



Photo Credit: MWA Architects

Better Housing by Design:

An Update to Portland's Multi-Dwelling Zoning Code

Assessment Report

December 2016



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



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Acknowledgments

Bureau of Planning and Sustainability

Charlie Hales, Mayor, Commissioner-in-charge

Susan Anderson, Director

Joe Zehnder, Chief Planner

Project Staff

Tom Armstrong, Supervising Planner, BPS

Bill Cunningham, Project Manager, BPS

Denver Igarta, Senior Planner, PBOT

Radcliffe Dacanay, Management Analyst, BPS

Leslie Lum, City Planner II, BPS

Lora Lillard, City Planner II, Urban Design, BPS

Marc Asnis, City Planner I, Urban Design, BPS

Sara Wright, Community Outreach and Information Representative, BPS

Daniel Soebbing, Hatfield Fellow, PBOT

Neil Heller, Community Service Aide II, BPS

Contributors

Eden Dabbs, Communications, BPS

Chaise Jonsen, Communications, BPS

Nick Kobel, Associate Economic Planner, BPS

Neil Loehlein, GIS Analyst, BPS

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Purpose and Organization of this Report

The primary purpose of this report is to establish a foundation for the development of implementation tools, such as Zoning Code regulations and street connectivity approaches, and to inform public discussion on the topic of the multi-dwelling zones and development.

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Introduction

Better Housing by Design: An Update to Portland's Multi-Dwelling Zoning Code

Project is being led by the City of Portland's Bureau of Planning and Sustainability (BPS). It will address barriers to achieving higher quality multi-dwelling residential development and healthy, connected neighborhoods. This will help implement Portland's new Comprehensive Plan, including policies that call for the development of a wide range of housing types to meet Portland's diverse housing needs, with design that is supportive of the positive qualities of neighborhoods. As part of goals for healthy, complete neighborhoods, policies call for safe and healthy housing that provides convenient access to the goods and services that meet Portlanders' daily needs.

Project Overview

The Better Housing by Design Project will focus on revising Zoning Code development and design standards in Portland's multi-dwelling zones (R3, R2, R1, and RH) outside the Central City. These medium to high-density residential zones play a key role in providing new housing to meet the needs of a growing Portland. The many types of housing built in these zones include apartment and condominium buildings, fourplexes, rowhouses, and houses. The project will address a range of subjects, including:

- Reducing barriers to housing development (especially affordable housing).
- Creating opportunities for open space and green elements that support healthy living for residents.
- Crafting building design and scale in middle-density zones that fits into neighborhoods.
- Integrating well-designed high-density housing in centers and corridors.
- Enabling new approaches to creating street and pedestrian connections in areas that lack them.
- Developing incentives for affordable housing and desirable features.

The project is partially funded by a Metro Community Planning and Development Grant, as part of a regional grant program that assists local planning efforts, to support development of future housing and jobs.

Portland Bureau of Transportation's Connected Centers Street Plan

This project will include a focus on East Portland to foster positive development outcomes responsive to the area's distinct characteristics and needs. This project and its public involvement components will be coordinated with the Portland Bureau of Transportation's Connected Centers Street Plan, which will be creating street plans for the Jade District and Rosewood/Glenfair centers.

The lack of street connectivity in East Portland neighborhoods is largely attributed to their rural and auto-oriented development history, and street systems that were created before they became part of the City of Portland. The Jade District and Rosewood/Glenfair area are examples of recently-designated centers, intended to become walkable places with concentrations of services and housing, that have large amounts of multi-dwelling zoning, but poor street connectivity.

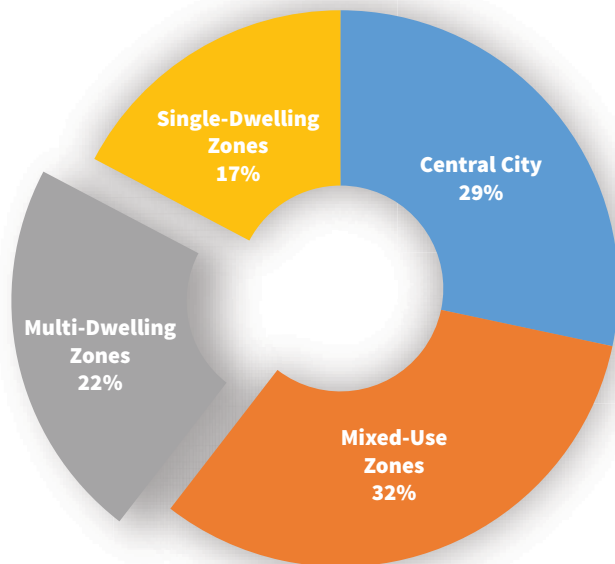


The range of housing types in the Multi-Dwelling Zones is diverse.



Why does this matter?

Between today and 2035, 80 percent of the roughly 120,000 new housing units developed in Portland will be in multi-dwelling buildings. Many of those buildings will be along mixed use corridors and main streets. Nearly one-quarter of the total growth will be in multi-dwelling zones outside the Central City. This housing development in and near centers and corridors is helping to meet local and regional objectives for locating housing close to services and transit. It also means that a lot more Portlanders will be living in multi-dwelling buildings and other compact housing types, and that the design of this housing will be playing an increasingly important role in providing quality living environments for residents and in shaping the form and character of neighborhoods. Better Housing by Design will develop approaches to help ensure that new development in the multi-dwelling zones better meets the needs of current and future residents, while contributing to the positive qualities of the places where they are built.



Percent of housing units by zone by 2035

The Multi-Dwelling Zones outside the Central City are anticipated to be the location of more than 23,000 new housing units by 2035. That is 22 percent of the total residential growth anticipated for the next 20 years.

Multi-dwelling zones play an important role in providing affordable housing opportunities, which are increasingly not available in single-dwelling zones or in higher density mixed-use zones – especially for families. Multi-dwelling zones have been the location of a large portion of housing development by affordable housing providers. These zones will continue to play a critical role in providing a broad range of housing to meet the needs of all Portlanders.

The livability of multi-dwelling housing has a disproportionate impact on the quality of life of people of color and low-income households, larger proportions of whom live in multi-dwelling housing than the general population. The project will be informed by extensive outreach to people of color, low-income and immigrant households, which was undertaken as part of past projects that focused on healthy housing. These projects identified the need for residential open spaces, housing design supportive of healthy living, and better and safer connections to neighborhood destinations – especially in East Portland.

