A G E N D A

600 NORTHEAST GRAND AVENUE PORTLAND, OREGON 97232-2736

METRO

TEL 503-797-1540 FAX 503-797-1793

MEETING: **METRO POLICY ADVISORY COMMITTEE**
DATE: September 10, 2008
DAY: Wednesday, 5:00-7:00 p.m.
PLACE: Metro Council Chamber/Annex

NO	AGENDA ITEM	PRESENTER	ACTION	TIME
	CALL TO ORDER	Norris		
1	SELF INTRODUCTIONS & COMMUNICATIONS	All		5 min.
2	CITIZEN COMMUNICATIONS FOR NON-AGENDA ITEMS			2 min.
3	CONSENT AGENDA • August 13, 2008 minutes		Action	3 min.
4	COUNCIL UPDATE	Metro Councilor	Update	5 min.
5	COMPARATIVE INFRASTRUCTURE COSTS	Wilkinson	Presentation Discussion	15 min. 30 min.
6	PERIODIC REVIEW ISSUES • Introduction • City of Forest Grove • City of Portland	 Deffebach Kidd Kelley	Discussion	60 min.

UPCOMING MEETINGS:

MPAC: Wednesday, September 24, 2008, 5-7 p.m.
MPAC Coordinating Committee: Wednesday, October 8, 2008, **12-1 p.m.**, Room **274**
Regional Forum - Joint meeting with MPAC, JPACT, the Metro Council and stakeholders:
Wednesday, October 8, 2008, 4-7 p.m., Oregon Convention Center
See page 2 for MPAC tentative agendas for upcoming months.

Metro website: www.oregonmetro.gov
Direct link to MPAC webpage: www.oregonmetro.gov/mpac

For agenda and schedule information, call Linnea Nelson at 503-797-1886. e-mail: linnea.nelson@oregonmetro.gov
MPAC normally meets the second and fourth Wednesday of the month.
To receive assistance per the Americans with Disabilities Act,
call the number above, or Metro teletype 503-797-1804.
To check on closure or cancellations during inclement weather, please call 503-797-1700.

600 NORTHEAST GRAND AVENUE PORTLAND, OREGON 97232-2736

METRO

2008-2009 MPAC Tentative Agendas
as of August 29, 2008

All meetings are on Wednesdays, in the Metro Council Chamber, 600 NE Grand Ave., Portland, unless otherwise noted. For current agendas and materials, visit www.oregonmetro.gov/mpac.

September 10, 5-7 p.m. • Infrastructure Cost Comparison • Periodic Review Issues (Forest Grove and Portland)	**September 24, 5-7 p.m.** • 20-year Forecast Review • Employment and Economic Trends
October 8, *4-7 p.m., Oregon Convention Ctr.* – Regional Forum: Joint Meeting with JPACT, the Metro Council and stakeholders (Preparation for October and November meetings on scenarios findings and policy implications)	**October 22, 5-7 p.m. – Joint Meeting with JPACT and the Metro Council** • Land Use Choices – land use scenarios findings and policy implications (Discussion)
November 12, 5-7 p.m. – Joint Meeting with JPACT and the Metro Council • Transportation Choices -- transportation scenarios findings and policy implications (Discussion)	**November 19 (and 26) -- *Canceled***
December 10, ***4-7 p.m.*** **– Joint Meeting with JPACT and the Metro Council** • Framing all of the choices – scenarios policy implications and choices (Discussion) • Nomination of MPAC Officers for 2009	**December 17 *(NOTE: Change of date)*** • Principles for Guiding RTP System Development (Discussion)
January 14, 2009, 5-7 p.m. • Principles for Guiding RTP System Development (Action) • Election of 2009 MPAC Officers	**January 28, 2009, 5-7 p.m.**

Metro Policy Advisory Committee

Septebmer 10, 2008
Item 3 – Consent Agenda Meeting Summary for August 13, 2008

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1916 | FAX 503 797 1930

METRO

METRO POLICY ADVISORY COMMITTEE
MINUTES
August 13, 2008
5:00 – 7:00 p.m.
Metro Regional Center, Council Chambers

MEMBERS PRESENT	AFFILIATION
Bob Austin	Mayor, City of Estacada, representing City of Clack. Co. outside UGB
Nathalie Darcy	Citizen, Washington County
Rob Drake	Mayor, City of Beaverton, representing Washington Co. 2nd Largest City
Nick Fish	Commissioner, City of Portland
Richard Kidd	Mayor, City of Forest Grove, representing Washington Co. Other Cities
Charlotte Lehan	Mayor, City of Wilsonville, representing Clackamas Co. Other Cities
Alice Norris	Mayor, City of Oregon City, representing Clack. Co. 2nd Largest City
Wilda Parks	North Clack. Chamber of Commerce, representing Clack. Co. Citizen
Michelle Poyourow	Bicycle Transportation Alliance, representing Multnomah Co. Citizen
Sandra Ramaker	Rockwood Water PUD, representing Multnomah Co. Special Districts
Martha Schrader	Commissioner, Clackamas County
Richard Whitman	Oregon Department of Land Conservation and Development/Land Conservation and Development Commission

MEMBERS EXCUSED	AFFILIATION
Ken Allen	Oregon AFSCME Council 75, representing Port of Portland
Shane Bemis	Mayor, City of Gresham, representing Multnomah Co. 2nd Largest City
Richard Burke	Tualatin Valley Water District, representing Wash. Co. Special Districts
Pat Campbell	Councilor, City of Vancouver, Washington
Jeff Cogen	Commissioner, Multnomah County
Andy Duyck	Commissioner, Washington County
Dave Fuller	Mayor, City of Wood Village, representing Multnomah Co. Other Cities
Judie Hammerstad	Mayor, City of Lake Oswego, representing Clackamas Co. Largest City
Tom Hughes	Mayor, City of Hillsboro, representing Washington County Largest City
Tom Potter	Mayor, City of Portland
Paul Savas	Oak Lodge Sanitary District, representing Clack. Co. Special Districts
Steve Stuart	Commissioner, Clark County, Washington
Rick Van Beveren	Reedville Center, LLC, representing TriMet Board of Directors
Vacant	Governing Body of School District
Vacant	City in Washington County outside UGB

ALTERNATES PRESENT	AFFILIATION
Craig Dirksen	Mayor, City of Tigard, representing Washington Co, Other Cities
Clark Balfour	Tualatin Valley Water District, representing Wash. Co. Special Districts
Donna Jordan	Councilor, City of Lake Oswego, representing Clack. Co. Largest City
Norm King	Mayor, City of West Linn, representing Clackamas Co. Other Cities
Donald McCarthy	Rockwood Water PUD, representing Multnomah Co. Special Districts
Shirley Craddick	Councilor, City of Gresham, representing Mult. Co. 2nd Largest City

METRO LIASONS PRESENT
Carl Hosticka Metro Councilor, District 3

OTHER METRO COUNCILORS PRESENT
Council President David Bragdon and Kathryn Harrington, Metro Councilor, District 4.

METRO STAFF PRESENT
Miranda Bateschell, Dick Benner, Andy Cotugno, Chris Deffebach, Kim Ellis, Matt Korot, Janet Matthews, Robin McArthur, Sherry Oeser, Ken Ray, Scott Robinson, Andy Shaw, Randy Tucker and Malu Wilkinson.

1. SELF-INTRODUCTIONS AND COMMUNICATIONS

Chair Alice Norris, called the meeting to order at 5:06 p.m. Chair Norris asked those present to introduce themselves. Sandra Ramaker, representative for Special Districts, Multnomah County, announced that this is her last MPAC meeting, and Donald McCarthy, the alternate, will be stepping in.

Chair Norris reviewed the MPAC tentative agenda schedule for the remainder of 2008, and emphasized the importance of the regional choices upcoming decisions. Richard Kidd, Mayor of Forest Grove, suggested inviting candidates for election to the fall MPAC meetings.

2. CITIZEN COMMUNICATIONS FOR NON-AGENDA ITEMS

There was none.

3. CONSENT AGENDA

The meeting summary for July 9, 2008:

MOTION: Wilda Parks, representing citizens in Clackamas County, with a second from Richard Kidd, Mayor of Forest Grove, moved to adopt the consent agenda without revisions.

ACTION TAKEN: The motion passed unanimously.

4. COUNCIL UPDATE

Metro Councilor Carl Hosticka gave an update on the High Capacity Transit open houses. On Sept. 12, 2008, at 4 p.m. a celebration will be held to celebrate the acquisition of 57 acres on the edge of Forest Park. The location will be posted later on the Metro website at www.oregonmetro.gov.

A copy of Councilor Hosticka's complete talking points will be included in the permanent record.

5. REGIONAL CHOICES ENGAGEMENT ARCHITECTURE

Robin McArthur, Metro Regional Planning Director, and Chris Deffebach, Metro Long Range Planning Manager, presented the Regional Choices Engagement Architecture (2008-2011) work plan and flow chart. Ms. McArthur focused on the decisions in Phase 3, July to December 2009. Many key decisions have to be made by the end of December 2009. The first phase, July to December 2008, is about framing

choices. The first six months of 2009 will take what is learned in 2008 to look at the pros and cons and develop a preferred alternative January to June 2009. Many entities are part of those decisions. The Metro Council is just part of the decisions. Local counties and cities have decisions to make as well.

Chris Deffebach, Metro Long Range Planning Manager, reviewed some items from the large chart in more detail. She reviewed the process to frame, refine and make regional growth management choices. A copy of her handout will be included in the permanent record. She reviewed the three phases and the local aspirations, scenarios, and demand and capacity analysis for each. The fall meetings will be used to review the broad view scenarios of "what if" certain choices are made and the resulting outcomes. By the end of 2009, the Metro Council is required by the state to adopt an analysis of the 20-year demand and capacity.

Donna Jordan, City of Lake Oswego Councilor, talked about local communities' involvement in this process and the alignment of updating local comprehensive plans.

Chair Norris asked representatives who represent cities if they felt prepared to give input to the Metro Council regarding their local aspirations.

Rob Drake, Mayor of Beaverton, explained about the City of Beaverton's completed visioning process that involved more than 1000 people and several languages. He noted that this is a rolling process, but works even though it seems information moves slowly.

Richard Kidd, Mayor of Forest Grove, commented on the City of Forest Grove's Vision Statement, and the clarity that provides.

Nathalie Darcy, representing citizens in Washington County, commented on the notion of visioning, and how it is a very different process in an urban unincorporated area. Comprehensive planning hasn't happened since the 1970s. She is not confident that visioning is going to occur to the degree that it is needed.

Charlotte Lehan, Mayor of Wilsonville, talked about a major roundtable event the City of Wilsonville held, with state and local partners. Local planning commissions are often not involved in regional issues, and the roundtable provided an opportunity for that.

Martha Schrader, Clackamas County Commissioner, talked about local aspirations and opportunities for involvement and feedback for clarity.

Bob Austin, Mayor of Estacada, talked about activities in his city. He feels their process will mesh readily with the Urban and Rural Reserves and other processes.

Craig Direksen, Mayor of Tigard, talked about Tigard's completed visioning process and updates to it. He also talked about a joint agreement between Tigard and Lake Oswego for water. He noted that comprehensive planning has become much more judicially driven over time. He cautioned about making sure it is also an aspirational document.

6. REGIONAL INFRASTRUCTURE ANALYSIS REPORT

Malu Wilkinson, Metro Associate Regional Planner, and Alice Rouyer, Executive Manager of the City of Gresham and member of the Infrastructure Advisory Committee, invited MPAC members to talk about

what is next with infrastructure work. A copy of their presentation will be included with the permanent record.

The infrastructure analysis was started in 2007. We are facing many challenges with infrastructure, and we cannot keep doing the same thing. We need to think more strategically to address needs for the future. They looked at a broad range of types of infrastructure. She emphasized that we have choices in where and how we put public dollars and the type of development that impacts infrastructure.

Ms. Rouyer commented on the analysis' findings and said she looks forward to MPAC's leadership on the topic.

Rob Drake, Mayor of Beaverton, asked about whether transportation is the most difficult type of infrastructure to provide. Ms. Wilkinson confirmed that it is the biggest by far.

Charlotte Lehan, Mayor of Wilsonville, felt that water is the larger challenge, a challenge that will "stop you." She noted that the discussion was not addressing limits of not providing a certain type of infrastructure. She reflected on the City of Wilsonville's three-year moratorium until the water issue had been resolved.

She felt that public awareness alone will not bring about public support. Some are opposed to growth, and stopping infrastructure investments is a way to stop growth. She asked if the committee had looked at limits and concurrency. Concurrency has pros and cons. We need to look at what the obstacles are.

Donna Jordan, City of Lake Oswego Councilor, talked about schools and their importance to the community. She feels we need to bring the school boards to the table to talk about how we maximize strategies together to build central communities.

Shirley Craddick, City of Gresham Councilor, spoke to the "elephant in the room" – Metro's charge to expand the urban growth boundary. She asked if we really need to continue to expand the UGB.

Carl Hosticka, Metro Councilor, clarified that Metro is not required to expand the UGB, but rather to provide land for future growth, which can be within the existing UGB.

Ms. Wilkinson explained that this is a piece of what will be addressed throughout the fall. If it is going to be a regional strategy, it will need regional leadership.

Robin McArthur, Metro Regional Planning Director, said we are on the eve of going to the Oregon Legislature in 2009, and commented on the need for more discussion on action.

Craig Dirksen, Mayor of Tigard, said he feels it is such a big issue that we need to engage the federal government.

Members discussed the possibility of pursuing a regional legislative agenda on infrastructure.

Bob Austin, Mayor of the City of Estacada, commented on the governor's package that is in process on transportation.

Randy Tucker, Metro's Legislative Affairs Manager, talked about regional endorsements for revenues and ways revenues are raised for $400-500 million per biennium for roads and new investment for transit. The

governor's committees have tentatively suggested a new institutional commitment to transit funding, with 80 percent for roads and 20 percent for transit. There are constitutional restrictions though. The region agreed the Columbia River Crossing bridge project would be funded out of state and federal and not from regional funds. There will be no pre-emption of local jurisdictions to raise their own revenues, because they will not all be addressed by the state and federal government.

Martha Schrader, Clackamas County Commissioner, said she also believes that water will be the main limiting factor.

Richard Whitman, Department of Land Conservation and Development, said he also feels water is one of the main limits to growth for the future. He also suggested looking at new funding sources for transit that would not necessarily require a constitutional amendment.

7. DESIGN AND DEVELOPMENT CODE TOOLKIT

Miranda Bateschell, Metro Associate Regional Planner, introduced the Innovative Design and Development Codes Toolkit, Volume 2. A copy of her presentation will be included with the permanent record. The toolkit addresses three main areas: 1.) Making transitions from suburban development patterns to a higher density, more urban, pedestrian-oriented character; 2.) Improving the relationship between buildings and zones of different scale through creative design approaches that also maintain support for compact development in centers and corridors; and 3.) Providing parking in areas targeted for compact development to achieve desired levels of density and urban forms.

Donna Jordan, City of Lake Oswego Councilor, talked about finding the right mix of pedestrian and private space. She talked about a parking structure with retail on the outside and an adjacent park, Millennium Park, created in her city. She noted that it cannot happen just based on the development code, but must involve many partners, with flexibility, for the right timing.

Ms. Bateschell noted the Hollywood development example. Commissioner Fish commented on the successful project as well.

Ms. Bateschell also noted the City of Seattle's menu-based point system as an example of code flexibility.

She talked about transition zones, where centers and corridors meet single-dwelling neighborhoods, and zones that have been successful.

Rob Drake, Mayor of Beaverton, asked how much is spurred by public investment as an inducement to create transition zones.

Nick Fish, City of Portland Commissioner, talked about financing for large projects, including tax abatements. It is not necessarily direct subsidy, but forgone tax revenue.

Ms. Bateschell discussed managing parking to maximize urban form. She called attention to unbundling parking, and the benefits of that. This has been done in a Buckman Heights project in Portland.

New technical tools are available for visualizing zoning. The visualize process enables communities to see what specific code changes are needed and what obstacles need to be removed to achieve the type of community development they desire.

Ms. Bateschell distributed a feedback card and asked members to complete them to help develop a technical assistance program.

There being no further business, Mayor Norris adjourned the meeting at 6:50 p.m.

Respectfully submitted,

Linnea Nelson

Linnea Nelson
Executive Coordinator
Office of the Chief Operating Officer

ATTACHMENTS TO THE RECORD FOR AUGUST 13, 2008

The following have been included as part of the official public record:

AGENDA ITEM	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT NO.
#4 Council Update	8-12-08	Speaking points from Carl Hosticka, Metro Councilor	081308-MPAC-01
#5 Regional Choices Engagement Architecture	7-30-08	Work plan chart from Chris Deffebach: Process to frame, refine and make regional growth management choices, Local aspirations, scenarios and capacity analysis	081308-MPAC-02
#6 Regional Infrastructure Analysis Report	8-13-08	Slides from Powerpoint presentation by Malu Wilkinson: Making the Greatest Place, Regional Infrastructure and Public Investment Analysis	081308-MPAC-03
#7 Design and Development Code Toolkit	8-13-08	Slides from Powerpoint presentation by Miranda Bateschell: Community Investment Tools, Innovative Design and Development Codes	081308-MPAC-04

Metro Policy Advisory Committee

Septebmer 10, 2008
Item 5 – Infrastrucuture Cost Comparison

MPAC Worksheet

Agenda Item Title (include ordinance or resolution number and title if applicable): Comparative Infrastructure Cost Analysis

Presenter: Malu Wilkinson/Todd Chase/Andy Shaw

Contact for this worksheet/presentation: Malu Wilkinson

Council Liaison Sponsor:

Purpose of this item (check no more than 2):

Information __X___
Update _____
Discussion ___X__
Action _____

MPAC Target Meeting Date: ____September 10, 2008_____

Amount of time needed for:
Presentation _15____
Discussion _30___

Purpose/Objective (what do you expect to accomplish by having the item on *this meeting's* agenda):
(e.g. to discuss policy issues identified to date and provide direction to staff on these issues)
The region's leaders will be making a variety of decisions over the next few years that will have a dramatic impact on the look and feel of the region for many years to come. An understanding of the factors that contribute to variations in infrastructure costs will help inform decision makers. This fall there will be a series of events that help to frame the choices and set the context for making local and regional decisions about public investments and growth. This discussion of the *Comparative Infrastructure Costs: Local Case Study Analysis* is a building block for framing the choices.

Action Requested/Outcome (What action do you want MPAC to take at *this meeting?* State the ***policy*** questions that need to be answered.)
Staff is looking for MPAC to help in determining the best way to present and use the information in upcoming forums and to inform local and regional decisions about investments and policies.

Background and context:
The Regional Infrastructure Analysis was presented to MPAC in August, at that time staff promised to return to present the results of the comparative infrastructure cost analysis. The goal of the comparative cost analysis is to provide a sense of what contributes to the cost of infrastructure in different locations and to begin to identify some of the public costs of investing in different ways.

MTAC had a lively discussion on September 3, 2008 on the analysis. MTAC members felt the information was critical to many of the important decisions that are to be made over the next few years. However, they also felt it important to better clarify what the analysis includes, describe key issues that were not addressed, and identify areas where the analysis could be bolstered with further work. MTAC felt the work is a good starting point, but could be refined with case studies on infill and more employment areas.

What has changed since MPAC last considered this issue/item?
Staff and consultants have completed work on this piece of the Regional Infrastructure Analysis.

What packet material do you plan to include? (must be provided 8-days prior to the actual meeting for distribution)
Discussion draft of "Comparative Infrastructure Costs: Local Case Studies"

What is the schedule for future consideration of item (include MTAC, TPAC, JPACT and Council as appropriate):
The Metro Council, MTAC and TPAC have already discussed the findings of this analysis. JPACT will discuss the analysis on September 11, 2008.

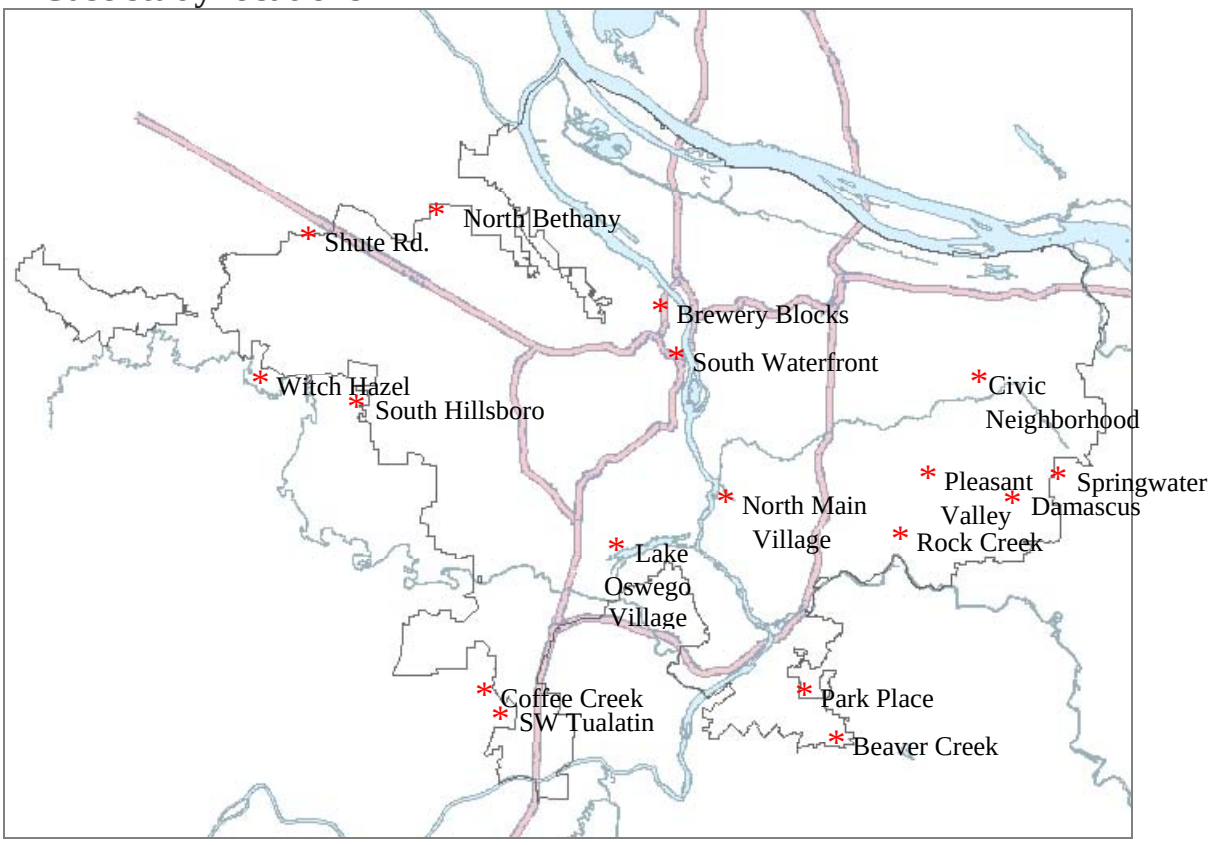
Comparative infrastructure costs: local case studies

Regional Infrastructure Analysis
Discussion draft

Purpose

In the coming years, the region will grapple with questions of where and how to grow. These decisions will have implications for the long-term costs, both environmental and financial, that will be borne by current and future residents. An understanding of the factors that contribute to variations in infrastructure costs will be essential in making these decisions. To assist in these decisions, this paper focuses on the financial costs associated with providing infrastructure. In particular, this paper places 17 local case study areas in the context of the national literature on the relationship between development patterns and infrastructure costs. These 17 case studies from throughout the Metro region include 12 areas that are newly urbanizing and 5 case studies that are in established urban areas.

