

**PLANNING COMMISSION
WEDNESDAY, AUGUST 13, 2014
6:00 PM**

AGENDA

I. 6:00 PM CALL TO ORDER - ROLL CALL

Ben Altman, Chair
Marta McGuire, Vice Chair
Jerry Greenfield
Peter Hurley
Al Levit
Phyllis Millan
Eric Postma
City Council Liaison Susie Stevens

II. 6:05 PM PLEDGE OF ALLEGIANCE

III. 6:10 PM CITIZEN'S INPUT

This is the time that citizens have the opportunity to address the Planning Commission regarding any item that is not already scheduled for a formal Public Hearing tonight. Therefore, if any member of the audience would like to speak about any Work Session item or any other matter of concern, please raise your hand so that we may hear from you now.

IV. 6:15 PM CITY COUNCIL LIAISON REPORT

V. 6:20 PM CONSIDERATION OF THE MINUTES

- A. July 9, 2014 Planning Commission Minutes
Documents: [July 9 2014 PC Minutes.pdf](#)

VI. 6:25 PM WORK SESSIONS

- A. Basalt Creek Concept Plan
Documents: [PC WS Basalt Crk Aug 2014.Pdf](#)
- B. Sanitary Sewer Collection System Master Plan Update
Documents: [Sanitary Sewer Master Plan.pdf](#)

VII. 8:25 PM OTHER BUSINESS

- A. 2014 Planning Commission Work Program
Documents: [2014 PC Work Program Aug.pdf](#)

VIII. 8:30 PM INFORMATIONAL ITEMS

- A. Draft Of Metro's Urban Growth Report (UGR)

Documents: [Metro UG Report.pdf](#)

IX. 8:40 PM ADJOURNMENT

Time frames for agenda items are not time certain.

Public Testimony

The Commission places great value on testimony from the public. People who want to testify are encouraged to:

- *Provide written summaries of their testimony*
- *Recognize that substance, not length, determines the value of testimony*
- *Endorse rather than repeat testimony of others*

Thank you for taking the time to present your views.

For further information on Agenda items, call Linda Straessle, Planning Administrative Assistant, at (503) 570-1571 or e-mail her at straessle@ci.wilsonville.or.us.

Assistive Listening Devices (ALD) are available for persons with impaired hearing and can be scheduled for this meeting.

The City will also endeavor to provide the following services, without cost, if requested at least 48 hours prior to the meeting:

- *Qualified sign language interpreters for persons with speech or hearing impairments
- *Qualified bilingual interpreters.

To obtain services, please call the Planning Administrative Assistant at (503) 682-4960



**PLANNING COMMISSION
WEDNESDAY AUGUST 13, 2014
6:00 PM**

V. CONSIDERATION OF THE MINUTES

A. Consideration of the July 9, 2014 Planning Commission minutes

DRAFT

**PLANNING COMMISSION
WEDNESDAY, APRIL 9, 2014
6:00 P.M.**

**Wilsonville City Hall
29799 SW Town Center Loop East
Wilsonville, Oregon**

Minutes

I. CALL TO ORDER - ROLL CALL

Chair Altman called the meeting to order at 6:00 pm. Those present:

Planning Commission: Ben Altman, Eric Postma, Al Levit, Phyllis Millan, Jerry Greenfield, and City Councilor Susie Stevens. Peter Hurley arrived during the first work session. Marta McGuire was absent.

City Staff: Chris Neamtzu, Barbara Jacobson, and Katie Mangle

II. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was recited.

III. CITIZEN'S INPUT - This is an opportunity for visitors to address the Planning Commission on items not on the agenda.

Theonie Gilmore noted the 25-page concept plan for an arts and wellness center in Wilsonville was recently emailed to the Planning Commission and was presented to City Council by the Wilsonville Arts & Cultural Council in October 2009. With the Commission's full agenda, she said she wanted to reintroduce the concept to the Commission. The Wilsonville Arts & Cultural Council had done a year of work and gone through many old records. Wilsonville citizens have had a few aquatic task forces that the Commission likely knew about, but no performing arts venue existed in Wilsonville.

- When the high school was built in 1994, the Wilsonville Arts & Cultural Council was told the City would contribute some money to the auditorium in hopes that the community could use it, but the high school arts program had become so wonderful that the only time available for community use was in the summer, making it difficult to build any programming. This was why the concept plan was developed.
 - The I-5 Music Group has grown from about 20 members five years ago to more than 60 now. They did not have enough room to rehearse or have concerts. The group was very good and needed a place to perform, as every time they performed in the Community Center or anywhere else, the place was packed.
 - There were many groups that would love to perform, such as the Wilsonville Theatre Company, which has done very well at the Frog Pond Grange, but the stage is quite small.
- Wellness was a big discussion item in 2009. The concept plan mentioned that originally, the Arts & Cultural Council tried to get Kaiser Permanente involved, but Kaiser was too busy building its Hillsboro facility, so the Council did not pursue it any further. The Council had intended to use the property across the street from City Hall and have underground parking, so cars would not have to be parked outside the building. They planned to have a swimming pool on one side of the property with a concession area in between the swimming pool and an auditorium, but the concept plan had never gotten very far.
- She reiterated that she wanted the Commission to be aware of the concept plan and know that the materials had also been sent to City Council because some of them were not around when the plan was sent originally.
- She concluded that she was available for any questions the Commissioners might have and thanked the Commissioners for their time.

IV. CITY COUNCIL LIAISON REPORT

A. City Council Update

Councilor Stevens reported that City Council:

- Unanimously approved adding median strips to the north section of Wilsonville Rd towards SW Stafford Rd. Median strips in Wilsonville Rd currently extend from the west side near Graham Oaks Nature Park, but no median strips were installed when the Landover and Arbor Crossing neighborhoods were built. During the last two Council meetings, citizens have commented about the speed in that area, especially drivers coming off Stafford Rd after the four-way stop. The idea was to install the median strips as a visual cue that drivers were now entering the city limits, which would hopefully reduce the speeds and traffic impact in that area, and resolve the residents' concerns. The addition of the median strips would be added to the 2014-15 Budget.
- Approved the Wilsonville Community Sharing Grant after receiving citizens' testimony.
- Passed the 2014-15 Budget.
- Held a lengthy work session where Tualatin Valley Water District (TVWD) presented Hillsboro's proposal for drawing water from the Willamette River and building another treatment plant.
 - She appreciated that TVWD had been updating Council during two or three work sessions on the matter. Most of the discussion regarded where the pipelines would be located, as the project meant major construction in the city once again, and determining the best routes was important. She noted the project was in its very early stages, but it would be a large one.
- Briefly discussed a comprehensive plan Staff put together regarding the significant deterioration of Charbonneau's infrastructure, its storm drainpipes, sewer lines and, to some degree, water lines in the streets. Staff proposed making the repairs during 38 smaller projects over a couple of decades. More about this plan would be made known and discussed at the July 21st meeting and then again in August.
- Discussed the closure of 110th Ave near Villebois, so that 100,000 cu yds of soil could be moved to create an entire new road; 110th Ave would not exist anymore and a new road would be built, but it was not safe to keep 110th open during the construction, because big vehicles would be crossing the road every two minutes. The four-month closure was unavoidable and would be much like the closure of the Boeckman Bridge and very inconvenient for many residents.
- She announced that the City recently launched a new, very comprehensive website for Economic Development that showcased Wilsonville's economic potential and what was happening now in terms of economic development and the companies currently located in Wilsonville

Chris Neamtzu, Planning Director, stated he would email the link for the new website to Councilor Stevens and the Planning Commissioners.

Commissioner Levit commented that the 38 proposed projects in Charbonneau would amount to about one project per year.

- Councilor Stevens agreed, adding the projects were widespread and had smaller pieces; the project map looked like a puzzle. The idea was to minimize construction by doing sewer, storm and perhaps water all at the same time. The most damaged areas would have the highest priority and then projects where, perhaps just storm and sewer needed repair would be prioritized next, and so forth. The project would not be fun for the community, but Staff determined this was the best way to address such a huge project.
 - She noted 15 critical projects might be addressed first or, depending on what Council decided, folded into larger projects. A video of the inside of one storm drainpipe showed that it was blocked, as rocks had fallen down into it, things were growing inside of it, and water could not get through it anymore. There was still a lot to think grapple with on the project.

V. CONSIDERATION OF THE MINUTES

A. Consideration of the May 14, 2014 Planning Commission minutes

The May 14, 2014 Planning Commission minutes were approved as presented by a 4 to 0 to 1 vote with Commissioner Postma abstaining.

VI. WORK SESSIONS

A. Frog Pond Area Plan (Mangle)

Katie Mangle, Manager, Long Range Planning, stated Staff had been working on the draft Vision Statement and Guiding Principles on the Frog Pond Area Plan over two meetings with the Task Force, which included Commissioners Greenfield and Millan, in addition to a number of other property owners and Wilsonville residents. The Opportunities & Constraints had been completed and, as Staff finalized the subject statements, the engineers were starting to quantify such things as infrastructure costs, and sketch out circulation patterns. Later this summer, Staff would start bringing some of the work that would start shaping what the area might look like to the Commission.

- She displayed “Opportunities & Constraints Exhibit 4: Planning Area” for the Frog Pond Area Plan, which set the tone for upcoming drawings and the work that would be reviewed in the fall. Exhibit 4 included everything that would be intended for the area. She requested the Commission’s feedback on the draft Vision Statement and Guiding Principles, which would be presented to Council on July 21. From these statements, Staff would develop metrics and performance measures to determine whether the vision was being achieved.

Ms. Mangle reviewed the Vision Statement, Guiding Principles and Process Principles of Attachment A, “A Vision For Frog Pond in 2035”, of the Frog Pond Area Plan, which was included in the packet. Commissioner feedback and discussion on these key elements, including responses and clarifications from Ms. Mangle, was as follows:

- Vision Statement
 - The word connected was used a lot; while clearly part of the concept, it seemed overly redundant.
 - Any mention of cars was notably absent.
 - The language, “a short connection to the rest of the city” was a bit misleading as Frog Pond sat way out by itself. While it would certainly be close and connected to that end of town, it would not be close to Charbonneau or Villebois, for example.
 - Although Boeckman Rd was a pretty direct connection, it was not a short route. No matter what was done within the site not much could be done about the location of the site with regard to the rest of the city.
 - Boeckman Creek provides green space; no plans were discussed for a vehicular crossing.
 - A trail was planned along Boeckman Creek and No. 9 on Exhibit 4 indicated a potential pedestrian crossing. The Canyon Creek Rd extension being constructed this summer would also be an important connection from the neighborhood to Town Center.
 - Compared to other expansion areas in the region, Frog Pond was incredibly connected. Many cities doing this type of planning had sites that were much more isolated or further out on the cities’ edge, such as being south of Charbonneau. Relatively, Frog Pond was very connected to the Town Center, existing neighborhoods, employment, and Argyle Square. Much of the discussion on the Task Force was to make the most of every possible connection. Connectivity was probably used a lot because it was a highly valued part of the vision of not wanting Frog Pond to feel like it was a satellite, but rather as a part of the community.
 - The word connected did not need to be used three times in the Vision Statement, but the use of it reflected the tone of that conversation.
 - Editing the Vision Statement to collapse all of the connected pieces together was suggested.
 - Substituting convenient for “short bike, walk or bus trip” was recommended, as well as replacing the last “connected” with “integral”.
 - Ms. Mangle agreed to incorporate those changes into the draft that goes to Council on July 21.
- Guiding Principles
 - “Create great neighborhoods” provided a description of what a great neighborhood would look, feel and act like.
 - Neighborhood scale retail was not specifically defined; the intent was not having a major shopping center, but instead a small retail area to serve the neighborhood. Staff would bring a

few different options forward so everyone could discuss whether the retail should be right on the street or internal; who it would serve, and how to make it successful; a few different options exist. The Task Force discussed having something to walk to as being an important part of a walkable neighborhood, not only just as service, but also as a gathering spot.

- The area near Willamette Way E did not function as planned because the project was either too small or not properly sited.
- Ms. Mangle added small retail areas were difficult and not necessarily an automatic part of the market. Leland Consulting Group prepared the market study for this project and believed Frog Pond was a highly viable, possible location because the existing neighborhoods south of Boeckman Rd and Advance Rd would also use it, and because of the traffic on Stafford Rd. Unlike some other small retail areas in Wilsonville, including Villebois, Frog Pond already had pass-by traffic so it was viable, and they certainly would want to set it up for as much likelihood of success as possible to ensure it would work over the long-term.
- While the design of the streets and intersections was very much on the table, no realignment of Stafford Rd or Advance Rd was considered necessary. Stafford Rd was already a boundary for the Urban Growth Boundary (UGB), as well as Boeckman Rd, and then with the school site, some fixed points already existed. How new streets should be used to connect the areas in a way that made sense was already being discussed.

Commissioner Hurley arrived at this time.

Discussion continued on the following Guiding Principles with these comments:

- “Frog Pond is an extension of Wilsonville”
 - Cars were not mentioned.
- “Honor Frog Pond’s history” The Frog Pond Grange Hall and history of trees could be retained, recognized and celebrated. The Task Force also felt Frog Pond Lane was an important part of the history of the area. More research was being done on the actual location of the Frog Pond, which could have been built over. A 1914 U.S. Geological Survey (USGS) map showed the historic creek ways on the west side of Stafford Rd, but the map did not show a pond anywhere in the area.
 - This principle would guide that no changes be made to the routing of Stafford Rd.
 - Family names could be used for street names. Kruse Rd at the southern part of the study area was named after a family. More historical family names would likely surface during the process.
- Process Principles.
 - “Create a model that could be used in other communities”
 - Creating such a model was a good byproduct, but creating a community that was interesting for other communities to look at as a standard might not fit Wilsonville’s standard.
 - The idea was that the neighborhood would be something Wilsonville was proud of; aiming for the best was probably a better description.
 - Aim for the best for the Wilsonville community and if it happened to be good for other communities, so be it.
 - No opposition existed to including the principle, but it should be listed last.
 - The principles should be listed logically, and not by priority.

Ms. Mangle said she would make the Commission’s recommended changes and present the Frog Pond Area Plan to City Council at their July 21 meeting. She announced that she would no longer be working on Frog Pond as she was leaving the City August 13 to take another job. Her last Planning Commission meeting would be in August when she would talk about the Basalt Creek Project. She noted that if there was anything she could do to ease the transition, especially for Task Force members, she was happy to help.

B. Industrial Form-Based Code (Neamtzu)

Chris Neamtzu, Planning Director, introduced the first draft of the Industrial Form-Based Code (FBC) and Pattern Book, noting that Staff was excited to hear the Commission’s comments. Creating the Code was

challenging without using a model on which to begin; Staff reviewed the initial draft from the consultants, who made changes resulting in the draft before the Commission. This same presentation would be presented to the City Council in a work session on July 21. Afterward, the Technical Advisory Committee (TAC) would reconvene, a website would be built, and neighborhood outreach would take place during the summer and into the fall.

Marcie McInelly, President of Urbsworks, Inc., introduced her consultant team, Keith Liden and Joseph Readdy, and noted the Commission had received a complete package related to the Code, which included previous meeting minutes, the Industrial FBC draft, a version of the Pattern Book, and some supplementary materials.

Ms. McInelly presented the City of Wilsonville's Light-Industrial Form-Based Code & Pattern Book project via PowerPoint, paper copies of which were distributed to the Planning Commission, with these key additional comments:

- The Commissioners were asked to focus their attention at a higher level and provide feedback about the components of the regulatory system that was developed, how the Development Standards, FBC and Pattern Book worked together, and the two-track process the team was refining. The two-track process was quite a departure from how the City currently reviewed projects as the roles of Staff and the Development Review Board (DRB) in reviewing projects were changed with greater authority given to Staff.
- The purpose of the project was to create Code amendments related to the Coffee Creek Master Plan, to have clear and objective standards with the potential of being administered by Staff. The draft attempted to create simpler, streamlined path for industrial projects.
 - A FBC approach was used for Section 4.134 Day Road Design Overlay District as clear and objective standards were included, such as setting specific heights and setbacks for buildings, defining specific characteristics for streets, etc. Everything had an urban form emphasis with less emphasis on the land use, which was already designated industrial with some flexibility built in for supplementary uses.
 - The team was also working to build in some very specific adjustments for pre-anticipated situations, so if one was trying, but could not exactly meet a development standard, an allowance was available for making an adjustment, and staff would be able to administer that allowance as well because it was clear, objective and numeric.
 - The Pattern Book was a supplement that detailed alternative approaches to meeting the clear and objective standards using design guidelines that would be administered very similarly to the way projects were administered now, being reviewed by the DRB to determine whether the application was in compliance or not.
- The project site included the Coffee Creek Master Plan area and Day Road Design Overlay District.
- Connectivity was important to the grantor of this project, the Transportation and Growth Management (TGM) arm of the Department of Land Conservation and Development (DLCD). Part of DLCD's role as the land use side of the Oregon Department of Transportation (ODOT) was to ensure that planning included a lot of consideration for other modes, even in an industrial area.
 - After a nationwide search for best practices, this would be one of the first FBCs for an industrial area and also a first in terms of the level of connectivity they were trying to achieve.
 - Creating greater connections across industrial sites for pedestrians, bicyclists and cars was not naturally considered for an industrial area because the sites and buildings tend to be very large.
 - Typical developments in this area were reviewed as to how they might conflict with the City's Transportation System Plan (TSP) connectivity standards. The team proposed a slightly altered connectivity requirement of about 600 ft to 660 ft, although the right dimension was yet to be determined, that could be met in a variety of ways that offer flexibility for industrial developers.
 - The connectivity standard could be met, for example, through a multi-use path, a multi-use path combined with a local street type of character but as a private easement, or a full-fledged public street, but no requirement to do so existed.
 - This was a challenge because the FBC technique typically tied the development standards to the streets that bound an area. In this case, no streets exist inside the area to be developed, so the team had to first determine the development standard mechanism to create the connectivity and

the future streets and then tie the development standards for the buildings and site design to those future connections.

- Importance of Streamlining. The genesis of this project was the development community giving the team an earful that the Coffee Creek Master Plan did not really speed the review process for industrial buildings. Industrial buildings equal jobs, and the more industrial projects that could be streamlined, the better it would be for Wilsonville.
 - The proposed Two Track System provided an alternative, streamlined path that gave Staff the authority to determine compliance with the clear and objective standards of the FBC. If an applicant could not meet the standards, they would be eligible for the alternative path using the design guidelines administered by the DRB, which was very similar to the existing process.
- Expected Results. The team hoped this streamlined process and refined Development Code would support economic development and job creation and a multi-modal transportation system that accommodated cars, freight, pedestrian, bicycles and transit. They also expected a complete network of new and existing streets to go in as development occurred and that the high quality site, landscape and building design envisioned in the Coffee Creek Master Plan would continue through a simpler process and with more focus on the public realm rather than the building.
- She reviewed the current schedule, which had been extended with an October end date due to concerns expressed about the speed of the project. The project scope was being amended and additional steps and meetings were being added so that the project could really be reviewed thoroughly.
- Next Steps. Three new tasks emerged as being extremely important for the project's success that were being finalized now:
 - Road Test. The team would walk through the proposed process as an applicant to determine whether different options being actually worked. The team would work directly with the Staff who administered the Code to ensure everything had been considered.
 - Urban form testing. The team would 3D model the development standards and design guidelines to illustrate the results that the new Code amendments would have on urban form and public realm design.
 - Code graphics testing. FBCs include a lot more illustrations than conventional codes, especially Wilsonville's Development Code. The team wanted to work directly with the people who published the City's Code to ensure the provided illustrations worked, were readable, useful and fulfilled some of the innovation that FBCs offer, but within the context of Wilsonville's current system.
- She noted several attachments included in the meeting packet and highlighted items for discussion by the Commission as follows:
- The Introductory Memorandum described how the Two Track System would be used (Slide 12).
 - Track One allowed projects to be approved by Staff that complied with all the development standards or with all the development standards and all of the adjustment allowances.
 - Track Two was used if a project did not comply with any or only with some of the development standards. The project must then comply with some or all of the design guidelines in the Pattern Book, whichever development standards were not being complied with, and Staff would prepare a recommendation for applicable design guidelines that would be presented to the DRB for approval.
- Master Organization Table (Attachment A, Pages 9 through 12 of the Staff report) laid out the four components of the proposed regulatory system: the Development Standards and Adjustment Allowance, which were within the FBC, and the Intent Statement and Design Guidelines that were in the Pattern Book.
 - The left hand side of the table identified the four major categories the team believed to be most important to regulate: District Character, Connectivity, Site Design, and Building Design. The table was intended to help track the parallels between the standards in the FBC and the design guidelines.
 - Slide 15 provided an example of how Building Design would be regulated across the system using each of the regulatory system components. For Building Design, the applicant could choose to go through either the Development Standards review with Staff, or the Design Guidelines review with the DRB.
 - Ideally, the applicant could pick and choose which regulation category and track to use.
- The Two Track System provided applicants with multiple options.

- Projects using Track One, the streamlined approval, must comply with all of the development standards for District Character, Connectivity, Site Design, and Building Design. Additionally, projects that comply with development standards and all the adjustment allowances for District Character, Connectivity, Site Design and Building Design would also receive a streamlined approval.
 - An adjustment allowance was a predetermined value built into a design to provide flexibility in anticipation of possible design adjustments. In the Building Design example on Slide 15, a building entrance location could be adjusted by a predetermined distance identified in the adjustment allowance. This adjustment would still be part of Track One; the applicant would not have to go before the DRB to move a building entrance a few feet. The team anticipated that such adjustments would be needed and would build them into the FBC.
- Track Two, Development Review Board Approval, would be used by projects that do not comply with the categories in the Development Standards, even after Adjustment Allowances were applied, and must comply with the Design Guidelines for District Character, Connectivity, Site Design and Building Design.
- She reviewed the feedback the consultant team received over the past several months from the Planning Commission, TAC and Staff with these key additional comments:
 - The Planning Commission was very articulate about the importance of this industrial district and speeding the development of buildings for jobs; however, a high quality design place with a strong sense of place was also important, as such areas attract high quality employers and a trained and talented workforce, all of which was good for the overall economy of Wilsonville and for industrial districts of the new economy.
 - As requested, the consultant team was working to integrate the new regulatory components into the current Development Code and to incorporate the Two Track System into current administrative procedures instead of inventing something new.
 - Leaving nothing “undersigned” was also extremely important. The Commission had to be comfortable with the Code amendments for specific development standards because in a sense, they were being taken out of review later. The Commission was reviewing them now in order to streamline the path through for certain applicants, which was also partly why the team extended the project schedule and added some tasks.
 - While the Commission acknowledged the need for citizen input into the process, the Commission believed trying a Two Track System and instituting something that was truly streamlined should occur in an industrial district where stirring up residents concern was not likely.
 - Staff noted that currently, the clear and objective standards of the FBC were not clearly linked to the Design Guidelines in the Pattern Book, which was something the team would work very hard on in the next draft. The master table provided in the meeting packet was an effort to show where the biggest gaps existed by lining up all of the components together side-by-side.
- She concluded by requesting feedback from the Commission.

Comments and discussion from the Planning Commission, Staff and the consultants regarding the draft Light-Industrial Form-Based Code continued as follows.

Chair Altman suggested that for the Road Test and if room existed in the budget, it would be very helpful to actually apply the process to some existing areas, such as the 95th Ave industrial area to see how it might have come out differently, rather than just doing a typical green field development. Doing so would be very helpful in grasping how the process would be different, while hopefully enhance the outcome.

- Although a 3-D design would be easier to understand, adding the flat surface design would help get a grasp on how those buildings might be different than they were now had the FBC had been in place. He did not know if one particular building stood out because so many were kind of the same. Rather than picking one building, perhaps an area where the building was built should be used instead.

Commissioner Hurley stated the only existing building that stood out was the Nike building because of its mass. He asked if something in the FBC would prohibit a building like that.

Commissioner Levit noted the proposed FBC would require a different shaped building to reduce the appearance of the mass.

Commissioner Millan added the FBC allowed for large developments, but some things had to be done to reduce the large façade of a massive building.

Commissioner Levit:

- Asked if someone wanted to put in a large campus, bigger than 600 ft or 660 ft, did that imply that they would have to have a road through their campus.
 - Ms. McInnelly replied no, the FBC was very flexible. The applicant could have multi-use paths or pedestrian-only paths and still meet the connectivity requirement. It would be very easy to design a connected system of trails or streets that met the connectivity requirements simply by designing the campus well and how people got from building-to-building or from the building to the parking lot and ensuring that people could also go through the site and onto adjacent sites.
- Asked if that should be spelled out as a possibility since it was not clear in the discussion about street spacing.
 - Ms. McInnelly responded it might not be clear now, but the FBC Development Standards provided connectivity standards that listed the distance between connections and then pointed to a menu with a wide range of various connection types to choose from. One could choose to do a simple multi-use or pedestrian-only path or a street on the other side of the spectrum. All of those choices would meet the connectivity requirement and could even be mixed and matched.
 - The three categories of streets were addressing streets, connecting streets and through connections. Addressing streets were the named streets that already existed or were planned. Connecting or supporting streets would generally be streets that came off addressing streets and provided accesses to parking lots; however these streets should be designed to some extent to look and feel like a street. Through connections included a wide variety of connection types to be chosen by the applicant and included everything from a pedestrian path to a bike path to a blend.
 - With all of the connection types, it was possible for a campus to be designed with the natural connections desired between buildings and parking lots to meet the connectivity standards and would not require extra connections that would not be made anyway.
- Believed something seemed to be missing because it was not clear in the information about the FBC that a non-motorized street spacing was an option, even though the third level implied that; it needed to be clarified or stated differently because most people think of roads or boundaries of parcels when discussing spacings of 600 ft or so.
 - Ms. McInnelly stated that this was a really important part of the Code and directed the Commission to page 27 of 114 of the Staff report, which showed the connectivity standards in a diagrammatic form. She noted the figure would be revised and made even clearer, but the maximum spacing shown was either 600 ft or 660 ft. The team was not sure which was the better dimension, but it was different than the TSP-required connectivity standard of 530 ft.
 - The dotted lines that the arrows pointed to showed maximum spacing and could be multi-use paths or pedestrian paths.
 - The actual street design types, shown on pages 25 and 26 of 114, were intended to be very flexible illustrations; the dark gray areas across the sections were the only requirements for the streets.
 - Page 25, Specifications for Supporting Streets, showed a section through a supporting street with a plan view of the same supporting street shown below. All the components in dark gray were required and all of the light gray components were optional. That street would function more like a street.
 - Likewise, the dark gray components on Page 26, Specifications for Through Connections, were the only requirements. So by eliminating all of the optional street components in the center, the minimum standard would be met with a path with a planted area on both sides.
 - The dotted lines on Page 27 indicated elements that needed to be 600 ft apart from each other and could either be a supporting street or a through connection, which was completely up to the developer.

Chair Altman:

- Confirmed that addressing streets had to do with buildings facing the street and that was most likely where the building's address would be located. Addressing streets were the main access streets for getting to a building and everything else was for circulation through the district.
 - Ms. McInnelly added that the addressing streets were public, they already existed or were planned as part of the City's planned street network. All streets inside of the addressing streets, which were supporting streets or through connections, did not need to be public.
- Stated that was not clear and it raised a question about pathways. He noted Mentor Graphics had pathways through their campus and they allowed people to use them, but they were not public easements.
- The Code needed to address somehow how the owner should deal with something like that because specific rules existed regarding private streets and pathways needing to be closed once a year and if the owner did not abide by the rules, private designations could be lost. Such issues had to be clarified so the outcome would be one that was expected, otherwise a pathway might exist that no one could use.

Ms. McInnelly agreed that was a good point and asked Commissioner Levit if that began to answer some of his concerns.

Commissioner Levit:

- Stated he would need to see what the FBC looked like as it progressed; clearly the graphics were meant to be changed and clarified, which was fine.
- Noted the Commission had received the revised Code Section 4.134, and asked that an annotated revision be provided in the future showing the changes made.
- Inquired about the entrance issue with the buildings. He did not recall what was wrong with Day Road Design Overlay and asked why it was suddenly an issue.
 - Mr. Liden stated it promoted visible entries on Day Road. The TAC stated the entry needed to be put where it worked best for the building and provide a functional entry accessible to the parking lot, instead of creating a ceremonial entry in one place. The team took that to heart with the FBC standards and Design Guidelines so the entrance needed to be seen from an addressing street and accessible within a certain distance from the addressing street. The distance that was set allowed the entrance to be on a supporting street or a through connection accessible to parking so more people would access it from that side of the building, but people arriving on foot, via transit or bike from the addressing street would know where to go.
 - Commissioner Postma agreed and added that a lot of discussion at the Task Force regarded whether it was realistic to avoid visitor parking and some notion of immediate access near those entrances. It did not look like the entrance because there was no place for anyone to park or have cars and it did not look like a through street existed there. This resulted in putting people in the middle of a road next to a sidewalk and it ceased to look like an entrance but more like a façade.
- Noted that if development occurred now, the project would go before the DRB, which would be publicized for public comment. With the proposed amendments, projects reviewed by Staff would have no public notification indicating something was happening, which made him uneasy. Clearly, if the project defaulted to the DRB, it would follow regular public announcements, but it seemed that, unless some public review or an announcement were made, things would happen, no one would know in advance, and people would get upset when they found out.
 - Mr. Readdy stated the team was considering using the Class II Administrative Review process currently on the books. Although Class II was a Staff review, prior to Staff's decision public notice was required announcing that an application was being considered and indicating the criteria to be considered. A comment period was provided for people to submit comments to Staff. After Planning Staff made a decision, notice of the decision was sent out. No hearing process would take place, but there would be public notice, so it was different from a Class I, which did not really require much public notice.
 - Mr. Neamtzu confirmed the DRB saw the Class II notifications being processed by Staff and notice of an action was sent to everyone within 250 ft of the site. He imagined all the sites could be posted with A-frame boards that displayed public hearing criteria and contact information on the property

itself. Notice is sent to surrounding property owners and gets posted in four places around the city. It could also be posted in a conspicuous location on the website and it could be published in the Wilsonville Spokesman. The times and dates could be modified and all of the specifics could be discussed, but currently it was a notice of action with no less than a 10-day period for comment, a decision could be rendered on the 11th day and then there was an appeal period. If someone was concerned about it, commented, received notice and was an affected property owner, they could take it up to the DRB first for a full public hearing and from DRB it went to City Council on appeal. The Class II Administrative Review process was successful, but it took time. He believed Commissioner Levit's comments were well taken, but time is money and developers need to go fast, so the team was trying to balance that with the needs of the community.

- The DRB members also had the authority to call up a project that they questioned just like Council did using the call up provision for the actions of the DRB. Several fallback and notification procedures existed that should really be focused on and discussed to ensure all the timeframes were adequate; 10 days might not be enough. Discussing such things was really reasonable and spelling it all out made a lot of sense. The process must be done correctly now before the FBC was implemented.
- Clarified that he was not trying to delay anything, but specific cases existed where the DRB had approved something and then Staff modified it or allowed a modification to it.
 - Mr. Neamtzu replied a Class I level review involved minor modifications that were a judgment call by Staff to a large extent. The Class I process was an over-the-counter review for minor revisions. Class II was for more significant and noticeable types of changes. He added 150 Class I reviews were done every year and that World of Speed had already had seven or eight Class I reviews. World of Speed had a design, but they were a creative bunch and wanted to change, add things and make adjustments and if Staff had to go back through a revision process or back to a board, the process would take years.
- Explained the one case he was concerned about was something that was approved and the feedback he received from Staff was that the developer could not afford to do what they proposed, so they requested something different. It was like a bait and switch and he believed that was wrong in that case. He was not against what actually was built, but the concept was tricky to him
- Mr. Neamtzu clarified that cost was not a criterion.

Commissioner Postma:

- Understood connectivity was related to receiving the grant and that connectivity was an important goal for the community, but he wanted to mirror some of the discussion from the Task Force meeting and comments heard from developers who were in the market. He was concerned about consistently seeing the very first item discussed was building a connectable industrial area, rather than talking about the desire to build a good, aesthetically pleasing and useful industrial zone. While he applauded the notion, he knew developers would not get past paragraph one before saying to themselves that the FBC looked really tough and risky and that they would have to build an industrial zone for many things that would not be required in another jurisdiction.
- Was concerned that putting connectivity, multi-modal travel and similar items right at the forefront was going a bit too far because the project's purpose was to make sure that a good, useful and aesthetically pleasing industrial area was being built and connectivity hopefully came with that, but it was not item number one in his opinion. He noted a few areas where he saw this happening:
 - In the Purpose provision of the revised Section 4.134 on Page 14 of 114, Item A stated, "a multi-modal transportation network" and Item B stated, "an industrial district featuring cohesive high-quality site landscape". Things seemed to be flipped here by telling the developers that the City wanted to build something that was attractive and useful. He did not want to downplay the multi-modal and connectivity but things had to be prioritized.
 - The same thing was being done with site design on page 16 of the FBC book where the developer was being hit over the head again with multi-modal transportation, rather than stating a useful site was wanted.

- Inevitably, Wilsonville was located right along the I-5 corridor, and inevitably some industrial uses in this area would require some freight traffic. If the first sentence talked about multi-modal, the company with freight traffic might feel it was much tougher to do and did not sound as appealing as another city down the corridor. It was just a function of priority and ensuring that one important piece was not overemphasized over the very overarching goal, which was a good, useful and aesthetically pleasing industrial area.
- Noted he had not gone through the FBC document to pick out multiple examples, but he believed keeping that in mind was incredibly important as the project was being drafted. A beautiful plan could be created and he believed the team's work was fantastic, but if development was never built because everyone was terrified to build it, it would not do anyone any good.
 - Ms. McInnelly confirmed the concern involved the messaging and how the order of things indicated a certain priority, which might not be the right messaging. She believed the whole story of connectivity was interesting because most developers in the area would have to meet the TSP requirement for connectivity, which was more restrictive than what the team proposed; perhaps the team needed to clarify that this was more of an industrial size standard.
- Clarified his point was that if developers were told that as the very first thing they would be scared off. Developers would already know they needed to match the TSP going in, but if the very first statement was that the City was creating a very different industrial district that would have a high standard on one thing that normally did not have a high standard, the developers might be put off and interested in going somewhere that did not discuss that right out of the gate, such as Hillsboro.
- Confirmed that reordering the items in Section 4.134(.01) with Item F moved to the top was one prominent example, but he believed there might be other places where that notion came through and that the team needed to go through the whole thing.

Chair Altman agreed with Commissioner Postma's comments up to the point of regarding connectivity. He noted Wilsonville had been fairly lucky, but if the FBC had been in place decades ago, another street would have connected the city north/south on the west side because when Payless went in the big warehouse they vacated Boberg Rd, which connected to Wilsonville Rd. No one thought about it at the time, but now the City was trying to replace that missing link with Kinsman Rd, and 95th Ave tied to Barber St, but did not go through so now offset street intersections existed.

- He suggested that the priority be on the addressing streets, which were critical. Boberg Rd probably would have been an addressing street in this context and those should not be vacated. The whole package had to be understood in terms of putting the pieces together, but at the same time the good strong message of attracting and not scaring off people needed to get out.

Commissioner Greenfield:

- Asked if the DRB's work load would decrease if the FBC was adopted.
 - Chair Altman responded yes, to a certain extent. The DRB would still review the commercial and residential applications and would probably still be pretty busy.
 - Mr. Readdy reminded that this FBC was only for the Coffee Creek Master Plan area; everything was unchanged for the rest of the city.
- Responded that hopefully, that was where the big action would take place.

Commissioner Levit:

- Recalled the FBC mentioning a concern about separating truck traffic from other traffic. He asked whether separate truck delivery streets could be designated in the grid work, so businesses going in could have alternate streets that allowed for heavy truck traffic, which might be more aesthetically pleasing and safer for everyone else, but he did not know how it would work.
- Agreed that if non-vehicular pathways were going to exist, larger vehicles should go around the outside, backside or through a hub system so they were not trying to squeeze onto the little roads. He noted connectivity was still desired, so there would be some crossing, but it would be more controlled.
 - Commissioner Greenfield added a different street-quality grade could be used.

- Noted page 18 of 114 mentioned a parcel driveway width of 24 ft and asked if that was big enough for truck traffic.
 - Ms. McInnelly replied the driveway would be to a parking lot. She read from page 18 stating, “24-foot maximum or it complies with the Supporting Street Standards,” which provided a bit more flexibility and would allow the driveway to be wider.
- Noted page 20 of 114 discussed the location and screening of utilities and services and confirmed that utilities were not permitted to be located on the addressing streets.
- Stated several places mentioned the materials to be used which included concrete for buildings and structures. He asked if that would lead to the same tilt-up construction that existed in so many places.
 - Ms. McInnelly replied it would allow that kind of construction, but did not restrict it.
- Asked if that was something the City wanted or something that was aesthetically pleasing.
 - It was explained the TAC was very clear that the team should not be over-managing the design and architecture of buildings, and that perhaps the Day Road Design Overlay overreached with its emphasis on office-style buildings. While office buildings were certainly welcome and possible under the FBC, the team anticipated that developers building very large buildings would want to build out of cost effective materials including tilt-up. The regulations the team was requesting in the FBC and providing guidance for in the Pattern Book required every building to clearly express a base, a body and a top. Within the tilt-up construction, developer would have to show how they met some articulation at the base, responded to the body and met the sky, in terms of clearly defining the edge of the building. The type of construction could vary from steel framed to concrete block to any number of things including cast in place or tilt-up concrete.
 - Ms. McInnelly stated the beginning of the standards for the base, body and top could be found on page 22 of 114. The team acknowledged that developers may build out of tilt-up, but the articulation of the tilt-up panels would still be required, which provided a bit of a balance between the office-style development of the Day Road Design Overlay and not allowing a material like tilt-up which was likely to be a very common method used for construction, however, some articulation was required to ensure some building features existed.
 - The team knew the building design requirements in the FBC were linked to the frontage requirements for landscaping so they worked together. Large expanses of less-embellished architecture would be screened and enhanced through the required plantings in the front setback, particularly along addressing streets. The team believed the design of the addressing streets, front yard landscape and the buildings themselves having a clear base, body and top should be enough to respond to the industrial context the Commission desired.
- Knew the DRB reviewed several cases where painting or some other articulation was requested for a massive building to address the visual structure but none of that was seen in the FBC. He asked if that was something the Commission should avoid specifying. He added most of the buildings were painted anyway.

Chair Altman said it seemed that the FBC relied more on the physical articulation, both horizontally and vertically, to break up the building. The building would still probably be painted or different materials would be used, but it seemed that was already better addressed in the FBC than in the current Development Code, which really did not state much other than identifying the setback. Although the DRB often asked for such things, no guidance really existed in the design criteria.

Commissioner Millan responded that the current Code was missing the base design and top design, and those two components would make the building more attractive because some delineation was required.

Ms. McInnelly stated the clear and objective Development Standards, which were criteria that must be met in order to go through the streamlined Track One process, were very specific and no judgment call was needed to determine if the criteria were met. Someone would go through the Design Guidelines if they wanted to do something they felt could not be met, such as having more articulation on their building or using a different material. She believed the Design Guidelines could still be used with an office building palette of materials. The Development Standards were different than the Design Guidelines. The team was trying to write

something that would lead to improved building and public realm design and site design that could be administered by Staff, because right now it was a judgment call by the DRB on every project.

Commissioner Levit said he knew Staff was really good, but they had also overlooked things because it was impossible to keep everything in mind. He asked if the FBC would assist Staff by making it easier for them to review, approve and understand that what was presented met the criteria.

- Ms. McInnelly replied yes, adding that was why the Code graphics testing, 3-D testing and Road Test were added. All three team members had a major role to play in those steps and would be having conversations with Staff about whether or not the tools helped them do their job, if they could easily administer the FBC and more easily make decisions, or were the tools not quite working. The team would then refine the tools to ensure that they worked.

Chair Altman referenced his earlier comment about applying the FBC process to an existing area and noted that it would be helpful to address some of the questions the DRB struggled with about how the FBC would have affected the existing basic tilt-up concrete buildings.

Commissioner Greenfield:

- Believed the team had been very thorough. One area of particular interest to him was the public realm. He understood the public realm regarded the streets, particularly the addressing streets and façades facing them, but he was also interested in the interior spaces of the development. At one point, the team referred to outdoor rooms, which was an interesting concept. The outdoor rooms were spaces between, behind and beside buildings that needed to be regarded as positive spaces to work well, instead of something that was simply leftover when the buildings were plopped down. The spaces should be functional, attractive and integrated with what went on inside the buildings that faced on these spaces. He was unsure whether the Code was very explicit about how these spaces could be built into the overall project. It seemed most of the focus was on the addressing street façades.
 - Ms. McInnelly replied it might seem that way, but the team had put a lot of thought into it. Development on a supporting street or through connection had some requirements regarding how much of the building must be near the street and how much of the façade must be transparent. The team had not ignored the inner streets at all and in fact, some of the same types of requirements for buildings located on addressing streets were also required for buildings located on a through connection.
 - For a lot that was completely located inside a block and not adjacent to an addressing street, all of the requirements for facing and addressing streets for frontage and transparency transferred to the nearest internal connection the developer made.
 - The team treated all of the connections, including the internal, as part of the public realm. Although not literally public, they would probably be easements or they might be private, but they would be part of a public realm network. She noted would want to deemphasize that and tell the story right so it would not scare developers off.
 - The end goal was that the connections inside would still have high quality façades and buildings facing them. Buildings inside the block had a responsibility to face the connections with some of the same architectural thought that would have to be met on an addressing street. However, the hierarchy was more toward facing the addressing street with a prominent entrance that was visible from the addressing street.
- Stated he was looking for some direction to developers about how these spaces should be defined to ensure they functioned as outdoor rooms, or what established gateways, corners and gathering places.

Chair Altman assumed that, while the Staff level review would be the more clear and objective approach, the Pattern Book would still be available as a guide for Staff to refer to in a preapplication meeting to provide examples of the elements being discussed and what the City was working to accomplish. He had not thought about that approach when he looked through the Pattern Book, but it occurred to him that the key to not scaring people off in terms of connectivity was getting the developers to think about those things when designing their project because typically the building was laid out and everything else fit around it because developers looked to the Code. A need existed to educate them up front which could mean more of an

emphasis on the preapplication input to get developers to seriously focus on connectivity in the public realm and the whole people place thing as a key design element and not just building the building and making parking and access to it work which was how it worked now. The developers needed to be guided and structuring the Pattern Book so that it laid out that sequence of thinking about the public realm, Staff might be able to get them to think that way without scaring them off.

Commissioner Greenfield:

- Said he was pleased to see a nod in a few places to the needs of visitors and the people working in the buildings, as the public realm that he was concerned about in the interior blocks; the spaces those people could use and would find attractive and that were welcoming and relieved the life inside the buildings. That was the public realm, not just the automobile traffic passing by and the literal public domain.
- Also expressed concern about the issue of property line boundaries and how crossable they were to ensure the area was really connected. If people were not free to walk across a property from one place of business to another through the interior of the development, the idea of achieving connectivity would fail in a very important way. He did not know how that could be mandated by Code, but believed it certainly needed to be a principle that developers buy into.
 - Ms. McInnelly added some concern also existed about that connectivity continuing across addressing streets as well because they created big boundaries. She noted the connection that the team talked about creating across the area was smaller grained than the intersections of addressing streets, so there probably would need to be some provision made for crossing the addressing streets mid-block in the future.

Commissioner Levit:

- Noted that people using the connections when commuting and at lunchtime if they wanted to take a walk was previously discussed, but he did not see any way that places or destinations for workers to go to get lunch could exist within the concept. The concept was missing destinations as a purpose for the connectivity. Having a minimum building height of 30 ft was an awful lot for a Starbucks or a developer wanting to put in a building that would offer places to eat and socialize.
 - Commissioner Postma commented that because the location was somewhat remote, one would be forced to hop in a car to get to lunch.
- Responded that was precisely his point, the location was so remote that people would drive anyway, so connectivity was of lesser value.
- Clarified that given the way the area was developed, there was no place for people to go. If employees had an hour for lunch, they would have to walk 20 minutes in each direction, making for a pretty rushed lunch. Considering what was currently there, from Day Road one would have to walk all of the way around to Commerce Circle to reach the first place to eat, and that was if they happened to be on the east end of Day Rd, but they could not walk if they were in the internal blocks of the area.
 - Mr. Neamtzu explained the Code would permit the 5,000 sq ft per building in the Regionally Significant Industrial Area, so it was reasonable to expect that a bunch of different types of services could exist depending on the density of the employment center. The FBC would permit a sandwich shop and other services in Coffee Creek.
- Replied it might be good for the Pattern Book to stimulate the thought that more amenities needed to be available to the workers. At one point, a discussion took place regarding small pocket parks along the railroad or the waysides, which was good for recreation or as a destination, but not for lunch.

Commissioner Hurley asked if Commissioner Levit wanted a requirement added to the FBC or if the option should just be made available so an entrepreneur could come in and open a sandwich shop.

Commissioner Levit replied he would like it to be an option and not required.

Commissioner Postma clarified that the design standards prevented that option now because of the size of buildings being discussed. He was unsure if much of an opening existed for smaller buildings to be tenanted.

Commissioner Hurley understood that they would have to be a subtenant.

Ms. McInnelly stated 5,000 sq ft was allowed as an accessory to another larger industrial building.

Commissioner Postma responded that was too large for a restaurant as 2,500 sq ft was considered big.

- Ms. McInnelly clarified 5,000 sq ft was the maximum allowance, so two, 2,500-sq ft spaces could be built.

Chair Altman added the spaces could actually be moved around in a multi-tenant building.

Mr. Neamtzu noted there could be up to 20 tenants in a multiple building complex.

Chair Altman believed the plan and FBC allowed the mix, but he agreed it was important to build into the thought process that connectivity ought to have a function because it would be nice to have things to go to, maybe even to the extent that portable food trucks should be allowed.

Commissioner Hurley remarked that a food truck and picnic tables could be put inside a fenced off loading bay as a covered restaurant. The loading bay could be subleased as a pop up restaurant area that would be covered from the Oregon weather for nine months out of the year.

Mr. Neamtzu recognized this was a lot of material, so he was open to taking comments as the Commission digested the information. He noted the team was regrouping in a number of different ways and that these conversations would continue, so Commissioners were invited to send him ideas for the team. A lot more input would be received from City Council at their next meeting which would be important because the Councilors that had taken part in the Day Road Design Overlay would remember the conversations and want to ensure that the proposed FBC would still create a high-quality visual environment. He believed the City had a great rough draft to start working on and he thanked the team for all their hard work.

Commissioner Postma congratulated the team for their great work on something that was brand new.

Mr. Neamtzu confirmed people in the market had not seen the draft yet. Now that the project had been published, he could get it into the TAC's hands. The team needed to continue with the next steps of building the website, getting the draft and information posted on the website, reaching out to property owners and holding another TAC meeting and several more work sessions.

Chair Altman asked if holding a joint TAC and Planning Commission meeting was possible, so the Commission could get TAC's input.

Commissioner Postma stated it would be good for the Commissioners to hear from people in the market because the TAC and consultant team really got an education hearing from them.

Mr. Neamtzu added the TGM program liked efficiencies in meetings, so combining one was a good suggestion.

Commissioner Greenfield asked how this project related to the Day Road Design Overlay. Was the Overlay being superceded or amended?

Chair Altman confirmed the Day Road Overlay was being replaced and the new proposed Light-Industrial Form-Based Code would apply to the entire Coffee Creek area, not just the Day Rd frontage. The feedback was that the decisions reflected in the Day Road Overlay would not work very well and must be replaced.

Commissioner Postma added the feedback was that if the City insisted upon the Overlay, it would never happen.

Chair Altman agreed, there would be a strip down Day Road with nothing there.

Commissioner Millan asked what the objection was to the Day Road Overlay.

Commissioner Postma explained the Day Road Overlay District was almost set to mimic Kruse Way in Lake Oswego, and those in the market said it could not be done because the area was too remote from the freeway, access was a serious problem, the amount of bodies would cause traffic problems and realistically, that did not reflect Wilsonville, so it would not work and they could not sell it.

Chair Altman added the overlay imposed Class A office design on an industrial district, which did not work.

Commissioner Postma added it lacked flexibility altogether.

Commissioner Millan asked if there was a concept or picture of the kind of industry that would be going in the area, such as light manufacturing, perhaps.

Commissioner Postma believed the market people said it would be similar to what the City currently had had gotten inquiries about doing projects like the Rockwell Collins buildings but such projects could not be built there so the developers had to look elsewhere. He believed their notion was that those were the kind of clientele that might be available if enough flexibility existed in the program to make it work.

Mr. Liden added any building that met the Day Road Design Overlay standards would still be possible under the new Coffee Creek Master Plan Design Overlay. The team was not rejecting the Day Road Design Overlay, but instead, taking the parts that were most manageable, most appealing and most implementable and incorporating those into the new standards while leaving out things that were keeping people from making progress.

VII. OTHER BUSINESS

A. 2014 Planning Commission Work Program

Commissioner Levit asked if anything had been decided about how the City would accept the French Prairie Bridge grant and if so, would work on the bridge begin anytime soon.

Mr. Neamtzu stated he would get an update, adding he had not heard anything since the last press release. A project manager had been assigned to the project. Staff had met with several consultants interested in doing the work and work continued with ODOT on the intergovernmental agreement (IGA), all of which were tediously slow, mind-numbing processes. The project was moving forward, but it was not teed up quite yet.

- He did not know the details regarding the City's acceptance of the grant, which were part of the IGA, but he would send that information to the Commission. He reviewed the two financial options presented with the grant, noting that each decision involved lots of money and different processes, so many existing complications needed to be worked out.

VIII. ADJOURNMENT

Chair Altman adjourned the regular meeting of the Wilsonville Planning Commission at 8:16 pm.

Respectfully submitted,

By Paula Pinyerd of ABC Transcription Services, Inc. for
Linda Straessle, Planning Administrative Assistant



**PLANNING COMMISSION
WEDNESDAY AUGUST 13, 2014
6:00 PM**

VI. WORK SESSIONS

A. Basalt Creek Concept Plan (Mangle)

**CITY COUNCIL MEETING
STAFF REPORT**

Meeting Date: August 13, 2014	Subject: Basalt Creek Concept Plan Update
	Staff Member: Katie Mangle Department: Community Development
Action Required	Advisory Board/Commission Recommendation
<input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input type="checkbox"/> Resolution <input type="checkbox"/> Information or Direction <input checked="" type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda	<input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input checked="" type="checkbox"/> Not Applicable Comments:

Staff Recommendation:
Recommended Language for Motion: N/A

PROJECT / ISSUE RELATES TO:		
<input checked="" type="checkbox"/> Council Goals/Priorities Economic Development	<input type="checkbox"/> Adopted Master Plan(s)	<input type="checkbox"/> Not Applicable

ISSUE BEFORE THE COMMISSION:

The purpose of this meeting is to update the Commission on the current status of the Basalt Creek Concept Plan project and process, and provide an overview of existing conditions, highlighting major findings.

