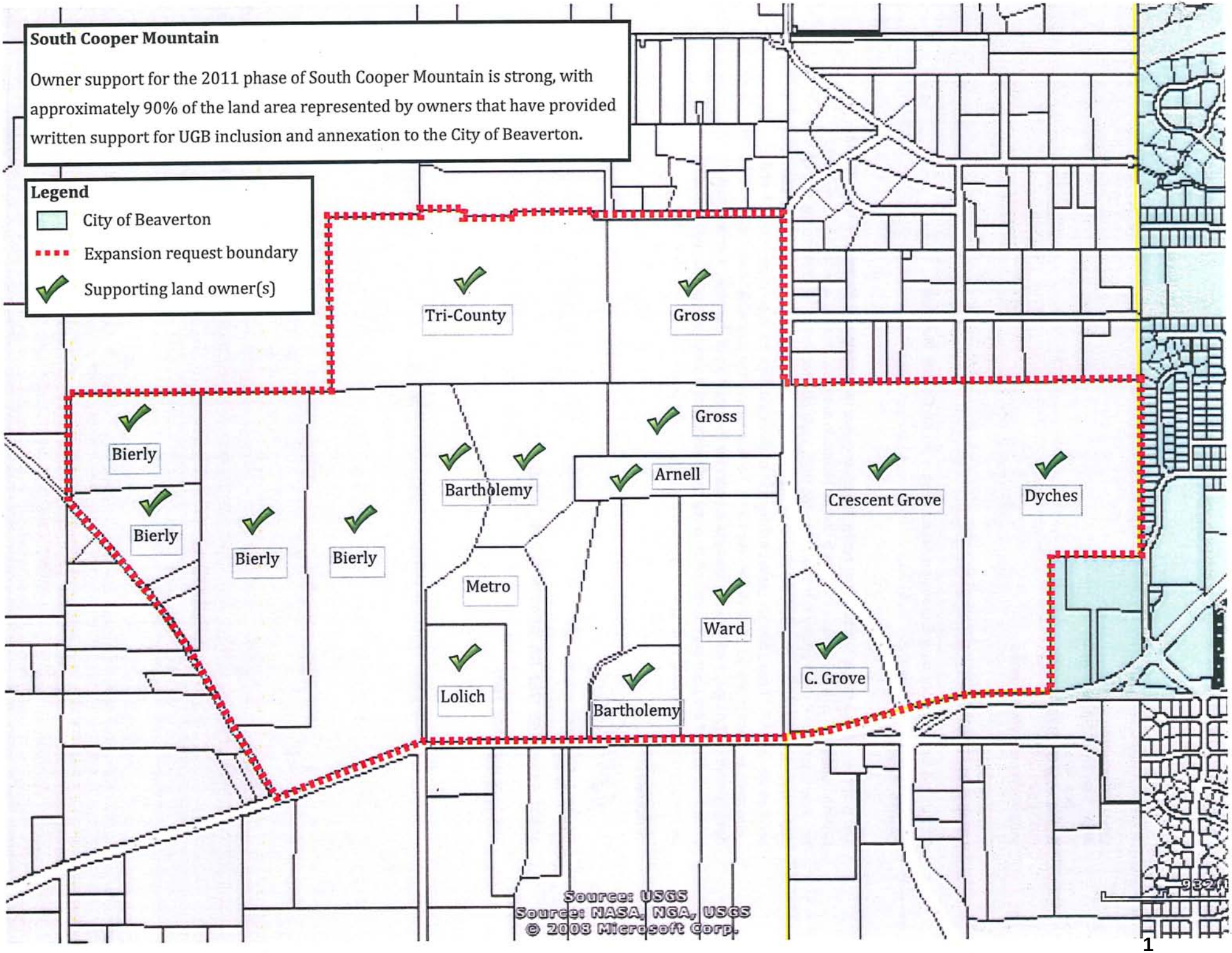

South Cooper Mountain
Owner support for the 2011 phase of South Cooper Mountain is strong, with approximately 90% of the land area represented by owners that have provided written support for UGB inclusion and annexation to the City of Beaverton.
Legend
City of Beaverton
Expansion request boundary
Supporting land owner(s)
Tri-County
Gross
Gross
Bierly
Bierly
Bierly
Bierly
Bierly
Bartholemy
Arnell
Crescent Grove
Dyches
Metro
Ward
Lolich
Bartholemy
C. Grove
Source: USGS
Source: NASA, NGA, USGS
© 2008 Microsoft Corp.

City of Beaverton
Attn: Steven A. Sparks, AICP
P.O. Box 4755
Beaverton, OR 97076-4755
(503) 526.2429
ssparks@ci.beaverton.or.us

October 21, 2010

RE: Urban Growth Boundary Expansion Study Area – South Cooper Mountain

Dear Mr. Sparks:

The purpose of this letter is to add to my earlier correspondence requesting that Metro expand the Urban Growth Boundary (UGB) to include the South Cooper Mountain area, also known as Area 6B. I wish it to be understood that if my property is brought into the UGB, I will also request annexation to the City of Beaverton. It is my expectation that the City of Beaverton will provide the governance of and urban services for Area 6B. I have already stated my support of including Area 6B in an expanded UGB and a willingness to develop my property in the near term. To help ensure the successful near term development of the land, I will provide financial support for the planning of the area. I expect that private funding of the planning efforts will be a regional example of a successful private-public funding partnership to achieve local and regional goals in planning for the South Cooper Mountain area.

Sincerely,

Robert J. Gross

17520 SW HORSE TALE DR. BEAVERTON OR, 97007

Tax Lots 1600 and 1605

City of Beaverton
Attn: Steven A. Sparks, AICP
P.O. Box 4755
Beaverton, OR 97076-4755
(503) 526.2429
ssparks@ci.beaverton.or.us

October 21, 2010

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Sincerely,

Frank Lolich, Jr.

Frank Lolich, Jr.

18407 SW Scholls Ferry Rd.

Beaverton, OR 97007

City of Beaverton
Attn: Steven A. Sparks, AICP
P.O. Box 4755
Beaverton, OR 97076-4755
(503) 526.2429
ssparks@ci.beaverton.or.us

October 21, 2010

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Sincerely,

Ed Bartholemy

18485 SW Scholls Ferry Rd.

Beaverton, OR 97007

Tax Lots 301 & 302

Tri-County Investments, LLC

17933 NW Evergreen Parkway, Suite 300| Beaverton, OR 97006
V. 503-597-7100 | F. 503-597-7149

City of Beaverton
Attn: Steven A. Sparks, AICP
P.O. Box 4755
Beaverton, OR 97076-4755
(503) 526.2429
ssparks@ci.beaverton.or.us

October 21, 2010

RE: Urban Growth Boundary Expansion Study Area – South Cooper Mountain

To whom it may concern:

The purpose of this letter is to add to my earlier correspondence requesting that Metro expand the Urban Growth Boundary (UGB) to include the South Cooper Mountain area, also known as Area 6B. I wish it to be understood that if my property is brought into the UGB, I will also request annexation to the City of Beaverton. It is my expectation that the City of Beaverton will provide the governance of and urban services for Area 6B. I have already stated my support of including Area 6B in an expanded UGB and a willingness to develop my property in the near term. To help ensure the successful near term development of the land, I will provide financial support for the planning of the area. I expect that private funding of the planning efforts will be a regional example of a successful private-public funding partnership to achieve local and regional goals in planning for the South Cooper Mountain area.

Sincerely,

John O'Neil

Tri-County Investments, LLC

Crescent Grove Cemetery
Mausoleum & Cremation Gardens
9925 SW Greenburg Road ~ Tigard, Oregon 97223
503.639.5347 ~ Fax 503.620.1264

October 22, 2010

City of Beaverton
Attn: Steven A. Sparks, AICP
PO Box 4755
Beaverton, OR. 97076-4755

Re: Urban Growth Boundary Expansion Study Area – South Cooper Mountain

Dear Mr. Sparks:

The purpose of this letter is to add to my earlier correspondence requesting that Metro expand the Urban Growth Boundary (UGB) to include the South Cooper Mountain area, also knows at Area 6B.

I wish it to be understood that if our property is brought into the UGB, I will also request annexation to the City of Beaverton. It is our expectation that the City of Beaverton will provide the governance of and urban services for Area 6B. I have already stated our support of including Area 6B in an expanded UGB and we will help ensure the successful development of the land and will support the planning of the area.

We expect that private funding of the planning efforts will be a regional example of a successful private-public funding partnership to achieve local and regional goals in planning for the South Cooper Mountain area.

Sincerely,

James O'Connor, President
Crescent Grove Cemetery Association

City of Beaverton
Attn: Steven A. Sparks, AICP
P.O. Box 4755
Beaverton, OR 97076-4755
(503) 526.2429
ssparks@ci.beaverton.or.us

October 21, 2010

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Sincerely,

Lewis Bierly

Bierly Family Properties, including

19293 SW Tile Flat Rd, Beaverton, OR

12150 SW Kobbe Dr., Beaverton, OR

18865 SW Scholls Ferry Rd., Beaverton, OR

Also known as Section 1 T2S R2W Tax Lots 100, 101, 200 and 201

October 26, 2010

City of Beaverton
Attn: Steven A. Sparks, AICP
P. O. Box 4755
Beaverton, Oregon 97076-4755
(503)526-2429

Re: Urban Growth Boundary Expansion Study area – South Cooper Mountain

We are writing to add to our earlier correspondence requesting that Metro expand the Urban Growth Boundary (UGB) to include South Cooper Mountain area, also known as Area 6B. We wish it to be understood that if our property is brought into the UGB, we will also request annexation to the City of Beaverton. We support the City of Beaverton's aspiration to govern and generate efficient use of this resource rich area.

We have already discussed the attributes that make South Cooper Mountain an important choice for development in the very near future. These include the nearness of utility services; the area contains key arterial junctions that connect efficiently to other urban regions; and topography that would be suitable for all types of residential and commercial development to sustain livable and efficient neighborhoods.

As a land owner in the area, we would support, to the extent possible, development planning that would make this a reality in South Cooper Mountain.

Sincerely,

David B. Ward, Trustee
Harold K. Ward Trust. Alma Ward, Credit Shelter Trust
17595 SW Scholls Ferry Road
Beaverton, Oregon 97007

City of Beaverton
Attn: Steven A. Sparks, AICP
P.O. Box 4755
Beaverton, OR 97076-4755
(503) 526.2429
ssparks@ci.beaverton.or.us

October 21, 2010

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City of Beaverton
Attn: Steven A. Sparks, AICP
P.O. Box 4755
Beaverton, OR 97076-4755
(503) 526.2429
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October 21, 2010

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Sincerely,

Michael J. Arnell

12231 SW 175TH AVE. BEAVERTON OR, 97007

UGB

Oregon
John A. Kitzhaber, MD, Governor

Department of Transportation
Region 1 Headquarters
123 NW Flanders Street
Portland, Oregon 97209
(503) 731.8200
FAX (503) 731.8531

March 29, 2011

Washington County Commission Chair Andy Duyck
155 North First Avenue
Hillsboro, Or 97124

Metro President Tom Hughes
600 NE Grand Avenue
Portland, OR 97232

Subject: Washington County Urban and Rural Reserves, Ordinance 740

The Oregon Department of Transportation has the following comments regarding the latest proposed Urban and Rural Reserves designations in Washington County. Please enter this letter into the record of your proceedings.

ODOT has an interest in the designation of additional acres of Urban Reserves north of US 26, in the vicinity of the Brookwood Parkway /Helvetia Rd interchange. The interchange is a primary entry point to regionally significant high-tech employment centers. We are currently developing a project to reduce congestion and improve safety and freight mobility, to better serve economic development opportunities inside the UGB in this area. ODOT's indented primary function of this interchange is to provide access to the regionally significant industrial area to the south of US 26, and goods movement for the industrial lands inside the UGB on both sides of US 26. If Metro and Washington County choose to designate additional acreage at this location for Urban Reserves, ODOT recommends a stipulation indicating that the capacity needed to protect that function be maintained if the land is brought into the Metro urban growth boundary.

Also, we wish to set the record straight that ODOT does **not** need an urban reserve designation in order to make currently proposed or future improvements at this interchange. The Transportation Planning Rule sections -0065 and -0070 provide for certain transportation improvements to be made on rural lands without and with exceptions to Statewide Planning Goals 3, 4, 11, and 14. In fact, an Urban Reserves designation does not affect any of the applicable requirements for interchange improvements.

ODOT thanks you for this opportunity to comment.

Lainie Smith
Senior Policy Advisor

CC: Jason Tell
Rian Windsheimer
Kirsten Pennington
Andy Johnson
Lidwien Rahman
John Williams, Metro
Jerry Lidz, Interim DLCD
Jennifer Donnelly, DLCD
Anne Debaut, DLCD

600 NE Grand Ave.
Portland, OR 97232-2736

Metro | *Agenda*

Meeting: Metro Council Work Session
Date: Tuesday, April 12, 2011
Time: 2 p.m.
Place: Council Chambers

CALL TO ORDER AND ROLL CALL

2 PM	**1.**	**DISCUSSION OF AGENDA FOR COUNCIL REGULAR MEETING, APRIL 14, 2011/ADMINISTRATIVE/ CHIEF OPERATING OFFICER COMMUNICATIONS**	
2:15 PM	**2.**	**CLIMATE LEADERSHIP SUMMIT: WRAP UP, PUBLIC OPINION PRESENTATION AND RECOMMENDATIONS– INFORMATION / DISCUSSION**	**Unfred Ellis Adam Davis, Davis, Hibbitts, & Midghall, Inc**
3:00 PM	**3.**	**SETTING CARBON EMISSIONS REDUCTION TARGETS FOR THE METRO REGION AND THE STATE RULEMAKING PROCESS – INFORMATION/DISCUSSION**	**Bob Cortright, DLCD**
4:00 PM	**4.**	**URBAN GROWTH BOUNDARY TIMELINE – INFORMATION**	**Williams**
4:25 PM	**5.**	**COUNCIL BRIEFINGS/COMMUNICATION**	

ADJOURN

Agenda Item Number 4.0

URBAN GROWTH BOUNDARY TIMELINE

Metro Council Work Session
Tuesday, April 12, 2011
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: April 12, 2011 Time: 4:00 Length: 25 min.

Presentation Title: 2011 Growth Management Decision Timeline

Service, Office, or Center: Planning and Development Department

Presenters (include phone number/extension and alternative contact information):
Carl Hosticka, x1549
John Williams, x1635

ISSUE & BACKGROUND

As described in more detail in the attached work program proposal, Council expects to make a growth management decision in fall 2011, following LCDC acknowledgment of urban and rural reserves. The work program details proposed timelines and key milestones to achieve this decision.

OPTIONS AVAILABLE

Options are available both on the timeline of the project and on the content of the decision. Working with Councilor Hosticka as Council liaison, staff has developed the attached timeline to best accommodate related work programs and allow public outreach and advisory committee input. Future work sessions, Council meetings and advisory committee meetings will discuss the content of the decision in much more detail.

IMPLICATIONS AND SUGGESTIONS

The Council's growth management decision is related to other work, most significantly the urban and rural reserves program, but also other programs as listed in the attached proposal.

QUESTION(S) PRESENTED FOR CONSIDERATION

1. Does the proposed timeline allow for appropriate Council deliberation, advisory committee recommendations, and public outreach?
2. Are Metro's role, and the Council's role, defined correctly?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION __Yes X No
DRAFT IS ATTACHED ___Yes ___No

2011 Growth Management Decision Work Program

Tim O'Brien, Project Manager



BACKGROUND: In 2009 the Metro Council accepted the Urban Growth Report (UGR), an analysis of the region's capacity to accommodate forecasted population and employment growth over the next 20 years. The UGR provided range forecasts of both capacity and demand, acknowledging uncertainty about the future and allowing for growth management decisions to focus on desired outcomes rather than numbers. In December 2010 the Council by ordinance narrowed the range of uncertainty by finding that actions taken by the Council and local governments provided capacity for at least 50 percent of the housing and employment forecast. What remains is how to address any remaining capacity gap, in particular for residential needs and large-site industrial needs.

The Council must make this decision in 2011 and has agreed to wait until state acknowledgment of the urban and rural reserves decision, allowing use of urban reserves for any needed urban growth boundary expansions. The current schedule calls for review of a revised reserves map by the Land Conservation and Development Commission in August 2011. Thus, we expect Council consideration of growth management choices to be conducted in September to November 2011.

The Council and its advisory committees have already conducted significant work on this topic, including extensive discussions of the use of range forecasts, analysis of tradeoffs and alternatives, and assessment of UGB expansion options. Staff intends to carry forward this base level of understanding into the 2011 discussions.

PROJECT GOAL: Growth management decision that balances multiple desired outcomes to best meet the state, regional and local goals and aspirations.

METRO ROLE:

- Lead technical analysis of urban reserve areas and provide staff recommendation for growth management decision including possible UGB expansion
- Implement public outreach program
- Coordinate with Metro committees and other interested parties
- Make growth management decision

WORK PROGRAM ELEMENTS:

- Staff recommendation for possible UGB expansion
- Public Outreach
- MPAC/MTAC, JPACT/TPAC coordination
- Required notifications to DLCD, general public and 26-29 report

RELATED PROJECTS/PROGRAMS:

- Greater Portland Vancouver Indicators project and Metro performance monitoring
- Community Investment Initiative
- Climate Smart Communities scenarios
- Industrial and Employment areas work program, including large lot industrial inventory and replenishment

EXTERNAL PARTNERS:

- Citizens and stakeholders
- Cities and counties in the region
- State agencies

COUNCIL ROLE *(Carl Hosticka, Council liaison)*

- Provide direction on work program throughout timeframe
- Complete a growth management decision that balances multiple desired outcomes to meet state, regional and local goals and aspirations

KEY MILESTONES AND DECISIONS TIMELINE

1. Metro Council and county adoption of urban and rural reserves	April 2011
2. Council decision on UGB study areas (following request to locals for any additional areas to be studied)	June, 2011
3. LCDC hearing on urban and rural reserves	August 18-19, 2011
4. Staff recommendation on potential UGB expansion	September 13, 2011
5. Initiate committee review of staff recommendation	September 14, 2011
6. Written order from DLCD acknowledging reserves	September 2011
7. Public outreach, notice to DLCD and general public on proposed UGB expansion area(s)	September 19-30, 2011
8. "26-29 Report" describing impacts of potential UGB expansion distributed to potentially impacted homeowners (required by Charter)	October 20-27, 2011
9. Final MPAC recommendation on growth management decision	October 26, 2011
10. Metro Council adoption of growth management ordinance	**November 17, 2011**

NOTE: FORMAL ACTIONS ARE BOLDED AND HIGHLIGHTED IN GRAY

DETAILED LISTING OF EVENTS AND PRODUCTS TO DELIVER KEY MILESTONES INCLUDING PROPOSED MEETING DATES

Milestone 1 (Metro Council and county adoption of urban and rural reserves):

- Council adoption of Ordinance No. 11-1255 — **April 21, 2011**
- Clackamas, Multnomah & Washington counties adoption of reserves — **April 2011**

Milestone 2 (Metro Council decision on study areas):

- Notice to Mayors and County Chairs requesting submittal of any additional areas to be studied (we already have list from 2010) — **April 26, 2011**
- Deadline for submittal of requests from local governments — **May 20, 2011**
- Metro Council decision on study areas — **May 24, 2011**

Milestone 3 (LCDC Hearing on urban and rural reserves):

- LCDC hearing — **Aug 18-19**

Milestone 4 (Staff recommendation on potential UGB expansion):

- Complete alternatives analysis study — **June-Aug. 2011**
- Staff recommendation on proposed UGB expansion — **Sept. 13, 2011**

Milestone 5 (Initiate committee review of staff recommendation):

- Initial MPAC review of staff recommendation — **Sept. 14, 2011**
- Initial MTAC review of staff recommendation — **Sept. 21, 2011**
- TPAC review of staff recommendation — **Sept. 30, 2011**
- JPACT review of staff recommendation — **Oct. 13, 2011**

Milestone 6 (Written order from DLCD acknowledging reserves):

- DLCD to provide written order acknowledging reserves — **Sept. 2011**

Milestone 7 (Public Outreach DLCD and general public notice):

- Public Outreach — **Sept. 19-30, 2011**
- Provide notice to DLCD on proposed UGB expansion area(s) — **Sept. 27, 2011**
- Provide general public notice in newspaper — **Sept. 27, 2011**

Milestone 8 (26-29 Report distributed to potentially impacted homeowners):

- Complete 26-29 Report on proposed expansion area(s) — **Sept.-Oct. 2011**
- Distribute 26-29 Report to potentially impacted homeowners — **Oct. 20-27, 2011**

Milestone 9 (Final MPAC Recommendation):

- MPAC makes final recommendation on proposed UGB expansion area(s) — **Oct. 26, 2011**

Milestone 10 (Metro Council growth management decision):

- Council work session
- Metro Council first reading of growth management ordinance — **Nov. 10, 2011**
- Metro Council adopts growth management ordinance — **Nov. 17, 2011**

DETAILED LISTING OF EVENTS AND PRODUCTS TO DELIVER KEY MILESTONES INCLUDING PROPOSED MEETING DATES

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- Deadline for submittal of requests from local governments — **May 20, 2011**
- Metro Council decision on study areas — **May 24, 2011**

Milestone 3 (Staff recommendation on potential UGB expansion):

- Complete alternatives analysis study — **June-July 2011**
- Staff recommendation on proposed UGB expansion — **Aug. 2, 2011**

Milestone 4 (Initiate committee review of staff recommendation):

- Initial MTAC review of staff recommendation — **Aug. 3, 2011**
- Initial MPAC review of staff recommendation — **Aug. 10, 2011**

Milestone 5 (LCDC Hearing on urban and rural reserves):

- LCDC hearing — **Aug. 18-19**

Milestone 6 (Public Outreach DLCD and general public notice):

- Public Outreach — **Aug. 22-31, 2011**
- Provide notice to DLCD on proposed UGB expansion area(s) — **Sept. 2, 2011**
- Provide general public notice in newspaper — **Sept. 2, 2011**

Milestone 7 (26-29 Report distributed to potentially impacted homeowners):

- Complete 26-29 Report on proposed expansion area(s) — **Aug.-Sept., 2011**
- Distribute 26-29 Report to potentially impacted homeowners — **Sept. 26-30, 2011**

Milestone 8 (Final MPAC Recommendation):

- MPAC makes final recommendation on proposed UGB expansion area(s) — **Sept. 28, 2011**
  (Note: date conflicts with League of Oregon Cities meeting)

Milestone 9 (Written order from DLCD acknowledging reserves):

- DLCD to provide written order acknowledging reserves — **Late Sept. 2011**

Milestone 10 (Metro Council growth management decision):

- Council work session
- Metro Council first reading of growth management ordinance — **Oct. 13, 2011**
- Metro Council adopts growth management ordinance — **Oct. 20, 2011**

600 NE Grand Ave.
Portland, OR 97232-2736
www.oregonmetro.gov

Metro | *Making a great place*

MINUTES OF THE METRO COUNCIL WORK SESSION MEETING

April 12, 2011
Metro Council Chamber

Councilors Present: Tom Hughes (Council President), Carlotta Collette, Kathryn Harrington, Shirley Craddick, Rex Burkholder, Carl Hosticka

Councilors Absent: None

Council President Tom Hughes convened the Metro Council Work Session Meeting at 2:04 p.m.

1. DISCUSSION OF AGENDA FOR COUNCIL REGULAR MEETING, APRIL 14, 2011/ADMINISTRATIVE/CHIEF OPERATING OFFICER COMMUNICATIONS
Dan Cooper, Chief Operating Officer, offered to provide more information regarding the possibility of a plumbers local 290 strike. Mr. Cooper started an initial discussion regarding the frequent flyer audit. The current proposal would be to make frequent flyer miles part of the official compensation for the Metro Council similar to Trimet and Port of Portland. Mr. Cooper asked for support and offered to bring a draft to the Council at a future work session.

2. CLIMATE LEADERSHIP SUMMIT: WRAP UP, PUBLIC OPINION PRESENTATION AND RECOMMENDATIONS– INFORMATION / DISCUSSION
Patty Unfred of Metro introduced agenda item and Adam Davis from Davis, Hibbitts, & Midghall Inc. Metro convened nearly 300 participants on Friday, April 1 at the Oregon Convention Center for a Climate Leadership Summit to explore strategies and policies that could help the area meet the state targets. At the summit Mr. Davis presented the results of public opinion research. He was not able to complete his presentation and was before Council with the PowerPoint to discuss the result and implications for council communications.

The Council asked how the survey questions were determined and how that affected the results. Suggestions from the Council included changing the language from "public" to "citizens" and include a partisan question in the survey. Councilors expressed enthusiasm in the results and supported planning a future work session to further discuss the approach for testing the land use and transportation strategies that will help the region reduce carbon emissions and meet state goals.

3. SETTING CARGON EMISSIONS REDUCTION TARGETS FOR THE METRO REGION AND THE STATE RULEMAKING PROCESS – INFORMATION/DISCUSSION
Bob Cortright from the Department of Land Conservations and Development (DLCD) provided a PowerPoint presentation on the proposed greenhouse gas reduction targets for the metropolitan areas. The targets are intended to guide metropolitan areas as they conduct land use and transportation scenario planning to reduce greenhouse gas emissions from light vehicles. The draft rule and targets released by DLCD assumes significant advancements in vehicle fleet, technologies and fuels, but also calls for the Portland region to reduce per person carbon emissions by 21 percent through other transportation and land use strategies that will be evaluated through the region's scenario planning.

Councilors asked clarifying questions including what specifically was measure in the emissions numbers and if it included small combustion engines or the construction of vehicles. The Council

also asked for the certainty of the assumptions in the report. With support from the Council, Kim Ellis of Metro stated work would move forward with the addition of updates and edits from the discussion at this work session.

4. URBAN GROWTH BOUNDARY TIMELINE – INFORMATION

John Williams of Metro provided two timelines for the Council's growth management decision. The Council must make a decision in 2011on the remaining capacity gap and has agreed to wait until state acknowledgement of the urban and rural reserves decisions. The current schedule calls for review of revised reserves map by the Land Conservation and Development Commission in August 2011. The expectation of Council is to have a consideration of growth management choices to be conducted in September to November 2011.

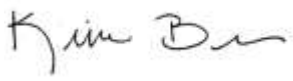
Council discussed the two proposed timelines. Concerns included holding hearings in August as many agencies will have employees on vacation or will be on recess. There is also a schedule conflict on September 28th to take into consideration. Mr. Cooper offered to provide the work product from 2010. Councilors asked for a debrief and for another meeting to discuss changes to the timeline.

5. COUNCIL BRIEFINGS/COMMUNICATION

Council discussion included a recap of the Greater Portland Vancouver Indicators Project meeting, the Oregon Zoo Bond Advisory Committee and Councilor Carlotta Collette's trip to Spain.

Adjourned at 4:59 p.m.

Prepared by,



Kim Brown
Council Policy Assistant

ATTACHMENTS TO THE PUBLIC RECORD FOR THE MEETING OF April 12, 2011

Item	Topic	Doc. Date	Document Description	Doc. Number
1	Agenda	4/12/11	Agenda: Metro Council regular meeting, April 14, 2011	041211cw-1
2	PowerPoint	4/12/11	PPT: Metro Area Residents' Attitudes about Climate Change and Related Land Use and Transportation Issues	041211cw-2
3	PowerPoint	4/11	PPT: Proposed Greenhouse Gas Reduction Targets for Metropolitan Areas	041211cw-3
4	Handout	4/12/11	Handout: Growth Management Decision: Alternative Schedule	041211cw-4

DETAILED LISTING OF EVENTS AND PRODUCTS TO DELIVER KEY MILESTONES INCLUDING PROPOSED MEETING DATES

Milestone 1 (Metro Council and county adoption of urban and rural reserves):	
▪ Council adoption of Ordinance No. 11-1255	**April 21, 2011**
▪ Clackamas, Multnomah & Washington counties adoption of reserves	**April 2011**
Milestone 2 (Metro Council decision on study areas):	
▪ Notice to Mayors and County Chairs requesting submittal of any additional areas to be studied (we already have list from 2010)	**April 26, 2011**
▪ Deadline for submittal of requests from local governments	**May 20, 2011**
▪ Metro Council decision on study areas	**May 24, 2011**
Milestone 3 (LCDC Hearing on urban and rural reserves):	
▪ LCDC hearing	**Aug 18-19**
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▪ Complete alternatives analysis study	**June-Aug. 2011**
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▪ JPACT review of staff recommendation	**Oct. 13, 2011**
Milestone 6 (Written order from DLCD acknowledging reserves):	
▪ DLCD to provide written order acknowledging reserves	**Sept. 2011**
Milestone 7 (Public Outreach DLCD and general public notice):	
• Public Outreach	**Sept. 19-30, 2011**
• Provide notice to DLCD on proposed UGB expansion area(s)	**Sept. 27, 2011**
• Provide general public notice in newspaper	**Sept. 27, 2011**
Milestone 8 (26-29 Report distributed to potentially impacted homeowners):	
• Complete 26-29 Report on proposed expansion area(s)	**Sept.-Oct. 2011**
• Distribute 26-29 Report to potentially impacted homeowners	**Oct. 20-27, 2011**
Milestone 9 (Final MPAC Recommendation):	
• MPAC makes final recommendation on proposed UGB expansion area(s)	**Oct. 26, 2011**
Milestone 10 (Metro Council growth management decision):	
• Council work session	
• Metro Council first reading of growth management ordinance	**Nov. 10, 2011**
• Metro Council adopts growth management ordinance	**Nov. 17, 2011**

DETAILED LISTING OF EVENTS AND PRODUCTS TO DELIVER KEY MILESTONES INCLUDING PROPOSED MEETING DATES

Milestone 1 (Metro Council and county adoption of urban and rural reserves):

- Council adopts reserves – Ordinance No. 11-1255 — **April 21, 2011**
- Clackamas, Multnomah & Washington counties adopt reserves — **April 2011**

Milestone 2 (Metro Council decision on study areas):

- Notice to Mayors and County Chairs requesting submittal of any additional areas to be studied (we already have list from 2010) — **April 26, 2011**
- Deadline for submittal of requests from local governments — **May 20, 2011**
- Metro Council decision on study areas — **May 24, 2011**

Milestone 3 (Staff recommendation on potential UGB expansion):

- Complete alternatives analysis study — **June 2011**
- Staff recommendation on proposed UGB expansion — **Aug. 2, 2011**

Milestone 4 (Initiate committee review of staff recommendation):

- Initial MTAC review of staff recommendation — **Aug. 3, 2011**
- Initial MPAC review of staff recommendation — **Aug. 10, 2011**

Milestone 5 (LCDC Hearing on urban and rural reserves):

- LCDC hearing — **Aug. 18-19**

Milestone 6 (Public Outreach DLCD and general public notice):

- Public Outreach — **Aug. 22-31, 2011**
- Provide notice to DLCD on proposed UGB expansion area(s) — **Sept. 2, 2011**
- Provide general public notice in newspaper — **Sept. 2, 2011**

Milestone 7 (26-29 Report distributed to potentially impacted homeowners):

- Complete 26-29 Report on proposed expansion area(s) — **Aug.-Sept., 2011**
- Distribute 26-29 Report to potentially impacted homeowners — **Sept. 26-30, 2011**

Milestone 8 (Final MPAC Recommendation):

- MPAC makes final recommendation on proposed UGB expansion area(s) *(Note: date conflicts with League of Oregon Cities meeting)* — **Sept. 28, 2011**

Milestone 9 (Written order from DLCD acknowledging reserves):

- DLCD to provide written order acknowledging reserves — **Late Sept. 2011**

Milestone 10 (Metro Council growth management decision):

- Council work session
- Metro Council first reading of growth management ordinance — **Oct. 13, 2011**
- Metro Council adopts growth management ordinance — **Oct. 20, 2011**

600 NE Grand Ave.
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Metro | *Agenda*

Meeting: Metro Council Work Session
Date: Tuesday, April 19, 2011
Time: 2 p.m.
Place: Council Chambers

CALL TO ORDER AND ROLL CALL

2 PM	**1.**	**DISCUSSION OF AGENDA FOR COUNCIL REGULAR MEETING, APRIL 21, 2011/ADMINISTRATIVE/ CHIEF OPERATING OFFICER COMMUNICATIONS**	
2:15 PM	**2.**	**OVERVIEW OF WORK SESSION**	**Cooper**
	3.	**OVERVIEW: MOVING FROM MAKING THE GREATEST PLACE POLICY TO IMPLEMENTATION**	
2:20 PM	3.1	• Community Investment Strategy	**McArthur**
2:30 PM	3.2	• Community Investment Initiative	**Cassin**
	4.	**KEY ELEMENTS OF COMMUNITY INVESTMENT STRATEGY IDENTIFIED IN FY 2011-12 BUDGET**	
2:40 PM	4.1	• Integrated Corridor Strategies: East County Connections Plan, SW Corridor	**McArthur**
2:50 PM	4.2	• Intertwine/NIN/Integration of Parks Planning	**Desmond**
3 PM	4.3	• Climate Smart Communities (scenario planning)	**Ellis**
3:05 PM	4.4	• New Emphasis Areas o Industrial and Employment Areas o Downtown and Mainstreet Development o Housing/Equity	**Williams**
	5.	**SOLID WASTE ROAD MAP**	
4:05 PM	5.1	• Overview of Timeline/Major Product	**Slyman**
4:15 PM	**6.**	**GREATER PORTLAND –VANCOUVER INDICATORS PROJECT**	**Hoglund**
4:30 PM	**7.**	**OVERVIEW AND THEORY OF THE SPECIAL APPROPRIATIONS SCHEDULE**	**Norton**
4:40 PM	**8.**	**BUDGET AMENDMENTS**	**Cooper**

ADJOURN

Agenda Item Number 3.0

OVERVIEW: MOVING FROM MAKING THE GREATEST PLACE POLICY TO IMPLEMENTATION

Metro Council Work Session
Tuesday, April 19, 2011
Metro Council Chambers

Community Investment Strategy roadmap

Working together to build livable, prosperous, equitable and climate smart communities

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Community Investment Strategy roadmap

Where we're headed

2011 Growth management decision
Making a growth management decision that balances multiple desired outcomes to best meet state, regional and local goals and aspirations

Large lot industrial inventory and replenishment
Creating sites for major traded sector employers who bring additional wealth into the region

Industrial and employment areas outreach and technical assistance
Laying the groundwork for private sector job creation by informing local and regional economic development strategies

Downtowns, main streets and station communities outreach and technical assistance
Creating readiness by leveraging public policies and investments to spark private development

Community Investment Initiative
Supporting a public-private partnership to exercise leadership to strengthen the region's economic fabric for the benefit of all

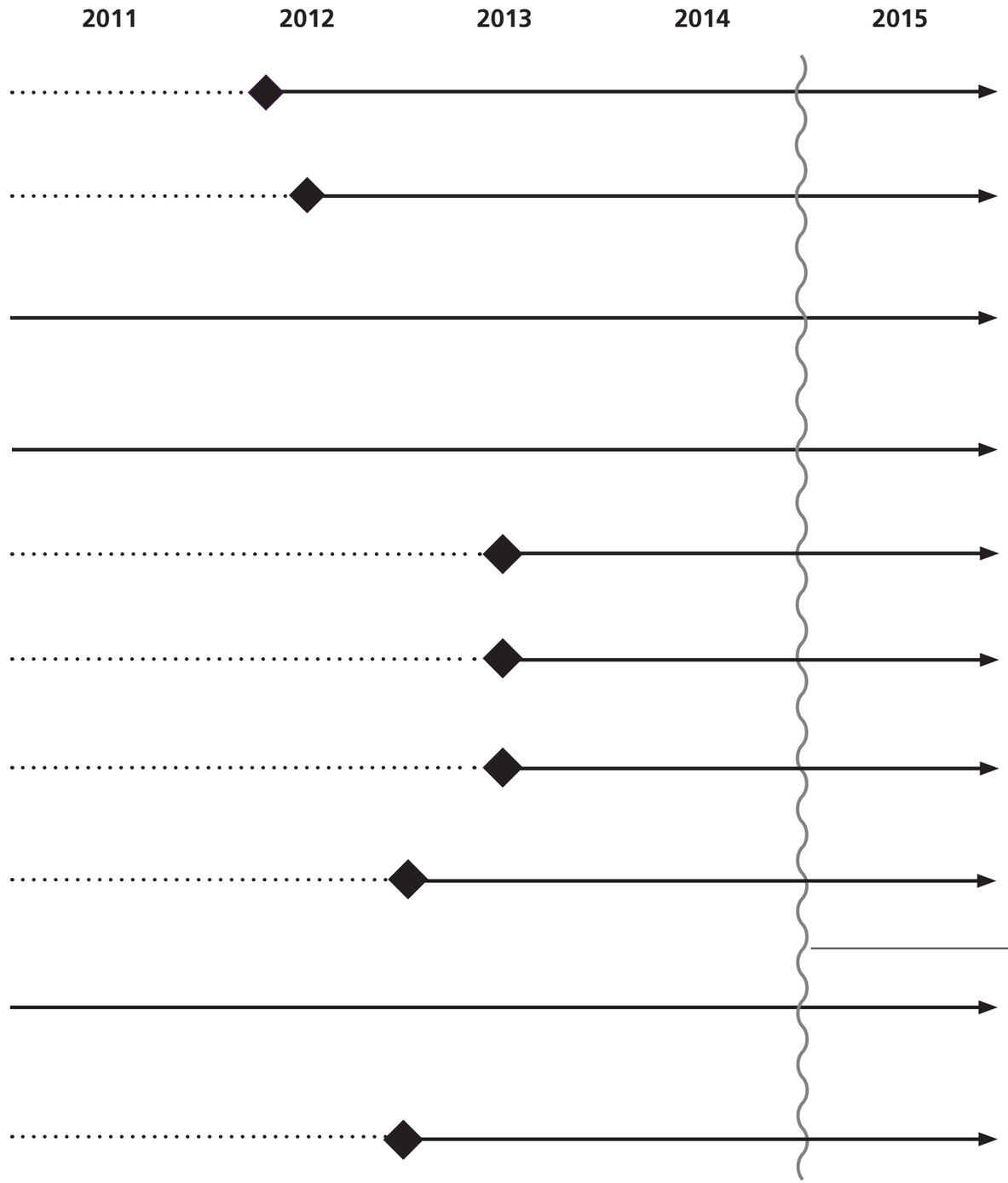
Climate Smart Communities scenarios
Learning how to achieve local and regional goals while reducing the region's carbon footprint

Southwest Corridor Plan
Creating livable and sustainable communities along the corridor from Portland to Sherwood through integrated community investments in land use and transportation

East Metro Connections Plan
Creating livable and sustainable communities through integrated community investments in land use and transportation

The Intertwine
Collaborating with local park providers, nongovernmental organizations and businesses on an innovative approach to developing and managing the region's parks, trails and natural areas

Solid Waste Roadmap
Guiding the evolution of the solid waste system through policies and projects important for the development of the region



Community Investment Strategy
An integrated set of policies and investments that support a long-term regional strategy to make the most of existing public resources, provide for good jobs and protect farms and forestland.



Performance check
The next Urban Growth Report and Regional Transportation Plan, both scheduled for publication in 2014, will serve as a performance check and to inform policy decisions.

Policy development

Implementation and investment

Milestone

11433 Printed on recycled-content paper.

Major policy decisions 2009-2010

2009 Urban Growth Report
Projected population and employment growth and the region's capacity to accommodate both within the urban growth boundary

2010 Capacity Ordinance
Evaluated capacity of the region to efficiently accommodate projected population and employment growth

2010-2011 Urban and rural reserves
Collaborated with three counties in the region to define the rural areas that will be protected from urbanization for 50 years and the areas that are most suitable for urbanization

2010 Regional Transportation Plan
Prioritized investments to make existing roads, bridges, bike paths, sidewalks and transit cleaner, faster, safer and easier to access throughout the region for the next 25 years

Agenda Item Number 4.0

KEY ELEMENTS OF COMMUNITY INVESTMENT STRATEGY IDENTIFIED IN FY 2011-12 BUDGET

Metro Council Work Session
Tuesday, April 19, 2011
Metro Council Chambers

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Industrial and Employment Areas Work Program

John Williams, Program Manager



GOAL: Prosperous, sustainable and accessible industrial and employment areas.

METRO ROLE: Identify barriers, develop and promote tools and coordinate investments to support a regional economic development strategy.

PROGRAM OBJECTIVES:

- Create development-ready employment sites
- Support job growth in industrial and employment areas
- Promote equitable jobs access for all populations
- Foster energy efficient and environmentally sustainable industrial and employment areas
- Increase regional coordination of employment forecasts, data and strategies
- Coordinate regional investment strategy in support of regional economic development strategy

WORK PROGRAM ELEMENTS:

1: Develop inventory and replenishment plan for regional large-lot industrial needs *(Ted Reid, lead)*. This work follows up on the 2010 Metro Council decision that sites 50 acres and larger were the only regional employment land need that was not satisfied within the existing urban growth boundary (UGB) and anticipates that this will be an ongoing capacity need. [1] The project will identify large-lot opportunities (both inside and outside the UGB and the strategies needed to make those sites development-ready. Strategies to be considered may include:

- Identifying, assessing and cleaning up brownfield contamination
- Consolidating fragmented ownership patterns
- Prioritizing and developing needed infrastructure
- Assessing and mitigating environmental constraints
- Streamlining permitting requirements

Finally, the project will address next steps for monitoring and replenishing regional employment land supply from identified opportunity sites.

2: Promote and support implementation of Metro's 2010 *Eco-Efficient Employment Toolkit (Miranda Bateschell, lead)*. This work will Identify barriers to triple-bottom line development in targeted employment areas around the region and will develop and promote tools to address these barriers. In FY 2011-2012 a major focus will be areas within the SW Corridor Plan and East Metro Connections Plan boundaries to support those major planning efforts.

3: Compliance related to Metro's Industrial and Employment Areas code (Title 4) to protect industrial and employment lands for job creation *(Ted Reid, lead)*.

4: Coordinate employment forecasts and data distribution (*Gerry Uba, lead).*

[1] This work program is not intended to provide additional large-lot capacity to count towards the need identified in the 2009 urban growth report. This is a longer-term effort to provide large-lot capacity for employment.

RELATED PROJECTS/PROGRAMS:

- Integrated mobility corridors (SW Corridor/East Metro Connections Plan)
- Community Investment Initiative especially to recognize the cost to implement the actions needed to upgrade the candidate sites to development-ready status.
- Climate Smart Communities Scenarios
- Community Development and Planning Grants
- Major regional investments – Lake Oswego to Portland transit project, Portland-Milwaukie Light Rail, Columbia River Crossing
- Future urban growth reports and UGB expansions
- Regional coordination for local economic opportunity analysis and comprehensive plan updates
- Housing and Equity Opportunity Mapping
- Implementation of the Regional Transportation Plan's Freight Plan
- Greenlight Greater Portland/Regional Partners economic development organization

EXTERNAL PARTNERS:

- Business Oregon
- Local jurisdictions
- Greenlight Greater Portland/Regional Partners
- Businesses, developers and private business development associations
- Workforce training organizations, equity groups
- Port of Portland
- Freight interests

COUNCIL ROLE: *(Councilors Harrington and Collette, liaisons)*

- Policy direction on overall program and elements including:
    - Whether the inventory and replenishment system triggers UGB expansions on an annual or other frequent timeline if no new sites have been made available inside the UGB
    - Potential changes to land protections and/or incentives for designated employment and industrial areas
- Political leadership in establishing investment strategies for industrial and employment areas and seeking resources for implementation
- Connecting industrial and employment investment strategies to Greenlight Greater Portland's regional economic development strategy, consistent with 2040 growth concept and desired regional outcomes
- Outreach to partners

KEY MILESTONES AND DECISIONS TIMELINE (WORK IN PROGRESS)

1. Metro Council direction on overall work program	April 2011
2. Metro Council decision on local jurisdiction requests to amend regional industrial and employment areas map	July 2011
3. Metro Council direction on large lot opportunity sites/barriers	November 2011
4. SW Corridor Plan/East Metro Connection Plan milestones TBD	TBD
5. Metro Council review of updated employment 2045 forecast distribution to small zones (TAZs) for planning purposes	Fall 2011

NOTE: FORMAL ACTIONS ARE BOLDED AND HIGHLIGHTED IN GRAY

EVENTS AND PRODUCTS TO ACTUALIZE KEY MILESTONES

Milestone 1 (Council direction on work program):

- Direction from Council liaisons — ***March 2, April 11***
- Initial discussion with Council — ***April 19***
- Work session on inventory and replenishment program

Milestone 2 (Title 4 status and local jurisdiction map requests):

- Staff report — ***June, date TBD***
- Metro Council decision on local jurisdiction map requests — ***July, date TBD***

Milestone 3 (Council direction on large lot opportunity sites, strategies and replenishment):

- Base inventory of large lots — ***done***
- Council initial direction on work program and replenishment concepts (based on 2009-2010 work) — ***Date TBD (April/May)***
- Work with local jurisdictions, private sector and others to identify opportunity sites — ***May-July***
- Work with local jurisdictions, private sector and others to identify barriers — ***August-September***
- Draft report to MTAC, MPAC and Council on large lots and barriers — ***October***
- Final report to MTAC, MPAC, Council – seek policy direction — ***November***

Milestone 4 (SW Corridor/East Metro Connections Plan):

- Milestone development currently underway — ***TBD***

Milestone 5 (Council review of updated employment forecast distribution)

- Regional planning directors agree to employment distribution methodology — ***May 2011***
- Regional planning directors review employment distribution for 2045 — ***Fall 2011***
- Metro Council reviews 2045 employment distribution data for use in planning — ***December 2011***

RESOURCES CURRENTLY ALLOCATED BY LAND USE PLANNING SECTION, FY 2011-2012

Staff: 3.70 FTE, includes 2.70 FTE in Planning, 1.00 FTE supported in Research Center

M&S: $15,000 for consultant expertise

Note: does not include staff in other departments

POTENTIAL ADDITIONAL WORK TASKS (NOT BUDGETED)

1. $50,000 for additional technical assistance by consultants related to the eco-efficient toolkit in corridors and other targeted locations. Funds would provide up to five site visits and consultations with local jurisdictions.

Housing and Equity: Opportunity Mapping Work Program

Ted Reid, Project Manager



BACKGROUND: All residents of the region should have access to opportunities such as:

- Quality education and libraries
- Health care, child care and social services
- Healthy foods
- Safe neighborhoods
- Transit and active transportation options
- Clean air
- Parks

A person's access to these types of opportunities is one determinant of their future prosperity. Much of the region's workforce housing is located in communities that lack these types of opportunities, contributing to the perpetuation of affordability problems. Likewise, many communities that provide these opportunities lack workforce housing.

PROJECT GOAL: Provide information that can help focus efforts to more equitably distribute opportunities throughout the region.

METRO ROLE:

- Map community opportunities relative to demographics throughout the region to illustrate where they are abundant or lacking and whether certain demographic communities lack access to certain opportunities
- Convene discussions of possible strategies for providing more equitable access to opportunities

DESIRED OUTCOMES:

- Improved regional understanding of community disparities in access to opportunities
- Foster a regional discussion of strategies to improve the equitable distribution of community opportunities
- Provide Metro and local planning efforts with information that can improve decisions
- Identify possible next steps for affordable-living policy development

WORK PROGRAM ELEMENTS:

- Convene the Consortium of public and community-based stakeholders that put together the 2010 HUD Sustainable Communities Initiative grant to inform the types of community attributes that should be mapped, to review results and provide perspectives on policy implications.
- Establish an internally-coordinated mapping approach so that the base map approach and attributes are useful for other Metro project teams as they conduct their own analyses.
- Map availability of opportunities throughout the region, such as sidewalk, park, trail, grocery store, transit service levels, jobs and other important access indicators.

- Map existing demographic characteristics of communities, including race, income, education level, housing cost, housing and transportation cost burden; develop a measure of household utility cost to expand the cost burden to housing, transportation and utility cost.
- Reconcile Metro's housing and transportation cost burden approach (forecast) with the approach used by the Center for Neighborhood Technology (existing conditions) for application to next urban growth report.
- Update the 2007 map that inventories publicly-subsidized housing
- Foster discussion of possible next steps on the development of affordable-living policies

RELATED PROJECTS/PROGRAMS:

- Regional Indicators project and Metro performance monitoring
- Internal Research Center equity tools inventory project
- Integrated mobility corridors (SW Corridor/East Metro Connections Plan)
- Community Investment Initiative
- Climate Smart Communities scenarios
- Community Planning and Development grants
- Major regional investments such as the Lake Oswego to Portland transit project, Portland-Milwaukie Light Rail, Columbia River Crossing
- Local comprehensive plan updates
- County consolidated housing plans
- Housing Needs Analysis of the Urban Growth Report
- The Intertwine

EXTERNAL PARTNERS:

- Local housing authorities
- Portland Institute for Metropolitan Studies
- Cities and counties in the region
- Community-based organizations
- Portland Sustainability Institute

COUNCIL ROLE

- Policy direction on work program
- Outreach to partners, including Consortium of stakeholders involved in the 2010 HUD Sustainable Communities Initiative grant
- Policy direction for next steps on affordable living and linkages to Metro functions and services, including transportation and parks
- Political support for establishing investment priorities

GUIDING PRINCIPLES

- Providing additional information about current conditions is a first step in a possible multi-year program to identify strategies to improve opportunities and affordability throughout the region.

- Housing expenses are a significant portion of the typical household's monthly bills, but many other factors also contribute to cost burdens for households, for example:
    - High transportation costs
    - High utility costs
    - Low wages
    - High health care costs that could be reduced through prevention and active living
- Since Metro's ability to directly influence the cost of living is limited to such issues as land use, transportation and parks, Metro's most important role is convening stakeholders and sharing information.
- Community-based organizations need to be engaged to identify the key services to include in opportunity mapping and to help draw conclusions about the results.
- Metro and many other public and private entities must collaborate to improve the region's cost of living.
- Community development plans, transportation plans, and housing plans could benefit from additional information about current levels of access to opportunities in the communities that are affected.
- Mapping access to key indicators would build off analyses previously developed by internal and external partners, including the Regional Flexible Fund analysis, the CLF Equity Atlas, the Greater Portland Vancouver Indicator Equity analysis and the Washington County Opportunity Mapping.

KEY MILESTONES AND DECISIONS TIMELINE (WORK IN PROGRESS)

1. Metro Council provides direction on work program	April 2011
2. Staff identifies preliminary list of opportunities that could be mapped	April 2011
3. Initiate coordination with and solicit input from external partners and internal work teams; convene HUD grant Consortium	May 2011
4. Introduce work program to MTAC and MPAC; seek initial input on opportunities that could be mapped	May –June 2011
5. Refine work program to reflect data availability and resources needed to include additional indicators	June 2011
6. Coordination with internal work teams and external partners as needed for draft map development	May – August 2011
7. Draft opportunity maps completed	September 2011
8. Initial discussions of draft maps with Council, the Consortium, advisory committees, internal teams and stakeholder groups. Seek initial input on implications for investment / policy needs	September – November 2011
9. Finalize opportunity maps	December 2011
10. Seek MTAC and Consortium advice on next steps	January 2011
11. Seek MPAC recommendation on next steps for affordable-living policy development / investment strategies	**January 2012**
12. Seek Metro Council direction on next steps for affordable-living policy development / investment strategies	**February 2012**

NOTE: FORMAL ACTIONS ARE BOLDED AND HIGHLIGHTED IN GRAY

EVENTS AND PRODUCTS TO ACTUALIZE KEY MILESTONES

Milestone 1 (Council direction on work program):

- Direction from Council liaisons **March 2011**
- Council WS **April 2011**

Milestone 2 (Staff identifies preliminary list of opportunities that could be mapped):

- Staff review of other opportunity mapping efforts **April 2011**
- Staff preliminary assessment of likely data needs and availability **April 2011**

Milestone 3 (seek initial input from internal work teams and stakeholders):

- Seek initial input on opportunities to map from: **May 2011**
    - Internal work teams:
        - The Community Investment Initiative
        - The SW Corridor Plan
        - The East Metro Connections Plan
        - Portland/Milwaukie light rail
        - Climate-Smart Communities
    - HUD grant Consortium

Milestone 4 (Initial input from advisory committees):

- Seek initial input from MTAC and MPAC on opportunities to map **May-June2011**

Milestone 5 (Refine work program):

- Assess data availability and additional resources needed; refine work program **June 2011**

Milestone 6 (Coordination with external partners and internal work teams on draft map development):

- Internal work teams **May-Aug 2011**
- External partners **May-Aug 2011**
    - HUD grant Consortium
    - Cities that are in periodic review of their comprehensive plans
    - Regional Indicators Project
    - Columbia River Crossing
    - Housing authorities

Milestone 7 (Complete draft opportunity maps):

- Reconcile Metro cost-burden analysis methodology with methodology developed by Center for Neighborhood Technologies **June-Aug 2011**
- Update map of subsidized housing **June-Aug 2011**
- Complete draft opportunity maps for internal review **Aug 2011**
- Internal review of draft maps **Aug 2011**
- DRC refinement of draft maps **Sept 2011**

Milestone 8 (Initial discussions of draft opportunity maps):

- Review draft maps with internal work teams: **Sept-Nov 2011**
- Review draft maps with MTAC, MPAC, Council **Sept-Nov 2011**

- Review draft maps with external stakeholders **Sept-Nov 2011**

Milestone 9 (Finalize opportunity maps):

- Finalize maps to reflect suggestions received **December 2011**
- Summarize regional implications: **December 2011**
    - Compare maps to the needs identified in county consolidated plans
    - Assess maps in relation to housing/transportation cost maps

Milestone 10 (Seek MTAC and stakeholder advice on next steps):

- Present final maps and seek advice from MTAC on next steps **January 2011**
- Present final maps and seek advice from HUD grant Consortium **January 2011**

Milestone 11 (Seek MPAC recommendation to Council on next steps):

- Present final maps and seek recommendation from MPAC on next steps **January 2012**

Milestone 12 (Seek Council direction on next steps):

- Present final maps and MPAC recommendations on next steps to Council **January 2012**
- Council direction on next steps **February 2012**

RESOURCES CURRENTLY ALLOCATED BY LAND USE PLANNING SECTION, FY 2011-2012:

Staff: 0.40 FTE in Planning plus 0.60 FTE supported in Research Center

M&S: $0

Note: does not include staff in other departments

IDENTIFIED ADDITIONAL NEEDS:

- Additional resources would be needed to expand the engagement and outreach and to develop new indicators beyond currently available data

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MINUTES OF THE METRO COUNCIL WORK SESSION MEETING

April 19, 2011
Metro Council Chamber

Councilors Present: Tom Hughes (Council President), Carlotta Collette, Kathryn Harrington, Shirley Craddick, Rex Burkholder, Carl Hosticka, Barbara Roberts

Councilors Absent: None

Council President Tom Hughes convened the Metro Council Work Session Meeting at 2:05 p.m.

1. DISCUSSION OF AGENDA FOR COUNCIL REGULAR MEETING, APRIL 21, 2011/ADMINISTRATIVE/CHIEF OPERATING OFFICER COMMUNICATIONS

Discussion of adoption of Ord. #11-1255. Dick Benner from Metro walked the Councilor's through what they are exactly the vote would be on.

2. OVERVIEW OF WORK SESSION

Dan Cooper, Acting Chief Operating Officer, provided the Council with an overview of the work session.

3. OVERVIEW: MOVING FROM MAKING THE GREATEST PLACE POLICY TO IMPLEMENTATION

3.1
Robin McArthur of Metro walked the Council through the difference between Community Investment Strategy (CIS) and Community Investment Initiative (CII). The CIS is the umbrella and the CII is a component under the umbrella. See folded handout "Community Investment Strategy roadmap."

Councilor Kathryn Harrington noted that staff should make sure all media materials (website and handouts) are fully updated to let the region know that the CIS is a Council adopted policy. She also asked that staff show how they are being accountable with this strategy, because initially it isn't apparent.

3.2
MaryAnn Cassin of Metro discussed the Community Investment Initiative Leadership Council and their role in the CIS. She referenced the timeline poster to give Council an idea of their plan/outcomes and meeting schedule. Discussion centered on how the CII was funded, if the CII Leadership Council was in control of the full CIS budget. Mrs. Cassin handed out a list of the contracts involved with the CIS and discussed which portions of it were related to the CII and the Leadership Council.

Councilors Rex Burkholder and Carlotta Collette asked for clarification on the Leadership's guiding principles and how those align with Council's guiding principles. Councilor Shirley Craddick asked for further discussion later regarding information dissemination to the public and to the Metro Council from the Leadership Council. The Council discussed with staff the clarification of whom the

Leadership Council was leading and that they are not in control of the CIS budget, that Metro and the Metro Council is.

4. KEY ELEMENTS OF COMMUNITY INVESTMENT STRATEGY IDENTIFIED IN FY 2011-12 BUDGET

4.1
Ms. McArthur walked the Council through the documents provided in agenda packet (East Metro Connections Plan and SW Corridor Work Plan). Specifically she focused on the listed program objectives for both plans.

Council asked for clarification of where the Nature in Neighborhoods program is located and a further description of the term "Health and Equity." Council discussed how the steering committees for both the East Metro Connections Plan and the SW Corridor Plan were selected which lead to a discussion about there not being a East Multnomah County representative on the CII Leadership Council. Staff and Council discussed this and decided to follow up with it at a later date.

4.2
Mr. Jim Desmond of Metro discussed the five main areas of the budget within the Sustainability Center including Nature in Neighborhoods, Youth Education, The Intertwine, Regional Funding Plan and Resource Conservation.

Council asked clarifying questions of where The Intertwine appears in the Program Budget and how established is the jurisdictional funding for the Intertwine Alliance. Council noted the possibility of discussing with regional elected the importance of donating to the Alliance as well as focusing that the Operations and Managements of our park facilities is a big expenditure from the General Fund and it is imperative that staff start to look at new ways of funding.

4.3
Kim Ellis of Metro walked the Council through the document in the Council Packet on Climate Smart Communities

Councilor Rex Burkholder asked staff to mine all available use out of this mandated work to make sure that Metro gets full use out of the money they must spend to complete the state mandated work.

4.4
John Williams of Metro lead a discussion revolved around papers in the Council Packet "Industrial and Employment areas work program," "Housing and Equity: Opportunity Mapping work program," He also discussed an additional handout "Downtown and main street development."
Regarding the Industrial and Employment areas work program Council discussed that Brownfields assessment needs to be covered by both Metro but also the CII Leadership Council.

The new Councilors asked for a briefing from Megan Gibb of Metro. Councilor Kathryn Harrington suggested work be designated as a "pilot program". Discussion included the HUD grant consortium, specifically the availability of FTE for that work.

5. SOLID WASTE ROAD MAP
Paul Slyman of Metro reminded the Council of the solid waste roadmap, acknowledging the proposal as ambitious.

The Council noted much of this work depended on the political effort instead of the financial resources. Councilors also asked the work plan be more directly linked to sustainability efforts.

6. GREATER PORTLAND –VANCOUVER INDICATORS PROJECT
Mike Hoglund of Metro provided an overview with the help of the work session handout. Mr. Hoglund noted that currently Metro has $76,000 of its responsibility to the GPVI budget, but still needs to provide around $16,000.

Councilors expressed concern in receiving help from partner public agencies. The Council asked for a milestone to be added into the Phase 2 from the handout.

COMMUNICATIONS
As Jim Middaugh of Metro did not have a chance to present at the previous budget work session, Mr. Middaugh provided an overview of the Communications budget at this meeting.

The Council noted their support for the work done by reporter Nick Christenson and hoped the program would be continued, but asked for the costs to be quantified. Councilors also expressed thanks to Mr. Middaugh for his good work in the Communications department.

7. OVERVIEW AND THEORY OF THE SPECIAL APPROPRIATIONS SCHEDULE
Margo Norton of Metro provided an overview and theory of the special appropriations schedule.

Councilors asked clarifying questions and planned to continue discussion at future work sessions.

8. BUDGET AMENDMENTS
Mr. Cooper noted budget amendments would come forward at future meetings specifically the technical budget amendments would be brought forward at the next Council work session.

Councilor Collette asked for support of the draft testimony before the Land Conservation and Development Commission handed out. The Council was in support.

Adjourned at 5:10 p.m.

Prepared by,

Sarah Grover
Administrative Assistant
Finance and Regulatory Services

Kim Brown
Council Policy Assistant

ATTACHMENTS TO THE PUBLIC RECORD FOR THE MEETING OF April 19, 2011

Item	Topic	Doc. Date	Document Description	Doc. Number
1	Agenda	4/19/11	Agenda: Metro Council regular meeting, April 21, 2011	041911cw-1
2	Handout	4/19/11	Community Investment Strategy Roadmap	041911cw-2
3	Handout	4/19/11	Community Investment Initiative FY11-12 Contracts Proposed Outcomes	041911cw-3
4	Handout	4/15/11	Downtowns, Main Streets and Station Communities Work Program	041911cw-4
5	Handout	4/19/11	Budget Overview	041911cw-5
6	Memo	4/19/11	To: Members of the Council From: Margo Norton Re: General Fund Special Appropriations	041911cw-6
7	Handout	4-19-11	Testimony of Councilor Carlotta Collette before the LCDC	041911cw-7

City of Hillsboro
2011 Large Lot Industrial
UGB EXPANSION STUDY AREA FINDINGS

Analysis of Proposed UGB Expansion Areas
Metro Code Section 3.07.1425(c)

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INTRODUCTION

Hillsboro has been a fast growing city for the past two decades as population growth followed local job creation. The city is home to a well known high-tech industrial cluster and emerging solar energy and bio-pharma manufacturing clusters. The city actively sought and has supported these expansions, seeing continued job and housing growth as desirable outcomes for the community, Washington County and the Region.

The city supports Metro's August 2010 Chief Operating Officer (COO) recommendation that 310 acres of large lot industrial land be added to the Urban Growth Boundary (UGB) north of Hillsboro (Map 1a).[1] This document addresses **three additional areas** north of the existing city and UGB that the city requests **Metro study for inclusion in the 2011 UGB decision**. Located within recently adopted Regional Urban Reserves, the North Hillsboro study areas have been selected by the city as areas of interest for UGB expansion (Maps 3 through 5).

The purpose of UGB expansion in North Hillsboro is to ensure an array of suitably located large lot industrial sites to support continued growth of established industry clusters of Regional and Statewide significance.

Each study area is analyzed for compliance with Metro Code Section 3.07.1425. As stated in the Metro Code; "*Compliance with this section shall constitute compliance with statewide planning Goal 14 (Urbanization) and the Regional Framework Plan*." Thus, statewide Planning Goal findings and Metro Regional Framework Plan considerations are assumed to be addressed through these Metro Code findings.

City Population and Employment Growth

Hillsboro is the fifth largest city in Oregon with a population of over 91,000 residents contained within a 15,166 acre area (23.7 square miles). Current employment in the city exceeds 70,000 jobs, about two jobs for each household. The US Census reports that between 2000 and 2009 Hillsboro saw a 36 percent growth in population and an 86 percent increase in employment.

Hillsboro is home to Oregon's well-known high tech industry cluster (approximately 23,000 high tech jobs are located in the city) and has recently been the focal point of an emerging Oregon solar energy manufacturing cluster. The benefits of industry jobs in Hillsboro are not only through new business recruitment and spin-off businesses. According to JOHNSON REID, each new industrial job generates a little over two additional jobs across all employment sectors throughout the region. Each day over 70,000 employees go to work in businesses located in the city. At the same time, farming and timber remain important parts of Hillsboro's roots as an agricultural market town and county seat.

[1] *Building a Sustainable, Prosperous and Equitable Region – Recommendations from Metro's Chief Operating Officer*, August 10, 2010, Page 15.

The city's Draft *Economic Opportunities Analysis & Long-Term Urban Land Needs Assessment* (EOA)[2] prepared by JOHNSON REID - Land Economics in 2009 projects growth will continue over the next 25 years at a more modest pace (Table 1). The EOA estimates the city's manufacturing intensive jobs base will nearly double between 2010 and 2035. If the city's success in fostering traded sector job growth and the EOA's projections are to be realized the city will need additional land where new manufacturing plants can be sited.

Table 1: Hillsboro Growth Forecasts

	2008	2015	2025	2035
Jobs	72,905	85,513**/95,924**	117,124**/134,097**	142,297**/172,270**
Population	89,145	115,928**/126,544**	165,111**/196,957**	214,294**/267,370**
Households	32,410	41,775**/46,266**	60,280**/72,283**	78,785**/98,300**
Total Dwellings	34,820	43,446**/48,117**	63,294**/75,897**	83,813**/104,198**

*Source: Draft City Economic Opportunities Analysis, March 2009 (low/**medium** estimates) and City of Hillsboro Planning Department, July 2010*

Employment Growth Capacity Within the Existing City

In partnership with Washington County, the city completed a vacant and buildable lands capacity analysis during 2008-2009. The information obtained from the analysis was included in the full data set supplied to Metro for use in preparation of the Urban Growth Report. The information from the city's analysis of its corporate area and adjacent UGB lands was also used by the city's EOA consultants, JOHNSON REID, in estimating future land needs for housing and employment uses through 2035.[3]

The city's draft EOA found there is a total industrial land supply of 988 acres within the city. Of those 988 acres, the majority are made up of sites less than 25 acres in size, with over 75 percent in sites under five acres in size. According to the draft EOA, "*Given documented site demand and existing inventory, Hillsboro will require anywhere from two additional industrial sites (Baseline Scenario) to 124 additional sites (High Growth Scenario) to meet economic opportunities identified in this analysis. … It should be underscored that under all growth scenarios, Hillsboro currently has insufficient land for "Cluster Anchor" industrial site demand during the planning period.*"[4]

[2] Attachment A – City of Hillsboro *Draft EOA Excerpts; Summary Population, Housing and Employment Demand Data*, March 2009.
[3] Ibid footnote 2, above.
[4] Ibid footnote 2, above

PART 1 - UGB EXPANSION STUDY AREAS OVERVIEW

Prequalifying Concept planning for North Hillsboro highlights the importance of this area to the city, regional and state economy. The area south of Highway 26 will allow expansion of the city's major industrial employment center, providing large, flat lots sought by industry anchors. The city's infrastructure planning demonstrates the ability to extend services into these areas. Metro's preliminary infrastructure study memos completed in 2009[5] confirm urban services can be easily extended into North Hillsboro.

All three areas of interest use natural features and existing land uses as buffers to ease the transition from urban to rural uses. In addition to serving as buffers, natural features will be used for parks and open space as development occurs, connecting to surrounding communities and regional trails through a network of bicycle and pedestrian paths.

A New Approach to Industrial Land Needs

As recommended by the COO in 2009, targeted strategies for managing the urban growth boundary to provide an adequate supply of industrial land will:

- ***Support*** *job creation and economic opportunity and enhance development in existing communities by making strategic UGB expansions as needed to* ***take advantage of real opportunities to attract key employers.***
- ***Protect*** *the region's industrial land supply from conversion to non-industrial uses and improve and protect access to major industrial areas*
- ***Support*** *good jobs and a healthy economy by* ***facilitating addition of industrial land to the urban growth boundary when needed***

(*Making the Greatest Place, Strategies for a Sustainable and Prosperous Region, A report from Metro's Chief Operating Officer, September 15, 2009, page 15; emphasis added*).

[5] Series of four memos dated February 9, 2009 from the Core 4 Technical Team (*Metro*, *Clackamas County*, *Multnomah County & Washington County staff*) to the Core 4 and Reserves Steering Committee; *http://rim.metro-region.org/webdrawer/rec/194586/view/Planning%20Department%20-%20Long%20Range%20Policy%20~%20Exhibits%20-%20Metro%20Technical%20Advisory%20Committee%20Agenda%20Packet%20for%20March%2018,%202009.PDF*

To address the need to foster a prosperous economy, the *2010 Growth Management Assessment* notes that the Metro Council will again face this decision in five years and that the Council must "*make a decision that positions the region for prosperity for the next five years . . .*" While the *2010 Growth Management Assessment* notes that this five-year period will likely be one of economic recovery, the recommendation cautions that **we must consider the twenty year timeframe** "***because planning, annexation and infrastructure provision take time***" (*2010 Growth Management Assessment, page 55*).

To be certain, the region needs to position itself for recovery in order to remain competitive for the next five years and beyond. The need for large industrial sites cannot be understated and supplying large lots cannot be delayed, as the demand for market choice in large lot decisions is immediate.

During the deepest part of the Great Recession, the city's Economic Development Department fielded inquiries for 14 sites a minimum of 50 acres in size (Table 2). These large lot site inquiries represented a third of all inquiries fielded by the city's economic development team during that time period.

With the market improving, recent site inquiries and city economic development marketing activities point to the need for a 2011 North Hillsboro UGB expansion to provide companies opportunities for large lot market choice in the short-term.

The *2010 Growth Management Assessment* raises two key points with respect to large lots, which are discussed below:

- The importance of traded sector industrial companies[6] in the regional (and, indeed, the state) economy (*2010 Growth Management Assessment*, p. 51); and

Table 2: Hillsboro Industrial Prospects

Hillsboro Industrial Siting Prospects Over 4 Years (2007-2010)		
PROJECT	LEAST ACRES	MOST ACRES
Sonnershien	450	800
Apricus	250	300
Tahoe	80	150
Parkway II	75	200
Hot	75	75
Parkway	65	75
Million	65	75
Tenant	60	80
A-US	50	200
August	50	100
Sunbelt	50	75
Bright	50	75
Boss	50	60
Kan	50	50
Prometheus	40	100
Bee	40	50
Bright	40	50
Valencia	40	50
Monarch	40	50
DT/Apollo	35	40
MIT	30	40
Reddy	26	40
Harvester	25	25
David II	20	50
Jade	20	50
DK	20	50
Overview	20	30
GM	20	25
SpectraWatt	20	25
David	20	20
Innovate	15	25
Ark	15	20
Beverage	13	14
Market	12	12
Cell	10	25
Cambridge	10	20
SAV	10	20
MS	10	20
Tulip	10	20
Champion	10	15
Edison	8	25
Wick	8	10
Wire	8	8
Ferro	5	10
Sunny	5	5
Lanta	3	25
Piccolo	3	5

Source: City of Hillsboro Ec. Dev. Dept. May 2011

[6] Specifically, anchors to these traded sectors, such as Intel, SolarWorld and Genentech, are crucial to the economy.

- The need for market choices of sites (*2010 Growth Management Assessment*, page 56).

As articulated by JOHNSON REID and acknowledged by the MPAC Employment Subcommittee, site availability is crucial for a region to be considered (*"having sites is essential to progressing to the next stage of the [selection] process*." (Attachment B – JOHNSON REID January 25, 2010 Memorandum, *Competitive Markets & Market Factor Approach to Large Industrial Site Provision*). As discussed herein, the proposed UGB expansion will further efforts to provide the type of large lot sites needed to keep the region competitive in the near term.

Importance of the Hillsboro Traded Sector Industry Clusters to the State

The North Hillsboro area is strategically positioned in the center of the existing traded sector industry clusters of Washington County. Green-tech continues to grow, with the potential of 10,200 to 16,474 Solar cluster jobs in west Washington County by 2035 (Attachment C). Within the city, SolarWorld is anticipating a significant increase in jobs at their Hillsboro facility, having grown to 1,000 workers by 2011, with plans to add another 1,000 workers over the next decade (Attachment D, page 3).

The UGR identifies demand for an additional 200 to 1,500 acres in large lot configurations (more than 50 buildable acres in a single site) for traded-sector uses. Hillsboro is home to three traded-sector industry clusters,[7] high-tech electronic components ("High-Tech" silica-based), photovoltaic solar panel manufacturing (silica-based), and bio-pharma (Map 6). Notable anchors located in Hillsboro in each of these clusters, respectively, include Intel, SolarWorld and Genentech. These anchors create "*'ripple effect' job growth*" including "*vendors, service providers, competitors, and customers who may require anywhere from an individual five-acre facility to a 60-acre flex space business park of various engineering, light manufacturing and research uses*" (Attachment E, page 1).

According to the MPAC Employment Subcommittee "Attracting and retaining traded-sector industrial companies is ***critical*** to the region's economic prosperity" (Attachment F; *see also 2010 Growth Management Assessment*, page 63, explaining that these firms "*sell products to consumers elsewhere in the country and world, bringing wealth into the Metro region*.").[8] The success of these

[7] Industry "clusters" have been defined as a group of geographically concentrated, inter-related firms. Companies that locate in a cluster benefit from a skilled labor force, increased innovation, coordinated advocacy efforts, high-quality supply chains, and knowledge spillover. Clusters interact in ways that establish competitive advantages through the creation and incorporation of new knowledge into products and the processes that produce them (http://www.pdc.us/bus_serv/overview-strategy.asp).

[8] Similarly, advice from E.D. Hovee in 2008 to Metro was:

> *Mid-Term (20 Year): For the 20-year time horizon, the region's prospects are* ***highly dependent on its current competitive position and decision by major high-tech*** *and Port related industries within the Portland metro area relative to other U.S. and global alternatives.*
>
> *The opportunity for the region to attract new growth lies with the region's existing industry clusters. . . . The ability of one company – such as Vestas or SolarWorld – to "anchor" the region's sustainability industry cluster could pave the way for spinoff industries.*

traded-sector industries is important not only to the region, but the State as well. In commenting on the reserves process in a coordinated letter, nine State agencies emphasized "*the need for an adequate supply of employment lands in the Metro urban growth boundary"* noting that the region *"often 'seeds' traded-sector technologies and businesses that disperse throughout the state."*[9]

Market Choice

In addition to the recommendation in the *2010 Growth Management Assessment* to consider market choice of sites, the State has recognized the importance of diversity. In response to the urban reserves process, in addressing "the importance of adequate employment lands," the State agencies stressed in their letter that

". . . assuring that there is ***enough diversity in sites*** *for [traded-sector] users to provide for varying needs (infrastructure, site specific characteristics, utilities, access to labor force, clustering near like employers and market choice), is important to the long-term economic health of not only the region, but the entire state."*[10]

Market choice has been identified as a crucial factor of demand for a healthy regional economy. As explained by JOHNSON REID,

". . . not all available [land] will be developed over a twenty-year period, but may be transacted by interests that intend to develop. Absence of such a supply provides fewer choices for business to purchase and expand . . . which in turn tends to drive up the cost of employment land, creating disincentive to economic development." (Attachment G, page 5)

Thus, market choice is important not only for attracting new businesses, but for maintaining existing employers by providing them room to grow and expand.[11] In a May 25, 2010 letter to MPAC, the Society of Industrial and Office Realtors highlighted this need to provide land for the expansion of existing industries and for the location of new companies:

> *Other opportunities include building off the region's other industry groupings, including established and emerging industries such as apparel, metals, high-tech, biosciences, and others.* (Excerpt from E.D. Hovee draft Memo to Metro: *Task 2 Variables Affecting (Industry) Location Decisions*, December, 2008)(emphasis added).

[9](http://library.oregonmetro.gov/files/state_agencies_final_consolidated_state_agency_comments_10-14-09.pdf, page 5; emphasis added).

[10] Ibid, footnote 9, above.

[11] Providing existing companies room to expand must take into account land banking by large industrial employers. As explained by Johnson Reid "*land banking by firms that expect to expand over the long-term in the Metro region is a crucial assumption to include in any large parcel demand analysis*" (Attachment H, page 5). Just as the region looks to its long term land needs, the certainty and ability to expand is an "*integral part of industrial land provision and business location decision-making*" (*Id.*, explaining that ignoring, underplaying or forbidding land-banking practices of industry both "*dramatically increase key facility input costs as well as dramatically reduces certainty and confidence in business expansion planning*").

"The kind of businesses that the region is looking for are the capital intensive companies. They are the companies that provide the best family wage jobs. . . . So, if we are going to ever get out of the Great Recession, with good family wage jobs, we need to look at the ability of ***existing and new companies*** *to purchase land to build the custom buildings designed specifically to support their capital intensive, technological manufacturing processes. These businesses need land to accomplish this."* (Attachment H; emphasis added).

Similar opinions were expressed in a September 29, 2010 letter from NAIOP, Commercial Real Estate Development Association, to Acting Council President Carlotta Collette and Metro Council:

"… Liveable communities; reliable, efficient and clean transportation and infrastructure; and social equity will require the region to have a globally competitive economy. ***The economy is more than an outcome; rather, it is the requirement for the region's livability, efficiency and sustainability goals****.*

… To achieve the "Greatest Place," to move from great plans to great communities, we must have the financial resources that are created by investment and jobs. And ***to create jobs, we must have the infrastructure and the land resources required for companies to locate and prosper****. We believe it is critical for the Council to focus on these basic economic inputs as you proceed with your deliberations regarding the investment strategy and* ***specifically on the upcoming Urban Growth Boundary expansion process****."* (Attachment I; emphasis added).

PART 2 – NORTH HILLSBORO UGB EXPANSION STUDY AREAS

North Hillsboro Urban Reserves

The North Hillsboro urban reserve contains approximately 3,155 acres bounded generally by McKay Creek to the west, Brookwood Parkway and the existing UGB along Helvetia Road to the east, NW Evergreen Road and the existing UGB to the south, and the Sunset Highway and West Union Road on the north.

An additional 440 acres located north of the Sunset Highway at the northwest corner of the Brookwood interchange was included in the urban reserves recommended by Washington County and adopted by Metro April 21, 2011 (Ord. No. 11-1255). This area was enlarged from the previous 86 acre urban reserve[12] located adjacent to the interchange as an offset for lands removed from urban reserve designation near Cornelius following the Land Conservation and Development Commission's oral remand in October 2010. Portions of this larger urban reserve area continue to be needed for future road improvements identified in the Brookwood Interchange Area Management Plan (IAMP), which is currently under development.

Prequalified Concept Planning

In Spring 2009 an inter-agency planning charette was held for the purpose of determining the suitability of North Hillsboro for future urban development and designation as an urban reserve. The planning charette provided key information about the urban suitability of the north Hillsboro reserves area then under study by the Core 4 and Washington County Urban & Rural Reserves Coordinating Committee. At that time, the UGB expansion areas under consideration were determined to be best suited for near-term industrial uses, especially to meet the needs of major anchor employers.

Following expansion of the UGB in 2011 to accommodate large lot industrial needs, the city will initiate full-scale concept planning in compliance with Metro Title 11 for the entire North Hillsboro urban reserve area. By including the entire urban reserve area in the concept planning process the city will more effectively address long term infrastructure needs, growth phasing and land supply issues.

North Hillsboro Expansion Areas for Study

The city concurs with the Metro Chief Operating Officer's (COO) recommendation to add 310 acres to the UGB for large lot industrial use (Map 1b). According to the August 10, 2010 recommendation:

> *"… Metro's Chief Operating Officer recommends that the Metro Council strategically add 310 acres of industrial land to the urban growth boundary north of Hillsboro. This*

[12] Area 8B, analyzed by Metro in Volume 2 – Appendix 8, *Building a Sustainable, Prosperous and Equitable Region – Recommendations from Metro's Chief Operating Officer*, August 10, 2010

expansion should only be made if there is certainty that this land will supply lots over 50 acres. This recommended UGB expansion for industrial employment is depicted in Figure 24. Staff believes that this area lends itself to large-site industrial development for the following reasons:

- *The site is flat, a requirement for the large industrial building format*
- *Infrastructure services could be extended from future development of the Evergreen area*
- *The site has access to Highway 26*
- *The site would complement an existing high-tech manufacturing cluster in the City of Hillsboro*
- *The City of Hillsboro has a track record of successfully delivering infrastructure services to UGB expansion areas*
- *The City of Hillsboro is actively engaged in efforts to recruit high-tech manufacturers*

If the Council wishes to plan for a higher point in the range of large-site industrial demand, there are additional urban reserves north of Hillsboro that are suitable" (2010 Growth Management Assessment, page 59).

The *Growth Management Assessment* further indicated there is traded sector industrial demand for 200 to 1,500 additional acres within the region on 50+ acre sites, taking into account an estimated range of large lot demand between four and 30 sites region wide.[13] Metro's COO recommends the region support the traded-sector economy by maintaining a moderate supply of large industrial sites within the UGB. Using a mid-range analysis approach, this would result in a target of 11-15 sites available throughout the Region. Further, Metro's COO recognized the importance of a continuous supply of large development ready industrial sites within the UGB;

"To maintain this target number of large industrial sites inside the UGB, Metro staff recommends that the Council consider adopting the large-site replenishment system described in Appendix 5." (2010 Growth Management Assessment, page 61).

While the COO recommended 310 acre North Hillsboro expansion area falls short of the mid-point acreage of the recognized UGR need range (200-1,500 acres), as well as the city's EOA 20 year demand estimate (1,300 acres), combining the COO recommendation with one of the three additional study areas would bring large lot industrial supply to the mid-point of the need range (approximately 650 acres). With this in mind, the city's proposal takes into account the

[13] The mid-point of this range is 13 sites.

existing land inventory in surrounding UGB areas, as well as the city's on-going efforts at site assembly.

The 310 acres recommended north of the city of Hillsboro could supply three sites suitable for the location of large, industrial anchor companies (Map 1). With the addition of the three existing State certified industrial sites within the city and UGB (Map 2), adoption of the COO recommendation would supply a total of six large lot industrial sites for traded sector job growth. According to local economic development professionals, only two other state-certified industrial sites are currently being marketed regionally to meet similar large lot, high and green tech industry needs.[14]

The city believes 350-400 additional acres of targeted UGB expansion in addition to the 310 acres recommended by the COO is important to maintain the Region's long term market competitiveness. Adding large lot acreage will move the total number of large lot industrial sites into the middle of the range[15]. Depending on which additional UGB expansion area is selected, the additional acreage would potentially provide up to seven prime industrial sites between two important highway interchanges on a major regional freight route.

The three requested study areas were selected primarily for their ability to deliver 50+ acre industrial sites with a minimum amount of land assembly. Each is described below.

Jackson School Road Area (Map 3)

This area was the subject of the city's September 3, 2010 letter to Metro Council and Council President David Bragdon. That letter affirmed the City Council's concurrence with the COO recommendation to add 310 acres for large site industrial purposes. As noted in the city's letter:

> *"The 310-Acre COO Industrial UGB recommendation would add three (3) existing large properties … to the UGB. It's a sizable step toward improving the Region's ability to attract new companies (although it falls considerably short of making the Region fully competitive for such companies as explained below). The COO seems to apply a "market/site suitability," rather than "acre-by-acre" UGB expansion approach; a more realistic and market-responsive way to accommodate effectively the Regional industrial large-lots need."*

The city's letter went on to recommend an additional 380 contiguous acres be added to the UGB (total 690 acres) to reach the low end of the middle of the UGR demand range for 50+ acre industrial sites within the UGB.

[14] Both sites are located in eastern Clackamas County and are being actively marketed. See also Metro July 2010 Inventory of Large Industrial Sites and Table 5, *Revised Draft Employment Areas Vacant land Supply Findings*, April 3, 2009 FCS memo to Malu Wilkinson, Metro and Eric Hovee (*Urban Growth Report* analysis).
[15] Ibid footnote 6, above.

Waibel Creek South (Map 4)

This 346 acre area was included in the initial UGB 950 acre expansion area studied by Metro in 2010 (*Hillsboro North Analysis Area – 8A Urban*).[16] While not contiguous with the 310 acre COO recommendation, the area abuts the city limits/UGB on its southern boundary and is generally bounded on the north by Waibel Creek.

This area is separated from the 310 acre COO recommended UGB expansion by approximately 210 acres of rural residential exception lands. The rural residential area is not suitable for large lot industrial conversion due to a high degree of parcelization and substantial private equity investment in residential development. Because of these factors the area does not contain any feasible large industrial lot opportunities and, thus, would not address that Regional need. Exclusion of this 210 acre area is not expected to create difficulty in delivery of cost-efficient transportation and public utilities to large industrial sites in the 310 acre or 346 acre UGB expansion areas since each area will likely be served by separate transportation and utility networks from either the east, or south and west, respectively.

Groveland Road (Map 5)

This 440 acre study area north of Highway 26 is the result of Metro's April 2011 Urban Reserves decision. Because of the change in adopted Urban Reserves, this area has not been studied for UGB expansion suitability. As noted earlier, the city commissioned a study by CH_2M/Hill in 2010 that identified a large part of this area northwest of the Brookwood interchange as the top-rated Regional opportunity site for "anchor company" location based on site-suitability criteria used by industrial site selectors. (Attachment J)

In addition, there is a need for part of the area to be included in the UGB to accommodate trip capacity improvements needed at the Brookwood/Hwy 26 interchange. Specifically, road capacity improvements will be needed on Meek Road, Jacobsen Road, Schaff Road, Huffman Road and Groveland Road to make the improved interchange function properly. UGB expansion may be needed in 2011 to build this "bundle" of road improvements because current State planning rules[17] prohibit taking a goal exception in Urban and Rural Reserves.

For the same reason, the city supports including the West Union Elementary School in the UGB in 2011. Should the school district need to connect the school to municipal water or sewer infrastructure in the future, they would be prohibited by the Rule from taking the needed

[16] Area 8A, analyzed by Metro in Volume 2 – Appendix 8, *Building a Sustainable, Prosperous and Equitable Region – Recommendations from Metro's Chief Operating Officer*, August 10, 2010

[17] OAR 660-027-0070(4) – *Notwithstanding the prohibitions in Sections (2) and (3) of these rules, counties may adopt or amend comprehensive plan provisions or land use regulations as they* ***apply to lands in urban reserves, rural reserves or both, unless an exception to Goals 3, 4, 11 or 14 is required,*** *in order to allow: …(c) Roads, highways and other transportation and public facilities and improvements, as provided in ORS 215.213 and 215.283, OAR 660-012-0065, and 660-033-0130 (agricultural land) or OAR chapter 660, division 6 (forest lands);* (emphasis added). Passage of HB3225 by the 2011 Legislature may have addressed this issue by enabling Statewide Planning Goal exceptions in Urban Reserves.

Statewide Planning Goal 11 Exception, which is required to connect existing uses outside a UGB to urban utilities provided from within the UGB.[18]

Conclusion

North Hillsboro offers the Region a unique opportunity to grow in a manner that will accommodate expected urban growth, ensure efficient use of land, provide an orderly and efficient transition from urban to rural land use and provide livable communities in accordance with state land use goals and Metro's Regional Framework Plan. Part 3 of this report addresses the specific criteria for UGB expansion that must be considered when analyzing the suitability of areas for future urbanization.

[18] OAR 660-011-0060 – Sewer Service to Rural Lands; (2) Except as provided in sections (3), (4), (8), and (9) of this rule, and consistent with Goal 11, a local government shall not allow:
(a) The establishment of new sewer systems outside urban growth boundaries or unincorporated community boundaries;
(b) **The extension of sewer lines from within urban growth boundaries** or unincorporated community boundaries **in order to serve uses on land outside those boundaries**;

PART 3 - COMPLIANCE WITH METRO CODE SECTION 3.07.1425(C)

C. If the Council determines there is a need to amend the UGB, the Council shall evaluate areas designated urban reserve for possible addition to the UGB and shall determine which areas better meet the need considering the following factors:

(1) Efficient accommodation of identified land needs

The Urban Growth Report (UGR) initially identified a demand for 200 to 800 acres of additional large-lot capacity on sites with 50 or more buildable acres. On the advice of MPAC, the Metro Council agreed to consider a demand range of 200 to 1,500 acres for large-lot capacity (4-30 large lots).

According to the city's March 2009 Economic Opportunities Analysis (EOA), "*It should be underscored that under all growth scenarios, Hillsboro currently has insufficient land for "Cluster Anchor" industrial site demand during the planning period.*"[19] The city's EOA determined a medium growth demand beyond current industrial land capacity for one additional industrial site between 50 and 100 acres and four industrial sites larger than 100 gross buildable acres through 2035, for a need range of 650-750 acres in large lot configurations (Attachment A, pp. 5 and 7).[20]

These findings mirror regional analysis performed by the FCS group for Metro as part of the 2009 *Urban Growth Report* background documentation.[21] The *Preliminary Vacant Land Supply Findings* tables included in the analysis show that as of April 2009, only two Tier A sites between 25 and 100 acres in size had been identified in the Region (104 acres total), and only one Tier B site over 50 acres was identified (56 acres). While the analysis found a total of 1,610 acres split between 46 sites 25 to 50 acres in size, and 461 acres split between seven sites over 50 acres in size, the majority were classed in Tiers D through G (Attachment K).[22]

COO Recommended UGB Expansion Area

In order to maximize the probability for greater land efficiencies through land assembly, the city initiated discussions in 2010 with property owners in the COO recommended 310 acre UGB expansion area. With the objective of identifying assembly options that will result in up to seven large sites, with the potential, through assembly, of one "super site" of over 300 acres, the city was successful in negotiating a joint agreement. As of October 2010, eight property owners south of Highway 26 have entered into the master agreement with the city to assemble and jointly market their properties for sale to large industrial manufacturers when their properties

[19] Ibid footnote 1, above.
[20] Total additional industrial land need was calculated as 683 acres across all site size categories.
[21] *Revised Draft Employment Areas Vacant land Supply Findings*, April 3, 2009 FCS memo to Malu Wilkinson, Metro and Eric Hovee, Table 5, p. 12. See also *2009-2030 Urban Growth Report* Employment Analysis, pp. 71-72.
[22] 49 percent of all 25-50 acres sites fell in Tier A (52 acres) and Tier B (738 acres); while only 23 percent of all sites greater than 50 acres fell in Tier A (52 acres) or Tier B (56 acres), **thus highlighting the extremely limited supply of vacant, development ready large lot industrial sites region-wide**.

are brought into the UGB in 2011. (Attachment L - *October 15, 2010 letter agreement to Interim President Carlotta Collette and Metro Councilors*).

