A G E N D A

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METRO

MEETING: **METRO TECHNICAL ADVISORY COMMITTEE**
DATE: July 1, 2009
DAY: Wednesday
TIME: 10:00 a.m. to 12 noon
PLACE: Room 370A&B

TIME	AGENDA ITEM	ACTION REQUESTED	PRESENTER(S)
10:00 a.m.	**CALL TO ORDER AND INTRODUCTIONS**		Chair Robin McArthur
1. 45 min.	**Centers and Corridors Designation Change Process Discussion** *Objectives:* • *Clarify existing process for changing Center and Corridor designations on the 2040 Growth Concept Map* • *Identify initial considerations for potentially changing the existing policies and guidance to clarify role of centers and corridors as part of Making the Greatest Place*	Discussion	Chris Deffebach
2. 1 hr.	**Comments on Employment Urban Growth Report** • Employment Refill *Objective: Clarify assumptions, obtain suggestions to refining the UGR and confirm comments to MPAC*	Discussion	Dennis Yee Ted Reid
12 noon	**ADJOURN**		

Next regularly scheduled meeting (MTAC meets the 1st & 3rd Wednesday of the month): July 15, 2009

For further information or to get on this mailing list, contact Paulette Copperstone @ paulette.copperstone@oregonmetro.gov or 503-797-1562

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Metro | *Memo*

To: MTAC

From: Chris Deffebach, Planning and Development Department

Subject: Centers and Corridors change designation process

Date: June 23, 2009

After nearly fifteen years of experience with the Growth Concept map, several jurisdictions have expressed interest in changing their center or corridor designation. This interest includes changing from Main Street to Town Center and Town Center to Regional Center as well as potentially shifting the location or number of centers and corridors. This memo clarifies the process for making these changes and identifies questions for MTAC consideration and discussion at the next meeting.

Metro can make these changes by revising the Growth Concept Map by ordinance and using existing Framework Plan policies to guide the decision. This was done to change Milwaukie from a Regional to a Town Center in the 1990s. While the Framework Plan does not set specific criteria, policies refer in general to centers and corridors and could be used to establish findings for changes. Attached are excerpts from the summary of the 2040 Growth Concept in the Regional Framework Plan, policies of the Regional Framework Plan, requirements and recommendations in the Urban Growth Management Functional Plan and requirements in the Regional Transportation Functional Plan that Council may consider in making changes to the Growth Concept map.

The second attachment identifies a summary of considerations from Regional Framework Plan Policy and guidance for Centers amendments. Thie list does not limit Metro to considering additional policies and, in fact, the discussion in 2009 may help define potential changes to center and corridor policies in 2010.

As part of Making the Greatest Place, several new concepts about centers and corridors have emerged. These include the Activity Spectrum concept as a way to consider the type of center that fits local aspirations and an investment strategy that links regional investments such as high capacity transit with local commitments for land use, transportation and financial incentives. Other changes to the Framework Plan policies to reflect updated expectations for centers and corridors could be considered.

Metro Council has indicated support for moving forward with consideration of changes to centers and corridors on the Growth Concept Map in response to interest by local jurisdictions. Such changes can support local aspirations and identify potential opportunities for increased capacities. Changes to the

Growth Concept map could be considered as part of the 2010 Ordinance that addresses other Framework or Functional Plan changes needed to support Making the Greatest Place. Local jurisdictions who are interested in requesting a change to a center or corridor on the Growth Concept map can contact Chris Deffebach 503 797-1921 or deffebachc@oregonmetro.gov for more information.

Staff are interested in MTACs thought on applying and potentially clarifying or modifying policies on centers and corridors for the purpose of raising topics that should be considered over the next year or longer. Questions for MTAC discussion include:

What are some of the questions you have after reading existing policy and direction on centers and corridors. For example:

- **How to define compact development?** Centers are intended as a focus for compact development. Is it based on persons per acre, mixed use zoning, or other?
- **Can there be too many regional or town centers?** The Growth Concept narrative calls for a relatively small number of regional centers because of limited market to support redevelopment and limited transportation funding to support the high quality transit and roadway improvements needed.

What changes to existing policies would help clarify the designation process for Council consideration as part of Making the Greatest Place?

- **Should the Growth Concept narrative be updated?** The narrative describes Regional Centers as serving 100,000s of people while Town Centers serve 10,000s of people. Corridors are described as having higher intensity development along arterial roads. Changes could reflect new concepts such as the Activity Spectrum, investment commitments and parks, trails, and civic spaces and include a description for Neighborhood Centers.

- **Should the Framework Plan add more explicit center and corridor policies?** New policies could re-enforce the Growth Concept narrative for centers and corridors and guide Metro investment actions.

- **Should the Functional Plan clarify or add recommendations for centers and corridors.** These changes could revise the recommended density targets for centers and corridors in Title 1 or replace them with reference to levels of activity in the Activity Spectrum. New requirements could also link land use commitments with regional investments, such as HCT. Should there be additional expectations for zoning code changes, mixed use zoning and other financial incentives for a center or corridor. The latest MTIP criteria for example, use these to demonstrate readiness of the community to leverage these investments. The HCT and RTP priorities support a similar investment strategy.

    - **Should the Growth Concept map be regulatory**? The Growth Concept Map is included in the Framework Plan as an illustration of policy and was adopted by ordinance along with the Growth Concept. Its legal status has not been as clear as its role in defining policy direction. If the map is included in the Functional Plan, it would legally establish boundaries of centers and corridors for use in monitoring performance, applying incentives and targeting investments over time.

Considerations from Regional Framework Plan Policy and Guidance for Centers Amendments

The following considerations can be derived from the Regional Framework Plan (Growth Concept; policies; functional plans) to serve as factors to be weighed when changes to Centers are contemplated:

1. Can the area play the roles expected of Centers in the 2040 Growth Concept?

- Regional Centers: "…serve large market areas outside the central city, connected to it by high-capacity transit and highways and are accessible by hundreds of thousands of people."

- Town Center : "…local shopping and employment opportunities within a local market area and accessible to tens of thousands of people."

2. Does the area have, or have zoned capacity for, the uses and intensity of uses that will enable the area to play the roles expected of Centers: e.g., enough "rooftops" to support retail and other services for "tens of thousands" (Town Center) or "hundreds of thousands (Regional Center)?

3. Is the area served by transit (Town Center) or high-capacity transit (Regional Center), or are there projects in the federal RTP and local TSP to establish that level of transit?

4. Does the area have, or have zoned capacity for, enough employment to be "balanced" with housing?

5. Does the area have, or have plans and funding for, a dense network of arterials and collectors (Regional Center) or a network of streets to make the Center walkable and services accessible (Town Center)?

6. Does the local government have a strategy for the Center, including the following elements?

- Proposed investments to improve the role of the Center with funding sources identified

- Parking management plan

7. Does the area provide, or have zoned capacity and other investment tools to provide, a mix of housing types to provide housing choices.

EXISTING POLICY AND DIRECTION ON CENTERS AND CORRIDORS
May 5, 2009

The 2040 Growth Concept calls for accommodation of most population and employment growth in Centers and Corridors. The 2040 Growth Concept Map shows the approximate locations of a Central City, seven Regional Centers and 30 Town Centers. The Map also shows Corridors along 400 miles of the region's arterials. Following a functional plan requirement (Title 1), cities and counties have designated the Centers and Corridors in their jurisdictions, deriving specific boundaries from the general locations depicted on the Growth Concept Map.

Some cities have told Metro, as part of their aspirations for the future, they would like to make changes to Centers in their jurisdictions to:

- Change the boundaries of a Center
- Move a Center from one location to another
- Change the Center category (from Town Center to Regional Center, e.g.) or
- Eliminate a Center

There are several sources of policy and guidance that help evaluate the proposed changes to Centers, each set forth verbatim in the following pages:

- The Summary of the 2040 Growth Concept in the Regional Framework Plan
- Policies of the Regional Framework Plan
- Requirements and Recommendations in the Urban Growth Management Functional Plan
- Requirements in the Regional Transportation Functional Plan

1. The Summary of the 2040 Growth Concept in the Regional Framework Plan

"Centers

Mixed-use urban centers inside the UGB are one key to the Growth Concept. Creating higher density centers of employment and housing and transit service with compact development, retail, cultural and recreational activities in a walkable environment is intended to provide efficient access to goods and services, enhance multi-modal transportation and create vital, attractive neighborhoods and communities. The Growth Concept uses interrelated types of centers:

- The central city is the largest market area, the region's employment and cultural hub and accessible to millions of people.
- Regional centers serve large market areas outside the central city, connected to it by high-capacity transit and highways and are accessible by hundreds of thousands of people.
- Connected to each regional center, by road and transit, are smaller town centers with local shopping and employment opportunities within a local market area and accessible to tens of thousands of people.

Planning for all of these centers will seek a balance between jobs, housing and unique blends of urban amenities so that more transportation trips are likely to remain local and become more multi-modal.

Creating higher density centers of employment and housing provides many advantages to communities. These centers provide citizens with access to a variety of goods and services in a relatively small geographic area, creating an intense business climate. Having centers also makes sense from a transportation perspective, since most centers have an accessibility level that is conducive to transit, bicycling and walking. Centers also act as social gathering places and community centers, where people would find the cultural and recreational activities and "small-town atmosphere" they cherish.

The major benefits of centers in the marketplace are accessibility and the ability to concentrate goods and services in a relatively small area. The problem in developing centers, however, is that most of the existing centers are already developed and any increase in the density must be made through redeveloping existing land and buildings. Emphasizing redevelopment in centers over development of new areas of undeveloped land is a key strategy in the Growth Concept.

"The Central City

Downtown Portland serves as the major regional center and functions well as an employment and cultural hub for the metropolitan area. It provides accessibility to the many businesses that require access to a large market area and also serves as the location for cultural and social functions that draw the region together. It is the center for local, regional, state and federal governments, financial institutions, commerce, the center for arts and culture, and for visitors to the region. In addition, downtown Portland has a high percentage of travel other than by car - three times higher than the next most successful area. Jobs and housing are readily available there, without the need for a car. Maintaining and improving upon the strengths of the regional downtown shall remain a high priority.

Improvements to the transit system network, development of a multi-modal street system and maintenance of regional through routes (the highway system) would provide additional mobility to and from the city center.

"Regional Centers

There are seven regional centers, serving four market areas (outside of the central city market area). Hillsboro serves the western portion of the region and Gresham the eastern. Gateway serves most of the Portland area outside the central city as a regional center. Downtown Beaverton and Washington Square serve the east Washington County area, and downtown Oregon City, Clackamas Town Center together serve Clackamas County and portions of outer southeast Portland.

These regional centers are the focus of compact development, redevelopment and high-quality transit service, multi-modal street networks and act as major nodes along regional through-routes.

Transit improvements will include light-rail connecting all regional centers to the central city. A dense network of multi-modal arterial and collector streets tie regional centers to surrounding neighborhoods and other centers. Regional through-routes are designed to connect regional centers and ensure that these centers are attractive places to conduct business. The relatively small number of centers reflects not only the limited market for new development at this density but also the limited transportation funding for the high-quality transit and roadway improvements envisioned in these areas.

"Town Centers

Smaller than regional centers and serving populations of tens of thousands of people, town centers are the third type of center with compact development and transit service.

Town centers provide local shopping, employment and cultural and recreational opportunities within a local market area. They are designed to provide local retail and services, at a minimum and vary greatly in character. Some will become traditional town centers, such as Lake Oswego, and Forest Grove, while others will change from an auto-oriented development into a more complete community, such as Hillsdale. Many also have regional specialties, such as office centers envisioned for the Cedar Mill town center. Several new town centers are designated, such as in Happy Valley and Damascus, to accommodate the retail and service needs of a growing population while reducing auto travel.

"Main Streets and Neighborhood Centers

During the early decades of this century, main streets served by transit and characterized by a strong business and civic community were a major land-use pattern throughout the region. Examples remain in Hillsboro, Milwaukie, Oregon City and Gresham as well as the Westmoreland neighborhood and Hawthorne Boulevard. Today, these areas are undergoing a revival and provide an efficient and effective land-use and transportation alternative.

Main streets typically serve neighborhoods and may develop a regional specialization - such as antiques, fine dining, entertainment or specialty clothing - that draws people from other parts of the region.

"Station Communities

Station communities are nodes of development centered around a light-rail or high-capacity transit station that feature a high-quality pedestrian environment. They provide for the highest density outside centers. Station communities encompass an area approximately one-half mile from a station stop."

2. <u>Policies of the Regional Framework Plan</u>

"1.1 Urban Form

It is the policy of the Metro Council to:
Balance the region's growth by:

a. Maintaining a compact urban form, with easy access to nature.
b. Preserving existing stable and distinct neighborhoods by focusing commercial and residential growth in mixed-use centers and corridors at a pedestrian scale.
c. Ensuring affordability and maintaining a variety of housing choices with good access to jobs and assuring that market-based preferences are not eliminated by regulation.
d. Targeting public investments to reinforce a compact urban form."

"1.3 Housing Choice

It is the policy of the Metro Council to:

1.3.1 Provide housing choices in the region, including single-family, multi-family, ownership and rental housing, and housing offered by the private, public and nonprofit sectors.

1.3.2 As part of the effort to provide housing choices, encourage local governments to ensure that their land use regulations:

a. Allow a diverse range of housing types;
b. Make housing choices available to households of all income levels; and
c. Allow affordable housing, particularly in Centers and Corridors and other areas well-served with public services."

"1.10 Urban Design

It is the policy of the Metro Council to:

1.10.1 Support the identity and functioning of communities in the region through:

a. Recognizing and protecting critical open space features in the region;
b. Developing public policies that encourage diversity and excellence in the design and development of settlement patters, landscapes and structures;
c. Ensuring that incentives and regulations guiding the development and redevelopment of the urban area promote a settlement pattern that:

(i) Links any public incentives to a commensurate public benefit received or expected and evidence of private need;
(ii) Is pedestrian 'friendly', encourages transit use and reduces auto dependence;
(iii) Provides access to neighborhood and community parks, trails and walkways, and other recreation and cultural areas and public facilities;
(iv) Reinforces nodal, mixed-use, neighborhood-oriented design;
(v) Includes concentrated, high-density mixed-use urban centers developed in relation to the region's transit system;
(vi) Is responsive to needs for privacy, community, sense of place and personal safety in an urban setting;
(vii) Facilitates the development and preservation of affordable mixed-income neighborhoods;
(viii) Avoids and minimizes conflicts between urbanization and the protection of regionally significant fish and wildlife habitat."

"1.15 Centers

It is the policy of the Metro Council to:

1.15.1 Recognize that the success of the 2040 Growth Concept depends upon the maintenance and enhancement of the Central City, Regional and Town Centers, Station Communities and Main Streets as the principal centers of urban life in the region. Each Center has its own character and is at a different stage of development. Hence, each needs its own strategy for success.

1.15.2 Develop a regional strategy for enhancement of Centers, Station Communities and Main Streets in the region:

a. Recognizing the critical connection between transportation and these design types, and integrate policy direction from the Regional Transportation Plan.

b. Placing a high priority on investments in Centers by Metro and efforts by Metro to secure complementary investments by others.
c. Including measures to encourage the siting of government offices and appropriate facilities in Centers and Station Communities.

1.15.3 Work with local governments, community leaders and state and federal agencies to develop an investment program that recognizes the stage of each Center's development, the readiness of each Center's leadership, and opportunities to combine resources to enhance results. To assist, Metro will maintain a database of investment and incentive tools and opportunities that may be appropriate for individual Centers."

1.15.4 Assist local governments and seek assistance from the state in the development and implementation of strategies for each of the Centers on the 2040 Growth Concept Map. The strategy for each Center will be tailored to the needs of the Center and include an appropriate mix of investments, incentives, removal of barriers and guidelines aimed to encourage the kinds of development that will add vitality to Centers and improve their functions as the hearts of their communities.

1.15.5 Determine whether strategies for Centers are succeeding. Metro will measure the success of Centers and report results to the region and the state. Metro will work with its partners to revise strategies over time to improve their results."

"**2.14.1** Plan for a regional motor vehicle system of arterials and collectors that connect the central city, regional centers, industrial areas and intermodal facilities, and other regional destinations, and provide mobility within and through the region."

"**2.27.1** Use transportation system management techniques to optimize performance of the region's transportation systems. Mobility will be emphasized on corridor segments between 2040 Growth Concept primary land-use components. Access and livability will be emphasized within such designations. Selection of appropriate transportation system techniques will be according to the functional classification of corridor segments."

"**2.29.1** Manage and optimize the efficient use of public and commercial parking in the central city, regional centers, town centers, main streets and employment centers to support the 2040 Growth Concept and related RTP policies and objectives."

3. <u>Requirements and Recommendations in the Urban Growth Management Functional Plan</u>

<u>Title 1 (Requirements for Housing and Employment Accommodation)</u>:

"3.07.170 Design Type Density Recommendations

A. For the area of each of the 2040 Growth Concept design types, the following average densities for housing and employment are recommended to cities and counties:

Central City - 250 persons per acre
Regional Centers - 60 persons per acre
Station Communities - 45 persons per acre
Town Centers - 40 persons per acre
Main Streets - 39 persons per acre

Corridor - 25 persons per acre
Employment Areas - 20 persons per acre
Industrial Areas - 9 employees per acre
Regionally Significant Industrial Area – 9 employees per acre
Inner Neighborhoods - 14 persons per acre
Outer Neighborhoods - 13 persons per acre."

Title 6 (Central City, Regional Centers, Town Centers and Station Communities):

"3.07.610 Purpose and Intent

The success of the 2040 Growth Concept depends upon the maintenance and enhancement of the Central City, Regional and Town Centers and Station Communities as the principal centers of urban life in the region. Title 6 intends to enhance Centers by encouraging development in these Centers that will improve the critical roles they play in the region and by discouraging development outside Centers that will detract from those roles. As used in this title, the term "Centers" includes the Central City, Regional and Town Centers and Station Communities.

3.07.620 Local Strategy to Improve Centers

A. Each city and county with a Center shown on the 2040 Growth Concept map shall, on a schedule established jointly with Metro but not later than December 31, 2007, develop a strategy to enhance Centers within its jurisdiction. The strategy shall include at least the following elements:

1. An analysis of physical and regulatory barriers to development and a program of actions to eliminate or reduce them.
2. An accelerated review process for preferred types of development.
3. An analysis of incentives to encourage development and a program to adopt incentives that are available and appropriate for each Center.
4. A schedule for implementation of Title 4 of the Urban Growth Management Functional Plan.
5. An analysis of the need to identify one or more Neighborhood Centers within or in close proximity to Inner and Outer Neighborhoods to serve as a convenient location of neighborhood commercial services, as authorized by Title 12, Section 3.07.1230 of the Urban Growth Management Functional Plan.
6. A work plan, including a schedule, to carry out the strategy.

