



2011 CENTRAL CITY DEVELOPMENT CAPACITY STUDY



*An update of the 2007 Central Portland
Development Capacity Study*



Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.



Contents

.....

Introduction	1
Study Area	2
Sub Districts	3
Results Summary	4
Methodology	5
Results Summary: All Sub Districts	9
Pace of Development	10
Size of Redevelopment Sites	11
Central Eastside	12
Downtown	14
Goose Hollow	16
Lloyd District	18
Lower Albina	20
River District	22
South Waterfront	24
University District	26
Central City 2035 Expanded Study Areas	28
Appendix A: Capacity Based on Current Utilization	30
Appendix B: Summary of Recent Development Projects	31

.....

Bureau of Planning and Sustainability

Sam Adams, *Mayor, Commissioner-in-charge*
 Susan Anderson, *Director*
 Joe Zehnder, *Chief Planner*
 Steve Iwata, *Supervising Planner*

.....

Elisa Hamblin, *Associate Planner*
 Karl Lisle, *City Planner*
 Kevin Martin, *GIS Analyst*
 Mark Raggett, *City Planner, Urban Design*
 Ralph Sanders, *Graphic Designer*
*Additional thanks to staff at the Portland
 Development Commission for assistance with
 determining potential redevelopment sites.*

.....

The Bureau of Planning and Sustainability is committed to providing equal access to information and hearings. If you need special accommodation, please call 503-823-7700, the City's TTY at 503-823-6868, or the Oregon Relay Service at 1-800-735-2900.



Bureau of Planning and Sustainability
 Innovation, Collaboration, Practical Solutions.



Bureau of Planning and Sustainability
 1900 SW 4th Avenue, Suite 7100
 Portland, Oregon 97201-5380
 Phone: 503-823-7700
www.portlandonline.com/bps

Introduction

The City of Portland is embarking on a new effort to plan for the long-term future of the core of the city. Central City 2035 (CC2035) will build on the legacy of great plans laid out by citizens and city leaders in the form of the 1972 *Downtown Plan* and the 1988 *Central City Plan*. In order to begin the discussion about the future of the Central City, it is important to establish a basic understanding of the area today. This study provides information useful to the CC2035 process.

The 2011 version of this report is an update to the *Draft Central Portland Development Capacity Study* completed in 2007. This update is necessary to understand current conditions, especially since the economic recession.

The primary conclusion of this report is that there appears to be ample land suitable for redevelopment within the current regulatory framework to meet potential demand in the Central City over the next 20 years or more. This conclusion is explained in this report.

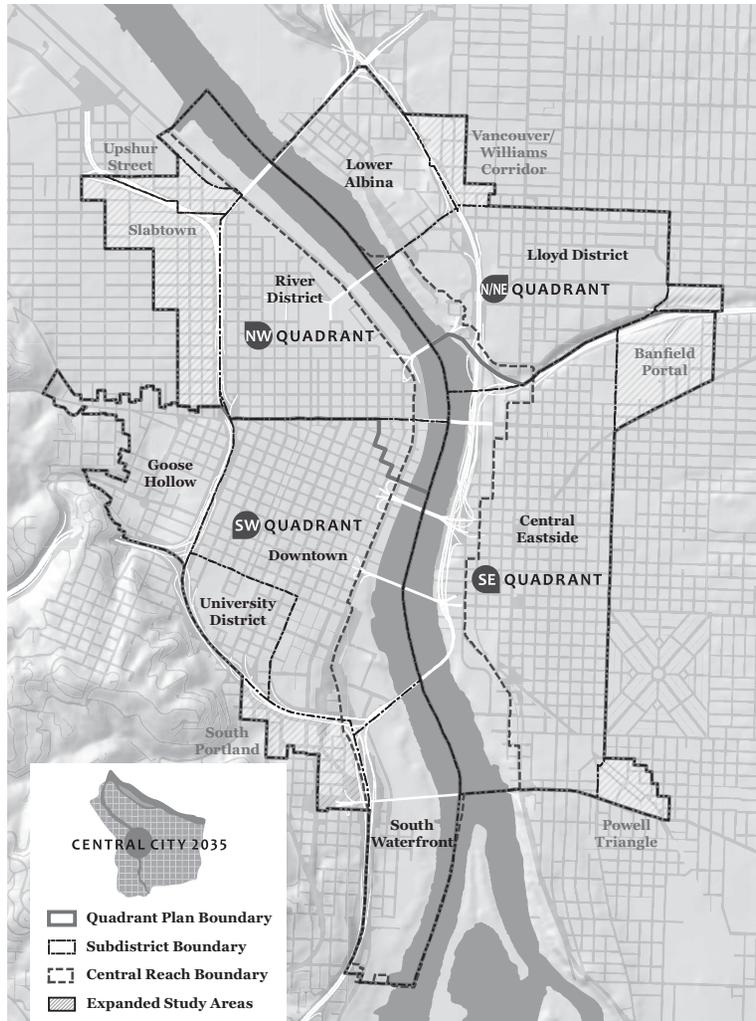
PURPOSE

This study provides answers to two basic questions regarding the availability of land for new development in Portland's Central City:

1. What sites are potentially available for redevelopment?
2. How much of different development uses (housing, office, etc.) could be built on these potential redevelopment sites?

The methodology used in this study makes many assumptions to answer these questions. As a result, the answers provided are "best guesses" as to the current development capacity of the Central City.

This study is not a projection of market demand for new construction. It only studies the development capacity of lands within the study area that could potentially become available for development/redevelopment if market demand existed.



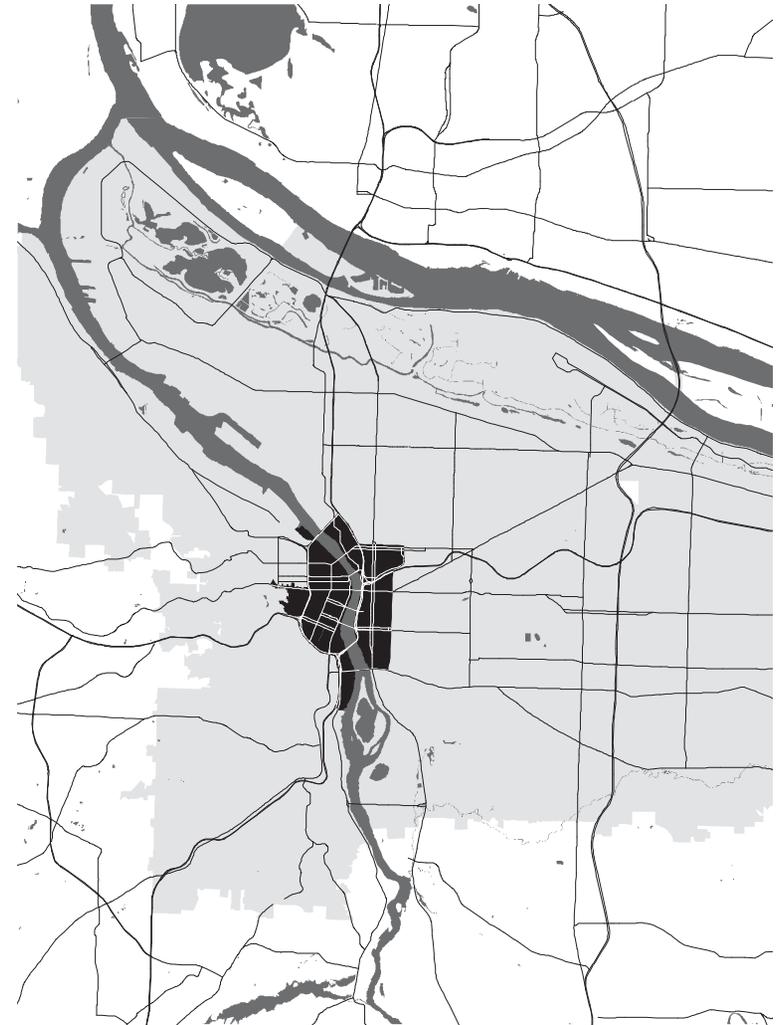
Study Area

The study area encompasses the core and most intensively developed areas of the City of Portland and the Greater Portland/Vancouver Metropolitan Area. It includes the traditional office and retail core of the central business district, the campus of Portland State University, Old Town/Chinatown, Jeld-Wen Field and Goose Hollow, the rapidly developing Pearl District and South Waterfront neighborhoods, the convention center, office uses and regional shopping center in the Lloyd District as well as the largely industrial Central Eastside and Lower Albina areas.