Case study locations



Urbanizing areas

Recent urban growth boundary expansion areas (costs are preliminary and are taken from concept plans)

- Shute Road
- Rock Creek
- Witch Hazel
- Coffee Creek I
- South Hillsboro
- Beavercreek
- SW Tualatin
- Pleasant Valley
- North Bethany
- Springwater
- Damascus
- Park Place

Urban Areas:

Recent redevelopment projects in existing urban areas (projects are completed; costs are final)

- North Main Village
- Gresham Civic Neighborhood
- South Waterfront
- Brewery Blocks
- Lake Oswego Village Center

The focus of this work is on the following categories of infrastructure:

- Civic buildings, parking structures, public plazas
- Energy
- Parks
- Sanitary Sewers
- Schools
- Stormwater
- Transportation
- Water

Infrastructure facilities were also broken into two main categories:

- Local / community infrastructure – facilities that are most directly tied to a particular development (e.g. on-site sewer lines)

- Regional infrastructure – facilities that are cumulatively necessary for the region (e.g. highways or light rail)

Primary findings:

- The case studies summarized herein substantiate the body of national planning literature that posits that, on average, lower-density, single-family development patterns on the urban fringe are typically costlier to serve than are mixed use developments in central locations.

- On average, it is less expensive to provide services and facilities for new jobs and people in existing urban areas because such developments are, up to a point, able to utilize existing facilities.
    - The weighted average local/community infrastructure cost for the urban case studies is $51,000 per EDU, or $31,000 if the South Waterfront case study area is excluded.
    - The weighted average local/community infrastructure cost in newly urbanizing locations is $75,000 per EDU, or $72,000 if the S.W. Tualatin case study area is excluded.[1]
    - Residents of the urban case study areas are forecasted to have substantially shorter commutes than the residents of newly urbanizing case study areas (in the year 2035). Longer commute distances translate into higher regional infrastructure costs that will be shared by all.

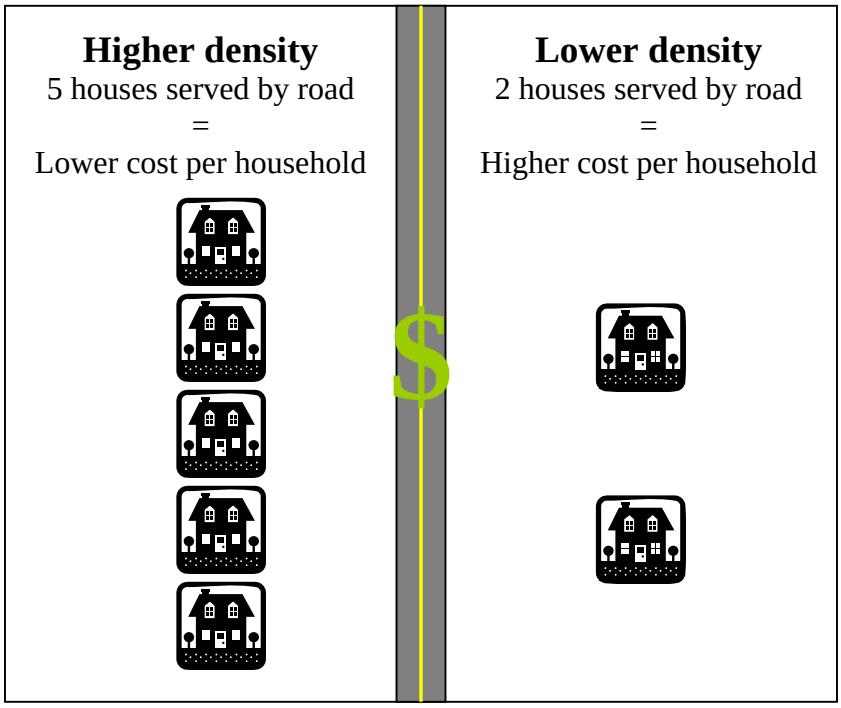
- There is a great deal of variation in local/community infrastructure costs. Factors such as amenity level, level of service, topography, and distance to existing facilities (e.g. existing sewer mains) may help explain the variation.

- Transportation infrastructure is the most substantial investment needed to accommodate growth in urbanizing areas. In urbanizing areas, developments on relatively flat land that are close to existing transportation facilities have the greatest return on investment.

[1] It should be noted that local/community infrastructure costs might approach zero for certain small-scale infill development projects that are located in areas that have available infrastructure capacity because of previous investments.

The literature on comparative infrastructure costs

A number of past studies have described the relationship between development patterns and infrastructure costs. Generally, these studies assert that the primary urban form characteristics that contribute to cost differences are density and distance from existing urban areas.



The influence of development density on infrastructure costs is fairly intuitive – larger lots require more lineal feet of pipes and pavement per household. These increased lengths translate into higher costs.

Even those costs that are initially born by the developer are eventually passed on to the general public. Upon completion, these facilities are dedicated to the public. Subsequent maintenance and replacement will typically be paid for by all tax and utility rate payers (at the higher cost that was caused by the longer lengths of pipes and pavement). Thus, all existing taxpayers have a financial interest in how new areas are developed.

However, density is not the end of the story. Collectively, longer commute distances translate into a need for more highway, bridge and transit capacity. When compared to their suburban counterparts, residents of central, urban locations have markedly shorter daily travel distances (on average, about 1/3 shorter). Ultimately, strategies that focus growth population and job growth in centers and corridors that are well connected by multiple transportation modes are the surest means of reducing commute distances and public costs (both financial and environmental).

Local case studies – methods

- Some of these case study areas include employment uses while others include residential uses. Since employees and households place different demands on infrastructure, the analysis uses a standardized measurement called an equivalent dwelling unit (EDU).

An EDU is a standard unit of measurement for infrastructure demand:

= One household (2.5 residents)

Has about the same infrastructure demand as:

= Five jobs

- Costs for the urbanizing areas were taken from concept plans. These costs are early estimates that will no doubt change as the planning becomes more refined.

- Costs for urban case studies were provided by the responsible redevelopment agencies and are for completed projects.

- The case study costs are from a span of several years. In order to provide a more fair comparison, costs for all case studies were escalated to first quarter 2008 dollars.

- Costs are broken down into two categories: local/community and regional.

    - Local/community costs are those that are most directly necessitated by a particular development and are paid for by the public (rather than the developer). Arterial roads are an example. Local/community costs are typically included in concept plans.

    - Regional costs are for facilities of regional importance such as highways, high-capacity transit, and air/water terminals. Regional costs were calculated as a function of forecasted commute distance. These distances were forecasted using MetroScope, a regional land use scenario model, and secondary construction cost data.

- Costs that were included in concept plans, but that appeared to be regional costs (e.g. state highway improvements), were deducted from local/community costs.

- Metro's consultant team, which includes FCS Group and Cogan Owens Cogan, assisted in data analysis. All local jurisdictions for which a case study is included herein had the opportunity to review and comment on the case study.

Local / community costs

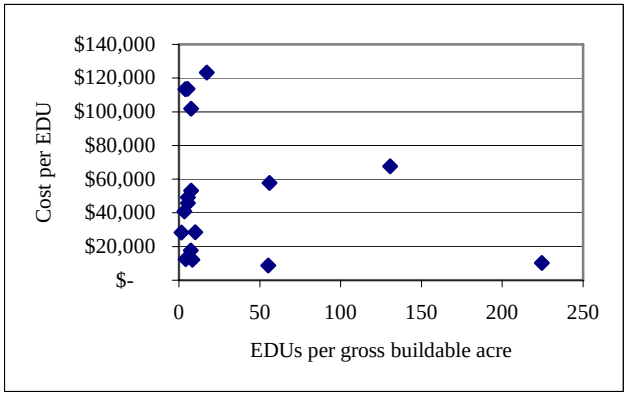
Local/community facilities are those that are most directly necessitated by a particular development that are paid for by the public (rather than the developer). The costs of these facilities are typically well documented and case studies are a useful way to understand them.

The case studies show that newly urbanizing areas typically have substantially higher per-EDU costs than do redevelopment projects in existing urban areas.

Average local/community infrastructure costs per EDU

Urbanizing areas:	$75,000	or	$72,000 (w/out SW Tualatin high-end case study)
Urban areas:	$51,000	or	$31,000 (w/out S. Waterfront high-end case study)

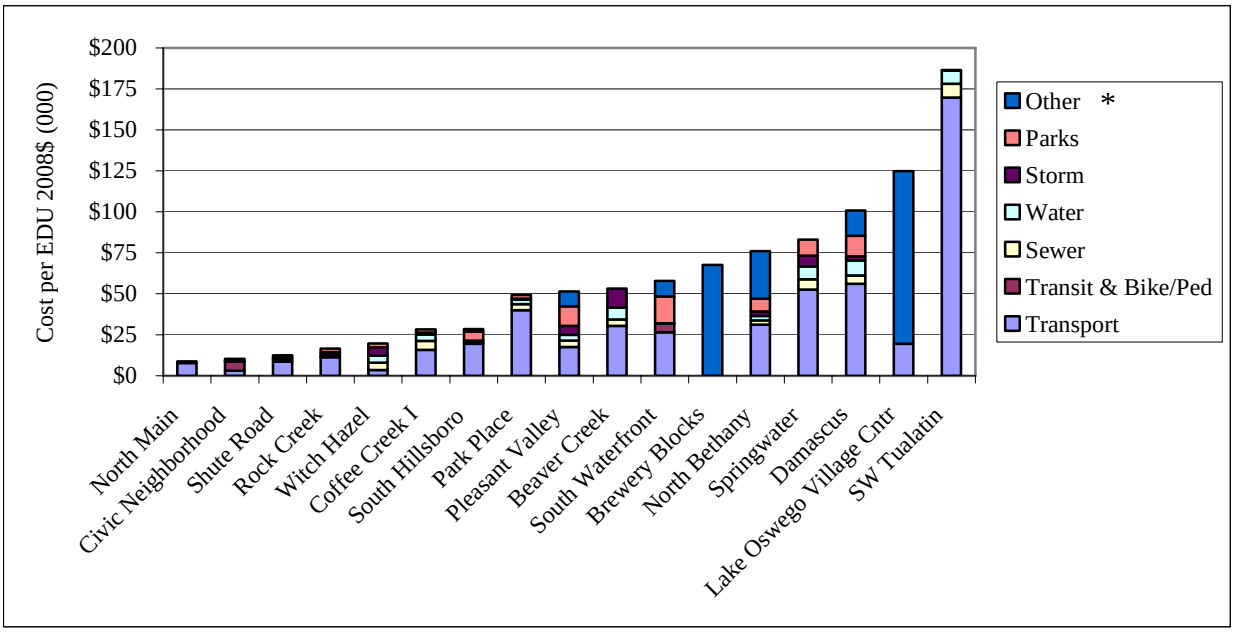
Wide variation local/community costs in lower-density case studies: Despite the clear difference in average costs for the two case study types, a relationship between density and the cost of providing local/community level infrastructure is difficult to discern when the case studies are looked at individually. In particular, this scatter plot shows a tremendous variation in costs for the urbanizing areas with lower densities. Perhaps a clearer relationship would emerge with additional case studies



and more information on the factors that affect costs. A summary of the local/community level costs for each case study is provided in Appendix 1.

Judging from this limited number of studies, there would appear to be additional factors that influence costs per EDU. These factors may include level of service or the provision of amenities such as parks and sidewalks and other facilities such as schools. Such amenities and facilities are often already available in established urban areas, thereby reducing incremental local/community infrastructure costs for redevelopment projects.

Components of local/community infrastructure costs (per EDU)



* "Other" costs may include structured parking, land write-downs, schools, etc

Who pays, and when?

In urbanizing areas, almost all the necessary capital facilities to initiate a project are located within the project area and can be capitalized into the final product, with the cost recovered upon sale of lots or homes. Consequently, the initial infrastructure costs for urbanizing areas are often largely private. The public costs for developing and maintaining urbanizing areas are typically paid later out of a combination of revenue sources or are paid in terms of social costs such as traffic congestion.

Redevelopment projects in urban areas, by contrast, must rebuild existing facilities, the price of which is already capitalized into the land value. This circumstance necessitates that a public

agency provide the capital for the project to commence. The result is that such projects are often criticized on the grounds that there is a large public subsidy. However, when all public facility costs, including regional costs (described below), are added up, urban redevelopments are less expensive per EDU than are developments in urbanizing areas.

Regional infrastructure costs

A second type of infrastructure cost, regional cost, is more difficult to account for with case studies and, for this reason, usually does not get included in concept plans. Regional infrastructure facilities include highways, light rail, bridges, and marine and air terminals. Unlike local and community level facilities, it is difficult to link any particular development with the need for a regional facility. Instead, the need for regional facilities is cumulative in nature and all residents end up paying for them indirectly. Yet, regional costs are substantial and are greatly affected by urban form.

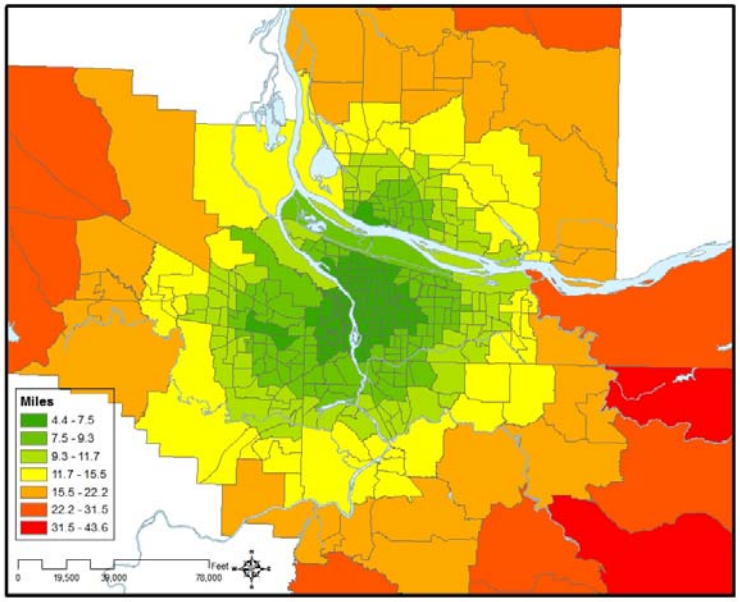
A good proxy for gauging regional infrastructure consumption is household commute distance. In essence, households that have longer commutes consume more regional infrastructure. Jonathan Miller[2], a long-time author of the Urban Land Institute's publication, Emerging Trends in Real Estate, recommends that regions develop the ability to conduct full cost analysis and pricing of infrastructure. Miller's report posits that if the full costs of infrastructure were capitalized into real estate prices, location choices would adjust, favoring central, transit-oriented locations. This phenomenon is likely to be amplified with increases in fuel prices. Considering these full costs will be an important consideration in future growth management decisions and investments in public facilities. Thus, the case studies that follow include regional cost estimates, using commute distance as a proxy.

Using MetroScope, an econometric model that forecasts future household and employer location choices (at the census tract level), average commute distances were forecasted for each census tract in the region (for the year 2035).[3]

[2] Miller, J. (2007). *Infrastructure 2007*. Urban Land Institute. Accessed at http://www.uli.org/AM/Template.cfm?Section=Home&CONTENTFILEID=27598&TEMPLATE=/CM/ContentDisplay.cfm on June 23, 2008.

[3] Because MetroScope cannot predict future policy changes made by cities or actions taken by firms, forecasted commute distances are not a foregone conclusion. Policy changes can serve to shorten or lengthen forecasted commutes. Generally, however, MetroScope scenarios can give reliable estimates of the likely outcomes of a given set of policy choices.

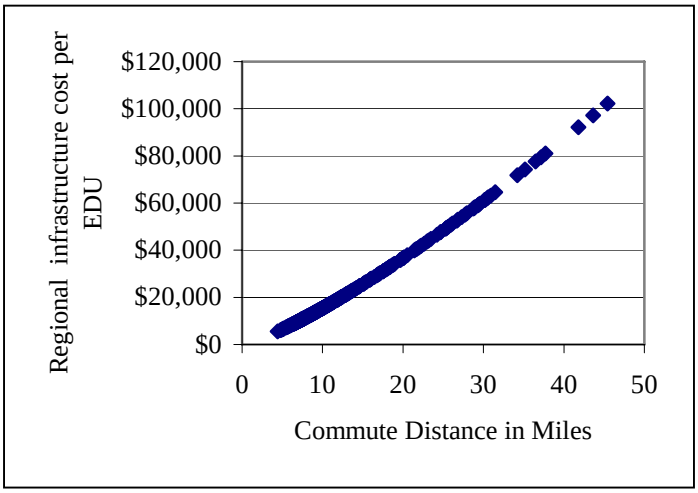
Average commute distance by census tract in 2035



Even in the year 2035, today's existing urbanized areas are likely to be home to most of the region's jobs. Generally, commute distances increase in concentric rings around the region's urban core.

Increased commute distances beget increased regional infrastructure costs:

The above commute distances were used to estimate the average per-household regional infrastructure costs for each census tract. Costs are based on national data sources.



Forecasted (year 2035) commute distances for case study areas range from:

5 miles in urban areas (minimum)

To

17 miles in newly urbanizing areas (maximum)

Compared to

12.32 miles average for the 7-county region

Regional infrastructure costs per EDU for case study areas range from:

$5,000 in urban areas (minimum)

To

$41,000 in newly urbanizing areas (maximum)

Compared to

$30,000 average for the 7-county region

Shorter work commutes save private money too:

5 mile commute:
= 10 miles per day (round trip)
= 2,600 miles per year
÷ 27 miles per gallon
= 96 gallons per year
X $4.00 per gallon
= $384 per year in gasoline

17 mile commute:
= 34 miles per day (round trip)
= 8,840 miles per year
÷ 27 miles per gallon
= 327 gallons per year
X $4.00 per gallon
= $1,308 per year in gasoline

The urban household saves over $900 in gasoline per year

…and that's just the commute!

Opportunities ahead

Focusing infrastructure investments in existing urban areas will be an important means of guiding growth in accordance with the wishes of the region's residents – in existing centers and corridors, rather than on rural land. A 2004 national poll[4] indicates that nearly nine in ten Americans (86%) want their states to fund improvements in existing communities over incentives for new development in the countryside.

[4] Belden Russonello & Stewart. (2004) *2004 National Community Preference Survey: conducted for Smart Growth America and National Association of Realtors®*. Accessed on June 27, 2008 at http://www.smartgrowthamerica.org/documents/NAR-SGASurvey.pdf

The need to prioritize funding is supported by recent changes in housing preferences. In recent years, residents are placing higher values on central locations, shorter commutes and walkable access to urban amenities. Leinberger (2008)[5] notes that, unlike twenty years ago, per square foot, urban residences command a 40 to 200 percent premium over traditional suburban neighborhoods in cities as diverse as New York City, Portland, Seattle, and Washington D.C.

These preference shifts can be attributed, in part, to demographic changes. According to Nelson (2006)[6], the demographic shifts that we have seen over the last 50 years will continue: more households without children and more single-person households, often seniors. These demographic changes point to a responsibility to build for an aging population. To provide for that population, jurisdictions in the region can focus on strengthening existing communities that are pedestrian friendly and well served by transit. Fortunately, these very design characteristics will also be a primary means of minimizing future infrastructure costs.

Finally, the prioritization of public investments in infrastructure in centers and corridors is a critical strategy for reducing the region's energy consumption and its contributions to global warming. Ewing et al (2007)[7] document the connection between urban form and travel behavior and point to studies that have found that residents of compact urban areas with interconnected streets and mixed uses drive about 1/3 less than residents of lower density, residential communities. Investments in infrastructure that supports centers and corridors will be an essential means of creating more housing choices. This strategy is also a primary means to reduce future infrastructure costs.

Limitations

- Concept plans use different methodologies, include or exclude different types of facilities, and have varying levels of detail. These differences make comparisons somewhat difficult and point to a need for standardization.
- The small sample size of case studies included herein places limitations on drawing firm conclusions.
- However, with these caveats, these case studies do point to local trends that echo the literature on the topic of comparative infrastructure costs. Generally, higher-density developments in central locations have lower infrastructure costs (local/community and regional) than do lower-density developments on the urban fringe.

---

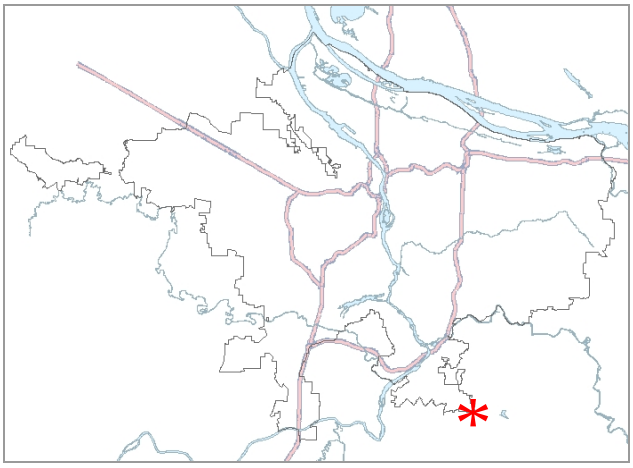
[5] Leinberger, C. (March, 2008) *The next slum?* The Atlantic Monthly. Accessed on June 27, 2008 at http://www.theatlantic.com/doc/200803/subprime

[6] Nelson, A.C. (2006) *Leadership in a new era*. Journal of the American Planning Association. 72(4). 393-407.

[7] Ewing, R., K. Bartholomew, S. Winkelman, J. Walters, D. Chen (2007) *Growing Cooler: the evidence on urban development and climate change*. Urban Land Institute. Accessed on June 27, 2008 at http://www.uli.org/AM/Template.cfm?Section=Home&CONTENTFILEID=32909&TEMPLATE=/CM/ContentDisplay.cfm

Beaver Creek concept area– urbanizing area

Oregon City, OR



Total acres:	453
Gross buildable acres:	292
Net new population:	3,624
Net new jobs:	3,652
Total EDUs:	2,180
Avg. EDUs per gross buildable acre:	7.47
Avg. commute miles in the year 2035:	17.09

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 94,000
Total:	$205,297,000

Proposed Use

The plan envisions a diverse mix of uses (an employment campus north of Loder Road, mixed use districts along Beavercreek Road, and two mixed use neighborhoods). Transit-oriented land uses are planned to increase the feasibility of transit service in the future. The concept area is adjacent to Clackamas Community College, providing workforce-training opportunities for future area residents and employees.

Existing Conditions

Transportation
The site is adjacent to Beavercreek Road and just south of the intersection between Highway 215 and 205. Traffic on Highway 213 is congested during peak rush hours. Beaver Creek road is a major local connector. There is very limited bike and pedestrian infrastructure.

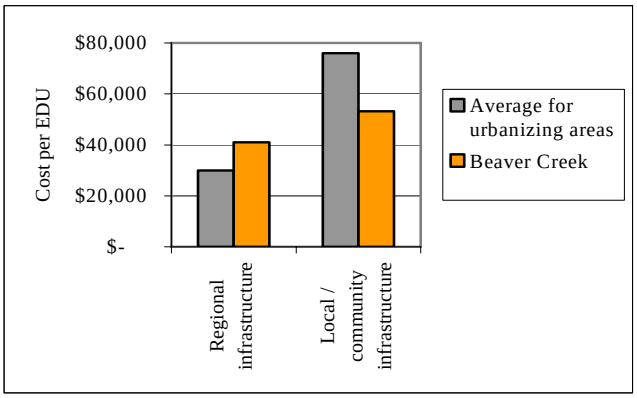
Water
Water is sourced from the Lower Clackamas River. The water system is mostly undeveloped and will need to be expanded to meet any future demand.