Additional UGB Large Lot Study Areas

To assist in the regional discussion regarding large lot needs, in early 2010, the city retained CH2M/Hill and JOHNSON REID to:

- Review the current supply of large industrial sites in the Hillsboro area;
- Research availability of large sites in markets competitive with Hillsboro (e.g. Raleigh, NC, Albuquerque, NM, Austin, TX, and Colorado Springs, CO); and
- Identify and evaluate potential large sites within the proposed urban reserves in North Hillsboro that could potentially be added to the current supply to maintain the region's competitiveness in attracting large industrial employers (Attachment J).[23]

The results of this report and the city's review of large industrial lots currently available within the UGB show West Washington County is presently uncompetitive for large lot industrial employers with only two State Certified 50+ acre sites available for development. The two 50+ acre development ready sites are:[24]

- Approximately 128 gross acres (total of 110 net developable acres) along Brookwood Parkway just north of Genentech;[25] and
- Approximately 73 (65.21 net developable) acres located at Brookwood Parkway and Huffman Roads (the "Nike" property).

Competitive markets typically do not have constraints on the amount of land they can offer for development. Development ready sites offered by competitors range from 1,125 to 2,000 acres and 11 to 25 sites of 50 acres or more. To remain competitive, the consultants' research documents a need for approximately 1,200 acres dedicated to industrial use in the Region for the next 20 years (Attachment J).

CH2M/Hill Identified a total of ten potential large lot sites in and around the North Hillsboro Urban Reserves that could meet the need for large lot industrial sites during the planning period (Attachment J). The Jackson School Road (Map 3) expansion area includes four of the

[23] This work was built on a previous study by Johnson Reid summarized in a January 25, 2010 memorandum entitled *Competitive Markets & Market Factor Approach to Large Industrial Site Provisions* (Attachment C).
[24] A third site that is slightly less than 50 acres is shown on Map 2. The Oregon prospector (www.oregonprospector.com) also lists a 51 gross acre site north of Hwy 26. However, development of this site for high tech will require upgrades to the nearby West Union substation.
[25] This site is challenged due to a 150' wide BPA easement running east-west on the northern portion of the property. The result is 52 net acres to the south of the easement and 58 net acres to the north. The area north of the BPA easement is further bifurcated by Waible Creek.

potential large lot sites (230 acres) identified by CH2M/Hill on 690 total taxlot acres[26] (579 net buildable acres). The Waibel Creek South (Map 4) expansion area includes one of the potential large lot sites (162 acres) identified by CH2M/Hill on 656 total taxlot acres (493 net buildable acres). The Groveland Road (Map 5) expansion area includes four of the potential large lot sites (approx. 200 acres) identified by CH2M/Hill on 717 gross acres (522 net buildable acres).

(2) Orderly and economic provision of public facilities and services

Providing superior levels of public facilities and services is vital for developing UGB expansion areas into desirable places for residents to live and work. Future development in north Hillsboro will be supported by adequate public services that are coordinated, efficient, and cost-effective in accordance with both local and regional planning objectives.

Existing public and private utility service providers will serve new areas as land is added to the UGB and annexed into the city of Hillsboro. In order to coordinate efficient public service delivery, the city intends to undertake concept planning in compliance with Title 11 for the entire North Hillsboro Urban Reserve. Concept planning will identify future facilities and utilities expansion needed to support anticipated development, as well as define the extent of future special utilities needed to serve ongoing traded sector development in North Hillsboro.

Water Supply

The Hillsboro Water Department has a long history of proactively securing water supplies, treatment production, and conveyance for the city's future needs. As such, Hillsboro is strategically prepared for key industrial growth to fuel the local, regional, and state economy, as well as residential growth to accommodate the necessary workforce.

Hillsboro is the founding and managing partner in the Joint Water Commission (JWC), the regional water supplier. The city is also a contract holder with the Bureau of Reclamation (BOR) of the stored raw water impoundment in Hagg Lake (Scoggins Dam) and is the managing partner of the Barney Joint Ownership Commission (BJOC), which is another raw water impoundment located in the coast range. Hillsboro is also a key member of the Tualatin Basin Water Supply project, which was formed to secure raw water supply needs for the next fifty years and beyond.

The JWC and the Hillsboro Water Department recently completed a 40-year capital improvements plan to identify the city's infrastructure needs. Overall, the Hillsboro Water Department's investment share in all projects is estimated to be approximately $400 million. Funding infrastructure investments will be accomplished through a mix of revenue bonds, system development charges, and revenue from water sales.

The Hillsboro Water Department has strategically located key reservoir facilities (Evergreen Reservoir, $12,500,000 prior investment) along the northern boundary feeding the high pressure

[26] All UGB study area acreages shown on maps 3 through 5 exclude rights-of-way from gross acreage calculations.

industrial area. This existing facility has excess capacity to serve up to the south edge of Highway 26. Another reservoir is schedule to be constructed near the intersection of NW Evergreen and NW Glencoe Road to serve existing underserved area customers, in addition to serving north to Highway 26. This reservoir will be built regardless of whether a UGB expansion in North Hillsboro occurs in 2011. Only the size of the reservoir will be impacted by the extent of future UGB expansion.

Currently, the city has approximately 28 MGD of excess capacity in the North Transmission Line ($23,000,000 prior investment). With the base transmission and storage components already existing or planned for current and future customers, the public investment in expansion area distribution infrastructure is expected to be minimal.

Developers are responsible for building distribution infrastructure suitable for their development. The Hillsboro Water Department cost shares with the developer to expand ("up size") the distribution infrastructure being constructed to meet long term needs. On average, the Department expects to fund approximately 15% of the overall cost due to anticipatory upsizing of the distribution infrastructure (approximately $2,000 per acre).

Consistent with Hillsboro's readiness to extend water services into the North Hillsboro study area, Metro's preliminary analysis of water service suitability shows the area as being highly suitable, meaning it will only require typical extensions of service, including general distribution lines and reservoirs with no major facilities needed.

Sanitary sewer

Sanitary sewer is handled by the city in partnership with Clean Water Services (CWS). Generally, the city supplies the distribution system with CWS providing trunk mains, pump stations and sewage treatment facilities. In order to serve areas added to the UGB as they develop, Hillsboro has identified the need to up-size downstream lines, including the Dawson Creek and West Hillsboro trunks.

Construction of a new Dawson Creek pump station at the corner of NE Cornell Road and Brookwood Parkway began in June 2010 and is approaching completion. The pump station will serve existing areas within the UGB as they approach buildout and has been sized to accommodate future growth as the UGB is expanded into the north industrial area.

In Metro's preliminary analysis of the efficiency of providing sanitary sewer service the eastern portion of the North Hillsboro urban reserve was ranked as efficient -- being an area that is the easiest and least costly to serve, requiring only upsizing of existing trunk lines or adding new trunk lines. The area to the west was ranked as moderately efficient, being an area "*that will require substantial improvements, but relatively easy ones.*" Notes for this area included the need for a new pump station near Hwy 26 and McKay Creek and the existence of relatively large areas of wetland and floodplain near McKay Creek north of Highway 26.

Storm Water

CWS, Washington County and the city of Hillsboro currently share the responsibility of public storm water management in and around Hillsboro. CWS responsibilities include master planning, operation and maintenance of regional water quality treatment and detention facilities and discharge to natural drainage ways. Washington County oversees open drainage improvements in public rights-of-way associated with County roads in unincorporated areas outside city jurisdiction.

The city of Hillsboro's responsibilities within its city limits include the operation and maintenance of all public conveyance systems, some service connections, and discharge to minor tributaries, ditches and intermittent streams. The city requires industrial developers to make on-site improvements (e.g., detention ponds) for storm water detention, thus having a net zero increase of flow into the system.

A key city objective is to provide infrastructure services in a manner that preserves riparian habitats and enhances water quality and the environment. To that end, the city commissioned a study of options for development of an Eco-Industrial Employment District in its high-tech industrial area, which will ultimately include additional lands north of the city. A focus of the study is to explore sustainable site development techniques, including an assessment of options for creation of decentralized water treatment systems at existing and new manufacturing operations. It is expected that as the North Hillsboro UGB expansion area develops, drainage systems will be incorporated into site designs, making use of on site, decentralized storm water treatment.

Electricity, Gas & Cable

The city recognizes the importance of private utility investments and their contribution to attracting new and maintaining existing industry anchors. Coordination meetings between prospective companies and private utilities are arranged and attended by city staff as needed to discuss requirements, quality, cost, and service issues prior to development permitting.

Electricity, cable, gas and communication services are provided by the private sector. Hillsboro's power provider is Portland General Electric (PGE). PGE has a total combined generating capacity of 1,957 megawatts, operating several Reliability Centers throughout the region.

Reliability Centers serve semiconductor plants and high technology operations, along with other industries and commercial operations that demand superior power quality and reliability. PGE's design criteria for these Centers features full redundancy at each level of the power network -- transmission lines, substation transformers and feeders. In the event of equipment failure, redundant components pick up the full load requirement.

The Sunset Reliability Center in Hillsboro is designed to meet the unique needs of high-tech manufacturers and companies with power-sensitive operations, including Intel Ronler Acres. This substation is served by:

- Three 115 kV transmission lines connected to a breaker and one half bus. Transmission lines include a pilot wire providing high-speed transfer trip technology clearing a fault within six cycles. A fault occurring in any two of the three lines will not result in an outage.

- Two 28 MVA and three 50 MVA transformers in the station are configured to provide full redundancy. The station is designed to accommodate four 115 kV lines and eight transformers.

- 13 kV feeders serve high tech customers through redundant underground distribution.

Portland General Electric is locating two new substations in the Evergreen industrial area. The substations are expected to be under construction by late 2011 or early 2012. The new substations will further enhance the reliability of power needed by high tech industrial users as the Evergreen and future UGB expansion area develops.

Transportation System

The city's urban reserve areas were selected, in part, based on the opportunities to connect them to existing transportation systems. Both the northern and southern UGB expansion areas are envisioned as being fully integrated to the existing city. Equally important to both are connections by pedestrian and bike trails designed to extend into the existing city. These systems will be used for both commuting and recreational purposes.

The existing transportation system in North Hillsboro includes a variety of roadways that ensure efficient vehicular and freight movement. US 26 traverses the study area, providing regional connections for residents and industry at the US 26/Jackson School Road and US 26/Brookwood interchanges. Significant other facilities include NW Evergreen Road, NW Helvetia Road/NW Brookwood Parkway, NW Jackson School Road, West Union Road and NW Meek Road. Many of these roads retain their rural designs, with no sidewalks or other multimodal amenities. Preliminary concept planning for the urban reserve area identified specific improvements that will be required as development occurs to address increased traffic demand and to meet urban design standards for road facilities.

Through the Oregon Jobs and Transportation Act (JTA), $45 million has been allocated towards the estimated $70 million needed to improve the Brookwood interchange area. This work will address existing capacity issues related to full development of North Hillsboro industrial lands within the existing UGB. The city has entered into a Memorandum of Understanding with ODOT and Washington County for this project funded for construction commencing in 2013. The second-phase Interchange Area Management Plan (IAMP) will be prepared to address

general vehicular and freight capacity needs in the vicinity of the interchange resulting from build out of the existing UGB and from future expansion of the UGB between Jackson School Road and Brookwood Parkway.

Table 3 lists the primary existing and anticipated future connections to and through the UGB expansion area. Jackson School Road and Brookwood Parkway provide existing connections within the area and to the existing city.

Table 3: Existing and Future Transportation Facilities

South of Highway 26	
North-South Connections	*East-West Connections*
Brookwood Parkway	Evergreen Road
Jackson School Road	Scotch Church/Meek (possible future realignment)
253rd Avenue Extension (future)	Huffman Road Extension (future)
North of Highway 26	
North-South Connections	*East-West Connections*
Groveland Road	West Union Road
Helvetia Road	

Metro's *Preliminary Analysis of Providing Urban Level Transportation Services* for the North Hillsboro urban reserve arrived at the following rankings for lane cost and connectivity suitability:

- Medium System Lane and Added Lane Cost Suitability – The particular data set showed that this area is somewhat suitable for providing a transportation system capable of accommodating urban levels of development.

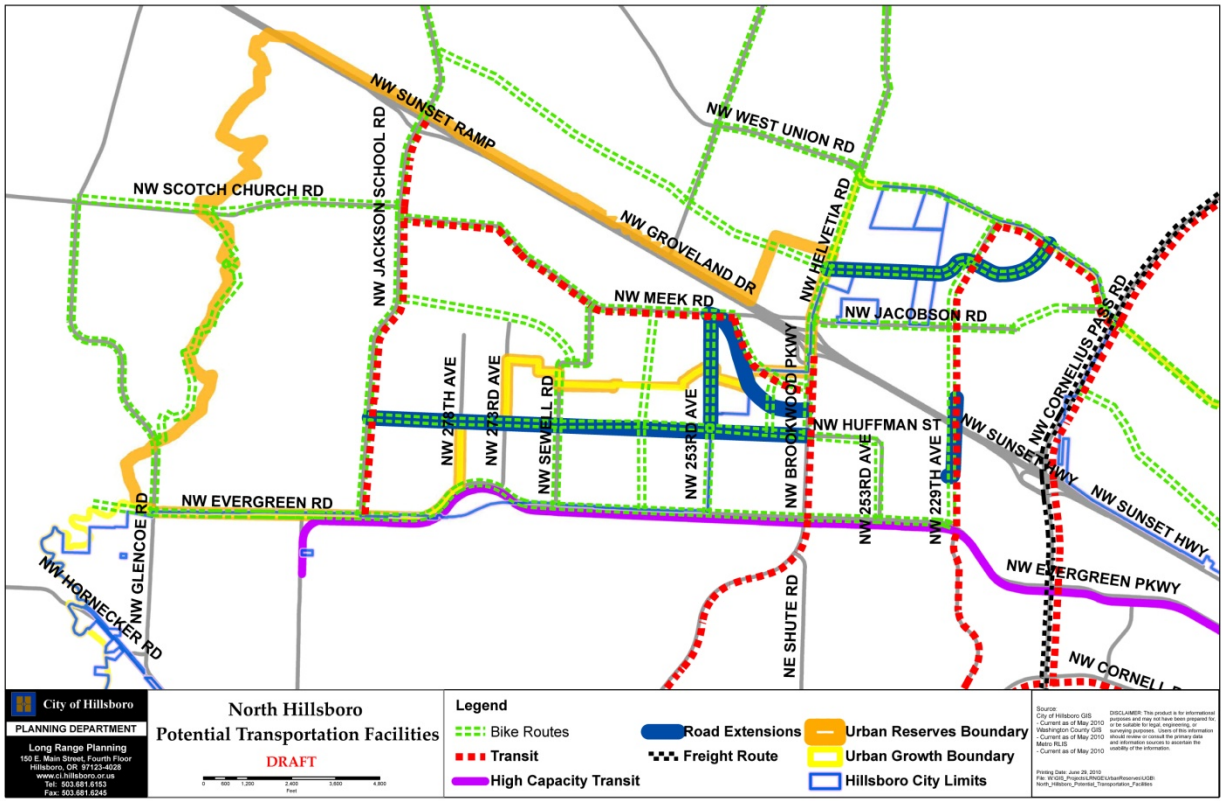
- High Connectivity Suitability - The particular data set showed that the area is among the most suitable for providing a transportation system capable of accommodating urban levels of development.

New transportation facilities will be crucial in providing connections both within the UGB expansion area and to existing communities and employment areas. Development in North Hillsboro will impact surrounding roadways and facilities, warranting improvements both on and off-site. As the North Hillsboro area will develop incrementally, new transportation facilities will need to be constructed with such future growth in mind. Potential transportation routes are illustrated in Figure 1.

Freight Mobility

Hillsboro expects continued growth in its industrial employment sector. As such, the movement of raw materials and finished goods is crucial to the city's future economic viability. In addition to freight movement along Hwy 26, Evergreen Road, Brookwood Parkway, Jackson School Road and Cornelius Pass Road will serve as major truck freight routes.

Figure 1 - Proposed North Hillsboro Transportation Facilities



Multi-Modal Connectivity

As the UGB expansion area is currently rural, dedicated bicycle and pedestrian access is limited. New bicycle and pedestrian routes will include lanes and sidewalks along roadways, as well as separate bikeways and trails for commuting and recreation.

Important aspects of bicycle and pedestrian routes include connecting residents and businesses with high capacity transit (HCT), as well as connecting open areas and parks for recreational purposes. Connections will be provided as development occurs both within the North Hillsboro area and to existing and proposed facilities within the current city limits.

Transit

Hillsboro is served by the Westside Light Rail Transit line, which terminates in downtown Hillsboro. Several industrial employers provide private shuttle services from the Orenco,

Hawthorne Farm and Fairplex Light Rail Transit Stations to the industrial employment centers to the north. Tri-Met provides bus transit service along key arterial and a few collector roadways in the city.

TriMet provides some transit service in the North Hillsboro area. The Route 46 bus serves north Hillsboro employment areas, linking the Hillsboro Regional Center to northwest and north Hillsboro, as well as the Fairplex light rail station. It provides service to key existing destinations including Intel Ronler Acres, Intel Jones Farm, Solarworld, TriQuint, Genentech and the Hillsboro Library.

Use of light rail transit has increased in Hillsboro due to an increase in frequency and coverage. With the cooperation of Tri-Met and Metro, the city hopes to see HCT service extended to the Tanasbourne/Amberglen community during the planning time frame (2035) and into the North Hillsboro industrial area during the 50-year urban reserve time frame. In the future, an additional HCT route could provide connections between existing city employment areas and the UGB expansion area to the north and west.

Other Public Facilities and Services

With regard to public safety services, including police and fire protection, Hillsboro is a full service city, providing a full array of urban services to its citizens. Hillsboro's Comprehensive Plan requires that essential services, such as schools, police and fire protection, must be available within five years of a development approval (*Hillsboro Comprehensive Plan Sec. 2(IV)(A)(4)*). These issues will be more thoroughly evaluated as part of the city's planned North Hillsboro Eco-Industrial Concept Plan effort, which will follow UGB expansion in 2011.

Public Safety

Public safety in the North Hillsboro area is currently provided by the Washington County Sheriff's Office. The city is the logical provider of urban services once urbanization begins. As areas in the urban reserves are brought into the UGB and annexed to the city, Hillsboro will coordinate with Washington County and the current service providers to transfer jurisdiction to city services where appropriate.

Fire protection for the North Hillsboro area is currently served by Washington County Fire District #2. Residents within the Hillsboro city limits are served by five Hillsboro Fire Department (HFD) stations, which includes the new Cherry Lane facility in the Orenco Station community near the Ronler Acres Intel campus.

Additional HFD facilities may be needed to ensure the safety and protection of North Hillsboro residents and businesses as the UGB and city limits are expanded over time. The HFD considers several criteria to ensure the city's "Standard of Coverage" is established throughout the city limits. Some of those criteria include:

- Meeting the service delivery standard of a four (4) minute response time for any emergency incident 75% of the time;
- Ensuring that HFD's effective force response is on-scene within eight (8) minutes 90% of the time;
- Having an engine company within the given service area at a 1.5 mile radius;
- Having a truck company in the given service delivery area at a 2.5 mile radius; and
- Maintaining the city's current Insurance Service Office (ISO) ratings to that of an ISO 2.

Schools, Parks and Library Services

Park and school needs to serve the North Hillsboro area are determined in coordination with the Hillsboro Parks Department and Hillsboro School District, respectively. Estimations of future school facility needs are coordinated with the Hillsboro School District at the time of annexation and rezoning by the city to ensure adequate school facilities will serve future development. The city is a participant in the school district's School Facility Plan update, which provides an opportunity to assess long term school facility needs in areas within the current UGB as well as Urban Reserves.

Library services are provided by the city to its residents through the Washington County Cooperative Library Service. Hillsboro has the highest circulation rate in the County. It is anticipated that new branch libraries will be provided as areas develop to maintain the existing high level of service in the city.

(3) Comparative economic, social, environmental and energy consequences

Economic

Economic consequences include impacts on the region's agricultural economy, cost of providing urban facilities and efficiency in accommodating indentified land needs for employment. As demonstrated below, the consequences of adding any of the UGB expansion study areas is low, while the benefits to the region will be high.

Impact on the Region's Agricultural Economy. The UGB expansion study areas are currently characterized by dryland farming on large lots interspersed with rural residences. While there would be some loss of agricultural activities and income, the area is within the urban reserves, mitigating the expectation of long-term farming.[27] According to the Washington County Farm

[27] It is also notable that the areas between Waible Creek and Hwy 26, as well as north of Hwy 26, were highly debated during the reserves designation process. The environmental coalition urged that all these areas be designated as rural reserves, while the County and city advocated for designation of these areas as urban reserves. The region's leaders deemed area 8A as appropriate as urban reserves. While not designated as urban reserves for any particular use, Hillsboro's pre-concept planning demonstrated that this area was uniquely suited for industrial use, especially those anchored by traded-sector companies. As part of the trade-off for certainty to both the development and agricultural communities, it was acknowledged that some foundation farmland would be included

Bureau there are approximately 150,000 acres of farmland in the county.[28] The 310 acres recommended for UGB expansion by Metro's COO would remove 2/10th of one percent of county farmland. In terms of total Washington County urban reserves, the 310 acre expansion represents 2.4 percent of total county urban reserves. Metro's analysis points out that "*... the potential economic impact of urbanization for industrial use on these large flat parcels will reduce or outweigh the impact of [the agricultural] loss.*"[29]

The city continues to actively engage property owners in the UGB expansion study areas to determine their willingness to (1) be included in the UGB and (2) work towards large lot assembly. The city met with seven (contiguous) property owners within and adjacent to the 310 acres recommended by the COO on August 31, 2010 to discuss these issues. At the conclusion of the meeting, there was a consensus of opinion to work together to reach the agreement included in Attachment L. This increases the likelihood that land will be available for development (including the likelihood of the ability to assemble a site of up to 300 acres) thus leading to increased economic benefits and minimizing potential long term conflicts with farming within the UGB.

Cost of Providing Urban Facilities. As demonstrated above in subsection (2) *Orderly and Economic Provision of Services*, all three study areas can efficiently be provided with services.

Efficiency of Accommodating Identified Land Needed for Employment. As set forth in full detail below, the UGB expansion study areas are highly suitable for large lot industrial employment. This employment type creates exponential return in terms of market value, payroll and property taxes per acre.[30]

Social

Social consequences include the ability to meet affordable housing objectives, create quality neighborhoods, and provide for institutional needs. The UGB expansion study areas, proposed for large lot employment, do not directly further these objectives. However, given the average annual 2009 payroll of $109,866 per employee in the existing North Hillsboro industrial employment areas[31], the addition of lands for traded-sector jobs will go a long way in furthering

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in future urban growth areas. Thus, the reserves process balanced specialized large lot industrial employment needs against some loss of agriculture activities and income in the immediate area.

[28] Washington County Farm Bureau testimony summary, Sept 1, 2009: Staff Recommendations for Revisions to Aug 3, 2009 County Staff Report , p. 4. http://www.co.washington.or.us/LUT/PlanningProjects/reserves/upload/WCRCC_Revised_Staff_Report_09-04-09.pdf

[29] Volume 2 – Appendix 8, *Building a Sustainable, Prosperous and Equitable Region – Recommendations from Metro's Chief Operating Officer*, August 10, 2010, Area 8A, p. 3.

[30] http://library.oregonmetro.gov/files/business_oregon_mapping_project_june_2009.pdf

[31] WorkSource Portland, city of Hillsboro high tech employment. Oregon Employment Department, NAICS 334-Computer and electronic product manufacturing table, Washington County, 2010 lists $115,032 as average employee annual salary

the region's goals of providing family-wage jobs and a tax base that will contribute towards achieving these objectives.[32]

Environmental

Environmental consequences address potential impacts on inventoried natural features (riparian corridors and wetlands). The closer that urban development comes to a protected water feature, the greater the likelihood of conflict. A key city objective is to guide development and provide infrastructure services in a manner that preserves riparian habitats and enhances water quality and the environment.

To that end, the city commissioned Group Mackenzie to complete a *North Hillsboro Industrial Development Strategy* study in 2010 to identify low impact options for development on environmentally sensitive sites in the Evergreen industrial area. A focus of the study has been to identify the most viable opportunities to incorporate sustainable systems and methods into future development. Lessons learned from the *North Hillsboro Industrial Development Strategy* will be directly transferrable to UGB expansion areas in north Hillsboro.

The levels of protection that will be afforded by the city support Metro's analysis that:

> *"The limitations on development presented by the flood plain areas, the limited amount of environmental resources within the area and the current level of agricultural activity adjacent to the stream indicate that urbanization can occur in this area with minimal additional impacts to environmental resources due to required urban level protection measures."*

Energy

Energy consequences generally consider travel distances to urban centers, solar orientation and energy costs related to the provision of public facilities (especially sewer and water). The energy consequences of adding the UGB expansion study areas for large lot industrial purposes are relatively low because of their proximity to urban facilities and services.

Travel distances must be considered not only to the urban center, but to existing industrial clusters. As noted, the UGB expansion study areas are located to the immediate north of the existing Silicon Forest and within close proximity to existing industrial anchors and their suppliers (Map 6). Additionally, the UGB expansion study areas are within three miles of the proposed AmberGlen Regional Center, and within five miles of the proposed South Hillsboro UGB expansion area. These areas will provide needed housing for the employees of the new industrial centers in North Hillsboro, many of whom will be able reduce energy consumption by using light rail or bus transit to travel between their homes and work.

[32] http://www.oregon4biz.com/newsletter-0809.php;and
http://library.oregonmetro.gov/files/business_oregon_mapping_project_june_2009.pdf

Finally, as demonstrated above in section (2) *Orderly and Economic Provision of Services*, the area can efficiently be provided with services.

(4) Compatibility of proposed urban uses with nearby agricultural and forest activities occurring on land outside the UGB designated for agriculture or forestry pursuant to a statewide planning goal

Farming has been and remains an important industry in and around the city of Hillsboro. Generally, campus style industrial uses of the type common in the city present the lowest level of conflict with active farm use. In fact, many of the city's largest high-tech employers are engaged in active farming[33] of portions of their sites that are not yet needed for industrial purposes but are planned for future expansion.

The intended large lot industrial use of the UGB expansion study areas is expected to keep agricultural-urban interface impacts to a minimum because of the large building setbacks, berms and lack of residential early morning and evening population in industrial areas. While occasional traffic conflicts can be vexing for both urban drivers and farmers driving slow moving equipment from field to field, such events are intermittent due to the seasonal nature of planting and harvest associated with dryland farming.

The city worked closely with the county in determining its urban reserve study areas and in meeting the criteria for their establishment, including balancing rural and urban reserve factors. Washington County completed an extensive review of agricultural and forest land suitability as part of the balancing process.[34] According to the September 1, 2009 supplemental staff report to the Washington County Reserves Coordinating Committee;

> *"Staff determined the ODA [Oregon Department of Agriculture] map provided the basis for evaluation but that the available information was too broad-based to make precise recommendations for rural reserves. Staff concluded a more rigorous analysis of agricultural lands than was available through the ODA report would be necessary for decision-making.*
>
> *The land mapping resulting from the ODA analysis is limited to a total of three classifications in their 2007 Agricultural Lands Inventory: Foundation, Important, and Conflicted lands. The overwhelming majority of the acreage was considered foundation land; this designation was broadly applied and made no further distinction among those agricultural areas. Staff believed a more intensive agricultural analysis was important to the rural reserve designation process.*

[33] In most cases, farming inside the UGB on industrial lands is conducted by tenant farmers operating under land lease agreements with the company land owner. Dryland farming is the most common consisting of grain, hay and grass/legume seed production within the city's industrial areas.

[34] Washington County Staff Recommendations for Revisions to the August 3, 2009 Staff Report – Urban and Rural Reserves Recommendations, Issue Paper No. 03, pp. 13-15 and Issue Paper No. 06, pp. 23-24, September 1, 2009 http://www.co.washington.or.us/LUT/PlanningProjects/reserves/upload/WCRCC_Revised_Staff_Report_09-04-09.pdf

The ODA data was an excellent source to begin the reserves analysis; however, it was incumbent on staff to provide additional detail on agricultural features in order to address the Rural Reserve Factors more completely. Parcelization, water accessibility where needed, soil capability, housing density and suitability to sustain long-term operations all were factored in staff's analysis." (Issue Paper No. 06, pp.23-24)

Partially based on Washington County's Rural Reserves suitability analysis, Urban Reserves and Undesignated lands were identified. Urban Reserve areas 8A and 8B north of Hillsboro were identified as moderate agricultural productivity areas classed as Tier 2 (south of Hwy 26) and Tier 3 (Helvetia) lands.[35] Thus, the April 2011 addition of 354 acres to Urban Reserves Area 8B by Metro expanded the north Hillsboro Urban Reserve into lower priority agricultural land.[36]

EOA Stakeholder Research -- Hillsboro Area Agriculture and Urban Balance

In undertaking its Economic Opportunities Analysis process, the city of Hillsboro sought to understand first-hand the perspective of key economic agents, partners, and industry clusters that will drive long-term growth in Western Washington County and the city. To this end, JOHNSON REID interviewed key stakeholders in the future economic development potential of Hillsboro, including members of the traded sector agricultural industry. For each participant, questions in the hour-long sessions focused on key areas with emphasis on existing and likely future industry clusters in Hillsboro and Western Washington County.

During the urban reserves planning process, it was generally viewed an unfortunate outcome that urban land needs and concerns and rural/agricultural concerns are adversarial in nature, with potential disagreements over where urban/rural lines would be drawn. Economic stakeholder input recognized the difficulty of the process and indicated the following:

"1. Agriculture industry clusters should be better understood so that long-term health, land need, workforce issues, and infrastructure need are more fully understood and protected instead of becoming battles over acreage and geography with urbanization interests.

[35] Washington County Agricultural Productivity Map 20; Farm Analysis Tiers and Sub-Areas Map 27, and Farm Analysis Tiers Map 28. http://www.co.washington.or.us/LUT/PlanningProjects/reserves/staff-report-august-3-2009.cfm

[36] Washington County, *Staff Recommendations for Revisions to the August 3, 2009 Staff Report – Urban and Rural Reserves Recommendations, Issue Paper No. 03 – Helvetia Area Soils Analysis*, pp. 13-15 describes the soil suitability factors analyzed in detail, explaining why lands north of Hwy. 26 are generally lower in agricultural productivity than those lying south of the highway. http://www.co.washington.or.us/LUT/PlanningProjects/reserves/upload/WCRCC_Revised_Staff_Report_09-04-09.pdf

2. An approach of balance between urbanized industry clusters and agriculture clusters would be ideal, particularly so that agriculture water and transportation infrastructure is protected and preserved over the long-term."[37]

(5) Equitable and efficient distribution of housing and employment opportunities throughout the region

As described in this analysis, the UGB expansion study areas are uniquely situated to efficiently accommodate the large lot industrial needs of the region. The area is centrally located in the heart of West Washington County's existing industry clusters, with direct access to Hwy 26, a skilled labor force and the essential infrastructure for high and green tech manufacturing. While this is the primary area considered for large lot industrial uses, the benefits of the development of this area will permeate through the entire region. As noted above, the multiplier effect for manufacturing jobs is over two jobs throughout the Region (*see Contributions to Centers* discussion). These employment spinoff jobs include retail and commercial employment, which is anticipated to occur in existing centers and corridors throughout the region.

While the north UGB expansion study areas will not provide housing, other efforts by the city will, including the nearby AmberGlen/Tanasborne Regional Center and the residential expansion into South Hillsboro. These changes will enhance land use efficiencies and move the Region towards reduced greenhouse gas emissions by shortening commutes and providing densities required for proposed high capacity transit.

(6) Contribution to the purposes of centers

The North Hillsboro UGB expansion study areas are located in proximity to both existing industry clusters and two significant mixed-use centers -- the Orenco Town Center and AmberGlen/Tanasborne Regional Center. The Orenco area provides a strong, nearby housing and retail base that complements the technology based employment areas to the north. Similarly, the AmberGlen/Tanasborne Regional Center provides a range of housing and retail/office amenities that meet the city's skilled workforce needs. Currently, the implementation phase of the AmberGlen Community Plan is underway, with creation of an urban renewal district and new Regional Center zoning both in process.

Whether located in close proximity to or further from 2040 centers and corridors, traded sector industrial areas contribute to the success of centers and corridors through their positive effect on the local economy. JOHNSON REID estimates that traded sector employment of the type typical of Hillsboro's existing industrial clusters generates over two spinoff jobs for every family wage industrial manufacturing job located in the Region. These "multiplier effect" jobs include supply chain manufacturers and service providers, local retail and professional services jobs. According to the city's EOA commercial land is the land use type that is already in shortest

[37] City of Hillsboro Draft Economic Opportunities Analysis, March 2009, Johnson Reid, p. 30.

supply. In order to meet future needs for retail and office uses as the city continues to grow existing centers and corridors will need to be more efficiently developed and redeveloped.

Traded sector job growth also supports housing demand through addition of family wage jobs to the employment base. The homes needed by industrial workers stimulate growth in the construction trades, thereby increasing the amount of construction employment in the region. As a result, a large percentage of "multiplier effect" job growth has and will continue to locate in the region's centers and corridors, thus contributing to achievement of the land use objectives of the 2040 Growth Concept.

(7) Protection of farmland that is most important for the continuation of commercial agriculture in the region

As described herein, the city has planned use of natural features and roadways to avoid conflicts between urban and rural land uses and to provide transitions that will minimize effects on farming practices. As the urban growth boundary will expand incrementally, expansions will require buffers at the edges to ease the transition to newly urbanized areas. In the UGB expansion study areas intended for large lot industrial development, traditional site usage patterns are generally compatible with nearby agricultural activities, which sometimes occur on the same parcel for a period of time.

One option being considered for future residential and commercial lands (including small commercial nodes that may be sited in the future Industrial Sanctuary zone) is a larger setback requirement inside the UGB for urban development adjacent to land in active farm use beyond the boundary. In addition to protecting farmland outside the UGB, the city is exploring zoning protections for existing Community Supported Agriculture (CSA) farms that operate within the UGB. Such farms can serve as examples of sustainable urban agriculture, maintaining operations near the people they serve.

(8) Avoidance of conflict with regionally significant fish and wildlife habitat

Hillsboro's Natural Resources Management Program includes a map that identifies the extent and location of significant wetlands, riparian corridors and wildlife habitat and their impact areas, as identified in the adopted *List of Significant Goal 5 Natural Resource Sites in the City of Hillsboro* and its supporting document, the *City of Hillsboro Goal 5 Natural Resources Inventory and Assessment Report* (ESEE analyses), completed pursuant to Goal 5 and Oregon Administrative Rule 660, Division 23.

The city implements its Significant Natural Resource Overlay to protect natural resources located in the existing North Hillsboro industrial area. Natural resources in annexed areas are inventoried and those determined to be significant are added to the Significant Natural Resource Ordinance District as part of the rezoning process.

Development projects located in or partially within the overlay area for the Natural Resources Management Program must address preservation of wildlife habitat, natural vegetation, wetlands, water quality, open space and other natural resources important to the ecosystem in the vicinity of any proposed development site. Also, in accordance with the Tualatin Basin Fish & Wildlife Habitat Program, land developers and property owners are encouraged to incorporate habitat friendly practices in their site design where technically feasible and appropriate.

Natural Systems and Open Space

The North Hillsboro urban reserve area is located within the Lower McKay Creek watershed. Natural features in the urban reserve area include riparian corridors, wetlands, floodplains, groundwater resources, and natural areas. The primary environmental features are Waible Creek and Storey Creek. The defining natural feature in the UGB expansion study areas is Waible Creek, an east-west tributary of McKay Creek that traverses the area between the Jackson School Road and Waible Creek South study areas before crossing the Evergreen Special Industrial District within the UGB.

Storey Creek and its wetlands cut through the southern edge of the western portion of the COO recommended UGB expansion area, then north through the center of the Jackson School Road UGB expansion study area. The areas constrained from development by both streams totals only 47 acres. Furthermore, the location of streams in relation to the boundaries and lot lines does not impede the creation of large, usable sites.

(9) Clear transition between urban and rural lands, using natural and built features to mark the transition

The city has planned use of natural features and roadways to avoid conflicts between urban and rural land uses and to provide transitions to minimize effects on farming practices. Where roads are used or in situations where there are no natural buffer areas as the UGB expands incrementally, the city can consider requiring larger setbacks and buffering inside the UGB. Such expansions will require buffers at the edges to ease the transition to urbanization of new areas.

With respect to the UGB expansion study areas, Waible Creek serves as a transition from urban to rural uses for both the Jackson School Road and Waible Creek South study areas. Hwy 26 is a significant built feature buffering rural uses north of the highway, and pockets of small acreage rural residential development provides a buffer between future urban and agricultural uses in several locations.[38]

[38] Volume 2 – Appendix 8, *Building a Sustainable, Prosperous and Equitable Region – Recommendations from Metro's Chief Operating Officer*, August 10, 2010, Area 8A, p. 4.

Natural features not only form a physical boundary around much of the UGB expansion study areas, they also present an opportunity to create a sense of place by integrating open space into future development plans. The city will apply the following sustainable development guidelines in UGB expansion areas following annexation:

- Preserve existing trees as part of development;
- Maintain wetlands and other vegetation as green areas, parks or pathways;
- Integrate natural drainage ways and significant vegetation into the development pattern to serve as transitional buffers, including pedestrian/bicycle connections through natural areas, where feasible; and
- Locate neighborhood parks adjacent to natural drainage ways to enhance surface water quality and manage storm water.

PART 4 - STATEWIDE PLANNING GOAL CONSIDERATIONS

While Goal 9 does not apply to Metro, the city's unique and important responsibilities within the context of Oregon land use – specifically, economic development – should be addressed. Moreover, there is a relationship between Goal 9 and 14, as well as with Metro's coordination role in the Portland Metro region, that should be considered when expanding the UGB.

Goal 9 – The Economy

City or county compliance with Goal 9 is largely dependent on preparation of an Economic Opportunities Analysis as described in Oregon Administrative Rule Chapter 660, Division 9. One of the objectives of a local EOA is to identify both short and long term employment land capacity within the jurisdiction's UGB. Identifying and capitalizing on short term land assets is especially important to achievement of the local government's economic aspirations articulated in its EOA.

OAR 660-009-0005(10) defines a "*short-term supply of land*" as "*suitable land that is ready for construction within one year of the application for a building permit or request for service extension*." Further, "*competitive short-term supply*" means "*the short-term supply of land provides a* ***range of site sizes and locations to accommodate the market needs*** *of a variety of industrial and other employment uses.*" (emphasis added)

The rule further requires local governments to ensure an adequate, ongoing short-term supply of employment land, which may mean rezoning existing lands, revising land development regulations or expanding the local government's UGB. Because of Goal 9's emphasis on maintaining a constant supply of development ready employment land, the city of Hillsboro has been keenly interested in the level of development readiness of existing large lot industrial sites within the regional UGB.

The city supports efforts to elevate large brownfield and aging inner ring industrial sites to development ready status. Improving and remediating these sites will take time and resources. In the meantime, the city believes it is imperative for the regional economy that an adequate development ready supply of industrial sites be identified and maintained within the regional UGB in order to create on-going opportunities for traded sector employment growth.

Industrial Traded Sector Land Need

The city's EOA anticipates a medium growth need (net of existing capacity) of approximately 1,300 gross buildable industrial acres through 2035. Hillsboro's combined existing industrial land capacity at 988 acres falls short of the estimated 2035 need by 24 percent. The EOA also estimates a medium growth need of four industrial sites larger than 100 gross buildable acres and one site 50 to 100 acres in size through 2035.

The EOA also addresses industrial user's projected demand for sites within a range of acreages that are suitable for certain development types and industrial clusters. Table 4 reconciles the estimated site size demand to the site sizes that currently exist within the city and its associated UGB area.

Table 4: North Hillsboro Industrial Land Need Accommodation

Land Use Type	Site Gross Buildable Acres Range	EOA 2035 Projected Need (Acres)	EOA 2035 Projected Need (Parcels)
Industrial	5 acres or less	198	28
Industrial	5 to 10 acres	(25)	(3)
Industrial	10 to 25 acres	178	8
Industrial	25 to 50 acres	217	4
Industrial	50 to 100 acres	148	1
Industrial	over 100 acres	535	4
Industrial Total		1,277	46

Note: Gross buildable acres shown are solely within existing tax lots, netting out existing rights-of-way.
Source: City of Hillsboro Economic Opportunities Analysis, Johnson Reid, March 2009

Table 5: Hillsboro Large Lot Industrial Market Based Land Demand (*Acres*)

	Parcel Size Distribution		
100+ Parcel Scenario	Baseline	Medium	High
"Super Anchor"	400	400	400
	165	150	150
		141	123
		100	100
			100
			100
"Multi-Anchor"	150	150	200
	115	141	150
	100	100	123
	100	100	100
	100	100	100
		100	100
		100	100
			100
Total 100+ Demand	**565**	**791**	**973**

Source: City of Hillsboro Long-Term Urban Land Need Assessment, Johnson-Gardner LLC, September 2008

Alternate Building Configurations

During preparation of the city's EOA, JOHNSON REID researched Floor Area Ratio (FAR) trends and the potential for alternative building configurations in the existing west side industrial clusters. Their findings state:

> *"Research during the process of this study gave no indication that industrial structures can be expected to make significant gains in FAR over the planning horizon. Anecdotally, input contradicts this notion: impervious surface for trucks and appropriate access/turning radii will be a significant building footprint determinant over the long run; and manufacturing space utilized by high-tech firms must be flexible in size to allow modifications to manufacturing processes and new product line manufacturing changes over time. However, it is also noted that high-tech facilities do incorporate significant office space utilization, though structures vary significantly between firms and individual sectors. Intel's Ronler Acres is an oft-cited example of a high-tech industrial facility over three stories in height with significant office use and structured parking. To model the reality of office-utilizing industrial employment and space increasing in density over the planning period, JOHNSON REID assumed industrial space-utilizing employment growth in Professional & Business Services, and Information, the two primary categories, would see FARs increasing by 0.025 every five years to 0.40 by 2035."*

Large Lot Site Location Factors

Existing large-site industrial users, as well as site locators, have identified a number of key site characteristics that make land uniquely suited for technology based industrial uses. In a memo to the city of Hillsboro in March 2010 JOHNSON REID provided an overview of the research the firm conducted as part of preparing the city's draft EOA:

> *"As part of the May 2009 City of Hillsboro Economic Opportunities Analysis ("EOA") process, representatives from the industry clusters themselves, as well as high-tech industry experts, alternative energy experts, State of Oregon economic development, and other economic stakeholders identified a combination of seven key qualities to the competitiveness of West Washington County, particularly in Hillsboro, for large technology cluster employers. The following is an excerpt from the EOA summarizing cluster stakeholder consensus.*
>
> *"According to interviewees, the question of "Why Hillsboro?" yielded a distinct mix of qualities highly desirable, if not integral, to a specific segment of the nation's high tech industry. The following qualities were frequently cited in a not replicable combination as distinct inputs required by targeted industry:*
>
> *1. High-Capacity, Continuous Electrical Power at Competitive Rates*
>
> *2. High-Capacity, High-Quality Water Supply*
>
> *3. Highly-Skilled/Educated Workforce with Existing High-Tech Cluster Investment*

4. Flat, Seismically Stable Land without Brownfield Costs & Risks

5. Proximate, Diverse Transportation Infrastructure (Freeway, Air, Rail)

6. Specialized, Existing Industrial Material Supply Infrastructure (Chemicals, Gases)

7. Unique Expertise and Experience of the City of Hillsboro

All of the above factors are individually attracted to a wide swath of industry, including high-tech, but the unique combination of all of the above distinguish Hillsboro from elsewhere in the State of Oregon and uniquely competitive with other markets in North America for high-tech industry that intrinsically depend heavily upon power, water, and highly-skilled labor."

Companies considering the Region need to be operating within a short period of time (usually within six months). For this reason, for companies like Genentech, shovel ready was an important threshold issue that led to their decision to locate here.

The UGB expansion study areas are uniquely suitable for large lot industrial employers. For example:

- The areas are readily served by nearby PGE substations that provide high-capacity, continuous electrical power.
- The areas are readily served by water.
- The existing industry clusters have attracted and continue to attract the necessary skilled workforce. On-going efforts in AmberGlen, Downtown and South Hillsboro will ensure the city's ability to continue providing the diversity of housing sought by industry cluster workers.
- The areas are flat, seismically stable, relatively vacant and do not contain brownfields.
- The areas are proximate to Highway 26.
- The areas are located in the heart of the three industry clusters, including nearby anchors such as Genetech, Solarworld and Intel.

In conclusion, the unique combination of all of the above land quality, infrastructure, workforce, existing technology firm investment, and city of Hillsboro high tech facility expertise were identified as a cumulative attractor to large cluster employers in the past and into the future. The EOA also identifies a 20-year, large industrial site demand of roughly 1,300 acres driven by the three key clusters.

The North Hillsboro UGB expansion study areas have the potential to significantly enhance the economic vitality of the entire region. All three UGB expansion study areas are strategically

located adjacent to the heart of the Silicon Forest, the center of Oregon's high-tech industry cluster and would be positioned to fill an important short-term employment land supply niche that is currently deficient within the existing UGB.

Combined with the city's on-going efforts to assemble large lots in the Shute and Evergreen industrial areas and streamline its industrial zoning framework through adoption of a new Industrial Sanctuary (IS) zoning district, adding 650 -750 acres to the UGB in 2011 would create adequate market choice of large lot sites with the attributes sought by industrial/manufacturing anchor companies. Such action would strategically enhance the Region's competitive edge in recruiting these highly desirable companies.

PART 5 – OTHER UGMFP CONSIDERATIONS

Title 4

The city is currently in compliance with Metro Title 4 and is actively developing Comprehensive Plan and Zoning Code amendments to further support regional job creation activities (e.g., Industrial Sanctuary zoning; Eco-Employment District studies).

The UGB expansion study areas will be uniquely suited for RSIA designation when those lands are brought into the UGB. Such action would also be consistent with the city's policy of protecting large lot industrial areas from parcelization and incompatible uses. Following annexation it is anticipated the city will apply the Industrial Sanctuary zone currently under development, thereby further strengthening Title 4 protections through local regulatory control.

Title 14

Title 14 contains a number of sections that include criteria applicable to various types of UGB expansion. While only section 3.07.1425 (Legislative Amendment) applies to this submission, it may be worthwhile to address similar criteria is related sections of Title 14.

Specifically, Section 3.07.1420(D) requires the COO to prepare a report on the effect of the proposed amendment on existing residential neighborhoods when the UGB expansion area is over 100 acres. In the case of the city's three UGB expansion study areas in north Hillsboro, the areas are adjacent to predominantly non-residential lands on the south and are bounded by farmland or sparsely settled rural residential lands to the north and west, thereby minimizing impacts of future development on residential areas.

Section 3.07.1440(B) includes Major Amendment criteria that requires a demonstration the amendment "*will provide for an orderly and efficient transition from rural to urban land use*," and that if the amendment is for industrial use, that "*a large site or sites cannot reasonably be created by land assembly or reclamation of a brownfield site*." The city's findings address these considerations in Part 3 of this report.

Finally, Section 3.07.1425(F) prohibits the Metro Council from amending the UGB in a manner that creates an island of urban land outside the UGB or of rural land within the UGB. As shown on Maps 3 through 5, all of the UGB expansion study areas would be contiguous to the UGB, provided the COO recommended 310 acres southwest of the Brookwood interchange is also included in the UGB in the case of the Jackson School Road study area.

ATTACHMENTS AND REFERENCES

Maps

Map 1a – North Hillsboro Urban Reserves and COO UGB Expansion Recommendation

Map 1b – Metro Hillsboro North – 8A Urban – Large Industrial Site

Map 2 – State Certified Industrial Sites (Hillsboro)

Map 3 – Jackson School Road Study Area

Map 4 – Waibel Creek South Study Area

Map 5 – Groveland Road Study Area

Map 6 – Hillsboro Industrial Cluster Employers

Attachments

Attachment A – City of Hillsboro Draft Economic Opportunities Analysis Excerpts – Summary Population, Housing and Employment Demand Data (March 2009)

Attachment B – *JOHNSON REID*, Competitive Markets & Market Factor Approach to Large Industrial Site Provision (January 25, 2010)

Attachment C – *JOHNSON REID*, Urban Growth Report Findings & Western Washington County Cluster Implications (September 29, 2009)

Attachment D – City of Hillsboro, Comments on the Preliminary Draft Urban Growth Report - Employment (June 22, 2009)

Attachment E – *JOHNSON REID*, Long-Term Economic Development & Land Need Coordination Opportunity (March 5, 2009)

Attachment F – MPAC Employment Subcommittee, Final Report to MPAC on Addressing Large-Industrial Site Demand (May 5, 2010)

Attachment G – *JOHNSON REID*, Review of Metro's June 2009 Large Lot/Large Employer Analysis Addendum to the Preliminary Urban Growth Report for Employment Land (July 10, 2009)

Attachment H – Society of Industrial and Office Realtors (through Capacity Commercial Group) letter dated May 25, 2010

Attachment I – NAIOP, Commercial Real Estate Development Assoc. letter to Metro Council dated September 29, 2010

Attachment J – CH2M/Hill and *JOHNSON REID*, North Hillsboro Area: Potential Large Industrial Sites Evaluation (May 17, 2010)

Attachment K – FCS Group, Revised Draft Employment Areas Vacant Land Supply Findings (April 3, 2009); and Metro Inventory of Large Industrial Sites – Draft Map

Attachment L - Property Owner Agreement Letter on Large Lot Assembly to Metro Council dated October 15, 2010

Attachment M – *JOHNSON REID*, Portland Metro Region Large Industrial Site Query Survey (January 25, 2010)

Attachment N - *JOHNSON REID*, Portland Metro Region Large Industrial Site Query Survey (January 26, 2010)

Other References

- Urban Growth Report 2009-2030 Employment and Residential (January 2010)
- Making the Greatest Place, Strategies for a Sustainable and Prosperous Region, A report from Metro's Chief Operating Officer (September 15, 2009)
- Making a Great Place: 2010 Growth Management Assessment (August 2010)
- http://www.oregon4biz.com/newsletter-0809.php
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- Sept 1, 2009: Staff Recommendations for Revisions to Aug 3, 2009 County Staff Report http://www.co.washington.or.us/LUT/PlanningProjects/reserves/upload/WCRCC_Revised_Staff_Report_09-04-09.pdf
- August 3, 2009: County Staff Report Draft Urban & Rural Recommendations http://www.co.washington.or.us/LUT/PlanningProjects/reserves/upload/Staff-Report_DRAFT_8-3-09.pdf
- County Report Appendix I – *a series of 39 maps, all dated August 3, 2009* http://www.co.washington.or.us/LUT/PlanningProjects/reserves/staff-report-august-3-2009.cfm

CITY OF HILLSBORO

DRAFT ECONOMIC OPPORTUNITIES ANALYSIS
- EXCERPTS -
MARCH 2009

SUMMARY POPULATION, HOUSING AND EMPLOYMENT DEMAND DATA

What Are We Planning For?

2008	2035	2060
JOBS		
72,905	172,270	347,700
POPULATION		
89,145	267,370	350,550
HOUSEHOLDS		
32,410	98,300	132,280



SOURCE: CITY EOA, MARCH 2009 – MID-RANGE ESTIMATES

FIGURE 1: EMPLOYMENT FORECAST BY INDUSTRY SECTOR, HILLSBORO THROUGH 2035 (2008-2035)

Baseline/Low Forecast	Base Year	Employment Forecast						2008-2035 Growth	
NAICS	2008	2013	2018	2023	2028	2033	2035	Jobs	AAGR
Natural Resources	309	317	331	350	365	377	382	74	0.8%
Construction	2,933	3,206	3,713	4,356	4,882	5,308	5,488	2,555	2.3%
Manufacturing	22,016	24,209	28,283	33,453	37,683	41,103	42,556	20,540	2.5%
Wholesale Trade	1,879	2,005	2,240	2,538	2,781	2,979	3,061	1,182	1.8%
Retail Trade	7,656	8,276	9,426	10,886	12,081	13,049	13,457	5,801	2.1%
T.W.U.	1,536	1,702	2,011	2,402	2,723	2,982	3,092	1,557	2.6%
Information	1,716	1,815	2,001	2,236	2,428	2,584	2,650	934	1.6%
Financial Activities	2,582	2,759	3,087	3,503	3,844	4,120	4,237	1,655	1.9%
Professional & Business	9,727	11,018	13,416	16,460	18,950	20,957	21,819	12,092	3.0%
Education & Health	10,179	11,788	14,775	18,567	21,669	24,165	25,243	15,064	3.4%
Leisure & Hospitality	5,067	5,607	6,611	7,885	8,928	9,770	10,129	5,062	2.6%
Other Services	3,319	3,531	3,922	4,420	4,827	5,157	5,296	1,976	1.7%
Public Administration	3,611	3,747	4,000	4,321	4,584	4,798	4,887	1,276	1.1%
TOTAL	***72,529***	***79,979***	***93,815***	***111,377***	***125,745***	***137,350***	***142,297***	***69,768***	***2.5%***

High Growth Forecast 1/	Base Year	Employment Forecast						2008-2035 Growth	
NAICS	2008	2013	2018	2023	2028	2033	2035	Jobs	AAGR
Natural Resources	309	321	343	368	390	412	422	113	1.2%
Construction	2,934	3,288	3,943	4,764	5,558	6,367	6,748	3,814	3.1%
Manufacturing	22,316	28,172	37,775	45,682	55,458	65,430	70,123	47,807	4.3%
Wholesale Trade	1,883	2,087	2,447	2,844	3,235	3,634	3,822	1,939	2.7%
Retail Trade	7,665	8,536	10,120	12,012	13,843	15,711	16,590	8,925	2.9%
T.W.U.	1,539	1,780	2,216	2,727	3,254	3,792	4,045	2,506	3.6%
Information	1,718	1,898	2,207	2,528	2,850	3,178	3,333	1,615	2.5%
Financial Activities	2,586	2,850	3,325	3,872	4,398	4,935	5,187	2,601	2.6%
Professional & Business	9,757	12,030	15,947	20,078	24,787	29,591	31,851	22,095	4.5%
Education & Health	10,189	12,327	16,260	21,120	26,431	31,848	34,397	24,208	4.6%
Leisure & Hospitality	5,075	5,841	7,232	8,886	10,574	12,296	13,107	8,032	3.6%
Other Services	3,324	3,646	4,220	4,876	5,504	6,144	6,446	3,122	2.5%
Public Administration	3,611	3,792	4,124	4,535	4,887	5,246	5,415	1,804	1.5%
TOTAL	***72,905***	***86,570***	***110,160***	***134,291***	***161,169***	***188,585***	***201,487***	***128,582***	***3.8%***

Medium Growth Forecast 1/	Base Year	Employment Forecast						2008-2035 Growth	
NAICS	2008	2013	2018	2023	2028	2033	2035	Jobs	AAGR
Natural Resources	309	319	337	359	378	399	409	99	1.0%
Construction	2,934	3,246	3,825	4,561	5,162	5,884	6,201	3,267	2.8%
Manufacturing	22,316	25,795	31,922	39,916	46,230	53,117	56,280	33,965	3.5%
Wholesale Trade	1,883	2,041	2,328	2,696	2,993	3,343	3,496	1,613	2.3%
Retail Trade	7,665	8,395	9,743	11,459	12,857	14,523	15,252	7,587	2.6%
T.W.U.	1,539	1,737	2,102	2,568	2,947	3,395	3,594	2,056	3.2%
Information	1,718	1,850	2,085	2,387	2,631	2,914	3,038	1,320	2.1%
Financial Activities	2,586	2,799	3,191	3,692	4,099	4,581	4,791	2,205	2.3%
Professional & Business	9,757	11,446	14,464	18,337	21,462	25,066	26,697	16,941	3.8%
Education & Health	10,189	12,045	15,484	19,854	23,423	27,665	29,574	19,385	4.0%
Leisure & Hospitality	5,075	5,714	6,893	8,395	9,618	11,068	11,712	6,636	3.1%
Other Services	3,324	3,581	4,052	4,654	5,142	5,721	5,972	2,648	2.2%
Public Administration	3,611	3,768	4,059	4,429	4,731	5,097	5,251	1,640	1.4%
TOTAL	***72,905***	***82,737***	***100,486***	***123,308***	***141,671***	***162,774***	***172,267***	***99,362***	***3.2%***

1/ High growth forecast utilizes Metro's *'80-'00 Trend* Scenario.

FIGURE 2: EMPLOYMENT FORECAST BY INDUSTRY SECTOR, HILLSBORO THROUGH 2060 (2008-2060)

Baseline Forecast	Base Year	Employment Forecast						2008-2060 Growth	
NAICS	2008	2038	2043	2048	2053	2058	2060	Jobs	AAGR
Natural Resources	309	390	403	417	431	442	452	143	0.7%
Construction	2,933	5,771	6,274	6,821	7,416	7,876	8,336	5,404	2.0%
Manufacturing	22,016	44,833	48,901	53,339	58,179	61,941	65,703	43,687	2.1%
Wholesale Trade	1,879	3,190	3,417	3,660	3,920	4,117	4,315	2,436	1.6%
Retail Trade	7,656	14,094	15,223	16,442	17,759	18,771	19,782	12,126	1.8%
T.W.U.	1,536	3,266	3,576	3,916	4,289	4,580	4,870	3,335	2.2%
Information	1,716	2,751	2,928	3,116	3,317	3,468	3,619	1,904	1.4%
Financial Activities	2,582	4,417	4,734	5,075	5,440	5,718	5,995	3,414	1.6%
Professional & Business	9,727	23,177	25,633	28,348	31,351	33,724	36,097	26,370	2.6%
Education & Health	10,179	26,949	30,054	33,517	37,378	40,460	43,542	33,363	2.8%
Leisure & Hospitality	5,067	10,692	11,700	12,804	14,012	14,954	15,897	10,830	2.2%
Other Services	3,319	5,511	5,888	6,291	6,722	7,048	7,374	4,055	1.5%
Public Administration	3,611	5,023	5,257	5,503	5,760	5,950	6,141	2,530	1.0%
TOTAL	***72,529***	***150,062***	***163,989***	***179,248***	***195,973***	***209,049***	***222,124***	***149,595***	***2.2%***

High Growth Forecast 1/	Base Year	Employment Forecast						2008-2060 Growth	
NAICS	2008	2038	2043	2048	2053	2058	2060	Jobs	AAGR
Natural Resources	309	437	464	493	524	547	570	261	1.2%
Construction	2,934	7,401	8,636	10,076	11,756	13,174	14,591	11,658	3.1%
Manufacturing	22,316	78,921	96,715	118,574	145,436	169,833	194,231	171,915	4.2%
Wholesale Trade	1,883	4,132	4,714	5,379	6,137	6,763	7,389	5,506	2.7%
Retail Trade	7,665	18,070	20,850	24,058	27,759	30,846	33,932	26,267	2.9%
T.W.U.	1,539	4,499	5,377	6,427	7,681	8,773	9,864	8,326	3.6%
Information	1,718	3,586	4,060	4,597	5,206	5,706	6,206	4,488	2.5%
Financial Activities	2,586	5,603	6,377	7,259	8,262	9,088	9,913	7,327	2.6%
Professional & Business	9,757	36,178	44,858	55,637	69,022	81,251	93,481	83,724	4.4%
Education & Health	10,189	39,351	49,265	61,679	77,225	91,517	105,809	95,621	4.6%
Leisure & Hospitality	5,075	14,552	17,338	20,658	24,613	28,041	31,469	26,394	3.6%
Other Services	3,324	6,937	7,848	8,879	10,047	11,000	11,954	8,630	2.5%
Public Administration	3,611	5,665	6,109	6,588	7,104	7,501	7,898	4,287	1.5%
TOTAL	***72,905***	***225,333***	***272,613***	***330,303***	***400,773***	***464,041***	***527,308***	***454,403***	***3.9%***

Medium Growth Forecast 1/	Base Year	Employment Forecast						2008-2060 Growth	
NAICS	2008	2038	2043	2048	2053	2058	2060	Jobs	AAGR
Natural Resources	309	423	447	473	501	522	543	234	1.1%
Construction	2,934	6,707	7,645	8,714	9,933	10,933	11,932	8,999	2.7%
Manufacturing	22,316	61,036	70,140	80,609	92,648	102,762	112,875	90,559	3.2%
Wholesale Trade	1,883	3,734	4,171	4,660	5,207	5,646	6,086	4,203	2.3%
Retail Trade	7,665	16,406	18,533	20,937	23,652	25,859	28,065	20,400	2.5%
T.W.U.	1,539	3,911	4,506	5,192	5,981	6,638	7,296	5,757	3.0%
Information	1,718	3,228	3,576	3,963	4,392	4,735	5,078	3,360	2.1%
Financial Activities	2,586	5,120	5,723	6,397	7,152	7,758	8,364	5,778	2.3%
Professional & Business	9,757	29,276	34,193	39,936	46,644	52,334	58,024	48,268	3.5%
Education & Health	10,189	32,675	38,593	45,582	53,838	60,906	67,974	57,785	3.7%
Leisure & Hospitality	5,075	12,738	14,660	16,871	19,417	21,531	23,646	18,571	3.0%
Other Services	3,324	6,364	7,081	7,880	8,768	9,479	10,190	6,866	2.2%
Public Administration	3,611	5,491	5,916	6,375	6,869	7,247	7,626	4,015	1.4%
TOTAL	***72,905***	***187,110***	***215,186***	***247,590***	***285,003***	***316,351***	***347,700***	***274,795***	***3.0%***

1/ High growth forecast utilizes Metro's *'80-'00 Trend* Scenario.

FIGURE 3: HILLSBORO URBAN AREA EMPLOYMENT LAND DEMAND THROUGH 2035 (GROSS BUILDABLE ACRES 2008-2035)

Use Type	Demand For Land (Acres) By Scenario: Baseline Growth	High Growth	Medium Growth	UGB Request (Approx.)
OFFICE COMMERCIAL	**421.9**	**1,383.6**	**1,093.4**	
INDUSTRIAL	**1,601.4**	**3,558.6**	**2,583.9**	**1,200.0**
RETAIL COMMERCIAL	**1,169.9**	**2,296.5**	**1,965.0**	
CITY RESIDENTS	1,037.0	2,035.5	1,741.7	
REGION/TOURISTS 1/	132.9	261.0	223.3	
OVERNIGHT LODGING	**22.6**	**35.8**	**29.6**	
SPECIALIZED USES 2/	**537.4**	**749.1**	**651.4**	
TOTAL	***3,753.2***	***8,023.6***	***6,323.3***	***1,200.0***

1/ Based on current ratios between locally supported and total sales, CE Survey from the BLS and Census of Retail Trade.

2/ Hospitals, Clinics, etc. for employment not otherwise categorized.

FIGURE 4: HILLSBORO URBAN AREA EMPLOYMENT LAND DEMAND THROUGH 2060 (GROSS BUILDABLE ACRES 2008-2060)

Use Type	Need For Land (Acres) By Scenario: Baseline Growth	High Growth	Medium Growth	Urb. Reserve Request (Approx.)
OFFICE COMMERCIAL	**1,728.5**	**4,979.1**	**3,077.9**	
INDUSTRIAL	**4,476.3**	**15,054.9**	**8,704.5**	**3,500.0**
RETAIL COMMERCIAL	**2,970.4**	**6,225.4**	**4,698.2**	
CITY RESIDENTS	2,632.9	5,518.0	4,164.3	
REGION/TOURISTS 1/	337.5	707.4	533.9	
OVERNIGHT LODGING	**48.3**	**117.8**	**82.9**	
SPECIALIZED USES 2/	**1,657.1**	**2,309.8**	**2,008.6**	
TOTAL	***10,880.6***	***28,687.1***	***18,572.0***	***3,500.0***

1/ Based on current ratios between locally supported and total sales, CE Survey from the BLS and Census of Retail Trade.

2/ Hospitals, Clinics, etc. for employment not otherwise categorized.

FIGURE 5: PROFILE OF CURRENT HOUSING CONDITIONS (2008)

CURRENT HOUSING CONDITIONS (2008)			SOURCE
Total 2008 Population:	90,165		Claritas[1]
- Estimated group housing population:	-1,020	(1.1% of Total)	Claritas
Estimated 2008 Population:	**89,145**	(Total - Group)	
Estimated 2008 Households:	**32,410**		Claritas
Avg. HH Size:	2.75	(Pop/HH)	Claritas
Total Housing Units:	**34,820**		Claritas
Occupied Housing Units:	32,410		
Vacant Housing Units:	2,410		
Current Vacancy Rate:	6.9%		

1 Claritas figures were cross-referenced with figures from the U.S. Census and PSU Population Research Center.

FIGURE 6: PROFILE OF FUTURE HOUSING CONDITIONS IN 2035

	Baseline Growth Scenario	Medium Growth Scenario	High Growth Scenario
2008 Population:	90,165	90,165	90,165
Annual Growth Rate:	3.3%	4.2%	4.8%
Estimated 2035 Population:	***214,294***	***267,368***	***319,770***
Estimated 2035 Households:	***78,785***	***98,297***	***117,563***
Total Housing Units:	***83,813***	***104,571***	***125,067***
Occupied Housing Units:	78,785	98,297	117,563
Vacant Housing Units:	5,029	6,274	7,504
New Population ('08-'35):	124,129	177,203	229,605
New Households ('08-'35):	46,375	65,887	85,153

Assumes average future household size of 2.72, and unit vacancy of 6%.
Sources: Claritas, Census, Johnson Reid, LLC.

FIGURE 7: PROFILE OF FUTURE HOUSING CONDITIONS IN 2060

PROJECTED FUTURE HOUSING CONDITIONS (2008 - 2060)		SOURCE
2008 Population (Minus Group Pop.)	90,165	Claritas[1]
Projected Annual Growth Rate	2.7%	Johnson Reid, LLC
Total 2060 Population:	354,449	
- Estimated group housing population:	-3,899	Claritas
Estimated 2060 Population:	**350,551**	
Estimated 2060 Households:	**132,283**	
Avg. HH Size:	2.65	Claritas
Total Housing Units:	**140,727**	
Occupied Housing Units:	132,283	
Vacant Housing Units:	8,444	
Projected Vacancy Rate:	6.0%	Johnson Reid, LLC

1 Claritas figures were cross-referenced with figures from the U.S. Census and PSU Population Research Center.

FIGURE 8: PROJECTED NEW RESIDENTIAL LAND NEED, HILLSBORO (2035)

BASELINE GROWTH SCENARIO						
Comp Plan Designation		Total Future Unit Need - Vacant Lands	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distrib-ution
RL	Residential - Low Density	28,348	9.2	3,097	3,871	70.6%
RM	Residential - Medium D.	9,660	13.5	716	894	16.3%
RH	Residential - High D.	4,122	19.1	216	269	4.9%
SCPA	Station Community Plan Area[1]	5,263	18.3	287	359	6.5%
MU	Mixed Use	1,049	15.0	70	87	1.6%
	Totals/Averages:	***48,442***	***11.9***	***4,385***	***5,481***	***100%***

MEDIUM GROWTH SCENARIO						
Comp Plan Designation		Total Future Unit Need - Vacant Lands	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distrib-ution
RL	Residential - Low Density	39,427	9.2	4,307	5,384	69.4%
RM	Residential - Medium D.	13,795	13.5	1,022	1,277	16.5%
RH	Residential - High D.	6,249	19.1	327	408	5.3%
SCPA	Station Community Plan Area[1]	8,124	18.3	443	554	7.1%
MU	Mixed Use	1,605	15.0	107	134	1.7%
	Totals/Averages:	***69,200***	***11.9***	***6,206***	***7,757***	***100%***

HIGH GROWTH SCENARIO						
Comp Plan Designation		Total Future Unit Need - Vacant Lands	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distrib-ution
RL	Residential - Low Density	50,365	9.2	5,502	6,877	68.7%
RM	Residential - Medium D.	17,876	13.5	1,324	1,655	16.5%
RH	Residential - High D.	8,350	19.1	437	546	5.5%
SCPA	Station Community Plan Area[1]	10,950	18.3	597	747	7.5%
MU	Mixed Use	2,154	15.0	144	179	1.8%
	Totals/Averages:	***89,696***	***18.3***	***8,004***	***10,004***	***100%***

[1] Figures presented for SCPA Designation includes "SC Residential", and excludes "SC Commercial"

Sources: City of Hillsboro, Metro RLIS, Johnson Reid LLC

FIGURE 9: PROJECTED FUTURE NEED FOR NEW HOUSING UNITS (2060)

OWNERSHIP HOUSING									
Price Range	**Single Family**	**Duplex**	**3- or 4-plex**	**5+ Units MFR**	**Mobile home**	**Boat, RV, other**	**Total Units**	**% of Units**	**Cummulative %**
$0 - 50k	352	8	5	36	-5	-6	390	0.5%	0.5%
$50k - 70k	125	2	1	8	0	-1	134	0.2%	0.7%
$70k - 90k	193	2	1	11	0	0	207	0.3%	0.9%
$90k - 120k	603	6	4	31	0	-1	643	0.8%	1.7%
$120k - 160k	868	13	9	61	-5	-6	940	1.2%	2.9%
$160k - 230k	-1,286	26	18	104	-41	-56	-1,236	-1.6%	1.4%
$230k - 350k	7,875	108	76	532	-37	-50	8,505	10.7%	12.1%
$350k - 460k	13,499	118	83	615	11	15	14,340	18.0%	30.1%
$460k - 690k	29,754	221	156	1,184	67	90	31,470	39.6%	69.7%
$690k +	22,777	164	116	883	57	77	24,073	30.3%	100.0%
Totals:	74,758	665	470	3,465	45	61	**79,466**	**% All Units:**	75.0%
Percentage:	94.1%	0.8%	0.6%	4.4%	0.1%	0.1%	100.0%		

RENTAL HOUSING									
Price Range	**Single Family**	**Duplex**	**3- or 4-plex**	**5+ Units MFR**	**Mobile home**	**Boat, RV, other**	**Total Units**	**% of Units**	**Cummulative %**
$0 - 250	255	51	44	631	-2	0	980	3.7%	3.7%
$250 - 375	132	18	19	267	-1	0	435	1.6%	5.4%
$375 - 500	228	83	55	747	1	0	1,114	4.2%	9.6%
$500 - 625	-313	-294	-115	-1,116	-16	0	-1,855	-7.0%	2.6%
$625 - 875	-504	-485	-178	-1,553	-29	0	-2,750	-10.4%	-7.8%
$875 - 1,250	329	91	133	2,643	-12	0	3,184	12.0%	4.2%
$1,250 - 1,87	1,336	652	415	5,981	8	0	8,392	31.7%	35.9%
$1,875 - 2,50	1,220	595	366	5,113	10	0	7,303	27.6%	63.6%
$2,500 - 3,75	1,323	608	368	5,009	11	0	7,319	27.7%	91.2%
$3,750 +	419	193	117	1,587	3	0	2,318	8.8%	100.0%
Totals:	4,424	1,513	1,223	19,307	-28	0	**26,441**	**% All Units:**	25.0%
Percentage:	16.7%	5.7%	4.6%	73.0%	-0.1%	0.0%	100.0%		

TOTAL HOUSING UNITS								
	Single Family	**Duplex**	**3- or 4-plex**	**5+ Units MFR**	**Mobile home**	**Boat, RV, other**	**Total Units**	**% of Units**
Totals:	79,183	2,179	1,693	22,773	18	61	**105,907**	**100%**
Percentage:	74.8%	2.1%	1.6%	21.5%	0.0%	0.1%	100.0%	

Sources: Claritas Inc., Census, Johnson Reid LLC

PROJECTED NUMBER OF SITES DEMANDED

The final step in establishing the City's land demand projections is to arrive at the number of sites expected to be demanded according to the above described development pattern types during the planning horizon. Because there are subjective components to this analysis, it is important to understand basic assumptions utilized in the analysis. The principal assumptions relate to methodology for identifying and categorizing medium and large sites and these include the following:

- The vast proportion of the employment land base, from the standpoint of total acreage, is consumed by sites larger than half an acre. Some of these are held for speculation and will be divided further, but the vast majority of these parcels are developed and used by going concerns.
- It is much easier to divide employment land into small parcels to meet the needs of smaller users than it is to aggregate small parcels in fractured ownerships to meet the needs of a larger user.

In estimating employment site demand, no single, simple methodology was utilized for estimating Hillsboro need for industrial land by parcel size and quality. Industry-specific and even firm-specific needs indicate an even more diverse range of requirements for known and likely future industries. Accordingly, JOHNSON REID utilized all of the following to identify likely site requirements for parcel size distribution in the context of physical site requirements by general use type summarized in the Development Type Pattern Matrices:

- *Economic Stakeholder Outreach:* Emphasis was put on flexible land supply to accommodate long-term investment decisions by "anchor" cluster firms (SolarWorld, Genentech, Intel). These larger, key industry firms' commitment to an economic area then attract various ripple effects via spin-offs, joint ventures, competitors, suppliers, and customers typically utilizing more moderate parcel sizes highly proximate to the "anchor" firm. Intel's Jones Farm and Ronler Acres are examples of employment ripple effect and spin-off well documented by Joe Cortright/Impresa Consulting and the Portland State University Institute of Metropolitan Studies. Input also emphasized flexibility regarding development orientation. Large firms land bank and build larger, more flexible structures to allow for modification of research and manufacturing process, as well as changes in product lines.
- *Industry-Specific Literature Review*: Industry studies and documents were utilized to understand likely parcel sizes required of emerging high technology-dependent firms and clusters based on operations standards and site investments elsewhere.
- *OECDD Industrial Site/Shovel Ready Guidelines*: Parcel quality and infrastructure need as documented by OECDD for statewide industry recruitment with sector specifics also utilized for pertinent industries.
- *City of Hillsboro Planning Documents*: Plans and analysis in support of the Shute Road Industrial Site comprehensive plan amendment, as well findings from the Evergreen Concept Plan and Helvetia Concept Plan were utilized.
- *Industrial Development Standards*: NAIOP, among others, indicate design and size standards for industrial development utilized by multiple users instead of "anchor" single users, i.e. business, industrial, and flex park development.
- *U.S. Census of Business*: Washington County zip codes 97123 and 97124 data for distribution of firms by industry and employment were utilized to assist in distribution of need by industry type.

- *Professional Experience*: As a due diligence and feasibility service provider to industrial development throughout the Pacific Northwest, JOHNSON REID experience for private and public interests (Portland Development Commission, et al.) was also utilized.

Figure 27 provides a detailed assessment of Hillsboro employment land demand through 2035 in terms number of sites demanded by site size, with a comparison to developable employment land supply by site quality within the existing Hillsboro urban growth boundary. Results are expressed for all three employment growth scenarios.

FIGURE 27: RECONCILIATION OF HILLSBORO EMPLOYMENT LAND SITE DEMAND & SUPPLY (2035)

2035 Land Demand Reconcilation - Site Need Count

Number of Sites by Development Pattern						Planning Horizon			
			Demand Projections - Sites			Vacant Supply (Sites)	Balance -Sites Needed		
		Typical Acreage	Baseline	High	Medium		Baseline	High	Medium
Office	Business Park	50.0	4	12	9	-	4	12	9
	Medium	25.0	5	16	12	1.0	4	15	11
	Small	5.0	25	80	64	30.0	(5)	50	34
	SubTotal		***33***	***108***	***86***	***31.0***	***7***	***77***	***55***
Industrial	Cluster Anchor	100.0+	4	10	7	3.0	1	7	4
	Anchor or Large Park	50.0 - 100.0	3	6	4	3.0	(0)	3	1
	Large User or Mid Park	25.0 - 50.0	7	15	11	7.0	(0)	8	4
	Medium User or Smaller Park	10.0 - 25.0	13	29	21	13.0	0	16	8
	Expanding User	5.0 - 10.0	14	31	22	25.0	(11)	6	(3)
	Small Businesses	5.0 or fewer	91	202	146	118.0	(27)	84	28
	SubTotal		***132***	***293***	***212***	***169.0***	***2***	***124***	***46***
Commercial Retail	Large	25.0	10	20	17	-	10	20	17
	Medium	10.0	55	108	93	1.0	54	107	92
	Small	1.5	243	476	408	73.0	170	403	335
	SubTotal		***308***	***605***	***517***	***74.0***	***234***	***531***	***443***

Note: Figures may not sum due to rounding.
SOURCE: City of Hillsboro Planning Department and Johnson Reid, LLC

2035 OFFICE EMPLOYMENT SITE DEMAND FINDINGS

- *Sites Demanded:* Hillsboro economic growth is estimated to drive demand for as few as 33 office commercial sites to as many as 108. The majority of sites for office commercial can be expected in the "Small" category, with typical parcel size at 5 acres.
- *Site Supply:* The City of Hillsboro currently has a total of 31 sites suitable for office commercial development, overwhelmingly concentrated in the "Small" category. It should be underscored that Hillsboro presently has no site availability suitable for larger, predominantly office business park development.
- *Sites Needed Reconciliation:* Given documented site demand and existing inventory, Hillsboro will require anywhere from seven new office commercial sites (Baseline Scenario) to 77 new sites (High Growth Scenario) to meet economic opportunities identified in this analysis.
- *Sites Needed Concentration:* Site need is greatly concentrated in the "Small" parcel category, generally 10 acres or less. Under the Baseline Growth Scenario, Hillsboro currently has five more "Small" sites available (30) than demanded (25). Hillsboro absolutely requires sites in larger size categories given nearly no availability within the current City UGB.

2035 Industrial Employment Site Demand Findings

- *Sites Demanded:* Hillsboro economic growth is expected to generate demand for a minimum of 132 industrial sites to as many as 293 over the planning period. The great majority of sites demanded will be five acres or fewer in size ("Small Businesses"), however sizeable shares are attributable to "Expanding Users" (5-10 acres) and "Medium User/Smaller Park" (10-25 acres).
- *Site Supply:* The City of Hillsboro currently has 169 sites suitable for industrial development within its UGB, greatly concentrated in parcels sized five acres or less. Hillsboro currently has some uncommitted, developable industrial sites within its UGB for all categories of site size demand.
- *Sites Needed Reconciliation:* Given documented site demand and existing inventory, Hillsboro will require anywhere from two additional industrial sites (Baseline Scenario) to 124 additional sites (High Growth Scenario) to meet economic opportunities identified in this analysis.
- *Sites Needed Concentration:* Under the conservative Baseline Scenario, Hillsboro will require the addition of land for one site in the "Cluster Anchor" size category, though the sum of site need due to rounding indicates a need for land sufficient for two industrial sites through 2035. Under the two higher growth scenarios, Hillsboro requires the addition of industrial land suitable for nearly all site size categories. It should be underscored that under all growth scenarios, Hillsboro currently has insufficient land for "Cluster Anchor" industrial site demand during the planning period.

2035 Retail Commercial Employment Site Demand Findings

- *Sites Demanded:* Hillsboro population growth, resulting from economic growth opportunity, is expected to create demand for a minimum of 308 commercial sites to as many as 605 over the planning period. The great majority of sites demanded will be three acres or fewer in size ("Small"), though "Medium" site need accounts for up to 20% of future commercial retail site demand through 2035.
- *Site Supply:* The City of Hillsboro currently has 74 sites suitable for retail development within its UGB, overwhelmingly concentrated in parcels sized three acres or less. It should be underscored that Hillsboro presently has nearly no developable sites suitable for commercial center development over the planning period, namely sites greater than three acres in size.
- *Sites Needed Reconciliation:* Given documented site demand and existing inventory, Hillsboro will require anywhere from 234 to 531 retail commercial sites of all suitable retail sizes over the planning period. Hillsboro has absolutely no retail commercial sites suitable for larger centers ("Large" – 20+ acres) and presently has only one, eight-acre site to serve medium-sized need through 2035. Hillsboro has significant undersupply in all retail commercial categories, and is arguably more undersupplied in retail commercial need than the other primary employment land categories.

MEMORANDUM

DATE: January 25, 2010

TO: Patrick Ribellia, Esq., Planning Director, CITY OF HILLSBORO

FROM: Bill Reid, Principal
JOHNSON REID, LLC

SUBJECT: Competitive Markets & Market Factor Approach to Large Industrial Site Provision

JOHNSON REID was retained by the City of Hillsboro to document the importance and need for large-site industrial "market choice" supply for successful economic development. The term "market choice" employed here is defined as the minimum site count or gross acreage of development-ready large industrial sites/parcels that ensure adequate choice for prospective industries and firms to consider for successful site selection and recruitment.

To this end, JOHNSON REID interviewed economic development professionals in a nationwide survey of market areas which have similar targeted industry recruitment to identify specific strategy and economic development policy underpinnings for other, competitive regions. The objective of this case study analysis is to understand the approach to land provision for economic development in other markets and how the availability or scarcity of large industrial sites impacts their business recruitment and marketability in business' location decisions.

In short, our findings reinforce the idea that the Portland metro area is basically unique in taking a detailed, micro-view of individual site need location, specific industry need planning, timing and land urbanization and development justification. Alternatively, nearly all markets that are frequently viewed as models or competitors, including North Carolina and Austin, Texas, regard large industrial site strategy as an issue of providing significant, prospective supply and choice based not on any study, best practice or empirical approach, but rather regional or jurisdictional economic goals and objectives and market/land owner coordination.

The sole exception, Seattle/King County, does not pursue larger manufacturers but focuses on research-based companies enabled, admittedly, by that market's unique feature of two high-profile research and development institutions: Fred Hutchison Cancer Research Center and the University of Washington.

We first provide an overview of consensus economic development and recruitment strategy among nationwide competitors with detailed summary of large industrial site supply approach. Consensus findings are followed by individual summaries of each competitive market area profiled.

CONSENSUS SUMMARY OF FINDINGS

Table 1 highlights the five market areas that were evaluated in our case study. These regions were selected to reflect similar livability characteristics, and represent regions that are known to compete with Hillsboro in the recruitment of Hillsboro's target industries, namely High-Tech manufacturing and Renewable Energy Manufacturing.

TABLE 1

Market Area
Austin, Texas
Albuquerque, New Mexico
Seattle, Washington
Raleigh-Durham, North Carolina
Colorado Springs, Colorado

Organization of Economic Development

For the most part, the approach to economic development, and particularly large sites and employer recruitment in our case study markets are similar. Typically, a market has a regional economic development lead, which most commonly is a private, non-profit Economic Development Corporation or a division of the regional Chambers of Commerce. The Economic Development Corporation is the lead in business recruitment and site location management, in coordination with local land brokers.

Localized jurisdictions typically get involved in the process of assembling incentive packages in coordination with respective state or other regional agencies. Our finding is that economic development is organized by this structure in part as a response to public economic development office restrictions on trade show travel, and other standard business recruitment expenses, as well as maintaining confidentiality of potential recruitment efforts.

Land Availability Strategy

Our finding is that competing market areas are faced with a far less rigorous land use planning process and that maintaining availability of sites is most commonly a function of market factors and physical land characteristics. While most regions have allocated resources to developing target industry identification strategies and strategies for local business development, we find that case study markets are neither faced with mandated site count minimums for adequate “choice” nor maximum restrictions on the number of sites in their inventory.

In other words, large industrial site scarcity is not an artificial product of regulatory environment and, when potential site supply is reduced, regional economic development policy seeks site supply replacement/refreshment to maintain sizeable supply stock, though “sizeable” varies from market to market. Availability of alternative locations in our case study, where physical land characteristics permitted, are seen as benefited by a diversity of marketable site alternatives.

When asked how this site marketability played into their success in recruiting large employers, the overwhelming consensus was ***significant***.

- According to Denis Houston, Director of Retention and Expansion for Albuquerque Economic Development Inc. "Having a diversity of sites is exceedingly important. At this stage in location selection, having the diversity [for firms] to shop multiple sites with different characteristics will "keep us in the game" as opposed to firms going elsewhere."
- This theme was echoed by Dave White, Executive Vice President of Marketing for Colorado Springs Economic Development Corp, "Site marketability and options are essential. The ability to offer a suitable site on a fast time frame is critical, without it you are not in the game."
- Conversely, Steve Gerritson, Business Development Manager for Enterprise Seattle expressed different approach with Seattle's limited physical land supply, "we're not really in the game for manufacturing. We don't have the sites... And what I do have does not pencil for those manufacturers." In the case of Seattle, education institutions and workforce that allows them to compete for research oriented firm were cited as strengths.

Land Availability

To demonstrate the issue of site availability and marketability in competing markets, on the following is a brief summary of respondents' estimate of their large industrial site inventory available.

Raleigh, North Carolina

- Raleigh has a site certification program at the state and county levels.
- Raleigh reported presently having industrial large, individual sites of 60, 66, and 130 acres.
- In addition, two “super sites” of 472 and 998 acres, respectively, were reported.
- Super sites are intended for much larger potential users, but can be subdivided as a park.

Albuquerque, New Mexico

- Albuquerque has more land available than any area in the case study.
- The majority of their land is concentrated around sites within two master planned areas, Mesa del Sol and SunCal.
- The first, Mesa del Sol, is among the largest master planned developments in the country covering nearly 20 square miles for employment and residential uses. The second master planned area is a SunCal project with an estimated 6,500 acres of combined employment and residential uses.
- Albuquerque Economic Development Inc. estimates they have between 8-10 parcels around 100 acres that are development-ready, or shovel-ready within 180 days, with an additional 2-3 vacant buildings in the 200,000 square foot range that have gotten attention as retrofits.

Colorado Springs, Colorado

- Colorado Springs has a significant amount of vacant land to the east of the City center. The Colorado Springs Economic Development Corp. estimates they have around 35 50-100 acre sites with roughly 20 development-ready.
- They recently made a push to identify potential sites with rail access, now well above 500 acres.

Seattle, Washington

- Representatives from Enterprise Seattle indicated they do not have a significant number of large sites, with "many" 20-30 acre sites but "few, if any" sites above 50 acres.
- They do not view this as problematic as economic development efforts in that market are focused on research-oriented firms that require smaller sites than manufacturers.

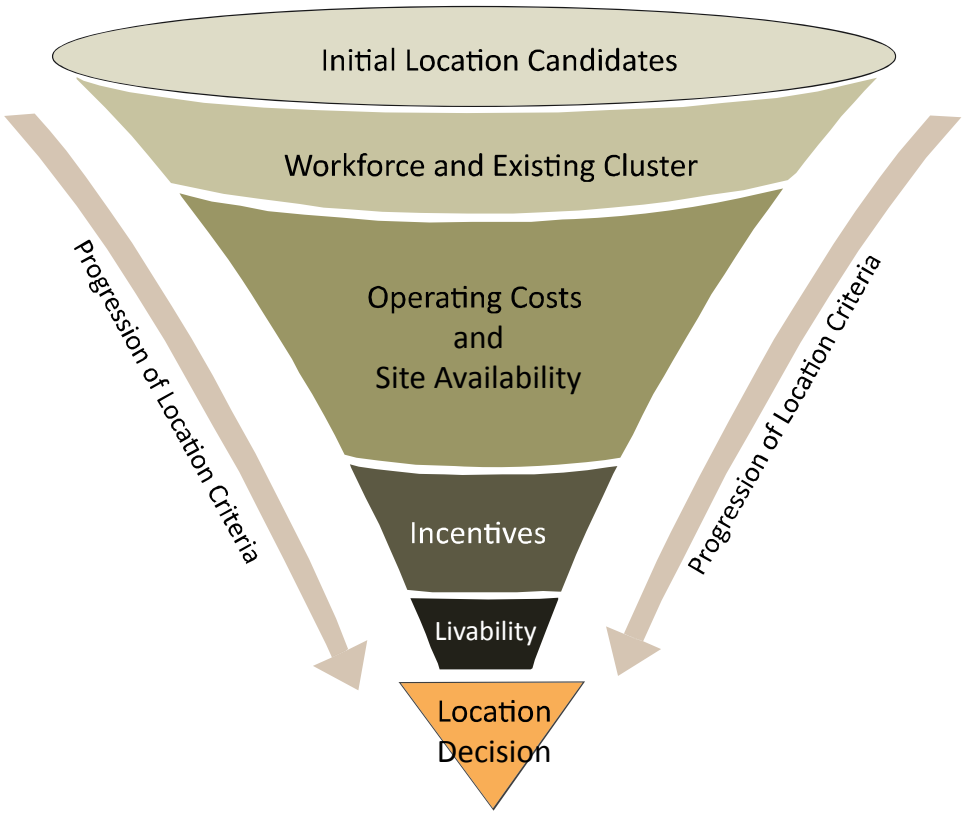
Austin, Texas

- Similar to Albuquerque, Austin has a significant amount of land available in master planned communities and various tech/industrial parks in production.
- Our survey of their inventory database found the equivalent of 520 acres available in their "featured property profile" including the Texas Clean Energy Park, a 140-acre park dedicated to the agglomeration of clean energy businesses.
- In the general database we identified well over 1,000 acres of large lot sites including 5-6 properties in the 100-to-185 acre range and a 315-acre super site.