Focus Areas

East Portland



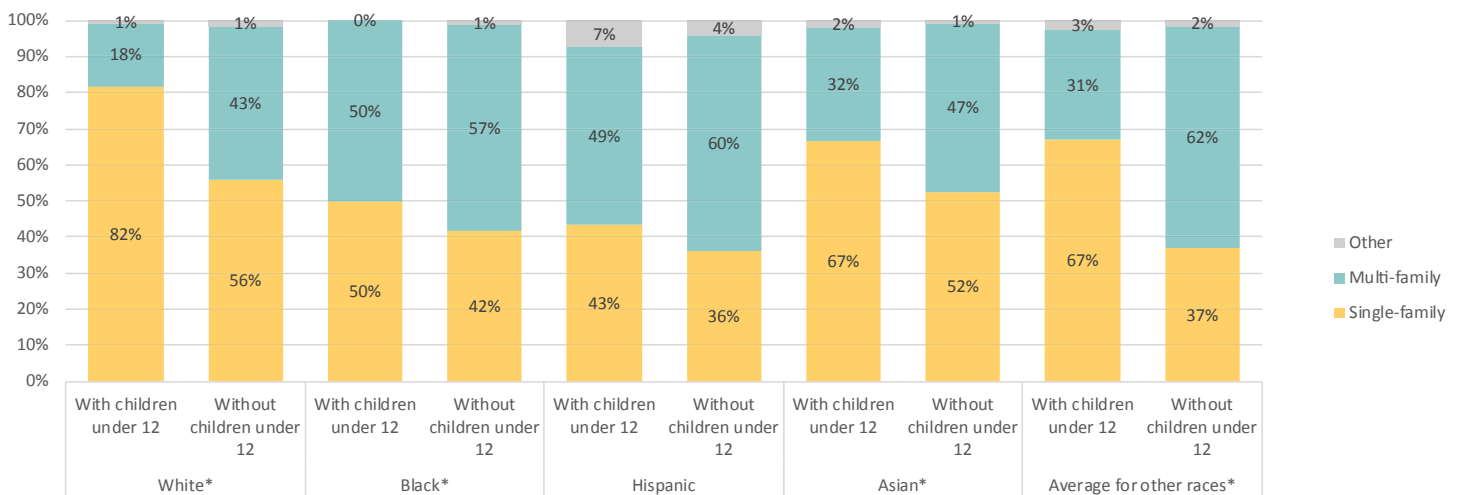
East Portland is home to a large percentage of Portland's youth, communities of color and low-income populations. This project will work on improving regulations to support the development of neighborhoods that increase safety and access to opportunity in East Portland, an area of the city where the lack of street connectivity compromises safe and convenient access to local destinations and transit for the area's population.

While mixed-use zoning is well-distributed along Portland's major streets, nearly 40 percent of all multi-dwelling zoning, over 2,000 acres, is located in East Portland. This project will create Zoning

Code and Portland Bureau of Transportation (PBOT) tools to improve the design of development and street/pedestrian connectivity in East Portland (site design and connectivity issues will also be relevant to West Portland). This project will focus on two study areas: the Jade District (R1 and R2 zoning) and Rosewood/Glenfair around the 148th Light Rail station (RH zoning).

Key Equity Considerations

**DWELLING STRUCTURE BY RACE/ETHNICITY OF HOUSEHOLDER
BY PRESENCE OF CHILDREN UNDER 12
MULTNOMAH COUNTY, OR (2010-2014)**



Denotes not Hispanic or Latino.
Source: IPUMS-USA, University of Minnesota. 2010-2014 ACS 5-year estimates. Portland Bureau of Planning and Sustainability.

The Portland Plan and 2035 Comprehensive Plan direct the City to prioritize underserved communities in planning decisions. Larger proportions of people of color, low income households and renters live in multi-family housing compared to the general population. The project will address the needs of under-represented Portlanders through better housing design, incentives for affordable housing and safer and more convenient street connections.

High-Density Housing in Inner Neighborhoods



The project will look at design and development standards in the RH zones, which allow 65 feet to 75 feet of height in areas with small-lot residential platting patterns. It will consider issues related to the form of high-density housing on small lots and focus on the Interstate Corridor, which has large areas with RH zoning.

Middle-Density Housing in Inner Neighborhoods



The Better Housing by Design project will consider design and development standards for medium-density, multi-dwelling infill development in neighborhoods that have an established small-lot residential platting pattern (including the Inner Ring Districts). It will also consider how middle-density housing (typically two-to-five units per lot) can be designed with greater continuity within the context of mixed single-family and small-scale multi-dwelling housing.

What will the Better Housing by Design Project do?

Over the past decade, multiple City of Portland project teams have worked with the community to identify issues related to the design of multi-dwelling development and the topic of healthy, connected neighborhoods.

Building on this diversity of public input, Better Housing by Design (BHD) will focus on creating new tools, such as Zoning Code regulations and street connectivity approaches, to address issues that are important to the community. The relationship between these previous projects and this project, including identification of issues and desired outcomes, are described in the Summary of Related Projects section of this report.

The BHD Project will focus on the following topics:

Site Design and Healthy Active Living



- Open space and other amenities for residents.
- Landscaping requirements, space for new trees or tree preservation.
- Accessibility/visitability, accommodation of on site stormwater management, and minimizing impervious surfaces.
- Possibilities for review of site design of large sites.

Past Projects

- 2035 Comprehensive Plan
- Infill Design Project
- East Portland Review and Action Plan
- Eastside MAX Station Community Project
- 122nd Avenue Planning Study
- Healthy Active Communities for Portland's Affordable Housing Families Initiative
- Promoting Health through Multi-Family Housing
- PBOT Street / Bicycle / Pedestrian Connectivity Studies

Increased Connectivity



- Develop implementation tools to achieve better street/pedestrian system connectivity. This is particularly important in East Portland and will be explored through PBOT's Connected Centers Street Plan.
- Minimum site size requirements for land divisions and multi-dwelling development proposals in areas with poor street connectivity, so that development sites are of sufficient size to provide street or pedestrian connections.