Wastewater
Wastewater systems are largely undeveloped. There is a 12-inch sewer trunk that runs the length of Beaver Creek road, which is insufficient for expanded use.

Stormwater
The concept plan area drains into two basins, Abernathy Creek and Caufield Creek, both of which drain into the Willamette River south of downtown Oregon City. Storm water systems are largely undeveloped.

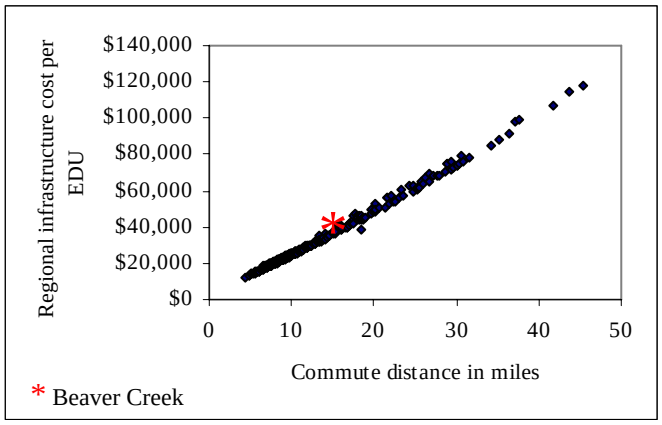
Parks, plazas, public places
There are no existing public parks or open spaces within the plan area.

How do Beaver Creek's infrastructure costs compare to the regional average?



Beaver Creek's regional infrastructure costs (highways, bridges, transit, etc) are significantly higher ($11,000 more per EDU) than average for the 7-county region. Its local/community infrastructure costs are about $22,000 less per EDU than the regional average for urbanizing areas. Improvements to highway 213 are not included in the local/community costs.

What are the factors that influence infrastructure costs in the Beaver Creek area?



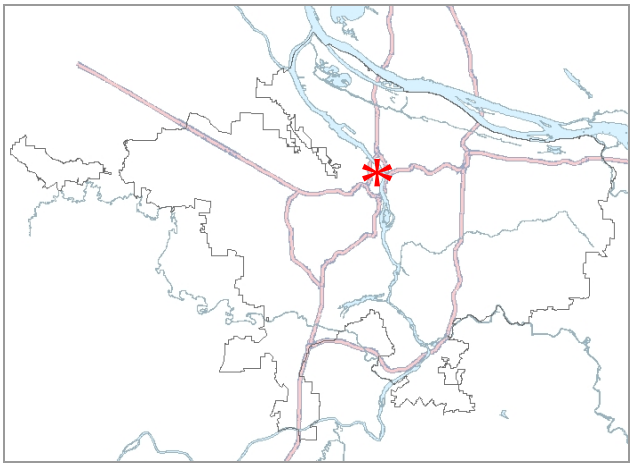
Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that comprises the Beaver Creek area are forecasted to have an average commute distance of 17.09 miles in the year 2035, significantly higher than the 7-county average (12.32 miles).

Topography: The Beaver Creek area is flat with one creek.

Parks: No parks are included in the concept plan (and its cost estimates).

Brewery Blocks – urban area

Portland, OR



Total acres:	4.6
Gross buildable acres:	4.6
Net new population:	282
Net new jobs:	2,440
Total EDUs:	601
Avg. EDUs per gross buildable acre:	130.65
Avg. commute miles in the year 2035:	4.99

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 73,000
Total:	$43,652,000

Proposed Use (completed project)

The Brewery Blocks development is a mix of high-density residential and commercial.

Existing Conditions

Transportation
An urban street grid exists. The streetcar system was developed as a part of the larger River District redevelopment.

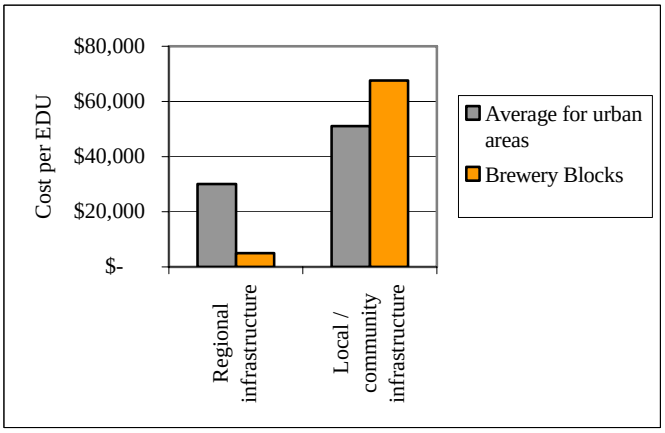
Water
Sufficient water facilities already exist within the area.

Wastewater
Sufficient wastewater facilities already exist within the area.

Stormwater
Sufficient stormwater facilities already exist within the area.

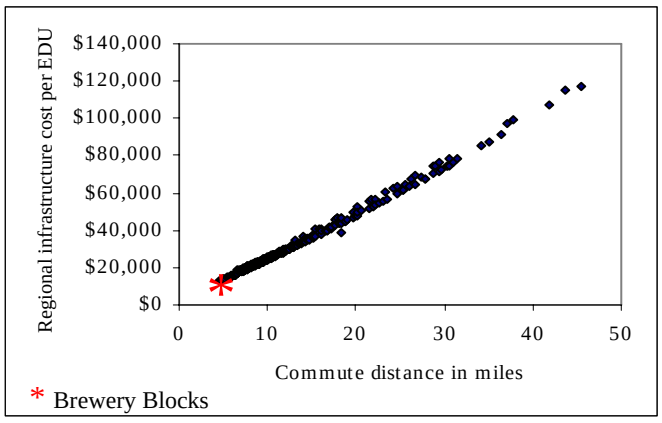
Parks, plazas, public places
Though there are no public parks within the Brewery Blocks, the development is able to take advantage of an existing park system that includes the North and South Park Blocks, Jamison Square, and Tanner Springs.

How do the Brewery Block's infrastructure costs compare to the regional average?



The Brewery Block's regional infrastructure costs (highways, bridges, transit, etc) are considerably lower ($25,00 less per EDU) than average for the 7-county region. Its local/community infrastructure costs are about $17,000 more per EDU than the regional average for urban areas.

What are the factors that influence infrastructure costs for the Brewery Blocks?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tracts that include the Brewery Blocks are forecasted to have an average commute distance of 4.99 miles in the year 2035, considerably shorter than the 7-county average of 12.32 miles.

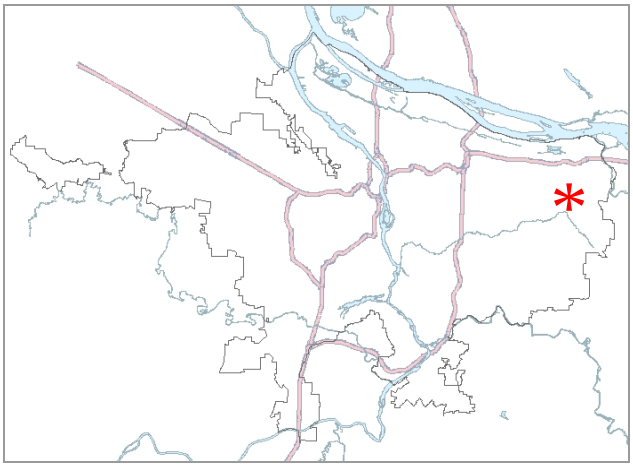
Topography: The Brewery Blocks are a redevelopment project. The entire parcel is buildable.

Existing facilities: The Brewery Blocks are able to take advantage of existing facilities, including transit, sewer, water, parks, and streets.

Structured parking and other improvements: The infrastructure costs associated with the Brewery Blocks redevelopment were accrued by the construction of structured parking, provision of street furnishings, and sidewalk improvements.

Civic Neighborhood– urban area

Gresham, OR



Total acres:	5
Gross buildable acres:	5
Net new population:	1,589
Net new jobs:	2,433
Total EDUs:	1,122
Avg. EDUs per gross buildable acre:	224.4
Avg. commute miles in the year 2035:	11.13

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 37,000
Total:	$41,824,000

Proposed Use

The Civic Neighborhood area is a mix of residential, retail, and office uses that is served by transit.

Existing Conditions

Transportation

The site is bisected by a light rail line and is served by four-lane major arterials and one local connector: Burnside Road, Division St., Eastman Parkway and the two-lane Wallula Road. Division St. was recently improved.

Water

The site is well integrated into Gresham's water infrastructure.

Wastewater

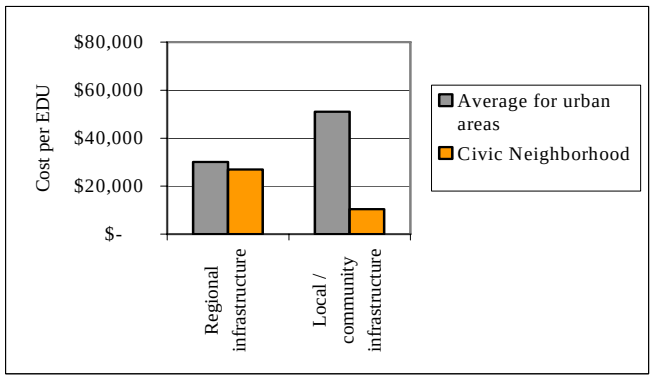
The site is well integrated into Gresham's sewer infrastructure.

Stormwater

Stormwater is handled by existing City of Gresham infrastructure.

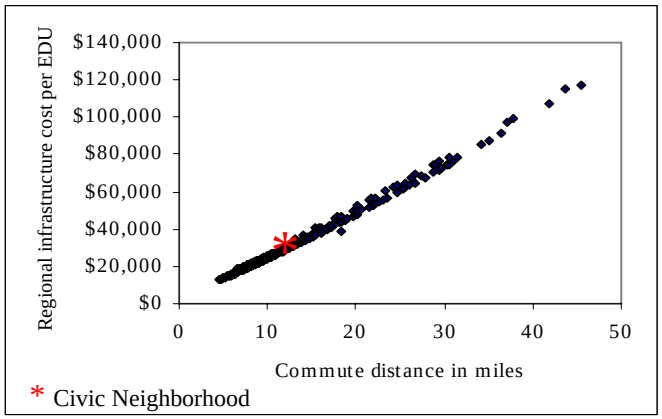
Parks, plazas, public places
Though there are no parks within the Civic Neighborhood area, it is being developed with a pedestrian orientation.

How do Civic Neighborhood's infrastructure costs compare to the regional average?



Civic Neighborhood's regional infrastructure costs (highways, bridges, transit, etc) are lower than average for the 7-county region. Its local/community infrastructure costs are also considerably lower (about $41,000 less per EDU) than the regional average for urban areas.

What are the factors that influence infrastructure costs in Civic Neighborhood?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that includes Civic Neighborhood are forecasted to have an average commute distance of 11.13 miles in the year 2035, shorter than the 7-county average of 12.32 miles.

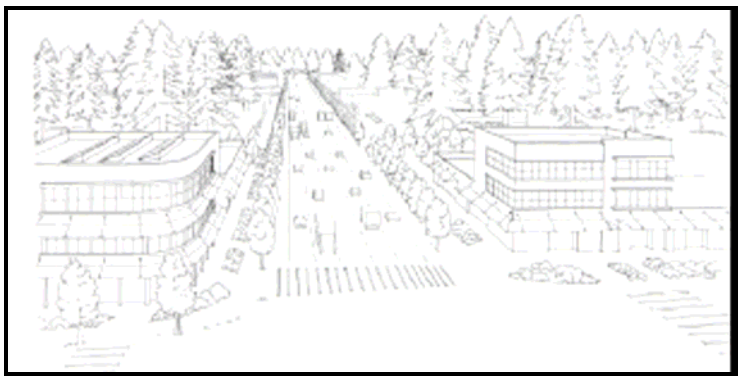
Topography: Civic Neighborhood is a redevelopment project. The entire parcel is buildable.

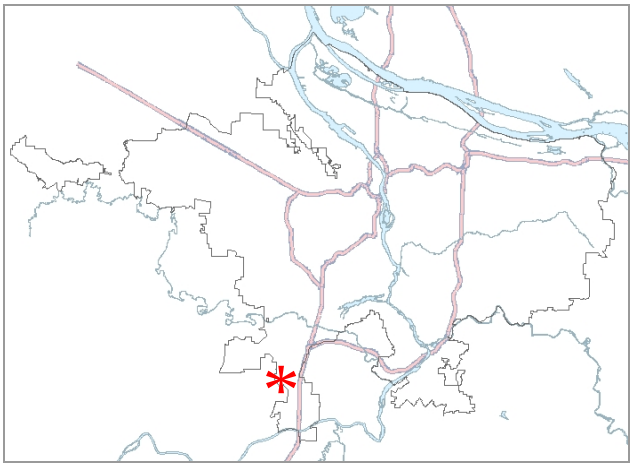
Existing facilities: Civic Neighborhood is able to take advantage of nearby facilities, including light rail.

Transit and street improvements: The bulk of Civic Neighborhood's costs are attributable to transit ($6,194,000) and transportation ($3,413,000) improvements.

Coffee Creek (1) master plan area– urbanizing area

Wilsonville, OR





Total acres:	216
Gross buildable acres:	196
Net new population:	(25)
Net new jobs:	1,474
Total EDUs:	295
Avg. EDUs per gross buildable acre:	1.51
Avg. commute miles in the year 2035:	12.82

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 59,000
Total:	$16,932,000

Proposed Use

Coffee Creek is being planned as a Regionally Significant Industrial Area.

Existing Conditions

Transportation

The area is within 1/2 mile of the Wilsonville I-5 North Interchange, with vehicle access via SW Lower Boones Ferry Road, Day Road and SW Grahams Ferry Road. There are few existing bicycle and pedestrian facilities and no transit service within the Coffee Creek Master Plan area. The closest transit stop is located nearby with a SMART bus line that provides stops along 95th Avenue and Commerce Circle (within ½ mile of the Master Plan area).

Water

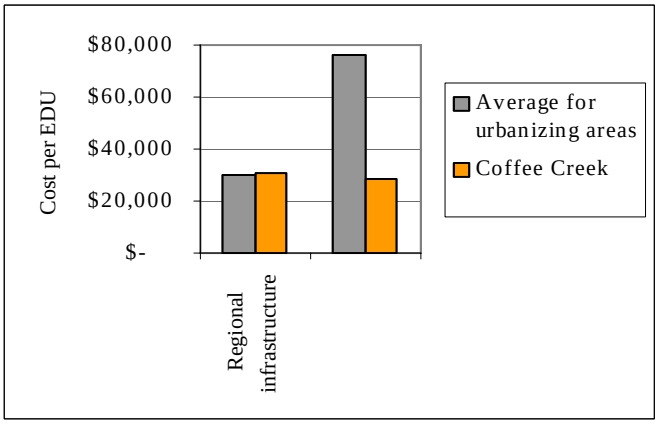
Water main transmission supply lines exist through the central and southern portions of the Master Plan area. An additional reservoir would be needed at some point to provide adequate peak capacity prior to build out of the Master Plan area.

Wastewater
The Coffee Creek Master Plan Area is located in the City of Wilsonville's United Disposal Interceptor sewer trunk line basin subarea. Sewer Main trunk links are located within the central portion of the Coffee Creek Master Plan area. Site survey work will need to occur and the City will need to update its sewer system model to determine on and offsite sewer system improvements and trunk line size/location, pump station requirements, and cost.

Stormwater
The Coffee Creek Master Plan area is located within the Coffee Lake Creek Basin. The north tributary to Basalt Creek is located south of Day Road. Basalt Creek drains into Coffee Creek Lake and extends north of Day Road into the City of Tualatin UGB. The master plan area is relatively flat with topography that varies 1-5 feet in elevation, and gently slopes from north to south. The City requires each new development within the Coffee Creek Industrial Master Plan area to detain and treat run off.

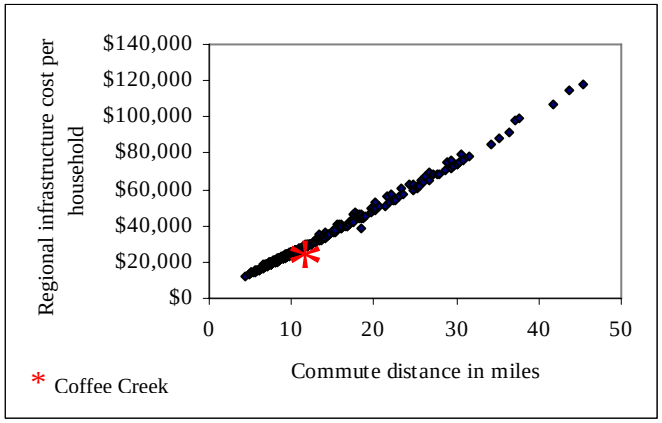
Parks, plazas, public places
There are no existing park facilities within the Master Plan area.

How do Coffee Creek's infrastructure costs compare to the regional average?



While Coffee Creek's regional infrastructure costs (highways, bridges, transit, etc) are about average for the 7-county region, its local/community infrastructure costs are about $47,000 per EDU lower than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in Coffee Creek?



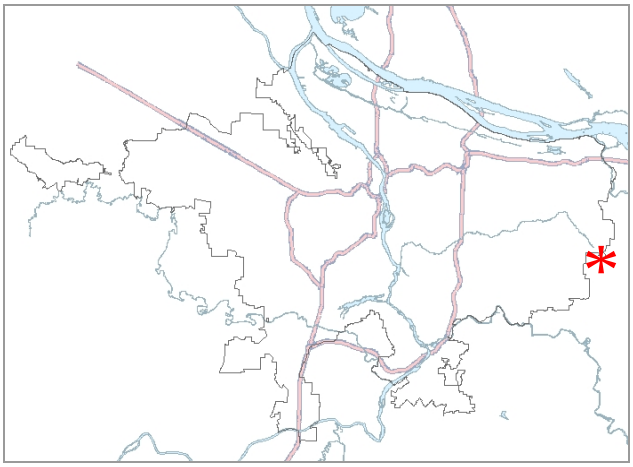
Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that includes Coffee Creek are forecasted to have an average commute distance of 12.82 miles in the year 2035. This distance is slightly higher than the average for the 7-county region (12.32 miles).

Topography / natural features: The Coffee Creek area is flat, making the area relatively less expensive to serve.

Transportation: Over half of Coffee Creek's local / community level infrastructure costs ($4,518,000) are attributable to transportation improvements.

Damascus Concept Plan– urbanizing area

Damascus and Happy Valley, OR



Total acres:	12,200
Gross buildable acres:	5,739
Net new population:	54,836
Net new jobs:	45,000
Total EDUs:	30,934
Avg. EDUs per gross buildable acre:	5.39
Avg. commute miles in the year 2035:	13.5

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 134,000
Total:	$4,147,851,000

Proposed Use

The Damascus area is being planned as a new community that will include a variety of housing densities, mixed-use areas, and employment zones.

Existing Conditions

Transportation

The area is served by a transportation system that was designed for farm-to-market travel purposes. The street system is primarily made up of narrow, two-lane roads that carry urban levels of traffic. Highway 212, 172nd Avenue, Foster Road, 242nd Avenue, 222nd Avenue and Sunnyside Road are the primary routes that connect the communities of Damascus and Boring to other parts of the region. Most roads perform adequately during rush hour, except for segments of Highway 212, Highway 224 and Sunnyside Road. Significant congestion and safety issues exist in the current Damascus city center (where Sunnyside, Highway 212, and Foster Road converge). Streets do not have bicycle and pedestrian facilities, except for sidewalks along limited sections of Highway 212 in the Damascus and Boring rural centers. Transit service is limited to two bus lines; a park-and-ride lot is located in Carver. The majority of the study area is located outside of the TriMet service boundary.

Water

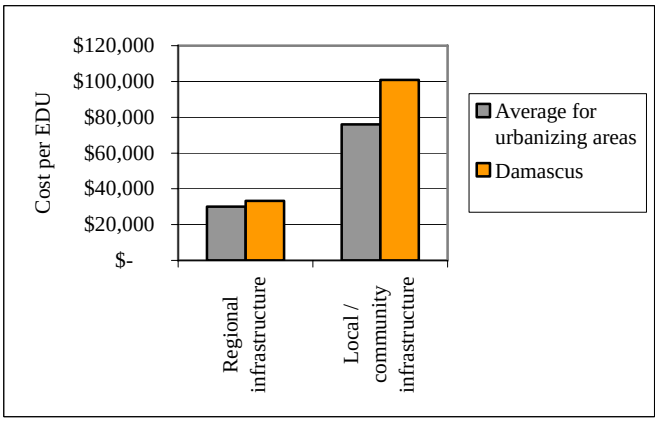
Two water districts, the Boring Water District and the Sunrise Water Authority, serve portions of the study area. Substantial portions of the area have no public water service.

Wastewater
Most of the primary study area has no sanitary sewer service. Only the far eastern edge of Damascus (Rock Creek corridor) has sanitary service. There are no sanitary sewage treatment facilities within the primary study area. There is a small, publicly-owned sanitary sewage treatment facility in the Boring rural center, but it is not available for additional hook-ups.

Stormwater
There is no existing public stormwater service in the study area.

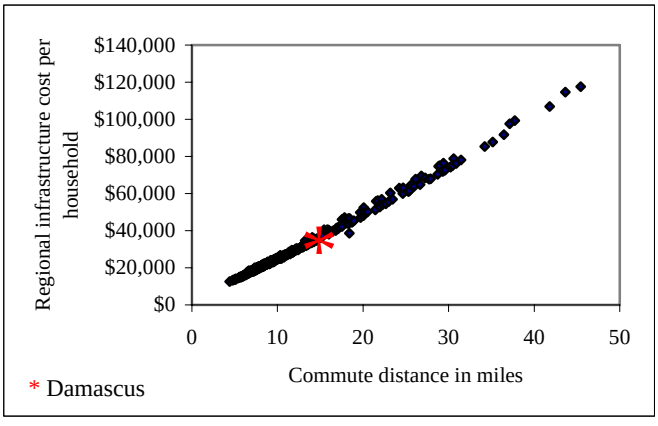
Parks, plazas, public places
North Clackamas County contains a wide range of regional, state, county, community parks and recreation facilities. Metro owns a parcel in the Damascus Buttes area. Clackamas County, the City of Portland, and the state own the right of way for the Cazadero and Springwater trails, which are currently undeveloped. Clackamas County provides parks near the study area, including Barton Park, a 116-acre county park located along the Clackamas River.

How do Damascus' infrastructure costs compare to the regional average?



Damascus' regional infrastructure costs (highways, bridges, transit, etc) are slightly higher than average for the 7-county region. Its local/community infrastructure costs are about $26,000 per EDU higher than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in Damascus?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tracts that comprise the Damascus area are forecasted to have an average commute distance of 13.5 miles in the year 2035. This distance is higher than the average for the 7-county region (12.32 miles).