3.07.630 Special Transportation Areas

Any city or county that has adopted a strategy for a Center pursuant to Section 3.07.620 and measures to discourage commercial retail use along state highways outside Center and Neighborhood Centers shall be eligible for designation of a Center by the Oregon Transportation Commission as a Special Transportation Area under Policy 1B of the 1999 Oregon Highway Plan.

3.07.640 Government Offices

A. Cities and counties shall encourage the siting of government offices in Centers by taking action pursuant to Section 3.07.620 to eliminate or reduce unnecessary physical and regulatory barriers to development and expansion of such offices in Centers.

B. Cities and counties shall discourage the siting of government offices outside Centers, Main Streets and Corridors by requiring a demonstration by the applicant government agency that sites within these designations cannot reasonably accommodate the proposed offices due to characteristics of the offices other than parking for employees.

C. For purposes of this section, "government offices" means administrative offices and those offices open to and serving the general public, such as libraries, city halls and courts. The term "government offices" does not include other government facilities, such as fire stations, sewage treatment plants or equipment storage yards."

4. Requirements in the Regional Transportation Functional Plan

"**6.4.5** Design Standards for Street Connectivity

* * *

2. In addition to preparing the above conceptual street plan map, cities and counties shall require new residential or mixed-use development involving construction of new street(s) to provide a site plan that reflects the following:

C. Centers, main streets and station communities:

Where full street connections over water features identified in Title 3 of the UGMFP cannot be constructed in centers, main streets and station communities (including direct connections from adjacent neighborhoods), or spacing of full street crossings exceeds 1,200 feet, provide bicycle and pedestrian crossings at an average spacing of 530 feet, unless exceptional habitat quality or length of crossing prevents a connection."

"6.4.6 Alternative Mode Analysis

1. Each jurisdiction shall establish an alternative mode share target (defined as non-single occupancy vehicle person-trips as a percentage of all person-trips for all modes of transportation) in local TSPs for trips into, out of and within all 2040 Growth Concept land-use design types within its boundaries. The alternative mode share target shall be no less than the regional modal targets for these 2040 Growth Concept land-use design types to be established in Table 1.3 [includes Centers] in Chapter 1 of this plan."

"**6.4.7 Motor Vehicle Congestion Analysis**

Policy 13.0 and Table 1.2 of this plan establish motor vehicle level-of-service policy for regional facilities. These standards shall be incorporated into local comprehensive plans and implementing ordinances to replace current methods of determining motor vehicle congestion on regional facilities. Jurisdictions may adopt alternative standards that do not exceed the minimum LOS established in Table 1.2. However, the alternative standard must not:

Increase SOV travel to a measurable degree that affects local consistency with the modal targets contained in Table 1.3 [includes Centers]."

Refill Rate Methodology and Background Information
June 24, 2009

REFILL RATE DEFINITION:
The refill rate measures (or forecasts) the share or proportion of past (or future) growth that is accommodated through redevelopment or infill on building capacity that is deemed in today's measurement as already developed. The refill rate measures the proportion of non-residential activity that is accommodated without utilizing "greenfield" development to "house" the employment activity. The denominator to the refill rate is the period of growth activity, whether it's the last five years or the next 20 years of projected growth.

Approach:
The preliminary employment urban growth report's (UGR) new demand paradigm includes two sets of refill (redevelopment and infill) assumptions. Both sets of assumptions are described here.

- Refill 1: Subarea Refill Rates by Building Type & Design Type – Demand Model Input Assumptions.

- Refill 2: Subarea Effective Refill Rates by Building Type – Demand Model Forecast Results

These tables are associated with the non-residential real estate demand model developed by ED Hovee for the employment UGR. The demand model specifications require that the refill rate definition be expanded from a single regional average to refill rates that are disaggregated across several dimensions.

Refill Rates are now described by the following joint distributions and are required to operate the model:

- Building Types (3 industrial and 3 non-industrial building types)
- Subareas (9 market subareas divided from a central, inner and outer rings)
- 2040 design types.(8 categories – note other equals neighborhoods only and corridors definition rolls up main streets and station communities)

These rates are based on professional expertise provided by ED Hovee, LLC.

The first table, Refill 1, summarizes the joint input assumptions for redevelopment and infill by building type, subarea and design type. These assumptions represent the refill rate as it would be if development were to occur within each of the building formats, subareas and design types. If no growth is forecasted (or negative growth) for any particular building format by subarea and design type, then the refill rate assumed in the input table doesn't get used and no redevelopment actually is expected. The assumption remains, but is not an assumption value that carries through to the effective refill rate shown in the results table (Refill 2).

The effective refill rates in the second table, Refill 2, are projected, realized refill rates based on a weighted average of refill rates by building type, subarea and design type. The weights are based on forecasted positive development amounts (measured in square footage). For example, if the square

footage demand forecast is negative or zero, then the refill rate is not applied and does not enter in the calculation of the effective weighted-average refill rates reported as outcomes of the modeling as shown in table Refill 2.

The summary REGION refill rates, shown in Refill 2, for industrial and non-industrial indicate the "Hovee assumptions" result in refill rates in the region that are very comparable to the regional refill rates reported in the preliminary draft UGR (p. 56 – table 11). MetroScope reference scenario refill rates project an outcome of 24% refill for industrial uses and 45% refill rate for non-industrial purposes.

MetroScope is not the UGR. In some instances, we import MetroScope scenario results into the urban growth report to inform what we may anticipate or forecast for future development trends. However, the UGR is based on a set or combination of assumptions that derive from various sources of which MetroScope is only one source. Other sources for assumptions used in the UGR analysis are policy variables, the regional forecast, other objective data sources and sometimes even expert opinions.

Refill 1 Subarea Refill Rates by Building Type & Design Type - Demand Model Input Assumptions

Subarea Refill Rate Assumptions (Hovee) by Design Type

INDUSTRIAL BUILDINGS

Subareas	Central	Corridors	Regional Center	Town Center	RSIA	Industrial	Employment	Other
Central	70%	60%	-	60%	60%	60%	60%	60%
Inner Westside	-	18%	30%	30%	-	18%	18%	18%
Inner North & East	60%	35%	60%	60%	35%	35%	35%	35%
Inner Clackamas	-	18%	30%	30%	18%	18%	18%	18%
Inner I-5	-	18%	30%	30%	-	18%	18%	18%
Outer Westside	-	20%	20%	20%	20%	20%	20%	20%
East Mult Co	-	10%	10%	10%	10%	10%	10%	10%
Outer Clackamas	-	-	-	20%	20%	20%	20%	20%
Outer I-5/205	-	10%	10%	10%	10%	10%	10%	10%

WAREHOUSE DISTRIBUTION BUILDINGS

Subareas	Central	Corridors	Regional Center	Town Center	RSIA	Industrial	Employment	Other
Central	70%	60%	-	60%	60%	60%	60%	60%
Inner Westside	-	18%	30%	30%	-	18%	18%	18%
Inner North & East	60%	35%	60%	60%	35%	35%	35%	35%
Inner Clackamas	-	18%	30%	30%	18%	18%	18%	18%
Inner I-5	-	18%	30%	30%	-	18%	18%	18%
Outer Westside	-	20%	20%	20%	20%	20%	20%	20%
East Mult Co	-	10%	10%	10%	10%	10%	10%	10%
Outer Clackamas	-	-	-	20%	20%	20%	20%	20%
Outer I-5/205	-	10%	10%	10%	10%	10%	10%	10%

FLEX BUILDINGS

Subareas	Central	Corridors	Regional Center	Town Center	RSIA	Industrial	Employment	Other
Central	70%	60%	-	60%	60%	60%	60%	60%
Inner Westside	-	18%	30%	30%	-	18%	18%	18%
Inner North & East	60%	35%	60%	60%	35%	35%	35%	35%
Inner Clackamas	-	18%	30%	30%	18%	18%	18%	18%
Inner I-5	-	18%	30%	30%	-	18%	18%	18%
Outer Westside	-	20%	20%	20%	20%	20%	20%	20%
East Mult Co	-	10%	10%	10%	10%	10%	10%	10%
Outer Clackamas	-	-	-	20%	20%	20%	20%	20%
Outer I-5/205	-	10%	10%	10%	10%	10%	10%	10%

OFFICE BUILDINGS

Subareas	Central	Corridors	Regional Center	Town Center	RSIA	Industrial	Employment	Other
Central	85%	65%	-	65%	65%	65%	65%	65%
Inner Westside	-	45%	65%	65%	-	45%	45%	45%
Inner North & East	65%	45%	65%	65%	45%	45%	45%	45%
Inner Clackamas	-	45%	65%	65%	45%	45%	45%	45%
Inner I-5	-	45%	65%	65%	-	45%	45%	45%
Outer Westside	-	30%	30%	30%	30%	30%	30%	30%
East Mult Co	-	30%	30%	30%	30%	30%	30%	30%
Outer Clackamas	-	-	-	30%	30%	30%	30%	30%
Outer I-5/205	-	30%	30%	30%	30%	30%	30%	30%

RETAIL BUILDINGS

Subareas	Central	Corridors	Regional Center	Town Center	RSIA	Industrial	Employment	Other
Central	85%	55%	-	65%	55%	55%	55%	55%
Inner Westside	-	45%	60%	60%	-	45%	45%	45%
Inner North & East	65%	45%	60%	60%	45%	45%	45%	45%
Inner Clackamas	-	45%	60%	60%	45%	45%	45%	45%
Inner I-5	-	45%	60%	60%	-	45%	45%	45%
Outer Westside	-	25%	25%	25%	25%	25%	25%	25%
East Mult Co	-	25%	25%	25%	25%	25%	25%	25%
Outer Clackamas	-	0%	-	25%	25%	25%	25%	25%
Outer I-5/205	-	25%	25%	25%	25%	25%	25%	25%

INSTITUTIONAL BUILDINGS

Subareas	Central	Corridors	Regional Center	Town Center	RSIA	Industrial	Employment	Other
Central	85%	65%	-	65%	65%	65%	65%	65%
Inner Westside	-	55%	65%	65%	-	55%	55%	55%
Inner North & East	65%	55%	65%	65%	55%	55%	55%	55%
Inner Clackamas	-	55%	65%	65%	55%	55%	55%	55%
Inner I-5	-	55%	65%	65%	-	55%	55%	55%
Outer Westside	-	35%	40%	40%	35%	35%	35%	35%
East Mult Co	-	35%	40%	40%	35%	35%	35%	35%
Outer Clackamas	-	-	-	40%	35%	35%	35%	35%
Outer I-5/205	-	35%	40%	40%	35%	35%	35%	35%

Refill 2 Subarea Effective Refill Rates by Building Type - Demand Model Forecast Results

Weighted-Average Refill Rates (bldg. sq. footage)

Demand-side Refill Rate Assumptions (by Hovee)

Summary Refill Rates by Subarea and Timeframe

2010-2015	Industrial	WD	Flex	Office	Retail	Instit	Ind	Non-Ind
Central	0%	0%	67%	80%	77%	75%	67%	77%
Inner Westside	19%	0%	20%	50%	50%	59%	20%	53%
Inner North & East	0%	36%	36%	47%	47%	57%	36%	50%
Inner Clackamas	18%	0%	19%	51%	50%	60%	19%	53%
Inner I-5	20%	21%	21%	51%	51%	58%	21%	53%
Outer Westside	20%	20%	20%	30%	25%	37%	20%	31%
East Mult Co	0%	10%	10%	30%	25%	36%	10%	30%
Outer Clackamas	20%	20%	20%	30%	0%	36%	20%	33%
Outer I-5/205	10%	0%	10%	30%	25%	36%	10%	30%
REGION	**16%**	**31%**	**26%**	**55%**	**52%**	**58%**	**23%**	**55%**

2015-30	Industrial	WD	Flex	Office	Retail	Instit	Ind	Non-Ind
Central	0%	68%	67%	80%	77%	75%	68%	77%
Inner Westside	0%	20%	20%	50%	50%	59%	20%	52%
Inner North & East	0%	36%	36%	47%	47%	57%	36%	50%
Inner Clackamas	0%	19%	19%	51%	50%	60%	19%	53%
Inner I-5	20%	21%	21%	51%	51%	58%	21%	52%
Outer Westside	20%	20%	20%	30%	25%	37%	20%	31%
East Mult Co	10%	10%	10%	30%	25%	36%	10%	30%
Outer Clackamas	20%	0%	20%	30%	0%	36%	20%	31%
Outer I-5/205	10%	10%	10%	30%	25%	36%	10%	30%
REGION	**18%**	**25%**	**22%**	**49%**	**51%**	**55%**	**21%**	**51%**

Refill rates weighted by building sq. footage

Total Square Ft. Demand (2010-15)	Industrial	WD	Flex	Office	Retail	Instit	Ind	Non-Ind
Central	(81,863)	(21,524)	270,073	4,127,996	3,122,196	2,877,678	166,686	10,127,871
Inner Westside	108,025	(122,732)	272,088	1,990,431	1,715,051	1,474,739	257,381	5,180,220
Inner North & East	(30,474)	846,340	251,066	2,246,662	2,079,266	2,054,960	1,066,933	6,380,888
Inner Clackamas	99,299	(16,978)	137,923	816,751	906,086	693,988	220,244	2,416,824
Inner I-5	23,381	32,374	94,049	1,108,573	1,031,797	600,043	149,804	2,740,414
Outer Westside	752,188	238,029	410,507	952,951	652,027	714,170	1,400,724	2,319,148
East Mult Co	(50,012)	41,001	57,458	631,763	786,127	652,148	48,446	2,070,038
Outer Clackamas	259,892	5,468	107,821	51,211	(19,972)	41,660	373,182	72,899
Outer I-5/205	652,825	(100,984)	405,990	1,094,588	965,142	803,950	957,831	2,863,680
							4,641,231	34,171,983

Total Square Ft. Demand (2015-30)	Industrial	WD	Flex	Office	Retail	Instit	Ind	Non-Ind
Central	(676,363)	1,538,180	564,365	7,058,496	7,302,985	4,389,808	1,426,182	18,751,290
Inner Westside	(814,577)	1,435,897	432,846	5,342,401	4,377,325	3,799,886	1,054,166	13,519,612
Inner North & East	(2,180,919)	6,662,527	214,469	5,459,513	3,738,490	4,708,354	4,696,077	13,906,357
Inner Clackamas	(164,752)	1,145,504	261,299	1,899,683	1,983,872	1,508,581	1,242,051	5,392,136
Inner I-5	66,710	876,693	390,961	3,219,544	2,760,888	1,491,187	1,334,364	7,471,619
Outer Westside	4,961,701	4,244,134	2,500,835	4,445,582	1,457,196	2,088,321	11,706,669	7,991,099
East Mult Co	529,386	1,858,879	771,160	3,100,448	2,449,770	2,049,059	3,159,424	7,599,277
Outer Clackamas	1,417,574	(158,259)	866,948	1,724,728	(71,715)	178,212	2,126,262	1,831,226
Outer I-5/205	1,524,259	4,226,870	1,138,459	2,745,149	2,327,607	2,140,304	6,889,588	7,213,060
							33,634,784	**83,675,676**

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Metro | *Memo*

Date: June 25, 2009
To: MPAC
From: Malu Wilkinson, Principal Regional Planner
Re: MTAC recommendations on the preliminary employment urban growth report

On June 24, MTAC devoted an extended session to a discussion of the preliminary employment urban growth report (UGR) and made recommendations for the draft UGR (to be released in September). MTAC was joined by members of the Employment Coordination Advisory Committee (ECAC). MTAC and ECAC's recommendations are summarized below.

Addendum to the preliminary UGR: large lot analysis

MTAC and ECAC received Metro's preliminary analysis of this topic at the June 24 meeting. Consequently, they have not yet had adequate time to review the materials. Initial comments are as follows:

- It was suggested that a job forecast may not be the best means of predicting demand for large lots since some large lot uses do not require very many employees (e.g., logistics, marine terminals), but are important to the regional economy for other reasons. MTAC and ETAC had no suggestion for an alternative means of predicting demand.
- TriMet anticipates a need for a large lot in the 20-year time horizon for a bus lot.
- The analysis should look at need for office parks and shopping centers (groupings of smaller employers).
- Office parks and shopping centers are not a need, but a preference for a particular format.
- Many large employers in the region now operate on multiple sites and would prefer to consolidate operations onto one big lot.
- We should focus first on what our regional vision is and only follow past trends if they are in keeping with that vision. Distinguish between needs and preferences.
- The discussion of large lot need is not a policy discussion, it is a factual discussion.
- Large lots are not interchangeable. Firms have very specific location needs. We need multiple large sites that exceed forecasted demand to allow for choice.

Range employment forecast

After some discussion of how DLCD and LCDC might regard the reasonableness of the range forecast (and the point on the range that is ultimately chosen), MTAC and ECAC expressed support for maintaining the range forecast in the forthcoming draft UGR.

Capture rate

The capture rate is the portion of the 7-county area's future growth that is expected to be in the Metro UGB. The group concurred that the capture rate will depend on which policy and investment choices are made and that MetroScope appears to offer a reasonable estimate of possible capture rates. Changes to the policy assumptions will result in changes to the capture rate.

Linking industry sectors to building types

The UGR recognizes that each industry sector uses a variety of building types (e.g., office, retail, general industrial) in different proportions. MTAC and ECAC expressed support for this approach, but suggested that the draft UGR mention that this approach might underestimate needs for uses that are land extensive, but require very little building square footage. The group also suggested that the draft UGR refer to some of the region's economic clusters that are difficult to discern in the preliminary UGR's linkage of industry sectors and building types.

Square feet per employee

The UGR assumes that demand for square feet per employee varies according to building type, market area, and whether it is in a center. This is based on the fact that land values influence uses. MTAC and ECAC indicated that the preliminary UGR's assumptions regarding square feet per employee appear reasonable, but that staff check with cities (Portland and Hillsboro in particular) on the assumptions that they use in their Economic Opportunity Analyses.

Distribution of jobs (demand)

The preliminary UGR uses MetroScope, an integrated land use and transportation model, to forecast where jobs may locate by the year 2030 if current policy and investment trends continue. MTAC and ECAC discussed how infrastructure funding shortfalls may diminish job demand in certain locations. The group suggested that the draft UGR needs to note that job demand may not always be the best measure of need for land and that demand is often site-specific.