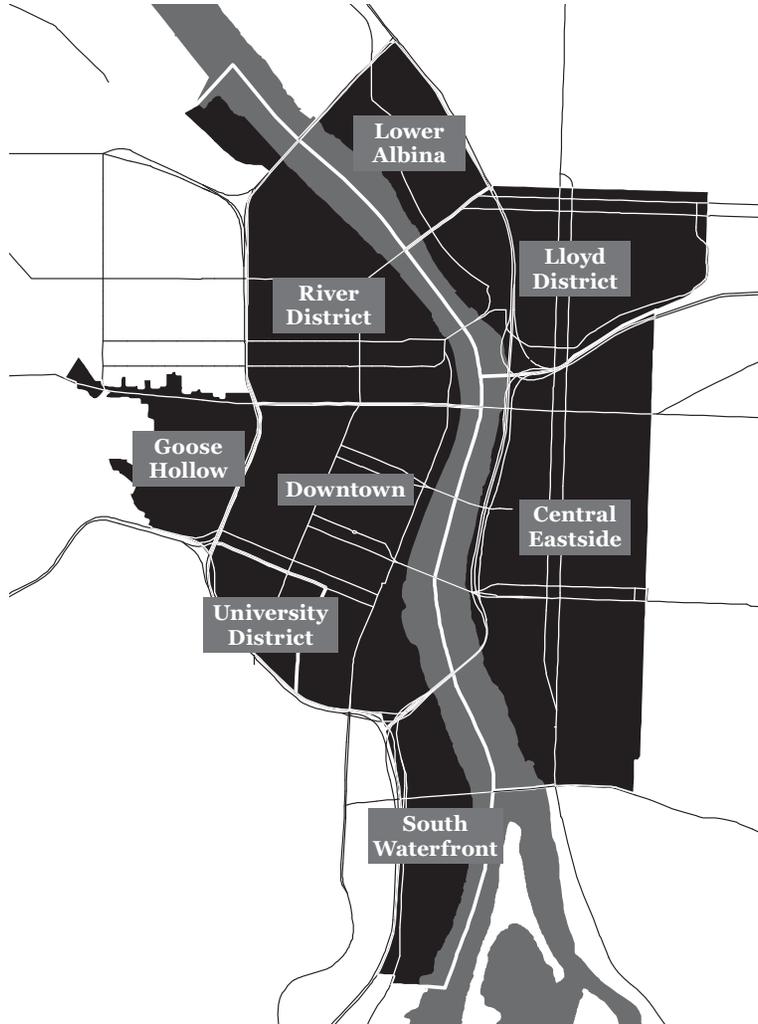
This study uses the established boundaries of the current Central City Plan District. The total area within the plan district is just under 3,000 acres, bisected by the Willamette River. The River occupies about 450 acres, or 15% of the plan area, public right-of-way occupies another nearly 1,000 acres, or 33% of the plan area, while public parks and open spaces account for 70 acres, or 2% of the plan area. This leaves roughly half of the total study area, or 1500 acres, available for development.

Zoning in the Central City Plan district generally allows the highest density and most flexibility of uses in anywhere in Portland. The four primary types of zoning in the study area are central commercial (CX) which accounts almost for 670 acres or 23% of the plan area, residential (central residential, RX; high density residential, RH; and residential 1000, R1) which accounts for 140 acres or 5% of the plan area, employment (central employment, EX; and general employment, EG) which accounts for 250 acres or 8% of the plan area, and industrial (general industrial, IG; and heavy industrial, IH) which accounts for 375 acres or 13% of the plan area.

Planning estimates the current inventory of developed square footage within the study area is approximately 98 million square feet.



Sub Districts



There are eight sub districts within the plan area and three additional planning sub areas within these sub districts. This study considers both the Central City Plan District as a whole as well as the eight sub districts. The three planning sub areas within districts (West End, NW Triangle and Central Eastside Employment Opportunity) are not analyzed separately as part of this work.



Of the eight sub districts, four are dominated by primarily mixed commercial uses: Downtown, the River District, South Waterfront and Lloyd District; two are largely industrial areas: Lower Albina and the Central Eastside; Goose Hollow is predominantly zoned to become a high density residential neighborhood and the University District is the home of Portland State University.

The bulk of the redevelopment potential identified in this study is within the mixed commercial districts of River, Lloyd, South Waterfront and Downtown.

Summaries of redevelopment capacity by sub districts are included later in this report.

Aside from the existing eight sub districts within the plan area, there are six expanded study areas that are receiving closer examination during the CC2035 process. These areas possess certain characteristics, explained on page 28, that potentially make them appropriate for inclusion in the CC2035 boundaries. These areas are not included in overall numbers for the Central City, but for reference there is a separate section at the end of this report that gives more detailed information about these areas and their development capacity.

Results Summary

Planning & Sustainability estimates that 377 acres of vacant or underutilized land either is now or could likely become available for development/redevelopment at some point in the next 20 years within the study area. The map at right illustrates the location of the land identified as potentially redevelopable by this study.

Considering a combination of zoning regulations and entitlements as well as historic and current building trends, Planning estimates that redevelopment of identified sites could produce an approximate net increase of over 85 million square feet of new building area if it were all developed.

Considering development trends since 1990, Planning & Sustainability estimates that around 30% (or approximately 28 million square feet) of this new development would be commercial office development. Around 50% would be residential development and could represent almost an additional 40,000 new housing units. This level of development would represent an increase of more than 175% from the estimated 23,000 housing units currently in the study area.

As stated previously, these capacity numbers do not estimate the market demand for development. They represent the potential capacity of identified redevelopable lands at current entitlements. They do not take into consideration the conversion of any significant industrial lands to mixed use/residential uses or any expansion of the current study area boundary. Also not considered is the potential for significant rehabilitation and renovation projects.

So how much development is this and how long might it take to reach build-out? For context, the total square footage of new development in the study area since 1990 amounts to approximately 28 million square feet, an average of 1.3 million square feet per year. It is reasonable to assume that the market for development has increased in the past few years, and the next 20 years will see more projects and larger projects than the past 20. Assuming the Central City could see an average of 2 million square feet of new development per year in the future, it would take over 40 years to exhaust the identified development capacity.



Identified potentially redevelopable sites

Methodology

A series of assumptions and calculations were made to generate the capacity estimates in this report. Because this study looks into the future at what could be built, it is important to remember that in fact, the future is uncertain and difficult to predict. The capacity numbers in this report are Planning & Sustainability's best conservative guess at what the city's effective build-out capacity might be under current zoning entitlements.