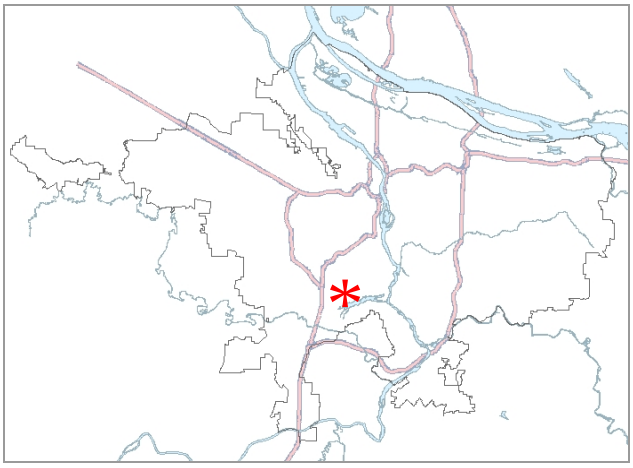
Topography / natural features: Buttes and transition areas (15-25% slopes) cover large portions of the Damascus area. Riparian areas are also found throughout the concept plan area. These features reduce average densities, making the area more expensive to serve. The topography will split the wastewater system to the east and to the west, resulting in increased cost of collection and conveyance. Existing treatment facilities are located some distance from the urban centers.

Transportation: $1,731,623,000 (2008$) of the local / community level infrastructure costs for Damascus are for transportation improvements. Regional transportation facilities (Sunrise Hwy) have been deducted from the costs.

Lake Oswego Village Center– urban area

Lake Oswego, OR

Photo: Todd Chase



Total acres:	2.39
Gross buildable acres:	2.39
Net new population:	0
Net new jobs:	207
Total EDUs:	41
Avg. EDUs per gross buildable acre:	17.15
Avg. commute miles in the year 2035:	8.83

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 147,000
Total:	$6,023,000

Proposed Use (project completed)

Redevelopment as a mixed-use (restaurant, retail, office) area with structured parking.

Existing Conditions

Transportation
An existing street network serves the area.

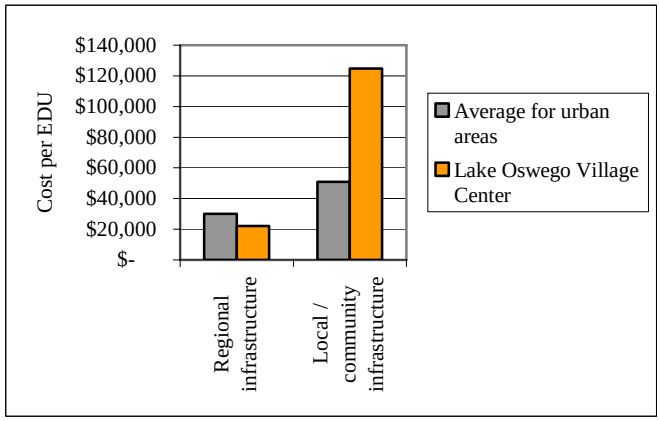
Water
Adequate water supply exists for the plan area.

Wastewater
Adequate sewer capacity exists in the plan area.

Stormwater
Adequate capacity to handle stormwater exists in the plan area.

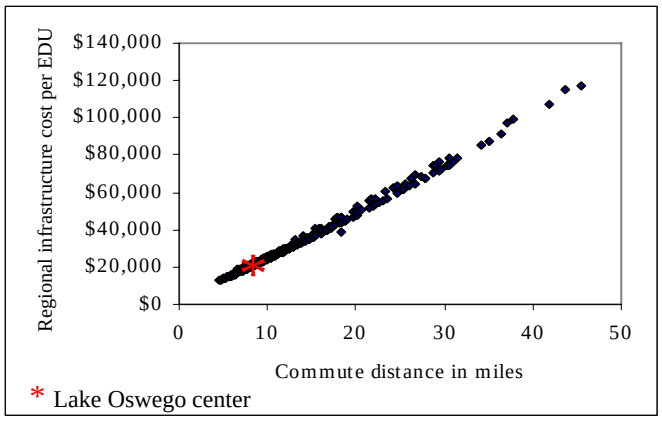
Parks, plazas, public places
Millennium Plaza Park is in the vicinity of the project area.

How do Lake Oswego Village Center's infrastructure costs compare to the regional average?



Lake Oswego center's regional infrastructure costs (highways, bridges, transit, etc) are lower than average for the 7-county region. Its local/community infrastructure costs are about $74,000 more per EDU than the regional average for urban areas.

What are the factors that influence infrastructure costs in Lake Oswego Village Center?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tracts that include Lake Oswego village center are forecasted to have an average commute distance of about 8.83 miles in the year 2035, lower than the 7-county average of 12.32 miles.

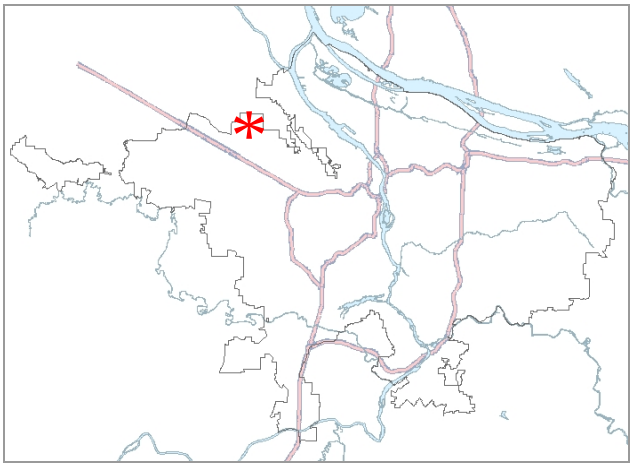
Topography: Lake Oswego center is a redevelopment project. The entire parcel is buildable.

Existing facilities: The project is able to take advantage of existing water, stormwater, and wastewater facilities.

Structured parking: Most of the local / community level infrastructure costs are attributable to the construction of a structured parking garage.

North Bethany concept area– urbanizing area

Washington County, OR



Total acres:	800
Gross buildable acres:	680
Net new population:	12,500
Net new jobs:	276
Total EDUs:	5,055
Avg. EDUs per gross buildable acre:	7.43
Avg. commute miles in the year 2035:	11.92

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 105,000
Total:	$530,299,000

Proposed Use

The North Bethany area is planned as a primarily residential community with some employment uses. The employment uses are commercial and institutional and are ancillary to the residential uses.

Existing Conditions

Transportation

Major transportation facilities in the vicinity of the plan area include Springville Rd., Kaiser, 185th, and Germantown Rd. There is bus service on Springville, 185th, and Kaiser.

Water

The current source of water in the concept area is private wells. Once fully developed, the area will be served by Tualatin Valley Water District.

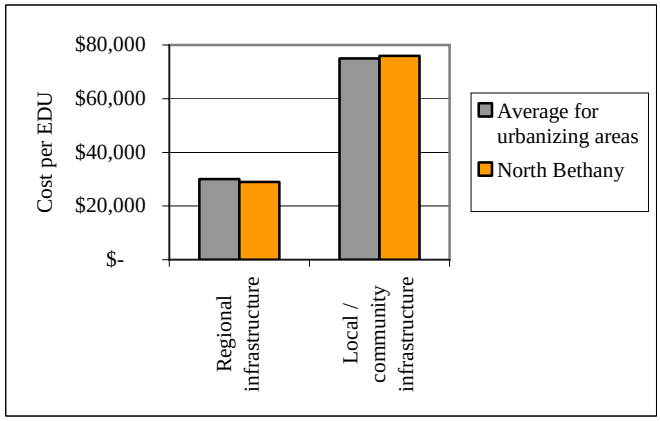
Wastewater

Wastewater is currently handled on-site through the use of septic systems.

Stormwater
Storm water runoff from the project site follows the natural topography, and is generally managed by several stream channels and the occasional culvert. The western end of the project site drains directly to Rock Creek. The remaining project site is the headwaters of small drainages that are tributaries to Abbey Creek and Bethany Creek.

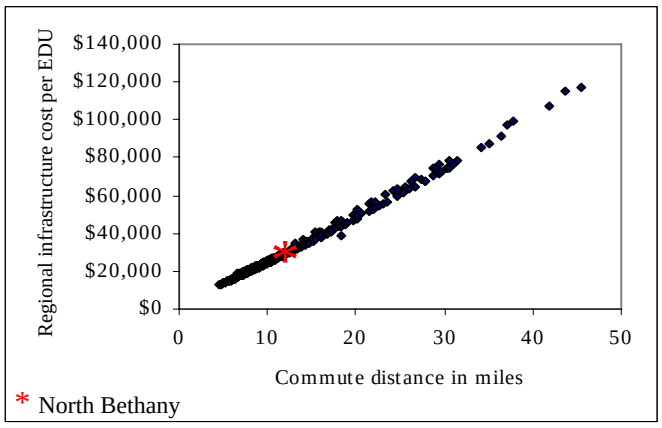
Parks, plazas, public places
Though there are a number of open spaces, trails, and parks in the vicinity of the plan area, there are no such areas that currently exist within the concept plan area.

How do North Bethany's infrastructure costs compare to the regional average?



North Bethany's regional infrastructure costs (highways, bridges, transit, etc) are about average for the 7-county region. Its local/community infrastructure costs per EDU are also about average for urbanizing areas.

What are the factors that influence infrastructure costs in the North Bethany area?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that comprises the North Bethany are forecasted to have an average commute distance of 11.92 miles in the year 2035, slightly lower than the 7-county average (12.32 miles).

Topography: The North Bethany area is relatively flat with the exception of the northern portion, which is sloped. A number of riparian areas are in the area.

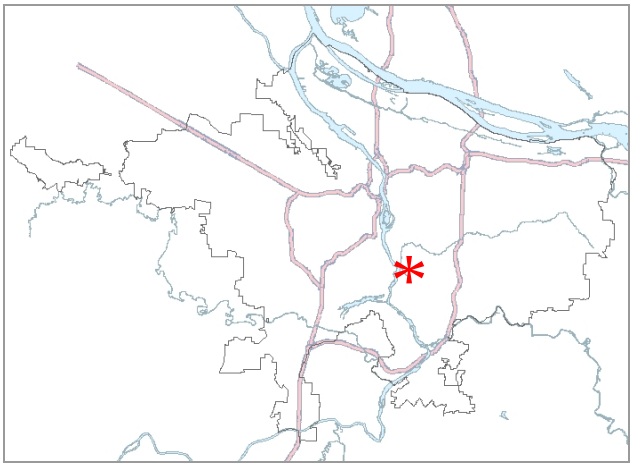
Amenities: The North Bethany area has been termed a "Community of Distinction" and the plan entails a number of amenities including significant amounts of parkland ($38,800,000). These parks would match Tualatin Valley Park and Recreation District's level of service standards.

Schools: North Bethany's local / community level infrastructure costs include the construction of 3 schools ($90 -$111 million). These costs include land and construction.

Off-site improvements – The costs include off-site improvements such as the Bethany Blvd. / US 26 overpass have been deducted from N. Bethany's total local/community costs since they are regional facilities.

North Main Village– urban area

Milwaukie, OR



Total acres:	1.9
Gross buildable acres:	1.9
Net new population:	228
Net new jobs:	40
Total EDUs:	105
Avg. EDUs per gross buildable acre:	55.26
Avg. commute miles in the year 2035:	7.99

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 28,000
Total:	$2,958,000

Proposed Use (completed)

The North Main Village project is located in downtown Milwaukie, OR and consists of thirteen three-story townhomes, each with a garage and ground floor commercial element with two stories of living space above. The project also includes twenty condominium units.

Existing Conditions

Transportation

North Main Village's location in an already urbanized setting affords it access to existing transportation facilities including the Milwaukie Transit Center. However, transportation improvements are necessary to serve the area's growth.

Water

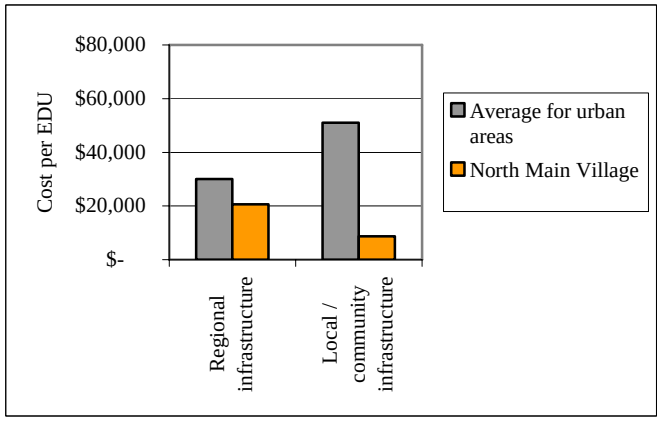
Existing water facilities are sufficient to serve North Main Village.

Wastewater
Existing wastewater facilities are sufficient to serve North Main Village.

Stormwater
Existing stormwater facilities are sufficient to serve North Main Village.

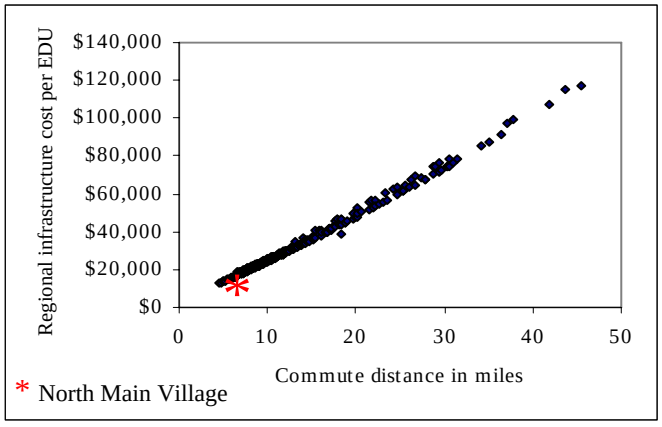
Parks, plazas, public places
North Main Village has no on-site parks, but a number of parks are nearby: Milwaukie Riverfront Park, Scott Park, and Dogwood Park.

How do North Main Village's infrastructure costs compare to the regional average?



North Main Village's regional infrastructure costs (highways, bridges, transit, etc) are about $9,000 per EDU lower than average for the 7-county region. Its local/community infrastructure costs are also about $42,000 per EDU lower than the regional average for urban areas.

What are the factors that influence infrastructure costs in North Main Village?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that includes North Main Village are forecasted to have an average commute distance of 7.99 miles in the year 2035, considerably lower than the 7-county average of 12.32 miles.

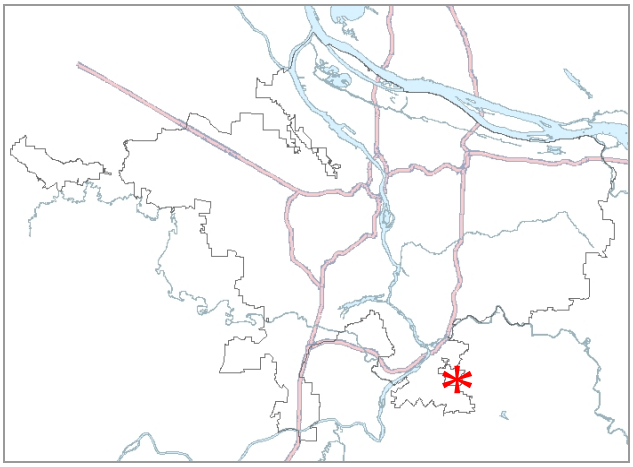
Topography: North Main Village is a redevelopment project. The entire parcel is buildable.

Transportation: The bulk of the local / community costs associated with North main village are transportation-related ($811,000).

Land write-downs: About $108,000 is attributable to land write-downs (appears in "other" costs in Appendix 1).

Park Place concept area – urbanizing area

Oregon City, OR



Total acres:	480
Gross buildable acres:	266
Net new population:	3,645
Net new jobs:	0
Total EDUs:	1,458
Avg. EDUs per gross buildable acre:	5.5
Avg. commute miles in the year 2035:	12.27

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 79,000
Total:	$115,222,000

Proposed Use

Park Place is being planned as a residential community. A developer has recently been consolidating ownership of over half of the plan area. It is hoped that that consolidation will simplify the provision of public facilities.

Existing Conditions

Transportation

Isolated portions of the roadway system experience congestion and delays. The Highway 213 corridor is approaching capacity, particularly on the segment between Redland Road and the I-205 interchange. The public transit system provides limited service to this low-density, suburban location. The bicycle and pedestrian systems are incomplete, but plans exist to make incremental improvements.

Water

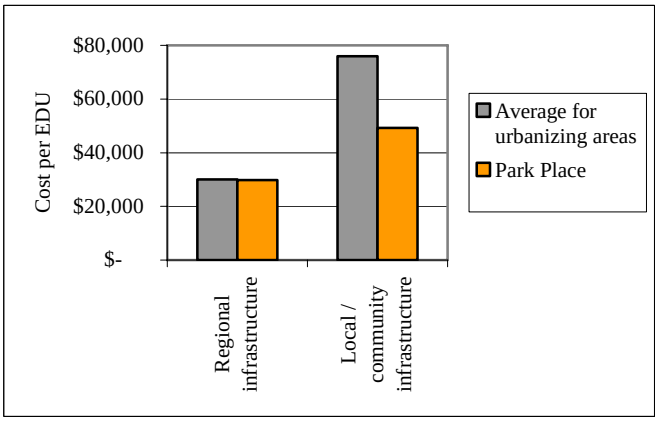
Water conveyance facilities are limited within the study area. The Oregon City water system has sufficient water supply to serve the study area.

Wastewater
Limited wastewater collection exists within the study area. However, most properties are on septic systems. Two-trunk interceptor lines, owned by the Tri-City Sewer District, pass through the study area. These two interceptors connect with the Highway 213/ Newell interceptor, which conveys their flows to the wastewater treatment plant. These interceptors and the treatment plant have capacity to serve future development within the study area.

Stormwater
Stormwater is currently managed with roadside ditches and natural drainage channels. No other major stormwater infrastructure facilities exist onsite. All stormwater within the study area is conveyed to Abernethy Creek, Newell Creek, and Livesay Creek. Abernethy Creek and Newell Creek are subject to occasional flooding.

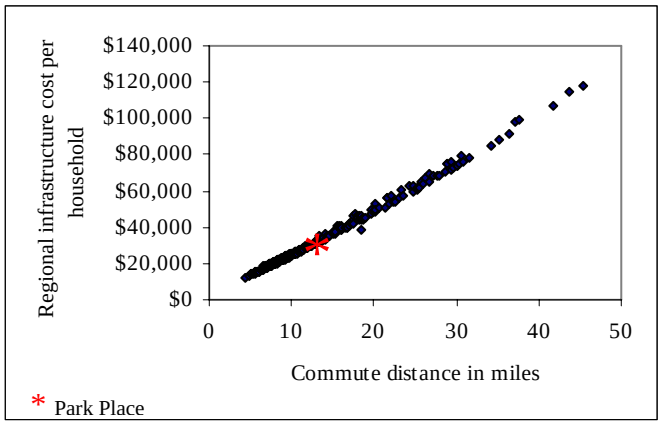
Parks, plazas, public places
Clackamas County and Metro own open spaces within the concept plan area.

How do Park Place's infrastructure costs compare to the regional average?



Park Place's regional infrastructure costs (highways, bridges, transit, etc) are about average for the 7-county region. Its local/community infrastructure costs are about $26,000 less per EDU than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in Park Place?



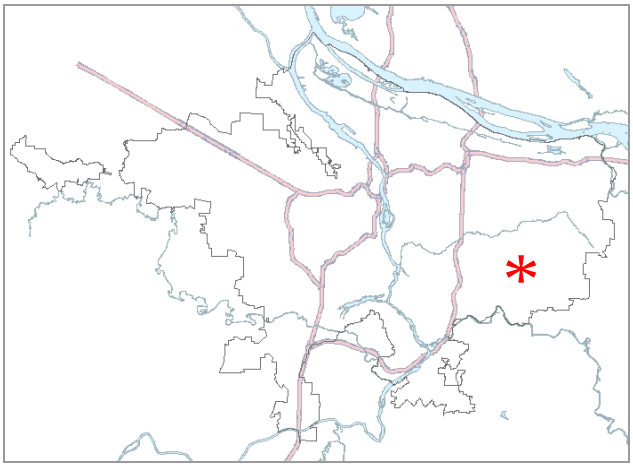
Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Park Place residents are forecasted to have an average commute distance of 12.27 miles in the year 2035. This distance is about average for the 7-county region (12.32 miles).

Topography / natural features: Large portions of the Park Place concept area are not developable because of constraints such as steep slopes and wetland areas.

Transportation: Park Place's transportation costs amount to $58,400,000 and make up the bulk of the area's local / community level infrastructure costs.

Pleasant Valley concept area– urbanizing area

Gresham, OR



Total acres:	1,530
Gross buildable acres:	1,071
Net new population:	12,315
Net new jobs:	4,935
Total EDUs:	5,913
Avg. EDUs per gross buildable acre:	5.5
Avg. commute miles in the year 2035:	10.8

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 77,000
Total:	$457,811,000

Proposed Use

The Pleasant Valley area is planned as a new community with a town center, residential neighborhoods, and employment zones.

Existing Conditions

Transportation
Foster Blvd., a two-lane rural road, is the main road that currently provides access to the area.

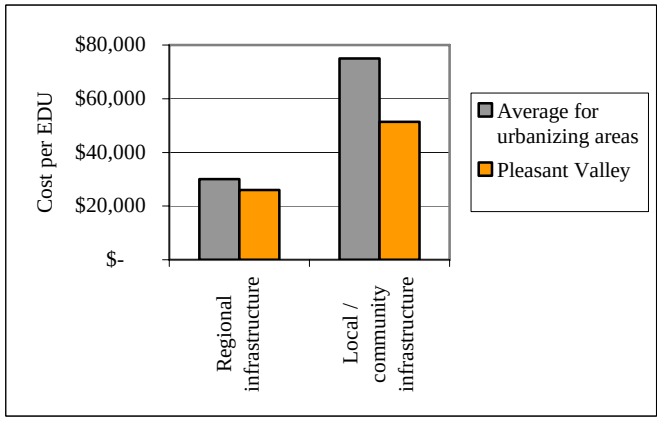
Water
The area is primarily served by private wells.

Wastewater
Wastewater is handled with private septic systems.

Stormwater
Stormwater is currently directed to ditches along local roads.

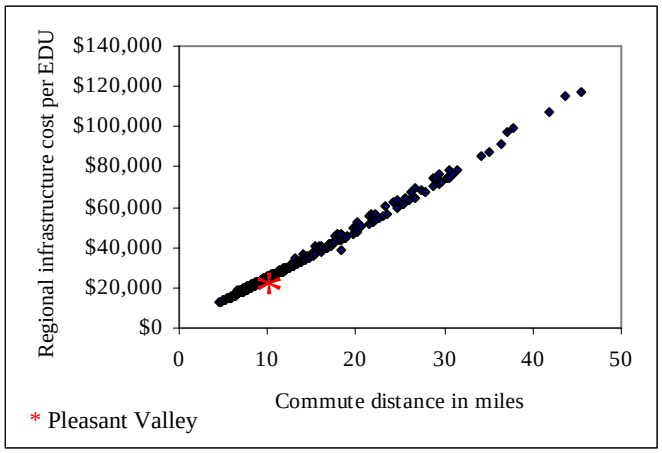
Parks, plazas, public places
The Springwater Corridor, a regional trail, passes through the Pleasant Valley plan area. There are no other existing parks within the area, though there is open space associated with Pleasant Valley Elementary School (existing).

How do Pleasant Valley's infrastructure costs compare to the regional average?



Pleasant Valley's regional infrastructure costs (highways, bridges, transit, etc) are slightly lower than average for the 7-county region. Its local/community infrastructure costs per EDU are about $24,000 less than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in the Pleasant Valley area?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tracts that comprise the Pleasant Valley area are forecasted to have an average commute distance of about 10.8 miles in the year 2035, lower than the 7-county average (12.32 miles).