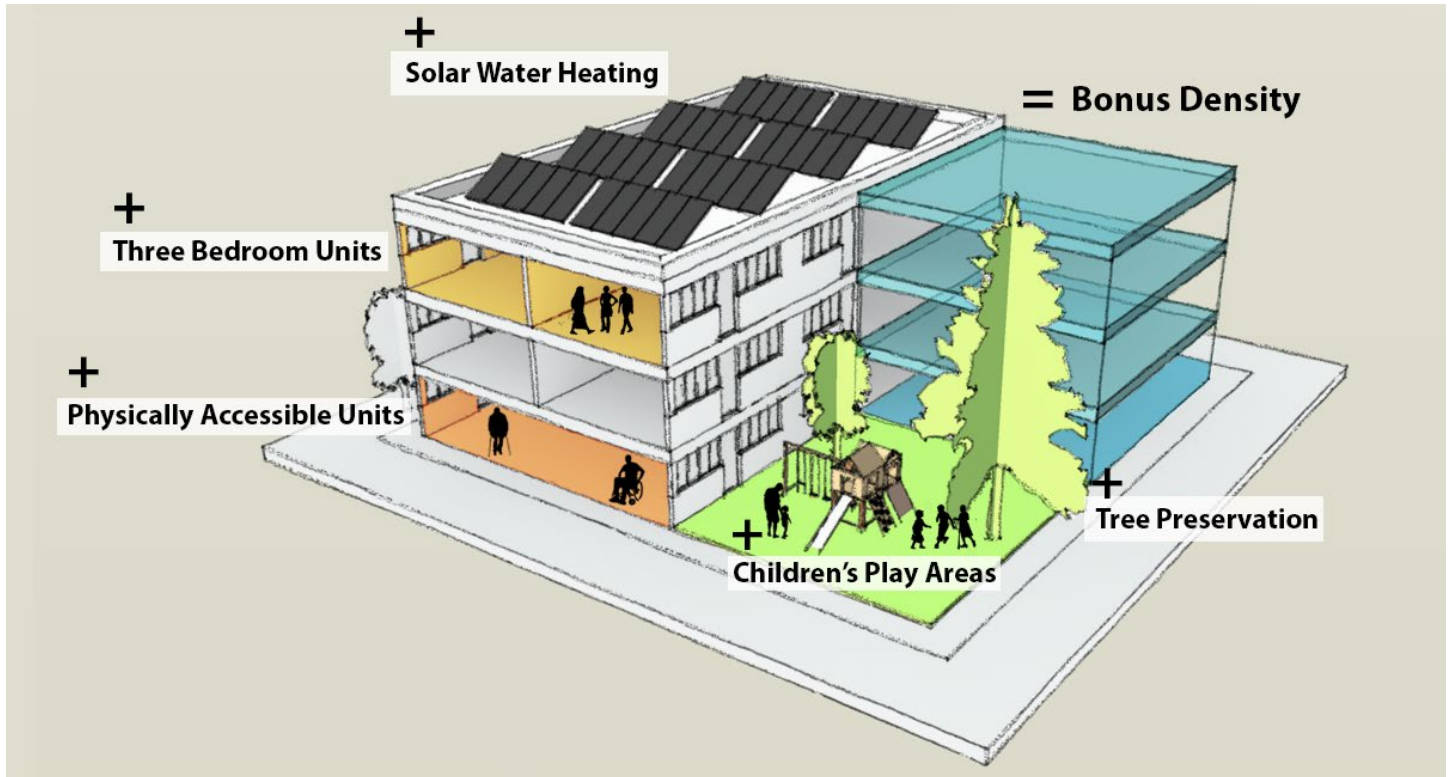
What will the Better Housing by Design Project do?

Address Building Design and Scale



- Address relation of buildings to streets, neighborhood context and transitions to lower-scale zones.
- Consideration of whether development standards should be different on corridors versus neighborhood side streets.
- Consideration of building form-related standards, including whether detached houses should be regulated similarly regardless of being on separate or shared lots.

Amenity Bonuses

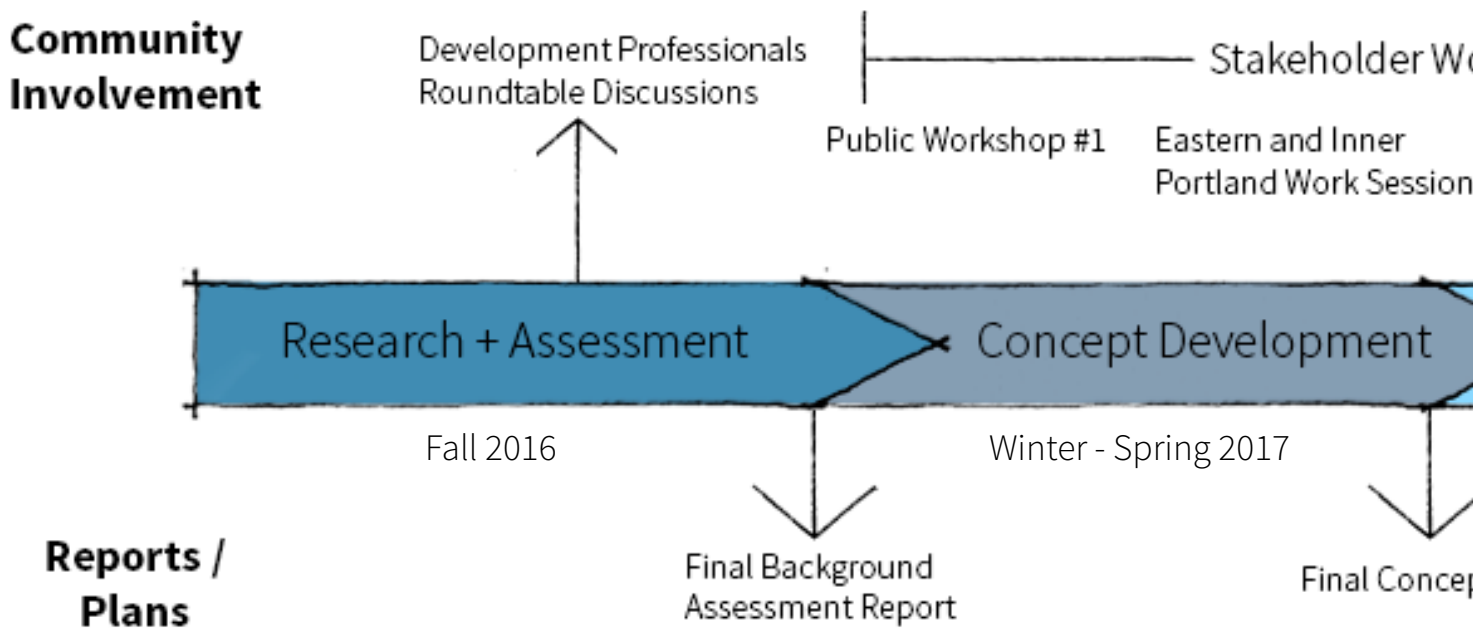


- Consideration of effectiveness of existing amenity bonuses.
- Consideration of refinements to bonuses for affordable housing, adopted as part of the Inclusionary Housing Zoning Project.
- Consider incentives for accessibility/age-friendly design and other outcomes called for by new Comprehensive Plan policies.

Project Work Plan

Outreach Components

Phase	Tasks
I. Research and Assessment <i>Fall 2016</i>	<ul style="list-style-type: none"> • Policy and code analysis • Regulatory review • Historic and recent development research • Block and street connectivity analysis • Best practice research
II. Concept Development <i>Winter - Spring 2017</i>	<ul style="list-style-type: none"> • Develop concepts for development standards • Create development prototypes for community discussion of preferred outcomes. • Analyze economic feasibility of concepts • Select performance measures for monitoring success. • Identify conceptual street/pedestrian connections for East Portland study areas.