EXECUTIVE SUMMARY:

Project Update

Staff from Tualatin and Wilsonville have been working with the Basalt Creek consultant team to complete a detailed task schedule for the project, document existing conditions in the study area, and develop draft Guiding Principles. A Community Workshop was held on June 17, 2014, to gather input that will be used to create several alternative concepts for future development in the Basalt Creek area. In addition, the project team has conducted a series of interviews and focus groups with property owners and developers, and held one meeting with the Agency Review Team.

Existing Conditions

The consultant team has gathered information about population and employment, environmental constraints, transportation, and infrastructure in the Basalt Creek study area. See Attachment A for a series of maps that illustrate these conditions.

EXPECTED RESULTS:

The Basalt Creek Concept Plan project will develop a plan for future development of the Basalt Creek area between Wilsonville and Tualatin. In 2004, Metro included this land within the urban growth boundary to accommodate increased development in the region for the next 20 years. Specifically, the Concept Plan will address a variety of factors including:

- Future city limit lines between the Cities of Tualatin and Wilsonville;
- Land uses including industrial, commercial, residential, parks, trails, and green ways;
- Multimodal transportation network;
- Provision of urban services such as water, sanitary sewer, and stormwater.

TIMELINE:

Next steps in the planning process include creating alternative concepts for development in the study area, evaluation and testing of the alternative scenarios, and choosing a preferred alternative. Planning Commissions and City Councils of both Tualatin and Wilsonville will receive regular updates throughout the planning process.

A schedule to guide the concept planning process has been developed (Attachment B). This schedule takes the project through Winter 2015, including public hearings and adoption of the concept plan. Following adoption, the cities will amend their planning area agreements with Washington County at which time, staff anticipates that annexation and development could begin to occur in some parts of the Basalt Creek Area, where infrastructure is available.

COMMUNITY INVOLVEMENT PROCESS:

The project team is implementing the Public Involvement Plan, including:

- the redesigned project website, located at www.BasaltCreek.com, went live on May 15;
- over 145 individuals have subscribed to the project listserv;
- all property owners have been contacted by mail about the project;

- project updates are sent via Twitter, Facebook, and press releases;
- conducting interviews and focus group meetings with property owners, development experts, and interested residents and businesses;
- a recent community workshop.

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY (businesses, neighborhoods, protected and other groups):

One of the outcomes of the Basalt Creek Concept Plan project will be to establish the future boundary between the cities of Wilsonville and Tualatin. The Basalt Creek area will be important for the long-term growth of Wilsonville's industrial land base and the associated employment opportunities. Growth in the Basalt Creek area will affect industrially-zoned properties in the Coffee Creek area, and it will be important to solicit the involvement of representatives from this area.

ATTACHMENTS

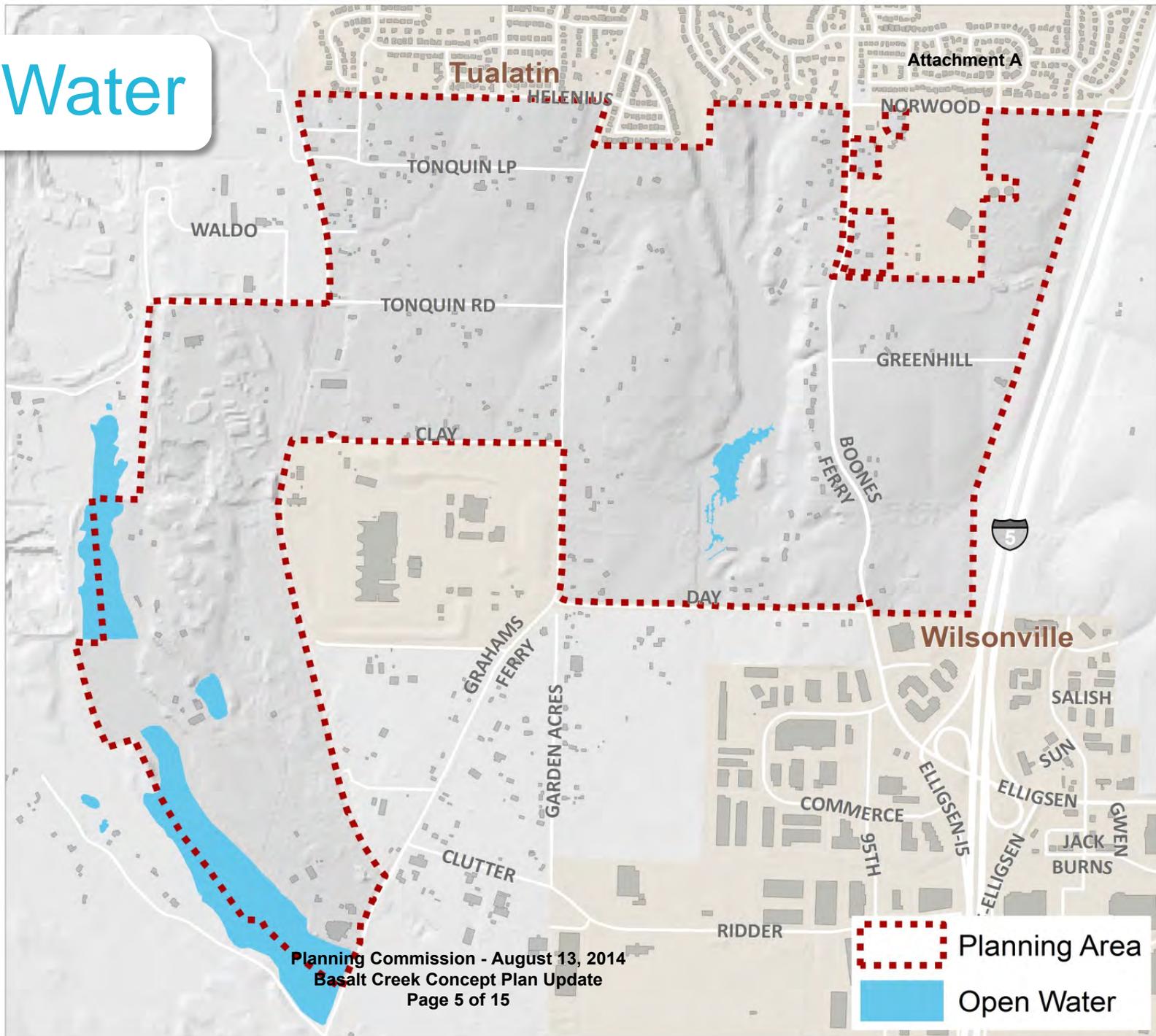
- A. Existing Conditions maps
- B. Schedule

Summary of Environmental Constraints

- Wetlands
- Habitat
- Steep slopes

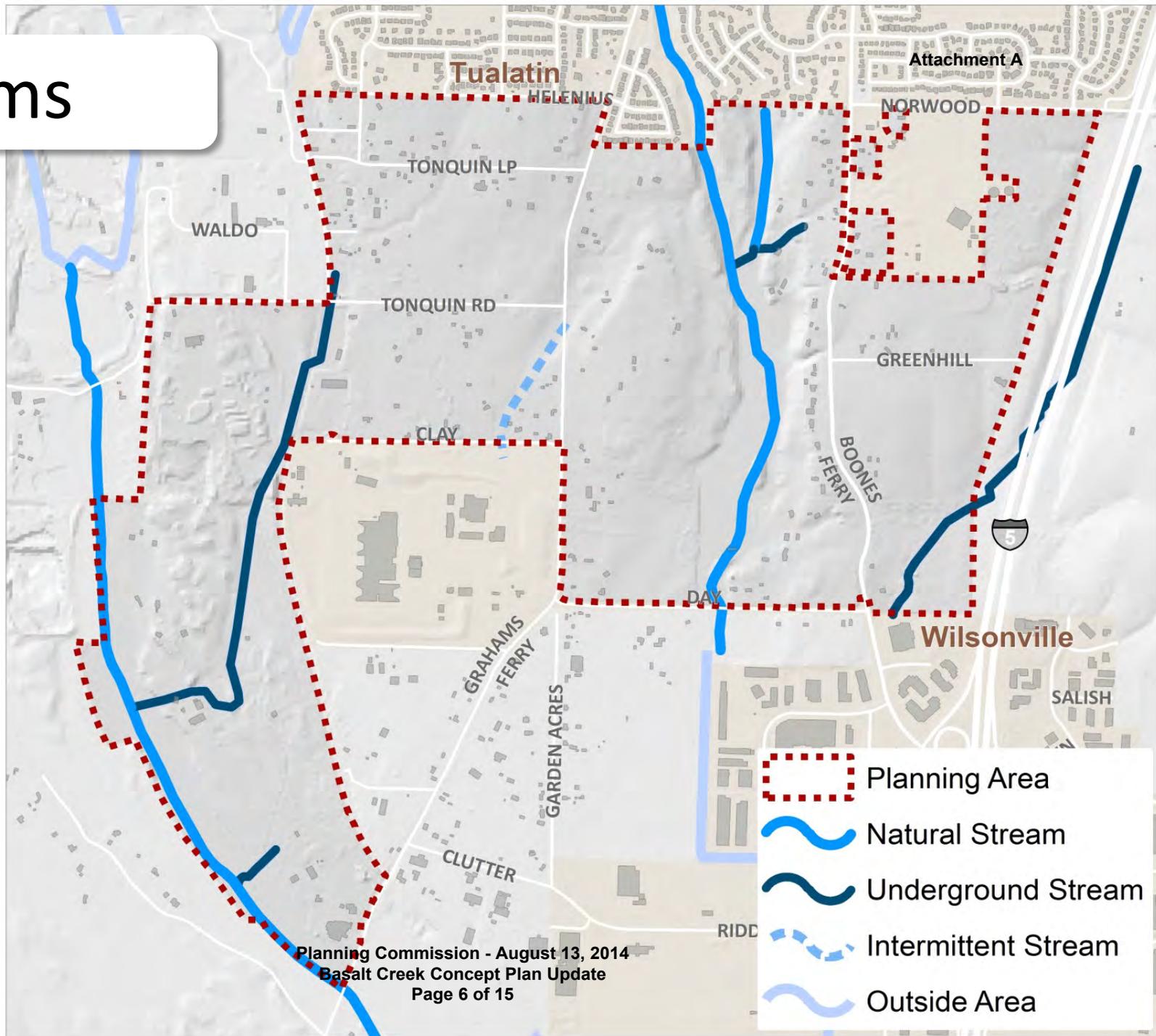


Open Water



 Planning Area
 Open Water

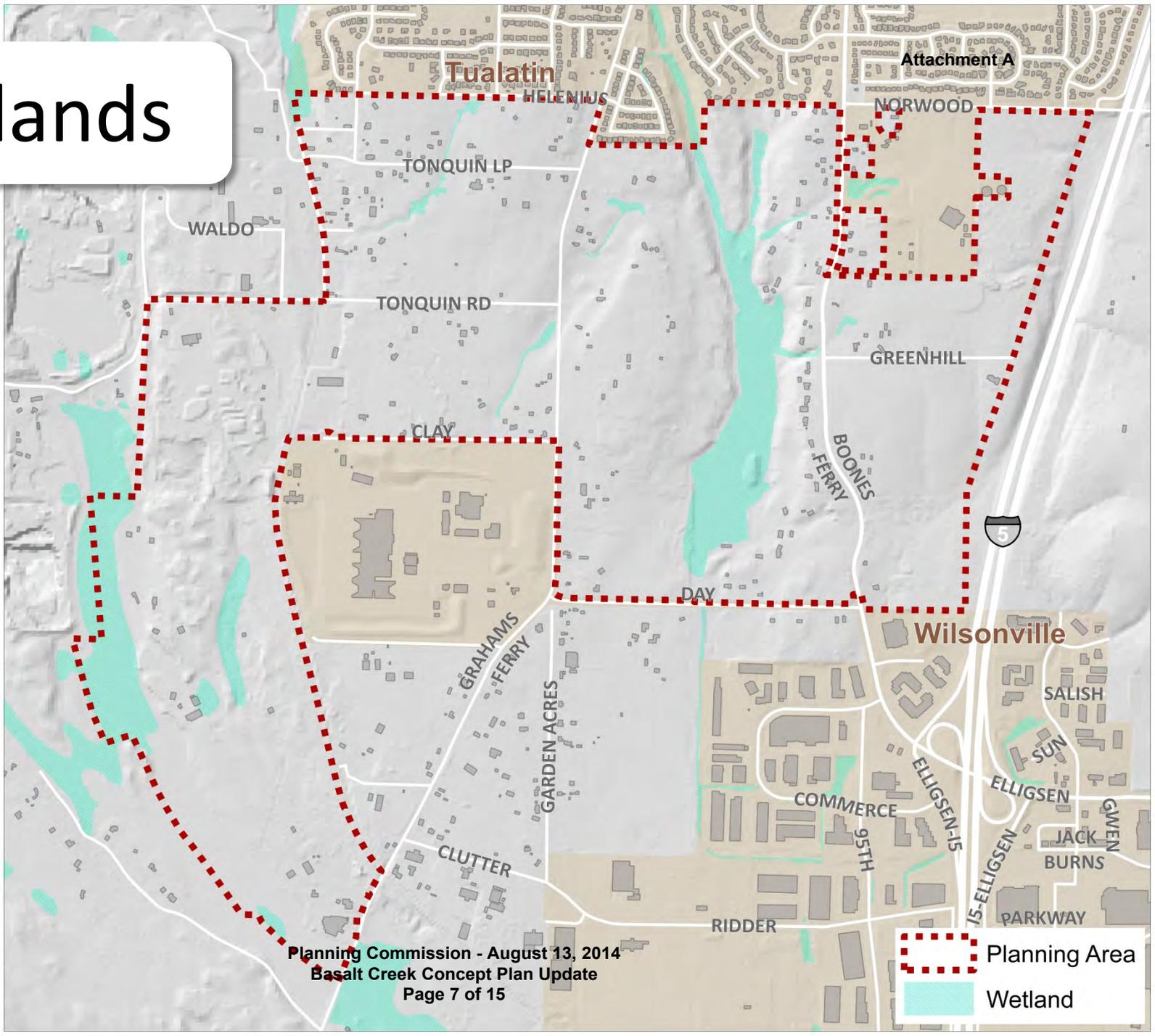
Streams



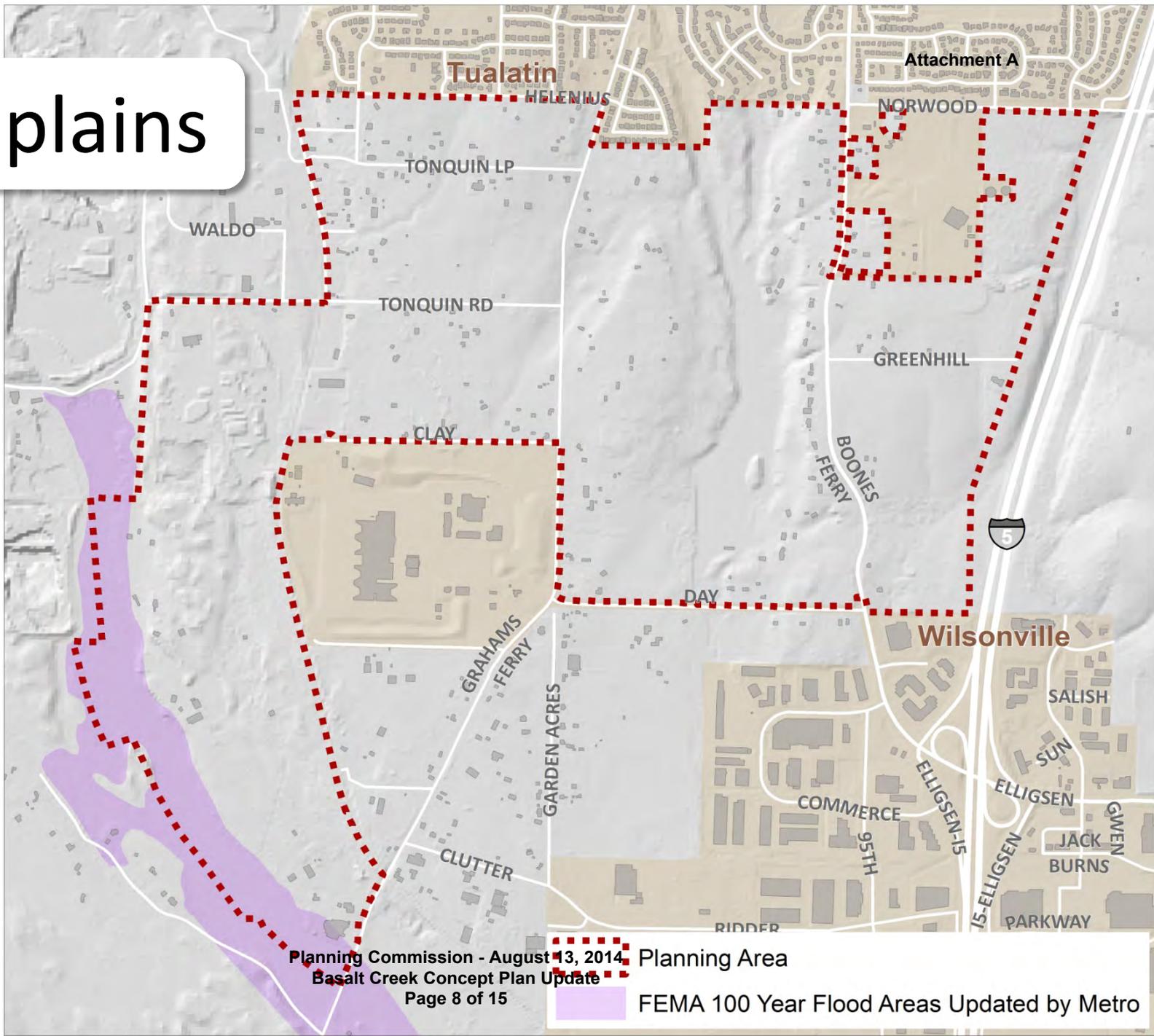
Attachment A

- Planning Area
- Natural Stream
- Underground Stream
- Intermittent Stream
- Outside Area

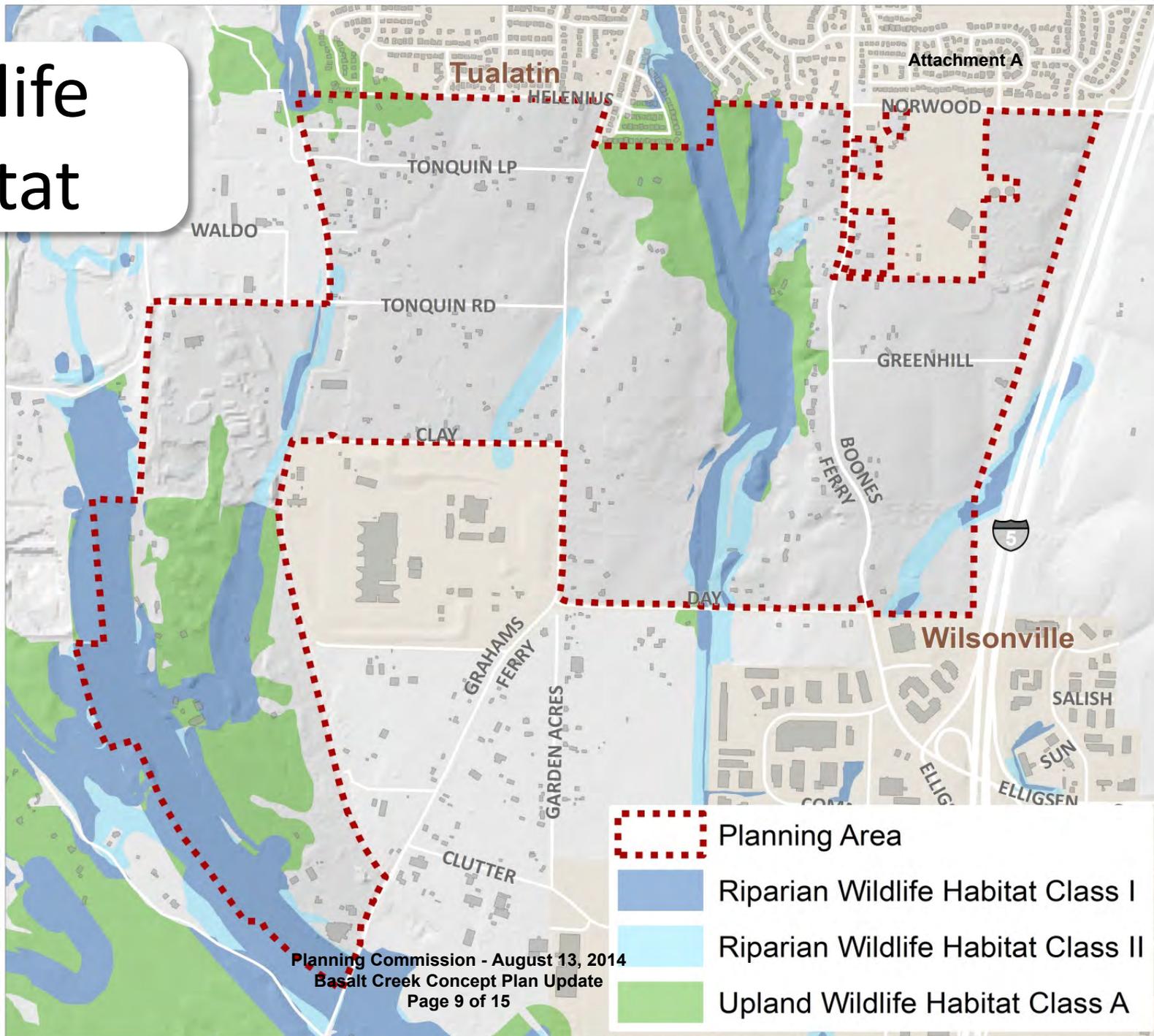
Wetlands



Floodplains



Wildlife Habitat

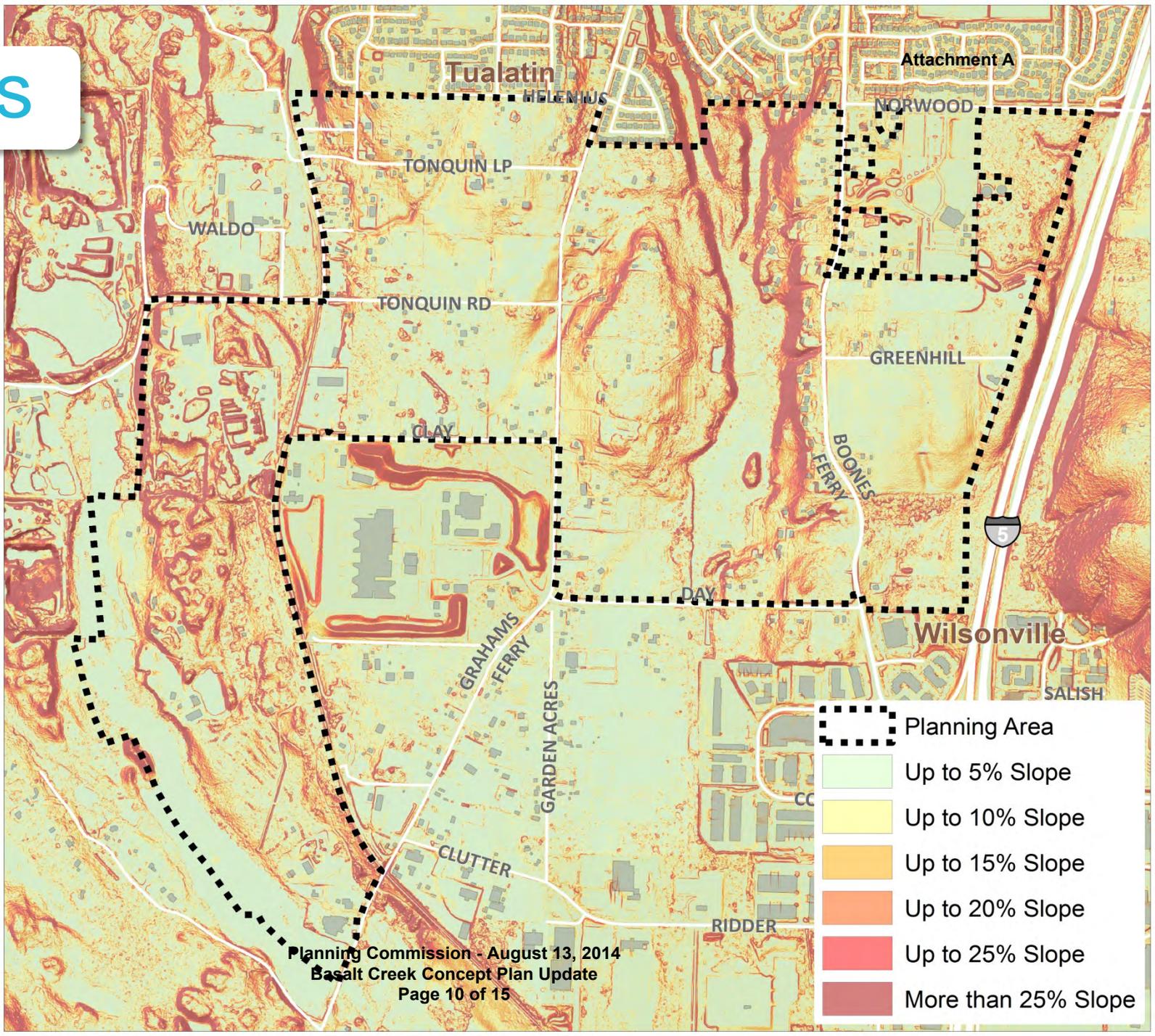


Data Source:
Metro Title 13
Wetlands
Inventory 2014

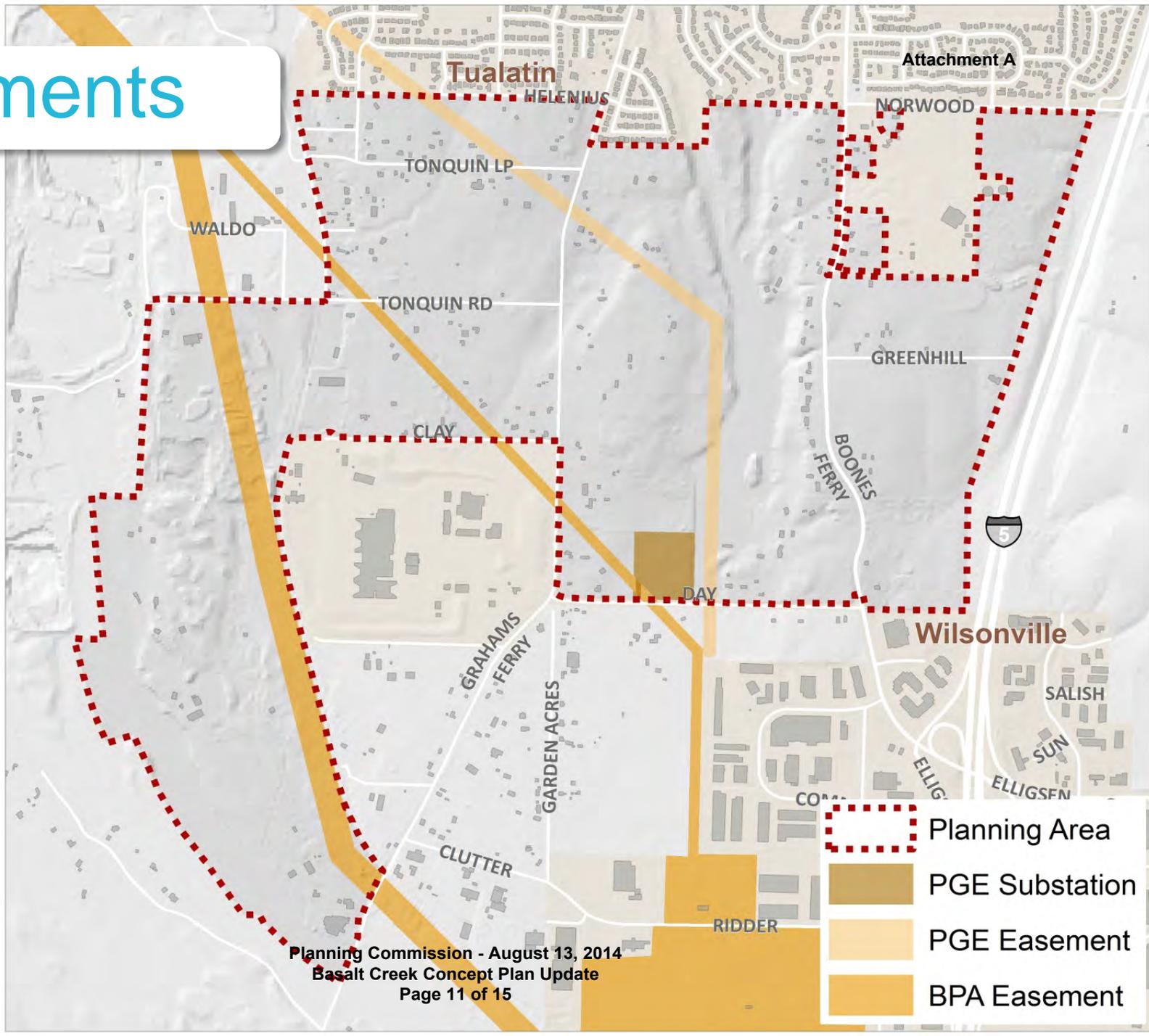
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- Planning Area
- Riparian Wildlife Habitat Class I
- Riparian Wildlife Habitat Class II
- Upland Wildlife Habitat Class A

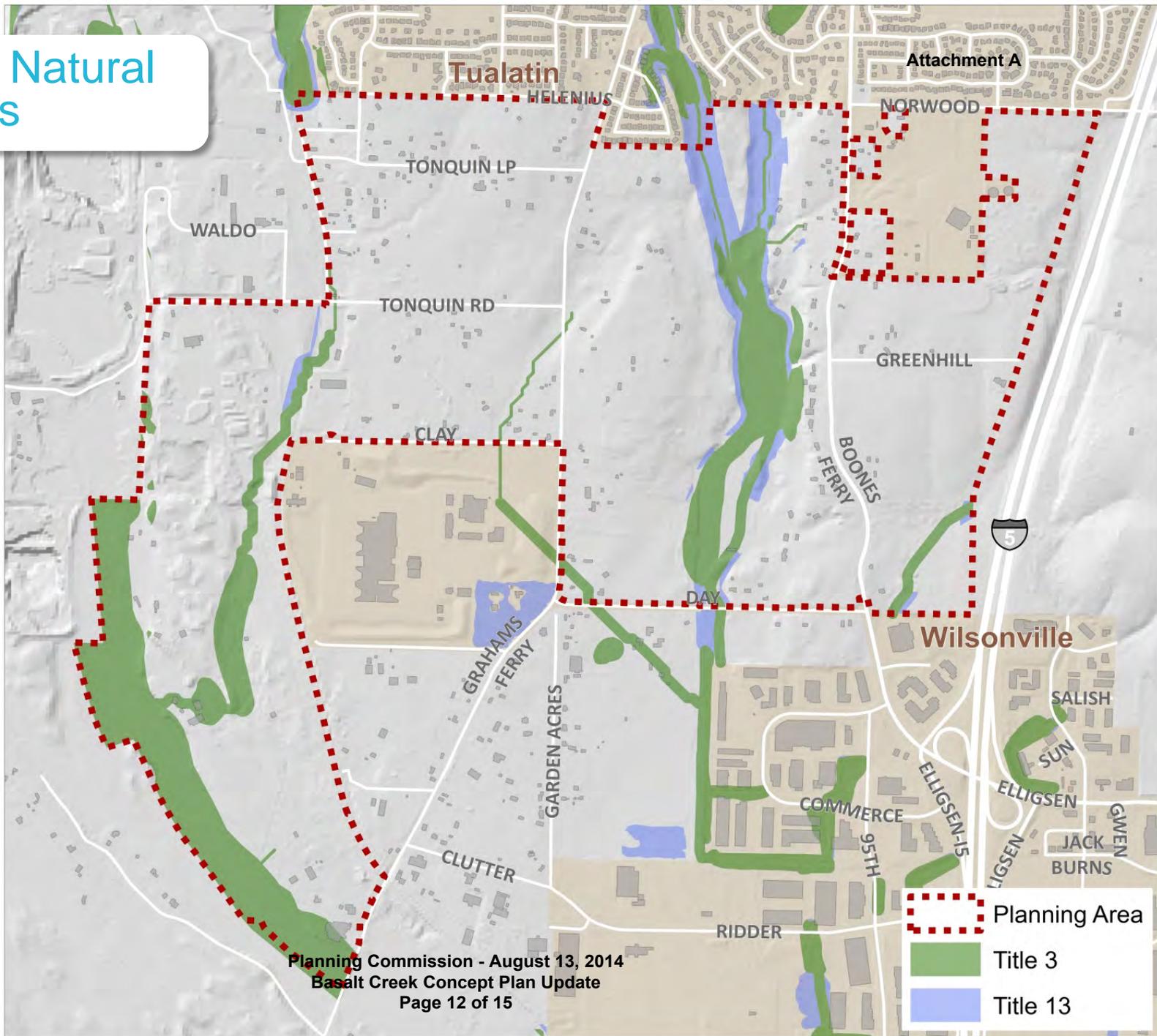
Slopes



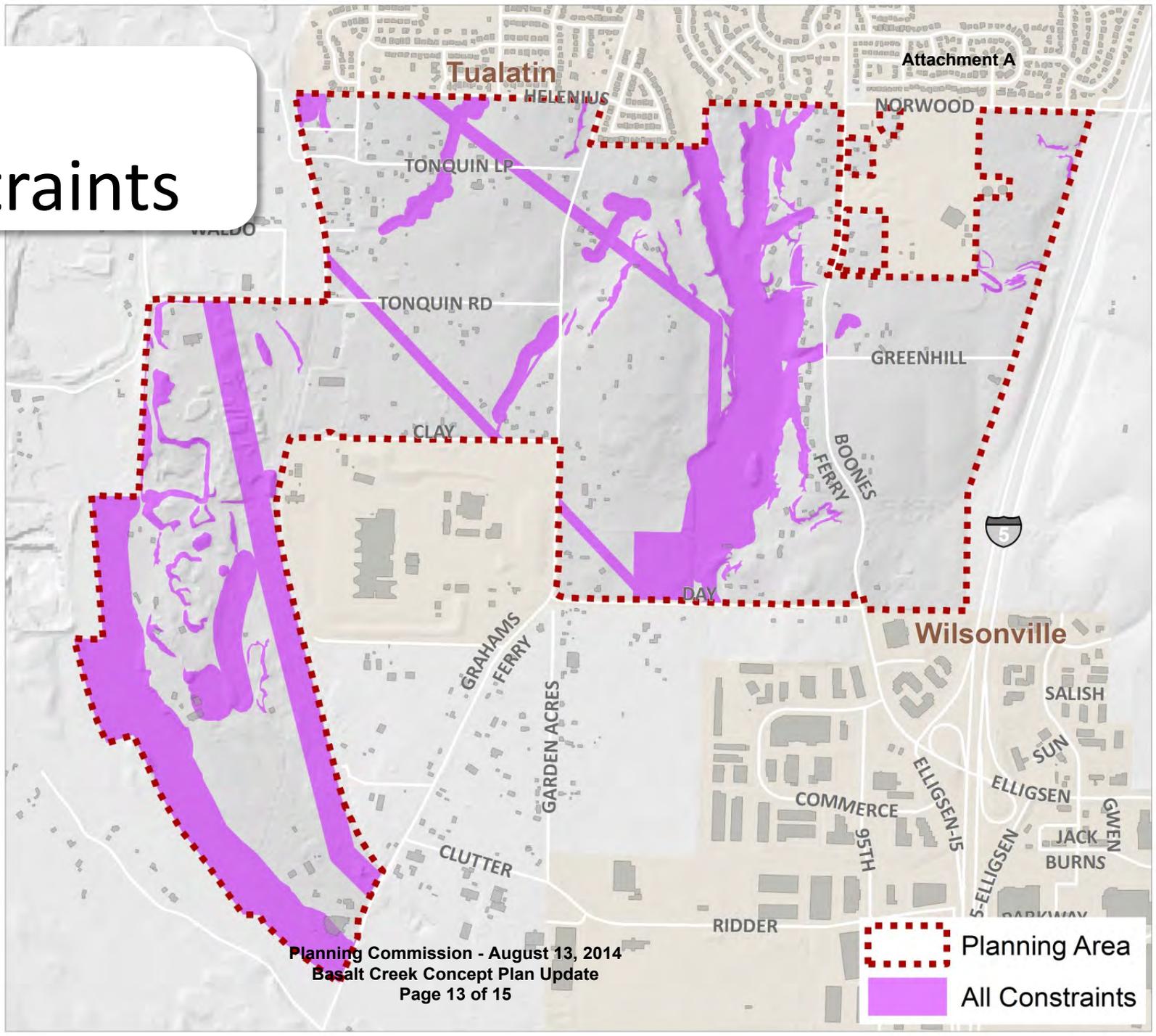
Easements



Protected Natural Resources



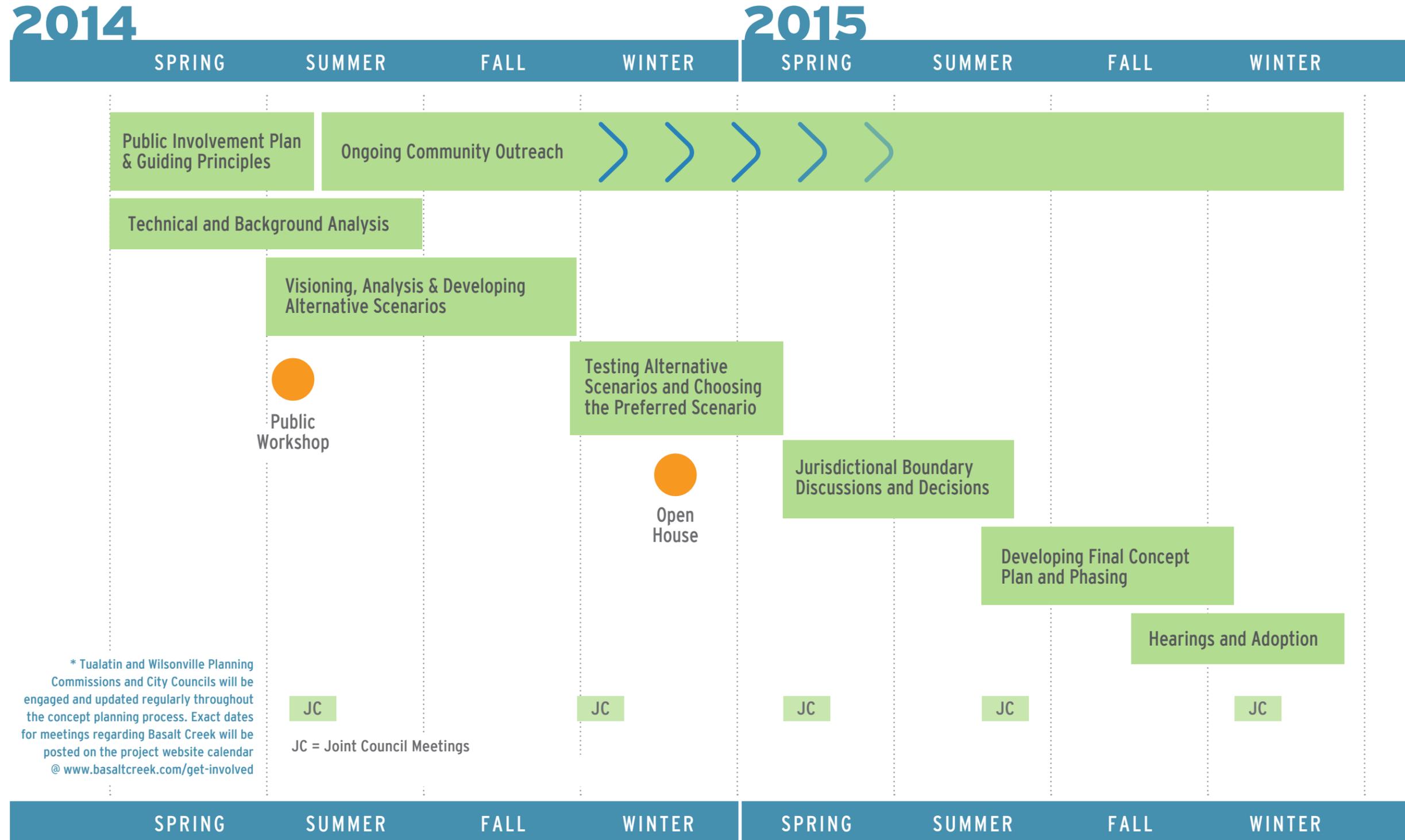
All Constraints



All Constraints

- 276 acres constrained
- Study area total is 847 acres
- 33% constrained

Concept Plan - Timeline



* Tualatin and Wilsonville Planning Commissions and City Councils will be engaged and updated regularly throughout the concept planning process. Exact dates for meetings regarding Basalt Creek will be posted on the project website calendar @ www.basaltcreek.com/get-involved

JC = Joint Council Meetings



**PLANNING COMMISSION
WEDNESDAY AUGUST 13, 2014
6:00 PM**

VI. WORK SESSIONS

B. Sanitary Sewer Master Plan (Kraushaar)



Community Development
29799 SW Town Center Loop East
Wilsonville, OR 97070
Phone 503-682-4960
Fax 503-682-7025
TDD 503-682-0843
Web www.ci.wilsonville.or.us

To: Planning Commission
From: Mike Ward, PE, Civil Engineer
Nancy Kraushaar, PE, Community Development Director
Date: August 6, 2014
Subject: Sanitary Sewer Collection System Master Plan Update

At the August 13, 2014 Planning Commission meeting, the project team for the Sanitary Sewer Collection System Master Plan Update will present a brief summary of work performed to date and information regarding upcoming public involvement and the proposed adoption schedule.

The following outline summarizes the work plan that has been underway for the Sanitary Sewer Master Plan Update project.

Task 1 – Project Management

Task 2 – Data Collection and Review

- a. Information compilation and review
- b. Current Plan evaluations and general planning criteria review

Task 3 – Planning and System Analysis Criteria

- a. Population and land use
- b. Planning criteria, population projections and regulatory requirements
- c. Hydraulic criteria

Task 4 – Existing Sewer Collection System Description and Evaluation

- a. Technical description and evaluation of facilities
- b. System inventory and existing system conditions
- c. Conceptual analysis of unserved areas
- d. Collection system map
- e. Review basin delineation

Task 5 – Wastewater Characterization and Forecasting

- a. Wastewater evaluations
- b. Flow forecasts
- c. Flow monitoring analysis

Task 6 – Infiltration and Inflow Evaluation

- a. Develop plan for additional flow monitoring
- b. I&I review flow measurements
- c. I&I summary
- d. I&I reduction plan

Task 7 – System Analysis

- a. Wastewater system model development
- b. Model calibration

- c. Hydraulic grade line analysis

Task 8 – Develop Wastewater Alternatives

- a. Develop preliminary alternatives
- b. Wastewater alternatives analysis workshop
- c. Environmental review of alternatives
- d. Evaluation of sewage collection and conveyance alternatives

Task 9 – Evaluate Alternatives

- a. Operational alternatives
- b. Infrastructure alternatives

Task 10 – Selection of Preferred Alternatives

Task 11 – Capital Improvements Plan and Implementation Program

- a. Capital Improvement Plan (CIP)
- b. Improvement prioritization and CIP coordination

Task 12 – Report Preparation

Task 13 – Final Plan Review and Adoption

- a. Final review process
- b. Planning Commission review, community meeting, Planning Commission public hearing
- c. Prepare final recommended system plan and conduct City Council public hearing
- d. Submit final adopted plan

Task 14 – Coordinate with Rate Consultant

- a. Develop rate scenarios with rate consultant
- b. Review System Development Charge relative to adopted CIP
- c. City Council meetings

It is necessary to update the City of Wilsonville Wastewater Collection System Master Plan which was adopted in 2001. The update project completes a comprehensive review of the existing wastewater system conditions and identifies deficiencies and needed improvements. The City's sanitary sewer trunk pipe network and pump stations are evaluated for capacity and operating conditions. In addition, the system is evaluated for future conditions to prepare for build out within the current urban growth boundary (UGB). Further, the plan reviews potential system needs for future UGB expansion areas adjacent to the City of Wilsonville.

The resulting Sanitary Sewer Collection System Master Plan (Plan) will provide a clear understanding of system needs and a 20-year list of prioritized capital improvement projects that will be used to efficiently program for well-maintained infrastructure with long-term capacity to serve the City over time.



**PLANNING COMMISSION
WEDNESDAY AUGUST 13, 2014
6:00 PM**

VII. OTHER BUSINESS

A. 2014 Planning Commission Work Program

2014 Annual Planning Commission Work Program

DATE	AGENDA ITEMS		
	Informational	Work Sessions	Public Hearings
August 13	Metro Urban Growth Report	Basalt Creek Concept Plan Sanitary Sewer Master Plan	
September 10		Frog Pond Area Plan Sanitary Sewer Master Plan	
October 8		6:00: CCI Public Meeting: Sanitary Sewer Master Plan 7:00 PC Meeting: Coffee Creek Industrial Area Form Based Code	
November 12			Coffee Creek Industrial Area Form Based Code Sanitary Sewer Master Plan

2014

- 1 5-year Infrastructure Plan
- 2 Asset Management Plan
- 3 **Basalt Creek Concept Planning**
- 4 Solid Waste and Recycling Code Amendments
- 5 Community Investment Initiative
- 6 Climate Smart Communities (Metro)
- 7 **Density Inconsistency Code Amendments**
- 8 Citywide signage and way finding program
- 9 **Industrial Form-Based Code**
- 10 **Frog Pond Area Plan**
- 11 **Goal 10 Housing Plan**
- 12 **Old Town Code Amendments**
- 13 Parks & Rec MP Update - Rec Center/Memorial Park Planning
- 14 **French Prairie Bike/Ped Bridge**

*Projects in bold are being actively worked on in preparation for future worksessions



**PLANNING COMMISSION
WEDNESDAY AUGUST 13, 2014
6:00 PM**

VIII. INFORMATIONAL ITEMS

- A. Draft of Metro's Urban Growth Report (UGR)**

Metro guide

2015 Growth Management Decision

HOW WE PLAN FOR THE FUTURE

As the Portland metropolitan region grows, our shared values guide policy and investment choices to accommodate growth and change, while ensuring our unique quality of life is maintained for generations to come. This means striking a balance between preservation of the farms and forests that surround the Portland region, supporting the revitalization of existing downtowns, main streets and employment areas, and ensuring there's land available for new development on the edge of the region when needed.

Urban growth report

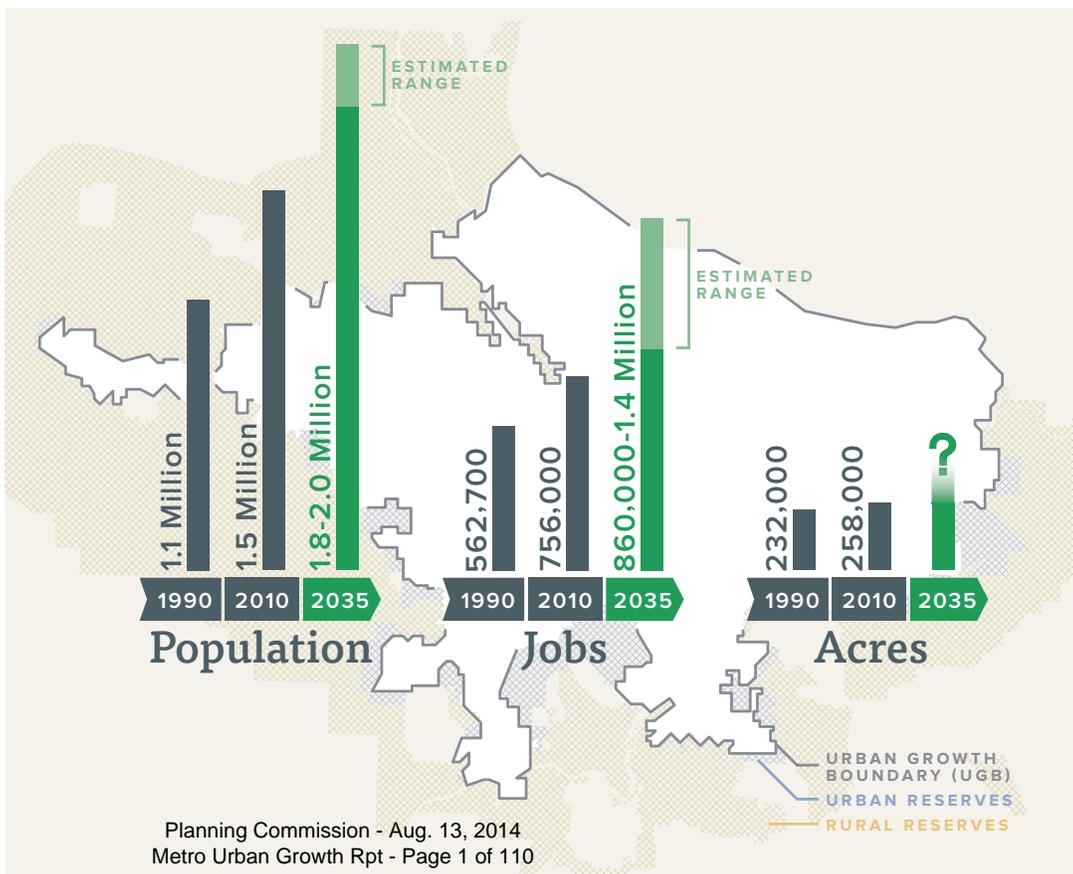
Oregon law requires that every five years, the Metro Council evaluate the capacity of the region's urban growth boundary to accommodate a 20-year forecast of housing needs and employment growth. The results of that evaluation are provided in the urban growth report (UGR). While complying with the requirements of state law, the UGR serves as more than just an accounting of available acres inside the urban growth boundary by drawing our attention to the region's successes and its challenges.

Working together

The urban growth report helps inform Metro, local jurisdictions, and other public and private sector partners as they consider new policies, investments, and actions to maintain the region's quality of life and promote prosperity. But the work does not end with the council's decision. Implementation will require coordination of local, regional and state policy and investment actions. In its role as convener for regional decision-making, Metro is committed to building and maintaining partnerships and alignments among the different levels of government and between the public and private sectors.

Past growth-future forecast

Population and job growth within the Metro urban growth boundary 1990-2035



WHAT THE NUMBERS SHOW

Population and employment forecasts in the urban growth report are expressed as ranges based on probability. Mid-point in the forecast range is Metro's best estimate of what future growth may be. It is less probable that growth will occur at the high or low ends of the range forecast.