Floor area ratio (FAR)

Floor area ratio is a measurement of the relationship between building floor area and the area of the parcel. The UGR uses both demand-and-supply-side FARs. Supply-side FARs are an interpretation of what zoning would allow, tempered by market realities. Demand-side FARs are an estimate of the densities that are supported by the market. The UGR recognizes that demand-side FARs vary by building type, market subarea, and 2040 design type (center, corridor, etc). Generally, the group found the FAR assumptions to be reasonable, but pointed out an error in an FAR table, which shows no regional center in the Outer Clackamas market subarea. Where available, cities will provide data on observed FAR trends.

Vacant land inventory

Cities will submit any corrections to the vacant land inventory by June 30.

Refill rates

The refill rate measures the percentage of future job growth that is expected to occur through redevelopment or infill (rather than on vacant land). The group ran out of time to discuss this element of the UGR.

DATE: June 16, 2009

TO: Malu Wilkinson, Metro

FROM: Scott Drumm, Port of Portland

RE: Preliminary Urban Growth Report (Employment) Comments

I circulated the document internally at the Port and have compiled comments in this one document. Additionally, a number of ECAC members are in the process of drafting a joint letter expressing concerns about the supply of and demand for large parcels. Given the coordination involved, this letter will like be submitted on Friday.

We request that our questions and concerns be addressed through discussion at future ECAC meetings, via a follow-up meeting that we had with you and other Metro staff in May, or in written form.

GENERAL COMMENTS

I appreciated having the chance to meet with Dennis Yee to gain a greater understanding of the model, its scope, and its outputs. While the model's outputs are an important tool for developing the urban growth report, there are some important issues the model cannot address that are more subjective than objective. We are striving for precision in an area where we just simply cannot be that precise. These issues must somehow be considered in the overall analysis. The following are concerns arising from our understanding of the Metroscope model and how it is being applied for this analysis. We do not quarrel with the Metroscope or its results, but rather feel we should recognize the limitations of models (any model) and proceed with analyses accordingly. If we are incorrect in any of our assumptions or understanding, please correct us.

- The size, shape, and location of a site are important factors in a company's determination of its suitability. We may have land available in the inventory, but it may not meet the needs of companies looking for land depending on their business models and their valuations of site attributes and trade-offs against other factors, such as transportation costs and access to labor.
- Further, not all sites are suited to all industries. The model cannot make a valuation as to whether or not a certain site will work for a given industry. For example, land in the Port of Portland's Portland International Center business park adjacent to Portland International Airport is excellent for distribution, logistics, and certain manufacturing industries, but not for high technology. Despite the ideal proximity to air cargo facilities, the soil type is such that vibrations from truck and airplane traffic preclude the location of high tech production.
- Portland-Vancouver does not have the luxury of being a market in and of itself because it is small. Most of the region's large firms do not need to be in the region; this is true of our burgeoning solar industry as well. If there are parcels in other west coast locations that offer adequate or better alternatives to what is in our inventory we stand to lose out on wealth

creation for the region. The model cannot evaluate how competitive our parcels are, yet having sites that can out-compete those in other areas is essential to sustained economic development.

- The model needs specific numbers as inputs in order to produce output. Unfortunately, we often may not know or have the exact numbers needed. The projection of industrial land need based on employment growth/decline is an example. We know that these two no longer correlate well, but we have nothing definitive to use in its stead. We need to be flexible to consider a range of options, using the employment-based number as a bottom end. This may not be an entirely empirical approach, but would yield a more accurate result than relying on something we know not to be as accurate as we desire.
- We appear to be very fearful of over supplying land for industrial use. If that is indeed the case, then an explanation should be included in the report regarding this downside risk. From a market perspective the land would only develop if there was a need for it to develop and if the finance industry were willing to provide the credit necessary for the development. If we oversupply by a little bit now perhaps the next round of expansion will be smaller. Please help us identify the downside of this.

The model provides a good starting point for discussion, but should not be the sole input for determining the region's need for industrial land. Rather, it has given us a good basis for discussion and has identified the next round of questions we must address. These, however, are more likely to require subjective evaluation. If we continue without investigating these critical issues that the modeling results have raised we risk aiming for a precise answer to a question that has inherent imprecision to it.

SPECIFIC COMMENTS

Large-lot Demand The main points will be covered in the aforementioned letter, but there are others that the letter does not address.

- Like transportation, land use is a system. Without considering all of its components as a system it is impossible to arrive at any conclusions. Asking us to evaluate the preliminary UGR Employment report without including the large lots is premature.
- This issue is clearly identified on the ECAC May 27 meeting agenda. We ran out of time at that meeting, but were assured that we would receive the results of that analysis within 2 weeks. That did not occur. When I asked about it during our June 10 meeting Metro staff indicated that this was going to MPAC. This seems like Metro's approach is changing. Why? And why is the ECAC unable to review the results?

Capture Rate The projection of the employment capture rate is between 73 and 75 percent for the 2010-2030 period. Table 4 shows that for the most recent 20-year period for which data is available (1986-2006) the capture rate was 80%. While there is nothing objectionable about the satellite cities and communities adding jobs, such a continued precipitous drop from 87% to 75% is a concern and begs several questions the region should address.

- Will the satellite cities actually accommodate the jobs forecast to move into the region? Repeating one of the general comment points above, not all sites are suitable for any given company or industry. If there is a competing site elsewhere the region is at risking of losing income and wealth.
- As we understand it, the model and the modeling work done for this analysis connects population and employment locations through commute travel. It does not address inbound supply and outbound product shipping for industrial locations. This relates to the site suitability issues raised earlier. Further, should we not also do analysis on potential expansion locations versus other locations in the 7-county metro area? For example, a distribution/logistics operation located near I-5, I-84, or I-205 would result in lower truck VMT than one located in a satellite city. It would also require less infrastructure investment and pose fewer truck-related conflicts within these communities. How are these trade-offs being addressed?
- From a more parochial perspective, the farther north of the Columbia River companies locate, the greater the likelihood they will use cargo services and facilities at the Port of Tacoma and the Port of Seattle (both Sea-Tac and their marine terminals). This is exacerbated by projected future levels of congestion on the Interstate and Glen Jackson bridges.
- What is the labor force demographic within these satellite communities? Do the skill sets and occupations match up with the kinds of jobs that could locate their in the future? In other words will we have a match between the local labor force and jobs or will it result in increased VMT as locals continue to remain employed elsewhere and residents of the Metro UGB take jobs in the satellite communities?

Redevelopment Opportunities We are very supportive of redevelopment projects, having recently undertaken a large redevelopment project at the former Reynolds aluminum smelter site in Troutdale. Our experience, however, raises a number of questions about the viability and timing of such projects.

- We have not yet seen any financial analyses as a part of this process. What are the estimated costs for redeveloping some of the parcels identified for this purpose? Who will be funding these projects?
- What is the timeline for turning some of the parcels into ready-to-develop sites?
- What are the assumptions regarding regulations; will they remain more or less static or become more stringent and how will that affect the availability of parcels identified as redevelopable?
- Navigating regulatory requirements can also pose a challenge to brownfield redevelopment.

Projecting Demand for Industrial Land As mentioned earlier in this memo, we and other members of the ECAC are convinced that projecting the need for industrial land based on employment levels will yield an inaccurate result. While we have wrestled with other proxies for this, we cannot identify anything that would be sufficient. Nonetheless, we believe the projections for industrial land demand are low and should be adjusted upwards, even if the adjustment is not empirical. The risk to the region is substantial. While these facilities are now using more space per employee they are also generating much greater fiscal returns to local jurisdictions.

- Our own experience provides an illustration of what is happening with industrial development. FedEx Ground, which is moving from our industrial park on Swan Island to our new park, the re-

developed Reynolds site, is increasing its footprint without growing employment in this first phase. Currently FedEx Ground operates in roughly 80,000 square feet of space; their new facility in Troutdale will be nearly six times as large, some 450,000 square feet, but employment will remain flat. However due the newness of the building the investment in newer and more sophisticated equipment it should generate greater tax revenue for the region that it contributes currently.

- The Task 1 report identifies this disconnection, showing that during the study period industrial jobs declined in the region, but development of industrial space continued to grow. Yes, part of that was due to "poaching" by commercial and office uses, but it also aligns with trends we are experiencing in industrial development.
- This is an area in which we need to combine the results of economic modeling, experience, best judgment (a subjective element, to be sure), and best available knowledge. We fear that if we do not blend these elements together we may, despite our best intentions, constrain rather than contain growth.

Opportunity Costs of Not Having Sufficient Parcels of the Right Size in the Right Place An issue we have raised previously is the notion of understanding what the region has already lost in terms of jobs, income, and fiscal contribution to local and state jurisdictions by not having the right parcels with the right configuration in the right place.

- Many economic development and planning agencies in the region can document lost business development opportunities due to lack of sufficient land in the Portland-Vancouver region. We, as a region, need to understand what we have forgone and work that into our analyses. Had the land been available for those firms to locate here our employment projection range would now be somewhat higher since our base numbers would have been higher.
- What quality of jobs are we losing because we currently do not have the necessary land resources? If these are technology (including solar), logistics, or other high paying industries then we have lost out on wealth creation at a time when regional income levels lag those of our neighbors up and down the West Coast.

CITY OF HILLSBORO

E-mail & Postal Delivery

To: Chris Deffebach, Malu Wilkinson and Dennis Yee, Metro Staff

From: Patrick Ribellia, Planning Director
Alwin Turiel, Long Range Planning Supervisor

Date: June 22, 2009

RE: Comments on the Preliminary Draft Urban Growth Report - Employment

Thank you for the opportunity to provide written comments for the record pertaining to the Regional Urban Growth Report – Employment ("UGR-Emp"). Our comments address four primary areas of concern to Hillsboro:

- Application of the "New Demand Paradigm" for determining the Region's 20-year industrial land need for land-intensive industrial cluster sectors in the Region;
- Recognizing and addressing the specialized land needs of existing and emerging industry clusters[1] (e.g., "high tech," green, and bio-pharma industries);
- Accommodating special Regional needs for large industrial lots demand in a timely manner; and
- Issues and challenges with land assembly and land banking by existing industries.

The Draft UGR-Emp report states: "*This analysis does not yet attempt to determine whether or not there is adequate large lot capacity inside the current UGB*" (pg. 61). Nonetheless, it finds and declares that there is no absolute need to expand the urban growth boundary to accommodate any type of future employment use. It also invites Metro's "*regional planning partners to develop a means to forecast potential demand for large lot industrial users*" in tandem with Metro staff and their consultants. We respectfully ask that the technical and analytical adjustments identified below be reflected in the final UGR-Emp Report.

The New Demand Paradigm

The Draft UGR-Emp report attempts to change fundamentally the conversation and approach concerning how the Region plans and provides for future employment (including industrial) growth through a "New Demand Paradigm" described in the E.D. Hovee report titled *Employment Demand Factors & Trends*, March 2009 (see pages 45-54). According to the Draft UGR-Emp report "*One of the innovations of this analysis is to consider employment demand and supply in terms of the*

[1] A cluster is defined as "*a geographic concentration of competing, complementary or interdependent firms with common needs for talent, technical support and infrastructure.*" Source: *Metro, 26-29 Technical Report*, January 2004.

buildings that accommodate jobs, rather than only on the land." (page 35). With its emphasis on six primary building types, 18 generalized job sectors and six Metro 2040 land use design types, the "New Demand Paradigm" aims to allow "*policy makers to discuss both the employment demand and the building form that shapes the way communities look and feel.*"

The "New Demand Paradigm" uses employment land supply/demand/need metrics that are indexed to building square feet and building type (in contrast to the more commonly – and historically - used employees/acre metrics). However, neither the UGR-Emp report, or its supporting E.D. Hovee report completes the final step in the employment land need analysis – a translation of building form types to corresponding site size (land area) requirements to enable a calculation of total acres needed over the next 20 years to accommodate forecasted future employment growth in the Region.

This unfinished work must be done so that the UGR-Emp report's findings and conclusions regarding current employment land capacity and estimates of future employment/industrial land need can be clearly understood and sufficiently verified on the ground. Information from the completion of this last step is essential to prove that the final UGR-Emp report has sufficient technical data and evaluative rigor to satisfy Goal 14 rules to show the 20-year UGB land capacity and land need can be "reasonably accommodated."[2] These rules will not be satisfied by outcome-based policy-driven discussions, alone, as the bases for findings and conclusions about UGB industrial/employment land capacity and need over the next 20 years.

As more fully explained below, the "New Demand Paradigm's" employment-centric analysis falls short in addressing the unique characteristics and needs of several important industrial subsectors of the regional economy (e.g., distribution, warehousing, and high technology). These subsectors may not represent land uses that are typified by square feet of building per employee. Nevertheless, they are significant contributors to achievement of the Region's goal of "*sustained economic competitiveness and prosperity.*" Typically they stimulate additional job creation through regional economic multiplier effects, enhance local tax bases, and provide family-wage jobs.

Unique Regional Industry Clusters

Several important and complex industry subsectors, or priority business clusters, are mentioned in passing in the Draft URG-Employment report (distribution/warehousing, high technology, green manufacturing, and construction). For example, the report includes data for high technology (high tech) industries in three primary employment sectors; *Manufacturing*, *Information* and *Professional Services* (see Table 5, page 35), but does not discuss the priority business cluster in any detail.

"High tech" is obscured within these NAICS categories because "*high tech tends to have a higher office component*," and thus cannot be neatly compartmentalized into a single employment sector[3] Thus, the Draft UGR-Emp report approach appears to be a case of the methodology obscuring, if

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[2] See OAR 660-024-0040 and OAR 660-024-0050(1) and (4).

[3] "*Metro's 2035 employment projections call for wholesale trade, warehousing and distributing to comprise 45% of net new industrial sector job growth, or a pro-rated 58,000 new jobs by 2035. Data indicates that warehouse buildings support fewer jobs per square feet than other types of industrial uses. Of the remaining industrial sector jobs projected, high tech accounts for 45% and construction accounts for 39%; neither of these are 'traditional' industrial sector land users (high tech tends to have a higher office component and construction requires more land for equipment storage than building square feet).*" E.D. Hovee, *Employment Demand Factors and Trends*, March 2009, Page 50.

not eclipsing, analysis of a key economic driver – the high tech industrial sectors - within the local, regional and statewide economies.

Given the importance of the high tech cluster to the region's economy (representing over 26,370 jobs in Washington County alone, or half of the State's high technology jobs), more attention is warranted in the Draft UGR-Emp report to accurately capture future industry needs.[4] Similarly, the unique characteristics and land needs of distribution facilities and metals manufacturing should be investigated further.

A decline in the manufacturing job forecast in the manufacturing industry group does not necessarily translate to a reduced need for land for that sector. As industries increase investment in technology or become more efficient through improved processes, jobs may fluctuate or decrease in a particular location, but may require a larger site and building. This does not suggest that industries with fewer jobs at a single location are less desirable. Increased investment in capital by industry often means more tax revenue for local jurisdictions and ultimately a more successful company, resulting in a larger multiplier effect for the regional economy.

Evolving Regional High Tech Industries

While high tech does not fit squarely within any one NAICs code or building type, it is a definable industry cluster characterized by capital intensive development providing family wage jobs. Using a combination of NAICS codes developed by the National Science Foundation in 2006 to identify high tech (see Appendix 1), it is apparent the industry cluster could also easily include many "green" industries such as Hillsboro's emerging solar enterprises and Gresham's wind generator production facilities. The Portland Development Commission also considers high tech to encompass a mix of manufacturing, software development and research. As pointed out by PDC at the 27 May 2009 ECAC meeting, under this definition, the region's solar cluster qualifies as "high tech."

Given the right environment, the region's emerging green manufacturing industries could add many more than the 3,000 additional manufacturing jobs projected by Metro for the sector through 2035.[5] For example, SolarWorld anticipates a four-fold increase in jobs at their Hillsboro facility, growing to 1,000 workers by 2011 and over 2,000 workers over the next decade.

High/Green Tech Building and Land Needs

The Focus Group feedback that was obtained as part of the E.D. Hovee study provides insight into the needs of high tech end users (see Focus Group Research, February 2009, pages 21-35). In addition, on June 1, 2009 the Metro Council and selected staff toured three Westside industrial operations (SolarWorld, Genentech and Sheldon Industries). The tour and roundtable discussion that was part of the day's program provided a unique opportunity to better understand the specialized manufacturing equipment, processes and operations of high/green tech companies, including the types of building and land design features they require.

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[4] Johnson-Reid, City of Hillsboro *Economic Opportunities Analysis*, March 2009, Page 11.

[5] *"Manufacturing jobs are projected to account for only 4% of non-distributing industrial job growth – a total of just 3,000 jobs between 2008 and 2035. Again, it should be noted that job sectors locate in various types of commercial space, which are only broadly classified as industrial, flex, office or retail."* E.D. Hovee, *Employment Demand Factors and Trends*, March 2009, Page 50.

Points made by industry representatives during the day-long tour included the following:

1) **Industries looking for sites have many requirements that vary by industry group, but all consider the following;**

   (a) Land and buildings that are the amount of property they require,
   (b) Available and developable,
   (c) Competitively priced,
   (d) With infrastructure available (especially reliable electricity, gas and water),
   (e) With adequate transportation for freight and people movement, and
   (e) Reasonable development costs.

2) A workforce that is educated, well trained and available is vitally important.

3) Green and high tech industries require "clean space."

4) Operating costs must allow for profitable operations (i.e., taxes, utilities, labor costs etc.)

5) Incentives requirements vary in importance by industry expectations.

6) Reasonable proximity among anchor companies and their suppliers, vendors, worker residences, etc. can be a key site location factor.

7) Certainty of land development entitlements is critical. As much certainty as possible is needed in the permit process, schedule and the planning process. Uncertainty or lack of a clear process are reasons to eliminate sites. This is a key reason that "just in time" urban growth boundary amendments could be problematic if it is the only method used to allow large site development.

8) Companies looking to come to the region want to be up and running within a short period of time (usually within six months). For this reason, for companies like Genentech *shovel ready* was the threshold issue that led to their decision to come to the region.

9) Retaining appropriate large sites for industrial growth is a public responsibility not the industry that purchases and develops. They make the best plans possible for the site but want flexibility. It is a tough balance. One way to retain sites in the available inventory is to have some type of public control through option or ownership.