As mentioned in the introduction, this study took on developing answers to two questions:

1. What sites are potentially available for redevelopment?
2. How much of different development types (housing, office, etc.) could be built on these potential redevelopment sites?

The following section explains the approach to answering these two questions in a general sense. More detailed tables are available in the appendices.

DETERMINING POTENTIALLY REDEVELOPABLE LAND

With 4,524 individual properties (taxlots) in the study area, the first task of the study was to narrow the field of possible sites for redevelopment using existing available property data. This was done in several ways:

3. All local and national historic landmarks (290 taxlots) and contributing structures within designated historic districts (203 taxlots) were excluded (10 taxlots with contributing or landmark structures were left in the calculations because they share taxlots with vacant or non-historic underdeveloped structures or have been recently proposed for redevelopment.)
4. All properties (130 taxlots) zoned or identified as parks or open space (OS) were excluded.
5. All properties with industrial (IG or IH) zoning (except in cases where there has recently been considerable discussion about non-industrial redevelopment opportunities) were removed. Industrial zones heavily restrict most uses other than industrial/manufacturing activities, and development entitlements are not regulated through the same mechanisms as other zones. There is certainly development potential in the industrial areas, but without changes to current zoning regulations, most new development in these areas will be industrial.



The next step in the analysis looked at all remaining parcels in the study area and performed two calculations to ascertain if they might be redevelopable. These calculations narrowed down the list of potentially redevelopable lands by applying two filters:

1. A calculation of the ratio of each parcel's assessed value of improvements to the assessed value of the land. Properties with improvements valued at less than half the value of the land were flagged as possibly redevelopable.
2. A calculation of the percentage of allowed development rights utilized by existing buildings. Using a 3D model of the study area, properties utilizing less than 20% of the development possible on the site were flagged as possibly redevelopable.

These two calculations resulted in a list of 1,139 properties that might be redevelopable based on the assumptions above. Because of known limitations in the tax assessor's data, the next step was to manually check each possible site on the map and verify that indeed the sites might be considered available for redevelopment at some point in the next 20 years. For the original draft of this report in 2007 this was done by the district planners at the Bureau of Planning & Sustainability with assistance from development staff from the Portland Development Commission familiar with the areas in question. Some parcels the calculations had missed for various reasons were added; others were deemed unlikely to redevelop and removed from the dataset. In some cases existing taxlots were manually split to reflect underutilized portions of the parcels — all vacant land and surface parking lots were included. This process was repeated in 2011 with staff at the Bureau of Planning & Sustainability.

This series of calculations resulted in a list of 1,145 potentially redevelopable parcels totaling 447 acres. As a number of these sites were fairly small parcels, and small parcels are typically more difficult and less likely to develop than larger sites, 190 sites under 10,000 square feet (a Portland quarter block) were removed from further calculations. Removal of these smaller lots from the calculations results in a reduction of potentially redevelopable lands by about 20 acres.



Major Steps to determining potentially redevelopable lands:

1. Start with all properties in the Central City.
2. Remove historic designated recognized historic properties.
3. Remove parks and designated open spaces.
4. Remove industrial lands.
5. Remove all parcels that utilize more than 20% of the available FAR OR have improvements assessed at less than 50% of the value of the land.
6. Manually check everything that is left to verify it should be considered “potentially redevelopable.”
7. Add in known significant redevelopment sites not captured by steps 2–5 above (example: US Main Post Office site).
8. Remove lots smaller than 10,000 square feet from calculations.



Major Steps to determining capacity of potentially redevelopable lands:

1. Sort redevelopable properties by base zone.
2. Estimate likely utilization of FAR by base zone.
3. Apply FAR utilization estimate to potential redevelopment capacity to estimate total area of new development by base zone.
4. Apply assumed mix of development type (housing, retail, office) by base zone to determine estimate of new space by base zone.
5. (For housing only) Estimate number of additional residential units represented by new of residential space by base zone.
6. Subtract development currently on lots identified as potentially redevelopable to determine net increase (since this development would typically be replaced by new development).

DETERMINING CAPACITY OF REDEVELOPABLE LAND

Portland regulates the size of new development in two primary ways: maximum heights and maximum floor area ratio or FAR. Maximum FAR is the more relevant factor when calculating maximum capacity, as the development potential of most parcels can be reached by adjusting the floor plate size. Maximum FAR varies across the study area and ranges from 2:1 to 15:1.

On a parcel with a FAR of 5:1, a new building may have a floor area 5 times the site area. So at 5:1 FAR, on a 20,000 square foot lot, a new building could have 100,000 square feet of floor area.

Typically, new development in the Central City is eligible for FAR bonuses of up to an additional 3:1 FAR (over the base entitlement) for including certain amenities in its design. If bonuses were attained, the above example could achieve an FAR of 8:1 and therefore be able to build a maximum of 160,000 square feet on the 20,000 square foot site.

Using the assigned maximum FAR to calculate development capacity produces an estimate of how much space could theoretically be built if all new development were to build the largest buildings allowed on sites. Build-out on identified redevelopable sites at base FAR would produce some 79 million sq. ft. of new building area, replacing about 6 million square feet of existing space for a net gain of 73 million square feet. Buildout at FAR + all available bonuses would produce a net gain of roughly 124 million sq. ft. of new building area.

Of course, while many developers seek to maximize the potential of their land by building the largest buildings allowed, not all buildings are likely to be built to the maximum. In order to determine what the average FAR utilization is likely to be, it is informative to look back at recent developments and current projects typical utilization. Major projects since 1990 have been trending upward in FAR utilization. Since 2003 development has utilized an average of over 80% of available base FAR, with the average in 2008 being the highest at 122%. As land and construction costs rise, it is likely FAR utilization rates will continue on an upward trend.

The graph at right illustrates the trend of projects consuming more of their available FAR. If the average utilization rate is applied (by base zone) to the identified redevelopable sites, full build-out under current entitlements amounts to 79 million sq. ft. of new construction. The amount of new construction is less than what was projected in 2007.

In 2007 when the original assumptions were applied, Portland was in the midst of a construction boom. Since then, projects have been more modest and there has been less construction overall due to the economic recession. This has impacted the development assumptions, and therefore the overall projected capacity. The most notable change in the development assumptions is the average base FAR utilization. Development since 2008 has been using less of the allowable FAR than in the years prior to 2008. However, the overall FAR utilization trend is still upward.

DETERMINING WHAT TYPE OF CONSTRUCTION TO EXPECT

Because most zoning (CX, EX) in the Central City (excepting industrial zones and a few areas specifically zoned for high density residential) allows a range of commercial and residential uses, Planning & Sustainability has to guess at what the breakdown of new space might be. How much will be residential? How much commercial?

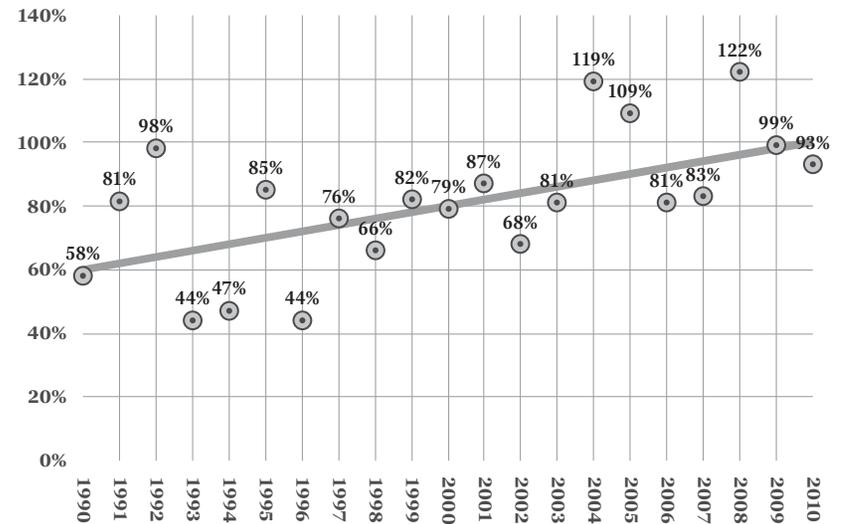
An analysis of projects built since 1990 in the study area and in different base zones helps make these assumptions as accurate as possible.