This analysis looks at long-term capacity needs for:

- single-family and multifamily housing
- general industrial employment uses
- large industrial sites
- commercial employment uses.

If policymakers choose to plan for the high end of the growth forecast range, there is a need for additional capacity for jobs and housing. But, at mid-point in the range and below, there is no need for additional growth capacity.

Whether you trace your Oregon roots five generations or moved here last week, you have your own reasons for loving this place – and Metro wants to keep it that way. Help shape the future of the greater Portland region and discover tools, services and places that make life better today.

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Let Metro know what's important to you. Join the new online opinion panel today.

www.oregonmetro.gov/connect

optin
ONLINE PANEL

To learn more about the growth management decision and the urban growth report, visit oregonmetro.gov/growth



LAND READINESS OR LAND SUPPLY?

For better or worse, our state land use planning system asks Metro to focus on counting acres of land to determine the region's 20-year growth capacity. But over the years, it's become clear that land supply alone isn't the cause or the solution for all of the region's challenges. Working together, we must make the most of the land we already have inside the urban growth boundary to ensure that those lands are available to maintain, improve, and create the kinds of communities that we all want – today and for generations to come.

Working together, we can:

- ensure that communities have governance structures in place that can respond to growth and change
- provide the types of infrastructure and services that signal to the development community a site or area is primed for investment
- make the strategic investments needed to clean up and reuse neglected lands.

HOW WE ACCOMMODATE GROWTH

URBAN AND RURAL RESERVES Areas outside the current UGB designated by Metro and the three counties through a collaborative process. Urban reserves are the best places for future growth if urban growth expansions are needed over the next 50 years. Rural reserves are lands that won't be urbanized for the next 50 years.

INFILL Development on a tax lot where the original structure has been left intact and the lot is considered developed.

REDEVELOPMENT Development on a tax lot where the original structure has been demolished and there is a net increase in housing units.

VACANT LAND Land inside the UGB that's not developed.

The urban growth report compares a buildable land inventory that has been reviewed by local jurisdiction staff with a peer-reviewed population and employment growth forecast.



Urban growth management decision TIMELINE

2013
Phase 1

**TECHNICAL
ENGAGEMENT**

Jan–Dec 2013
Develop 20-year growth capacity estimates

2014
Phase 2

**URBAN GROWTH
REPORT**

July 2014
Draft urban growth report released

Dec 2014
Metro Council approves UGR

2015
Phase 3

**GROWTH
MANAGEMENT
DECISION**

Sept 2015
COO recommendation to Metro Council

Dec 2015
Council decision to adopt measures to meet housing and employment needs

Planning Commission - Aug. 13, 2014
Metro Urban Growth Rpt - Page 2 of 110

July / 2014

2014 URBAN GROWTH REPORT

Draft

*Investing
in our
communities
2015 – 2035*



If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

So, hello. We're Metro – nice to meet you.

In a metropolitan area as big as Portland, we can do a lot of things better together. Join us to help the region prepare for a happy, healthy future.

Metro Council President

Tom Hughes

Metro Councilors

Shirley Craddick, District 1

Carlotta Collette, District 2

Craig Dirksen, District 3

Kathryn Harrington, District 4

Sam Chase, District 5

Bob Stacey, District 6

Auditor

Suzanne Flynn



If you have a disability and need accommodations, call 503-220-2781, or call Metro's TDD line at 503-797-1804.

If you require a sign language interpreter, call at least 48 hours in advance. Activities marked with this symbol are wheelchair accessible: 

Bus and MAX information

503-238-RIDE (7433) or trimet.org

Stay in touch with news, stories and things to do.

oregonmetro.gov/connect



To learn more about the growth management decision and the urban growth report, visit [**oregonmetro.gov/growth**](http://oregonmetro.gov/growth)

Draft

2014 URBAN GROWTH REPORT

Investing in our communities
2015 – 2035

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Introduction

As the Portland metropolitan region grows, our shared values guide policy and investment choices to accommodate growth and change, while ensuring our unique quality of life is maintained for generations to come.

Metro, local jurisdictions and many other partners work together to guide development in the region. This means striking a balance between preservation of the farms and forests that surround the Portland region, supporting the revitalization of existing downtowns, main streets and employment areas, and ensuring there's land available for new development on the edge of the region when needed.

Oregon law requires that every five years, the Metro Council evaluate the capacity of the region's urban growth boundary to accommodate a 20-year forecast of housing needs and employment growth. The results of that evaluation are provided in the urban growth report.

While complying with the requirements of state law, the urban growth report serves as more than just an accounting of available acres inside the urban growth boundary. It plays a vital role in the implementation of the region's 50-year plan that calls for the efficient use of land, redevelopment before expansion, and the preservation of the region's resources for future generations.

ACHIEVING DESIRED OUTCOMES

To guide its decision-making, the Metro Council, on the advice of the Metro Policy Advisory Committee (MPAC), adopted six desired outcomes, characteristics of a successful region:

- People live, work and play in vibrant communities where their everyday needs are easily accessible.
 - Current and future residents benefit from the region's sustained economic competitiveness and prosperity.
 - People have safe and reliable transportation choices that enhance their quality of life.
 - The region is a leader in minimizing contributions to global warming.
 - Current and future generations enjoy clean air, clean water and healthy ecosystems.
 - The benefits and burdens of growth and change are distributed equitably.
-

WORKING TOGETHER

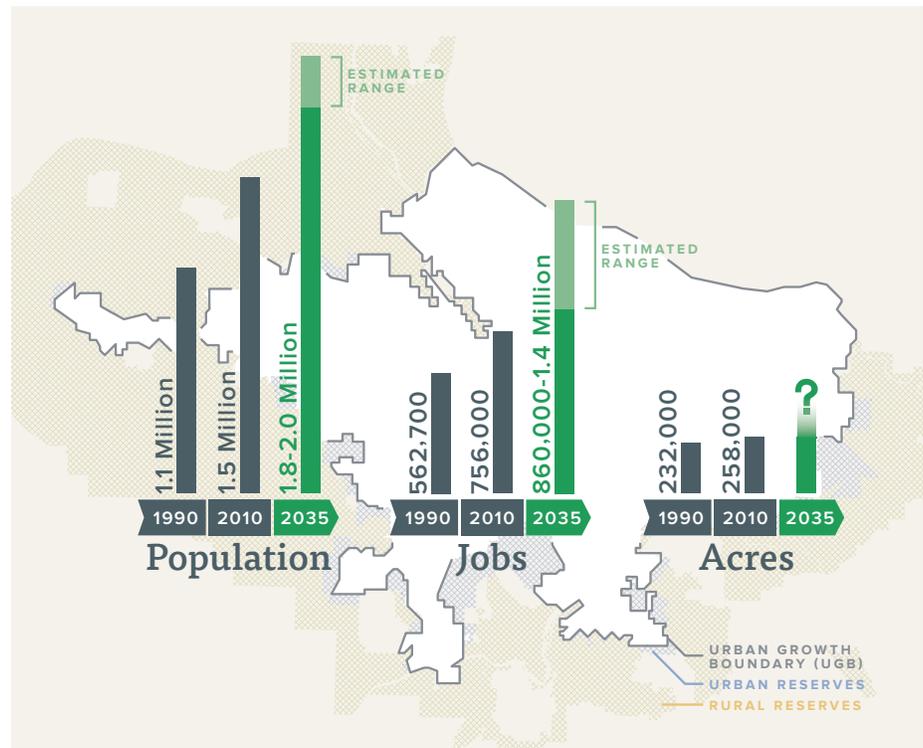
The population and employment range forecasts in the urban growth report help inform Metro, local jurisdictions, and other public and private sector partners as they consider new policies, investments, and actions to maintain the region's quality of life and promote prosperity.

The urban growth report, once accepted in its final form by the Metro Council in December 2014, will serve as the basis for the council's urban growth management decision, which will be made by the end of 2015.

But the work does not end with the council's decision. Implementation will require coordination of local, regional and state policy and investment actions. In its role as convener for regional decision-making, Metro is committed to building and maintaining partnerships and alignments among the different levels of government and between the public and private sectors.

Past growth-future forecast

Population and job growth within the Metro urban growth boundary 1990-2035



SUCCESSSES AND CHALLENGES

The region's longstanding commitment to protecting farms and forests, investing in existing communities, and supporting businesses that export goods and services is paying off in economic growth. From 2001 to 2012, the Portland region ranked third among all U.S. metropolitan areas for productivity growth, outpacing the Research Triangle in North Carolina, the Silicon Valley in California, and several energy producing regions in Texas.ⁱ Likewise, the region's walkable downtowns, natural landscapes, and renowned restaurants, breweries, and vineyards are well known around the world. In 2013, visitors to Clackamas, Multnomah and Washington counties spent \$4.3 billion dollars, supporting 30,100 jobs in the region.ⁱⁱ These successes are no accident – they demonstrate that prosperity, livability and intentional urban growth management are compatible.

However, Metro and its partners also have challenges to face when it comes to planning for additional population and employment growth. These include making sure that workforce housing is available in locations with access to opportunities, providing more family-friendly housing choices close to downtowns and main streets, delivering high quality transportation options that help people get where they need to go, ensuring freight mobility, and protecting and enhancing the environment.



Outcomes-based approach to growth management

A core purpose of the urban growth report is to determine whether the current urban growth boundary (UGB) has enough space for future housing and employment growth. Considerable care and technical engagement have gone into the assessment of recent development trends, growth capacity, and the population and employment forecasts provided in this report. However, this kind of analysis is necessarily part art and part science. State laws direct the region to determine what share of growth can “reasonably” be accommodated inside the existing UGB before expanding it but ultimately, how the region defines “reasonable” will be a reflection of regional and community values.

HOW WE ACCOMMODATE GROWTH

URBAN AND RURAL RESERVES Areas outside the current UGB designated by Metro and the three counties through a collaborative process. Urban reserves are the best places for future growth if urban growth expansions are needed over the next 50 years. Rural reserves are lands that won't be urbanized for the next 50 years.

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VACANT LAND Land inside the UGB that's not developed.

RESIDENTIAL BUILDABLE LAND INVENTORY

If the region's historic annual housing production records (high and low from 1960 to 2012) are any indication, how long might the residential buildable land inventory last?

SINGLE FAMILY 10 to 52 years

MULTIFAMILY 28 to 354 years

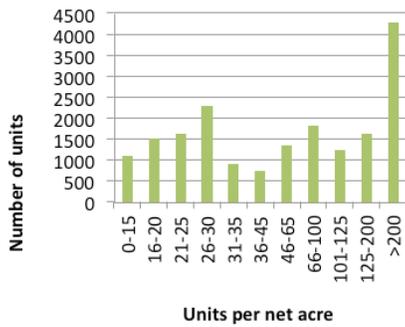


FIGURE 1 Net new multifamily units by density inside UGB (built 2007-2012)

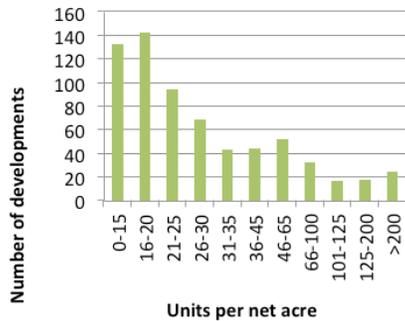
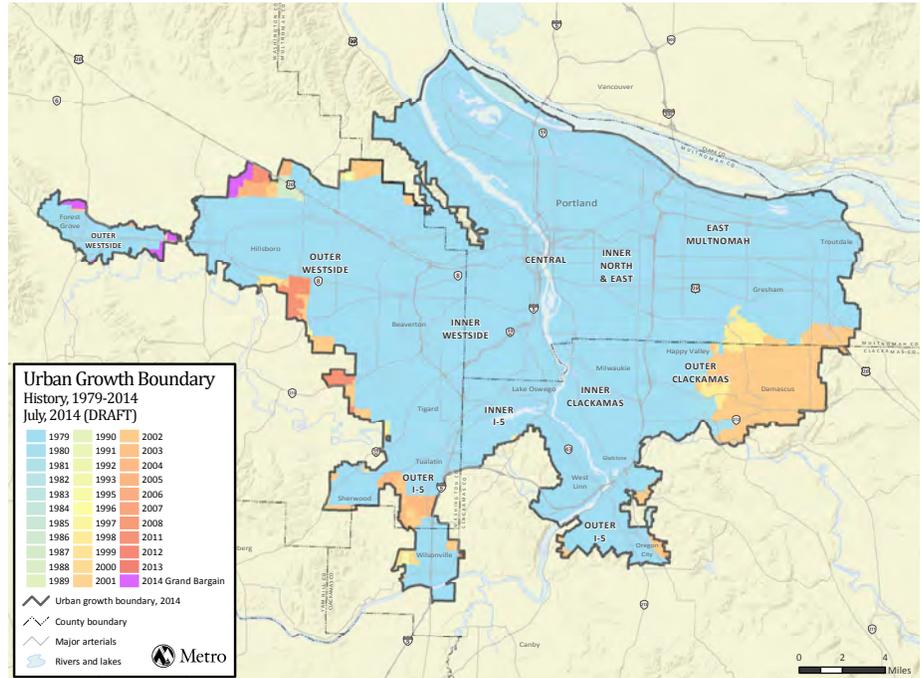


FIGURE 2 Net new multifamily developments by density inside UGB (built 2007-2012)



MAP 1 Metro UGB expansions over time (1979 - 2014)

How has the region been growing?

The Portland region's original urban growth boundary was adopted in 1979. As depicted in Map 1, the UGB has been expanded by about 31,400 acres. During the same time period, the population inside the UGB has increased by over half a million people. This represents a 61 percent increase in population inside an urban growth boundary that has expanded by 14 percent.

RESIDENTIAL DEVELOPMENT TRENDS

From 1998 to 2012, 94 percent of the new residential units were built inside the original 1979 boundary. During these 14 years, post-1979 UGB expansion areas produced about 6,500 housing units compared to the approximately 105,000 units produced in the original 1979 UGB. With a couple of notable exceptions, UGB expansion areas have been slow to develop because of challenges with governance, planning, voter-approved annexation, infrastructure financing, service provision, and land assembly. Development of Wilsonville's Villebois and Hillsboro's Witch Hazel communities demonstrates that new urban areas can be successful with the right combination of factors such as governance, infrastructure finance, willing property owners, and market demand. There are also challenges in our existing urban areas. Infill and redevelopment have been focused in a few communities while many downtowns and main streets have been slow to develop.

The 2040 Growth Concept, the Portland region's 50-year plan for growth, calls for focusing growth in existing urban centers and transportation corridors, and making targeted additions to the urban growth boundary when needed. To achieve this regional vision, redevelopment and infill are necessary. During the six years from 2007 through 2012, which included the Great Recession, the region saw levels of redevelopment and infill that exceeded past rates. During

this time period, 58 percent of the net new residential units built inside the UGB were through redevelopment (46 percent) or infill (12 percent) and 42 percent were on vacant land. There are a variety of views on whether the recession explains this uptick in redevelopment and infill or whether this is an indication of people wanting to live in existing urban areas with easy access to services and amenities. What is clear is that development challenges exist in both urban areas and past expansion areas. In some cases, however, market demand in existing urban areas appears to have overcome those challenges.

During this same six years, new residential development was evenly split between multifamily and single-family units with a total of 12,398 single-family and 12,133 multifamily residences built. The average density of new single-family development was 7.6 units per acre (5,766 square foot average lot size) and multifamily development was 41.8 units per acre. The highest density multifamily developments also tended to be the largest, so while there were many smaller developments, the statistics are dominated by the large high-density developments. This pattern is clear in Figures 1 and 2 (p. 8), which depict the number of units and developments built per net acre, indicating levels of density.

EMPLOYMENT TRENDS

As in most regions, many people in the Portland region lost their jobs in the Great Recession. With the ensuing recovery, total employment in the region was essentially unchanged when comparing 2006 and 2012. However, the recession did lead to some major changes across industries. Private education recorded the highest growth rate at 25.4 percent from 2006 to 2012, while health and social assistance employers saw the largest net gain in employment with the addition of just over 14,000 jobs during the same period. Construction saw the largest decline, with a loss of around 9,600 jobs, or 20.2 percent of total jobs, in the industry as of 2006. The loss of construction jobs reflects the housing crash that brought residential construction nearly to a halt for several years. Appendix 8 describes the region’s employment trends in greater detail.

Aggregating to the sector level, industrial and retail employment declined from 2006 to 2012 while service and government employment increased (Table 1).

Sector	2006 Employment	2012 Employment	Net Change	Percent Change	Avg. Annual Growth Rate
Industrial	244,951	218,311	-26,640	-10.9%	-1.9%
Retail	86,921	84,475	-2,446	-2.8%	-0.5%
Service	396,470	419,516	23,046	5.8%	0.9%
Government	103,736	108,582	4,846	4.7%	0.8%

Table 1 Employment in the three-county area by aggregated sector 2006-2012 (Clackamas, Multnomah, Washington) | Source Quarterly Census of Employment and Wages

Policy considerations

HEALTHY DEBATE AND INFORMED DECISION-MAKING

Though this report strives for completeness, balance, and accuracy, there is always room for debate. At the end of 2014, the Metro Council will be asked to decide if the report provides a reasonable basis for moving forward and making a growth management decision in 2015. Throughout this document, policy questions and topics that have been raised by Metro Council and involved stakeholders are called out for further discussion by policymakers and members of the community.

LAND READINESS OR LAND SUPPLY?

For better or worse, our state land use planning system asks Metro to focus on counting acres of land to determine the region’s 20-year growth capacity. Over the years, it’s become clear that land supply alone isn’t the cause or the solution for all of the region’s challenges. Working together, we must make the most of the land we already have inside the urban growth boundary to ensure that those lands are available to maintain, improve, and create the kinds of communities that we all want – today and for generations to come.

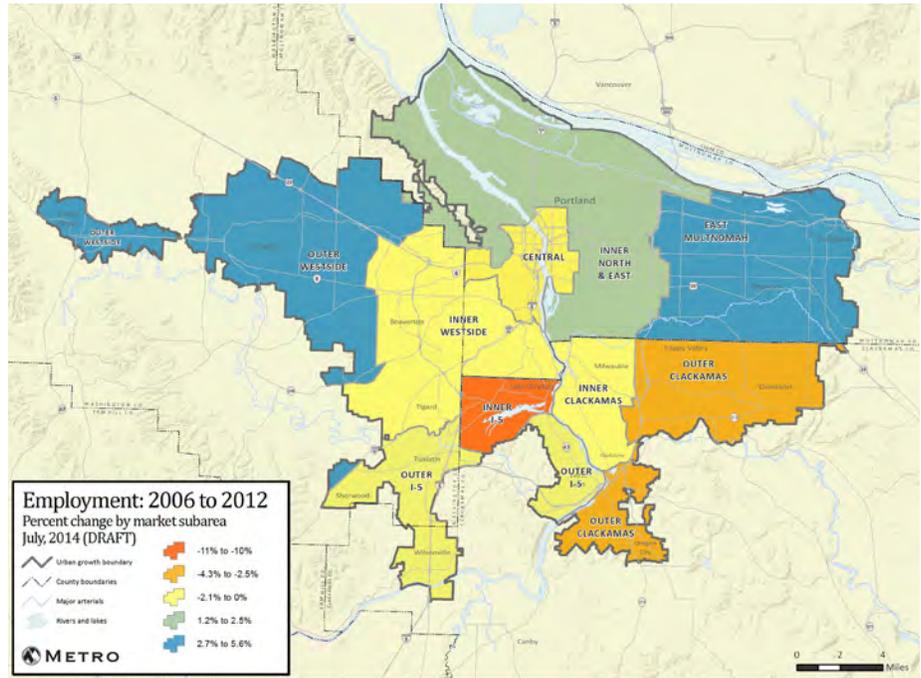
Working together, we can:

- ensure that communities have governance structures in place that can respond to growth and change
- provide the types of infrastructure and services that signal to the development community a site or area is primed for investment
- make the strategic investments needed to clean up and reuse neglected lands.

Policy considerations

CHANGES IN OUR COMMUNITIES

People around the region are concerned about new development in their communities. The concern exists not just in existing urban areas experiencing a new wave of development, but also in areas added to the urban growth boundary. With population growth expected to continue, change is inevitable. What policies and investments are needed to ensure that change is for the better?



Map 2 Employment gains and losses in Metro UGB 2006 - 2012

From 2006 to 2012, there was also a change in where jobs were located in the three-county area (Map 2). While about 25 percent of all jobs could still be found in the central part of the region, the subarea experienced a loss of about 2,300 jobs, or 1.2 percent. The inner I-5 area saw a decline in employment of roughly 2,200 jobs, or 11.0 percent of 2006 employment. This area was home to many firms involved in real estate and finance, industries that were hard hit by the housing collapse and recession. Many businesses in the area, like mortgage and title companies, contracted or closed during this time period. For example, the Kruse Way area in Lake Oswego had an office vacancy rate of 22.4 percent in 2012. In the southeastern part of the region, the outer Clackamas and outer I-5 subareas together lost about 3,400 jobs or 3.2 percent. In contrast, the outer Westside experienced the greatest increase in employment, gaining about 5,800 jobs, an increase of 5.6 percent. The East Multnomah subarea also gained jobs, increasing employment by 1,800 or 2.7 percent.

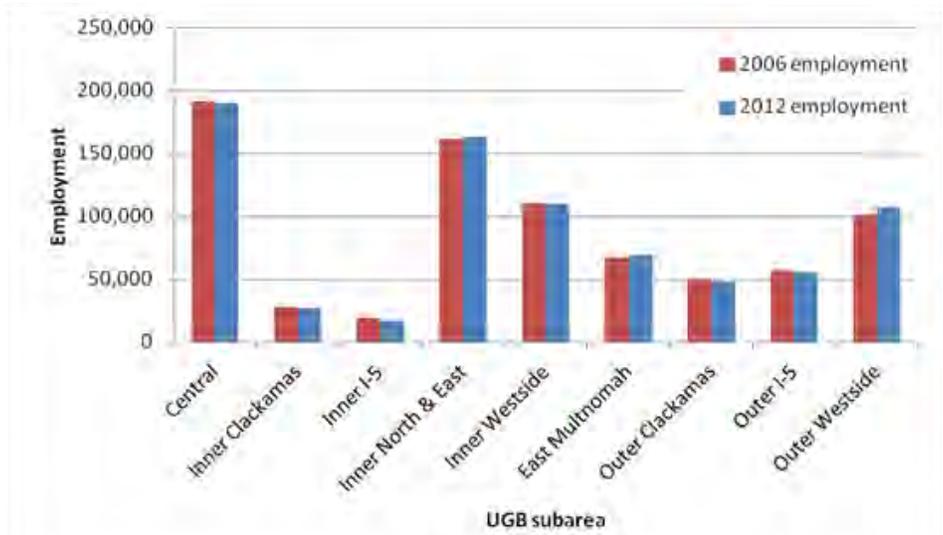


Figure 3 Total employment by subarea for 2006 and 2012



Case study

VILLEBOIS, WILSONVILLE

The Villebois community is one of only a few urban growth boundary expansion areas that has been developed. The roughly 500-acre area was brought into the UGB in 2000. With plans for about 2,600 households, the area quickly rebounded from the recession and is now about half built. Residents benefit from a variety of amenities such as parks, plazas, and community centers.



Case study

HASSALO ON 8TH, LLOYD DISTRICT, PORTLAND

Adjacent to MAX and streetcar stops, construction is now underway on a site that was previously a parking lot. Once built, the development will provide over 600 rental apartments, plazas, office and retail space, more than 1,000 underground car parking places, and space to park more than 1,000 bikes – all in a central location.

Policy considerations

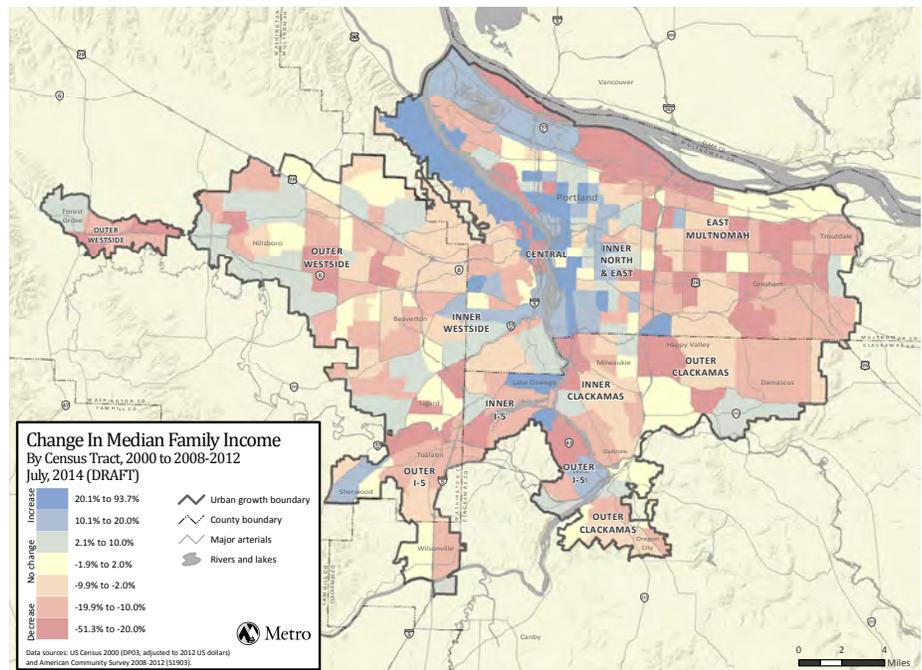
OPPORTUNITIES FOR WORKFORCE HOUSING

Market-rate workforce housing is typically provided by existing housing stock, not new construction. Yet, existing housing in locations with good access to jobs is often too expensive for the region's workforce. What policies, investments, innovative housing designs and construction techniques could provide additional workforce housing in locations with good transportation options? Who has a role?

UNINTENDED CONSEQUENCES OF REDEVELOPMENT

Our region has made a commitment to ensuring its decisions improve quality of life for all. Yet, like many metropolitan areas, we've struggled to make good on that intent. Investments made to encourage redevelopment and revitalization have too often disproportionately impacted those of modest means. The consequence has been that people with lower incomes have often been displaced from their long-time communities when redevelopment in the city center drives up land values and prices follow.

Map 3 shows the change in median family income around the region over the last decade. There is a clear trend of incomes increasing in close-in Northwest, Northeast, and Southeast Portland, Lake Oswego, and West Linn, while incomes have stagnated or decreased elsewhere. Outlying areas like outer east Portland, Gresham, Cornelius, and Aloha stand out as having decreasing incomes. In many cases, increases in incomes in central locations and decreases elsewhere indicate displacement of people from their communities as housing prices increase.



Map 3 Change in median family income 2000-2012

GROWTH WITHOUT SERVICES AND FACILITIES

Over the last couple of decades, the trend of depopulation of the urban core and the movement of the middle class to the suburbs has reversed in many regions in the U.S. The Portland metropolitan region is no exception. While there have been positive outcomes, this has also led to displacement and concentrations of poverty in places that lack adequate services and facilities like sidewalks and transit. Additional information about access to opportunity around the region can be found in Appendix 10. Information about housing and transportation cost burdens can be found in Appendix 12.

COMMUTING TRENDS: THE JOBS-HOUSING BALANCE

For years, leaders have talked about a jobs-housing balance – ensuring there are homes close to employment areas. But evidence and common sense tell us that people’s lives don’t neatly line up with the available housing inventory. Some people work at or close to home, some commute from one end of the region to the other, and some live halfway between where they work and their spouse works. In other words, putting homes next to major employers doesn’t necessarily cut down on commuting.

However, services and amenities near residential areas can make our lives outside of jobs and commutes easier and help create strong local economies. When people can go out to eat, do their shopping, visit the bank or see a doctor close to where they live, they spend less time going somewhere and more time with friends and family, actively enjoying their communities and the region.

Map 4 illustrates the region’s commute patterns. Using Washington County as an example (2011 data):ⁱⁱⁱ

- about 120,000 people who live in Washington County also work there
- about 118,000 people who live outside Washington County work in Washington County
- about 104,000 people who live in Washington County work outside Washington County.



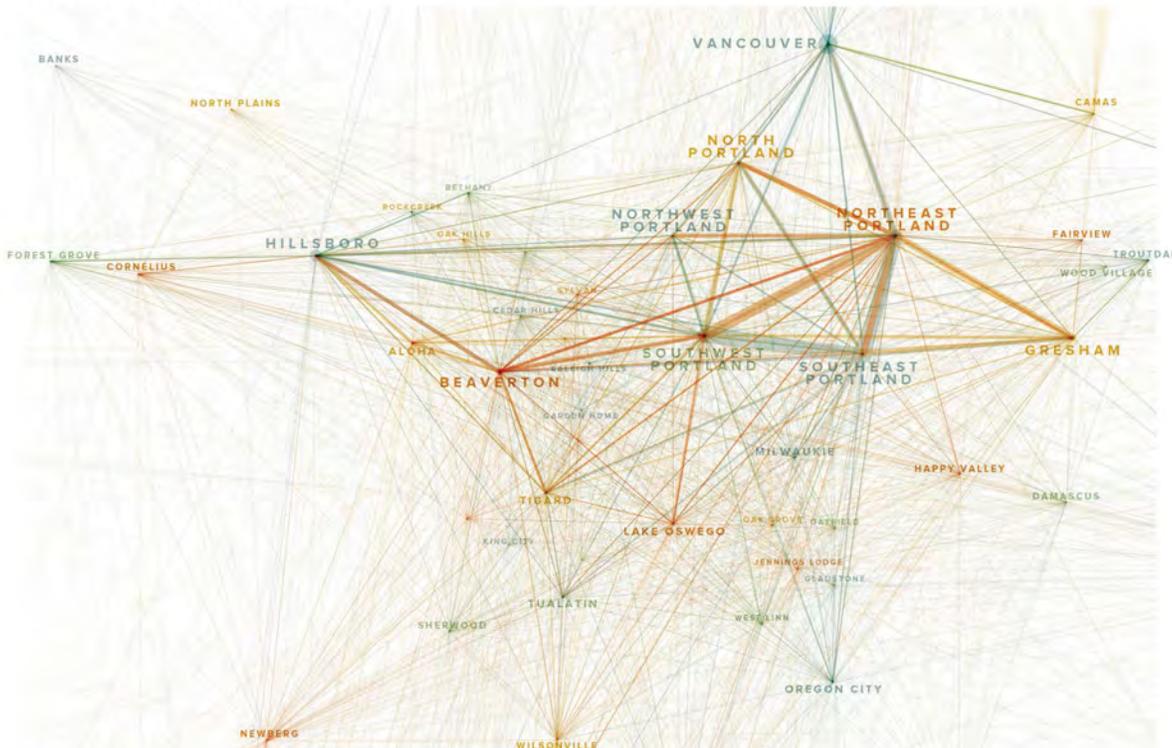
Policy considerations

A BIGGER PICTURE

Regional and local policies and investments also interact with actions taken in neighboring cities, Clark County and Salem. What are the best policies for using land efficiently and reducing time spent in traffic?

TRAVEL COMMUTE PATTERNS

2011 commute patterns from cities/places in the Portland metropolitan region
 Lines connect a person’s place of residence to place of employment
 Line thickness represents number of people



DATA SOURCE: LONGITUDINAL EMPLOYER-HOUSEHOLD DYNAMICS, U.S. CENSUS BUREAU

Policy considerations

MANAGING UNCERTAINTY

- What are the risks and opportunities of planning for higher or lower growth in the forecast range?
- Recognizing that the two forecasts are linked, are there different risks when planning for employment or housing growth?
- Are there different risks when planning for land use, transportation, or for other infrastructure systems?
- Who bears the public and private costs and benefits associated with different growth management options?

How many more people and jobs should we expect in the future?

A core question this report addresses is how many more people and jobs should the region plan for between now and the year 2035. In creating the 2035 forecast, Metro convened a peer review group consisting of economists and demographers from Portland State University, ECONorthwest, Johnson Economics, and NW Natural. The forecast assumptions and results in this report reflect the recommendations of this peer review panel. A summary of the peer review can be found in Appendix 1C.

However, even with a peer review of the forecast, some forecast assumptions will turn out to be incorrect. For that reason, the population and employment forecasts in this report are expressed as ranges, allowing the region's policymakers the opportunity to err on the side of flexibility and resilience in choosing a path forward. As with a weather forecast, this population and employment range forecast is expressed in terms of probability. The baseline forecast (mid-point in the forecast range) is Metro staff's best estimate of what future growth may be. The range is bounded by a low end and a high end. There is a ninety percent chance that actual growth will occur somewhere in this range, but the probability of ending up at the high or low ends of the range is less.

Appendix 1B describes the accuracy of past forecasts. These typically have been reliable, particularly when it comes to population growth. For example, Metro's 1985 to 2005 forecast proved to be off by less than one percent per year for both population and employment over the 20-year time frame.

POPULATION AND JOB GROWTH IN THE SEVEN-COUNTY PORTLAND/VANCOUVER METROPOLITAN AREA

To “show our work” and to understand our region in its economic context, this analysis starts with a forecast for the larger seven-county Portland/Vancouver/Hillsboro metropolitan area.² Full documentation of the metropolitan area forecast is available in Appendix 1A. It is estimated that there will be about 470,000 to 725,000 more people in the seven-county area by the year 2035. Mid-point in the forecast range, or best estimate, is for 600,000 more people. This amount of growth would be consistent with how the region has grown in the past; the seven-county area grew by about 600,000 people between 1985 and 2005 and by about 700,000 from 1990 to 2010. Adding 600,000 people would be comparable to adding the current population of the city of Portland to the seven-county area.

The forecast calls for 120,500 to 648,500 additional jobs in the seven-county Portland/Vancouver metropolitan area between 2015 and 2035. The forecast range for employment is wider than the forecast range for population since regional employment is more difficult to predict in a fast-moving global economy. Unexpected events like the Great Recession, technological advances, international relations, and monetary policy can lead to big changes. Mid-point in the forecast range, or best estimate, is for 384,500 additional jobs. This amount of growth would surpass the 240,000 additional jobs that were created in the seven-county metropolitan area during the 20-year period from 1990 to 2010, which included job losses from the recession.

POPULATION AND JOB GROWTH IN THE METRO UGB

A market-based land and transportation computer model is used to determine how many of the new jobs and households in the seven-county area are likely to locate inside the Metro urban growth boundary. The model indicates that about 75 percent of new households and jobs may locate inside the UGB. The share of regional growth accommodated inside the boundary varies depending on what point in the forecast range is chosen. More detail can be found in Appendices 4 and 6. It is estimated that there will be about 300,000 to 485,000 additional people inside the Metro urban growth boundary between 2015 and 2035 (Figure 4). At mid-point in this range, the UGB will have about 400,000 additional people. This would be comparable to adding more than four times the current population of the city of Hillsboro to the UGB. The population forecast is converted into household growth for this analysis.

It is estimated that there will be about 85,000 to 440,000 additional jobs in the Metro UGB between 2015 and 2035 (Figure 5). At mid-point in this range, there would be about 260,000 additional jobs between 2015 and 2035. This job forecast is converted into demand for acres for this analysis.

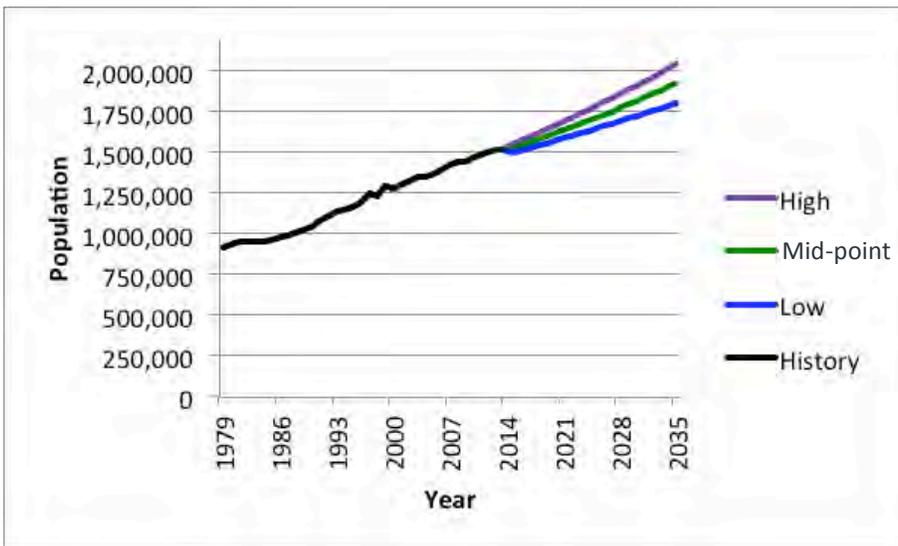


Figure 4 Population history and forecast for Metro UGB 1979 - 2035

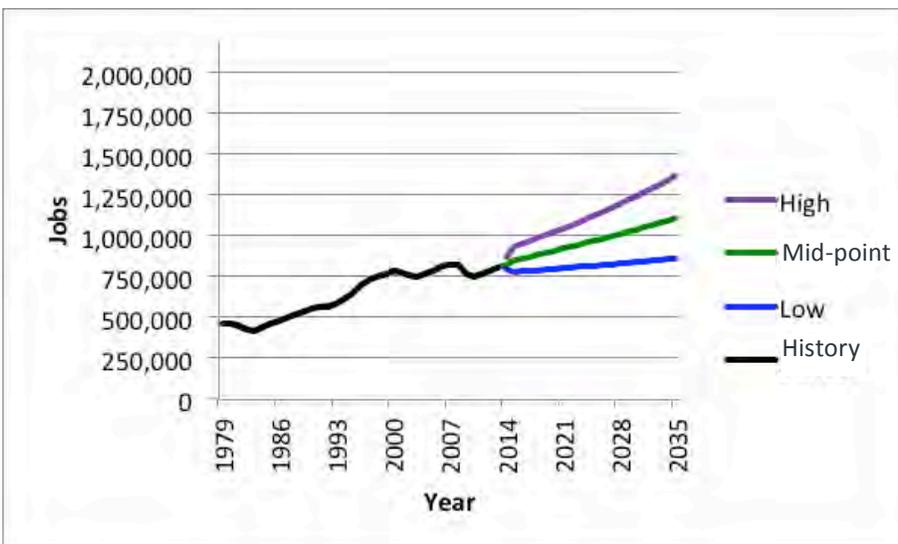


Figure 5 Employment history and forecast for Metro UGB, 1979-2035

DIDN'T THE STATE LEGISLATURE JUST EXPAND THE UGB?

Signed into state law in the spring of 2014, HB 4078 codifies the fundamental principles behind our region's decision about urban and rural reserves. The legislation provides greater protection for farms, forests and natural areas, offers predictability to our communities, home builders and manufacturers, and makes our land use system more efficient. The legislation also expanded the UGB in several locations in Washington County and described how Metro must account for those lands in this urban growth report.



How much room for growth is there inside the UGB?

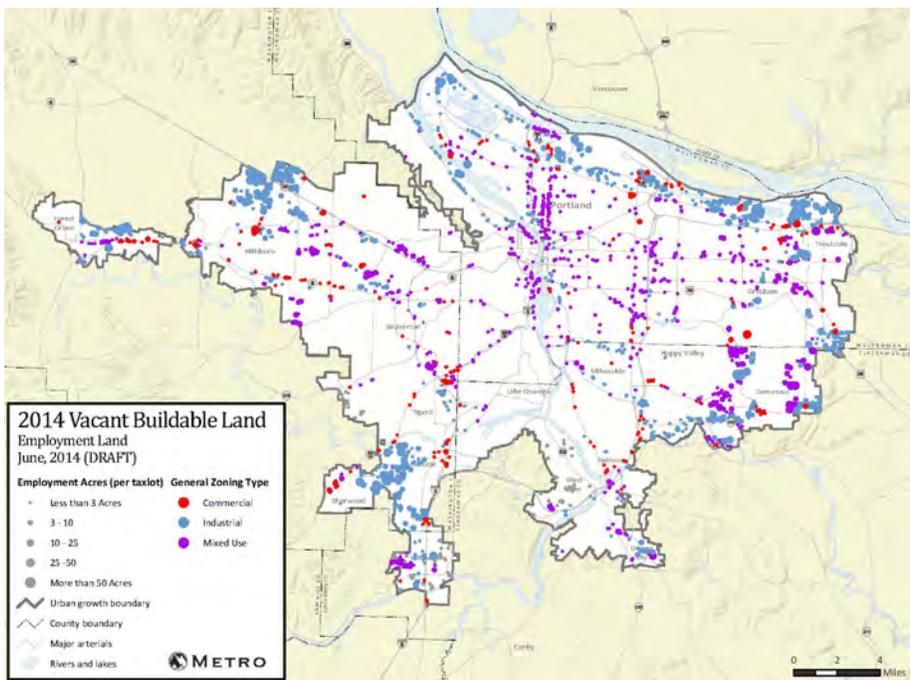
Cities and counties around the region plan for the future and prioritize investments that support their community's vision. In most cases, however, long-term plans for downtowns, main streets and employment areas are more ambitious than what is actually built or redeveloped. One task of this analysis is to help us understand how the market might respond to long-term community plans in the next 20 years.

To analyze the region's growth capacity, detailed aerial photos of all the land inside the urban growth boundary were taken. Factoring in current adopted plans and zoning designations, the photos were used to determine which parcels of land were developed and which were vacant. Methodologies for assessing the redevelopment potential and environmental constraints of the land were developed over the course of a year by Metro and a technical working group consisting of representatives from cities, counties, the state and the private sector (see pages 30-31 for a complete list of technical working group members).

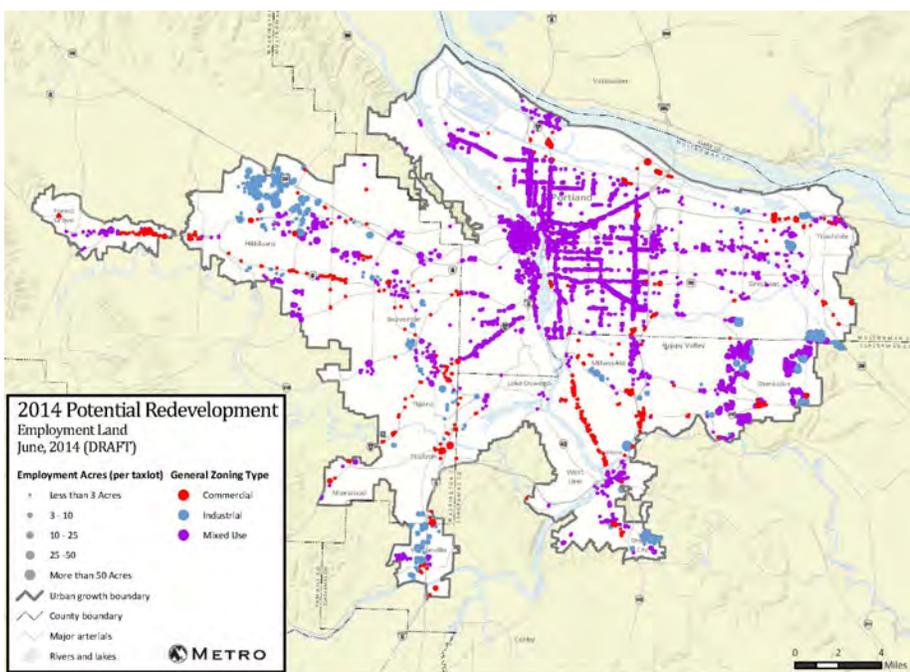
After settling on the methodology described in Appendix 2, Metro produced a preliminary buildable land inventory that local cities and counties had more than two months to review. The draft buildable land inventory described in Appendix 3 reflects refined local knowledge about factors such as environmental constraints including wetlands, steep slopes, and brownfield contamination. Maps 4 through 7 illustrate the buildable land inventory reviewed by local jurisdictions. They are available at a larger scale in Appendix 3. The buildable land inventory is considered a "first cut" at determining the region's growth capacity. For a variety of reasons described in the next section, not all of it may be developable in the 20-year time frame.

ESTIMATING RESIDENTIAL GROWTH CAPACITY

Current plans and zoning allow for a total of almost 1.3 million residences inside the urban growth boundary after accounting for environmental constraints and needs for future streets and sidewalks. About half of that potential capacity is in use today. This urban growth report does not count all of this capacity since doing so would assume that every developed property in the region will redevelop to its maximum density in the next twenty years. A rational developer will only build products that are expected to sell. Redevelopment requires market demand, which is a function of a number of factors, including expected population growth. This affects whether a property will be redeveloped and at what density.



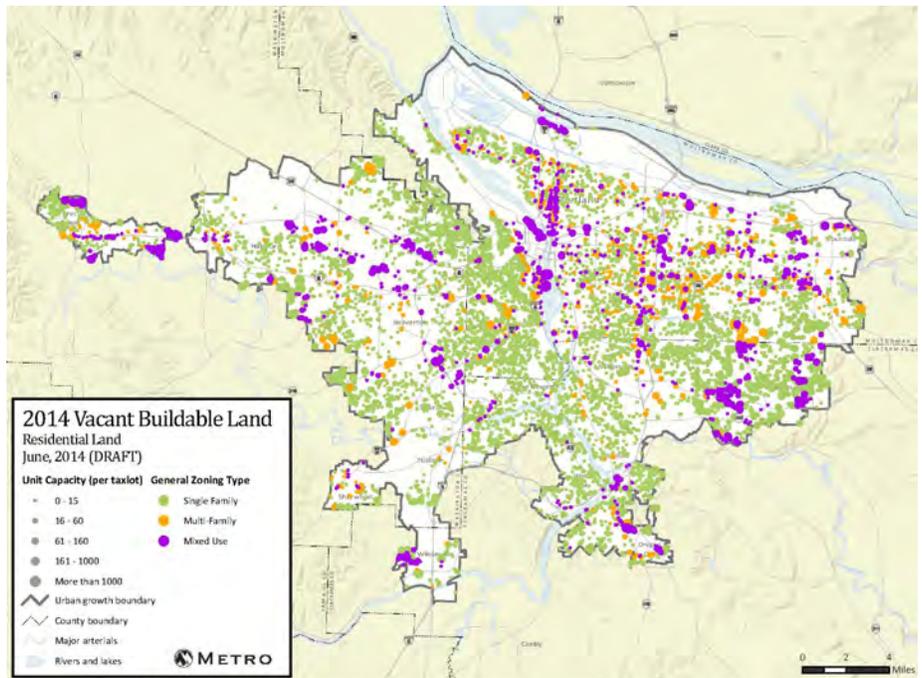
Map 4 Employment vacant buildable tax lots (reviewed by local jurisdictions)



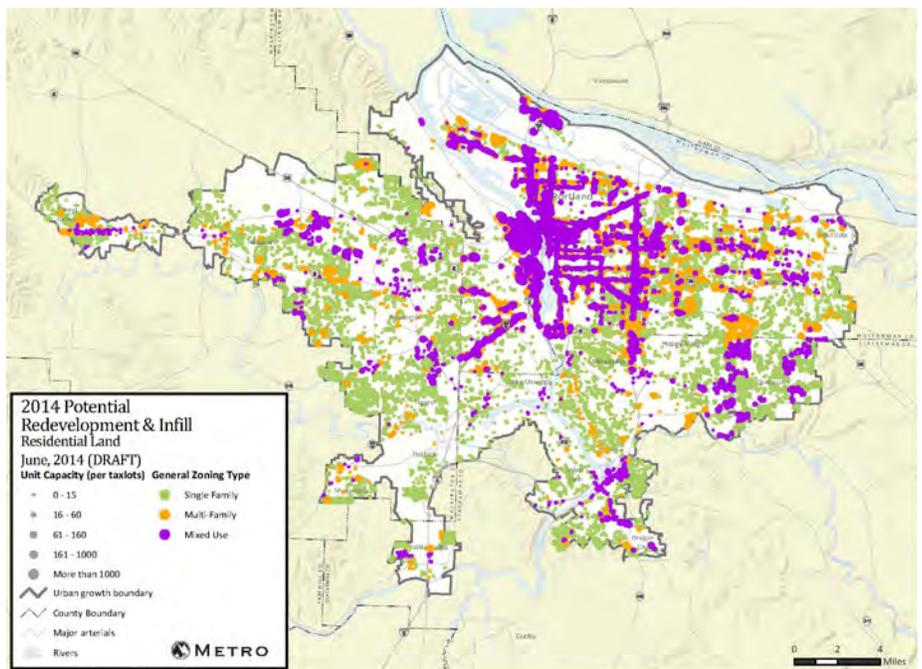
Map 5 Employment infill and redevelopment candidate tax lots (reviewed by local jurisdictions)

Acknowledging this complexity, Metro staff convened representatives from cities, counties, the state and the private sector to establish consensus for estimating how much of the region's buildable land inventory might be absorbed by the year 2035 (see pages 30-31 for a complete list of technical working group members). Redevelopment and infill are most common in locations where there is significant demand for housing, so the growth capacity from redevelopment and infill rises with assumptions for population growth. For this reason, the region's residential growth capacity is expressed as a range. The amount of growth capacity that the region has depends, in part, on the point in the household forecast range for which the Metro Council chooses to plan. Appendix 4 describes the approach for identifying the 20-year capacity range for housing.

Map 6 Residential vacant buildable tax lots (reviewed by local jurisdictions)



Map 7 Residential redevelopment candidate tax lots (reviewed by local jurisdictions)



HOW DO DEVELOPERS EVALUATE REDEVELOPMENT POTENTIAL?

The construction of new infill (original structure intact) and redevelopment (original structure demolished) projects is increasing in some places, fueled by a renewed interest in and market demand for housing and jobs close to the urban core. In order to realize a return on an investment, given the higher costs of urban redevelopment, investors will evaluate the redevelopment potential of the site by considering the following:

- Where is the site located? Is it an up and coming area?
 - What is the value of the existing building or structure on the site? What is the value of the land? At what point does the building become worth less than the land it sits on?
 - What is the developer allowed to build under the local zoning code?
 - What are the construction costs and fees for the new building?
 - How much will the developer be able to sell or rent space for in the new building?
-



Policy considerations

HOW SHOULD POLICYMAKERS EVALUATE DEVELOPMENT POTENTIAL?

Since the adoption of the 2040 Growth Concept, there has often been skepticism about the viability of redevelopment as a source of growth capacity. Our region's history shows that developing urban growth boundary expansion areas is difficult as well. Aside from developing a concept plan, what other factors support the likelihood that an urban reserve will be developed if brought into the UGB?



Case study

4TH MAIN, HILLSBORO

With a shared vision for an active, historic main street area, Metro, the City of Hillsboro and the Federal Transit Administration worked together to attract private sector redevelopment of a city block adjacent to the Hillsboro Central MAX station. 4th Main offers 71 market-rate apartments, underground parking, and active retail along main street. The existing 1950s era vacant bank building on site is being updated for restaurant and retail use. When 4th Main opened in May 2014, over half the units were leased.