10) Industry clusters are not defined by distance but by general proximity in a region. They want a business environment that will accommodate like businesses and suppliers so they are not isolated. Closer is often better for suppliers but not always for like businesses. An example is semiconductor companies that wanted to be in the Portland area but not next to others (LSI, Fujitsu, Wafer Tech).

Future Large Lot and End User Demand

Contrary to discussions regarding large-lot demand, such demand is not "episodic" but, rather, is a constant and critical part of the Region's industrial land market. That such demand is constant has been relayed to Metro Councilors by OECDD, ECAC, spokespersons for large industrial users, PDC, the broker community and national industrial site selectors.

Limited site availability and development uncertainty in the Region's industrial land entitlement regimen will put the Region at a severe competitive disadvantage in its ability to attract and keep new industry firms seeking to grow or locate here. Oregon's business recruitment experience has been that such firms neither cannot nor will not wait for a process to expand, annex, zone (with potential challenges) and prepare a site. "Shovel-ready site certification" is the industry standard and was established because of that experience.

The suggested fast-track UGB review mechanism to meet large industrial lot demand will not provide the site development entitlement certainty or timeliness required by industry users. Such a "just-in-time" approach would put the region at a national (if not international) competitive disadvantage, compromising Metro's *Characteristics of a Successful Region* goal of maintaining "*the region's sustained economic competitiveness and prosperity.*" To maintain the region's competitive edge in an ever globalizing economy, we need to ensure these industries continue to find places to thrive in our region.

The need to provide sufficient lands, of the right size, in the right places cannot be understated. Considerations by large lot industrial users include those listed under item #1 in the above section.

We recommend that some industry leaders or site locators be involved in MPAC subcommittee review. Tasks referred to subcommittee should include outlining methods of ensuring large lots brought into UGB for industrial purposes will remain dedicated to industrial uses.

Land Assembly and Land Banking Challenges

Additional explanatory detail on Metro's assumptions regarding land assembly is needed since the realities of the costs of assembly and land banking are not evident in the tabular data or the report discussion of these issues. Our experience indicates that land assembly has become increasingly challenging as the city has urbanized. The probability of acquiring multiple parcels at a reasonable price declines virtually in direct proportion to increasing land value, land division and property owner expectations. No amount of "aspiring" will make land assembly happen if property owner motivation is insufficient, condemnation (or the possibility of) is not involved, and the number of separate property owners involved in the sales transactions exceeds a few. Sadly, the possibility of a massive land assembly such as happened when the city acquired the land that Intel's Ronler Acres was built on in the 1990's is virtually nil in light of recent U.S. Supreme Court rulings that limit methods of site acquisition permissible in urban renewal areas.

The Ronler Acres site was assembled by the city of Hillsboro during the 1990's using urban renewal as the funding source. It included assembling and vacating over 698 lots in an under developed subdivision to create an opportunity for a mixed use employment area. Today, the Ronler Acres Intel plant on 250 acres forms the nucleus of a thriving high tech primary business

cluster. Without urban renewal and the possibility of condemnation the city would have had little chance of assembling such a large, fragmented area. Since this type of use of urban renewal funding in tandem with eminent domain powers is no longer lawful in Oregon, it would be exceedingly difficult to replicate a public land assembly success like Ronler Acres today.

We understand from Metro staff that Table 9 (p. 53) accounts for land banking by local industries. Land banking, which industries see more as a way to create "future readiness for the next big thing," is a direct result of existing industries needs to create certainty for future growth in the same location. Professional industrial site locators inform us there will continue to be demand for large sites for targeted industry clusters. Companies are not looking for large sites to speculate on real estate but acquire them to meet projected business growth. They don't want to grow and run out of land. Developing new sites is disruptive, expensive and usually inefficient. Since expansion of existing businesses has historically been a major component of local economic growth it makes sense to recognize this industry preference in the analysis as a component of "committed employment land capacity."

Other Issues

- Reconciliation of vacant lands layer – 349 acres less between City and Metro analysis (Metro over-estimates vacant land availability by 27%). See detailed summary tables provided by Doug Miller.
- Integrity of FCS Group analysis of industrial land readiness (application of rating system of Great to Poor). Based on the general description in the vacant lands memo, we cannot determine how the ratings for a number of sites were determined.
- Table 8, pg. 50 shows theoretically buildable acres but does not accurately reflect the findings in the FCS Group memorandum regarding large lots (50-100 acres or 100 acres and above) throughout the region. As shown in the FCS Group "preliminary Vacant Land Supply Findings (Attachment 2), there are virtually no sites anywhere within the existing UGB that could accommodate a user similar to Intel or SolarWorld.
- Refill rates in Table 11 show the outer Westside has a reported refill rate of 20% for industrial uses; Figure 26 shows overall refill potential of 50% (*see also* Table 12). How do these two tables reconcile?
- Multiplier effects are not discussed in the Draft UGR-Emp Report. The opportunity for substantial employment growth will be lost without the opportunity to site new base industries in the region and maintain the health of existing ones.
- There is a need for a Regional Economic Development Strategy. For example, of the three rebound sectors identified by economists for the US economy over the next two years (bio-pharma, information services and entertainment), Hillsboro provides the region with two of the three as established or emerging industries. Hopefully, maintaining this competitive advantage would be part of an overall Regional Economic Development Strategy.

We look forward to discussing these comments with you and providing additional input to the final UGR as it nears completion later this year.

Sincerely,
CITY OF HILLSBORO PLANNING DEPARTMENT:

Patrick Ribellia, Esq., AICP
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Long Range Planning Supervisor

Attachments: 1) Defining "High Tech"
2) FCS Group, *Vacant Employment Land Supply*, appendices, December 2008
3) Johnson-Reid, *Economic Opportunities Analysis*, Industrial Sector Worksheets, March 2009

ATTACHMENT 1 - Defining "High Tech" based on NAICS

To identify economic and industrial market trends shaping high-tech research space need, JOHNSON GARDNER uses the National Science Foundation (NSF) definition of high-tech research and engineering.[6] The NSF defines industries conducting high-technology research, engineering and manufacturing based on the North American Industrial Classification System (NAICS) for a specific set of private industries. That list can be found in the figure on the following page.

There are 39 recognized "high-technology" industries in the United States that are technically subsectors of broader industry categories. For example, four high-tech industries related to ordinance and accessory manufacture are identified with six-digit NAICS codes, which reflect that they are a subset of the broader Manufacturing industry and its two-digit NAICS code 33.

The primary business function of the 39 industries can be characterized as follows:

- *High-Tech Manufacturing:* 30 of the 39 (77%) industries primarily manufacture goods utilizing advanced technology, depend upon development of new technology, or produce new technology as part of the product development process. These industries likely also conduct research, though only secondary to or in support of primary manufacturing function.
- *High-Tech Services:* 9 of the 39 (23%) industries primarily provide research services, engineering services, or utilize advanced technology in providing services as a primary business function. These industries likely also manufacture items, but only secondary to or in support of primary services function.

[6] *Science & Engineering Indicators 2006*, National Science Foundation. The report can be found at the following URL: http://www.nsf.gov/statistics/seind06/front/about.htm

HIGH-TECHNOLOGY INDUSTRIES BY NAICS CODE

NAICS[1] code	Industry
32411	Petroleum refineries
3251	Basic chemical manufacturing
3252	Resin, synthetic rubber, and artificial and synthetic fibers and filaments manufacturing
3253	Pesticide, fertilizer, and other agricultural chemical manufacturing
3254	Pharmaceutical and medicine manufacturing
3255	Paint, coating, and adhesive manufacturing
3256	Soap, cleaning compound, and toilet preparation manufacturing
3259	Other chemical product and preparation manufacturing
332992	Ordnance & accessories manufacturing—small arms ammunition manufacturing
332993	Ordnance & accessories manufacturing—ammunition (except small arms) manufacturing
332994	Ordnance & accessories manufacturing—small arms manufacturing
332995	Ordnance & accessories manufacturing—other ordnance and accessories manufacturing
3331	Agriculture, construction, and mining machinery manufacturing
3332	Industrial machinery manufacturing
3333	Commercial and service industry machinery manufacturing
3336	Engine, turbine, and power transmission equipment manufacturing
3339	Other general purpose machinery manufacturing
3341	Computer and peripheral equipment manufacturing
3342	Communications equipment manufacturing
3343	Audio and video equipment manufacturing
3344	Semiconductor and other electronic component manufacturing
3345	Navigational, measuring, electromedical, and control instruments manufacturing
3346	Manufacturing and reproducing magnetic and optical media
3353	Electrical equipment manufacturing
33599	All other electrical equipment and component manufacturing
3361	Motor vehicle manufacturing
3362	Motor vehicle body and trailer manufacturing
3363	Motor vehicle parts manufacturing
3364	Aerospace product and parts manufacturing
3391	Medical equipment and supplies manufacturing
5112	Software publishers
514191	On-line information services
5142	Data processing services
5413	Architectural, engineering, and related services
5415	Computer systems design and related services
5416	Management, scientific, and technical consulting services
5417	Scientific research and development services
6117	Educational support services
811212	Computer and office machine repair and maintenance

SOURCE: *Science & Engineering Indicators 2006*, National Science Foundation.

[1] North American Industrial Classification System

ATTACHMENT 2 - *Vacant Employment Land Supply, Appendices*, FCS Group, December 2008

Table 5 Total Tri-County Region UGB

Estimated Vacant Employment Land Supply, December 2008

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
RSIA																
Tier A, Vac/No Const	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier B Vac/Const	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier C Infill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier D Part Vac/Const	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier E Vac/Non Urban	4	4	48	88	57	313	13	234	4	137	0	0	0	0	126	776
Tier F Part Vac/Non Urban	4	3	117	210	52	250	12	168	1	28	0	0	0	0	186	659
Tier G Infill/Non Urban	103	62	0	0	0	0	0	0	0	0	0	0	0	0	103	62
Total	111	68	165	298	109	564	25	402	5	165	0	0	0	0	415	1,497

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Industrial																
Tier A Vac/No Const	0	0	32	57	12	56	4	60	0	0	1	52	0	0	49	225
Tier B Vac/Const	3	2	188	343	183	1,016	46	755	15	487	1	56	0	0	436	2,660
Tier C Infill	210	143	0	0	0	0	0	0	0	0	0	0	0	0	210	143
Tier D Part Vac/Const	5	4	155	271	83	452	12	196	9	285	3	224	0	0	267	1,432
Tier E Vac/Non Urban	6	5	55	99	62	334	8	120	3	112	2	129	0	0	136	799
Tier F Part Vac/Non Urban	1	1	98	186	76	389	14	220	3	82	0	0	0	0	192	877
Tier G Infill/Non Urban	112	65	0	0	0	0	0	0	0	0	0	0	0	0	112	65
Total	337	220	528	956	416	2,246	84	1,351	30	967	7	461	0	0	1,402	6,202

Table 5 Continued
Total UGB

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Employment																
Tier A Vac/No Const	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier B Vac/Const	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier C Infill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier D Part Vac/Const	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier E Vac/Non Urban	4	3	23	41	18	88	3	39	0	0	0	0	0	0	48	172
Tier F Part Vac/Non Urban	2	2	95	166	40	179	3	42	0	0	0	0	0	0	140	389
Tier G Infill/Non Urban	189	114	0	0	0	0	0	0	0	0	0	0	0	0	189	114
Total	195	119	118	207	58	267	6	81	0	0	0	0	0	0	377	675

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Mixed-Use Emp.																
Tier A Vac/No Const	4	6	44	86	26	171	4	66	1	52	0	0	0	0	79	380
Tier B Vac/Const	2	2	68	115	58	302	12	227	4	172	0	0	0	0	144	819
Tier C Infill	79	57	1	1	0	0	0	0	0	0	0	0	0	0	80	57
Tier D Part Vac/Const	1	1	46	104	23	139	5	109	4	175	0	0	0	0	79	528
Tier E Vac/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier F Part Vac/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier G Infill/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	86	65	159	306	107	612	21	402	9	399	0	0	0	0	382	1,784

Table 5 Continued
Total UGB

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Mixed-Use Res.																
Tier A Vac/No Const	4	7	38	73	13	67	1	17	0	0	0	0	0	0	56	164
Tier B Vac/Const	11	11	76	135	29	156	3	51	1	47	0	0	0	0	120	400
Tier C Infill	111	76	1	1	3	18	1	15	0	0	0	0	0	0	116	111
Tier D Part Vacant/Const	8	9	46	77	18	84	2	113	0	0	0	0	0	0	74	283
Tier E Vacant/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier F Part Vacant/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier G Infill/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	134	103	161	286	63	325	7	196	1	47	0	0	0	0	366	957

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Commercial																
Tier A Vac/No Const	3	2	38	72	6	30	0	0	0	0	0	0	0	0	47	104
Tier B Vac/Const	3	2	45	82	13	71	2	52	1	32	0	0	0	0	64	238
Tier C Infill	64	39	0	0	0	0	0	0	0	0	0	0	0	0	64	39
Tier D Part Vacant/Const	1	1	40	67	11	54	0	0	0	0	0	0	0	0	52	122
Tier E Vacant/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier F Part Vac/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier G Infill/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	71	43	123	221	30	155	2	52	1	32	0	0	0	0	227	502

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Public Facilities																
Tier A Vac/No Const	0	0	0	0	2	11	0	0	0	0	0	0	0	0	2	11
Tier B Vac/Const	0	0	6	9	6	36	3	111	0	0	0	0	0	0	15	155
Tier C Infill	6	4	0	0	0	0	0	0	0	0	0	0	0	0	6	4
Tier D Part Vacant/Const	0	0	5	11	3	22	0	0	0	0	0	0	0	0	8	33
Tier E Vacant/Non Urban	2	2	1	2	0	0	1	11	0	0	0	0	0	0	4	15
Tier F Part Vac/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tier G Infill/Non Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	8	6	12	22	11	69	4	122	0	0	0	0	0	0	35	218

Table 5 Continued
Total UGB

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
GRAND TOTAL	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Tier A Vacant/No Const	11	15	152	288	59	334	9	143	1	52	1	52	0	0	233	884
Tier B Vacant/Const	19	17	383	684	289	1581	66	1196	21	738	1	56	0	0	779	4,271
Tier C Infill	470	319	2	2	3	18	1	15	0	0	0	0	0	0	476	354
Tier D Part Vacant/Const	15	15	292	529	138	752	19	418	13	460	3	224	0	0	480	2,398
Tier E Vacant/Non Urban	16	13	127	230	137	735	25	404	7	250	2	129	0	0	314	1,761
Tier F Part Vacant/Non Urban	7	6	310	562	168	818	29	430	4	109	0	0	0	0	518	1,926
Tier G Infill/Non Urban	404	241	0	0	0	0	0	0	0	0	0	0	0	0	404	241
Total	942	626	1,266	2,295	794	4,237	149	2,605	46	1,610	7	461	0	0	3,204	11,834

Table 6 Total Tri-County UGB, Estimated Tier A Vacant Employment Land Supply, December 2008

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
RSIA																
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner North & East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner I-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Multnomah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer I-5/I-205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Industrial																
Central	0	0	2	3	0	0	0	0	0	0	0	0	0	0	2	3
Inner North & East	0	0	5	9	4	13	0	0	0	0	0	0	0	0	9	23
Inner I-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Westside	0	0	0	0	1	9	0	0	0	0	0	0	0	0	1	9
Inner Clackamas	0	0	7	15	0	0	0	0	0	0	0	0	0	0	7	15
East Multnomah	0	0	7	12	5	24	2	33	0	0	1	52	0	0	15	120
Outer Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer I-5/I-205	0	0	3	4	2	10	1	11	0	0	0	0	0	0	6	26
Outer Westside	0	0	8	13	0	0	1	16	0	0	0	0	0	0	9	29
Total	0	0	32	57	12	56	4	60	0	0	1	52	0	0	49	225

Table 6 Continued, Tier A Land Supply

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Employment																
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner North & East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner I-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Multnomah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer I-5/I-205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Mixed-Use Emp.																
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner North & East	0	0	1	1	3	23	0	0	0	0	0	0	0	0	4	25
Inner I-5	1	1	4	7	0	0	0	0	0	0	0	0	0	0	5	8
Inner Westside	0	0	11	18	2	9	0	0	0	0	0	0	0	0	13	27
Inner Clackamas	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
East Multnomah	1	1	0	0	3	17	0	0	0	0	0	0	0	0	4	18
Outer Clackamas	2	4	3	19	3	39	1	18	1	52	0	0	0	0	10	132
Outer I-5/I-205	0	0	6	9	2	15	0	0	0	0	0	0	0	0	8	24
Outer Westside	0	0	18	30	13	67	3	48	0	0	0	0	0	0	34	145
Total	**4**	**6**	**44**	**86**	**26**	**171**	**4**	**66**	**1**	**52**	**0**	**0**	**0**	**0**	**79**	**380**

Table 6 Continued, Tier A Land Supply

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Mixed-Use Res.																
Central	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	2
Inner North & East	0	0	7	11	0	0	0	0	0	0	0	0	0	0	7	11
Inner I-5	0	0	7	11	0	0	1	17	0	0	0	0	0	0	8	29
Inner Westside	0	0	5	9	0	0	0	0	0	0	0	0	0	0	5	9
Inner Clackamas	0	0	2	4	3	19	0	0	0	0	0	0	0	0	5	23
East Multnomah	0	0	13	25	9	43	0	0	0	0	0	0	0	0	22	68
Outer Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer I-5/I-205	0	0	1	2	1	5	0	0	0	0	0	0	0	0	2	7
Outer Westside	4	7	2	8	0	0	0	0	0	0	0	0	0	0	6	15
Total	4	7	38	73	13	67	1	17	0	0	0	0	0	0	56	164

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Commercial																
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner North & East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner I-5	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Inner Westside	0	0	7	14	1	3	0	0	0	0	0	0	0	0	8	17
Inner Clackamas	0	0	9	18	1	5	0	0	0	0	0	0	0	0	10	23
East Multnomah	1	1	3	6	0	0	0	0	0	0	0	0	0	0	4	7
Outer Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer I-5/I-205	2	1	8	16	1	5	0	0	0	0	0	0	0	0	11	23
Outer Westside	0	0	10	16	3	16	0	0	0	0	0	0	0	0	13	32
Total	3	2	38	72	6	30	0	0	0	0	0	0	0	0	47	104

