGB expansion would likely be necessary. In 2011, the Metro Council made the urban growth boundary (UGB) decision based on investment policies and a point on the forecast range it picked.

The next step after the UGB decision, required by law, is the distribution of the forecast at smaller geographies to guide local and regional planning efforts as explained in this report. Oregon law (ORS 195.025; 195.036) requires Metro to coordinate a population forecast with local governments for planning purposes inside the UGB. Local governments that are scheduled to review and update their land use plans are expected by the Oregon Department of Land Conservation and Development to rely on the population and employment distribution information for their analysis. In addition to the state law, the Federal Clean Air Act requires Metro to use its forecast distributed at smaller geographies called traffic analysis zones (TAZ)<sup>1</sup> as the basis for its federally-required air quality conformity determination. This federal law requires Metro to show that the region will continue to meet the federal and state air quality regulations if the projects included in the RTP are built.

Metro has collaborated with local governments in the past to distribute the region's population and employment forecasts at the TAZ level. The last distribution, coordinated with local governments, was completed in 2006. The TAZ and city and county level distributions reflect adopted policies.

Metro Council adopted the household and employment forecast distributions by jurisdiction in November 2012 (Ordinance No. 12-1292) after the distributions were reviewed by Metro advisory committees – Metro Policy Advisory Committee, Joint Policy Advisory Committee on Transportation, Metro Technical Advisory Committee, Transportation Policy Alternatives Committee.



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<sup>1</sup> The TAZ is the standard unit containing data representing the building blocks of Metro's key forecasting tools

**How growth distribution information is used**

Local governments and Metro rely on the population and employment forecast distribution to help build the future they want in the region and ensure that as jobs and population grow, they will be able to make wise investments that support economic development, safe neighborhoods and strong and vibrant communities, and minimize the burdens of growth.



The growth distribution information is useful for various entities:

Cities and Counties rely on the information to support their:

- Comprehensive plan update processes and address requirements for their periodic review of their land use plans
- Coordination of planning in areas outside Metro's jurisdictional boundary but within county boundaries.
- Planning of where to extend and upgrade pipes, roads and other essential public structures
- Identify needs necessary to update Transportation System Plan for consistency with the Regional Transportation Functional Plan and State Transportation Rule.

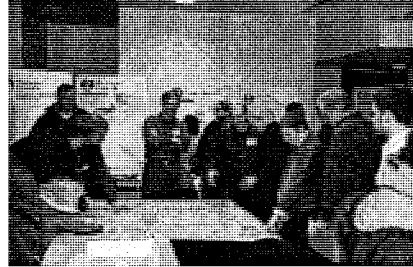
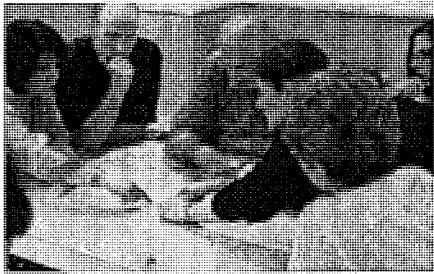
Schools and Special Districts can use the population and employment distribution for:

- Facility and financial planning
- Financial planning for facilities
- Parks planning
- Water and sewer system planning
- Sewer system planning
- Public school enrollment forecasting

Metro relies on the information to support:

- Updates to the Regional Transportation Plan
- Analysis of planning scenarios for the Climate Smart Communities Scenarios Project
- Transportation investments through the analysis of potential benefits of proposed projects within a half-mile radius of those projects

- Corridor planning such as the East Metro Connections Plan (EMCP) and Southwest Corridor Plan.



### **How Metro and local governments coordinated on growth distribution**

There are two key steps in the actual forecast distribution coordinated by Metro and local governments:

- Estimating regional land supply -- existing housing and employment capacity, including undeveloped land that is available for development, based on existing zoning)
- Distributing the regional household and employment growth forecast to the available land supply

*Land supply:* Current approach of calculating residential land supply across the region is the buildable land inventory (BLI). The calculation method varies from one local government to another. Metro and local planners coordinated to refine the regional BLI method. The BLI method relies on local zoning to estimate the capacity of residential and employment land (how many residential units and acres of employment land can be accommodated in any area). However, not all zoned capacity will get used everywhere. The capacity estimation takes into account environmental constraints, rights of way, and future UGB expansion into urban reserves.

Additional capacity is realized from the decisions and policies made by some cities to encourage redevelopment in certain areas through incentive programs, such as urban renewal, tax abatement, streetscape and infrastructure improvements, and other policies. The additional capacity is added on top of the capacity that is based on residential and employment land zoning.