ESTIMATING EMPLOYMENT GROWTH CAPACITY

To determine the UGB's employment growth capacity, analysis began with the creation of a buildable land inventory. As with the residential analysis, employment capacity depends on demand since different types of jobs have different space needs. For instance, an office job will have very different location and space needs than a warehouse job. Metro staff convened a group of public and private sector experts to help update these employment demand factors. Appendix 6 describes the approach for identifying the 20-year capacity range. (See pages 30-31 for a complete list of technical working group members).

Different jobs have different space needs





Is there a regional need for additional growth capacity?

Under state law, Metro's analysis must assess regional, not local or subregional, growth capacity needs. While some local jurisdictions may desire additional land for growth, this analysis is required to keep those needs in the regional context, knowing that other locations in the region may have greater growth capacity.

This analysis uses a probabilistic range forecast. The baseline forecast (middle of the range) has the highest probability. Though there is a 90 percent chance that growth will occur within the range, it is less probable at the low and high ends of the range.

DOES THE REGION NEED MORE LAND FOR HOUSING GROWTH?

Regional growth management policy alone cannot ensure adequate housing choices. Other elements that influence what kind of housing gets built include tax policy, lending practices, local plans and decisions, public investments, market demand, and developer responses. All of these factors impact housing production.

Appendix 4 describes in detail the residential demand analysis and includes estimates of potential demand by housing type (single-family and multifamily), tenure (own and rent), average density, as well as detail about demand from different household income brackets. For accounting purposes, the detailed analysis uses rigid supply and demand categories – for instance, single-family and multifamily. In reality, demand for these two housing types is somewhat fluid, particularly as average household sizes continue to decrease. By 2035, about 60 percent of new households are expected to include just one or two people.

WHAT THE NUMBERS SHOW

Population and employment forecasts in the urban growth report are expressed as ranges based on probability. Mid-point in the forecast range is Metro's best estimate of what future growth may be. It is less probable that growth will occur at the high or low ends of the range forecast.

This analysis looks at long-term capacity needs for:

- single-family and multifamily housing
- general industrial employment uses
- large industrial sites
- commercial employment uses.

If policymakers choose to plan for the high end of the growth forecast range, there is a need for additional capacity for jobs and housing. But, at mid-point in the range and below, there is no need for additional growth capacity.

Policy considerations

WHAT ABOUT DAMASCUS?

With its ongoing community and political challenges, how much of Damascus' growth capacity should be counted during the 2015 to 2035 time frame is more of a policy question than a technical question. For this analysis, Metro staff followed the advice of its technical advisory group and used a market-based model to determine that about half of Damascus' estimated buildable land inventory capacity could be counted in the "market-adjusted" residential supply. For modeling purposes, it was assumed that development challenges will persist in Damascus for another decade, delaying its availability to the market. If Damascus' capacity is not available, it may become somewhat more difficult to provide new single-family housing inside the existing urban growth boundary. Does the region have other options for making up for Damascus' capacity if it is not counted?

Policymakers have the challenge of balancing the type of housing and neighborhoods people prefer with funding realities, governance and annexation challenges. They also must consider regional and community goals such as preserving the character of existing neighborhoods, reducing carbon emissions, preserving farms and forests, and creating vibrant downtowns and main streets. To inform that discussion, Metro and a group of public and private sector partners conducted a study on residential preferences across the region and will make results available to policymakers in the early fall of 2014.

The capacity estimation method recommended by Metro's public and private sector advisory group recognizes that infill and redevelopment depend on demand. Consequently, the capacity from those two sources increases with greater household demand (i.e., a higher growth forecast results in a greater housing capacity).

Table 2 and Table 3 summarize the more detailed analysis of residential needs provided in Appendix 4.

Single-family dwelling units

	Buildable land inventory	Market-adjusted supply	Demand	Surplus/need
Low growth forecast	118,700	76,600	70,600	+6,000
Middle (baseline) growth forecast		90,700	89,000	+1,700
High growth forecast		97,700	103,800	-6,100

Table 2 Metro UGB single-family residential needs 2015 to 2035 expressed in dwelling units

Multifamily dwelling units

	Buildable land inventory	Market-adjusted supply	Demand	Surplus/need
Low growth forecast	274,000	119,100	82,700	+36,400
Middle (baseline) growth forecast		130,800	108,400	+22,400
High growth forecast		165,800	132,200	+33,600

Table 3 Metro UGB multifamily residential needs 2015 to 2035 expressed in dwelling units

If policymakers choose to plan for the high end of the growth forecast range, there is a need for additional capacity for jobs and housing. But, at mid-point in the forecast range and below, there is no need for additional growth capacity. No scenarios points to a regional need for additional multifamily housing capacity. However, if policymakers decide to plan for high growth and expand the UGB for residential purposes, there may be valid policy reasons for considering some amount of multifamily housing and commercial uses in the local planning process for the area.

Policy considerations

PROVIDING HOUSING OPPORTUNITIES

As policymakers consider their options for responding to housing needs, there are considerations to keep in mind.

- If policymakers decide that a urban growth boundary expansion is needed to provide room for housing, where should that expansion occur? Metro is aware of two cities in the region that are currently interested in UGB expansions for housing – Sherwood and Wilsonville. Both cities had residential land added to the UGB in 2002 that they have not yet annexed. Sherwood requires voter-approved annexation and voters have twice rejected annexing the area. What is a reasonable time frame for seeing results in past and future UGB expansion areas?
 - Given that the region has ample growth capacity for multifamily housing but a more finite supply of single-family growth capacity, should policymakers consider ways to encourage “family-friendly” housing in multifamily and mixed-use zones? To what extent might that address single-family housing needs in this analysis? Are there ways to ensure that housing in downtowns and along main streets remains within reach of families with moderate or low incomes?
 - State land use laws and regional policy call for efficient use of any land added to the UGB. However, over the years very little multifamily housing has been built in UGB expansion areas. What is the right mix of housing types in areas added to the UGB in the future and how are they best served?
 - How might policymakers balance residential preferences with other concerns such as infrastructure provision, transportation impacts, affordability, and environmental protection?
-

IMPACT OF MILLENNIALS ON HOUSING

Millennials, those born since 1980, are the biggest age cohort the U.S. has ever had (bigger than the Baby Boomer cohort) and will have a significant influence on the types of housing that are desired in the future. Today, 36 percent of the nation’s 18 to 31-year olds are living with their parents.¹ This has variously been attributed to student loan debt, high unemployment or fear of losing a job, and stricter mortgage lending standards. Builders have responded by reducing their housing production and focusing on apartment construction. What will these trends mean for home ownership, housing type, and location choices in the longer term?





Policy considerations

INVESTING IN JOB CREATION

Metro has been actively engaged in the question of regional investment priorities since the release of the 2008 Regional Infrastructure Analysis and consequential discussion with regional community and business leaders through the Community Investment Initiative. From these efforts, Metro established the Regional Infrastructure Supporting our Economy (RISE) team to deliver regionally significant projects and new infrastructure investment to enhance the local and regional economy. Are there areas where RISE should focus its attention to ensure the region can generate job growth?

DOES THE REGION NEED MORE LAND FOR INDUSTRIAL JOB GROWTH?

Industrial employment includes a wide range of jobs like high tech manufacturers, truck drivers, and metal workers. Since it is common to find commercial jobs (offices, stores, restaurant, etc.) in industrial zones, this analysis shifts a portion of the overall industrial redevelopment supply into the commercial category.

Table 4 summarizes regional needs for general industrial employment growth, expressed in acres. Additional detail about this analysis can be found in Appendix 6. The need for large industrial sites (sites with over 25 buildable acres) is described separately. At mid-point in the forecast range, there is no regional need for additional land for general industrial employment uses. At the high end of the forecast range, there is a deficit. However, there are limited areas in urban reserves that may eventually be suitable for industrial uses.

General industrial employment (acres)

	Buildable land inventory	Market-adjusted supply	Demand	Surplus/need
Low growth forecast	7,100	5,800	1,200	+4,600
Middle (baseline) growth forecast		5,000	3,800	+1,200
High growth forecast		5,000	6,500	-1,500

Table 4 Metro UGB general industrial acreage needs 2015 to 2035

Note: reflecting real market dynamics where commercial uses locate in industrial zones, the market adjustment shifts some of the region's industrial redevelopment supply into the commercial land supply. The amount varies by demand forecast.

Case study
TROUTDALE REYNOLDS INDUSTRIAL PARK

Located between the Columbia and Sandy rivers and bordered by the Troutdale Airport and Marine Drive, this 700-acre superfund site is being redeveloped with a mix of industrial uses, natural areas and utility and trail



access. The Port of Portland is working closely with local, regional and state jurisdictions to redevelop this former aluminum plant brownfield site and return it to productive industrial use with a traded-sector job focus. The Port has invested over \$37 million in the acquisition and redevelopment of the site. Today, a portion of the site is home to FedEx Ground's regional distribution center. Another \$48 million in investment is needed to make the remainder of the site ready to market to industrial employers. At full build-out, this industrial development is projected to result in 3,500 direct jobs, \$410 million in personal income and \$41 million in state and local taxes annually (all jobs).

HOW SHOULD THE REGION PRIORITIZE INVESTMENTS IN LARGE INDUSTRIAL SITE READINESS?

The region's economic development strategy focuses on several sectors with anchor firms that sometimes use large industrial sites (over 25 buildable acres). These firms are important because they often pay higher-than-average wages, export goods outside the region (bringing wealth back), produce spin off firms, and induce other economic activity in the region. However, forecasting the recruitment of new firms or growth of existing firms that use large industrial sites is challenging since these events involve the unique decisions of individual firms. To produce an analysis that is as objective as possible, the estimate of future demand for large industrial sites is based on the employment forecast. That assessment and its caveats are described in Appendix 7.

The analysis finds that there may be demand for eight to 34 large industrial sites between 2015 and 2035. There are currently 50 large vacant industrial sites inside the UGB that are not being held for future expansion by existing firms.³ This does not include sites added to the UGB in 2014 under HB 4078. To exhaust this supply of sites by 2035, the region would need to attract five major industrial firms every two years. In addition to this inventory of 50 sites, there are 24 sites inside the UGB that are being held by existing firms for future expansion (growth of existing firms is implicit in the demand forecast). Given this total supply of 74 large industrial sites and the fact that there are only two areas in urban reserves (near Boring and Tualatin) that may be suitable for eventual industrial use, policymakers can consider whether to focus on land supply or site readiness.

There are a limited number of areas in urban reserves that may be suitable for eventual industrial use. Therefore, this demand analysis may be more useful for informing the level of effort that the region may wish to apply to making its existing large industrial sites development-ready. Existing sites typically require actions such as infrastructure provision, wetland mitigation, site assembly, brownfield cleanup, annexation by cities, and planning to make sites development-ready. Many of these same development-readiness challenges exist in the two urban reserve areas that may eventually be suitable for industrial use. Metro and several public and private sector partners continue to work to understand the actions and investments that are needed to make more of the region's large industrial sites development-ready.



Policy considerations

THE PORTLAND HARBOR

The harbor is a unique environmental, recreational and economic asset that cannot be replaced elsewhere in the Portland region. For more than a century, the harbor has played a critical role in the history of trade and manufacturing in our region. Today, the harbor needs to be cleaned up to continue providing benefits. What is the appropriate balance between environmental and economic goals? What investments and policies can advance those goals?

³ This inventory is preliminary as of June 16, 2014, and will be confirmed by Metro and its partners before Metro Council consideration of the final UGR. This work is being conducted by Mackenzie for an update of the 2012 Regional Industrial Site Readiness project. However, the inventory is not expected to change enough to result in a different conclusion regarding there being no regional need for additional UGB expansion.

Policy considerations

KEEPING SHOPPING AND SERVICES CLOSE BY

It makes sense to locate commercial uses close to where people live. If the Metro Council chooses to plan for a high growth scenario, are there places where it makes sense to expand the UGB for a mix of residential and commercial uses?



DOES THE REGION NEED MORE LAND FOR COMMERCIAL JOB GROWTH?

The commercial employment category includes a diverse mix of jobs such as teachers, restaurant workers, lawyers, doctors and nurses, retail sales people, and government workers. Generally, these are population-serving jobs that are located close to where people live. Table 5 summarizes regional needs for commercial employment growth, expressed in acres. Additional detail about this analysis can be found in Appendix 6. At mid-point in the forecast range, there is no regional need for additional land for commercial employment uses. At the high end of the forecast range, there is a deficit. However, it may not be desirable to locate commercial uses on the urban edge unless those uses are integrated with residential development.

Commercial employment (acres)

	Buildable land inventory	Market-adjusted supply	Demand	Surplus/need
Low growth forecast	4,300	4,200	1,400	+2,800
Middle (baseline) growth forecast		4,500	3,600	+900
High growth forecast		5,100	5,700	-600

Table 5 Metro UGB commercial acreage needs 2015 to 2035

Note: reflecting real market dynamics where commercial uses locate in industrial zones, the market adjustment shifts some of the region's industrial redevelopment supply into the commercial land supply. The amount varies by demand forecast.

Conclusion

The 2014 urban growth report is more than an accounting of available acres and forecast projections. It provides information about development trends, highlights challenges and opportunities, and encourages policymakers to discuss how we can work together as a region to help communities achieve their visions. This region has seen tremendous change and progress over the last 20 years and we know change will continue. Our shared challenge is to guide development in a responsible and cost-effective manner so that we preserve and enhance the quality of life and ensure that the benefits and costs of growth and change are distributed equitably across the region.

LOCAL LEADERSHIP

Examples of strong partnerships abound already. At the local level, cities and counties are working closely with the private sector to bring new vibrancy to downtowns, more jobs to employment areas, and to provide existing and new neighborhoods with safe and convenient transportation options. Residential and employment areas as varied as Beaverton's Creekside District, Portland's South Waterfront, Hillsboro's AmberGlen, Wilsonville's Villebois, the Gresham Vista Business Park and many others, both large and small, are pointing the way to our region's future.

METRO'S ROLE

At the regional level, Metro supports community work with a variety of financial and staff resources. The Community Planning and Development Grant program has funded over \$14 million in local project work to support development readiness. The RISE (Regional Infrastructure Supporting our Economy) program is designed to deliver regionally significant projects and spur infrastructure investment. The Transit-Oriented Development Program provides developers with financial incentives that enhance the economic feasibility of higher density, mixed-used projects served by transit. Corridor projects such as the Southwest Corridor and East Metro Connections Plan are bringing together Metro, local jurisdictions, educational institutions, residents, businesses and others to develop comprehensive land use and transportation plans for individual areas that will support local community and economic development goals.

INVESTING IN OUR COMMUNITIES

These are just a few examples of the kind of work that's happening all across the region. While the Metro Council's growth management decision must address the question of whether to adjust the region's urban growth boundary, the more difficult questions center on how to find the resources needed to develop existing land within our communities and new land in urban growth boundary expansion areas in a way that meets community and regional goals. Many of these questions and policy considerations are highlighted throughout this urban growth report to support policy discussions in the 2015 growth management decision and beyond.

Next steps

JULY THROUGH DECEMBER 2014 The urban growth report helps inform policy discussions for the Metro Policy Advisory Committee (MPAC) and Metro Council.

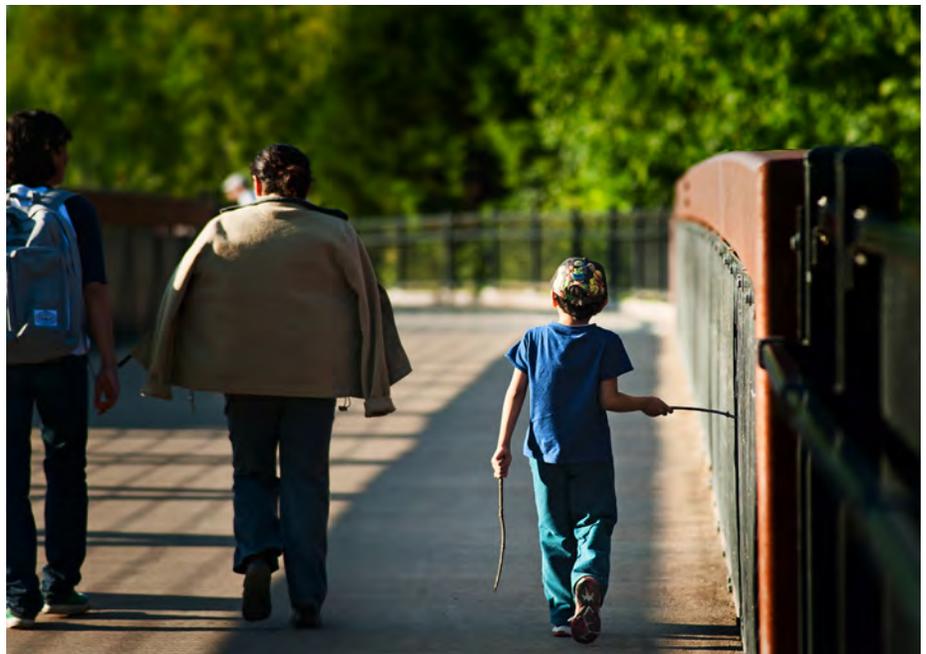
DECEMBER 2014 The Metro Council will consider a final urban growth report that will serve as the basis for its growth management decision in 2015. The Metro Policy Advisory Committee will be asked to advise the council on whether the urban growth report provides a reasonable basis for its subsequent growth management decision.

JULY 2014 – MAY 2015 Local and regional governments will continue to implement policies and investments to create and enhance great communities while accommodating anticipated growth.

MAY 2015 Local jurisdictions interested in urban growth boundary expansions in urban reserves must complete concept plans for consideration by MPAC and the Metro Council.

SEPTEMBER 2015 Metro's chief operating officer makes a recommendation for the Metro Council's growth management decision that becomes the basis for MPAC and council discussion during fall 2015. The recommendation will take into account the final urban growth report, assessments of urban reserve areas, actions that have been taken at the regional or local level – such as measures that lead to more efficient land use and adopted concept plans for urban reserves – and other new information that may influence our understanding of future growth in the region.

BY THE END OF 2015 If any additional 20-year capacity need remains, the Metro Council will consider UGB expansions into designated urban reserves. The Metro Policy Advisory Committee will be asked to advise the council on the growth management decision.



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Tim O'Brien, principal planner
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Maribeth Todd, associate researcher and modeler
Dennis Yee, chief economist

THE FOLLOWING PEOPLE GRACIOUSLY LENT THEIR EXPERTISE TO INFORM THIS REPORT

2014 Urban Growth Report: buildable land inventory technical working group

The following people advised Metro staff on the methods used for identifying the region's buildable land inventory. Additional review of the preliminary inventory was provided by numerous city and county staff.

Jill Sherman, Gerding Edlen
Eric Cress, Urban Development Partners NW
Steve Kelley, Washington County
Brian Hanes, Washington County
Erin Wardell, Washington County
Colin Cooper, Hillsboro
Ali Turiel, Hillsboro
Emily Tritsch, Hillsboro
Ken Rencher, Beaverton
Mike Rizzitiello, Beaverton
Larry Conrad, Clackamas County
Denny Egner, Lake Oswego, Milwaukie
Chris Neamtzu, Wilsonville
Chuck Beasley, Multnomah County
Adam Barber, Multnomah County
Tom Armstrong, Portland
Tyler Bump, Portland (alternate)
Brian Martin, Gresham
Mike Tharp, Norris, Beggs, and Simpson
Bob LeFeber, Commercial Realty Advisors

Drake Butsch, First American Title Company
Stuart Skaug, CB Richard Ellis
Dan Grimberg, Arbor Homes
Jeff Bacharach, Bacharach Law
Andrew Tull, 3J Consulting
Justin Wood, Home Builders Association of Metropolitan Portland
Anne Debbaut, DLCD
Jennifer Donnelly, DLCD
Tom Hogue, DLCD
Gordon Howard, DLCD
Jerry Johnson, Johnson Economics
Eric Hovee, E.D. Hovee and Associates

2014 Urban Growth Report: residential supply range technical working group

This group advised Metro staff on how much of the residential buildable land inventory's redevelopment supply may be developable in the 20-year time horizon.

Erin Wardell, Washington County
Jeannine Rustad, Hillsboro
Emily Tritsch, Hillsboro
Gordon Howard, DLCD
Anne Debbaut, DLCD
Jennifer Donnelly, DLCD
Tom Armstrong, Portland
Justin Wood, Home Builders Association
Jerry Johnson, Johnson Economics
Eric Hovee, E.D. Hovee and Associates

2014 Urban Growth Report: employment land technical working group

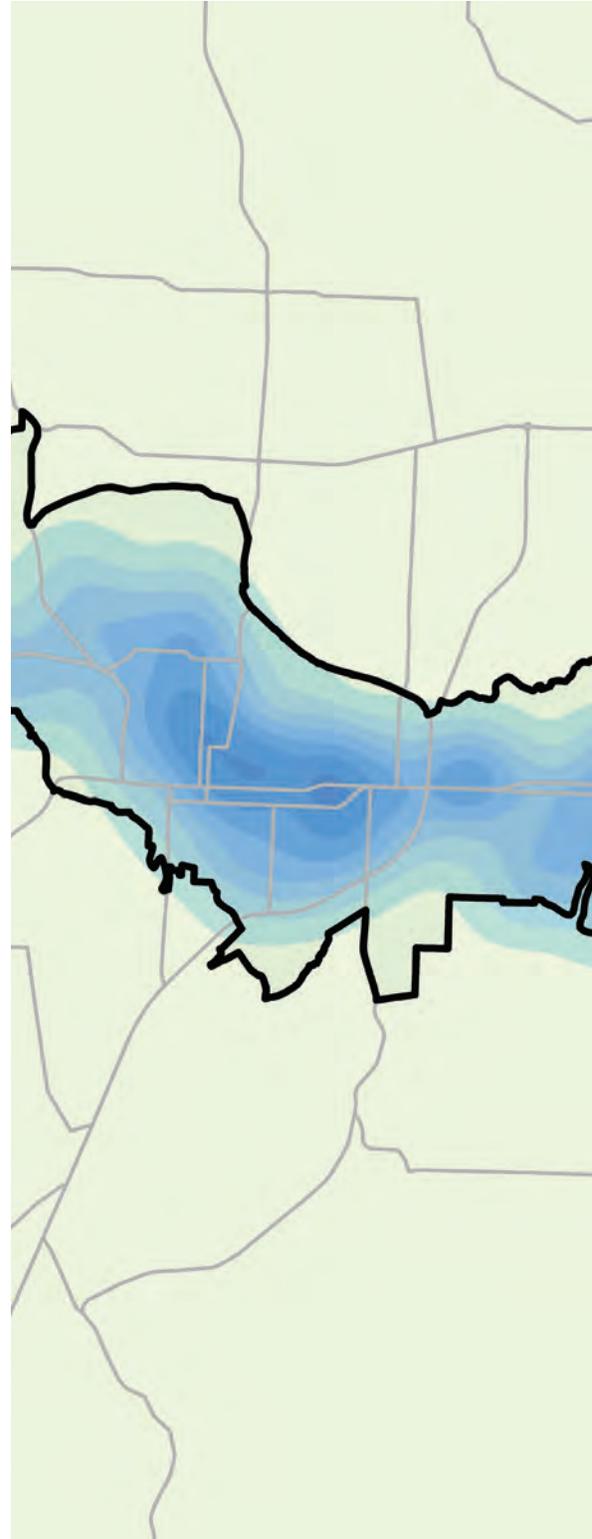
This group advised Metro staff on how various employment sectors use building space (square feet per employee and floor-area ratios).

Bob LeFeber, Commercial Realty Advisors
Mark Childs, Capacity Commercial
Steve Kountz, Portland
Tyler Bump, Portland
Brian Owendoff, Capacity Commercial
Mike Tharp, Norris, Beggs, and Simpson

2014 Urban Growth Report: regional forecast advisory panel

Dr. Tom Potiowsky, Chair, Northwest Economic Research Center, PSU
Dr. Jennifer Allen, Institute for Sustainable Solutions, PSU
Jerry Johnson, Johnson Economics
Dr. Jason Jurjevich, Population Research Center, PSU
Dave Lenar, NW Natural
Dr. Randall Pozdena, ECONorthwest
Steve Storm, NW Natural

oregonmetro.gov/growth



Appendix 1a

Population and employment forecast for the Portland-Vancouver-Hillsboro metropolitan statistical area (2015 - 2035)

Introduction

Under ORS 195.025, Metro is the governing body responsible for coordinating all planning activities affecting land uses in the urban portions of Clackamas, Multnomah and Washington Counties, which are contained within the metropolitan service district boundary. The purpose for this coordinating responsibility is to assure an integrated comprehensive plan for the entire urbanized area. The coordinating body – Metro – is required by ORS 195.036 to establish and maintain a population forecast (and employment forecast) for the entire area within in its boundary for use in maintaining and updating comprehensive plans, and shall coordinate the regional forecast with the local governments in its boundary. ORS 197.299 directs Metro to complete an assessment of urban growth boundary sufficiency that includes a complete inventory, determination and analysis of need every 5 years. The regional forecast becomes an essential piece of determining need for housing and employment in the analysis of buildable land supply sufficiency.

What's been updated in the 2014 regional forecast?

- IHS Global Insight U.S. macroeconomic (November 2013) provides the economic backdrop for the regional forecast past year 2040.
- 2012 National Population Projections for future birth rates, death rates and immigration provide the basis for adjusting regional population trends going forward.
- Economic equations in the regional econometric model have been re-estimated and the overall model re-calibrated to reflect the latest historical data available for employment (U.S. Bureau of Labor Statistics (BLS)), income and wages (Bureau of Economic analysis (BEA)), input-output coefficients (BEA), and population (Census, Oregon and Washington).

What trends can be seen in the 2014 regional forecast?

- Historically weak U.S. economic recovery dampening the outlook for U.S. gross domestic product (GDP)
- Resulting in less economic stimulus for the region in future years (*current baseline employment outlook is close to the "lower middle-third" of the range forecast that was adopted by the Metro Council in 2010*)
- Downshift in U.S. population projection – fertility and immigration adjusted lower
- Resulting in lower natural population increase in the region
- Net in-migration is expected to be on par with historical trends (*just not as robust as the forecast from 5-years ago*)

- A slower national economy and lower demographic growth factors combine to make a more muted regional population outlook (*current baseline population forecast is lower than the “lower middle-third” forecast*)

The Great Recession (Dec. 2007 to June 2009) continues to weigh heavily against the future growth projections. The recession eliminated (from peak to trough) nearly 100,000 jobs in the Portland-Vancouver-Hillsboro, OR-WA MSA. The bi-state MSA (metropolitan statistical area) is comprised of 7 counties (Clackamas, Columbia, Multnomah, Washington and Yamhill counties in Oregon and Clark and Skamania counties in Washington)¹. Nearly 5 years after the recession, the regional economy continues to struggle with lackluster job growth, stubbornly high unemployment and low business/consumer confidence. The recovery has been unusually feeble and this anemic growth expansion provides a weaker basis going forward for the regional forecast.

The national outlook from IHS Global Insight projects much lower U.S. GDP growth as compared to the 2009 vintage regional forecast. Less GDP growth means lower job growth expectations for the U.S. job market and the regional job outlook. The regional job market has been slow to respond to economic stimuli and is just now barely back to pre-recession levels. Meanwhile, the population and labor force in the region has continued to grow, but weaker-than-expected job growth continues to sideline potential workers. So, the “actual” unemployment is at least double the reported headline unemployment rate and there are much larger numbers of under-employed workers than normal. The weak job market has hurt recent graduates and younger aged workers the most, and their lack of engagement in the real economy is expected have a long-lasting impact that will linger to dampen the economic recovery for more years to come.

The weaker recovery is expected to keep migration levels at moderate levels similar to historical levels. The regional forecast does not anticipate unusually large net in-migration flow.

The U.S. population is projected to grow at a slower pace over the coming years than was projected 5 years ago. The 2012 Census national population updates projects significantly lower foreign immigration and fertility rates. A lower fertility rate and a delay before a woman has her first child means that the typical American woman will bear fewer children during her lifetime. The Census also asserts that net immigration levels will be 24.4 million fewer than previous expectations. Factoring in the downsizing in immigration levels and lower fertility rates translates into lower expectations of in-migration and lower natural population increase in the region population than previously anticipated.

¹ The Whitehouse OMB is responsible for metropolitan area delineations. This link provides official notice and information about the standards and practices for update of metropolitan statistical areas: http://www.whitehouse.gov/omb/infoereg_statpolicy/#ms .

What a difference 5-years makes in between the 2014 regional forecast (baseline trend) vs. 2009 regional forecast (“lower middle-third”)

	2009 vintage regional forecast (<i>lower middle-third</i>)		2014 vintage regional forecast (<i>baseline</i>)		Difference	
	Population	Employment	Population	Employment	Population	Employment
2000	1,927,881	973,230	1,927,881	973,230	0	0
2005	2,092,906	983,680	2,067,325	983,530	-25,581	-150
2010	2,258,600	986,300	2,226,000	968,830	-32,600	-17,470
2015	2,494,800	1,090,800	2,342,500	1,100,000	-152,300	9,200
2020	2,682,900	1,189,600	2,519,200	1,228,100	-163,700	38,500
2025	2,853,700	1,282,100	2,671,800	1,311,600	-181,900	29,500
2030	3,015,600	1,380,200	2,814,100	1,399,800	-201,500	19,600
2035	3,167,900	1,486,900	2,937,900	1,484,500	-230,000	-2,400
2040	3,322,300	1,596,100	3,052,100	1,571,300	-270,200	-24,800
APR% (2000-40)	1.37%	1.24%	1.16%	1.20%		
Portland-Vancouver-Hillsboro, OR-WA, MSA						
Source: 2009 UGR, 2014 UGR						

Comparing Portland Metro's population forecasts and other forecasts

Portland MSA

Metro Regional Population Forecasts

	(7-county* MSA)		(7-county MSA)	
	2010 release	%APR	2014 release	%APR
2000	1,927,881	2.0%	1,927,881	2.0%
2005	2,092,906	1.7%	2,067,325	1.4%
2010	2,226,009	1.2%	2,226,000	1.5%
2015	2,494,800	2.3%	2,342,500	1.0%
2020	2,682,900	1.5%	2,519,200	1.5%
2025	2,853,700	1.2%	2,671,800	1.2%
2030	3,015,600	1.1%	2,814,100	1.0%
2035	3,167,900	1.0%	2,937,900	0.9%
2040	3,322,300	1.0%	3,052,100	0.8%

2010-40 APR% 1.3% 1.1%
 source: Metro Research Center (baseline medium growth scenario)

* 7 counties = Clackamas, Columbia, Multnomah, Washington, Yamhill, Clark and Skamania

OEA / OFM Regional Population Forecast

	(7-county MSA)	
	2012/13 release	%APR
2000	1,927,881	2.0%
2005	2,067,325	1.4%
2010	2,229,899	1.5%
2015	2,346,849	1.0%
2020	2,509,701	1.4%
2025	2,678,730	1.3%
2030	2,840,509	1.2%
2035	2,987,264	1.0%
2040	3,121,048	0.9%

source: Oregon Office of Economic Analysis, Kanhaiya Vaidya (2013 release)
 Washington Office of Financial Management (2012 release)

IHS Global Insight Portland MSA Population Forecast

	(5-county PMSA)		(7-county MSA)		(7-county MSA)	
	Sep 2001 release	%APR	Sep 2008 release	%APR	Sep. 2013 release	%APR
2000	1,875,000	2.0%	1,942,000	2.1%	1,940,510	2.1%
2005	2,019,000	1.5%	2,297,000	3.4%	2,072,256	1.3%
2010	2,155,000	1.3%	2,474,000	1.5%	2,236,413	1.5%
2015	2,284,000	1.2%	2,637,000	1.3%	2,380,688	1.3%
2020	2,419,000	1.2%	2,794,000	1.2%	2,525,884	1.2%
2025	2,558,000	1.1%	2,947,000	1.1%	2,651,944	1.0%
2030			3,096,000	1.0%	2,769,572	0.9%
2035			3,245,000	0.9%	2,884,610	0.8%
2040					2,997,777	0.8%

source: IHS Global Insight Regional Services

OEA Oregon Population Forecasts

	2004 release		2013 release	
	release	%APR	release	%APR
2000	3,436,750	1.5%	3,431,100	1.5%
2005	3,618,200	1.0%	3,626,900	1.1%
2010	3,843,900	1.2%	3,837,300	1.1%
2015	4,095,708	1.3%	4,001,600	0.8%
2020	4,359,258	1.3%	4,252,100	1.2%
2025	4,626,015	1.2%	4,516,200	1.2%
2030	4,891,225	1.1%	4,768,000	1.1%
2035	5,154,793	1.1%	4,995,200	0.9%
2040	5,425,408	1.0%	5,203,000	0.8%

2010-40 APR% 1.2% 1.0%
 source: Oregon Office of Economic Analysis, <http://www.oregon.gov/DAS/OEA/Pages/demographic.aspx>

Census Oregon State Population Projections

	1996 release		2005 release	
	release	%APR	release	%APR
2000	3,397,000	1.6%	3,421,399	1.4%
2005	3,613,000	1.2%	3,596,083	1.0%
2010	3,803,000		3,790,996	1.1%
2015	3,992,000	1.0%	4,012,924	1.1%
2020	4,177,000		4,260,393	1.2%
2025	4,349,000	0.9%	4,536,418	1.3%
2030	N/A		4,833,918	1.3%
2035	N/A		N/A	
2040	N/A		N/A	

source: U.S. Census, State Population Projections
<http://www.census.gov/population/projections/data/state/index.html>

IHS Global Insight Oregon Population Forecasts

	2008 release		Oct. 2013 release	
	release	%APR	release	%APR
2000	3,436,350	1.5%	3,434,800	1.5%
2005	3,638,420	1.1%	3,621,200	1.1%
2010	3,920,340	1.5%	3,842,100	1.2%
2015	4,178,350	1.3%	4,006,900	0.8%
2020	4,408,740	1.1%	4,195,800	0.9%
2025	4,624,020	1.0%	4,370,500	0.8%
2030	4,826,450	0.9%	4,529,100	0.7%
2035	5,016,980	0.8%	4,680,900	0.7%
2040	5,200,410	0.7%	4,825,700	0.6%

source: IHS Global Insight Regional Services

Oregon State

Census U.S. Population Projection

	2012 release	
	release	%APR
2000	281,421,906	1.4%
2005	295,516,599	1.0%
2010	309,349,689	0.9%
2015	321,362,789	0.8%
2020	333,895,553	0.8%
2025	346,407,223	0.7%
2030	358,471,142	0.7%
2035	369,662,023	0.6%
2040	380,015,683	0.6%

source: U.S. Census
 2012 National Population Projection
<http://www.census.gov/population/projections/data/national/index.html>

IHS Global Insight U.S. Population Forecast

	Apr 2008 release		Nov 2013 release	
	release	%APR	release	%APR
2000	282,841,119	1.5%	282,790,000	1.5%
2005	297,336,781	0.9%	296,460,000	0.9%
2010	310,852,451	0.9%	310,064,000	0.9%
2015	324,286,814	0.8%	321,937,000	0.8%
2020	337,732,931	0.8%	334,474,000	0.8%
2025	351,404,489	0.7%	346,978,000	0.7%
2030	365,583,894	0.7%	359,025,000	0.7%
2035	379,902,031	0.6%	370,192,000	0.6%
2040	N/A		380,530,000	0.6%

source: IHS Global Insight
 Long-term U.S. Trend Projection

Pew Research U.S. Population Projection

	2008 release	
	release	%APR
2000	281,646,000	1.4%
2005	295,709,000	1.0%
2010	309,653,000	0.9%
2015		
2020	340,219,000	0.9%
2025		
2030	371,822,000	0.9%
2035		
2040	403,648,000	0.8%

source: Pew Research Center
 Jeffrey S. Passel and D'Vera Cohn
 Social & Demographic Trends, Feb. 11, 2008
www.pewresearch.org
 Planning Commission - Aug. 13, 2014
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World Bank U.S. Population Projection

	2013 release	
	release	%APR
2000	282,163,000	1.4%
2005		
2010	309,307,000	0.9%
2015		
2020	330,963,000	0.7%
2025		
2030	352,612,000	0.6%
2035		
2040	370,573,000	0.5%

source: World Bank
<http://datatopics.worldbank.org/hnp/popestimates>

U.N. U.S. Population Projection

	2012 release	
	release	%APR
2000	284,594,000	1.6%
2005	298,166,000	0.9%
2010	312,247,000	0.9%
2015	325,128,000	0.8%
2020	337,983,000	0.8%
2025	350,626,000	0.7%
2030	362,629,000	0.7%
2035	373,468,000	0.6%
2040	383,165,000	0.5%

Source: Population Division, United Nations
 World Population Prospects: The 2012 Revision.
<http://esa.un.org/unpd/wpp/unpp/p2k0data.asp>

United States

Comparing Portland Metro's employment forecasts and other forecasts

Portland MSA

Metro Regional Employment Forecasts

	(5-county MSA)		(7-county* MSA)		(7-county* MSA)	
	2002 release	%APR	2010 release	%APR	2014 release	%APR
2000	958,020	2.9%	973,230	2.9%	973,230	2.9%
2005	1,043,510	1.7%	983,680	0.2%	983,530	0.2%
2010	1,168,700	2.3%	965,500	-0.4%	968,830	-0.3%
2015	1,273,140	1.7%	1,090,800	2.5%	1,100,040	2.6%
2020	1,387,730	1.7%	1,189,600	1.7%	1,228,140	2.2%
2025	1,515,530	1.8%	1,282,100	1.5%	1,311,570	1.3%
2030			1,380,200	1.5%	1,399,790	1.3%
2035			1,486,900	1.5%	1,484,460	1.2%
2040			1,596,100	1.4%	1,571,290	1.1%
2010 to 2040 APR%			1.7%		1.6%	

source: Metro Research Center (baseline medium growth scenario)

* 7 counties = Clackamas, Columbia, Multnomah, Washington, Yamhill, Clark & Skamania

IHS Global Insight Portland MSA Employment Forecast

	(7-county* MSA)	
	Sep. 2013 release	%APR
2000	973,500	3.0%
2005	983,400	0.2%
2010	968,700	-0.3%
2015	1,079,500	2.2%
2020	1,175,100	1.7%
2025	1,212,900	0.6%
2030	1,252,600	0.6%
2035	1,294,200	0.7%
2040	1,349,800	0.8%
2010 to 2040 APR%		1.1%

source: IHS Global Insight

Oregon Employment Department MSA Employment Forecast

	(Oregon part of MSA)	
	Aug. 2004 release	%APR
2000	852,630	2.8%
2005	848,960	-0.1%
2010	918,800	1.6%
2015	973,920	1.2%
2020	1,011,780	0.8%
2025	1,050,270	0.7%
2030	1,096,800	0.9%
2035	1,148,310	0.9%
2040	1,201,390	0.9%
2010 to 2040 APR%		0.9%

source: OED, Art Ayre

Metro's Oregon Employment Forecasts

	(Oregon)		(Oregon)	
	2010 release	%APR	2014 release	%APR
2000	1,617,800	2.5%	1,617,900	2.5%
2005	1,654,300	0.4%	1,654,400	0.4%
2010	1,728,200	0.9%	1,602,100	-0.6%
2015	1,908,600	2.0%	1,836,200	2.8%
2020	2,071,800	1.7%	2,061,200	2.3%
2025	2,224,100	1.4%	2,163,500	1.0%
2030	2,384,900	1.4%	2,270,900	1.0%
2035	2,558,300	1.4%	2,379,200	0.9%
2040	2,855,900	2.2%	2,493,100	0.9%
2010 to 2040 APR%		1.7%	1.5%	

source: Metro Research Center

IHS Global Insight Portland Oregon Employment Forecast

	Jun. 2014	
	release	%APR
2000	1,618,000	2.7%
2005	1,654,100	0.4%
2010	1,601,800	-0.6%
2015	1,756,400	1.9%
2020	1,898,400	1.6%
2025	1,952,800	0.6%
2030	2,007,300	0.6%
2035	2,071,900	0.6%
2040	2,159,000	0.8%
2010 to 2040 APR%		1.0%

source: IHS Global Insight

Oregon Employment Department Oregon Employment Forecast

	Aug. 2004	
	release	%APR
2000	1,606,700	2.5%
2005	1,620,900	0.2%
2010	1,751,280	1.6%
2015	1,857,480	1.2%
2020	1,934,560	0.8%
2025	2,013,080	0.8%
2030	2,108,480	0.9%
2035	2,215,530	1.0%
2040	2,326,810	1.0%
2010 to 2040 APR%		1.0%

source: OED, Art Ayre

Oregon State

IHS Global Insight U.S. Employment Forecast (in millions)

	Feb 2001		Apr 2008		Nov 2013	
	release	%APR	release	%APR	release	%APR
2000	131.76	2.4%	131.79	2.4%	131.89	2.4%
2005	138.68	1.0%	133.69	0.3%	133.74	0.3%
2010	147.51	1.2%	140.77	1.0%	129.91	-0.6%
2015	154.93	1.0%	147.99	1.0%	140.54	1.6%
2020	162.00	0.9%	153.39	0.7%	149.56	1.3%
2025	168.84	0.8%	159.61	0.8%	153.48	0.5%
2030			167.03	0.9%	159.25	0.7%
2035			175.06	0.9%	164.47	0.6%
2040					170.63	0.7%
2010 to 2040 APR%			0.9%		0.9%	

source: IHS Global Insight

Long-term U.S. Trend Projection

Bureau of Labor Statistics (BLS) U.S. Employment Forecast

	Dec. 2013	
	release	%APR
2000	132.03	2.4%
2005	134.00	0.3%
2010	130.27	-0.6%
2012	134.43	0.3%
2022	149.75	1.1%
2025		
2030		
2035		
2040		
(in millions)		

source: BLS, last updated Dec. 19, 2013

United States

Population Range Projections through Year 2060

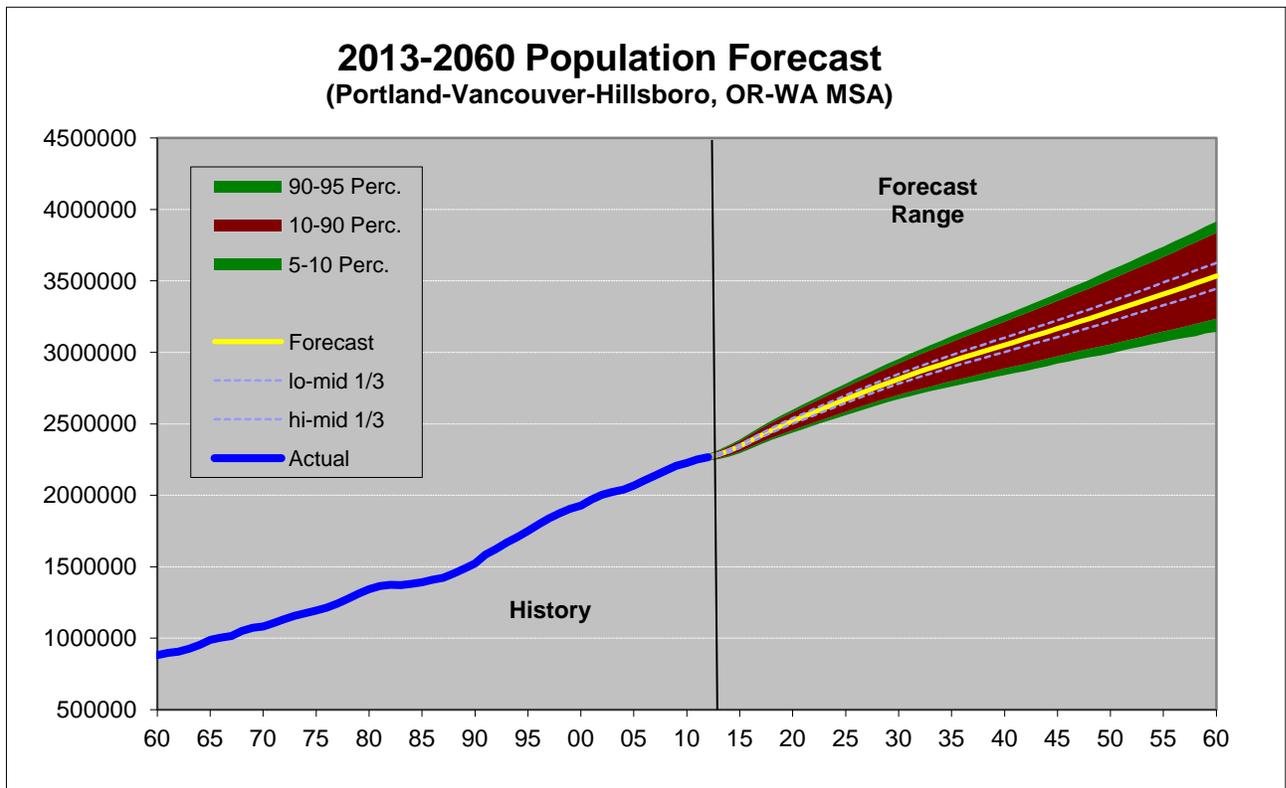
(7-county MSA)

Probabilistic Population Forecast Range

	POPULATION					POPULATION - annual pct. chg.				
	Low - 5%	mid-lo 1/3	Pop. Base	mid-hi 1/3	High - 95%	Low - 5%	mid-lo	Pop. Base	mid-hi	High - 95%
1990			1,523,741							1.8%
1995			1,749,224							2.8%
2000			1,927,881							2.0%
2005			2,067,325							1.4%
2010			2,226,009							1.5%
2015	2,294,400	2,331,100	2,342,501	2,353,887	2,390,000	0.6%	0.9%	1.0%	1.1%	1.4%
2020	2,438,500	2,500,500	2,519,163	2,538,425	2,598,800	1.2%	1.4%	1.5%	1.5%	1.7%
2025	2,560,500	2,645,800	2,671,777	2,698,584	2,780,600	1.0%	1.1%	1.2%	1.2%	1.4%
2030	2,672,800	2,780,900	2,814,058	2,847,884	2,953,600	0.9%	1.0%	1.0%	1.1%	1.2%
2035	2,760,900	2,896,800	2,937,885	2,980,976	3,113,600	0.7%	0.8%	0.9%	0.9%	1.1%
2040	2,840,600	3,001,500	3,052,078	3,102,751	3,261,900	0.6%	0.7%	0.8%	0.8%	0.9%
2050	2,992,900	3,217,200	3,284,438	3,352,973	3,576,600	0.5%	0.7%	0.7%	0.8%	0.9%
2060	3,143,400	3,444,700	3,534,390	3,626,500	3,915,600	0.5%	0.7%	0.7%	0.8%	0.9%

Annual Percentage Rate (APR):

1960-80			2.12%		
1980-00			1.83%		
2000-20	1.18%	1.31%	1.35%	1.39%	1.50%
2020-40	0.77%	0.92%	0.96%	1.01%	1.14%



Employment Range Projections through Year 2060

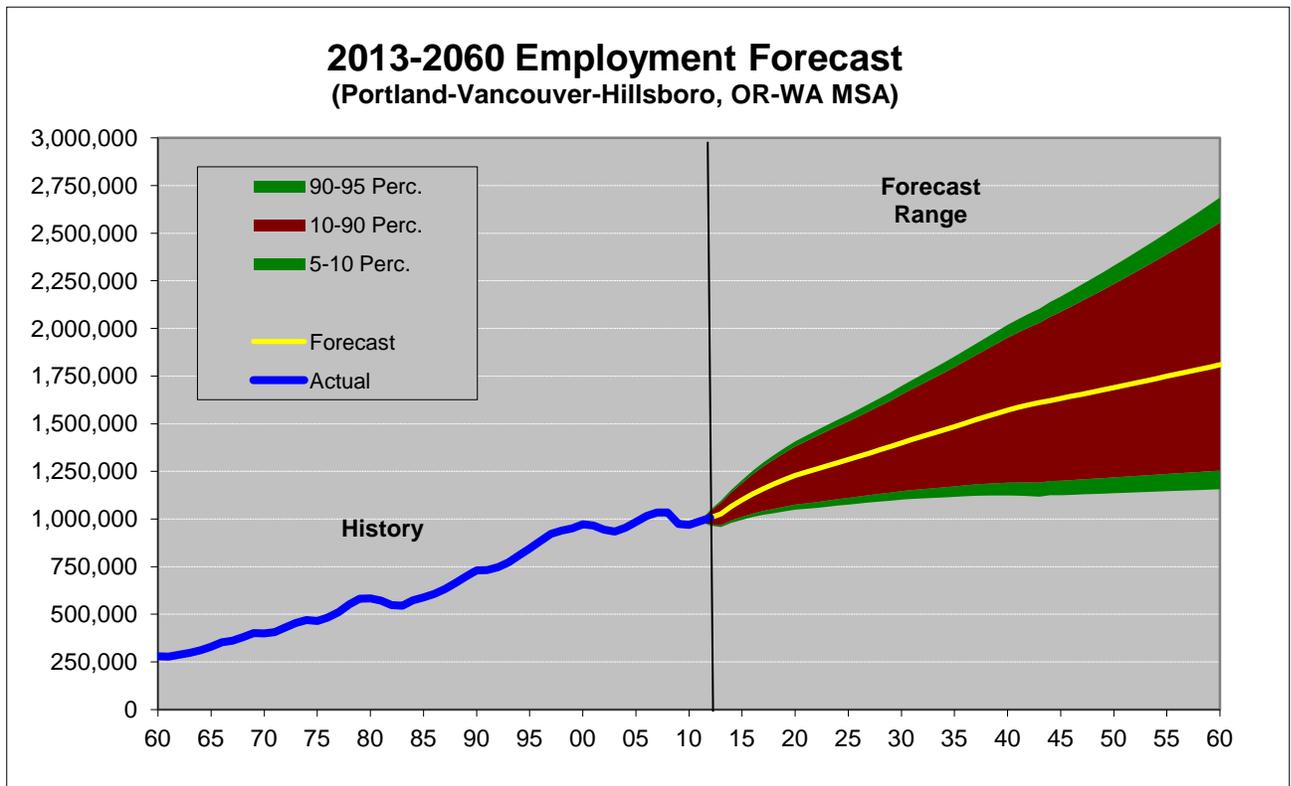
(7-county MSA)