Phase

Tasks

III. Code Development

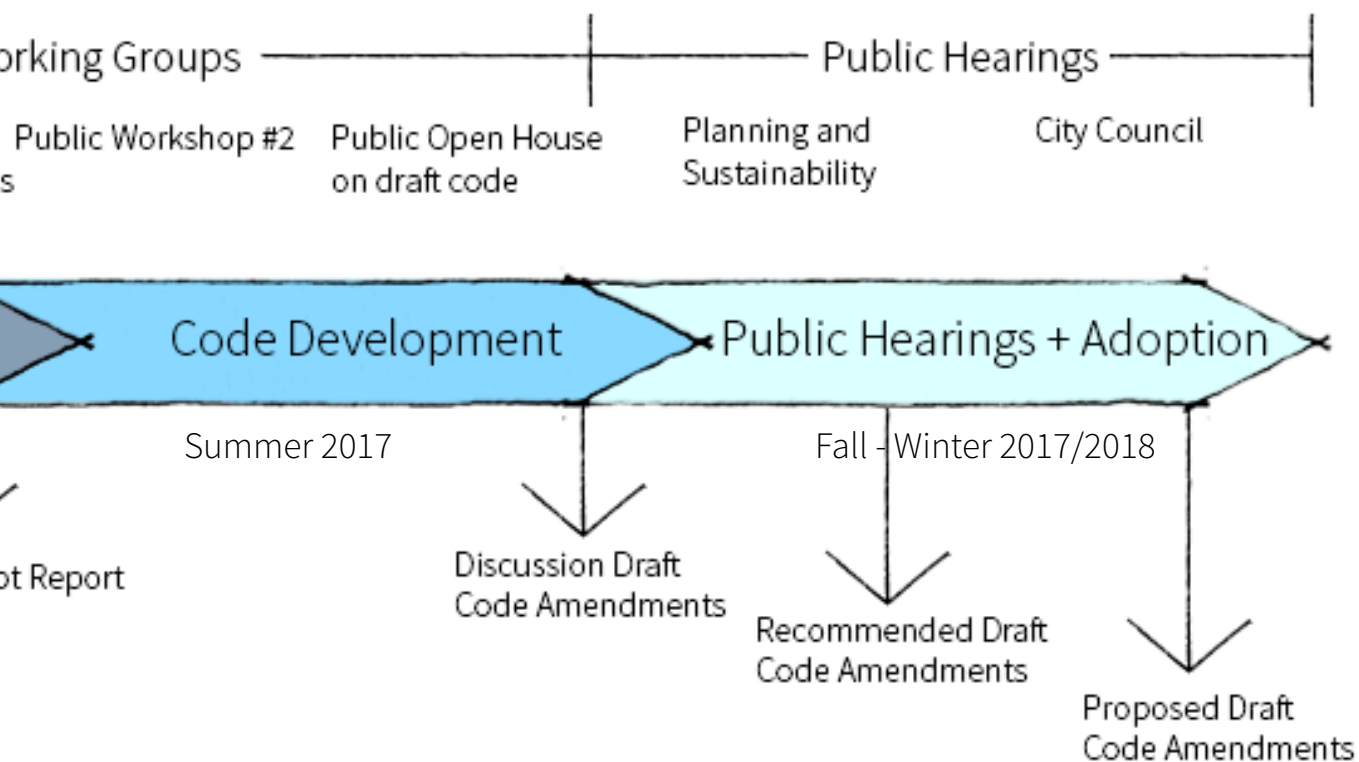
Summer 2017

- Develop Zoning Code development standards to implement the Concept Plan.
- Develop Connected Centers street plans for Jade District and Rosewood centers.

IV. Public Hearings and Adoption

Fall - Winter 2017

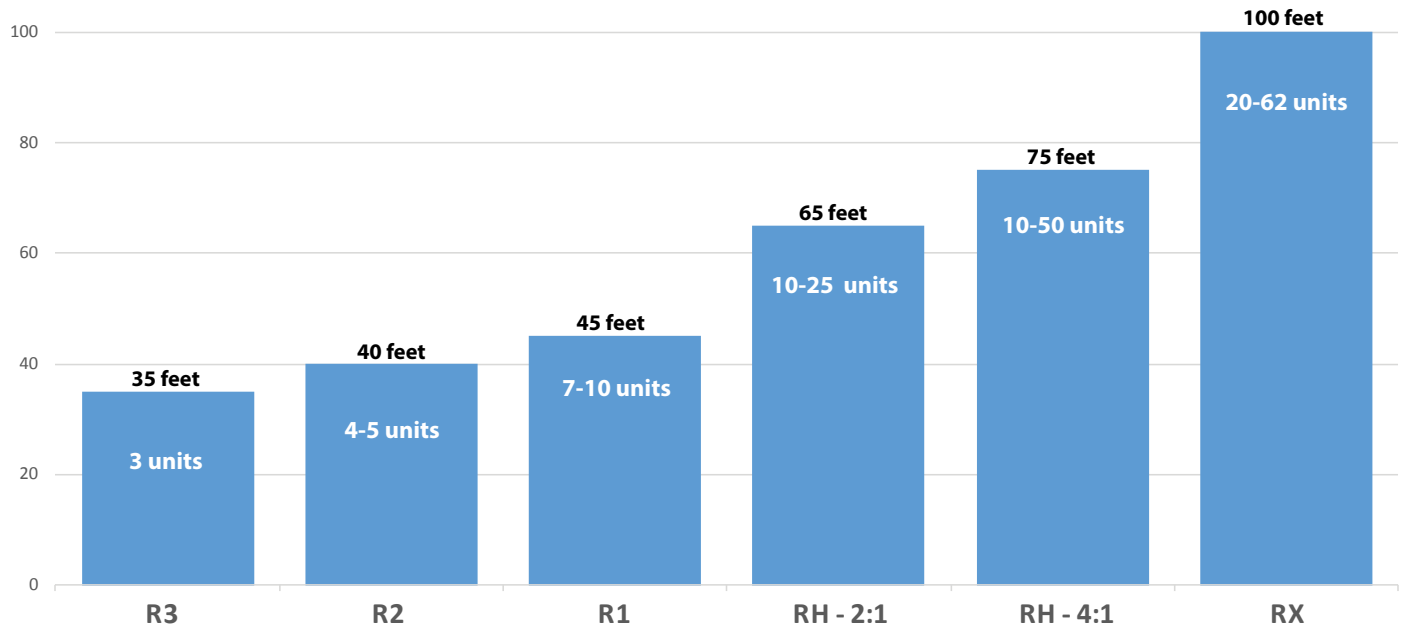
- Prepare proposed draft code amendments.
- Present to Planning and Sustainability Commission at hearings and worksession.
- Present to City Council at hearings and worksessions.



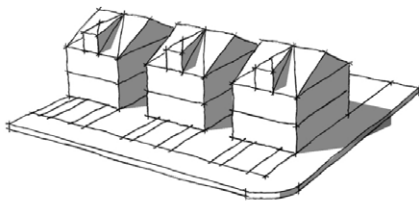
Summary of Citywide Development Activity (2006 - 16)

Base Zone Density Diagram

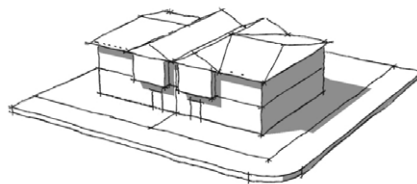
Below is a diagram showing the estimated amount of units for each multi-dwelling base zone, based on a 10,000 square foot site. The diagrams shows maximum heights and density requirements for each zone [The RH and RX zones are regulated by floor area ratio, instead of unit density].