Based on these facts and a general observation that future development is likely to take advantage of more available FAR than projects in the past, this study is able to make reasonable assumptions regarding types of new development. Because some sub districts have seen little recent development, and other sub districts are experiencing dramatic transformations and shifts in predominant use, sub district-specific assumptions regarding projected use types are not made. Instead, projected development by use is based on the observed trends since 1990 in the different base zones.

In the Central Commercial Zone (CX), 43% of new development since 1990 was commercial, 40% was residential, and 6% was new retail space. In the mixed employment and general industrial zones (EX, EG1, IG1), 17% was commercial, 63% was residential, and 8% was retail space. In the residential zones (RX, RH) — which places significant limits on non-residential development, only 9% was commercial, 78% was residential, and 5% was retail space.

This breakdown of uses by type in the different base zones is applied to the capacity for new space to determine how much space of the various types might be achieved at build-out. The results are summarized in the table on the next page.

Average Base FAR Utilization by Year 1990-2010



Results Summary: All Central City Sub Districts

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	671.6	58.8	227.2	59.0	88.7	55.6	23.9	3.3	22.2	21,532
Industrial ⁵	341.7	8.6	35.3	0	0	0	0	0	0	0
Mixed employment	283.4	18.5	82.7	13.7	24.5	18.9	3.3	1.5	11.8	9,890
Open space	66.9	0.2	0	0	0	0	0	0	0	0
Residential	142.6	11.4	31.4	6.6	10.4	6.1	0.5	0.3	4.8	5,814
Right-of-way/river	1,414.8	0	0	0	0	0	0	0	0	0
Totals⁶	2,921.0	97.5	376.5	79.3	123.6	80.6	27.7	5.1	38.8	37,236

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

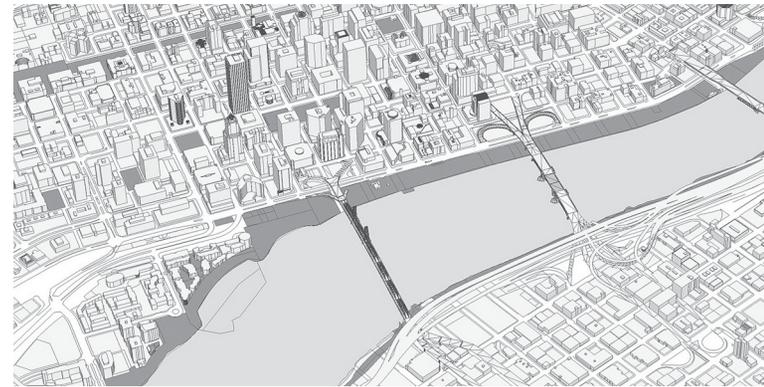
Pace of Development

How long could it take Portland’s Central City to see an addition of 86 million square feet of new development? This study does not attempt to analyze market demand for new space into the future; however, there are two sources of information that can help gauge the rate of future development.

The first is the pace of development in the recent past. Over the past ten years, the study area has seen the construction of 17.3 million square feet of new space. This represents an average of 1.7 million square feet of new space per year. If that pace and scale of construction is maintained, it would take 50 years to absorb the identified redevelopment potential within existing zoning entitlements. Even if the rate of construction doubled, the results of this study suggest it could take 25 years to exhaust the capacity of identified redevelopment sites.

Another source of information about the pace of construction in the future is found in Metro’s growth projections. Metro’s 2035 forecast targets about 37,000 new households and around 46,000 new jobs in the Central City. The job numbers equate to about 20 million square feet of new construction.* The household growth translates to roughly 1,500 units per year every year between 2011 and 2035. This represents 1.6 million square feet of new residential construction per year. More than half of new space constructed since 1990 has been residential. Metro’s projected residential growth rate appears to be more than the actual rate of construction seen over the past 20 years. At Metro’s projected growth rate for housing, the study area appears to have at least 26 years of available capacity for redevelopment.

*BPS, 2012 Portland Economic Opportunities Analysis

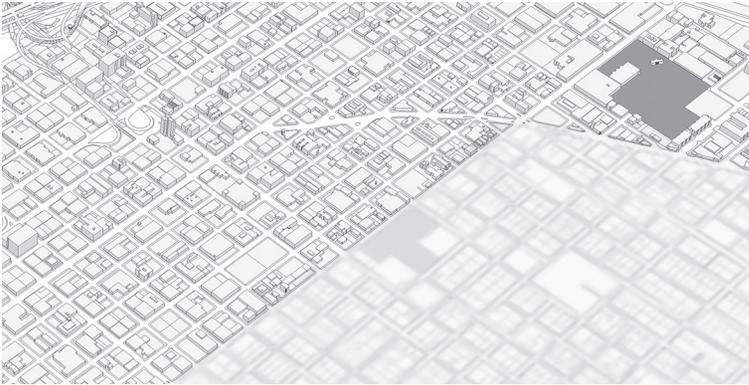


Metro 2030 projections: Central City housing

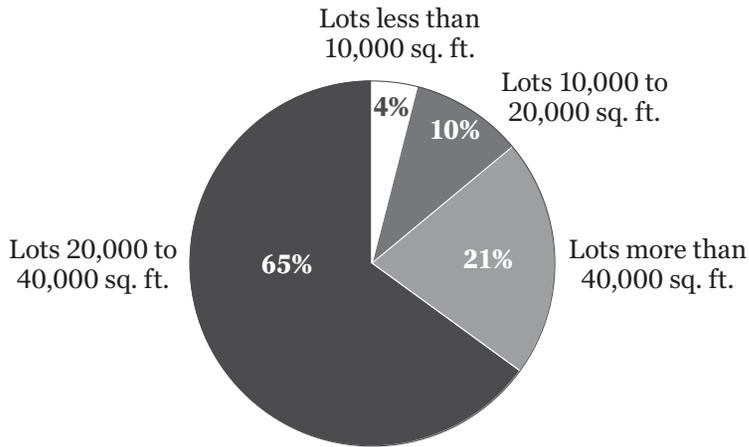
2010 Estimated households	21,451
2035 Total households	58,979
New households 2011–2035	37,528

Sub district specific allocations for households are not included here due to limitations of the Metro forecast reporting and the mismatch between Metro’s analysis zone boundaries and the Central City Plan boundaries. The City’s estimate of current housing units in the study area is higher than Metro’s 2010 numbers. The 2010 Census counted 24,989 housing units in the Central City.

Source: BPS analysis of Metro “Gamma” 2035 regional forecast, December 2011.



Potential redevelopment sites by size



Redevelopable acres	376.5
Potential net increase @ base FAR (million sq. ft.)	79.3
Potential net increase with maximum FAR bonus (million sq. ft.)	123.6

Size of Redevelopment Sites

The information at the left shows the acreage and potential increase in square feet for identified potential redevelopment sites. Of the 376.5 redevelopable acres, about 4% are lots that are smaller than 10,000 square feet. As very small lots can be more difficult to develop, lots under 10,000 square feet in area were removed from the development capacity calculations used in the rest of this report. Removing small lots from the calculations results in minimal reduction of overall redevelopment capacity of the study area, as these small lots represented only 4% in both the potential net increase at both base FAR and full utilization of bonus FAR.