Nonfarm Job Forecast Range

	EMPLOYMENT					e-p ratio (base)	EMPLOYMENT - annual pct. chg.				
	Low	mid-lo 1/3	Job Base	mid-hi 1/3	High		Low	mid-lo	HH Base	mid-hi	High
1990			730,268			0.48			4.4%		
1995			845,611			0.48			3.0%		
2000			973,222			0.50			2.9%		
2005			983,526			0.48			0.2%		
2010			968,800			0.44			-0.3%		
2015	995,700	1,094,600	1,100,000	1,105,300	1,204,300	0.47	0.5%	2.5%	2.6%	2.7%	4.4%
2020	1,048,900	1,219,000	1,228,100	1,237,500	1,407,400	0.49	1.0%	2.2%	2.2%	2.3%	3.2%
2025	1,075,600	1,298,800	1,311,600	1,324,800	1,547,600	0.49	0.5%	1.3%	1.3%	1.4%	1.9%
2030	1,101,700	1,383,300	1,399,800	1,416,600	1,697,900	0.50	0.5%	1.3%	1.3%	1.3%	1.9%
2035	1,116,200	1,463,700	1,484,500	1,506,300	1,852,800	0.51	0.3%	1.1%	1.2%	1.2%	1.8%
2040	1,123,600	1,545,300	1,571,300	1,597,400	2,019,000	0.51	0.1%	1.1%	1.1%	1.2%	1.7%
2050	1,135,700	1,655,300	1,689,900	1,725,200	2,329,300	0.51	0.1%	0.7%	0.7%	0.8%	1.4%
2060	1,156,200	1,763,500	1,809,400	1,856,600	2,687,400	0.51	0.2%	0.6%	0.7%	0.7%	1.4%

Annual Percentage Rate (APR):

1960-80					3.74%
1980-00					2.60%
2000-20	0.38%	1.13%	1.17%	1.21%	1.86%
2020-40	0.34%	1.19%	1.24%	1.28%	1.82%



Household Range Projections through Year 2060

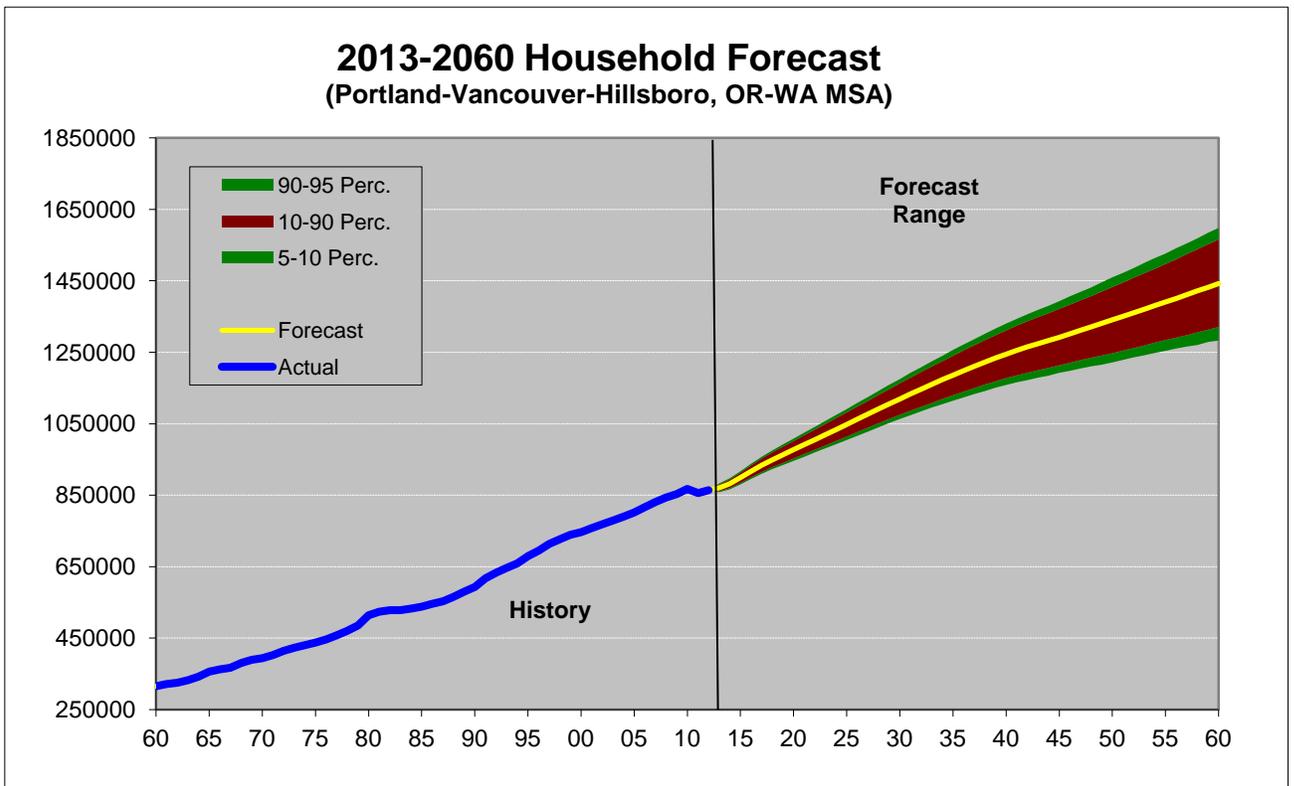
(7-county MSA)

Household Forecast Range

	HOUSEHOLDS					HH Size	HOUSEHOLD - annual pct. chg.				
	Low	mid-lo 1/3	HH Base	mid-hi 1/3	High		Low	mid-lo	HH Base	mid-hi	High
1990			593,092			2.57			1.5%		
1995			679,640			2.60			2.8%		
2000			746,625			2.58			1.9%		
2005			801,794			2.58			1.4%		
2010			867,794			2.60			1.6%		
2015	880,300	894,400	898,746	903,100	917,000	2.61	0.3%	0.6%	0.7%	0.8%	1.1%
2020	946,100	970,200	977,439	984,900	1,008,400	2.57	1.5%	1.6%	1.7%	1.7%	1.9%
2025	1,004,600	1,038,000	1,048,227	1,058,700	1,090,900	2.53	1.2%	1.4%	1.4%	1.5%	1.6%
2030	1,063,300	1,106,300	1,119,466	1,132,900	1,175,000	2.50	1.1%	1.3%	1.3%	1.4%	1.5%
2035	1,114,400	1,169,200	1,185,775	1,203,200	1,256,700	2.47	0.9%	1.1%	1.2%	1.2%	1.4%
2040	1,158,500	1,224,200	1,244,782	1,265,400	1,330,300	2.45	0.8%	0.9%	1.0%	1.0%	1.1%
2050	1,221,600	1,313,200	1,340,587	1,368,600	1,459,800	2.45	0.5%	0.7%	0.7%	0.8%	0.9%
2060	1,283,000	1,406,000	1,406,000	1,480,200	1,598,200	2.45	0.5%	0.7%	0.5%	0.8%	0.9%

Annual Percentage Rate (APR):

1990-00			2.33%		
2000-20	1.19%	1.32%	1.36%	1.39%	1.51%
2020-40	1.02%	1.17%	1.22%	1.26%	1.39%
2010-40 diff	290,700	356,400	377,000	397,600	462,500



Population and Demographic Forecast, 2010 to 2040

Portland-Hillsboro-Vancouver, OR-WA MSA

	1990	2000	2005	2010	2015	2020	2025	2030	2035	2040
Components of Population (in thousands)										
Population (7 counties)	1,523.7	1,927.9	2,067.3	2,226.0	2,342.5	2,519.2	2,671.8	2,814.1	2,937.9	3,052.1
Pct. Chg. (5-year avg.)	1.8	2.0	1.4	1.5	1.0	1.5	1.2	1.0	0.9	0.8
Annual Avg. Change	26.5	35.8	27.9	31.7	23.3	35.3	30.5	28.5	24.8	22.8
Births, annual avg.	22.2	26.9	28.2	29.4	29.7	31.4	32.8	33.8	34.6	35.1
Crude Birth Rate	15.2	14.4	13.9	13.5	12.9	12.8	12.5	12.3	12	11.7
Deaths, annual avg.	12.0	14.0	14.9	15.2	16.8	18.7	21	23.5	26.1	28.3
Crude Death Rate	8.2	7.5	7.4	7.0	7.3	7.6	8.0	8.5	9.0	9.4
Natural Increase	10.2	12.9	13.3	14.2	12.9	12.6	11.8	10.3	8.5	6.8
Net Migration (5-year avg.)	16.5	23.1	17.2	14.8	10.9	24.4	20.6	19.7	17.7	17.5
%Migration Growth Share	62.3	64.6	61.6	46.6	46.9	69.2	67.4	69.1	71.3	76.7
Regional Population Cohorts										
under 5 years old	112.6	134.8	140.2	145.3	151.1	155.2	160.9	166.4	170.7	174
5 to 9 years old	113.2	140.7	143.7	146.1	154	159.4	164	169	173.4	177.3
10 to 14 years old	107.3	136	141.9	147.5	155	161.7	166.2	170.8	175	179.1
15 to 19 years old	99	128.9	136.2	143.5	155.7	163.1	168.2	172.8	176.8	180.9
20 to 24 years old	101.7	127.2	133.2	138.9	162.2	171.5	177.1	181.7	185.2	189
25 to 29 years old	124	147.6	157.2	166.8	163.9	176.8	184.1	189.6	193.3	196.8
30 to 34 years old	139.4	152.1	160.5	168.7	164.3	176.6	185.7	192.8	197.5	201.4
35 to 39 years old	142.8	159.3	162.3	164.8	167.2	176.2	185	193.1	199.2	204
40 to 44 years old	126.7	162.7	161.2	159.1	170.7	176.1	182.9	190.8	197.6	203.5
45 to 49 years old	92.5	155	157.8	159.9	171	175.1	180.1	186.6	193.5	200
50 to 54 years old	67.6	130	144.2	159.3	164.7	171.2	176	181.6	187.8	194.4
55 to 59 years old	57.2	90.9	116.9	149.9	148.1	160.4	168	174.1	180	186.4
60 to 64 years old	57.2	62.9	88.3	123.8	122.3	140.8	153.1	161.8	168.7	175.3
65 to 69 years old	56.5	50.5	64.9	83.2	94.7	114.8	130.9	142.8	151.8	159.3
70 to 74 years old	46.4	48.3	51.7	55	70.5	87.6	104.1	118	129	137.9
75 to 79 years old	34.9	43.3	42.4	41.3	51	62.9	76.6	90	101.6	111.3
80 to 84 years old	23.8	30.9	32.7	34.5	34.4	41.5	50.9	61.4	71.4	80.4
85 years or older	20.9	26.8	32.1	38.2	41.6	48.1	57.9	70.8	85.5	101.1
Total	1,523.7	1,927.9	2,067.3	2,226.0	2,342.5	2,519.2	2,671.8	2,814.1	2,937.9	3,052.1
Population Share by Age (in percents)										
under 5 years old	7.39	6.99	6.78	6.53	6.45	6.16	6.02	5.91	5.81	5.7
5 to 9 years old	7.43	7.3	6.95	6.56	6.58	6.33	6.14	6	5.9	5.81
10 to 14 years old	7.04	7.05	6.86	6.63	6.62	6.42	6.22	6.07	5.96	5.87
15 to 19 years old	6.49	6.68	6.59	6.45	6.65	6.48	6.3	6.14	6.02	5.93
20 to 24 years old	6.67	6.6	6.44	6.24	6.92	6.81	6.63	6.46	6.31	6.19

Population and Demographic Forecast, 2010 to 2040

Portland-Hillsboro-Vancouver, OR-WA MSA

	1990	2000	2005	2010	2015	2020	2025	2030	2035	2040
25 to 29 years old	8.14	7.65	7.60	7.49	7	7.02	6.89	6.74	6.58	6.45
30 to 34 years old	9.15	7.89	7.76	7.58	7.01	7.01	6.95	6.85	6.72	6.6
35 to 39 years old	9.37	8.26	7.85	7.4	7.14	6.99	6.93	6.86	6.78	6.68
40 to 44 years old	8.31	8.44	7.80	7.15	7.29	6.99	6.85	6.78	6.73	6.67
45 to 49 years old	6.07	8.04	7.63	7.19	7.3	6.95	6.74	6.63	6.59	6.55
50 to 54 years old	4.44	6.75	6.97	7.16	7.03	6.8	6.59	6.45	6.39	6.37
55 to 59 years old	3.75	4.71	5.66	6.73	6.32	6.37	6.29	6.19	6.13	6.11
60 to 64 years old	3.75	3.26	4.27	5.56	5.22	5.59	5.73	5.75	5.74	5.74
65 to 69 years old	3.71	2.62	3.14	3.74	4.04	4.56	4.9	5.07	5.17	5.22
70 to 74 years old	3.04	2.51	2.50	2.47	3.01	3.48	3.9	4.19	4.39	4.52
75 to 79 years old	2.29	2.25	2.05	1.86	2.18	2.5	2.87	3.2	3.46	3.65
80 to 84 years old	1.56	1.6	1.58	1.55	1.47	1.65	1.91	2.18	2.43	2.63
85 years or older	1.37	1.39	1.55	1.71	1.78	1.91	2.17	2.52	2.91	3.31

Population Groups (in thousands)

Children under 18 years old	398.9	496.8	497.4	525.1	553.5	574.2	592	609.9	625.2	639
Pct. of Children	26.2	25.8	24.1	23.6	23.6	22.8	22.2	21.7	21.3	20.9
Working age (16 to 64)	982.9	1,284.3	1,399.6	1,506.1	1,559.0	1,655.3	1,726.6	1,790.3	1,844.2	1,895.5
Pct. Working-Age Pop.	64.5	66.6	67.7	67.7	66.6	65.7	64.6	63.6	62.8	62.1
65 years and older	181.5	198.3	225.2	252.2	292.3	354.9	420.5	483	539.2	589.9
Pct. Retirement Age	11.9	10.3	10.9	11.3	12.5	14.1	15.7	17.2	18.4	19.3

Percent of Women of Child-bearing Age

Women, 15 to 44 years old	24.1	22.9	22.3	21.3	21.1	20.8	20.4	20	19.7	19.4
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Dependency Ratio (working age = 16 to 64 years old) (in |

Kids (under 16 years old)	36.6	34.7	31.6	31	31.5	30.7	30.4	30.2	30.1	29.9
Seniors (65+ years old)	18.5	15.4	16.1	16.7	18.7	21.4	24.4	27	29.2	31.1
Total Dependency Ratio	55.0	50.1	47.7	47.8	50.3	52.2	54.7	57.2	59.3	61

Households by Age of Head Person (in thousands)

Households, total	593.1	746.6	801.8	857.4	896.5	980.9	1056	1125.8	1187.3	1244
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Share of Household by Age (in percents)

15 to 24 years old	5.3	5.9	5	4	4.3	4.1	4	3.8	3.7	3.6
25 to 34 years old	21.7	19.3	18.9	18.2	17	16.7	16.3	15.8	15.3	14.9
35 to 44 years old	25.7	23.5	21.9	20.1	20	19.1	18.5	18.1	17.7	17.4
45 to 54 years old	15.9	22	21.4	20.5	20.6	19.4	18.5	18	17.7	17.4
55 to 64 years old	11.4	12.3	15.3	18.8	17.7	18.1	17.9	17.5	17.3	17.1
65 to 74 years old	11.19	8.23	9.15	10.15	11.6	12.98	14	14.57	14.88	15.03
75 to 84 years old	6.69	6.56	5.96	5.33	5.72	6.39	7.26	8.08	8.76	9.26
85 years or older	2.17	2.17	2.54	2.91	3.04	3.22	3.6	4.12	4.72	5.33

Population and Demographic Forecast, 2010 to 2040

Portland-Hillsboro-Vancouver, OR-WA MSA

	1990	2000	2005	2010	2015	2020	2025	2030	2035	2040
State-level Forecasts (in percents)										
CA Population	2.43	1.34	1.11	0.8	0.74	0.75	0.77	0.71	0.64	0.56
CA Employment	3.02	3.13	0.43	-1.19	1.46	1.73	1.33	1.22	1.12	0.97
WA Population	2.04	1.46	1.2	1.45	0.65	1.19	1.31	1.17	1.02	0.91
WA Employment	4.61	2.93	0.48	0.07	1.75	2.09	1.51	1.37	1.34	1.29
OR Population	1.24	1.45	1.1	1.18	0.74	1.13	1.13	1.03	0.91	0.82
OR Employment	4.04	2.53	0.45	-0.64	2.77	2.34	0.97	0.97	0.94	0.94
U.S. Population (% chg.)	0.97	1.16	0.95	0.9	0.75	0.77	0.74	0.68	0.61	0.55
16 years and older	1.02	1.29	1.16	1.12	0.9	0.83	0.78	0.74	0.7	0.62

Age Adjusted Fertility Rates, 2010 to 2040

Portland-Hillsboro-Vancouver, OR-WA MSA

Both Sexes for all Race and Ethnicities*

	Fertility rates per 10,000 persons								Total Fertility
	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>	<u>TFR</u>
1990	3.720	253.582	655.352	620.866	469.911	218.043	46.326	3.773	2.27
2000	2.920	197.718	535.133	537.668	460.196	212.201	41.825	2.789	1.99
2010	2.033	139.326	439.108	491.527	474.094	248.740	59.715	4.689	1.86
2011	2.033	139.326	439.108	491.527	474.094	248.740	59.715	4.689	1.86
2012	2.033	139.326	439.108	491.527	474.094	248.740	59.715	4.689	1.86
2013	2.031	139.174	438.730	491.442	473.666	248.211	59.499	4.666	1.86
2014	2.029	139.021	438.352	491.356	473.239	247.682	59.283	4.643	1.86
2015	2.027	138.868	437.974	491.270	472.811	247.153	59.067	4.620	1.85
2016	2.025	138.716	437.595	491.185	472.384	246.624	58.851	4.597	1.85
2017	2.022	138.563	437.217	491.099	471.956	246.095	58.635	4.573	1.85
2018	2.020	138.410	436.839	491.013	471.529	245.566	58.419	4.550	1.85
2019	2.018	138.258	436.461	490.928	471.101	245.037	58.203	4.527	1.85
2020	2.016	138.105	436.083	490.842	470.674	244.509	57.987	4.504	1.84
2021	2.013	137.952	435.705	490.756	470.246	243.980	57.771	4.481	1.84
2022	2.011	137.800	435.327	490.671	469.819	243.451	57.555	4.458	1.84
2023	2.009	137.647	434.949	490.585	469.391	242.922	57.339	4.434	1.84
2024	2.007	137.494	434.570	490.500	468.964	242.393	57.124	4.411	1.84
2025	2.004	137.342	434.192	490.414	468.536	241.864	56.908	4.388	1.84
2026	2.002	137.189	433.814	490.328	468.109	241.335	56.692	4.365	1.83
2027	2.000	137.036	433.436	490.243	467.681	240.806	56.476	4.342	1.83
2028	1.998	136.884	433.058	490.157	467.254	240.277	56.260	4.319	1.83
2029	1.996	136.731	432.680	490.071	466.826	239.748	56.044	4.295	1.83
2030	1.993	136.578	432.302	489.986	466.399	239.220	55.828	4.272	1.83
2031	1.991	136.426	431.923	489.900	465.971	238.691	55.612	4.249	1.82
2032	1.989	136.273	431.545	489.814	465.544	238.162	55.396	4.226	1.82
2033	1.987	136.121	431.167	489.729	465.116	237.633	55.180	4.203	1.82
2034	1.984	135.968	430.789	489.643	464.689	237.104	54.964	4.180	1.82
2035	1.982	135.815	430.411	489.558	464.261	236.575	54.748	4.156	1.82
2036	1.980	135.663	430.033	489.472	463.834	236.046	54.533	4.133	1.82
2037	1.978	135.510	429.655	489.386	463.407	235.517	54.317	4.110	1.81
2038	1.976	135.357	429.277	489.301	462.979	234.988	54.101	4.087	1.81
2039	1.973	135.205	428.898	489.215	462.552	234.460	53.885	4.064	1.81
2040	1.971	135.052	428.520	489.129	462.124	233.931	54	4.041	1.81

* Fertility rates are combined together on a weighted-average basis. The weights are derived from 2010 Census estimates of persons by race and held constant through the forecast period. Rates reflect change over time on the basis of fertility assumptions included in the Census 2012 National Population Projections. Rates are denominated by total population.

Age Adjusted Mortality Rates, 2010 to 2040

Portland-Hillsboro-Vancouver, OR-WA MSA

Both Sexes for all Race and Ethnicities*

Mortality rates per 10,000 persons

	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>
1990	20.648	2.908	1.023	8.298	9.362	9.148	12.078	14.117	23.951
2000	12.028	1.872	0.657	5.327	6.648	5.897	8.643	12.523	18.520
2010	12.594	1.574	0.542	4.737	5.975	5.395	8.000	9.707	15.086
2011	12.594	1.574	0.542	4.737	5.975	5.395	8.000	9.707	15.086
2012	12.594	1.574	0.542	4.737	5.975	5.395	8.000	9.707	15.086
2013	12.487	1.561	0.532	4.646	5.829	5.278	7.814	9.489	14.771
2014	12.385	1.561	0.523	4.549	5.701	5.158	7.635	9.289	14.450
2015	12.267	1.540	0.515	4.457	5.570	5.036	7.460	9.077	14.137
2016	12.164	1.508	0.509	4.351	5.451	4.920	7.302	8.886	13.844
2017	12.056	1.460	0.498	4.278	5.336	4.804	7.143	8.695	13.545
2018	11.960	1.458	0.492	4.177	5.208	4.701	6.970	8.502	13.261
2019	11.873	1.445	0.482	4.115	5.099	4.588	6.825	8.318	12.981
2020	11.774	1.435	0.478	4.032	4.993	4.487	6.664	8.148	12.712
2021	11.663	1.432	0.470	3.923	4.868	4.382	6.512	7.955	12.449
2022	11.571	1.431	0.463	3.851	4.771	4.282	6.367	7.802	12.182
2023	11.482	1.429	0.456	3.776	4.671	4.182	6.236	7.629	11.925
2024	11.383	1.403	0.449	3.709	4.563	4.078	6.095	7.453	11.680
2025	11.287	1.400	0.444	3.624	4.462	3.999	5.970	7.302	11.438
2026	11.189	1.399	0.440	3.548	4.363	3.899	5.832	7.148	11.197
2027	11.091	1.367	0.431	3.466	4.269	3.811	5.709	7.003	10.962
2028	11.009	1.365	0.429	3.398	4.173	3.729	5.583	6.844	10.739
2029	10.918	1.349	0.420	3.340	4.082	3.653	5.461	6.699	10.518
2030	10.818	1.307	0.413	3.259	3.997	3.566	5.343	6.555	10.290
2031	10.729	1.295	0.403	3.210	3.906	3.487	5.239	6.431	10.089
2032	10.639	1.295	0.393	3.154	3.827	3.421	5.127	6.301	9.890
2033	10.554	1.291	0.389	3.075	3.744	3.346	5.011	6.179	9.703
2034	10.480	1.280	0.388	3.016	3.668	3.276	4.915	6.040	9.505
2035	10.396	1.280	0.382	2.968	3.602	3.208	4.823	5.919	9.316
2036	10.320	1.268	0.381	2.902	3.521	3.127	4.712	5.789	9.112
2037	10.235	1.266	0.375	2.849	3.440	3.068	4.606	5.662	8.919
2038	10.151	1.265	0.367	2.789	3.375	2.988	4.497	5.546	8.737
2039	10.086	1.253	0.360	2.734	3.286	2.927	4.393	5.424	8.539
2040	10.012	1.240	0.358	2.689	3.235	2.859	4.299	5.292	8.360

Age Adjusted Mortality Rates, 2010 to 2040

Portland-Hillsboro-Vancouver, OR-WA MSA

Both Sexes for all Race and Ethnicities*

Mortality rates per 10,000 persons

	<u>45-49</u>	<u>50-54</u>	<u>55-59</u>	<u>60-64</u>	<u>65-69</u>	<u>70-74</u>	<u>75-79</u>	<u>80-84</u>	<u>85+</u>
1990	28.136	47.007	101.996	124.555	210.041	313.093	302.599	792.841	2017.935
2000	29.443	42.399	67.506	119.162	262.106	225.973	438.568	754.515	1579.668
2010	30.948	37.984	59.300	87.836	145.948	180.642	390.415	572.357	1384.974
2011	30.948	37.984	59.300	87.836	145.948	180.642	390.415	572.357	1384.974
2012	30.948	37.984	59.300	87.836	145.948	180.642	390.415	572.357	1384.974
2013	30.334	37.259	58.319	86.474	144.079	178.787	387.190	568.698	1378.846
2014	29.720	36.547	57.334	85.133	142.231	176.965	384.001	565.072	1372.762
2015	29.128	35.860	56.380	83.823	140.433	175.144	380.818	561.456	1366.739
2016	28.523	35.190	55.434	82.526	138.614	173.359	377.675	557.896	1360.755
2017	27.964	34.519	54.509	81.238	136.849	171.585	374.557	554.335	1354.829
2018	27.415	33.875	53.594	79.988	135.108	169.836	371.492	550.812	1348.948
2019	26.854	33.238	52.704	78.749	133.376	168.114	368.443	547.337	1343.124
2020	26.335	32.614	51.818	77.552	131.685	166.400	365.418	543.870	1337.355
2021	25.798	32.004	50.976	76.353	130.024	164.731	362.482	540.538	1331.973
2022	25.291	31.416	50.119	75.190	128.382	163.082	359.568	537.203	1326.641
2023	24.792	30.822	49.313	74.038	126.768	161.446	356.700	533.912	1321.368
2024	24.312	30.255	48.479	72.920	125.164	159.838	353.835	530.655	1316.138
2025	23.828	29.689	47.670	71.801	123.588	158.237	351.018	527.397	1310.946
2026	23.351	29.141	46.909	70.695	122.039	156.657	348.201	524.190	1305.820
2027	22.898	28.590	46.133	69.615	120.512	155.092	345.433	520.990	1300.728
2028	22.443	28.070	45.381	68.569	118.977	153.552	342.677	517.809	1295.693
2029	22.013	27.548	44.624	67.505	117.498	152.021	339.949	514.672	1290.703
2030	21.578	27.048	43.895	66.489	116.033	150.498	337.268	511.556	1285.764
2031	21.171	26.563	43.206	65.520	114.638	149.074	334.693	508.590	1281.155
2032	20.779	26.084	42.529	64.552	113.251	147.655	332.148	505.666	1276.586
2033	20.386	25.612	41.862	63.632	111.881	146.257	329.649	502.753	1272.064
2034	19.994	25.185	41.191	62.691	110.545	144.859	327.145	499.861	1267.585
2035	19.628	24.718	40.549	61.779	109.225	143.488	324.675	496.980	1263.149
2036	19.211	24.245	39.865	60.810	107.806	141.952	321.781	493.415	1255.930
2037	18.840	23.795	39.197	59.871	106.386	140.428	318.902	489.890	1248.745
2038	18.465	23.351	38.532	58.916	105.007	138.921	316.046	486.376	1241.608
2039	18.095	22.904	37.891	58.009	103.635	137.437	313.232	482.880	1234.514
2040	17.721	22.470	37.254	57.102	102.283	135.960	310.437	479.425	1227.464

* Mortality rates by race are combined together on a weighted-average basis. The weights are derived from 2010 Census estimates of persons by race and held constant through the forecast period. Rates for men and women are averaged together. Projected rates are based on the Census 2012 National Population Projections.

Household Headship Rates and Household Size Forecast

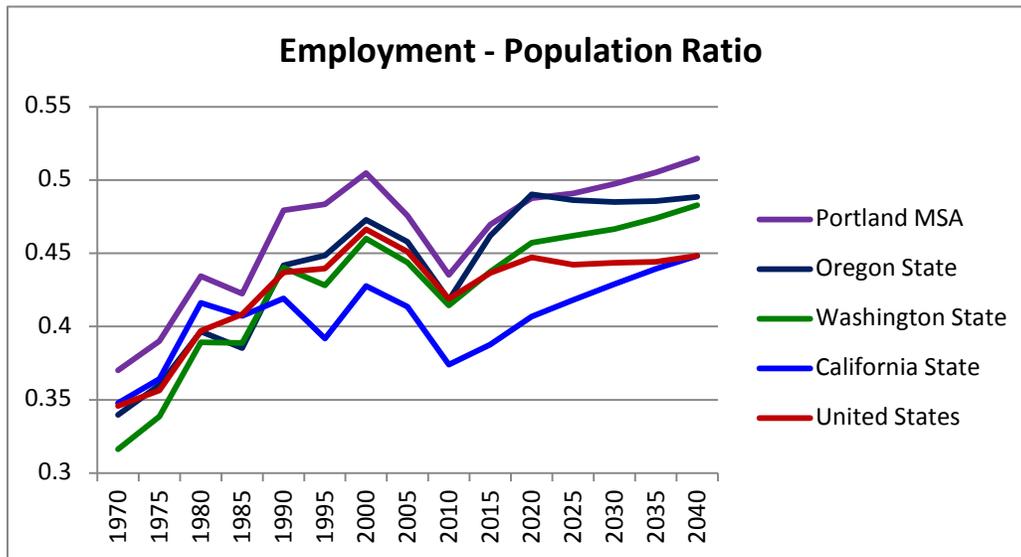
Portland-Hillsboro-Vancouver, OR-WA MSA

	1990	2000	2005	2010	2015	2020	2025	2030	2035	2040
Age-specific Household Headship Rate Assumptions										
15 to 24 year olds	0.16	0.171	0.147	0.123	0.121	0.121	0.121	0.121	0.121	0.121
25 to 34 year olds	0.488	0.482	0.473	0.465	0.464	0.464	0.464	0.464	0.464	0.464
35 to 44 year olds	0.565	0.545	0.538	0.532	0.531	0.531	0.531	0.531	0.531	0.531
45 to 54 year olds	0.585	0.576	0.563	0.55	0.55	0.55	0.55	0.55	0.55	0.55
55 to 64 year olds	0.59	0.599	0.594	0.588	0.588	0.588	0.588	0.588	0.588	0.588
65 to 74 year olds	0.643	0.622	0.626	0.629	0.629	0.629	0.629	0.629	0.629	0.629
75 to 84 year olds	0.709	0.66	0.632	0.604	0.601	0.601	0.601	0.601	0.601	0.601
85 years and over	0.654	0.605	0.63	0.655	0.656	0.656	0.656	0.656	0.656	0.656
Population - MSA	1,523,740	1,927,881	2,067,325	2,226,009	2,342,501	2,519,163	2,671,777	2,814,058	2,937,885	3,052,078
Households - MSA	593,092	746,625	801,794	857,379	896,519	980,872	1,055,978	1,125,755	1,187,311	1,244,034
Household Size (persons per household)										
Portland MSA	2.57	2.58	2.58	2.60	2.61	2.57	2.53	2.50	2.47	2.45
U.S.	2.65	2.64	2.62	2.65	2.60	2.55	2.53	2.5	2.47	2.44

Employment-Population Ratio

(Total Nonfarm Payroll Employment / Total Population)

	Portland MSA	Oregon State	Washington State	California State	United States
1970	0.370031	0.339759	0.316209	0.347811	0.345713
1975	0.390162	0.360125	0.338692	0.364347	0.356436
1980	0.434323	0.396675	0.389205	0.416125	0.397082
1985	0.422572	0.385401	0.388724	0.407311	0.408418
1990	0.47926	0.441752	0.440322	0.41925	0.436916
1995	0.483482	0.448478	0.42822	0.39191	0.439527
2000	0.504819	0.472864	0.460002	0.427765	0.466392
2005	0.475749	0.45789	0.443821	0.413488	0.451118
2010	0.435233	0.418195	0.414358	0.374135	0.418981
2015	0.4696	0.461959	0.437437	0.387639	0.436547
2020	0.48752	0.490309	0.457267	0.406942	0.447142
2025	0.490897	0.486422	0.461898	0.418191	0.442322
2030	0.497426	0.485082	0.466474	0.428989	0.443571
2035	0.505281	0.485631	0.473839	0.439416	0.444289
2040	0.514827	0.488494	0.48283	0.448343	0.448407



Employment Forecast, 2010 to 2040

Portland-Hillsboro-Vancouver, OR-WA MSA

	1985	1990	1995	2000	2005	2010
(Employment in thousands)						
Nonfarm Wage & Salary Jobs	587.98	730.27	845.61	973.23	983.53	968.83
Manufacturing, TOTAL	108.69	124.91	135.34	143.3	123.42	107.02
Durables, total	78.1	89.04	96.28	107.52	93.6	79.64
Wood Products	7.65	7.94	6.36	5.91	5.88	3.53
Primary Metals	6.55	8.5	6.76	7.73	6.01	5.47
Fab. Metals	9.91	10.76	13.2	13.67	12.52	11.17
Machinery Mfg.	7.12	9.2	10.48	10.44	8.38	7.08
Computer & Electronics	27.88	28.12	32.7	41.21	36.48	33.27
Transportation Equipment	6.74	9.51	9.56	11.16	8.95	6.3
Other Durable Goods	12.24	15.01	17.23	17.4	15.37	12.83
Nondurables, total	30.59	35.88	39.06	35.78	29.82	27.38
Food Processing	8.76	9.53	9.63	8.87	8.56	9.48
Paper	6.72	7.52	7.12	6.52	4.98	3.63
Other Nondurables	15.12	18.83	22.31	20.39	16.27	14.27
Nonmanufacturing (private)	395.78	501.11	595.38	699.43	722.47	714.43
Natural Resources & Mining	2.07	2.05	2.01	1.88	1.78	1.07
Construction	22.26	36.87	45.34	53.17	58.46	45.05
Wholesale Trade	35.54	41.62	49.07	55.58	56.29	53.23
Retail Trade	67.67	82.56	92.46	106.78	104.83	101.16
Auto	9.11	10.83	12.18	14.24	14.16	11.37
Food	11.59	15.18	16.62	18.78	18.55	19.86
Other	46.97	56.55	63.66	73.76	72.12	69.94
TWU	23.65	31.72	35.01	38.63	36.88	33.28
Information Services	16.14	16.14	19.03	25.96	23.09	22.46
Publishing	4.67	4.49	6.49	9.73	9.12	9.07
Internet, etc.	11.47	11.64	12.54	16.23	13.97	13.39
Financial Activities	42.03	49.96	55.43	64.85	68.22	61.92
Finance & Insurance	27.93	30	33.12	41.57	43.85	39.96
Real Estate	14.1	19.96	22.3	23.28	24.37	21.95
Pro. Business Services	57.1	77.51	104.63	130.45	128.5	127.8
Pro., Sci., Tech.	22.73	36.31	43.88	48.51	49.08	53.04
Mgmt. of Co.	8.63	10.2	14.92	20.19	20.25	23.22
Admin Sup. & Waste Mgmt.	25.75	30.99	45.83	61.74	59.17	51.55
Education & Health	55.65	73.47	87.35	102.92	119.83	139.38
Education	8.21	11.68	14.07	18.03	20.95	24.9
Health	47.43	61.79	73.29	84.89	98.87	114.48
Leisure + Hospitality	51.47	63.57	75.97	85.78	90.08	94.48
Arts, ent. & rec.	6.9	9.91	11.77	13.05	13.22	13.64
Lodgings & Food	44.57	53.66	64.19	72.73	76.86	80.83
Other Services	22.2	25.65	29.09	33.42	34.51	34.6
Social Orgs., & Churches	6.56	11.96	13.16	15.33	15.12	16.29
Other	10.94	13.69	15.93	18.09	19.38	18.31
Government, TOTAL	96.03	112.73	122.23	137.66	144.84	154.35
Fed. Defense	7.97	8.48	7.34	7.16	7.12	6.96
Civilian. Govt. Total	88.07	104.24	114.89	130.5	137.64	147.38
Civilian. Federal	16.94	18.8	17.96	18.89	18.36	18.58
State & Local	71	85	97	112	119	129

Employment Forecast, 2010 to 2040

Portland-Hillsboro-Vancouver, OR-WA MSA

	2015	2020	2025	2030	2035	2040
(Employment in thousands)						
Nonfarm Wage & Salary Jobs	1100.04	1228.14	1311.57	1399.79	1484.46	1571.29
Manufacturing, TOTAL	119.11	123.1	123.23	123	124.37	127.16
Durables, total	90.21	93.57	94.43	94.76	96.74	100.01
Wood Products	4.2	4.62	4.36	4.16	3.91	3.77
Primary Metals	5.82	5.15	4.85	4.62	4.45	4.35
Fab. Metals	13.53	13.17	12.67	12.39	12.26	12.33
Machinery Mfg.	8.89	8.64	8.3	8.13	7.97	7.9
Computer & Electronics	36.42	40.33	42.93	44.39	47.31	51.08
Transportation Equipment	7.23	6.36	5.76	5.39	5.13	4.83
Other Durable Goods	14.12	15.29	15.56	15.69	15.71	15.76
Nondurables, total	28.9	29.54	28.8	28.24	27.63	27.15
Food Processing	10.39	9.82	9.6	9.53	9.5	9.5
Paper	3.3	3.03	2.62	2.31	2.01	1.79
Other Nondurables	15.21	16.68	16.58	16.41	16.12	15.86
Nonmanufacturing (private)	827.69	937.9	1011.01	1087.06	1158.79	1229.74
Natural Resources & Mining	1.44	1.73	1.49	1.39	1.28	1.25
Construction	59.92	72.49	79.78	90.11	99.27	110.88
Wholesale Trade	60.22	66.67	71.15	75.45	79.55	82.72
Retail Trade	113.41	123.25	129.7	137.66	144.63	150.66
Auto	12.03	13.81	14.76	15.64	16.33	17.05
Food	22.5	24.57	26.21	28	29.67	30.93
Other	78.88	84.87	88.73	94.03	98.64	102.69
TWU	37.84	41.44	42.44	43.86	45.01	46.05
Information Services	23.46	26.79	29.89	32.64	35.56	38.31
Publishing	9.55	11.3	13.34	15.46	17.62	19.45
Internet, etc.	13.92	15.5	16.56	17.18	17.95	18.86
Financial Activities	65.66	68.26	70.15	72.6	75.54	78.74
Finance & Insurance	42.58	43.34	44.35	46	48.34	50.98
Real Estate	23.08	24.92	25.8	26.6	27.2	27.75
Pro. Business Services	161.58	196.35	217.42	235.18	251.66	270.47
Pro., Sci., Tech.	65.62	77.4	84.37	91.13	97.68	104.45
Mgmt. of Co.	27.6	33.44	37.44	40.68	43.6	46.35
Admin Sup. & Waste Mgmt.	68.37	85.51	95.6	103.38	110.39	119.67
Education & Health	155.44	176.68	193.55	211.05	227.46	240.78
Education	27.58	28.66	28.92	30.63	32.58	34.43
Health	127.86	148.02	164.62	180.42	194.88	206.34
Leisure + Hospitality	110.69	121.87	128.88	136.45	144.1	151.01
Arts, ent. & rec.	16.66	19.09	19.78	20.78	21.83	22.73
Lodgings & Food	94.03	102.78	109.1	115.67	122.27	128.28
Other Services	38.02	42.37	46.57	50.66	54.72	58.88
Social Orgs., & Churches	17.24	19.25	21.26	23.16	24.98	26.73
Other	20.78	23.12	25.3	27.5	29.75	32.15
Government, TOTAL	159.86	173.66	183.84	196.31	207.94	221.08
Fed. Defense	6.62	6.51	6.51	6.57	6.63	6.68
Civilian. Govt. Total	153.25	167.15	177.33	189.73	201.31	214.4
Civilian. Federal	17.58	17.4	16.6	17.66	17.54	18.57
State & Local	136	150	161	172	184	196

Employment

(percent change)

Portland-Hillsboro-Vancouver, OR-WA MSA

	1985	1990	1995	2000	2005	2010
(average annual percent change)						
Total Nonfarm W & S	0.18	4.43	2.98	2.85	0.21	-0.3
Manufacturing, TOTAL	-1.91	2.82	1.62	1.15	-2.94	-2.81
Durables, total	-2.59	2.66	1.58	2.23	-2.73	-3.18
Wood Products	-3.77	0.75	-4.34	-1.46	-0.09	-9.73
Primary Metals	-2.21	5.33	-4.47	2.72	-4.92	-1.85
Fab. Metals	-3.65	1.65	4.17	0.71	-1.75	-2.27
Machinery Mfg.	-6.95	5.25	2.63	-0.07	-4.3	-3.31
Computer & Electronics	-1.05	0.17	3.07	4.73	-2.4	-1.83
Transp. Equipment	-4.32	7.14	0.09	3.15	-4.31	-6.79
Other Durable Goods	-0.45	4.16	2.8	0.2	-2.45	-3.56
Nondurables, total	-0.01	3.24	1.71	-1.74	-3.58	-1.69
Food Processing	0.46	1.72	0.21	-1.63	-0.71	2.06
Paper	-1.51	2.28	-1.08	-1.75	-5.22	-6.13
Other Nondurables	0.42	4.49	3.45	-1.78	-4.41	-2.6
Nonmanufacturing (private)	0.8	4.83	3.51	3.27	0.65	-0.22
Natural Resources & Mining	-0.75	-0.2	-0.37	-1.37	-1.1	-9.66
Construction	-4.52	10.63	4.22	3.24	1.91	-5.08
Wholesale Trade	-0.32	3.2	3.35	2.52	0.25	-1.11
Retail Trade	0.66	4.06	2.29	2.92	-0.37	-0.71
Auto	1.04	3.52	2.39	3.16	-0.11	-4.29
Food	5.2	5.55	1.83	2.48	-0.25	1.37
Other	-0.36	3.78	2.4	2.99	-0.45	-0.61
TWU	0.77	6.05	1.99	1.99	-0.92	-2.03
Information Services	-0.58	0	3.35	6.41	-2.31	-0.56
Publishing	7.54	-0.77	7.64	8.42	-1.27	-0.13
Internet, etc.	-3.02	0.31	1.49	5.3	-2.96	-0.84
Financial Activities	-0.08	3.52	2.1	3.19	1.02	-1.92
Finance & Insurance	-0.28	1.44	2	4.65	1.08	-1.84
Real Estate	0.32	7.19	2.25	0.86	0.92	-2.07
Pro. Business Services	3.85	6.3	6.18	4.51	-0.3	-0.11
Pro., Sci., Tech.	2.95	9.83	3.86	2.03	0.23	1.56
Mgmt. of Co.	2.27	3.41	7.9	6.24	0.06	2.78
Admin Sup. & Waste Mgmt.	5.29	3.78	8.14	6.14	-0.85	-2.72
Education & Health	2.25	5.71	3.52	3.33	3.09	3.07
Education	3.14	7.3	3.79	5.08	3.05	3.51
Health	2.1	5.43	3.47	2.98	3.1	2.97
Leisure + Hospitality	0.87	4.31	3.63	2.46	0.98	0.96
Arts, ent. & rec.	0.87	7.49	3.51	2.08	0.26	0.63
Lodgings & Food	0.87	3.78	3.65	2.53	1.11	1.01
Other Services	1.44	2.93	2.55	2.81	0.64	0.06
Social Orgs., & Churches	-0.08	12.76	1.93	3.09	-0.27	1.5
Other	2	4.59	3.08	2.58	1.39	-1.14
Government, TOTAL	0.54	3.26	1.63	2.41	1.02	1.28
Fed. Defense	3.25	1.25	-2.85	-0.5	-0.11	-0.44
Civilian. Govt. Total	0.32	3.43	1.96	2.58	1.07	1.38
Civilian. Federal	0.25	2.11	-0.91	1.01	-0.57	0.24
State & Local	0.33	3.73	2.55	2.86	1.34	1.55

Employment

(percent change)

Portland-Hillsboro-Vancouver, OR-WA MSA

	2015	2020	2025	2030	2035	2040
(average annual percent change)						
Total Nonfarm W & S	2.57	2.23	1.32	1.31	1.18	1.14
Manufacturing, TOTAL	2.16	0.66	0.02	-0.04	0.22	0.44
Durables, total	2.52	0.73	0.18	0.07	0.42	0.67
Wood Products	3.57	1.92	-1.16	-0.95	-1.21	-0.74
Primary Metals	1.22	-2.38	-1.2	-0.98	-0.73	-0.45
Fab. Metals	3.92	-0.54	-0.77	-0.45	-0.2	0.11
Machinery Mfg.	4.65	-0.57	-0.79	-0.42	-0.4	-0.18
Computer & Electronics	1.83	2.06	1.26	0.67	1.28	1.54
Transp. Equipment	2.79	-2.54	-1.95	-1.32	-0.99	-1.21
Other Durable Goods	1.94	1.61	0.35	0.16	0.02	0.06
Nondurables, total	1.09	0.44	-0.5	-0.39	-0.43	-0.35
Food Processing	1.84	-1.12	-0.45	-0.15	-0.05	0
Paper	-1.88	-1.69	-2.89	-2.53	-2.68	-2.36
Other Nondurables	1.29	1.87	-0.12	-0.21	-0.36	-0.32
Nonmanufacturing (private)	2.99	2.53	1.51	1.46	1.29	1.2
Natural Resources & Mining	6.13	3.71	-2.84	-1.48	-1.64	-0.46
Construction	5.87	3.88	1.93	2.47	1.95	2.24
Wholesale Trade	2.5	2.05	1.31	1.18	1.06	0.78
Retail Trade	2.31	1.68	1.02	1.2	0.99	0.82
Auto	1.13	2.81	1.33	1.17	0.86	0.87
Food	2.53	1.78	1.3	1.32	1.17	0.84
Other	2.44	1.47	0.89	1.17	0.96	0.81
TWU	2.6	1.83	0.48	0.66	0.52	0.46
Information Services	0.88	2.69	2.22	1.77	1.73	1.5
Publishing	1.04	3.42	3.38	3	2.64	2
Internet, etc.	0.78	2.17	1.33	0.74	0.88	0.99
Financial Activities	1.18	0.78	0.55	0.69	0.8	0.83
Finance & Insurance	1.28	0.36	0.46	0.73	1	1.07
Real Estate	1.01	1.55	0.7	0.61	0.44	0.41
Pro. Business Services	4.8	3.97	2.06	1.58	1.36	1.45
Pro., Sci., Tech.	4.35	3.36	1.74	1.55	1.4	1.35
Mgmt. of Co.	3.52	3.91	2.29	1.67	1.4	1.23
Admin Sup. & Waste Mgmt.	5.81	4.58	2.26	1.58	1.32	1.63
Education & Health	2.21	2.59	1.84	1.75	1.51	1.14
Education	2.07	0.77	0.18	1.16	1.24	1.11
Health	2.24	2.97	2.15	1.85	1.55	1.15
Leisure + Hospitality	3.22	1.94	1.13	1.15	1.1	0.94
Arts, ent. & rec.	4.08	2.76	0.71	0.99	0.99	0.81
Lodgings & Food	3.07	1.79	1.2	1.18	1.12	0.96
Other Services	1.9	2.19	1.91	1.7	1.55	1.48
Social Orgs., & Churches	1.14	2.23	2.01	1.72	1.52	1.37
Other	2.57	2.16	1.82	1.68	1.58	1.57
Government, TOTAL	0.7	1.67	1.15	1.32	1.16	1.23
Fed. Defense	-1.01	-0.32	-0.01	0.19	0.17	0.17
Civilian. Govt. Total	0.78	1.75	1.19	1.36	1.19	1.27
Civilian. Federal	-1.1	-0.21	-0.93	1.24	-0.13	1.14
State & Local	1.04	2	1.42	1.37	1.32	1.28

High Growth Scenario

Portland-Hillsboro-Vancouver, OR-WA MSA

	2015	2020	2025	2030	2035	2040
(in thousands)						
Nonfarm Employment, Civ. total	1,204.3	1,407.4	1,547.6	1,697.9	1,852.8	2,019.0
Private nonfarm emp.	1,045.6	1,233.3	1,362.3	1,498.9	1,641.0	1,792.8
Manufacturing, total	135.97	151.29	157.08	161.27	167.74	175.59
Durable Goods	103.39	115.88	121.44	125.2	131.36	138.74
Wood Products	4.98	6.01	6.12	6.27	6.35	6.54
Primary Metals	6.68	6.36	6.07	5.85	5.74	5.71
Fab. Metals	14.26	14.08	13.68	13.66	13.83	14.26
Machinery	9.82	9.98	9.79	9.79	9.79	9.91
Electronics	41.69	50.64	56.09	59.1	64.44	70.59
Computers	32.36	39.6	44.27	47.29	52.14	57.6
Oth. Elect.	9.33	11.04	11.83	11.81	12.29	12.99
Transport. Eq.	10	10.91	11.57	12.1	12.53	12.74
Oth. Durables	15.96	17.9	18.12	18.44	18.67	18.98
Non-Durable Goods	32.59	35.42	35.64	36.07	36.39	36.85
Food Proc.	11.42	11.15	11.03	11	11	11.01
Paper	4.02	4	3.64	3.33	3.02	2.77
Other Non-Dur.	17.15	20.28	20.97	21.73	22.36	23.06
Non-Mfg. (private)	909.65	1,082.03	1,205.21	1,337.58	1,473.25	1,617.18
Natural Resources	1.67	1.97	1.7	1.58	1.46	1.44
Construction	74.43	93.52	104.9	120.5	135.97	155.05
Trade, Transport & Utilities	223.9	248.37	262.12	278.33	293.33	307.04
Wholesale Trade	62.63	69.4	73.97	78.45	82.77	86.21
Retail Trade	120.85	134.05	141.83	151.6	160.52	169.02
Auto parts	13.53	16.27	17.23	18.34	19.2	20.17
Food & Bev.	25.21	28.78	31.38	34.22	37.08	39.83
Other Retail	82.11	89	93.21	99.05	104.24	109.01
TWU	40.42	44.92	46.32	48.28	50.05	51.81
Information	26.35	31.28	35.65	39.55	43.63	47.65
Printing	11.84	15.08	18.19	21.22	24.2	26.85
Internet, etc.	14.51	16.21	17.46	18.33	19.43	20.8
Financial Activities	70.69	76.39	80.86	86.04	92.02	98.5
Finance & Insurance	45.4	47.73	50.29	53.72	58.05	62.79
Real Estate	25.29	28.66	30.57	32.32	33.97	35.71
Pro. Business	185.47	252.71	302.51	351.86	403.69	462.23
Pro., Sci., Tech.	71.87	90.55	103.59	117.39	132.09	148.33
Management of Companies	32.16	42.12	50.09	57.66	65.48	73.67
Admin & Waste Mgmt.	81.44	120.03	148.84	176.81	206.12	240.23
Edu. & Health	166.92	195.82	220.51	247.44	274.86	300.57
Education	32.41	34.56	35.25	37.5	39.82	41.85
Health Care	134.51	161.26	185.26	209.95	235.04	258.72
Leisure & Hospitality	117.1	131.33	140.04	149.32	158.91	168.11
Arts, Entertain. & Rec.	18.62	22.45	24.19	26.15	28.15	30.06
Accomm. & Food Ser.	98.48	108.88	115.84	123.17	130.76	138.05
Other Services	43.11	50.65	56.93	62.94	69.4	76.61
Social Orgs.	21.18	26.09	29.93	33.5	37.4	41.76
Other	21.93	24.55	26.99	29.45	32	34.84
Government, total	166.33	181.77	193.07	206.9	219.66	234.17
Military	7.61	7.71	7.76	7.84	7.89	7.95
Civilian Federal	18.89	19.49	19.21	20.95	21.26	22.93
State & Local	139.83	154.57	166.1	178.11	190.51	203.29