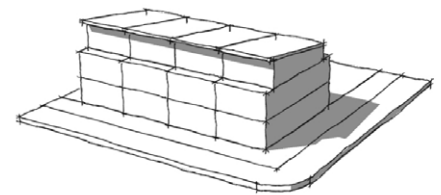
Multi-Dwelling Housing Types



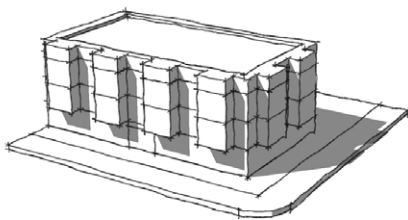
Single-family homes
Found in: R3, R2, R1 zones



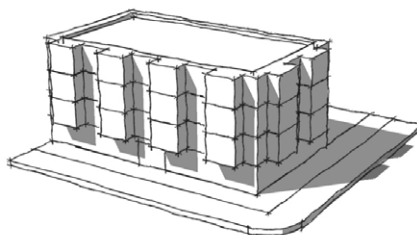
Duplex
Found in: R3, R2, R1, RH zones



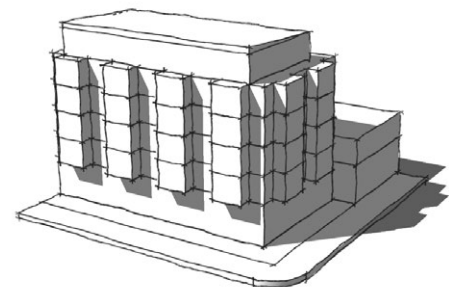
Rowhouses / Townhouses
Found in: R3, R2, R1, RH zones



Low-rise Apartments
(fewer than 20 units)
Found in: R2, R1, RH, RX zones



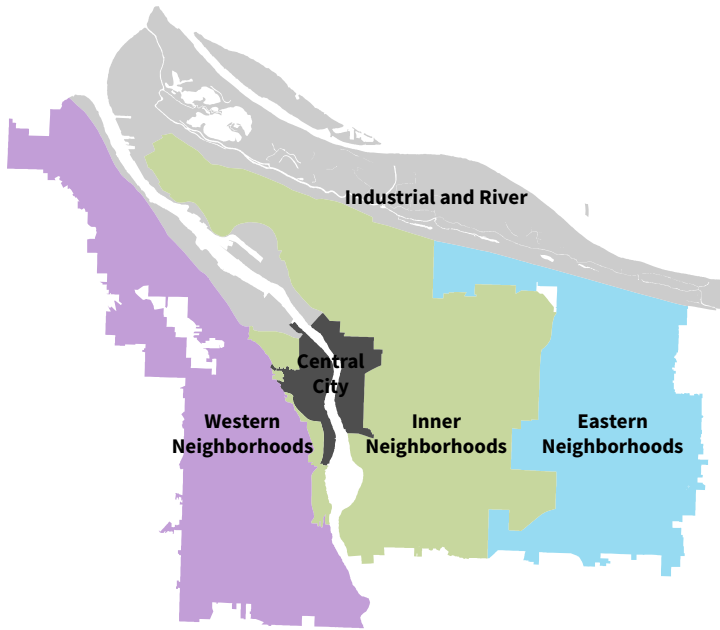
Mid-rise Apartments
(fewer than 20 units)
Found in: R2, R1, RH, RX zones



High-rise Apartments
(more than 20 units)
Found in: RH, RX zones

Portland's Five Pattern Areas

Portland includes three fundamentally distinct types of neighborhoods: the Inner Neighborhoods, with their main street commercial districts and compact street grid; the Western Neighborhoods, whose urban form is shaped by hilly terrain, streams and other natural features; and the Eastern Neighborhoods, whose diverse mix of urban and more rural forms is set against a backdrop of Douglas firs and buttes. Beyond these three neighborhood urban forms are two other Portland patterns: those of the Central City neighborhoods, Portland's most intensely urbanized area; and the industrial districts, with their own distinct urban form characteristics.



Western Neighborhoods



Inner Neighborhoods



Central City



Eastern Neighborhoods

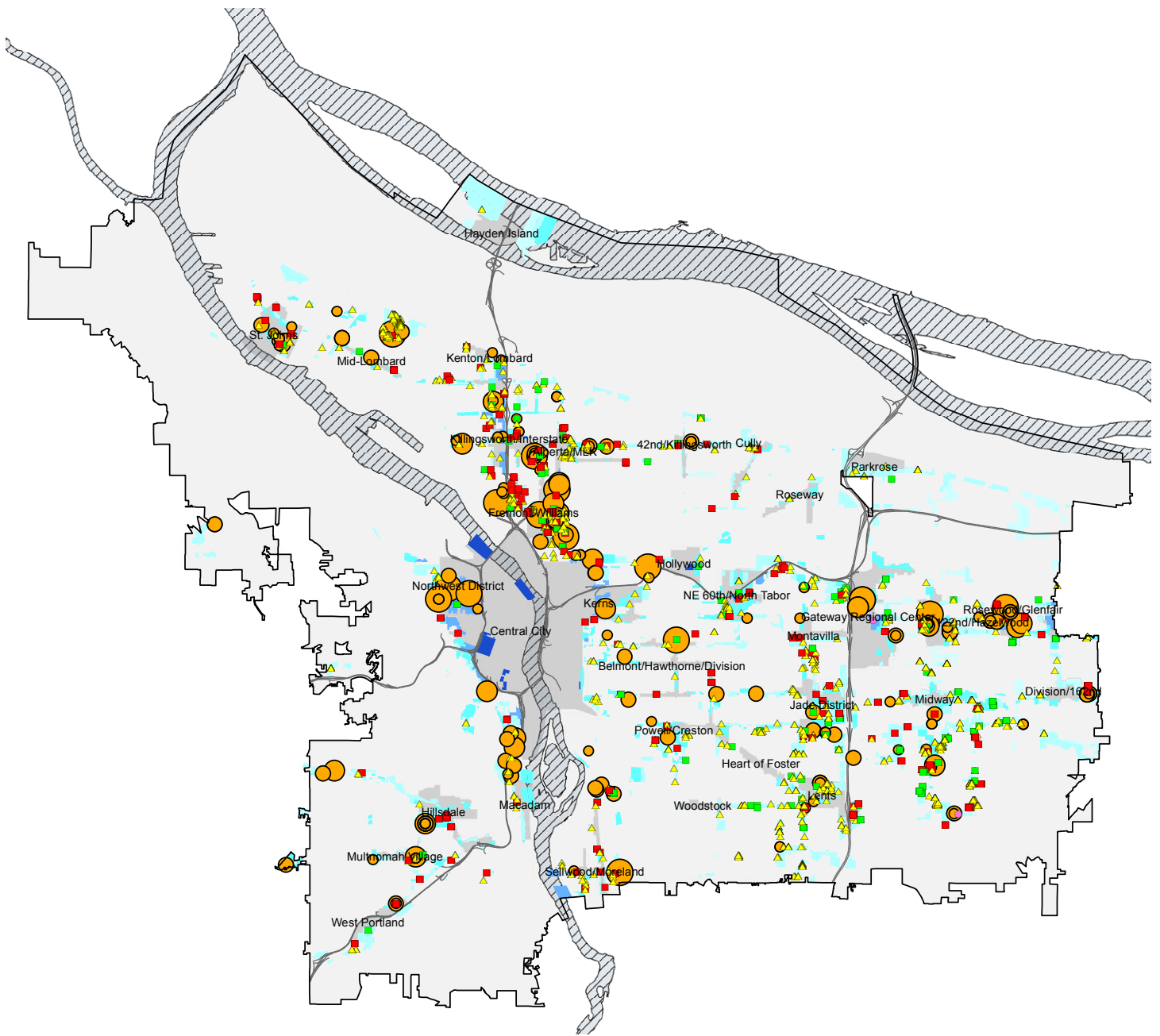


Industrial and River



Summary of Citywide Development Activity

The following map and charts show development activity in the multi-dwelling residential zones from 2006 through 2016.