Table 6 Continued, Tier A Land Supply

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Public Facilities																
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner North & East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner I-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Multnomah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer I-5/I-205	0	0	0	0	2	11	0	0	0	0	0	0	0	0	2	11
Outer Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	2	11	0	0	0	0	0	0	0	0	2	11

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
GRAND TOTAL	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Central	0	0	3	5	0	0	0	0	0	0	0	0	0	0	3	5
Inner North & East	0	0	13	22	7	36	0	0	0	0	0	0	0	0	20	58
Inner I-5	1	1	12	20	0	0	1	17	0	0	0	0	0	0	14	38
Inner Westside	0	0	23	41	4	22	0	0	0	0	0	0	0	0	27	63
Inner Clackamas	0	0	19	38	4	24	0	0	0	0	0	0	0	0	23	62
East Multnomah	2	2	23	43	17	83	2	33	0	0	1	52	0	0	45	213
Outer Clackamas	2	4	3	19	3	39	1	18	1	52	0	0	0	0	10	132
Outer I-5/I-205	2	1	18	31	8	47	1	11	0	0	0	0	0	0	29	91
Outer Westside	4	7	38	68	16	83	4	64	0	0	0	0	0	0	62	221
Total	11	15	152	288	59	334	9	143	1	52	1	52	0	0	233	884

Table 7 Total Tri-County UGB, Estimated Tier B Vacant Employment Land Supply, December 2008

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
RSIA																
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner North & East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner I-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inner Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Multnomah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer Clackamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer I-5/I-205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outer Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	.2 to 1 ac.		1 to 3 ac.		3 to 11 ac.		11 to 25 ac.		25 to 50 ac.		50 to 100 ac.		over 100 ac.		Total (over .2 ac.)	
Land Use Class	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres	taxlots	acres
Industrial																
Central	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Inner North & East	0	0	0	0	59	346	14	225	4	135	0	0	0	0	77	706
Inner I-5	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	2
Inner Westside	0	0	7	14	1	3	1	14	1	26	0	0	0	0	10	57
Inner Clackamas	0	0	39	67	13	69	2	40	1	30	0	0	0	0	55	207
East Multnomah	0	0	76	143	49	256	14	217	5	182	1	56	0	0	145	854
Outer Clackamas	0	0	0	0	1	10	0	0	0	0	0	0	0	0	1	10
Outer I-5/I-205	2	2	48	83	38	216	2	23	1	31	0	0	0	0	91	354
Outer Westside	0	0	18	36	22	116	13	236	3	83	0	0	0	0	56	471
Total	3	2	189	345	183	1,016	46	755	15	487	1	56	0	0	437	2,661

ATTACHMENT 3 - *Economic Opportunities Analysis*, Industrial Sector Worksheets, Johnson-Reid, March 2009

EXHIBIT 1.23

INDUSTRIAL EMPLOYMENT DENSITY WORKSHEET BY INDUSTRY SECTOR
HILLSBORO, OREGON
2008-2060

Industrial Space Density	Distribution by Building Type 1/			Square Feet per Job 2/			Average Space per Job			
Employment Sector	Warehouse/ Distrib.	General Industrial	Tech/ Flex	Warehouse/ Distrib.	General Industrial	Tech/ Flex	Warehouse/ Distrib.	General Industrial	Tech/ Flex	Weighted Average
Construction	0%	75%	25%	1,350	533	467	0	400	117	**517**
Manufacturing	0%	75%	25%	1,350	533	467	0	400	117	**517**
Wholesale Trade	90%	0%	10%	2,746	533	467	2,471	0	47	**2,518**
Retail Trade	0%	0%	0%	1,350	533	467	0	0	0	**0**
Transportation, Warehousing & Utilitie:	100%	0%	0%	1,707	533	467	1,707	0	0	**1,707**
Information	0%	0%	100%	1,350	533	467	0	0	467	**467**
Financial Activities	0%	0%	0%	1,350	533	467	0	0	0	**0**
Professional & Business Services	0%	0%	100%	1,350	533	467	0	0	467	**467**
Education & Health Services	0%	0%	0%	1,350	533	467	0	0	0	**0**
Leisure & Hospitality	0%	0%	0%	1,350	533	467	0	0	0	**0**
Other Services	0%	75%	25%	1,350	533	467	0	400	117	**517**
Government	50%	0%	50%	1,350	533	467	675	0	234	**909**

1/ Regional Industrial Land Study Phase II (Otak, Inc. et al, 1999) converted to NAICS by Johnson Reid, LLC.
2/ Regional Industrial Land Study Phase III (EcoNorthwest and Otak, Inc., 2001) converted to NAICS by Johnson Reid, LLC.

EXHIBIT 1.24

DEMAND PROJECTIONS FOR COMMERCIAL INDUSTRIAL SPACE BY INDUSTRY SECTOR
HILLSBORO, OREGON
2008-2060

Declined Growth Scenario	Local Area Jobs in Industrial Space 1/								Avg Space	Projected Industrial Space Needs 3/								
Employment Sector	2008	2038	2043	2048	2053	2058	2060	08-60	Per Job 2/	2008	2033	2038	2043	2048	2053	2058	2060	08-60
Construction	880	1,731	1,882	2,046	2,225	2,363	2,501	1,621	517	499,898	904,674	983,563	1,069,331	1,162,578	1,263,956	1,342,432	1,420,908	921,011
Manufacturing	20,915	42,591	46,456	50,672	55,270	58,844	62,417	41,502	517	11,882,911	22,184,853	24,198,087	26,394,018	28,789,226	31,401,794	33,432,121	35,462,449	23,579,537
Wholesale Trade	1,785	3,031	3,246	3,477	3,724	3,911	4,099	2,314	2,518	4,944,829	7,837,898	8,394,774	8,991,215	9,630,033	10,314,238	10,834,399	11,354,559	6,409,730
Transportation, Warehousing & Utilities	1,075	2,286	2,503	2,741	3,002	3,206	3,409	2,334	1,707	2,018,281	3,919,479	4,292,249	4,700,471	5,147,518	5,637,082	6,019,377	6,401,672	4,383,391
Information	172	275	293	312	332	347	362	190	467	88,127	132,755	141,301	150,397	160,078	170,383	178,158	185,934	97,807
Professional & Business Services	973	2,318	2,563	2,835	3,135	3,372	3,610	2,637	467	499,668	1,076,580	1,190,622	1,316,745	1,456,228	1,610,486	1,732,384	1,854,281	1,354,613
Other Services	1,992	3,306	3,533	3,775	4,033	4,229	4,425	2,433	517	1,131,574	1,758,124	1,878,483	2,007,083	2,144,486	2,291,295	2,402,581	2,513,866	1,382,292
Government	542	753	789	825	864	893	921	379	909	541,253	719,269	752,886	788,074	824,907	863,462	891,973	920,484	379,231
Total	28,333	56,291	61,265	66,683	72,584	77,164	81,744	53,412	693	21,606,541	38,533,633	41,831,966	45,417,334	49,315,054	53,552,696	56,833,425	60,114,154	38,507,613
Low Growth Scenario	**Local Area Jobs in Industrial Space 1/**								**Avg Space**	**Projected Industrial Space Needs 3/**								
Employment Sector	2008	2038	2043	2048	2053	2058	2060	08-60	Per Job 2/	2008	2033	2038	2043	2048	2053	2058	2060	08-60
Construction	880	2,220	2,591	3,023	3,527	3,952	4,377	3,497	517	500,005	1,081,217	1,261,533	1,471,921	1,717,397	2,003,812	2,245,413	2,487,013	1,987,008
Manufacturing	21,200	74,975	91,880	112,645	138,164	161,342	184,519	163,319	517	12,044,791	34,776,386	42,597,151	52,201,434	63,999,532	78,497,893	91,666,211	104,834,529	92,789,738
Wholesale Trade	1,789	3,926	4,479	5,110	5,830	6,425	7,020	5,231	2,518	4,955,412	9,531,782	10,873,974	12,405,716	14,153,776	16,148,864	17,796,535	19,444,206	14,488,794
Transportation, Warehousing & Utilities	1,077	3,149	3,764	4,499	5,377	6,141	6,905	5,828	1,707	2,022,400	4,947,939	5,913,484	7,067,567	8,446,987	10,095,785	11,530,708	12,965,631	10,943,231
Information	172	359	406	460	521	571	621	449	467	88,255	162,720	184,214	208,568	236,163	267,435	293,117	318,799	230,543
Professional & Business Services	976	3,618	4,486	5,564	6,902	8,125	9,348	8,372	467	501,193	1,499,237	1,858,446	2,304,378	2,858,055	3,545,661	4,173,884	4,802,108	4,300,915
Other Services	1,994	4,162	4,709	5,328	6,028	6,600	7,172	5,178	517	1,133,042	2,090,169	2,364,631	2,675,271	3,026,868	3,424,858	3,749,917	4,074,976	2,941,933
Government	542	850	916	988	1,066	1,125	1,185	643	909	541,325	787,574	849,223	915,737	987,507	1,064,955	1,124,474	1,183,992	642,667
Total	28,630	93,259	113,230	137,616	167,414	194,281	221,147	192,518	692	21,786,424	54,877,024	65,902,656	79,250,591	95,426,285	115,049,263	132,580,258	150,111,253	120,324,829
Medium Growth Scenario	**Local Area Jobs in Industrial Space 1/**								**Avg Space**	**Projected Industrial Space Needs 3/**								
Employment Sector	2008	2038	2043	2048	2053	2058	2060	08-60	Per Job 2/	2008	2033	2038	2043	2048	2053	2058	2060	08-60
Construction	880	2,012	2,294	2,614	2,980	3,280	3,580	2,700	517	500,005	1,002,914	1,143,185	1,303,079	1,485,341	1,693,102	1,863,456	2,033,811	1,533,805
Manufacturing	21,200	57,984	66,633	76,579	88,016	97,624	107,231	86,031	517	12,044,791	28,669,445	32,943,573	37,857,711	43,508,218	50,006,289	55,464,811	60,923,333	48,878,542
Wholesale Trade	1,789	3,548	3,963	4,427	4,946	5,364	5,782	3,993	2,518	4,955,412	8,797,151	9,826,261	10,976,696	12,262,876	13,701,071	14,858,076	16,015,082	11,059,670
Transportation, Warehousing & Utilities	1,077	2,738	3,154	3,634	4,187	4,647	5,107	4,030	1,707	2,022,400	4,462,523	5,141,161	5,923,059	6,823,921	7,861,881	8,725,559	9,589,236	7,566,836
Information	172	323	358	396	439	474	508	336	467	88,255	149,690	165,818	183,714	203,574	225,622	243,248	260,874	172,619
Professional & Business Services	976	2,928	3,419	3,994	4,664	5,233	5,802	4,827	467	501,193	1,287,650	1,503,911	1,756,504	2,051,522	2,396,109	2,688,403	2,980,697	2,479,504
Other Services	1,994	3,819	4,249	4,728	5,261	5,688	6,114	4,120	517	1,133,042	1,950,073	2,169,577	2,413,960	2,686,065	2,989,082	3,231,386	3,473,690	2,340,648
Government	542	824	887	956	1,030	1,087	1,144	602	909	541325	764,033	823,161	886,890	955,582	1,029,628	1,086,413	1,143,197	601,872
Total	28,630	74,174	84,957	97,328	111,524	123,396	135,268	106,638	692	21,786,424	47,083,479	53,716,647	61,301,614	69,977,099	79,902,783	88,161,352	96,419,921	74,633,497

1/ From EXHIBIT 1.22
2/ From EXHIBIT 1.23
3/ Assumes a market-clearing 10% industrial space vacancy rate.
*Estimate

EXHIBIT 1.25

INDUSTRIAL FLOOR-TO-AREA RATIO (FAR) WORKSHEET BY INDUSTRY SECTOR
HILLSBORO, OREGON
2008-2060

Employment Sector	Distribution by Building Type 1/			FAR by Industry sector 2/			Average Space per Job			
	Warehouse/ Distrib.	General Industrial	Tech/ Flex	Warehouse/ Distrib.	General Industrial	Tech/ Flex	Warehouse/ Distrib.	General Industrial	Tech/ Flex	Weighted Average
Construction	0%	75%	25%	0.31	0.30	0.26	0.00	0.23	0.07	**0.29**
Manufacturing	0%	75%	25%	0.31	0.30	0.26	0.00	0.23	0.07	**0.29**
Wholesale Trade	90%	0%	10%	0.31	0.30	0.26	0.28	0.00	0.03	**0.31**
Retail Trade	0%	0%	0%	0.31	0.30	0.26	0.00	0.00	0.00	**0.00**
Transportation, Warehousing & U	100%	0%	0%	0.31	0.30	0.26	0.31	0.00	0.00	**0.31**
Information	0%	0%	100%	0.31	0.30	0.26	0.00	0.00	0.26	**0.26**
Financial Activities	0%	0%	0%	0.31	0.30	0.26	0.00	0.00	0.00	**0.00**
Professional & Business Services	0%	0%	100%	0.31	0.30	0.26	0.00	0.00	0.26	**0.26**
Education & Health Services	0%	0%	0%	0.31	0.30	0.26	0.00	0.00	0.00	**0.00**
Leisure & Hospitality	0%	0%	0%	0.31	0.30	0.26	0.00	0.00	0.00	**0.00**
Other Services	0%	75%	25%	0.31	0.30	0.26	0.00	0.23	0.07	**0.29**
Government	0%	0%	0%	0.31	0.30	0.26	0.00	0.00	0.00	**0.00**

1/ Regional Industrial Land Study Phase II (Otak, Inc. et al, 1999) converted to NAICS by Johnson Reid, LLC.
2/ Regional Industrial Land Study Phase III (EcoNorthwest and Otak, Inc., 2001) converted to NAICS by Johnson Reid, LLC.

EXHIBIT 1.26

INDUSTRIAL FLOOR AREA RATIO WORKSHEET - TRENDING OFFICE SPACE-UTILIZING INDUSTRIAL LAND
HILLSBORO, OREGON
2008-2060

FAR Trend by Sector	Floor Area Ratio Trend						
Employment Sector	2008	2028	2035	2058	2060	*08-35*	*08-60*
Construction	0.29	0.32	0.32	0.35	0.36	**0.03**	**0.07**
Manufacturing	0.29	0.32	0.32	0.35	0.36	**0.03**	**0.07**
Wholesale Trade	0.31	0.32	0.32	0.33	0.33	**0.01**	**0.03**
Transportation, Warehousing & Utilities	0.31	0.31	0.31	0.31	0.31	**0.00**	**0.00**
Information	0.26	0.36	0.40	0.51	0.52	**0.14**	**0.26**
Professional & Business Services	0.26	0.36	0.40	0.51	0.52	**0.14**	**0.26**
Other Services	0.29	0.32	0.32	0.35	0.36	**0.03**	**0.07**
Total	**0.29**	0.33	**0.34**	**0.39**	**0.39**	**0.05**	**0.11**

DRAFT

JOHNSON REID
LAND USE ECONOMICS

MEMORANDUM

DATE: June 22, 2009

TO: Joint MTAC / ECAC Committee

CC: CREEC, CAR, NAIOP, PBA, CCBA, SIOR, ICSC, Davis Wright Tremaine, & OECDD

FROM: Bill Reid, Principal
Johnson Reid, LLC

SUBJECT: Review of Metro's May 2009 Preliminary Urban Growth Report for Employment Land

JOHNSON REID was retained jointly by the above-listed parties ("the Consortium") to provide a review of Metro's May 2009 Preliminary Urban Growth Report on Employment Land ("the UGR"). Specifically, the Consortium has significant concerns about the validity of the following five conclusions expressed on Page 1 of the UGR:

1. *"There is sufficient capacity within the current urban growth boundary to meet the low end of the regional forecasted employment demand in the 5- and 20-year time frames."*
2. *"There is sufficient capacity to meet the high end of industrial demand..."*
3. *"But policy or investment changes must be made to meet the high end of the non-industrial demand."*
4. *There is "...a potential gap in the capacity of the existing UGB to meet unique industry needs."*
5. *"The report illustrates a potential disparity between the location of certain types of land supply and current employment location trends."*

This memorandum is intended as a summary of JOHNSON REID's review of policy and analytical documentation in the UGR and the resulting findings that lead to these five conclusions. This is intended as identification of issues that we recommend the Consortium raise during the current review phase of the UGR. JOHNSON REID will provide another memorandum to the Consortium in response to dialogue with Metro by the end of June 2009.

GENERAL METHODOLOGY COMMENTS

Metro methodology for determining demand and supply for employment land basically comprises the following three-step process:

i. **What is Forecasted Demand?** - Metropolitan area employment forecast exogenous (independent) of regional land supply, location and quality under three growth scenarios.

ii. **What is Regional Land Supply?** – Assuming various policy preferences as well as refill and floor area ratio (FAR) trends for *currently known* industries, the capacity of the existing supply of land within the urban growth boundary generally regardless of specific industry needs and locational considerations.

iii. **Does the Existing Supply of Land Under Metro's Capacity Assumptions Meet Forecasted Demand?** – Existing capacity estimated by Metro less forecasted demand for land under each growth scenario.

In the document, Metro clearly indicates the report is meant to shape regional planning discussion and is not meant to be a final, conclusive study of the region's employment land need.

However, a number of fundamental issues arise in a detailed reading of the report that indicate it quite reasonable to question not only the five critical findings summarized on the first page of this document, but the three-step methodology utilized by Metro as well.

Following are general comments regarding the basic methodology utilized by Metro for reaching its employment land need findings for the planning period through 2030.

1. A Basic Confusion of the Roles of Land Supply and Demand in Economic Growth

Despite a well-documented employment growth forecast for the metro region, in actuality job growth will only materialize if the location, type and quality of building and land are available as specifically required by various industry sectors. In other words, growth capacity *starts* with a thorough understanding of the nature of land supply within the UGB as determined by key industries and the regional jurisdictions planning for economic development as required by Statewide Planning Goal 9. For example:

- *Is there sufficient industrial acreage in East Multnomah County proximate to the Port of Portland for targeted sustainable energy industries (wind turbines, etc.) as well as potential alternative fuels vehicle manufacturing as currently being pursued by the Governor's Office?*
- *Is there sufficient industrial acreage suitable for photovoltaic solar manufacturing in Washington County that is seismically stable, provides adequate water and power capacity, and is proximate to the County's existing high-tech workforce?*

To the extent that Metro fails to understand these types of employment lands and does not provide for the needs of specific uses, promising industries targeted by State, counties and local governments will not materialize, leading to far greater economic stagnation in the region.