Medium Growth Scenario

Portland-Hillsboro-Vancouver, OR-WA MSA

	2015	2020	2025	2030	2035	2040
(in thousands)						
Nonfarm Employment, Civ. total	1,100.0	1,228.1	1,311.6	1,399.8	1,484.5	1,571.3
Private nonfarm emp.	946.8	1,061.0	1,134.2	1,210.1	1,283.2	1,356.9
Manufacturing, total	119.11	123.1	123.23	123	124.37	127.16
Durable Goods	90.21	93.57	94.43	94.76	96.74	100.01
Wood Products	4.2	4.62	4.36	4.16	3.91	3.77
Primary Metals	5.82	5.15	4.85	4.62	4.45	4.35
Fab. Metals	13.53	13.17	12.67	12.39	12.26	12.33
Machinery	8.89	8.64	8.3	8.13	7.97	7.9
Electronics	36.42	40.33	42.93	44.39	47.31	51.08
Computers	28.48	31.88	34.32	36.02	38.93	42.48
Oth. Elect.	7.94	8.45	8.62	8.37	8.39	8.6
Transport. Eq.	7.23	6.36	5.76	5.39	5.13	4.83
Oth. Durables	14.12	15.29	15.56	15.69	15.71	15.76
Non-Durable Goods	28.9	29.54	28.8	28.24	27.63	27.15
Food Proc.	10.39	9.82	9.6	9.53	9.5	9.5
Paper	3.3	3.03	2.62	2.31	2.01	1.79
Other Non-Dur.	15.21	16.68	16.58	16.41	16.12	15.86
Non-Mfg. (private)	827.69	937.9	1,011.01	1,087.06	1,158.79	1,229.74
Natural Resources	1.44	1.73	1.49	1.39	1.28	1.25
Construction	59.92	72.49	79.78	90.11	99.27	110.88
Trade, Transport & Utilities	211.47	231.36	243.28	256.98	269.18	279.43
Wholesale Trade	60.22	66.67	71.15	75.45	79.55	82.72
Retail Trade	113.41	123.25	129.7	137.66	144.63	150.66
Auto parts	12.03	13.81	14.76	15.64	16.33	17.05
Food & Bev.	22.5	24.57	26.21	28	29.67	30.93
Other Retail	78.88	84.87	88.73	94.03	98.64	102.69
TWU	37.84	41.44	42.44	43.86	45.01	46.05
Information	23.46	26.79	29.89	32.64	35.56	38.31
Printing	9.55	11.3	13.34	15.46	17.62	19.45
Internet, etc.	13.92	15.5	16.56	17.18	17.95	18.86
Financial Activities	65.66	68.26	70.15	72.6	75.54	78.74
Finance & Insurance	42.58	43.34	44.35	46	48.34	50.98
Real Estate	23.08	24.92	25.8	26.6	27.2	27.75
Pro. Business	161.58	196.35	217.42	235.18	251.66	270.47
Pro., Sci., Tech.	65.62	77.4	84.37	91.13	97.68	104.45
Management of Companies	27.6	33.44	37.44	40.68	43.6	46.35
Admin & Waste Mgmt.	68.37	85.51	95.6	103.38	110.39	119.67
Edu. & Health	155.44	176.68	193.55	211.05	227.46	240.78
Education	27.58	28.66	28.92	30.63	32.58	34.43
Health Care	127.86	148.02	164.62	180.42	194.88	206.34
Leisure & Hospitality	110.69	121.87	128.88	136.45	144.1	151.01
Arts, Entertain. & Rec.	16.66	19.09	19.78	20.78	21.83	22.73
Accomm. & Food Ser.	94.03	102.78	109.1	115.67	122.27	128.28
Other Services	38.02	42.37	46.57	50.66	54.72	58.88
Social Orgs.	17.24	19.25	21.26	23.16	24.98	26.73
Other	20.78	23.12	25.3	27.5	29.75	32.15
Government, total	159.86	173.66	183.84	196.31	207.94	221.08
Military	6.62	6.51	6.51	6.57	6.63	6.68
Civilian Federal	17.58	17.4	16.6	17.66	17.54	18.57
State & Local	135.67	149.75	160.73	172.07	183.77	195.83

Low Growth Scenario

Portland-Hillsboro-Vancouver, OR-WA MSA

	2015	2020	2025	2030	2035	2040
(in thousands)						
Nonfarm Employment, Civ. total	995.75	1048.92	1075.56	1101.69	1116.19	1123.62
Private nonfarm emp.	102.24	94.91	89.39	84.73	81	78.71
Manufacturing, total	102.24	94.91	89.39	84.73	81.01	78.73
Durable Goods	77.03	71.26	67.43	64.32	62.13	61.28
Wood Products	3.42	3.23	2.59	2.04	1.47	1
Primary Metals	4.95	3.95	3.64	3.39	3.17	2.99
Fab. Metals	12.81	12.26	11.65	11.11	10.69	10.39
Machinery	7.96	7.3	6.81	6.46	6.14	5.88
Electronics	31.15	30.03	29.77	29.68	30.19	31.57
Computers	24.6	24.16	24.37	24.75	25.71	27.37
Oth. Elect.	6.55	5.86	5.41	4.94	4.49	4.2
Transport. Eq.	4.46	1.81	-0.04	-1.32	-2.27	-3.09
Oth. Durables	12.28	12.68	13	12.94	12.75	12.53
Non-Durable Goods	25.21	23.65	21.96	20.41	18.88	17.45
Food Proc.	9.35	8.49	8.16	8.05	8	7.99
Paper	2.59	2.07	1.6	1.28	1.01	0.8
Other Non-Dur.	13.26	13.09	12.19	11.08	9.87	8.66
Non-Mfg. (private)	745.74	793.77	816.82	836.55	844.33	842.32
Natural Resources	1.2	1.49	1.29	1.19	1.09	1.06
Construction	45.41	51.46	54.65	59.72	62.58	66.72
Trade, Transport & Utilities	199.05	214.34	224.45	235.63	245.04	251.82
Wholesale Trade	57.81	63.93	68.32	72.46	76.33	79.23
Retail Trade	105.96	112.46	117.57	123.73	128.74	132.31
Auto parts	10.52	11.36	12.28	12.94	13.45	13.92
Food & Bev.	19.78	20.36	21.04	21.77	22.25	22.02
Other Retail	75.66	80.74	84.24	89.01	93.03	96.37
TWU	35.27	37.95	38.55	39.45	39.97	40.29
Information	20.58	22.3	24.14	25.73	27.5	28.97
Printing	7.25	7.52	8.48	9.71	11.04	12.06
Internet, etc.	13.32	14.79	15.66	16.02	16.46	16.91
Financial Activities	60.63	60.14	59.45	59.15	59.06	58.97
Finance & Insurance	39.76	38.95	38.41	38.27	38.64	39.17
Real Estate	20.88	21.18	21.04	20.88	20.42	19.79
Pro. Business	137.69	139.99	132.32	118.5	99.64	78.72
Pro., Sci., Tech.	59.37	64.25	65.16	64.86	63.26	60.57
Management of Companies	23.04	24.76	24.79	23.69	21.71	19.03
Admin & Waste Mgmt.	55.29	50.99	42.37	29.95	14.66	-0.88
Edu. & Health	143.96	157.54	166.58	174.66	180.07	180.99
Education	22.75	22.76	22.59	23.76	25.34	27.02
Health Care	121.21	134.79	143.99	150.89	154.73	153.97
Leisure & Hospitality	104.29	112.4	117.72	123.58	129.3	133.92
Arts, Entertain. & Rec.	14.7	15.73	15.36	15.41	15.51	15.4
Accomm. & Food Ser.	89.58	96.68	102.36	108.17	113.79	118.52
Other Services	32.93	34.1	36.21	38.38	40.05	41.16
Social Orgs.	13.3	12.4	12.59	12.82	12.56	11.69
Other	19.63	21.69	23.62	25.56	27.49	29.46
Government, total	153.4	165.55	174.61	185.72	196.21	207.99
Military	5.63	5.31	5.26	5.31	5.36	5.42
Civilian Federal	16.26	15.3	14	14.37	13.83	14.2
State & Local	131.51	144.94	155.35	166.04	177.02	188.37

Location Quotients

Portland-Hillsboro-Vancouver, OR-WA MSA

	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040
Manufacturing, total	1.06	1.09	1.12	1.18	1.24	1.22	1.19	1.18	1.19	1.21	1.25
Durable Goods, total	1.24	1.29	1.34	1.42	1.51	1.44	1.39	1.4	1.43	1.48	1.54
Wood Products	2.19	1.53	1.3	1.43	1.38	1.06	1.01	1	0.97	0.94	0.92
Primary Metal	1.85	1.46	1.68	1.75	2.03	1.86	1.47	1.38	1.43	1.55	1.79
Fabricated Metal	1	1.13	1.06	1.12	1.17	1.11	0.97	0.91	0.92	0.93	0.93
Machinery	0.98	1.01	0.97	0.98	0.95	0.98	0.87	0.82	0.83	0.87	0.91
Electrical Machinery	2.22	2.69	3.07	3.77	4.08	4.32	4.39	4.5	4.68	4.78	4.85
Transportation Equipment	0.67	0.67	0.74	0.69	0.63	0.59	0.52	0.5	0.47	0.44	0.43
Non-durable Goods, total	0.77	0.79	0.76	0.77	0.82	0.83	0.81	0.78	0.76	0.75	0.74
Food Processing	0.95	0.86	0.77	0.79	0.88	0.89	0.76	0.7	0.66	0.64	0.62
Paper	1.74	1.54	1.46	1.4	1.23	1.13	0.97	0.83	0.7	0.59	0.52
Non-manufacturing, total	1.02	1.02	1.01	1.01	1	1	1.01	1.01	1.01	1.01	1
Natural Resources	0.4	0.44	0.42	0.38	0.2	0.2	0.22	0.18	0.17	0.15	0.14
Construction	1.05	1.19	1.06	1.08	1.09	1.16	1.1	1.09	1.09	1.11	1.12
Retail Trade	0.94	0.92	0.95	0.93	0.94	0.94	0.97	1.01	1.02	1.02	1.02
Motor Vehicle & Parts	1.09	1.04	1.04	1	0.94	0.84	0.95	1	1.03	1.04	1.05
Food & Beverage Stores	0.82	0.8	0.85	0.89	0.95	0.98	1.05	1.11	1.16	1.2	1.23
Other Retail	0.95	0.94	0.96	0.93	0.94	0.95	0.96	0.98	0.98	0.98	0.96
Transp., Warehouse, & Utilities	1.13	1.08	1.04	1.02	0.94	0.92	0.87	0.85	0.84	0.85	0.88
Information, total	0.9	0.93	0.97	1.03	1.11	1.12	1.11	1.11	1.14	1.14	1.12
Publishing	0.77	0.99	1.27	1.37	1.6	1.75	2.03	2.42	2.72	2.94	3.06
Internet & Other	0.96	0.9	0.85	0.88	0.92	0.9	0.83	0.77	0.75	0.71	0.68
Finance Activities	1.13	1.12	1.13	1.13	1.08	1.06	1.07	1.06	1.05	1.03	1.03
Finance & Insurance	0.9	0.9	0.98	0.98	0.93	0.93	0.94	0.9	0.89	0.87	0.86
Real Estate	1.83	1.76	1.57	1.55	1.52	1.44	1.44	1.49	1.54	1.55	1.57
Pro. Business Services	1.07	1.13	1.06	1.03	1.02	1.03	1.05	1.01	0.97	0.94	0.91
Pro., Sci., & Tech.	1.2	1.2	0.98	0.95	0.96	0.98	1.03	0.94	0.86	0.8	0.75
Mgmt. of Companies	0.92	1.23	1.52	1.56	1.66	1.73	1.97	2.22	2.49	2.75	3.01
Admin. Support	1	1.05	1.02	0.99	0.93	0.92	0.9	0.88	0.87	0.85	0.84
Edu. & Health Care	1	0.91	0.92	0.94	0.96	0.94	0.94	0.96	0.97	0.97	0.97
Educational	1.04	0.97	1.02	1.01	1.06	1.07	1.09	1.14	1.18	1.2	1.22
Health Care	1	0.9	0.9	0.92	0.94	0.91	0.91	0.94	0.95	0.94	0.93
Leisure & Hospitality	1.03	1	0.98	0.96	0.97	0.97	0.98	1	1.01	1	0.99
Arts, Entertainment & Rec.	1.31	1.12	0.99	0.95	0.96	1.05	1.12	1.12	1.04	0.98	0.95
Accommodation & Food	0.99	0.99	0.98	0.96	0.97	0.96	0.96	0.98	1	1.01	1
Other Services	0.9	0.88	0.88	0.87	0.87	0.89	0.95	1.01	1.03	1.07	1.11
Government, Civilian total	0.92	0.87	0.9	0.9	0.92	0.92	0.91	0.89	0.89	0.9	0.91
Federal, Civilian											
State & Local	0.84	0.82	0.84	0.85	0.89	0.9	0.89	0.87	0.89	0.9	0.92

Personal Income (includes nominal and inflation adjusted fig.)

Portland-Hillsboro-Vancouver, OR-WA MSA

	1975	1980	1985	1990	1995	2000	2005
(annualized percent change)							
Personal Income (MSA)	11.36	13.26	6.73	8.19	7.5	7.55	3.33
+ Wage Disbursement	10.04	13.16	4.78	8.71	7.41	8.59	2.62
- Social Ins. Contribution	15.93	15.53	8.21	9.91	7.94	7.41	2.94
+ Transfer Payments	17.95	10.47	8.82	5.88	8.32	5.91	6.63
+ Other Labor Income	17.06	17.79	7.75	8.16	7.84	6.63	5.29
+ Farm Proprietors Inc.	10.37	-2.6	5.83	19.69	-12.15	-32.26	55.54
+ Bus. Proprietors Inc.	9.17	11.47	5.77	10.47	7.61	9.47	3.84
+ Div., Interest, & Rent	10.84	16.89	11.73	7.95	7.67	5.57	1.6
+ Res. Adjustment	94.81	-163.04	241.98	1.17	-20.49	-244.33	19.65
Personal Income (MSA)							
(in millions)	\$8,028	\$14,963	\$20,724	\$30,720	\$44,100	\$63,463	\$74,750
% change	11.36	13.26	6.73	8.19	7.5	7.55	3.33
inflation adjusted (2000\$)	\$26,642	\$30,530	\$34,716	\$42,406	\$50,602	\$62,696	\$67,043
% change	4.4	2.76	2.6	4.08	3.6	4.38	1.35
Per Capita Income (MSA)	\$6,738	\$11,183	\$15,003	\$20,159	\$25,212	\$32,918	\$35,923
% change	9.24	10.66	6.05	6.09	4.58	5.48	1.76
inflation adjusted (2000\$)	\$22,502	\$22,758	\$25,040	\$27,833	\$28,931	\$32,521	\$32,221
% change	2.57	0.23	1.93	2.14	0.78	2.37	-0.19
Average Household Inc. (MSA)				\$51,796	\$64,888	\$85,000	\$93,229
% change					4.61	5.55	1.87
inflation adjusted (2000\$)				\$72,376	\$75,371	\$85,000	\$84,643
% change					0.81	2.43	-0.08
U.S. Personal Income Components - Nominal Levels							
(annualized percent change)							
Personal Income	9.74	11.51	8.72	6.75	5.06	6.58	4.21
+ Wage Disbursement	8.11	11.01	7.62	6.69	4.51	7.14	3.36
- Social Ins. Contribution	14.05	13.21	11.08	7.82	5.38	5.79	4.36
+ Transfer Payments	17.88	10.46	8.74	6.96	8.12	4.26	6.9
+ Other Labor Income	15.94	16.16	8.73	6.11	5.67	5.66	7.12
+ Farm Proprietors Inc.	11.24	-11.84	12.38	8.93	-7.3	7.4	8.06
+ Bus. Proprietors Inc.	8.29	10.63	6.83	8.15	7.49	9.45	5.13
+ Div., Interest, & Rent	10.2	14.65	13.51	6.88	3.97	5.7	3.06

Personal Income (includes nominal and inflation adjusted fig.)

Portland-Hillsboro-Vancouver, OR-WA MSA

	2010	2015	2020	2025	2030	2035	2040
(annualized percent change)							
Personal Income (MSA)	3.3	5.19	6.12	4.81	4.57	4.45	4.44
+ Wage Disbursement	2.51	5.02	5.44	4.6	4.59	4.44	4.43
- Social Ins. Contribution	2.54	5.67	6.37	4.87	4.49	4.32	4.33
+ Transfer Payments	10.52	3.09	5.03	5.35	5.42	4.98	4.73
+ Other Labor Income	2.33	4.79	5.76	4.73	4.53	4.59	4.63
+ Farm Proprietors Inc.	-197.69	11.33	1.12	2.17	2.19	3.2	5.21
+ Bus. Proprietors Inc.	0.23	5.67	5.57	4.9	4.87	4.61	4.36
+ Div., Interest, & Rent	2.16	7.97	9.31	4.99	3.81	3.88	4.08
+ Res. Adjustment	14.41	-35.97	-5.38	-4.62	-4.63	-4.5	-4.47
Personal Income (MSA)							
(in millions)	\$87,940	\$113,240	\$152,425	\$192,794	\$241,065	\$299,650	\$372,295
% change	3.3	5.19	6.12	4.81	4.57	4.45	4.44
inflation adjusted (2000\$)	\$70,804	\$84,083	\$102,933	\$118,531	\$134,748	\$151,602	\$169,905
% change	1.1	3.5	4.13	2.86	2.6	2.39	2.31
Per Capita Income (MSA)	\$39,505	\$48,339	\$60,503	\$72,155	\$85,660	\$101,990	\$121,975
% change	1.92	4.12	4.59	3.59	3.49	3.55	3.64
inflation adjusted (2000\$)	\$31,807	\$35,893	\$40,858	\$44,362	\$47,882	\$51,601	\$55,667
% change	-0.26	2.45	2.63	1.66	1.54	1.51	1.53
Average Household Inc. (MSA)	\$102,569	\$126,311	\$155,397	\$182,574	\$214,136	\$252,377	\$299,264
% change	1.93	4.25	4.23	3.28	3.24	3.34	3.47
inflation adjusted (2000\$)	\$83,593	\$94,222	\$105,425	\$112,765	\$120,247	\$128,274	\$137,206
% change	-0.25	2.42	2.27	1.36	1.29	1.3	1.36
U.S. Personal Income Compar							
(annualized percent change)							
Personal Income	3.23	4.5	5.02	4.32	4.39	4.32	4.35
+ Wage Disbursement	2.3	4.12	4.64	4	4.32	4.2	4.26
- Social Ins. Contribution	2.41	4.76	5.44	4.32	4.31	4.2	4.25
+ Transfer Payments	8.53	3.36	4.84	5.34	5.41	5.01	4.77
+ Other Labor Income	2.99	2.69	4.68	3.79	3.98	4.03	4.2
+ Farm Proprietors Inc.	-0.16	16.9	-1.12	-2.17	-2.19	-3.2	-5.21
+ Bus. Proprietors Inc.	1.13	6.58	4.69	4.76	5.12	4.91	4.67
+ Div., Interest, & Rent	2.34	6.36	6.71	4.39	3.58	3.83	4.11

Personal Income (includes nominal and inflation adjusted fig.)

Portland-Hillsboro-Vancouver, OR-WA MSA

	1975	1980	1985	1990	1995	2000	2005
U.S. Personal Income							
(in billions)	\$1,335	\$2,302	\$3,497	\$4,847	\$6,276	\$8,633	\$10,610
% change	9.74	11.51	8.72	6.75	5.06	6.58	4.21
inflation adjusted (2000\$)	\$4,270	\$4,810	\$5,596	\$6,387	\$7,092	\$8,633	\$9,356
% change	2.81	2.41	3.07	2.68	1.87	4.01	1.62
U.S. Per Capita Income	\$6,173	\$10,095	\$14,646	\$19,341	\$23,509	\$30,527	\$35,790
% change	8.62	10.34	7.73	5.72	3.73	5.36	3.23
inflation adjusted (2000\$)	\$19,750	\$21,101	\$23,438	\$25,489	\$26,565	\$30,527	\$31,560
% change	1.76	1.33	2.12	1.69	0.59	2.82	0.67
U.S. Avg. Household Inc.	\$18,442	\$28,099	\$39,757	\$51,425	\$62,150	\$80,665	\$93,663
% change	7.24	8.79	7.19	5.28	3.72	5.35	3.03
inflation adjusted (2000\$)	\$58,999	\$58,729	\$63,623	\$67,772	\$70,229	\$80,665	\$82,594
% change	0.47	-0.09	1.61	1.27	0.58	2.81	0.47
U.S. Consumer Price Index	53.8	82.4	107.6	130.7	152.4	172.2	195.3

Personal Income (includes nominal and inflation adjusted fig.)

Portland-Hillsboro-Vancouver, OR-WA MSA

	2010	2015	2020	2025	2030	2035	2040
U.S. Personal Income							
(in billions)	\$12,435	\$15,494	\$19,790	\$24,454	\$30,315	\$37,452	\$46,332
% change	3.23	4.5	5.02	4.32	4.39	4.32	4.35
inflation adjusted (2000\$)	\$9,818	\$11,101	\$12,870	\$14,443	\$16,227	\$18,068	\$20,082
% change	0.97	2.49	3	2.33	2.36	2.17	2.14
U.S. Per Capita Income	\$40,105	\$48,128	\$59,169	\$70,476	\$84,437	\$101,170	\$121,757
% change	2.3	3.71	4.22	3.56	3.68	3.68	3.77
inflation adjusted (2000\$)	\$31,666	\$34,481	\$38,478	\$41,624	\$45,198	\$48,807	\$52,774
% change	0.07	1.72	2.22	1.58	1.66	1.55	1.57
U.S. Avg. Household Inc.	\$106,166	\$124,906	\$150,952	\$178,222	\$210,815	\$250,002	\$297,221
% change	2.54	3.3	3.86	3.38	3.42	3.47	3.52
inflation adjusted (2000\$)	\$83,825	\$89,488	\$98,166	\$105,261	\$112,847	\$120,608	\$128,826
% change	0.3	1.32	1.87	1.41	1.4	1.34	1.33
U.S. Consumer Price Index	218.1	240.3	264.8	291.5	321.7	356.9	397.3

Industry Wage Rates (nominal dollars)

Portland-Hillsboro-Vancouver, OR-WA MSA

	1980	1985	1990	1995	2000	2005	2010
Hourly Wage Rates (annualized percent change)							
Lumber & Wood Products		2.3	3.1	5.6	2.6	6.7	0.7
Primary Metal Mfg.		3.4	4.2	3	4	5.3	3.1
Fabricated Metal Mfg.		2.9	3.3	3	4	2.7	3
Machinery Mfg.		4.5	4.2	3.7	6.3	3.9	3.1
Computer & Electronics		6.9	5.6	9	12.5	-2	5
Transportation Equipment		5	3.1	2.2	5.3	-0.2	4.7
Other Durables		4.2	3.3	3.8	3.9	3.6	2.7
Food Manufacturing		2.6	1.5	3.9	4	2.2	1.2
Paper Manufacturing		6.3	1.8	4.1	1.8	3.2	0.2
Other Nondurables		3.2	3.9	3.7	4.3	1.3	2.5
Wholesale Trade		3.5	4.1	4.7	6.3	3.7	3
Retail Trade		3.1	2.7	4.1	4.1	2	1.1
Transport., Warehousing & Util.		2.2	3.6	2.4	5.2	-0.5	2.5
Information		6.2	3.5	5.6	7.8	3.6	3.3
Finance & Insurance		6.1	6	5.5	5.3	6.5	1.9
Real Estate Rental & Leasing		3.9	4.7	3.6	5.5	6.9	0.2
Pro., Sci., & Tech. Services		6.8	7.8	4.2	5.7	-1.9	3.3
Management of Co.		3.8	7.3	4.2	12.7	-3.8	1.2
Admin. & Waste Support		4.1	1.1	3.7	6.3	1.6	3.4
Educational Services		4.5	3.7	3.9	3.5	2.8	3.1
Health Services		6.2	5	4.5	3.6	1.3	2.8
Federal Govt., Civilian		6.9	4.3	5	2.8	5.6	3.3
State & Local Govt.		7.8	2.5	4.2	3.3	3.9	2.9

Industry Hourly Wage Rates (nominal dollars)

Lumber & Wood Products	7.02	7.87	9.15	12.05	13.66	18.89	19.56
Primary Metal Mfg.	10.55	12.44	15.25	17.69	21.56	27.87	32.46
Fabricated Metal Mfg.	9	10.37	12.22	14.19	17.29	19.75	22.84
Machinery Mfg.	9.03	11.24	13.81	16.59	22.57	27.35	31.92
Computer & Electronics	8.81	12.32	16.15	24.8	44.7	40.42	51.56
Transportation Equipment	10.71	13.65	15.86	17.71	22.96	22.76	28.57
Other Durables	7.53	9.26	10.9	13.11	15.84	18.91	21.57
Food Manufacturing	8.56	9.74	10.49	12.73	15.45	17.2	18.22
Paper Manufacturing	11.32	15.35	16.76	20.45	22.41	26.22	26.44
Other Nondurables	8.22	9.62	11.64	13.94	17.21	18.33	20.78
Wholesale Trade	10.1	11.97	14.64	18.38	24.9	29.84	34.52
Retail Trade	5.67	6.6	7.55	9.23	11.31	12.48	13.16

Industry Wage Rates (nominal dollars)

Portland-Hillsboro-Vancouver, OR-WA MSA

	2015	2020	2025	2030	2035	2040	2040
Hourly Wage Rates (annualized percent change)							
Lumber & Wood Products	3	1.9	2.4	2.6	2.6	2.6	2.6
Primary Metal Mfg.	0.8	3.1	3	2.7	2.5	2.4	2.4
Fabricated Metal Mfg.	1.2	2.1	2.3	2.3	2.2	2.2	2.2
Machinery Mfg.	4.1	3.9	3.8	3.8	3.6	3.6	3.6
Computer & Electronics	3.5	5	5.2	4.9	4.9	4.7	4.7
Transportation Equipment	0.6	2.7	2.4	2.3	2.2	2.2	2.2
Other Durables	1.5	2.4	2.5	2.5	2.5	2.4	2.4
Food Manufacturing	1.5	1.9	1.9	1.9	1.9	1.9	1.9
Paper Manufacturing	2	2.4	2.3	2.4	2.3	2.3	2.3
Other Nondurables	1.6	2.3	2.3	2.3	2.2	2.2	2.2
Wholesale Trade	3.1	3.2	3.4	3.4	3.4	3.4	3.4
Retail Trade	2	2.6	2.3	2.3	2.2	2.2	2.2
Transport., Warehousing & Util.	0.9	2	1.8	1.8	1.8	1.7	1.7
Information	2.3	4.3	3.9	3.9	3.8	3.8	3.8
Finance & Insurance	3.6	3.9	3.8	3.9	3.7	3.7	3.7
Real Estate Rental & Leasing	2.7	3.6	3.7	3.5	3.5	3.4	3.4
Pro., Sci., & Tech. Services	1.9	4	3.4	3.1	3	3.1	3.1
Management of Co.	4.5	4.5	3.4	3.3	3.2	3.2	3.2
Admin. & Waste Support	2.1	2.4	2.5	2.5	2.5	2.5	2.5
Educational Services	1.7	2.8	2.8	2.7	2.7	2.6	2.6
Health Services	2.3	2.9	2.8	2.7	2.6	2.6	2.6
Federal Govt., Civilian	2.9	2.6	2.9	3.8	3.5	3.6	3.6
State & Local Govt.	3.2	2.8	3.1	3.2	3.1	3.1	3.1

Industry Hourly Wage Rates (nominal dollars)

Lumber & Wood Products	22.67	24.93	28.04	31.91	36.29	41.23	41.23
Primary Metal Mfg.	33.79	39.45	45.66	52.14	58.9	66.26	66.26
Fabricated Metal Mfg.	24.27	26.98	30.16	33.76	37.71	42.06	42.06
Machinery Mfg.	39.04	47.19	56.84	68.37	81.74	97.75	97.75
Computer & Electronics	61.21	78.11	100.42	127.64	161.91	204.14	204.14
Transportation Equipment	29.51	33.75	37.91	42.47	47.43	52.9	52.9
Other Durables	23.27	26.26	29.75	33.71	38.07	42.93	42.93
Food Manufacturing	19.66	21.64	23.83	26.25	28.83	31.64	31.64
Paper Manufacturing	29.14	32.89	36.9	41.53	46.64	52.37	52.37
Other Nondurables	22.47	25.2	28.22	31.6	35.28	39.33	39.33
Wholesale Trade	40.3	47.13	55.58	65.81	77.72	91.68	91.68
Retail Trade	14.51	16.48	18.45	20.62	23.01	25.64	25.64

Industry Wage Rates (nominal dollars)

Portland-Hillsboro-Vancouver, OR-WA MSA

	1980	1985	1990	1995	2000	2005	2010
Transport., Warehousing & Util.	10.38	11.55	13.75	15.51	19.96	19.42	21.95
Information	8.17	11.01	13.07	17.18	25.03	29.92	35.23
Finance & Insurance	7.03	9.43	12.61	16.51	21.39	29.33	32.25
Real Estate Rental & Leasing	5.26	6.36	8.01	9.55	12.5	17.42	17.64
Pro., Sci., & Tech. Services	7.45	10.34	15.09	18.57	24.54	22.26	26.2
Management of Co.	11.22	13.54	19.3	23.66	43.08	35.51	37.75
Admin. & Waste Support	5.4	6.61	6.98	8.38	11.34	12.27	14.51
Educational Services	5.56	6.91	8.28	10.01	11.9	13.63	15.88
Health Services	7.1	9.59	12.21	15.22	18.16	19.33	22.22
Federal Govt., Civilian	13.25	18.53	22.92	29.21	33.59	44.19	52.06
State & Local Govt.	8.28	12.08	13.67	16.76	19.74	23.95	27.67
U.S. Consumer Price Index	82.4	107.6	130.7	152.4	172.2	195.3	218.1

Industry Wage Rates (nominal dollars)

Portland-Hillsboro-Vancouver, OR-WA MSA

	2015	2020	2025	2030	2035	2040	2040
Transport., Warehousing & Util.	22.91	25.32	27.71	30.31	33.07	36.04	36.04
Information	39.53	48.88	59.29	71.8	86.59	104.2	104.2
Finance & Insurance	38.49	46.67	56.35	68.09	81.84	98.18	98.18
Real Estate Rental & Leasing	20.15	24.02	28.83	34.3	40.73	48.17	48.17
Pro., Sci., & Tech. Services	28.72	34.9	41.33	48.1	55.8	64.85	64.85
Management of Co.	47.06	58.66	69.19	81.42	95.4	111.54	111.54
Admin. & Waste Support	16.09	18.11	20.47	23.21	26.28	29.73	29.73
Educational Services	17.25	19.79	22.76	26.05	29.74	33.87	33.87
Health Services	24.94	28.79	32.99	37.73	42.99	48.9	48.9
Federal Govt., Civilian	60.06	68.39	79.05	95.23	113.24	135.13	135.13
State & Local Govt.	32.4	37.13	43.3	50.76	59.19	69.01	69.01
U.S. Consumer Price Index	240.3	264.8	291.5	321.7	356.9	397.3	397.3

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2000	2001	2002	2003	2004	2005	2006	2007
Total Nonfarm Wage and Salary Jobs, TOTAL								
Portland PMSA	973.8	966.5	945.0	935.2	955.6	985.1	1,017.0	1,036.6
%ch	2.4	-0.75	-2.23	-1.04	2.19	3.09	3.24	1.93
U.S.	111.1	110.8	108.94	108.52	109.88	111.93	114.15	115.42
%ch	2.13	-0.27	-1.68	-0.39	1.25	1.87	1.98	1.11
Manufacturing, TOTAL								
Portland PMSA	143.32	135.86	123.82	118.11	120.22	123.42	126.62	126.06
%ch	1.1	-5.21	-8.86	-4.61	1.78	2.66	2.59	-0.44
U.S.	17.27	16.44	15.26	14.51	14.31	14.23	14.16	13.88
%ch	-0.33	-4.78	-7.2	-4.9	-1.34	-0.62	-0.49	-1.97
Durable Goods, total								
Portland PMSA	107.55	102.26	92.8	87.93	90.05	93.61	96.38	95.71
%ch	2.09	-4.92	-9.25	-5.25	2.41	3.96	2.96	-0.69
U.S.	10.88	10.34	9.48	8.96	8.92	8.95	8.98	8.81
%ch	0.43	-4.99	-8.24	-5.49	-0.43	0.34	0.3	-1.94
Wood Products								
Portland PMSA	5.91	5.68	5.54	5.53	5.69	5.88	5.95	5.58
%ch	-3.17	-3.81	-2.49	-0.29	3.01	3.36	1.12	-6.17
U.S.	0.62	0.58	0.56	0.54	0.55	0.56	0.56	0.52
%ch	-1.18	-6.35	-3.35	-3.17	2.29	1.71	-0.08	-7.8
Primary Metals								
Portland PMSA	7.73	6.69	6.26	5.58	5.72	6.01	6.29	6.57
%ch	-2.9	-13.46	-6.46	-10.79	2.38	5.09	4.71	4.5
U.S.	0.62	0.57	0.51	0.48	0.47	0.47	0.46	0.46
%ch	-0.51	-8.26	-10.79	-6.26	-2.18	-0.16	-0.52	-1.75
Fabricated Metals								
Portland PMSA	13.67	12.71	11.97	11.51	11.87	12.52	12.93	13.31
%ch	0.73	-7.07	-5.77	-3.9	3.12	5.54	3.26	2.96
U.S.	1.75	1.68	1.55	1.48	1.5	1.52	1.55	1.56
%ch	1.44	-4.35	-7.64	-4.51	1.21	1.68	2.03	0.62
Machinery Mfg.								
Portland PMSA	10.44	9.9	8.78	8.43	8.26	8.38	8.38	8.59
%ch	2.97	-5.19	-11.28	-3.99	-2.07	1.52	0.01	2.49
U.S.	1.46	1.37	1.23	1.15	1.15	1.16	1.18	1.19
%ch	-0.78	-5.95	-10.13	-6.48	-0.58	1.69	1.58	0.35
Computer & Electronics								
Portland PMSA	41.22	42.72	37.68	34.69	35.63	36.48	37.7	36.88
%ch	7.33	3.64	-11.8	-7.94	2.71	2.41	3.33	-2.19
U.S.	1.82	1.75	1.51	1.36	1.32	1.32	1.31	1.27
%ch	2.22	-3.93	-13.81	-10.1	-2.41	-0.46	-0.69	-2.68

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2008	2009	2010	2011	2012	2013	2014	2015
Total Nonfarm Wage and Salary								
Portland PMSA	1,036.0	975.6	968.8	987.5	1,006.5	1,026.9	1,067.1	1,100.0
%ch	-0.06	-5.83	-0.54	1.93	1.92	2.03	3.92	3.08
U.S.	114.35	108.31	107.42	109.41	111.82	114.06	116.12	118.44
%ch	-0.93	-5.28	-0.82	1.85	2.21	2	1.81	2
Manufacturing, TOTAL								
Portland PMSA	123.16	109.08	107.02	111.05	114.18	115.58	118.38	119.11
%ch	-2.3	-11.43	-1.9	3.76	2.82	1.23	2.42	0.61
U.S.	13.4	11.85	11.53	11.73	11.92	11.98	12.21	12.44
%ch	-3.41	-11.62	-2.69	1.72	1.65	0.48	1.93	1.85
Durable Goods, total								
Portland PMSA	93.54	81.72	79.64	83.36	86.09	87.37	89.72	90.21
%ch	-2.27	-12.64	-2.55	4.67	3.27	1.49	2.69	0.55
U.S.	8.46	7.28	7.06	7.27	7.46	7.52	7.75	8
%ch	-3.91	-13.94	-3.03	2.97	2.63	0.78	3.03	3.2
Wood Products								
Portland PMSA	4.82	3.73	3.53	3.28	3.38	3.42	3.68	4.2
%ch	-13.58	-22.61	-5.6	-7.04	3.26	1.02	7.62	14.22
U.S.	0.46	0.36	0.34	0.34	0.34	0.35	0.4	0.5
%ch	-11.45	-21.34	-5.02	-1.55	0.45	2.9	15.72	25.21
Primary Metals								
Portland PMSA	7.07	5.84	5.47	5.72	6.07	6.21	6.02	5.82
%ch	7.48	-17.34	-6.29	4.57	5.97	2.43	-3.07	-3.45
U.S.	0.44	0.36	0.36	0.39	0.4	0.39	0.4	0.4
%ch	-3.02	-18.04	0.04	7.2	3.47	-1.82	0.76	0.74
Fabricated Metals								
Portland PMSA	13.43	11.07	11.17	11.92	12.48	12.99	13.38	13.53
%ch	0.89	-17.55	0.79	6.73	4.75	4.06	3.02	1.13
U.S.	1.53	1.31	1.28	1.35	1.41	1.44	1.49	1.56
%ch	-2.24	-14.12	-2.29	5.14	4.73	1.81	3.72	4.44
Machinery Mfg.								
Portland PMSA	8.33	7	7.08	7.72	7.94	8.29	8.72	8.89
%ch	-3	-16	1.16	8.94	2.92	4.35	5.23	1.94
U.S.	1.19	1.03	1	1.06	1.1	1.1	1.13	1.16
%ch	0.04	-13.34	-3.21	5.97	4.04	0.58	2.42	2.47
Computer & Electronics								
Portland PMSA	35.92	33.85	33.27	34.7	35.37	35.86	36.96	36.42
%ch	-2.6	-5.76	-1.73	4.3	1.92	1.4	3.05	-1.46
U.S.	1.24	1.14	1.09	1.1	1.09	1.08	1.09	1.08
%ch	-2.2	-8.64	-3.73	0.82	-0.87	-0.97	0.76	-1.36

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2016	2017	2018	2019	2020	2021	2022	2023
Total Nonfarm Wage and Salary								
Portland PMSA	1,131.9	1,159.5	1,183.0	1,206.4	1,228.1	1,244.9	1,261.4	1,278.8
%ch	2.89	2.44	2.03	1.97	1.81	1.36	1.32	1.38
U.S.	120.95	123.07	124.54	125.6	126.29	126.83	127.38	127.95
%ch	2.12	1.75	1.19	0.85	0.55	0.43	0.43	0.44
Manufacturing, TOTAL								
Portland PMSA	119.24	120.24	121.44	122.46	123.1	123.38	123.63	123.99
%ch	0.11	0.84	1	0.84	0.53	0.22	0.21	0.29
U.S.	12.59	12.66	12.69	12.7	12.65	12.57	12.46	12.4
%ch	1.26	0.56	0.21	0.07	-0.41	-0.63	-0.81	-0.53
Durable Goods, total								
Portland PMSA	90.07	90.86	91.93	92.89	93.57	93.98	94.42	94.93
%ch	-0.15	0.88	1.17	1.04	0.73	0.44	0.47	0.54
U.S.	8.17	8.24	8.24	8.24	8.21	8.15	8.08	8.05
%ch	2.18	0.79	0.02	0.08	-0.48	-0.7	-0.8	-0.46
Wood Products								
Portland PMSA	4.57	4.63	4.61	4.63	4.62	4.55	4.47	4.42
%ch	8.7	1.33	-0.47	0.44	-0.13	-1.47	-1.77	-1.24
U.S.	0.57	0.56	0.55	0.56	0.55	0.54	0.52	0.52
%ch	12.04	-0.43	-1.99	0.88	-0.31	-2.62	-2.95	-1.51
Primary Metals								
Portland PMSA	5.55	5.4	5.3	5.22	5.15	5.09	5.03	4.97
%ch	-4.5	-2.85	-1.86	-1.39	-1.28	-1.26	-1.2	-1.13
U.S.	0.41	0.42	0.43	0.43	0.43	0.42	0.42	0.42
%ch	2.37	2.82	1.36	0.5	-0.29	-0.8	-0.84	-0.5
Fabricated Metals								
Portland PMSA	13.58	13.55	13.42	13.28	13.17	13.05	12.92	12.81
%ch	0.35	-0.23	-0.96	-1.01	-0.87	-0.92	-1	-0.8
U.S.	1.61	1.64	1.64	1.64	1.65	1.65	1.66	1.66
%ch	3.61	1.68	-0.12	0.28	0.47	0.26	0.08	0.16
Machinery Mfg.								
Portland PMSA	8.89	8.86	8.77	8.7	8.64	8.57	8.48	8.41
%ch	-0.01	-0.38	-0.91	-0.86	-0.71	-0.75	-1.03	-0.88
U.S.	1.19	1.2	1.21	1.21	1.21	1.21	1.2	1.2
%ch	2.27	1.62	0.28	0.25	-0.07	-0.23	-0.47	-0.25
Computer & Electronics								
Portland PMSA	35.95	36.84	38.22	39.4	40.33	41.13	42.02	42.87
%ch	-1.3	2.48	3.76	3.06	2.38	1.97	2.16	2.03
U.S.	1.05	1.06	1.08	1.11	1.12	1.13	1.14	1.15
%ch	-2.25	0.7	2.38	1.88	1.3	0.87	0.85	0.77

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2024	2025	2026	2027	2028	2029	2030	2031
Total Nonfarm Wage and Salary								
Portland PMSA	1,295.7	1,311.6	1,328.8	1,346.4	1,363.3	1,380.6	1,399.8	1,417.3
%ch	1.33	1.22	1.31	1.32	1.26	1.27	1.39	1.25
U.S.	128.56	129.3	130.18	131.12	132.13	133.13	134.16	135.11
%ch	0.48	0.58	0.68	0.73	0.77	0.76	0.77	0.71
Manufacturing, TOTAL								
Portland PMSA	123.94	123.23	123.09	123.13	122.98	122.91	123	123.1
%ch	-0.04	-0.57	-0.12	0.03	-0.12	-0.06	0.07	0.08
U.S.	12.3	12.21	12.13	12.04	11.94	11.84	11.75	11.67
%ch	-0.76	-0.78	-0.64	-0.74	-0.82	-0.87	-0.77	-0.64
Durable Goods, total								
Portland PMSA	95	94.43	94.41	94.58	94.55	94.59	94.76	94.96
%ch	0.07	-0.6	-0.02	0.17	-0.02	0.03	0.18	0.21
U.S.	7.97	7.9	7.84	7.78	7.7	7.61	7.54	7.48
%ch	-0.89	-0.93	-0.72	-0.85	-1.01	-1.15	-0.98	-0.76
Wood Products								
Portland PMSA	4.37	4.36	4.35	4.3	4.22	4.17	4.16	4.12
%ch	-1	-0.31	-0.2	-1.11	-1.83	-1.14	-0.45	-0.85
U.S.	0.51	0.51	0.51	0.51	0.49	0.49	0.49	0.49
%ch	-1.17	0.17	0.41	-1.41	-2.37	-1.27	0.18	-0.44
Primary Metals								
Portland PMSA	4.93	4.85	4.8	4.76	4.72	4.66	4.62	4.59
%ch	-0.94	-1.47	-1.08	-0.77	-1.01	-1.13	-0.92	-0.66
U.S.	0.42	0.41	0.4	0.4	0.39	0.38	0.37	0.36
%ch	-0.8	-1.15	-1.67	-2.1	-2.49	-2.47	-2.54	-2.42
Fabricated Metals								
Portland PMSA	12.73	12.67	12.62	12.56	12.49	12.42	12.39	12.38
%ch	-0.64	-0.51	-0.38	-0.46	-0.56	-0.56	-0.28	-0.07
U.S.	1.65	1.63	1.62	1.59	1.57	1.55	1.53	1.52
%ch	-0.55	-0.9	-1.14	-1.43	-1.45	-1.51	-1.23	-0.76
Machinery Mfg.								
Portland PMSA	8.35	8.3	8.27	8.23	8.2	8.16	8.13	8.11
%ch	-0.7	-0.62	-0.42	-0.38	-0.45	-0.49	-0.36	-0.19
U.S.	1.19	1.19	1.18	1.16	1.15	1.13	1.11	1.09
%ch	-0.48	-0.62	-0.87	-1.24	-1.31	-1.64	-1.7	-1.55
Computer & Electronics								
Portland PMSA	43.23	42.93	43.1	43.49	43.75	44.05	44.39	44.71
%ch	0.83	-0.68	0.4	0.88	0.6	0.68	0.78	0.72
U.S.	1.14	1.12	1.1	1.1	1.09	1.08	1.08	1.08
%ch	-0.73	-1.91	-1.15	-0.7	-0.58	-0.57	-0.47	-0.42

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2032	2033	2034	2035	2036	2037	2038	2039
Total Nonfarm Wage and Salary								
Portland PMSA	1,433.8	1,450.2	1,467.0	1,484.5	1,502.7	1,520.6	1,537.8	1,554.5
%ch	1.16	1.15	1.16	1.19	1.23	1.19	1.13	1.09
U.S.	136.01	136.93	137.92	138.89	139.92	141.02	142.11	143.17
%ch	0.67	0.68	0.72	0.71	0.74	0.78	0.77	0.75
Manufacturing, TOTAL								
Portland PMSA	123.2	123.49	123.87	124.37	124.95	125.5	126.09	126.67
%ch	0.08	0.24	0.31	0.41	0.46	0.44	0.47	0.47
U.S.	11.58	11.49	11.41	11.35	11.28	11.21	11.15	11.09
%ch	-0.81	-0.8	-0.63	-0.59	-0.63	-0.62	-0.55	-0.53
Durable Goods, total								
Portland PMSA	95.2	95.64	96.13	96.74	97.41	98.06	98.74	99.43
%ch	0.25	0.46	0.52	0.63	0.69	0.67	0.7	0.7
U.S.	7.41	7.34	7.29	7.25	7.2	7.15	7.12	7.08
%ch	-0.96	-0.91	-0.67	-0.6	-0.64	-0.63	-0.55	-0.53
Wood Products								
Portland PMSA	4.01	3.93	3.91	3.91	3.9	3.87	3.84	3.8
%ch	-2.59	-1.96	-0.58	-0.05	-0.2	-0.85	-0.7	-1.15
U.S.	0.47	0.46	0.46	0.46	0.46	0.45	0.45	0.45
%ch	-3.62	-2.53	0.13	0.34	0.15	-1.05	-0.45	-1.23
Primary Metals								
Portland PMSA	4.56	4.52	4.48	4.45	4.43	4.41	4.39	4.38
%ch	-0.73	-0.86	-0.81	-0.59	-0.43	-0.45	-0.48	-0.4
U.S.	0.35	0.34	0.33	0.32	0.31	0.29	0.28	0.27
%ch	-2.61	-2.73	-2.73	-3.36	-3.83	-3.77	-3.7	-3.56
Fabricated Metals								
Portland PMSA	12.34	12.3	12.27	12.26	12.27	12.27	12.29	12.31
%ch	-0.28	-0.36	-0.22	-0.09	0.07	0.05	0.12	0.19
U.S.	1.5	1.49	1.48	1.47	1.46	1.45	1.44	1.44
%ch	-0.72	-0.88	-0.86	-0.8	-0.62	-0.52	-0.34	-0.14
Machinery Mfg.								
Portland PMSA	8.08	8.03	7.99	7.97	7.95	7.93	7.92	7.91
%ch	-0.45	-0.57	-0.46	-0.34	-0.23	-0.18	-0.14	-0.13
U.S.	1.07	1.05	1.03	1.02	1	0.98	0.97	0.96
%ch	-1.7	-1.8	-1.86	-1.73	-1.79	-1.54	-1.37	-1.23
Computer & Electronics								
Portland PMSA	45.21	45.93	46.6	47.31	48.05	48.8	49.58	50.38
%ch	1.12	1.57	1.46	1.54	1.55	1.57	1.6	1.6
U.S.	1.08	1.08	1.09	1.1	1.11	1.11	1.12	1.13
%ch	0.17	0.55	0.63	0.71	0.76	0.83	0.88	0.9

Annual Employment (Portland MSA and U.S.)