Process of Location Selection and Criteria

During our case study interviews, a central theme emerged time and again that became a consensus view of how firms review sites in a market, select locations and where various selection criteria fall in the process. We have organized this process into the figure below.

FIGURE 1: BUSINESS LOCATION DECISION PROCESS



Initial Location Candidates

Firms begin with basket of potential locations based on their preliminary understanding of these and other location characteristics. Selection process frequently starts with 10-15 location "candidates". In other words, for particular industries or individual businesses, locations are "on the radar" because they are broadly known to have a mix or variety of favorable conditions.

Workforce & Industry Criteria

The first and most important selection criterion is the presence of an appropriately trained workforce and industry network for that firm. For some firms or industries, this could be the impact of a major educational institution, existing well-trained workforce, cluster of interrelated businesses or vendors, or most frequently a combination. Firms then eliminate location candidates that do not satisfy this basic criterion. This is often an internal process in the very preliminary phases of the site search process.

Operating Costs and Site Availability

After locations with suitable workforce and industry characteristics are established, firms begin to evaluate their cost of doing business at each location. This is the stage in the location process that economic development recruiters refer to when they are "in the game". Firms evaluate utility rates, standard wages, and tax structure,

among countless other factors. In this process firms begin to look for sites that that fit their operating needs. Large industrial sites are unique, and no site is ever "perfect". It is in this stage that case study respondents indicated that having sites is essential to progressing to the next stage of the process. As put by Adrienne Cole, Director of Raleigh Economic Development, "This is a game of not being eliminated. Having a choice of suitable sites keeps you in the game longer, gets you to the next stage."

Incentives & Livability

At this stage, firms have narrowed their candidates down to a small list of potential locations, and most likely have potential sites identified. It is here where a location's ability to provide financial incentives as necessary can win the decision. Tools available to some jurisdictions usually range from property tax incentives to credits for high wage job creation, to discretionary funds.

According to our case study respondents, livability of a community comes into play in this stage again in an “all else equal” preference situation. Effectively, all communities that were initially "on the radar" have a generally high livability standard that, in conjunction with all other criteria, got them on the radar in the first place. Livability typically factors again at the end of the process, in instances where other business-related factors remain roughly equal, such that decision makers' preference for a particular community quality of life may "break the tie."

INDIVIDUAL SUMMARIES

AUSTIN, TEXAS

- The Economic Development Lead is the Chamber of Commerce. The Chamber manages the site inventory and does initial recruiting. The City gets involved when the Chamber has a recruiting target that is interested in the region. The City will partner with the State to put together incentive packages as necessary.

- Targeted Industries include: Clean energy, bio-tech, corporate headquarters, digital media, (video) gaming, and nanotech. The City's primary competitive advantage is workforce. The combination of the University of Texas and an existing high-tech semiconductor cluster is the source. Otherwise cost of business and livability are factors.

- Austin sees itself competing largely with Raleigh and the Tennessee Valley, although nearly every other respondent noted Austin as a major competitor.

- There is no mandate or strategy in Austin requiring or limiting site availability. Zoning limitations on land in Austin were the most relaxed in the survey.

- The region focuses on workforce and infrastructure investment. The region has the most diverse set of incentive tools in the case study.

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AUSTIN CHAMBER OF COMMERCE
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ALBUQUERQUE, NEW MEXICO

- Industry recruitment efforts are driven by the private economic development corporation Albuquerque Economic Development. Public jurisdiction administrative restrictions on travel and other recruiting expenses indicate a private corporation approach to avoid such restrictions. The City gets involved in the process when putting together incentive plans and working with the state.

- Targeted Industries include: Film industry, renewable energy, and high-tech manufacturing. Their advantages are driven by the presence of National Laboratories in Los Alamos, Air Force, Department of Defense, and other federal research investments. The cluster has generated many private spin-offs and vendors related to government programs. Federal funding is a huge part of driving the cluster. They have three Science and Tech campuses. Otherwise they promote livability and favorable utility/tax rates relative to what they see as major market competitors in Phoenix and Denver. The New Mexico Governor even has a discretionary fund to strategically disburse targeted incentives.

- Albuquerque landed Schott Solar in 2008 which took required 80 acres.

- Albuquerque does not have a mandate or program for land inventory because land supply is ample. Much of the recruiting efforts are driven in the direction of two master planned sites, Mesa del Sol and SunCal.

- According to Albuquerque Economic Development Inc. having a diversity of sites is exceedingly important. They find that firms will begin shopping areas based on workforce criteria and operating costs, and then move into site characteristics. At this stage in site selection they find that having the diversity to shop multiple sites with different characteristics will "keep them in the game" as opposed to looking elsewhere with similar workforce, cost, and livability criteria.

- Albuquerque competes primarily with Austin, Salt Lake, Phoenix, and Oregon on high-tech.

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RALEIGH, NORTH CAROLINA

- "Raleigh Economic Development" is a division of the Chamber of Commerce that partners with the local jurisdictions and Wake County. They are the economic development lead in the market in charge of recruiting. They are contracted through the city to allow for better use of private and public funding pools and for confidentiality. The City and State become involved in the later incentive process.

- Targeted Industries include: Photonics, IT communication equipment, advanced medical care, corporate headquarters, bio-tech, video gaming and entertainment, renewable energy, nonwoven textiles, defense, and aeronautical engineering.

- The Raleigh 2030 Plan adopted in 2009 outlines the need to resist the conversion of large employment sites into residential and other uses. It has targeted areas of growth and encourages the certification of sites through either the State or the County site certification programs. While the region has goals to encourage economic development in target industries, the land use system does not set mandates or requirements on the number of particular sites that need to be available. The availability of land in the region has allowed the market to supply multiple marketing options.

- The recruitment process for them begins when firms start with a large number of potential locations on the basis of workforce, livability, etc. and then start to look at operating cost advantages to narrow the list. After the list of geographies is narrowed down, site availability and characteristics are weighed. According to Raleigh, this the critical point in the process where if site availability and selection is not available, recruitment potential is lost as firms keep moving through the candidates looking at incentives and comparing sites in other markets.

- Raleigh competes primarily with Austin, Tennessee Valley, Orlando, Charlotte, Richmond, and Atlanta but less so now than historically.

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COLORADO SPRINGS, COLORADO

- Economic Development is headed by the Colorado Springs Economic Development Corporation, a private non-profit contracted with the City. They cover a broad geographic area including the City of Pueblo. The city and state get involved in the incentive and development process.

- There are four primary industry targets in Colorado Springs: Aerospace/defense, IT and software, sports/health fitness/life sciences (includes medical devices), and renewable energy. They specifically target "primary employers" as defined by firms that export greater than 50% of their products or services.

- The catalyst for the community's workforce cluster is largely military and government-driven. Colorado Springs is proximate to many military bases and establishments, including NORAD. They have a number of local and state-level incentives at their disposal, including an enterprise zone and local performance-based funding based on job creation.

- However, they feel that they are not as competitive in incentives as New Mexico and Texas. Lower taxes are probably their biggest incentive. They are highly competitive for wind energy. Colorado Springs is preparing to make a major wind energy recruitment announcement.

- There is no regional policy that they are beholden to with respect to land inventory. The market adequately provides ample opportunities. For example, a number of years ago they were severely lacking adequate large sites with rail access and were losing some recruitment opportunities as a result. They went out into the market and started identifying sites and contacting land owners to meet that need. The process concluded with the assembly of a 500-acre subdividable parcel with strong location and rail service.

- Site marketability and options are essential. "You have to have the sites." It was noted that firms need to turn these sites around fast and moving dirt in six months. "The ability to offer a suitable site on a fast time frame is critical, without it you are not in the game."

- Land scarcity is not viewed to be an issue. They have an abundance of flat, prairie land to the east. They estimate they have the equivalent of roughly 35 50-to-100 acre sites, half of which are development ready/serviced. In addition, they have a number of large, vacant existing structures that they have found to be highly marketable for retrofits to renewable energy firms. Primarily, they have a vacated Intel Fab that can be delivered at a "fire sale" basis, which has gotten a lot of interest from solar firms recently.

- Primary markets they compete with are:
  For high-tech and renewable energy, Albuquerque, Austin, Phoenix, and Oregon
  For Corporate Headquarters, Denver, Austin, and Dallas
  For Data Centers, Omaha, Kansas City, and San Antonio

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SEATTLE, WASHINGTON

- Enterprise Seattle is a private non-profit economic development corporation. They are the regional economic development council in charge of recruiting and economic development in Seattle/King County. They work with the City and County economic development groups to place firms and businesses and grow existing businesses and industries in the region.

- Primary Target Industries include: bio-tech, renewable energy, aerospace, computer software. However, they are recruiting more research-oriented firms and not necessarily manufacturers.

- There is no formal strategy in the management of large lot inventory. They actually focus very little of their efforts in recruiting outside industries. He estimates they concentrate 70% to 80% efforts on local business development. They work with commercial brokers to be aware of the inventory of sites available in the region.

- They perceive themselves as having serious disadvantage nationally because Washington has a constitutional mandate that limits ability to produce incentive packages for business recruitment. This has played into their "grow organically" strategy.

- The Seattle region has very few sites in the 50-100 acre range. Actually, a 50-100 acre site would be "near impossible." 20 to 30-acre sites are achievable in marketable numbers. They are not really competing for large industrial users because they do not have the sites. For Seattle it is not only site size limitation but cost as well. He says large manufacturing oriented users are not looking at Seattle because they could not find sites on a functional cost basis. They shop more rural locations with cheaper available land and more favorable utility rates. Hillsboro, Austin, and Albuquerque were specifically identified as such examples.

- Primary markets they compete with are:
  For Bio-Tech: Chicago, Boston, New Jersey
  For Renewable Energy: Austin, San Diego, San Francisco
  Others: Portland, Las Vegas, Denver

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MEMORANDUM

DATE: September 29, 2009

TO: Patrick Ribellia, Esq., Planning Director, CITY OF HILLSBORO
Richard Meyer, Director of Development & Operations, CITY OF CORNELIUS
Jon Hollan, Community Development Director, CITY OF FOREST GROVE
Don Otterman, City Manager, City of NORTH PLAINS
Jim Hough, City Manager, City of BANKS

FROM: Bill Reid, Principal
JOHNSON REID, LLC

SUBJECT: Urban Growth Report Findings & Western Washington County Cluster Implications

JOHNSON REID has reviewed the September 15, 2009 Draft Urban Growth Report ("UGR"). With the Oregon Land Conservation & Development Commission ("LCDC") visiting Hillsboro to study urban land use issues, we specifically reviewed the UGR to understand any continued discrepancies between it and Hillsboro and the West Washington County Economic Opportunities Analyses ("EOAs") and resulting land need estimates. The West County Partners are particularly concerned about industry cluster opportunity cost should land be under-provided over the planning periods discussed. The focus of this memorandum, then, is a review of the UGR with specific focus on following UGR appendices which provide detailed analytical findings pertinent to west County's economic future:

- Appendix 3: Industry Cluster Forecast; and
- Appendix 4: Large employer/large lot analysis

Cluster Analysis Inconsistencies Between the UGR and West County EOAs

In the Draft UGR, Metro has added a formal industry cluster analysis apparently based on its broader trend economic forecasts. Figure 1 provides a contrast between the EOA industry cluster Medium and High Growth scenarios and the Metro Cluster analysis (Appendix 3) High Growth Scenario.

Based on the comparison and review of the Appendix 3 Industry Cluster Forecast, JOHNSON REID has strong concerns about the adequacy of the current analysis in indicating employment growth in the key, emerging Solar industry cluster.

- On Page A3-1, Metro attributes SolarWorld – photovoltaic ("PV") solar panel manufacturer – to the electric power generation, transmission, and distribution sector. This is a potentially serious problem in Metro's analysis that is worth revisiting, as SolarWorld manufactures silicon-based photo cell panels and is not actually in the business of power generation and transmission, i.e. a utility.
- SolarWorld and other PV panel manufacturers, as documented in the west County jurisdictions' EOA studies, are actually in the same industry classification as silicon-based microprocessor production like Intel and others prevalent in Washington County (NAICS 334).
- According to Metro's documented methodology, that would put SolarWorld and other future manufacturers in the "Advanced manufacturing" cluster as categorized by the Portland Development Commission.

Figure 1 on the following page provides a comparison of west Washington County key cluster growth through 2035 with analogous cluster growth estimate by Metro in Appendix 3.

By 2030, Metro anticipates the Advanced manufacturing cluster (definition analogous to the Existing High-Tech cluster in the Hillsboro area) to add roughly 8,900 jobs metro area-wide under its High growth scenario. In contrast, the west County EOAs estimates that existing High-Tech in west County can be expected to add between 6,100 and 24,700 jobs by 2035. Although we view Metro's estimate conservative, their number can be viewed as consistent with the slower cluster growth estimate for west County as the cluster and what remains of available land are greatly located in the vicinity of Hillsboro.

FIGURE 1: WEST COUNTY CLUSTER GROWTH COMPARISON, EOA & METRO UGR

	Hillsboro EOA New Jobs to 2035		Metro UGR 2030 New Jobs
Hillsboro Cluster	**Medium Growth**	**High Growth**	**Metro UGB (High)**
Solar			
Primary Manufacturing	5,477	8,849	
Induced Manufacturing	2,028	3,265	See Existing
Induced Other Activity	2,713	4,360	High-Tech
Subtotal	*10,218*	*16,474*	
Bio-Tech			
Primary Manufacture	262	876	
Induced Manufacture	96	321	
Induced Other Activity	128	428	
Subtotal	*486*	*1,625*	~3,800
Existing High-Tech			
Primary; Manufacture	1,754	7,044	
Induced Manufacture	752	3,019	
Induced Other Activity	3,633	14,592	
Subtotal	*6,139*	*24,655*	~8,900

SOURCE: City of Hillsboro EOA & Metro Draft 2009-2030 Urban Growth Report

Based on review, we would recommend discussions with Metro to revisit the apparent absence of Solar manufacturing from its cluster analysis in coordination with West Washington County jurisdictions. By Metro's own description, Solar should be included in their Advanced materials job forecast (NAICS 334), but presently it is not.

Interviews with solar firms, industry experts, Business Oregon, and examination of numerous national green/clean energy industry studies – along with a formal forecast methodology we developed with the assistance of the Oregon Department of Energy – all conducted by JOHNSON REID indicate that west County should see anywhere from a total of 10,200 to 16,474 Solar cluster jobs. Those would include the Solar firms themselves (Primary), supply and parts manufacturing vendors (Induced Manufacturing), and all other service, wholesaling, etc. commerce that would be generated as well and locate in west County (Induced Other Activity).

Recommendations by Metro regarding land need and UGB sufficiency currently appear to under-appreciate the growth potential of Solar manufacturing in western Washington County and Portland metro region-wide. SolarWorld is already building North America's largest solar panel manufacturing facility. And as the west County EOA analyses indicate, the Solar energy cluster can exceed 54,000 jobs metro area wide based on

Oregon Department of Energy solar megawatt capacity expectations. There is, then, an opportunity for west Washington County jurisdictions to share information with Metro to refine understanding of the Solar PV industry.

However, until the Solar PV manufacturing industry and emerging cluster is better accounted in Metro's analysis, there is a significant lost economic opportunity for west Washington County, as well as for regional and State efforts to attract and grow clean energy industry in terms of land demand and provision for that emerging cluster.

Large Lot Demand Inconsistencies Between the UGR and the West County EOAs

In the Draft UGR, Metro has conducted additional analysis of large parcel/lot demand resulting from 20-year economic growth. Despite these refinements, and until the Solar manufacturing cluster is discussed further, we caution that there is underestimate of large parcel demand in the current, Draft UGR. Additional consideration by Metro of the issue will likely resolve discrepancies in west County and Metro analyses.

Despite that, however, we would urge west County jurisdictions to further coordinate with Metro regarding some additional refinements that will benefit land need modeling. In general, current Metro large lot methodology does the following:

- Translates industry job growth forecasts into a distribution of firms by size.
- Translates firms by size into likely land use categories by size.
- Translates firms by land category into a distribution of single/aggregated parcel demand.
- Metro then matches demand for large parcels based on firm sizes to the metro *region-wide* supply of parcels sized 20 acres or greater.

Although the analysis is a welcome addition to the UGR, JOHNSON REID recommends that additional consideration be provided from the perspective of industry/cluster need characteristics rather than a ledger-type comparison of firms by size and parcels by size, all else equal. Although ultimately parcel need is the topic in question for employers, different industry clusters have very different and varied location, infrastructure and workforce needs that in many cases are more important than purely parcel size itself. Following is a review of primary issues that merit additional consideration when considering demand and supply of parcels region-wide.

- Geology and physical characteristics: Low-slope and seismic stability are crucial for many types of industries, as well as avoidance of engineering and financial risk of infill/brownfields.
- Utility needs: High-capacity and redundant power and high-quality water are two of many crucial needs of different cluster employers. Absence of these will in many instances negate the possibility of an employer siting at a parcel, no matter how well-suited it is in other qualities.
- Workforce location: Creative cluster employers (Apparel, Software, etc.) will likely prefer being closer to creative population centers in Portland for instance, just as high-tech manufacturers will prefer to be closer to scientifically-trained workforce.
- Cluster location: Larger cluster employers, by definition of a cluster, will seek to physically be located to benefit from proximity of firm customer/vendor networks, labor force networks, and other synergistic connections., vendor/service location.
- Permitting/Municipal Experience: For clusters with more high-tech aspects, and therefore very dynamic facility growth plans, it is crucial for sites to be located in jurisdictions with experience to provide flexible, on-time project review and permitting process. Delays and changes can cost millions of dollars for high-tech employers.

All of these factors are well documented and specific to each cluster in different State and regional studies, including the West County EOAs. We would encourage west County jurisdictions to partner with Metro to better account industry land needs by cluster rather than the current, more ledger-style UGR approach.

For many employers, each of the above site qualities – in addition to parcel size alone – amount to a "must have" for location and growth. Without most of the above qualities ensured, firms will not consider a site no matter how perfectly sized it is. In other words, a more elaborate discussion of large parcel need by cluster industries is merited in the UGR. Without such analysis, many parcels currently considered adequate based largely on size are likely not suitable at all. This reinforces comments made in UGR focus groups to the effect of firms increasingly having to look outside of the metro area for sites over 20 acres – a reflection of industry/firm needs, not purely site size.

General Inconsistencies Between the UGR and West County EOAs

Finally, it is important to note how fundamentally the UGR and the west County EOA analyses differ in overall approach. The UGR is an assessment of long-term land use patterns and needs based on regionally-identified and adopted land use policies preferences, existing and future policy tools and investments to facilitate land use efficiency aspirations, and resulting urbanized land need based on land use policy preferences. Like the west County EOAs, UGR land need estimates are based on employment growth forecasts. Unlike the EOAs, employment growth as forecast by Metro is highly based on national trend and regional trend since 2002. This has the following broad implications:

- 2002 to 2006 marked lack-luster growth in the region's high-tech sector compared to well-documented industry growth in the 1990s. In other words, the Hillsboro area specifically is capable of growing far faster than purely trend forecast would indicate, particularly informed by 2002-2008 or 2008. This is already being evidenced by the fact that SolarWorld's facility is the largest of its kind in North America.
- The Metro forecast is highly informed by the Global Insight's proprietary national economic forecast. Accordingly, the resulting Portland metro area forecast for key manufacturing sectors are informed by national manufacturing trends, which for more than two decades have generally been declining. However, as is obvious in Washington County, high-tech manufacturing industry employment if planned and nurtured can both grow dramatically and highly contrary to national industry trends over the long-haul.
- The Metro UGR never considered lands north of the existing West Washington County UGB as candidate expansion areas for employment growth, modeling, and employment land capacity study (Appendix 2: Documentation of Metroscope Scenario Assumptions). This is important, as the EOAs documented from numerous industry and cluster interviews that the Hillsboro vicinity and Gresham areas are the only two specific submarkets in the Portland metro area that are suitable for existing and critical water and electricity infrastructure, workforce, and access for the vast majority of high-tech manufacturing growth prospects, particularly solar and likely biotech for at least the 20-year planning horizon. Therefore, the attribution of high-tech manufacturing industry growth to locate outside of these two specific geographies should be reconsidered.

The bottom line to these general differences is the following: Western Washington County jurisdictions examined economic opportunities from the "bottom up," i.e. detailed examination of industry growth and need potential unique to the existing and emerging high-tech firms among others. By comparison, the Metro UGR relies on national and regional trend economic analysis, an econometric model shaped by policy preferences, and mathematically-derived growth capture factors further shaped by candidate urban expansion areas, or a "top down" approach. The UGR process did include outreach to industries with focus groups, but the emphasis of those meetings was more on built environment trends for different uses. This contrasts with industry cluster growth potential, unique industry needs, economic development recruitment

priorities, and other issues that the west County EOA process did cover. There is accordingly an opportunity for information gathered during the west County EOA process to assist Metro with its approach to key regional industries.

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

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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

[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
Planning Director

_____

Alwin Turiel, AICP
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

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

MEMORANDUM

DATE: March 5, 2009

TO: Pat Ribellia, Hillsboro Director of Planning
Jon Hollan, Forest Grove Community Development Director
Richard Meyer, Cornelius Development & Operations Director
Don Otterman, North Plains City Manager
Jim Hough, Banks City Manager

FROM: Bill Reid, Principal
JOHNSON REID, LLC

SUBJECT: Long-Term Economic Development & Land Need Coordination Opportunity

This memorandum is intended as a guiding document for the five Cities of Hillsboro, Forest Grove, Cornelius, North Plains, and Banks in considering economic development and employment land provision opportunities as a distinct subregion of the Portland metro area economy.

City of Hillsboro Land Demand & Broad Strategy Response

Long-term employment land need has been estimated for each of the above cities individually, i.e. assuming each city operates in isolation of one another. Resulting forecasts have been labeled "Organic" growth scenarios implying how each jurisdiction may grow on its own given existing and future industries and individual competitive advantages of each city. However, during the course of work for City of Hillsboro Economic Opportunities Analysis, it has been found that Hillsboro's long-term growth potential significantly exceeds its ability to provide sufficient land of the sizes and types that targeted high-tech clusters will require over a twenty-year and fifty-year period.

The primary implication is that Hillsboro has decided that it will focus its economic development efforts, and resulting industrial land provision, targeting "cluster anchor" industrial users, or those that generally require large industrial parcels, i.e. 90-100 or more acres each. Hillsboro's infrastructure, physical qualities of industrial lands, technical expertise and existing cluster of high-tech firms have provided it with a competitive advantage in recruiting such users vis-à-vis elsewhere across North America.

In doing so, however, the City of Hillsboro will require greater economic development and employment land coordination with its neighbor cities in Western Washington County. Although large users may choose to site in Hillsboro, a wide array of industrial site types less than 100 acres in size will be demanded across the planning horizon by the various types of "ripple effect" job growth resulting from the attraction of a cluster anchor. These include vendors, service providers, competitors, and customers who may require anywhere from an individual five-acre facility to a 60-acre flex space business park of various engineering, light manufacturing and research uses.

Without the provision of industrial acreage in more moderate parcel and site sizes by the partner cities in Western Washington County, larger high-tech cluster industrial recruitment in general may likely be compromised. The well-documented multiplier effects and dependent cluster of firms and sectors supporting and supported by new high-tech anchors will not be able to grow within a land-constrained Hillsboro over the long-term and must seek proximate industrial sites in nearby cities.

HIGH-TECH INDUSTRY GROWTH THROUGH 2035

Figure 1 below provides a comparison of the three primary economic growth scenarios estimated for the City of Hillsboro through 2035. In total, targeted industries and resulting achievable growth trajectories indicate Hillsboro could see demand for industrial land ranging from 1,600 acres to as high as 3,560 acres through 2035. Estimates reflect total demand potential, regardless of ability to site growth or existing capacity within the existing Hillsboro UGB.

FIGURE 1: HILLSBORO URBAN AREA EMPLOYMENT LAND DEMAND (GROSS BUILDABLE ACRES 2008-2035)

Use Type	Demand For Land (Acres) By Scenario: Baseline Growth	High Growth	Medium Growth	UGB Request (Approx.)
OFFICE COMMERCIAL	**421.9**	**1,383.6**	**1,093.4**	
INDUSTRIAL	**1,601.4**	**3,558.6**	**2,583.9**	**1,200.0**
RETAIL COMMERCIAL	**1,169.9**	**2,296.5**	**1,965.0**	
CITY RESIDENTS	1,037.0	2,035.5	1,741.7	
REGION/TOURISTS 1/	132.9	261.0	223.3	
OVERNIGHT LODGING	**22.6**	**35.8**	**29.6**	
SPECIALIZED USES 2/	**537.4**	**749.1**	**651.4**	
TOTAL	***3,753.2***	***8,023.6***	***6,323.3***	***1,200.0***

1/ Based on current ratios between locally supported and total sales, CE Survey from the BLS and Census of Retail Trade.

2/ Hospitals, Clinics, etc. for employment not otherwise categorized.

Figure 1 also demonstrates that the City of Hillsboro has identified the additional quantity of industrial acreage it will pursue for its cluster anchor strategy of economic development, specifically 1,200 acres for growth through 2035.

In total, anywhere from 400 to 2,360 acres of industrial demand in support of high tech cluster anchor growth will be required through 2035 with a strong preference for proximity to the City of Hillsboro. Accordingly, findings suggest that a coordinated "Five Cities" will be crucial for attracting and retaining not only the anticipated 1,200 acres of industry cluster anchor growth, but up to nearly 2,400 acres of additional ancillary industrial growth associated with high-tech industry expansion in Western Washington County.

HIGH-TECH INDUSTRY GROWTH THROUGH 2060

Over the urban reserves planning horizon through 2060, land demand analysis suggests that inter-jurisdictional coordination will be even more crucial to overall high-tech industry retention and expansion in Western Washington County. Figure 2 on the following page provides a similar comparison of employment land demand potential in the City of Hillsboro along with the quantity of industrial land the City of Hillsboro seeks for urban reserves over the 2060 planning horizon for high-tech cluster anchors.

The City of Hillsboro presently plans to seek up to 3,500 gross acres in urban reserves, inclusive of the 1,200 UGB request displayed in Figure 1, to strategically target high-tech industrial cluster anchors typically requiring sites 100 acres or greater in size. In contrast, industry growth demand could reach as high as 15,000 gross acres of industrial land by 2060 assuming maximum potential success in growing targeted industries.

FIGURE 2: HILLSBORO URBAN AREA EMPLOYMENT LAND DEMAND (GROSS BUILDABLE ACRES 2008-2060)

Use Type	Need For Land (Acres) By Scenario: Baseline Growth	High Growth	Medium Growth	Urb. Reserve Request (Approx.)
OFFICE COMMERCIAL	**1,728.5**	**4,979.1**	**3,077.9**	
INDUSTRIAL	**4,476.3**	**15,054.9**	**8,704.5**	**3,500.0**
RETAIL COMMERCIAL	**2,970.4**	**6,225.4**	**4,698.2**	
CITY RESIDENTS	2,632.9	5,518.0	4,164.3	
REGION/TOURISTS 1/	337.5	707.4	533.9	
OVERNIGHT LODGING	**48.3**	**117.8**	**82.9**	
SPECIALIZED USES 2/	**1,657.1**	**2,309.8**	**2,008.6**	
TOTAL	***10,880.6***	***28,687.1***	***18,572.0***	***3,500.0***

1/ Based on current ratios between locally supported and total sales, CE Survey from the BLS and Census of Retail Trade.
2/ Hospitals, Clinics, etc. for employment not otherwise categorized.

Because Hillsboro strategy is to target larger users based on its identified competitive advantage, overall success in fostering economic growth will greatly depend upon the availability of additional industrial land, in a wide array of site sizes, suitable for the various types of "ripple effect" economic growth associated with the presence of larger users and their industrial synergy. We find the need for such a strategy even more crucial over the 2060 planning period as the discrepancy between planned new supply and potential demand is very significant.

NEXT STEPS

It is the understanding of JOHNSON REID that the Five Cities have expressed interest in a coordinated approach to employment land provision and economic development initiatives in Western Washington County based on individual and joint Economic Opportunities Analysis findings. We would recommend the following in response:

- A multi-city work session(s) to identify which city, where and when will best provide different types of industrial land in a coordinated economic development approach *above and beyond* the individual "organic" growth potential of each city; and
- City endorsement of a coordinated employment land provision plan for the 2035 and 2060 planning horizons for UGB and urban reserve planning purposes.

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Metro | *Memo*

Date: May 5, 2010

To: MPAC

From: MPAC employment subcommittee:
Robin McArthur, Metro, Chair of Subcommittee
Mayor Shane Bemis, City of Gresham, Chair of MPAC
Mayor Sam Adams, City of Portland
Mayor Denny Doyle, City of Beaverton
Councilor Carl Hosticka, Metro
Councilor Rod Park, Metro
Mayor Jerry Willey, City of Hillsboro
Richard Whitman, Director of DLCD
Charlie Allcock, PGE
Gary Barth, Clackamas County
Steve Dotterer and Bob Clay, City of Portland
Susie Lahsene, Port of Portland
Steve Peterson, CH2M Hill
Patrick Quinton, PDC
Pat Ribellia, City of Hillsboro
Doug Rux, City of Tualatin
Mike Wells, Cresa Partners; Mark Clemons, Group Mackenzie

Re: Final report to MPAC on addressing large-industrial-site demand

Background:

Attracting and retaining traded-sector industrial companies is critical to the region's economic prosperity. Traded-sector companies sell goods to buyers outside of the Metro region, bringing additional wealth into the region. The 2009 Urban Growth Report (UGR) identified demand for an additional 200 to 1,500 acres in large lot configurations (more than 50 buildable acres in a single site) for traded-sector industrial uses. The MPAC employment subcommittee was formed to consider how the growth management decisions that will be made in December 2010 can address large lot demand and help the region to achieve its desired outcomes.

The subcommittee's recommendations to MPAC include short-term and long-term strategies, which are elaborated on in the body of this memo:

Short-term strategies for providing large sites

- Strengthen Title 4 of the Urban Growth Management Functional Plan to protect against specific conflicting uses (parks, schools, churches) in Regionally Significant Industrial Areas
- Create a large-site-metering system
- When making a growth management decision in 2010, consider factors such as the current trend in unemployment rates, the employment forecast, the need for site choices, and the region's history of developing large lots added to the UGB.

Long-term strategies for providing large sites

- Pursue new infrastructure funding strategies to make sites development-ready
- Elevate brownfield cleanup to a regional priority
- Require concept planning of urban reserves before UGB expansion
- Revamp Title 4 of the Urban Growth Management Functional Plan to recognize blurry boundaries between employment uses
- Explore the concept of large-lot industrial tax deferral

This memo is organized under two broad themes:

- Recommendations for large sites already inside the UGB
- Recommendations if UGB expansions are made to provide additional large sites

Subcommittee recommendations for large sites already inside the UGB

1. **Strive to make the region's large lot inventory development-ready:**

   An inventory of vacant sites is, alone, inadequate for attracting traded-sector industrial employers. The region should have a goal to increase its supply of development-ready sites. This would better align local and regional efforts with Statewide Planning Goal 9 (Economic Development), which calls for maintaining a competitive short-term supply of land for employment uses. Multiple public and private entities must collaborate to achieve a goal of making a site development ready within 180 days of approval of a development application. Infrastructure must be available, zoning must be adopted, and the site must be annexed into a city. The actions recommended in this memo would help to increase the number of development-ready sites in the region.

2. **Protect unique industrial areas from conflicting uses:**

   Regulations are essential for protecting large industrial sites from conversion to non-industrial uses. However, there is a need to tailor land use regulations and other strategies to achieve a better balance of public and private sector benefits and burdens. The subcommittee recommends further work on two possible options:

   Balance public and private interests with a large-lot industrial tax deferral program

   Oregon's farm use tax assessment program could serve as a model for tax assessment of large, vacant industrial sites. Under the farm use assessment system, lands kept in active farm use are assessed at a lower rate through use of a tax deferral. The subcommittee recommends Metro staff research the feasibility of an industrial tax deferral program. Such a system could offset the

use restrictions placed on these sites as they await industrial development. The program would also seek to ensure that public infrastructure investments serve their intended purpose (to serve future industrial areas). Depending on the circumstances, market-rate back taxes could be collected on properties that get used or rezoned for non-industrial purposes.

The subcommittee recommends further exploration of the applicability of this concept for large, vacant industrial sites. Because this type of program would require legislative changes, it is a longer-term recommendation.

Issues for further discussion regarding a large lot tax deferral system

1. How much foregone tax revenue would such a system entail? Are there other funding mechanisms that could limit the fiscal impacts to cities if this program were instituted?
2. What are the financial incentives and disincentives that would need to be created in order for the program to work? For example, what level of back taxes may need to be incurred to discourage conversion of industrial land to non-industrial uses?
3. Is there a way to use this type of program as an incentive to encourage lot assembly?
4. What legislative changes would be necessary and how likely is it that efforts to change the law would be successful?

Focus Title 4 of the Urban Growth Management Functional Plan on protecting Regionally Significant Industrial Areas

Title 4 of the Urban Growth Management Functional Plan seeks to provide and protect a supply of sites for employment by limiting the types and scale of non-industrial uses in Regionally Significant Industrial Areas, Industrial and Employment Areas.

In the short-term (before any UGB expansions are made in 2010), the subcommittee recommends that Title 4 be amended to prohibit new schools, places of assembly, recreation facilities and parks (with exceptions for habitat protection) in Regionally Significant Industrial Areas.

In the long-term (2011), the subcommittee recommends more significant changes to Title 4 and the Title 4 map. These changes would implement the recommendations of the 2004 Greater Metropolitan Employment Lands Study (GMELS). Generally, the proposed changes are:

- Work with jurisdictions in the region to identify key industrial sanctuaries with unique site characteristics or infrastructure facilities.
- Focus regulations on protecting the region's most important industrial areas and their associated public facilities (e.g. transportation facilities)
- Loosen regulations in other employment areas to allow for a wider range of uses that reflects the sometimes blurry lines between industrial and non-industrial uses

3. Prioritize brownfield cleanup as a strategy for increasing the region's supply of development-ready sites:

Some traded-sector industrial uses require large sites with marine or other specialized terminal access or, more generally, locations in existing urban areas. These needs cannot be accommodated through UGB expansions. However, some of the region's large industrial sites are contaminated. Brownfield cleanup will be essential in order to accommodate some priority sectors.

The subcommittee recommends that brownfield cleanup be elevated to a regional priority. Brownfield cleanup should be as much of a funding priority as paying for the infrastructure necessary to make greenfield sites development-ready. New sources of funding are needed for cleanup. Federal and State legislative changes are needed to reduce future property owner liabilities.

The subcommittee suggests identifying the large sites that are regional priorities for cleanup. This could be accomplished through the use of a tiered list of priority sites. The subcommittee also recommends documenting the potential cleanup costs for high-priority brownfield sites.

4. Pursue new infrastructure funding strategies to make sites development-ready:
Sites will not be development-ready if public facilities are not available. Existing infrastructure funding mechanisms are inadequate for ensuring the region's economic competitiveness. According to Metro's 2008 Regional Infrastructure Analysis, the estimated cost of building the public and private facilities needed to accommodate growth in jobs and housing in the three-county Portland region through 2035 is $27-41 billion. Traditional funding sources are expected to cover only about half that amount. Even if the region does not experience this projected growth, $10 billion is needed just to repair and rebuild our existing infrastructure. The subcommittee recommends that new collaborative funding strategies be explored at the local, regional, and state level.

Subcommittee recommendations if UGB expansions are made

5. Require concept planning of urban reserves before UGB expansion:

A critical step towards providing development-ready sites is to complete some level of concept planning for urban reserve areas. The intergovernmental agreements that were signed by Metro and the three counties on urban and rural reserves require that concept planning be completed. These concept plans[1] will provide more certainty for how an area will be developed, could be used to market sites to potential firms, and would provide the means for making UGB expansions that intentionally accomplish regional and community goals. Pre-expansion concept planning would be necessary to make the UGB metering process, summarized in recommendation six, function properly.

The subcommittee recommends that pre-UGB-expansion concept plans be specific enough to inform UGB expansion decisions, but not be overly-prescriptive such that they become immediately outdated or preclude some degree of flexibility with future land uses.

<u>Recommended contents of a concept plan for large lot industrial uses</u>
A pre-expansion concept plan for large lot industrial uses should describe the following.

1. The suitability of the site for particular industry sectors.
2. The general locations of the types of uses desired for the area.
3. The general locations of sewer, water and storm-water systems and transportation facilities, and a description of either connections of these systems to existing systems within the UGB or a description of how decentralized infrastructure systems may be

[1] Note - if UGB expansions are made in 2010, there will not be time for pre-expansion concept planning; this is a longer-term recommendation for future UGB expansion areas.

configured on site. These descriptions should include preliminary estimates of the costs to provide the facilities and services.

4. Natural features that will be subject to protection under Titles 3 and 13 of Metro's Urban Growth Management Functional Plan.
5. An understanding between or among the county, the city or cities that will provide any urban service to the area, and other service providers that determines which city, cities or special districts will be the eventual providers of urban services.
6. An understanding between or among the county and the city or cities that determines the city or cities that will have authority to annex the area, or portions of it, following addition to the UGB.
7. An evaluation of possibilities for the assembly of smaller taxlots.

Issues for further discussion regarding concept planning

The subcommittee recommends further discussion of the following issues regarding pre-UGB-expansion concept planning:

1. Who will pay for concept planning?
2. What level of plan specificity is appropriate?
3. Before UGB expansions are made, cities have a greater leverage to encourage cooperation amongst landowners to assemble larger sites for industrial uses. After UGB expansions are made, it is more likely that there will be landowners that will hold out for high sales prices. Because cities are unable to provide landowners with any certainty that their properties will be included in the UGB in the near term, devising a strategy for lot assembly before UGB expansions are made would be challenging. To address this challenge, the subcommittee proposes the following ideas for further consideration:
    a. Cities could enter into option agreements with landowners to assemble large sites.
    b. Service providers could withhold services to properties until a taxlot assembly plan or agreement is in place for a UGB expansion area.

6. Create a land-metering mechanism to maintain the region's inventory of large industrial sites:

Growth management decisions made in 2010 will provide an additional 200 to 1,500 acres in large site configurations. In order to ensure that the region maintains a supply of large industrial sites that is competitive with other regions, the MPAC employment subcommittee recommends the creation of a land-metering process that operates in the intervening years of the five-year growth management decision cycle.

With a land-metering mechanism, as large sites inside the UGB get developed, they would be replenished through fast-track UGB expansions or through an action that makes land inside the UGB available (e.g. taxlot assembly or brownfield cleanup[2])[3]. The Metro Council would return the region's large-site supply to its baseline target within a year of notification that ground has been broken on a large site.

[2] Standards need to be developed to determine whether a brownfield has been cleaned sufficiently to make it part of the large site inventory. An example of possible standards for brownfield cleanup are those that DEQ applies.

[3] To satisfy state law, before expanding the UGB, Metro would first need to determine whether efficiency measures can be taken.

Regional large-lot demand and supply would again be reassessed in the 2014 urban growth report, which would be the basis for a growth management decision in 2015. The large lot supply that results from those decisions would be the new baseline inventory inside the UGB to maintain through 2030. The metering process would again be used in those intervening years to maintain a competitive supply within the UGB.

Elements of large-site-metering mechanism

1. With the 2010 growth management decision, the Metro Council establishes a baseline target for the number of vacant, buildable large sites to be maintained inside the UGB.
2. Metro and local governments identify the urban reserves with potential to provide large sites once inside the UGB.
3. Metro and local governments monitor the large-site supply inside the UGB.
4. The Metro Council adopts a fast-track process for adding industrial land to the UGB from urban reserves.
5. When the supply drops below the target (large sites are no longer vacant or buildable), the Metro Council has one year to return the baseline supply of large sites to its target. This can be accomplished either through efficiency measures such as brownfield cleanup and taxlot assembly or through a UGB expansion. If the UGB is expanded, use the fast-track process between five-year capacity cycles, or the legislative process associated with the next cycle if the drop occurs within one year of the capacity analysis. In making UGB expansions, consider the efficient distribution of employment opportunities throughout the region.
6. The Metro Council reviews the target to adjust to market changes at each five-year capacity cycle.

7. **Aim to accommodate priority traded-sector industries when making growth management decisions:**

   A number of cities in the region have recently completed economic opportunity analyses (EOAs) that describe their economic development priorities[4]. These priorities include attracting several industries in traded sectors that have preferences for large lots. The specific site preferences of priority sectors listed in EOAs as well as the freight facilities that support those sectors should be a particular focus in upcoming growth management decisions.

8. **Location matters: policy considerations to guide where within the 200-to-1,500-acre range to plan:**

   Individual industry sectors and clusters have specific site size, transportation network, infrastructure, and labor needs. Efforts to attract firms in these sectors could be more successful if there are a variety of sites in a variety of locations from which to choose. When deciding where within the 200-to-1,500-acre range to plan, MPAC and the Metro Council should plan for a point in the range that provides future firms with adequate site choices.[5]

[4] Note – other sectors are also economic development priorities for cities in the region. This short list only includes traded-sector industries that have historically had a preference for large sites and that are mentioned in EOAs. Included are manufacturing (especially high-tech, solar, medical devices, and advanced manufacturing) and logistics, warehousing, and distribution (including marine and air terminal uses).

[5] If a land-metering process is adopted, as described in recommendation number six, it could reduce the risk of making more modest cyclical UGB expansions.

Examples of factors that influence demand and potential supply include:

- Current unemployment rates
- Employment forecast
- Potential adoption of a large-site-metering mechanism
- Potential adoption of additional protections for industrial areas
- Need for site choices to attract traded-sector firms and clusters
- History of development in past UGB expansion areas
- Current industrial building vacancy rates

MEMORANDUM

DATE: March 31, 2010

TO: Patrick Ribellia, Esq., Planning Director, CITY OF HILLSBORO
FROM: Bill Reid, Principal
JOHNSON REID, LLC

SUBJECT: West WashCo./Metro Region Competitive Large Industrial Site Supply

As the Regional Government considers new, large industrial site supply for urbanization, on behalf of the established high tech industry, the emerging silicon solar energy manufacturing industry cluster and the incubating bio-pharma industry cluster in West Washington County, the City of Hillsboro specifically seeks to provide a supply of large, development-ready sites that is competitive with other markets nationwide that strive to grow similar targeted industry clusters.

To understand what West WashCo (aka the "heart of the Silicon Forest" in Hillsboro) currently has in terms of large industrial site supply – *not necessarily 180-day development ready* – and what it should supply to maintain competitiveness, JOHNSON REID constructed the following summary table comparing:

- Current West WashCo. UGB large industrial site "buildable" supply ***contingent upon site assembly***;[1]
- West WashCo.'s total 20-Year Medium Growth demand for large sites; and
- Current, development-ready supply (180-day) marketed by the Region's identified competitors. We would underscore that competitors – Albuquerque and Austin – have each identified replacement industrial land supply exceeding a thousand acres according to officials interviewed.

Competitive	50-100 Acre Sites		100+ Acre Sites		50+ Acre Sites	
Market	Site Count	Acreage	Site Count	Acreage	Site Count	Acreage
Colorado Springs	20	1,500	5	500	**25**	**2,000**
Raleigh	2	126	12	1,470	**14**	**1,596**
Austin (Round Rock)	5	380	6	855	**11**	**1,235**
West WashCo. - Medium Demand (20 yr)	*4*	*310*	*7*	*904*	***11***	***1,214***
Albuquerque	3	225	9	900	**12**	**1,125**
West WashCo. - Current Buildable Supply	*3*	*162*	*3*	*369*	***6***	***531***

SOURCE: City of Hillsboro Vacant Lands Inventory (Dec. 2008), City of Hillsboro EOA (Mar. 2009), Johnson Reid (Feb. 2010)

- Within Hillsboro, the heart of the Silicon Forest now uncompetitively supplies 531 acres, or six 50+ acre vacant sites in total *contingent upon site assembly*, of which fewer than 400 acres are "site certified" or development-ready according to Business Oregon.
- **The Hillsboro Economic Opportunities Analyses estimated a large industrial site market demand for these 3 industry clusters of 1,214 acres over a twenty-year period**.[2] An available inventory of sites, that matches that market demand and reasonably development-ready, would place West WashCo "in the middle of the pack" compared to its most comparable competitors for silicon-based, high-tech manufacturing, Albuquerque and Austin.
- To be *truly* competitive, however, that inventory of sites would also have to be largely or completely development-ready for 180-day site location decisions by targeted industry clusters rather than simply "buildable."

During the course of research, it was also learned that a large solar employer was recently forced to locate in another state because current land price in West WashCo. for limited available supply was cost-inhibitive.

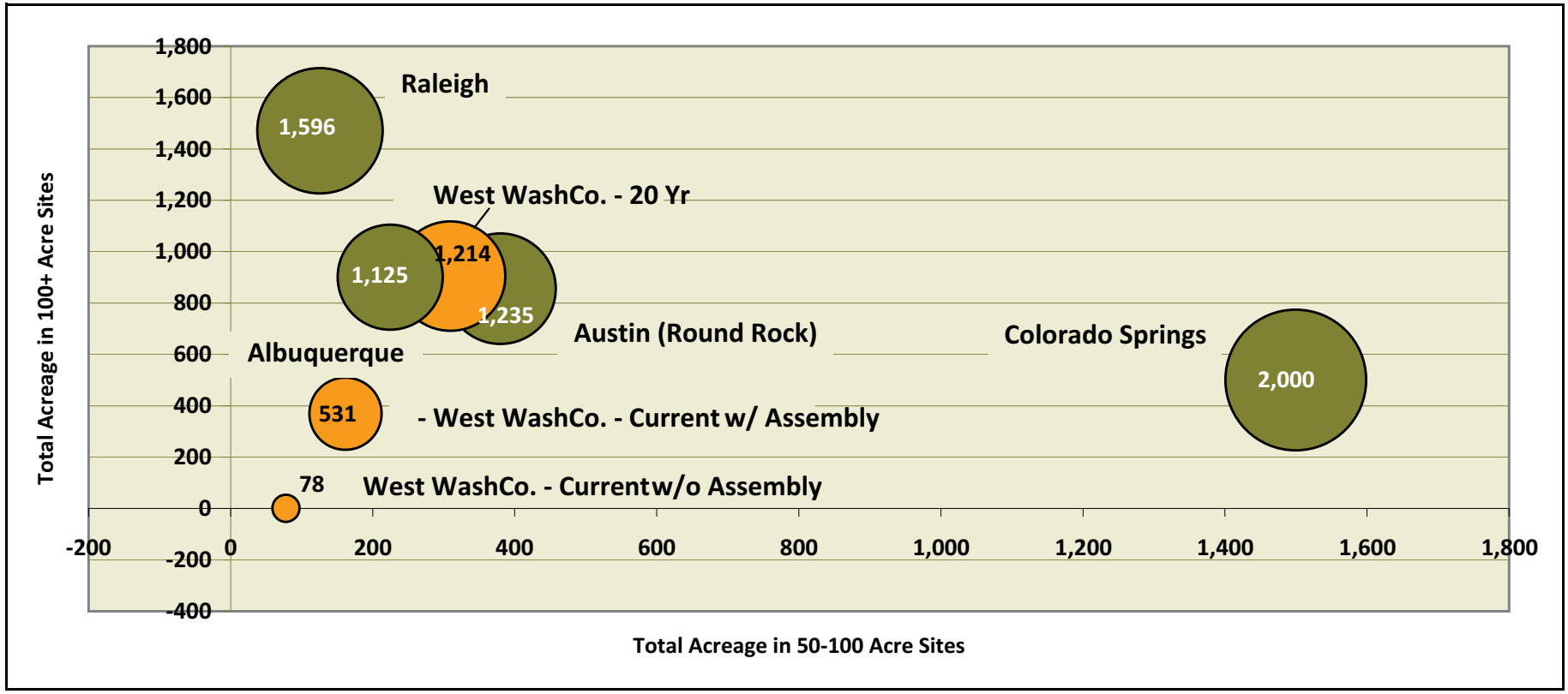
[1] The heart of the Silicon Forest in Hillsboro currently has only one 50-100 acre tax lot site (Nike Foundation site on Shute Road) and no single, 100+ acre tax lot site.
[2] Medium Growth Scenario, Hillsboro Economic Opportunities Analysis, Figures 27 and 28 (March 2009).

We therefore recommend the following for the heart of the Silicon Forest in Hillsboro to maximize competitiveness:

- Addition of at least 140 acres in single lot or easily-assembled 50-100 acre sites;
- Addition of at least 550 acres in single lot or easily-assembled 100+ acre sites;
- Rapid pursuit of site certification or "development-ready" status for as many sites as possible.
- Potential "clustering" of site supply in 300+ acre areas or flexible "supersites" to allow greater flexibility and competitiveness with the markets identified above, as well as Tennessee and other solar competitors.

West Washington County/ Portland Region
Large Industrial Site Competitiveness - Market Comparison

[High-Tech, Silicon Solar Manufacturing & Bio-Pharma Large Industrial Acreage]



MEMORANDUM

DATE: January 25, 2010

TO: Patrick Ribellia, Esq., Planning Director, CITY OF HILLSBORO

FROM: Bill Reid, Principal
JOHNSON REID, LLC

SUBJECT: Competitive Markets & Market Factor Approach to Large Industrial Site Provision

JOHNSON REID was retained by the City of Hillsboro to document the importance and need for large-site industrial "market choice" supply for successful economic development. The term "market choice" employed here is defined as the minimum site count or gross acreage of development-ready large industrial sites/parcels that ensure adequate choice for prospective industries and firms to consider for successful site selection and recruitment.

To this end, JOHNSON REID interviewed economic development professionals in a nationwide survey of market areas which have similar targeted industry recruitment to identify specific strategy and economic development policy underpinnings for other, competitive regions. The objective of this case study analysis is to understand the approach to land provision for economic development in other markets and how the availability or scarcity of large industrial sites impacts their business recruitment and marketability in business' location decisions.

In short, our findings reinforce the idea that the Portland metro area is basically unique in taking a detailed, micro-view of individual site need location, specific industry need planning, timing and land urbanization and development justification. Alternatively, nearly all markets that are frequently viewed as models or competitors, including North Carolina and Austin, Texas, regard large industrial site strategy as an issue of providing significant, prospective supply and choice based not on any study, best practice or empirical approach, but rather regional or jurisdictional economic goals and objectives and market/land owner coordination.

The sole exception, Seattle/King County, does not pursue larger manufacturers but focuses on research-based companies enabled, admittedly, by that market's unique feature of two high-profile research and development institutions: Fred Hutchison Cancer Research Center and the University of Washington.

We first provide an overview of consensus economic development and recruitment strategy among nationwide competitors with detailed summary of large industrial site supply approach. Consensus findings are followed by individual summaries of each competitive market area profiled.

CONSENSUS SUMMARY OF FINDINGS

Table 1 highlights the five market areas that were evaluated in our case study. These regions were selected to reflect similar livability characteristics, and represent regions that are known to compete with Hillsboro in the recruitment of Hillsboro's target industries, namely High-Tech manufacturing and Renewable Energy Manufacturing.

TABLE 1

Market Area
Austin, Texas
Albuquerque, New Mexico
Seattle, Washington
Raleigh-Durham, North Carolina
Colorado Springs, Colorado

Organization of Economic Development

For the most part, the approach to economic development, and particularly large sites and employer recruitment in our case study markets are similar. Typically, a market has a regional economic development lead, which most commonly is a private, non-profit Economic Development Corporation or a division of the regional Chambers of Commerce. The Economic Development Corporation is the lead in business recruitment and site location management, in coordination with local land brokers.

Localized jurisdictions typically get involved in the process of assembling incentive packages in coordination with respective state or other regional agencies. Our finding is that economic development is organized by this structure in part as a response to public economic development office restrictions on trade show travel, and other standard business recruitment expenses, as well as maintaining confidentiality of potential recruitment efforts.

Land Availability Strategy

Our finding is that competing market areas are faced with a far less rigorous land use planning process and that maintaining availability of sites is most commonly a function of market factors and physical land characteristics. While most regions have allocated resources to developing target industry identification strategies and strategies for local business development, we find that case study markets are neither faced with mandated site count minimums for adequate “choice” nor maximum restrictions on the number of sites in their inventory.

In other words, large industrial site scarcity is not an artificial product of regulatory environment and, when potential site supply is reduced, regional economic development policy seeks site supply replacement/refreshment to maintain sizeable supply stock, though “sizeable” varies from market to market. Availability of alternative locations in our case study, where physical land characteristics permitted, are seen as benefited by a diversity of marketable site alternatives.

When asked how this site marketability played into their success in recruiting large employers, the overwhelming consensus was ***significant***.

- According to Denis Houston, Director of Retention and Expansion for Albuquerque Economic Development Inc. "Having a diversity of sites is exceedingly important. At this stage in location selection, having the diversity [for firms] to shop multiple sites with different characteristics will "keep us in the game" as opposed to firms going elsewhere."
- This theme was echoed by Dave White, Executive Vice President of Marketing for Colorado Springs Economic Development Corp, "Site marketability and options are essential. The ability to offer a suitable site on a fast time frame is critical, without it you are not in the game."
- Conversely, Steve Gerritson, Business Development Manager for Enterprise Seattle expressed different approach with Seattle's limited physical land supply, "we're not really in the game for manufacturing. We don't have the sites... And what I do have does not pencil for those manufacturers." In the case of Seattle, education institutions and workforce that allows them to compete for research oriented firm were cited as strengths.

Land Availability

To demonstrate the issue of site availability and marketability in competing markets, on the following is a brief summary of respondents' estimate of their large industrial site inventory available.

Raleigh, North Carolina

- Raleigh has a site certification program at the state and county levels.
- Raleigh reported presently having industrial large, individual sites of 60, 66, and 130 acres.
- In addition, two “super sites” of 472 and 998 acres, respectively, were reported.
- Super sites are intended for much larger potential users, but can be subdivided as a park.

Albuquerque, New Mexico

- Albuquerque has more land available than any area in the case study.
- The majority of their land is concentrated around sites within two master planned areas, Mesa del Sol and SunCal.
- The first, Mesa del Sol, is among the largest master planned developments in the country covering nearly 20 square miles for employment and residential uses. The second master planned area is a SunCal project with an estimated 6,500 acres of combined employment and residential uses.
- Albuquerque Economic Development Inc. estimates they have between 8-10 parcels around 100 acres that are development-ready, or shovel-ready within 180 days, with an additional 2-3 vacant buildings in the 200,000 square foot range that have gotten attention as retrofits.

Colorado Springs, Colorado

- Colorado Springs has a significant amount of vacant land to the east of the City center. The Colorado Springs Economic Development Corp. estimates they have around 35 50-100 acre sites with roughly 20 development-ready.
- They recently made a push to identify potential sites with rail access, now well above 500 acres.

Seattle, Washington

- Representatives from Enterprise Seattle indicated they do not have a significant number of large sites, with "many" 20-30 acre sites but "few, if any" sites above 50 acres.
- They do not view this as problematic as economic development efforts in that market are focused on research-oriented firms that require smaller sites than manufacturers.

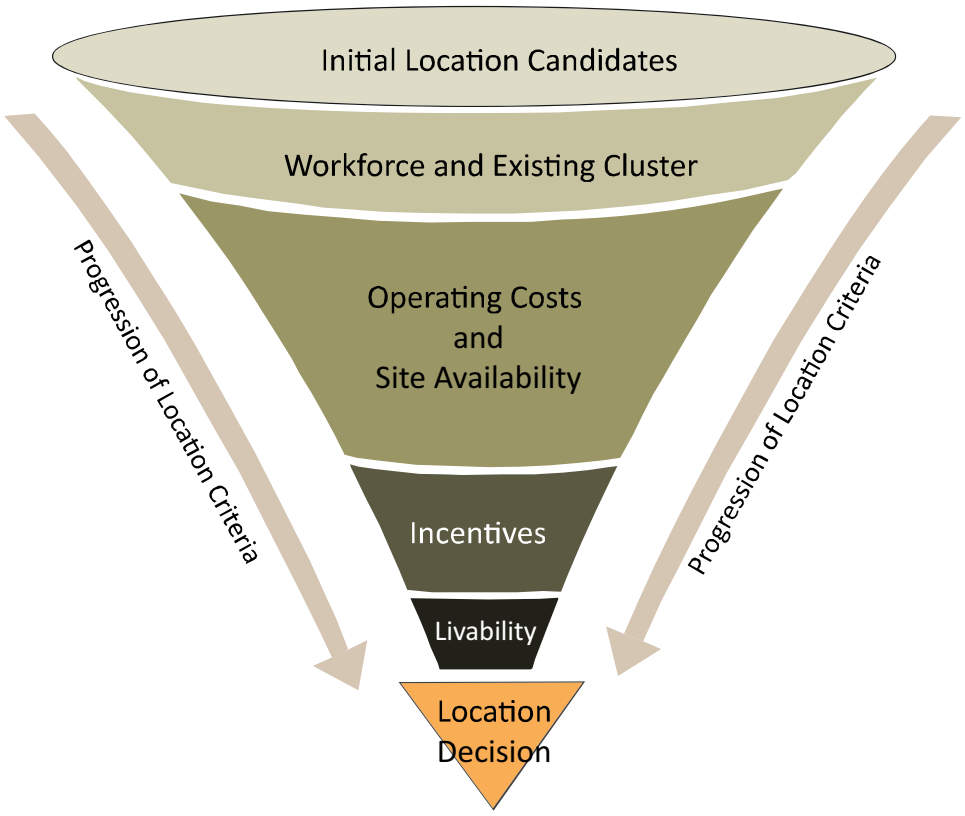
Austin, Texas

- Similar to Albuquerque, Austin has a significant amount of land available in master planned communities and various tech/industrial parks in production.
- Our survey of their inventory database found the equivalent of 520 acres available in their "featured property profile" including the Texas Clean Energy Park, a 140-acre park dedicated to the agglomeration of clean energy businesses.
- In the general database we identified well over 1,000 acres of large lot sites including 5-6 properties in the 100-to-185 acre range and a 315-acre super site.

Process of Location Selection and Criteria

During our case study interviews, a central theme emerged time and again that became a consensus view of how firms review sites in a market, select locations and where various selection criteria fall in the process. We have organized this process into the figure below.

FIGURE 1: BUSINESS LOCATION DECISION PROCESS



Initial Location Candidates

Firms begin with basket of potential locations based on their preliminary understanding of these and other location characteristics. Selection process frequently starts with 10-15 location "candidates". In other words, for particular industries or individual businesses, locations are "on the radar" because they are broadly known to have a mix or variety of favorable conditions.

Workforce & Industry Criteria

The first and most important selection criterion is the presence of an appropriately trained workforce and industry network for that firm. For some firms or industries, this could be the impact of a major educational institution, existing well-trained workforce, cluster of interrelated businesses or vendors, or most frequently a combination. Firms then eliminate location candidates that do not satisfy this basic criterion. This is often an internal process in the very preliminary phases of the site search process.

Operating Costs and Site Availability

After locations with suitable workforce and industry characteristics are established, firms begin to evaluate their cost of doing business at each location. This is the stage in the location process that economic development recruiters refer to when they are "in the game". Firms evaluate utility rates, standard wages, and tax structure,

among countless other factors. In this process firms begin to look for sites that that fit their operating needs. Large industrial sites are unique, and no site is ever "perfect". It is in this stage that case study respondents indicated that having sites is essential to progressing to the next stage of the process. As put by Adrienne Cole, Director of Raleigh Economic Development, "This is a game of not being eliminated. Having a choice of suitable sites keeps you in the game longer, gets you to the next stage."

Incentives & Livability

At this stage, firms have narrowed their candidates down to a small list of potential locations, and most likely have potential sites identified. It is here where a location's ability to provide financial incentives as necessary can win the decision. Tools available to some jurisdictions usually range from property tax incentives to credits for high wage job creation, to discretionary funds.

According to our case study respondents, livability of a community comes into play in this stage again in an “all else equal” preference situation. Effectively, all communities that were initially "on the radar" have a generally high livability standard that, in conjunction with all other criteria, got them on the radar in the first place. Livability typically factors again at the end of the process, in instances where other business-related factors remain roughly equal, such that decision makers' preference for a particular community quality of life may "break the tie."

INDIVIDUAL SUMMARIES

AUSTIN, TEXAS

- The Economic Development Lead is the Chamber of Commerce. The Chamber manages the site inventory and does initial recruiting. The City gets involved when the Chamber has a recruiting target that is interested in the region. The City will partner with the State to put together incentive packages as necessary.

- Targeted Industries include: Clean energy, bio-tech, corporate headquarters, digital media, (video) gaming, and nanotech. The City's primary competitive advantage is workforce. The combination of the University of Texas and an existing high-tech semiconductor cluster is the source. Otherwise cost of business and livability are factors.

- Austin sees itself competing largely with Raleigh and the Tennessee Valley, although nearly every other respondent noted Austin as a major competitor.

- There is no mandate or strategy in Austin requiring or limiting site availability. Zoning limitations on land in Austin were the most relaxed in the survey.

- The region focuses on workforce and infrastructure investment. The region has the most diverse set of incentive tools in the case study.

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AUSTIN CHAMBER OF COMMERCE
Dave Porter, Senior Vice President of Economic Development
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ALBUQUERQUE, NEW MEXICO

- Industry recruitment efforts are driven by the private economic development corporation Albuquerque Economic Development. Public jurisdiction administrative restrictions on travel and other recruiting expenses indicate a private corporation approach to avoid such restrictions. The City gets involved in the process when putting together incentive plans and working with the state.

- Targeted Industries include: Film industry, renewable energy, and high-tech manufacturing. Their advantages are driven by the presence of National Laboratories in Los Alamos, Air Force, Department of Defense, and other federal research investments. The cluster has generated many private spin-offs and vendors related to government programs. Federal funding is a huge part of driving the cluster. They have three Science and Tech campuses. Otherwise they promote livability and favorable utility/tax rates relative to what they see as major market competitors in Phoenix and Denver. The New Mexico Governor even has a discretionary fund to strategically disburse targeted incentives.

- Albuquerque landed Schott Solar in 2008 which took required 80 acres.

- Albuquerque does not have a mandate or program for land inventory because land supply is ample. Much of the recruiting efforts are driven in the direction of two master planned sites, Mesa del Sol and SunCal.

- According to Albuquerque Economic Development Inc. having a diversity of sites is exceedingly important. They find that firms will begin shopping areas based on workforce criteria and operating costs, and then move into site characteristics. At this stage in site selection they find that having the diversity to shop multiple sites with different characteristics will "keep them in the game" as opposed to looking elsewhere with similar workforce, cost, and livability criteria.

- Albuquerque competes primarily with Austin, Salt Lake, Phoenix, and Oregon on high-tech.

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ALBUQUERQUE ECONOMIC DEVELOPMENT INC.
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Bob Walton, Vice President of Business Development
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RALEIGH, NORTH CAROLINA

- "Raleigh Economic Development" is a division of the Chamber of Commerce that partners with the local jurisdictions and Wake County. They are the economic development lead in the market in charge of recruiting. They are contracted through the city to allow for better use of private and public funding pools and for confidentiality. The City and State become involved in the later incentive process.

- Targeted Industries include: Photonics, IT communication equipment, advanced medical care, corporate headquarters, bio-tech, video gaming and entertainment, renewable energy, nonwoven textiles, defense, and aeronautical engineering.

- The Raleigh 2030 Plan adopted in 2009 outlines the need to resist the conversion of large employment sites into residential and other uses. It has targeted areas of growth and encourages the certification of sites through either the State or the County site certification programs. While the region has goals to encourage economic development in target industries, the land use system does not set mandates or requirements on the number of particular sites that need to be available. The availability of land in the region has allowed the market to supply multiple marketing options.

- The recruitment process for them begins when firms start with a large number of potential locations on the basis of workforce, livability, etc. and then start to look at operating cost advantages to narrow the list. After the list of geographies is narrowed down, site availability and characteristics are weighed. According to Raleigh, this the critical point in the process where if site availability and selection is not available, recruitment potential is lost as firms keep moving through the candidates looking at incentives and comparing sites in other markets.

- Raleigh competes primarily with Austin, Tennessee Valley, Orlando, Charlotte, Richmond, and Atlanta but less so now than historically.

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COLORADO SPRINGS, COLORADO

- Economic Development is headed by the Colorado Springs Economic Development Corporation, a private non-profit contracted with the City. They cover a broad geographic area including the City of Pueblo. The city and state get involved in the incentive and development process.

- There are four primary industry targets in Colorado Springs: Aerospace/defense, IT and software, sports/health fitness/life sciences (includes medical devices), and renewable energy. They specifically target "primary employers" as defined by firms that export greater than 50% of their products or services.

- The catalyst for the community's workforce cluster is largely military and government-driven. Colorado Springs is proximate to many military bases and establishments, including NORAD. They have a number of local and state-level incentives at their disposal, including an enterprise zone and local performance-based funding based on job creation.

- However, they feel that they are not as competitive in incentives as New Mexico and Texas. Lower taxes are probably their biggest incentive. They are highly competitive for wind energy. Colorado Springs is preparing to make a major wind energy recruitment announcement.

- There is no regional policy that they are beholden to with respect to land inventory. The market adequately provides ample opportunities. For example, a number of years ago they were severely lacking adequate large sites with rail access and were losing some recruitment opportunities as a result. They went out into the market and started identifying sites and contacting land owners to meet that need. The process concluded with the assembly of a 500-acre subdividable parcel with strong location and rail service.

- Site marketability and options are essential. "You have to have the sites." It was noted that firms need to turn these sites around fast and moving dirt in six months. "The ability to offer a suitable site on a fast time frame is critical, without it you are not in the game."

- Land scarcity is not viewed to be an issue. They have an abundance of flat, prairie land to the east. They estimate they have the equivalent of roughly 35 50-to-100 acre sites, half of which are development ready/serviced. In addition, they have a number of large, vacant existing structures that they have found to be highly marketable for retrofits to renewable energy firms. Primarily, they have a vacated Intel Fab that can be delivered at a "fire sale" basis, which has gotten a lot of interest from solar firms recently.

- Primary markets they compete with are:
  For high-tech and renewable energy, Albuquerque, Austin, Phoenix, and Oregon
  For Corporate Headquarters, Denver, Austin, and Dallas
  For Data Centers, Omaha, Kansas City, and San Antonio

Contact:
COLORADO SPRINGS ECONOMIC DEVELOPMENT CORP.
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SEATTLE, WASHINGTON

- Enterprise Seattle is a private non-profit economic development corporation. They are the regional economic development council in charge of recruiting and economic development in Seattle/King County. They work with the City and County economic development groups to place firms and businesses and grow existing businesses and industries in the region.

- Primary Target Industries include: bio-tech, renewable energy, aerospace, computer software. However, they are recruiting more research-oriented firms and not necessarily manufacturers.

- There is no formal strategy in the management of large lot inventory. They actually focus very little of their efforts in recruiting outside industries. He estimates they concentrate 70% to 80% efforts on local business development. They work with commercial brokers to be aware of the inventory of sites available in the region.

- They perceive themselves as having serious disadvantage nationally because Washington has a constitutional mandate that limits ability to produce incentive packages for business recruitment. This has played into their "grow organically" strategy.

- The Seattle region has very few sites in the 50-100 acre range. Actually, a 50-100 acre site would be "near impossible." 20 to 30-acre sites are achievable in marketable numbers. They are not really competing for large industrial users because they do not have the sites. For Seattle it is not only site size limitation but cost as well. He says large manufacturing oriented users are not looking at Seattle because they could not find sites on a functional cost basis. They shop more rural locations with cheaper available land and more favorable utility rates. Hillsboro, Austin, and Albuquerque were specifically identified as such examples.

- Primary markets they compete with are:
  For Bio-Tech: Chicago, Boston, New Jersey
  For Renewable Energy: Austin, San Diego, San Francisco
  Others: Portland, Las Vegas, Denver

Contact:

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ENTERPRISE SEATTLE
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DRAFT

JOHNSON REID
LAND USE ECONOMICS

MEMORANDUM

DATE: July 10, 2009

TO: Malu Wilkinson, Metro
Joint MTAC / ECAC Committee

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

FROM: Bill Reid, Principal
JOHNSON REID, LLC

SUBJECT: Review of Metro's June 2009 Large Lot/Large Employer Analysis Addendum to the 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 June 2009 Preliminary Large Lot/Large Employer Analysis ("large lot analysis") in supplement to the May 2009 Employment Urban Growth Report. The large lot analysis is intended to remedy omitted consideration of large-parcel employment land demand and supply in the May 2009 Preliminary Urban Growth Report.

This memorandum is intended as a summary of JOHNSON REID's review of analytical documentation in the large lot analysis and resulting findings. In general, we find the large parcel employment land demand analysis to be a welcome remedy to a critical omission in the Preliminary UGR. However, broadly speaking we also find significant shortfalls in this preliminary analysis due to:

1. Extremely narrow definition of large parcel demand solely from "large employers"; and
2. Complete silence on the basic suitability of individual large parcel supply for the uses required through 2030, i.e. location, configuration, infrastructure, brownfield/constraints, industry clustering, and nearly every other detail except for sheer parcel size.

This memorandum is organized into three sections:

1. SUMMARY OF METRO LARGE LOT FINDINGS
2. DETAILED CRITICAL EVALUATION OF STUDY METHODOLOGY
3. EMPLOYMENT DEVELOPMENT FORM APPENDIX

SUMMARY OF METRO LARGE LOT FINDINGS

In the executive summary of the document, the Metro large lot analysis finds the following:

- Not all large employers use large parcels of land (25 acres or bigger); 66% of large parcel users are "homegrown" and existing employers "should not be forgotten amongst efforts to attract new employers."
- Large parcel users "accounted for about eight percent of employment in the UGB in 2006," commonly assemble tax lots for larger sites, and hold land for future business expansion.

- Large parcel demand under the High growth scenario (UGR employment forecast) is estimated as follows-

High-Growth Large Parcle Demand (Metro, June 2009)

Lot size (acres)	Ware./ Dist.	Gen. Ind.	Tech Flex	Office	Retail	Institution	Total
25 to 50	11	4	2	1	0	5	23
50 to 100	3	1	1	0	0	7	12
100 plus	2	0	0	0	0	0	2

- Large parcel demand under the Low growth scenario (UGR employment forecast) is estimated as follows -

Low-Growth Large Parcle Demand (Metro, June 2009)

Lot size (acres)	Ware./ Dist.	Gen. Ind.	Tech Flex	Office	Retail	Institution	Total
25 to 50	5	0	1	1	0	4	11
50 to 100	3	0	1	0	0	6	10
100 plus	2	0	0	0	0	0	2

- Comparison of the above demand tables and supply analysis summarized in the UGR indicate the following demand/supply reconciliation by Metro staff assuming no tax lot assembly -

Large Lot Demand & Supply Comparison with No Tax Lot Assembly (Metro, June 2009)

Lot size (acres)	Lots Available	Lot Demand High Growth	Lot Demand Low Growth
25 to 50	36	22	11
50 to 100	7	13	10
100 plus	1	2	2

- Metro concludes that without tax lot assembly for larger employers, there appears to be sufficient land within the UGB to accommodate all demand for 25 to 50-acre sites through 2030, but a "potential deficit" may exist for tax lots over 50 acres in size.

- Alternatively, assuming tax lot assembly potential, comparison of the above demand tables and supply analysis summarized in the UGR indicate the following demand/supply reconciliation by Metro staff -

Large Lot Demand & Supply Comparison with Tax Lot Assembly (Metro, June 2009)

Lot size (acres)	Lots Available	Lot Demand High Growth	Lot Demand Low Growth
25 to 50	26	22	11
50 to 100	10	13	10
100 plus	2	2	2

- Metro staff concludes that with tax parcel assembly, the current UGB has sufficient inventory in large parcels (25+ acres) to meet all demand through 2030 *except* for potential "high growth" demand for parcels between 50 acres and 100 acres in size.

As indicated in the introduction to this memorandum, it is the finding of JOHNSON REID that analysis of large parcel demand is significantly incomplete, supply analysis continues to be flawed consistent with our review of the Preliminary UGR, and related findings and conclusions about large lot demand

are flawed as well. The following section provides a more thorough treatment of our concerns with this analysis and resulting conclusions.

DETAILED CRITICAL EVALUATION OF STUDY METHODOLOGY

The following summarizes JOHNSON REID's primary concerns with the large lot analysis, in sequence with the large lot analysis document's organization.

1. Questionable Definition of "Large Employers" Driving Large Lot Demand

Beginning on Page 6 of the large lot analysis, Metro defines "large employer" and conducts rather detailed analysis of firms that would qualify as large employers based on a minimum 20-acre-equivalent employment level for various building type and space usage per employee. For example, "Flex" large employers must be at least 600 employees or more based on a methodology qualitatively described in the report.

It is our opinion Metro should demonstrate calculations and basis for definitions of "large employer":

- Why was large employer not defined by sector, industry, or even cluster? It is not clear that building space definitions provided (flex, general industrial, etc.) correspond meaningfully to individual employers because of important industry distinctions as well as the ability of a high-tech firm, for instance, to use flex space, general industrial, or in some cases office space.
- Calculations themselves are questionable. For instance, a large flex employer has to have at least 600 employees. Based on comments by Alwin Turiel, City of Hillsboro Long-Range Planning Supervisor at the June 24, 2009 Joint MTAC/ECAC workshop, Hillsboro/ Washington County high-tech flex employers utilize an average of 1,000 square feet or more per employee because of extensive capital equipment usage. JOHNSON REID would then calculate a large "flex" or tech employer having as few as 200 employees as follows:

  20 Gross Acre Parcel *** 0.75** Gross to Net Factor = **15 Net Acres**

  15 Net Acres *** 0.3** FAR *** 43,560** square feet = **196,020 square foot building size**

  196,020 square feet **/ 1,000** sq. ft. per tech flex job = **196 flex jobs**

  This difference in "large" flex employer from the 600-employee definition inexplicably cited in large lot analysis Table 5 should be reconciled as there will be far more firms in the 200-job to 599-job size range that will undoubtedly add to the demand analysis for 20+ acre parcels.
- A re-inspection and potential revision to other use types estimated should occur based on the potential flaw demonstrated for tech/flex, or at least methodology for the other uses should be demonstrated.
- Large "Office" employers are not defined at all because 20 acres is cited by Metro as having far more employees than meaningful to estimate. Therefore, office/office campus parcel demand is either not estimated or dramatically understated, necessarily rendering the analysis of large parcel need incomplete.
- Unfortunately, large retail employer analysis misses the mark due to the fact that land need in retail is largely based on multi-tenant or multi-establishment centers which combine for various, total employment sizes. We can think of no single retail employer that remotely approaches 700 full-time employees in a single retail building format without some kind of headquarter/administration function and office usage. Accordingly, the definition of large retail parcel demand in terms of a non-existent, minimum retail employer size of 700 jobs unreasonably leads to no demand for retail parcels of 25 acres or more in the analysis. Again,

shopping centers 25 acres or larger have been excluded entirely due to the parcel demand methodology relying on single-employer definition.

- Finally, we would note that the 20-acre, minimum employer size does not necessarily factor in the lower effective FARs in high-tech and other expanding industries due to land banking activity for cost-effective employment expansion over time. Again, to cite the tech-flex example above, if a 25% land banking factor is added based on observed firm behavior, a 20-acre parcel then reflects a minimum firm size of 147 employees because the effective parcel size, though 20 acres in total, would be 15 acres of committed land and 5 acres of banked land.

2. Troubling Comparison of "Homegrown" and New Large Firms for Policy Implications

Beginning on Page 8 of the large lot analysis, a description of the 89 identified large employers within the UGB occurs. In addition to a summary of large employers by likely building space type, there is surprisingly detailed analysis regarding the history of large employers in the region, specifically the year of company founding. Although interesting, JOHNSON REID interprets this historical analysis, specifically identifying the ratio of "homegrown" large employers to non-native firms, as somewhat subtle implication that recruitment of new firms is either not necessary or is of less importance in terms of large parcel land provision. This is a highly troubling implication, whether subtle or not, from an economic development and land use perspective.

- "Local Industry Only" or even "primarily" flies directly in the face of local, regional, and Statewide economic development interests and efforts. Whether out-of-state investment origin (i.e. Intel), or international investment (i.e. port cargo facilities, Vestas, and SolarWorld), these are important investments for the region and the State and are at best inappropriate, at worst counterproductive, to balance against the importance of "homegrown" firms.
- "Homegrown" firms frequently owe their origin and expansion to external investment, rendering the comparison not useful. As a primary example, the Institute for Metropolitan Studies at Portland State University has produced or funded extensive research into the business and economic relationships between high-tech anchor firms Intel and Techtronix and their profound, fundamental role in creating the workforce, business networks, and investment mechanisms that have enabled large "homegrown" firms to exist and thrive such as FEI, TriQuint, Merix, Mentor Graphics, not to mention numerous other firms of various sizes. Therefore, to deemphasize external investment relative to homegrown industry is to deny the frequently ultimate driver of opportunity for homegrown firms to start-up and thrive.

3. Large Parcel Demand Driven Solely by Large Employers

Beginning on Page 10 of the large lot analysis, Metro staff identify existing large lot users and set the stage for demand assumptions for large parcels based on known large lot users and large lot/parcel assemblies by building space types.

Accordingly, future demand for large parcels or assembly of parcels in the remainder of the analysis is driven solely by large employers as defined by Metro. Whether or not one accepts the definition of "large employer" based on a minimum 20-acre size and related assumptions, the large lot analysis is rendered seriously incomplete without consideration of multi-user, multi-tenant land use such as office business park, industrial business park, tech-flex business park, and retail commercial centers of various sizes, all frequently greater than 20 acres in size. Not only are land use efficiencies gained with various park and commercial center development in terms of parking, transportation, and development costs, multi-user configurations are integral to the economic viability of the vast majority of small businesses who, in addition to operation business risk, could not take on owner-

occupied real estate risk as well. This fact is not only the foundation of commercial real estate, but industrial organization overall.

JOHNSON REID would recommend significant reconsideration of large parcel need to include multi-tenant, multi-user needs. As initial recommendation, the final section of this report is an appendix of various office, industrial, retail and institutional development forms and typical site/parcel acreages we recommended to western Washington County jurisdictions during their economic opportunities analysis process, as well as other jurisdictions statewide in Planning Goal 9 process, documentation, and findings and policy adoption. We would further recommend that Consortium members also continue providing input on industry-specific standards and regional project examples to further assist Metro in its analytical efforts.

Second, we would further echo our UGR comments about the 75% to 80% Metro UGB employment capture rate for the seven-county area.

- Does this reflect a Metro policy of forgoing 25% of potential employment opportunity for the region?
- Accordingly, does this not also reflect a policy choice to encourage a full 25% of future employment opportunity to sprawl outside of the metro UGB with related impacts to regional infrastructure and land use pattern inefficiency, as well as impacts to jurisdictional urban growth boundary planning outside of the purview of Metro?

We would also note that all comments about demand estimation methodology for all industries, use types, and assumptions that were provided by JOHNSON REID for the Preliminary UGR are valid and applicable to methodology in the large lot analysis. Accordingly, any UGR analysis refinements to demand analysis would have parallel revision implications for this large lot analysis.

We further point out the absence of treatment of the following issues which are integral to accurate employment land need over the long-term:

- Land-Banking: Although discussed as a policy implication, land banking by firms that expect to expand over the long-term in the metro region is a crucial assumption to include in any large parcel demand analysis. While holding land vacant for potential future development may be viewed as objectionable from a planning theory perspective, retaining land capacity is an integral part of industrial land provision and business location decision-making. To ignore, underplay, or forbid such necessary industry activity is to both dramatically increase key facility input costs as well as dramatically reduce certainty and confidence in business expansion planning. In our review of industry FARs utilized in the preliminary UGR, it was indicated that Westside/suburban industrial FARs were as low 0.19 compared to the assumed 0.3 FAR. This discrepancy is greatly explained by land purchase and banking patterns by technology-related industry and others that seek to guarantee/ensure predictability and flexibility for future expansion and may serve as a model example of land banking rates that can be assumed for land demand.
- Market Choice/Transaction Demand: A factor of demand must be included that reflects transaction demand need for healthy commercial real estate market activity. Not all land available will be developed over a twenty-year period, but may be transacted by interests that intend to develop. Absence of such supply provides fewer choices for business to purchase and expand, homegrown or external investment, which in turn tends to drive up the cost of employment land, creating disincentive to economic development. Under-provision of retail land in particular will put price pressure on industrial land which will frequently have freeway/transportation access and visibility upon which retail also depends, if not more.
- Regional & Municipal Economic Aspiration: The analysis provides no discussion of economic development aspiration, targeted industry need and unique large site quality information

reflective of regional economic development agents (Port, economic stakeholders, industry groups, etc.) or municipal economic element findings and comprehensive plan policies that would shape large parcel need for critical industries.

Accordingly, based on all preceding comments about large lot demand methodology, we point out that large lot demand estimates by parcel size and building space type as expressed on Page 18 of the large lot analysis, as well as cited in the first section of this memorandum, are incomplete and potentially significantly underestimate large lot need over the next twenty years.

4. Large Parcel Supply Analysis Ignores All Supply Factors but Parcel Size and Adjacent Assembly

Beginning on Page 19, an analysis of large parcel supply (25 acres or more) is conducted to identify potential supply to accommodate estimated large parcel demand. We would first note that all critical shortcomings of the industrial supply analysis that JOHNSON REID discussed in its Preliminary UGR review have similar implications for supply analysis in the large lot analysis.

Perhaps even more fundamentally, however, we point out that 25+ acre supply indicated in this large lot analysis and related assembly potential is only analyzed from a parcel supply size perspective with only very basic consideration for zoning. In other words, according to this analysis, if a 25+ acre parcel exists somewhere in the metro region, no matter its physical suitability including site orientation (long, narrow strip vs. square/rectangle), location, existing infrastructure, industry cluster or site suitability, brownfield/redevelopment constraint, owner intention, expense or financial tools necessary to assemble sites, or any other physical or locational issue, the parcel is still considered suitable for meeting large parcel need.

In our view, this implausibly and critically oversimplifies the large lot supply issue and falls short of being a reasonable basis to discuss large lot parcel supply for demand/need reconciliation. A significant revision to large parcel supply methodology to more seriously reflect large user suitability is paramount to understanding true regional need for employment land of all stripes.

5. Demand and Supply Reconciliation Flawed

Accordingly, though much analytical effort by Metro staff in the document is obvious, we would be remiss to formally conclude that the supply and demand reconciliation of large employment sites is flawed and requires significant revision in our finding based on all methodological concerns raised.

We would further ask the following:

- How, who, or what pays for constrained land assembly?
- How, who, or what pays for brownfield remediation and how does that affect the plausibility of various refill/infill assumptions? Metro staff are invited to review the 2004 *Brownfield/Greenfield Development Cost Comparison Study* co-funded by Metro, PDC, the Port of Portland and the City of Portland to identify critical financial and physical constraints for key sectors and end users' ability to utilize remediated brownfield sites altogether.
- Metro staff are also invited to review both *Employment Opportunity Sites Portfolio*(s) from 2004, commissioned by the Portland Development Commission, that identify in great detail the specific physical and financial constraint considerations for the majority of key redevelopment/infill sites throughout the City of Portland. We would further note that redevelopment will have higher perceived financial risk from a lending perspective and will require greater cost of borrowing, potentially rendering opportunities identified in that document as infeasible.
- How does the allocation of urban renewal subsidy in the Residential Urban Growth Report to residential infill, rather than economic development financing and infill, constrain or render refill/infill assumptions plausible?

- Finally, how does this and future large lot demand analysis relate to or affect existing employment land findings? Large lot users frequently anchor clusters and create ripple effects that then create demand for various employment form uses including retail commercial indirectly via employed household spending. Does this and revised analysis change existing UGR findings in total?

OFFICE DEVELOPMENT PATTERN TYPES MATRIX

	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Ownership/Leasing Patterns	Parking, Loading, Storage (Loading & Storage not major issues for Offices)
Large Office Users (150-1200+ Employees.; 60k-500+k sq. ft. built space)	Main Branch/Head-quarters Offices for Banking, Security and Commodity, Real Estate, and Insurance Carriers, Healthcare, Communications, Transportation Services, Back Office Processing	Transportation system that provides access to labor is essential and may require convenient connections to major arterial roadways and State Highways. Proximity to Government offices may be a factor. Convenient airport access is almost always important. Convenient public transportation may be a consideration, especially for a downtown site.	Water, sewer, and storm drainage must be adequate. Site must be able to be served by modern telecommunications. Multiple energy suppliers may be a consideration.	Downtown – Large users sometimes occupy high-rise structures in downtown areas. Site sizes are usually 0.75 to 4 acres per user arrayed among traditional downtown development patterns. Large tenants critical in pre-lease requirements for high-rise construction.	Typically own or long-term leases from affiliated real estate company. Sometimes independent long-term leases.	Parking must be reasonably adequate and convenient- Often structured. Usually a mix of private and public if structured.
				Business/Office Park- Usually two to three story buildings. Users usually have 3.5 to 15 acre sites clustered within a larger park of 50 to 400 hundred acres. Large users may also prefer a campus siting, and may land bank for potential future expansion.	Typically Own or lease from affiliated real estate company.	Usually uses on-site surface parking.
				Under-performing Commercial Sites – Usually adaptive reuse of an under-performing commercial site 2 to 20 acres arrayed within a larger commercial node of 20 to 500 acres.	Typically discount lease structure, but may own	Usually uses on-site existing surface parking
Medium Office Users (35-175 employees; 12k-70k sq. ft.)	Community Branches for Banking, Security and Commodity, Real Estate, and Insurance Carriers, and Community Healthcare Professional Business Services, Legal Services, Communications, Transportation Services	Transportation system that provides access to labor is important and will require convenient connections to at least a minor collector and may require convenient connections to major arterial roadways and State Highways. Proximity to Government offices may be a factor. High visibility access to customers is essential for the consumer oriented users. Airport access is important. Convenient public transportation may be a consideration, especially for a downtown site.	Water, sewer, and storm drainage must be adequate. Site must be able to be served by modern telecommunications.	Downtown- Medium users tend to utilize one or two floors of an existing building. Downtown can be cost-prohibitive for uses that require ground floor customer visibility. Site sizes come from existing configurations. The size of these tenants and their ability to pre-commit on space make building new speculative space difficult at the scale seen in more urban locations.	Limited ownership opportunities may be a limiting factor. Leases prevalent.	Tends to utilize public supplied parking downtown that may include leases of public spaces.
				Business/Office Park- Occupy buildings individually or with a group of tenants. Users often seek sites near campus development patterns with which they interact. Sites are typically 0.5 to 3 acres per user within a larger park of 30 to 100 acres.	Ownership or leases from affiliated companies common and may be deciding factor.	Usually uses on-site surface parking.
				Commercial Centers-These are the preferred development patterns for consumer oriented medium sized office users such as branch banks and real estate offices. Users often seek sites near campus development patterns with which they interact. Sites are typically 0.5 to 3 acres per user within a larger community commercial node of 10 to 200 acres.	Ownership varies with the user requirements.	Usually on-site, but may be shared parking with adjoining commercial uses.