Rather, we find the first questions to reasonably be: How Much and What Types of Employment Growth Does the Current Inventory of Land Indicate Based on the Needs of Existing and Targeted Industries? Does This Meet Regional Needs and Goals? If Not, What Else & How Might It Be Required?

2. The Urban Growth Report is Not Consistent with Statewide Planning Goal 9 – Employment Land

On page 8 of the UGR, it is made clear that the document was:

- "...completed to comply with state statutory requirements in Oregon statewide planning goal 14."
- Further, "...While Metro is not required to comply with planning goal 9, much of the work completed to analyze employment demand and supply can support the cities and counties in the region that are addressing the requirements of goal 9 in their periodic review work plans."

Thereafter follows statutory language for both Oregon Goals 14 ("Urbanization") and 9 ("Economic Development"). To paraphrase for the uninitiated:

- Goal 14 requires planning jurisdictions to adequately answer the question of whether urbanized development can be reasonably located within the existing UGB and, if not, where it is best situated.
- Goal 9 requires planning jurisdictions to identify the specific economic opportunities to be pursued and match this to the specific inventory of employment land necessary to successfully achieve economic development goals. [Sentence awkward: is edited version accurate?]

Based on our own experience of conducting analyses of both Goals 9 and 14 for various jurisdictions throughout the state, JOHNSON REID is unsure how exactly a Goal 14 analysis can adequately be conducted *without* well-considered, Goal 9-consistent documentation.

In other words, Metro indicates it has answered the question "Can all expected growth reasonably go inside the existing UGB?" But we find it reasonable to question whether "expected growth" is even fundamentally understood from an industry sector and economic development perspective as required by planning Goal 9.

Indeed, the Urban Growth Report acknowledges Metro does not need to comply with planning Goal 9, and Metro staff has indicated that it is not within its purview to take into account individual jurisdictions' Goal 9 documentation. One can appreciate the difficulty of such a jurisdiction-by-jurisdiction undertaking. But this renders significant aspects of various City and County Goal 9 requirements meaningless and guarantees silence on the following crucial issues among others, and an incomplete portrait of "expected growth" for Goal 14 consistency purposes:

- The nature and characteristics of existing industries with regional presence as well as new or emerging industries targeted for public investment as determined by the local jurisdictions themselves and their State agency partners including Oregon Department of Land Conservation and Development (DLCD) and Oregon Economic & Community Development Department (OECDD), among others.
- The unique land needs of industries targeted by jurisdictions, including size, location, transportation, power, water/wastewater, geological quality, workforce proximity, need for land capacity beyond immediate employment plans ("land banking"), and a host of other qualities.
- Specifically, the ability of the City of Portland's employment land capacity to physically accommodate Metro's projections of refill and industry location needs as Portland's own Goal 9 process is incomplete, but soon coming to a close.
- Specifically, the ability of western Washington County and eastern Multnomah County to adequately pursue PV solar panel manufacturing firms, the only industry currently being recruited with OECDD programmatic resources, as well as wind energy manufacturers and service providers, other alternative energy initiatives, and specifically in the case of western Washington County, bio-pharmaceuticals-related industry.

Contrary to the Urban Growth Report's contention, it is our opinion that Metro is subject to conformance with Goal 9, if not the associated rules. At the very least, as with its election to conduct a metro area-wide Goal 5 analysis of environmentally sensitive lands consistent with State requirements, analysis of economic need and documentation of both local and regional economic development plans as they determine land need quality consistent with State requirements would be preferred.

3. The "New Paradigm" Focus on Building Types Critically Mischaracterizes Industry Land Demand

The UGR adopted what it calls a "New Paradigm" to characterize employment land need and capacity sufficiency within the current urban growth boundary. Specifically, the "New Paradigm" focuses on

the built environment that accommodates employment uses, and potential trends in built retail, office, and industrial uses. This differs with past consideration of land need where employment density per acre by broad industry groups was the of Metro analytical emphasis. Resulting methodology assessing employment land need for broad employment space types utilizes the following algorithm:

Employment Forecast X Built Space per Job / Building Floor Area Ratio = Land Demand

With a well-documented statistical employment forecast and significant past work to determine average space usage per employed person by different broad uses, Metro focused new analytical resources for this UGR on the issue of floor area ratios as a measure of building foot print and as a barometer of long-term land use efficiency. Specifically, goals of increasing FARs over time as an indicator of more efficient use of land as there is an increase in occupied space and decrease in parking/impervious surface to serve the building's economic function. Metro's efforts, via its consultant team, included a number of focus groups to discuss sector-specific FARs and built environment trends, recent real estate and built environment trends by specific use types, and potential direction for building efficiencies over time by use type.

While all of the above are constructive additions to understanding of land usage by regional industry, we point out the following shortcomings of the approach in fully understanding regional employment land need:

- Analytical efforts by Metro's consulting team on the built environment produced over-emphasis on various real estate trends and potential outlook issues of measurable developed speculative space as measured by CoStar, Inc., a commercial real estate database. Based on our experience, CoStar is an important tool for space and land brokerage, but its databases for office, industrial, and retail uses are not comprehensive and overwhelmingly reflect speculative, or for-lease, space. These spaces are predominantly smaller, more flexible buildings that can meet the needs of a broad range of tenants (in-line retail, flex business park, etc.) with shared parking and provide a skewed picture of built environment factors that Metro then utilizes to inform land need over 20 years and potentially inform 50-year need as well.
- Alternatively, Co-Star is far less complete in its information regarding owner-occupied space characteristics because the latter is built-to-suit and not marketed for occupancy transaction. Such uses frequently do not follow a consistent or flexible pattern due to the unique economic function of the facility (i.e. Intel's Ronler Acres) and long-term investment requirements of the firm. This is also true for larger owner-occupied commercial and office development, which may require unique freight/merchandise transportation accommodation and security provisions, respectively.
- The report acknowledges absence of analysis of "large industrial lot" demand issues including characteristics, industry specifics, and land banking need among others. Because both existing and emerging industrial clusters, which the UGR credits as major drivers of future economic opportunity, are usually anchored by larger users and their unique, long-term land needs, the absence of large-lot demand is of particularl concern. This is underscored with the comment made by a focus group participant that "For sites of 20+ acres, an increasing need to look outside the metro region" exists (p. 22).
- The report focuses on commercial real estate *space* rents and occupancy, but ignores the importance of the non-residential land market, including recent transaction prices and their signal as to the lack of availability of a diverse array of suitable industrial sites for specific industry needs throughout the metro region.

4. Metro Policy Assumptions and Impact Upon Findings Are Not Clearly Explained

Although a technical appendix of Metroscope model policy assumptions is provided at Metro's UGR website, key policy details are not clearly spelled out or explained based upon our reading. We seek further explanation and refinement of the following:

- How does infrastructure cost and reinvestment policy get modeled and affect findings? The technical appendix states that Metroscope models the effect of policy choices and that infrastructure costs are based on national statistics, but it is far from clear how exactly these costs determine specific locations of future economic growth, particularly within the existing UGB.
- What infrastructure costs are assumed to be borne by the private sector and what percent by the public?
- How are different infrastructure costs modeled given different cost realities in different areas? Washington County lands are flatter with significant, existing infrastructure suitable for high-tech industry adjacent and efficiently extended only in part by the public. Does the recent transportation bill that funds widening of Highway 26 to 185th, expansion of interchange capacity at Shute Road and Glencoe Road, and significant additional resources for arterial and other expansion within Washington County change infrastructure policy assumptions? Study findings? The Dundee Bypass given Yamhill County inclusion in the Metroscope model? Study findings?
- Do national statistics accurately reflect the cost of retrofitting existing infrastructure in core urban areas for dramatic increases in commercial retail and office (re)development intensity predicted by the model?
- How exactly does assumed residential unit subsidy schedule, as expressed in the Second Appendix of the UGR, shape future commercial retail geographic allocation? If infrastructure policy assumptions are sensitive to cost considerations, is it reasonable to assume nearly 90,000 residential units within the current UGB will individually receive up to $50,000 in direct subsidy, presumably via numerous urban renewal districts throughout the metro region.
- The appendix notes that officials of Metro member counties and the City of Portland reviewed the information, but were the urban renewal districts, frequently even independent of City Council bodies, consulted? Which urban renewal districts would require voter approval for what would most likely amount to significant plan amendments for these subsidy schedules? Is Metro aware ORS 457 will likely be amended to reduce loss in incremental revenues to affected service providers, thus reducing urban renewal maximum indebtedness over the long term? How does all of this factor into the analysis of commercial retail demand and geographic location over the planning period?
- The appendix notes that candidate urban growth expansion areas modeled largely do not include candidate industrial areas identified by economic stakeholders and western Washington County jurisdictions as most suitable for regional cluster growth, and buildable, cost-effective quality. How does modeling their exclusion differ from results if modeling their consideration for inclusion?

SPECIFIC METHODOLOGY AND FINDINGS COMMENTS

Given the above comments about broad methodological and policy issues that shape the UGR, this section of the document provides a list of questions about specific methodology and policy assumptions that we recommend the Consortium pursue given their economic interests.

Page 28 – SolarWorld in Hillsboro has indicated a commitment to hire 2,000 employees, many before 2015. The Low forecast for the entire metro area indicates 2,700 manufacturing jobs in five years then a loss of 300 to 2,400 new jobs in 20 years. The SolarWorld figure does not include manufacturing ripple effects, or any other manufacturing firms in the seven-county area. In light of the discrepancy, should the employment forecast take into account documented, near-term employment commitments from employers, including emerging clusters?

Page 28 – Manufacturing jobs, in the Employment Report, include Computer Electronics (growth projected) and non-Computer Electronics (decline projected). Since solar panel manufacturing is not computer electronics, but is categorized in the silicon-based microprocessor NAICS category, where is the emerging Solar Cluster accounted for in the forecast scenarios? If western Washington County has not considered for reasons of policy assumptions, where will this employment go?

Page 29, Figure 3 – As the chart clearly verifies, significant employment growth, greatly driven by high-tech in Washington County and Multnomah County, occurred between 1984 and 2000. It must also be noted, however, that industrial land availability during the 1980s and 1990s was significantly greater, more diverse, and less expensive than presently. Is it reasonable to assume these key industries can, much less will expand in the region given far less inventory selection for firms that need to plan for rapid expansion with site diversity and flexibility need?

Pp. 33-34 – Estimates of Metro area UGB capture of 7-county employment growth indicate declining share over the past several years and a fixed, 2006 level for future projections. Doesn't a declining capture signal the lack of suitable employment land within the Metro UGB and the increasing movement of that demand to Clark County in particular? Is this a trend Metro should continue to plan, or should workforce and industry use of freeway infrastructure be rethought and reduced?

Page 35 – We would note that all building types in Table 5, based on Metro consultant team work and extensive use of CoStar for built environment trends, are speculative space terms and reflect their skewed supply characteristics compared to owner-occupied and end users, with the exception of Institution use. For example, what categorization would Ronler Acres get? General Industrial? Office?

Page 37+ - In the Economic Trends report conducted by the Metro consulting team, it was reported that the Central & Inner Metro area Subrings lost roughly 25,000 industrial jobs between 2000 and 2006 (Appendix 1, Figure 6). Alternatively, the Outer Ring Subareas (Appendix 1, Figure 7) reported gaining roughly 15,000 jobs during the same period. Starting on Page 37 of the UGR, however, it is found that the Portland metro region will undergo a rather dramatic reversal regarding where industrial jobs can be expected to locate through 2015 and 2030. Despite losing the second-largest number of industrial jobs over the past six years, Inner north and northeast are expected to see over 3 million square feet in industrial space demand through 2015, the second highest total barely behind Outer Westside (Figure 10). Central is expected to see roughly 750,000 square feet of industrial demand through 2015 despite dramatic losses over the previous six years, signaling dramatic changes in industrial sectors and need in the central city area. Through 2030, the reversal is even more dramatic, with Inner North and northeast leading the metro region in industrial employment demand for space (13 million square feet) followed more distantly by Outer Westside at below 10 million square feet of demand. Land inventories, fiscal tools, emerging industries, etc. will not be dramatically different through 2015 than they have been in the last few years. How exactly does Metro explain this rather remarkable, if not improbable, change from trend? Has the City of Portland verified that type of capacity or consistency with their comprehensive planning efforts? We would ask similar questions for other jurisdictions.

Page 37+ - A similar reversal in non-industrial space demand from E.D. Hovee's findings has been allocated to Central and Inner Rings compared to Outer Ring subareas with similarly lacking explanation for economic rationale for the dramatic change from trend. An explanation is warranted.

Page 43+ - Development trends information greatly relies on CoStar data, which as earlier expressed provides much greater detail and information for speculative space to serve the needs of commercial real estate brokerage services. This information is not at all clear how owner-occupied, end user data is accounted for at all and, therefore, how these findings may skew analysis of future land need accordingly.

Pp. 45-46 – Discussion of FARs is provided and compared for descriptive purposes and a comparison of FAR trend findings by the Metro consultant team is given. Although this information is useful in general description, it falls short of identifying the range of FARs by employment use in affecting *demand*. Greater FAR discussion is given later in the report, but only in support of estimating potential capacity of supply, not characteristics of demand.

Pp. 45-46 - There is no discussion about the translation of FARs into land demand via the size of the user or tenant in determining building size and resulting relationship to land demand. This crucial link, in terms of demand for parcel size in relationship to building space by firm/user/tenant(s) size is a critical omission as ultimately the supply of land available can only reasonably support demand if all user sizes are accounted. Figure 20 on p. 45 unintentionally illustrates this critical flaw – illustration of FARs varies greatly, but in each example the size of the land parcel is the same. Obviously, parcel size need varies by industry type and user just as FARs do.

SPECIFIC METHODOLOGY AND FINDINGS COMMENTS - SUPPLY

Although it is clear much time and effort has been put into identifying the total inventory of buildable employment land within the current Urban Growth Boundary, the analysis of existing supply capacity has critical flaws that in our opinion require significant additional analysis and explanation.

Specifically, the buildable land supply analysis makes no effort to discuss the size of existing, buildable parcels other than to classify sites "buildable" if, among other things, they are greater than one (1) acre in size. A review by Johnson Reid of all employment parcels included in the published inventory, regardless of parcel ratings as established by Metro, indicates the following:

- Gross Acreage
    i. Median Size – 2.2 acres
    ii. Mean Size – 4.9 acres
    iii. Modal Size (most common) – 1.05 acres
- Net Buildable Acreage
    i. Median Size – 1.8 acres
    ii. Mean Size – 4.0 acres
    iii. Modal Size – 0.9 acres

In other words, the vast majority of the employment land inventory – regardless of quality rating - as published is predominantly very small and unsuitable for the vast majority of employment land development types regardless of potential FAR realized on site. In fact, the most common net buildable individual parcel acreage was less than one acre (0.9), throwing the entire grading system of "at least one acre" into question.

Despite the details of FARs and potential refill/infill rates, the critical absence of discussion of parcel sizes and their suitability to accommodate the nature of future growth needs to be remedied. Without such a discussion, it is our own view that the Urban Growth Report fails to address whether or not future employment land demand and need can be met "reasonably" within the existing urban growth boundary.

Finally, we would further note that members of the Consortium have expressed strong concern at the assumed refill rates, as well as some of the Inner Ring FARs utilized for long-term projection purposes. Dennis Yee has graciously worked with Consortium members to seek common ground and refine his analysis if necessary. We therefore note that neither Johnson Reid, nor the Consortium members, have seen revised analysis reflecting recommended changes to model assumptions. Additional input and feedback, as well as alternative Metroscope scenario modeling has been requested by the Consortium, and is in our opinion appropriate given the nature of identified issues and concerns expressed in this memorandum.

June 22, 2009

Malu Wilkinson, Principal Regional Planner
Metro
600 NE Grand Avenue
Portland, Oregon 97232

Dear Ms. Wilkinson:

We appreciate the opportunity to comment on the Preliminary Urban Growth Report for Employment land and recognize the effort expended by staff and consultants on this foundation report for the future Urban Growth Boundary decision. While a number of the undersigned agencies, organizations and jurisdictions have their own individual comments to make on the details and findings of the report, we collectively agree that a fundamental component of the report is lacking. Specifically, the report does not adequately address the need for large lot industrial sites, a critical element of for our region's industrial land supply.

In particular, please consider the following:

- The need for large lots is not episodic as described in the report. Technical advisory committee members, the broker community and economic development strategies suggest that large lot demand is a constant and critical part of our region's industrial land market.
- The mechanism suggested for fast track boundary expansions for large lots does not provide certainty or timeliness for a potential user. This will create a competitive disadvantage for the region as firms seek to grow or locate here and neither cannot nor will not wait for a process to expand, annex, zone, (with potential challenges) and prepare a site. Shovel-ready site certification is the industry standard.
- Large lots must also be the right land in the right place and available for uses that support existing industry and business clusters. Other important factors include parcel shape, access to transportation, and slope and other physical constraints, which vary depending on the specific industry sector.
- Employment growth is not a suitable method of predicting the demand for large lots, particularly in manufacturing and distribution/logistics industries. A decline in the manufacturing job forecast does not necessarily translate to a reduced need for land for that sector. As industries increase investment in technology or become more efficient through improved processes, jobs may fluctuate or decrease in a particular location, but may require a larger site and building. This does not suggest that industries with fewer jobs at a single location are less desirable. Increased investment in capital by industry often means more tax revenue for local jurisdictions and ultimately a more successful company, resulting in a larger multiplier effect for the regional economy.

We request that you consider these factors in addressing large lot industrial demand and we look forward to further discussion of this topic at both MTAC and ECAC. In addition, we are eager to help inform the MPAC subcommittee formed to tackle this issue.

Sincerely,

Tom Bouillion
MTAC representative for Port of Portland

Ron Papsdorf
City of Gresham

Scott Drumm
ECAC representative for Port of Portland

Richard Meyer
MTAC representative for City of Cornelius

Pat Ribellia
MTAC representative for City of Hillsboro

Rich Faith
MTAC representative for City of Troutdale

Alwin Turiel
ECAC representative for City of Hillsboro

Lynne Boussi
ECAC representative for Portland Development Commission

Renate Mengelberg
MTAC representative for Regional Economic Development Partners of Clackamas County

Jon Holan
MTAC representative for City of Forest Grove

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Metro | *Memo*

Date: June 23, 2009
To: MPAC
From: Malu Wilkinson, Principal Regional Planner
Re: MTAC recommendations on the preliminary residential urban growth report

On June 17, MTAC devoted an extended session to a discussion of the preliminary residential urban growth report (UGR) and made recommendations for the draft UGR (to be released in September).