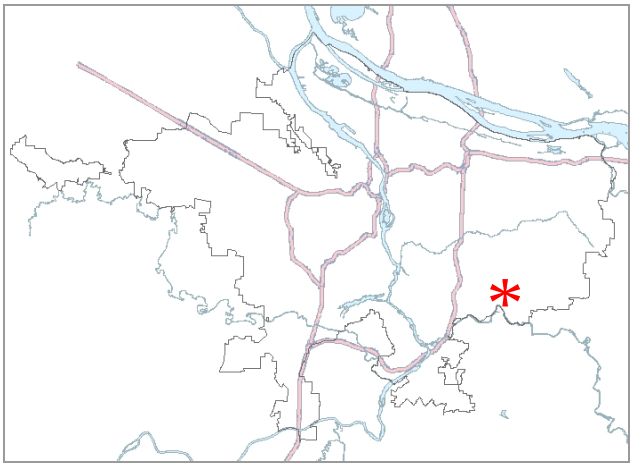
Topography: The Pleasant Valley area is mostly flat, but has a number of riparian areas.

Green practices: Most of the streets will be green streets. Though there are not additional capital costs associated with these streets, it is anticipated that there will be higher maintenance costs. All stream crossings will use bridges (no culverts)

Parks: About ¼ of Pleasant Valley's local / community level costs are attributable to parks ($70,186,000).

Rock Creek concept area– urbanizing area

Happy Valley, OR



Total acres:	670
Gross buildable acres:	357
Net new population:	7,037
Net new jobs:	619
Total EDUs:	2,939
Avg. EDUs per gross buildable acre:	8.23
Avg. commute miles in the year 2035:	10.72

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 43,000
Total:	$126,680,000

Proposed Use

The Rock Creek area is planned as a community with residential, mixed-use, and employment uses.

Existing Conditions

Transportation
Two-lane rural roads with soft shoulders and roadside drainage ditches are typical in the plan area.

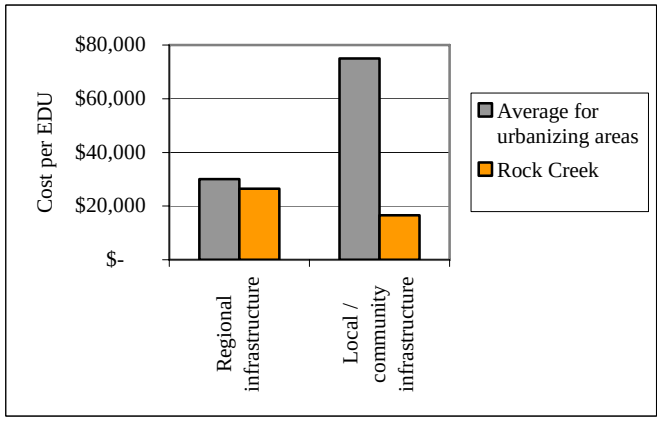
Water
Two wells and water from the Clackamas River supply the area with water. According to the Mt. Scott Water District, all necessary facilities are in place for any new developments in the planning area with the exception of a 12-in water line for the higher areas.

Wastewater
There are three points of connection to the existing sewer system. There will need to be additional pumps installed in order to get the effluent to a point where a gravity flow system will work.

Stormwater
Storm drainage in the area is mostly over land, with some culverts under existing roads and ditches running alongside these roads. The area is split into two drainage areas that flow into Rock Creek and Sieben Creek.

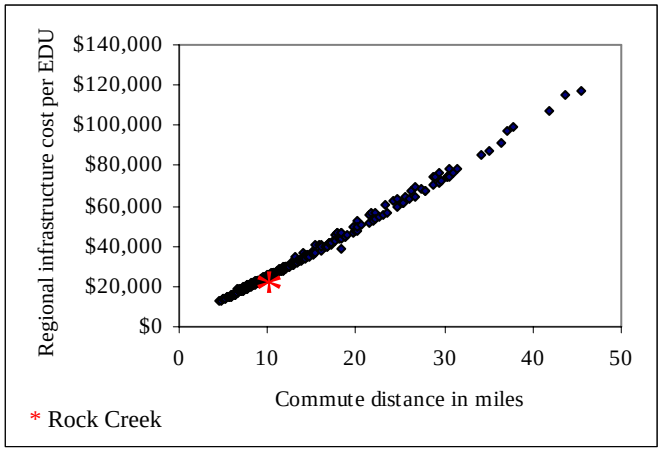
Parks, plazas, public places
The area does not have any existing parks.

How do Rock Creek's infrastructure costs compare to the regional average?



Rock Creek's regional infrastructure costs (highways, bridges, transit, etc) are slightly lower than average for the 7-county region. Its local/community infrastructure costs are about $58,000 per EDU cheaper than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in the Rock Creek concept area?



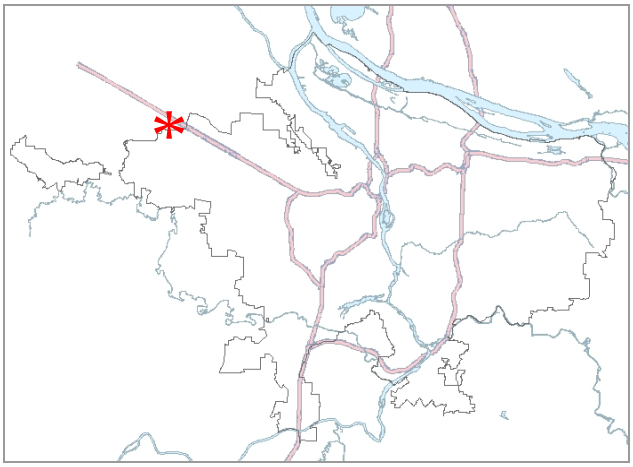
Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tracts that include the Rock Creek area are forecasted to have an average commute distance of 10.72 miles in the year 2035, lower than the 7-county average (12.32 miles).

Topography: The Rock Creek area has slopes to the north (over 30% slopes) and Rock Creek and its tributaries flow through the area. South of Sunnyside Rd., the area is flat.

Transportation: Approximately 2/3 of Rock Creek's local / community level infrastructure costs are attributable to transportation improvements ($33576,000). Roads, including Sunnyside Road, and 147th Avenue, have been improved to urban standards to provide multimodal access.

Shute Road concept area– urbanizing area

Washington County, OR



Total acres:	203
Gross buildable acres:	175
Net new population:	0
Net new jobs:	3,660
Total EDUs:	732
Avg. EDUs per gross buildable acre:	4.18
Avg. commute miles in the year 2035:	13.99

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 46,000
Total:	$33,623,000

Proposed Use

The Shute Rd. concept area is being planned to provide large lots for industrial uses. Genentech, an international biomedical manufacturer, has acquired nearly half of this site (85 acres). Genentech has developed phase 1 facilities and will provide 300-400 jobs in the first phase.

Existing Conditions

Transportation

The site is adjacent to the Shute Road exit of the Sunset Highway. Shute Road and Evergreen Road, both five lane local connectors intersect at the southwest corner of the site.

Water

Water mains run along Shute Road and Evergreen road adjacent to the site.

Wastewater

There are currently no sanitary lines running though the site. One trunk line runs up Evergreen Road to the corner of the site and another line dead-ends into Shute Road near the center of the site.

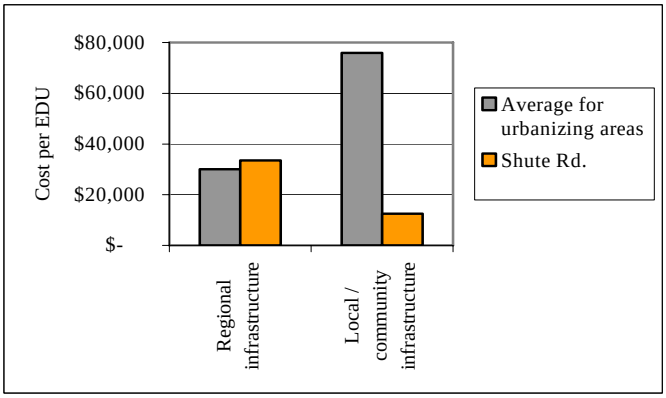
Stormwater

Storm lines parallel water lines along Shute Road and Evergreen Road.

Parks, plazas, public places

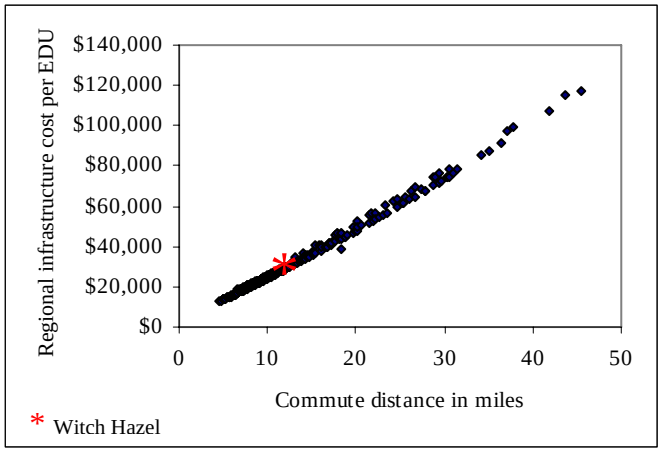
There are no existing public parks or green spaces within the site.

How do Shute Rd.'s infrastructure costs compare to the regional average?



Shute Rd.'s regional infrastructure costs (highways, bridges, transit, etc) are slightly higher than average for the 7-county region. Its local/community infrastructure costs are about $63,000 per EDU lower than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in the Shute Rd. concept area?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that comprises the Shute Rd. area are forecasted to have an average commute distance of 13.99 miles in the year 2035, higher than the 7-county average (12.32 miles).

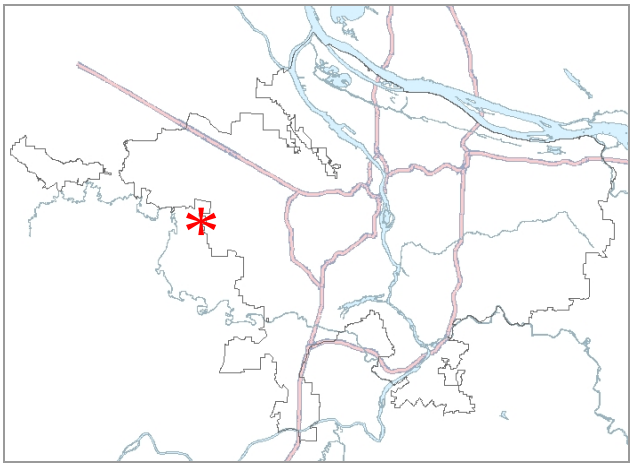
Topography: The Shute Rd. concept area is relatively flat with a small riparian area associated with Waibel Creek. The area around the creek is non-wetland.

Employment use: Shute Rd. will be an employment area. Employment uses tend to place fewer demands on infrastructure than residential uses.

Transportation: Approximately 2/3 of Shute Rd.'s local / community level infrastructure cost is attributable to transportation improvements ($6,350,000).

South Hillsboro concept area– urbanizing area

Hillsboro, OR



Total acres:	1,565
Gross buildable acres:	1,030
Net new population:	25,455
Net new jobs:	879
Total EDUs:	10,358
Avg. EDUs per gross buildable acre:	10.05
Avg. commute miles in the year 2035:	12.2

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 58,000
Total:	$600,591,000

Proposed Use

The South Hillsboro area will be a community including residential, retail, and office uses.

Existing Conditions

Transportation

Current transportation facilities generally consist of two lane sections without curbs. Drainage crossings are primarily culverts with some minor retaining / transition structures. At grade railroad crossings connect the study area to Tualatin Valley Highway.

Water

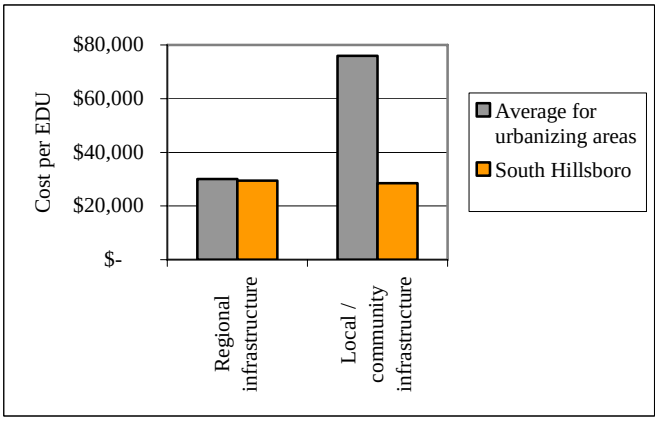
Existing 8” and 10” waterlines to the northwest of the study area provide distribution to current development in that area and will eventually be connected to the grid for the South Hillsboro planning area. An existing 42” transmission line is located at the south side of the railroad tracks along the north edge of the South Hillsboro planning area. Connection to this line will be made to serve south into the planning area.

Wastewater
A 24" trunk sewer in Davis Road extending from the River Road Pump Station to SW 234th Avenue is currently being constructed. The trunk sewer is designed to serve 525 acres including a significant portion of the South Hillsboro planning area. Area 71 is within this service area. The Clean Water Services "Aloha Pump Station" on SW 209th Avenue near SW Stoddard Drive and the Cross Creek Pump Station further south on 209th Avenue near SW Murphy Lane can serve Area 69 of the South Hillsboro planning area.

Stormwater
Development to the west and north of the study area includes storm drainage conveyance, storage and treatment of the areas consistent with standards in place at the time of the respective land use action. Outfall from these systems is to natural drainage tributaries of the Tualatin River. Throughout the South Hillsboro planning area, ditches provide storm water management along roadways. Large agricultural tracts have surface ditches that direct flow to natural conveyances.

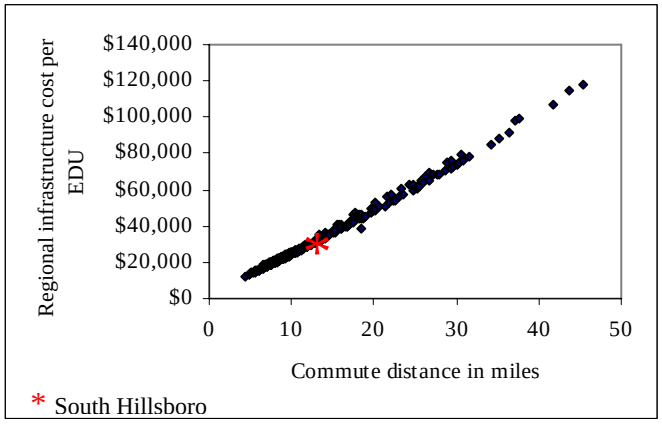
Parks, plazas, public places
The City of Hillsboro currently has no park or recreation facilities located within the South Hillsboro Community Plan Study Area. The Bonneville Power Administration right-of-way north of Tualatin Highway extends south into the study area and could accommodate a trail.

How do South Hillsboro's infrastructure costs compare to the regional average?



South Hillsboro's regional infrastructure costs (highways, bridges, transit, etc) are about average for the 7-county region. Its local/community infrastructure costs per EDU are about $46,000 less than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in the South Hillsboro area?



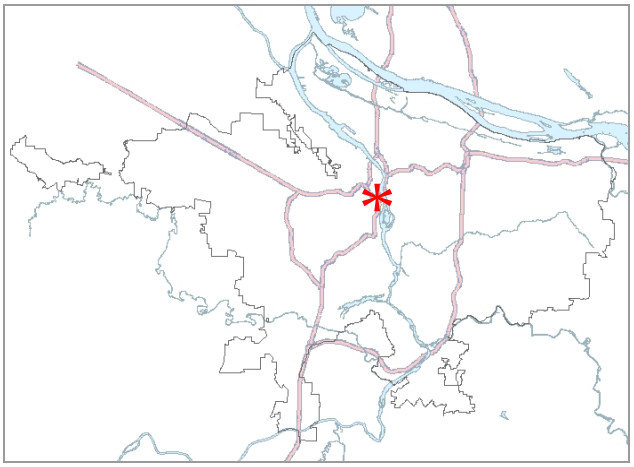
Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that comprises the South Hillsboro area are forecasted to have an average commute distance of 12.2 miles in the year 2035, slightly less than the 7-county average.

Topography: The South Hillsboro area is flat. Several Tualatin River tributaries flow west/southwesterly through the site, including Gordon Creek, Butternut Creek, a Butternut Creek tributary, Rosedale Creek (also referred to as Hazeldale Creek), and an unnamed tributary.

Stormwater: There are no stormwater costs associated with the South Hillsboro area.

South Waterfront – urban area

Portland, OR



Total acres:	130
Gross buildable acres:	100
Net new population:	9,000
Net new jobs:	10,000
Total EDUs:	5,600
Avg. EDUs per gross buildable acre:	56
Avg. commute miles in the year 2035:	5.33

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 72,000
Total:	$401,857,000

Proposed Use

The South Waterfront District offers a unique opportunity for redevelopment as it provides the largest block of vacant or underutilized land within the city's core. The district will have a mix of urban-scale offices, housing, hotels, parks and retail uses. The area will be served by a multimodal transportation system and may serve as a transit hub for south downtown. Redevelopment in the district is meant to serve as a catalyst for the creation of a larger science and technology-based economy in the Central City.

Existing Conditions

Transportation

Though the South Waterfront's central Portland location affords it extensive transportation connections, a substantial amount of redevelopment is contemplated.

Water

Existing water facilities are sufficient to serve South Waterfront.

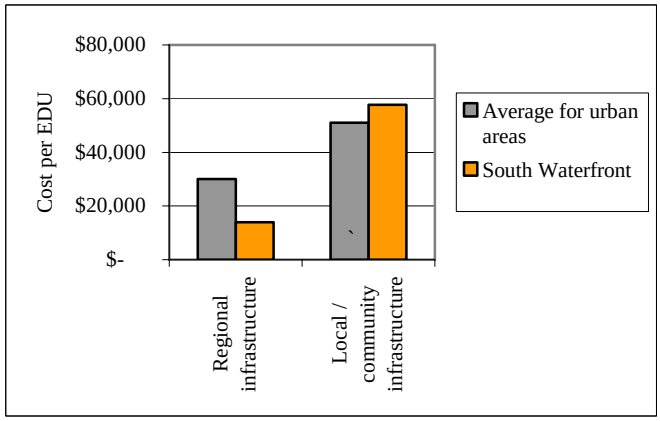
Wastewater

Existing sewer facilities are sufficient to serve South Waterfront.

Stormwater
Upgrades to the areas stormwater system will be necessary to serve the planned development.

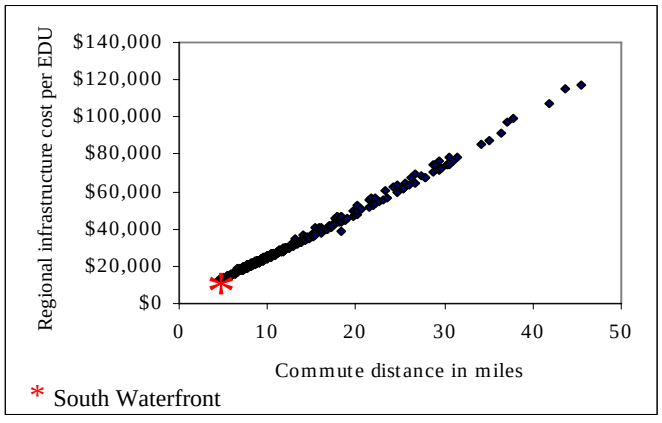
Parks, plazas, public places
There are no existing parks within the plan area. The plan includes the creation of a Willamette River Greenway. Given the area's central location, numerous parks and trails are in the vicinity.

How do South Waterfront's infrastructure costs compare to the regional average?



South Waterfront's regional infrastructure costs (highways, bridges, transit, etc) are about $16,000 less per EDU than average for the 7-county region. Its local/community infrastructure costs are about $7,000 more per EDU than the regional average for urban areas.

What are the factors that influence infrastructure costs for South Waterfront?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tracts that include South Waterfront are forecasted to have an average commute distance of 5.33 miles in the year 2035, considerably shorter than the 7-county average of 12.32 miles.

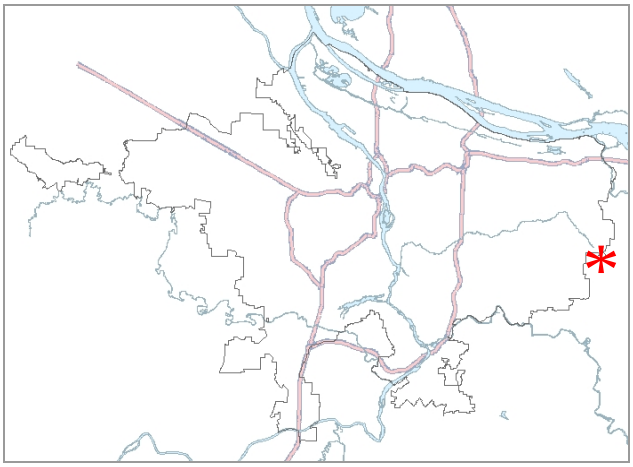
Topography: South Waterfront is a redevelopment project. The portion closest to the Willamette River will not be developed, but will be restored as a greenway.

Existing facilities: South Waterfront is able to take advantage of existing streets, sewer, and water facilities.

Most local / community costs are attributable to transportation ($148,445,000), transit / bike / pedestrian ($29,900,000), park ($92,553,000), and affordable housing requirements.

Springwater Community Plan– urbanizing area

Gresham, OR



Total acres:	1,272
Gross buildable acres:	762
Net new population:	4,022
Net new jobs:	15,330
Total EDUs:	4,522
Avg. EDUs per gross buildable acre:	5.9
Avg. commute miles in the year 2035:	12.82

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 114,000
Total:	$471,254,000

Proposed Use

The Springwater area is planned for industrial/high-tech campuses. To augment the mixed-use theme of the City as a whole, a village center with mixed retail and housing, and low-density residential development are also planned for areas too sloped for industrial use.

Existing Conditions

Transportation

The existing transportation system was designed primarily to serve rural residential and farm to market uses. The arterials are generally fast moving with most intersections either having no traffic control or only stop signs. Highway 26 is the major thoroughfare that traverses the study area, connecting Gresham with both Portland (to the west) and Sandy (to the southeast). Hogan Road/242nd Avenue also provides a north/south connection through the western portion of Springwater.

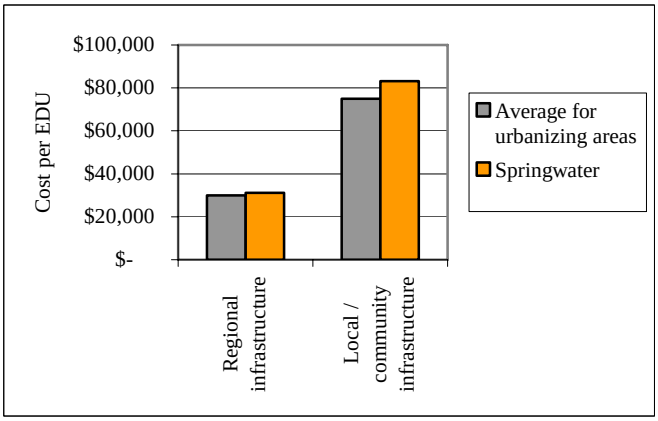
Water
The area has no public water system. Private wells serve the area.

Wastewater
The area has no public sewer system. Waste is directed to private septic systems.