	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Ownership/Leasing Patterns	Parking, Loading, Storage (Loading & Storage not major issues for Offices)
Small (1-40 employees; 400 to 13k square feet)	Sole proprietor or small partnership of professional service offices for Banking, Security & Commodity, Real Estate, Insurance Agents and Brokers, Business Services and Legal Services	Access to customer base very important to consumer oriented users such as insurance agents/brokers and real estate agents/brokers. Transportation system that provides access to labor is important, but these users may have to compromise convenient access to labor as a cost saving measure. Executive housing concentrations are important for many small users, minimizing commute times for executives that don't rely upon specific locations. Proximity to Government offices may be a factor. These office uses can be served by all functional street functional classifications Airport access is important. Convenient public transportation may be a consideration, especially for a downtown site.	Water, sewer, and storm drainage must be adequate. Site should have, but may not always, require modern telecommunications.	Downtown- These small user companies absorb the smaller spaces downtown that are too small or have limitations for larger users. Site sizes downtown are predetermined by existing development patterns and to a lesser extent by redevelopment.	Most are done as leases. Some small ownerships available through condominiums.	Tends to utilize public supplied parking downtown that may include leases of public spaces.
				Business/Office Park- These small user companies absorb the smaller spaces in larger projects that are too small or have limitations for larger users or occupy expansion areas for medium and large users. Sites sizes are typically driven by larger users except when small companies pool resources to occupy sites. Sites are typically are typically 0.5 to 3 acres within a larger park of 30 to 100 acres.	Most space is leased. A collection of small users sometimes pool their resources to jointly own and lease back a 'medium' sized building /site or as a condominium/padlot.	Usually uses on-site surface parking.
				Commercial Centers - These small user companies absorb the smaller spaces in larger projects that are too small or have limitations for larger users or occupy expansion areas for medium and large users. These sites tend to be predetermined by the larger users. These sites are most important to consumer oriented users such as insurance agents.	Most space is leased.	Usually on-site, but may be shared parking with adjoining commercial uses.
				Residential to Office Conversions – These offices tend to be in older transitional areas where commercial and office uses are supplanting residential. Sites tend to be .12 to .75 acres	These are typically owned by the Company or the Companies' owner(s), often central issue in the decision.	Usually a combination of public on-street and private off-street. Parking can often be limiting factor.
				Home Based Businesses – These offices exist within residences and the use is considered accessory to the residence. Site sizes are dictated by residential standards.	Ownership through home ownership is often central to the decision to operate a home based office business.	Customer parking typically restricted or not allowed per residential standards.

COMMERCIAL RETAIL DEVELOPMENT PATTERN TYPES MATRIX

	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Ownership/Leasing Patterns	Parking, Loading, Storage
Large Retail Users (45k-500+k sq. ft./; and/or 15+ acres of outdoor storage)	Retail Trade (Regional Retail);	Transportation system that provides convenient connections and very high visibility from major arterial roadways and state highways is essential. Convenient public transportation may be a consideration, especially for a downtown site. Pedestrian traffic on public sidewalks is very important to Downtown Sites and elevated pedestrian connections between buildings can be important as well, Internal pedestrian traffic is essential for Malls, and Lifestyle Centers.	Water, sewer, and storm drainage must be adequate. Site must be able to be served by modern telecommunications. Multiple energy suppliers may be a consideration.	Downtown – Downtown retail sites for large users typically occupy the ground floor and sometimes additional stories. They may occupy existing buildings or the lower floors of new multi-story office buildings. Large Downtown anchors are typically furniture stores and Department stores. Typical site sizes are .5 to 2 acres. Downtown anchors are no longer seen as vital to downtown revitalization, with smaller format unanchored specialty retail more common tenant types.	No known definitive ownership/leasing practices.	Parking is usually a combination of public and private and may be structured. Loading and storage needs can be limiting factor due to existing development patterns. Loading tends to be on-street or in alleys
				Regional Malls- Regional malls are a well-known development pattern and are large physical structures that contain a cluster of small and medium retailers anchored by three to seven large retail users in one to three stories. Large anchors are often Department stores. Some *outlet malls* are also configured in a traditional regional mall pattern. Typical site sizes are 3.5 to 10 acres within the larger 50 to 100+ acre mall site.	The large anchors sometimes own their building and portions of the Mall site – Otherwise they are done as Triple Net Leases from the Mall owner that is often a commercial REIT	Use on-site shared parking that is sometimes structured. Loading is generally off-hours in designated areas, loading docks and/or vacant parking spaces, storage is almost always indoors.
				Open –Air Centers – Lifestyle Centers are an example, which are a newer trend in retail development patterns that is a hybrid between an enclosed Mall and a Downtown. It has the concentration of retailers similar to an enclosed mall, but with open air pedestrian connections between stores similar to a Downtown. Some newer *outlet malls* are configured in a lifestyle center pattern. Typical site sizes are 2.5 to 7 acres within the larger 25 to 60+ acre.[23]	The large anchors sometimes own their building and portions of the Mall site – Otherwise they are typically done as Triple Net Leases.	Use on-site center-wide parking that is sometimes structured. Loading is generally off-hours in designated areas. Modern loading bays are one benefit of the lifestyle concept. Storage is almost always indoors.
				Large Format Retail – These are large auto oriented stores that house a collection of goods within a single store. A recent trend has seen smaller vendors co-locate within the larger store (Such as a McDonalds within a Wal-Mart) Individual user site sizes are typically 6 to 14 acres and large format retail tends to seek sites that are clustered with other large format retailers in regional commercial centers that are 55 to 350+ acres.	These sites are typically owned by the retail company or an affiliated real estate company.	Usually use on-site surface parking that is sometimes structured and may be shared with adjacent properties. Loading is generally non peak-hours in designated areas, storage is mostly indoors, but some out.
				Vehicle/Equipment Salesplex – These are large vehicle and equipment sales yards that serve a wide regional market area. Typical site sizes are 15 to 40+ acres often within a larger cluster of 50 to 200+ acres of similar uses.	These sites are typically owned by the retail company or an affiliated real estate company.	Outdoor storage areas are dominant feature with surface customer parking on-site. Loading is often in designated areas on-site.

[23] This definition is broader than the typical definition of "Lifestyle Center" in the retail industry.

	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Ownership/Leasing Patterns	Parking, Loading, Storage
Medium Retail Users (12k-50k sq. ft./; and/or 3 to15 acres of outdoor inventory)	Retail Trade (Community Retail)	Transportation system that provides convenient connections and very high visibility from major arterial roadways and state highways is essential. Convenient public transportation may be a consideration, especially for a downtown site. Pedestrian traffic on public sidewalks is very important to Downtown Sites and elevated pedestrian connections between buildings can be important as well, Internal pedestrian traffic is essential for Malls, and Lifestyle Centers	Water, sewer, and storm drainage must be adequate. Site must be able to be served by modern telecom.	Downtown- Medium users tend to utilize one or two floors of an existing building. Downtown can be cost-prohibitive for some medium sized retail uses. Site sizes are dictated by existing development patterns or as a result of a large user or speculative development project. Second floor retail is typically seen as having limited appeal, unless a multi-floor tenant is found with ground floor presence.	Limited ownership opportunities may be a limiting factor. Leases prevalent.	Tends to utilize public and private supplied parking downtown that may include leases of public spaces. Downtown sites rarely have outdoor storage. Loading often done in alleys and may be a limiting factor.
				Neighborhood Shopping Centers- Typically use 3-10 acres, with leasable area of 30,000 to 100,000. Centers are typically anchored by grocers. These centers serve localized populations, and typically locate near population concentrations.	Ownership or leases from affiliated companies common and may be deciding factor.	Usually use on-site surface parking.
				Community Shopping Areas/Centers- Typically use 10 to 30 acres, with leasable area of 100,000 to 450,000. Anchors often include junior department stores, large variety, discount or department stores.	Ownership or leases from affiliated companies common and may be deciding factor.	Usually use on-site surface parking.
				Regional Malls- Regional malls are a well-known development pattern and are large physical structures that contain a cluster of small and medium retailers anchored by three to seven large retail users in one to three stories. Large anchors are often Department stores. Some *outlet malls* are configured in a traditional regional mall pattern. Typical site sizes are 3.5 to 10 acres within the larger 50 to 100+ acre mall site.	The medium anchors rarely own their building and portions of the Mall site – Otherwise they are done as Triple Net Leases from the Mall owner that is often a REIT	Use on-site mall-wide parking that is sometimes structured. Loading is generally off-hours in designated areas or vacant parking spaces, storage is almost always indoors.
				Open Air-Centers – Lifestyle centers are an example, which are a newer trend in retail development patterns that is a hybrid between an enclosed Mall and a Downtown. It has the concentration of retailers similar to an enclosed mall, but with open air pedestrian connections between stores similar to a Downtown. Some newer *outlet malls* are configured in a lifestyle center pattern. Typical site sizes are 2.5 to 7 acres within the larger 25 to 60+ acre site.	The medium anchors sometimes own their building and portions of the site – Otherwise they are typically done as Triple Net Leases.	Use on-site center-wide parking that is sometimes structured. Loading is generally off-hours in designated areas. Modern loading bays are one benefit of the lifestyle concept. Storage is almost always indoors.
				Vehicle/Equipment Dealership– These are medium sized vehicle and equipment sales yards that serve a community market area. Typical site sizes are 4 to 15 acres	Ownership varies with the user requirements.	Outdoor inventory storage areas are dominant feature with surface customer parking on-site. Loading is often in designated areas on-site.
				Truck Center– These are unique uses that serve regional shippers needs for quick services near statewide freight routes. Typical site sizes are 8 to 20 acres	Ownership varies with the user requirements.	Surface tractor trailer customer parking is usually the dominant feature. Limited outdoor storage. Stacking for fuel stations is important.

	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Ownership/ Leasing Patterns	Parking, Loading, Storage
Small Retail and Commercial Services (200 to 15k square feet and/or less than 5 acres outdoor storage)	Retail Trade (Neighborhood and Specialty)	Transportation system that provides convenient connections and visibility from higher order roadways and state highways is important and essential for some users. Convenient public transportation may be a consideration, especially for a downtown site. Pedestrian traffic on public sidewalks is very important to Downtown Sites and elevated pedestrian connections between buildings can be important as well, Internal pedestrian traffic is essential for Malls, and Lifestyle Centers.	Water, sewer, and storm drainage must be adequate. Site must be able to be served by modern telecom.	Downtown-Small retailers tend to seek ground floor downtown sites. Users tend to be specialty retail, restaurants, bars and similar uses. Site sizes are dictated by existing development patterns or as a result of a large user or speculative development project.	Most space is leased. Some small ownerships available through condominiums.	Tends to utilize public supplied parking downtown that may include leases of public spaces. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.
				Free-Standing Shopping Center Pads- These uses are typically service commercial uses such as restaurants, bars and convenience retail such as convenience marts and fuel stations. Sites are very highest visibility within larger projects. Site sizes are .5 to 2 acres co-located within larger projects such as lifestyle centers, regional malls, clusters of large format retailers and community shopping centers.	Space is leased and owned. Many uses are corporate and seek sites with ownership.	Usually uses on-site surface parking, may be shared parking with adjoining commercial uses. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.
				Attached Boutique/Specialty– These retail sites are co-located within larger buildings that house anchor users in larger projects such as lifestyle centers, regional malls, clusters of large format retailers and community shopping centers. Small sites are the individual lease suites within larger site.	Most space is leased from larger building owners – often commercial REITS.	Usually on-site surface parking shared with adjoining commercial uses. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.
				Neighborhood Commercial – These are small stand alone users that usually locate along higher order transportation facilities and sometimes cluster with a few other similar sized users. These uses are sometimes occur in residential to commercial conversion areas. These uses tend to be neighborhood service and convenience retail uses such as coffee shops and neighborhood markets. Sites are usually an acre or less within a smaller cluster that is up to three acres.	Space may be leased or owned.	Usually on-site surface parking. Pre-existing ratios may be a limiting factor. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.
				Stand-Alone Legacy Commercial Sites – These are sites in older commercial areas that lack a cohesive development pattern or theme. This development pattern is often linear and arrayed along major transportation corridors. Sites are typically .5 to 4 acres arrayed in within areas containing similar uses along with small scale industrial uses.	Space may be leased or owned. Ownership patterns tend to be fractured.	Usually on-site surface parking. Pre-existing ratios may be a limiting factor. These uses have small amounts of inventory so loading and storage is rarely a limiting factor.
				Vehicle/Equipment Sales Lots– These are medium sized vehicle and equipment sales yards that serve a community market area. Typical site sizes are .5 to 3.5 acres	Space is usually leased, but may be owned.	Outdoor inventory storage areas are dominant feature with surface customer parking on-site.

INDUSTRIAL DEVELOPMENT PATTERN TYPES MATRIX

	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Ownership/ Leasing Patterns	Parking, Loading, Storage
Large Industrial Users (90k-750+k sq. ft. built space/; and/or 20+ acres of outdoor inventory/production areas)	Lumber & Wood, Stone, Glass & Concrete, Trucking & Warehousing, Electric, Gas & Sanitation, Food Products, Transportation Equipment, Wholesale Trade, Air Transportation	Transportation system that provides convenient connections to state highways is very important- and especially Interstate 5. Proximity to natural resources can be important for uses that utilize natural resource inputs. Rail access is important to many uses and can be essential for some uses. Convenient access to air freight is important to many uses and may be essential for some. Convenient access to well trained and qualified workforce is essential and industry clustering for access to skilled labor force is common. Convenient access to ocean ports is important to many users and essential for some.	Water, sewer, and storm drainage must be adequate; some of these uses can consume very large quantities of water and produce large quantities of sewage requiring special facilities' plans. Site must be able to be served by modern telecomm. Multiple energy suppliers are important to most users and the ability purchase wholesale energy can be essential for some.	Indoor/Outdoor Industrial Processes - Including Manufacturing, Repair, Remanufacturing, Salvage Yards, Micro-Energy, Agri-business, etc. These development patterns typically process raw materials into intermediate industrial input materials and include lumber mills, plywood plants, aggregate processing plants and co-gen power plants. These uses typically have moderate to high levels of airborne emissions, noise production, and waste products. Access to rail can be essential. Site Sizes are typically 40 acres to 200+ acres and may cluster with similar uses in areas that are 1000+ acres.	Typically Corporate Owned (Or Affiliate)	Uses can typically accommodate employee parking easily. These uses typically require large outdoor storage areas for raw materials. Large loading areas are typically needed for trucks and/or railcars.
				Logistics/Warehousing/Transportation Hubs- These development patterns are extremely transportation infrastructure sensitive and require sites with efficient and direct access to the transportation facilities they utilize. Some of these uses may not require proximity to large labor forces. These uses typically produce moderate to high levels of airborne emissions and noise associated with high volumes of truck traffic, rail yard activities, etc. Site sizes are typically 50 to 400+ acres and can cluster with similar uses in freight centers that are 2,000+ acres.	Usually sites are corporate or gov. owned, but many will include flex space for smaller users.	Uses can typically accommodate employee parking easily. These uses are essentially one large storage and loading area with large amounts of land for indoor and outdoor storage and loading areas for trucks, railcars, and sometimes airplanes.
				Transmission-Regional utility transmission facilities such regional substations and 500kv lines. Noise, emissions and waste levels vary considerably from facility to facility. Site sizes are typically 20+ acres, although some uses can be very large such as solar arrays that cover thousands of acres.	Almost always Corporate Owned.	Parking, loading and storage needs are minimal.
				Enclosed Manufacturing – These development patterns contain a wide variety of uses from food production to microchip processors and typically process intermediate materials into finished goods and/or parts. Uses are predominantly indoors within enclosed buildings. Convenient access to skilled labor force is essential. These uses typically have low to moderate levels of airborne emissions, noise production, and waste products. Site Sizes are typically 20 to 200+ acres and users often require sufficient area to accommodate long-term expansion. Users may seek integration with office developments.	Typically Corporate Owned	These uses can have a large labor forces requiring large parking areas. Uses typically have large loading areas and some outdoor storage is usually required.
				Waste Handling – These development patterns include sanitary landfills, regional transfer stations, recycling plants, and sewage treatment plants and large salvage yards. Uses typically have large amounts of outdoor storage/processing. These uses typically have moderate to high levels of airborne emissions and noise production. Site sizes vary considerably from 20 acres to 150+ acres.	Typically Corporate Owned.	Uses can typically accommodate employee parking easily. These uses are essentially usually require large outdoor storage areas. Solid waste disposal facilities typically require large loading areas.
				Spec/Flex Space – Flex space development patterns are enclosed industrial uses where the buildings are developer/investor owned and space is rented to industrial tenants. Often multiple tenants occupy a single building. Low to very low levels of airborne emissions, noise production and waste products. Sites can be 4 to 25 acres.	REIT and Private Equity Ownership	Flex space typically has employee and customer parking and a loading door for each suite. Little outdoor storage is utilized.

	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Ownership/ Leasing Patterns	Parking, Loading, Storage
Medium Industrial Users (25k-100k sq. ft. built space/; and/or 4 to 25 acres of outdoor inventory/production areas	Instruments, Electronic Equipment, Printing & Publishing Transit Transportation Services, Business Services Communications Construction, Lumber & Wood, Stone, Glass & Concrete, Trucking & Warehousing, Electric, Gas & Sanitation, Food Products, Transportation Equipment, Wholesale Trade Air Transportation	Transportation system that provides convenient connections to state highways is very important- and especially Interstate 5. Proximity to natural resources can be important for uses that utilize natural resource inputs. Rail access is important to many uses and can be essential for some uses. Convenient access to air freight is important to many uses and may be essential for some. Convenient access to well trained and qualified workforce is essential and industry clustering for access to skilled labor force is common. Convenient access to ocean ports is important to many users and essential for some.	Water, sewer, and storm drainage must be adequate; some of these uses can consume large quantities of water and produce large quantities of sewage requiring special facilities' plans. Site must be able to be served by modern telecommunications. Multiple energy suppliers are important to most users.	Indoor/Outdoor Industrial Processes - Including Manufacturing, Repair, Remanufacturing, Salvage Yards, Micro-Energy, Agri-business, etc. Uses typically contain indoor activities, but typically more than 25 percent of the site is devoted to outdoor inventory and processes on individual lots. Convenient access to skilled labor force is essential. These uses often have very unique site requirements specific to each industrial processes. These uses typically have moderate levels of airborne emissions, noise production, and waste products. Site Sizes are typically 6 to 25 acres and users often require sufficient area to accommodate medium-term expansion planning. Users often seek sites clustered in industrial areas of 100+ acres.	Mix of ownership and leasing	Uses can typically accommodate employee parking easily. These uses include large amounts of land for indoor and outdoor storage and loading areas for trucks, railcars, and sometimes airplanes.
				Trucking/Warehousing/Distribution/Waste Transfer Substations/Staging- These development patterns are transportation infrastructure sensitive and require sites with efficient and direct access to the transportation facilities they utilize. Some of these uses may not require proximity to large labor forces. These uses typically produce moderate levels of airborne emissions and noise associated with high volumes of truck traffic and rail yard activities. Site sizes are typically 4 to 20 acres and can cluster with similar uses in freight centers that are 2,000+ acres.	Sites are corporate or developer owned, but may include some leased space for smaller users.	Uses can typically accommodate employee parking easily. These uses are essentially one large storage and loading area with large amounts of land for indoor and outdoor storage and loading areas for trucks, railcars, and sometimes airplanes.
				Transmission-These are local and small regional substations, natural gas pressure reduction stations for local distribution, and micro power generation uses. These uses typically have low levels of airborne emissions, noise production, and waste products. These uses are typically 4 to 10 acres.	Almost universally corporate owned.	Parking and loading requirements are minimal. The facilities themselves are kind of outdoor storage.
				Enclosed Industrial Processes – Including Manufacturing, Repair, Remanufacturing, etc. Uses are predominantly indoors within enclosed buildings on individual lots with typically less than 30 percent of the site devoted to outdoor storage. Convenient access to skilled labor force is essential. These uses often have very unique site requirements specific to each industrial processes. These uses typically have low to moderate levels of airborne emissions, noise production, and waste products. Site Sizes are typically 4 to 20 acres and users often require sufficient area to accommodate medium-term expansion planning. Users often seek sites clustered in industrial/business parks of 100+ acres and some may seek integrated projects with commercial and office patterns.	Usually Corporate owned or affiliate owned.	These uses can have moderately sized labor forces requiring large parking areas. Uses typically have large loading areas and some outdoor storage is usually required. Rail and/or air loading areas are sometimes required.
				Personal Storage – Sites should be convenient for access from residential areas. Vehicle storage is typically outdoors while other storage is typically fully enclosed. Low to very low levels of airborne emissions, noise production and waste products. Sites can be 4 to 25 acres.	Some Corporate and Private Equity Ownership	Employees parking is minimal. Customer parking/loading must be provided for use of each unit
				Spec/Flex Space – Flex space development patterns are enclosed industrial uses where the buildings are developer/investor owned and space is rented to industrial tenants within a complex and usually there are multiple tenants occupying a single building. Low to very low levels of airborne emissions, noise production and waste products. Sites can be 4 to 25 acres.	REIT and and Private Equity Ownership	Flex space typically has employee and customer parking and a loading door for each suite. Little outdoor storage is utilized.

	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Ownership/ Leasing Patterns	Parking, Loading, Storage
Small (Less than 30k square ft built space and/or less than 5 acres outdoor inventory/production areas)	Instruments, Electronic Equipment, Printing & Publishing Transit Transportation Services, Business Services Communications Construction, Lumber & Wood, Stone, Glass & Concrete, Trucking & Warehousing, Electric, Gas & Sanitation, Food Products, Transportation Equipment, Wholesale Trade Air Transportation	Transportation system that provides reasonably convenient connections to state highways is important. Rail access is important to some uses and is occasionally essential. Convenient access to air freight is important to many uses and may be essential for some. Convenient access to well trained and qualified workforce is essential and industry clustering for access to skilled labor force is common. Convenient access to ocean ports is important to some and can be essential.	Water, sewer, and storm drainage must be adequate; Site must be able to be served by modern telecommunications. Multiple energy suppliers are important to some users.	Indoor/Outdoor Industrial Uses - Including Manufacturing, Repair, Remanufacturing, Salvage Yards, Micro-Energy, etc. Uses typically contain indoor activities, but typically more than 25 percent of the site is devoted to outdoor inventory and processes on individual lots. These uses typically have moderate levels of airborne emissions, noise production, and waste products. Site Sizes are typically 1 to 5 acres.	Mix of ownership and leasing	Uses can typically accommodate employee parking easily. These uses need some land for indoor and outdoor storage and loading areas for trucks rarely railcars and airplanes.
				Enclosed Industrial Processes – Including Manufacturing, Repair, Remanufacturing, etc. Uses are predominantly indoors within enclosed buildings on individual lots with typically less than 30 percent of the site devoted to outdoor storage. Convenient access to skilled labor force is essential. These uses typically have low to moderate levels of airborne emissions, noise production, and waste products. Site Sizes are typically .5 to 5 acres and users often require sufficient area to accommodate limited expansion. Users often seek sites clustered in industrial/business parks of 100+ acres and some may seek integrated projects with commercial and office patterns.	Usually Corporate owned or affiliate owned.	These uses can have moderately sized labor forces requiring large parking areas. Uses typically have large loading areas and some outdoor storage is usually required.
				Personal Storage – Sites should be convenient for access from residential areas. Vehicle storage is typically outdoors while other storage is typically fully enclosed. Low to very low levels of airborne emissions, noise production and waste products. Sites can be .5 to 5 acres.	Most are Private Equity Ownership	Employee parking is minimal. Customer parking/loading must be provided for use of each unit
				Flex Space – Flex space development patterns are enclosed industrial uses where the buildings are developer/investor owned and space is rented to industrial tenants. Often multiple tenants occupy a single building. Low to very low levels of airborne emissions, noise production and waste products. Sites can be .5 to 5 acres.	Most are Private Equity Ownership	Flex space typically has employee and customer parking and a loading door for each suite. Little outdoor storage is utilized.

CAMPUS/INSTITUTIONAL DEVELOPMENT PATTERN TYPES MATRIX

Campus/Institutional development patterns are just that. Campuses are large and medium sized developments usually with a single or very limited set of ownerships. While the many uses within a campus can vary considerably, all the uses within a campus/institutional development are usually aimed at a common purpose or goal. The nature of this common purpose or goal is what shapes the design, site requirements and other characteristics of each individual campus/institutional development. For this reason, the below table describes the site characteristics according to the principal goal of each campus/institution; some uses are merely identified because their requirements will vary too greatly for each particular use.

Type	Target Industries	Transportation; Access to Labor and Customers	Public Facilities/ Utilities	Site Sizes and Development Pattern Discussion	Parking, Loading, Storage
Intellectual/Academic	Intellectual and Academic Campuses support the development of intellectual labor capital. Over time, the organic process that is intellectual development tends to intertwine with and support the target industry opportunities in the communities where they exist.	The transportation needs for each campus depends on the type of campus and purpose of the campus. In general, intellectual campuses should have reasonably convenient connections to I-5 and have direct connections to two or more arterials. These uses are often served by public transit and can have high alternative transportation use if facilities are well planned. Good air transportation is essential for some.	Water, sewer, and storm drainage must be adequate; some of these uses can consume large quantities of water and produce large quantities of sewage requiring special facilities' plans. Site must be able to be served by modern telecomm and demands on telecomm facilities can be immense. Multiple energy suppliers can be important as can the ability purchase wholesale energy can be essential for some.	Major University/National Laboratory- These campuses serve statewide, national and international populations. These campuses are very large and are usually at least 50 acres and can be as large as a 1000+ acres. University campuses usually have on-site dormitories. A wide variety of accessory commercial uses is often necessary to serve the campus population. These uses need excellent connections to regional transportation systems and need convenient air service for passengers and freight.	Loading and storage needs are minimal as a percentage of the overall site sizes for Major Universities. National Labs sometimes require larger storage areas for outdoor scientific equipment. Significant amounts of parking are usually required and may be structured.
				Post-Grad Technology – These can be Private and/or Public and usually involve research and development. These campuses serve statewide, national and international populations. These campuses can vary in size considerably from less than 20 acres to 200+ acres. These uses need excellent connections to regional transportation systems and need convenient air service for passengers and freight	Loading and storage needs are not extensive, but some storage can be required for outdoor scientific equipment. Amount of parking is proportional to the campus.
				Small College/Community College – These campuses serve regional populations primarily. These may or may not have on-site dormitories. Campuses are typically 20 to 40 acres outside downtown areas. These campuses are sometimes arrayed like a large office user when they are located in a downtown area.	Some Community Colleges have trade programs that require loading and storage areas. Most do not require significant loading and storage. Significant amounts of parking are usually required and may be structured.
				Junior High School/High School – These campuses serve local and regional populations and can be public or private. Campuses are typically 15 to 40 acres. Findings Sites that balance the need to be near residential centers that have access to local and regional transportation networks can be challenging.	Storage needs are not extensive. Student drop-off/pick-up areas are important. High Schools demand more parking than Junior Highs. Parking demands can be reduced by extend of bus services.

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May 25, 2010

The Hon. Shane Bemis, Chair
Metro Policy Advisory Committee
600 NE Grand Avenue
Portland, OR 97232

Subject: Response to May 12, 2010 Memo on 2009 Urban Growth Report (UGR)
Feedback on MOAC Employment Subcommittee Draft Recommendations

Dear Chair Bemis and Committee Members:

I am the Director of Governmental Affairs for the Society of Industrial and Office Realtors (SIOR). We are members of a global commercial real estate brokerage organization for which only the most experienced and productive real estate brokers can qualify. Currently, there are about 30 of probably 500 or so commercial real estate brokers that qualify for the SIOR designation in the Portland area.

This letter is on behalf of the Oregon Chapter of SIOR in response to the subject Memo from representatives of Clackamas County. My organization responds because we are acutely aware, and experience daily the effects of not having enough developable land to properly support either the expansion of local businesses nor the influx of new businesses.

The Memo addresses current net absorption rates for what are mostly speculative, leased multi-tenant industrial parks. It identifies that due to the Great Recession, the current net absorption is down, and with the resultant lower net absorption rate, there should not be a need for additional speculative, leased multi-tenant industrial parks for a long time.

This logic could certainly make sense if we want to stay in the Great Recession. Actually, per the attached graphic which references the CoStar data base, the net absorption for 2009 was almost -3M SF, which means that at the end of 2009 the illogical thing to do would have been to plan on converting 3M SF of industrial space into other uses every year thereafter. But this is not the foresight that we need if we want to come out of the Great Recession, especially since there is very little connection between the CoStar speculative leased vacancy rate and the kind of jobs that the Portland Metropolitan Area (PMA) is looking for.

The vacancy rate for speculative, leased multi-tenant industrial parks is often used as a barometer of the local industrial economy. As a general barometer, it works quite well. However, it is not the barometer that measures the kind of Economic Development opportunity and the quality jobs that the PMA is looking for. Businesses tend to make real estate lease/own decisions depending upon their investment in capital equipment. If you have very little invested in capital equipment (warehousing, call centers, light assembly), then you will probably lease space. If you have a heavy investment in capital equipment and the facility infrastructure to support it, you cannot afford to have a landlord decide if your lease is

going to be renewed, so those businesses typically own their real estate. Even if large leased space availabilities were an indication of the PMA's ability to support or attract companies with well paying jobs, per the attached CBRE table there are only three alternatives available (2, 6, 15) that represent concrete tilt-up buildings with a minimum 25 foot clear height, which is what current businesses are looking for.

The kind of businesses that the region is looking for are the capital intensive companies. They are the companies that provide the best family wage jobs. And, those are the companies that almost invariably own their real estate. Genentech and SolarWorld are the best two recent examples. Although SolarWorld was fortunate enough to find a heavily capitalized vacant building for pennies on the dollar (resulting from Komatsu leaving which we don't want repeated), they both have invested heavily in custom built facilities to meet their needs, which never could have been provided for in speculative, leased multi-tenant industrial parks.

So, if we are going to ever get out of the Great Recession, with good family wage jobs, we need to look at the ability of existing and new companies to purchase land to build the custom buildings designed specifically to support their capital intensive, technological manufacturing processes. These businesses need land to accomplish this.

The topic of discussion monthly at our SIOR meetings is the lack of quality industrial land that is ready to develop. Our members are confronted daily with the challenges of trying to either help local companies expand, or represent companies considering Portland that are searching on a national or global level. All too often, companies evaluate the Portland marketplace and can't find the property that they are looking for, so they decide to focus their search on other marketplaces.

The region has recently undergone a major evaluation of rural and urban reserves. When looking at the results of the process, most SIOR's believe that there should be more urban reserves. However, we will stand behind the results and support their implementation. But we will not stand behind a reduction in urban reserves, especially on such flawed assumptions.

Respectfully,
Capacity Commercial Group



Mark S. Childs, SIOR
Senior Vice President
SIOR Government Liaison

C: Jeff Sholian, SIOR, Pacific Real Estate Partners, President Oregon Chapter
Mike Wells, SIOR, CRESA Partners
Paul Breuer, SIOR, Colliers International
Tony Reser, SIOR, GVA Kidder Mathews

CBRE
CB RICHARD ELLIS

1Q2010 Portland Industrial
150,000+ SF Contiguous Spaces

	Property Name / Address	Prop/Dev Type / Status / Construction	Building Size / Office SF	Total Available / Min Available / Max Contiguous / Total Vacant	Lease Rate / Office Surcharge / NNN & TIs	Amps / Volts / Phase	Min Clear Ht / Max Clear Ht / Sprinkler / Yard Space	Loading / Rail / Crane
1	89 S Timm Rd	Whse/Distribution	190,294 SF	190,294 SF	$0.55 - $0.60 NNN		20 FT	**Grnd:** 6
	89 S Timm Rd	Existing		190,294 SF	BLN		32.5 FT	**Dock:** 18
	Ridgefield, WA 98642	Metal	**Site:** 16.83 acres	190,294 SF	**NNN:** **TIs:**		Yes	No Rail
	Complex:			190,294 SF	**For Sale:** $8,900,000 ($46.77/sf)			
	Administrative Info: **Property ID:** 100021148 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 02/03/2010 **Date Verified:** 03/25/2010 **Listing No.:**							
2	Cascade Dist Center	Whse/Distribution	303,050 SF	152,435 SF	$0.39 - $0.39 NNN	3000A	30 FT	**Grnd:** 1
	20016 - 20078 NE Sandy Blvd	Existing		152,435 SF	$.75/sf	277/480V	30 FT	**Dock:** 27
	Gresham, OR 97230	Concrete Tilt-up	**Site:** 14 acres	152,435 SF	**NNN:** $0.10/sf **TIs:**	3P	Yes	No Rail
	Complex:			152,435 SF	**For Sale:** No			
	Administrative Info: **Property ID:** 100021178 **Vacancy Rate:** 50.3% **Vacancy Index:** Industrial **Date Updated:** 09/23/2009 **Date Verified:** 03/29/2010 **Listing No.:**							
3	2455 NW Nicolai	Whse/Distribution	235,818 SF	154,690 SF	$0.35 - $0.35 NNN	225A	24 FT	**Grnd:** No
	2455 NW Nicolai St	Existing		154,690 SF	$.75/sf	277/480V	26 FT	**Dock:** 44
	Portland, OR 97210-1812	Concrete Tilt-up	**Site:** 7.8 acres	154,690 SF	**NNN:** $0.09/sf **TIs:**	3P	Yes	Yes Rail
	Complex:			154,690 SF	**For Sale:** No			
	Administrative Info: **Property ID:** 110003726 **Vacancy Rate:** 65.6% **Vacancy Index:** Industrial **Date Updated:** 09/21/2009 **Date Verified:** 03/29/2010 **Listing No.:**							
4	Consolidated Metco	Manufacturing	172,400 SF	172,400 SF			18 FT	**Grnd:** Yes
	13940 N Rivergate Blvd	Existing	21,000 SF	172,400 SF		277/480V	20 FT	**Dock:** Yes
	Portland, OR 97203-6565	Other	**Site:** 20 acres	172,400 SF	**NNN:** **TIs:**			Possible
	Complex:			172,400 SF	**For Sale:** $9,500,000 ($55.10/sf)		Yard	Yes Crane
	Administrative Info: **Property ID:** 110002331 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 03/31/2010 **Date Verified:** 03/29/2010 **Listing No.:**							
5	Linnton Plywood	Manufacturing	210,000 SF	210,000 SF	TBD		36 FT	**Grnd:** Yes
	10504 NW St Helens Rd	Existing		210,000 SF			36 FT	**Dock:** Yes
	Portland, OR 97231-1049	Other	**Site:** 24.74 acres	210,000 SF	**NNN:** **TIs:**			Yes Rail
	Complex:			210,000 SF	**For Sale:** $8,082,558 ($38.49/sf)		Yard	
	Administrative Info: **Property ID:** 110002880 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 09/21/2009 **Date Verified:** 03/29/2010 **Listing No.:**							

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1Q2010 Portland Industrial
150,000+ SF Contiguous Spaces

	Property Name / Address	Prop/Dev Type / Status / Construction	Building Size / Office SF	Total Available / Min Available / Max Contiguous / Total Vacant	Lease Rate / Office Surcharge / NNN & Tls	Amps / Volts / Phase	Min Clear Ht / Max Clear Ht / Sprinkler / Yard Space	Loading / Rail / Crane
6	Bldg 1 6308 N Marine Dr Portland, OR 97217 **Complex:** Marine Dr Dist I	Whse/Distribution Existing Concrete Tilt-up	225,250 SF **Site:** 12.9 acres	225,250 SF 106,000 SF 225,250 SF 0 SF	$0.35 - $0.35 NNN $.70/sf **NNN:** $0.09/sf **Tls:** **For Sale:** No	 277/480V 3P	26 FT 26 FT ESFR	**Grnd:** 3 **Dock:** 46 Yes Rail
	Administrative Info: **Property ID:** 110001420 **Vacancy Rate:** 0% **Vacancy Index:** Industrial **Date Updated:** 11/25/2009 **Date Verified:** 05/19/2010 **Listing No.:**							
7	Panel Equipment Sales 6803 SE Johnson Creek Blvd Portland, OR 97206-9457 **Complex:**	Manufacturing Existing Wood Frame	168,160 SF **Site:** 10.68 acres	168,000 SF 30,000 SF 168,000 SF 168,000 SF	TBD **NNN:** **Tls:** **For Sale:** $5,950,000 ($35.38/sf)	 480V 3P	20 FT 26 FT Dry Yard	**Grnd:** 9 **Dock:** 1 No Rail Yes Crane
	Administrative Info: **Property ID:** 110003166 **Vacancy Rate:** 99.9% **Vacancy Index:** Industrial **Date Updated:** 09/23/2009 **Date Verified:** 03/29/2010 **Listing No.:**							
8	Wilhelm Whse #3 2400 SE Mailwell Dr Milwaukie, OR 97222-7328 **Complex:**	Whse/Distribution Existing Concrete Tilt-up	280,122 SF **Site:** 7.85 acres	280,122 SF 70,000 SF 210,122 SF 210,122 SF	$0.25 - $0.30 NNN **NNN:** $0.05/sf **Tls:** **For Sale:** $7,000,000 ($24.99/sf)	 	18 FT 20 FT Yes	**Grnd:** 1 **Dock:** 27 Yes Rail
	Administrative Info: **Property ID:** 110003743 **Vacancy Rate:** 75.0% **Vacancy Index:** Industrial **Date Updated:** 12/29/2009 **Date Verified:** 03/29/2010 **Listing No.:**							
9	Bldg A 11241 SE Hwy 212 Clackamas, OR 97015 **Complex:** 212 Corporate Ctr	Whse/Distribution Existing Concrete Tilt-up	164,824 SF **Site:** 12 acres	164,824 SF 80,000 SF 164,824 SF 164,824 SF	$0.35 - $0.35 NNN $.70/sf **NNN:** $0.09/sf **Tls:** **For Sale:** No	4000A 480V 3P	24 FT 26 FT Yes Yard	**Grnd:** 10 **Dock:** 16 No Rail
	Administrative Info: **Property ID:** 110001397 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 01/12/2010 **Date Verified:** 03/29/2010 **Listing No.:**							
10	BMC West 20285 SW Cipole Rd Sherwood, OR 97140 **Complex:**	Whse/Distribution Existing Concrete Tilt-up	157,100 SF 31,100 SF **Site:** 18.86 acres	157,100 SF 37,500 SF 157,100 SF 157,100 SF	 **NNN:** **Tls:** **For Sale:** $12,500,000 ($79.57/sf)	 3P	16 FT 26 FT Wet Yard	**Grnd:** 13 **Dock:** 8 Possible
	Administrative Info: **Property ID:** 100046416 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 09/23/2009 **Date Verified:** 03/29/2010 **Listing No.:**							
11	G.M. Service Parts 15005 SW Tualatin Valley Hwy Beaverton, OR 97005-0000 **Complex:**	Whse/Distribution Existing Concrete Tilt-up	199,911 SF **Site:** 16.52 acres	199,911 SF 199,911 SF 199,911 SF 199,911 SF	$0.28 - $0.28 NNN $.80/sf **NNN:** **Tls:** **For Sale:** $8,850,000 ($44.27/sf)	2600A 460V 3P	18 FT 20 FT Yes Yard	**Grnd:** No **Dock:** 17 Yes Rail
	Administrative Info: **Property ID:** 110002585 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 09/23/2009 **Date Verified:** 03/30/2010 **Listing No.:**							

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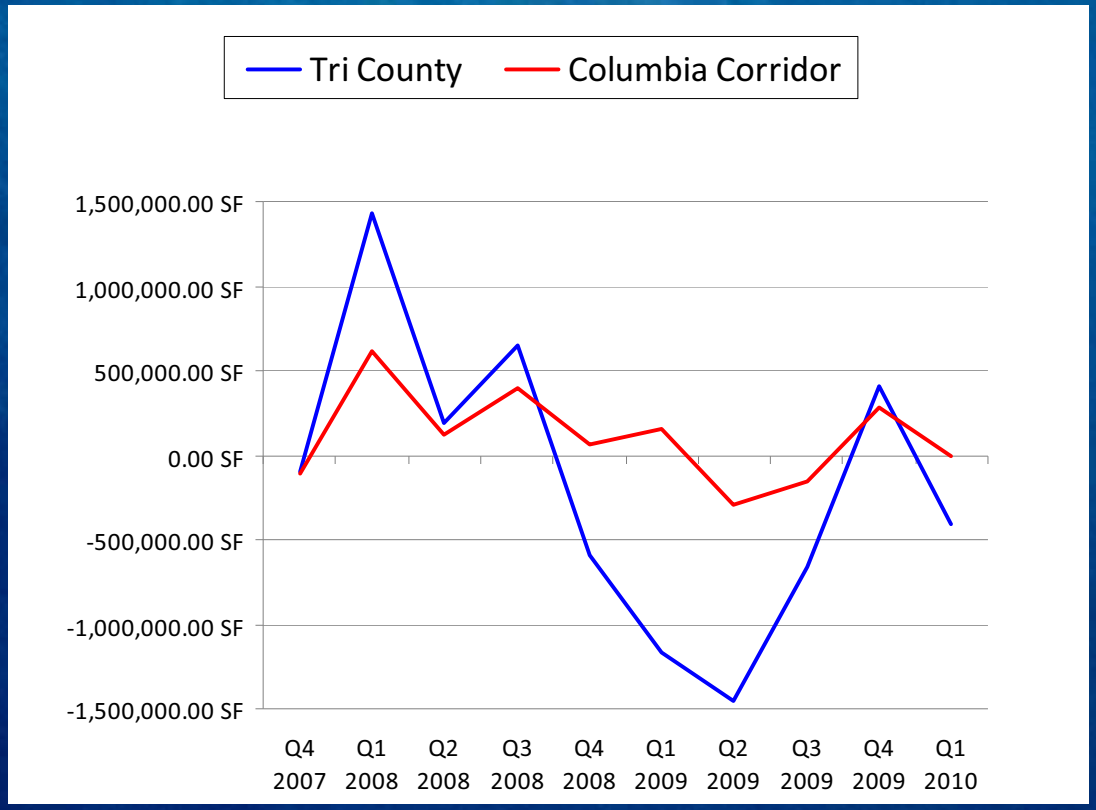
1Q2010 Portland Industrial
150,000+ SF Contiguous Spaces

	Property Name / Address	Prop/Dev Type / Status / Construction	Building Size / Office SF	Total Available / Min Available / Max Contiguous / Total Vacant	Lease Rate / Office Surcharge / NNN & Tls	Amps / Volts / Phase	Min Clear Ht / Max Clear Ht / Sprinkler / Yard Space	Loading / Rail / Crane
12	Hollywood Video 25600 SW Parkway Center Dr Wilsonville, OR 97070-9606 **Complex:**	Whse/Distribution Existing Concrete Tilt-up	177,580 SF **Site:** 10.37 acres	177,580 SF 177,580 SF 177,580 SF 0 SF	TBD (Lease Type: NNN) $.60/sf **NNN:** **Tls:** **For Sale:** No	1200A 277/480V	24 FT 25 FT Yes	**Grnd:** 1 **Dock:** 36 No Rail
	Administrative Info: **Property ID:** 110002706 **Vacancy Rate:** 0% **Vacancy Index:** Industrial **Date Updated:** 03/04/2009 **Date Verified:** 03/29/2010 **Listing No.:**							
13	Joe's Stores Warehouse 9805 SW Boeckman Rd Wilsonville, OR 97070-9242 **Complex:**	Whse/Distribution Existing Concrete Tilt-up	300,361 SF **Site:** 14.09 acres	300,361 SF 127,000 SF 300,361 SF 300,361 SF	TBD **NNN:** **Tls:** **For Sale:** No	 3P	22 FT 30 FT Yes Yard	**Grnd:** No **Dock:** 54 Possible
	Administrative Info: **Property ID:** 110002583 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 03/29/2010 **Date Verified:** 03/29/2010 **Listing No.:**							
14	MasterBrand 600 SW Walnut St Hillsboro, OR 97123 **Complex:**	Whse/Distribution Existing Metal	241,770 SF 16,185 SF **Site:** 17.85 acres	241,770 SF 73,925 SF 167,845 SF 241,770 SF	TBD **NNN:** **Tls:** **For Sale:** $4,900,000 ($20.27/sf)		12 FT 20 FT Yes Yard	**Grnd:** 8 **Dock:** 11 Possible
	Administrative Info: **Property ID:** 110004172 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 07/29/2009 **Date Verified:** 01/12/2010 **Listing No.:**							
15	Nike Distribution Center 27255 SW 95th Ave Wilsonville, OR 97070-0000 **Complex:**	Whse/Distribution Existing Concrete Tilt-up	508,277 SF **Site:** 25.95 acres	399,277 SF 399,277 SF 399,277 SF 399,277 SF	TBD (Lease Type: NNN) **NNN:** $0.10/sf **Tls:** **For Sale:** No	 3P	30 FT 30 FT 	**Grnd:** 3 **Dock:** 45 No Rail
	Administrative Info: **Property ID:** 110003028 **Vacancy Rate:** 78.6% **Vacancy Index:** Industrial **Date Updated:** 11/11/2009 **Date Verified:** 03/20/2010 **Listing No.:**							
16	Tektronix Bldg 58 2540 SW Karl Braun Dr Beaverton, OR 97077 **Complex:** Tek Bvtn Campus	R&D/Flex Existing Brick	195,441 SF **Site:**	195,441 SF 195,441 SF 195,441 SF 195,441 SF	$0.85 - $0.85 NNN BLN **NNN:** **Tls:** **For Sale:** No			**Grnd:** No **Dock:** No No Rail
	Administrative Info: **Property ID:** 100043635 **Vacancy Rate:** 100% **Vacancy Index:** Industrial **Date Updated:** 03/09/2009 **Date Verified:** 03/29/2010 **Listing No.:**							

TOTAL **Properties: 16** **Building SF: 3,730,358** **Available SF: 3,389,455**

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Absorption Rates – Net Absorption



Tri County

2007 – 4,514,750 SF

2008 – 1,671,226 SF

2009 - -2,867,468 SF

Q1 2010 - -502,183 SF

Columbia Corridor

2007 – 1,291,112 SF

2008 – 1,195,673 SF

2009 – -3,618 SF

Q1 2010 - -28,602 SF

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ProLogis

Ann Young
US Bank

Executive Director

Kelly Ross

September 29, 2010

The Hon. Carlotta Collette, Acting Council President
Metro Council
600 NE Grand Ave.
Portland, OR

Dear President Collette and Councilors:

We appreciate the opportunity to comment on Chief Operating Officer Michael Jordan's "Community Investment Strategy, Building a sustainable, prosperous and equitable region". NAIOP has been an active participant in the urban growth planning and development process and we are committed to working with Metro policy makers and staff to achieve the goals of employment, economic development and revenue creation in the region. A vibrant, creative and sustainable economy is the foundation upon which the region will achieve the Council's desired outcomes. Livable communities; reliable, efficient and clean transportation and infrastructure; and social equity will require the region to have a globally competitive economy. The economy is more than an outcome; rather, it is the requirement for the region's livability, efficiency and sustainability goals.

Without a strong economic base that is generating tax revenue, the COO's Community Investment Strategy will not be achievable. To achieve the "Greatest Place," to move from great plans to great communities, we must have the financial resources that are created by investment and jobs. And to create jobs, we must have the infrastructure and the land resources required for companies to locate and prosper. We believe it is critical for the Council to focus on these basic economic inputs as you proceed with your deliberations regarding the investment strategy and specifically on the upcoming Urban Growth Boundary expansion process.

An inventory of industrial sites to meet the needs of expanding local companies and the requirements of firms wanting to locate in the Portland metropolitan region is a prerequisite for competitiveness. We realize that the focus of the COO's recommendations is on industrial sites greater than 50 acres, due to the conclusions in the Urban Growth Report that the region did not lack industrial sites less than 50 acres. But before we comment on that recommendation, we'd like to provide a few market realities that the region currently faces regarding sites for new jobs.

12725 SW 66th Avenue, Suite 107 Portland, OR 97223 **Tel:** (503) 223-1766 **Fax:** (503) 597-3668

As is commonly assumed, the majority of new jobs and economic growth is created by small and medium size businesses. These firms require parcels much less than 50 acres, and in many cases, much less than 25 acres. We asked two of our real estate brokerage members to use their internal site data bases to analyze market activity and availability of sites equal to or less than 25 acres in the metropolitan area. CB Richard Ellis' (CBRE) local office determined that over the last 10 years, the region has averaged 30 sales of land parcels less than 25 acres per year; the average parcel size per sale was 5.4 acres; and the average price per square foot was $5.42.

As to availability of these size parcels, CBRE found that there is currently **142 parcels under 25 acres** for sale in Greater Portland (Oregon only). Capacity Commercial, another local brokerage firm, determined from their analysis that there are currently **11 sites 25 acres in size** that are viable sites for a company to purchase and construct a facility today. Assuming historical absorption rates, it is fair to assume that the region has less that a 20 year supply for these smaller, market viable industrial sites. While 50 and greater acre sites are an important component of our industrial land base, we look forward to the next UGR process to ensure the region is competitive for all sizes of parcels for new jobs.

The previous smaller site discussion is by no means meant to diminish the need for 50 acre and greater sites. The current UGR has rightly identified a lack of these sites, estimating a need for between 200 and 1,500 acres of these larger parcels. The COO has recommended adding 310 *gross* acres of industrial land north of Hillsboro to meet this need. We firmly believe that this is an insufficient amount of land to meet the identified need.

In many of the other analyses done by Metro, the mid-point of range was used. The COO recommended in his 9/09 report, "Strategies for a Sustainable and Prosperous Region" that the Metro Council focus in 2010 on the middle third of the population and employment forecasts. This concept of the middle third was incorporated into the recently completed urban/rural reserves process. The middle third of the population projection was also used to identify a need for residential land to accommodate in the range of approximately 48,000 – 58,000 new dwelling units.

We strongly recommend this same "middle third" measure be used for large lot industrial land. We recommend that between 800 – 900 acres of large lot industrial land be added to the UGB. And we support that these acres be added in locations that can be serviced and have the local governance in place to bring these sites to market expeditiously. The COO's recommendation is for these large acre sites to be located north of Hillsboro and states that "if….a higher point in the range of large-site industrial demand, there are additional urban reserves north of Hillsboro that are suitable." The City of Hillsboro has determined that 5-6 large sites can be identified if the Council chooses to move towards the mid-point of the demand range. Hillsboro's own analysis has determined a need for 1400 acres of suitable and available large industrial sites (50-100 acres) in order to be globally competitive for larger "anchor" companies. A larger addition of industrial land to the UGB, combined with the adjacent industrial area already in the boundary, can result in a total acreage of industrial land that will reach this demand and, when added to the region's existing assets, will increase our competitiveness for new jobs, investment and revenue.

While we appreciate the COO's recommendation that brownfields be elevated to a regional priority for redevelopment within the UGB, it is clear that the uncertainties, resources and time required to bring these to market can not substitute for land that can be brought to market much more rapidly to meet an immediate need.

We also support the COO's recommendation that these large industrial parcels be protected from incursion by schools, churches and other public uses. We cautiously endorse the concept of an inventory system to replenish large sites as they are taken out of the inventory; however, we believe this concept requires significant more discussion, which we would be pleased to participate in.

In closing, our Oregon NAIOP chapter and its members are committed to a partnership with the public sector to ensure that we have the resources necessary to build a strong, competitive and sustainable economic foundation in this region. Without this foundation, we will not have the jobs, tax revenue and quality of life that we need and deserve from such a great place. This partnership requires policies and decisions at the public level that will ensure that we have the tools and the basic requirements for a competitive economy. We trust you will make those hard choices.

Sincerely,



Greg Manning
Banner Bank
2010 Chapter President

Date: May 17, 2010

To: Patrick Ribellia, Esq., Planning Director, City of Hillsboro

FROM: Dick Sheehy, CH2M HILL
Steve Petersen, CH2M HILL
Bill Reid, Principal, Johnson Reid, LLC

SUBJECT: **NORTH HILLSBORO AREA: POTENTIAL LARGE INDUSTRIAL SITES EVALUATION**

As part of the City of Hillsboro ongoing effort to attract and retain industry in its 3 target cluster areas, the City has retained CH2M HILL and JOHNSON REID LLC to:

- Review and understand the current supply of large industrial sites in Hillsboro area
- Research availability of large sites in markets competitive with Hillsboro
- Identify and evaluate potential large sites within the proposed Urban Reserve and Undesignated areas that could potentially be added to the current supply

I. WEST WASHINGTON COUNTY LARGE INDUSTRIAL SITE LAND NEED

Introduction

Western Washington County (aka the "heart of the Silicon Forest" in Hillsboro) has emerged as a successful location for three high-technology industry clusters that are important to the regional and state economies:

- High-Tech Electronic Components ("High-Tech" silicon-based, etc.);
- Photovoltaic Solar Panel Manufacture (silicon-based, etc.); and
- Biotech/biopharma.

The High-Tech cluster established the region as the "Silicon Forest" and its economic importance for the region cannot be overstated. The latter two have emerged over the last five years, in large part due to the reputation for West Washington County as positive environment for large, technology-related firms. Growth prospects for all three industry clusters, specific to Western Washington County, were documented in detail in the May 2009 City of Hillsboro Economic Opportunities Analysis. Long-term growth prospects in all three clusters were identified as having significant implications for current and future large industrial site supply in particularly, West Washington County.

To understand the nature of 20-year demand for large industrial sites (50 acres or greater) driven by the three industry clusters and resulting land supply policy issues in West Washington County, the following topics are treated in this analysis:

1. *Why West Washington County/Hillsboro Area for the Clusters?*
2. *What is the Competitive Environment for the Clusters?*
3. *How Do National Competitors Specifically Address Large Cluster Employer Land Need?*
4. *Is West Washington County Competitive?*
5. *West Washington County Cluster Need Conclusions*

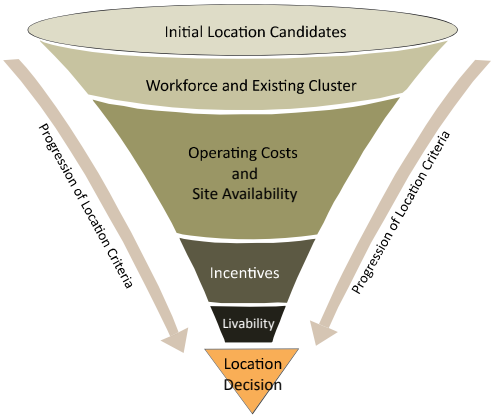
Why West Washington County/Hillsboro Area for the Clusters?
As part of the May 2009 City of Hillsboro Economic Opportunities Analysis ("EOA") process, representatives from the industry clusters themselves, as well as high-tech industry experts, alternative energy experts, State of Oregon economic development, and other economic stakeholders identified a combination of seven key qualities to the competitiveness of West Washington County, particularly in Hillsboro, for large technology cluster employers. The following is an excerpt from the EOA summarizing cluster stakeholder consensus.

> *"According to interviewees, the question of "Why Hillsboro?" yielded a distinct mix of qualities highly desirable, if not integral, to a specific segment of the nation's high tech industry. The following qualities were frequently cited in a not replicable combination as distinct inputs required by targeted industry:*
>
> 1. *High-Capacity, Continuous Electrical Power at Competitive Rates*
> 2. *High-Capacity, High-Quality Water Supply*
> 3. *Highly-Skilled/Educated Workforce with Existing High-Tech Cluster Investment*
> 4. *Flat, Seismically Stable Land without Brownfield Costs & Risks*
> 5. *Proximate, Diverse Transportation Infrastructure (Freeway, Air, Rail)*
> 6. *Specialized, Existing Industrial Material Supply Infrastructure (Chemicals, Gases)*
> 7. *Unique Expertise and Experience of the City of Hillsboro*
>
> *All of the above factors are individually attracted to a wide swath of industry, including high-tech, but the unique combination of all of the above distinguish Hillsboro from elsewhere in the State of Oregon and uniquely competitive with other markets in North America for high-tech industry that intrinsically depend heavily upon power, water, and highly-skilled labor."*

In conclusion, the unique *combination* of all of the above physical land quality, infrastructure, workforce, existing technology firm investment, and City of Hillsboro large tech facility expertise were identified as a cumulative, compelling attractor to large cluster employers in the past and into the future. The EOA process also identified a 20-year, large industrial site demand (50-acre+) of roughly 1,200 acres driven by the three key clusters. The demand estimate assumed a "medium growth" scenario, where growth and recruitment of the solar and biotech industries was "moderate" in nature.

What is the Competitive Environment for the Clusters?
As the above EOA excerpt indicates, the West Washington County/Hillsboro area is "uniquely competitive with *other markets in North American* for high-tech industry…" particularly those that depend upon the seven qualities cited. Subsequent research of high-tech cluster competition commissioned by the City of Hillsboro has confirmed the highly competitive nature of high-tech industry recruitment elsewhere across the country. A result of the survey of national competitors to West Washington County for cluster employers was the "Funnel Model" displayed below.

Figure 1 – Site Selection "Funnel" Model



The model demonstrates the site selection decision-making process of large employers as experienced collectively by economic development entities in the tech-competitive markets of:

- Albuquerque, New Mexico,;
- Austin, Texas;
- Colorado Springs, Colorado; *and*
- Raleigh, North Carolina.

The above is not an exhaustive list of markets competitive to West Washington County for cluster growth, though the above are directly competitive for the three key clusters and are known to have successfully recruited prospects that were also considering the Hillsboro vicinity.

Among all of the variables considered during the site selection process, a city or region usually has the greatest, immediate power to affect *site availability* for large employers. All other factors considered are usually shaped by regions over a longer term (workforce, existing cluster, livability), or are greatly or completely out of the control of local or regional interests (transportation/utilities/operating costs, incentives).

To maximize competitiveness for large, high-tech cluster employers, the above competitive markets were found to specifically focus on maximizing a supply of large industrial sites that are "development-ready" for construction to begin within 180 days of development application.

How Do National Competitors Specifically Address Large Cluster Employer Land Need?
A survey of West Washington County's selected competitors' approach to industrial land supply was conducted and is summarized in the table on the following page. Key findings were as follows:

- Competing high-tech, alternative energy, and high quality-of-life markets that specifically recruit manufacturers, including Austin, Texas and Raleigh-Durham, North Carolina, are faced with far less rigorous land use planning process and do not face mandated site count minimums for adequate supply or "choice" nor maximum restrictions on the number of large industrial sites in their inventory.
- Large industrial site strategy by most competitors is an issue of providing significant, prospective supply and choice based not on any study, best practice or empirical approach, but rather regional or jurisdictional economic goals and objectives and market/land owner coordination. Survey of competitor large site supply is below.
- Great emphasis is placed by competitors on "development ready" acreage, or sites that can be development within 180 days of application. This requires sites be certified as having all physical, environmental, and other qualities documented and known, infrastructure/services guaranteed, and willing sellers with an understood price or likely price range to ensure transaction.

Figure 2 – National Cluster Competitor Large "Development-Ready" Site Supply

	Albuquerque	Austin	Colorado Springs	Raleigh, NC	Seattle/King County
50-100 Acres	2-3 retrofit sites	380 acs in a "Featured Property Profile"	20 shovel-ready 15 not certified	60 ac, 66 ac	None
100+ Acres	8-10 100 ac	5-6 100 ac - 185 ac 140-acre park for clean energy agglomeration	500 acres with rail	472 ac, 998 ac	None
Other	18,000 acres of planned communities with significant dedicated employment land	Over 1,000 acres of large lot sites in total, many like Albuquerque in planned communities	Rail-served supply capacity increase still in progress	Larger, supersites intended for larger users but can and will be subdivided if necessary.	Capitalizes on Fred Hutchison Cancer Research Center and University of Washington for research/innovation jobs.

- Large site quantity, diversity, and flexibility to give firms multiple options were universally viewed as essential to cluster competitors.
- Inadequate site provision can frequently eliminate a market from contention entirely early in the site selection process.
- Competitive markets supplied a balance of 50-100 acre sites with 100+ acre sites. Some markets emphasized "supersites" or collections of proximate sites that can be assembled in to a single site of several hundred acres.

Is West Washington County Competitive?
A review of currently available large industrial sites in the Hillsboro vicinity/West Washington County that are suitable for the three key industry clusters yields the following:

- *Total Large Site (50-acre+) Supply:* A single 78-acre tax lot exists in Hillsboro on the east side of Brookwood Parkway south of Highway 26. The site is currently constrained by Brookwood/Highway 26 interchange capacity limitation and the site has a significant goal 5 resource area that sizably reduces buildable area.
- *Total "Development Ready" Large Site Supply:* The single 78-acre site already described.

It cannot be understated that the term "large site" is defined as either a single tax lot, or a pre-negotiated assembly of smaller parcels that together comprise at least 50 acres in size. Multiple landowners with different preferences for land disposition can and have prevented land assembly for large employers in the past, specifically in the West Washington County area. Furthermore, competitive regions market substantial "development-ready" sites that have site size ensured or assured.

The City of Hillsboro has specifically undertaken a process to plan and successfully implement site assembly, specifically in the Evergreen and Helvetia Special Industrial Districts currently within the urban growth boundary. Should the City of Hillsboro have absolute success with site assembly in those districts, the West Washington County can offer the following:

- *Total Large Site (50-acre+) Supply Assuming Maximum Site Assembly:* 531 acres in the Evergreen and Helvetial Special Industrial Districts, as well as the 78-acre site previously described.
- *Total "Development Ready" Large Site Supply Assuming Maximum Site Assembly:* The single 78-acre site already described.

Therefore, within the current UGB, West Washington County can offer a minimum of a 78-acre "development-certified" site and a maximum of 531 acres, only 78 acres of which are development-ready, *should the City of Hillsboro have maximum site assembly success*.

To specifically answer the question of West Washington County competitiveness regarding large industrial site supply, the following table provides a comparison of current supply in West Washington County and the identified, cluster competitors elsewhere in the country.

Figure 3 – West Washington County Large Industrial Site Supply Competitiveness

	50-100 Acre Sites		100+ Acre Sites		50+ Acre Sites	
Market	**Site Count**	**Acreage**	**Site Count**	**Acreage**	**Site Count**	**Acreage**
Colorado Springs	20	1,500	5	500	**25**	**2,000**
Raleigh	2	126	12	1,470	**14**	**1,596**
Austin (Round Rock)	5	380	6	855	**11**	**1,235**
West Wash. Co. - Medium Demand (20 yr)	*4*	*310*	*7*	*904*	***11***	***1,214***
Albuquerque	3	225	9	900	**12**	**1,125**
West Wash. Co. - Current Buildable Supply	*3*	*162*	*3*	*369*	***6***	***531***

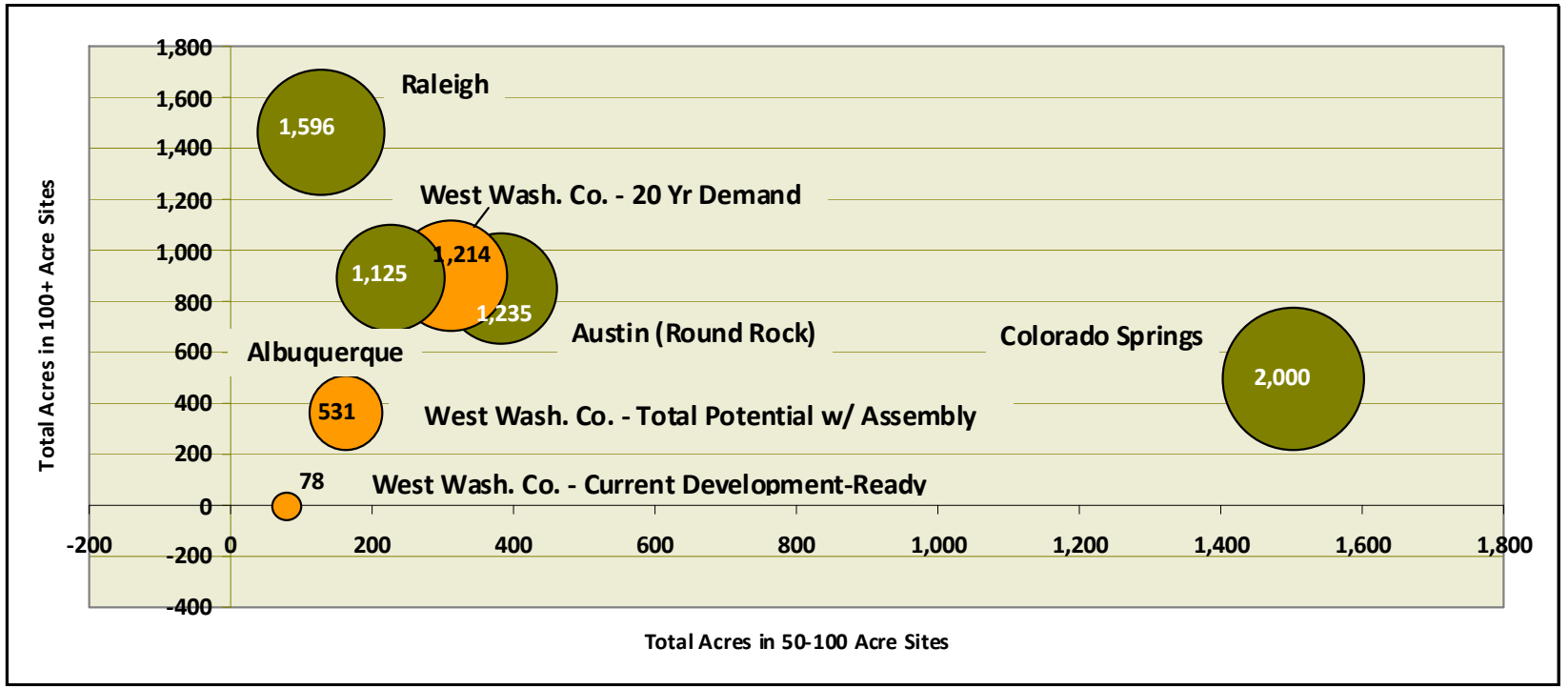
SOURCE: City of Hillsboro Vacant Lands Inventory (Dec. 2008), City of Hillsboro EOA (Mar. 2009), Johnson Reid (Feb. 2010)

- All national competitors currently market no less than 1,125 acres of development-ready sites (Albuquerque) for key industry clusters.

- Colorado Springs and Raleigh, who both specifically target more than the three West Washington County industry clusters, feature the greatest amount of development-ready large sites at between 1,600 to 2,000 acres.
- At the same time, the West Washington County area uncompetitively offers only a single, 78-acre development-ready site.
- Optimistically assuming the City of Hillsboro has maximum success with site assembly in the Evergreen and Helvetia Special Industrial Districts and all sites are development-ready certified, West Washington County clusters have less than half of the potential supply choices offered by the nearest competitor, Albuquerque.
- Finally, if a full 1,214 acres of large sites – assembled and single-tax lot – were made available consistent with cluster large employer demand documented in the May 2009 City of Hillsboro EOA, West Washington County would potentially have a competitive acreage supply, though only a percentage at any time would likely be development-ready.

A graphic illustration of West Washington County large site supply competitiveness with the other cluster competitors documented is found in Figure 4 on the following page.

Figure 4 - Competitive Market Development-Ready Site Supply & West Washington County Total Supply Compared



SOURCE: City of Hillsboro Vacant Lands Inventory (Dec. 2008), City of Hillsboro EOA (Mar. 2009), Johnson Reid (Feb. 2010)

West Washington County Cluster Need Conclusions

A review of all of the above findings indicates the following cluster large site need conclusions:

- West Washington County is presently uncompetitive regarding large cluster employer site supply with only one site "development ready" though transportation constrained.
- West Washington County is more competitive, but still disadvantaged with improbable maximum site assembly yielding 531 acres in the current UGB, the majority of which would not be site certified.
- Total supply of 1,214 acres matching 20-year cluster demand, including the 531 acres within the current UGB, would significantly enhance competitiveness as several sites could be certified as development-ready. Inventory would still, however, be hard-pressed to match development-ready site supply offered by competitors.

We therefore recommend the following for the heart of the Silicon Forest in Hillsboro to maximize competitiveness:

- A total buildable supply of no less than 1,214 acres consistent with 20-year estimated demand by the West Washington County clusters.
- Rapid pursuit of site certification or "development-ready" status for as many sites as possible.
- Potential "clustering" of site supply in 300+ acre areas or flexible "supersites" to allow greater flexibility and competitiveness with the markets identified above, as well as Tennessee and other solar competitors.
- Pursuit of large sites in West Washington County that have as many of the following qualities as possible:
    1. High-Capacity, Continuous Electrical Power at Competitive Rates;
    2. High-Capacity, High-Quality Water Supply;
    3. Highly-Skilled/Educated Workforce with Existing High-Tech Cluster Investment;
    4. Flat, Seismically Stable Land without Brownfield Costs & Risks;
    5. Proximate, Diverse Transportation Infrastructure (Freeway, Air, Rail);
    6. Specialized, Existing Industrial Material Supply Infrastructure (Chemicals, Gases);
    7. Unique Expertise and Experience of the City of Hillsboro in large site development review.

II. WEST WASHINGTON COUNTY LARGE SITE IDENTIFICATION AND EVALUATION

CH2M HILL SCOPE

Based on the foregoing description and evaluation, the long-term growth and viability of the traded sector high tech, solar energy manufacturing and bio-pharma/bio-medical clusters in West Washington County/Hillsboro requires an steady inventory of large sites (50-100 acres) to remain as a nationally competitive location for new companies investing in high technology electronics, solar manufacturing and bio-pharmaceuticals. Previous studies by the City and Johnson Reid have indicated there are currently a limited number of readily developable large sites greater than 50 acres in the region and specifically in Hillsboro.

As discussed in the previous sections compared to competitive markets, the area has fewer large sites (50 + acres) which places West WashCo/Hillsboro and the Portland Region at a competitive disadvantage. Companies prefer to have multiple sites to consider based on company specific criteria and in negotiating the purchase of a selected site.

As part of the City's ongoing planning and economic development efforts, CH2M HILL was retained to identify and review potential large industrial sites (50 to 100 acres) within the proposed Urban Reserve and Undesignated areas in North Hillsboro that could be competitive nationally for new high tech, solar energy manufacturing and bio-pharma/medical anchor businesses based on their site characteristics and other site suitability features.

APPROACH

CH2M HILL identified and reviewed/evaluated potential large industrial sites (50-100-acres in size) in the North Hillsboro Area utilizing the following review parameters:

- Evaluation was based on industry requirements within the 3 target clusters and site selection criteria developed through CH2M experience in working with these industries to find suitable sites for new companies
- Review was conducted at a high level using existing data and information
- Evaluation focused mainly on site characteristics, and not on other site selection criteria such as operating costs, labor, incentives etc.
- Sites were evaluated using CH2M acquired knowledge of, and experience nationally and internationally with industry requirements and knowledge of the North Hillsboro area
- Sites were identified in the proposed Urban Reserve and Undesignated areas in proximity to Highway 26 between Shute Road and Jackson School Road interchanges

SITE IDENTIFICATION

To identify potential large industrial sites CH2M HILL:

- Reviewed maps of the area including
    1. Ownership
    2. Topography
    3. Environmental restrictions and other encumbrances
    4. Utilities
    5. Transportation
- Reviewed city plans for economic development, utilities, and transportation improvements
- Conducted a windshield survey of the area and all the potential sites identified

EVALUATION CRITERIA

Based on the site requirements for the 3 target clusters described in the past by new companies in these clusters that have inquired into possible sites in the North Hillsboro area, CH2M HILL developed the high level site evaluation criteria below:

Site Suitability for development

- *Topography*—relatively flat or gently sloping site is desirable
- *Configuration*—square or rectangular site is the most desireable for most efficient utililization of land
- *Sites size*---Minimum of 50 contiguous usable acres
- *Site constraints*---Free of environmental restrictions, easements or other encumbrances
- *Visibility*—easily visible site from highway or major street.

Deliverability

- Minimal Number of property owners—affects ability to assemble suitable sites
- Proximity to existing Urban Growth Boundary
- Indication of support for development from owners in the area

Services

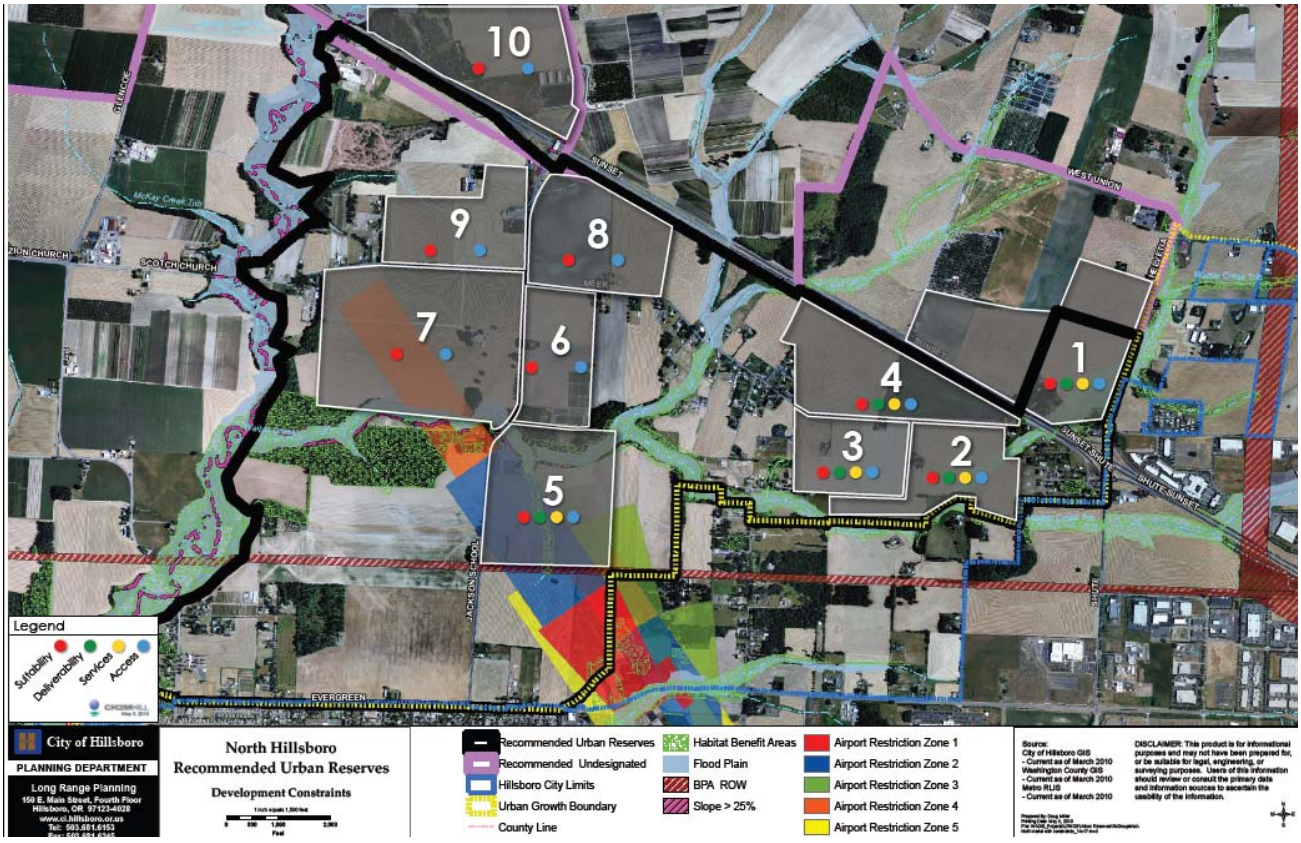
- Proximity to existing infrastructure (roads, utilities)
- Infrastructure expansion plans that could affect development of property
- Reasonable cost and timing to deliver services

Access

- Good Highway access
- Efficient Local street access
- Understanding of planned access improvements

IDENTIFIED SITES AND DISCUSSION

CH2M HILL identified and evaluation 10 potential large industrial sites within the proposed Urban Reserve and Undesignated Area's of the North Hillsboro Industrial Area (See Attached Map). The sites were reviewed using the evaluation criteria and are discussed below.



Site No. 1

Size: 200+/- acres
Description: This site is a combination of proposed Urban Reserve and Undesignated properties located adjacent to, and at the northwest quadrant of the Hwy 26/Brookwood Parkway Interchange. The site includes 2 (Jim Standing-owned) lots that are within the Urban Reserve combined with 1 lot north in Undesignated area along Helvetia Rd and 2 lots west along Hwy 26 also in the Undesignated area.

- Suitability:
  - To create a contiguous 50+ acre site requires the combination of the lots described above because the Southeast corner of the site directly adjacent to the Interchange is significantly impacted by environmental restrictions and the potential realignment of Groveland Road (to provide continued property access to public roadways and to support area traffic circulation) could bisect the site.
  - Slope <10%
  - Rectangular site or sites could be created depending upon Groveland Road realignment
  - Good site visibility from Hwy 26

- Deliverability:
  - The 2 owners along Helvetia have indicated interest in Urban Reserve designation. Interest by the owners of property to the west in being designated Urban Reserve is mixed (support and oppose)
  - Site is adjacent to current UGB boundary along Helvetia Road

- Services:
  - Public sewer and water infrastructure are available across Helvetia Rd to the east

- Access:
  - Good site access would further improve when planned Hwy 26 interchange improvements are built in the coming 2-3 years

Site No. 2

Size: 100 acres approx.
Description: Property owned by Erdman Living Trust west of the Meek Road rural residential area

- Suitability:
  - Total site configuration is not ideal but approx 60-70 acres create a relatively square, large site
  - Site is impacted and divided by 100 year flood plain
  - Site could be impacted and divided by potential Meek Rd Realignment
- Deliverability:
  - Single owner that has expressed interest in being included in the Urban Reserve
  - Site adjacent to the UGB
- Services:
  - Infrastructure services could be extended from future Evergreen area development
- Access:
  - Site access from Meek Rd to Brookswood Parkway and Hwy 26 interchange
  - Meek Road will require improvements to accommodate significant development

Site No. 3

Size: 80 acres approx.
Description: 3 lots owned by owned by Alderton, Cawrse and Bryan

- Suitability:
  - Relatively flat site
  - Site not contiguous to UGB but could be part of site 2. Separated from UGB by 100 year flood plain.
  - No obvious environmental restrictions on site
- Deliverability:
  - 2 owners have expressed interest in be included in Urban Reserve
  - Third owner's interest in Urban Reserves unknown
- Services:
  - Would tie into planned infrastructure services for the Evergreen area
- Access:
  - Access onto Meek Road to Brookwood Parkway to Hwy 26 interchange
  - Access onto Meek Road west to Jackson School Road to Hwy 26 could provide alternative access
  - Improvements to Meek Road would be required for significant development

Site No. 4

Size: 130 acres approx.
Description: 2 lots south of Hwy 26 owned by Tsai and Park

- Suitability:
  - Flat site
  - Site configuration is triangular but could provide a rectangular site of 50+ acres
  - Limited environmental restrictions or other encumberances on site.
  - Good site visibility from Hwy 26
- Deliverability:
  - 2 owners who have expressed interest in being included in the Urban Reserve
  - Site not adjacent to the current UGB
- Services:
  - Infrastructure services would need to be provided from those planned in the Evergreen area
- Access:
  - Site access from Meek Road to Brookwood Parkway and Hwy 26 interchange or Meek Road to Jackson School Road to Hwy 26
  - Improvements to Meek Road required to accommodate significant development

Site No. 5

Size: 162 acres approx.
Description: Property owned by Gerald Vanderzanden east of Jackson School Rd.

- Suitability:
  - Flat site
  - Site configuration is square
  - Bisected by 100 year flood plain

- Within Airport Approach Zone which may create development restrictions for the site
- Environmental and Airport Zone restrictions impact useable acreage but a site of approx. 80 useable acres could be developed.

- Deliverability:
  - Single owner that has indicated interest in being included in Urban Reserve
  - Southeast corner of site is adjacent to UGB
- Services:
  - Infrastructure services could be provided from Evergreen Road or from new services planned for the Evergreen Industrial area
- Access:
  - Site access to Jackson School Rd that connects to Evergreen to the south and Hwy 26 to the north

Site No. 6

Size: 70 acres approx.
Description: East of Jackson School Roadd owned by Christopher and Lee Hodges

- Suitability:
  - Flat site
  - Site has rectangular shape
  - South portion of site may be impacted by 100 year flood plain
  - 60-70 acres of usable site
  - No site visibility to highway 26
- Deliverability:
  - Ownership appears to be one family
  - Owners have indicated interest in being included in Urban Reserve
  - Site not adjacent to UGB
- Services:
  - Services would need to be extended from Evergreen along Jackson School Rd.
  - Extending services to site would have to be part of overall area development plan or would pass undeveloped sites
- Access:
  - Site access onto Jackson School Road to Hwy 26 interchange
  - Site access to Meek Road on north provides second access to Hwy26/Brookwood Parkway Interchange

Site No. 7

Size: 245 acres approx.
Description: Single property owner Thomas Vanderzanden

- Suitability:
  - Square/rectangular site
  - Relatively flat
  - Limited restrictions from Airport Overlay zone (Zone 5)
  - No apparent environmental restrictions
  - Not adjacent to UGB
- Deliverability:
  - Single owner that has expressed support for inclusion in Unban Reserve

- Services:
  - Infrastructure services could be provided along Jackson School Road from the south
- Access:
  - Site access onto Jackson School Road north to Hwy 26 and south to Evergreen Road

Site No. 8

Size: 160 acres approx.
Description: Site is located in southeast sector of Hwy 26-Jackson School Road Interchange. Consists of 3 lots (2 owned by Robert and Alys Zurcher and 1 owned by Leonard and Beverly Zurcher)

- Suitability:
  - Site relatively square
  - Excellent site visibility from Hwy 26
  - Flat site
  - Potential on-site environmental restriction with 100 year flood plain in northwest corner of the site
- Deliverability:
  - Within Urban Reserve designation with 1 owner supporting inclusion
- Services:
  - Infrastructure services could be extended from Evergreen Road thru Jackson School Road
- Access:
  - Site access from Jackson School Road on west and Meek Road on south
  - Immediate access to Hwy 26 from Jackson School Road

Site No. 9

Size: 80 acres
Description: West of Jackson School Rd and north of NW Scotch Church. 2 lots (Mike and Sue Management and Richard Vanderzanden)

- Suitability:
  - - Rectangular in shape
  - - Site is relatively flat
  - - Potential environmental restriction on north section(100 year flood plain)
- Deliverability:
  - Two owners with one owner indicating interest in being included in Urban Reserve but interest by second owner along Jackson School is unknown
  - Site requires both owners to be over 50 acres
  - Site not adjacent to UGB
- Services:
  - Infrastructure services would need to be delivered along Jackson School Rd from Evergreen
  - Timing for service extension unknown at this time
  - Infrastructure extension would have to be part of a larger area plan
- Access:
  - Good site access from Jackson School Road to Hwy 26 interchange and possible access to Scotch Church Road

Site No. 10

Size: 200+ acres
Description: This site at the northwest corner of the Jackson School Road- Hwy 26 Interchange could consolidate up to 3 lots

- Suitability:
  - Good site visibility to Hwy 26
  - Some environmental impact on west portion of site
  - Relatively flat site
  - Triangular in shape but large enough to create large square site of over 100 acres
- Deliverability:
  - Unknown as it is in Undesignated Area
- Services:
  - Urban infrastructure services don't appear to be readily available
- Access:
  - Site access to Hwy 26 is good at Jackson School Road/Hwy 26 Interchange

FINDINGS

- Based on past new companies inquiries, Hillsboro and Western Washington County industrial subregion continue to be viewed as favorable potential locations for large-scale industrial developments by companies within the 3 Target Industry Clusters. (See attached 2008-2009 site inquiries list)
- Although this subregion is viewed favorably, there is not a sufficient choice of large sites within the subregion at this time: There is only one ready-to-go or "development ready" site greater than 50 acres.
- The subregion needs to have multiple options for sites that are development-ready to stay competitive in the global market.
- Companies have different and their own unique site requirements and prefer to have multiple site options when considering a new location. Alternative development-ready sites are needed to reduce the risk of a first-choice site failing and to improve the site price negotiations once a preferred site is identified.
- There are companies within the 3 Target Clusters that can use small sites, however, most large projects are looking for large sites that can accommodate future growth and expansion. Not having room to expand is a negative for most companies looking for new sites. Some examples of projects that have located or considered locating in west Washington County include:
  - Genentech: approximately 75 acres on Evergreen Road. Phase I is complete and expansion is capable with additional property available.
  - Intel – multiple campuses in Washington county ranging from approximately 80 acres in Aloha to 400 acres at Ronler Acres.
  - TOK – small supplier to the electronics industry on approximately 40 acres. Currently completing their 3rd phase of expansion.
  - Solar World – approximately 100 acres, existing facility purchase and have expanded once with additional capability.
  - Solar Manufacturing Prospect in Hillsboro (June 2008) – 100 acre requirement, no site large enough without restrictions of wetlands, encumbrances and price could be assembled.
  - Solar Manufacturing Prospect - (February 2009) – 75 acre site, interested in Brookwood parkway site, limited developable acreage impact from wetlands and flood plane.

CONCLUSIONS AND RECOMMENDATIONS

Based upon our review and evaluation of the 10 identified sites (See map) and out recent experiences with companies in the 3 Target Clusters seeking large industrial lots we have concluded that the following sites are the most suitable and hold the best opportunity for development in the short term. They also offer the potential for the fastest turnaround for the provision of services and other necessary actions to make them "development ready". Descriptions and evaluations of each site are discussed in an earlier section. The sites below are in order starting with the best.

- ***Site 1.*** *We consider this site to have the best attributes and holds good potential for development. It is relatively flat, good highway access, and freeway visibility. The site is adjacent to the UGB and existing utilities which, therefore, provides the opportunity to relatively quickly provide services and annex it into the city. This site is impacted by environmental restrictions so to reach its maximum potential it will need to include sites currently in the proposed Undesignated area as indicated in the site description*

- ***Sites 2&3.*** *Both sites meet most of the industry requirements and could be desirable large industrial sites. Improvements to Meek Road and utility extensions into the Evergreen area are currently being planned and would overcome development constraints on the properties. The sites are adjacent to the existing UGB which could provide easier annexation into the city.*

- ***Site 4.*** *From a development stand point this site has similar attributes to 2&3 but with the additional advantage of good Hwy 26 visibility. It is not currently adjacent to the UGB and the planned utilities in the Evergreen area but could be considered with Sites 2&3 as planned access and utility improvements are made.*

- ***Site 5.*** *This site meets many of the development criteria but could be more problematic than other sites in extending utilities and accommodating environmental and other restrictions.*

The additional 5 sites (6-10) we reviewed meet some of the criteria but require longer term plans to deal with development constraints and the provision of adequate services. None of these are adjacent to the UGB.

****

Hillsboro Industrial Siting Prospects 3 Years (2007-2009)		
PROJECT	**LEAST ACRES**	**MOST ACRES**
Sonnershien	450	800
Apricus	250	300
Tahoe	80	150
Parkway II	75	200
Hot	75	75
Parkway	65	75
Million	65	75
Sunbelt	50	75
Bright	50	75
August	50	100
Boss	50	60
Bee	40	50
Bright	40	50
Valencia	40	50
Monarch	40	50
DT/Apollo	35	40
MIT	30	40
Reddy	26	40
Harvester	25	25
GM	20	25
David II	20	50
Overview	20	30
SpectraWatt	20	25
Jade	20	50
Innovate	15	25
Ark	15	20
Cell	10	25
Cambridge	10	20
SAV	10	20
Champion	10	15
MS	10	20
Wick	8	10
Edison	8	25
Ferro	5	10

Hillsboro Industrial Site Recruitments Over 3 Years				
	Least Acres	**Max. Acres**	**Percent**	
100+ Acres	2	5	15%	*
50-99 Acres	9	12	35%	*
25-49 Acres	8	10	29%	
< 25 Acres	15	7	21%	
Total Sites	34	34	100%	

50% of total site inquiries for parcels over 50 acres in size

Source: City of Hillsboro Ec. Dev. Dept.
December 2009

Employment Coordination and Advisory Committee
3/11/09 Meeting Summary

Employment Areas Vacant Land Supply

The consultant team provided a summary of the findings in the draft preliminary employment areas vacant land supply. The primary goal of the presentation was to provide the committee with an understanding of the methodology and the tier system used for categorizing the parcels. Questions, comments and concerns focused on:

- The extent of the survey; whether this only included the UGB or surrounding areas and cities; this needs to be clarified
- Besides absorption, schools, churches, and wetland development were other reasons found for the reduction in land supply
- There needs to be a local review of how the parcels were categorized into tiers
- There was concern regarding how land falls into these tiers and constraints that are beyond the city's control; this information, such as owner willingness, should also be translated into parcel classification
- The database is set up so that constraints can be piled as desired; multiple tiers could be created within each tier designated in this report; and can sort by 2040 design type
- Supply of 50-100 acres parcels is an improvement over 10 years ago of which most are ready for development
- There is an effort to track pending actions to reflect this in UGR supply and inform decisions
- There are limited large commercial sites
- Definition of the different classes (e.g. what does public facilities include) should be clarified and included on each page
- The classes were defined by zoning type, not use and from local jurisdictions classifications, not Metro's synthesized versions
- The memo needs to include a description of the limitations for drawing conclusions (e.g. determining the total absorption)
- Include brief tier definition on table pages

Upcoming Agenda Items

A revised version of this memo will be developed. For the next meeting, the TAC will receive a summary on the land capacity portion of this analysis.