MetroScope assumptions

MetroScope, an integrated land use and transportation model, informs the UGR's analysis of potential refill rates and the likelihood of development of vacant land in different locations. MTAC recommends:

Keep same assumptions about infrastructure funding. Funding becomes available in new urban areas, as follows:

- 2020 for Damascus
- 2010 for Happy Valley
- 2015 for all other post-1997 expansion areas

Keep assumptions about residential incentives in centers the same as in the preliminary UGR with the following changes:

- Remove Beaverton and Troutdale from list of centers with incentives
- Make changes to Villebois as suggested by Wilsonville (# of units, timing)

All other inputs will remain the same as those used for the preliminary UGR.

Refill rate

The UGR must make an assumption about what portion of future development is likely to occur through redevelopment or infill (refill). MTAC recommends that the draft UGR use a range of 27 to 40 percent refill.

Parks and school land takeouts

The UGR must make an assumption about how much vacant land will be used for future parks and schools. MTAC recommends that, in consultation with cities, Metro staff perform additional research on likely amounts of park acquisition funding. MTAC also recommends that Metro staff consult with local school districts on their growth plans.

CITY OF CORNELIUS

Cornelius - Oregon's Family Town

June 1, 2009

Robin McArthur
Planning and Development Director
620 NE Grand Avenue
Portland, Oregon 97232

Dear Robin McArthur:

RE: Preliminary Urban Growth Report Comments

Last week at Metro's Technical Advisory Committee, Metro staff asked for comments from local jurisdictions to begin discussions of the Urban Growth Report presented at that meeting. Here are our initial comments. We plan to be part of the dialogue scheduled over the following months that lead up to the regional decisions on Urban Growth Boundary expansion so important to the City of Cornelius.

General Report Concern

The Report reads as though Metro has already decided the UGB will not be expanded this five-year cycle. This fosters questions about bias and undermines the public deliberative process so important to regional buy-in and success to regional policies and plans. The low range point of current UGB capacity shown in the report is a compromise. The high range point shown is only theoretically possible. The paragraph on page 9 under "What is the potential gap between housing demand and capacity and what are some policy Choices?" is too brief and certainly a conclusion that should stimulate objective discussion. The first four of the six questions listed for consideration are leading and assume that the region will bank on future policy decisions to accommodate growth rather than existing 2040 Plan policy – an assumption that we believe is a mistake and unprecedented. Questions 5 and 6 are more useful considerations for next winter's chosen number.

If Metro succeeds in limiting next winter's 20-year accommodation decision to that which can be located within the current UGB and puts off the decision to reasonably expand the UGB until the end of 2011 (page 10), then it has delayed another two years the adjustment of the UGB contrary to State requirements, local government assurances and private expectations. The 2007 State Legislature gave a one-time 2-year extension to Metro to complete the Urban and Rural Reserves task. Many public and private entities, including the City of Cornelius and area property owners, agreed with that delay with the understanding that the next regional UGB decision would be made by the end of 2009. This further delay hurts our city's ability to become a great community.

Housing Capacity

Metro's responsibility to assure space for housing appears to be viewed too narrowly. Metro is the agency legally responsible for anticipating changes in population and monitoring the availability of an array of housing to meet people's needs. Housing choice is an important element in a complete or great community. Yet, by relying on 1) heavier than historical experience encouraging infill, and 2) redevelopment of housing at higher densities than the market currently supports, choices such

as a single family home with a modest yard for a low-moderate income family and a suburban flat and shop for an elderly couple are lost.

Metro sees the value of the Pearl District with its high density, multiple amenity, carless community for talented, educated professionals with no kids. Portland central is a great place for many people. But what of the low-income people displaced by inner city redevelopment, many of which moved to the edge communities of the region, like Cornelius? What of the family building and nurturing parts of our region, many of whom want a single-family house with a yard? There are many types of people in our region with a variety of preferences and ways to live gently on the earth, save energy and recycle. A reasonable array of housing implies a broader definition of options than implied by forcing another 20 years of housing into the existing UGB with new, not yet adopted regulations.

Regional Housing Gap – Local Housing Gaps

Metro reports an estimate of general region-wide gap between anticipated population and capacity for housing, but it does not report on sub-regional or local gaps that impact important regional land use goals like urban center sustainability, efficient use of infrastructure and school investment, and financing decent urban services. The City of Cornelius suffers from a big deficit in housing choice. Our housing is predominantly low value and affordable. In order to keep growing families and incomes in town, improve our comparatively low tax base, and help the region offer a sustainable affordable housing stock, Cornelius needs room to build medium and higher cost/quality homes for balance. Ask any public housing authority about the importance of mixing low income housing with medium and high income housing in a neighborhood. We have room for mixed use housing in Cornelius' Main Street District. We have room for only about 200 infill homes within the current UGB. We have no room for a subdivision of the type of homes that will balance our current housing choices. A balance of type, size and cost of housing is vital to a sustainable 2040 Plan community.

A Warming Planet

Metro projects the need to plan for reduced water and power to justify a "redoubling our efforts to foster . . . compact mixed-use communities", in view of global warming. However, it does not also project additional population growth from new in migration likely from drier, hotter areas south of Oregon. Nor has Metro yet accounted for the flat land needed for alternative energy industry clusters both wanted and likely in Oregon.

Pipes and Pavement

Metro's report of the costs of infrastructure "pipes and pavement", is simply not accurate. The modeling done to estimate and map the ease/difficulty of providing infrastructure for population growth was not vetted adequately by public works professionals in the region. The Cornelius – Forest Grove area for example, contrary to a map in the study commissioned by Metro, can easily and comparatively inexpensively extend utilities and roads necessary for new development with existing policies, master plans, development charge ordinances and physical structures in place. The housing and industry capacity just outside the current UGB of Cornelius that could be served by existing urban infrastructure investment is substantial. Building there would be less expensive than up-sizing many pipes and roads in existing urban areas. And the costs of constructing the infrastructure necessary to serve build-out of the current UGB in the Damascus area is astronomical in comparison.

UGB Capacity Range

Metro's High Supply capacity range is unrealistic and unreasonable. Projecting housing demand over the next twenty years is a standard planning practice and a required calculation by state law. However, projecting policy changes that may or may not be adopted by 26 local jurisdictions over the next twenty years to increase the measureable capacity under existing zoning and special districts is not reasonable and begs challenge. Two of the three key assumptions for the High Supply estimate of dwelling units are throwaways. How can market feasibility be ignored in projecting reasonable accommodation, even with Olympian public subsidy? Moreover, a refill rate of 40% is so unrealistic (almost twice the current rate) as to require massive change in property owner choices, politics, resources to move gardens to roof-tops, etc. The third assumption, additional unit capacity from urban renewal areas, should be estimated by local jurisdictions that planned, adopted and manage them.

Using a 27 percent refill estimate based on existing zoning, with only a 4 percent vacancy rate, is already a stretch for the market and local politics. Ask owners of bungalows in Portland neighborhoods, like Multnomah, whether they want full build-out of the zoning considering the recently loosened height and setback restrictions; many will complain about 3-story walls ten feet from their house blocking their solar exposure or the cutting of neighborhood trees for more building room. Even this Low Supply estimate assumes that the variation of zoning designations offers the variation of housing options that diverse urban dwellers want, with decreasing flexibility to choose not to fill up one's backyard or less opportunity to have an organic garden or keep a woodworking shop. Refill rates depend upon the costs of replacing old improvements, brownfield mitigation, fitting into built neighborhoods, etc., but largely upon the market. A community like Cornelius has to be growing 'greater' to attract refill development. We need more room to grow out in order to grow up.

Reasonable Accommodation Decision

Finally, to determine a housing need number for Urban Growth Boundary expansion this next year, "expected housing capacity **(should not be)** based upon *future* policy choices", as the report suggests. Expected housing capacity should be based on current policy. The clear and publicly vetted and adopted elements of the Regional 2040 Plan applied to the best population projections will continue to serve the region well.

Your partner in building healthy sustainable communities,

Richard Meyer
Development & Operations Director

Copy: Kathryn Harrington, Metro Councilor
William Bash, Cornelius Mayor
Jef Dalin, Cornelius Council President
Vickie Cordell, Cornelius Planning Commission Chair
Dave Waffle, Cornelius City Manager

Beaverton
SCHOOL DISTRICT
creating pathways to the future for all students

Richard L. Steinbrugge, P.E.
Executive Administrator for Facilities
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June 5, 2009

Malu Wilkinson
Principal Regional Planner
METRO
600 NE Grand Ave.
Portland, OR 97232-2736

Re: Preliminary Urban Growth Report, 2009 – 2030, Residential; March 2009 Draft

Dear Malu:

The Beaverton School District has reviewed the draft Residential report and is concerned about the conclusion that: "*This forecast identified no additional land need other than what schools presently own ...* " (see page 28 of the report). We are convinced that our district will have additional land acquisition requirements before 2030.

The Portland State University Population Research Center completed a population and enrollment forecast study for the school district in November 2008 that projected significant student growth. The principal conclusion was: "*Although the weak economy and slow housing market may keep enrollment flat in the short run (one to two years) ... overall BSD enrollment will increase in the long run.*" The PSU study presented three growth scenarios with the middle, or most likely scenario, forecasting that our student population would increase by about 8,500 students (23%) by 2025. Although the study did not predict exactly where the growth would occur, we believe much of it is likely to be in the southwest area of the district where we have no land banked for future schools. Additional study would be needed to estimate the acreage requirements.

While each school district in the Metro area may find themselves in their own unique situation regarding future growth and capacity, it should be noted that available school capacity in one part of the region is generally not transferrable to another area.

Thank you for the opportunity to comment on the draft report.

Sincerely,

Richard Steinbrugge, P.E.
Executive Administrator for Facilities

Malu Wilkinson

From: Hal Bergsma [hbergsma@thprd.org]
Sent: Monday, June 08, 2009 12:34 PM
To: Malu Wilkinson
Cc: Richard Steinbrugge; Doug Menke
Subject: Comment on Preliminary Residential Urban Growth Report assumption regarding future parks

Malu,

In response to your request at the June 3rd MTAC meeting and Councilor Hosticka's June 5th email, I am hereby submitting this comment on behalf of the Tualatin Hills Park and Recreation District regarding the assumption on page 66 of Appendix 1: Capacity Methodology, of the Preliminary Residential Urban Growth Report 2009-2030 relating to the amount of land to be subtracted from the vacant buildable acres inventory for new parks. According to the text in the appendix, the 1100 acres subtracted for future new parks in the region on line 14 of the Draft Residential Dwelling Capacity Range Assessment is calculated based on the assumption that all new park land will be acquired with revenue from existing system development charges (SDCs) for parks. It is our experience that although SDCs are a critical source of funding for acquisition of land for new parks, it is not the only source.

In November 2008 the District's voters approved a $100 million dollar bond measure that includes $33.6 million for land acquisition. Of that $33.6 million, $8.4 million is designated for acquisition of natural areas. Assuming most natural areas are unbuildable land, that leaves $25.2 million for acquisition of land for community and neighborhood parks and other recreation facilities, primarily on buildable residential land. Assuming that land sells for an average of $400,000 an acre, 63 acres of buildable residential land would not be available for residential development in the District's service area.

It should also be noted that the District has used and will continue to use its local share of Metro's 2006 Natural Areas Bond Measure to acquire park land. Two acres of buildable park land have acquired to this point, and it is likely that several more acres will be acquired. I am aware that the City of Beaverton is also likely to spend part of its local share of bond measure funds to acquire buildable residential land.

The appendix text references MPAC endorsement of a 2002 UGR assumption for new park acquisitions that they would be limited by SDC revenues. At that time, such an assumption may have seemed reasonable, but as I have noted above, recent experience demonstrates that it does not reflect reality. My records show that even in 2002 there was considerable debate about how much land should be subtracted from the supply of residential buildable land for parks, with some calling for use of a larger, more aspirational number.

Metro's passage of its bond measure in 2006 and our success in 2008 indicates that voters in the region are sometimes willing, when asked, to pay more of their hard-earned money to acquire and develop land for parks. Whether our success will be repeated in the future in other parts of the region is an open question, but it is certainly a possibility. I think it is a mistake to preclude that possibility by assuming only SDC revenues will fund future park land acquisitions.

I cannot say with any certainty how much buildable residential land to assume might be acquired using revenues from local bond measures or other sources (e.g., state or federal grants, donations) but a reasonable guess might be half the acreage that might be acquired using SDCs, or 550 acres. That would bring the total of land subtracted for new parks to 1650 acres.

To conclude, THPRD's recent experience is that people in our District are willing to dig deeper in their pockets to pay for land acquisition and improvements that they view as enhancing community livabililty. I believe the process that led to adoption of Title 13 of the Metro UGMFP and approval of the 2006 Metro Natural Areas Bond Measure indicates this sentiment applies to the entire region. Therefore, I think Metro should be more optimistic about the amount of buildable residential land that its citizens will want to set aside for parks and other recreational amenities in the future.

Hal Bergsma
Director of Planning
Tualatin Hills Park and Recreation District
503-645-6433
hbergsma@thprd.org

city of forest grove

June 10, 2009

Malu Wilkinson
Metro
600 NE Grand Avenue
Portland, Oregon 97232

Re: Comments on Preliminary Residential Growth Report

Dear Ms. Wilkinson,

The following are preliminary comments on the Residential Growth Report and Housing Needs Analysis from the City of Forest Grove. Overall, we concur with the comments dated June 1st submitted by Richard Meyer, City of Cornelius.

- The approach taken in the Residential Growth Report appears suggestive and bias towards no expansion of the UGB. It is premature to presume a particular direction. The process should allow that decision to be made.

- Housing types oriented towards higher density development tends to favor particular portions of the region and not promote a variety of housing types for the region.

- Regarding capacity, the underlying assumptions to absorb future residential growth within the current UGB under the high scenario is based on extraordinarily high refill rates that are unsupported by experience. Further, the subsidized refill rate is predicated on a substantial public investment (based on discussions at MTAC, it is our understanding the amount is $3.5 billion) that is most likely unaffordable.

- We concur with Mr. Meyer's point that infrastructure analysis was not adequately vetted. The private cost for infrastructure in the Forest Grove – Cornelius area is relatively inexpensive. This is in part because the extension of services is fairly straightforward and lines have been adequate sized to accommodate planned growth without the need to upsize existing lines.

It appears to us that the results are significantly influenced by transportation costs. Examining the map associated with the factor shows those areas furthest from downtown Portland essentially having the highest costs (i.e. Forest Grove – Cornelius and Wilsonville). This assumes that there is a significant commute pattern to Portland. We are finding that many employed residents in the community travel within Washington County. Reviewing the American Community Survey (2005 to 2007), it reveals that Forest Grove has the smallest percentage of workers (12.8%) commuting outside the county and the second lowest commute time (22 minutes) of all metro communities (11 total) in the survey. With future industrial expansion in western Washington County, we do not envision much change in this commute pattern over time.

- There needs to be further discussion and detailed review of the Preliminary Urban Growth Report – Draft Residential Dwelling Capacity Range Assessment on page 62 of the document. For example, under the High capacity assumptions, 39,200 units are attributed to residential infill at 40%. This compares with the 81,400 units assigned to residential infill at 27%. The additional units for 40% are substantially higher percentage increase than the 13% suggested by the table. The explanatory notes do not offer any further clarification.

- Please explain the relationship between these projections/analysis and Metro's request to review vacant land data by June 30th. It appears this review and the assessments are premature.

- There is much information which is difficult to absorb and evaluate over a relatively short period of time. The detailed data appendix in the Housing Needs Analysis alone may warrant more specific review. For example, explanation needs to be provided how the infrastructure and transportation costs were derived. What is the significance of Exhibit 16 (or the assumption of transportation based on trips to downtown Portland) in determining transportation costs? As noted above, this assumption for Forest Grove may not be valid, particularly with any substantial industrial development in western Washington County.

This concludes our comments at this time. Please contact me if you have any further questions.

Sincerely,

Jon Holan, Community Development Director

Malu Wilkinson

From: Neamtzu, Chris [neamtzu@ci.wilsonville.or.us]
Sent: Thursday, June 11, 2009 12:24 PM
To: Malu Wilkinson
Subject: May 29, 2009 memo on UGR

Hello Malu,

I was reviewing your May 29 memo to MTAC and had a comment. On the table on the back page, Villebois is listed as Tier C with a 20% subsidy from 2015 – 2035 and 1000 units.

I would think that the timeframe should start in 2010, as we currently have upward of 800 units built. Does a 33% allocation for the first three 5 year slots make more sense (2010, 2015, 2020). I sure hope we are done with this project by 2020. Last comment is on the total number of subsidized units, the project will have 2,500 units in the end. Should 1000 be changed to 2500?

I may not understand exactly what it is you were doing with the timeframes and allocations, so if I am missing something, I do apologize.

Thank you for your time.

Chris Neamtzu, AICP
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Malu Wilkinson

From: Clay, Bob [bclay@ci.portland.or.us]
Sent: Friday, June 12, 2009 5:06 PM
To: Malu Wilkinson
Cc: Robin McArthur; Christina Deffebach; Burns, Al; Odenthal, Gary; Sack, Barbara; Krishnan, Uma; Dotterrer, Steve (Planning); Zehnder, Joe; Anderson, Susan
Subject: Response to Residential UGR Methodology

Malu,
In reply to your recent request for comments on the Residential UGR, the Portland Bureau of Planning and Sustainability staff greatly appreciates the opportunities you have provided to work with you and comment on the UGR reports during their preparation. Staff has tracked the progress of the UGR reports closely and has offered suggestions for the past several months. We are highly supportive of the UGR report products prepared to date. We believe they represent very substantial improvements over the approach and methodology in 2002.

There are only two areas we recommend you examine more closely in the next draft.