The next section of this report summarizes the results of this study by each of the eight sub districts.

Central Eastside

The Central Eastside is dominated by light industrial uses with roughly 70% of the available land area zoned for industrial uses. With the exception of sites with mixed use Comprehensive Plan designations (typically EX) all sites in the district with industrial zoning were excluded from consideration as redevelopable. Vacant areas near OMSI at the south end of the district that have a comprehensive plan designation of General Employment (EG2) were also included. There are certainly redevelopment opportunities in industrial areas, but the uses allowed are limited and do not include housing. If changes are made to the industrial zoning in much of this district, there would obviously be a considerable increase to the ultimate residential and commercial development capacity of this district.

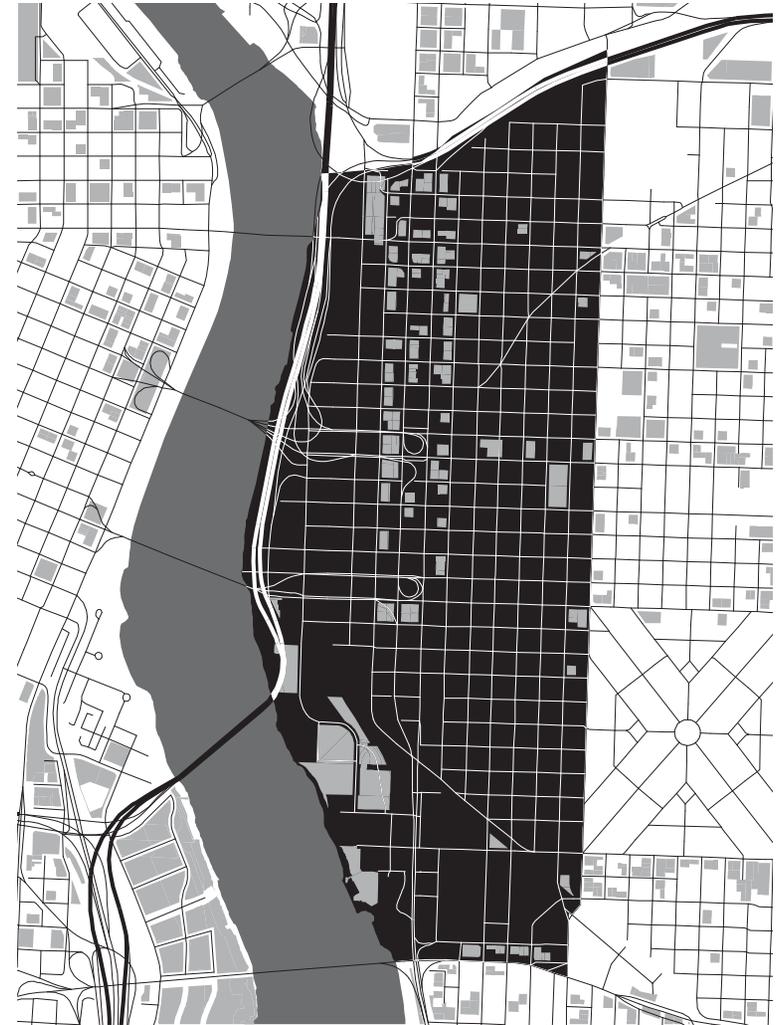
The sites near OMSI have been included because of their slightly more accommodating comprehensive plan designation and because the area has been the subject of recent discussions as a possible location for mixed use development. A change to the zoning designation in this area would be required to allow the level of office and housing production reflected in the district summary table at right.

The other two significant areas with considerable identified redevelopment potential are a cluster of vacant and underdeveloped properties centered on the intersection of East Burnside Street and Grand/MLK Avenues (site of the proposed Burnside Bridgehead development) and a two-block vacant lot at SE 11th and SE Belmont Street (the site of the former Monte Carlo restaurant).



The Central Eastside has seen limited new development, but quite a bit of renovation and rehabilitation projects. It may be a number of years before the capacity identified in this study is utilized, unless both kinds of development occur.

There is significant development potential in the industrial areas, but these areas are not included in the report because of the methodology and the limitations on allowed uses.



Central Eastside Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	0	0	0	0	0	0	0	0	0	0
Industrial ⁵	239.8	6.7	5.3	0	0	0	0	0	0	0
Mixed employment	131.6	4.2	39.5	9.2	14.3	11.8	2.0	1.0	7.4	6,212
Open space	7.3	0.01	0	0	0	0	0	0	0	0
Residential	4.9	0.2	0	0	0	0	0	0	0	0
Right-of-way/river	410.1	0	0	0	0	0	0	0	0	0
Totals⁶	793.9	11.0	44.8	9.2	14.3	11.8	2.0	1.0	7.4	6,212

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

Downtown

Major opportunity areas in Downtown include the Morrison and Hawthorne Bridgeheads, numerous surface parking lots and underdeveloped parcels in Old Town area and the West End (west of the Park Blocks) and a collection of larger opportunity sites at the southern end of the district (South Auditorium and RiverPlace).

Downtown is home to the highest existing entitlements (FARs and maximum heights) in the study area and as a result, relatively small parcels can represent quite significant development potential. One square block in the core area of 15:1 FAR can — with bonuses — accommodate over 700,000 square feet of new development.

Downtown also has the largest existing concentration of office space in the study area and may be one of the most likely places to see new large-scale commercial projects built in the near future.



There has been some recent development in Downtown, mostly in the West End. There are a few other proposals for development throughout the district.



Downtown Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	183.4	32.3	42.8	10.6	16.1	10.3	4.4	0.6	4.1	3,977
Industrial ⁵	0	0	0	0	0	0	0	0	0	0
Mixed employment	0.4	0.06	0	0	0	0	0	0	0	0
Open space	34.3	0.01	0	0	0	0	0	0	0	0
Residential	47.3	6.3	8.1	2.4	3.5	2.2	0.2	0.1	1.7	2,122
Right-of-way/river	276.7	0	0	0	0	0	0	0	0	0
Totals⁶	542.2	38.7	50.9	13.0	19.6	12.5	4.6	0.7	5.9	6,099

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

Goose Hollow

Primarily a high-density residential area, with the busy commercial Burnside Corridor at the north edge of the district and Jeld-Wen Field at its center, Goose Hollow possesses a variety of potential redevelopment sites including the two-block Oregonian complex at SW 17th Avenue and SW Taylor Street. Most other redevelopment opportunity sites in the district are less than a full block in size and are either surface parking lots or underdeveloped parcels.

Zoning in Goose Hollow is a mix of Central Residential (RX) which places significant limitations on the non-residential uses allowed and Central Commercial (CX) which allows both commercial and residential development.



The most recent residential projects in Goose Hollow were completed in 2007 and 2008. There has been little new non-residential development in the recent past, aside from the remodel and expansion at Jeld-Wen Field. There is some proposed residential development at 20th Avenue and Jefferson. Additionally, Lincoln High School is a potential future site for redevelopment, but is not included here due to various complex factors affecting the site.