Follow Up Items:

- Exercise for reviewing and classifying parcels into the tiers (invite those that completed initial maps)

FCS GROUP
Solutions-Oriented Consulting

Memorandum

To: Malu Wilkinson, Metro and Eric Hovee **Date:** April 3, 2009

From: Todd Chase, AICP, LEED

CC: Justin Healy, Real Urban Geographics

RE Revised Draft Employment Areas Vacant Land Supply Findings

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Introduction

This memorandum provides revised draft preliminary land supply findings and current land inventory estimates for land that has been considered by Metro to be available for potential employment growth. The preliminary land supply findings are intended to provide a draft estimate of the gross buildable land area for areas within the Urban Growth Boundary (UGB) area (tri-county area) that are planned for industrial, employment, commercial, public facilities, or mixed-use developments (per the 2040 Regional Framework Plan and local zoning codes).

This land inventory includes an analysis of tax lots that were characterized as vacant or partially vacant by Metro Regional Land Information System While this land supply tabulation is intended to be an approximate indicator of vacant and partially vacant employment lands within the existing UGB, it is not intended to reflect vacant land absorption over a fixed time period. Comparisons with prior UGB land supply estimates and studies are difficult to make due to changes in tax lot boundaries (i.e., tax lot line boundary adjustments), zoning changes, and corrections made to prior vacant land mapping assumptions. This analysis includes adjustments to the prior 2007 Metro Vacant land inventory database, with current assumptions as of December 2008. Attempts have been made to remove tax lots from the vacant buildable land inventory if construction has been completed (as of December 2008), but not for tax lots with construction underway or development applications approved or pending approval.

The steps used to conduct this analysis are generally laid out as follows.

Step 1 Meet with Metro staff to confirm current GIS data assumptions, and available GIS analysis layers that should be used in this analysis.

Step 2 Prepare draft buildable lands maps for the tri-county UGB region that depict prior 2007 vacant and part vacant land inventory assumptions for industrial, employment, commercial, public facilities, and or mixed-use areas.

Step 3 Distribute draft buildable land maps to local jurisdictions and the Port of Portland for review and comment. Reviewers were asked to provide comments on specific tax lots, and to define any areas that are deemed to be "special planning areas" with expected levels of future development and employment growth. Please refer to separate Memorandum from Miranda Bateschell of Metro to local jurisdictions dated November 26, 2008.

Step 4 Compile comments from local jurisdictions for each tax lot, and incorporate comments into the GIS data base. Note, 22 of 23 jurisdictions along with the Port of Portland did provide some level of review and comment on the draft employment land inventory assumptions. This effort resulted in comments that helped to verify new development projects with buildings that have been constructed as of December 2008. Map reviewers also provided comments regarding current zoning, and ownership considerations (such as whether the tax lot is owned a school or parks district), and noted whether tax lots should be "added" or removed" from the vacant land inventory.

Step 5 Estimate the buildable land area for each tax lot by analyzing GIS data pertaining to environmental features that would constrain the amount of potential site development on vacant and part vacant areas. For purposes of this analysis, the City of Portland and Washington County identified vacant tax lots to be included in this analysis. Washington County also identified environmental constraints, which is used for this work. For areas, outside Washington County, the environmental constraints were calculated for each site using estimates for land area that is constrained by the following: Metro Title 3 designation (waterways, wetlands, riparian buffers) or applicable local significant resource overlay zone (applicable to Wilsonville); slopes over 10% for tax lots with industrial land use classifications, or 25% for tax lots with other employment and mixed use land use classifications.

Step 6 Remove "developed" tax lots and tax lots that no longer have an "employment land use" classification inventory (based on comments). Also, remove tax lots with less than 0.2 buildable acres after accounting for environmental constraints[1]. This step resulted in a total of 649 tax lots with 1,127 net buildable acres being removed from the draft land supply inventory. The primary reason for removing vacant lands in tax lots with less than one acre in size was most often attributed to adjustments needed to be made to delete "slivers" of vacant lands that resulted after accounting for environmental constraints. For tax lots over one acre in size, the land being removed from the inventory primarily reflects recent construction of public, private and non-profit developments, and some local zone changes (noted and recorded as of December 2008). Additional analysis of the tax lots over one acre, reveals that approximately 20% of the land removed is attributed to public and non-profit development activity (churches, schools, etc.) and 80% to private development activity. The amount of land removed or added due to changes in land use zoning is not known at this time because of the methodology used to assimilate the data.

[1] Unlike the prior Regional Industrial Land Study for the Portland-Vancouver Region (1999-2003) reports, and subsequent vacant industrial land supply updates (2007), this analysis has been expanded to include all types of employment land (industrial, commercial, mixed-use, public facilities, etc.) and includes tax lots of less than 1.0 acre in size.

As indicated in **Table 1**, after accounting for the inventory being removed, the amount of remaining vacant employment land inventory includes approximately 3,286 tax lots with a total of 12,151 net buildable acres inside the existing Metro UGB area.

Table 1
Portland Metropolitan Region (tri-county) Urban Growth Boundary
Estimated Employment Land Supply, December 2008
(net buildable acres)

	Less than 1 ac.		More than 1 ac.		Total	
	tax lots	acres	Tax lots	acres	Tax lots	acres
Estimated Inventory Before Analysis	1,327	691	2,608	12,587	3,935	13,278
Inventory Removed*	386	83	263	1,044	649	1,127
Remaining Inventory After Analysis	**941**	**608**	**2,345**	**11,543**	**3,286**	**12,151**

** represents tax lots removed from Metro's draft vacant and part vacant land supply inventory based on jurisdiction input, or size thresholds (removes tax lots with less than 8,712 square feet of buildable land area). Compiled by FCS GROUP based on Metro GIS data and jurisdiction/Port input.*

Step 7 Sort tax lots into Tiers based on an analysis of tax lot location, existing building and land value, environmental development constraints, infrastructure availability, transportation access, local land use designation and "land banking" issues. For purpose of this analysis, a transportation deficiency was noted for tax lots within 1/4 mile of major arterial roadway with a peak-hour volume-capacity ratio greater than 1.0 (V/C>1.0 as defined by the current Metro Regional Transportation Plan traffic model). Land use policy constraints were identified for tax lots that have not been annexed or zoned by local jurisdictions, and for sites with identified restrictions (based on map review comments reflecting brownfields, aviation flight protection overlay zone, or marine-use restrictions). The current assessed market value for building improvements helped determine if a site is considered as vacant or part vacant. For purposes of this analysis, tax lots with less than $25,000 in building valuation are assumed to be vacant, and tax lots with more than $25,000 are assumed to be part vacant.

The general land use classifications included in this vacant employment land analysis include tax lots that have the following local land use classifications, which are defined within the Metro Regional Land Information System, GIS database as "GEN ZONE CLASS" or 2040 Design Type "DESGNTYP" if no local urban zoning has been established.

A summary of the relevant 2040 Design classifications considered in this vacant land inventory are provided in **Table 2**.

Table 2
2040 Design Types Evaluated in this Vacant Land Analysis

2040 Design Type	Expected/Planned Uses
Central City	Includes Downtown Portland and portions of the South Waterfront and Lloyd District, which function as the major regional center. Expected uses include a broad mix of high-rise development for employment, housing, and institutional uses; with urban amenities and public open spaces.
Regional Centers	There are 7 regional centers outside the Central City, including: Hillsboro; Gresham; Gateway (east Portland); Downtown Beaverton; downtown Oregon City; Washington County Town Center; and Clackamas Town Center. Expected uses include a broad mix of low and mid-rise developments with employment, housing, and institutional uses; and urban amenities and public open spaces.
Town Centers	Town Centers are located in small to mid-size cities, and provide local shopping, employment, cultural and recreational opportunities. Expected uses include low- to mid-rise developments for retail, employment, housing and institutional uses, and public open spaces. Examples include: downtown Lake Oswego, Forest Grove, Hillsdale and Gladstone.
Corridors	Located along transit routes, Corridors are less dense than centers, but can include nodes of relatively higher density developments. Expected developments include row-houses, duplexes and low- to mid-rise office buildings, along with neighborhood retail/services.
Station Communities	Generally located within 1/2 mile from light-rail, commuter rail or high capacity transit, these areas include nodal developments with excellent pedestrian and transit access. Expected uses include a mix of mid- to high rise developments, with retail, employment and housing.
Main Streets and Neighborhood Centers	Traditional "main streets" served by transit with a strong business and civic community that generally serves local neighborhoods and travelers. Expected uses include a mix of low- to mid-rise developments, with a mix of retail, services, employment, and housing. Examples are found in Hillsboro, Milwaukie, Oregon City, and Gresham.
Employment Areas	Areas set aside or planned for a mix of light industrial and office developments, with good transportation access. Expected uses include light industrial and "flex" developments, campus office, and medical office, with ancillary retail/services.
Industrial and Regionally Significant Industrial Areas (RSIA)	Areas set aside or planned primarily for industrial uses and activities. Located near existing/planned highways, rail corridors, and marine/air freight handling areas, these industrial areas are critical for regional commodity flows and access to national and international markets. Expected uses include low- to mid-rise industrial developments (warehousing distribution, manufacturing, processing, etc.), corporate headquarters, and ancillary retail/services. RSIA has more restrictive limitations on non-industrial activities than found in Industrial Areas.
Inner and Outer Neighborhoods	Primarily includes low-rise residential neighborhoods with public parks and open spaces. May include neighborhood retail/services and institutional uses (ie., schools and churches) in low-rise environment.

Relevant local general zoning classifications considered in this vacant employment land inventory are listed in **Table 3**.

Table 3
General Local Zoning Classifications Evaluated in this Vacant Land Analysis

Land Use Classification		Expected/Planned Uses
CC	Central Commercial	Range of mid to high-rise commercial uses; typically associated with CBD's and downtowns, including retail, service and/or office uses.
CO	Office Commercial	Range of low-rise offices and businesses, such as professional and medical offices, often in "campus" settings.
COM	Commercial	Retail, service and/or office uses.
IH	Heavy Industrial	Light and heavy industrial uses with intensive activity, such as chemical and food processing, heavy manufacturing, assembly, and intermodal shipping; uses may have noxious externalities.
IL	Light Industrial	Light industrial uses, such as warehousing distribution, light manufacturing, processing, fabrication and assembly. May allow corporate headquarters and ancillary commercial services.
IND	Industrial	Light and/or heavy industrial uses, such as manufacturing, fabrication, processing, assembly and warehouse distribution.
MUE	Multiple Use Employment	Broad range of uses, including office, retail, warehouse distribution, and light industrial activities.
MUR	Mixed Use Residential	Low to high-rise residential housing, with ancillary retail, service and office uses
PF	Public Facilities	Broad range of government buildings, public facilities and institutions, such as public works yards, treatment plants, and schools.

Step 8: In addition to deducting selected environmental constraints from the gross buildable land supply (please refer to Step 7), this vacant land analysis also deducted land for future public right-of-way (streets and pedestrian corridors). The analysis utilized current Metro Urban Growth Report assumptions for planned future right of ways to be: 18.5% of gross buildable area for tax lots larger than one acre; 10% of gross buildable area for tax lots between 3/8 acre and one acre; and 0% for tax lots under 3/8 acre.

The current 2009 Employment Land Supply Tier classifications and applicable constraints are summarized in **Table 4.**

Table 4
2009 Vacant Employment Land Supply Classifications

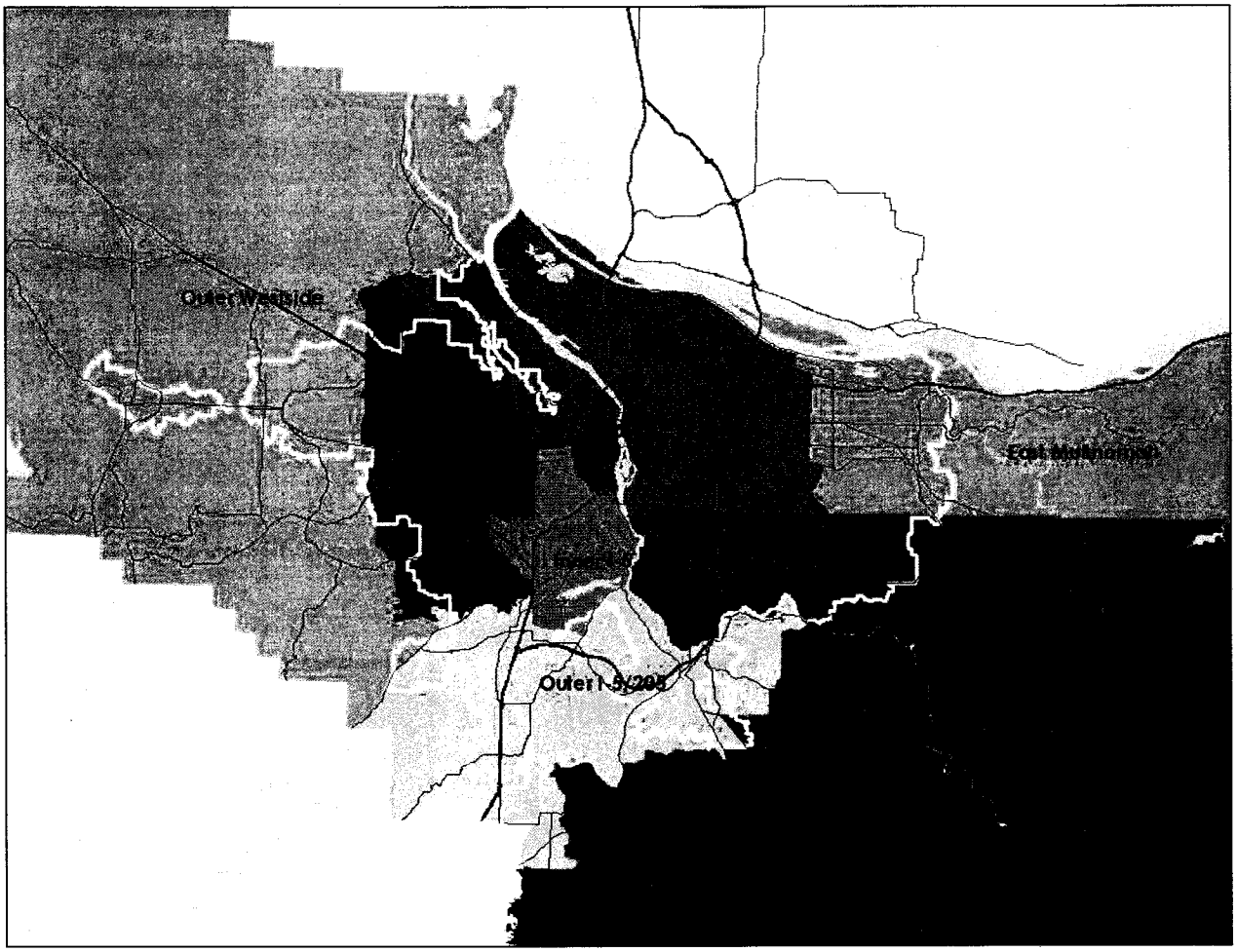
Tier	Title	Applicable Constraints	Development Readiness
A	Vacant, Unconstrained	Must be over 1 net buildable acre with no known constraints*	Great
B	Vacant, Constrained	Must be over 1 buildable acre, and have one or more constraints listed in Note 1.	Good
C	Infill, with 0.2 to 1 acre in size (Vacant or Part Vacant)	Tax Lots with 0.2 to 1 acre, and already annexed.	
D	Part Vacant, with constraints	Portion of existing tax lot that is (net of existing building and parking), over 1 acre, and be already annexed**	
E	Vacant, but lacks urban services, infrastructure and current zoning	Vacant, over 1 acre, but lacks needed infrastructure, and requires annexation and current zoning before development can commence*	Fair
F	Part Vacant or Redevelopable, but lacks urban services, infrastructure and current zoning	Part vacant land, over 1 acre, but lacks needed infrastructure, and requires annexation and current zoning before development can commence**	Poor
G	Infill, with 0.2 to 1 acre in size, but lacks urban services and infrastructure and current zoning (Vacant or Part Vacant)	Small areas of vacant or part vacant land outside existing service district, lacks needed infrastructure, and requires annexation and current zoning before development can commence.	

Notes:
1) applicable constraints include one or more of the following: Title 3 Environmental designation (waterways, wetlands, riparian buffers, etc.) or applicable local significant resource overlay zone; slopes over 10% for industrial lands or 25% for other employment and mixed use lands; transportation deficiency (within 1/4 mile of major arterial roadway with V/C>1.0 (defined by Metro RTP); lack of adequate sewer or water infrastructure, lack of local zoning consistent with urban employment-related development, or known land use/policy constraints (such as sites designated as "brownfields", aviation flight protection overlay zone, or marine-use restrictions); or tax exempt tax lot status.
** Tax lot building market value is less than $25,000, according to County Assessor records, 2008.*
*** Tax lot building market value is more than $25,000, according to County Assessor records, 2008.*

Preliminary Findings

In addition to the work undertaken to derive Tier designations, this vacant employment land supply analysis groups vacant lands by generalized land use classification, parcel size, and market geography. This approach provides a useful means for understanding the amount of land supply as well as its ability to accommodate near-term and long-term employment growth throughout the region. The vacant land supply is reported for nine tri-county market geographies. These areas are depicted in **Figure 1.**

Figure 1 Tri-County Market Geographies



The draft land supply findings are reported in the following tables:

Table 5: Regional UGB Area Total Vacant Land Supply by Tier
Table 6: Tier A Vacant Land Supply by Market Geography
Table 7: Tier B Vacant Land Supply by Market Geography

Please refer to **Appendix A** for a more detailed breakdown of estimated net buildable land area for each of the market areas shown in Figure 1.

It should be noted that the vacant employment land supply estimates contained in this memorandum and Appendix A are limited to the land use classifications listed in Table 1 and Table 2. In addition to these employment land use classifications, we have also identified approximately 238 net acres of "Rural" land use classifications within the Inner North & East Market Geography. These lands are primarily concentrated in West Hayden Island, and were previously classified as "Regionally Significant Industrial Area 2040 Design Type" in 2002, but that designation was subsequently amended to a "Rural Design Type." Planning decisions regarding the future use of West Hayden Island are still pending local and regional review and approvals.

Next Steps

The next steps in the vacant employment land analysis includes estimating the near-term development capacity potential that could be accommodated on vacant Tier A and Tier B lands within the existing tri-county UGB.

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**

Table 7 Continued, Tier B 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	6	11	9	46	1	13	1	46	0	0	0	0	**17**	**116**
Inner I-5	0	0	1	1	1	0	0	0	0	0	0	0	0	0	**2**	**1**
Inner Westside	0	0	21	31	10	37	2	39	0	0	0	0	0	0	**33**	**108**
Inner Clackamas	0	0	3	6	0	0	0	0	0	0	0	0	0	0	**3**	**6**
East Multnomah	0	0	8	15	6	32	1	13	0	0	0	0	0	0	**15**	**60**
Outer Clackamas	2	2	0	0	3	15	2	41	0	0	0	0	0	0	**7**	**58**
Outer I-5/I-205	0	0	6	11	5	28	3	77	1	39	0	0	0	0	**15**	**156**
Outer Westside	0	0	23	40	24	143	3	45	2	87	0	0	0	0	**52**	**315**
Total	**2**	**2**	**68**	**115**	**58**	**302**	**12**	**227**	**4**	**172**	**0**	**0**	**0**	**0**	**144**	**819**

Table 7 Continued, Tier B 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	10	17	3	18	1	13	0	0	0	0	0	0	**14**	**49**
Inner North & East	0	0	8	12	2	11	0	0	0	0	0	0	0	0	**10**	**24**
Inner I-5	6	3	0	0	0	0	0	0	0	0	0	0	0	0	**6**	**3**
Inner Westside	0	0	22	39	10	52	2	38	1	47	0	0	0	0	**35**	**176**
Inner Clackamas	0	0	12	24	8	44	0	0	0	0	0	0	0	0	**20**	**68**
East Multnomah	0	0	14	25	4	17	0	0	0	0	0	0	0	0	**18**	**42**
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	10	18	2	13	0	0	0	0	0	0	0	0	**12**	**31**
Outer Westside	5	8	0	0	0	0	0	0	0	0	0	0	0	0	**5**	**8**
Total	**11**	**11**	**76**	**135**	**29**	**156**	**3**	**51**	**1**	**47**	**0**	**0**	**0**	**0**	**120**	**400**

	.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	1	4	0	0	0	0	0	0	0	0	**1**	**4**
Inner I-5	1	1	6	12	2	13	1	20	0	0	0	0	0	0	**10**	**46**
Inner Westside	0	0	11	19	0	0	0	0	0	0	0	0	0	0	**11**	**19**
Inner Clackamas	0	0	10	19	1	4	0	0	0	0	0	0	0	0	**11**	**23**
East Multnomah	2	1	1	1	3	12	0	0	0	0	0	0	0	0	**6**	**15**
Outer Clackamas	0	0	2	3	0	0	0	0	0	0	0	0	0	0	**2**	**3**
Outer I-5/I-205	0	0	6	10	2	9	0	0	0	0	0	0	0	0	**8**	**20**
Outer Westside	0	0	9	18	4	28	1	32	1	32	0	0	0	0	**15**	**109**
Total	**3**	**2**	**45**	**82**	**13**	**71**	**2**	**52**	**1**	**32**	**0**	**0**	**0**	**0**	**64**	**238**

Table 7 Continued, Tier B 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	2	15	1	12	0	0	0	0	0	0	**3**	**27**
Inner I-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Inner Westside	0	0	5	7	2	11	1	85	0	0	0	0	0	0	**8**	**103**
Inner Clackamas	0	0	0	0	1	4	0	0	0	0	0	0	0	0	**1**	**4**
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	1	1	1	6	1	13	0	0	0	0	0	0	**3**	**21**
Outer Westside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Total	**0**	**0**	**6**	**9**	**6**	**36**	**3**	**111**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**155**

	.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	1	0	10	17	3	18	1	13	0	0	0	0	0	0	**15**	**49**
Inner North & East	0	0	14	23	73	423	16	250	5	181	0	0	0	0	**108**	**877**
Inner I-5	7	4	8	15	3	13	1	20	0	0	0	0	0	0	**19**	**52**
Inner Westside	0	0	66	111	23	104	6	176	2	73	0	0	0	0	**97**	**463**
Inner Clackamas	0	0	64	115	23	121	2	40	1	30	0	0	0	0	**90**	**307**
East Multnomah	2	1	99	184	62	318	15	230	5	182	1	56	0	0	**184**	**970**
Outer Clackamas	2	2	2	3	4	25	2	41	0	0	0	0	0	0	**10**	**70**
Outer I-5/I-205	2	2	71	123	48	272	6	113	2	70	0	0	0	0	**129**	**581**
Outer Westside	5	8	50	94	50	286	17	313	6	202	0	0	0	0	**128**	**903**
Total	**19**	**17**	**384**	**685**	**289**	**1,581**	**66**	**1,196**	**21**	**738**	**1**	**56**	**0**	**0**	**780**	**4,272**

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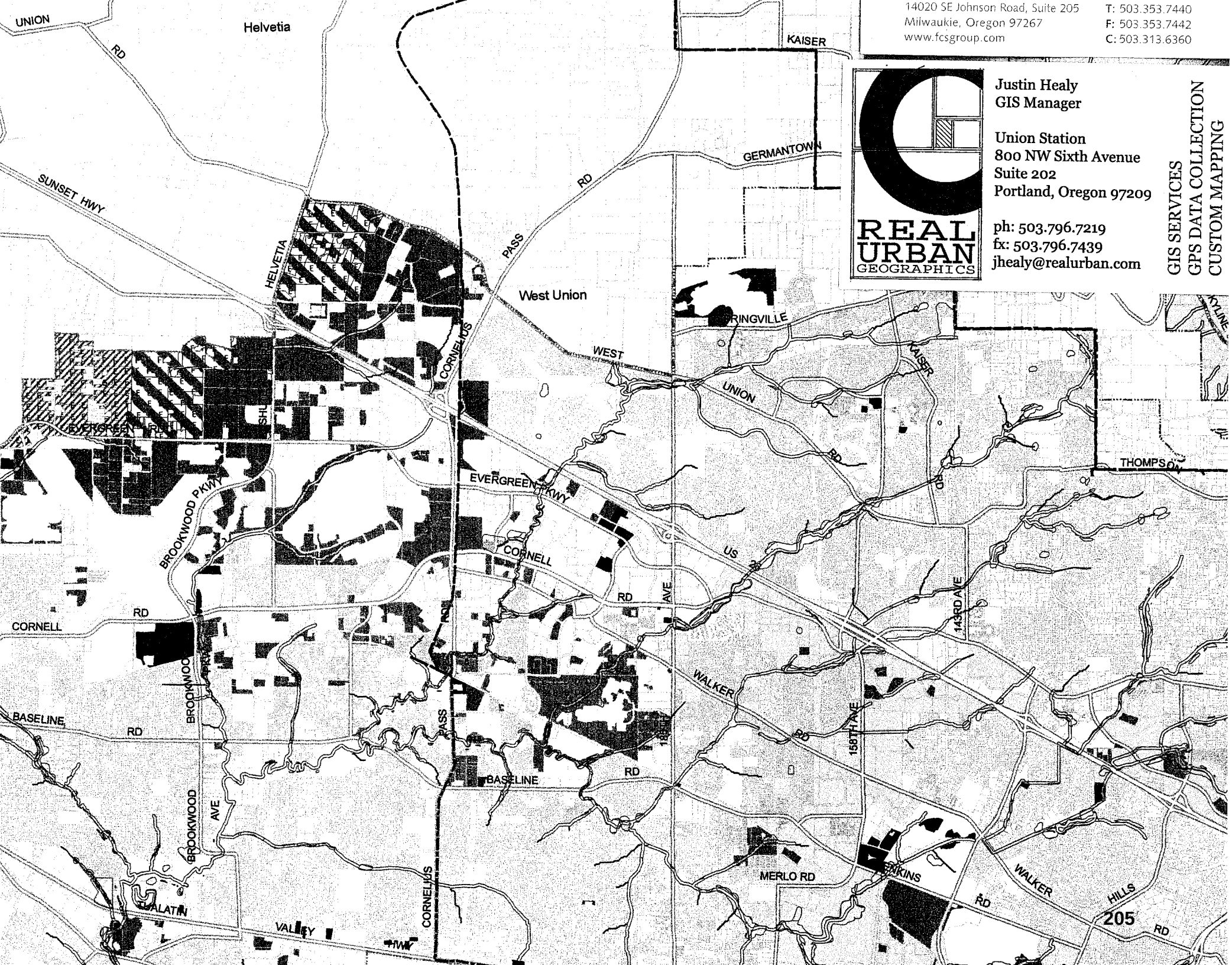
REAL URBAN GEOGRAPHICS

Justin Healy
GIS Manager

Union Station
800 NW Sixth Avenue
Suite 202
Portland, Oregon 97209

ph: 503.796.7219
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GIS SERVICES
GPS DATA COLLECTION
CUSTOM MAPPING



INVENTORY OF LARGE INDUSTRIAL SITES

Preliminary Draft

Criteria for large industrial sites:

1. Included all tax lots either designated Title 4 (RSI, EMP, IND) or zoned for industrial use.

2. Included tax lots that are primarily vacant; any improvements are minimal.

3. Tax lots with significant acreage of steep slopes (greater than 10%) were removed.

4. Large sites are defined as groups of tax lots 50 acres or greater with common ownership.

Site 1
99 ac.

Site 2
774 ac.

Site 3
373 ac.

Site 4
223 ac.

Site 5
51 ac.

Site 6
248 ac.

Site 7
118 ac.

Site 8
116 ac.

Site 9
95 ac.

Site 10
67 ac.

Site 11
66 ac.

Site 12
51 ac.

Site 13
213 ac.

Site 14
63 ac.

Site 15
96 ac.

Site 16
74 ac.

Site 17
51 ac.

Banks
North Plains
Hillsboro
Forest Grove
Cornelius
Beaverton
Gaston
Tigard
King City
Durham
Tualatin
Sherwood
Rivergrove
Lake Oswego
West Linn
Newberg
Wilsonville
Canby
Barlow
Oregon City
Gladstone
Johnson City
Milwaukie
Happy Valley
Damascus
Gresham
Portland
Vancouver
Maywood Park
Troutdale
Fairview
Wood Village
Camas
Washougal
Sandy
Estacada

Sites under consideration

Large industrial sites

October 15, 2010

Honorable Interim President Carlotta Collette and Metro Councilors:

I/we are informed of the August, 2010 Metro Chief Operating Officer (COO) recommendation to include the above property within the Metro Urban Growth Boundary (UGB) for exclusive, large-site industrial use. I/we own the property and support its inclusion in the UGB for industrial use.

We understand that this COO recommendation includes a specific caveat: "*This expansion should only be made if there is certainty that this land will supply lots over 50 acres*". It also references possible application of conditional UGB approval or land use tools that "*would encourage landowners to assemble their tax lots, making the site more development ready*". As used in this Agreement, "*development ready site*" shall mean:

- The site is inside the urban growth boundary;
- The site has been annexed to the City of Hillsboro (the "City");
- Comprehensive Plan amendments and zoning have been adopted for the site; and
- Necessary infrastructure services to the site, including transportation, water, sewer, storm water and electricity have been demonstrated to be readily-available;

and, "*large lot industrial user*" shall mean a purchaser of 50 acres or more for the purpose of developing the property for the purchaser's manufacturing or research and development operations.

Property Owner Land Assembly & Representation Authorization

Subject to the consideration and limitations listed below, I/we hereby authorize and are willing to allow:

1. The assembly or merger/consolidation of my property with other adjacent and nearby properties included in the COO UGB expansion recommendation to create a "development-ready" large site within the UGB expansion area that contains at least 100 acres of land.

2. The application of City land subdivision, planned unit developments, lot-line adjustments and/or other customary City land use techniques and procedures to my property to create the development-ready site, provided that any resulting land remnant shall not be less than 50 acres in size. In the event my/our property contains remnant parcel(s) created by any land assembly, consolidation or resulting sale to a large lot industrial user, the City of Hillsboro agrees to apply City land use tools and procedures to assure future legal industrial use of such remnant parcel(s), either separately, or as part of another large industrial site.

3. Joint listing of my/our property for sale pursuant to a joint marketing agreement for the sale of multiple properties for large-site industrial use and representation on my behalf in such a transaction by a single point of contact person jointly approved by all owners of properties included in the transaction. A single point of contact may include a real estate broker, an attorney, a City official, or another entity agreed to by the property owners.

4. Granting a right-of-entry to the City and prospective buyer(s) of my property for industrial use subject to my/our receipt of reasonable advance notice of the date and time at which entry onto the property is requested to take place. Persons entering the property do so at their own risk and any right of entry shall be subject to an indemnification of the landowner/occupant for any injury. Entry onto property for testing shall require prior written authorization from landowner.

5. Documentation of this authorization shall be recorded with the Washington County Assessment and Taxation Department to establish that the authorization shall run with the land included in a UGB Expansion covering the Area for five (5) years from the date of recording, which shall be the date of final Metro approval of a 2010/2011 UGB expansion that includes my/our property. Upon the transfer of the property to a large lot industrial user this authorization shall expire as to the transferred property only, and shall remain in effect for properties in the Area not transferred to the user.

6. Application of City land use policies that prohibit the subdivision, partition or any other form of land division of each parcel within the UGB Expansion Area into parcels smaller than their existing size on the date of UGB Expansion approval by Metro, unless such a partition, subdivision or other property divisions is done to accommodate and complete the purchase and use of the parcel(s) by a large lot industrial user. This limitation shall apply to the properties as long as they remain zoned by the City for large lot industrial use, notwithstanding the 5-years authorization granted by this Agreement.

Authorization Limitations:

This authorization is granted in consideration for, and subject to the following limitations:

- This authorization is contingent upon expansion of the UGB by Metro, without conditions of property assembly, to include the land area depicted on the attached map. In the event that Metro applies conditions of approval to any such UGB expansion, this authorization will be valid only if the conditions are agreed-to, in writing, by the affected property owners.

- In any proposed or pending joint sale transaction for industrial use that includes my/our property, I shall have input in a joint selection of a single-point-of-contact sellers' representative and in determining the combined sale price and terms for the assembled land to be sold. My/our input into these matters shall not be unreasonably tendered or withheld.

Please consider this statement in support of inclusion of the above property in the expansion of the UGB. I/we are committed to working with the City, County and Metro to accomplish the assembly of parcels to create the needed large lot parcels for industrial development.

Signed:

Charlotte, Donald or Juanita Alderton
(Tax Lot 1N2210001602)

Alayne Bryan
(Tax Lot 1N2160000800)

James or Donna Burns
(Tax Lot 1N2200000300)

Thomas Clocker
(Tax Lot 1N2210001400)

Maxine Erdman
(Tax Lots 1N2210001500 & 1N2210001504)

Arne Nyberg for NYBERG LIMITED PARTNERSHIP
(Tax Lot 1N2210001600)

Jung Park
(Tax Lot 1N2160000700)

Marvin or Alice Suess
(Tax Lot 1N2210001601)

Tsung-Whei or Su-Mei Tsai
(Tax Lot 1N2160000801)

Mayor Jerry Willey

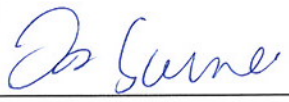
Copy: Michael Jordan, Metro COO
Hillsboro City Council
Hillsboro Planning Commission

North Hillsboro UGB Industrial Large Lot Agreement

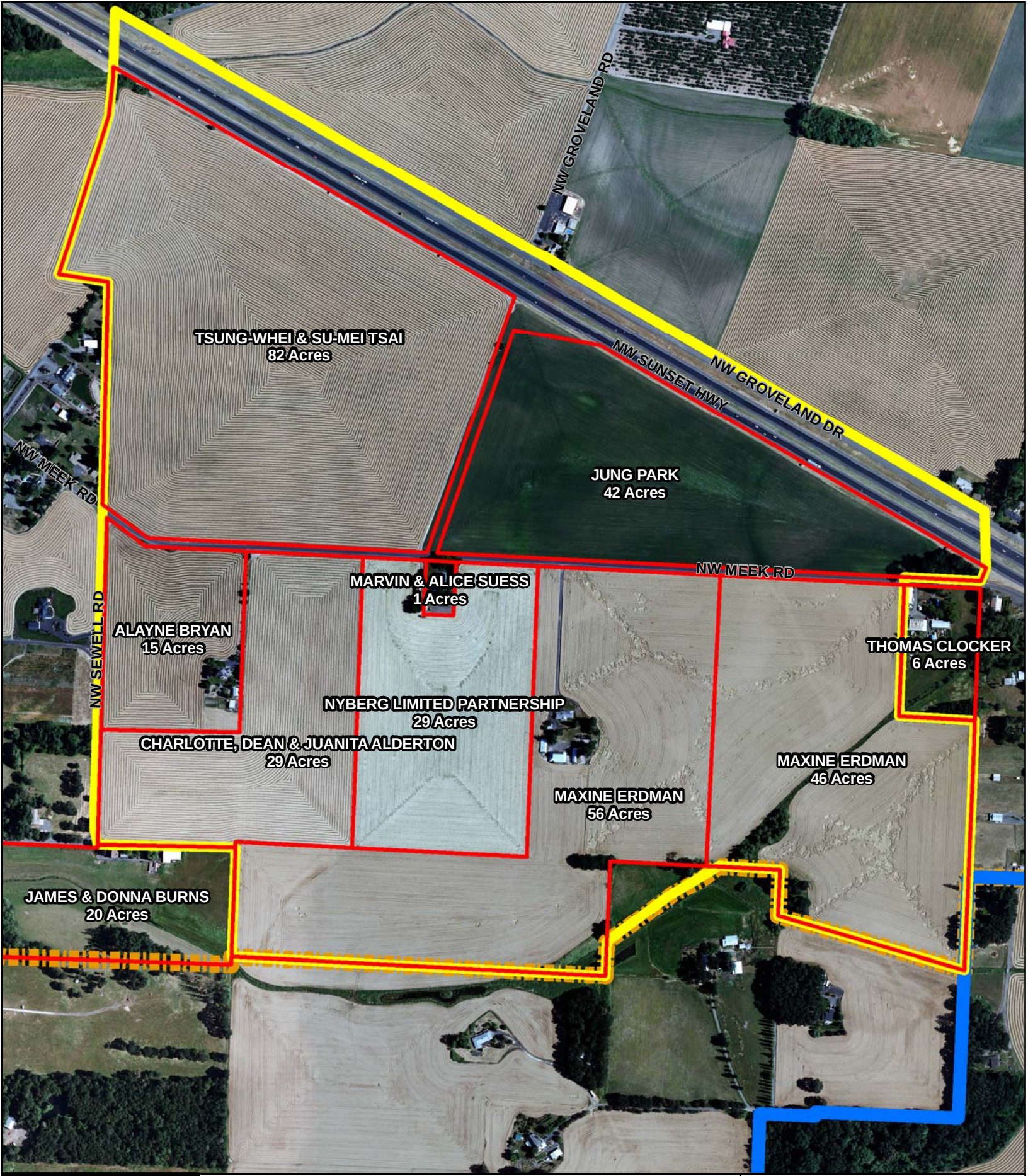
Signed:

Jung Park
(Tax Lot 1N2160000700)

North Hillsboro UGB Industrial Large Lot Agreement

Signed: 

Tsung-Whei or Su-Mei Tsai
(Tax Lot 1N2160000801)



City of Hillsboro

PLANNING DEPARTMENT

Long Range Planning

150 E. Main Street, Fourth Floor
Hillsboro, OR 97123-4028
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North Hillsboro UGB Industrial Large Lot Agreement

Legend

- Urban Growth Boundary
- Metro COO Recommended UGB Expansion
- Hillsboro City Limits
- Tax Lots

0 375 750 Feet

Source:
City of Hillsboro GIS
- Current as of October 2010
- Aerial Photo as of June 2009
Washington County GIS
- Current as of October 2010
Metro RLIS
- Current as of October 2010

DISCLAIMER: This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Prepared By: rutda
Printing Date: October 15, 2010
File: W:\GIS_Projects\LRNGE\UrbanReserves\NoHi_UGB_Industrial_Large_Lot_Agreement

N W E S

(Property owner Thomas Clocker is not within the 310 acre site)

From: Thomas Clocker [mailto:boangtom@gmail.com]
Sent: Monday, October 25, 2010 7:59 AM
To: Daniel Rutzick
Subject: North Hillsboro

Dan, Alwin:

Thank you for time in explaining the ramifications of the UGB agreement et all. My neighbors to the West have my full support in their endeavor to create large lot industrial plats. Although I would like to be included in this expansion, because of my small lot size, location, and other factors, I choose not to go with the "group agreement" at this time. Please keep me updated. Sincerely,

Tom Clocker
24880 NW Meek Rd.

MEMORANDUM

DATE: January 25, 2010

TO: Patrick Ribellia, Esq., Planning Director, CITY OF HILLSBORO

FROM: Bill Reid, Principal
JOHNSON REID, LLC

SUBJECT: Portland Metro Region Large Industrial Site Query Survey

JOHNSON REID was retained by the City of Hillsboro to document private, market query activity over the last ten years for large industrial sites throughout the Portland metro area. To this end, JOHNSON REID surveyed membership of the Society of Industrial & Office Realtors (SIOR) on details of ten-year large industrial site demand. SIOR comprises many of the region's prominent industrial and office property brokers, who in turn are most likely to have been involved in large site queries, marketing and transactions.

Our survey results indicate the following key findings:

- The three-county region's industrial brokers field an estimate of eleven 50+ acre parcel queries annually.
- Technology manufacturers comprise 35% of all 50+ acre site queries.
- 12% of all large site queries, or three annually, are actually realized as a transaction for site development.
- Almost one of every three large site transactions does not realize development, i.e. transaction demand.
- The region loses at least one large site query annually explicitly due to site unavailability.
- The region likely loses more queries due to site availability, but broker participation in the site selection process frequently does not enable full knowledge of a firm's decisions and final outcome.
- For every public lead that generated a large site query, brokers fielded nearly 3 private, large site queries in the metro area over the last ten years.

Large Site Query Findings

Seven industrial brokers, six SIOR members and one non-affiliate, throughout the Portland metro area provided survey responses to a host of questions about the nature of large industrial site queries, realized demand, and non-realized queries over the past ten years. Regional SIOR membership presently includes approximately 20 industrial brokers, therefore the sample represents 30% of total SIOR industrial broker population in the Portland metro tri-county area. We further estimate that respondents comprise the great majority of active industrial brokers in the larger site/parcel market.

Figure 1 on the following page provides a comprehensive summary of survey results within the format of the survey instrument utilized. Below is a summary of key query statistics.

- Total 50+ Industrial Site Queries: 106, or 11 annually
- Total 50-100 Acre Queries: 79, or 8 annually
- Total 100+ Acre Queries: 27, or 3 annually
- Share of Total Queries Which Were Public/State Leads: 26%
- Share of Total Queries That Transacted/Location Decision: 12% (14% 50-100 Acres, 7% 100+ Acres)

- Share of Transactions That Did Not See Development (Transaction Supply): 23% (18% 50-100 Acres, 50% 100+ Acres)
- Survey respondents indicated that individual user queries most commonly compared a Portland metro site with up to six other geographic markets in the country, in generally Pacific Northwest or western states, though the typical range reported was 2-6 other markets competing with the Portland metro area.

FIGURE 1: SURVEY INSTRUMENT & RESULTS SUMMARY

Please Enter Your Identification (Broker, Developer, Both)

This is a survey of large industrial site demand queries over the last ten years in the Portland metro area.
For this survey, "industrial site" is defined as fully development-ready within a 180-day period.
For this survey, "large industrial site" is divided into two size categories: 50 - 100 Acres & 100+ Acres.
For this survey, "Portland metro area" is defined as Multnomah, Washington, and Clackamas Counties.

To the best of your knowledge:
For both size categories, please enter into the shaded cells below the number of large site queries you have handled since 1999.
Please provide query counts for each Query Description & Outcome (1 - 7) by each User Type (A - E).

Finally (8), for each User Type (A - E), please indicate the typical number of competing, Out of State markets the query considered.

	User Types				
	A	B	C	D	E
50 - 100 Acre Sites	Individual User				Multi-Tenant
Query Description & Outcome	Technology Manufacturing	General Manufacturing	Warehouse/ Distribution	Corporate/ Institutional Campus	Industrial/ Business Park
How many total metro area queries?	22	12	29	5	12
How many of the total were public leads?	12	1	4	1	0
How many of the total actually transacted?	4	1	5	0	1
How many transacted have since been built upon?	2	1	5	0	1
Failed to transact:					
No local site availability and went elsewhere?	0	1	6	0	1
No local site availability and did not proceed elsewhere?	0	1	5	0	0
Did not transact but outcome uncertain?	14	10	14	5	8

100+ Acre Sites	Individual User				Multi-Tenant
Use	Technology Manufacturing	General Manufacturing	Warehouse/ Distribution	Corporate/ Institutional Campus	Industrial/ Business Park
How many total metro area queries?	15	4	3	5	0
How many of the total were public leads?	8	0	2	0	0
How many of the total actually transacted?	2	0	0	0	0
How many transacted have since been built upon?	1	0	0	0	0
Failed to transact:					
No local site availability and went elsewhere?	3	0	3	0	0
No local site availability and did not proceed elsewhere?	0	0	0	0	0
Did not transact but outcome uncertain?	7	4	0	5	0

Generally by User Type:	A	B	C	D	E
How many **alternative markets outside of Oregon** did the typical query in each User Type (A - E) competitively consider, if at all?	"Western States"; "5"; "6"	"3-4"; "5"	"Generally North-west or Western States"; "2-3"; "6"; "3"	"6"	

In addition to general characterization of industrial site queries, query or demand by industrial user type emerged:

- Fifty percent of all queries for large industrial sites were for manufacturers.
- Technology manufacturers have comprised 35% of all large-site queries over the past ten years, the single greatest share of all large-site land interest.
- Technology manufacturers have comprised a full 56% of all 100+ acre site queries since 1999 despite far slower activity in the high-tech sectors since 2000.

- Warehouse/distribution users accounted for the second-largest share of all large-site demand at 30%, though queries were overwhelmingly in the 50-100 acre category.
- 50-100 acre queries for multi-tenant business parks equaled queries by general manufacturing users over the ten-year period.

Results not only indicate a significant amount of query activity by technology manufacturers and warehouse/distribution uses, but also a significant amount of query activity fielded by private brokers above and beyond public agency lead process involvement.

- Nearly half of all large-site technology manufacturing queries fielded by regional brokers had no public lead.
- 94% of all general manufacturing large site queries were handled solely by brokers with no public lead involvement.
- 84% of all large-site warehouse/distribution queries had no public lead involvement.
- Campus/institutional and multi-tenant industrial park queries had practically no public lead involvement over the last ten years.

For queries that did not result in a realized transaction and therefore successful business/development recruitment, there is far from certainty about final query outcomes.

- The final outcome of over 72% of unsuccessful large site queries was reported as uncertain by brokers surveyed.
- Uncertain outcome was most common for technology manufacturer queries, probably due in large part to the confidential nature of queries which were most commonly via public lead.
- Industrial brokers reported that to their knowledge, 24% of unsuccessful 100+ acre site queries did not locate in the Portland metro area due to suitable site unavailability and located in another market.
- For the 50-100 acre industrial site, brokers indicated knowledge that almost 12% of unsuccessful queries met the same fate – no local, suitable site and location in a competitive market.
- Applying the site unavailability rate to estimated potential queries annually, the Portland metro region is losing an average of nearly one 100+ acre query annually explicitly to site unavailability problems, half likely high-tech manufacturers.
- Applying the site unavailability rate to estimated potential queries annually, the Portland metro region is losing an average of at least one 50-100 acre query annually explicitly to site unavailability problems, 75% of them warehouse/distribution users.
- Because brokers are usually only involved in the process of fielding potential locations in their home market, the final outcome of a site query is far more frequently uncertain to the broker involved. Accordingly, the outcome for the majority of unsuccessful queries cannot be verified by brokers but site unavailability is still probable in some cases.

Additional Survey Respondent Comments

In addition to specific query counts for tabulation, survey respondents also made comments on topics related to survey questions. Comments are directly quoted below.

"50+ acre land requests are a large requirement in our market."

"An element missing in your survey is the cost of land. I have had numerous inquiries from national developers looking for opportunities in the Northwest but they cannot accept our land costs and therefore go elsewhere. This activity is not accounted for in my survey."

"Many of our campus, manufacturing, distribution and business park land sales have been 20 – 40 acres because the scope of their operations didn't require additional acreage for expansion or it was accomplished in the original acquisition."

"Because of our success in the smaller properties and with reasonable future demand – it is likely to put pressure on the larger available site inventory."

"We already have a finite land universe and if the market had been better/economy stronger - or our pricing wasn't at its current level – considered high by many reviewing Oregon as a site location - We would be done."

MEMORANDUM

DATE: January 26, 2010

TO: Patrick Ribellia, Esq., Planning Director, CITY OF HILLSBORO
John Southgate, Economic Development Director, CITY OF HILLSBORO

FROM: Bill Reid, Principal
JOHNSON REID, LLC

SUBJECT: Portland Metro Region Large Industrial Site Query Survey

JOHNSON REID was retained to document both large industrial site market activity throughout the Portland metro area, as well as large industrial site supply strategy employed by regions elsewhere in the country that are competitive with the Portland metro area in high-tech and alternative energy sectors. This memorandum is a summary of key findings, a graphical schematic of large industry site recruitment process by competitors to the Portland metro area, and a summary of Hillsboro's own large-user recruitment leads over just the last three years.

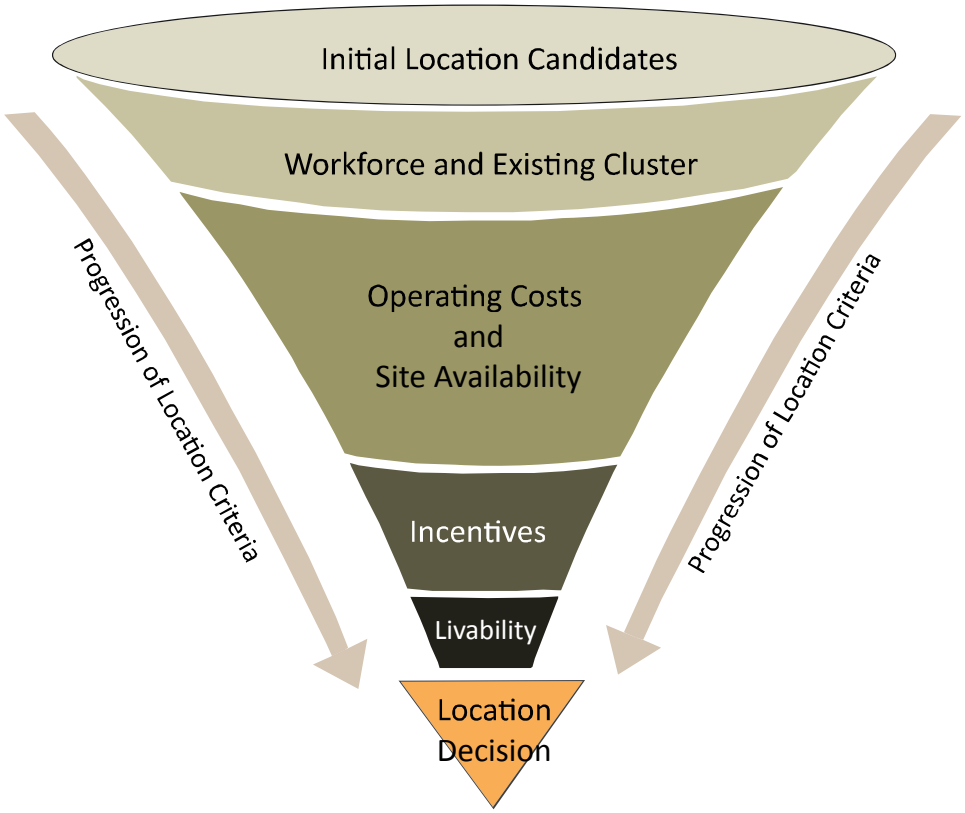
Competitive Market key findings:

- Competing high-tech, alternative energy, and high quality-of-life markets, including Austin, Texas and Raleigh-Durham, North Carolina, are faced with far less rigorous land use planning process and do not face mandated site count minimums for adequate supply or "choice" nor maximum restrictions on the number of large industrial sites in their inventory.
- Large industrial site strategy by most competitors is an issue of providing significant, prospective supply and choice based not on any study, best practice or empirical approach, but rather regional or jurisdictional economic goals and objectives and market/land owner coordination. Survey of competitor large site supply is below.

	Albuquerque	Austin	Colorado Springs	Raleigh, NC	Seattle/King County
50-100 Acres	2-3 retrofit sites	380 acs in a "Featured Property Profile"	20 shovel-ready 15 not certified	60 ac, 66 ac	None
100+ Acres	8-10 100 ac	5-6 100 ac - 185 ac 140-acre park for clean energy agglomeration	500 acres with rail	472 ac, 998 ac	None
Other	18,000 acres of planned communities with significant dedicated employment land	Over 1,000 acres of large lot sites in total, many like Albuquerque in planned communities	Rail-served supply capacity increase still in progress	Larger, supersites intended for larger users but can and will be subdivided if necessary.	Capitalizes on Fred Hutchison Cancer Research Center and University of Washington for research/innovation jobs.

- Large site quantity, diversity, and flexibility to give firms multiple options was universally viewed as essential to Portland metro area's economic development competitors.
- Large site provision is one of many important factors including quality of life. However, inadequate site provision and cost eliminates a market from contention early in the process before factors like quality of life and incentives are even seriously factored into a decision, indicated by the following schematic.

FIGURE 1: BUSINESS LOCATION DECISION PROCESS

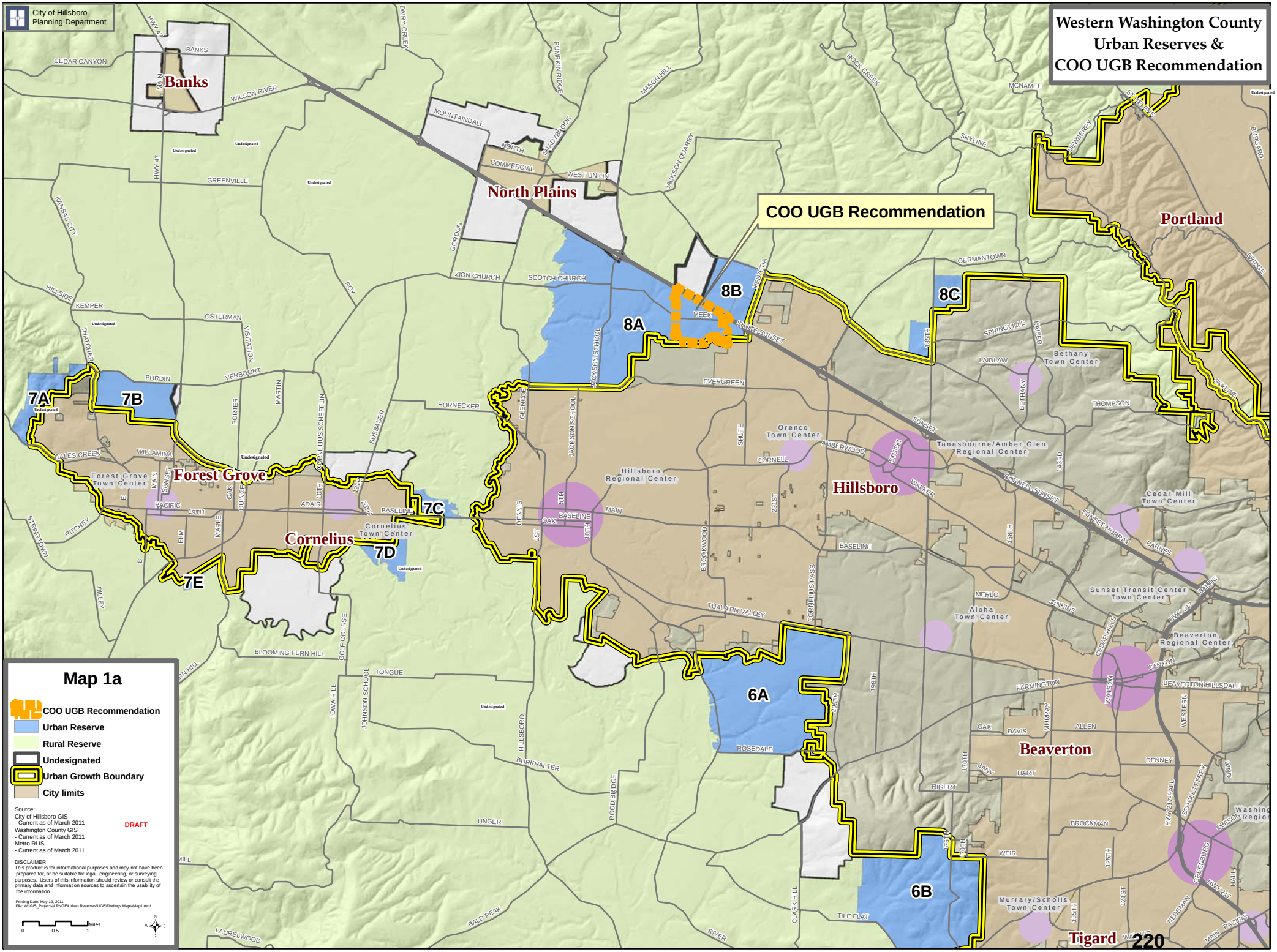


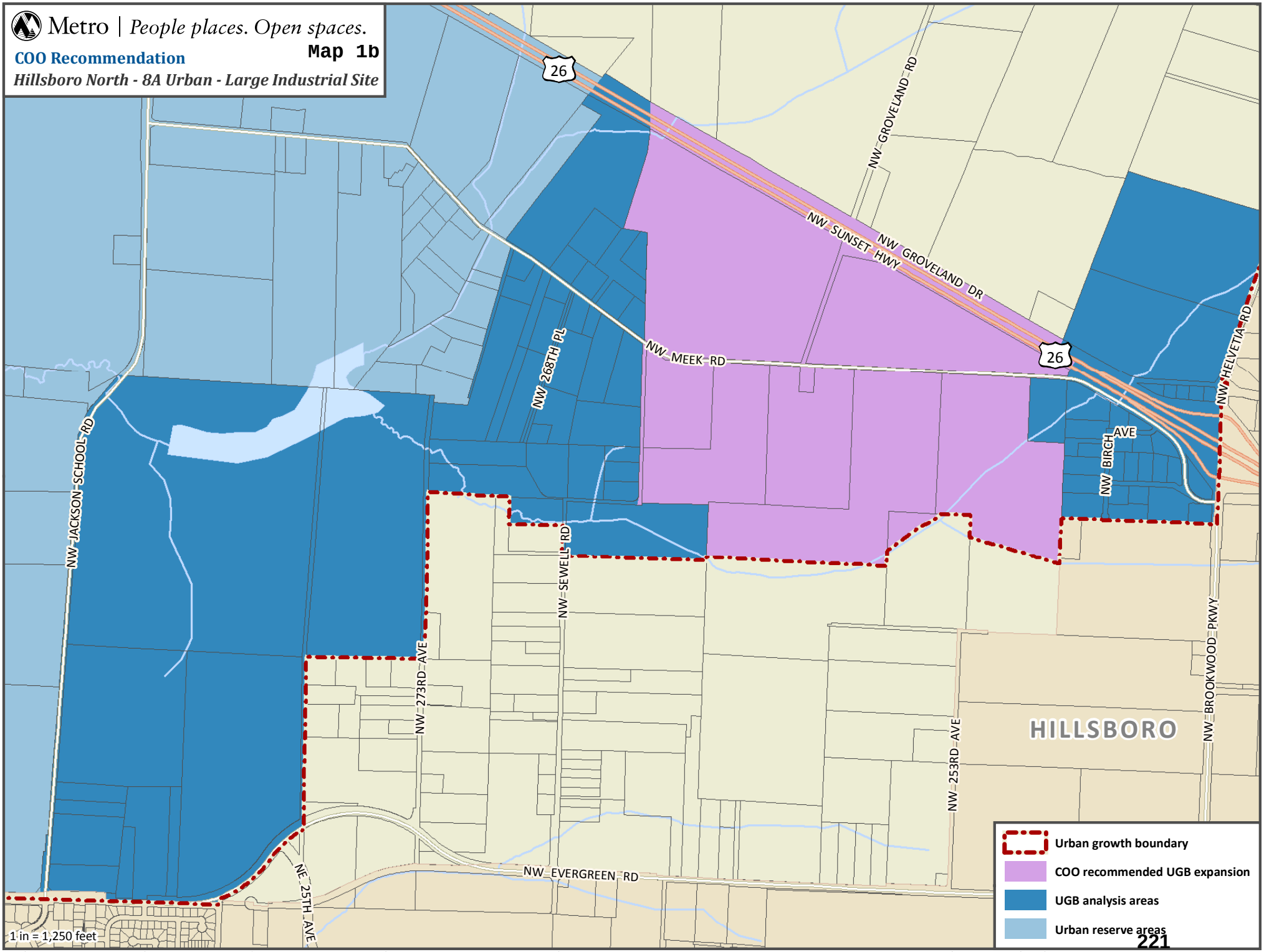
Portland Metro Broker Survey Key Findings:

- The Portland metro three-county region's industrial brokers fielded an estimate of eleven 50+ acre parcel queries annually over the last ten years, largely by technology manufacturers and warehouse/distribution.
- Technology manufacturers comprised 35% of all 50+ acre site queries over the last decade, indicating continued viability and continued growth potential for the cluster.
- For every public lead that generated a large site query fielded by a broker, private brokerages fielded nearly 3 large site queries independent of public economic development involvement.
- The region loses at least one large site query annually due explicitly to site unavailability, however JOHNSON REID concludes more are also likely lost to site unavailability but limited broker involvement and firm confidentiality prevent verification.
- Almost one of every three sites purchased by large users over the last ten years has not yet realized development. In other words supply capacity should include at least 33% land investment and "transaction demand" capacity to enable firms adequate choice for the large site market to function.

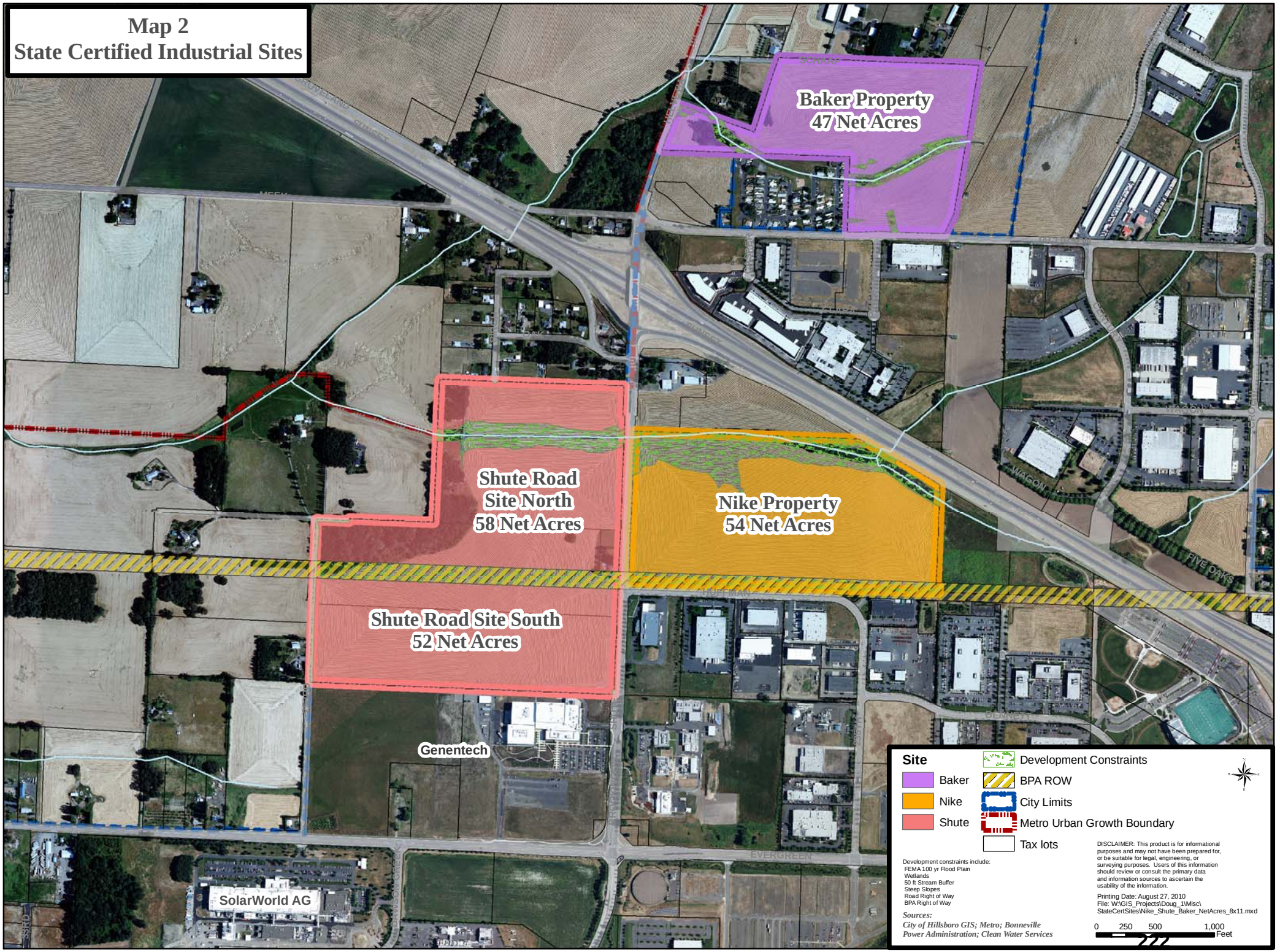
Conclusion:

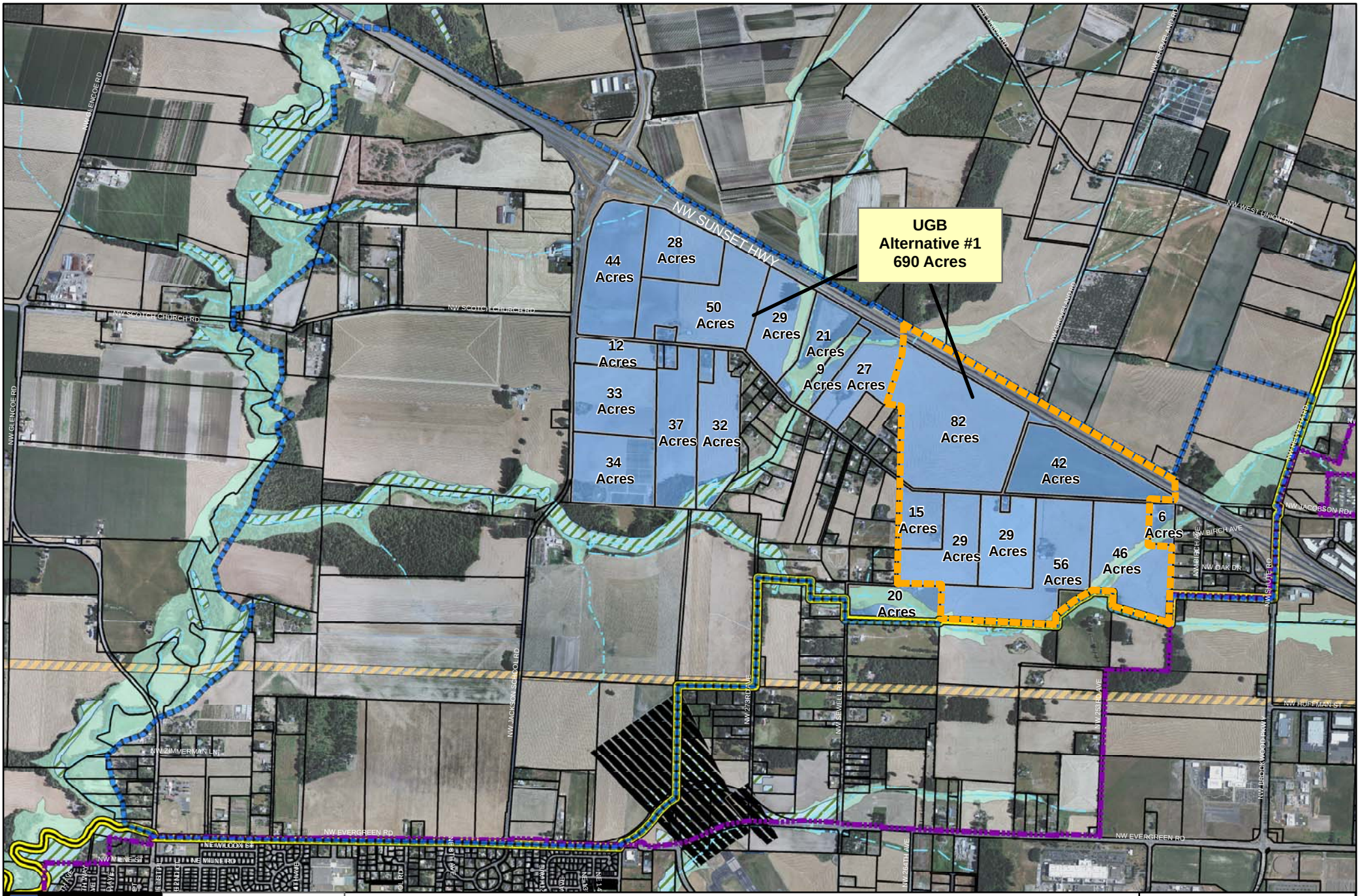
Portland metro competes with regions across the country for high-tech and renewable energy sectors that offer significantly greater development-ready industrial land supply, selection, diversity, and lower land cost. Continued inability to factor competitiveness as borne out by surveyed regional broker activity, including diversity of large industrial site supply and competitive cost, sacrifices the region's long-term competitiveness for these key industries.


City of Hillsboro
Planning Department
Western Washington County
Urban Reserves &
COO UGB Recommendation
COO UGB Recommendation
Banks
North Plains
Portland
Forest Grove
Hillsboro
Cornelius
Beaverton
Tigard
7A
7B
7C
7D
7E
8A
8B
8C
6A
6B
Map 1a
COO UGB Recommendation
Urban Reserve
Rural Reserve
Undesignated
Urban Growth Boundary
City limits
Source:
City of Hillsboro GIS
- Current as of March 2011
Washington County GIS
- Current as of March 2011
Metro RLIS
- Current as of March 2011
DRAFT
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Miles
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Map 2
State Certified Industrial Sites
Baker Property
47 Net Acres
Shute Road
Site North
58 Net Acres
Nike Property
54 Net Acres
Shute Road Site South
52 Net Acres
Genentech
SolarWorld AG
Site
Baker
Nike
Shute
Development Constraints
BPA ROW
City Limits
Metro Urban Growth Boundary
Tax lots
Development constraints include:
FEMA 100 yr Flood Plain
Wetlands
50 ft Stream Buffer
Steep Slopes
Road Right of Way
BPA Right of Way
Sources:
City of Hillsboro GIS; Metro; Bonneville Power Administration; Clean Water Services
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0 250 500 1,000
Feet



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Fax: 503.681.6245

Map 3
North Hillsboro UGB Expansion

1 inch = 0.38 miles
1 inch = 2,000 feet
0 1,000 2,000
Feet

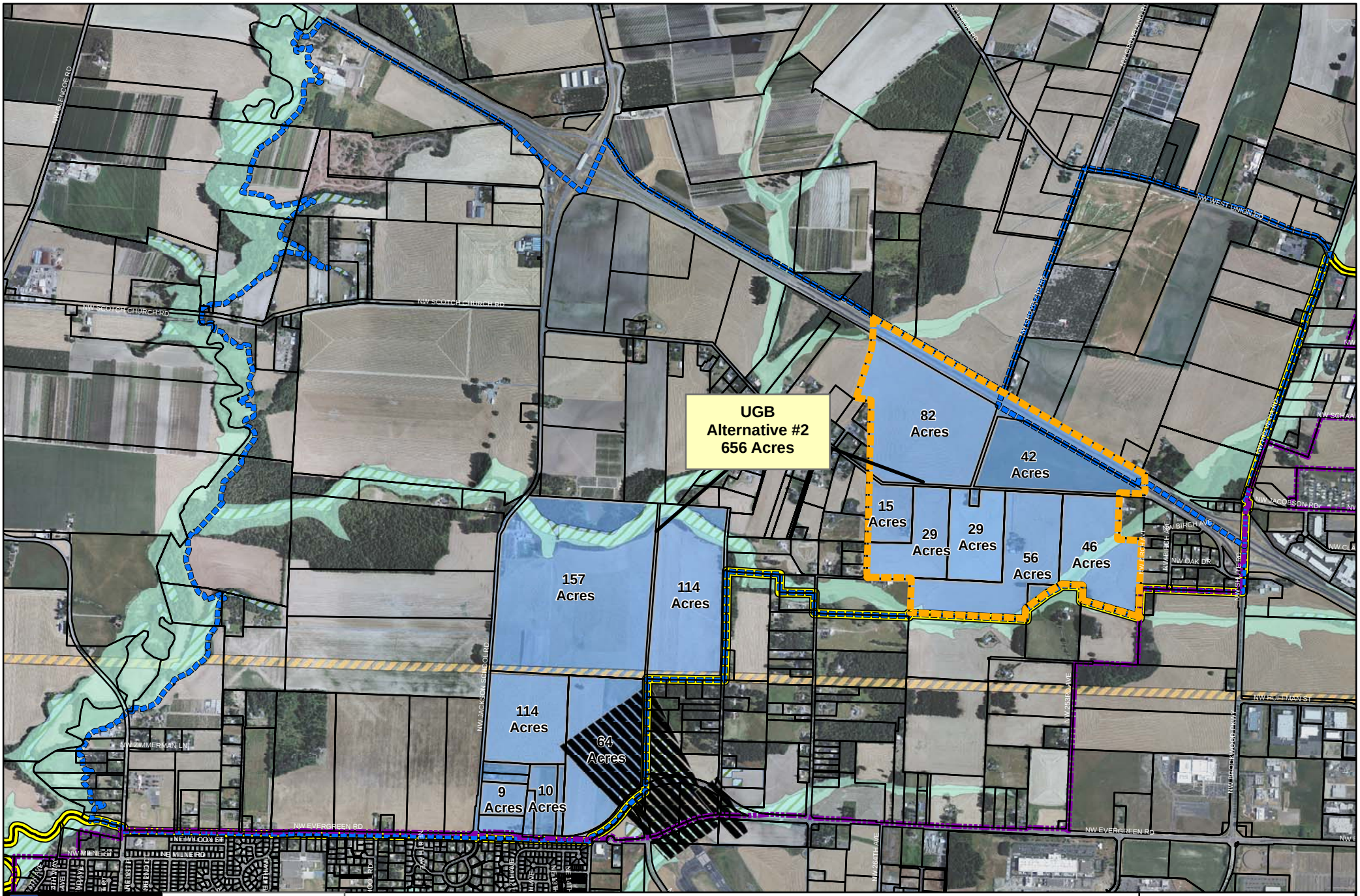
- Alternative #1
- Alt #1 Taxlots over 5 acres
- COO Recommendation
- Urban Reserves Boundry
- Urban Growth Boundary
- Hillsboro City Limits
- FEMA 100 Yr Floodplain
- Wetlands
- BPA ROW
- Airport Restriction Zone 1
- Tax lots

Alt #1 Gross Taxlot Acres	Less: Constraints	Net Acres	Less: 10% for Future Roads	Net Buildable Acres	Employment Density	Employment Capacity
690	(47)	643	(64)	579	19.6	11,347

Source:
City of Hillsboro GIS
- Current as of May 2010
Washington County GIS
- Current as of May 2010
Metro RLIS
- Current as of May 2010

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Map 4
North Hillsboro UGB Expansion

1 inch = 0.38 miles
1 inch = 2,000 feet

0 1,000 2,000
Feet

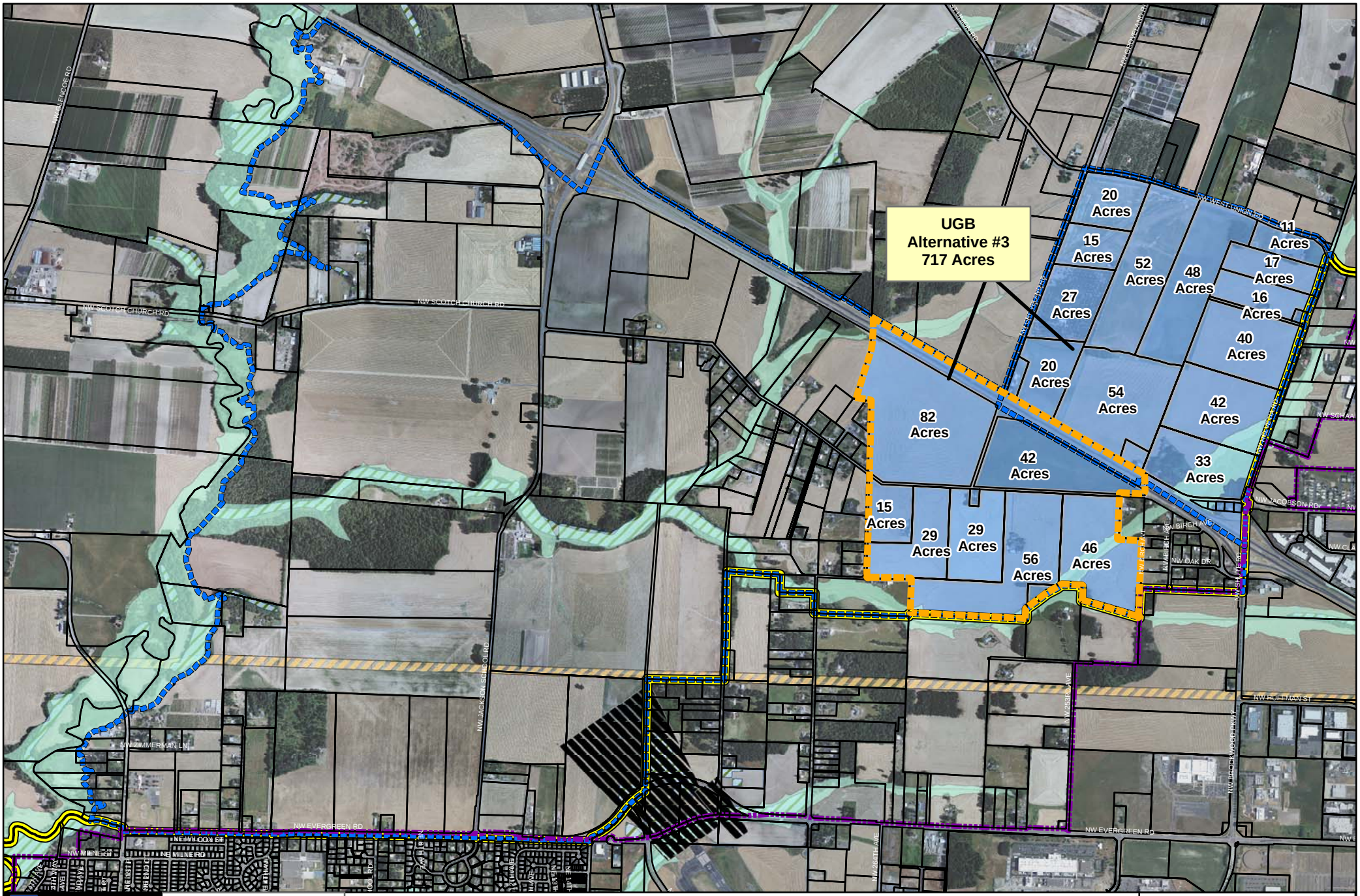
- UGB Alternative #2
- Alt #2 Taxlots over 5 acres
- COO Recommendation
- Urban Reserves Boundry
- Urban Growth Boundary
- Hillsboro City Limits
- FEMA 100 Yr Floodplain
- Wetlands
- BPA ROW
- Airport Restriction Zone 1
- Tax lots

Alt #2 Gross Taxlot Acres	Less: Constraints	Net Acres	Less: 10% for Future Roads	Net Buildable Acres	Employment Density	Employment Capacity
656	(109)	547	(55)	493	19.6	9,657

Source:
City of Hillsboro GIS
- Current as of March 2011
Washington County GIS
- Current as of March 2011
Metro RLIS
- Current as of March 2011

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Fax: 503.681.6245

Map 5
North Hillsboro UGB Expansion

1 inch = 0.38 miles
1 inch = 2,000 feet
0 1,000 2,000
Feet

- Alternative #3
- Alt #3 Taxlots over 5 acres
- COO Recommendation
- Urban Reserves Boundry
- Urban Growth Boundary
- Hillsboro City Limits
- FEMA 100 Yr Floodplain
- Wetlands
- BPA ROW
- Airport Restriction Zone 1
- Tax lots

Alt #3 Gross Taxlot Acres	Less: Constraints	Net Acres	Less: 10% for Future Roads	Net Buildable Acres	Employment Density	Employment Capacity
717	(137)	580	(58)	522	19.6	10,231

Source:
City of Hillsboro GIS
- Current as of March 2011
Washington County GIS
- Current as of March 2011
Metro RLIS
- Current as of March 2011

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CITY OF HILLSBORO
ECONOMIC DEVELOPMENT

Map 6

North Industrial Area—Major Companies













COMMUNITY INVESTMENT STRATEGY

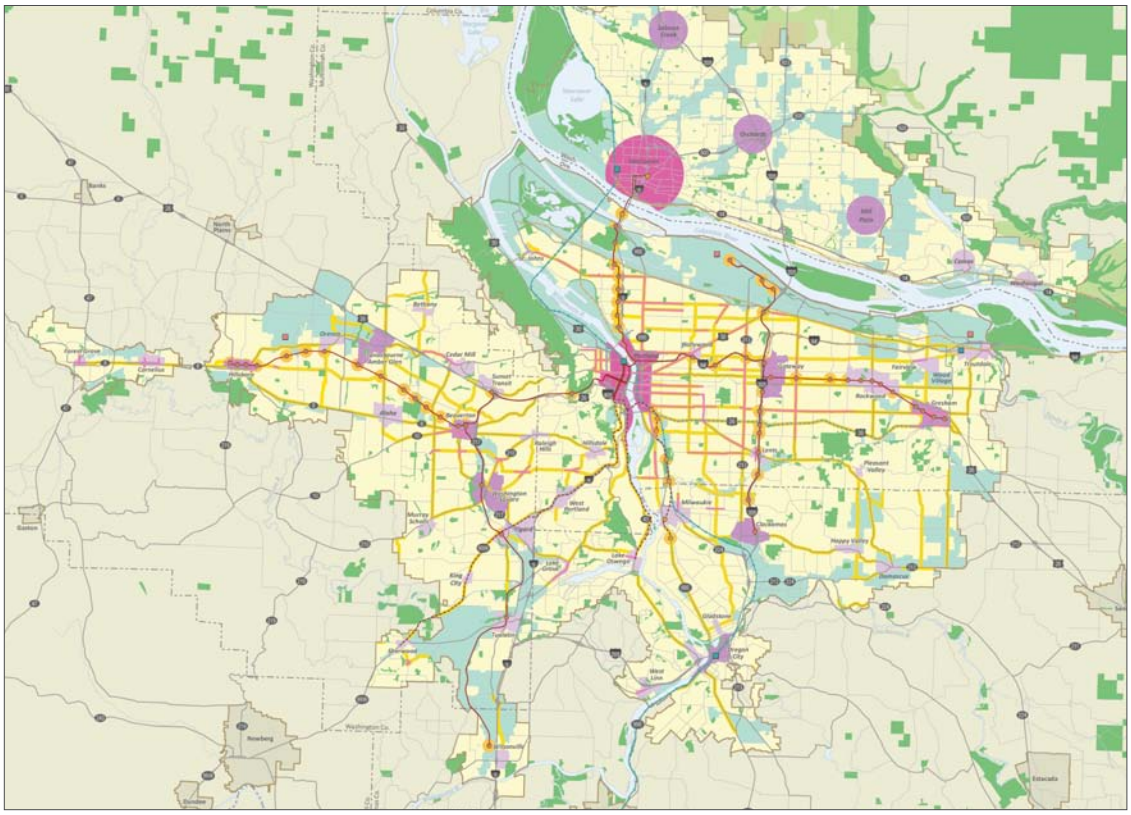
State of the Centers

Investing in our communities

MAY 2011

Metro | *Making a great place*

2040 Growth Concept



The 2040 Growth Concept is the region's blueprint for the future, guiding growth and development based on a shared vision to create livable, prosperous, equitable and climate smart communities now and for generations to come.

Attributes of great communities

Goals for the region endorsed by city and county elected officials and approved by the Metro Council

Vibrant communities
People live, work and play in vibrant communities where their everyday needs are easily accessible.

Economic prosperity
Current and future residents benefit from the region's sustained economic competitiveness and prosperity.

Safe and reliable transportation
People have safe and reliable transportation choices that enhance their quality of life.

Leadership on climate change
The region is a leader in minimizing contributions to global warming.

Clean air and water
Current and future generations enjoy clean air, clean water and healthy ecosystems.

Equity
The benefits and burdens of growth and change are distributed equitably.

For more information about centers, call 503-797-1562. To download a copy of the report, visit www.oregonmetro.gov/centersreport.

State of the Centers

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Lents 78
Milwaukie 80
Murray/Scholls 82
Orenco 84
Pleasant Valley 86
Raleigh Hills 88
Rockwood 90
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Tigard 98
Troutdale 100
Tualatin 102
West Linn – Historic Willamette 104
West Linn – Bolton 106
West Portland 108
Wilsonville 110

Companion DVD

2011 State of the Centers report
Region, center and typology composite heat maps
Context tool results and explanations
Resources for developing centers

State of the centers

Where we are today



More than a decade ago, the region set a course to grow as a constellation of compact, vibrant communities that use land efficiently, maintain connections to the natural environment and promote strong local and regional economies. The adoption in 1995 of the 2040 Growth Concept provided a guide to actively manage the growth of the region by encouraging development in centers and corridors and maintaining a tight urban growth boundary. By designating 38 centers across the Portland metropolitan area as a focus for redevelopment, transportation options and concentrations of housing and employment, the growth concept provides direction for achieving the desired outcomes for the region. It helps protect the farms, forestland and natural areas so critical to the quality of life residents of the region enjoy.

Over the 15 years since the growth concept was adopted, local governments have developed aspirations for vibrant centers that reflect the vision of the residents, businesses and property owners.

The State of the Centers report helps measure progress in creating the type of centers envisioned in the 2040 Growth Concept and to illustrate the kind of investments that contribute to a successful center.

City and county governments have taken steps to create vibrant, safe and livable centers by amending their comprehensive plans, providing financial assistance and investing in essential public amenities to help spur private investment.

The State of the Centers report is intended to help measure the region's progress in creating the type of centers envisioned in the 2040 Growth Concept and reflected in local aspirations, and to illustrate the kind of investments that contribute to a successful center. The report reflects the relationship between people, employment, housing, businesses and built environment that makes each center unique. What emerges is an indication of the common elements in centers that contribute to meeting aspirations of local communities. In categorizing and examining these elements, the report serves as a "toolbox" to help communities evaluate progress in achieving their aspirations and to promote successful investments that move communities toward the desired regional outcomes reflected in the growth concept.

2009 State of the Centers report

Two years ago, Metro published the first report on the state of the centers. The initial report provided a snapshot of land use and transportation conditions in centers to establish a framework for evaluating future development

and investments. In doing so, it illustrated the wide variation in the level of development among centers. It was the first report to delineate each center and provide comparative statistics about them as well as tools to guide conversation about future development. The boundaries for centers reflect those adopted by local governments where available. For centers without adopted boundaries, the data reflects mixed-use residential and commercial areas for analysis purposes within the vicinity of the center on the 2040 Growth Concept map.

The 2009 report displayed in graphic form different places along a spectrum of activity by illustrating the relationship between populations that live or work in a center and the number of urban amenities – a retail outlet or service that supports urban lifestyles and preferences – in each. The activity spectrum identified six districts within the Portland city limits that each represent a type of center, providing a reference point for local jurisdictions to use to guide their own aspirations for their center.

2011 State of the Centers report

Although economic conditions have slowed both nationally and regionally in the past three years, the region continues to see incremental investments in its urban centers. In a time of limited funding, it has become increasingly important to target investments and leverage them with other public and private funding to be successful.

> The Community Investment Strategy is an integrated set of policies and investments designed to achieve the six desired regional outcomes.

Based on suggestions from local jurisdiction staff and other stakeholders, the second edition of the State of the Centers report includes additional measures to help communities understand how their centers are performing, including information on jobs, income and transportation use. New in this year's report is the visual representation of seven characteristics of a successful center and the relative strength of each compared to the region. Another feature is the addition of comparative data for a one-mile buffer zone, measured from the center's boundary.

Not surprisingly, as communities evolve aspirations for centers change. The 2011 report reflects the change in 2010 of the Tanasbourne Town Center to a regional center, the addition of Cornelius Town Center and the relocation of the Happy Valley Town Center.

Community Investment Strategy

In 2010, the Metro Council adopted a Community Investment Strategy (Ordinance 10-1244B) that proposes a coordinated approach to target investments for the most effective use of public and private resources within each community in the context of broader regional needs.

The 2011 edition of the State of the Centers report is intended to help identify investment needs by illustrating current conditions and providing a comparison for centers across the region.

Looking forward

Future editions of the State of the Centers report will be increasingly web-based, allowing the data to be updated regularly to better monitor the performance of a center in meeting desired outcomes for vibrant communities, jobs, transportation choices, greenhouse gas reduction and equity. New 2010 census data and other sources will continue to be reviewed and included, as relevant, while retaining key measures that will allow for comparisons over time. Metro is open to suggestions for improving the presentation of data or in defining new measures for evaluating performance.

About the data

Measuring performance of a center



The data displayed in the profiles for regional and town centers help measure a center's performance in achieving local aspirations and regional goals. Communities can use the State of the Centers report to help determine the extent to which their centers have developed as the walkable, transit-oriented, active, diverse and economically strong center they originally envisioned. By comparing the measures to local aspirations and conditions in other centers, local communities can identify the need for targeted investments that:

- complete sidewalk and bike path networks
- improve park and natural area access
- promote mixed-use development that supports transit, vibrant places and affordable living
- promote a mix of housing and job types to support diverse income and economic needs.

Development of the region's centers is a long and evolutionary process. As part of the Community Investment Strategy, Metro established policies in the Urban Growth Management Functional Plan that give priority for regional investments, such as future high capacity transit, to those communities that have taken the steps to promote center development. These steps include:

- analyzing physical and market barriers to development goals and identifying an action plan to address them
- adopting a parking management program that supports compact development
- promoting public-private partnerships for planning and project implementation
- incorporating affordable housing near transit and services to promote affordable living
- promoting job growth in areas well-served by transit with transit-oriented design principles
- engaging diverse populations in decisions affecting their communities and promoting the capacity of organizations representing diversity to have an active role in the community.