Stormwater
The area has no public stormwater system. Stormwater is directed to creeks and to drainage ditches along roads.

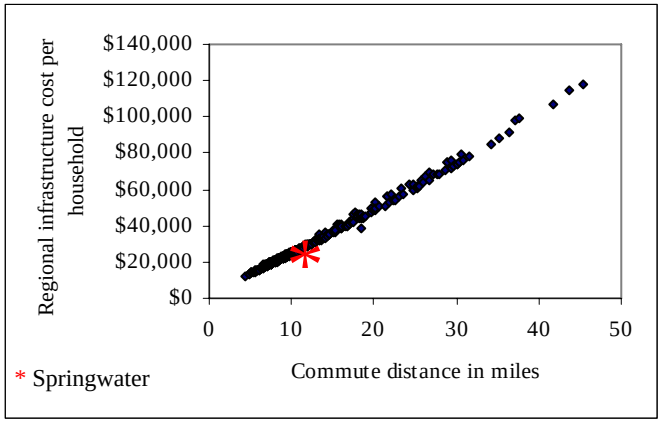
Parks, plazas, public places
The area has no public parks, but is bisected by the Springwater Corridor, a regional trail that connects Portland to Boring.

How do Springwater's infrastructure costs compare to the regional average?



Springwater's regional infrastructure costs (highways, bridges, transit, etc) are about average for the 7-county region and its local/community infrastructure costs are about $8,000 per EDU higher than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in Springwater?



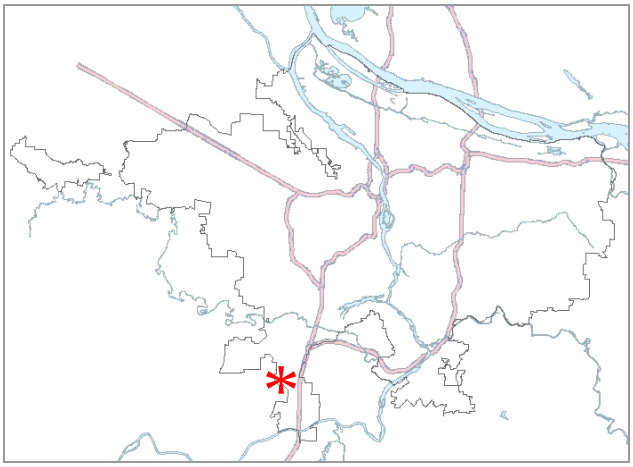
Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that includes the Springwater area are forecasted to have an average commute distance of 12.82 miles in the year 2035. This distance is slightly higher than the average for the 7-county region (12.32 miles).

Topography / natural features: With the exception of its western portion, the Springwater area is relatively flat. The sloped, western portion of the area will be low-density residential. The concept area also has a number of riparian areas. These features reduce average densities, making the area more expensive to serve.

Transportation: Almost 2/3 of the local / community costs ($237,231,000) associated with Springwater are attributable to transportation improvements.

SW Tualatin Concept Plan– urbanizing area

Tualatin, OR



Total acres:	431
Gross buildable acres:	352
Net new population:	0
Net new jobs:	5,760
Total EDUs:	1,152
Avg. EDUs per gross buildable acre:	3.27
Avg. commute miles in the year 2035:	12.36

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 216,512
Total:	$249,422,000

Proposed Use

The SW Tualatin area is planned as an industrial area.

Existing Conditions

Transportation

SW Tualatin-Sherwood Road, SW 115th Avenue and SW 120th Ave to the north and SW Tonquin Road and SW Waldo Way to the south serve the SW Tualatin concept area. A future SW 124th Avenue arterial connection is planned to connect Tualatin-Sherwood Road with SW Tonquin Road, and would become a primary point of vehicle access in the future. This connection would be regarded as a community level facility as it would serve both Tualatin and Sherwood. SW 115th Avenue will serve as a secondary north-south access between SW Tualatin-Sherwood Road and SW Tonquin Road. A railroad line boarders the east boundary of the study area.

Water

There are no public water lines in the study area.

Wastewater

No sanitary sewer system of adequate size to serve the proposed development exists on or near the study area.

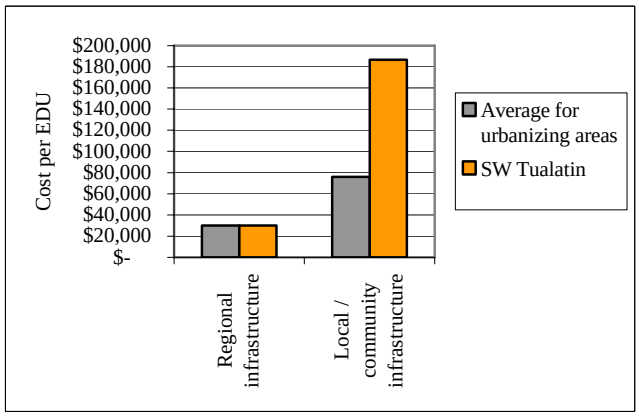
Stormwater

No storm water system exists within the study area. The plan area rises gradually in elevation. Drainage is imperfect, but generally toward the north and toward the south, with a break point at approximately the middle of the Concept Plan area. Drainage in the northern portion around and in the quarry infiltrates through the fragmented basalt. Drainage to the south flows toward Coffee Lake Creek/Seely Ditch, which flows to the Willamette River.

Parks, plazas, public places

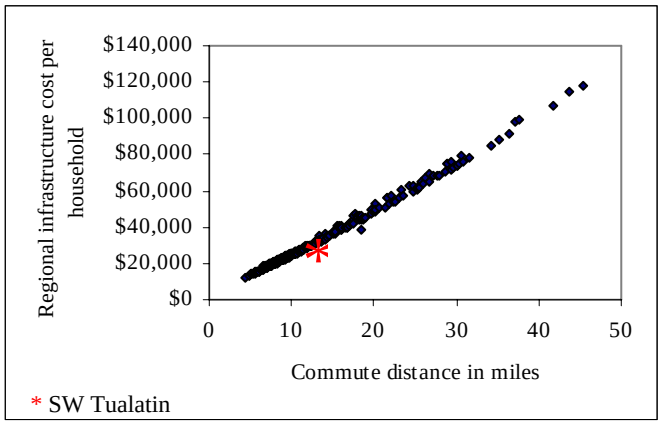
There are no existing parks within the concept area. However, there are long-term plans for a regional trail that would follow the Bonneville Power Administration easement through the area. Additionally, a forested area is envisioned west of a railroad line located in the eastern boundary of the study area to create a transition from residential to industrial uses.

How do SW Tualatin's infrastructure costs compare to the regional average?



SW Tualatin's regional infrastructure costs (highways, bridges, transit, etc) are average for the 7-county region. Its local/community infrastructure costs are about $112,000 per EDU higher than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in SW Tualatin?

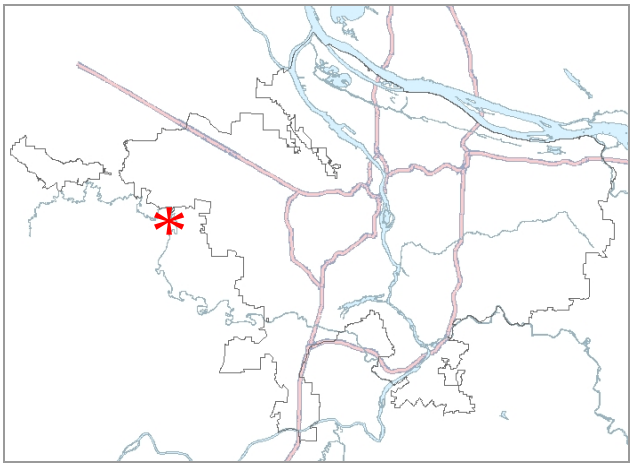


Commute distance: Residents of the census tract that comprises the SW Tualatin area are forecasted to have an average commute distance of 12.36 miles in the year 2035, similar to the 7-county average (12.32 miles).

Transportation: A substantial portion of the local / community infrastructure costs for SW Tualatin are attributable to transportation improvements. Since the writing of the concept plan, estimated costs for 124th Avenue have gone up significantly. Other transportation projects have also increased in cost since 2005, including SW 115 Avenue, SW Blake Street, SW 120 Avenue, Tonquin Road and Waldo Way. Total transportation costs are now estimated at $195,431,000, or about 91% of the total infrastructure costs for the concept area.

Witch Hazel concept area– urbanizing area

Hillsboro, OR



Total acres:	318
Gross buildable acres:	270
Net new population:	5,000
Net new jobs:	0
Total EDUs:	2,000
Avg. EDUs per gross buildable acre:	7.41
Avg. commute miles in the year 2035:	12.20

Estimated capital costs (2008$, including regional costs)

Per EDU:	$ 49,000
Total:	$98,465,000

Proposed Use

The Witch Hazel area is planned as a residential community with mixed-use zones.

Existing Conditions

Transportation

Direct north-south access to the Witch Hazel Village plan area is provided by three county roadways: SW River Road (along the western edge), SW 247th /Brookwood Avenue (at the center), and SW 234th/Century Boulevard (along the eastern edge); and east-west access is provided by one city roadway, SE Alexander Street (along the northern edge). Except for River Road, which has a bike lane, the roads are without sidewalks, curbs and bike/ped infrastructure.

Water

Current residents are on private well systems. When the plan area is annexed to the City and is urbanized, water will be supplied by the City of Hillsboro.

Wastewater

With the exception of the new Witch Hazel Elementary School (which has sewer service), all developed properties within the plan area are currently served by private septic systems.

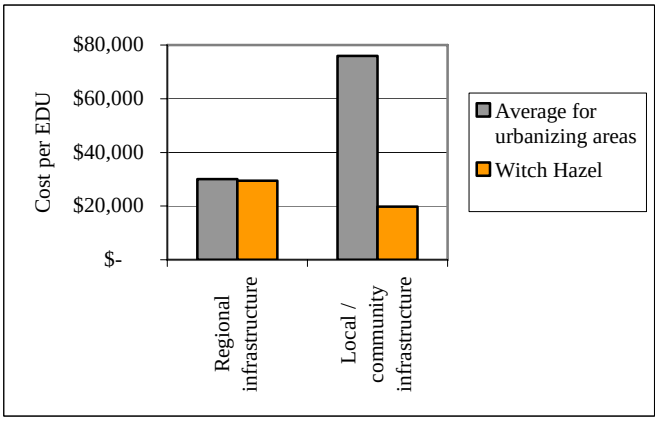
Stormwater

The existing stormwater system within the plan area includes pipes/culverts, subsurface tiling, overland flow, natural swales, irrigation and roadway drainage ditches, all of which flow to Witch Hazel Creek or Gordon Creek, eventually draining to the Tualatin River.

Parks, plazas, public places

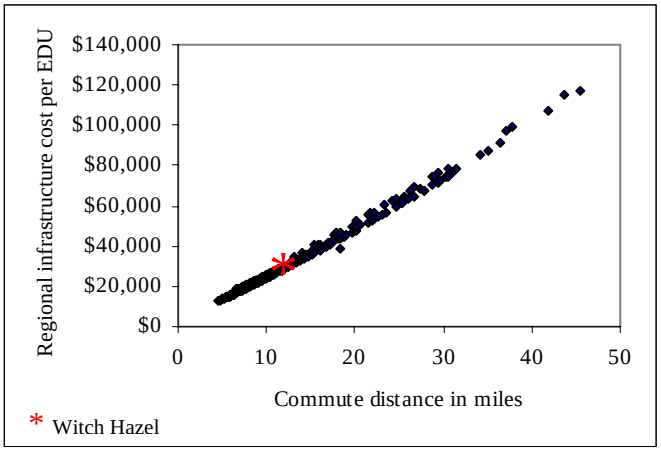
There are no existing public parks within the Witch Hazel Village plan area. However, Clean Water Services owns a wetland area in the northwest portion of the concept area.

How do Witch Hazel's infrastructure costs compare to the regional average?



Witch Hazel's regional infrastructure costs (highways, bridges, transit, etc) are average for the 7-county region. Its local/community infrastructure costs are about $55,000 lower per EDU than the regional average for urbanizing areas.

What are the factors that influence infrastructure costs in Witch Hazel?



Commute distance: Longer travel distances translate into more regional infrastructure needed per household. Residents of the census tract that comprises the Witch Hazel area are forecasted to have an average commute distance of 12.2 miles in the year 2035, similar to the 7-county average (12.32 miles).

Topography: The Witch Hazel area is fairly flat with no substantial riparian zones.

Proximity of existing services: Water and sanitary sewer services exist to the north of the area. There is an existing school on site.

Appendix 1

Preliminary capital costs (000) escalated to 2008$[8]

	Transport	Transit & Bike/Ped	Sewer	Water	Storm	Parks	Subtotal	Other	Total
Coffee Creek I	$4,518	$0	$1,530	$1,140	$300	$570	$8,058	$0	**$8,058**
Springwater	$237,231	$0	$28,894	$35,032	$29,993	$44,642	$375,791	$0	**$375,791**
Damascus	$1,731,623	$0	$162,240	$282,843	$75,712	$390,203	$2,642,621	$476,674	**$3,119,295**
SW Tualatin	$195,431	$0	$9,674	$9,224	$562	$0	$214,891	$0	**$214,891**
Witch Hazel	$6,862	$0	$9,275	$8,575	$10,236	$4,612	$39,559	$0	**$39,559**
Shute Road	$6,350	$0	$967	$619	$1,200	$0	$9,136	$0	**$9,136**
Rock Creek	$33,576	$0	$1,076	$3,185	$4,664	$6,295	$48,796	$0	**$48,796**
Pleasant Valley	$103,823	$0	$22,686	$21,172	$32,213	$70,186	$250,080	$53,993	**$304,073**
North Bethany	$157,723	$0	$13,500	$13,800	$13,800	$38,800	$237,623	$146,000	**$383,623**
Beaver Creek	$66,300	$0	$8,500	$15,900	$25,200	$0	$115,900	$0	**$115,900**
Park Place	$58,400	$0	$5,520	$3,800	$820	$3,220	$71,760	$0	**$71,760**
South Hillsboro	$203,057	$0	$7,550	$11,316	$0	$56,894	$278,817	$16,700	**$295,517**
South Waterfront	$148,445	$29,900	$0	$0	$710	$92,553	$271,607	$51,850	**$323,457**
Lake Oswego Village Cntr	$797	$0	$0	$0	$0	$0	$797	$4,319	**$5,116**
Brewery Blocks	$0	$0	$0	$0	$0	$0	$0	$40,647	**$40,647**
Civic Neighborhood	$3,413	$6,194	$366	$266	$1,365	$0	$11,606	$0	**$11,606**
North Main	$811	$0	$0	$0	$0	$0	$811	$108	**$919**

[8] Escalation assumed to equal 1st Q. 2008 dollars. Change between year of planning estimate and this year, based on 4% annual escalation rate. Costs do not reflect state facilities. SW Tualatin project assumes 50% of 242nd Ave. improvement is allocated to project area.

Metro Policy Advisory Committee

Septebmer 10, 2008
Item 6 – Periodic Review Issues:
City of Forest Grove
City of Portland

MPAC Worksheet

Agenda Item Title (include ordinance or resolution number and title if applicable):

Periodic Review Issues – Forest Grove and Portland

Presenter: Richard Kidd, Forest Grove and Gil Kelley, Portland

Contact for this worksheet/presentation: Chris Deffebach/Sherry Oeser

Council Liaison Sponsor:

Purpose of this item (check no more than 2):

Information __X_
Update _____
Discussion __X__
Action _____

MPAC Target Meeting Date: _____9/10/08_____

Amount of time needed for:
Presentation __25_
Discussion __20_

Purpose/Objective (what do you expect to accomplish by having the item on *this meeting's* agenda):
(e.g. to discuss policy issues identified to date and provide direction to staff on these issues)

To highlight the significance of the periodic review process and its connection to decisions the region will be making in the coming months and years

Action Requested/Outcome (What action do you want MPAC to take at *this meeting?* State the ***policy*** questions that need to be answered.)

MPAC members will learn from the experience and approaches taken by Forest Grove and Portland in developing their work programs for periodic review as well as their local aspirations

Background and context:

In the next four years, 13 local governments within Metro's boundaries will begin periodic review of local comprehensive plans and land use regulations to insure compliance with statewide planning goals. Coordination of state, regional and local government efforts is essential.

The first two jurisdictions entering periodic review are Forest Grove and Portland. Officials from both jurisdictions will share what they have learned thus far in preparing their work programs.

At the same time, Metro will be updating estimates of regional capacity for 20 years per state requirements and will factor in the local jurisdiction updates in upcoming regional growth management decisions.

What has changed since MPAC last considered this issue/item?

Presentations have been made to MPAC on the regional planning process and timeline. This item will highlight local plans.

What packet material do you plan to include? (must be provided 8-days prior to the actual meeting for distribution)

Forest Grove: Vision Statement
Portland: Summary of the Portland Plan

What is the schedule for future consideration of item (include MTAC, TPAC, JPACT and Council as appropriate):

MPAC will review a preliminary urban growth report in early 2009, discuss and review growth management options in mid-2009, and take actions in late 2009.

Forest Grove Vision Statement

This statement is written and designed to reflect the best of what exists now, and what we aspire to become, as a community.

Forest Grove is a friendly, twenty-first century, small, full service city. It was settled in 1841 by pioneers who valued respect for education, faith, enterprise, service to humanity, and the bountiful resources of the Tualatin Plain. Those values persist to inspire a common vision for a high quality of life in a thriving and progressive community that reaches from its historical commercial core around Pacific University to a horizon of forests, farms, vineyards, and the Coast Range. As an engaged and diverse people, we assure sustainability in our economy and our environment, thus supporting a community that nurtures our youth, educates all residents, and attracts and welcomes visitors. Forest Grove is itself a *destination* that thrives by *design* and is our *home*.

Forest Grove is a *Destination* that offers visitors and residents:

- **A rich heritage** preserved by honoring the city's natural, cultural, and historic treasures while also embracing the future.
- **A centrally located gateway** to forests, waterways, beaches, and mountains; this wealth of resources is cherished and preserved to foster sport, recreation, reflection, and leisure.
- **Arts & culture** that abound throughout the year; we celebrate our cultures and participate in a wide variety of visual and performing arts and festivals.
- **A community** recognized for its commitment to conserve, preserve, protect and restore our natural assets.

Forest Grove is a community by *Design* through:

- **Participation** of an engaged public and accessible, responsive government.
- **Planning** that considers and accommodates both the desires and needs of all community members to ensure their quality of life and prosperity.
- **Sustainable transportation** modes, systems, and networks that provide opportunities for all to conveniently and safely move about within and outside of the community.
- **Economic development** that encourages innovative, diverse and ecologically sound enterprises that provide ample opportunities for employment, and ensures the vitality of the community.
- **Fiscally sound funding** of quality public safety and municipal services including locally owned public utility and watershed.

Forest Grove is *Home* to:

- **Individuals** who are respected and valued for their experience, abilities, and differences, and where all residents are included in the life of the community through excellent education, recreation, and social programs.
- **Young people** who are nurtured and encouraged to achieve their full potential.
- **Families** of every size and description who have community resources needed for lifelong learning and development.
- **Older residents** whose ongoing leadership, wisdom and investment in the community build the foundation for our future.
- **Distinctive neighborhoods** replete with a variety of accessible housing options, schools, parks, places of worship and social gathering, and farmlands and open spaces.
- **A community** in harmony, bound by commonly shared respect for its residents, natural resources, economic vitality, and its active role in a global society.

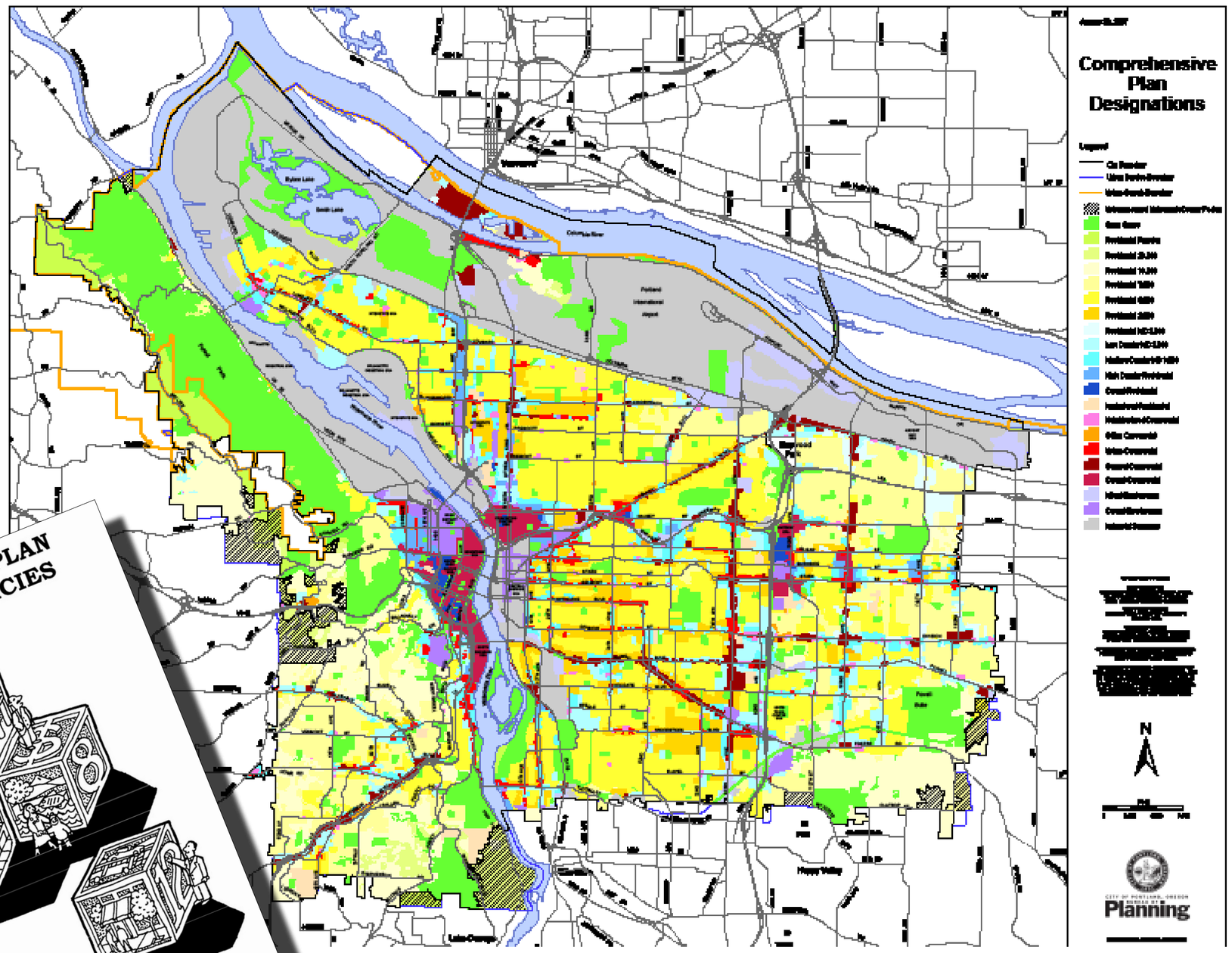
What is the Comp Plan?