Goose Hollow Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	54.1	3.0	14.1	2.7	4.5	2.6	1.1	0.2	1.1	1,020
Industrial ⁵	0	0	0	0	0	0	0	0	0	0
Mixed employment	0	0	0	0	0	0	0	0	0	0
Open space	7.0	0.1	0	0	0	0	0	0	0	0
Residential	42.4	2.1	7.7	1.1	1.8	1.0	0.1	0.05	0.8	929
Right-of-way/river	71.5	0	0	0	0	0	0	0	0	0
Totals⁶	175.0	5.23	21.9	3.8	6.4	3.6	1.2	0.2	1.8	1,949

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

Lloyd District

The Lloyd District has tremendous capacity to accommodate new development. Of the eight sub districts, only the largely vacant South Waterfront District has the potential to see as much new space built in the future.

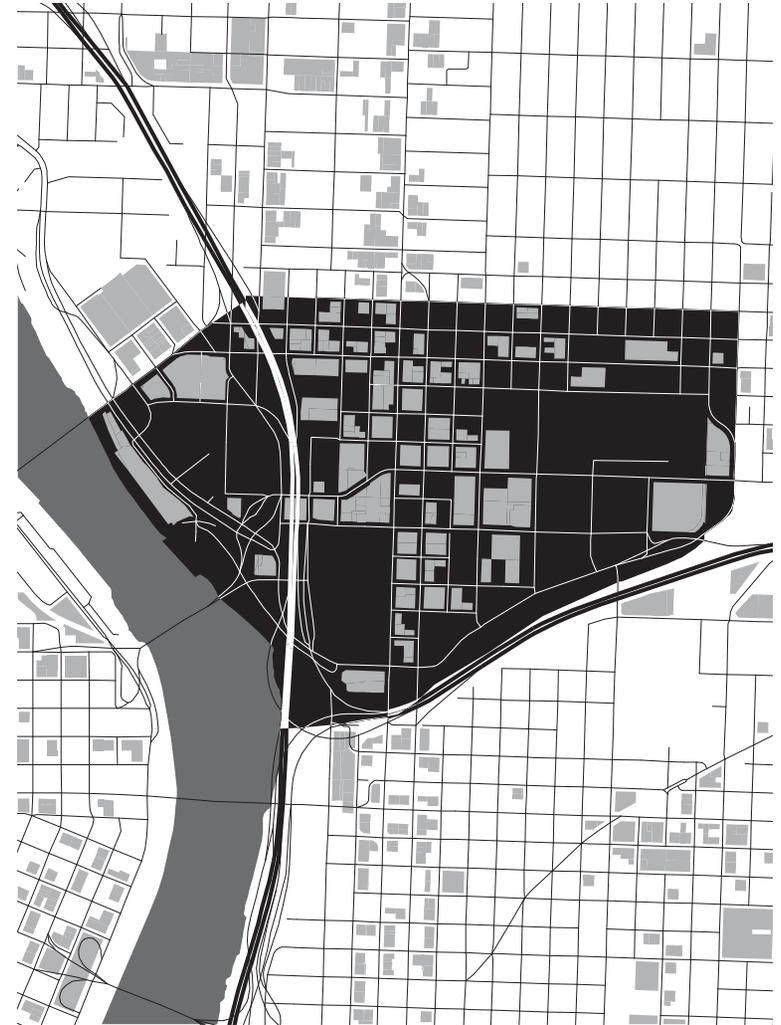
The 70 acres of identified redevelopable land in the Lloyd District have enough development potential under current entitlements to more than double (nearly triple) the amount of built space in the district. The identified redevelopment sites are comprised of both surface parking lots and significantly underdeveloped parcels. Over one-half of the identified redevelopment acres are sites that are larger than 40,000 square feet.

The Lloyd District has a strong retail presence in the Lloyd Center mall, the second greatest concentration of office space in the study area after Downtown, and zoning that could allow a significant amount of housing.



Recent major private development activity has included a few residential projects completed in the last five years and one office building completed in 2002.

Current development activity is limited. However, there are currently proposals for renovation of the Veterans Memorial Coliseum and new construction of several residential projects.



Lloyd District Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	203.0	11.0	66.0	21.1	30.0	19.7	8.5	1.2	7.9	7,632
Industrial ⁵	11.3	0.1	0.1	0	0	0	0	0	0	0
Mixed employment	0.1	0	0	0	0	0	0	0	0	0
Open space	5.4	0.001	0	0	0	0	0	0	0	0
Residential	10.3	0.8	3.7	1.4	1.9	1.2	0.1	0.06	0.9	1,159
Right-of-way/river	165.3	0	0	0	0	0	0	0	0	0
Totals⁶	395.5	11.9	69.8	22.5	31.9	20.9	8.5	1.2	8.8	8,791

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

Lower Albina

The vast majority of the buildable land in Lower Albina is zoned industrial. The only exceptions are the small area of Central Employment (EX) zoning along N Russell Street and a strip of commercial zoning (CX) along N Broadway immediately to the east of the Broadway Bridge.

This study identifies only two sites with mixed-use zoning larger than 10,000 square feet on N Russell Street as potentially redevelopable. The rest of the identified redevelopment opportunity is made up of the seven-acre Portland School District's Blanchard Education Services Center site and the three large blocks directly to the south fronting N Broadway.

The school district's property is currently zoned industrial (IG1) and would require a change of zoning to allow the type of development capacity identified in this study. The site is included in this study because its potential for mixed-use redevelopment has recently been the subject of considerable discussion.

The Blanchard site is identified on the map at right and in the accompanying table, in the industrial category, as potentially redevelopable. No actual increase in square footage is shown in the table due to zoning limitations.

Without changes to the zoning and desired future of the Blanchard building site and blocks to the south, it is unlikely much of the development capacity reflected in the summary table at right would be realized.



There is significant development potential in the industrial areas, but these areas are not included in this report because of the methodology and the limitations on allowed uses.



Lower Albina Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	4.4	0.1	1.5	0.3	0.5	0.2	0.1	0.01	0.1	93
Industrial ⁵	90.6	1.9	8.0	0	0	0	0	0	0	0
Mixed employment	3.9	0.2	2.8	0.4	0.8	0.4	0.2	0.03	0.2	185
Open space	0	0	0	0	0	0	0	0	0	0
Residential	0	0	0	0	0	0	0	0	0	0
Right-of-way/river	100.6	0	0	0	0	0	0	0	0	0
Totals⁶	199.6	2.1	12.3	0.7	1.2	0.7	0.3	0.04	0.3	277

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

River District

Over the past 15 years, the River District (which includes the Pearl District and most of Old Town/Chinatown) has seen the most rapid development of the districts in the study area. The former home of warehouses, light industrial uses and a large rail yard, the district has effectively been transformed into a vibrant mixed use neighborhood that over 12,000 people call home.