The information provided in the State of the Centers report about exisiting conditions in each community can help inform a range of decisions, actions and priorities in local capital improvement plans, transportation system plans, housing needs, economic development strategies and targeted financial incentives.

Metro looks forward to partnering with communities as they analyze their centers, identify investment strategies and continue implementation of the 2040 Growth Concept and the Community Investment Strategy.

Measures and data sources

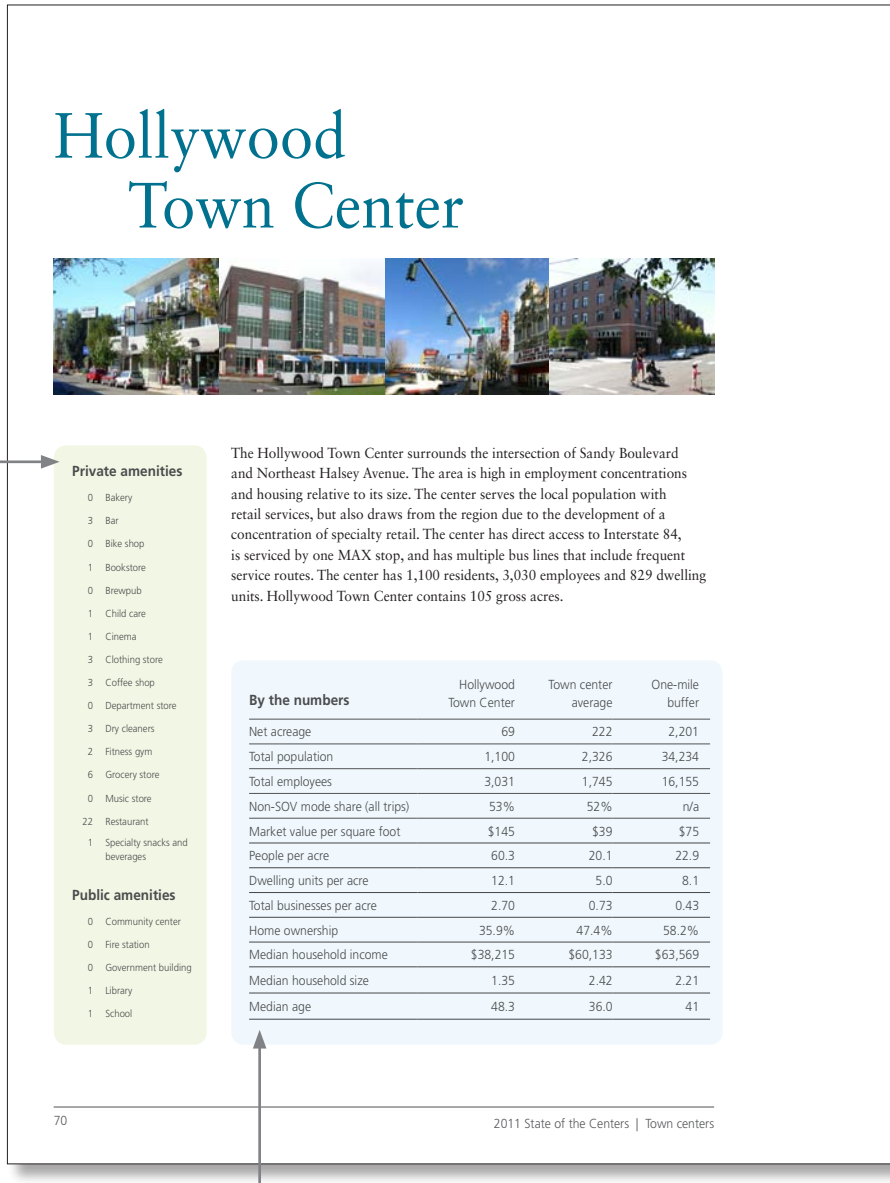
Measure	Data source
Numbers of residents	Metro's Regional Land Information System (RLIS) single-family/multi-family inventory
Numbers of employees	Environmental Systems Research Institute (ESRI) Business Analyst
Household size	2000 Census (2010 projections)
Home ownership	2000 Census (2010 projections)
Household income	2000 Census (2010 projections)
Urban amenities - private	Businesses that correlate with increased market strength, ranging from coffee shops to boutiques. Data provided by ESRI Business Analyst.
Urban amenities - public	Libraries, government offices, fire stations, community centers and schools as reported in Metro's Regional Land Information System (RLIS)
Businesses	Total businesses in the center from ESRI Business Analyst
Mode share	The nonsingle occupant vehicle mode share presented here includes all non-SOV modes (bicycle, walk, transit, carpool, etc) for all trips per day. This represents trips to, from and within a center. The data is based on the 2005 base year from Metro's Travel Behavior Forecasting Model.
Market value	Calculated at dollars per square foot using county assessor data; publicly owned land was subtracted to avoid distorting the market potential.
Job types	Summarized by retail, service and other using Metro Employment data. "Other" encompasses jobs related to office and industrial work.
One-mile buffer	The one-mile buffer represents a 20-minute walk, consistent with the 20-minute neighborhood concept that has been adopted by several local jurisdictions in the region.
Net acres	Total acres within the center boundaries with a subtraction for all public right-of-way.
People per acre[1]	A measure of the density of people within one-quarter mile of the grid cell. The measure counts both residents and employees and is an indication of the relative activity of an area.
Amenity density[1]	A measure of the density of specific private businesses that contribute to the livability of an area within one-quarter mile of the grid cell.
Sidewalk density[1]	A measure of the density of sidewalks within one-quarter mile of the grid cell. The measure is an indication of the accessibility of safe walking routes.
Transit density[1]	A measure of the density of transit within one-quarter mile of the grid cell. The measure reflects the frequency of trips through bus stops. Therefore, a bus stop that serves two high-frequency bus lines will have a higher weighting than a stop that serves a single, more limited frequency line.
Block size[1]	A measure of the block sizes within one-quarter mile of the grid cell. Block sizes were grouped into classifications and given weighted scores based on research tying smaller block sizes to increase transit mode split.
Bike access[1]	A measure of the relative "bikeability" of an area based on the bike lane classifications in Metro's "Bike There!" map. Every cell in the grid is based on the density of bike routes within one mile of the cell. The better the "Bike There!" classification, the higher the weighting of the route.

[1]For further description of the context tool, see Appendix DVD.

User guide

Urban amenities

What makes a center livable? Business such as coffee shops and grocery stores help residents meet everyday needs. Attractions like theaters, restaurants and pubs keep visitors coming. These private investments increase livability and market value of an area by supporting urban lifestyles and preferences. Public amenities such as schools, libraries, community centers, fire stations and civic buildings provide services residents rely on. Public investments such as these help leverage the private investment needed to bring more amenities to the area.



Hollywood Town Center

Private amenities

0	Bakery
3	Bar
0	Bike shop
1	Bookstore
0	Brewpub
1	Child care
1	Cinema
3	Clothing store
3	Coffee shop
0	Department store
3	Dry cleaners
2	Fitness gym
6	Grocery store
0	Music store
22	Restaurant
1	Specialty snacks and beverages

Public amenities

0	Community center
0	Fire station
0	Government building
1	Library
1	School

The Hollywood Town Center surrounds the intersection of Sandy Boulevard and Northeast Halsey Avenue. The area is high in employment concentrations and housing relative to its size. The center serves the local population with retail services, but also draws from the region due to the development of a concentration of specialty retail. The center has direct access to Interstate 84, is serviced by one MAX stop, and has multiple bus lines that include frequent service routes. The center has 1,100 residents, 3,030 employees and 829 dwelling units. Hollywood Town Center contains 105 gross acres.

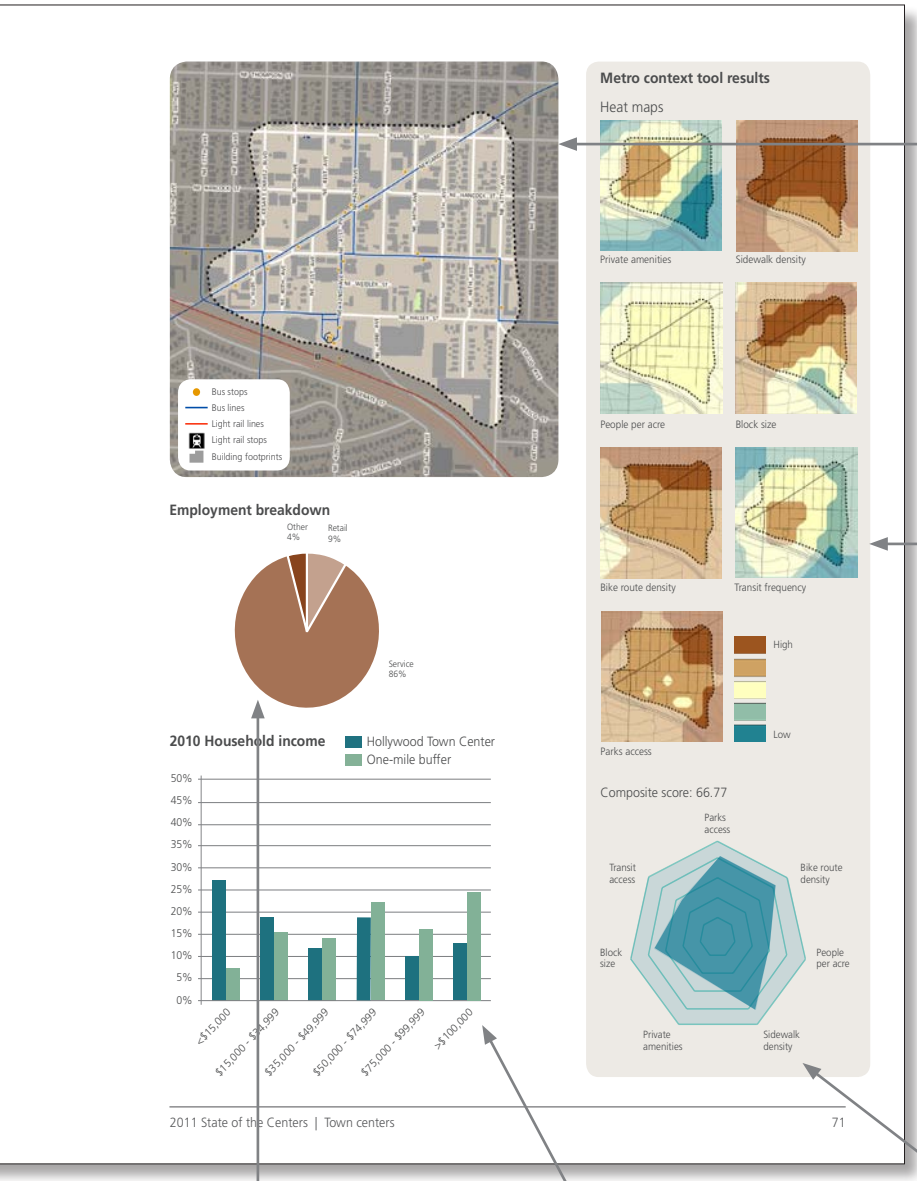
By the numbers	Hollywood Town Center	Town center average	One-mile buffer
Net acreage	69	222	2,201
Total population	1,100	2,326	34,234
Total employees	3,031	1,745	16,155
Non-SOV mode share (all trips)	53%	52%	n/a
Market value per square foot	$145	$39	$75
People per acre	60.3	20.1	22.9
Dwelling units per acre	12.1	5.0	8.1
Total businesses per acre	2.70	0.73	0.43
Home ownership	35.9%	47.4%	58.2%
Median household income	$38,215	$60,133	$63,569
Median household size	1.35	2.42	2.21
Median age	48.3	36.0	41

70

2011 State of the Centers | Town centers

By the numbers

A successful, vibrant center needs a critical mass of people, both residents and workers, to sustain local business and support efficient transit and other services. By comparing a center's population, use of transportation mode, home ownership, businesses per acre, market value per square foot and other socioeconomic indicators to unweighted town or regional center averages, a picture emerges of the vibrancy, economic strength and diversity of the center. The same measures for one mile out, or a 20-minute walk, from the center's boundary indicate who benefits from investments made in the centers.



Center map

Centers vary greatly in size, form and transportation access. Proximity to interstates, street networks, light rail and bus lines provides a snapshot of access to, from and within the center by automobile and transit. Bus and light rail stops indicate options for travel within the center. Building footprints display the relative location and size of the built environment. Viewed together, they give an indication of the level of development within a center.

Metro context tool results

Heat maps

How do we measure the character of a center? The Metro context tool helps indicate character by producing heat maps that illustrate the accessibility of sidewalks, bike routes, block size, transit service and park access relative to the region as a whole. Sidewalks, high quality bike routes, frequent transit services and smaller block sizes score higher. The heat maps also illustrate relative density of business and people per one-quarter-mile cell. They provide an at-a-glance indication of the level of services available, the intensity of development and the relative strengths within the center. For each measure, the heat map displays the relative concentration – from low to high – represented by cool to warm colors. The measures reflect data in a 264-foot grid, representing a one-minute walk distance.

Composite score

How does the center measure up? In addition to providing a visual representation of the data, the context tool produces a composite score for each center. A score of 1 to 5 is based on the average score for each measure within a 264-foot grid cell. The composite score is the sum of each of the scores for the seven measures, unweighted, and normalized to a 100-point scale. The result is an at-a-glance score card that shows the relative strengths of the center on average.

Employment breakdown

Employment within the center is broken down into three general categories: retail, service and other. “Other” includes office, industrial and manufacturing jobs. These data help indicate if the job mix aligns with local aspirations and can inform future economic development activities.

2010 household income

Household income levels within the center and the one-mile buffer provide a look at who benefits from a center and the segments of the market that local jurisdictions should consider when planning for their centers.

Activity spectrum and typologies



Elements of a successful center

What makes a center successful? Every community is unique and there is no one formula that can transform local aspirations into a vibrant center. However, by looking at examples of successful centers in the Portland metropolitan area, elements common to each suggest a connection between the access to transit, number of people per acre, urban form, the diversity of businesses and the center's success.

Six vibrant centers differing in size, form and activity level are profiled in the pages that follow to provide reference points for communities that wish to see growth and development in their own centers. These typologies include three small neighborhood districts, similar to 2040 main streets or town centers, and three large districts, similar to 2040 regional centers or larger town centers. The areas selected represent the range of development possibilities and urban form that can be found throughout the region. Each district showcases how desirable characteristics of place, such as an active pedestrian environment, access to transit and a successful retail/housing mix, can be achieved in different forms and concentrations.

Some centers support activities throughout the day and evening, some are more active in a concentrated time period. The 14- to 24-hour duration of sustained activity indicated for each center highlighted in the typology section provides a clue to the center's focus – employment, entertainment, tourism, dining and shopping or a combination of several. These typologies can be used to help local leaders define how they want to maintain and enhance their communities as populations continue to grow.

While there are a number of steps communities can take to encourage the development of a successful center, a center's greatest asset is a critical mass of people, both residents and workers, to sustain local businesses, support efficient transit and create a kind of place the community desires.

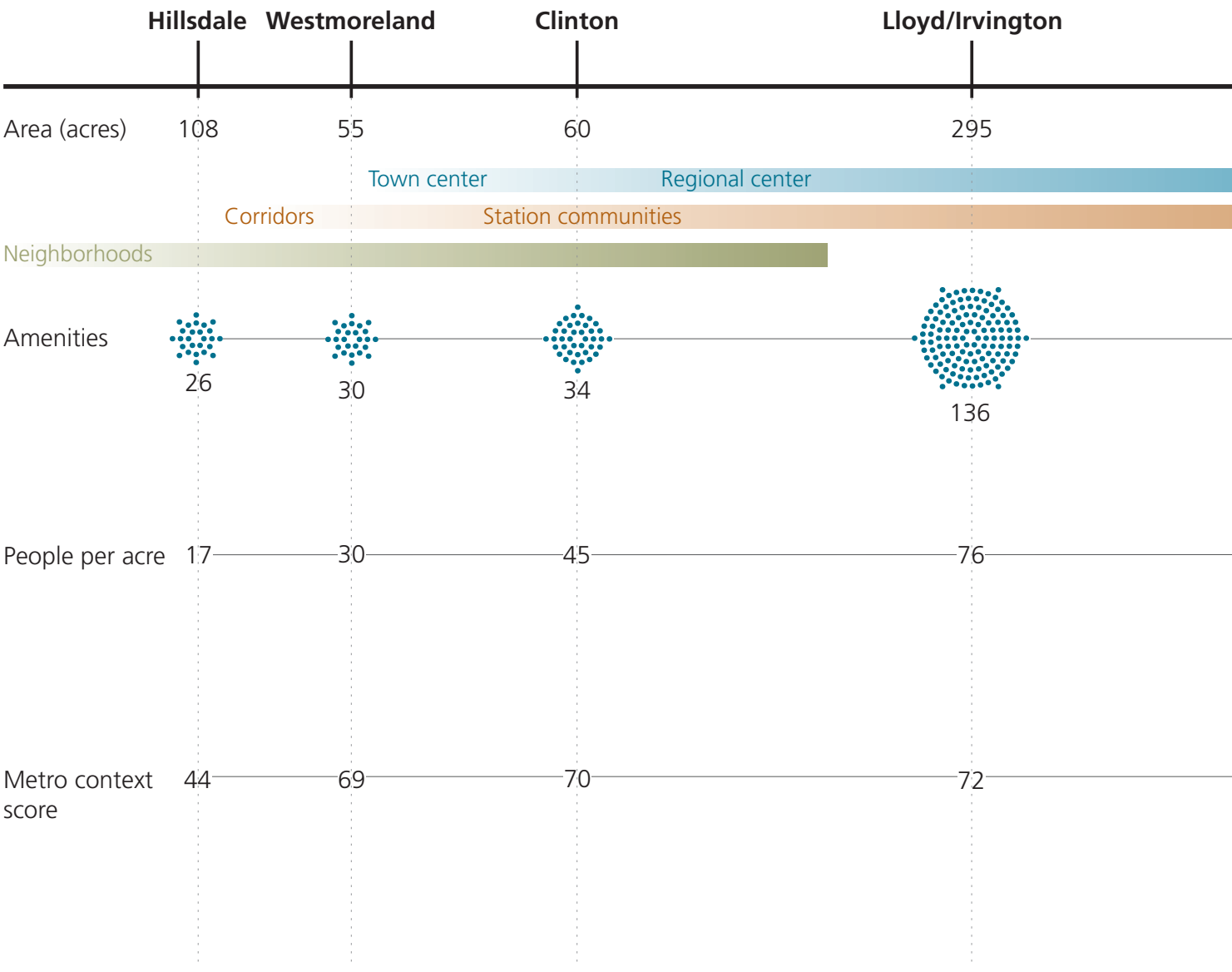
A spectrum of center activity

What makes a center an active place? Is it the number of people living and working there, the businesses they support, the size of the area – or is it the relationship between all three that makes a place come to life with continuous activity? The activity spectrum illustrates the relationships between the population, business activity, urban form and transportation that contribute to the activity levels of the six districts highlighted in the typology section. Each regional and town center presented in this report has a place within the continuum of the spectrum, determined by its own unique form and goal for future activity.

Activity spectrum

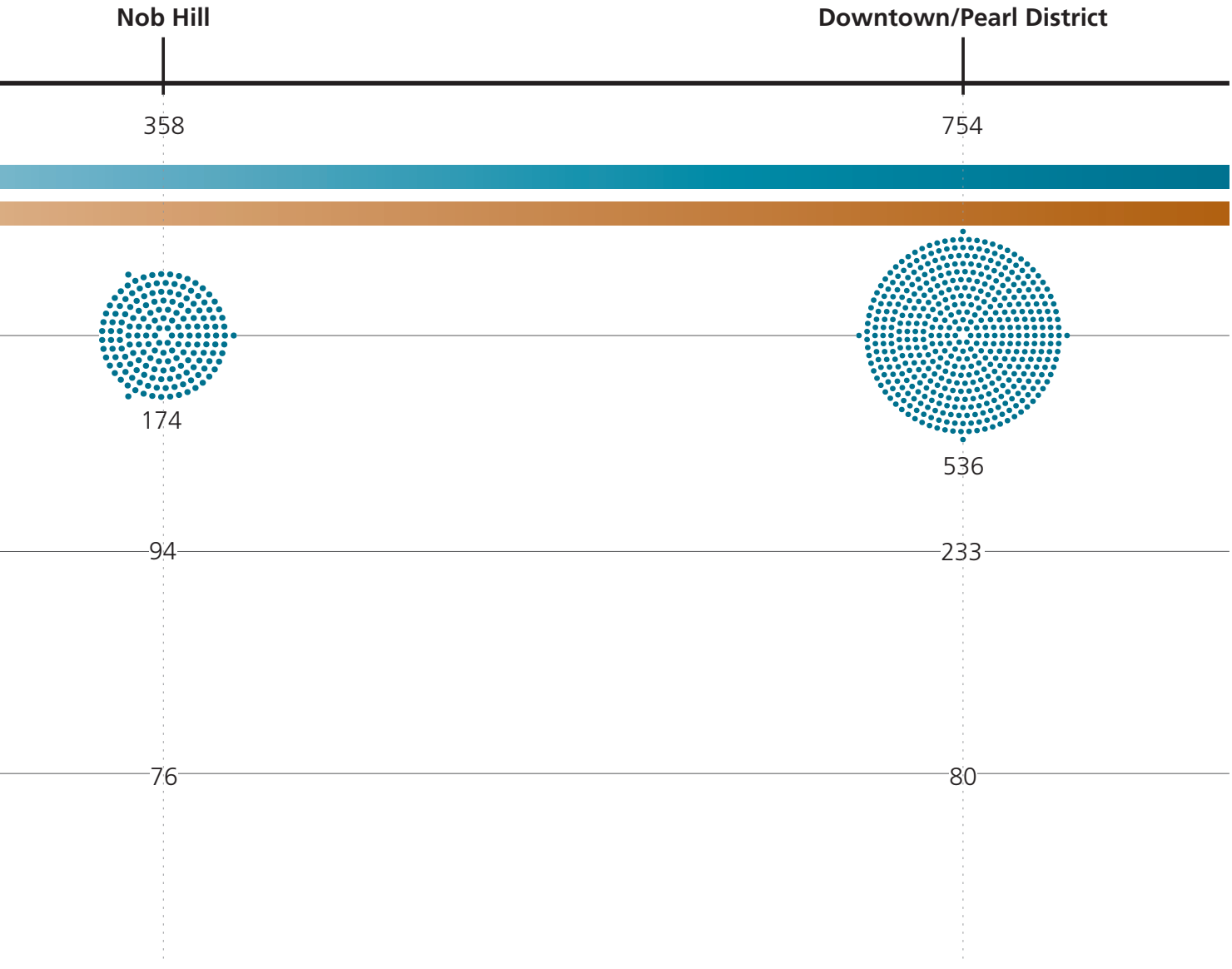
12-hour





24-hour





Downtown and the Pearl District

FOCUS | Employment, entertainment hub and tourist destination



Activity level
24 hour

Economic focus
Employment and tourism

Median household size
1.3

Median household income (2010)
$27,000

Median age
37

Home ownership
14 percent

People per acre
233

Dwelling units per acre
31

Market value per square foot
$573

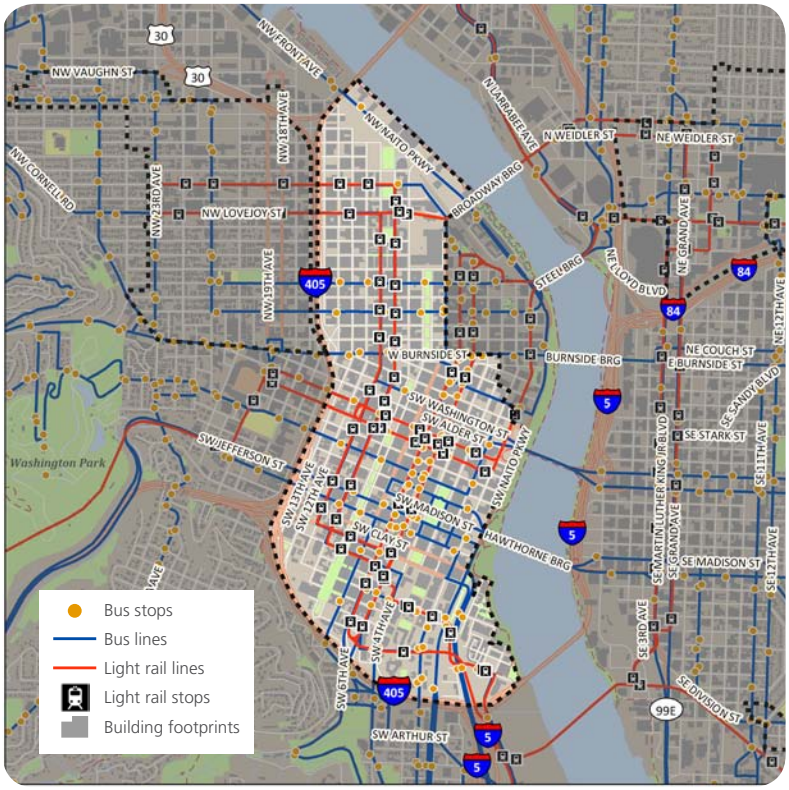
Downtown and the Pearl District include significant amounts of employment and businesses and an expanding housing stock. The area is the primary tourist destination in the region, boasting multiple theaters, museums, restaurants and high-end retailers.

The area has a population of 16,316 residents and a total of 79,750 employees, highlighting its primary function as the regional employment center. The area includes a substantial amount of housing stock in the form of urban-style condos and apartments, allowing for many to live and work within the district.

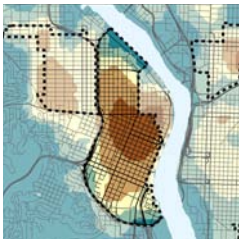
Downtown and the Pearl is considered a 24-hour activity center, with daytime uses that include office jobs, high-end and specialty retailers, grocery stores, farmers markets, museums and many limited-service restaurants. Nighttime activity includes fine dining restaurants, coffee shops, theaters, bars and nightclubs. Within the area there is a wide range of businesses, especially restaurants, coffee shops and specialty clothing stores, with additional businesses that include: bakeries, dry cleaners, fitness gyms, child care and book stores.

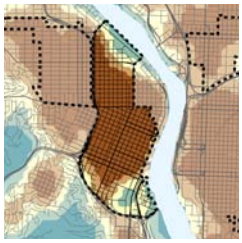
Residents, workers and visitors can easily access the area through a variety of transportation options. The area is served by multiple light rail and bus lines, a streetcar system, multiple bike routes, and pedestrian-friendly streetscapes based on an urban-style small grid network and narrow streets. Additionally, this center serves as the central hub for all bus lines in the region, meaning most major bus routes stop in this district at some point. Auto access is prevalent with access to several major highways and thoroughfares that further support the area's accessibility to others from outside the region. Land values in this center allow for the strategic placement of structured parking throughout. Large, mixed-use parking structures and underground parking are prevalent. In addition, surface parking lots can be found in key locations along the edge of the district. Various forms of public transit and walkable streetscapes help make the car a secondary choice for transportation into and out of the district. Parks are found in abundance throughout the district, and are utilized by workers, residents, and tourists alike.

24-hour



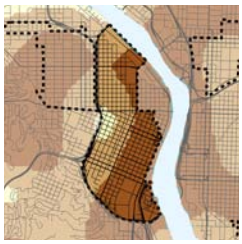
Heat maps


Private amenities


Sidewalk density


People per acre


Block size


Bike route density


Transit frequency


Parks access



Private amenities

4	Bakery
23	Bar
1	Bike shop
7	Bookstore
5	Brewpub
10	Child care
7	Cinema
71	Clothing store
48	Coffee shop
7	Department store
20	Dry cleaners
22	Fitness gym
16	Grocery store
4	Music store
281	Restaurant
10	Specialty snacks and beverages

Public amenities

0	Community center
1	Fire station
1	Government building
1	Library
17	School

Nob Hill District

FOCUS | Tourism and entertainment








Activity level
24 hour

Economic focus
Tourism and entertainment

Median household size
1.4

Median household income (2010)
$37,000

Median age
34

Home ownership
10 percent

People per acre
94

Dwelling units per acre
27

Market value per square foot
$210

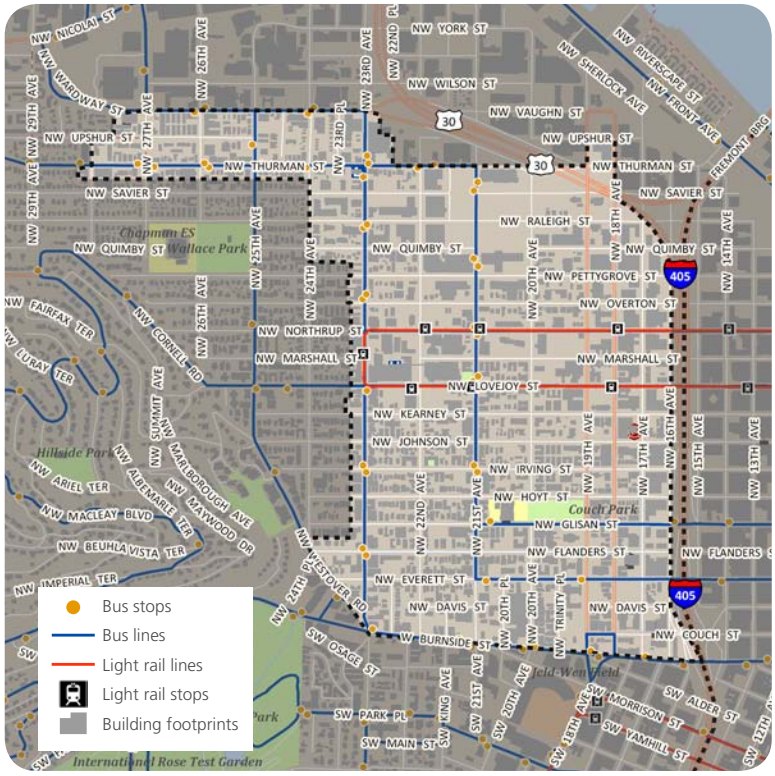
The Nob Hill District includes significant housing, employment and commercial businesses. It serves the local population and functions as a regional and tourist destination, because of its unique combination of fine dining, specialty foods, clothing and accessory retail.

The area has a population of 8,467 residents and a total of 13,716 employees. While it is a hub for employment, it also has a significant amount of housing providing considerable opportunity for those living in the district to also work in the district.

Nob Hill is considered a 24-hour activity location, with daytime office uses and supporting services such as limited service restaurants and other services such as a grocery and dry cleaning that can be easily accessed by workers and residents alike. Nighttime retail activities include restaurants, a cinema, bars and brew pubs. There are many businesess in the district especially restaurants, coffee shops and specialty clothing stores, with an additional range of businesses that include: bakeries, dry cleaners, fitness gyms, grocery stores and bookstores.

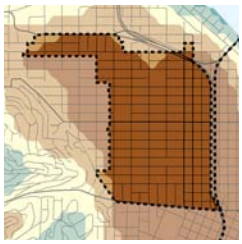
Residents, workers and visitors can easily access the area through a variety of transportation options. The area is served by frequent bus service, a streetcar system, and has a high amount of established bike routes. Sidewalk coverage is high, with small block sizes, which helps to promote pedestrian movement and access to the area. The center has auto access to several major highways and thoroughfares that support the area's regional accessibility to others from outside the region. There is limited structured and surface parking in the area, however, on-street parking is available throughout the district. The area is home to multiple parks, allowing for easy access to greenspaces by residents and visitors alike.

24-hour



Heat maps

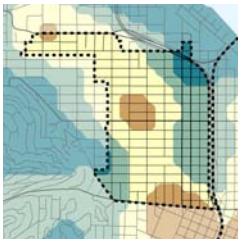

Private amenities

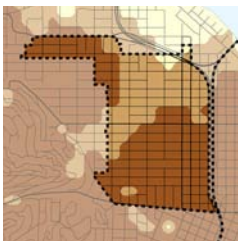

Sidewalk density


People per acre


Block size


Bike route density


Transit frequency


Parks access



Private amenities

5	Bakery
11	Bar
3	Bike shop
1	Bookstore
2	Brewpub
2	Child care
2	Cinema
28	Clothing store
11	Coffee shop
0	Department store
4	Dry cleaners
3	Fitness gym
8	Grocery store
1	Music store
92	Restaurant
1	Specialty snacks and beverages

Public amenities

0	Community center
1	Fire station
0	Government building
1	Library
4	School

Lloyd/Irvington District

FOCUS | Shopping and employment



Activity level
18 hour

Economic focus
Shopping and employment

Median household size
1.6

Median household income (2010)
$48,000

Median age
38

Home ownership
20 percent

People per acre
76

Dwelling units per acre
9

Market value per square foot
$200

Lloyd/Irvington is a district with an emphasis on employment and commercial retail activities. This district focuses on office and retail employment, which is highlighted by a regional shopping center and several large-scale office complexes. Additionally, the core of the center is surrounded by low to medium density housing in the form of single-family housing and several apartment buildings.

The area has a population of 3,202 residents and a total of 15,818 employees, which indicates that a large percentage of the workers in the center travel from outside the area to a job within the district. Additionally, the regional shopping center draws many trips in from outside the area.

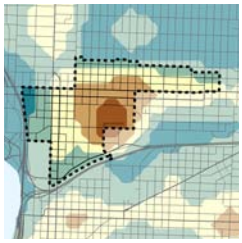
The Lloyd/Irvington District is considered an 18-hour activity center, with a majority of daytime uses in the form of office jobs and retail employment. These uses are supported by many fast food and limited service restaurants as well as dry cleaners, child care and coffee shops. Nighttime activity includes restaurants, bookstores, specialty retail and a major movie theater.

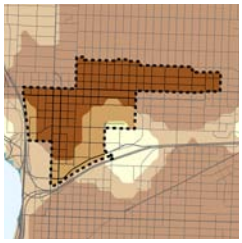
As an employment and regional shopping destination, the area can be easily accessed by a variety of transportation options. The area is served by a light rail line for morning and evening commutes in and out of the district, as well as multiple bus lines. The automobile is the primary form of transportation in this district. Several major highways and thoroughfares provide access to the regional shopping and employment locations. The area is mainly comprised of surface and on-street parking with some structured parking attached to major employment/office locations. The street network tends to be a mix of small block grids in the residential neighborhood areas and "super blocks" in the office and shopping areas, making walking somewhat more difficult in several areas as wide streets and fast-moving traffic discourage pedestrian movement between the residential areas and the shopping/office areas. Regardless, the district has good sidewalk coverage and well-defined bike routes, allowing for more transportation options.

18-hour



Heat maps

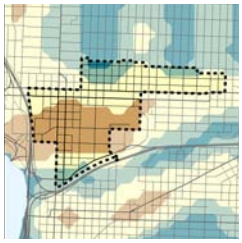

Private amenities


Sidewalk density


People per acre


Block size


Bike route density


Transit frequency


Parks access



Private amenities

3	Bakery
1	Bar
0	Bike shop
1	Bookstore
0	Brewpub
3	Child care
2	Cinema
37	Clothing store
11	Coffee shop
6	Department store
3	Dry cleaners
3	Fitness gym
2	Grocery store
2	Music store
58	Restaurant
4	Specialty snacks and beverages

Public amenities

0	Community center
1	Fire station
0	Government building
0	Library
1	School

Westmoreland District

FOCUS | Specialty retail, small town feel



Activity level
18 hour

Economic focus
Shopping and dining

Median household size
1.8

Median household income (2010)
$48,000

Median age
43

Home ownership
52 percent

People per acre
30

Dwelling units per acre
8

Market value per square foot
$120

Westmoreland is a moderately populated district with an emphasis on dining and specialty retail shopping. It serves the local population and functions as a regional and tourist destination because of its unique combination of fine dining, specialty foods, and clothing and accessory retail. The area was historically considered a main street. Today, it still serves the same purpose but it has evolved into a destination location.

The area has a population of 508 residents and a total of 629 employees. While the area is a hub for specialty retail, it also has a significant amount of housing in the surrounding neighborhoods. The majority of the housing is single-family residential, of which 52 percent is owner occupied. The majority of the jobs in the district are retail and service-oriented.

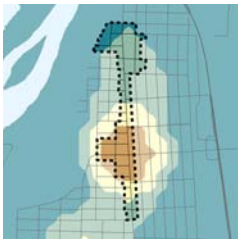
Westmoreland is considered an 18-hour activity center, with a majority of daytime uses in the form of grocery stores, garden stores, clothing stores and coffee shops. Nighttime activity includes several bars, one cinema and multiple restaurants.

The Westmoreland District is accessible by many different modes of transportation. As a shopping destination to individuals outside of the immediate neighborhoods, the majority of access occurs via automobile. Parking is handled by multiple surface lots and considerable on-street parking. Additionally, parking tends to move into the residential neighborhoods during peak dining and shopping times. The area is served by bus lines, with a frequency of 15-minute headways and multiple stops. The street network is mainly small block in nature with narrower residential streets just off the main thoroughfare. With smaller blocks and good sidewalk connectivity, the area encourages local pedestrian access. Bicycle access is high, with well-defined bike routes through the district. The area has above average access to parks in much of the surrounding neighborhoods.

18-hour



Heat maps


Private amenities


Sidewalk density


People per acre


Block size


Bike route density


Transit frequency


Parks access



Private amenities

0	Bakery
2	Bar
0	Bike shop
1	Bookstore
0	Brewpub
0	Child care
1	Cinema
2	Clothing store
2	Coffee shop
0	Department store
2	Dry cleaners
0	Fitness gym
1	Grocery store
0	Music store
18	Restaurant
1	Specialty snacks and beverages

Public amenities

0	Community center
0	Fire station
0	Government building
0	Library
0	School

Clinton District

FOCUS | Dining and entertainment







Activity level
18 hour

Economic focus
Dining and entertainment

Median household size
1.97

Median household income (2010)
$50,000

Median age
34

Home ownership
42 percent

People per acre
45

Dwelling units per acre
11

Market value per square foot
$102

Clinton is a moderately populated district with a focus on dining and entertainment. The main retail and service core of this typology is surrounded by predominantly single-family and multi-family housing. The district clearly offers services to the local population and is also a popular scene for younger people to come and hang out at the local bars and restaurants. Ample outside seating is present at most of the restaurants, cafes and bars.

The area has a population of 774 residents and total of 945 employees. The majority of the employment is centered around retail, restaurants and entertainment activities. The housing stock is primarily from the early 20th century and includes a mix of single-family residential and multi-family structures of which 42 percent are owner-occupied. Significant infill development has also been prevalent in the area, primarily in form of duplexes and apartments.

Clinton is considered an 18-hour activity center, with a majority of daytime uses in the form of coffee shops, clothing stores and music stores. Nighttime activity includes full-service and limited-service restaurants, as well as multiple bars and theaters.

The Clinton District is accessible by many different modes of transportation. The district is a network of narrow streets and small blocks, with a high amount of sidewalk coverage, making it very pedestrian-friendly. Additionally, Clinton is an official bike boulevard, making bike travel a viable and often-used option. Several bus lines cross through this district with multiple stops and short headways. The area has frequent bus service to assist in the movement of workers into and out of the district during morning and evening peak travel times. The district has above average access to parks in much of the surrounding neighborhoods.

18-hour



Heat maps


Private amenities


Sidewalk density


People per acre


Block size


Bike route density


Transit frequency


Parks access



Private amenities

1	Bakery
6	Bar
1	Bike shop
0	Bookstore
0	Brewpub
0	Child care
1	Cinema
3	Clothing store
2	Coffee shop
0	Department store
0	Dry cleaners
0	Fitness gym
3	Grocery store
3	Music store
13	Restaurant
1	Specialty snacks and beverages

Public amenities

0	Community center
0	Fire station
0	Government building
0	Library
1	School

Hillsdale District

FOCUS | Dining and local services







Activity level
14 hour

Economic focus
Dining and local services

Median household size
2.10

Median household income (2010)
$54,000

Median age
34

Home ownership
36 percent

People per acre
17

Dwelling units per acre
6

Market value per square foot
$50

Hillsdale is a district with a more suburban, single-family residential feel. The area was historically considered a main street, serving the local population. Today, the area is still primarily geared toward serving the local population, and significant efforts have been made, or are underway, to improve the pedestrian environment. Despite having a state highway as the main street in the district, it has evolved into a destination location for restaurants and a farmer's market. The area also has several trails and two schools within walking distance.

The area has a population of 778 residents and a total of 342 employees. The majority of jobs in the district are retail and service-related, and housing is primarily single-family residential with some multi-family housing located in clusters near the main highway.

Hillsdale is considered a 14-hour activity center, with a majority of daytime uses in the form of coffee shops, clothing stores and child care. Nighttime uses are centered around restaurants, as there are no bars or nightclubs located in the district.

Hillsdale is accessed predominantly via the automobile. Transit service is average, with only one frequent service line along Southwest Capitol Highway. The area lacks sidewalk continuity and has larger block sizes, making pedestrian access less continuous and potentially discouraging for walking trips. Bicycle access is better in the eastern portion of the district, and above average overall. Parks can be found in abundance, and the area has very good park access for those living inside of, and in close proximity to, the district. Parking is generally found in surface lots and on street. The use of parking structures is limited due to land values and uses in the district.

14-hour



Heat maps


Private amenities


Sidewalk density


People per acre


Block size


Bike route density


Transit frequency


Parks access



Private amenities

1	Bakery
0	Bar
0	Bike shop
1	Bookstore
0	Brewpub
1	Child care
0	Cinema
1	Clothing store
1	Coffee shop
0	Department store
2	Dry cleaners
1	Fitness gym
2	Grocery store
0	Music store
14	Restaurant
2	Specialty snacks and beverages

Public amenities

0	Community center
0	Fire station
0	Government building
1	Library
2	School

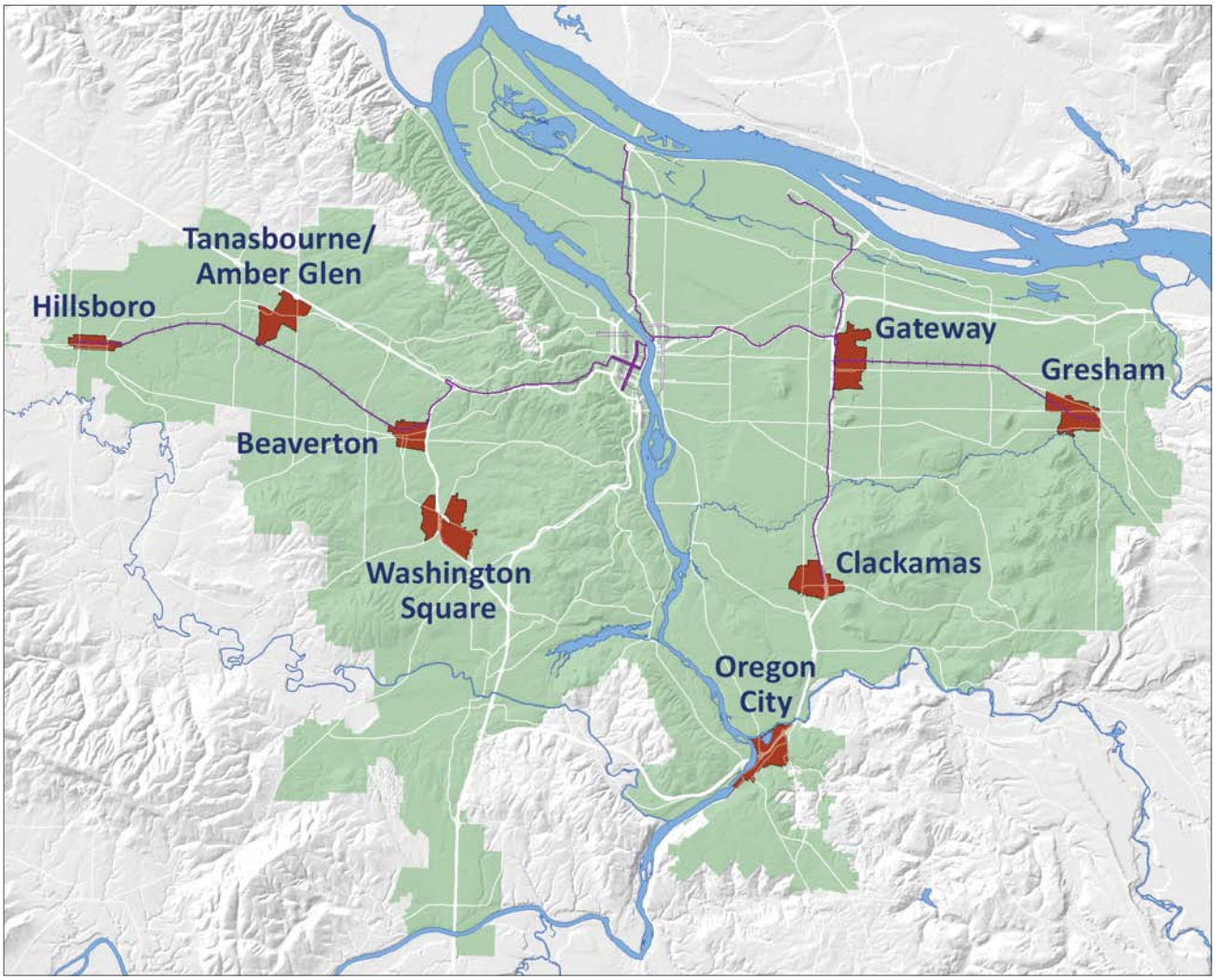
Regional centers



Regional centers

Eight areas of concentration





Regional centers at a glance

	Net acreage	Total population	Total employment	People per acre	Dwelling units per acre	Market value per square foot
Beaverton	328	2,290	1,398	11.2	3.2	$37
Clackamas	500	5,227	2,261	15.0	5.4	**$54**
Gateway	**650**	**8,709**	**3,536**	**18.8**	**6.0**	$47
Gresham	552	4,684	1,936	12.0	3.8	$37
Hillsboro	212	2,336	666	14.1	3.7	$44
Oregon City	503	256	172	0.9	0.2	$12
Tanasbourne	610	3,614	1,616	8.6	3.3	$32
Washington Square	791	2,465	1,083	4.5	1.5	$33

Numbers in blue represent the largest in that category.

Regional centers are the focus of redevelopment, multi-modal transit connections and concentrated growth. Eventually, the 2040 Growth Concept calls for rail connections to tie all the regional centers to each other and to the central city area of Portland.

There are eight regional centers, serving different market areas (outside of the central city market area). The Metro Council recently added a new regional center to the 2040 Growth Concept map. The decision to change Tanasbourne from a town center to a regional center was consistent with regional plans and the City of Hillsboro's desire to leverage that investment to achieve goals more consistent with regional center metrics.

Hillsboro, Beaverton, Tanasbourne and Washington Square serve Washington County, the West Hills and the communities along the Interstate 5 corridor. Oregon City and Clackamas serve northern Clackamas County and the Interstate 205 corridor. Gresham and Gateway serve Portland east of I-205 and all of eastern Multnomah County.

All of the centers, with the exception of Oregon City and Tanasbourne, are well connected to the rest of the region through MAX lines, the Westside Express Service (WES) commuter rail line and frequent bus service.

Urban form varies greatly from center to center. Hillsboro, Oregon City and downtown Gresham all have grid street patterns and maintain a historic downtown feel. Washington Square, Tanasbourne, Clackamas and Gateway all have larger block sizes with large format retail, more typical of suburban style malls.

All of the regional centers except Washington Square are either using or considering urban renewal to spur growth.

Beaverton Regional Center



Private amenities

1	Bakery
5	Bar
2	Bike shop
4	Bookstore
0	Brewpub
1	Child care
0	Cinema
10	Clothing store
8	Coffee shop
3	Department store
3	Dry cleaners
5	Fitness gym
11	Grocery store
1	Music store
63	Restaurant
5	Specialty snacks and beverages

Public amenities

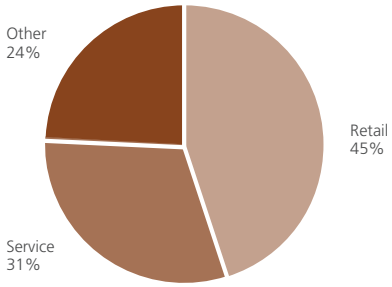
0	Community center
0	Fire station
1	Government building
1	Library
1	School

The Beaverton Regional Center serves as a retail and transportation hub for Beaverton and unincorporated Washington County. Located directly west of Highway 217 and south of Highway 26, the center is served by several additional ODOT facilities, including State Highway 8 and 10. Two MAX stops, as well as a regional transit center, provide extensive transit service in and out of the center. The center has 2,290 residents, 1,398 employees and 1,047 dwelling units. Beaverton Regional Center contains 407 gross acres.

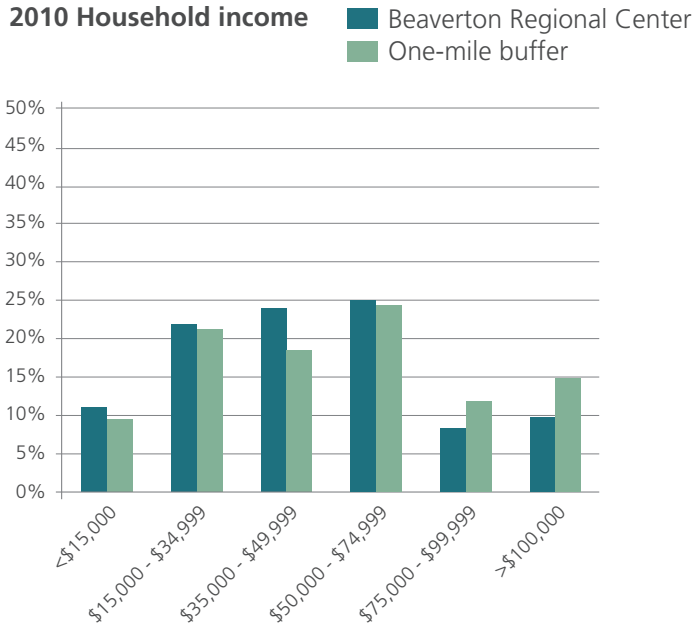
By the numbers	Beaverton Regional Center	Regional centers average	One-mile buffer
Net acreage	328	518	3,792
Total population	2,290	3,698	32,908
Total employees	1,398	1,584	20,217
Non-SOV mode share (all trips)	56%	55%	n/a
Market value per square foot	$37	$37	$28
People per acre	11.2	10.6	14.0
Dwelling units per acre	3.2	3.4	4.0
Total businesses per acre	1.34	0.86	0.34
Home ownership	24.4%	30.0%	41.6%
Median household income	$45,422	$49,209	$50,796
Median household size	2.58	2.57	2.4
Median age	30	32.3	34.5



Employment breakdown



2010 Household income



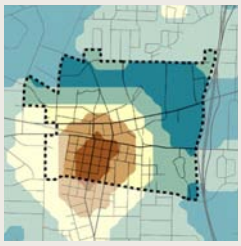
Metro context tool results

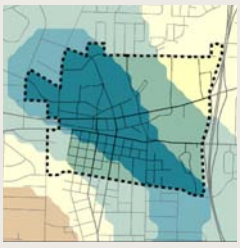
Heat maps

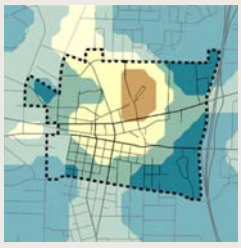

Private amenities


Sidewalk density


People per acre


Block size

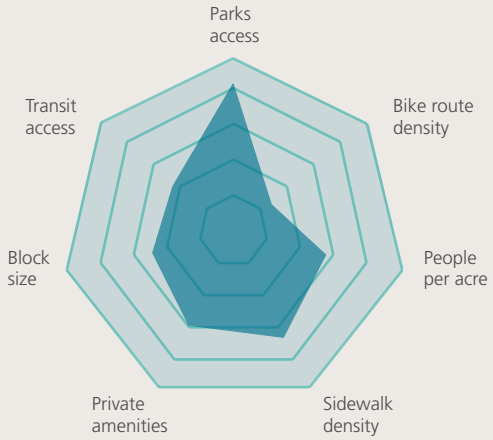

Bike route density


Transit frequency


Parks access



Composite score: 43.70



Clackamas Regional Center



Private amenities

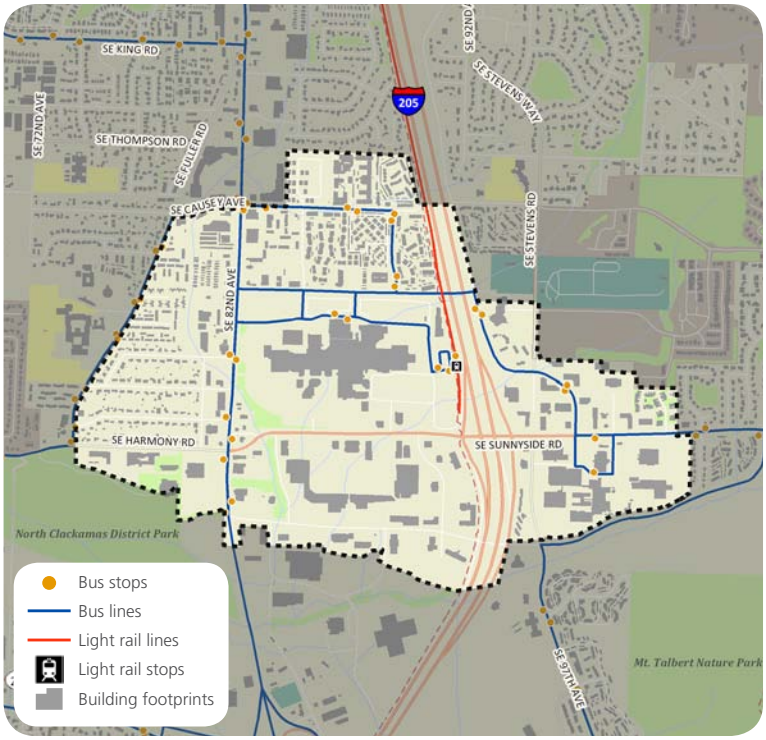
2	Bakery
0	Bar
1	Bike shop
1	Bookstore
0	Brewpub
0	Child care
1	Cinema
42	Clothing store
7	Coffee shop
9	Department store
1	Dry cleaners
4	Fitness gym
0	Grocery store
1	Music store
44	Restaurant
8	Specialty snacks and beverages

Public amenities

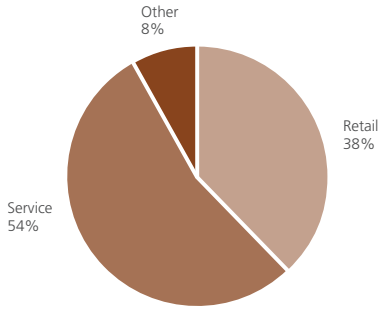
0	Community center
1	Fire station
0	Government building
1	Library
2	School

The Clackamas Regional Center is located directly adjacent to Interstate 205 and serves as the retail hub of northern Clackamas County and much of East Portland. Located in unicorporated Clackamas county, the center is home to a large regional mall and many destination shops and services. It is the final southbound stop on the newly opened MAX Green Line. This MAX station is also home to a 750-space park-and-ride facility, which allows for extended transit service to 10 bus lines. The regional center is part of an active urban renewal district and contains abundant surface parking. The center has 5,227 residents, 2,260 employees and 2,680 dwelling units. Clackamas Regional Center contains 631 gross acres.

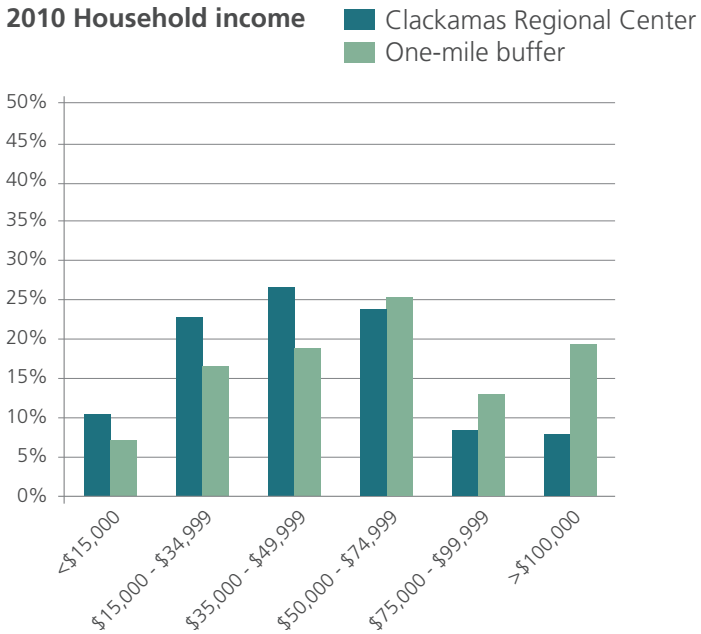
By the numbers	Clackamas Regional Center	Regional center average	One-mile buffer
Net acreage	500	518	4,377
Total population	5,227	3,698	31,649
Total employees	2,261	1,584	20,775
Non-SOV mode share (all trips)	54%	55%	n/a
Market value per square foot	$54	$37	$22
People per acre	15.0	10.6	12.0
Dwelling units per acre	5.4	3.4	3.0
Total businesses per acre	0.68	0.86	0.21
Home ownership	15.2%	30.0%	46.9%
Median household income	$44,636	$49,209	$56,787
Median household size	2.22	2.57	2.52
Median age	28.5	32.3	32.9



Employment breakdown

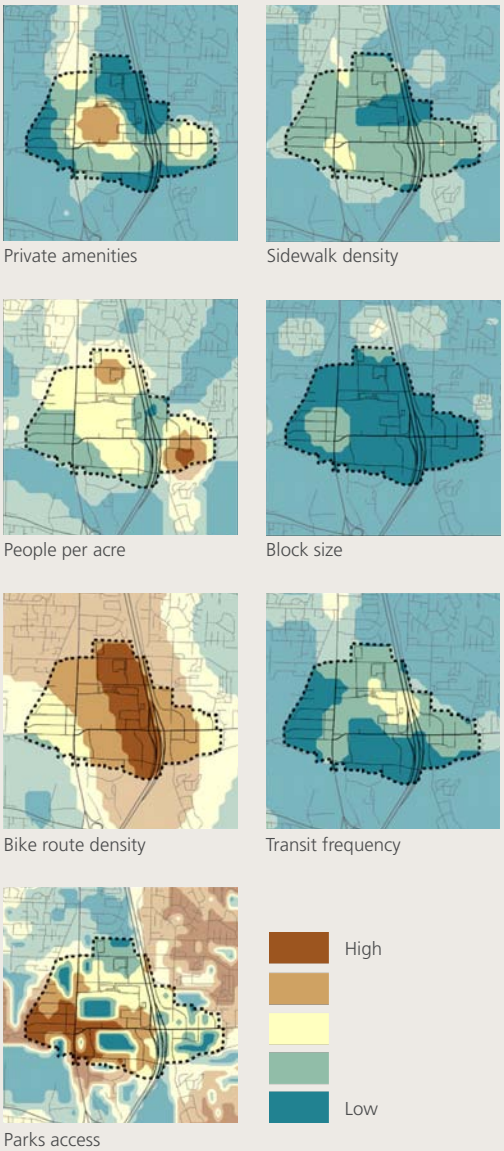


2010 Household income

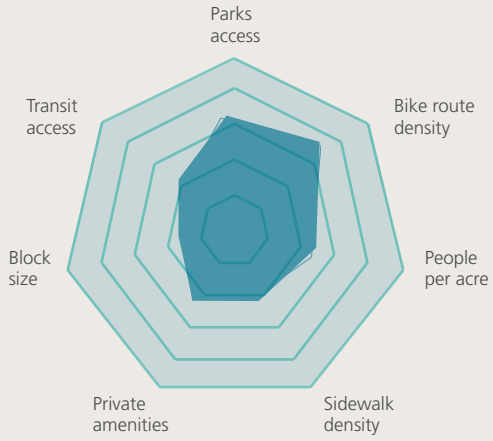


Metro context tool results

Heat maps



Composite score: 33.00



Gateway Regional Center



Private amenities

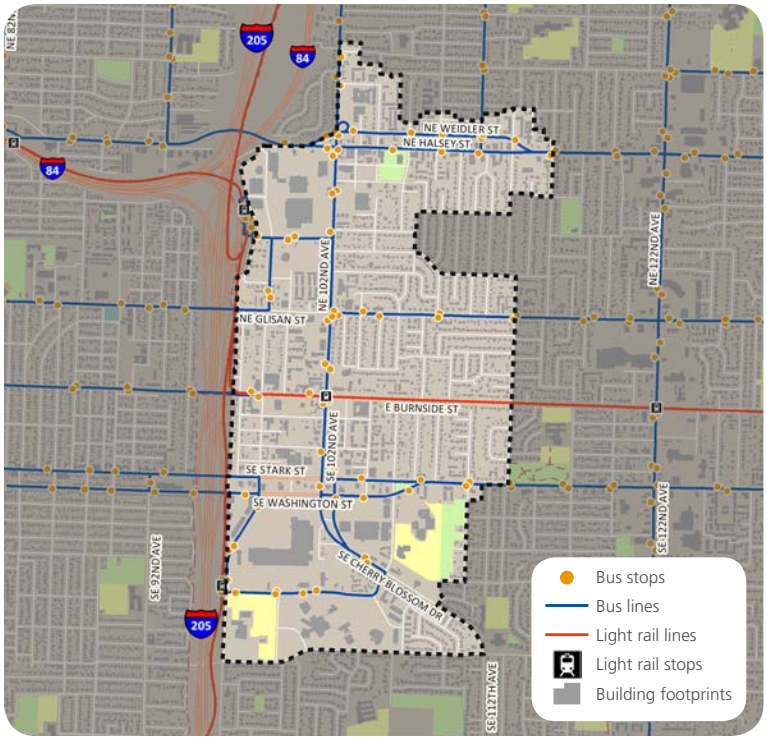
0	Bakery
5	Bar
1	Bike shop
0	Bookstore
0	Brewpub
2	Child care
0	Cinema
6	Clothing store
7	Coffee shop
3	Department store
4	Dry cleaners
5	Fitness gym
7	Grocery store
0	Music store
42	Restaurant
4	Specialty snacks and beverages

Public amenities

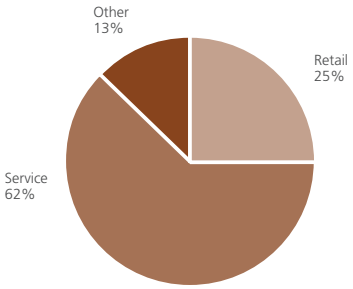
0	Community center
0	Fire station
0	Government building
0	Library
6	School

The Gateway Regional Center serves the northeast and eastern portions of Portland along with shoppers and travelers from most locations east of the Willamette River and both sides of the Columbia River. The center is well connected to the entire region through the major transportation corridors of Interstate 205 and Interstate 84. Additionally, the Gateway transit center serves the Blue, Green and Red MAX lines, six bus lines, and contains 690 parking spaces devoted to park-and-ride commuters. Gateway is part of an active urban renewal district. The center has 8,709 residents, 3,536 employees and 3,878 dwelling units. Gateway Regional Center contains 809 gross acres.

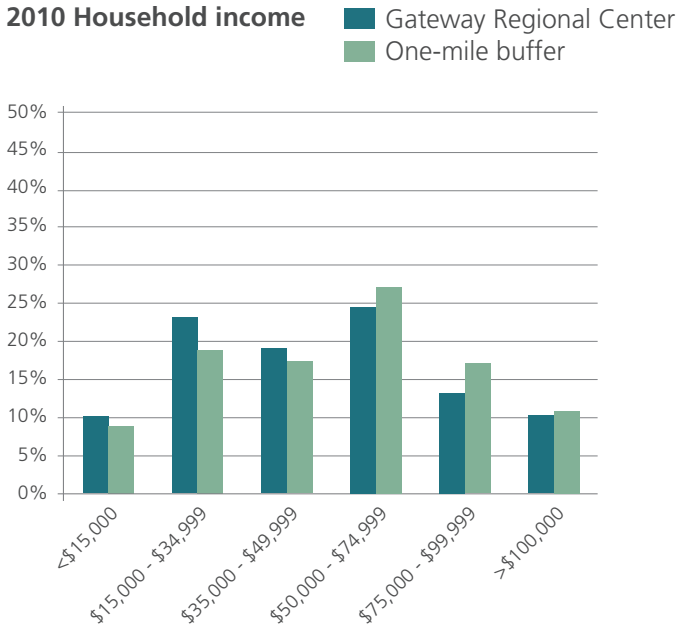
By the numbers	Gateway Regional Center	Regional center average	One-mile buffer
Net acreage	650	518	4,574
Total population	8,709	3,698	59,302
Total employees	3,536	1,584	18,233
Non-SOV mode share (all trips)	55%	55%	n/a
Market value per square foot	$47	$37	$31
People per acre	18.8	10.6	17.0
Dwelling units per acre	6.0	3.4	5.3
Total businesses per acre	0.68	0.86	0.28
Home ownership	40.8%	30.0%	56.1%
Median household income	$47,871	$49,209	$54,368
Median household size	2.45	2.57	2.61
Median age	35	32.3	36.7



Employment breakdown

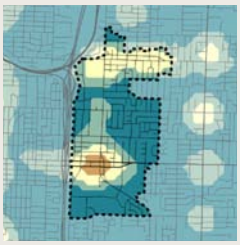


2010 Household income



Metro context tool results

Heat maps

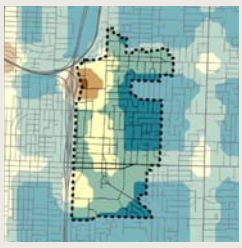

Private amenities


Sidewalk density

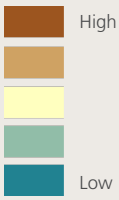

People per acre


Block size

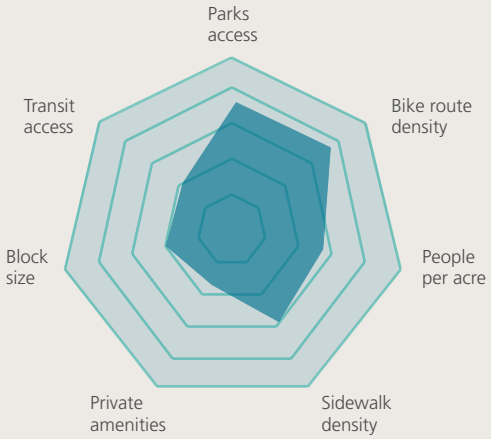

Bike route density


Transit frequency


Parks access



Composite score: 42.74



Gresham Regional Center



Private amenities

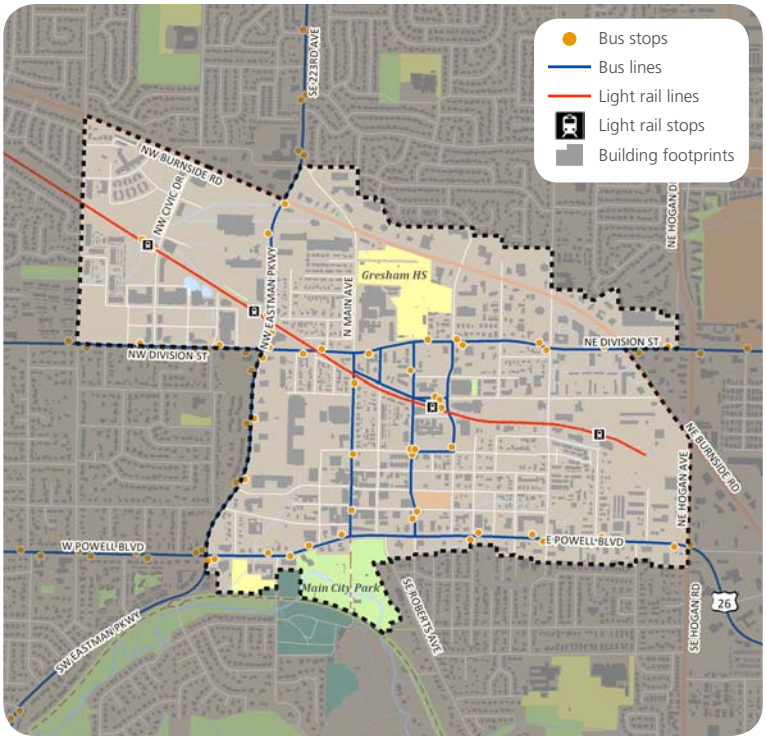
1	Bakery
5	Bar
2	Bike shop
1	Bookstore
1	Brewpub
3	Child care
1	Cinema
19	Clothing store
11	Coffee shop
2	Department store
3	Dry cleaners
3	Fitness gym
4	Grocery store
0	Music store
61	Restaurant
5	Specialty snacks and beverages

Public amenities

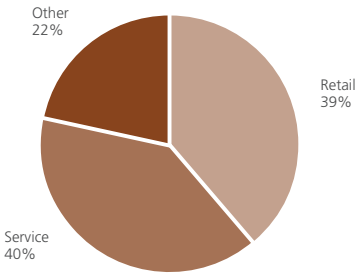
1	Community center
1	Fire station
1	Government building
1	Library
6	School

The Gresham Regional Center serves eastern Multnomah County with destination shopping and dining. The center encompasses two distinct neighborhoods: Civic Neighborhood and downtown Gresham. Although not on an interstate highway, the center is served by State Highway 26 (Powell Boulevard), and multiple east-west arterials. Downtown Gresham is the eastern terminus of the MAX Blue Line, which contains a 540-space park-and-ride facility and serves eight separate bus lines. The newly opened Civic Station MAX stop is developing into a transit-oriented site, with ongoing public and private investments. The center has 4,684 residents, 1,936 employees and 2,098 dwelling units. Gresham Regional Center contains 692 gross acres.

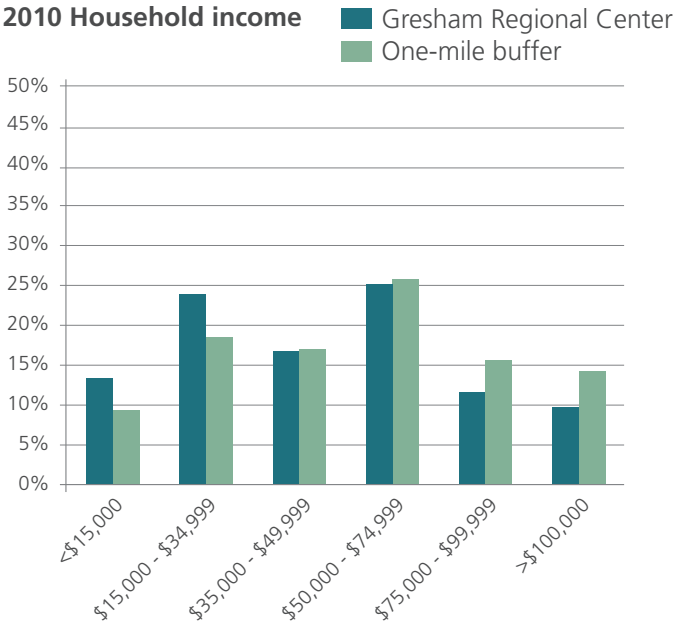
By the numbers	Gresham Regional Center	Regional center average	One-mile buffer
Net acreage	552	518	4,933
Total population	4,684	3,698	48,395
Total employees	1,936	1,584	13,463
Non-SOV mode share (all trips)	55%	55%	n/a
Market value per square foot	$37	$37	$23
People per acre	12.0	10.6	12.5
Dwelling units per acre	3.8	3.4	4.0
Total businesses per acre	0.84	0.86	0.18
Home ownership	26.2%	30.0%	47.2%
Median household income	$47,298	$49,209	$54,440
Median household size	2.73	2.57	2.56
Median age	31	32.3	33.1



Employment breakdown

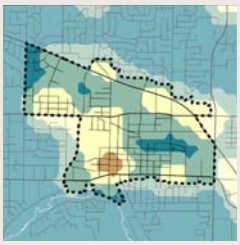


2010 Household income



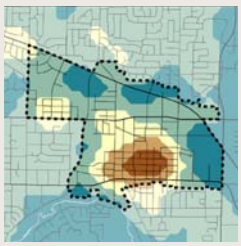
Metro context tool results

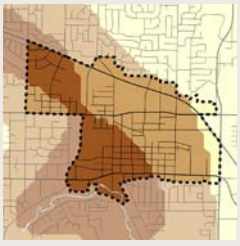
Heat maps


Private amenities


Sidewalk density


People per acre


Block size

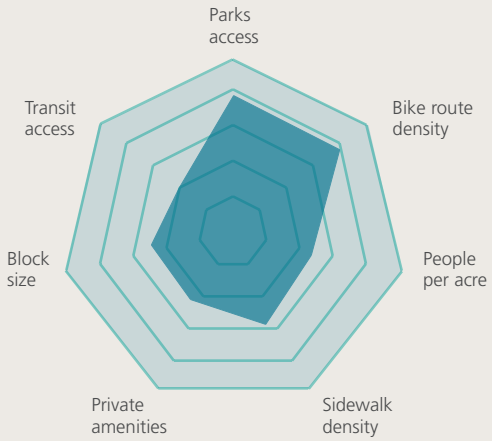

Bike route density


Transit frequency


Parks access



Composite score: 48.11



Hillsboro Regional Center



Private amenities

2	Bakery
1	Bar
1	Bike shop
0	Bookstore
0	Brewpub
4	Child care
1	Cinema
4	Clothing store
4	Coffee shop
0	Department store
3	Dry cleaners
0	Fitness gym
5	Grocery store
0	Music store
33	Restaurant
0	Specialty snacks and beverages

Public amenities

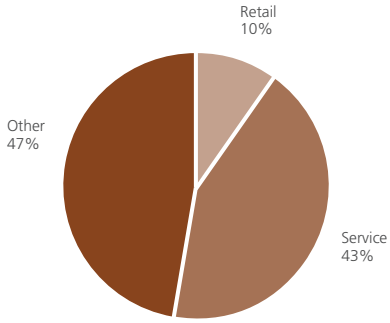
1	Community center
1	Fire station
1	Government building
2	Library
3	School

The Hillsboro Regional Center serves jurisdictions in the western part of region such as Forest Grove and Cornelius as well as rural portions of Washington County. Historic downtown Hillsboro is within the regional center, and is home to the Hillsboro Civic Building, Washington County Courthouse, a satellite campus of Pacific University, and Tuality Community Hospital. The center is the western terminus of the MAX Blue Line, and contains the Hillsboro Central Transit Center, which serves five bus lines. The nearby Hatfield Government Center parking garage contains 250 available spaces for park-and-ride users. The center has 2,336 residents, 666 employees and 784 dwelling units. Hillsboro Regional Center contains 295 gross acres.

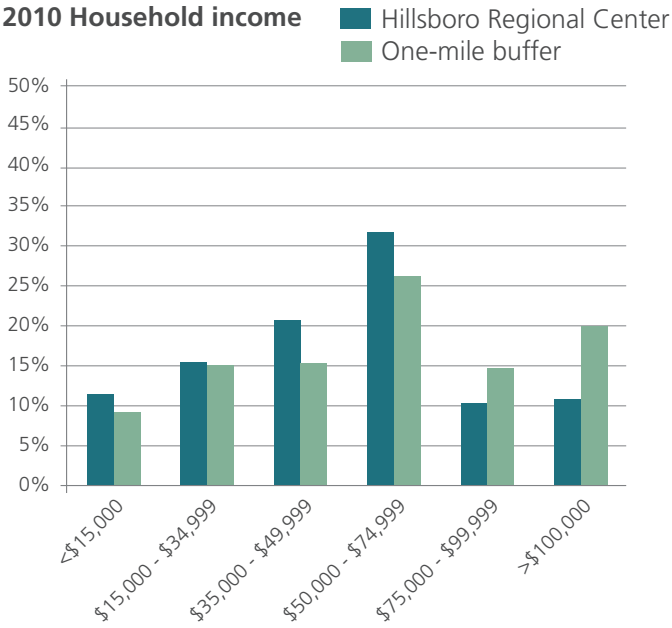
By the numbers	Hillsboro Regional Center	Regional center average	One-mile buffer
Net acreage	212	518	3,753
Total population	2,336	3,698	31,694
Total employees	666	1,584	11,091
Non-SOV mode share (all trips)	55%	55%	n/a
Market value per square foot	$44	$37	$16
People per acre	14.1	10.6	11.4
Dwelling units per acre	3.7	3.4	2.9
Total businesses per acre	1.54	0.86	0.19
Home ownership	45.0%	30.0%	55.9%
Median household income	$51,675	$49,209	$60,690
Median household size	3.8	2.57	3.17
Median age	32.6	32.3	32



Employment breakdown



2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density

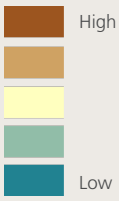

People per acre


Block size

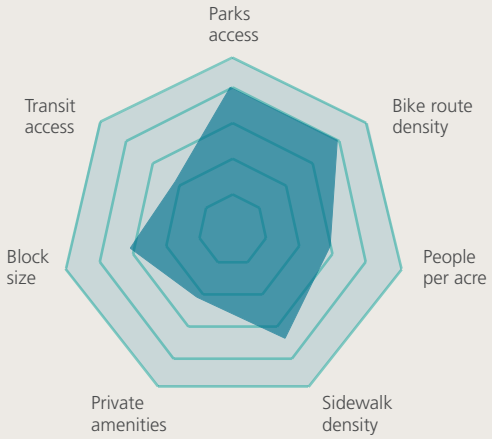

Bike route density


Transit frequency


Parks access



Composite score: 54.26



Oregon City Regional Center



Private amenities

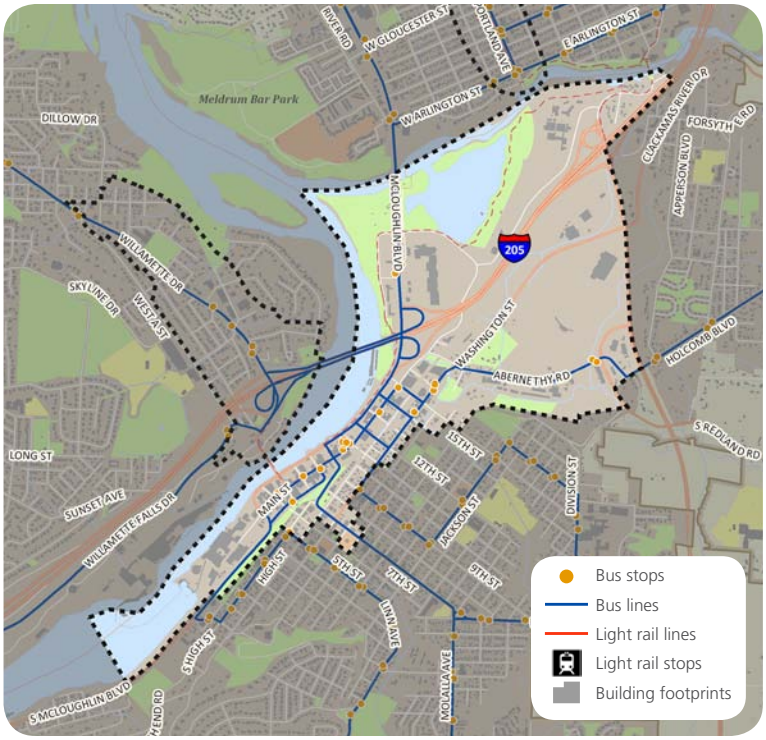
1	Bakery
7	Bar
1	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
0	Clothing store
8	Coffee shop
0	Department store
0	Dry cleaners
4	Fitness gym
0	Grocery store
0	Music store
20	Restaurant
0	Specialty snacks and beverages

Public amenities

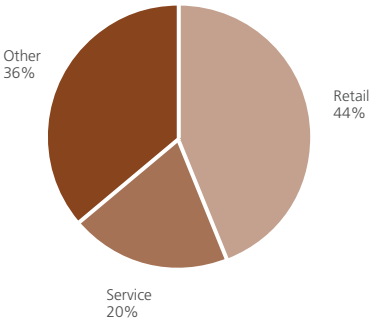
1	Community center
1	Fire station
0	Government building
1	Library
0	School

The Oregon City Regional Center is the southernmost regional center, serving Clackamas County and neighboring cities. The oldest incorporated city in Oregon, the center abuts the Willamette River and is known for its historic, small town feel. The transportation network consists of direct access to Interstate 205 and the additional ODOT facilities of McLoughlin Boulevard (Highway 99 East) and Highway 213. The center is served by several bus lines, and is included for a potential high capacity transit service in the the Regional Transportation Plan. Oregon City Regional Center contains 407 gross acres.

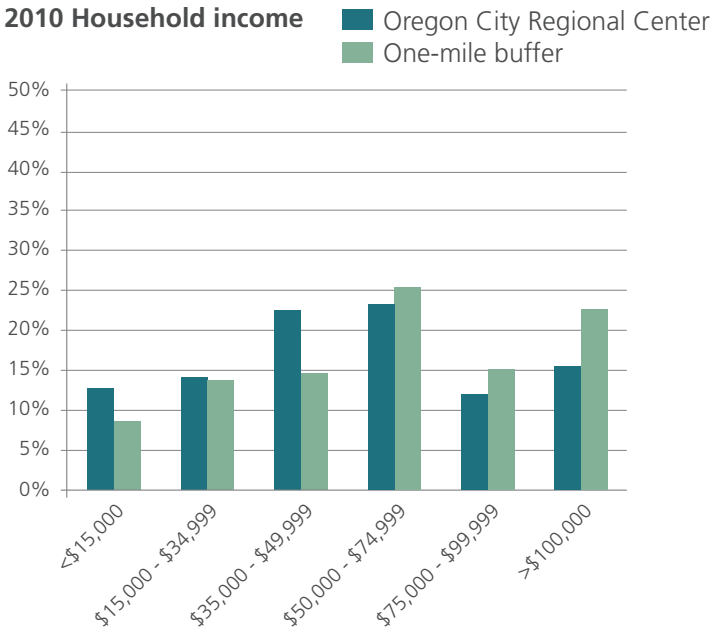
By the numbers	Oregon City Regional Center	Regional center average	One-mile buffer
Net acreage	503	518	5,282
Total population	256	3,698	31,150
Total employees	172	1,584	10,297
Non-SOV mode share (all trips)	50%	55%	n/a
Market value per square foot	$12	$37	$16
People per acre	0.9	10.6	7.8
Dwelling units per acre	0.2	3.4	2.3
Total businesses per acre	0.41	0.86	0.12
Home ownership	48.7%	30.0%	60.7%
Median household income	$50,704	$49,209	$62,725
Median household size	2.53	2.57	2.59
Median age	37.8	32.3	37.6



Employment breakdown



2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density

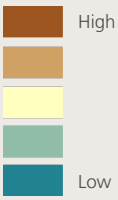

People per acre


Block size

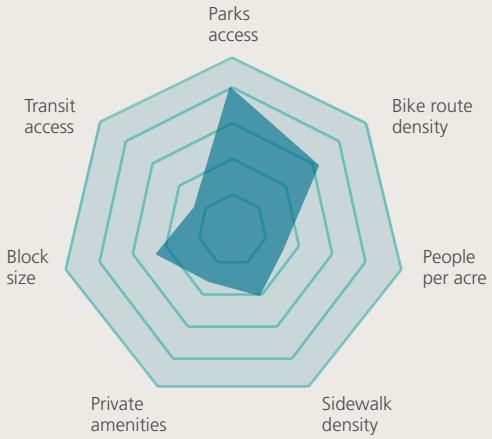

Bike route density


Transit frequency


Parks access



Composite score: 28.88



Tanasbourne Regional Center



Private amenities

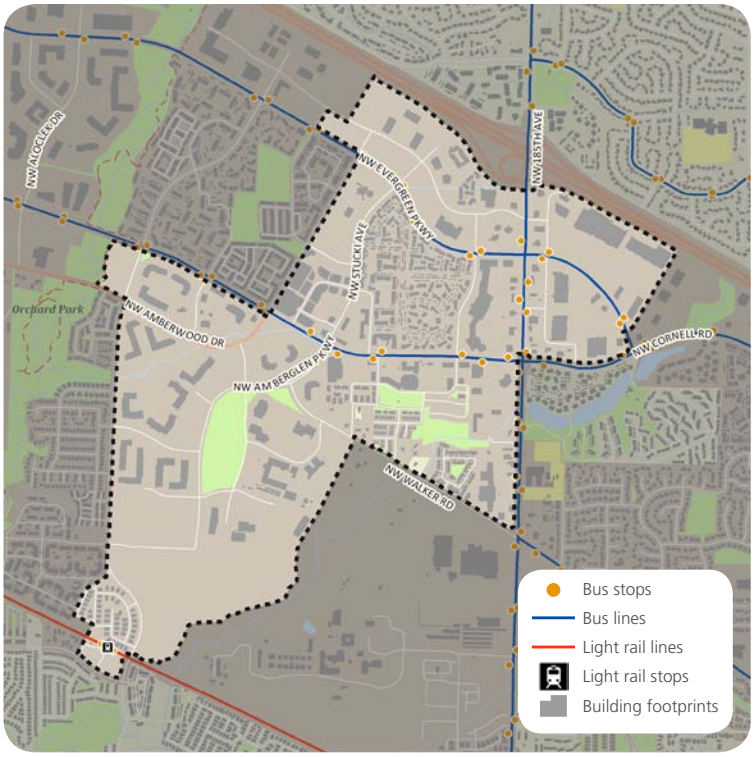
1	Bakery
0	Bar
0	Bike shop
1	Bookstore
0	Brewpub
0	Child care
1	Cinema
28	Clothing store
5	Coffee shop
4	Department store
1	Dry cleaners
3	Fitness gym
5	Grocery store
1	Music store
41	Restaurant
1	Specialty snacks and beverages

Public amenities

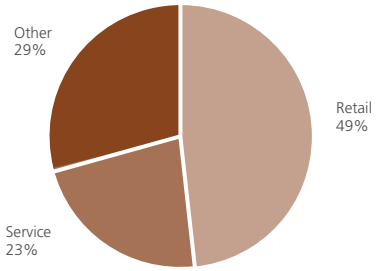
0	Community center
0	Fire station
0	Government building
0	Library
1	School

The Tanasbourne Regional Center is located along Cornell Road, south of Highway 26 in Hillsboro. Tanasbourne was upgraded to a regional center in 2010 when the City of Hillsboro completed a new area plan for AmberGlen, subsequently added it to the center boundary, and petitioned the Metro Council for the new designation. The area includes a mix of employment and commercial businesses, notably the Streets of Tanasbourne regional shopping center. The center is serviced by two major arterials, Cornell Road and Northwest 185th Avenue. The center has 3,614 residents, 1,616 employees and 2,037 dwelling units. Tanasbourne Regional Center contains 678 gross acres.