Legend

New Development in Multi-dwelling Zones

- ▲ Single Family Dwelling/Accessory Dwelling Unit
- Duplex
- Rowhouse/Townhouse
- Special Residential

Apartment/Condo

- < 6
- 7 - 19
- 20 - 50
- 51 - 332

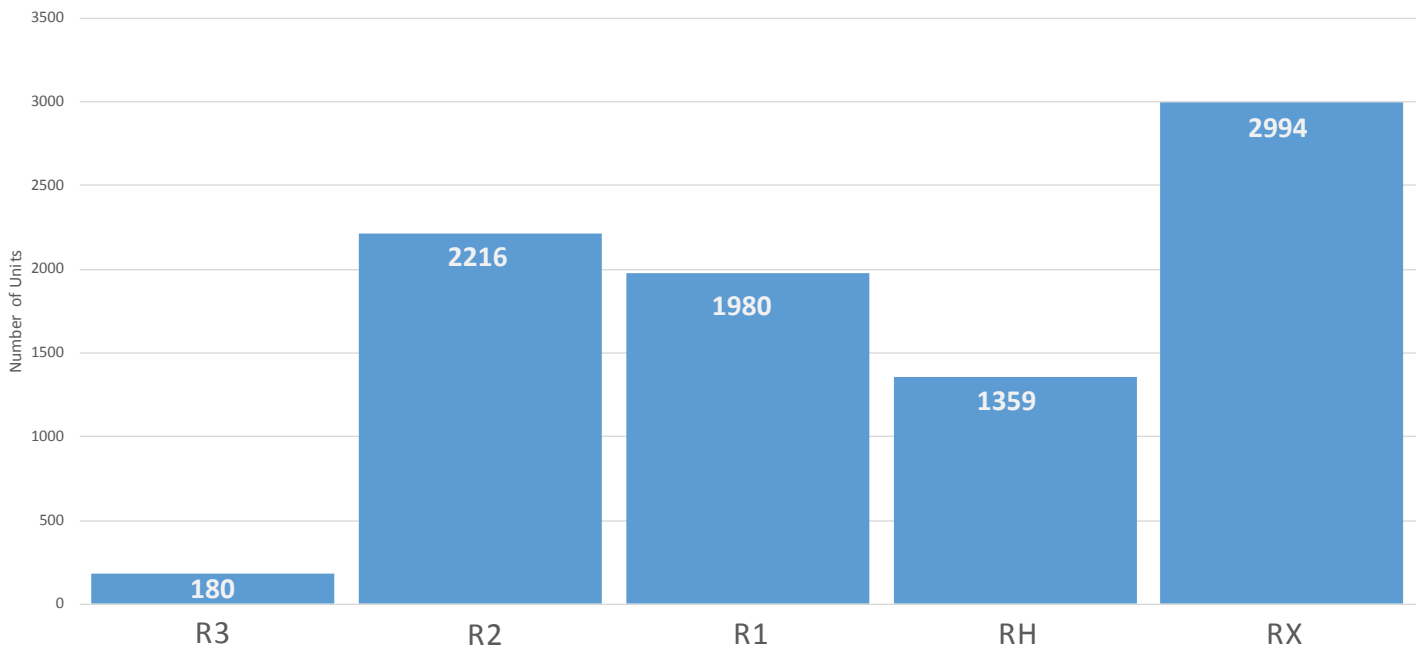
Multi-Family Zoning Designations*

- R3 - Multi-Dwelling Residential 3,000
- R2 - Low Density Multi-Dwelling Residential 2,000
- R1 - Medium Density Multi-Dwelling Residential 1,000
- RH - High Density Multi-Dwelling Residential
- RX - Central Multi-Dwelling Residential

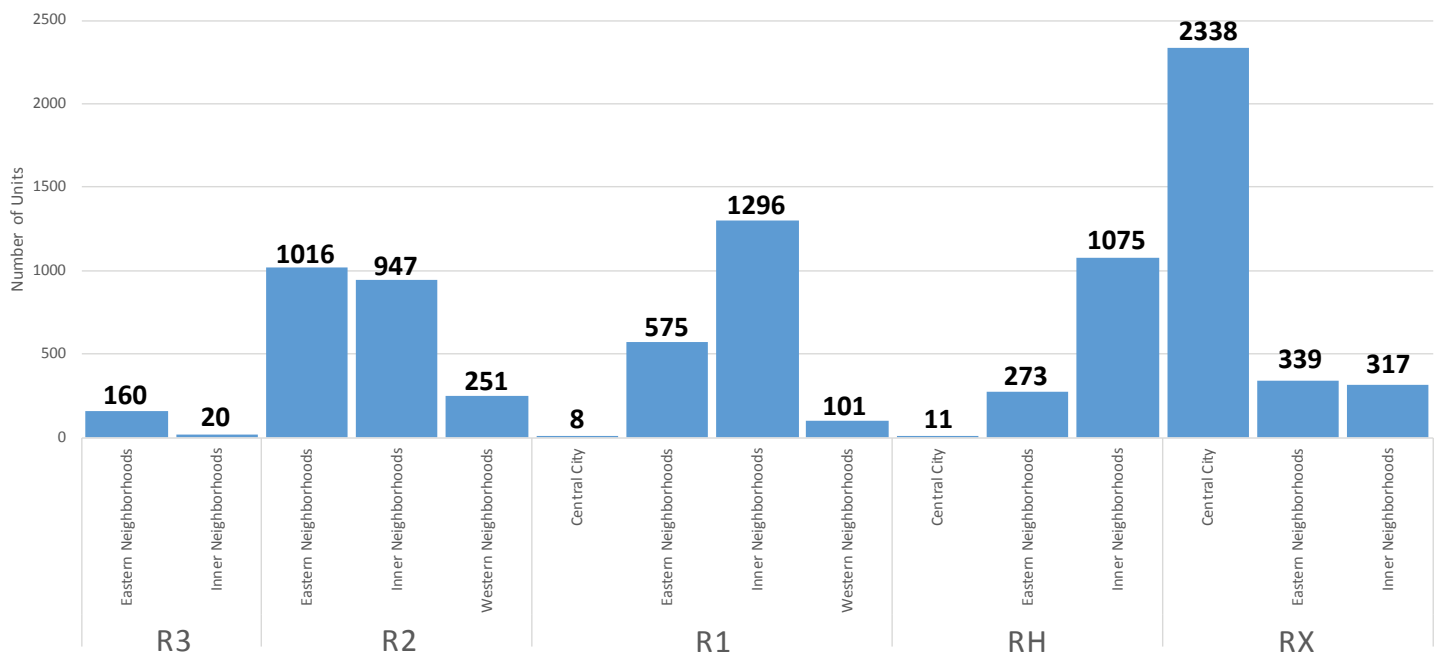
What is the data telling us?