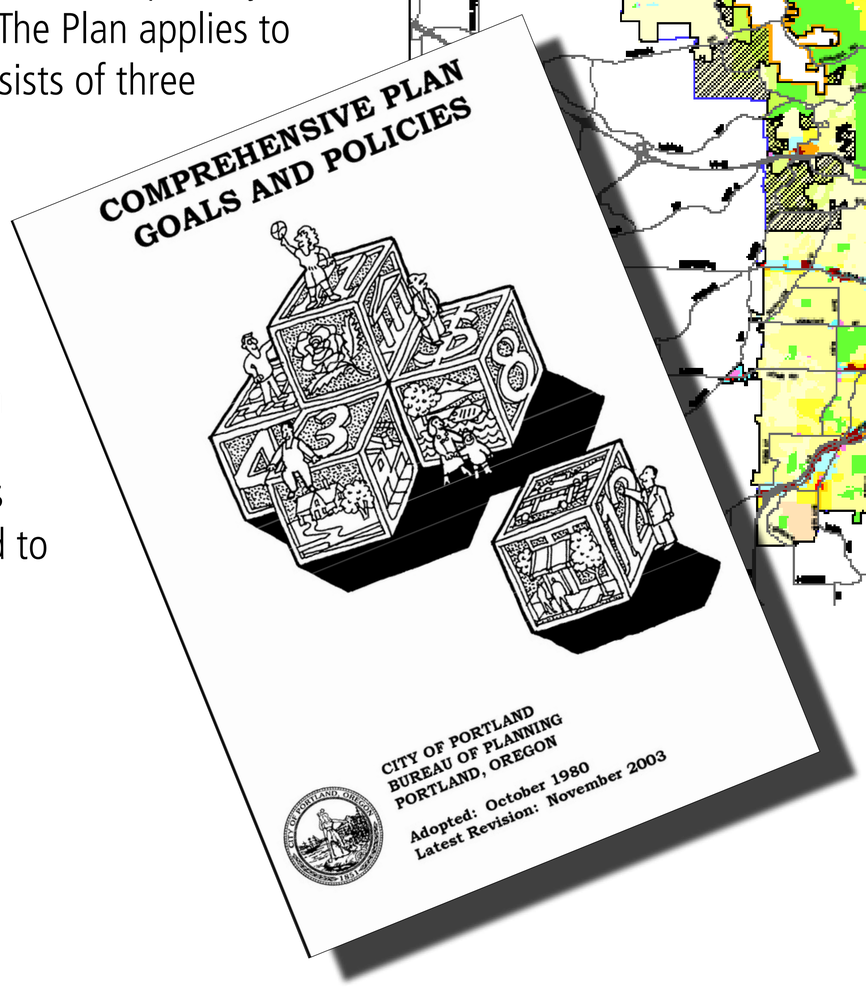
The "Comp Plan" is the casual name by which people refer to Portland's Comprehensive Plan. It provides direction for City decision-making on land use, transportation, parks, sewer and water systems, natural resources, and air and water quality management programs.

Guided by Portlanders, the City started writing its existing Comp Plan in 1978, in response to new statewide land use planning laws. The current Comp Plan was adopted by the City Council in 1980. The Plan applies to the entire city and consists of three major components:

- Goals & Policies
- Comprehensive Plan Map
- Public Facilities Plan

The plan has served us well, but now we need to update it.





PORTLAND PLAN

. . . and what is the Portland Plan?

The Portland Plan will be the Comprehensive Plan for a new generation. It is an inclusive, citywide planning effort which will guide the growth and development of Portland over the next 25 years and beyond.

The Plan will address crucial aspects of city life – for instance, housing, jobs, transportation, sustainability, the natural environment and infrastructure – with a long-term and holistic perspective.

It will cover the geography of the entire city and zoom in on particular areas and topics as needed, unifying several plans and projects.

The Portland Plan will be a multi-year process coordinating several bureaus and agencies with a consistent approach. And, perhaps most importantly, it will involve and depend on our city's most valuable resource: its people.

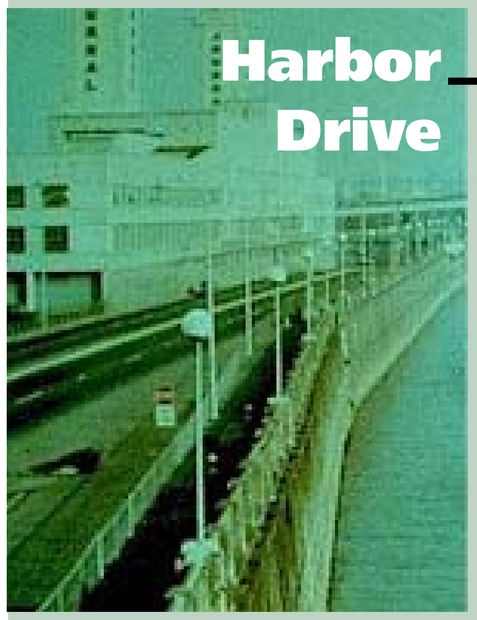
CITY OF PORTLAND
BUREAU OF
PLANNING

why plan now?

PORTLAND HAS CHANGED

Do you recognize these places?

They were Portland. But they're not any more.



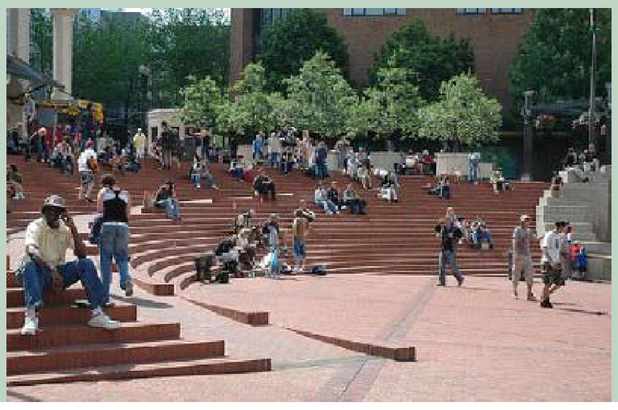
became Waterfront Park

Harbor Drive was removed and replaced by a 73-acre park, named for former Governor Tom McCall. The park was dedicated in

1978

These projects are the legacy of the planning done by Portland in the 1970s,'80s and '90s … and the hard work of implementation through all those years.

became Pioneer Courthouse Square



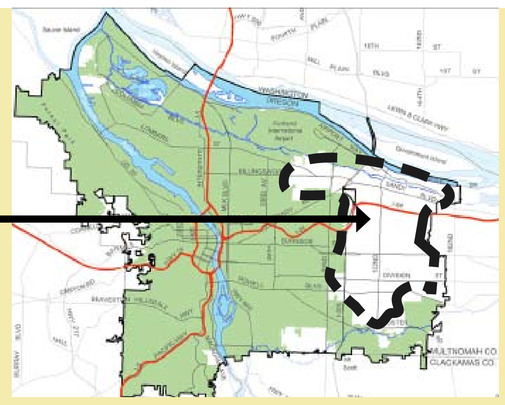
The city acquired the land in 1979. A design competition was held and Pioneer Courthouse Square opened in

1984

WE'VE GROWN A LOT

We have one-third more land area than we did in 1980.

23,000 ACRES WERE ADDED SINCE 1980



We have 50% more people living here than we did in 1980.

IN 1980 PORTLAND'S POPULATION WAS **368,000**

NOW WE ARE **562,000**

How will Portland grow in the next 25 years?

PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING

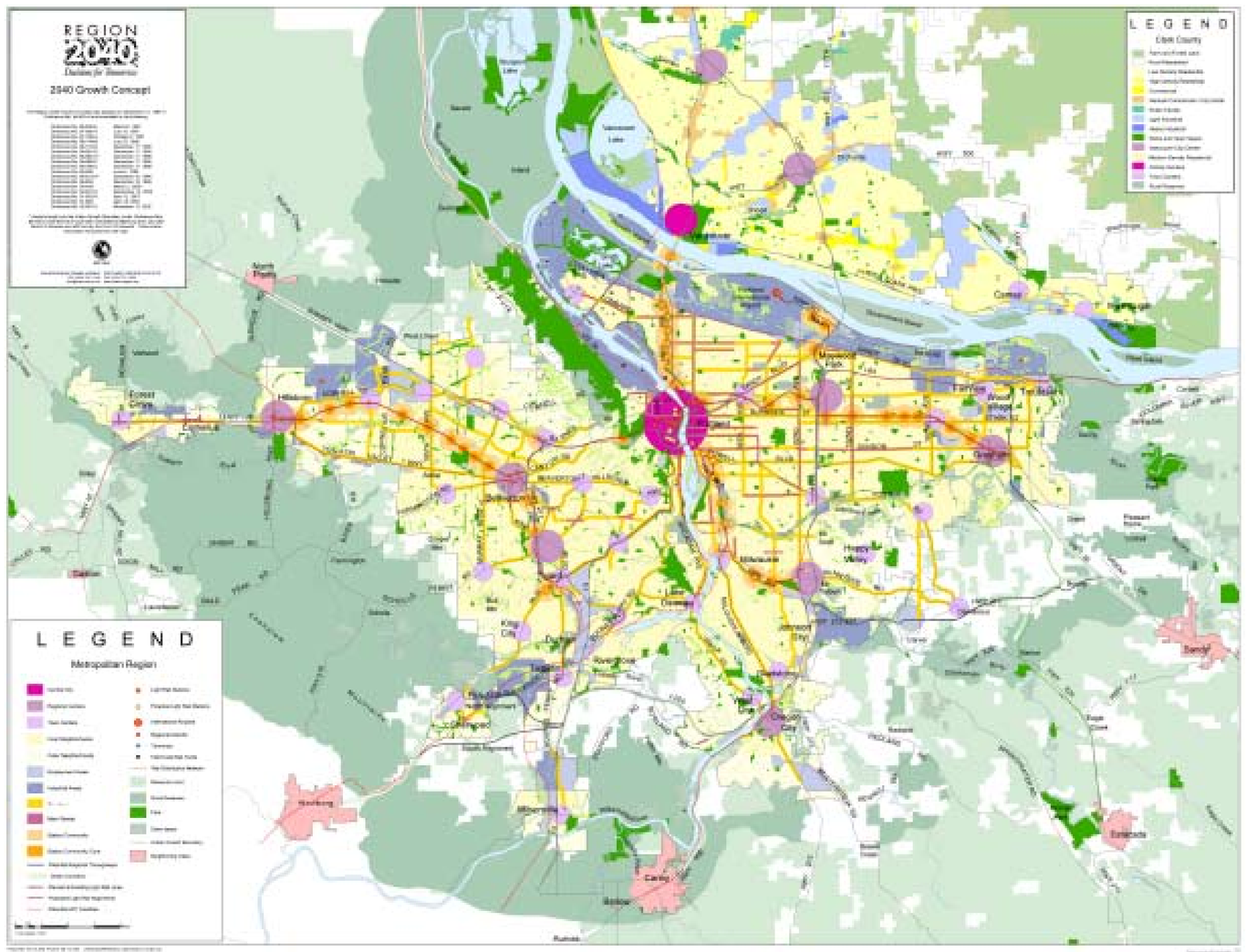
the Portland puzzle:

Planning at various scales

METRO

The Metro government coordinates actions and policies of the many cities in our regional area to ensure that the parts add up to a healthy whole. The agency provides growth forecasts, and its Metro Region 2040 Growth Concept map illustrates where growth should be directed. Essential themes of the 2040 Concept are the:

- **Urban Growth Boundary (UGB),** which "separates urban land from rural land."
- **Allocation of numbers of jobs and housing units** that are in the Metro regional forecast, to provide an overall balance within the UGB.
- **Emphasis on growth in centers and corridors** for more density and intensity of land uses.
- **Location of a range of community sizes and types,** from Central City, to regional centers such as Gateway, to main street areas.

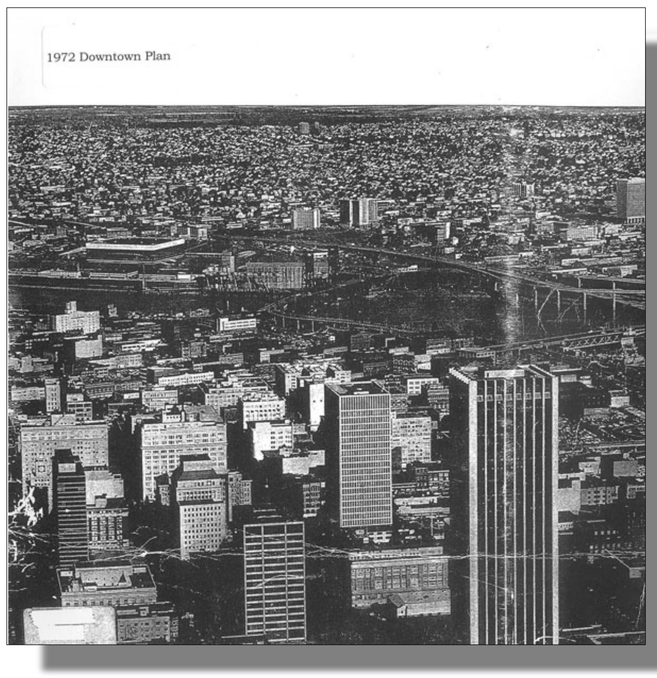


The Metro Region 2040 Growth Concept map directs new development while providing choices in the type and intensity of development, from commercialized urban areas with tall buildings (such as Central Portland) to main street areas and neighborhoods of single family detached homes.

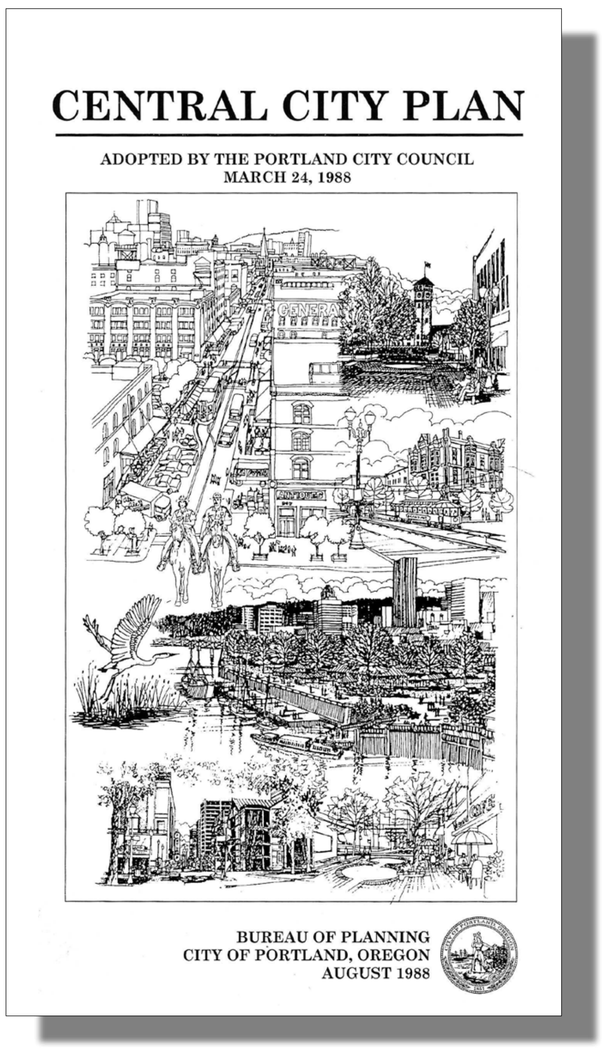
CENTRAL PORTLAND

It's no coincidence that the big, bright pink dot at the center of the Metro 2040 Growth Concept map is Portland's Central City. It's not just the geographical center but also the transportation hub of the metro area. The success of Metro regional planning and the health of the region rely on Central Portland remaining strong as the area's most densely, intensely developed mix of uses.

Central Portland includes the historic downtown and is where the two sides of the Willamette River come together, with parks and other public facilities that belong to all Portlanders. Through the continued, various planning efforts in Central Portland starting in the 1970s and 1980s, the heart of the city has become the vibrant place that we enjoy.



The **1972 *Downtown Plan*** and the 1988 ***Central City Plan*** have helped us navigate to now. Much has changed, and we have new challenges to address in the new Central Portland Plan.



PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING

visionPDX

visionPDX was an extensive public engagement process to develop a shared vision for our community for the next 20 years and beyond. Almost 17,000 Portlanders weighed in over two years and in September 2007, City Council accepted the community vision and values, below. visionPDX forms the foundation for the Portland Plan. Learn more at www.visionPDX.com.

Portland's Vision for 2030

Shaped by the Willamette and Columbia Rivers, Portland connects people and nature to create an international model of equity and sustainability.

We are a city of communities. Our distinct neighborhoods and vibrant downtown are safe, energizing civic and cultural spaces.

Our diverse population, innovative businesses and forward-thinking leaders work together to ensure livability for all.

Portland's Values

Community Connectedness and Distinctiveness

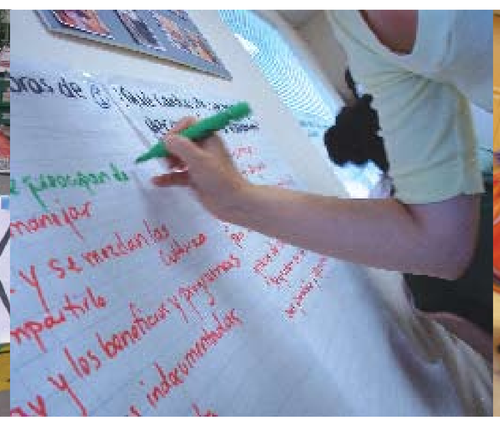
We value a strong sense of connection in our communities. Building trust and relationships leads to a better quality of life. We value our **local and small-scale** political, social, economic and cultural environments. Our **varied neighborhoods** make Portland a special place.

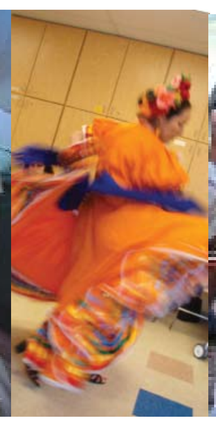
Equity and Accessibility

We value the right of every person to have **access to opportunities** for meeting basic needs and improving health and well-being. We believe that all residents should be able to use our systems to access jobs, services, housing, education, transportation options and passive and active recreation **without physical, social or economic barriers**.

Sustainability

We value taking responsibility for actions that will affect our long-term future. Sustainability means meeting **the environmental, social, cultural and economic needs** of the present while ensuring the similar needs of future generations. Sustainability indicates **care and respect for the ecosystem** as well as for the people within it.





Accountability and Leadership

We value transparent and fair processes. We value **decision-makers with integrity** who are connected to the community and consider the common good when making choices. We value **leaders who inspire others** to act towards a common goal.

Inclusion and Diversity

We value fostering respect for and promoting interaction among **all individuals in our community**, regardless of race, ethnicity, sex, gender or gender identity, sexual orientation, belief system, political ideology, ability, socioeconomic status, educational status, veteran status, place of origin, language spoken, age or geography. By doing this, we will have richer relationships and make better decisions for our future.

Innovation and Creativity

We value imagination and original thinking to introduce and test new ideas, products and services that benefit the community. We believe that many solutions can be found to seemingly intractable problems through **collective and creative problem-solving**.

Safety

We value communities that are safe, crime-free and work in partnership with public safety efforts. We value a **caring community** that seeks to support those in need of help or assistance. We **prepare for emergencies** and support development and maintenance of **infrastructure** – sidewalks, roads, bike paths, sewer and water lines, power lines, urban tree canopy, etc. – that will support safe and **healthy communities**.

PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING

ECONOMIC DEVELOPMENT & PROSPERITY

Economic development is concerned with improving the performance and capacity of our economy to build a more prosperous, sustainable future.

Conditions & Trends

- **Most new jobs in the region are locating outside the city's boundaries.**
- **Inflation-adjusted income has declined** for most Oregon households in the last two decades, despite economic growth (see chart).
- **Economic globalization** has put more pressure on regions to be adaptable and competitive to remain prosperous.

Challenges & Opportunities

Challenges

- **Funding –** There is a wide gap between planned transportation projects needed to support the economy and the budgets to pay for them. Future population growth will compound these problems by bringing increased capacity needs.
- **Workforce development –** Access to higher education in Oregon has not kept pace with global trends or competitive opportunities.
- **Site readiness –** Businesses are locating outside of Portland due to lack of large, development-ready sites in the city.

Opportunities

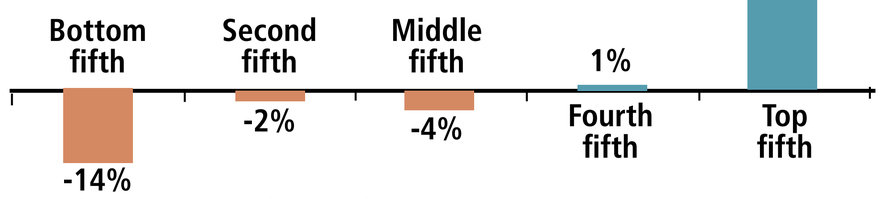
- **Regional commercial center –** Portland has long been the core city to the growing Columbia Basin, offering regional services that generate substantial job growth and bring income into the metro area.
- **Model for innovation –** Distinctiveness and livability have made Portland competitive in attracting talent for our knowledge-based growth.
- **Sustainable development –** Portland firms' expertise in green building, solar energy, biofuels and related fields can help catalyze sustainable business development in the wider region.

Questions

- How can we **position Portland in the global and regional economy** to remain a prosperous city, building on our competitive strengths and core values?
- Where should we **locate projected employment** growth?
- How can we expand economic opportunities in the city to **reduce poverty and revitalize** economically distressed areas?
- What can we do to help industry and individuals **reduce their carbon footprint?**

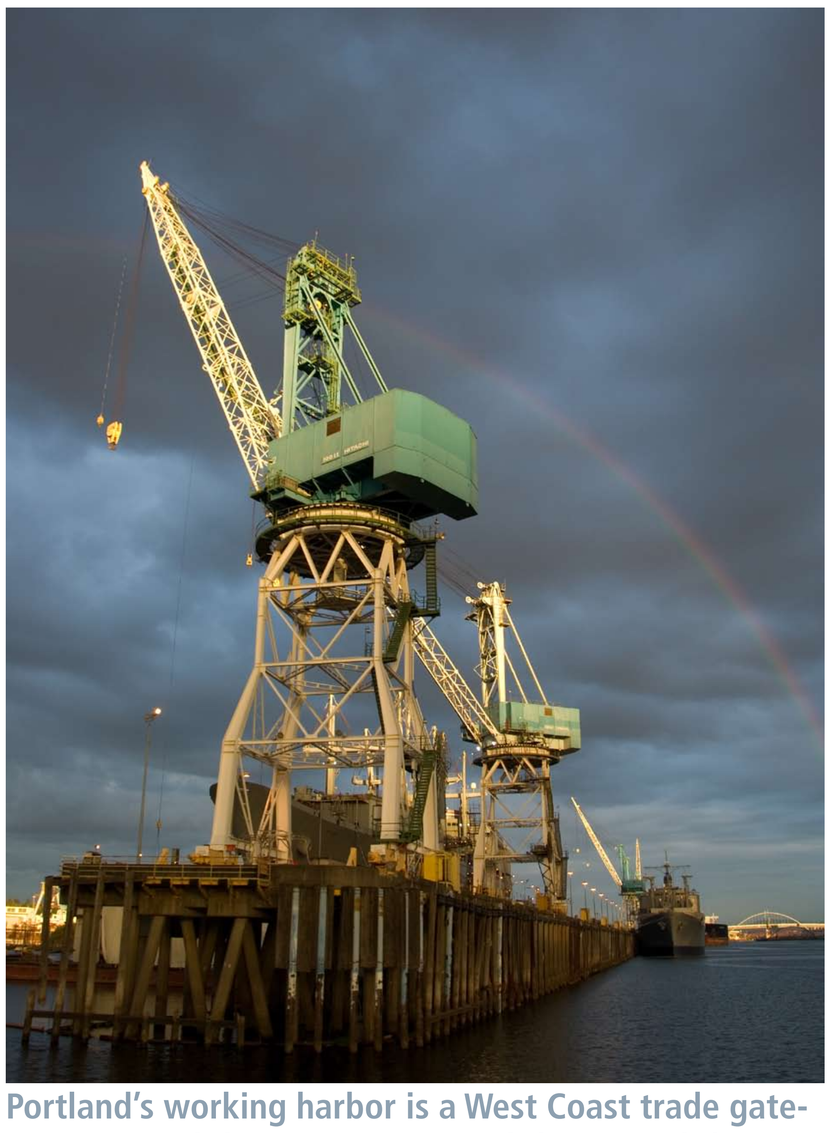
An Oregon Economy for the Few . . .