	Manufacturing employment sectors				APR
	2040	2041	2042	2043	2000-43
Total Nonfarm Wage and Salary					
Portland PMSA	1,571.3	1,585.5	1,598.9	1,610.4	1.2%
%ch	1.08	0.91	0.84	0.72	
U.S.	144.28	145.4	146.51	147.57	0.7%
%ch	0.77	0.77	0.77	0.72	
Manufacturing, TOTAL					
Portland PMSA	127.16	127.63	128.15	128.7	-0.2%
%ch	0.38	0.37	0.4	0.43	
U.S.	11.02	10.98	10.95	10.93	-1.1%
%ch	-0.56	-0.4	-0.3	-0.14	
Durable Goods, total					
Portland PMSA	100.01	100.58	101.19	101.82	-0.1%
%ch	0.59	0.56	0.61	0.63	
U.S.	7.04	7.02	7	7.01	-1.0%
%ch	-0.52	-0.32	-0.18	0.02	
Wood Products					
Portland PMSA	3.77	3.76	3.74	3.73	-1.1%
%ch	-0.78	-0.18	-0.57	-0.39	
U.S.	0.44	0.44	0.44	0.44	-0.8%
%ch	-0.75	0.09	-0.94	-0.18	
Primary Metals					
Portland PMSA	4.35	4.33	4.31	4.28	-1.4%
%ch	-0.51	-0.6	-0.52	-0.51	
U.S.	0.26	0.25	0.25	0.24	-2.2%
%ch	-3.59	-3.42	-3.17	-3.08	
Fabricated Metals					
Portland PMSA	12.33	12.35	12.37	12.4	-0.2%
%ch	0.13	0.18	0.19	0.23	
U.S.	1.44	1.44	1.44	1.45	-0.4%
%ch	-0.21	-0.04	0.11	0.34	
Machinery Mfg.					
Portland PMSA	7.9	7.88	7.86	7.84	-0.7%
%ch	-0.2	-0.2	-0.22	-0.26	
U.S.	0.95	0.94	0.93	0.93	-1.0%
%ch	-1.04	-0.76	-0.64	-0.4	
Computer & Electronics					
Portland PMSA	51.08	51.73	52.43	53.14	0.6%
%ch	1.39	1.27	1.35	1.37	
U.S.	1.14	1.15	1.16	1.17	-1.0%
%ch	0.68	0.63	0.67	0.71	

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2000	2001	2002	2003	2004	2005	2006	2007
Transport. Equipment								
Portland PMSA	11.18	8.55	7.71	7.59	7.96	8.95	9.32	9
%ch	-3.68	-23.48	-9.84	-1.6	4.95	12.46	4.08	-3.41
U.S.	2.06	1.94	1.83	1.78	1.77	1.77	1.77	1.71
%ch	-1.51	-5.73	-5.61	-3	-0.48	0.31	-0.19	-3.23
Other Durable Goods								
Portland PMSA	17.4	16.01	14.86	14.61	14.93	15.37	15.81	15.77
%ch	-0.9	-8	-7.18	-1.69	2.16	3	2.82	-0.21
U.S.	4.01	3.82	3.53	3.34	3.32	3.32	3.33	3.29
%ch	0.61	-4.65	-7.64	-5.51	-0.52	-0.09	0.34	-1.2
Non-Durable Goods								
Portland PMSA	35.77	33.6	31.02	30.18	30.18	29.82	30.24	30.35
%ch	-1.78	-6.08	-7.69	-2.68	-0.03	-1.19	1.43	0.36
U.S.	6.39	6.1	5.77	5.55	5.39	5.27	5.17	5.07
%ch	-1.6	-4.42	-5.44	-3.94	-2.8	-2.21	-1.83	-2.02
Food Processing								
Portland PMSA	8.87	8.79	8.74	8.72	8.64	8.56	8.8	9.1
%ch	-0.89	-0.84	-0.66	-0.19	-0.87	-0.97	2.82	3.4
U.S.	1.55	1.55	1.52	1.52	1.49	1.48	1.48	1.48
%ch	0.19	-0.19	-1.64	-0.49	-1.54	-1.1	0.12	0.29
Paper								
Portland PMSA	6.52	6.3	5.6	5.38	5.15	4.98	4.94	4.66
%ch	1.84	-3.32	-11.11	-4.01	-4.18	-3.24	-0.85	-5.74
U.S.	0.6	0.58	0.55	0.52	0.5	0.48	0.47	0.46
%ch	-1.77	-4.47	-5.38	-5.55	-4.02	-2.28	-2.83	-2.63
Other Non-Durable Goods								
Portland PMSA	20.39	18.51	16.68	16.09	16.38	16.27	16.5	16.59
%ch	-3.26	-9.24	-9.87	-3.55	1.82	-0.66	1.39	0.56
U.S.	4.23	3.98	3.7	3.51	3.4	3.31	3.22	3.13
%ch	-2.22	-5.96	-6.93	-5.11	-3.17	-2.69	-2.55	-2.98

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2008	2009	2010	2011	2012	2013	2014	2015
Transport. Equipment								
Portland PMSA	8.58	6.93	6.3	6.78	7.32	7.47	7.31	7.23
%ch	-4.74	-19.15	-9.12	7.55	7.99	2.08	-2.12	-1.09
U.S.	1.61	1.35	1.33	1.38	1.46	1.49	1.52	1.55
%ch	-6.07	-16.17	-1.08	3.63	5.37	2.27	2.28	2.1
Other Durable Goods								
Portland PMSA	15.39	13.28	12.83	13.25	13.53	13.13	13.65	14.12
%ch	-2.42	-13.69	-3.48	3.32	2.08	-2.97	3.96	3.47
U.S.	3.18	2.76	2.65	2.71	2.76	2.77	2.84	2.91
%ch	-3.17	-13.17	-4.17	2.47	1.76	0.28	2.68	2.12
Non-Durable Goods								
Portland PMSA	29.62	27.36	27.38	27.69	28.1	28.22	28.67	28.9
%ch	-2.39	-7.63	0.05	1.13	1.47	0.43	1.59	0.81
U.S.	4.94	4.56	4.46	4.45	4.46	4.46	4.46	4.44
%ch	-2.56	-7.64	-2.15	-0.24	0.06	-0.03	0.09	-0.48
Food Processing								
Portland PMSA	9.22	9.11	9.48	9.69	10.1	10.52	10.62	10.39
%ch	1.27	-1.1	4.02	2.2	4.2	4.23	0.91	-2.19
U.S.	1.48	1.46	1.45	1.46	1.47	1.47	1.48	1.49
%ch	-0.23	-1.59	-0.38	0.53	0.66	0.04	0.86	0.77
Paper								
Portland PMSA	4.45	3.92	3.63	3.43	3.31	3.25	3.26	3.3
%ch	-4.48	-11.79	-7.43	-5.72	-3.4	-1.72	0.3	1.31
U.S.	0.44	0.41	0.39	0.39	0.38	0.38	0.37	0.37
%ch	-2.88	-8.56	-3.03	-1.84	-2.08	-0.86	-0.48	-0.07
Other Non-Durable Goods								
Portland PMSA	15.96	14.32	14.27	14.57	14.69	14.44	14.79	15.21
%ch	-3.82	-10.24	-0.42	2.16	0.81	-1.69	2.38	2.85
U.S.	3.02	2.7	2.62	2.61	2.61	2.61	2.6	2.57
%ch	-3.62	-10.48	-2.97	-0.43	0.05	0.05	-0.27	-1.26

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2016	2017	2018	2019	2020	2021	2022	2023
Transport. Equipment								
Portland PMSA	7.05	6.79	6.63	6.51	6.36	6.2	6.06	5.96
%ch	-2.44	-3.71	-2.36	-1.78	-2.38	-2.52	-2.2	-1.67
U.S.	1.58	1.57	1.55	1.53	1.48	1.44	1.41	1.38
%ch	1.63	-0.36	-1.26	-1.57	-3.08	-2.65	-2.57	-1.92
Other Durable Goods								
Portland PMSA	14.48	14.8	14.97	15.14	15.29	15.39	15.44	15.48
%ch	2.57	2.22	1.15	1.14	0.98	0.63	0.32	0.29
U.S.	2.95	2.98	2.98	2.98	2.97	2.96	2.94	2.92
%ch	1.61	0.9	0.11	-0.02	-0.4	-0.47	-0.65	-0.4
Non-Durable Goods								
Portland PMSA	29.17	29.37	29.51	29.57	29.54	29.4	29.21	29.06
%ch	0.94	0.71	0.47	0.19	-0.12	-0.47	-0.63	-0.53
U.S.	4.42	4.43	4.45	4.45	4.44	4.42	4.38	4.35
%ch	-0.39	0.12	0.58	0.04	-0.27	-0.52	-0.84	-0.64
Food Processing								
Portland PMSA	10.23	10.09	9.98	9.89	9.82	9.75	9.7	9.66
%ch	-1.52	-1.32	-1.14	-0.87	-0.75	-0.71	-0.53	-0.41
U.S.	1.5	1.52	1.55	1.56	1.57	1.58	1.58	1.59
%ch	0.78	1.1	1.59	0.92	0.85	0.57	0.14	0.36
Paper								
Portland PMSA	3.33	3.28	3.2	3.11	3.03	2.94	2.85	2.77
%ch	0.7	-1.45	-2.56	-2.57	-2.51	-3.08	-3.05	-2.86
U.S.	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.38
%ch	0.08	0.39	0.8	0.35	0.21	0.07	-0.29	-0.07
Other Non-Durable Goods								
Portland PMSA	15.61	16	16.34	16.57	16.68	16.71	16.66	16.63
%ch	2.67	2.49	2.11	1.38	0.71	0.15	-0.27	-0.2
U.S.	2.54	2.53	2.53	2.51	2.49	2.46	2.42	2.38
%ch	-1.13	-0.5	-0.06	-0.55	-1.03	-1.29	-1.56	-1.39

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2024	2025	2026	2027	2028	2029	2030	2031
Transport. Equipment								
Portland PMSA	5.86	5.76	5.68	5.59	5.52	5.45	5.39	5.33
%ch	-1.73	-1.64	-1.48	-1.43	-1.31	-1.23	-1.15	-1.12
U.S.	1.35	1.34	1.33	1.33	1.33	1.32	1.31	1.3
%ch	-2.02	-1.2	-0.16	-0.12	-0.3	-0.76	-0.86	-0.42
Other Durable Goods								
Portland PMSA	15.53	15.56	15.6	15.64	15.66	15.67	15.69	15.72
%ch	0.33	0.17	0.25	0.24	0.14	0.07	0.12	0.2
U.S.	2.91	2.89	2.87	2.85	2.83	2.8	2.77	2.74
%ch	-0.57	-0.59	-0.64	-0.66	-0.82	-1.16	-1.08	-0.88
Non-Durable Goods								
Portland PMSA	28.94	28.8	28.67	28.55	28.43	28.33	28.24	28.13
%ch	-0.41	-0.48	-0.44	-0.44	-0.43	-0.35	-0.31	-0.37
U.S.	4.33	4.31	4.29	4.26	4.25	4.23	4.21	4.2
%ch	-0.52	-0.5	-0.49	-0.54	-0.45	-0.35	-0.4	-0.43
Food Processing								
Portland PMSA	9.63	9.6	9.58	9.56	9.54	9.53	9.53	9.52
%ch	-0.31	-0.3	-0.21	-0.18	-0.17	-0.12	-0.08	-0.11
U.S.	1.6	1.61	1.61	1.62	1.62	1.63	1.63	1.64
%ch	0.56	0.55	0.46	0.29	0.3	0.32	0.31	0.36
Paper								
Portland PMSA	2.69	2.62	2.56	2.49	2.43	2.36	2.31	2.25
%ch	-2.88	-2.59	-2.36	-2.54	-2.74	-2.69	-2.29	-2.57
U.S.	0.37	0.37	0.37	0.37	0.37	0.37	0.38	0.38
%ch	-1.34	-0.84	0.06	0.12	0.21	0.33	0.27	0.2
Other Non-Durable Goods								
Portland PMSA	16.62	16.58	16.54	16.49	16.46	16.43	16.41	16.37
%ch	-0.05	-0.24	-0.27	-0.27	-0.23	-0.14	-0.15	-0.22
U.S.	2.36	2.33	2.3	2.27	2.25	2.23	2.2	2.18
%ch	-1.11	-1.16	-1.23	-1.23	-1.1	-0.95	-1.02	-1.12

Annual Employment (Portland MSA and U.S.)

Manufacturing employment sectors

	2032	2033	2034	2035	2036	2037	2038	2039
Transport. Equipment								
Portland PMSA	5.28	5.22	5.18	5.13	5.08	5.02	4.96	4.89
%ch	-1.05	-0.97	-0.9	-0.9	-0.99	-1.1	-1.27	-1.37
U.S.	1.3	1.29	1.29	1.28	1.27	1.26	1.25	1.24
%ch	-0.33	-0.47	-0.42	-0.37	-0.68	-0.74	-1.01	-1.19
Other Durable Goods								
Portland PMSA	15.73	15.71	15.7	15.71	15.73	15.74	15.75	15.76
%ch	0.03	-0.11	-0.04	0.04	0.11	0.08	0.06	0.05
U.S.	2.71	2.68	2.65	2.62	2.6	2.58	2.56	2.54
%ch	-1.15	-1.19	-1.09	-0.95	-0.97	-0.83	-0.71	-0.59
Non-Durable Goods								
Portland PMSA	28	27.86	27.74	27.63	27.54	27.44	27.35	27.25
%ch	-0.49	-0.51	-0.42	-0.39	-0.34	-0.35	-0.35	-0.37
U.S.	4.17	4.15	4.12	4.1	4.08	4.05	4.03	4.01
%ch	-0.54	-0.61	-0.55	-0.57	-0.6	-0.59	-0.54	-0.54
Food Processing								
Portland PMSA	9.51	9.51	9.5	9.5	9.5	9.5	9.5	9.5
%ch	-0.08	-0.03	-0.02	-0.01	0	-0.01	0	-0.01
U.S.	1.64	1.65	1.65	1.65	1.65	1.65	1.65	1.65
%ch	0.25	0.14	0.16	0.11	0.01	0.01	0.07	0.08
Paper								
Portland PMSA	2.18	2.12	2.06	2.01	1.97	1.92	1.88	1.83
%ch	-2.9	-3.02	-2.52	-2.39	-2.23	-2.39	-2.37	-2.45
U.S.	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
%ch	0.04	0.03	0.08	0.03	-0.06	-0.02	0.05	0.11
Other Non-Durable Goods								
Portland PMSA	16.31	16.23	16.17	16.12	16.07	16.02	15.97	15.92
%ch	-0.39	-0.45	-0.38	-0.35	-0.3	-0.3	-0.3	-0.34
U.S.	2.15	2.12	2.1	2.07	2.05	2.02	2	1.98
%ch	-1.23	-1.3	-1.21	-1.21	-1.19	-1.18	-1.15	-1.17

Annual Employment (Portland MSA and U.S.)

	Manufacturing employment sectors				APR
	2040	2041	2042	2043	2000-43
Transport. Equipment					
Portland PMSA	4.83	4.77	4.73	4.68	- 2.0%
%ch	-1.3	-1.16	-0.92	-0.95	
U.S.	1.22	1.21	1.2	1.2	- 1.2%
%ch	-1.23	-1.12	-0.43	-0.16	
Other Durable Goods					
Portland PMSA	15.76	15.75	15.75	15.74	- 0.2%
%ch	-0.01	-0.02	-0.03	-0.04	
U.S.	2.53	2.52	2.52	2.52	- 1.1%
%ch	-0.52	-0.28	-0.19	-0.04	
Non-Durable Goods					
Portland PMSA	27.15	27.05	26.96	26.87	- 0.7%
%ch	-0.37	-0.34	-0.35	-0.32	
U.S.	3.98	3.96	3.94	3.93	- 1.1%
%ch	-0.64	-0.54	-0.51	-0.42	
Food Processing					
Portland PMSA	9.5	9.5	9.5	9.5	0.2%
%ch	0.02	-0.03	0	0	
U.S.	1.65	1.65	1.65	1.65	0.1%
%ch	-0.09	-0.04	0.01	0.03	
Paper					
Portland PMSA	1.79	1.75	1.71	1.67	- 3.1%
%ch	-2.37	-2.31	-2.25	-2.31	
U.S.	0.38	0.38	0.38	0.38	- 1.1%
%ch	-0.05	-0.13	-0.15	-0.05	
Other Non-Durable Goods					
Portland PMSA	15.86	15.81	15.76	15.71	- 0.6%
%ch	-0.37	-0.3	-0.35	-0.29	
U.S.	1.95	1.93	1.91	1.9	- 1.8%
%ch	-1.21	-1.04	-1.03	-0.88	

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2000	2001	2002	2003	2004	2005	2006	2007
Total Non-Manufacturing								
Portland PMSA	699.4	698.6	686.5	682.7	697.6	722.5	749.8	766.6
%ch	2.6	-0.1	-1.7	-0.6	2.2	3.6	3.8	2.2
U.S. (millions)	93.8	94.4	93.7	94.0	95.6	97.7	100.0	101.5
%ch	2.6	0.6	-0.7	0.4	1.7	2.3	2.3	1.6
Natural Resources								
Portland PMSA	1.9	1.7	1.7	1.7	1.7	1.8	1.7	1.6
%ch	-9.9	-7.5	-4.6	0.7	0.8	5.5	-5.3	-2.9
U.S. (millions)	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
%ch	0.1	1.1	-3.9	-1.8	3.2	6.2	9.1	5.7
Construction								
Portland PMSA	53.2	54.0	51.6	50.1	53.9	58.5	63.2	65.3
%ch	1.5	1.6	-4.5	-3.0	7.5	8.5	8.1	3.4
U.S. (millions)	6.8	6.8	6.7	6.7	7.0	7.3	7.7	7.6
%ch	3.72	0.57	-1.63	0.3	3.53	5.17	4.86	-0.81
Wholesale Trade								
Portland PMSA	55.58	56.29	54.63	54.79	55.11	56.29	57.47	58.13
%ch	3.6	1.28	-2.95	0.29	0.59	2.13	2.1	1.16
U.S. (millions)	5.93	5.77	5.65	5.61	5.66	5.76	5.9	6.02
%ch	0.68	-2.69	-2.08	-0.8	0.95	1.78	2.46	1.89
Retail Trade								
Portland PMSA	106.78	103.42	100.51	99.59	101.25	104.83	107.59	109.78
%ch	1.75	-3.14	-2.81	-0.91	1.67	3.53	2.63	2.04
U.S. (millions)	15.28	15.24	15.03	14.92	15.06	15.28	15.36	15.52
%ch	2.06	-0.26	-1.39	-0.73	0.96	1.46	0.49	1.05
Transportation, Warehousing and Utilities								
Portland PMSA	38.63	38.43	37.3	36.51	37.03	36.88	37.48	37.82
%ch	0.61	-0.53	-2.94	-2.1	1.4	-0.39	1.63	0.91
U.S. (millions)	5.01	4.97	4.82	4.76	4.81	4.92	5.02	5.1
%ch	2.18	-0.81	-3.07	-1.23	1.12	2.15	2.04	1.55
Information								
Portland PMSA	25.96	25.91	23.83	22.52	22.49	23.09	23.98	24.77
%ch	8.88	-0.18	-8.05	-5.5	-0.11	2.67	3.87	3.27
U.S. (millions)	2.59	2.61	2.43	2.26	2.21	2.16	2.14	2.13
%ch	7.52	0.51	-6.83	-6.84	-2.47	-2.3	-0.98	-0.25
Financial Activities								
Portland PMSA	64.85	65.05	65.58	66.43	66.07	68.22	70.63	70.37
%ch	-0.51	0.31	0.81	1.3	-0.55	3.26	3.53	-0.37
U.S. (millions)	7.78	7.9	7.96	8.08	8.11	8.2	8.37	8.35
%ch	0.42	1.5	0.69	1.52	0.35	1.13	2.06	-0.23

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2008	2009	2010	2011	2012	2013	2014	2015
Total Non-Manufacturing								
Portland PMSA	764.2	716.8	714.4	731.0	747.4	766.1	798.2	827.7
%ch	-0.3	-6.2	-0.3	2.3	2.2	2.5	4.2	3.7
U.S. (millions)	100.9	96.5	95.9	97.7	99.9	102.1	103.9	106.0
%ch	-0.6	-4.4	-0.6	1.9	2.3	2.2	1.8	2.0
Natural Resources								
Portland PMSA	1.6	1.2	1.1	1.1	1.0	1.0	1.1	1.4
%ch	-5.1	-21.5	-12.3	-1.7	-9.4	1.8	16.4	27.6
U.S. (millions)	0.8	0.7	0.7	0.8	0.9	0.9	0.9	0.9
%ch	5.9	-9.4	1.5	11.8	8.0	3.0	2.7	0.9
Construction								
Portland PMSA	60.8	49.5	45.1	46.6	48.2	49.5	55.2	59.9
%ch	-6.9	-18.7	-8.9	3.4	3.5	2.8	11.3	8.6
U.S. (millions)	7.2	6.0	5.5	5.5	5.6	5.8	6.1	6.6
%ch	-6.1	-16.01	-8.27	0.26	1.99	2.93	4.23	9.14
Wholesale Trade								
Portland PMSA	57.83	54.35	53.23	54.62	55.86	57.48	58.96	60.22
%ch	-0.51	-6.02	-2.06	2.62	2.26	2.91	2.57	2.14
U.S. (millions)	5.94	5.59	5.45	5.54	5.67	5.76	5.82	5.93
%ch	-1.21	-6.01	-2.41	1.67	2.37	1.53	1.02	1.81
Retail Trade								
Portland PMSA	108.56	101.15	101.16	102.38	103.93	105.12	109.26	113.41
%ch	-1.11	-6.83	0.02	1.2	1.52	1.14	3.94	3.8
U.S. (millions)	15.28	14.52	14.44	14.67	14.87	15.18	15.38	15.4
%ch	-1.49	-5	-0.53	1.57	1.35	2.06	1.33	0.14
Transportation, Warehousing and Utilities								
Portland PMSA	37.58	34.19	33.28	33.67	33.77	35.01	36.61	37.84
%ch	-0.64	-9.02	-2.65	1.16	0.29	3.68	4.58	3.36
U.S. (millions)	5.07	4.8	4.74	4.85	4.97	5.03	5.11	5.26
%ch	-0.56	-5.32	-1.14	2.34	2.37	1.26	1.6	2.89
Information								
Portland PMSA	24.6	22.87	22.46	22.42	22.47	23.23	23.32	23.46
%ch	-0.68	-7.05	-1.79	-0.15	0.19	3.42	0.38	0.61
U.S. (millions)	2.1	2.01	1.95	1.93	1.94	1.96	1.97	1.98
%ch	-1.31	-4.58	-2.93	-1.16	0.78	1.19	0.2	0.67
Financial Activities								
Portland PMSA	67.77	63.81	61.92	61.6	62.2	63.25	64.11	65.66
%ch	-3.7	-5.84	-2.97	-0.51	0.97	1.69	1.36	2.42
U.S. (millions)	8.2	7.84	7.7	7.7	7.79	7.89	7.9	7.9
%ch	-1.72	-4.46	-1.81	0.01	1.15	1.28	0.16	0.04

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2016	2017	2018	2019	2020	2021	2022	2023
Total Non-Manufacturing								
Portland PMSA	856.1	880.0	899.7	919.6	937.9	953.0	967.1	982.1
%ch	3.4	2.8	2.3	2.2	2.0	1.6	1.5	1.6
U.S. (millions)	108.4	110.4	111.9	112.9	113.6	114.3	114.9	115.6
%ch	2.2	1.9	1.3	0.9	0.7	0.6	0.6	0.6
Natural Resources								
Portland PMSA	1.7	1.8	1.8	1.8	1.7	1.7	1.6	1.6
%ch	18.9	5.9	-1.3	-1.8	-1.7	-3.3	-3.2	-2.6
U.S. (millions)	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
%ch	3.2	1.3	1.0	-0.4	0.2	1.2	0.9	-0.5
Construction								
Portland PMSA	64.4	67.2	69.0	70.8	72.5	73.7	74.8	76.3
%ch	7.5	4.4	2.6	2.6	2.4	1.7	1.5	1.9
U.S. (millions)	7.2	7.7	7.9	8.0	8.1	8.1	8.2	8.3
%ch	9.53	5.89	2.44	1.52	1.16	0.73	0.73	1.12
Wholesale Trade								
Portland PMSA	61.47	62.87	64.2	65.48	66.67	67.69	68.56	69.45
%ch	2.07	2.27	2.13	1.98	1.82	1.54	1.29	1.29
U.S. (millions)	6.07	6.2	6.29	6.36	6.39	6.43	6.46	6.48
%ch	2.36	2.14	1.6	0.98	0.59	0.55	0.44	0.4
Retail Trade								
Portland PMSA	116.71	118.89	120.39	121.89	123.25	124.42	125.5	126.77
%ch	2.91	1.87	1.27	1.25	1.12	0.95	0.87	1.01
U.S. (millions)	15.46	15.52	15.53	15.5	15.43	15.33	15.23	15.12
%ch	0.37	0.42	0.06	-0.18	-0.46	-0.65	-0.67	-0.73
Transportation, Warehousing and Utilities								
Portland PMSA	39	39.95	40.57	41.05	41.44	41.68	41.84	42.03
%ch	3.04	2.44	1.55	1.18	0.96	0.57	0.39	0.46
U.S. (millions)	5.44	5.61	5.73	5.76	5.77	5.77	5.77	5.76
%ch	3.41	3.08	2.15	0.6	0.12	0.04	-0.05	-0.1
Information								
Portland PMSA	24.07	24.75	25.38	26.07	26.79	27.47	28.15	28.81
%ch	2.6	2.79	2.55	2.72	2.78	2.54	2.46	2.35
U.S. (millions)	2.04	2.11	2.16	2.21	2.27	2.32	2.39	2.45
%ch	3.14	3.53	2.02	2.44	2.55	2.56	2.77	2.75
Financial Activities								
Portland PMSA	66.78	67.05	67.29	67.75	68.26	68.61	68.97	69.35
%ch	1.7	0.41	0.35	0.69	0.76	0.51	0.52	0.55
U.S. (millions)	7.87	7.81	7.75	7.74	7.74	7.73	7.73	7.74
%ch	-0.35	-0.87	-0.67	-0.23	0.02	-0.13	0.03	0.1

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2024	2025	2026	2027	2028	2029	2030	2031
Total Non-Manufacturing								
Portland PMSA	996.9	1,011.0	1,026.0	1,041.2	1,056.0	1,071.0	1,087.1	1,102.6
%ch	1.5	1.4	1.5	1.5	1.4	1.4	1.5	1.4
U.S. (millions)	116.3	117.1	118.1	119.1	120.2	121.3	122.4	123.4
%ch	0.6	0.7	0.8	0.9	0.9	0.9	0.9	0.8
Natural Resources								
Portland PMSA	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4
%ch	-3.1	-2.1	-0.8	-1.6	-2.5	-2.0	-0.5	-0.6
U.S. (millions)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9
%ch	-0.7	-0.6	-0.3	-0.4	-0.3	-0.2	-0.5	-0.5
Construction								
Portland PMSA	77.8	79.8	81.9	83.9	85.8	87.8	90.1	92.3
%ch	2.1	2.5	2.6	2.5	2.3	2.3	2.6	2.4
U.S. (millions)	8.4	8.5	8.7	8.9	9.0	9.2	9.4	9.5
%ch	1.38	1.83	2.14	1.94	1.64	1.65	2.03	1.68
Wholesale Trade								
Portland PMSA	70.37	71.15	71.94	72.84	73.71	74.57	75.45	76.38
%ch	1.33	1.1	1.12	1.25	1.2	1.16	1.18	1.24
U.S. (millions)	6.52	6.55	6.58	6.61	6.6	6.59	6.57	6.55
%ch	0.5	0.55	0.48	0.44	-0.14	-0.25	-0.25	-0.34
Retail Trade								
Portland PMSA	128.17	129.7	131.31	132.91	134.46	136.01	137.66	139.34
%ch	1.11	1.19	1.25	1.22	1.17	1.15	1.21	1.22
U.S. (millions)	15.07	15.08	15.1	15.14	15.21	15.27	15.33	15.39
%ch	-0.29	0.06	0.13	0.27	0.48	0.4	0.37	0.39
Transportation, Warehousing and Utilities								
Portland PMSA	42.25	42.44	42.7	43	43.29	43.56	43.86	44.18
%ch	0.51	0.45	0.61	0.71	0.66	0.63	0.7	0.72
U.S. (millions)	5.8	5.87	5.93	5.95	5.96	5.98	5.97	5.95
%ch	0.72	1.17	1	0.31	0.25	0.23	-0.11	-0.39
Information								
Portland PMSA	29.39	29.89	30.39	30.89	31.43	32.01	32.64	33.27
%ch	2.02	1.71	1.66	1.64	1.76	1.84	1.97	1.93
U.S. (millions)	2.49	2.5	2.51	2.53	2.55	2.58	2.61	2.66
%ch	1.3	0.6	0.49	0.51	0.89	1.08	1.44	1.64
Financial Activities								
Portland PMSA	69.75	70.15	70.48	70.91	71.41	71.98	72.6	73.16
%ch	0.57	0.58	0.47	0.61	0.7	0.8	0.86	0.78
U.S. (millions)	7.75	7.76	7.75	7.76	7.79	7.83	7.87	7.9
%ch	0.14	0.12	-0.1	0.13	0.35	0.51	0.52	0.44

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2032	2033	2034	2035	2036	2037	2038	2039
Total Non-Manufacturing								
Portland PMSA	1,116.6	1,130.3	1,144.3	1,158.8	1,173.9	1,188.7	1,202.9	1,216.5
%ch	1.3	1.2	1.2	1.3	1.3	1.3	1.2	1.1
U.S. (millions)	124.4	125.5	126.5	127.5	128.7	129.8	131.0	132.1
%ch	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Natural Resources								
Portland PMSA	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
%ch	-3.3	-3.8	-1.2	0.7	0.7	-0.2	-0.6	-1.1
U.S. (millions)	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
%ch	-0.3	-0.3	0.0	0.1	0.2	0.1	0.0	-0.2
Construction								
Portland PMSA	93.8	95.3	97.1	99.3	101.7	104.0	106.3	108.7
%ch	1.7	1.5	1.9	2.3	2.4	2.3	2.3	2.2
U.S. (millions)	9.6	9.7	9.7	9.9	10.1	10.2	10.4	10.6
%ch	0.75	0.48	0.96	1.59	1.81	1.64	1.65	1.56
Wholesale Trade								
Portland PMSA	77.21	77.99	78.76	79.55	80.35	81.1	81.75	82.3
%ch	1.08	1.01	1	1	1.01	0.93	0.81	0.67
U.S. (millions)	6.53	6.52	6.51	6.49	6.48	6.47	6.46	6.44
%ch	-0.26	-0.2	-0.15	-0.23	-0.19	-0.16	-0.19	-0.28
Retail Trade								
Portland PMSA	140.73	141.95	143.24	144.63	146.09	147.45	148.68	149.78
%ch	0.99	0.86	0.91	0.97	1.01	0.93	0.84	0.74
U.S. (millions)	15.46	15.53	15.6	15.67	15.73	15.82	15.9	15.97
%ch	0.43	0.45	0.47	0.42	0.42	0.55	0.5	0.48
Transportation, Warehousing and Utilities								
Portland PMSA	44.43	44.62	44.81	45.01	45.25	45.51	45.72	45.9
%ch	0.56	0.44	0.42	0.45	0.53	0.57	0.47	0.4
U.S. (millions)	5.93	5.9	5.88	5.85	5.81	5.77	5.74	5.69
%ch	-0.32	-0.4	-0.38	-0.6	-0.64	-0.62	-0.63	-0.73
Information								
Portland PMSA	33.89	34.43	35	35.56	36.12	36.69	37.29	37.86
%ch	1.85	1.61	1.65	1.61	1.56	1.6	1.63	1.52
U.S. (millions)	2.69	2.72	2.76	2.79	2.82	2.86	2.92	2.98
%ch	1.47	1.08	1.2	1.1	1.07	1.47	2.02	2.09
Financial Activities								
Portland PMSA	73.6	74.16	74.83	75.54	76.21	76.9	77.55	78.11
%ch	0.6	0.76	0.91	0.95	0.89	0.89	0.85	0.73
U.S. (millions)	7.92	7.96	8.02	8.09	8.14	8.2	8.25	8.29
%ch	0.24	0.54	0.77	0.81	0.67	0.67	0.64	0.47

Annual Employment (Portland MSA and U.S.)

	Nonmanufacturing employment sectors				APR
	2040	2041	2042	2043	2000-43
Total Non-Manufacturing					
Portland PMSA	1,229.7	1,241.5	1,251.7	1,260.1	1.4%
%ch	1.1	1.0	0.8	0.7	
U.S. (millions)	133.3	134.4	135.6	136.6	0.9%
%ch	0.9	0.9	0.9	0.8	
Natural Resources					
Portland PMSA	1.3	1.3	1.3	1.3	-0.9%
%ch	-1.1	0.1	0.0	-0.3	
U.S. (millions)	0.9	0.9	0.9	0.9	1.0%
%ch	-0.1	0.0	-0.1	-0.2	
Construction					
Portland PMSA	110.9	113.2	115.5	117.8	1.9%
%ch	2.0	2.1	2.0	2.0	
U.S. (millions)	10.7	10.9	11.0	11.2	1.2%
%ch	1.32	1.48	1.41	1.4	
Wholesale Trade					
Portland PMSA	82.72	82.95	82.96	82.72	0.9%
%ch	0.5	0.28	0.01	-0.29	
U.S. (millions)	6.42	6.4	6.39	6.37	0.2%
%ch	-0.32	-0.28	-0.2	-0.27	
Retail Trade					
Portland PMSA	150.66	151.35	151.76	151.84	0.8%
%ch	0.59	0.46	0.27	0.05	
U.S. (millions)	16.05	16.11	16.16	16.18	0.1%
%ch	0.51	0.38	0.26	0.17	
Transportation, Warehousing and Utilities					
Portland PMSA	46.05	46.12	46.14	46.05	0.4%
%ch	0.32	0.17	0.03	-0.18	
U.S. (millions)	5.66	5.63	5.61	5.59	0.3%
%ch	-0.64	-0.47	-0.31	-0.35	
Information					
Portland PMSA	38.31	38.71	39.1	39.34	1.0%
%ch	1.18	1.07	0.98	0.63	
U.S. (millions)	3.01	3.06	3.12	3.18	0.5%
%ch	1.26	1.53	2	1.93	
Financial Activities					
Portland PMSA	78.74	79.35	79.89	80.37	0.5%
%ch	0.8	0.78	0.68	0.61	
U.S. (millions)	8.34	8.39	8.44	8.49	0.2%
%ch	0.62	0.65	0.58	0.56	

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2000	2001	2002	2003	2004	2005	2006	2007
Professional Business Services								
Portland PMSA	130.45	127.48	121.67	117.89	122.09	128.5	134.82	136.43
%ch	5.36	-2.28	-4.56	-3.11	3.56	5.25	4.92	1.2
U.S. (millions)	16.67	16.48	15.97	15.98	16.39	16.95	17.57	17.95
%ch	4.49	-1.15	-3.07	0.06	2.52	3.44	3.66	2.13
Education & Health Services								
Portland PMSA	102.91	106.55	110.99	113.62	115.64	119.83	123.22	127.75
%ch	2.27	3.53	4.16	2.38	1.77	3.62	2.83	3.68
U.S. (millions)	15.11	15.64	16.2	16.59	16.95	17.37	17.82	18.32
%ch	2.13	3.53	3.57	2.39	2.18	2.48	2.62	2.79
Leisure & Hospitality								
Portland PMSA	85.78	85.47	84.82	85.59	87.64	90.08	94.09	97.96
%ch	1.5	-0.36	-0.76	0.9	2.4	2.79	4.45	4.12
U.S. (millions)	11.86	12.03	11.99	12.18	12.49	12.81	13.11	13.43
%ch	2.74	1.46	-0.39	1.58	2.6	2.57	2.31	2.43
Other Services								
Portland PMSA	33.42	34.18	33.89	33.98	34.74	34.51	35.65	36.62
%ch	3.13	2.28	-0.86	0.26	2.23	-0.67	3.31	2.72
U.S. (millions)	5.17	5.26	5.37	5.4	5.41	5.39	5.44	5.49
%ch	1.6	1.73	2.17	0.53	0.16	-0.27	0.79	1.02
Fed. Government, Civilian								
Portland PMSA	18.89	18.13	17.97	18.56	18.42	18.36	17.97	17.98
%ch	4	-4.05	-0.89	3.3	-0.78	-0.31	-2.13	0.07
U.S. (millions)	2.87	2.76	2.77	2.76	2.73	2.73	2.73	2.74
%ch	3.44	-3.55	0.08	-0.19	-1.06	0.02	0.04	0.1
State & Local Government								
Portland PMSA	111.61	113.33	115.77	114.95	117.86	119.28	120.98	124.29
%ch	2.2	1.54	2.16	-0.71	2.53	1.2	1.43	2.73
U.S. (millions)	17.93	18.36	18.74	18.82	18.89	19.07	19.24	19.48
%ch	2.18	2.41	2.11	0.41	0.36	0.98	0.89	1.26

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2008	2009	2010	2011	2012	2013	2014	2015
Professional Business Services								
Portland PMSA	136.55	124.92	127.8	133.55	138.66	143.08	151.93	161.58
%ch	0.08	-8.52	2.3	4.5	3.83	3.19	6.19	6.35
U.S. (millions)	17.74	16.58	16.72	17.33	17.93	18.54	19.2	20.07
%ch	-1.15	-6.56	0.89	3.6	3.48	3.39	3.59	4.51
Education & Health Services								
Portland PMSA	132.57	135.16	139.38	143.08	145.2	147.29	151.78	155.44
%ch	3.77	1.96	3.12	2.66	1.48	1.44	3.05	2.41
U.S. (millions)	18.84	19.19	19.53	19.89	20.32	20.68	20.94	21.2
%ch	2.82	1.88	1.76	1.82	2.19	1.76	1.26	1.24
Leisure & Hospitality								
Portland PMSA	99.26	94.46	94.48	96.75	99.64	103.55	108.08	110.69
%ch	1.32	-4.84	0.01	2.41	2.98	3.92	4.38	2.41
U.S. (millions)	13.44	13.07	13.04	13.35	13.75	14.16	14.42	14.59
%ch	0.09	-2.74	-0.21	2.35	2.97	2.98	1.86	1.15
Other Services								
Portland PMSA	37.13	35.26	34.6	35.27	36.48	37.6	37.9	38.02
%ch	1.39	-5.04	-1.86	1.93	3.45	3.05	0.81	0.32
U.S. (millions)	5.51	5.37	5.33	5.36	5.44	5.48	5.51	5.47
%ch	0.4	-2.71	-0.66	0.56	1.42	0.89	0.41	-0.63
Fed. Government, Civilian								
Portland PMSA	18.32	18.56	18.58	18.01	17.51	17.43	17.72	17.58
%ch	1.91	1.27	0.11	-3.08	-2.75	-0.46	1.64	-0.78
U.S. (millions)	2.76	2.83	2.98	2.86	2.82	2.75	2.8	2.78
%ch	0.94	2.52	5.15	-3.93	-1.53	-2.5	1.95	-0.56
State & Local Government								
Portland PMSA	128.74	129.57	128.81	127.5	127.41	127.78	132.8	135.67
%ch	3.58	0.64	-0.58	-1.01	-0.07	0.29	3.93	2.16
U.S. (millions)	19.74	19.72	19.51	19.23	19.1	19.11	19.17	19.32
%ch	1.32	-0.1	-1.05	-1.45	-0.69	0.06	0.3	0.79

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2016	2017	2018	2019	2020	2021	2022	2023
Professional Business Services								
Portland PMSA	170.26	177.69	184	190.51	196.35	201.1	205.69	210.29
%ch	5.37	4.36	3.55	3.54	3.07	2.42	2.28	2.24
U.S. (millions)	20.8	21.38	21.82	22.3	22.77	23.23	23.76	24.28
%ch	3.63	2.81	2.06	2.2	2.09	2.04	2.25	2.21
Education & Health Services								
Portland PMSA	159.91	164.58	168.9	173	176.68	180.09	183.35	186.68
%ch	2.87	2.92	2.63	2.42	2.13	1.93	1.81	1.82
U.S. (millions)	21.66	22.11	22.53	22.83	22.98	23.11	23.21	23.29
%ch	2.18	2.07	1.92	1.33	0.66	0.54	0.44	0.37
Leisure & Hospitality								
Portland PMSA	113.23	115.7	117.81	119.95	121.87	123.29	124.58	126.03
%ch	2.29	2.18	1.83	1.81	1.6	1.17	1.04	1.17
U.S. (millions)	14.71	14.91	15.06	15.14	15.17	15.17	15.16	15.13
%ch	0.84	1.36	1.02	0.54	0.2	-0.01	-0.08	-0.2
Other Services								
Portland PMSA	38.56	39.44	40.39	41.37	42.37	43.24	44.04	44.9
%ch	1.41	2.3	2.41	2.43	2.41	2.05	1.86	1.93
U.S. (millions)	5.45	5.46	5.47	5.44	5.42	5.41	5.4	5.39
%ch	-0.42	0.18	0.2	-0.48	-0.36	-0.24	-0.18	-0.29
Fed. Government, Civilian								
Portland PMSA	17.3	17.13	16.96	16.81	17.4	16.64	16.56	16.47
%ch	-1.57	-0.99	-1.02	-0.84	3.46	-4.36	-0.49	-0.55
U.S. (millions)	2.73	2.7	2.67	2.64	2.78	2.63	2.61	2.6
%ch	-1.9	-1.18	-1.21	-0.93	5.12	-5.45	-0.55	-0.42
State & Local Government								
Portland PMSA	139.2	142.13	144.91	147.47	149.75	151.93	154.09	156.22
%ch	2.6	2.1	1.96	1.77	1.55	1.45	1.42	1.38
U.S. (millions)	19.51	19.73	20	20.25	20.49	20.73	20.98	21.21
%ch	1.01	1.11	1.36	1.26	1.19	1.15	1.2	1.11

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2024	2025	2026	2027	2028	2029	2030	2031
Professional Business Services								
Portland PMSA	214.15	217.42	221.22	224.91	228.25	231.55	235.18	238.57
%ch	1.84	1.52	1.75	1.67	1.49	1.45	1.57	1.44
U.S. (millions)	24.72	25.14	25.63	26.11	26.56	27	27.46	27.89
%ch	1.79	1.73	1.94	1.87	1.72	1.66	1.7	1.55
Education & Health Services								
Portland PMSA	190.13	193.55	196.95	200.42	203.93	207.47	211.05	214.43
%ch	1.85	1.79	1.76	1.76	1.75	1.73	1.73	1.6
U.S. (millions)	23.41	23.55	23.7	23.89	24.14	24.39	24.63	24.87
%ch	0.51	0.6	0.62	0.81	1.05	1.04	0.98	0.98
Leisure & Hospitality								
Portland PMSA	127.58	128.88	130.28	131.79	133.28	134.81	136.45	138.13
%ch	1.23	1.02	1.09	1.16	1.13	1.15	1.22	1.23
U.S. (millions)	15.11	15.08	15.08	15.14	15.23	15.33	15.43	15.52
%ch	-0.16	-0.17	0.03	0.35	0.6	0.68	0.63	0.63
Other Services								
Portland PMSA	45.78	46.57	47.36	48.18	48.98	49.8	50.66	51.51
%ch	1.97	1.73	1.71	1.72	1.67	1.66	1.73	1.67
U.S. (millions)	5.39	5.41	5.43	5.47	5.51	5.55	5.58	5.59
%ch	0.09	0.35	0.45	0.6	0.79	0.68	0.49	0.26
Fed. Government, Civilian								
Portland PMSA	16.51	16.6	16.7	16.79	16.88	16.96	17.66	17.16
%ch	0.25	0.6	0.56	0.54	0.53	0.53	4.1	-2.86
U.S. (millions)	2.62	2.65	2.69	2.73	2.76	2.8	2.98	2.88
%ch	0.71	1.38	1.36	1.34	1.33	1.31	6.31	-3.24
State & Local Government								
Portland PMSA	158.38	160.73	163.02	165.27	167.5	169.77	172.07	174.44
%ch	1.38	1.48	1.43	1.38	1.35	1.35	1.36	1.38
U.S. (millions)	21.39	21.52	21.64	21.77	21.89	22.01	22.12	22.2
%ch	0.84	0.62	0.58	0.57	0.56	0.57	0.47	0.36

Annual Employment (Portland MSA and U.S.)

Nonmanufacturing employment sectors

	2032	2033	2034	2035	2036	2037	2038	2039
Professional Business Services								
Portland PMSA	241.86	245.33	248.51	251.66	255.13	258.76	262.33	266.18
%ch	1.38	1.43	1.3	1.27	1.38	1.42	1.38	1.47
U.S. (millions)	28.34	28.81	29.24	29.66	30.12	30.59	31.05	31.54
%ch	1.62	1.65	1.52	1.44	1.53	1.55	1.51	1.6
Education & Health Services								
Portland PMSA	217.76	221.04	224.28	227.46	230.59	233.5	236.17	238.58
%ch	1.55	1.51	1.47	1.42	1.38	1.26	1.14	1.02
U.S. (millions)	25.14	25.4	25.67	25.91	26.16	26.42	26.66	26.87
%ch	1.06	1.07	1.04	0.93	0.98	0.98	0.91	0.78
Leisure & Hospitality								
Portland PMSA	139.63	141.15	142.64	144.1	145.62	147.12	148.5	149.78
%ch	1.09	1.09	1.06	1.03	1.05	1.03	0.94	0.86
U.S. (millions)	15.63	15.74	15.84	15.94	16.03	16.15	16.26	16.38
%ch	0.66	0.71	0.66	0.62	0.59	0.74	0.69	0.73
Other Services								
Portland PMSA	52.28	53.08	53.88	54.72	55.59	56.45	57.28	58.09
%ch	1.51	1.52	1.52	1.56	1.59	1.54	1.47	1.41
U.S. (millions)	5.6	5.62	5.64	5.65	5.67	5.68	5.71	5.73
%ch	0.27	0.32	0.31	0.22	0.27	0.29	0.39	0.39
Fed. Government, Civilian								
Portland PMSA	17.27	17.36	17.45	17.54	17.63	17.73	17.82	17.91
%ch	0.65	0.53	0.53	0.53	0.53	0.52	0.52	0.51
U.S. (millions)	2.92	2.95	2.99	3.03	3.06	3.1	3.14	3.17
%ch	1.27	1.25	1.24	1.23	1.21	1.2	1.19	1.18
State & Local Government								
Portland PMSA	176.77	179.07	181.4	183.77	186.19	188.6	191	193.43
%ch	1.34	1.3	1.3	1.3	1.32	1.3	1.27	1.27
U.S. (millions)	22.28	22.37	22.47	22.56	22.65	22.74	22.83	22.91
%ch	0.39	0.41	0.42	0.4	0.42	0.4	0.38	0.37

Annual Employment (Portland MSA and U.S.)