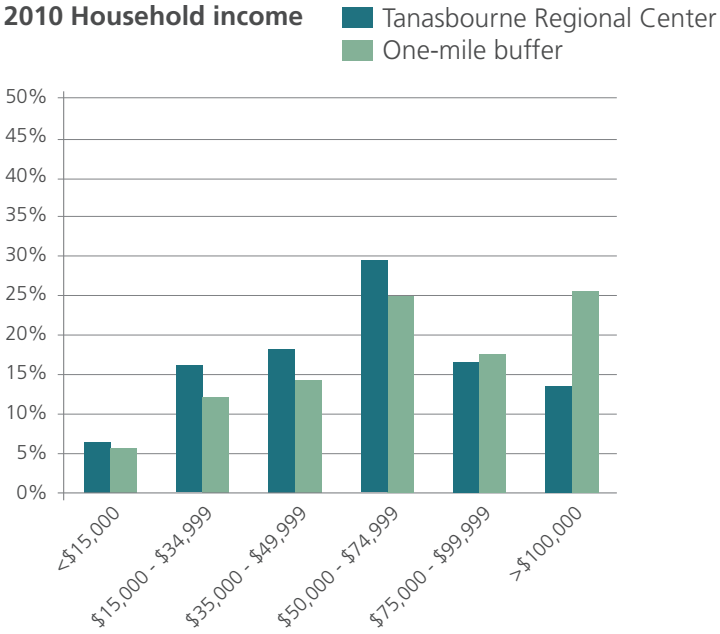
By the numbers	Tanasbourne Regional Center	Regional center average	One-mile buffer
Net acreage	610	518	5,046
Total population	3,614	3,698	49,133
Total employees	1,616	1,584	16,156
Non-SOV mode share (all trips)	52%	55%	n/a
Market value per square foot	$32	$37	$25
People per acre	8.6	10.6	12.9
Dwelling units per acre	3.3	3.4	4.2
Total businesses per acre	0.50	0.86	0.16
Home ownership	4.6%	30.0%	43.7%
Median household income	$58,286	$49,209	$67,579
Median household size	1.97	2.57	2.47
Median age	29.4	32.3	32



Employment breakdown

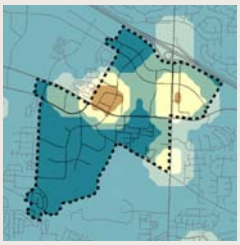


2010 Household income

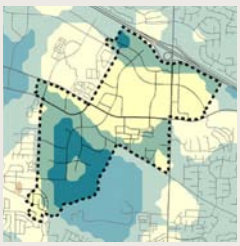


Metro context tool results

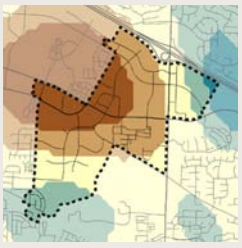
Heat maps


Private amenities


Sidewalk density


People per acre


Block size

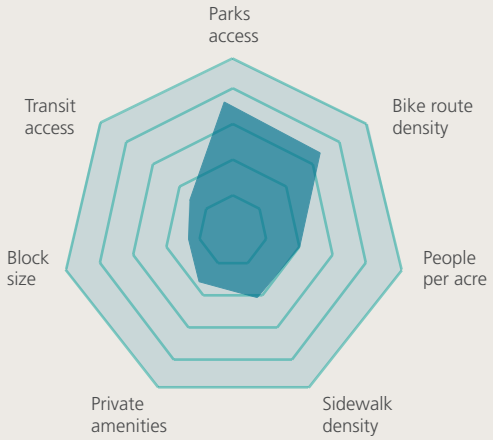

Bike route density


Transit frequency


Parks access



Composite score: 31.61



Washington Square Regional Center



Private amenities

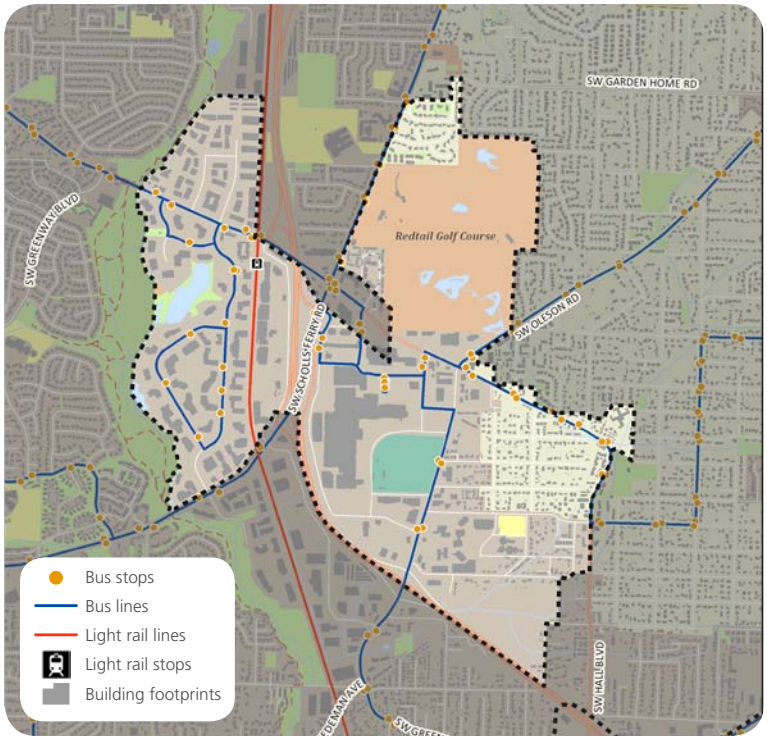
1	Bakery
1	Bar
0	Bike shop
2	Bookstore
0	Brewpub
3	Child care
0	Cinema
36	Clothing store
6	Coffee shop
6	Department store
2	Dry cleaners
2	Fitness gym
3	Grocery store
0	Music store
33	Restaurant
8	Specialty snacks and beverages

Public amenities

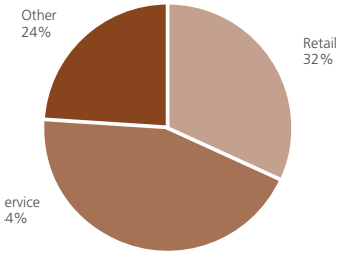
0	Community center
1	Fire station
0	Government building
0	Library
2	School

The Washington Square Regional Center is a major retail hub for central and southern Washington County, western Clackamas County, and surrounding cities. It is located in the jurisdictions of both Beaverton and Tigard and a portion of unincorporated Washington County. The Washington Square mall is a thriving shopping center and has attracted many other satellite retail developments. The center is served by Highway 217, Southwest Scholls Ferry Road and Southwest Hall Boulevard. Additionally, the center has a Westside Express Service (WES) commuter rail stop and three bus lines. The center has 2,465 residents, 1,083 employees and 1,161 dwelling units. Washington Square Regional Center contains 914 gross acres.

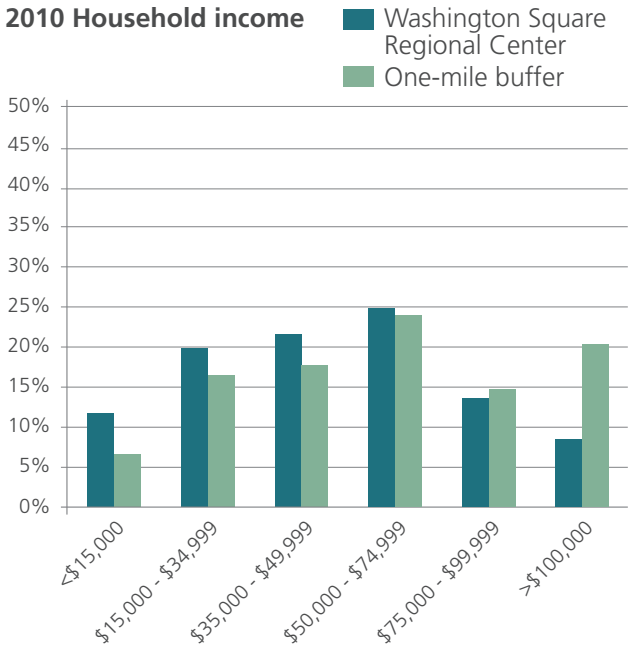
By the numbers	Washington Square Regional Center	Regional center average	One-mile buffer
Net acreage	791	518	5,625
Total population	2,465	3,698	45,500
Total employees	1,083	1,584	27,586
Non-SOV mode share (all trips)	62%	55%	n/a
Market value per square foot	$33	$37	$27
People per acre	4.5	10.6	13.0
Dwelling units per acre	1.5	3.4	3.5
Total businesses per acre	0.86	0.86	0.30
Home ownership	34.8%	30.0%	50.7%
Median household income	$47,783	$49,209	$60,133
Median household size	2.29	2.57	2.44
Median age	34	32.3	36.2



Employment breakdown



2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density


People per acre


Block size

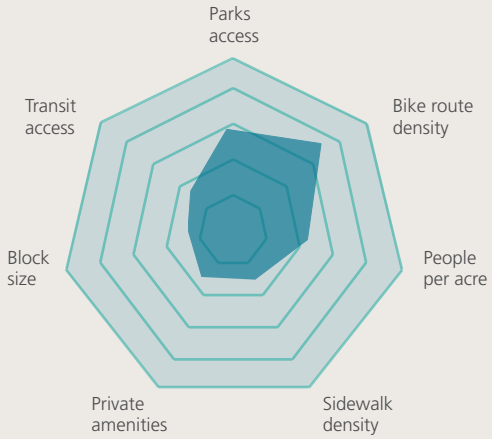

Bike route density


Transit frequency


Parks access



Composite score: 26.94



Town centers

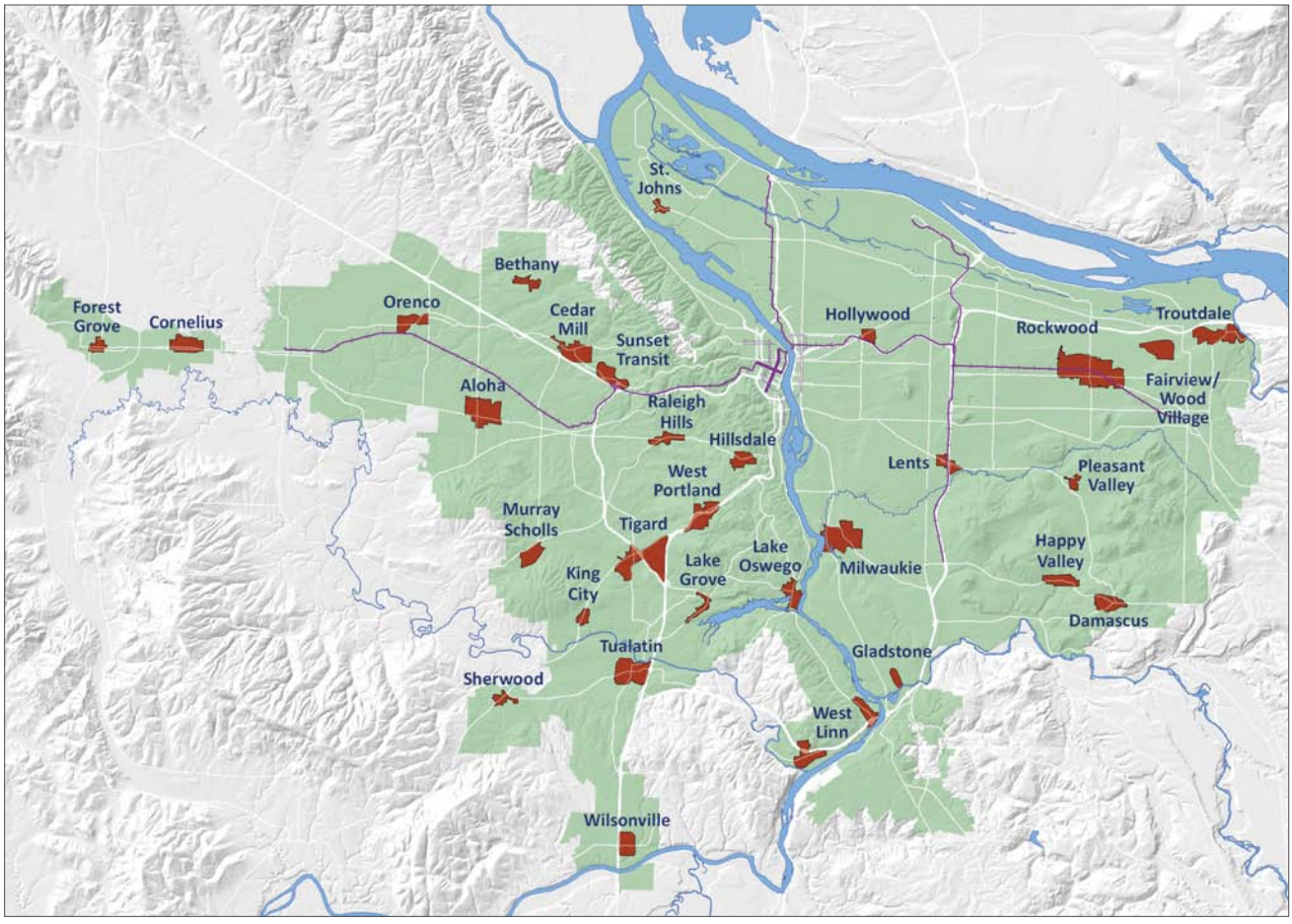


Town centers

Building a strong community



The 2040 growth concept designates 30 town centers. Town centers serve local populations with everyday needs and on occasion have specialty and destination retail. Town centers are usually connected to regional centers via major road networks and transit, although the development of town centers varies greatly. For example, Damascus and Pleasant Valley, having been included in recent urban growth boundary expansions, are primarily rural and auto-oriented in nature. St. Johns, Hollywood and Gladstone were original "streetcar suburbs" and have more of a traditional grid street network. Transit service also varies greatly from center to center. A few, such as Orenco and Rockwood, are easily connected to the regional MAX system, while others, like Cedar Mill and Bethany, lack even frequent bus service.



Town centers at a glance

	Net acreage	Total population	Total employment	People per acre	Dwelling units per acre	Market value per square foot
Aloha	511	6,611	1,003	18.2	6.0	$26
Bethany	122	1,641	649	21.4	8.1	$50
Cedar Mill	338	3,185	1,476	15.6	5.8	$30
Cornelius	282	1,864	352	10.2	3.3	$18
Damascus	236	263	555	3.8	0.4	$7
Fairview/Wood Village	287	2,199	755	12.3	3.4	$31
Forest Grove	107	991	1,326	26.2	5.2	$22
Gladstone	85	939	289	21.7	6.0	$51
Happy Valley	212	540	404	5.1	1.3	$10
Hillsdale	181	1,600	1,048	18.3	6.5	$47
Hollywood	105	1,100	3,031	60.3	12.1	$145
King City	94	465	1,075	20.4	4.0	$53
Lake Grove	118	377	2,426	28.7	2.4	$41
Lake Oswego	218	2,194	2,054	25.8	8.7	$73
Lents	155	1,653	312	22.2	7.2	$33
Milwaukie	879	3,694	3,368	16.9	4.5	$26
Murray/Scholls	204	2,507	47	14.1	7.3	$38
Orenco	235	3,200	1,175	24.1	10.5	$51
Pleasant Valley	77	31	17	0.6	0.2	$4
Raleigh	153	1,599	1,802	26.0	7.2	$48
Rockwood	1,029	16,456	2,264	22.7	7.6	$25
Sherwood	109	138	1,325	16.9	0.8	$48
St. Johns	70	437	857	30.0	5.1	$68
Sunset Transit	262	1,939	6,221	39.2	4.2	$40
Tigard	702	1,923	6,876	15.8	1.7	$30
Troutdale	418	1,924	775	7.9	2.5	$17
Tualatin	462	3,636	3,332	17.6	4.2	$30
West Linn	462	2,492	1,620	13.0	2.8	$28
West Portland	339	2,880	3,820	29.4	6.5	$39
Wilsonville	230	1,292	2,107	17.8	3.5	$26

Numbers in blue represent the largest in that category.

Aloha Town Center



Private amenities

3	Bakery
2	Bar
0	Bike shop
0	Bookstore
0	Brewpub
2	Child care
0	Cinema
0	Clothing store
0	Coffee shop
0	Department store
1	Dry cleaners
0	Fitness gym
6	Grocery store
0	Music store
17	Restaurant
1	Specialty snacks and beverages

Public amenities

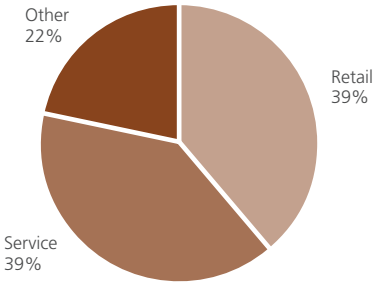
0	Community center
0	Fire station
0	Government building
0	Library
1	School

The Aloha Town Center is located along Tualatin Valley Highway, running north and south along 185th Avenue, within Washington County. The center has one ODOT facility within its boundary: Southwest Tualatin Valley Highway (State Highway 8), which connects Beaverton to Hillsboro. Auto-oriented retail locations serve the surrounding community along Southwest Tualatin Valley Highway. The center has 6,610 residents, 1,000 employees and 2,520 dwelling units. Aloha Town Center contains 511 gross acres.

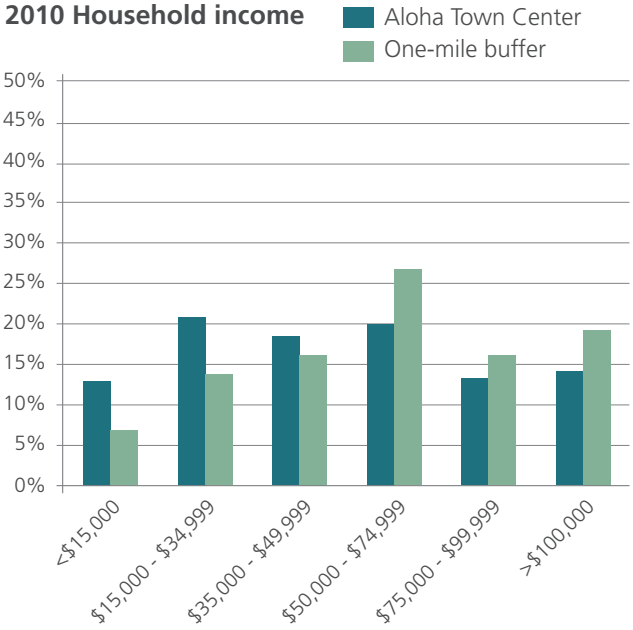
By the numbers	Aloha Town Center	Town center average	One-mile buffer
Net acreage	419	222	4,168
Total population	6,611	2,326	45,914
Total employees	1,003	1,745	5,693
Non-SOV mode share (all trips)	54%	52%	n/a
Market value per square foot	$26	$39	$22
People per acre	18.2	20.1	12.4
Dwelling units per acre	6.0	5.0	4.0
Total businesses per acre	0.28	0.73	0.10
Home ownership	38%	47.4%	48.3%
Median household income	$48,053	$60,133	$62,368
Median household size	2.91	2.42	2.77
Median age	29.3	36.0	31.1



Employment breakdown

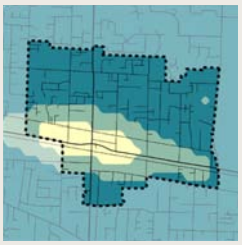


2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density

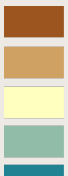

People per acre


Block size

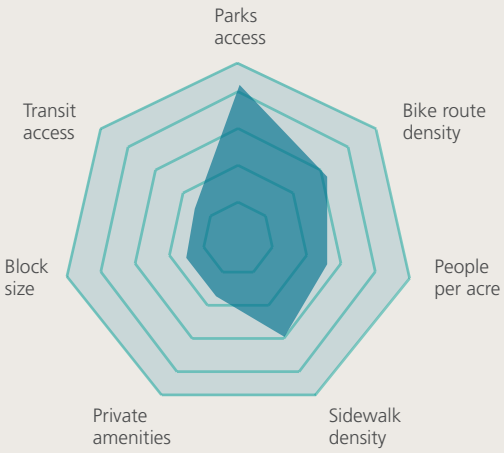

Bike route density


Transit frequency


Parks access



Composite score: 35.79



Bethany Town Center



Private amenities

0	Bakery
0	Bar
1	Bike shop
0	Bookstore
0	Brewpub
2	Child care
0	Cinema
0	Clothing store
2	Coffee shop
0	Department store
1	Dry cleaners
2	Fitness gym
1	Grocery store
0	Music store
4	Restaurant
1	Specialty snacks and beverages

Public amenities

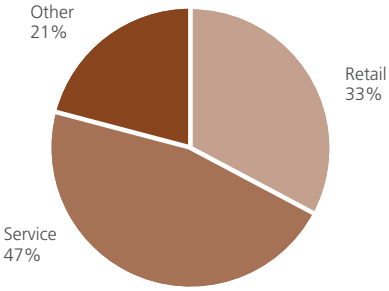
0	Community center
0	Fire station
0	Government building
1	Library
0	School

The Bethany Town Center is located in northern Washington County, along Bethany Road. The area, in unincorporated Washington County, has no direct highway access and is not serviced by any ODOT facilities. The center is primarily a local retail shopping destination and multi-family housing location. It has 1,641 residents, 649 employees and 868 dwelling units. Bethany Town Center contains 122 gross acres.

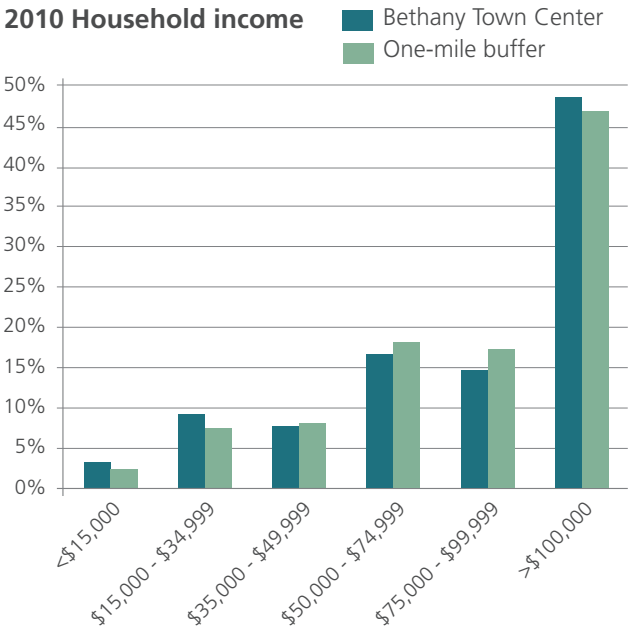
By the numbers	Bethany Town Center	Town center average	One-mile buffer
Net acreage	107	222	3,103
Total population	1,641	2,326	27,964
Total employees	649	1,745	1,531
Non-SOV mode share (all trips)	53%	52%	n/a
Market value per square foot	$50	$39	$28
People per acre	21.4	20.1	9.5
Dwelling units per acre	8.1	5.0	3.2
Total businesses per acre	0.63	0.73	0.04
Home ownership	69.5%	47.4%	73.2%
Median household income	$96,870	$60,133	$94,093
Median household size	1.98	2.42	2.88
Median age	33.6	36.0	34.4



Employment breakdown



2010 Household income



Metro context tool results

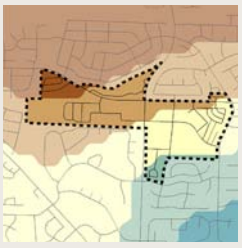
Heat maps


Private amenities


Sidewalk density


People per acre


Block size

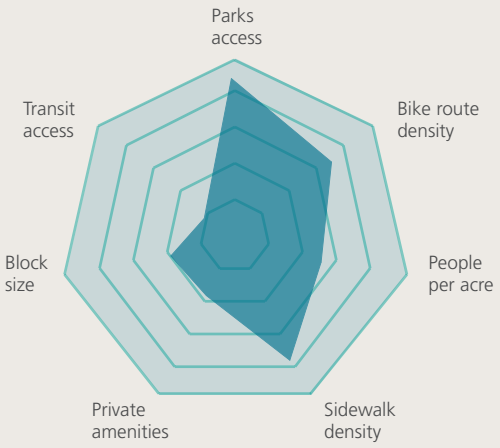

Bike route density


Transit frequency


Parks access



Composite score: 41.45



Cedar Mill Town Center



Private amenities

0	Bakery
2	Bar
0	Bike shop
0	Bookstore
0	Brewpub
3	Child care
0	Cinema
0	Clothing store
4	Coffee shop
0	Department store
3	Dry cleaners
1	Fitness gym
3	Grocery store
0	Music store
15	Restaurant
2	Specialty snacks and beverages

Public amenities

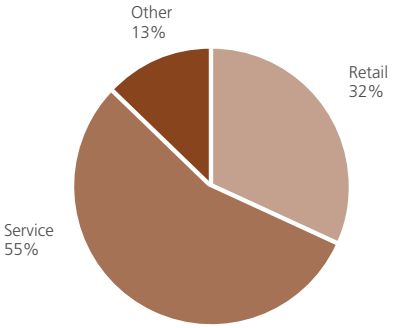
0	Community center
0	Fire station
0	Government building
1	Library
1	School

The Cedar Mill Town Center is located north of Highway 26, along Cornell Road in unincorporated Washington County. The center is accessed by two major arterials, Cornell and Murray roads, and is not served by any ODOT facilities. The area is characterized by single-family housing and local retail shopping. It has 3,185 residents, 1,476 employees and 1,735 dwelling units. Cedar Mill Town Center contains 338 gross acres.

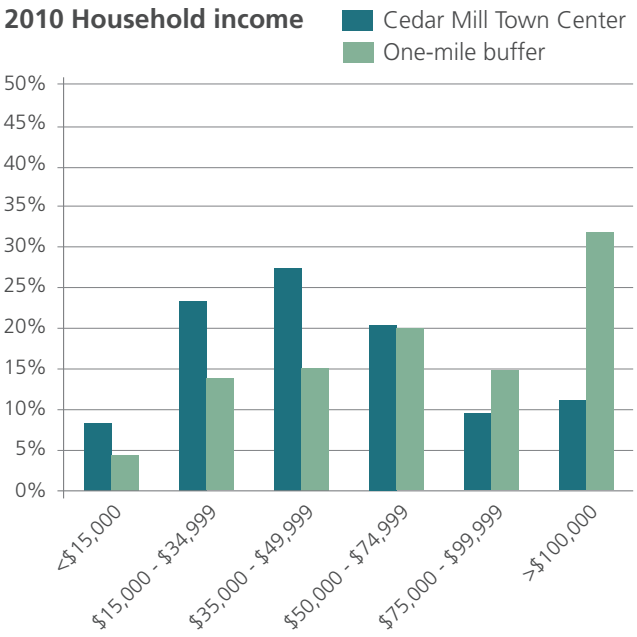
By the numbers	Cedar Mill Town Center	Town center average	One-mile buffer
Net acreage	298	222	3,828
Total population	3,185	2,326	31,399
Total employees	1,476	1,745	7,339
Non-SOV mode share (all trips)	50%	52%	n/a
Market value per square foot	$30	$39	$29
People per acre	15.6	20.1	10.1
Dwelling units per acre	5.8	5.0	3.3
Total businesses per acre	0.54	0.73	0.12
Home ownership	29.8%	47.4%	60.6%
Median household income	$44,455	$60,133	$70,262
Median household size	2.27	2.42	2.56
Median age	31.9	36.0	37.2



Employment breakdown



2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density


People per acre


Block size

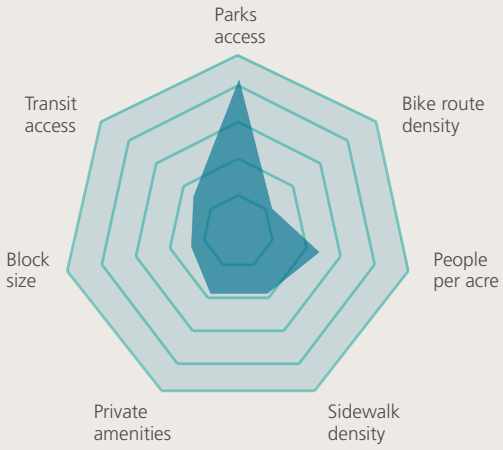

Bike route density


Transit frequency


Parks access



Composite score: 23.62



Cornelius Town Center



Private amenities

1	Bakery
1	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
1	Clothing store
1	Coffee shop
0	Department store
1	Dry cleaners
1	Fitness gym
0	Grocery store
0	Music store
4	Restaurant
9	Specialty snacks and beverages

Public amenities

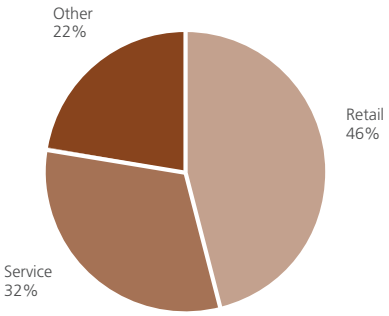
0	Community center
1	Fire station
1	Government building
1	Library
1	School

The Cornelius Town Center is located along Highway 8, in downtown Cornelius, between downtown Hillsboro and Forest Grove. The center has no major interstate access, but is served by one ODOT facility, Southwest Tualatin Valley Highway (State Highway 8). One frequent service bus line runs along Highway 8, with a connection to Hillsboro and the MAX line. The center has 1,864 residents, 352 employees and 722 dwelling units. Cornelius Town Center contains 282 gross acres.

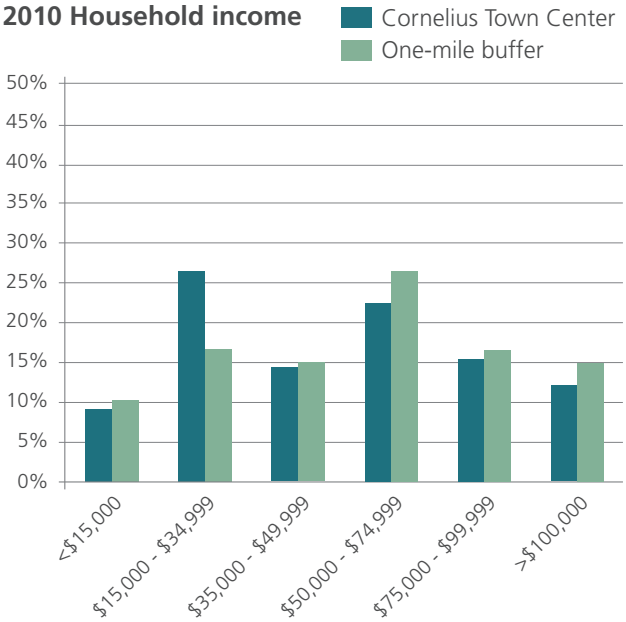
By the numbers	Cornelius Town Center	Town center average	One-mile buffer
Net acreage	217	222	3,731
Total population	1,864	2,326	12,124
Total employees	352	1,745	1,721
Non-SOV mode share (all trips)	54%	52%	n/a
Market value per square foot	$18	$39	$7
People per acre	10.2	20.1	3.7
Dwelling units per acre	3.3	5.0	1.2
Total businesses per acre	0.19	0.73	0.03
Home ownership	62.4%	47.4%	63.3%
Median household income	$50,000	$60,133	$56,781
Median household size	2.95	2.42	3.13
Median age	32	36.0	30.8



Employment breakdown



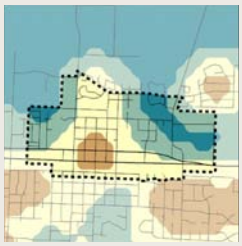
2010 Household income



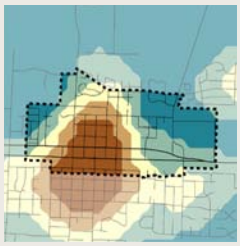
Metro context tool results

Heat maps


Private amenities


Sidewalk density

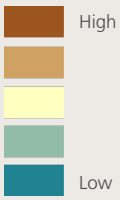

People per acre


Block size

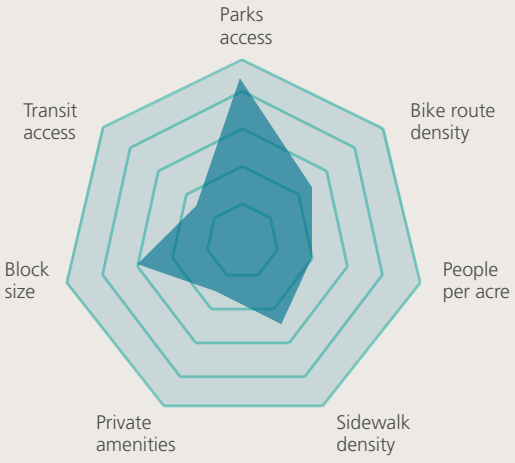

Bike route density


Transit frequency


Parks access



Composite score: 36.68



Damascus Town Center



Private amenities

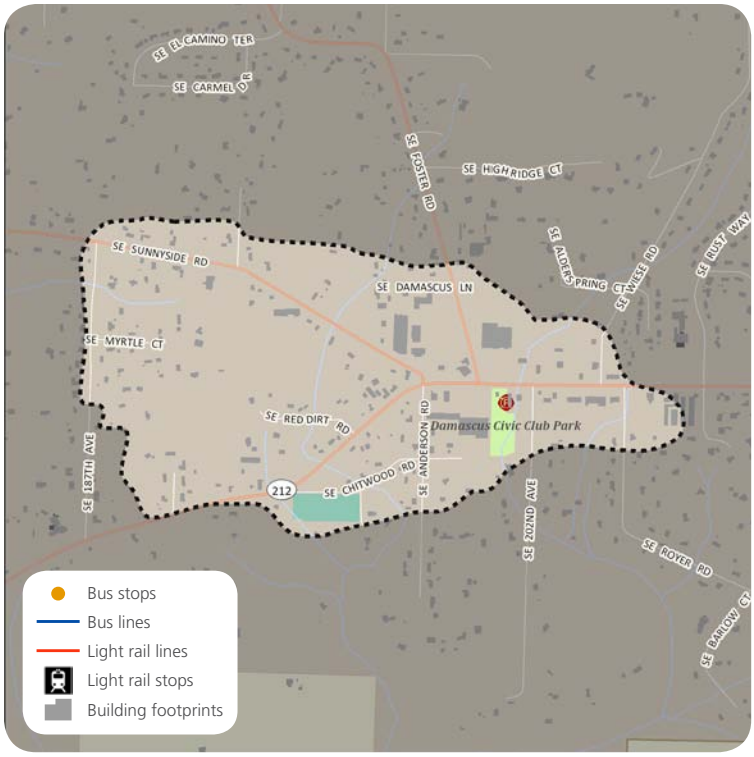
0	Bakery
1	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
0	Clothing store
4	Coffee shop
1	Department store
0	Dry cleaners
1	Fitness gym
1	Grocery store
0	Music store
3	Restaurant
1	Specialty snacks and beverages

Public amenities

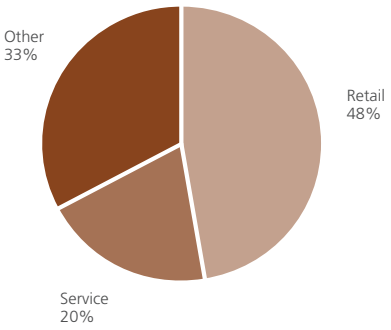
0	Community center
1	Fire station
0	Government building
0	Library
0	School

The Damascus Town Center is located in the southeastern portion of the region. The city, incorporated in 2004, has adopted a comprehensive plan but still has low-density rural zoning in place. The new plan calls for Damascus Town Center to relocate. The Damascus center has no direct access to the interstate system, but is bisected by the ODOT facility State Highway 212. The center has no transit service available. Damascus has 263 residents, 555 employees and 88 dwelling units. Damascus Town Center contains 236 gross acres.

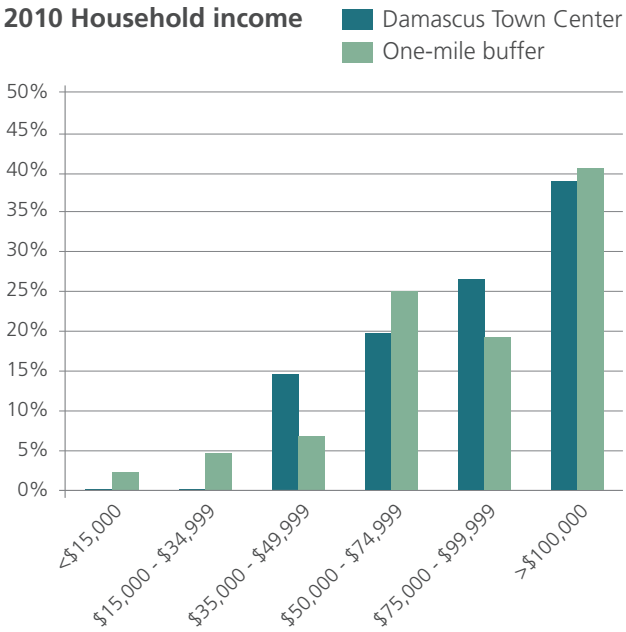
By the numbers	Damascus Town Center	Town center average	One-mile buffer
Net acreage	215	222	3,708
Total population	263	2,326	3,908
Total employees	555	1,745	752
Non-SOV mode share (all trips)	50%	52%	n/a
Market value per square foot	$7	$39	$4
People per acre	3.8	20.1	1.3
Dwelling units per acre	0.4	5.0	0.4
Total businesses per acre	0.20	0.73	0.02
Home ownership	90.6%	47.4%	90.3%
Median household income	$87,154	$60,133	$86,820
Median household size	3.13	2.42	2.99
Median age	42.8	36.0	45



Employment breakdown

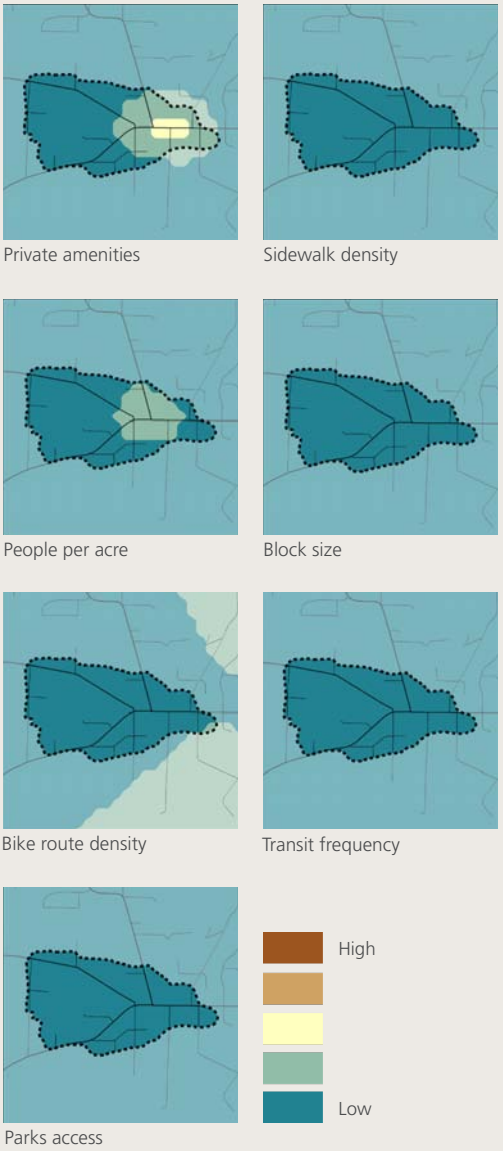


2010 Household income

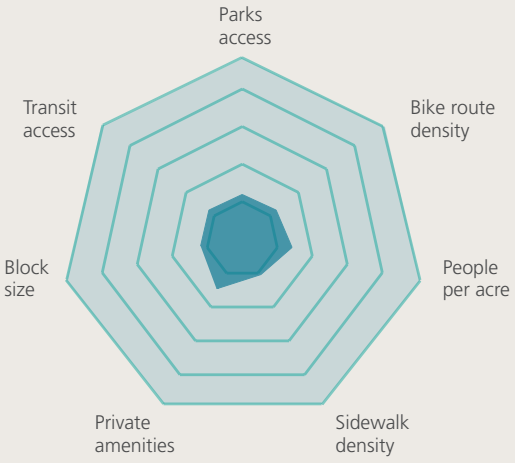


Metro context tool results

Heat maps



Composite score: 2.02



Fairview/Wood Village Town Center



Private amenities

0	Bakery
1	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
0	Clothing store
3	Coffee shop
1	Department store
0	Dry cleaners
2	Fitness gym
2	Grocery store
0	Music store
9	Restaurant
2	Specialty snacks and beverages

Public amenities

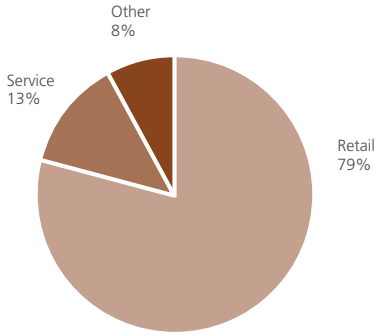
0	Community center
0	Fire station
1	Government building
1	Library
0	School

The Fairview/Wood Village Town Center is a combination of two local jurisdictions, located south of Interstate 84 at the intersection of Halsey Avenue and Fairview Road. The town center has direct access to I-84 and is serviced by the major arterials of Halsey and Glisan streets, but is not served by any major ODOT facilities. Both Wood Village and Fairview are serviced by two bus lines, one of which is a frequent service route. The center has 2,199 residents, 755 employees and 813 dwelling units. Fairview/Wood Village Town Center contains 287 gross acres.

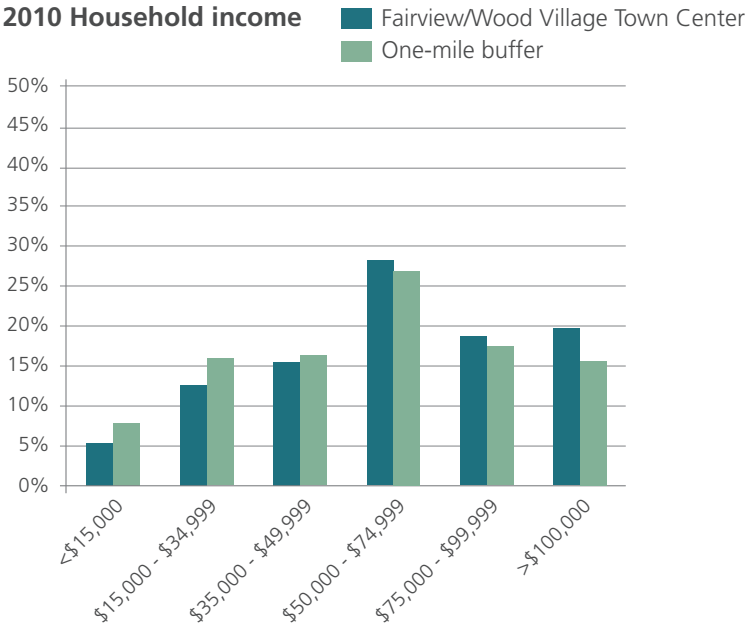
By the numbers	Fairview Town Center	Town center average	One-mile buffer
Net acreage	241	222	2,990
Total population	2,199	2,326	19,935
Total employees	755	1,745	6,940
Non-SOV mode share (all trips)	53%	52%	n/a
Market value per square foot	$31	$39	$17
People per acre	12.3	20.1	9.0
Dwelling units per acre	3.4	5.0	2.6
Total businesses per acre	0.19	0.73	0.08
Home ownership	64.2%	47.4%	56.6%
Median household income	$63,222	$60,133	$58,309
Median household size	2.50	2.42	2.69
Median age	34.5	36.0	33.5



Employment breakdown

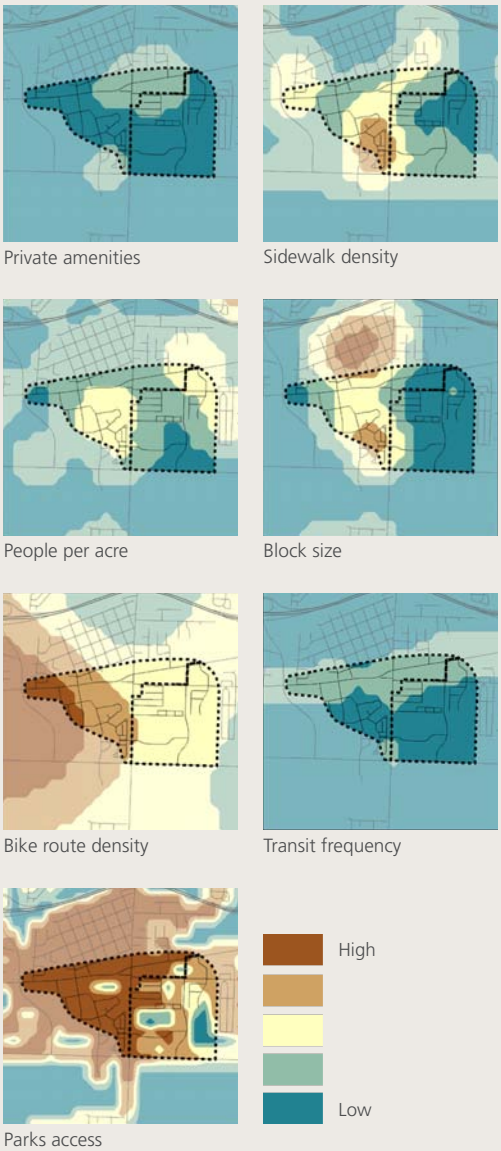


2010 Household income

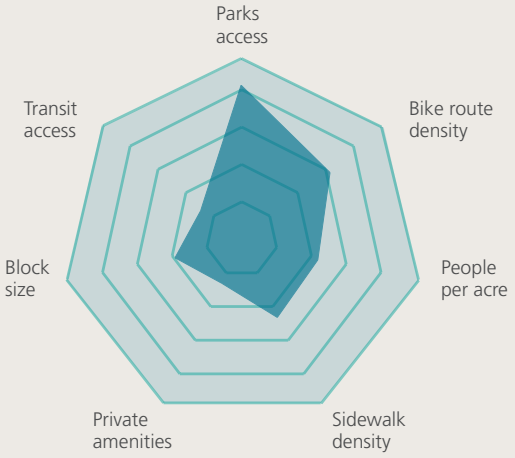


Metro context tool results

Heat maps



Composite score: 32.59



Forest Grove Town Center



Private amenities

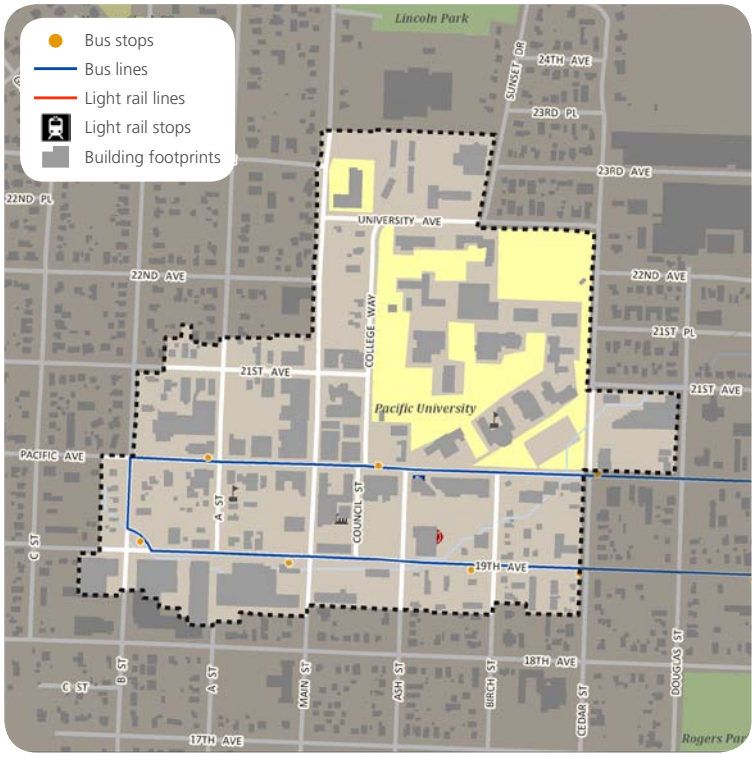
0	Bakery
1	Bar
1	Bike shop
1	Bookstore
0	Brewpub
0	Child care
1	Cinema
0	Clothing store
2	Coffee shop
1	Department store
0	Dry cleaners
2	Fitness gym
1	Grocery store
0	Music store
12	Restaurant
1	Specialty snacks and beverages

Public amenities

0	Community center
1	Fire station
1	Government building
1	Library
2	School

The Forest Grove Town Center is located on the far western edge of the region. The town center functions as the cultural and commercial heart of the town and is the home of Pacific University, which adds a student population. It has no major interstate access but is directly accessed by the ODOT facility State Highway 8. One frequent service bus line runs along Highway 8 with a connection to Hillsboro and the MAX line. The center has 991 residents (not counting students), 1,326 employees and 460 dwelling units. Forest Grove Town Center contains 107 gross acres.

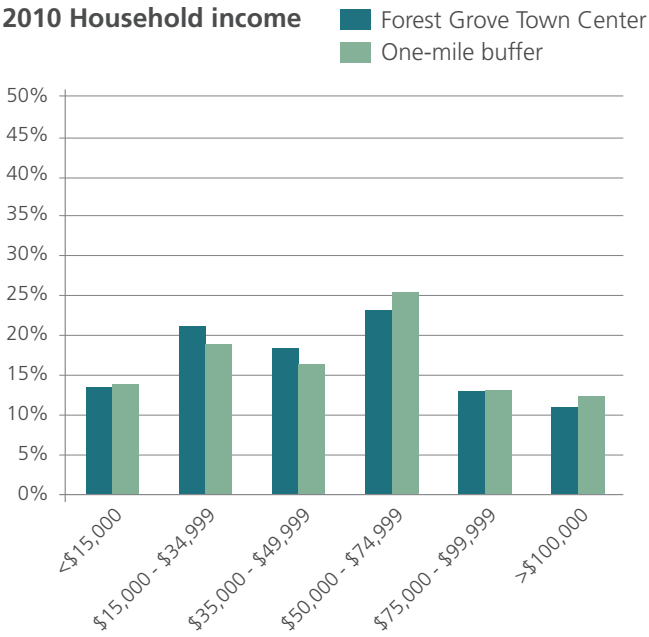
By the numbers	Forest Grove Town Center	Town center average	One-mile buffer
Net acreage	88	222	2,792
Total population	991	2,326	14,269
Total employees	1,326	1,745	3,336
Non-SOV mode share (all trips)	53%	52%	n/a
Market value per square foot	$22	$39	$10
People per acre	26.2	20.1	6.3
Dwelling units per acre	5.2	5.0	2.0
Total businesses per acre	0.76	0.73	0.07
Home ownership	38.9%	47.4%	52.8%
Median household income	$47,056	$60,133	$50,597
Median household size	6.37	2.42	2.65
Median age	30.8	36.0	34.1



Employment breakdown

Data not available for publication.

2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density

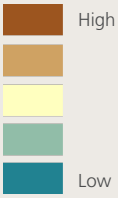

People per acre


Block size

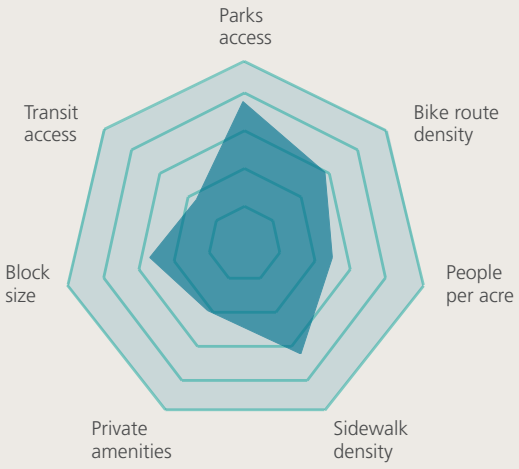

Bike route density


Transit frequency


Parks access



Composite score: 46.43



Gladstone Town Center



Private amenities

1	Bakery
2	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
0	Clothing store
1	Coffee shop
0	Department store
1	Dry cleaners
0	Fitness gym
1	Grocery store
0	Music store
5	Restaurant
0	Specialty snacks and beverages

Public amenities

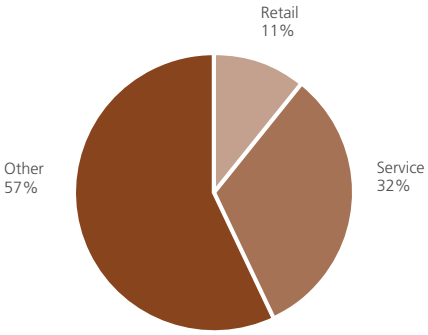
0	Community center
1	Fire station
1	Government building
0	Library
0	School

The Gladstone Town Center is located along the former street car line on Portland Avenue. Gladstone has no direct interstate access but has one ODOT facility, McLoughlin Boulevard, located a half mile west of the town center. The center is serviced by two bus lines and a grid street network pattern, encouraging pedestrian connectivity from the surrounding neighborhood to the main street. The center has 939 residents, 289 employees and 342 dwelling units. Gladstone Town Center contains 85 gross acres.

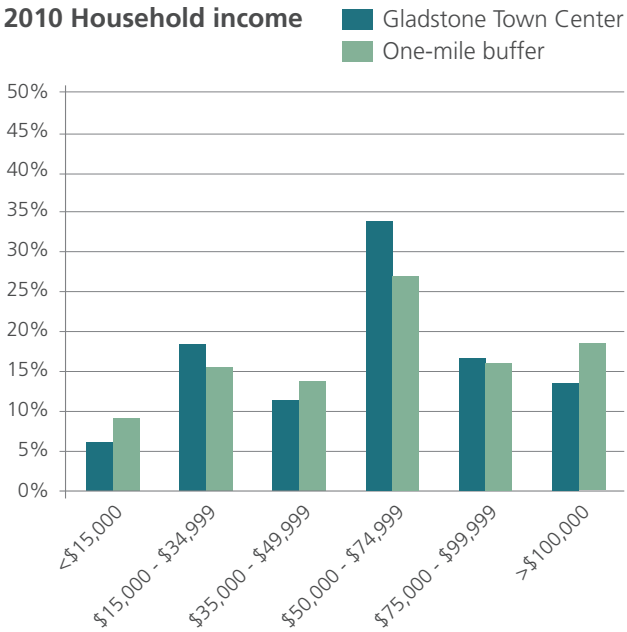
By the numbers	Gladstone Town Center	Town center average	One-mile buffer
Net acreage	57	222	2,342
Total population	939	2,326	17,341
Total employees	289	1,745	5,064
Non-SOV mode share (all trips)	52%	52%	n/a
Market value per square foot	$51	$39	$18
People per acre	21.7	20.1	9.6
Dwelling units per acre	6.0	5.0	2.7
Total businesses per acre	0.69	0.73	0.12
Home ownership	55.8%	47.4%	60.5%
Median household income	$60,901	$60,133	$61,605
Median household size	2.76	2.42	2.65
Median age	37.2	36.0	38.4



Employment breakdown

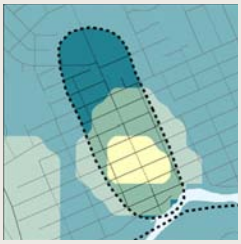


2010 Household income



Metro context tool results

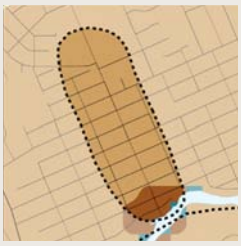
Heat maps


Private amenities

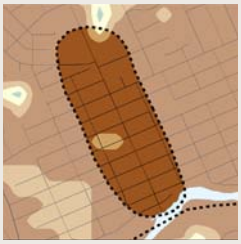

Sidewalk density


People per acre


Block size

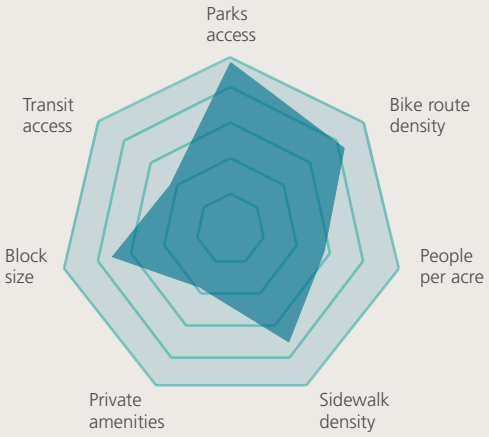

Bike route density


Transit frequency


Parks access



Composite score: 56.11



Happy Valley Town Center



Private amenities

- 0 Bakery
- 0 Bar
- 0 Bike shop
- 0 Bookstore
- 0 Brewpub
- 0 Child care
- 0 Cinema
- 0 Clothing store
- 1 Coffee shop
- 0 Department store
- 1 Dry cleaners
- 1 Fitness gym
- 1 Grocery store
- 0 Music store
- 2 Restaurant
- 1 Specialty snacks and beverages

Public amenities

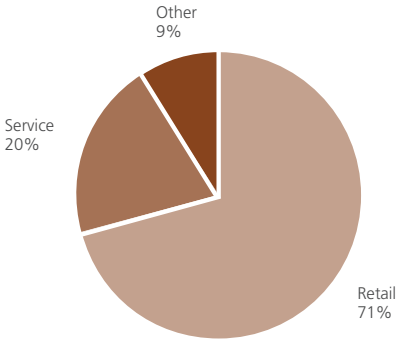
- 0 Community center
- 0 Fire station
- 0 Government building
- 0 Library
- 0 School

The Happy Valley Town Center has relocated since the 2009 State of the Centers report to the intersection of Southeast 162nd Avenue and Sunnyside Road. It is the retail and government center of Happy Valley and is served by a limited service bus line along Sunnyside Road. There are no ODOT facilities within the town center. The center has 500 residents, 400 employees and 244 dwelling units. Happy Valley Town Center contains 212 gross acres.

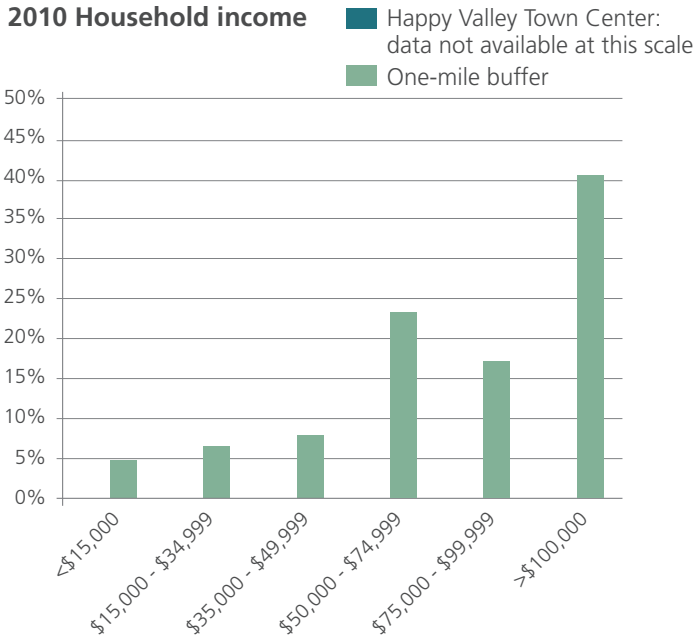
By the numbers	Happy Valley Town Center	Town center average	One-mile buffer
Net acreage	185	222	3,664
Total population	540	2,326	9,504
Total employees	404	1,745	1,023
Non-SOV mode share (all trips)	51%	52%	n/a
Market value per square foot	$10	$39	$8
People per acre	5.1	20.1	2.9
Dwelling units per acre	1.3	5.0	0.9
Total businesses per acre	0.11	0.73	0.02
Home ownership	n/a	47.4%	80.7%
Median household income	n/a	$60,133	$84,206
Median household size	n/a	2.42	2.87
Median age	n/a	36.0	36.5



Employment breakdown

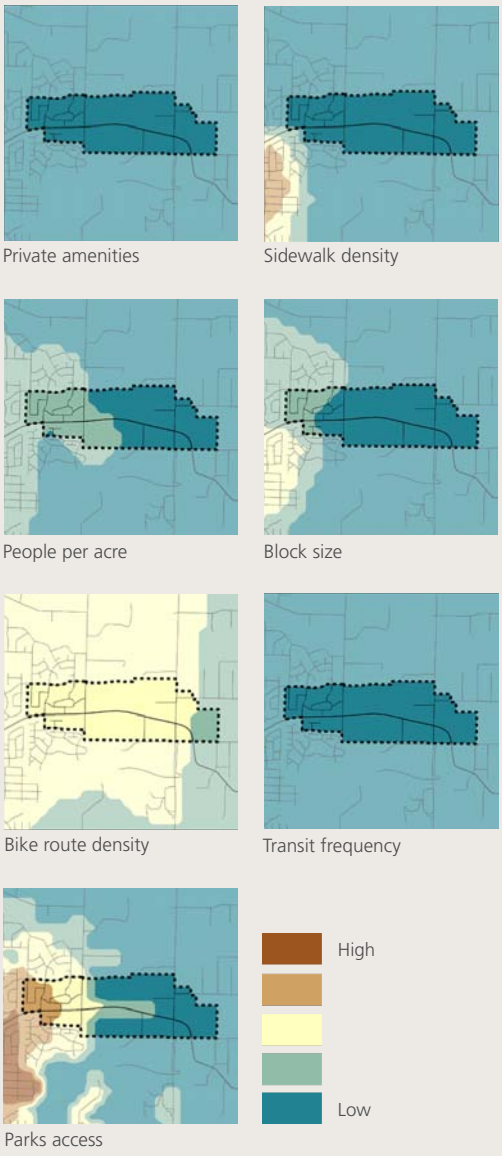


2010 Household income

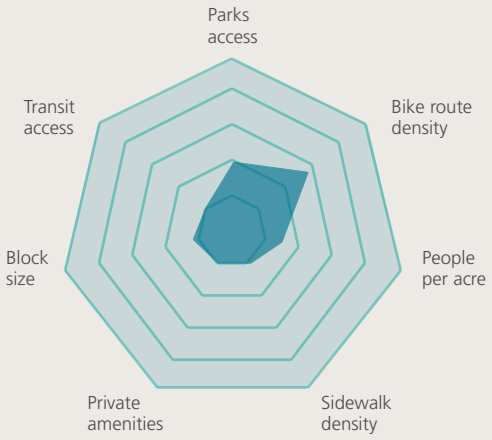


Metro context tool results

Heat maps



Composite score: 10.47



Hillsdale Town Center



Private amenities

1	Bakery
0	Bar
0	Bike shop
1	Bookstore
0	Brewpub
1	Child care
0	Cinema
1	Clothing store
1	Coffee shop
0	Department store
2	Dry cleaners
2	Fitness gym
2	Grocery store
0	Music store
14	Restaurant
2	Specialty snacks and beverages

Public amenities

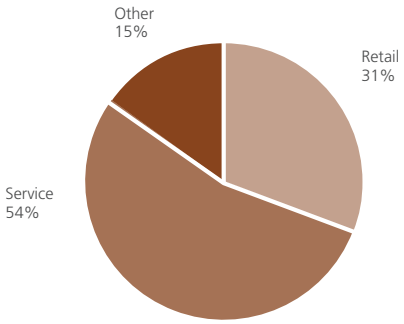
0	Community center
1	Fire station
0	Government building
1	Library
4	School

The Hillsdale Town Center is located in Southwest Portland, along the Beaverton-Hillsdale Highway (State Highway 10), an ODOT-managed facility. The center includes a high school and grade school with an adjacent middle school and is serviced by multiple bus lines, one of which is frequent service. Hillsdale has 1,600 residents, 1,048 employees and 935 dwelling units. Hillsdale Town Center contains 181 gross acres.

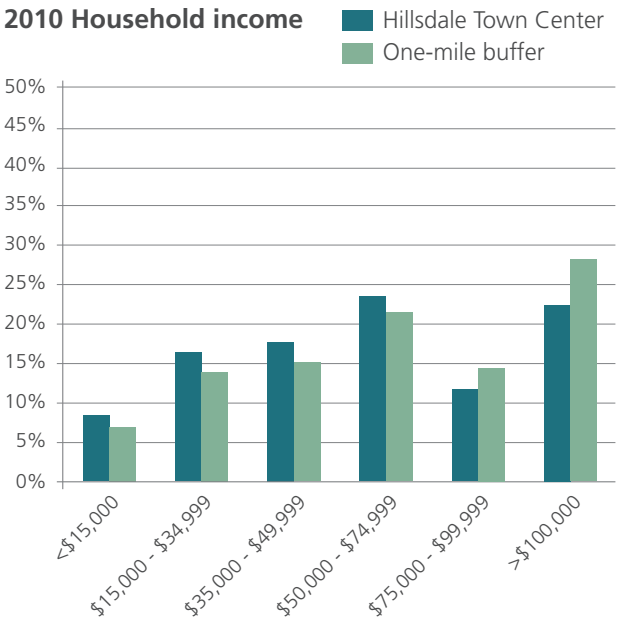
By the numbers	Hillsdale Town Center	Town center average	One-mile buffer
Net acreage	145	222	2,730
Total population	1,600	2,326	22,495
Total employees	1,048	1,745	8,381
Non-SOV mode share (all trips)	52%	52%	n/a
Market value per square foot	$47	$39	$43
People per acre	18.3	20.1	11.3
Dwelling units per acre	6.5	5.0	4.5
Total businesses per acre	0.77	0.73	0.29
Home ownership	42.3%	47.4%	55.3%
Median household income	$56,912	$60,133	$64,800
Median household size	2.02	2.42	2.07
Median age	34.1	36.0	39.3



Employment breakdown

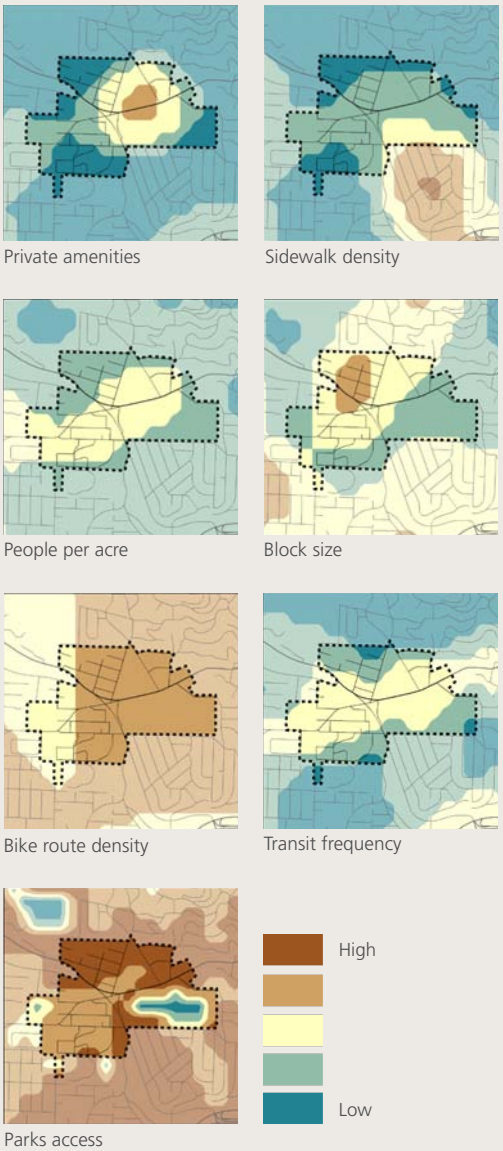


2010 Household income

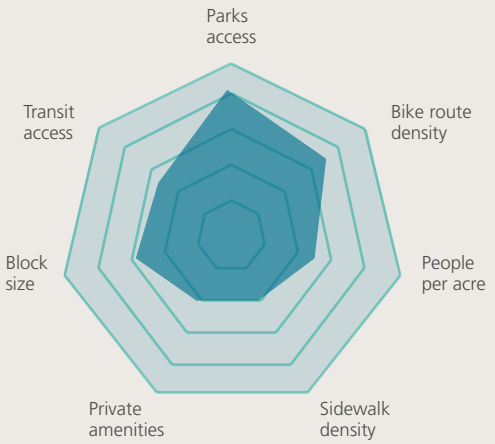


Metro context tool results

Heat maps



Composite score: 44.13



Hollywood Town Center



Private amenities

0	Bakery
3	Bar
0	Bike shop
1	Bookstore
0	Brewpub
1	Child care
1	Cinema
3	Clothing store
3	Coffee shop
0	Department store
3	Dry cleaners
2	Fitness gym
6	Grocery store
0	Music store
22	Restaurant
1	Specialty snacks and beverages

Public amenities

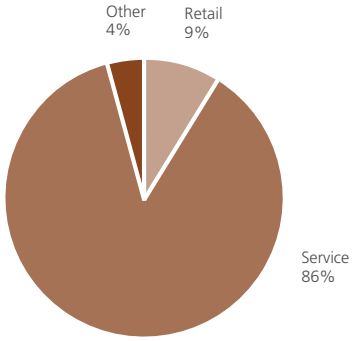
0	Community center
0	Fire station
0	Government building
1	Library
1	School

The Hollywood Town Center surrounds the intersection of Sandy Boulevard and Northeast Halsey Avenue. The area is high in employment concentrations and housing relative to its size. The center serves the local population with retail services, but also draws from the region due to the development of a concentration of specialty retail. The center has direct access to Interstate 84, is serviced by one MAX stop, and has multiple bus lines that include frequent service routes. The center has 1,100 residents, 3,030 employees and 829 dwelling units. Hollywood Town Center contains 105 gross acres.

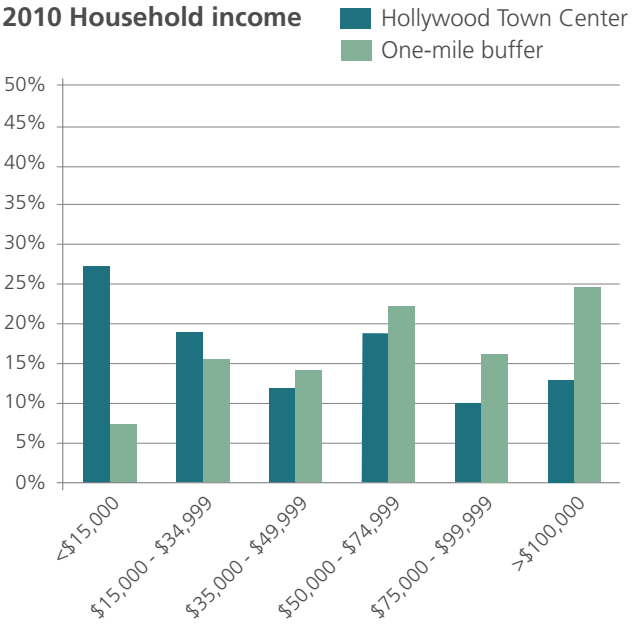
By the numbers	Hollywood Town Center	Town center average	One-mile buffer
Net acreage	69	222	2,201
Total population	1,100	2,326	34,234
Total employees	3,031	1,745	16,155
Non-SOV mode share (all trips)	53%	52%	n/a
Market value per square foot	$145	$39	$75
People per acre	60.3	20.1	22.9
Dwelling units per acre	12.1	5.0	8.1
Total businesses per acre	2.70	0.73	0.43
Home ownership	35.9%	47.4%	58.2%
Median household income	$38,215	$60,133	$63,569
Median household size	1.35	2.42	2.21
Median age	48.3	36.0	41



Employment breakdown



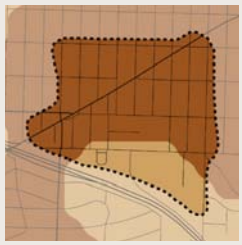
2010 Household income



Metro context tool results

Heat maps


Private amenities

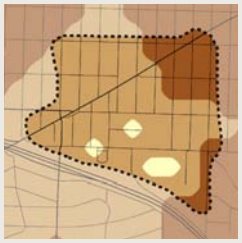

Sidewalk density


People per acre


Block size

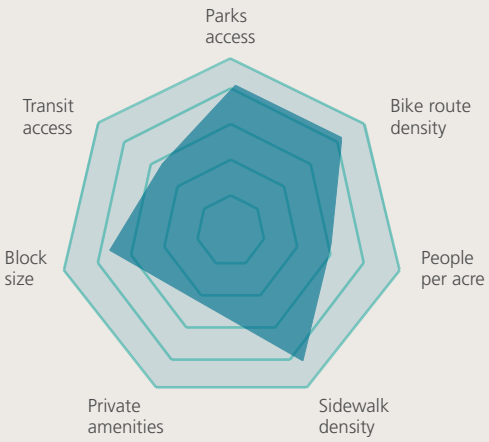

Bike route density


Transit frequency


Parks access

High
Low

Composite score: 66.77



King City Town Center



Private amenities

1	Bakery
1	Bar
1	Bike shop
0	Bookstore
0	Brewpub
1	Child care
0	Cinema
1	Clothing store
4	Coffee shop
1	Department store
3	Dry cleaners
3	Fitness gym
3	Grocery store
0	Music store
12	Restaurant
1	Specialty snacks and beverages

Public amenities

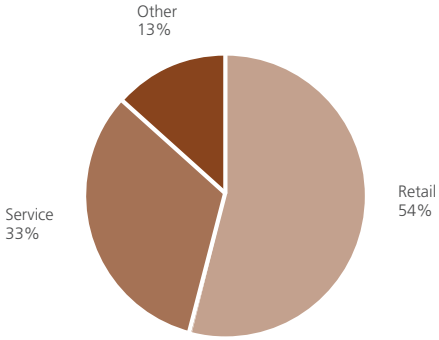
1	Community center
0	Fire station
1	Government building
0	Library
0	School

The King City Town Center is bisected by Southwest Pacific Highway (Highway 99 West), an ODOT facility. A single frequent service bus line runs along 99W, allowing for service from King City to surrounding communities along 99W and into central Portland. The center has 465 residents, 1,075 employees and 300 dwelling units. King City Town Center contains 94 gross acres.

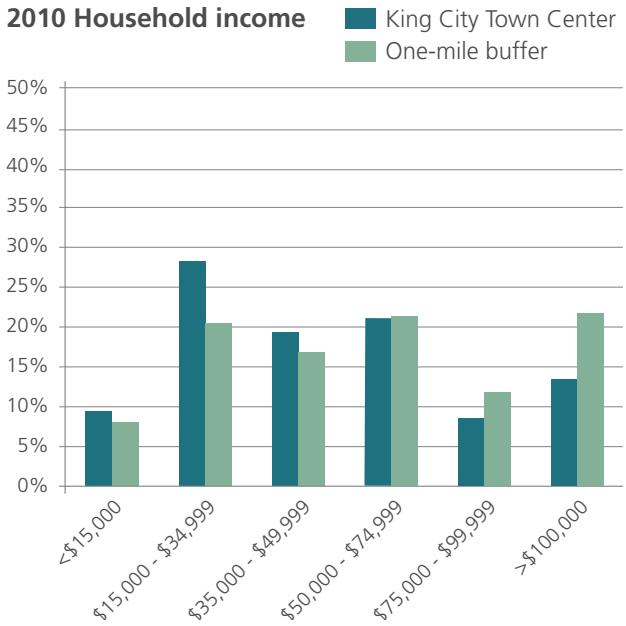
By the numbers	King City Town Center	Town center average	One-mile buffer
Net acreage	75	222	2,595
Total population	465	2,326	23,532
Total employees	1,075	1,745	2,661
Non-SOV mode share (all trips)	54%	52%	n/a
Market value per square foot	$53	$39	$25
People per acre	20.4	20.1	10.1
Dwelling units per acre	4.0	5.0	4.4
Total businesses per acre	1.38	0.73	0.09
Home ownership	44.3%	47.4%	57.9%
Median household income	$44,324	$60,133	$54,376
Median household size	1.35	2.42	2.2
Median age	56.9	36.0	44.6



Employment breakdown



2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density

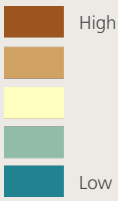

People per acre


Block size

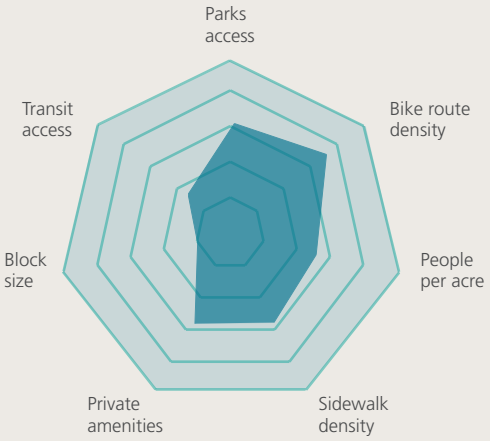

Bike route density


Transit frequency


Parks access



Composite score: 36.67



Lake Grove Town Center



Private amenities

2	Bakery
0	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
4	Clothing store
3	Coffee shop
0	Department store
7	Dry cleaners
0	Fitness gym
2	Grocery store
0	Music store
19	Restaurant
1	Specialty snacks and beverages

Public amenities

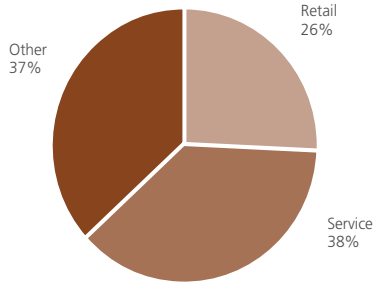
0	Community center
0	Fire station
0	Government building
0	Library
1	School

The Lake Grove Town Center is located roughly at the intersection of Boones Ferry Road and Kruse Way. Lake Grove is serviced by two separate bus lines that allow for connectivity to downtown Lake Oswego, Portland and parts of eastern Washington County. The center has 377 residents, 2,426 employees and 234 dwelling units. Lake Grove Town Center contains 118 gross acres.

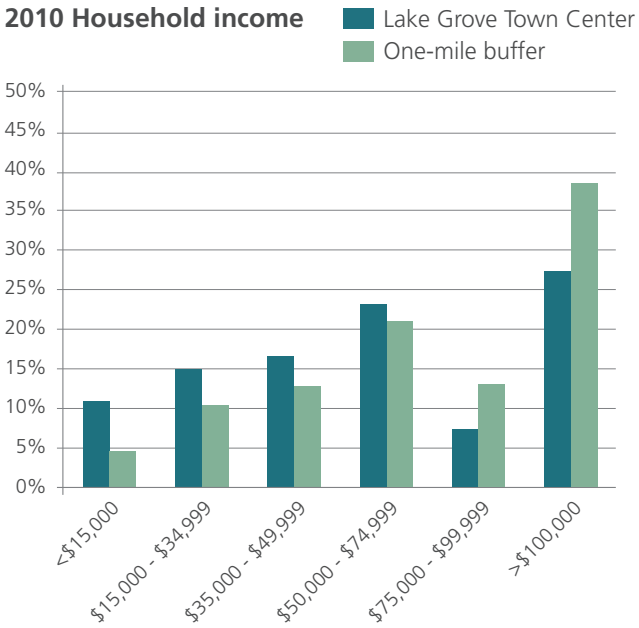
By the numbers	Lake Grove Town Center	Town center average	One-mile buffer
Net acreage	98	222	3,338
Total population	377	2,326	21,730
Total employees	2,426	1,745	16,116
Non-SOV mode share (all trips)	47%	52%	n/a
Market value per square foot	$41	$39	$37
People per acre	28.7	20.1	11.3
Dwelling units per acre	2.4	5.0	2.7
Total businesses per acre	2.17	0.73	0.29
Home ownership	51.2%	47.4%	62.7%
Median household income	$56,040	$60,133	$77,080
Median household size	1.95	2.42	2.44
Median age	40.2	36.0	41.4



Employment breakdown

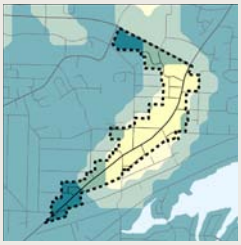


2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density


People per acre


Block size

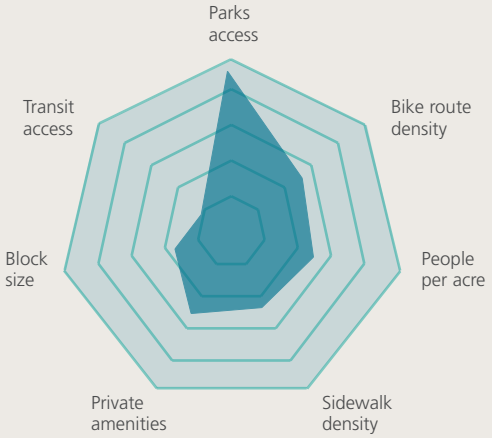

Bike route density


Transit frequency


Parks access



Composite score: 36.15



Lake Oswego Town Center



Private amenities

2	Bakery
3	Bar
2	Bike shop
1	Bookstore
0	Brewpub
2	Child care
1	Cinema
11	Clothing store
4	Coffee shop
0	Department store
5	Dry cleaners
5	Fitness gym
5	Grocery store
0	Music store
22	Restaurant
3	Specialty snacks and beverages

Public amenities

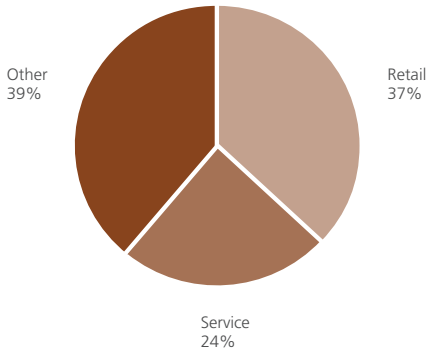
0	Community center
1	Fire station
1	Government building
0	Library
0	School

The Lake Oswego Town Center covers the majority of downtown and land along the Willamette River waterfront. The town center is serviced by three separate bus lines that connect to Portland and eastern Washington County. Highway 43, an ODOT facility, serves the center. The center has 2,194 residents, 2,054 employees and 1,429 dwelling units. Lake Oswego Town Center contains 218 gross acres.

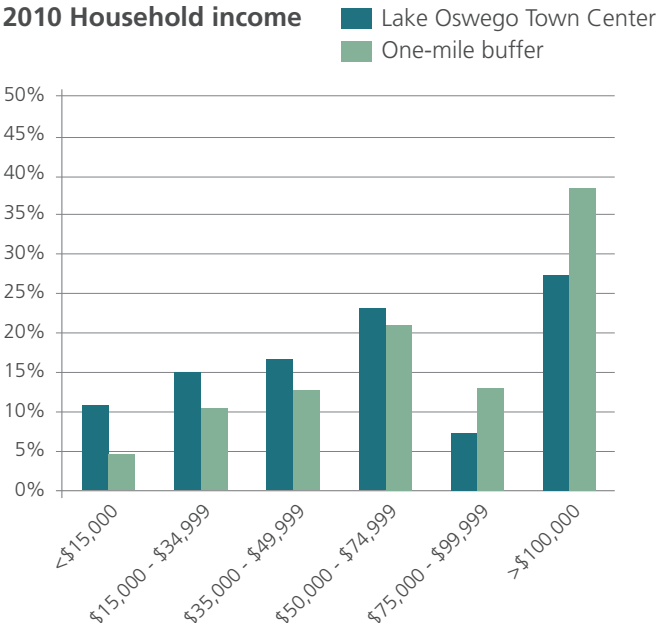
By the numbers	Lake Oswego Town Center	Town center average	One-mile buffer
Net acreage	165	222	3,302
Total population	2,194	2,326	18,436
Total employees	2,054	1,745	4,175
Non-SOV mode share (all trips)	51%	52%	n/a
Market value per square foot	$73	$39	$26
People per acre	25.8	20.1	6.8
Dwelling units per acre	8.7	5.0	2.5
Total businesses per acre	1.38	0.73	0.10
Home ownership	43.0%	47.4%	60.1%
Median household income	$67,849	$60,133	$67,922
Median household size	1.69	2.42	2.26
Median age	44.5	36.0	45.2



Employment breakdown



2010 Household income



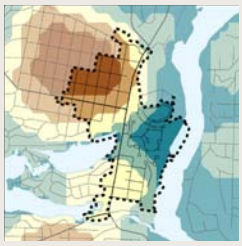
Metro context tool results

Heat maps


Private amenities


Sidewalk density

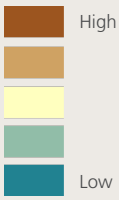

People per acre


Block size

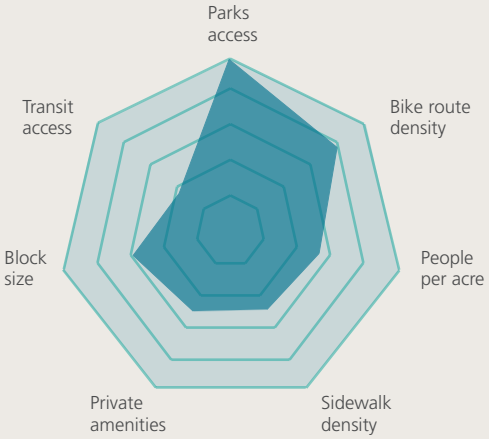

Bike route density


Transit frequency


Parks access



Composite score: 50.96



Lents Town Center



Private amenities

1	Bakery
0	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
0	Clothing store
2	Coffee shop
0	Department store
0	Dry cleaners
0	Fitness gym
0	Grocery store
0	Music store
6	Restaurant
0	Specialty snacks and beverages

Public amenities

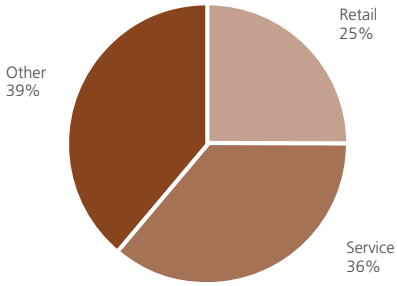
0	Community center
1	Fire station
0	Government building
0	Library
0	School

The Lents Town Center is located at the intersection of Interstate 205, an ODOT facility, and Foster Road in Southeast Portland. An Interstate 205 interchange, an ODOT facility, runs through the town center, offering direct auto access. The area is serviced by two bus lines (one of which is frequent service) and the MAX Green Line with a station at Foster Road. The center has 1,653 residents, 312 employees and 636 dwelling units. Lents Town Center contains 155 gross acres.

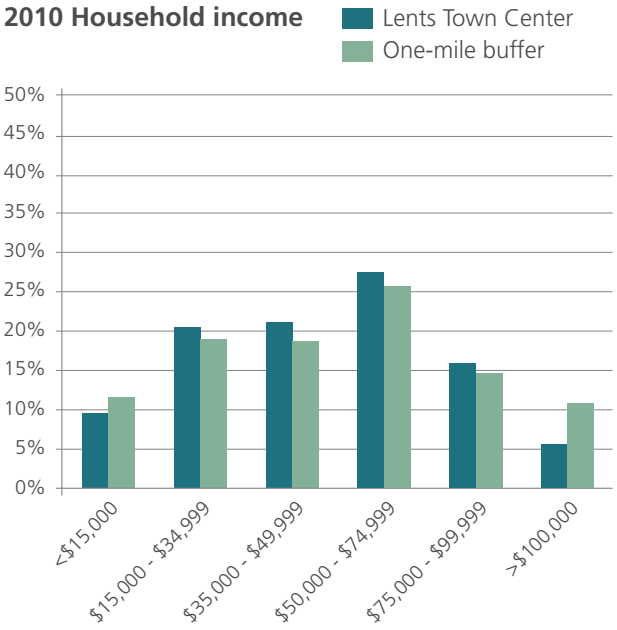
By the numbers	Lents Town Center	Town center average	One-mile buffer
Net acreage	88	222	2,863
Total population	1,653	2,326	34,073
Total employees	312	1,745	5,544
Non-SOV mode share (all trips)	56%	52%	n/a
Market value per square foot	$33	$39	$23
People per acre	22.2	20.1	13.8
Dwelling units per acre	7.2	5.0	4.7
Total businesses per acre	0.33	0.73	0.13
Home ownership	50.6%	47.4%	55.8%
Median household income	$49,340	$60,133	$50,638
Median household size	2.80	2.42	2.72
Median age	31.3	36.0	35.9



Employment breakdown



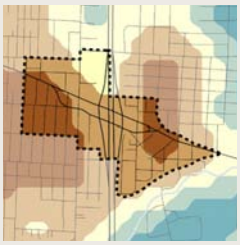
2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density


People per acre


Block size

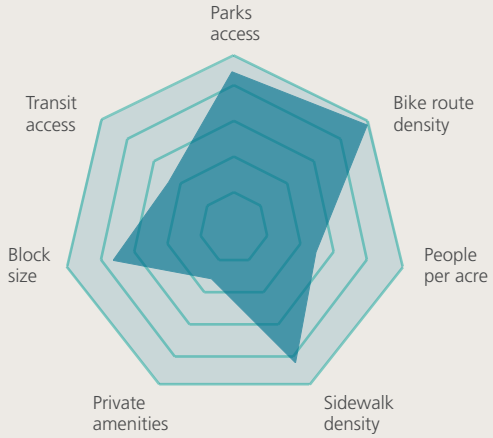

Bike route density


Transit frequency


Parks access



Composite score: 57.22



Milwaukie Town Center



Private amenities

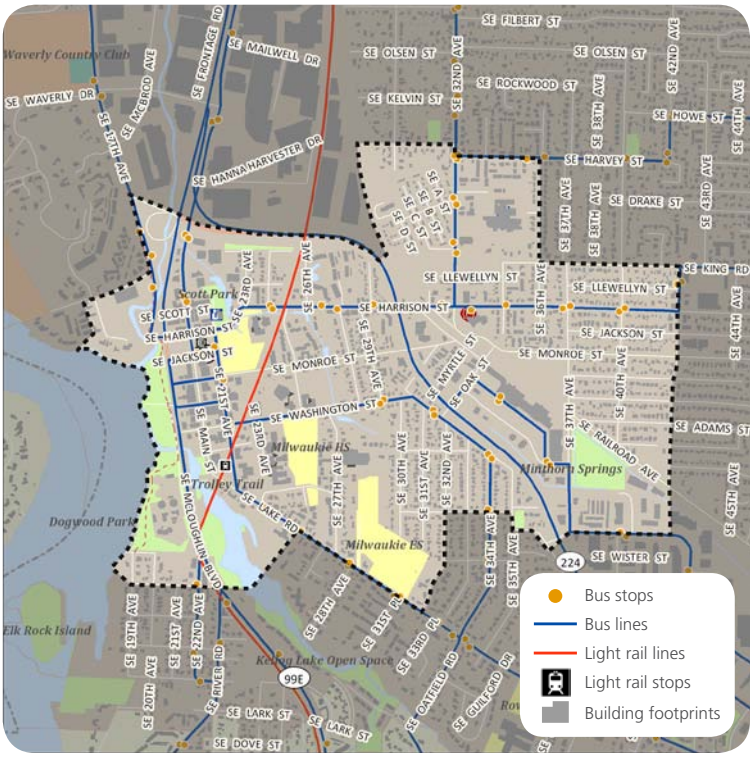
1	Bakery
2	Bar
0	Bike shop
2	Bookstore
0	Brewpub
5	Child care
1	Cinema
2	Clothing store
4	Coffee shop
0	Department store
2	Dry cleaners
2	Fitness gym
4	Grocery store
0	Music store
20	Restaurant
1	Specialty snacks and beverages

Public amenities

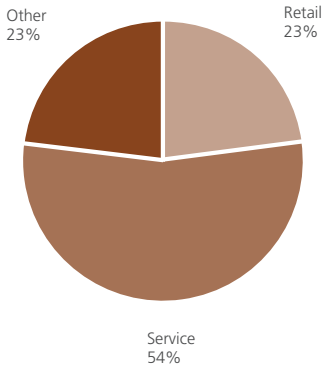
0	Community center
1	Fire station
1	Government building
1	Library
7	School

The Milwaukie Town Center represents the historic main street of downtown Milwaukie, the Highway 224 corridor and the surrounding residential neighborhoods in the area. The area is served by multiple bus lines, has a downtown transit center and will have a light rail station when the MAX line is continued to Milwaukie within the next 5 years. The center has 3,694 residents, 3,368 employees and 1,877 dwelling units. Milwaukie Town Center contains 579 gross acres.