From 1979 to 2005, the average real adjusted gross income grew 47% for the top fifth of Oregon households, but stagnated or dropped for all other income groups.



NOTE: "Households" here refers to tax filers with positive adjusted gross incomes. Excludes negative returns from bottom fifth. Adjusted for inflation using 2005 dollars with CPI-U.
Source: OCPP analysis of Oregon Dept. of Revenue data.

Food carts provide a low-cost way to start up a small business. This cart sits on an otherwise empty lot in North Portland, in the Mississippi neighborhood.



Portland's working harbor is a West Coast trade gateway, Oregon's largest seaport and the region's largest heavy industrial area.

PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING

ENVIRONMENT

Environment refers to our natural systems, as well as how buildings, roads and other structures impact them, and the functions that this "green infrastructure" provide by cleaning the air and water, capturing carbon, safeguarding us from hazards, contributing to a high quality of life, and providing places to recreate and enjoy natural beauty.

Conditions & Trends

- Portland's **air quality has improved.**
- All of Portland's major **water bodies** (except Balch Creek) **do not meet standards** for bacteria, temperature, toxics and dissolved oxygen.
- **Significant investments are being made to improve water quality and restore ecological functions** in degraded floodplains, streams, riparian areas, and upland habitat throughout the city.
- **Salmon species** are listed under the federal Endangered Species Act; habitats for other species are in degraded condition.

Challenges & Opportunities

Challenges

- **Population growth** is increasing pressure to develop on environmentally sensitive lands, including areas that Portland's environmental zoning program does not protect.
- Climate change may result in **widespread ecological change**, including a higher water level in the Willamette River, increased stream flows during the winter, increased soil erosion, and lower stream flows and higher stream temperatures during the summer.
- Lower-income neighborhoods often have **limited access to nature**, including larger open spaces and urban street trees.

Opportunities

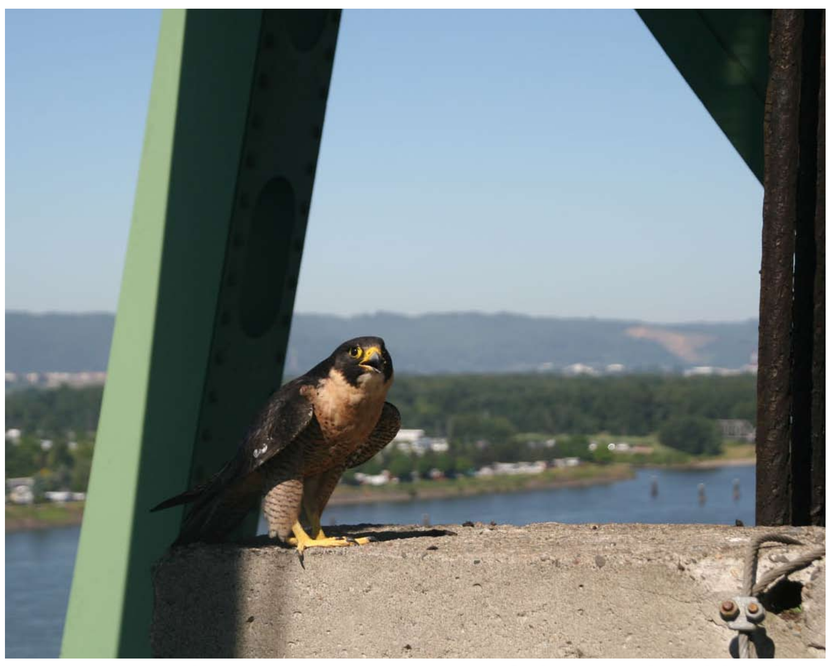
- Developing **land use plans that sustain the integrity of natural systems** and respond to the natural character of the land can enhance community distinctiveness while sustaining fish and wildlife, increasing public health and safety, and providing connections to nature.
- **Innovative site design** and technologies can keep the air and water clean and cool, provide wildlife habitat, and encourage clean up and development of brownfields.
- **Watershed councils and stewardship groups**, working in partnership with local agencies, conduct critical restoration projects that improve watershed health and community pride.

Questions

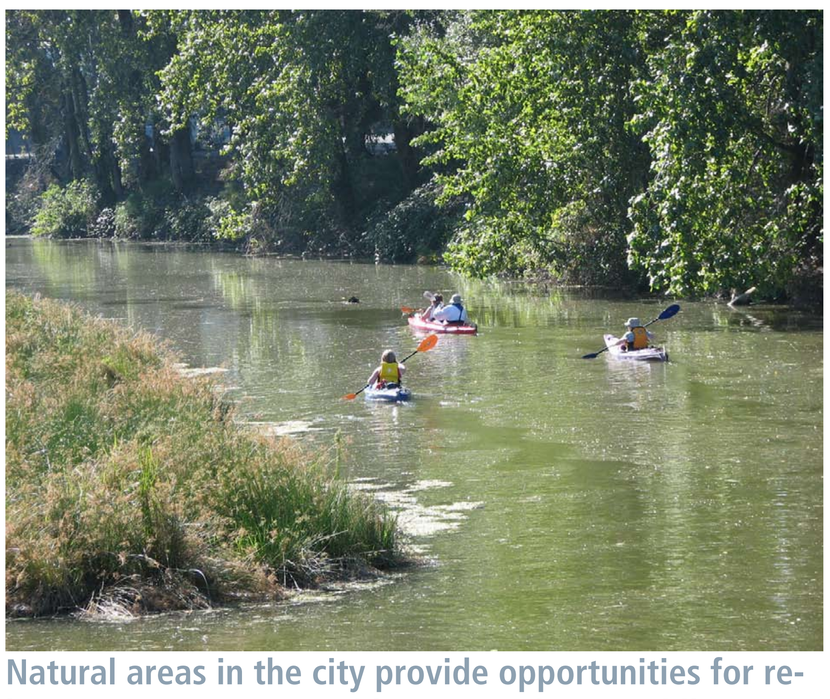
- How can we create a city which will **restore functional ecosystems** and employ green infrastructure?
- How do we move from planning approaches that "balance" environmental goals against other goals, to approaches that recognize that **healthy natural systems are the foundation for the city's long-term vitality**?
- How can access to **parks, open spaces, and natural areas be more equitably distributed** throughout the City to ensure that all Portlanders, especially children, have ample opportunities to learn from and enjoy nature?

Photo courtesy of Bob Sallinger, Audubon Society of Portland

Street trees and "green streets" help collect and treat stormwater, cool the air and provide wildlife habitat within city neighborhoods like this one in NE Portland.



Peregrine Falcons nest on many of the Portland bridges that cross the Willamette River, including the St. Johns, Fremont and Marquam Bridges.



Natural areas in the city provide opportunities for relaxation, recreation and learning. These paddlers are exploring the Columbia Slough near NE 42nd Avenue.

PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING

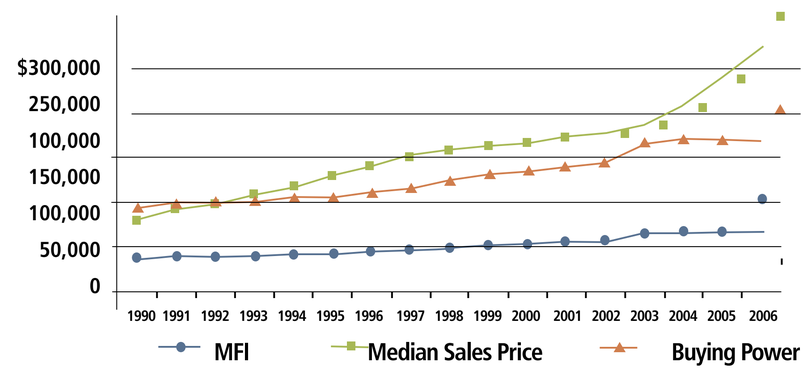
HOUSING

Housing addresses policies and programs that aim to ensure all Portlanders have access to affordable, healthy dwellings.

Conditions & Trends

Affordability of housing is an increasingly important issue in Portland. A range of factors are converging to make it difficult for people to afford to live in Portland.

- **Housing prices in Portland are rising faster than incomes.**
- There is a trend of **families with children moving** to the edge of Portland or outside city limits in search of larger, more affordable housing.
- **People are being forced into homelessness** due to the steep declines in housing affordability.
- **Transportation costs are an important part of a household's cost of living**. Research indicates that transportation costs are often the second largest expenditure behind housing.
- **Renovation and new development in some close-in neighborhoods** have displaced some low-and moderate-income families.



SOURCE: PDC. CHART NOTES: MFI-metro area median family income for a family of four. Home Buying Power (Bank Loan of 2.5 * MFI) - for a family of four at 100% MFI.

Home Buying Power of Median Family Income in Relation to

Challenges & Opportunities

Challenges

- **Decreasing Affordability –** Rising costs make it more difficult for low- and moderate-income households to afford quality housing within the city.
- **Limited Resources –** Government programs that assist people with affordable housing are likely to be further strained due to funding cuts.

Opportunities

- **Housing Demand –** Population growth will provide a market for denser, infill development in urban centers and corridors.
- **Response to Peak Oil –** As car travel grows more expensive due to rising oil prices, demand for housing closer to jobs, transit, schools, and other basic services and stores will increase. This in turn will encourage more mixed-use, higher density development.

The Central City Concern building, at right above, provides 180 units of transitional, affordable housing in downtown Portland.

New attached housing at New Columbia was funded by the federal Hope VI affordable housing program.

Questions

- How do we **help low- and moderate-income households from being priced out** of many Portland neighborhoods, particularly those with good access to transportation, jobs and other opportunities?
- How can we **improve mixed-use neighborhoods** emerging in central Portland?
- Should Portland build and strengthen a **permanent supply of affordable housing units?**
- Should the City try to attract and retain **middle income/family households?**

TRANSPORTATION & INFRASTRUCTURE

Transportation is instrumental in maintaining our quality of life, how we get around, how we move goods and do business and how we treat the environment. Infrastructure also includes our systems addressing water, sewer, and stormwater, and providing parks and civic services.

Conditions & Trends

- Portland has an **infrastructure maintenance deficit** because systems are aging, preventative maintenance is under-funded, and the cost to maintain infrastructure is increasing.
- Population growth will mean new or updated roads, sewers, water lines and parks and will likely lead to **more wear and tear** on our existing systems.
- **Shifts in climate, energy sources, demographic patterns**, and the regulatory environment will impact the City's infrastructure needs.

Challenges & Opportunities

Challenges

- To respond to demographic shifts, the City will need to identify, plan for, and adapt to emerging and **unmet infrastructure needs**.
- **Traffic congestion** can impede freight movement, cause delays to businesses and commuters, and increase the cost of doing business in Portland.
- Investments are needed to **maintain or replace aging assets**, satisfy mandates and address growth needs.

Opportunities

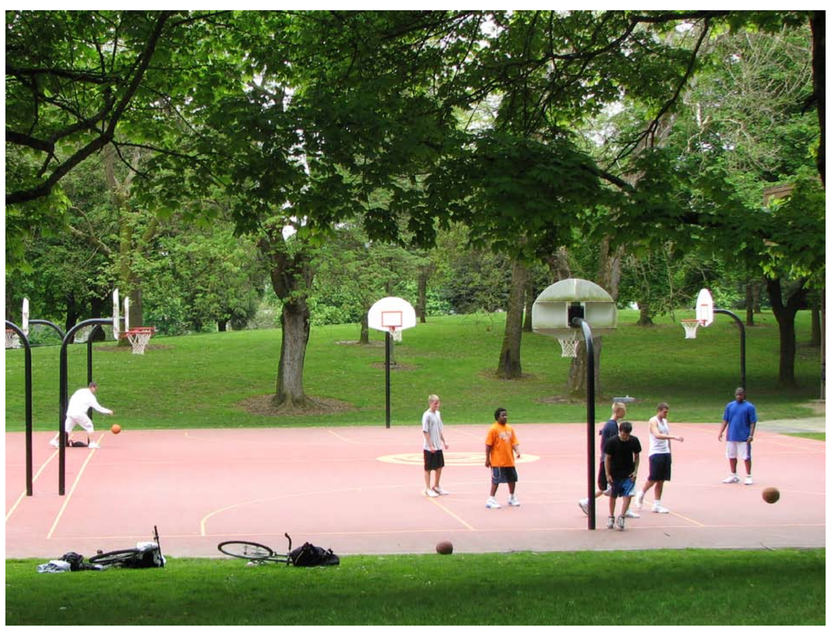
- **"Green infrastructure,"** such as tree canopy, aquifers, green streets, open spaces, streams and wetlands can help protect environmental quality, reduce long-term costs, enhance quality of life and advance sustainability.
- Infrastructure can play a key role in **fostering public and environmental health,** economic prosperity and community cohesion.
- Portland's transit system, including the proposed and expanded Streetcar System, provides an opportunity for additional high-quality, **transit-oriented development**.

Questions

- What would it mean to **consider natural resources** that perform important functions as part of the City's infrastructure?
- Are there ways that **service or design standards** can be revised to more efficiently meet community needs to ensure adequate infrastructure for all Portlanders?
- What investments can we make to **improve the transportation system** most dramatically?
- What **new opportunities and approaches** to getting the most out of our transportation system should be explored?

The Eastside MAX Blue Line to Gresham, the first of Portland's light rail routes, was completed in 1986.

The City's water bureau provides about 100 million gallons of water per day, including to Benson Bubblers.



Portland's Parks & Recreation department manages more than 7,000 acres of natural areas and over 3,200 acres of developed parks, like this one in the Irvington neighborhood.

PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING

URBAN DESIGN & LAND USE

Portland is shaped by its natural setting and by development decisions, both past and present. The Portland of tomorrow will be shaped by the urban design and land use decisions we make today and in the future.

Conditions & Trends

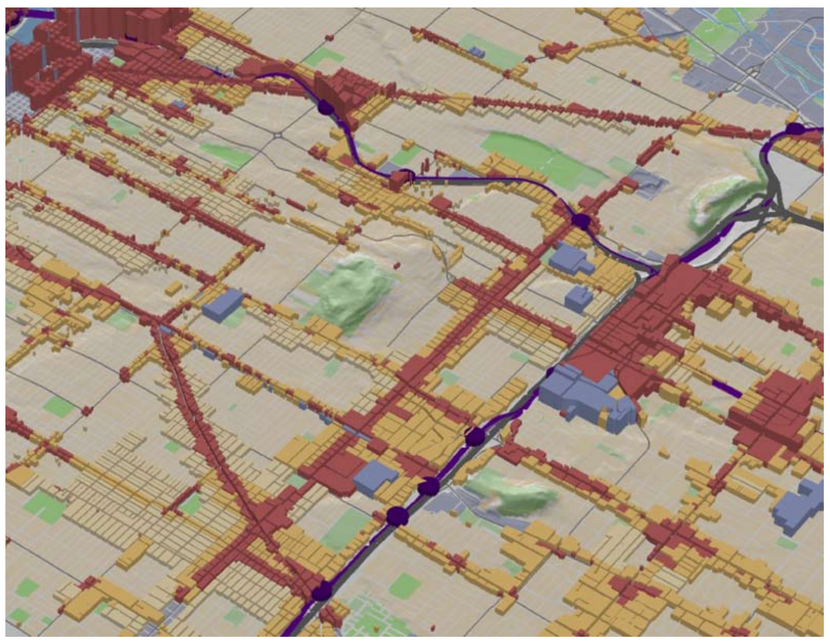
- The Metro 2040 Urban Growth Concept provides Portland with a regional growth strategy that **focuses growth in centers and corridors.**
- **Higher-density housing types** now account for three quarters of new housing being built.
- Portland's commercial zones allow for entirely residential development, which can eliminate opportunities for developing **neighborhood-serving commercial uses.**
- **Transitions** between land uses, densities, natural and built areas, and existing and new development are becoming more controversial.

Challenges & Opportunities

- Portland has **three predominant neighborhood patterns** – Western, Inner, and Eastern – which were shaped by the natural environment as well as by the eras in which they evolved.
- **Rising energy and transportation costs** are causing us to reconsider how we move around and how we build our city.
- The City needs a **diagram of its intended physical form** that highlights where development can and cannot occur, where natural features are protected, and where key connections, civic and outdoor amenities are located.

Questions

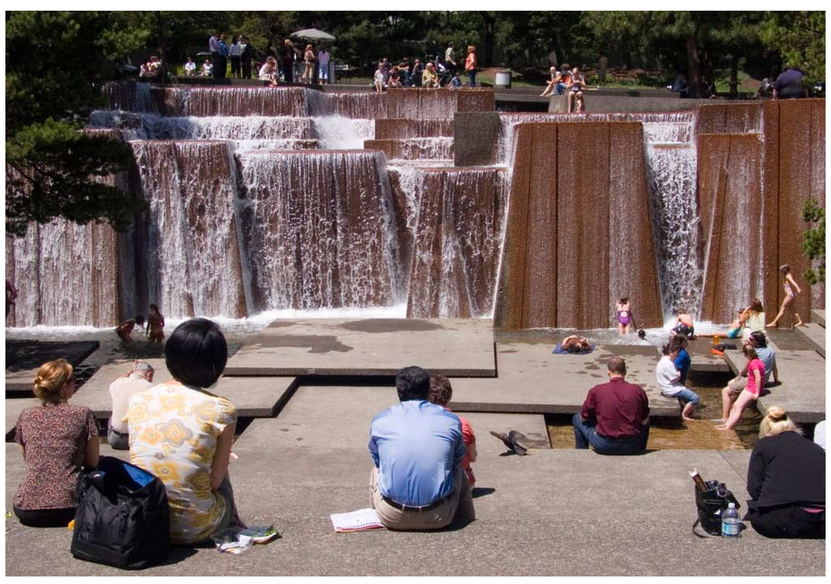
- How does our growth strategy – the **densities and arrangement of land uses** – respond to the eight critical issues?
- How can we physically and spatially become **more energy efficient?**
- How can we design a city that **preserves and enhances the quality of our neighborhoods** as we accommodate growth?
- How can our approach to **urban design and land use** assist in creating a more sustainable and flexible urban environment?



Generalized diagram of relative development intensity currently allowed by regulation.

Predominant development patterns in western, inner and eastern neighborhoods.

Medium-density infill development in East Portland.



Public space in Central Portland that attracts many different city residents.

PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING

HEALTH & HUMAN SAFETY

Sustainable food systems, neighborhood walkability, healthy communities: Portlanders care deeply about these issues, and there is growing evidence that urban planning and design do impact people's health, well-being, and quality of life.

Conditions & Trends

Safety

- **378 people have been killed** and 2,662 have been injured on Portland's roads due to a lack of funding for safety improvements.
- Overall bike crashes and associated injuries or fatalities are remaining fairly steady while **ridership has increased exponentially**.

Health

- **Childhood obesity** in Oregon is up 100% in the past 20 years.
- Portland's **bikeway network** includes 270 miles of on-street bike lanes, bike boulevards, and paved trails.

Food

- One in five Oregon children lives in a **food-insecure home**.
- **Food prices**, especially for staple products like wheat, eggs, and milk, have risen at double-digit rates in the past year.
- Around 500 Portlanders are currently on a **waiting list for a community garden**.

Challenges & Opportunities

Challenges

- **Health impacts of government decisions** are not often recognized or taken into consideration.
- **Food insecurity** is a significant problem for low-income residents, including the availability, accessibility, and affordability of healthful foods.
- **Crime and safety concerns** are more acute in some areas of Portland than others.

Opportunities

- Promote **"20-minute neighborhoods,"** where people can walk to services, stores and civic amenities, to reduce social isolation and encourage walking and biking.
- **Food consciousness** and direct-market agriculture is on the rise in farmers markets, urban farms, gardening and local and organic foods at grocery stores and restaurants.
- Portland's systems of **community policing and crime prevention** are community-based resources that can help to create safer communities.

Questions

- How will we provide public funding fairly so that all Portlanders have **access to basic amenities** (sidewalks, parks, community gardens) to support their health?
- How can our communities be planned to promote the **availability of healthful and affordable food**?
- With increasingly limited funds for maintenance, enhancements and expansion for the transportation system, what are some **viable alternatives for generating new revenue streams** to ensure public safety?

Community gardeners at Colonel Summers Park have cut their plot sizes in half to make room for more gardeners.

The Eastbank Esplanade is one of many newer trails for walking and biking in Portland.

Fourteen farmers markets provide healthful food within the city of Portland. Many now accept food stamps.

PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING

SOCIAL & CULTURAL ISSUES

Education is essential to the social and economic health of the city. Portland's vitality also depends on supporting a strong cultural, artistic and entertainment community.

Conditions & Trends

Education

- While the Portland Public Schools district has experienced an **11,000-student drop** in enrollment, other **districts outside of Portland's inner neighborhoods have seen enrollment rise** dramatically.
- Access to higher education in Oregon has not kept pace with global trends or competitive opportunities. Additionally, vocational training will be challenged to keep pace with retiring boomers and industrial growth.

Arts and Culture

- Since the 1990s, the City of Portland has had **substantial growth in creative service fields** such as advertising, design and independent films.
- According to the Regional Arts and Culture Council, the Portland metro region's 111 nonprofit arts and culture organizations **produced $206 million** in personal or business income in 2006.

Challenges & Opportunities

Challenges

- **Oregon's educational funding** per student is 7.2% below the national average.
- Portland Public School's **four-year cohort graduation rate is 57%** (other measures looking at completion rates regardless of time find the figure is closer to 80%).

Opportunities

- Our **schools can be multiple-use facilities** and integral components of our neighborhoods and communities.
- Arts, cultural and historic resources are **major contributors to the region's outstanding "livability"** because they encompass many of the special extras that give Portland its character and appealing uniqueness.
- There is growing interest in live/work housing and **affordable artist housing**, as exemplified in projects like Milepost 5, an artist community in NE Portland.

Questions

- What is the role of the City in supporting **pre-K–12 schools** so that we give our students the strong foundation they need and deserve?
- How can the City support expansion of higher education institutions and research and development in the Central City to offer **catalyst economic opportunities**?
- How can we best ensure the **stability and growth** of cultural institutions, businesses and programming and the range of cultural offerings in Portland?
- How can we more fully realize and **leverage the benefits** of artistic and cultural energy and diversity into economic returns such as jobs?

Portland State University is Oregon's largest university, enrolling 37,000 students, including 13,000 full-time.

Portland Public Schools lack of funding has stretched budgets for such "extras" as arts and athletics.

New galleries are opening near the creative services firms locating in the Pearl District and Old Town/Chinatown parts of Central Portland.

PORTLAND PLAN

CITY OF PORTLAND BUREAU OF PLANNING