	Nonmanufacturing employment sectors				APR
	2040	2041	2042	2043	2000-43
Professional Business Services					
Portland PMSA	270.47	274.51	278.4	282.05	1.8%
%ch	1.61	1.49	1.42	1.31	
U.S. (millions)	32.1	32.66	33.22	33.77	1.7%
%ch	1.77	1.72	1.72	1.66	
Education & Health Services					
Portland PMSA	240.78	242.46	243.8	244.71	2.0%
%ch	0.92	0.7	0.55	0.37	
U.S. (millions)	27.08	27.26	27.44	27.6	1.4%
%ch	0.78	0.69	0.66	0.55	
Leisure & Hospitality					
Portland PMSA	151.01	152.01	152.67	153.05	1.4%
%ch	0.82	0.66	0.44	0.24	
U.S. (millions)	16.5	16.62	16.72	16.81	0.8%
%ch	0.71	0.72	0.64	0.55	
Other Services					
Portland PMSA	58.88	59.61	60.28	60.91	1.4%
%ch	1.37	1.24	1.12	1.05	
U.S. (millions)	5.75	5.77	5.79	5.81	0.3%
%ch	0.42	0.35	0.38	0.33	
Fed. Government, Civilian					
Portland PMSA	18.57	18.1	18.22	18.31	-0.1%
%ch	3.67	-2.49	0.61	0.51	
U.S. (millions)	3.35	3.25	3.29	3.33	0.3%
%ch	5.59	-2.84	1.14	1.13	
State & Local Government					
Portland PMSA	195.83	198.29	200.79	203.33	1.4%
%ch	1.24	1.26	1.26	1.26	
U.S. (millions)	23	23.1	23.2	23.3	0.6%
%ch	0.39	0.41	0.43	0.44	

U.S. Population and Labor Force Measures

	1970	1975	1980	1985	1990	1995	2000
U.S. Population (in millions)							
Population (U.S.)	205.4	216.2	228.0	238.7	250.6	267.0	282.8
Pct. Chg. (5-year avg.)	1.09	1.03	1.06	0.93	0.97	1.27	1.16
Annual Avg. Change	2.2	2.2	2.4	2.2	2.4	3.3	3.2
Population by Age (in millions)							
0 to 4 years old	17.2	16.1	16.5	17.9	18.9	19.6	19.2
5 to 15 years old	44.8	42.5	38.8	37.4	38.7	42.6	45.2
16 to 21 years old	22.6	25.2	25.9	23.4	22.4	21.7	24.3
22 to 54 years old	82.0	89.6	99.3	109.4	118.2	127.9	134.5
55 to 64 years old	18.7	20.1	21.8	22.1	21.1	21.4	24.5
65 to 84 years old	18.7	20.9	23.5	25.8	28.2	30.1	30.8
85 years and older	1.4	1.8	2.3	2.7	3.1	3.7	4.3
Population Share by Age (in percent)							
0 to 4 years old	8.37	7.42	7.24	7.48	7.54	7.34	6.79
5 to 16 years old	21.80	19.64	17.00	15.68	15.45	15.95	15.98
17 to 21 years old	10.99	11.67	11.36	9.82	8.94	8.14	8.58
22 to 54 years old	39.91	41.45	43.55	45.83	47.15	47.90	47.57
55 to 64 years old	9.11	9.29	9.55	9.26	8.42	8.00	8.66
65 to 84 years old	9.12	9.68	10.30	10.81	11.27	11.29	10.90
85 years and older	0.70	0.85	1.00	1.12	1.23	1.39	1.52
Population Change (annual pct. change)							
0 to 4 years old	-2.71	-1.37	0.57	1.58	1.14	0.73	-0.41
5 to 16 years old	0.79	-1.06	-1.81	-0.69	0.67	1.93	1.19
17 to 21 years old	3.20	2.27	0.51	-1.97	-0.90	-0.61	2.22
22 to 54 years old	1.28	1.80	2.07	1.96	1.55	1.59	1.02
55 to 64 years old	1.80	1.42	1.62	0.31	-0.93	0.24	2.78
65 to 84 years old	1.49	2.25	2.32	1.91	1.82	1.30	0.46
85 years and older	5.66	4.99	4.53	3.24	2.84	3.73	3.01
Labor Force (in millions)							
Population 16 years and older	143.4	157.7	172.7	183.4	193.0	204.8	218.4
Labor Force, total	82.8	93.8	107.0	115.9	125.9	133.1	142.6
16 to 64 years old	79.6	90.8	103.9	113.0	122.4	129.2	138.3
65 years and older	3.2	3.0	3.1	2.9	3.5	3.9	4.3
Participation Rate (in percent)							
Labor Force, total	57.7	59.5	61.9	63.2	65.2	65.0	65.3
16 to 64 years old	64.6	67.3	70.7	72.9	75.7	75.6	75.4
65 years and older	16.0	13.0	11.9	10.2	11.0	11.5	12.4
Employment & person-hour							
Nonfarm Empl. (millions)	71.0	77.1	90.5	97.5	109.5	117.3	131.9
Unempl. Rate (percent)	5.0	8.5	7.2	7.2	5.6	5.6	4.0
Average Weekly Hours	35.9	34.6	33.7	33.9	33.3	33.4	33.4
Mfg. Workweek (hours)	39.8	39.4	39.7	40.5	40.5	41.3	41.2
Durable Mfg.	40.5	40.0	40.3	41.3	41.2	42.1	41.8
Nondurable Mfg.	39.0	38.6	38.8	39.4	39.6	40.1	40.3
Productivity Measures (annual pct. change)							
GDP / Employment	0.28	1.04	0.39	1.79	0.98	1.17	1.92
FRB Ind. Production, all	3.23	1.76	4.55	2.25	2.94	3.22	5.80
FRB Ind. Production, Mfg.	3.50	1.78	4.22	1.72	2.62	2.89	5.15
Employment Cost Index (annual pct. change)							
Pvt. Sector wages & salaries			7.88	6.01	3.72	3.07	3.67

U.S. Population and Labor Force Measures

	2005	2010	2015	2020	2025	2030	2035	2040
U.S. Population (in millions)								
Population (U.S.)	296.5	310.1	321.9	334.5	347.0	359.0	370.2	380.5
Pct. Chg. (5-year avg.)	0.95	0.9	0.75	0.77	0.74	0.68	0.61	0.55
Annual Avg. Change	2.7	2.7	2.4	2.5	2.5	2.4	2.2	2.1
Population by Age (in millions)								
0 to 4 years old	19.9	20.2	20.9	21.6	21.9	22.1	22.3	22.8
5 to 15 years old	45.2	45.2	45.2	46.1	47.8	49.3	49.9	50.4
16 to 21 years old	25.3	26.8	25.5	25.4	25.5	26.2	27.6	28.1
22 to 54 years old	138.5	140.3	141.5	142.4	145.3	149.7	154.3	158.7
55 to 64 years old	30.8	37.0	40.9	42.7	41.1	38.8	38.6	40.7
65 to 84 years old	32.0	35.0	41.6	49.5	57.9	63.9	65.8	65.6
85 years and older	4.8	5.6	6.4	6.7	7.4	9.0	11.7	14.2
Population Share by Age (in percent)								
0 to 4 years old	6.72	6.51	6.49	6.47	6.32	6.15	6.03	6.00
5 to 16 years old	15.23	14.59	14.03	13.79	13.78	13.73	13.49	13.25
17 to 21 years old	8.54	8.63	7.93	7.58	7.36	7.29	7.45	7.39
22 to 54 years old	46.71	45.25	43.95	42.56	41.88	41.70	41.68	41.69
55 to 64 years old	10.38	11.92	12.70	12.78	11.83	10.81	10.43	10.70
65 to 84 years old	10.80	11.30	12.92	14.80	16.68	17.81	17.77	17.23
85 years and older	1.61	1.80	1.97	2.01	2.15	2.51	3.15	3.73
Population Change (annual pct. change)								
0 to 4 years old	0.74	0.28	0.69	0.69	0.28	0.12	0.24	0.44
5 to 16 years old	-0.02	0.04	-0.03	0.42	0.72	0.61	0.25	0.20
17 to 21 years old	0.87	1.10	-0.92	-0.14	0.13	0.49	1.05	0.40
22 to 54 years old	0.58	0.26	0.17	0.12	0.41	0.60	0.60	0.56
55 to 64 years old	4.66	3.75	2.04	0.88	-0.80	-1.12	-0.11	1.07
65 to 84 years old	0.76	1.81	3.48	3.55	3.17	2.02	0.57	-0.07
85 years and older	2.17	3.15	2.64	1.19	2.03	3.87	5.33	4.01
Labor Force (in millions)								
Population 16 years and older	231.4	244.6	255.9	266.7	277.2	287.6	297.9	307.3
Labor Force, total	149.3	153.9	159.2	164.3	167.7	171.6	176.5	181.8
16 to 64 years old	144.0	147.2	150.2	153.3	154.7	157.2	161.7	167.1
65 years and older	5.3	6.7	8.9	11.0	12.9	14.4	14.8	14.7
Participation Rate (in percent)								
Labor Force, total	64.5	62.9	62.2	61.6	60.5	59.7	59.2	59.2
16 to 64 years old	74.0	72.1	72.3	72.8	73.0	73.2	73.4	73.5
65 years and older	14.3	16.5	18.6	19.6	19.8	19.8	19.1	18.4
Employment & person-hour								
Nonfarm Empl. (millions)	133.7	129.9	140.5	149.6	153.5	159.3	164.5	170.6
Unempl. Rate (percent)	5.1	9.6	6.4	5.1	5.1	4.9	4.9	5.0
Average Weekly Hours	32.6	32.3	32.7	32.5	32.5	32.5	32.5	32.5
Mfg. Workweek (hours)	40.6	41.1	41.5	41.2	41.0	41.0	41.0	41.0
Durable Mfg.	41.1	41.3	41.8	41.3	41.0	41.0	41.0	41.0
Nondurable Mfg.	39.9	40.8	41.0	41.0	41.0	41.0	41.0	40.9
Productivity Measures (annual pct. change)								
GDP / Employment	2.24	1.34	0.78	1.62	1.85	1.65	1.75	1.64
FRB Ind. Production, all	0.81	-1.66	3.12	3.05	2.93	2.78	2.51	2.46
FRB Ind. Production, Mfg.	0.69	-1.04	3.12	2.84	2.38	2.15	1.99	1.89
Employment Cost Index (annual pct. change)								
Pvt. Sector wages & salaries	3.00	2.49	1.96	2.61	2.57	2.57	2.50	2.47

Key U.S. Economic Forecast Indicators

	1975	1980	1985	1990	1995	2000	2005
Components of GDP							
	inflation adjusted (in pct. change)						
Gross Domesitc Product	2.7	3.7	3.3	3.4	2.6	4.3	2.5
Consumption	3.2	3.2	3.8	3.3	2.8	4.6	3.1
Durables	5.1	3.4	7.7	3.7	3.8	9.8	6.7
Computers			105.9	43.8	51.4	59.6	30.7
Software			103.5	49.6	51.9	42.2	29.5
Info. Processing Equipment	2.6	0.6	54.9	39.8	48.9	53.7	30.4
Nondurables	1.4	2.6	2.5	2.4	2.1	3.6	2.7
Food	1	2.1	1.7	2.4	0.9	2.1	2.2
Gasoline & other fuels	1.6	-0.7	1.1	1.9	1.8	1.2	0.2
Clothing & footwear	3.8	5.9	5.5	3.7	3.8	5.1	3.8
Gross Domestic Investments	1.3	7.2	5.6	1.4	4.6	8.9	2.4
Nonresidential Fixed Investments	2.4	7.9	5	2	4.7	9.9	0.8
Industrial Equipment	1.3	4	-0.2	0.5	4.3	3.9	-1.6
Computer Equipment	24.6	61.9	42.5	14.6	29.2	39.1	8.1
Transportation Equip.	3.3	5	3.7	-2.9	8.4	6.7	-0.6
Structures/Buildings	-0.8	7.8	3	-2.1	-2	4.9	-4.6
Residential Fixed Investments	0.8	3.6	4.6	0.1	3.4	5.2	6.5
Equipment	7.5	6.6	5.1	2.6	0.6	4.4	5.3
Structures/Buildings	0.4	3.9	4.4	0	3.5	6.4	6.5
Exports	6.9	7.5	0.4	11	7.2	7	1.8
Goods	7.4	8.1	-0.5	11	7.8	8.2	1.4
Services	5.6	5.4	3.4	11	5.7	4.1	2.6
Imports	1.3	6.5	8.6	5.3	7	11.6	4.3
Federal Spending	-2.4	2.3	5.2	2.4	-2.2	-0.1	4.8
State & Local Spending	3.1	1.2	1.7	3.8	2.2	3.4	1.2
Inflation Measures							
	inflation adjusted (in pct. change)						
GDP Deflator	6.6	7.2	5.2	3.1	2.4	1.7	2.4
Consumer Price Index	6.7	8.9	5.5	4	3.1	2.5	2.5
excluding Food & Energy	5.7	8.4	6.2	4.4	3.5	2.4	2.1
Producer Price Index	9.6	9	2.8	2.4	1.4	1.3	3.5
Employment Cost Index		7.9	6	3.7	3.1	3.7	3
Interest Rates							
	(in percents)						
Fed Funds	5.8	13.4	8.1	8.1	5.8	6.2	3.2
3-month Treasury Bill	5.8	11.4	7.5	7.5	5.5	5.8	3.1
30-Year Treasury Bond		11.3	10.8	8.6	6.9	5.9	4.6
30-Year Fixed Mortgage	9	13.8	12.4	10.1	8	8.1	5.9
Personal Income							
	inflation adjusted (in pct. change)						
Nominal	9.6	11.1	8.7	6.9	5.1	6.6	4.2
Inflation adjusted	2.7	2.1	3	2.8	1.9	4	1.6
Other Key U.S. Economic Measures							
Oil Prices (nominal \$/barrel)							
W. Texas Intermediate			27.9	24.5	18.4	30.3	56.5
Refiners Acquisition Cost	10.4	28.2	26.7	22.3	17.2	28.2	50.3
Domestic Crude	8.4	24.2	26.7	22.4	17.3	29.1	53
Imported Crude	13.9	34	27	22.2	17.1	27.7	48.9
Exchange Rate Indexes (2009=1.0)							
	(weighted, inflation-adjusted)						
Major Trading Partners	1.225	1.088	1.47	1.083	1.04	1.303	1.075
Other Important Partners		1.025	1.488	1.404	1.265	1.283	1.181
Housing Starts (in millions)							
Single-family	0.891	0.855	1.071	0.901	1.082	1.232	1.719
Multi-family	0.269	0.445	0.671	0.303	0.279	0.341	0.354
Consumer Sentiment (U. Mich.)	70.4	64.4	93.2	81.6	92.2	107.6	88.6

Key U.S. Economic Forecast Indicators

	2010	2015	2020	2025	2030	2035	2040
Components of GDP							
	inflation adjusted (in pct. change)						
Gross Domesitc Product	0.8	2.4	2.9	2.4	2.4	2.4	2.4
Consumption	1	2.4	2.6	2.2	2.3	2.3	2.3
Durables	0.7	6.7	4.5	4.3	4.7	4.7	4.9
Computers	17.5	17.1	14.9	13.9	14.3	14.2	14.2
Software	15	8.2	8	6.7	7.2	7.1	7.1
Info. Processing Equipment	16	12.8	11.7	10.6	11	10.9	11
Nondurables	0.8	1.9	2.1	2.1	2.3	2.5	2.6
Food	0.4	2	1.9	1.4	1.4	1.4	1.3
Gasoline & other fuels	-1.1	-0.5	-0.1	-0.7	-1	-1.1	-1.5
Clothing & footwear	1	2.4	3.3	3.1	4	3.8	3.7
Gross Domestic Investments	-4.5	6.7	3.8	2.5	2.3	2.3	2.6
Nonresidential Fixed Investments	-0.5	5.6	4.9	3	2.8	2.8	3
Industrial Equipment	-3.8	8.3	2.6	2.2	2.5	2.8	2.8
Computer Equipment	10.2	4.7	12.6	9.2	5.3	4.3	4.3
Transportation Equip.	-7.1	11.6	2.7	2.1	3.5	3.6	3.9
Structures/Buildings	-2.8	4.4	5.2	1.6	1.6	1.3	1.6
Residential Fixed Investments	-15.2	11.4	1.4	0.3	0.6	0.3	0.7
Equipment	-2.2	4.8	3.7	3.9	4.1	4.4	4.3
Structures/Buildings	-15.4	11.6	1.4	0.2	0.6	0.2	0.7
Exports	4.9	4.6	6.6	5.9	5.4	5.3	4.8
Goods	4.7	4.7	6.9	6.6	5.9	5.9	5.2
Services	5.6	4.3	5.9	4.3	4.3	4	3.7
Imports	0.6	3.9	3.7	3.6	3.9	4	4
Federal Spending	4.2	-1.8	-0.4	0.2	1.2	1.1	1.3
State & Local Spending	0.3	-0.8	1.1	1	1.1	1.1	1.3
Inflation Measures							
	inflation adjusted (in pct. change)						
GDP Deflator	1.9	1.7	1.7	1.7	1.8	1.9	2
Consumer Price Index	2.2	2	2	1.9	2	2.1	2.2
excluding Food & Energy	2	1.9	2	1.9	2	2.1	2.2
Producer Price Index	3.3	2.3	1.4	1.4	1.3	1.4	1.5
Employment Cost Index	2.5	2	2.6	2.6	2.6	2.5	2.5
Interest Rates							
	in percents						
Fed Funds	0.2	0.4	4	4	4	4	4
3-month Treasury Bill	0.1	0.4	3.7	3.7	3.7	3.7	3.7
30-Year Treasury Bond	4.3	4.2	4.8	4.8	4.8	4.8	4.8
30-Year Fixed Mortgage	4.7	4.9	6.6	6.6	6.6	6.6	6.6
Personal Income							
	inflation adjusted (in pct. change)						
Nominal	3.2	4.5	5	4.3	4.4	4.3	4.3
Inflation adjusted	1	2.5	3	2.3	2.4	2.2	2.1
Other Key U.S. Economic Measures							
Oil Prices (nominal \$/barrel)							
W. Texas Intermediate	79.4	96.1	106.8	117.6	129.9	142.1	155.6
Refiners Acquisition Cost	76.7	94.3	106.6	118.3	130.6	142.8	156.3
Domestic Crude	77.9	95.6	109.1	121.3	133.6	145.8	159.3
Imported Crude	75.9	93.2	104.1	115.4	127.7	139.9	153.4
Exchange Rate Indexes (2009=1.0)							
	(weighted, inflation-adjusted)						
Major Trading Partners	0.994	1.016	0.978	0.955	0.936	0.921	0.908
Other Important Partners	0.948	0.804	0.695	0.647	0.621	0.605	0.591
Housing Starts (in millions)							
Single-family	0.471	1.045	1.11	1.061	1.011	0.972	0.959
Multi-family	0.114	0.427	0.499	0.496	0.545	0.542	0.538
Consumer Sentiment (U. Mich.)							
	71.8	88.7	88.9	88.9	90.3	90.1	90.2

U.S. Industrial Productivity Measures for key industries

	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040
U.S. Manufacturing Productivity Measures (Federal Reserve Board)											
(annualized average percent change)											
Total Industrial Production	2.6	2.9	5.1	0.7	-1.0	3.1	2.8	2.4	2.2	2.0	1.9
Manufacturing, total	3.0	3.5	5.9	1.0	-1.4	3.4	3.2	3.0	2.8	2.6	2.5
Nondurable Goods	2.8	1.8	1.3	0.5	-2.0	1.0	2.4	2.0	2.0	2.2	2.3
Food Processing	1.9	1.9	1.6	1.2	0.0	1.7	2.1	1.6	1.7	1.6	1.6
Paper	2.5	1.9	-0.4	-1.3	-2.8	0.2	1.8	1.5	1.7	1.8	1.9
Durable Goods	3.3	4.8	9.4	1.5	-0.9	5.6	4.2	3.8	3.5	3.0	2.9
Wood Products	2.9	1.6	2.6	1.3	-8.6	8.2	1.4	-0.1	-0.1	-0.4	0.2
Primary Metals	2.6	1.9	1.0	-1.0	-0.9	3.2	3.6	2.3	0.2	-0.8	-1.1
Fabricated Metals	0.8	3.3	3.2	-1.2	-2.8	5.2	2.8	1.7	1.2	1.2	1.4
Machinery	2.3	3.3	2.9	-1.3	-1.6	6.1	3.5	2.5	2.1	1.8	2.0
Computer & Electronics	8.1	14.3	30.7	7.5	7.7	7.0	7.5	7.8	7.3	5.4	5.1
Transport Equipment	2.2	1.4	4.0	1.1	-1.8	6.6	3.5	2.8	3.2	3.3	2.5

U.S. Manufacturing Productivity

	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040
(index 2002=100)											
Total Industrial Production	62.2	71.8	92.2	95.5	90.6	105.7	121.6	136.7	152.1	167.9	184.4
Manufacturing, total	56.8	67.3	89.8	94.4	87.9	103.7	121.4	140.6	161.7	183.5	207.9
Nondurable Goods	82.4	89.9	95.9	98.3	88.7	93.5	105.1	116.3	128.6	143.2	160.6
Food Processing	78.1	85.8	92.7	98.6	98.6	107.4	119.3	129.3	140.4	152.1	164.5
Paper	100.1	110.1	107.7	100.7	87.2	88.0	96.0	103.3	112.6	123.1	135.1
Durable Goods	42.7	54.0	84.8	91.2	87.3	114.9	140.8	169.4	201.6	234.1	270.1
Wood Products	80.7	87.3	99.3	105.9	67.6	100.5	107.7	107.2	106.9	104.9	105.7
Primary Metals	87.1	95.6	100.3	95.2	91.1	106.4	126.7	142.2	143.4	137.7	130.2
Fabricated Metals	70.0	82.5	96.6	90.9	79.0	101.6	116.7	127.3	135.1	143.7	154.0
Machinery	71.9	84.8	97.7	91.6	84.6	113.7	135.1	153.1	170.1	186.4	206.0
Computer & Electronics	7.2	14.0	53.6	76.9	111.6	156.5	225.3	328.1	466.0	606.3	778.5
Transport Equipment	67.7	72.7	88.3	93.0	85.0	117.3	139.4	160.4	187.8	220.4	249.9

U.S. Components of National Income

(Nominal billions of dollars unless otherwise noted)

	1975	1980	1985	1990	1995	2000	2005
U.S. National Income Accounts							
Total Personal Income	1,366.9	2,316.8	3,515.9	4,904.5	6,276.5	8,632.8	10,610.3
pct. chg. (annualized)	9.6	11.1	8.7	6.9	5.1	6.6	4.2
Inflation-adjusted	4,503.2	5,267.0	6,204.8	7,272.6	8,219.8	10,384.3	11,499.4
pct. chg. (annualized)	3.1	3.2	3.3	3.2	2.5	4.8	2.1
Wage & Salary Disbursements	814.9	1,373.4	1,982.6	2,741.2	3,418.0	4,825.9	5,692.9
Social Security Contributions	89.9	167.2	282.8	412.1	535.5	709.4	878.0
Transfer Payments to Persons	170.0	279.5	424.9	594.9	879.0	1,083.0	1,512.0
Other Labor Income	88.6	163.9	258.7	395.0	520.5	685.5	966.8
Proprietors, total	118.2	171.6	241.1	354.5	484.5	757.8	979.0
Farm	22.0	11.7	21.0	32.2	22.0	31.5	46.4
Businesses (nonfarm)	96.2	159.9	220.1	322.3	462.4	726.3	932.6
Dividends, Interest and Rent	220.2	411	748.9	1,030.40	1,252.00	1,651.90	1,920.60
 (annualized percent change)							
Wage & Salary Disbursements	8.1	11	7.6	6.7	4.5	7.1	3.4
Social Security Contributions	14	13.2	11.1	7.8	5.4	5.8	4.4
Transfer Payments to Persons	17.9	10.5	8.7	7	8.1	4.3	6.9
Other Labor Income	12.2	13.1	9.6	8.8	5.7	5.7	7.1
Proprietors, total	8.7	7.7	7	8	6.4	9.4	5.3
Farm	11.2	-11.8	12.4	8.9	-7.3	7.4	8.1
Businesses (nonfarm)	8.2	10.7	6.6	7.9	7.5	9.4	5.1
Dividends, Interest and Rent	10.4	13.3	12.7	6.6	4	5.7	3.1

U.S. Components of National Income

(Nominal billions of dollars unless otherwise noted)

	2010	2015	2020	2025	2030	2035	2040
U.S. National Income Accounts							
Total Personal Income	12,435.2	15,494.0	19,790.4	24,453.6	30,314.9	37,452.1	46,332.2
pct. chg. (annualized)	3.2	4.5	5	4.3	4.4	4.3	4.3
Inflation-adjusted	12,232.4	14,048.6	16,411.0	18,561.0	20,997.6	23,545.3	26,344.0
pct. chg. (annualized)	1.2	2.8	3.2	2.5	2.5	2.3	2.3
Wage & Salary Disbursements	6,377.5	7,803.7	9,789.1	11,911.9	14,713.9	18,078.1	22,267.3
Social Security Contributions	989.0	1,247.7	1,625.9	2,008.6	2,480.7	3,047.1	3,751.9
Transfer Payments to Persons	2,276.9	2,686.2	3,402.2	4,412.0	5,740.9	7,330.5	9,251.6
Other Labor Income	1,120.4	1,279.6	1,608.3	1,936.8	2,353.8	2,868.3	3,523.2
Proprietors, total	1,032.7	1,457.3	1,801.4	2,238.2	2,839.4	3,576.0	4,462.1
Farm	46.0	100.4	94.9	85.0	76.1	64.7	49.5
Businesses (nonfarm)	986.7	1,356.9	1,706.5	2,153.2	2,763.3	3,511.4	4,412.5
Dividends, Interest and Rent	2,156.50	2,934.90	4,060.70	5,033.20	6,001.40	7,241.20	8,856.90
(annualized percent change)							
Wage & Salary Disbursements	2.3	4.1	4.6	4	4.3	4.2	4.3
Social Security Contributions	2.4	4.8	5.4	4.3	4.3	4.2	4.2
Transfer Payments to Persons	8.5	3.4	4.8	5.3	5.4	5	4.8
Other Labor Income	3	2.7	4.7	3.8	4	4	4.2
Proprietors, total	1.1	7.1	4.3	4.4	4.9	4.7	4.5
Farm	-0.2	16.9	-1.1	-2.2	-2.2	-3.2	-5.2
Businesses (nonfarm)	1.1	6.6	4.7	4.8	5.1	4.9	4.7
Dividends, Interest and Rent	2.3	6.4	6.7	4.4	3.6	3.8	4.1

Latest U.S. conditions and outlook

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Real GDP (% change)	-0.3	-2.8	2.5	1.8	2.8	1.7	2.5	3.1	3.3
Payroll Employment (ch. in mil.)	-0.8	-6	-0.9	1.6	2.2	2.2	2.2	2.5	2.7
Federal Funds Rate (pct.)	1.93	0.16	0.18	0.1	0.14	0.11	0.14	0.37	2.15
10-yr. T-Note Yield (pct.)	3.7	3.3	3.2	2.8	1.8	2.3	2.9	3.2	3.8
Brent Crude Price (\$/bbl)	97.9	61.6	79.8	111	111.8	107.7	103.9	99.2	97.9
CPI (% change)	3.8	-0.3	1.6	3.1	2.1	1.4	1.4	1.7	1.9
Housing Starts (mil.)	0.98	0.6	0.64	0.66	0.84	0.97	1.21	1.57	1.74
Consumer Sentiment	63.8	66.3	71.8	67.4	76.5	78.5	82.3	88.7	89.4
Unemployment Rate (percent)	5.8	9.3	9.6	8.9	8.1	7.5	6.9	6.4	5.9

source: IHS Global Insight, January 2014 U.S. Macroeconomic Outlook

Appendix 1b

Frequently asked questions about population and employment forecasting

How does Metro develop its employment and population forecasts?

We rely on computer models to forecast and help foresee future trends (and ranges) in employment and population growth in the region. The region is the Portland-Vancouver-Hillsboro MSA (i.e., Portland MSA). Our computer model is a statistical, regression-based economic representation of the regional economy. The econometric model is integrated with a traditional cohort-component population model. The econometric portion of the model predicts regional employment, income and wage trends while the cohort model predicts regional population growth. (This econometric model also has tie-ins to MetroScope – an integrated land use distribution model – and a Transportation Demand Model (TDM) to complete Metro’s suite of detailed socio-economic, land use and transportation models).

What counties make up the Portland-Vancouver-Hillsboro MSA?

The U.S. Office of Management and Budget (OMB) has the responsibility of delineation and periodically refreshing the counties that make up metropolitan statistical areas (MSA). The recent rendition of the Portland MSA includes the following counties in two states.

Oregon counties:

- Clackamas
- Columbia
- Multnomah
- Washington
- Yamhill

Washington counties:

- Clark
- Skamania

Metro updates its regional definition and associated models whenever there is an official change in MSA delineations.

Why does Metro produce a forecast for the larger metropolitan area instead of the urban growth boundary, counties and cities?

Eventually, in coordination with cities and counties, Metro does produce forecasts for smaller geographies. However, we start with the seven-county MSA for several reasons, including:

- The most current population and employment numbers from the federal government are for the MSA geography. We want to make sure we can tie our forecast to actual historic numbers.
- We need to understand the larger context of the economic region before forecasting greater detail.
- We’re “showing our work” instead of jumping to forecasts for smaller geographies.

What are the key assumptions for the regional population forecast?

A population forecast is comprised of 3 primary components:

- Births
- Deaths
- (Net) Migration.

Demographers use the term "natural increase" to describe births and deaths added together. "Net migration" takes into account migration inflows minus migration outflows. The mechanics of any population model are simply adding together estimates of natural increases and net migration to arrive at a population forecast. Extrapolating natural increase and net migration into future years yields a population forecast.

The regional population forecast thus depends on projection rates for births, deaths and migration. The birth and death rate projections are assumptions derived from Census data and specifically adjusted for age. Race, ethnicity and sex are also major factors that affect birth and death rates. Differences caused by these factors are factored into the projections. The migration component derives from a regression analysis that considers economic trends with observed net migration data and is integrated with the Metro economic forecast. (The notion being that migration ebbs and flows with business cycles and economic trends.)

Birth rates – Metro relies on the U.S. Census Bureau to supply births rate assumption for future forecast years. These rates are age-adjusted according to the birth mother's age. Because these birth rates are for the U.S., Metro re-calibrates these birth rates so that they align with historical age-adjusted birth rates observed in the Portland MSA for the last 15 years.

Death rates – Metro relies on the U.S. Census Bureau and Centers for Disease Control (CDC) to supply death rate assumptions. These rates are adjusted according to age bracket. Because these death rates are for the U.S., Metro re-calibrates the death rates so that they align with historical regional age-adjusted rates observed for the last 15 years.

Net Migration – Metro bases its migration forecast on historical trends. The historical net-migration estimates are provided by Portland State University Population Research Center. The Metro migration forecast is tied into the regional econometric model and regional forecast. We have found statistically significant socio-economic relationship between annual migration rates and the pace of regional economic activity. We exploit this relationship within the Metro regional econometric model to predict net migration flows to the MSA region.

What data sources are used in preparing the population forecast?

- Portland State University Population Center – basic county population estimates, <http://www.pdx.edu/prc/population-estimates-0>
- Washington State Office of Financial Management, <http://www.ofm.wa.gov/pop/>

- U.S. Census Bureau, National Population Projections, <http://www.census.gov/population/projections/data/national/index.html>
- Oregon county vital statistics, <http://public.health.oregon.gov/BirthDeathCertificates/VitalStatistics/annualreports/CountyDataBook/Pages/cdb.aspx>
- Washington State county vital statistics, <http://www.doh.wa.gov/DataandStatisticalReports/VitalStatisticsData.aspx>

What are the main economic drivers for the regional employment forecast?

The Metro regional employment forecast is based on projections from a structural econometric model. What this means is that for each key regional industry, we use statistics – i.e., regression analysis – to forecast what direction we think the employment in the industry will grow. The focus is to define an econometric or statistical relationship between the dependent variable (industry employment) and a set of one or more independent variables. This statistical relationship typically describes how we understand regional employment will grow over time with expected variations in the independent variable(s). Metro keeps this regional econometric model up to date with the most recent data available as it prepares the regional forecast.

For us to forecast regional employment trends, we need to have assumptions about future values for the independent variables in each regression equation. As we have done so in previous regional employment forecasts, we get future estimates for these independent variables from IHS Global Insight. IHS is the leading provider of diverse global market and economic information. IHS is a global information company with world-class experts in the pivotal areas shaping today's business landscape, including energy, economics, geopolitical risk, sustainability and supply chain management.

The Global Insight 30-year Long-term U.S. macroeconomic outlook serves up the economic drivers that are the cornerstone for the Metro regional forecast. The economic drivers (or variables) include:

- forecasts of GDP and its components (e.g., consumption, investments, imports/exports and government spending)
- interest and inflation rates
- foreign exchange rates
- production and productivity
- demographics

What data sources go into preparing the employment forecast?

- IHS Global Insight - U.S. macro-economic drivers (variables include GDP components, interest rates, foreign exchange rates, inflation rates, production and productivity, etc.), <http://www.ihs.com/index.aspx> (data are proprietary and on paid subscription)
- U.S. Census, <http://www.census.gov/>
- Bureau of Labor Statistics, <http://www.bls.gov/home.htm>

- Bureau of Economic Analysis, <http://www.bea.gov/>
- Oregon Employment Department, <http://www.qualityinfo.org/olmisij/CEW>

How are the “range forecasts” created by Metro?

To recognize that forecasts carry an element of uncertainty, Metro generates a forecast range for total regional population and employment by industry sector and sums the industry ranges for total regional employment. The ranges represent a 90% confidence interval that future employment and population for the region will fall within this growth band. Another way of saying is that 10% of the time we might expect growth to be faster or slower so that population and employment growth in these instances will fall outside of the confidence interval.

Since the methodology for creating the population and employment forecasts are different, the approach for creating ranges plays to the strengths of each methodology.

Population Range Methodology – The regional population forecast employs a standard cohort-component approach for projecting future population growth. Recall that the cohort-component relies on a set of assumptions for age-adjusted birth and death rates and net migration. Since these are assumptions, it’s not much of a stretch to imagine that these assumptions could be wrong or have some standard error to them. Further, if we imagine that each of these assumptions is in actuality a continuous random variable, then it is possible to assign a probability density function that describes the expected value of the population component rate assumptions and to then ascribe a standard forecast error that is akin to a standard deviation to account for some uncertainty in these assumptions.

Having no prior knowledge of what the true shape of the probability density function is for the population components, we assert that the error distribution for each population component is normally distributed. A normal distribution is useful and a unique error distribution can be defined by a mean and a standard deviation. We assume that the expected values in the baseline forecast assumptions represent the mean of the normal distribution while the standard deviation is represented by estimating the standard error of the forecast for each birth and death rate component.

Applying a monte carlo computation method, each population component is randomized 10,000 times and each time a new alternative population simulation is calculated. Because of the properties of a normal distribution, the chance of one of the alternative population forecasts is more likely to fall closer to the expected or mean value represented by the baseline population forecast than near the tail ends. By tabulating all 10,000 alternative population simulations into a crosstab, we end up having a population forecast range or interval. Within in this interval, we can easily infer from the tabulation what percentage of forecast alternatives fall within 1, 2 or more standard deviations from the forecast baseline (or mean). By repeating the simulations many times and tabulating these results, we may infer from these random draws a confidence interval that is “bell-shaped”.

Employment Range Methodology – The regional employment forecast is computed from a regional econometric model that is rooted in regression analysis. This means that for each equation there is a

forecast standard error calculated from the regression. From here, it is straight forward to infer a 1- or 2-standard deviation forecast range for each industry sector. The range is computed by taking the baseline forecast as an anchor point and adding/subtracting twice the value of the forecast error. This range represents a 90% confidence interval or 2 standard deviations.

What importance is attributed to the Metro baseline forecast for population and employment?

The baseline population (and employment) forecast serves as an anchor point for the range forecast. The range represents statistically a confidence interval (typically 2 standard deviations or equal to 90%) for the uncertainty the forecaster has over the forecast. The confidence bands usually grow wider over time as the forecast years increase away from the forecast base year. Typically, the base year for demographic data is a decennial census year (e.g., 2010) and the employment and other economic variables will vary with most base years set in the case of this forecast as 2013 (part year).

Why doesn't Metro use the population estimates from PSU's Population Research Center (PRC)?

Population estimates aren't the same as a population forecast or projection. As the PRC says on its website, population estimates are annual population estimates prepared by the center as current year estimates for the years in the decade between the most recent decennial census and the next decennial census. (source: <http://www.pdx.edu/prc/population-estimates-0>)

Why doesn't Metro use the population forecasts from PSU's Population Research Center (PRC)?

The timing of PRC's population forecast for the Metro area is out of sync with when Metro needs this information for the analysis to go into the 2014 Urban Growth Report.

PSU and DLCD are now working together to come up with a schedule to forecast population growth of the State and its counties and cities. But an agreement for this work has not yet been hammered out and forecast work has not yet begun. Meanwhile, Metro has need for this information now in order stay on schedule with meeting its 5-year mandate to review the region's capacity for accommodating a future 20-year growth expectation.

Is the Metro population forecast coordinated with PSU's Population Research Center (PRC)?

Yes. Metro and PRC formally reviewed and shared component assumptions for population growth of the region. Metro shared its forecast methodology with PRC and had them scrutinize the approach, component assumptions and review the forecast results for the baseline and range. PRC staff also participated in Metro's regional forecast review panel (see next question).

Was the regional forecast peer reviewed?

Yes. Metro convened a panel of experts from the region to review the veracity of the 2014 regional forecast (and range). The panel met twice. The first time was to discuss the U.S. macro-economic outlook (IHS Global Insight), review the model's structure and to provide preliminary feedback on the general tone and direction of the forecast assumptions. The second meeting was to confirm the veracity of the baseline and discuss factors and assumptions that could influence the direction and magnitude of a high and low growth forecast scenarios.

Members of the peer review panel included staffs from Portland State University (PSU) Population Research Center, PSU center for sustainability, PSU Northwest Economic Research Center (panel chaired by Dr. Thomas Potiowsky), NW Natural, Johnson Economics and EcoNorthwest Consulting. A summary of the panel’s discussions is included in the Urban Growth Report’s appendices.

Has the 2014 regional forecast been coordinated with local governments?

As yet, no. The regional forecast will be reviewed and coordinated with local jurisdictions in the context of Metro’s growth distribution process depicted in Figure 1. This step takes place after state acknowledgement of the Metro Council’s decision to adopt a regional forecast. When the time comes, the regional forecast will be distributed to traffic analysis zones (TAZ) for households and employment. In turn, TAZ estimates (which are smaller than census tracts) may be subtotaled to approximate population (or employment) by city limits. This work requires detailed coordination with cities and counties.

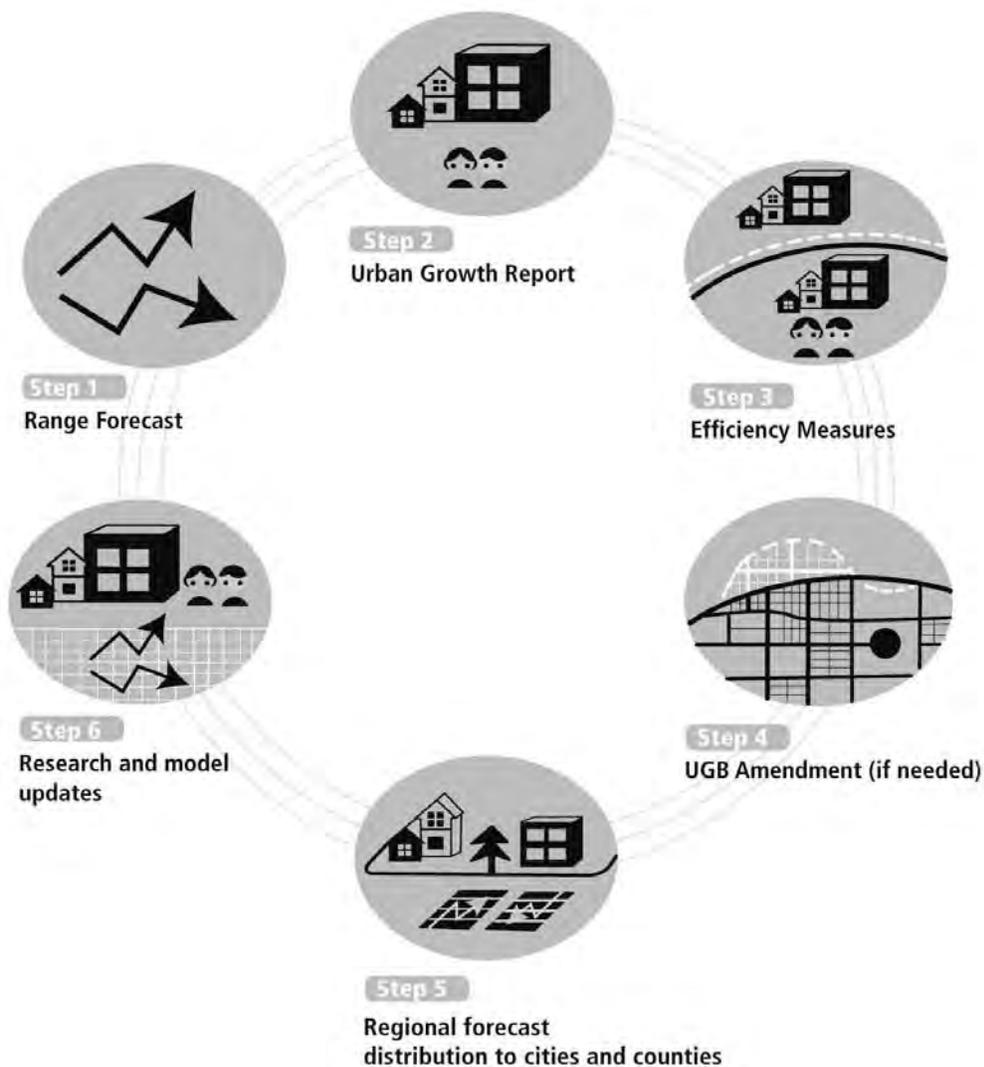


Figure 1: Illustration of Forecast, Legislative & Growth Coordination Cycle

What's different about regional vs. county forecasts (or other smaller geographies)?

Smaller geographies – even counties – historically experience broader growth trend fluctuations than regional or state forecasts. Bigger areas benefit from larger numbers that tend to smooth out local variations that are hard to predict or near impossible to expect. We see the regional and county differences play out in the forecast because of specific geographic disparities and advantages. For example, why did the high tech economy sprout in Silicon Forest in Washington County and not Clackamas or Multnomah? This historical idiosyncrasy creates regional and subregional growth rate differences that show up in the county-level job forecasts. Migration and differences in housing preferences and the mix of housing supply in each county played a role in bolstering suburban population growth during the 1980's and 90's. This too led to variations between county vs. regional growth rates.

What modeling tools does Metro use to prepare forecasts areas smaller than the Portland-Vancouver-Hillsboro metropolitan statistical area? Why?

MetroScope, which is a mathematical economic model developed to analyze and simulate urban growth and predict future development patterns. It is what scientists call an integrated land use and transportation model. It is state-of-the-art market equilibrium model which is capable of forecasting where population and employment will locate in the future. It is a model that explicitly considers where people live and work in the future after taking into account regulatory, market trends, and socio-economic factors that could impact the ease of future transportation and commuting, the price of real estate, and the availability of land supply for housing and industry growth. These are factors that a traditional cohort-component population model is not capable of assessing.

The smallest geography for which Metro produces forecasts is the Transportation Analysis Zone (TAZ). The TAZ forecast is primarily used by Metro and local area transportation forecasters and modelers. TAZ are pretty small areas – about ¼ the size of a typical census tract. There are over 2,100 TAZ geographic units in the Portland region. This data is used as inputs in modeling congestion, transit, and traffic flows for transportation and corridor planning projects. Examples of recent uses include the Columbia River Crossing (CRC) Study, Southwest Corridor Planning Project (SWCPO, East Metro Connections Plan (EMCP), and updates to the Regional Transportation Plan (RTP).

Why are forecasts sometimes incorrect?

Creating a forecast requires us to make assumptions or guesses about events that have not yet occurred, and if those future actual events don't match our assumptions about them, the forecast can be incorrect. Forecasts are not always correct – whether the models are founded on statistical relationships or cognitive – because the models we use are necessarily simplifications of the real world. If events in the real world drift away from the theoretical and practical underpinnings of our models, the forecast results from our model will look very different from the events that unfold in the future.

Forecasts are often not always correct due to unforeseen fluctuations in the inputs we use to make the forecast. And even when we are able to predict these fluctuations, we may be wrong about the

magnitude of change in these factors. Sometimes these fluctuations are simply measurement errors which are eventually revised or re-benchmarked according to better and more full accounting by federal and state statistical agencies. Regardless of the type of error – whether it’s measurement error or a judgment error about how input assumptions will impact the forecast – these discrepancies in what we call inputs are partly to blame for forecasts that are not always correct.

The models we use are mathematical constructs of reality based on statistical relationships and observed over many years. If these statistical correlations break down in the future, regardless of how accurately we predict the input assumptions, the relationships between the input drivers and the forecasts are likely to be led astray from actual future events.

In sum, error sources include:

1. Historical estimates could be wrong (re-benchmarked/revised in later years when more/better data become available)
2. Socio-economic drivers / assumptions could be wrong (independent variables used in the forecasting of employment are themselves forecasts and likely based on other forecast assumptions)
3. Unanticipated and very large economic shocks are unanticipated
4. Theoretical basis for the forecast could be wrong
5. Statistical relationships assumed from econometric analysis do not carry forward into the future and therefore could lead to wrong conclusions.

Why do population forecasts seem more accurate than employment forecasts?

Population forecasts generally reveal themselves to be closer to actual trends because the factors / input assumptions that drive the forecast are more predictable. We have to rely on future assumptions about mortality and birth rates and future migration levels in order to forecast regional population growth.

Mortality and birth rates vary over time, but generally these variations happen slowly and in relatively predictable patterns. Additionally, the differences between national rates and regional rates are generally similar so we can very reasonably rely on national data sets to predict regional natural population increases.

Predicting migration is a more difficult problem and suffers from greater historical deviations. Moreover, past migration trends may not be directly comparable to future levels because of the potential for sweeping economic fluctuations that could swing the migration level wildly up or down according to regional business cycles.

Why do employment forecasts have greater uncertainty?

Employment (and economic) forecasts are generally less accurate because there are so many more variables involved that we are able to consider only part of the economic picture. There is a much

higher degree of uncertainty in the variables we use to predict regional employment. Besides more uncertainty in the input variables, the economic relationship between the regional economy and national/global economy is also subject to wider economic shifts. In other words, past performance is no guarantee of future results.

How do Metro's past Metro forecasts hold up when compared with actual growth?

Metro has looked back at three forecasts: 1985, 2000, and 2010 vintage forecasts. There's not enough history gone by to make a legitimate comparison of the 2010 regional forecast. This leaves the 1985 and 2000 forecasts for comparison.

1985 vintage regional forecast

The 1985 regional forecast shows a -9.4 percent forecast error in population. This is a pretty accurate forecast given that it has a less than 1% annual error rate ($-9.4\% / 15 \text{ years} = -0.62\%$). The negative sign indicates population grew faster than projected. This is not surprising since the region experienced an unexpected higher level of migration in the late 80's and early 90's as "equity migrants" cashed out of lucrative homes in southern California and settled here in the Portland area due to its milder climate and attractive real estate opportunities.

The 1985 regional forecast showed a miniscule percent forecast error in employment of -3.3 percent by the end of its 20 year forecast horizon in 2005. This forecast was remarkably accurate despite the economic turmoil (positive and negative) that played out during the 20 year time frame.

Lastly, in terms of business cycle comparisons, both 1985 and 2005 are roughly at the same stage of the business cycle – i.e., both are trending up and somewhere in the middle of the peak and trough of their respective recessions. For trend analysis point of view, this is a fair comparison.

2000 vintage regional forecast

The 2000 regional forecast shows a 3.2 percent forecast error in population. Averaged over 10 years, this represents a pretty close difference between the forecast and actual events.

The 2000 regional forecast shows a very wide error margin in employment of 22.1% (or a difference of 211,688 jobs by 2010). The mitigating reason for this wide margin was of course the Great Recession. In terms of trend comparison purposes, this is the worst comparison to make because the 2000 base year was a peak business cycle year while 2010 is trough business cycle year. Without the recession (or comparing peak to peak in the trend) the regional economy would have yielded about 200,000 more jobs on a trend basis, but the unforeseen Great Recession caused instead a loss of 70,000 annual jobs (2008-10).

A Regional Population & Employment Forecast to 1990 & 2005
Portland Metropolitan Area : July 1985

A service of the Intergovernmental Resource Center, Metropolitan Service District

	Forecast Population		Actual Population (Census or PSU)				
	1990	2005	1980	1990	2000	2005	2010
7-county MSA	N/A	N/A	1,341,542	1,523,741	1,928,339	2,067,325	2,226,009
4-county region	1,410,500	1,739,572	1,242,645	1,412,344	1,789,915	1,919,220	2,066,399
3-county region	1,177,373	1,424,264	1,050,418	1,174,191	1,444,677	1,524,943	1,641,036
Clackamas County	284,067	362,477	241,911	278,850	338,391	359,308	375,992
Multnomah County	597,728	652,510	562,647	583,887	660,486	674,862	735,334
Washington County	295,578	409,277	245,860	311,554	445,800	490,773	529,710

	Forecast Employment		Actual Employment (BLS)				
	1990	2005	1980	1990	2000	2005	2010
7-county MSA	N/A	N/A	582,700	730,400	973,300	983,600	968,800
4-county region	686,900	910,010	556,210	698,430	933,310	941,481	927,532
3-county region	595,400	780,010	491,131	607,167	810,325	807,118	793,019
Clackamas County	84,400	120,000	62,102	92,268	133,056	143,621	136,805
Multnomah County	370,400	433,000	334,766	375,768	453,254	428,305	421,452
Washington County	140,600	227,010	94,263	139,131	224,015	235,192	234,762

7-county MSA:

Oregon: Clackamas, Columbia, Multnomah, Washington & Yamhill.
 Washington: Clark & Skamania

4-county:
 3-county:

Clackamas, Multnomah, Washington & Clark
 Clackamas, Multnomah & Washington

forecast source: Metro Data Resource Center

	1990		2005	
	Difference	%Difference	Difference	%Difference
	-1,844	-0.1%	-179,648	-9.4%
	3,182	0.3%	-100,679	-6.6%
	5,217	1.9%	3,169	0.9%
	13,841	2.4%	-22,352	-3.3%
	-15,976	-5.1%	-81,496	-16.6%

	1990		2005	
	Difference	%Difference	Difference	%Difference
	-11,530	-1.7%	-31,471	-3.3%
	-11,767	-1.9%	-27,108	-3.4%
	-7,868	-8.5%	-23,621	-16.4%
	-5,368	-1.4%	4,695	1.1%
	1,469	1.1%	-8,182	-3.5%

Economic Report to the Metro Council: 2000-2030 Regional Forecast

Proposed Final DRAFT; Released March 2002, Revised September 2002

Metro Data Resource Center, Gen 2.3 TAZ forecast allocation, final draft circa 2006

	Forecast Population										Actual Population (Census)			
	2000	2005	2010	2015	2020	2025	2030	1980	1990	2000	2010			
7-county MSA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,341,542	1,523,741	1,928,339	2,226,009			
5-county PMSA	1,874,450	2,049,190	2,233,890	2,394,100	2,571,100	2,768,200	2,955,300	1,297,977	1,477,895	1,874,449	2,165,592			
4-county region	1,789,460	1,956,300	2,134,300	2,287,000	2,455,700	2,643,700	2,821,000	1,242,645	1,412,344	1,789,915	2,066,399			
3-county region	1,422,316	1,543,528	1,697,006	1,775,618	N/A	N/A	2,177,840	1,050,418	1,174,191	1,444,677	1,641,036			
Clackamas County	336,413	365,035	404,278	447,794	N/A	N/A	618,779	241,911	278,850	338,391	375,992			
Multnomah County	643,962	683,949	734,980	744,632	N/A	N/A	863,170	562,647	583,887	660,486	735,334			
Washington County	441,941	494,545	557,748	583,192	N/A	N/A	695,890	245,860	311,554	445,800	529,710			

	Forecast Employment										Actual Employment (BLS, OR & WA Labor Dept.)			
	2000	2005	2010	2015	2020	2025	2030	1980	1990	2000	2010			
7-county MSA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	582,700	730,400	973,300	968,800			
5-county PMSA	958,020	1,043,490	1,168,680	1,273,200	1,387,700	1,515,500	1,641,500	572,600	718,770	960,910	956,992			
4-county region	930,900	1,011,860	1,134,000	1,234,900	1,345,600	1,469,000	1,590,100	556,210	698,430	933,310	927,532			
3-county region	832,841	903,459	1,009,987	1,086,224	N/A	N/A	1,407,999	491,131	607,167	810,325	793,019			
Clackamas County	134,639	146,256	166,060	188,964	N/A	N/A	251,284	62,102	92,268	133,056	136,805			
Multnomah County	461,867	492,507	542,434	572,849	N/A	N/A	705,729	334,766	375,768	453,254	421,452			
Washington County	236,335	264,697	301,492	324,411	N/A	N/A	450,986	94,263	139,131	224,015	234,762			

7-county MSA: Oregon: Clackamas, Columbia, Multnomah, Washington & Yamhill.
Washington: Clark & Skamania

5-county PMSA Oregon State: Clackamas, Columbia, Multnomah, Washington & Yamhill; Washington State: Clark

4-county: Clackamas, Multnomah, Washington & Clark

3-county: Clackamas, Multnomah & Washington

	2000		2010	
	Difference	%Difference	Difference	%Difference
1	0.0%	0.0%	68,298	3.2%
-455	0.0%	0.0%	67,901	3.3%
-22,361	-1.5%	-1.5%	55,970	3.4%
-1,978	-0.6%	-0.6%	28,286	7.5%
-16,524	-2.5%	-2.5%	-354	0.0%
-3,859	-0.9%	-0.9%	28,038	5.3%

	2000		2010	
	Difference	%Difference	Difference	%Difference
-2,890	-0.3%	-0.3%	211,688	22.1%
-2,410	-0.3%	-0.3%	206,468	22.3%
22,516	2.8%	2.8%	216,968	27.4%
1,583	1.2%	1.2%	29,255	21.4%
8,612	1.9%	1.9%	120,982	28.7%

2010-2040 Regional Forecast and Growth Distribution (GAMMA TAZ Forecast Distribution)

Final Draft, December 2012 (Metro ordinance # 12-1292A)

Metro Research Center - Economic Land Use Forecasting

	Forecast Population					Actual Population (Census)				
	2010	2025	2035	2040		1980	1990	2000	2010	
7-county MSA	2,226,009	2,851,368	3,147,270	3,285,704		1,341,542	1,523,741	1,928,339	2,226,009	
4-county region	2,066,399	2,571,052	2,847,551	2,983,520		1,242,645	1,412,344	1,789,915	2,066,399	
3-county region	1,641,036	2,003,860	2,239,603	2,363,327		1,050,418	1,174,191	1,444,677	1,641,036	
Clackamas County	375,992	504,085	557,174	587,514		241,911	278,850	338,391	375,992	
Multnomah County	735,334	875,555	970,639	1,027,702		562,647	583,887	660,486	735,334	
Washington County	529,710	624,220	711,790	748,111		245,860	311,554	445,800	529,710	

2010	
Difference	%Difference
0	0%
0	0%
0	0%
0	0%
0	0%
0	0%

	Forecast Employment				Actual Employment (BLS, OR & WA Labor Dept.)			
	2010	2025	2035	2040	1980	1990	2000	2010
7-county MSA	970,033	1,297,930	1,491,091	1,594,151	582,700	730,400	973,300	968,800
4-county region	916,396	1,229,810	1,412,607	1,513,840	556,210	698,430	933,310	927,532
3-county region	789,129	1,042,390	1,190,587	1,276,429	491,131	607,167	810,325	793,019
Clackamas County	137,946	183,230	210,444	227,483	62,102	92,268	133,056	136,805
Multnomah County	419,164	533,818	597,331	626,710	334,766	375,768	453,254	421,452
Washington County	232,019	325,342	382,812	422,236	94,263	139,131	224,015	234,762

2010	
Difference	%Difference
1,233	0.1%
-11,136	-1.2%
-3,890	-0.5%
1,141	0.8%
-2,288	-0.5%
-2,743	-1.2%

7-county MSA:

Oregon: Clackamas, Columbia, Multnomah, Washington & Yamhill.
Washington: Clark & Skamania

5-county PMSA

Oregon State: Clackamas, Columbia, Multnomah, Washington & Yamhill; Washington State: Clark

4-county:

Clackamas, Multnomah, Washington & Clark

3-county:

Clackamas, Multnomah & Washington