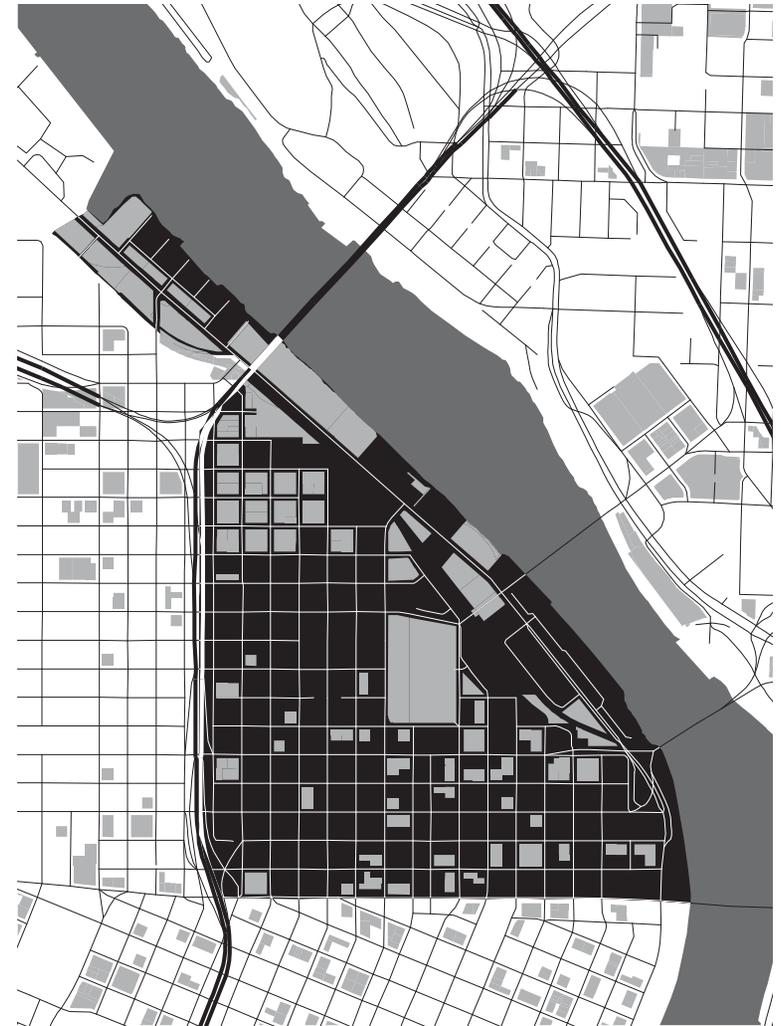
Despite this rapid development, there remains significant redevelopment potential within the River District. Redevelopment of all the identified opportunities in this district at current development trends would result in a doubling of the amount of built space in the district and more than a doubling of the current number of residential units.

Several blocks are identified as potential redevelopment sites in Old Town/Chinatown and in the southern part of the Pearl District, but the largest opportunity area is found in the northwest part of the district, where around 16 blocks appear as potential redevelopment sites. Significant potential also exists in the form of vacant or underdeveloped land along the river as well as in the 13 acre Main US Post Office site in the center of the district at NW Broadway and NW Lovejoy Street.

The Post Office has not formally announced plans to relocate their facility in the River District, but redevelopment of the site has long been the subject of discussions and it is widely anticipated that at some point in the next 20 years, the facility will relocate to an area with more available land and better airport and truck access.



Because the River District has seen the most sustained pace of development, it may actually reach substantial build-out in the not-too-distant future. Between 2001 and 2010, the district saw an average of around 860,000 square feet of new construction per year. If this rate of construction were to continue, the potential net increase reflected in the chart at right would be consumed in just over 18 years. If the Post Office doesn't relocate, allowing its site to be redeveloped, build-out could be reached 3 to 5 years sooner.



River District Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	62.4	4.7	15.2	3.7	5.7	3.5	1.5	0.2	1.4	1,361
Industrial ⁵	0	0	0	0	0	0	0	0	0	0
Mixed employment	147.3	14.1	54.5	7.3	14.5	10.9	2.0	0.9	6.9	5,760
Open space	7.2	0	0	0	0	0	0	0	0	0
Residential	25.0	0.7	6.7	0.6	1.4	0.5	0.05	0.02	0.4	480
Right-of-way/river	241.9	0	0	0	0	0	0	0	0	0
Totals⁶	483.8	19.5	76.3	11.6	21.6	14.9	3.4	1.1	8.7	7,601

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

South Waterfront

South Waterfront is unique among study area districts in that today, it is largely vacant. As a result almost 80 of the 130 acres of buildable land in the district are identified as redevelopable. No other district in the study area has as much potential for transformation as South Waterfront.

The central section of the district that is not identified as redevelopable is the location of the district's first significant new structures. Several large residential towers have recently been completed here and OHSU's Center for Health and Healing is located in the district.

Even with periods of robust construction, it will be many years before the district reaches the capacity reflected in the table at right.

Because public parks and right of way haven't yet been constructed in all parts of this district, the numbers in the table at right may be somewhat higher than the actual build-out capacity. It is also worth noting that the Willamette Greenway setback requires new construction to be set back from the bank of the river, but since the development capacity

of the district includes that land area (meaning the entitlements of the greenway lands may be transferred to other parcels in the district) the map includes undeveloped lands within the greenway.

The first major project in the northern part of the district, the OHSU/OUS Collaborative Life Sciences Building is now under construction. It will add a little less than one-half million square feet to the district.



South Waterfront Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	126.8	4.4	78.9	18.4	28.6	17.0	7.3	1.0	6.8	6,590
Industrial ⁵	0	0	0	0	0	0	0	0	0	0
Mixed employment	0	0	0	0	0	0	0	0	0	0
Open space	0.3	0	0	0	0	0	0	0	0	0
Residential	0	0	0	0	0	0	0	0	0	0
Right-of-way/river	110.8	0	0	0	0	0	0	0	0	0
Totals⁶	238.0	4.4	78.9	18.4	28.6	17.0	7.3	1.0	6.8	6,590

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

University District

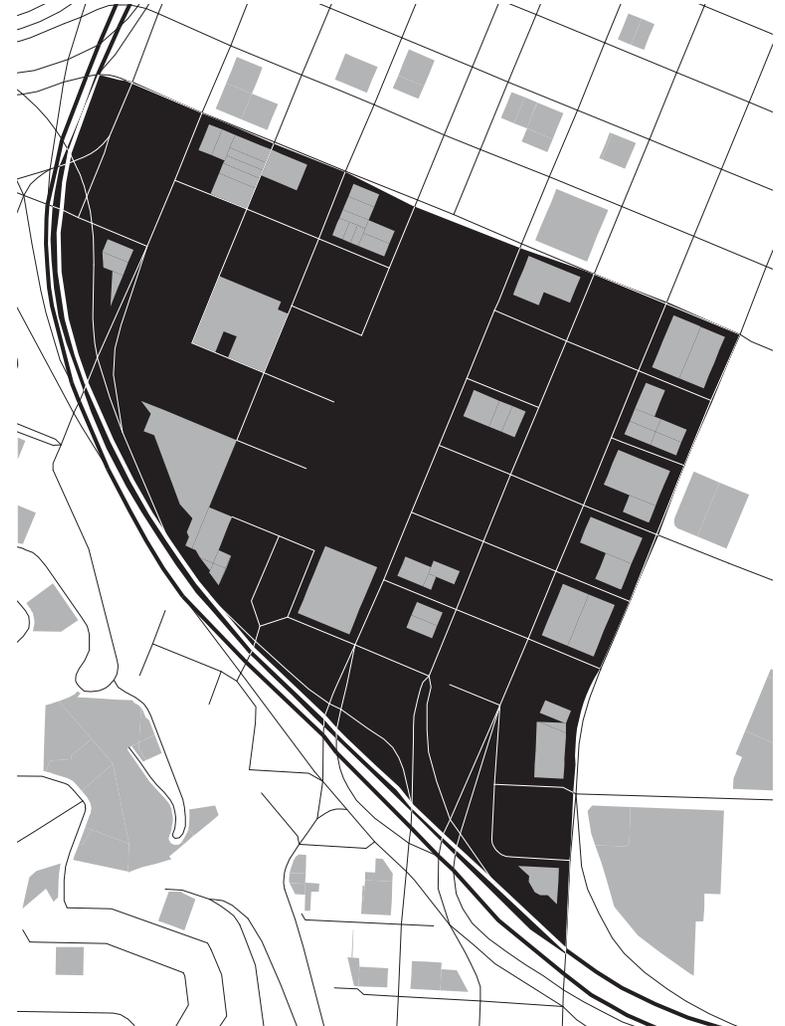
The smallest of the sub districts in the study area, the University District is home to Portland State University and the university is the district's largest land owner.