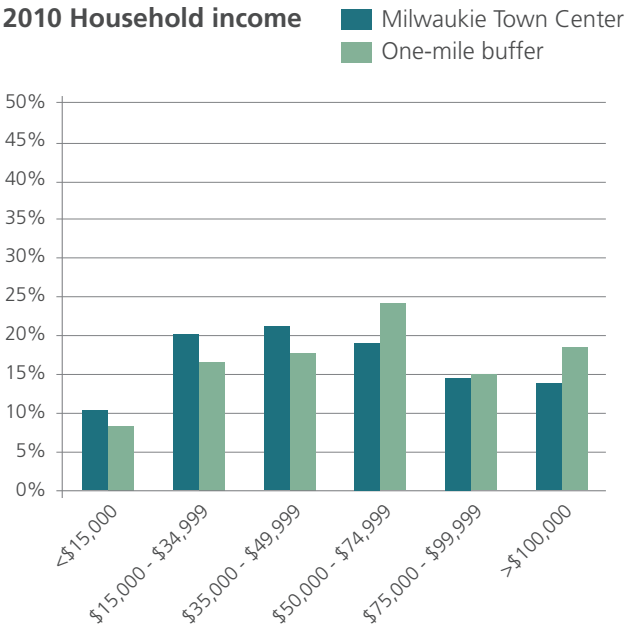
By the numbers	Milwaukie Town Center	Town center average	One-mile buffer
Net acreage	418	222	4,049
Total population	3,694	2,326	31,373
Total employees	3,368	1,745	13,393
Non-SOV mode share (all trips)	50%	52%	n/a
Market value per square foot	$26	$39	$24
People per acre	16.9	20.1	11.1
Dwelling units per acre	4.5	5.0	3.4
Total businesses per acre	0.52	0.73	0.16
Home ownership	38.6%	47.4%	53.0%
Median household income	$48,115	$60,133	$57,750
Median household size	2.07	2.42	2.24
Median age	38.3	36.0	39.8



Employment breakdown

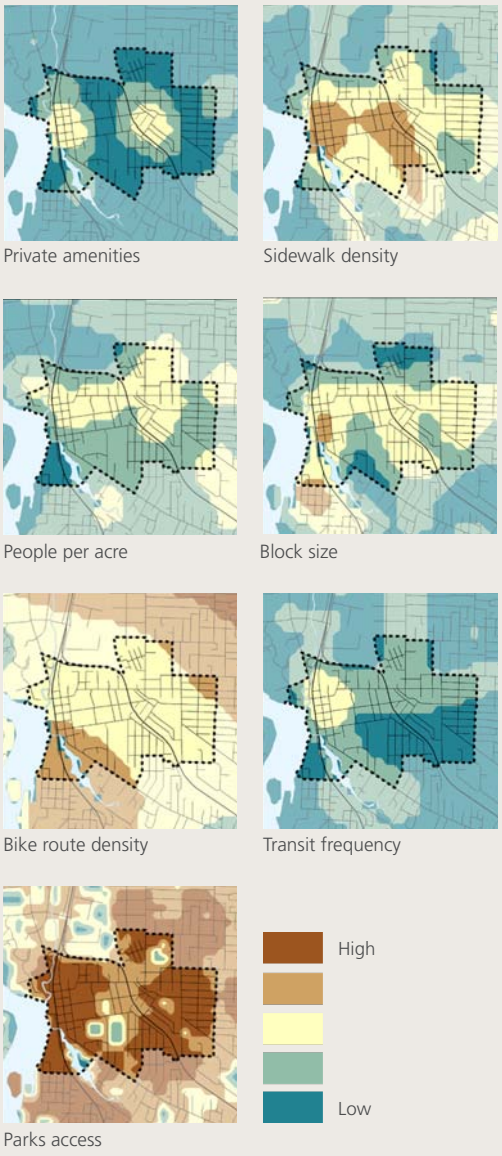


2010 Household income

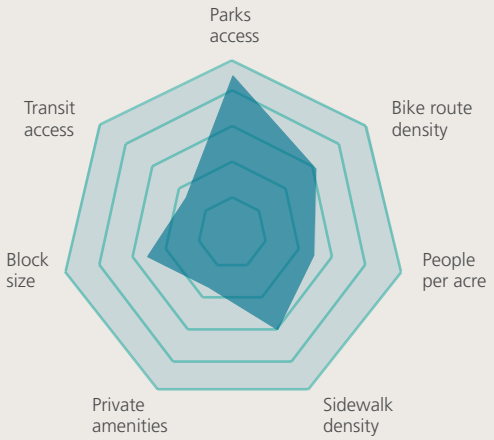


Metro context tool results

Heat maps



Composite score: 41.47



Murray/Scholls Town Center



Private amenities

- 0 Bakery
- 0 Bar
- 0 Bike shop
- 0 Bookstore
- 0 Brewpub
- 0 Child care
- 0 Cinema
- 0 Clothing store
- 0 Coffee shop
- 0 Department store
- 0 Dry cleaners
- 0 Fitness gym
- 0 Grocery store
- 0 Music store
- 0 Restaurant
- 0 Specialty snacks and beverages

Public amenities

- 0 Community center
- 0 Fire station
- 0 Government building
- 0 Library
- 0 School

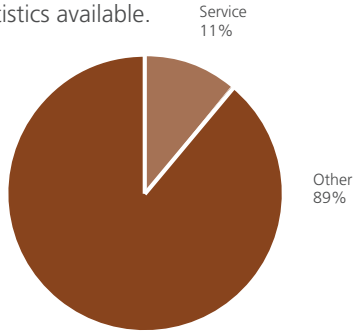
The Murray/Scholls Town Center in Beaverton is located at the intersection of Murray Boulevard and Scholls Ferry Road. A mixture of single- and multi-family residential units represent the majority of land uses within the center boundaries. The center has no direct interstate or highway access and is serviced by two bus lines, one along Murray Boulevard and another along Scholls Ferry Road. The center has 2,507 residents, 47 employees and 1,322 dwelling units. Murray/Scholls Town Center contains 204 gross acres.

By the numbers	Murray/Scholls Town Center	Town center average	One-mile buffer
Net acreage	181	222	3,200
Total population	2,507	2,326	32,069
Total employees	47	1,745	2,419
Non-SOV mode share (all trips)	53%	52%	n/a
Market value per square foot	$38	$39	$26
People per acre	14.1	20.1	10.8
Dwelling units per acre	7.3	5.0	4.0
Total businesses per acre	0.06	0.73	0.06
Home ownership	21.9%	47.4%	55.5%
Median household income	$57,662	$60,133	$75,578
Median household size	2.02	2.42	2.68
Median age	31.1	36.0	33.5

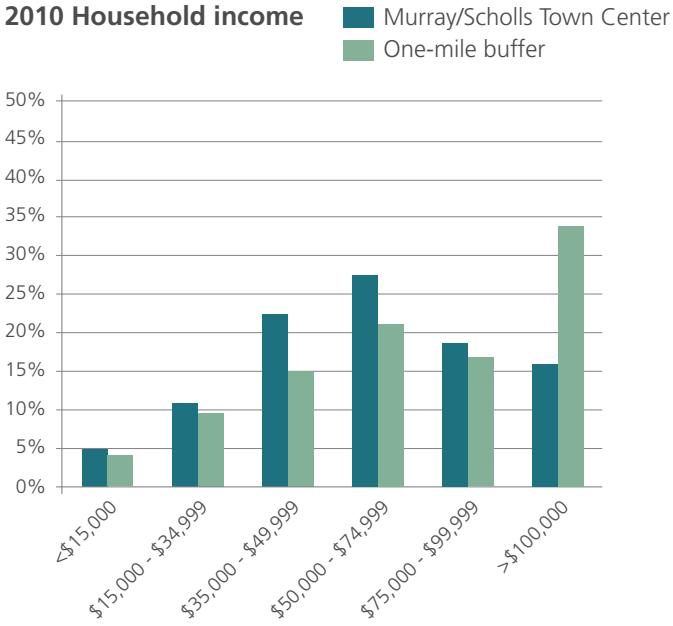


Employment breakdown

No retail statistics available.

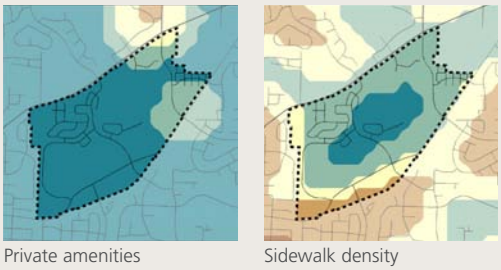


2010 Household income

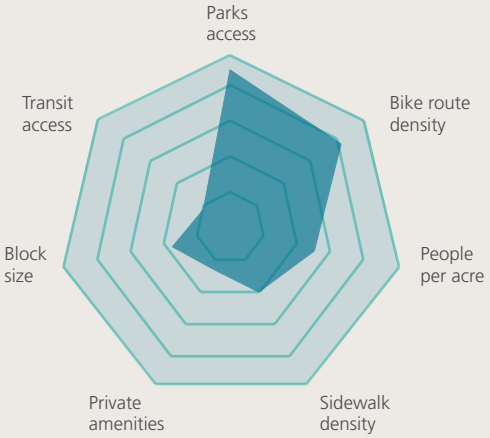


Metro context tool results

Heat maps



Composite score: 34.43



Orenco Town Center



Private amenities

0	Bakery
0	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
0	Clothing store
2	Coffee shop
1	Department store
1	Dry cleaners
2	Fitness gym
0	Grocery store
0	Music store
18	Restaurant
2	Specialty snacks and beverages

Public amenities

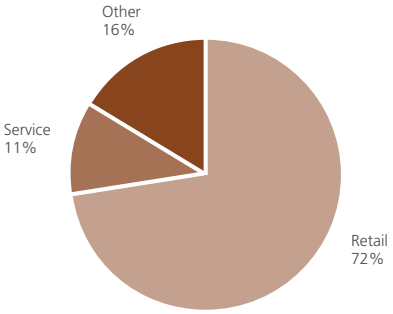
0	Community center
0	Fire station
0	Government building
0	Library
0	School

The Orenco Town Center in Hillsboro functions as a local retail destination and medium-density housing location. No major interstate access is available to the town center however, the major arterial of Cornell Road bisects it. The center is serviced by multiple bus lines and a MAX stop, located within its southern portion. The center has 3,200 residents, 1,175 employees and 1,910 dwelling units. Orenco Town Center contains 235 gross acres.

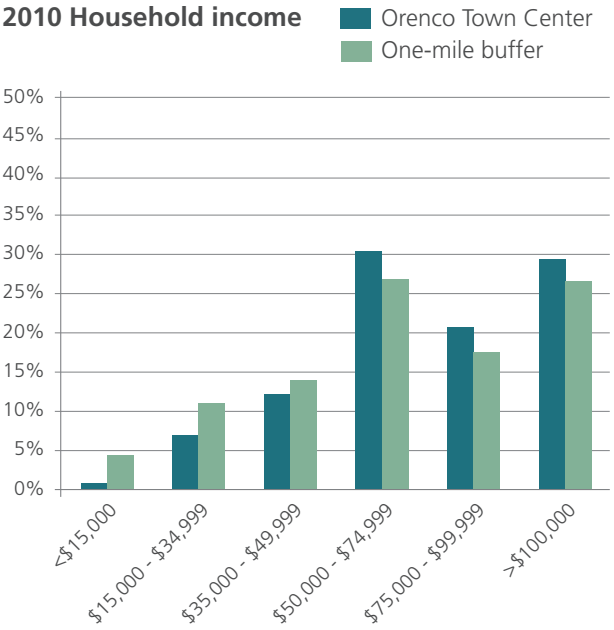
By the numbers	Orenco Town Center	Town center average	One-mile buffer
Net acreage	182	222	3,639
Total population	3,200	2,326	21,954
Total employees	1,175	1,745	13,500
Non-SOV mode share (all trips)	55%	52%	n/a
Market value per square foot	$51	$39	$22
People per acre	24.1	20.1	9.7
Dwelling units per acre	10.5	5.0	2.8
Total businesses per acre	0.36	0.73	0.14
Home ownership	21.7%	47.4%	36.0%
Median household income	$75,054	$60,133	$69,176
Median household size	1.78	2.42	2.3
Median age	35	36.0	31.3



Employment breakdown

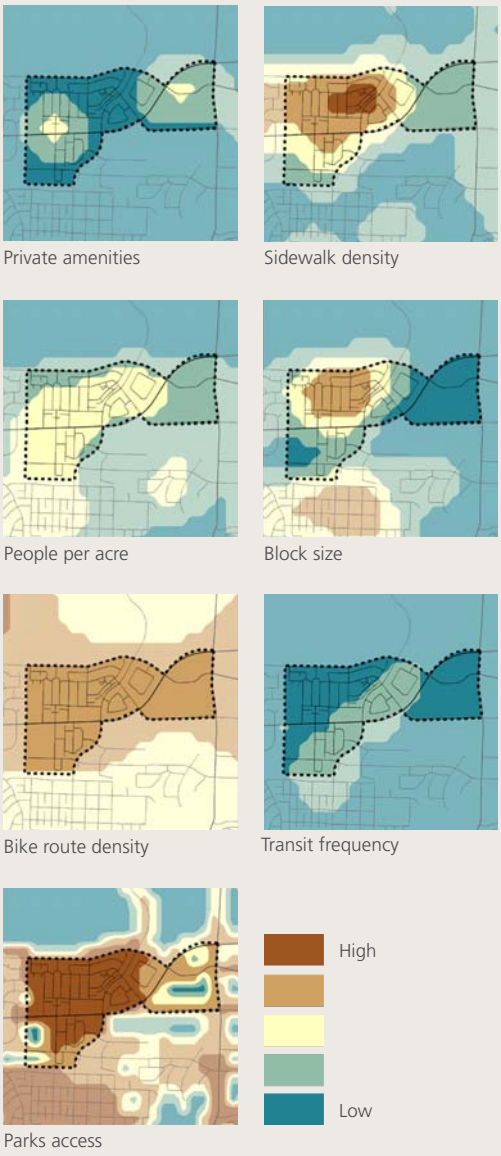


2010 Household income

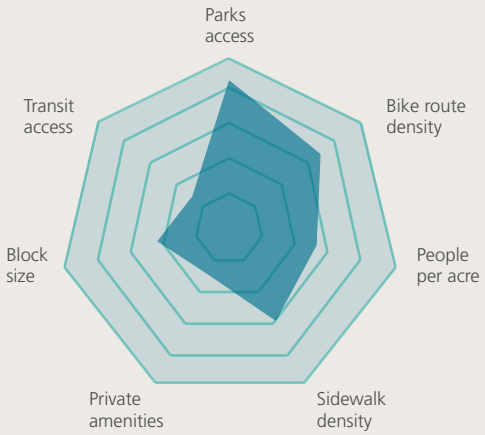


Metro context tool results

Heat maps



Composite score: 41.61



Pleasant Valley Town Center



Private amenities

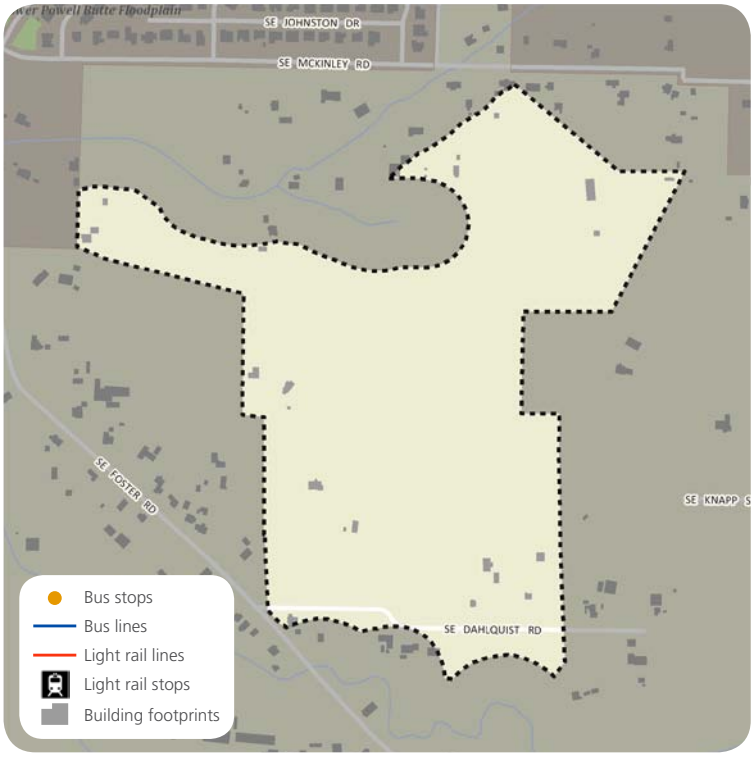
- 0 Bakery
- 0 Bar
- 0 Bike shop
- 0 Bookstore
- 0 Brewpub
- 0 Child care
- 0 Cinema
- 0 Clothing store
- 0 Coffee shop
- 0 Department store
- 0 Dry cleaners
- 0 Fitness gym
- 0 Grocery store
- 0 Music store
- 0 Restaurant
- 0 Specialty snacks and beverages

Public amenities

- 0 Community center
- 0 Fire station
- 0 Government building
- 0 Library
- 0 School

The Pleasant Valley Town Center in Gresham is a rural area brought into the urban growth boundary in 1998. It has no direct highway access and is serviced by Foster Road, the only major street in the center. No bus service is available in Pleasant Valley. Urban development has yet to occur with any frequency in this center. It has 31 residents, 17 employees and 14 dwelling units. Pleasant Valley Town Center contains 77 gross acres.

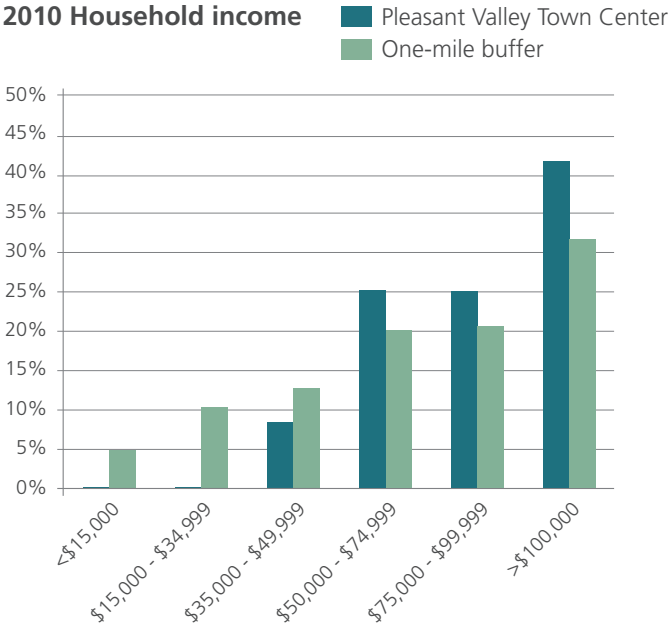
By the numbers	Pleasant Valley Town Center	Town center average	One-mile buffer
Net acreage	77	222	2,982
Total population	31	2,326	6,968
Total employees	17	1,745	312
Non-SOV mode share (all trips)	48%	52%	n/a
Market value per square foot	$4	$39	$7
People per acre	0.6	20.1	2.4
Dwelling units per acre	0.20	5.0	0.8
Total businesses per acre	0.04	0.73	0.01
Home ownership	85.7%	47.4%	71.0%
Median household income	$89,441	$60,133	$76,981
Median household size	2.21	2.42	2.78
Median age	36.3	36.0	39.4



Employment breakdown

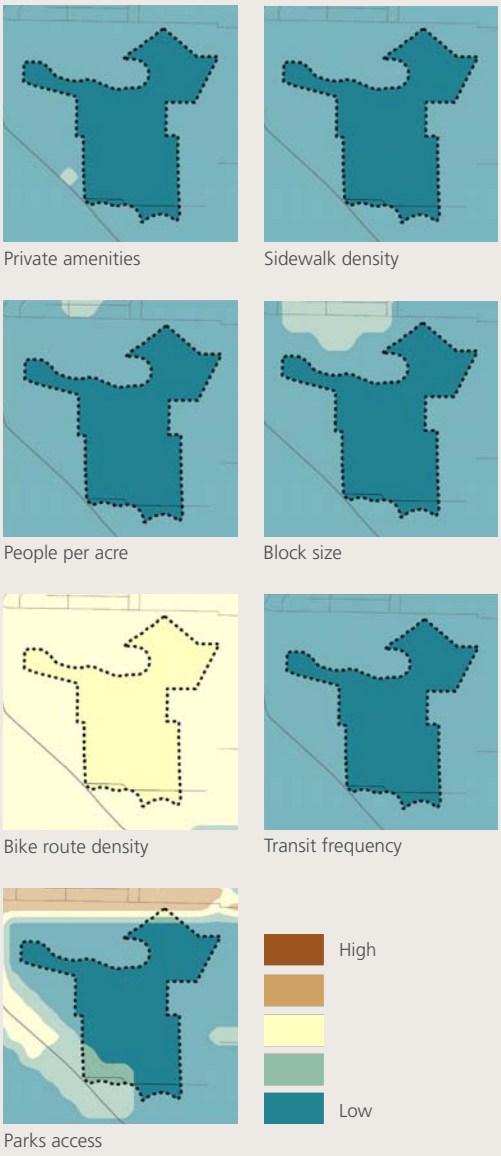
Data not available for publication.

2010 Household income

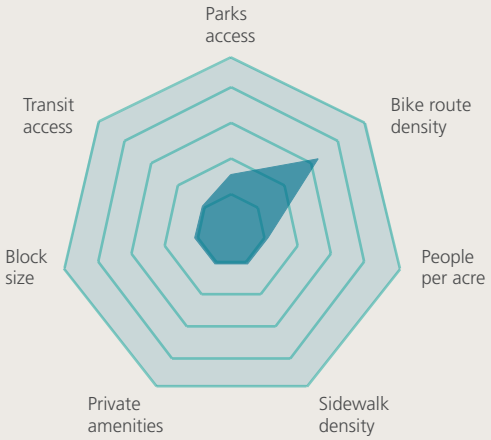


Metro context tool results

Heat maps



Composite score: 8.74



Raleigh Hills Town Center



Private amenities

1	Bakery
1	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
3	Clothing store
1	Coffee shop
0	Department store
3	Dry cleaners
1	Fitness gym
3	Grocery store
0	Music store
17	Restaurant
0	Specialty snacks and beverages

Public amenities

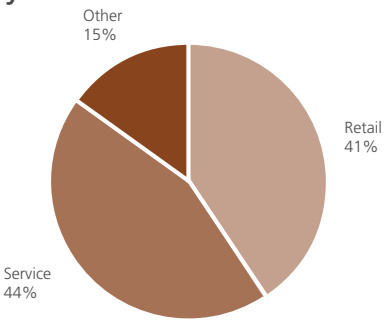
0	Community center
0	Fire station
0	Government building
0	Library
0	School

The Raleigh Hills Town Center is located at the intersection of the Beaverton-Hillsdale Highway, an ODOT facility, and Scholls Ferry Road in unincorporated Washington County, adjacent to Portland. The center is served by three separate bus lines, two of which are frequent service. It has 1,599 residents, 1,800 employees and 948 dwelling units. Raleigh Hills Town Center contains 153 gross acres.

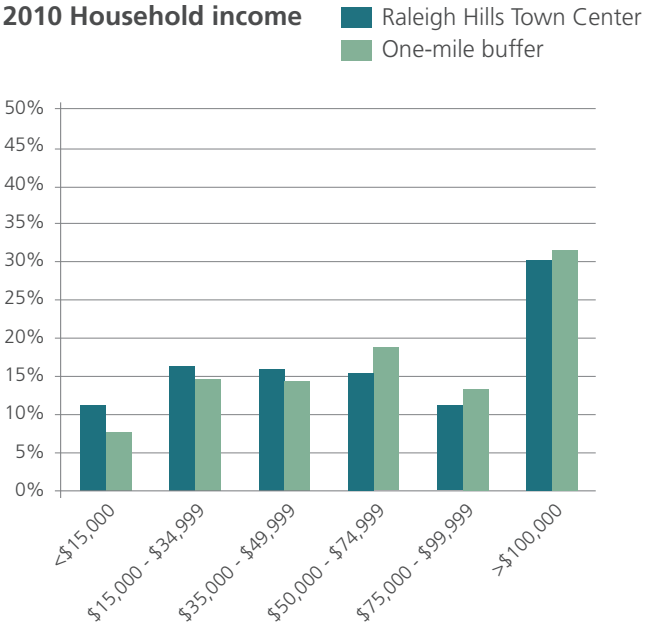
By the numbers	Raleigh Hills Town Center	Town center average	One-mile buffer
Net acreage	131	222	3,264
Total population	1,599	2,326	22,587
Total employees	1,802	1,745	5,187
Non-SOV mode share (all trips)	51%	52%	n/a
Market value per square foot	$48	$39	$27
People per acre	26.0	20.1	8.5
Dwelling units per acre	7.2	5.0	3.3
Total businesses per acre	1.12	0.73	0.14
Home ownership	48.5%	47.4%	57.1%
Median household income	$59,796	$60,133	$67,057
Median household size	1.91	2.42	2.26
Median age	42.2	36.0	42.7



Employment breakdown

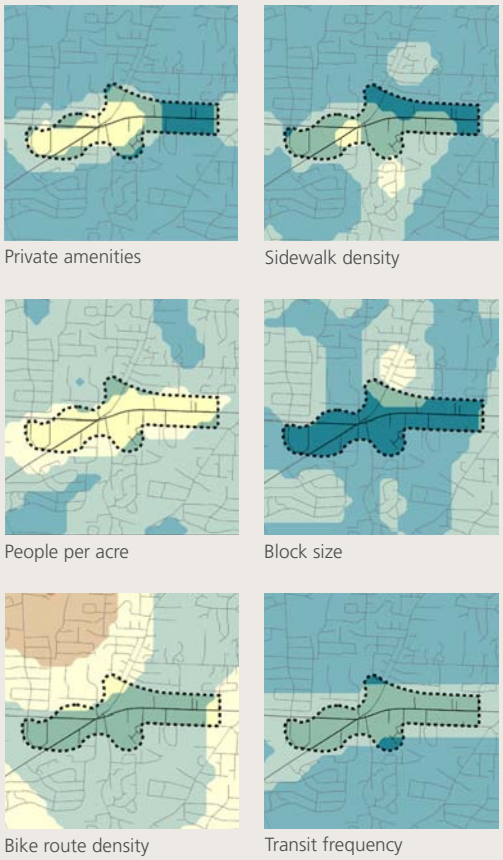


2010 Household income

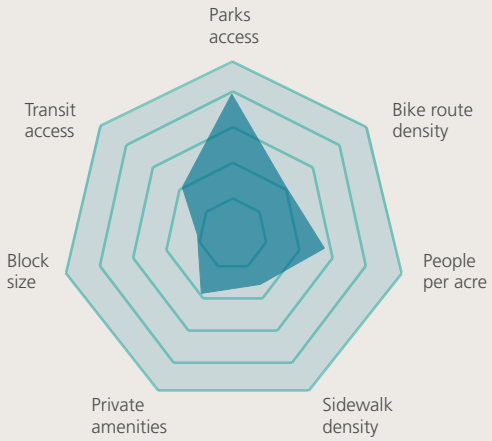


Metro context tool results

Heat maps



Composite score: 32.25



Rockwood Town Center



Private amenities

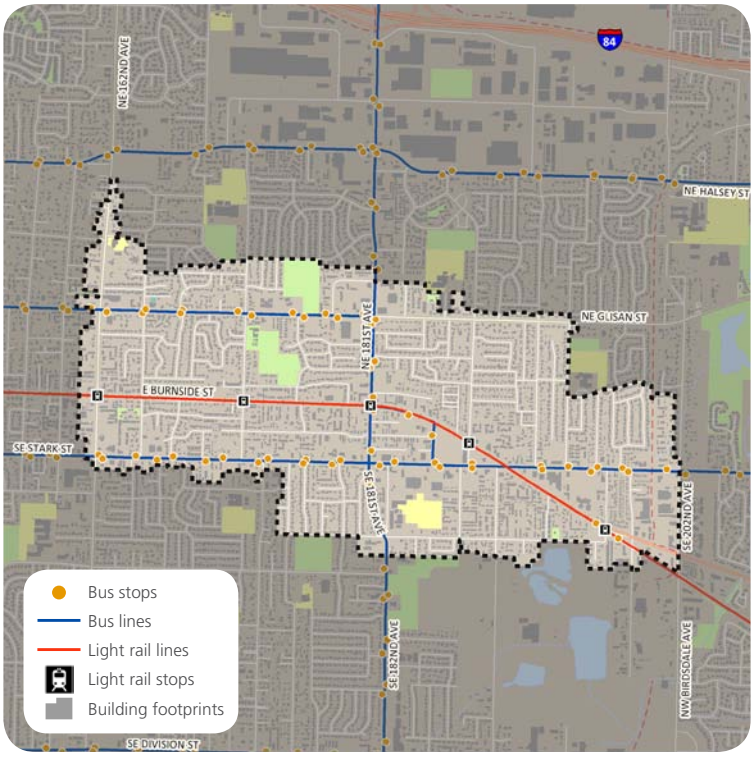
1	Bakery
2	Bar
0	Bike shop
0	Bookstore
0	Brewpub
2	Child care
0	Cinema
4	Clothing store
3	Coffee shop
0	Department store
2	Dry cleaners
0	Fitness gym
9	Grocery store
1	Music store
31	Restaurant
1	Specialty snacks and beverages

Public amenities

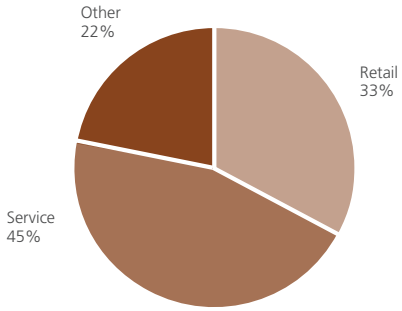
0	Community center
0	Fire station
0	Government building
1	Library
4	School

The Rockwood Town Center is located along the Eastside MAX line in Gresham. The center is bisected by two major arterials, Burnside and Stark streets. Two separate MAX stops are within the town center boundaries, as well as two bus lines along Stark Street and 182nd Avenue. The center has 16,456 residents, 2,264 employees and 6,278 dwelling units. Rockwood Town Center contains 1,029 gross acres.

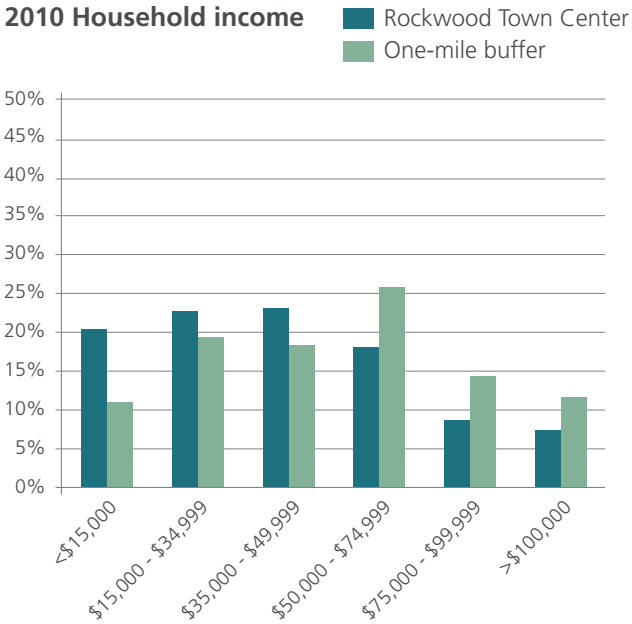
By the numbers	Rockwood Town Center	Town center average	One-mile buffer
Net acreage	826	222	5,677
Total population	16,456	2,326	64,143
Total employees	2,264	1,745	11,882
Non-SOV mode share (all trips)	59%	52%	n/a
Market value per square foot	$25	$39	$26
People per acre	22.7	20.1	13.4
Dwelling units per acre	7.6	5.0	4.4
Total businesses per acre	0.21	0.73	0.12
Home ownership	32.4%	47.4%	51.1%
Median household income	$39,943	$60,133	$51,179
Median household size	3.39	2.42	2.74
Median age	27.8	36.0	33.6



Employment breakdown



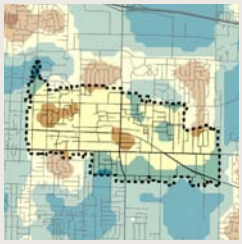
2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density


People per acre


Block size

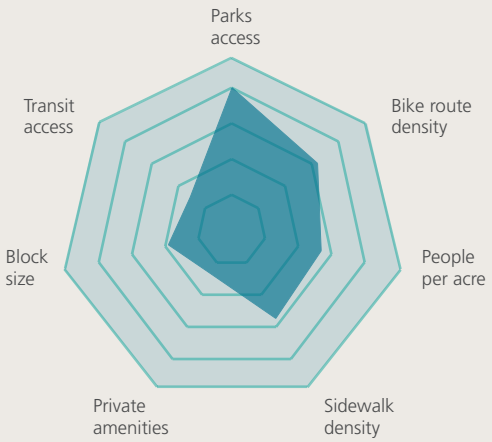

Bike route density


Transit frequency



Parks access

Composite score: 37.89



Sherwood Town Center



Private amenities

0	Bakery
0	Bar
0	Bike shop
0	Bookstore
0	Brewpub
0	Child care
0	Cinema
1	Clothing store
2	Coffee shop
0	Department store
0	Dry cleaners
1	Fitness gym
0	Grocery store
0	Music store
11	Restaurant
0	Specialty snacks and beverages

Public amenities

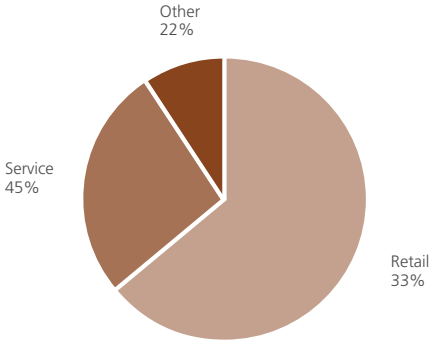
0	Community center
0	Fire station
0	Government building
0	Library
0	School

The Sherwood Town Center is located at the junction of Highway 99 West, an ODOT facility, and Tualatin-Sherwood Road. Sherwood has no direct interstate access. One bus line services the town center and continues to the Old Town portion of downtown Sherwood. Sherwood has 138 residents, 1,325 employees and 69 dwelling units. Sherwood Town Center contains 109 gross acres.

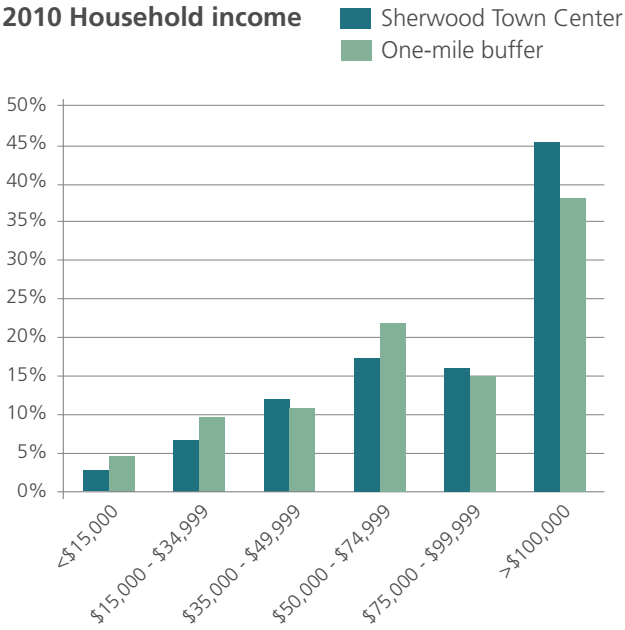
By the numbers	Sherwood Town Center	Town center average	One-mile buffer
Net acreage	86	222	3,120
Total population	138	2,326	13,669
Total employees	1,325	1,745	3,525
Non-SOV mode share (all trips)	54%	52%	n/a
Market value per square foot	$48	$39	$12
People per acre	16.9	20.1	5.5
Dwelling units per acre	0.80	5.0	1.6
Total businesses per acre	0.95	0.73	0.08
Home ownership	77.9%	47.4%	71.8%
Median household income	$91,097	$60,133	$78,940
Median household size	2.60	2.42	2.75
Median age	34	36.0	32.2



Employment breakdown

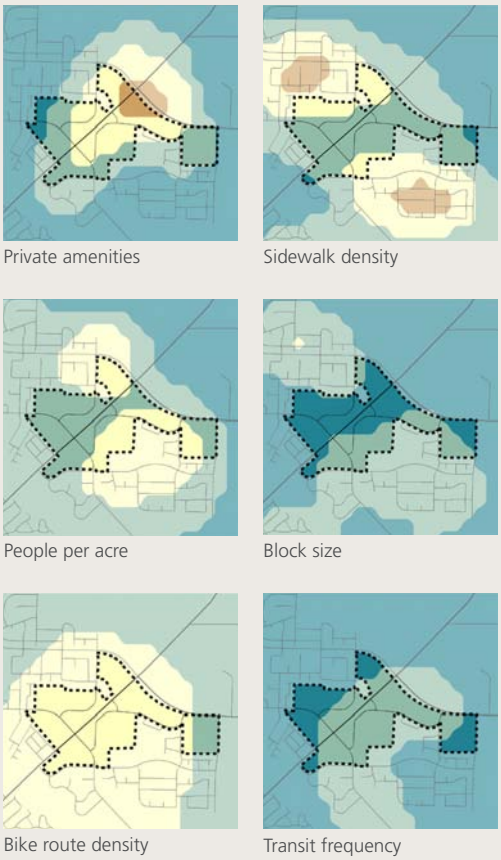


2010 Household income

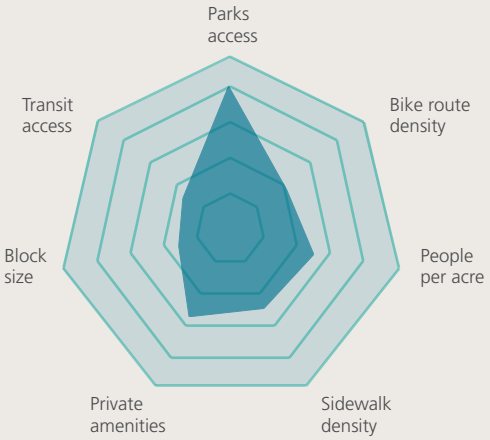


Metro context tool results

Heat maps



Composite score: 33.46



St. Johns Town Center



Private amenities

0	Bakery
1	Bar
1	Bike shop
1	Bookstore
0	Brewpub
0	Child care
1	Cinema
2	Clothing store
4	Coffee shop
0	Department store
0	Dry cleaners
1	Fitness gym
4	Grocery store
1	Music store
19	Restaurant
1	Specialty snacks and beverages

Public amenities

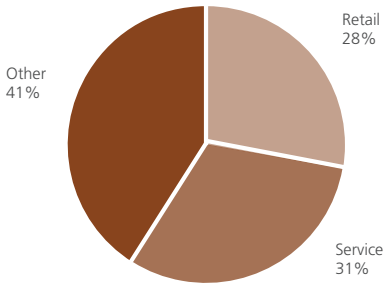
0	Community center
0	Fire station
0	Government building
0	Library
1	School

The St. Johns Town Center is located in North Portland, adjacent to the Willamette River. St. Johns has no direct interstate access, but can access U.S. Highway 30 by crossing the Willamette River at the St. Johns Bridge. The area is served by five bus lines, including one frequent service line, allowing for multiple transportation options both in and out of the center. St. Johns has 437 residents, 857 employees and 219 dwelling units. St. Johns Town Center contains 70 gross acres.

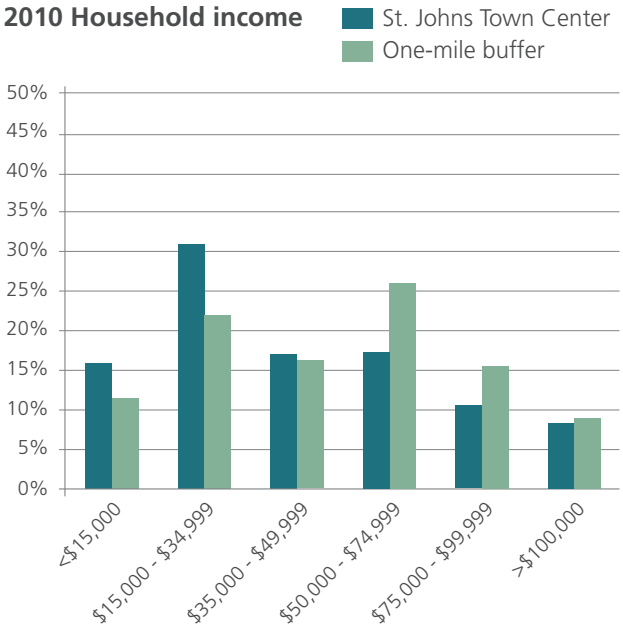
By the numbers	St. Johns Town Center	Town center average	One-mile buffer
Net acreage	43	222	2,013
Total population	437	2,326	18,567
Total employees	857	1,745	4,575
Non-SOV mode share (all trips)	54%	52%	n/a
Market value per square foot	$68	$39	$22
People per acre	30.0	20.1	11.5
Dwelling units per acre	5.1	5.0	3.8
Total businesses per acre	1.83	0.73	0.11
Home ownership	43.1%	47.4%	52.6%
Median household income	$36,853	$60,133	$50,263
Median household size	2.12	2.42	2.59
Median age	37.9	36.0	34



Employment breakdown

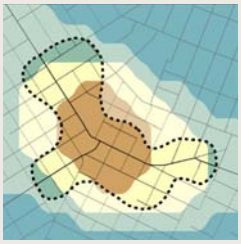


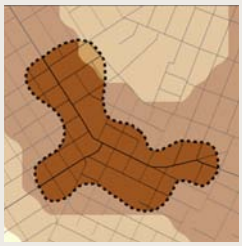
2010 Household income



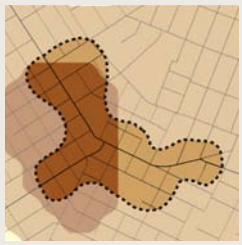
Metro context tool results

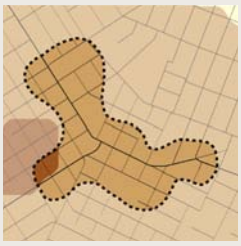
Heat maps


Private amenities

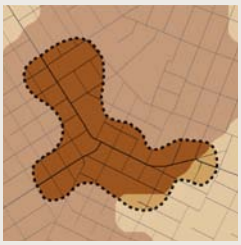

Sidewalk density

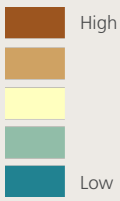

People per acre


Block size

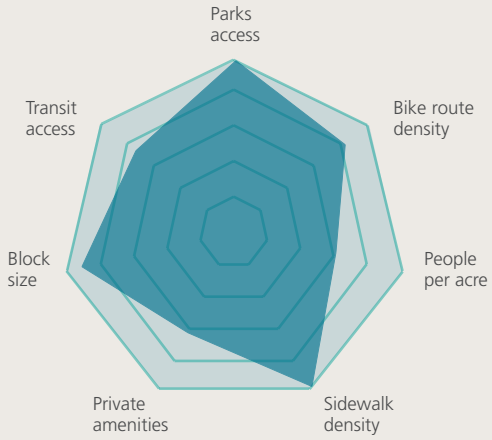

Bike route density


Transit frequency


Parks access



Composite score: 76.41



Sunset Transit Town Center



Private amenities

1	Bakery
0	Bar
0	Bike shop
0	Bookstore
0	Brewpub
1	Child care
0	Cinema
0	Clothing store
2	Coffee shop
0	Department store
1	Dry cleaners
0	Fitness gym
1	Grocery store
0	Music store
6	Restaurant
2	Specialty snacks and beverages

Public amenities

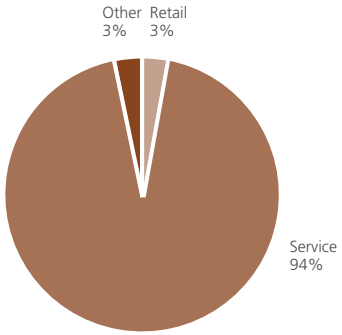
0	Community center
0	Fire station
0	Government building
0	Library
0	School

The Sunset Transit Town Center in unincorporated Washington County, adjacent to Beaverton, is located at the intersection of several major arterials including Barnes Road, Highway 26, Highway 217 and the MAX. The Sunset Transit Center serves as a transportation hub for the north portion of Washington County and northwest Portland. As a transit center, the area is serviced by multiple bus lines and both Blue and Red Line MAX trains. The center has 1,940 residents, 6,220 employees and 879 dwelling units. Sunset Transit Town Center contains 262 gross acres.

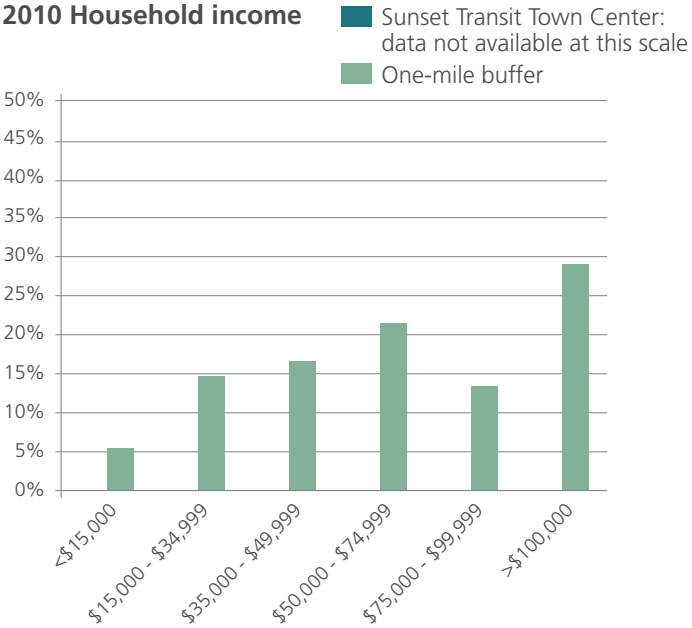
By the numbers	Sunset Transit Town Center	Town center average	One-mile buffer
Net acreage	208	222	3,361
Total population	1,939	2,326	25,243
Total employees	6,221	1,745	11,412
Non-SOV mode share (all trips)	51%	52%	n/a
Market value per square foot	$40	$39	$25
People per acre	39.2	20.1	10.9
Dwelling units per acre	4.2	5.0	3.2
Total businesses per acre	0.80	0.73	0.16
Home ownership	n/a	47.4%	55.9%
Median household income	n/a	$60,133	$65,233
Median household size	n/a	2.42	2.32
Median age	n/a	36.0	37.9



Employment breakdown

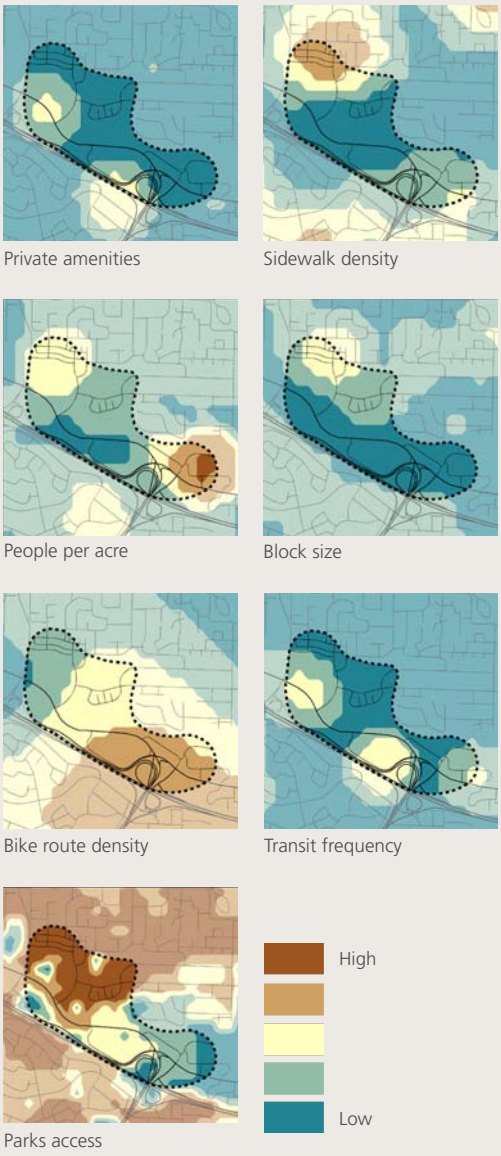


2010 Household income

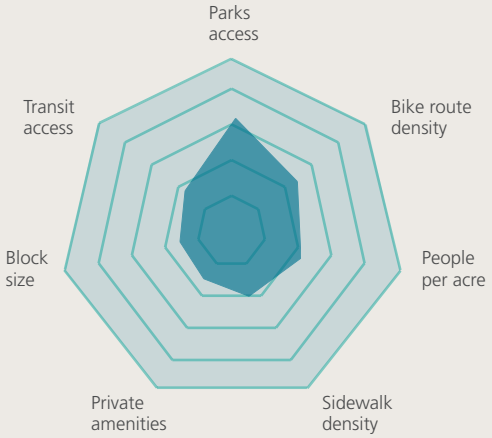


Metro context tool results

Heat maps



Composite score: 27.07



Tigard Town Center



Private amenities

1	Bakery
0	Bar
1	Bike shop
0	Bookstore
0	Brewpub
3	Child care
2	Cinema
3	Clothing store
4	Coffee shop
0	Department store
2	Dry cleaners
3	Fitness gym
2	Grocery store
0	Music store
37	Restaurant
1	Specialty snacks and beverages

Public amenities

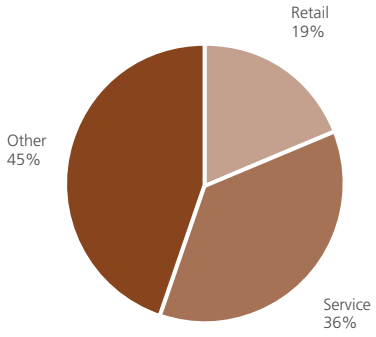
0	Community center
1	Fire station
1	Government building
0	Library
4	School

The Tigard Town Center includes the newly added Tigard Triangle area to the existing town center. The center is focused around the ODOT facility of Highway 99 West and has been chosen as the priority corridor for a study of future high capacity transit expansion in the region. The center is serviced by multiple bus lines and is home to a TriMet transit center and a Westside Express Service (WES) commuter rail station. The center has 1,923 residents, 6,876 employees and 944 dwelling units. Tigard Town Center contains 702 gross acres.

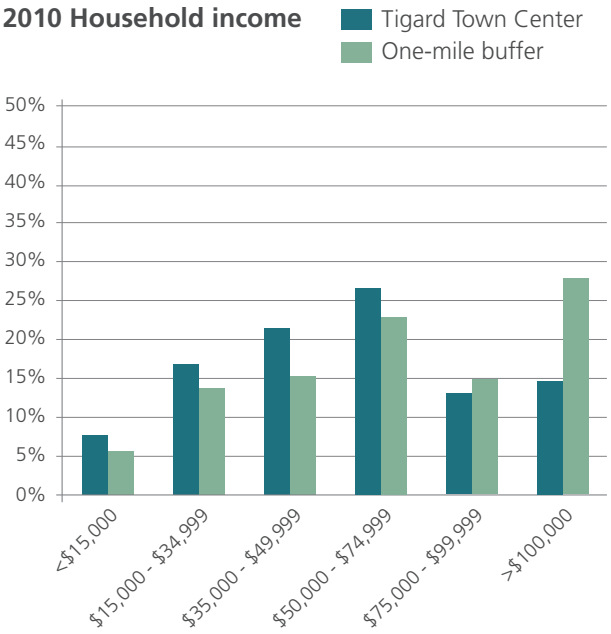
By the numbers	Tigard Town Center	Town center average	One-mile buffer
Net acreage	558	222	5,259
Total population	1,923	2,326	39,885
Total employees	6,876	1,745	26,244
Non-SOV mode share (all trips)	50%	52%	n/a
Market value per square foot	$30	$39	$31
People per acre	15.8	20.1	12.6
Dwelling units per acre	1.7	5.0	3.1
Total businesses per acre	0.70	0.73	0.30
Home ownership	28.6%	47.4%	55.8%
Median household income	$53,777	$60,133	$66,312
Median household size	2.32	2.42	2.51
Median age	32.3	36.0	37.1



Employment breakdown

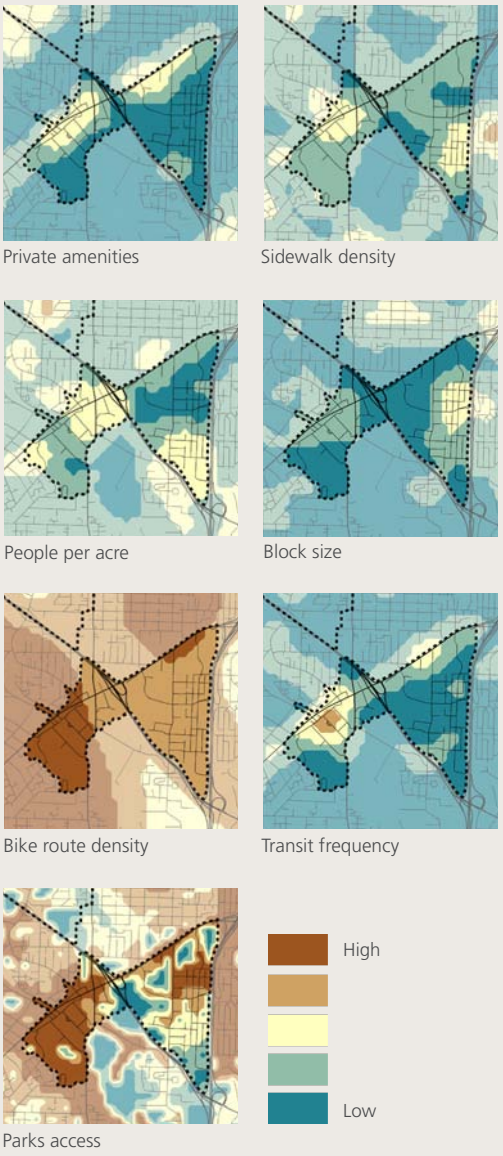


2010 Household income

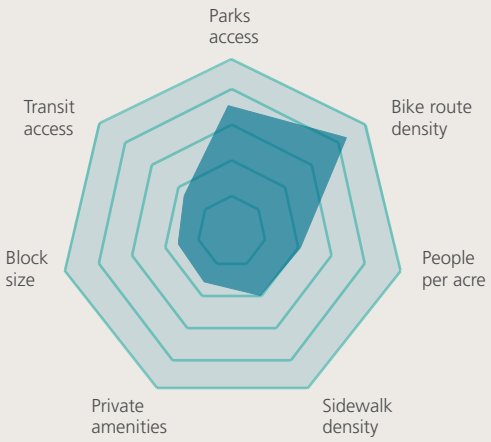


Metro context tool results

Heat maps



Composite score: 34.99



Troutdale Town Center



Private amenities

1	Bakery
0	Bar
0	Bike shop
1	Bookstore
0	Brewpub
0	Child care
0	Cinema
10	Clothing store
0	Coffee shop
0	Department store
0	Dry cleaners
0	Fitness gym
0	Grocery store
0	Music store
7	Restaurant
0	Specialty snacks and beverages

Public amenities

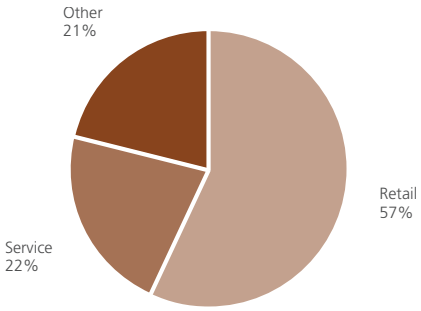
0	Community center
0	Fire station
1	Government building
0	Library
2	School

The Troutdale Town Center is located at the eastern end of the region. The center includes a historic main street in downtown Troutdale as well as a significant portion of land west of downtown. The center has direct access to Interstate 84 and contains the historic Columbia River Highway, an ODOT facility. The center has 1,924 residents, 775 employees and 853 dwelling units. Troutdale Town Center contains 418 gross acres.

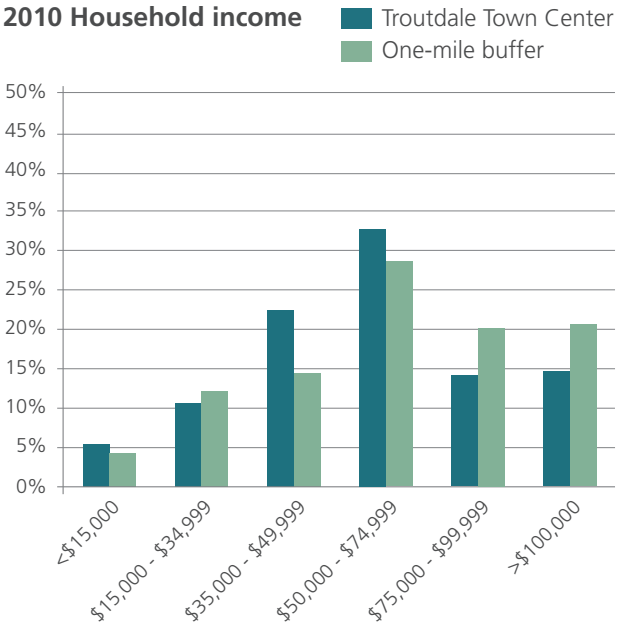
By the numbers	Troutdale Town Center	Town center average	One-mile buffer
Net acreage	343	222	4,287
Total population	1,924	2,326	17,519
Total employees	775	1,745	6,861
Non-SOV mode share (all trips)	54%	52%	n/a
Market value per square foot	$17	$39	$12
People per acre	7.9	20.1	5.7
Dwelling units per acre	2.5	5.0	1.5
Total businesses per acre	0.23	0.73	0.06
Home ownership	61.9%	47.4%	63.4%
Median household income	$58,685	$60,133	$65,196
Median household size	2.53	2.42	2.91
Median age	34.3	36.0	31.6



Employment breakdown



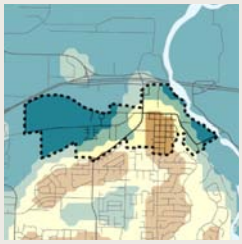
2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density


People per acre


Block size

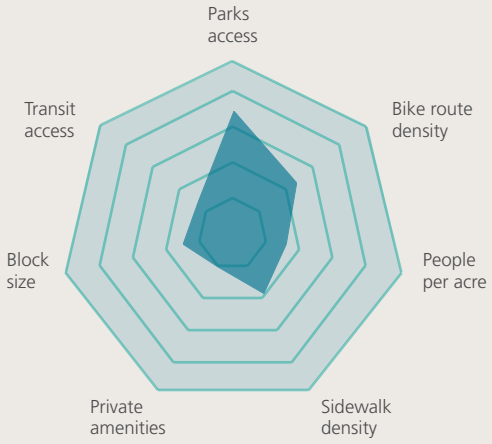

Bike route density


Transit frequency


Parks access



Composite score: 25.58



Tualatin Town Center



Private amenities

0	Bakery
1	Bar
0	Bike shop
0	Bookstore
0	Brewpub
1	Child care
0	Cinema
0	Clothing store
5	Coffee shop
2	Department store
4	Dry cleaners
3	Fitness gym
3	Grocery store
0	Music store
44	Restaurant
3	Specialty snacks and beverages

Public amenities

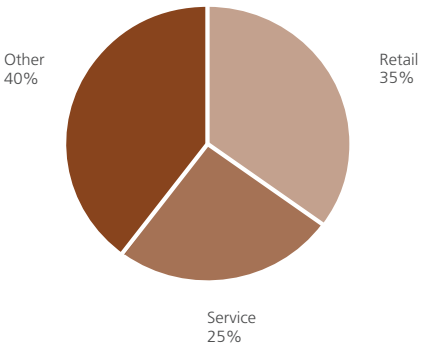
0	Community center
1	Fire station
1	Government building
1	Library
3	School

The Tualatin Town Center is located at the intersection of Tualatin-Sherwood and Boones Ferry roads, both major arterials. The center is serviced by multiple bus lines and has a stop on the Westside Express Service (WES) commuter rail line. The center has 3,636 residents, 3,332 employees and 1,660 dwelling units. Tualatin Town Center contains 462 gross acres.

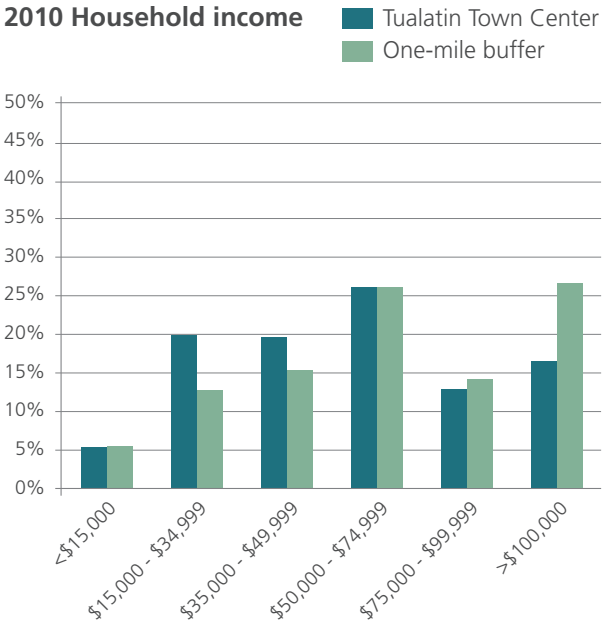
By the numbers	Tualatin Town Center	Town center average	One-mile buffer
Net acreage	395	222	3,912
Total population	3,636	2,326	22,338
Total employees	3,332	1,745	16,680
Non-SOV mode share (all trips)	49%	52%	n/a
Market value per square foot	$30	$39	$23
People per acre	17.6	20.1	10.0
Dwelling units per acre	4.2	5.0	2.3
Total businesses per acre	0.67	0.73	0.23
Home ownership	5.0%	47.4%	48.6%
Median household income	$53,704	$60,133	$65,601
Median household size	2.05	2.42	2.57
Median age	28.1	36.0	33.8



Employment breakdown



2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density

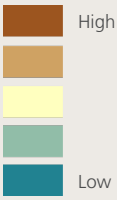

People per acre


Block size

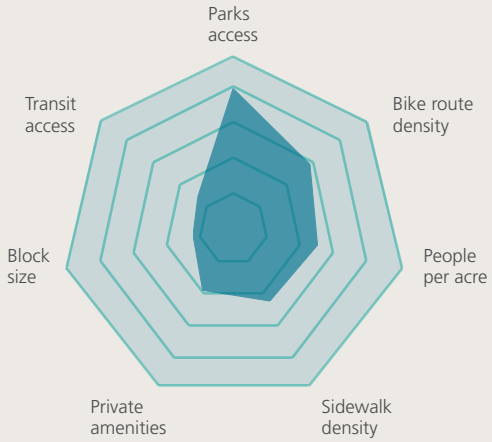

Bike route density


Transit frequency


Parks access



Composite score: 32.83



West Linn – Historic Willamette Town Center



Private amenities

1	Bakery
1	Bar
0	Bike shop
0	Bookstore
0	Brewpub
4	Child care
0	Cinema
1	Clothing store
5	Coffee shop
0	Department store
1	Dry cleaners
4	Fitness gym
2	Grocery store
0	Music store
20	Restaurant
1	Specialty snacks and beverages

Public amenities

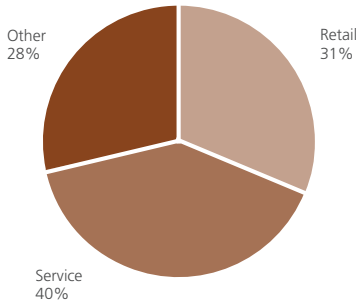
0	Community center
1	Fire station
0	Government building
1	Library
5	School

The West Linn town centers are represented by two distinct geographic locations, Bolton and Historic Willamette. Both locations are served by Interstate 205, an ODOT facility. Both centers are also serviced by bus lines. The centers have a combined total of 2,492 residents, 1,620 employees and 896 dwelling units. West Linn town centers contain a combined total of 462 gross acres, 274 in Bolton and 188 in Historic Willamette. Metro context tool results and center boundary map (p. 105) are specific to Historic Willamette. All other data reflect both Historic Willamette and Bolton locations.

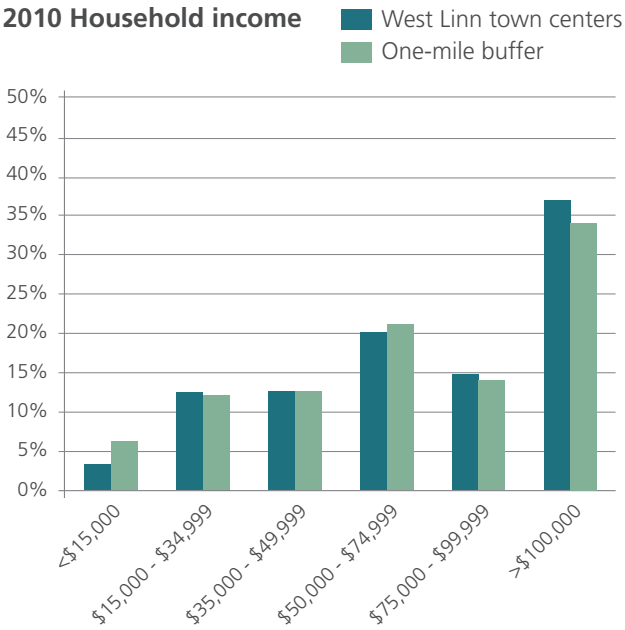
By the numbers	West Linn town centers	Town center average	One-mile buffer
Net acreage	316	222	5,872
Total population	2,492	2,326	30,016
Total employees	1,620	1,745	8,582
Non-SOV mode share (all trips)	50%	52%	n/a
Market value per square foot	$28	$39	$17
People per acre	13.0	20.1	6.6
Dwelling units per acre	2.8	5.0	2.0
Total businesses per acre	0.53	0.73	0.10
Home ownership	72.4%	47.4%	63.5%
Median household income	$81,054	$60,133	$72,217
Median household size	2.44	2.42	2.58
Median age	40.3	36.0	39



Employment breakdown

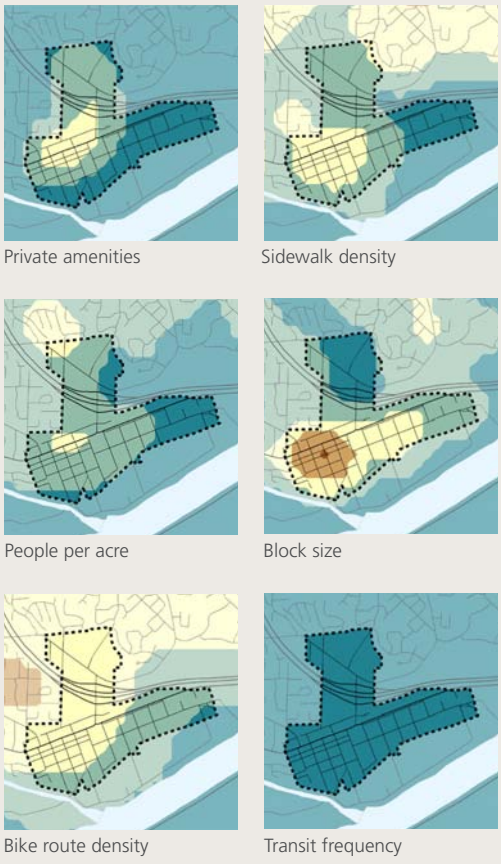


2010 Household income

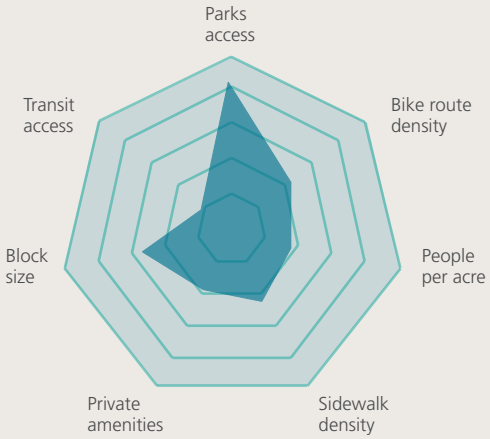


Metro context tool results

Heat maps



Composite score: 29.64



West Linn – Bolton Town Center



Private amenities

1	Bakery
1	Bar
0	Bike shop
0	Bookstore
0	Brewpub
4	Child care
0	Cinema
1	Clothing store
5	Coffee shop
0	Department store
1	Dry cleaners
4	Fitness gym
2	Grocery store
0	Music store
20	Restaurant
1	Specialty snacks and beverages

Public amenities

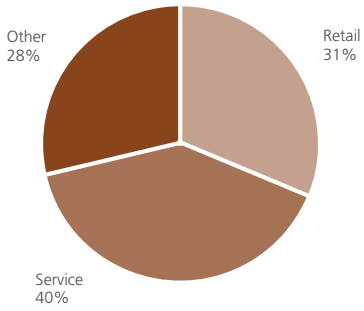
0	Community center
1	Fire station
0	Government building
1	Library
5	School

The West Linn town centers are represented by two distinct geographic locations, Bolton and Historic Willamette. Both locations are served by Interstate 205, an ODOT facility. Both centers are also serviced by bus lines. The centers have a combined total of 2,492 residents, 1,620 employees and 896 dwelling units. West Linn town centers contain a combined total of 462 gross acres, 274 in Bolton and 188 in Historic Willamette. Metro context tool results and center boundary map (p. 107) are specific to Bolton. All other data reflect both Historic Willamette and Bolton locations.

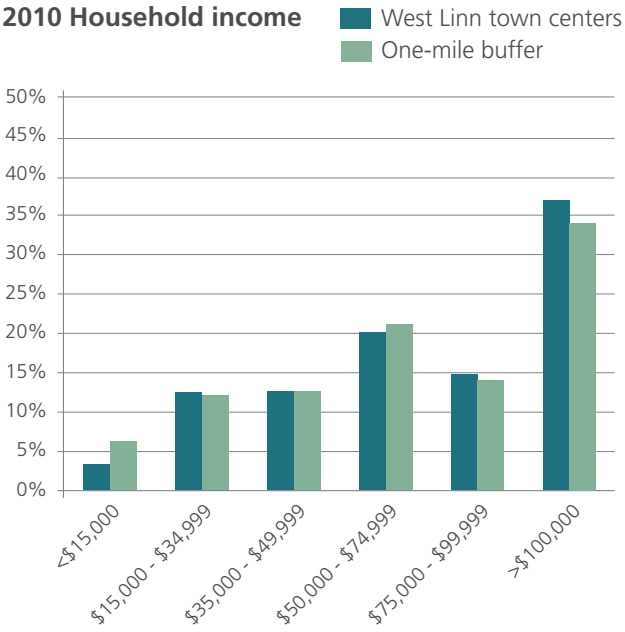
By the numbers	West Linn town centers	Town center average	One-mile buffer
Net acreage	316	222	5,872
Total population	2,492	2,326	30,016
Total employees	1,620	1,745	8,582
Non-SOV mode share (all trips)	50%	52%	n/a
Market value per square foot	$28	$39	$17
People per acre	13.0	20.1	6.6
Dwelling units per acre	2.8	5.0	2.0
Total businesses per acre	0.53	0.73	0.10
Home ownership	72.4%	47.4%	63.5%
Median household income	$81,054	$60,133	$72,217
Median household size	2.44	2.42	2.58
Median age	40.3	36.0	39



Employment breakdown

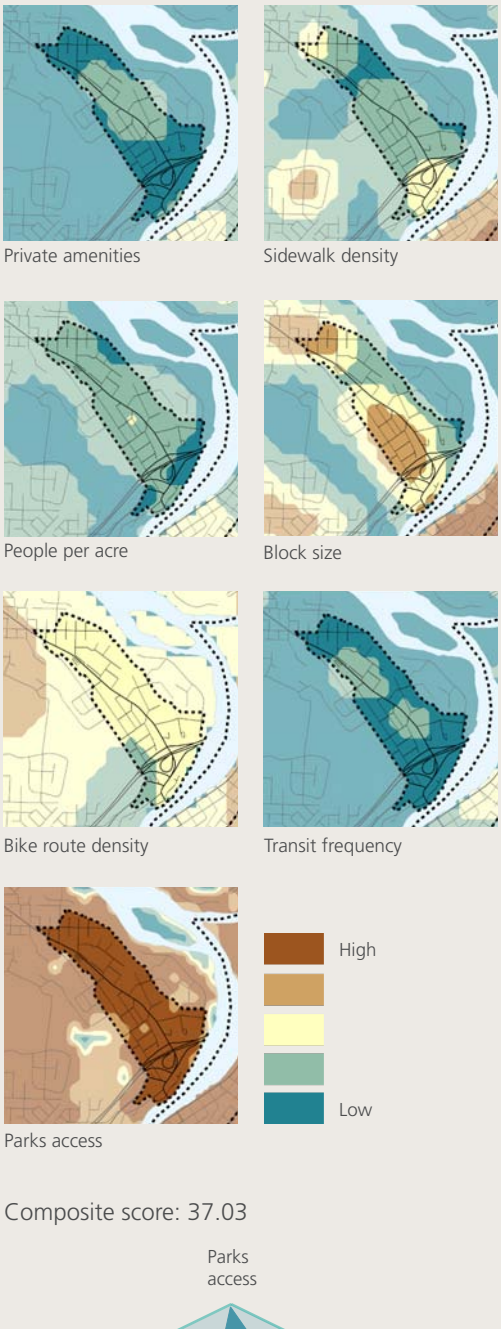


2010 Household income

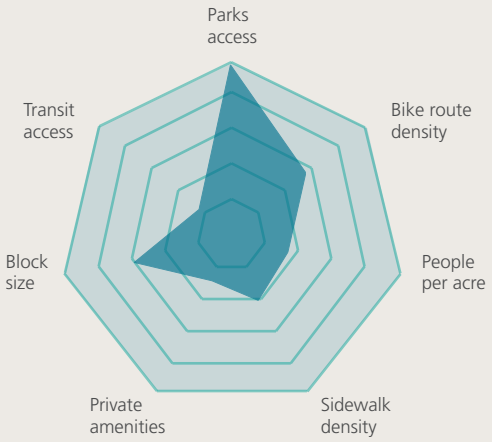


Metro context tool results

Heat maps



Composite score: 37.03



West Portland Town Center



Private amenities

0	Bakery
1	Bar
0	Bike shop
2	Bookstore
0	Brewpub
3	Child care
0	Cinema
0	Clothing store
1	Coffee shop
0	Department store
1	Dry cleaners
1	Fitness gym
2	Grocery store
0	Music store
12	Restaurant
0	Specialty snacks and beverages

Public amenities

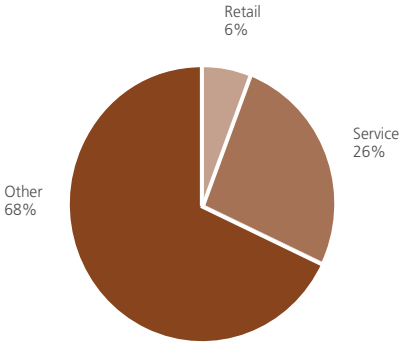
0	Community center
0	Fire station
0	Government building
1	Library
2	School

The West Portland Town Center is located at the interchange of Highway 99 West. The majority of service activity in the center revolves around Capital Highway and businesses located along Barbur Boulevard. The center is bisected by two ODOT facilities: Interstate 5 and Highway 99 West. The area is serviced by multiple bus lines, with one frequent service line along Barbur Boulevard. It has 2,880 residents, 3,820 employees and 1,489 dwelling units. West Portland Town Center contains 339 gross acres.

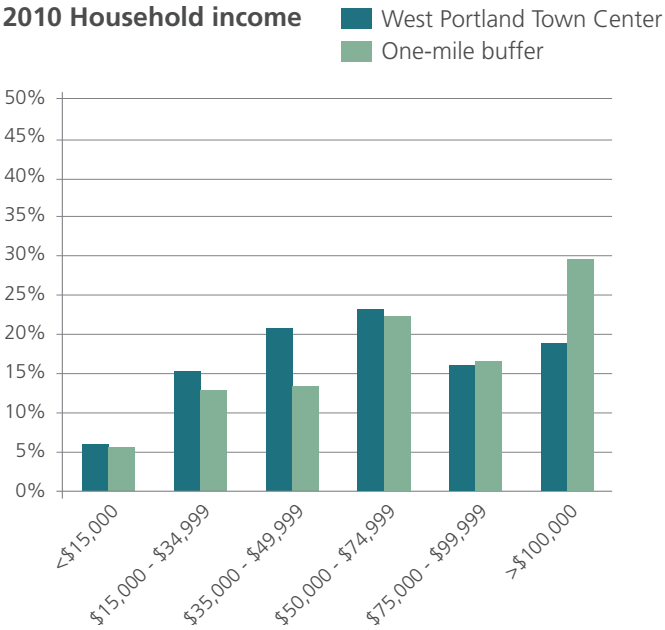
By the numbers	West Portland Town Center	Town center average	One-mile buffer
Net acreage	228	222	3,599
Total population	2,880	2,326	31,327
Total employees	3,820	1,745	8,546
Non-SOV mode share (all trips)	47%	52%	n/a
Market value per square foot	$39	$39	$32
People per acre	29.4	20.1	11.1
Dwelling units per acre	6.5	5.0	4.0
Total businesses per acre	0.79	0.73	0.18
Home ownership	44.3%	47.4%	63.1%
Median household income	$59,267	$60,133	$69,668
Median household size	2.33	2.42	2.32
Median age	33.1	36.0	39.9



Employment breakdown



2010 Household income



Metro context tool results

Heat maps


Private amenities


Sidewalk density


People per acre


Block size

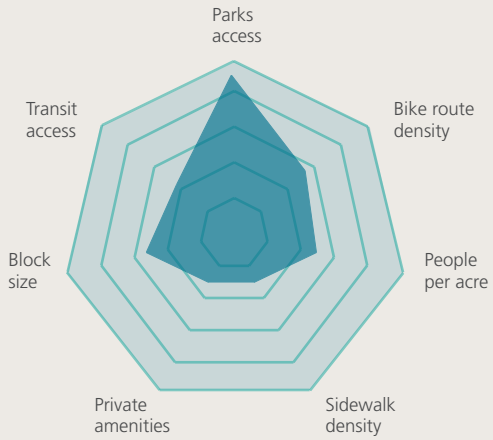

Bike route density


Transit frequency


Parks access



Composite score: 39.56



Wilsonville Town Center



Private amenities

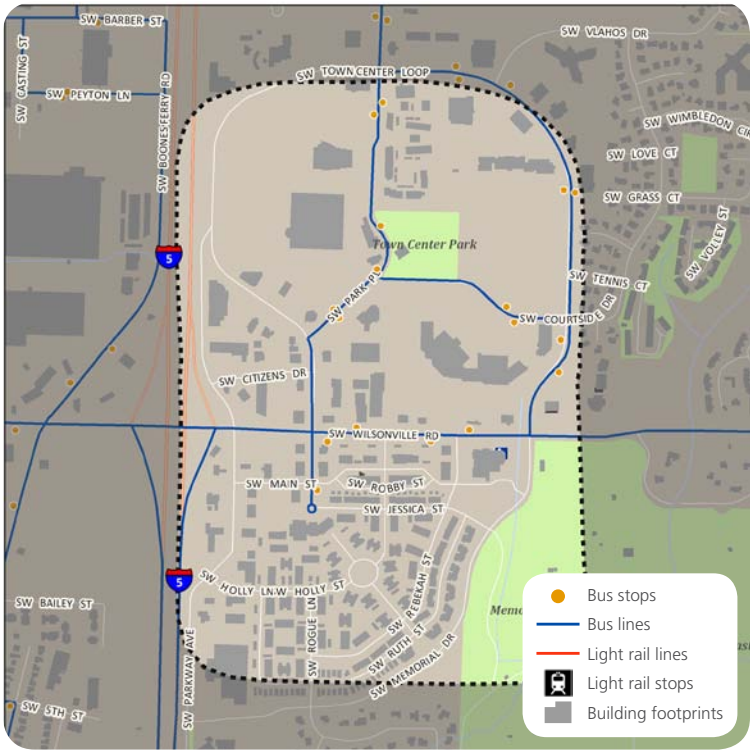
1	Bakery
2	Bar
0	Bike shop
0	Bookstore
0	Brewpub
2	Child care
1	Cinema
1	Clothing store
1	Coffee shop
0	Department store
3	Dry cleaners
3	Fitness gym
4	Grocery store
0	Music store
26	Restaurant
1	Specialty snacks and beverages

Public amenities

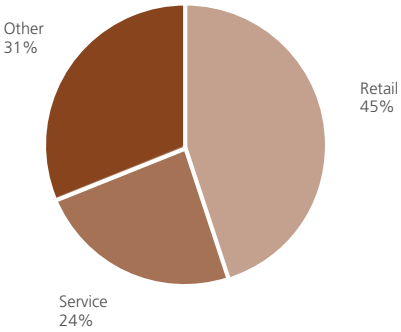
0	Community center
0	Fire station
1	Government building
1	Library
1	School

The Wilsonville Town Center is located east of Interstate 5, in downtown Wilsonville. The center has direct access to I-5, and is also serviced by Wilsonville's own Transit service, SMART, and by bus into the Portland area, a shuttle that runs between Wilsonville and Salem during the week and a Westside Express Service (WES) commuter rail stop located just outside of the center. The center has 1,292 residents, 2,110 employees and 662 dwelling units. Wilsonville Town Center contains 230 gross acres.

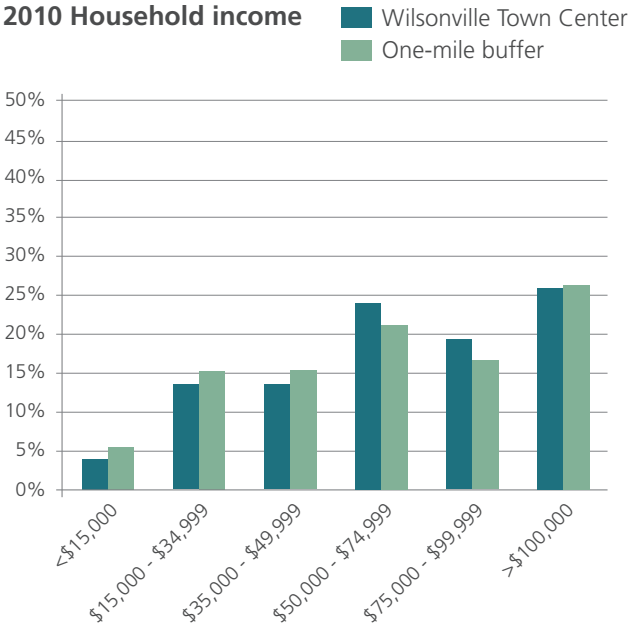
By the numbers	Wilsonville Town Center	Town center average	One-mile buffer
Net acreage	191	222	3,067
Total population	1,292	2,326	13,497
Total employees	2,107	1,745	7,256
Non-SOV mode share (all trips)	55%	52%	n/a
Market value per square foot	$26	$39	$16
People per acre	17.8	20.1	6.8
Dwelling units per acre	3.5	5.0	2.0
Total businesses per acre	0.66	0.73	0.10
Home ownership	29.6%	47.4%	47.5%
Median household income	$68,887	$60,133	$65,990
Median household size	2.02	2.42	2.31
Median age	29.7	36.0	35.8



Employment breakdown



2010 Household income



Metro context tool results

Heat maps



Private amenities



Sidewalk density



People per acre



Block size



Bike route density



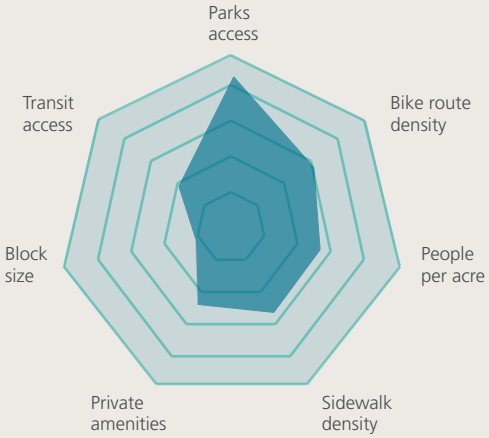
Transit frequency



Parks access

High
Low

Composite score: 36.20



Acknowledgments
This report was developed through a collaborative effort between Metro planning, research and communications teams to help communities realize their aspirations to become vibrant, prosperous and livable centers. Special thanks to all those invested in developing successful centers who provided feedback on the 2009 State of the Centers report.

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Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to providing services, operating venues and making decisions about how the region grows. Metro works with communities to support a resilient economy, keep nature close by and respond to a changing climate. Together, we're making a great place, now and for generations to come.

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SOC II Errata Sheet

Regional Centers at a Glance

Page	Line	Center	Reads	Should Read
29	Total Employment	Beaverton	1,398	5,290
		Clackamas	2,261	12,059
		Gateway	3,536	7,447
		Gresham	1,936	6,902
		Hillsboro	666	6,122
		Oregon City	172	3,380
		Tanasbourne	1,616	6,084
		Washington Square	1,083	12,742
29	People per Acre	Beaverton	11.2	23.1
		Clackamas	15	34.6
		Gateway	18.8	24.9
		Gresham	12	21
		Hillsboro	14.1	39.9
		Oregon City	0.9	7.2
		Tanasbourne	8.6	15.9
		Washington Square	4.5	19.2

By the Numbers

Page	Line	Measure	Reads	Should Read
30	Beaverton Regional Center	Total Employees	1,398	5,290
		People per Acre	11.2	23.1
	Regional Center Average	People per Acre	10.6	23.2
32	Clackamas Regional Center	Total Employees	2,261	12,059
		People per Acre	15	34.6
	Regional Center Average	People per Acre	10.6	23.2
34	Gateway Regional Center	Total Employees	3,536	7,447
		People per Acre	18.8	24.9
	Regional Center Average	People per Acre	10.6	23.2
36	Gresham Regional Center	Total Employees	1,936	6,902
		People per Acre	12	21
	Regional Center Average	People per Acre	10.6	23.2
38	Hillsboro Regional Center	Total Employees	666	6,122
		People per Acre	14.1	39.9
	Regional Center Average	People per Acre	10.6	23.2
40	Oregon City Regional Center	Total Employees	172	3,380
		People per Acre	0.9	7.2
	Regional Center Average	People per Acre	10.6	23.2
42	Tanasbourne Regional Center	Total Employees	1,616	6,084
		People per Acre	8.6	15.9
	Regional Center Average	People per Acre	10.6	23.2
44	Washington Square Regional Center	Total Employees	1,083	12,742
		People per Acre	4.5	19.2
	Regional Center Average	People per Acre	10.6	23.2

Metro State of the Centers II-Errata Sheet and Corrections
Memo from Brian Harper. October 21, 2011