Issue One:
Accommodation of "Needed Housing" Rather than Accommodation of a Raw "Residential Capacity"

The residential report was published before the housing needs analysis. The residential report and the needs analysis should be combined in the next draft of the Residential Urban Growth Report. The housing needs analysis is very important given fundamental changes in the environment, energy, and economy. The report contains an excellent analysis that for the first time considers combined household housing and transportation costs and the likely distribution of households throughout the region. It is the one analysis that addresses socio-economic equity issues and enables a comparative look at the trade-offs and benefits to alternative growth scenarios. The next draft should consider accommodation strategies most likely to meet the various types of identified housing needs, especially affordable housing. The Residential Urban Growth Report cites Statewide Planning Goal 14 and ORS 1977.303 *et seq.* as governing authorities; but omits reference to equally applicable requirements in LCDC's Metropolitan Housing rule. Particularly:

> **OAR 660-007-0030** (1) (a) "New Construction Mix" which requires Metro forecast dwelling units by "type." Type includes:
> (b) household structure, size, or composition by age;
> (c) economic factors impacting demand for single family versus multiple family units; and
> (d) price ranges and rent levels relative to income levels.
>
> and
>
> **OAR 660-007-0050** "Regional Coordination" which requires:
> (1) At each periodic review of the Metro UGB, Metro shall review the findings for the UGB. They shall determine whether the buildable land within the UGB satisfies housing needs by type and density for the region's long-range population and housing projections.
> (2) Metro shall ensure that needed housing is provided for on a regional basis through coordinated comprehensive plans.

So, the measure for identifying housing needs should be the "unit" not the "acre." These units should be identified by form, (attached or detached), tenure (owned or rented), size (related to number of members in

household), and affordability (related to combined household income). This would be similar to the approach taken by the Employment Urban Growth Report were the measure was changed "acre" to "square foot."

At all costs we should avoid an outcome were a substantial percentage of the total future housing need is identified as a need for affordable housing; and have no part of the selected accommodation strategy (whether expansion or efficiency) reserved for affordable housing.

Issue Two:
There is no Rational Basis for a Land "Vacancy Rate"

There is fairly broad agreement that some housing vacancy is always needed to avoid short-term distortions in housing supply and prices. We agree that short term housing market demand analysis should assume a vacancy rate factor, but Metro's vacancy rate translates into a long-term "land" vacancy rate; not a short-term housing unit vacancy rate. The purported cure has no reasonable relation to the identified malady. We believe retaining this factor is redundant and therefore overstates the residential urban land supply need.

The inclusion and maintenance of a vacancy rate operates as follows. A twenty-year residential "land" supply need is expressed in acres. This figure is multiplied by a vacancy rate of four percent - a vacancy rte that already exists in the housing supply and will exist among new unit into the future; resulting in a regional residential land supply sufficient for twenty-years, nine-months, and twenty-nine days. The beyond-twenty-year land supply does absolutely nothing to increase short term housing supply. We agree that if we had set a "forever" urban growth boundary with only a twenty year land supply we might get price distortions in year 15 and beyond; but a forever boundary is prohibited by state planning law. We must revisit the boundary every five to seven years and provide for another twenty-year period of need. Under this scheme we will never have less than a 13-year supply, more than enough to avoid housing price distortions. So the original "market factor" of the 1979 boundary and its present-day derivative "vacancy rate" have been eclipsed by changes in state planning law in 1995 (new 20-year supply required every five years) and 2007 (urban and rural reserves).

We would support a strategy that helped avoid short-term shortages of housing; but a long-term land vacancy rate is not such a strategy. We recommend removing the vacancy factor.

If you have questions, please do not hesitate to contact me or Al Burns.

Best regards,

Bob

Bob Clay, AICP, Supervising Planner
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Home Builders Association
of Metropolitan Portland

HBA's positions and comments on Metro's Preliminary Urban Growth Report

In March, 2009, the Metro Council released the residential element of the preliminary Urban Growth Report (UGR). The UGR, which Metro is required to update every five years by Oregon law, analyzes the capacity of the region's current Urban Growth Boundary (UGB) to accommodate anticipated growth over the next 20 years under various scenarios. This report was later followed by the draft Preliminary Housing Needs and Employment Needs Analyses.

Metro has asked for feedback on its reports, stating that their intent is to spark discussion and debate about the local and regional policy and investment choices that will influence the growth management decisions anticipated for 2010.

HBA has reviewed the UGR reports and has discussed them extensively within internal policy review meetings and in conjunction with other organizations and groups. HBA was part of a broad housing and employment coalition that commissioned Group Mackenzie to review and provide feedback on Metro's draft Infrastructure Study, which was released in the fall of 2008. In addition, this coalition also commissioned Johnson Reid to clarify and evaluate methodologies used in the UGR itself. The Johnson Reid and Group Mackenzie work was intended to provide further substantive feedback to Metro. Summary white papers are attached for both studies.

There is clearly much more work still to be done to help shape this important regional policy discussion. This document has been submitted to outline HBA's general position on the assumptions made in the UGR. It asks some specific questions and it raises concerns and makes recommendations regarding the UGR and the housing needs analysis. While our focus is on the residential housing needs, we will provide some comment on the employment needs data as well, primarily in areas where assumptions have been made that impact our region's ability to accommodate for growth.

HBA's general positions on accommodating growth successfully in our region

1) **HBA supports the region's desire to grow smart, to have vibrant urban centers and close-in neighborhoods, and to protect and enhance the livability of our area.** We need solutions that keep our core areas economically viable and prosperous and that provide good connections between our urban and rural resources. This should be part of a balanced approach to handling growth needs related to housing and employment

2) **HBA is not advocating for a specific amount of UGB expansion (or Urban Reserves) nor for specific locations.** We just want to be certain that the expansion review process is done based on accurate data, that it uses realistic market-based approaches, and that it allows our industry to provide housing that meets various price, location, size and style needs of the individuals and families in our region.

3) **We can meet our region's livability goals in ways that go beyond just focusing on urban centers.** Adding land on one side of the region for housing, and adding land on a completely opposite side for jobs, only worsens our transportation, sustainability and livability impacts. We also now have growing percentages of people commuting from Portland to the suburbs – a reverse of traditional trends. Ensuring the proper connection between

residential, industrial and commercial lands can greatly help us achieve goals – and still provide people with choices on where and how they want to live.

4) **Underestimating or incorrectly accommodating for residential growth in the current UGB will create greater problems for our region.** People will leapfrog to towns outside of the Metro UGB or into Washington, creating even greater transportation, environmental, and livability concerns. We can't simply think about our own tri-county area or create a one-size-fits-all mandate that will cause people to look elsewhere to get the home price, size, lot, or neighborhood that works best for them.

5) **We must think about employment and job growth as a region competing against other states and even other countries.** We need to look at what areas in our region are the most attractive to provide business sites for potential employers. Businesses look at a variety of livability factors when determining whether or not to select a specific location. A variety of housing options is clearly one of those livability factors. The availability of targeted workforce housing is another. Also of tremendous importance for attracting new industry is a significant number of suitable site options. An organization should have options from which to choose so they can then select the parcel that best suits their needs. This is an attractive scenario for new businesses or companies looking to relocate.

6) **Our region must place a higher priority on housing affordability as well as choice.** Certain levels of density can improve affordability. However, when density reaches a certain tipping point, much higher costs per square foot are realized. In addition, a constrained land supply will drive up land acquisition costs. Simply addressing affordability issues by mandating/forcing increased densities, smaller lots and smaller home sizes does not provide the range of housing choice the region needs to be economically prosperous and meet the needs of future homebuyers. So far, there has been little incorporation of data on how different decisions might affect housing affordability and the ability of our region to "...allow for flexibility of housing location, type and density." This latter part must also be addressed as part of the process as mandated by Statewide Planning Goal 10, but page 57 of the Preliminary UGR leaves out this important component when it quotes Planning Goal 10.

Specific points regarding Metro's Urban Growth Report and related studies

1. **Too much emphasis is placed on increased residential subsidies.** The HBA recommends that Metro reduce the UGR's reliance on the use of public subsidy tools. Although the Region should be able to count on the use of these strategies to some degree, we believe that the preliminary UGR has relied upon them to a fault. We are interested in finding out how the reduction of these subsidies will impact Metro's housing needs analysis, and how it may make expansion area growth more desirable than it has been presented throughout the report.
   a. Appendix 3 (page 97) of the preliminary UGR discusses the report's use of residential subsidies and assumptions that have been made with regard to their use. The greatest of those assumptions is that public subsidy tools such as urban renewal and tax abatement will indeed be readily available in the future, that their use will be widespread, and that these tools will successfully generate billions of dollars for development located primarily in centers and corridors. No consideration is given to the fact that public support for such subsidies is waning, or to the possibility that local policy makers may be unwilling to make use of these tools, even in areas where they are currently active.
   b. Within the table found in Appendix 3 (page 97) Metro has presented some supporting data for the UGR showing the potential for an investment of approximately $3.5 billion in public subsidy for approximately 86,000 housing units through 2030. Metro's draft Residential Capacity Range Assessment found on page 62 relies upon 71,100 of these subsidized units in addition to a dramatically exaggerated refill rate of 40% in order to demonstrate that adequate capacity is available for the projected high capacity scenario. This public investment will benefit approximately 24% of the anticipated high demand estimate of needed households at the tune of approximately $40,300 for each and every one of these subsidized units.

c. This monumental assumption is found only in the appendices of the UGR, yet its potential for negative impact is tremendous. What is the impact of the loss of $3.5 billion that would otherwise have been spent on social services, schools, fire departments and other infrastructure needs? Are all regional partners going to be in favor of using these tools if as shown in Appendix 3, approximately 71% or $2.5 billion in subsidy is going to be used in the Central City over the next 15 years? If there is no public support for the use of these tools, what is plan B? If growth doesn't actually materialize in the areas that you have targeted for investment, what then? Metro's preliminary infrastructure analysis certainly didn't consider this subsidy as a cost, if it is considered, what new conclusions can be drawn?

d. Currently, HB3056 ("Amendments to Oregon Urban Renewal Statutes") is winding its way through the state legislature. Assuming this becomes statute, the revised UGR will need to determine the impact it will have on assumptions made regarding the use of Urban Renewal funds for future subsidized development.

2. **The refill rate Metro uses for "attainable high capacity" is 50% higher than historical figures (40% versus 27%), appears to be overly reliant on increased public subsidies (addressed above), and flies in the face of current public opposition to increasing zoning capacity in current areas.**

   a. There are many who would argue even maintaining the current refill rate would be extremely hard. The "low hanging fruit", or lands more easily open to refill, are the ones that have largely helped the Metro region achieve the current refill rate. It's likely that most future areas will be more difficult and costly to refill.

   b. Also, current neighborhood and city opposition to redevelopment and increased densification of existing housing areas is high, yet Metro claims that rezoning lands to mixed-use residential and adding capacity for over 18,000 is "critical for protecting the character of existing, single-family neighborhoods." Our industry sees just the opposite – existing neighborhoods and communities view increased densities and redevelopment as changing the character of their neighborhoods, furthering traffic and congestion problems, and reducing open space around them.

   c. Metro's own public survey shows that a significantly high percentage of those surveyed (57%) rated "encouraging development where I live" as their least desired outcome, and almost 60% stated that "preserving open space where I live" was their most desired outcome. What justification is Metro relying on to assume that such a significantly higher refill rate can actually occur?

3. **The justifications for the underbuild rate are not substantiated and result in a huge reduction in potential future housing land need.** In 2002 there was a 20% reduction in housing capacity of vacant land due to physical constraints that made 100% of zoned capacity unfeasible. The current UGR reduces this to 5% based on "an assumption synthesized from oral communication provided by MTAC members." The 20% reduction in 2002 amounted to a 23,800 housing unit loss for capacity within the current UGB; a 5% reduction amounts to a 2,300 unit loss. This is a big assumption and runs contrary to ORS 197.296(5) which requires that the determination of housing capacity and need "must be based on data relating to land within the urban growth boundary that has been collected since the last periodic review or five years, whichever is greater." Also, what reduction in buildable land inventory is Metro including for areas that have been targeted for expansion, but where voters have not approved local annexations needed to carry the expansions forward, or for the Damascus area, which Metro has stated will not be able to be fully developed for at least twenty years.

4. **The land being deducted for future parks and schools needs further examination and justification.**

   a. The 1,100 acres deducted from the buildable land supply for parks is the exact same amount used in the 2002 UGR. However, since that time, almost every city now charges a park SDC and there are additional parks districts that also charge. Park SDC amounts have increased dramatically during the last seven years and Metro and THP&RD both have passed major bond measures that will result in major acreage purchases.

b. Most importantly, based on Metro's own expected capture rate of future population growth, planning to only acquire an additional 1,100 acres of park land would translate into between 1.7-2.4 acres per thousand of population—an amount far less than the park service levels of 10-20 acres per thousand that many local government park master plans and SDC methodologies are based within our region. Unless Metro is assuming far fewer parks and open spaces as the region grows, its projections grossly underestimate the amount that needs to be deducted from the buildable land supply and will add to the shortage of land needed for housing. We would like to see a breakdown of the amounts used by Metro to justify the same 1,100-acre amount used in 2002.
c. Regarding schools, no additional land is projected because of the current amount of land (1,000 vacant acres) owned by school districts. However, has any research been done on who owns the land and whether that will be in the locations that future growth and schools will be needed?

5. **Recent UGB expansion areas shouldn't be used as indicators of future UGB expansion needs.** Just because most new housing has been built on land within the UGB for 30 years doesn't negate the need for good expansion land areas. Metro's point that "94.5 percent of all new residential development in the last ten years occurred on land that was already within the boundary 30 years ago" is misleading and shouldn't be used to frame the discussion.
   a. The major UGB expansion occurred in 2002. It was supposed to bring in land that would be needed for the next twenty years, so it is way too early to determine its true impact or eventual use. These expansion lands were under appeal for three years, so that added delays and little to no planning progress was made during that time to get them ready for development
   b. The bulk of that expansion occurred in the Damascus area. That was the worst possible area to bring in from a development standpoint. Metro acknowledged that at the time, but stated it had to bring in that land due to current land hierarchy rules even though it recognized most of the land wouldn't be built on for at least 10-20 years.
   c. The 2002 expansion represented a transition to a new paradigm, both in the regional real estate market and in the way that local governments fund infrastructure for new development. Because of drastic changes within the housing market, coupled with increased expectations for a developer's contribution to infrastructure costs, build-out of these new areas will inevitably take longer. It would be a mistake, however, to point to these delays and conclude that all future UGB expansions will be the same.
   d. HBA understands that Metro operates with the assumption that UGB expansion areas will not realize on the ground development/construction until 10 years after inclusion into the UGB. This lag time is meant to resolve planning related and politically driven issues. Based upon that assumption, it appears that <u>some</u> significant expansion areas are well on their way as Metro had anticipated.
   e. Even with the above challenges, it still appears inaccurate to term the expansion areas as failures. *If the 28,000 acres of expansion land brought in since 1998 represents 11% of total UGB area, and in ten years (or much less for the bulk of the area) it's responsible for 5.5% of permitted units, then it is actually performing incredibly well*, especially given the infrastructure and economic challenges we've had the last several years. Much of it wasn't planned to be fully developed until closer to 2022.

6. **Infrastructure needs and costs for urban development versus suburban/rural development have not been accurately researched and vary based upon the location being examined.** Metro refers to its "2008 infrastructure study" on the costs needed to accommodate growth. That study used very limited data sets to make a case for urban redevelopment. HBA conducted an independent analysis of Metro's infrastructure study by Group Mackenzie (attached as a supplement to this letter) in the fall of 2008 and Metro has since admitted to several flaws in that report. It can be very easy to use less expensive urban redevelopment areas and more expensive expansion areas to make a case for higher density redevelopment only. Infrastructure costs are truly a critical component of any plan for handling future growth. There are urban locations and potential areas for urbanization that make logical sense for handling our future growth. We must make the right choices among both locations, rather than choosing one over the other.

7. **The data used to support a major trend toward urban centers is narrowly used and is overly focused on limited housing types.**

   a. Metro's stated point that "the trends are moving away from suburban style housing and more to urban centers and close-in neighborhoods" is based on one poll conducted of retired people. That is not a complete picture of what the public needs and wants. Even so, 19% of those polled chose conventional suburbs.
   b. In addition, Metro's apparent intent to provide a mix of housing types is to focus significantly more attention on multi-family housing, including rental housing (p.5 and p.10 of the preliminary housing needs analysis executive summary). While we agree multi-family housing should be a part of the mix, this does not provide for a true mix of housing types as needed and required for our region.
   c. We also question the accuracy of the statement that increased rental housing is "generally associated with healthy economic activity...and a shift in housing demand towards more central urban locations." We believe the region's goal, and what really helps healthy economic activity while creating stronger neighborhoods and prosperity for residents, is increasing the homeownership rate. What data is Metro using to show how its policy decisions affect homeownership rates in the future?
   d. Regardless of how much we can grow within urban centers and redevelopment areas, we still need to ensure that there are a variety of options to support all kinds of family and lifestyle choices. In addition, as previously stated, a range of housing types is needed to attract economic development from outside of the region, in fulfillment of Metro's obligations under statewide land use planning Goal 9.

The only way the case can be made to reach Metro's High Supply assumption is if almost all of their desired higher density, refill and subsidized development rates are met – a goal that has never been realized and that faces serious economic, political and public challenges. In addition, several issues mentioned above do not appear to be accurately reflected or the assumptions put into the Metroscope model are incorrect, which would lead to further serious problems with the housing needs analysis and related information. Regardless of best intentions, trying to achieve everything through infill, refill and higher density development has a high likelihood of making development harder or not feasible while increasing the cost of housing significantly, providing fewer choices to people and negatively impacting livability in the region.

In summary, we believe the following issues should be examined and included in a revised or final version of the UGR:

1) The 2008 draft Infrastructure Study should be revised to address the errors already acknowledged and to further explore the merits of issues raised in the analysis provided by Group Mackenzie. Underestimating the true costs of development will have a huge impact on affordability and will also dictate erroneous policy decisions that will have big implications for the future economic prosperity and livability of our region.
2) Evaluation and further justification needs to be provided for Metro's assumptions in the UGR and related housing studies regarding the increased use of residential subsidies, increased refill rates, and decreased underbuild rates. We do not believe these can be supported at their high capacity levels, and the residential subsidy issue in particular will create huge economic challenges for our region.
3) The deductions for net buildable land need to be re-evaluated, especially as it relates to parks. It appears as though Metro's assumptions are based on future levels far lower than what are currently provided for within the region.
4) The UGR shows a high emphasis on more limited housing types, and does not appear to show a balance that would be required under Oregon Statewide Planning Goal 10, which states that we must "...allow for flexibility of housing location, type and density." Metro's own statistics show increasing reliance on multi-family housing, smaller lot sizes and smaller house sizes to achieve its goals. Its focus on centers and corridors also doesn't take into account current employment and transportation trends and could negatively affect job growth, transportation issues, housing affordability, economic prosperity and livability in our region.