Some 14 acres of land in the district have been identified as potentially redevelopable with several large parcels within the campus and a collection of blocks and partial blocks stretching along SW 4th Avenue.



The university has been gradually expanding and building new buildings in and adjacent to the district, and several private housing developments have been proposed at the edges of the district or just outside the boundaries.

Additionally, PSU and its partners are nearing completion on the University Pointe at College Station project. It will add roughly 1,000 new beds to the district.



University District Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	37.5	3.3	8.7	2.3	3.5	2.2	1.0	0.1	0.9	860
Industrial ⁵	0	0	0	0	0	0	0	0	0	0
Mixed employment	0	0	0	0	0	0	0	0	0	0
Open space	5.3	0.01	0	0	0	0	0	0	0	0
Residential	12.7	1.4	5.2	1.1	2.0	1.2	0.1	0.06	0.9	1,124
Right-of-way/river	37.7	0	0	0	0	0	0	0	0	0
Totals⁶	93.2	4.6	13.9	3.5	5.3	3.4	1.1	0.2	1.8	1,984

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

Central City 2035 Expanded Study Areas

Since the adoption of the 1988 Central City Plan the Plan District boundaries have been changed only slightly. During the Central City 2035 process areas outside of the Plan District boundaries are being looked at. Some of these areas could be included or excluded in the future boundaries of the Central City. There are six expanded 'study areas' which possess certain characteristics that potentially make them appropriate for inclusion in the Central City 2035 boundaries. The characteristics of the areas are:

- Areas adjacent to and within roughly 2,000 feet of the existing Central City Plan District boundary;
- Areas likely subject to significant change through redevelopment;
- Major commercial corridors/gateways to Central City; and,
- Areas that are within identifiable natural boundaries, such as topography.

Information about the redevelopment capacity of these areas is not included in the totals for the existing Central City.

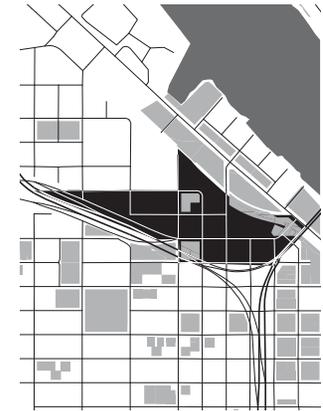
The expanded 'study areas' are:

- **Slabtown** — west of the River District and I-405, mixed uses with large redevelopment potential
- **Upshur Street** — west of the River District and North Pearl area, mixed uses with early 20th-century industrial buildings
- **Vancouver/Williams** — east of Lower Albina, historic area with open space and a school
- **Banfield Portal** — east of the Lloyd District and Central Eastside, areas on either side of I-84, mixed uses, open space, school
- **Powell Triangle** — east of the Central Eastside, industrial, office, and institutional area, new light rail station coming
- **South Portland** — west of Downtown and South Waterfront, largely institutional and commercial, close proximity to Downtown

The total amount of redevelopable land in these areas is quite small compared to the larger Central City. However, many of these areas could have a significant impact on the image the Central City in the future.



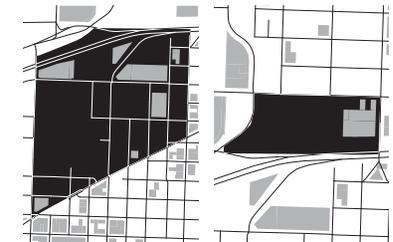
Slabtown



Upshur Street



Vancouver/Williams



Banfield Portal



Powell Triangle



South Portland

Expanded Study Areas Summary

Generalized zone ¹	Total acres	Developed building area (million sq. ft.)	Redevelopable acres	Potential net increase @ base FAR (million sq. ft.)	Potential net increase with maximum FAR bonus (million sq. ft.)	Projected net increase (million sq. ft.) ²	Projected commercial (million sq. ft.) ³	Projected retail (million sq. ft.) ³	Projected residential (million sq. ft.) ³	Projected new residential units ⁴
Commercial	47.6	1.4	13.9	2.2	4.0	2.0	0.8	0.1	0.8	755
Industrial ⁵	26.6	0.6	1.2	0	0	0	0	0	0	0
Mixed employment	114.1	3.8	25.7	3.4	6.7	4.4	0.7	0.4	2.8	2,297
Open space	20.2	0.01	0	0	0	0	0	0	0	0
Residential	40.3	1.8	5.3	0.5	1.2	0.4	0.04	0.02	0.3	383
Right-of-way/river	186.1	0	0	0	0	0	0	0	0	0
Totals⁶	435.0	7.6	46.1	5.9	11.8	6.7	1.6	0.5	3.9	3,435

1. Base zones grouped into three primary developable categories. *See Appendix A.*

2. Based on utilization by zone of projects under construction through 2011. *See Appendix A.*

3. Based on % of new space by use by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

4. Based on average residential unit size by generalized zone for 176 major projects constructed or under construction 1990–2010. *See Appendix B.*

5. Industrial is shown here for reference. Development potential is not calculated due to methodology and the limitations on allowed uses.

6. Totals may not add due to rounding.

Appendix A – Capacity based on current utilization

Development capacity by use based on projects through June 2011

Predominant use	Square footage allowed by base FAR (million sq. ft.)	Projected FAR utilization based on projects 2004–2011 *		Breakdown of new space by type, based on development trends 1990–2011							
		Average, base FAR utilization	Projected space built (million sq. ft.)	% Commercial	Square footage commercial (million sq. ft.)	% Retail	Square footage retail (million sq. ft.)	% Residential	Square footage residential (million sq. ft.)	Average residential unit size	New residential units
Commercial – CX	61.8	90%	55.7	43%	23.9	6%	3.3	40%	22.2	1,033	21,532
EG1	0.6										
EG2	0.8										
EX	14.1										
Combined Mixed Employment	15.4	123%	18.9	17%	3.3	8%	1.5	63%	11.8	1,196	9,890
IG1	—										
IH	—										
Combined Industrial	—	—	—	—	—	—	—	—	—	—	—
R1	0										
RH	0.7										
RX	6.3										
Combined Residential (RX+)	7.0	87%	6.1	9%	0.5	5%	0.3	78%	4.8	821	5,814
Totals	84.3	—	86.3	33%	28.7	7%	5.6	49%	43.0	1055	37,236

Source: Bureau of Planning and Sustainability

*This period was seen as an appropriate time frame to judge FAR utilization as it includes market fluctuations.

Appendix B — Summary of recent development projects

Central City development¹ — Major projects: 1990–2010

	Commercial zones	Mixed employment zones	Residential zones	All zones
Total building area (sq. ft.)	14,457,699	9,912,612	3,695,520	28,065,831
Total site area (sq. ft.)	3,304,507	2,214,765	862,615	6,381,887
% Residential ²	40%	63%	78%	53%
% Commercial ²	43%	17%	9%	30%
% Retail ²	6%	8%	5%	7%
Residential units built	5,541	5,210	3,510	14,261
Average residential unit size (sq. ft.)	1,033	1,196	821	1,040
Average base far utilization	78%	102%	81%	88%

Based on 176 projects completed or under construction 6/2011. Source: Bureau of Planning and Sustainability

1. Note: Development reflected here does not include rehabilitation or renovation projects.
2. Percentages may not total 100% due to square footage attributed to other uses, such as parking.

185657 Exhibit A(8)

BLI Appendix B Recommended Draft June 2012