*Distribution of the forecast:* At this step in the process, the goal is to match the demand (forecast population and employment) with the supply (capacity of residential and employment land). The demand of forecast population was based on household size, income brackets, and age of households. Factors used to match the demand with the supply include built space by zone, location of household and employment, tenure choice (own or rent), type of building, estimate of development density, prices and cost of land, travel activity levels by mode and road segment, travel times between TAZs by time of day, and cost perceived by travelers in getting from any TAZ to another.

### Summary of results

***[Following is a Place Holder]***

Figure 2 show the growth in households, displayed in housing units, captured inside the Metro UGB and the number of housing units captured by communities outside the Metro UGB. The forecast distribution indicates 4% decrease in the total number of single-family units captured by local governments inside the UGB (from 68% in 2010 to 64% in 2035), and slight (1%) increase in the number of multi-family units captured by local governments inside the UGB (from 83% in 2010 to 84% in 2035).

The analysis of the forecast distribution data also depicts changes in the mix of single family and multi-family units in the jurisdiction inside the UGB. For example, the City of Portland the current mix of more single-family (58%) than multi-family (48%) in 2010 will change to more multi-family (55%) than single-family (45%) in 2035. The data show similar reversal of mix in the Cities of Beaverton and Hillsboro. In the City of Gresham, the mix of more single-family (52%) and multi-family (48%) in 2010 will be even in 2035 (50% single-family and 50% multi-family). The current (2010) mix of more multi-family than single-family units in the Cities of Fairview, Wilsonville and Wood Village will not change in 2035. The current (2010) mix of more single-family than multi-family units in the remaining cities and unincorporated areas will not change in 2035.

**Figure 2: Housing Units (for Household) Forecast**

Area	2010		2035		2010-2035 change	
	Single-Family	Multi-Family	Single-Family	Multi-Family	Single-Family	Multi-Family
Inside Metro UGB	357,090 (68%)	236,346 (83%)	452,823 (64%)	384,225 (84%)	95,733 (53%)	147,879 (84%)
Outside Metro UGB	170,422 (32%)	47,872 (17%)	256,610 (36%)	75,309 (16%)	86,188 (47%)	27,437 (16%)
Seven county PMSA	527,512 (100%)	284,218 (100%)	709,433 (100%)	459,534 (100%)	181,921 (100%)	175,316 (100%)

Figure 3 show the growth in jobs captured inside the Metro UGB and the number captured by communities outside the Metro UGB. The forecast distribution indicates a decrease in the total number of jobs units captured by local governments inside the UGB (from 82% in 2010 to 79% in 2035).

**Figure 3: Employment Forecast**

Area	2010	2035	2010-2035 change
Inside Metro UGB	753,032 (82%)	1,118,440 (79%)	365,408 (74%)
Outside Metro UGB	163,364 (18%)	294,167 (21%)	130,803 (26%)
Seven county PMSA	916,396 (100%)	1,412,607 (100%)	496,211 (100%)

Further analysis if the forecast distribution data reveal success in the 2040 Growth Concept objectives. For example, 37% growth in centers, 17% growth in corridors, strong redevelopment, and rise in residential density to 12.3 unit/acre. There are drawbacks depicted by the forecast distribution. For example, lower income households get squeezed on affordability, and steep rise in single family residential prices beyond 2035.

**Future improvement of land supply estimation approach**

Comments from local governments during the estimation of regional land supply acknowledged improvements in the residential capacity methodology so as to match households and land supply correctly in the long-term. The comments emphasized areas where the methodology could be further improved, such as residential location choice, including quality-of-life factors that influences a person's preference for single- or multi-family housing, and generational shift. The comments also emphasized the need to consider the difference between housing preference and living preference. In response, Metro has identified future research on:

- Residential choice study enhanced with market segmentation
- Redevelopment supply assumption refinement

It is anticipated that the research would further refine the residential capacity assumptions and methodology, provide valuable insight into how people weigh transportation and housing costs when deciding where to live, and illustrate differentiation of the full range of housing needs in the region. Implementation of the research is dependent on funding availability.

**Sharing the information**

[TO BE ADDED: FTP and Web addresses where interested persons can find the growth distribution information]



**DRAFT**

**Attachment 5 (Staff Report to Ordinance no. 12-1292)**

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# **Technical Documentation**

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## **Regional Growth Distribution**

**Population and Employment**

**2010-40 TAZ Growth Distribution “gamma scenario”**

**Metro**

**Research Center and Planning and Development Department**

**October 2012**

Attachment 6 (Staff Report to Ordinance No 12-1292)

## **Regional Forecast Distribution**

# **2025 MID-TERM AND 2035 LONG-TERM DISTRIBUTIONS Local Governments' Comments and Metro Response**

Comments and responses – Feb. 9 to May 14, 2012  
Comments and responses – August 1 to August 31, 2012