- RX zone is producing the most units. Most of these units are located in the Central City, which is outside the scope of the Better Housing by Design project.
- The majority of R1 and RH units are located in the inner neighborhoods.
- R2 zone is producing the most units in East Portland.
- R3 zone is producing the least amount of units, mostly located in East Portland in limited areas.

Number of units by zone [2006 - 16]



Number of units by zone and pattern area [2006 - 16]



Profile of the Base Zones

R3: Residential 3000

Summary

R3 is a low-density multi-dwelling zone located predominately in East Portland. Housing is characterized by one to two story buildings and a low building coverage. Often the types of new development will be multi-dwelling structures such as duplexes, triplex and rowhouses. Density is approximately 14.5 dwelling units per acre, 21 units per acre if an amenity bonus provision is used.

Community Examples

Examples of recent development in R3 zones throughout the city.



Pattern Area: **Eastern**
Housing Type: **Duplex**
Number of Units: **2**



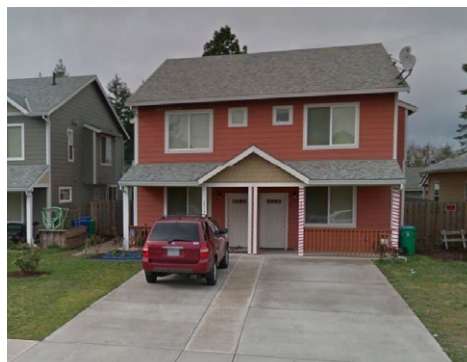
Pattern Area: **Eastern**
Housing Type: **Duplex**
Number of Units: **2**



Pattern Area: **Eastern**
Housing Type: **Townhouses**
Number of Units: **20**



Pattern Area: **Eastern**
Housing Type: **Duplex**
Number of Units: **2**

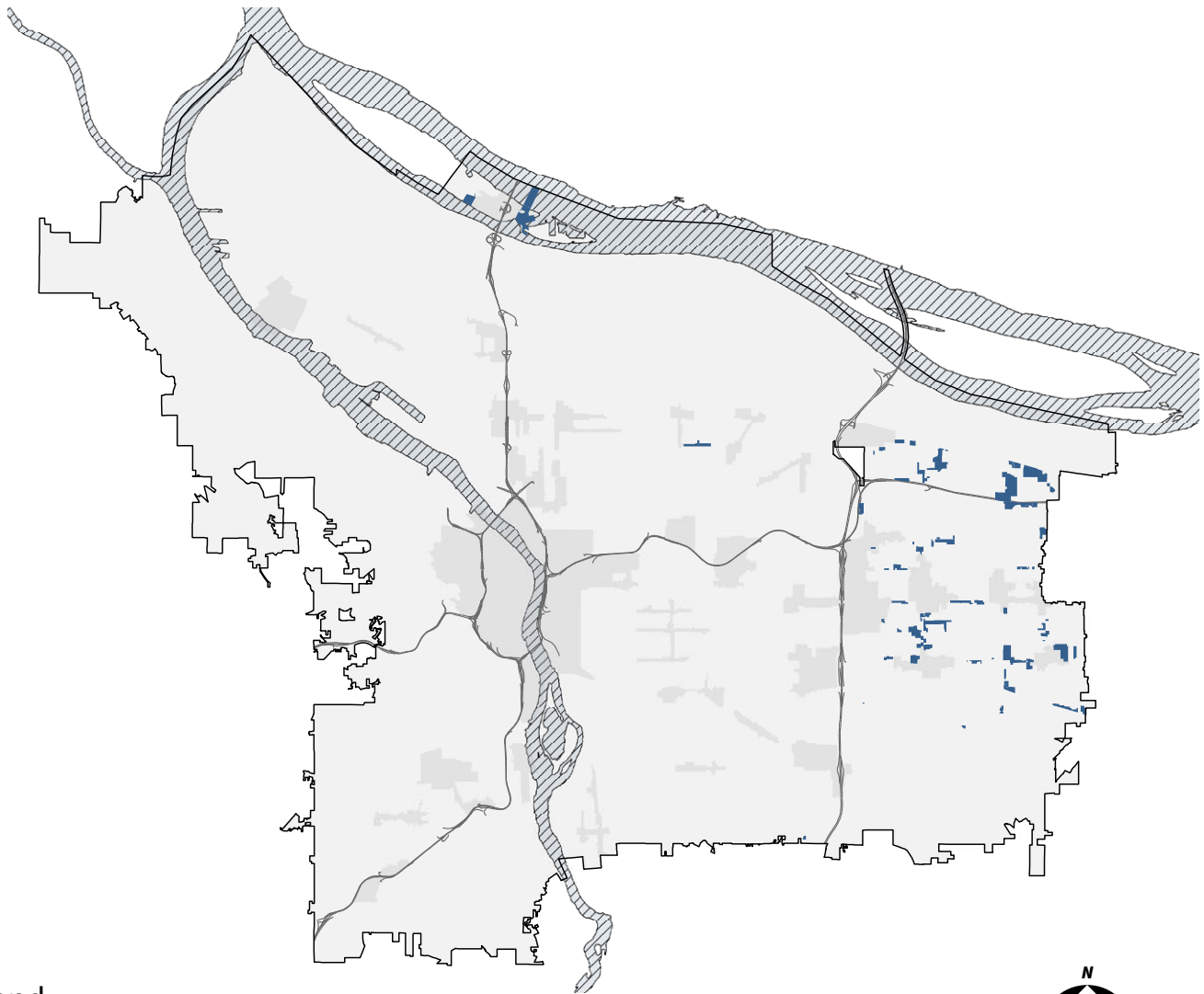


Pattern Area: **Eastern**
Housing Type: **Duplex**
Number of Units: **2**



Pattern Area: **Eastern**
Housing Type: **Single-family homes**
Number of Units: **2**

Map of R3 Zone



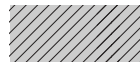
Legend:



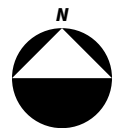
R3 Zoning



City Centers



Rivers



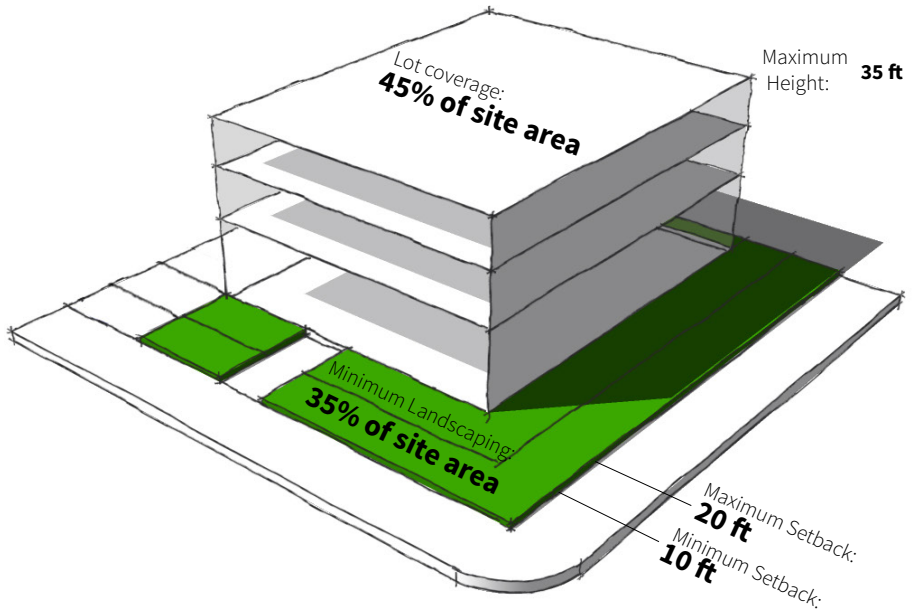
Land Area



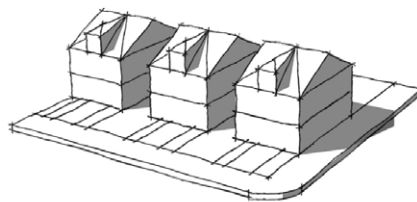
R3 has a total of 517 acres, a majority of this land located in the eastern neighborhoods. According to the City's Buildable Land Inventory, roughly 720 units will be built in the R3 zone over the next 20 years.

R3: Building and Site Requirements

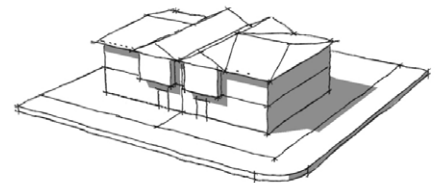
Primary permitted uses	Residential
Height	35 ft
Maximum density	1 unit per 3000 ft² Allows 8 units maximum per building
Minimum density	1 unit per 3750 ft²
Maximum front setback	20 ft
Minimum front setback	10 ft
Maximum lot coverage	45% of site area
Maximum building length	None
Minimum Landscaping	35% of site area
Required outdoor area	48 ft² / unit



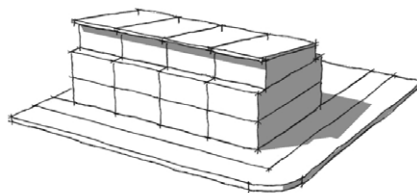
What housing types are found in the R3 Zone?



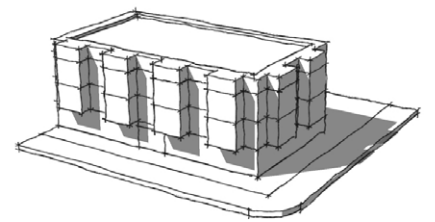
Single-family homes



Duplex



Rowhouses / Townhouses

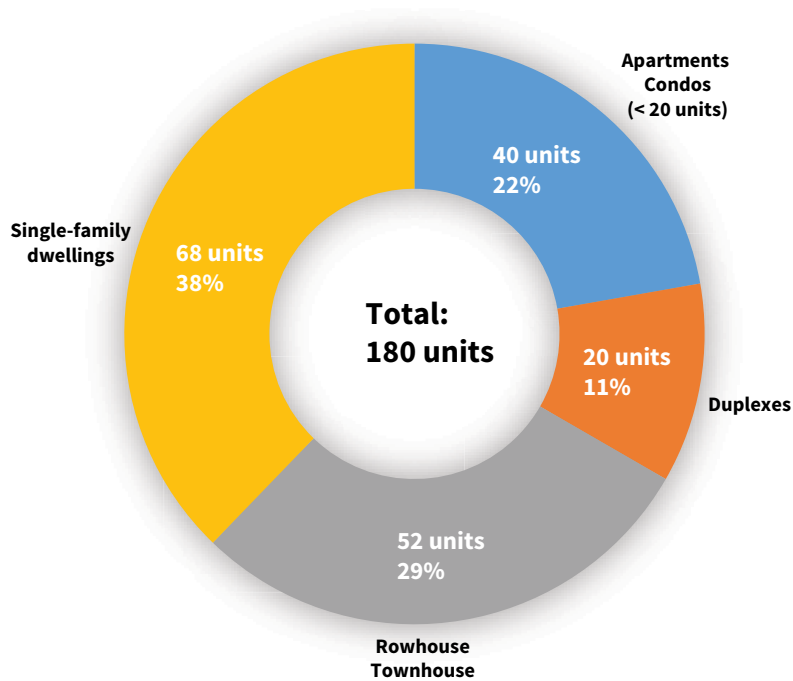


Low-rise apartments
(fewer than 20 units)

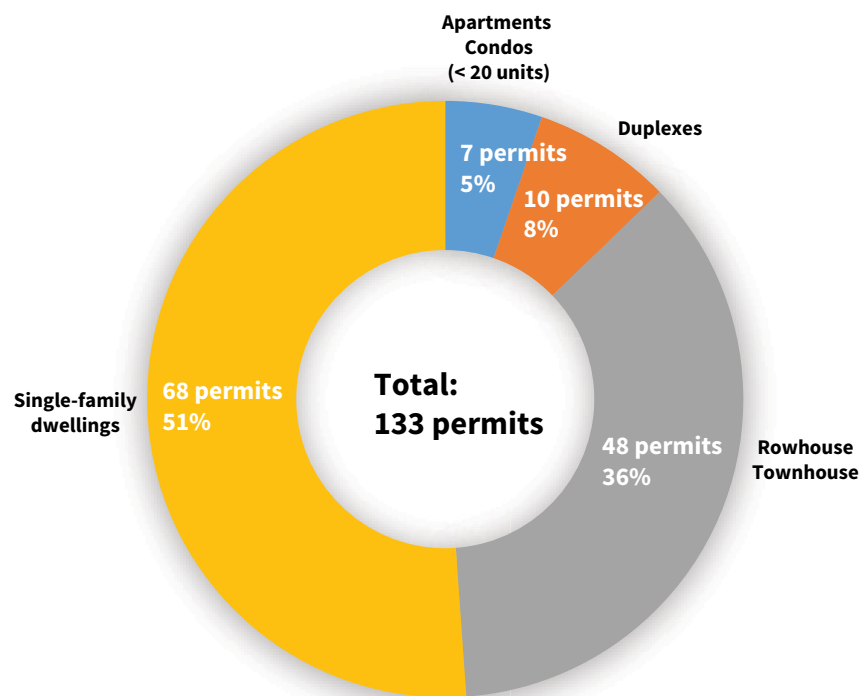
What is the data telling us?

- In this zone, Single Family Dwellings are the most prevalent housing type.
- Rowhouses / Townhouses are becoming a more common development type in the R3 zone.
- Duplex is the least common housing type.

Number of units by zone and typology [2006 - 16]



Number of permits by zone and typology [2006 - 16]



R2: Residential 2000

Summary

R2 is a low density multi-dwelling zone characterized by two to three story residential buildings and a medium building coverage. The types of new development include multi-dwelling structures (condominiums and apartments), duplexes, townhouses, and rowhouses. Density is approximately 21.8 dwelling units per acre, 32 units per acre if an amenity bonus provision is used.

Community Examples

Examples of recent development in R2 zones throughout the city.



Pattern Area: **Inner**
Housing Type: **Apartments**
Number of Units: **32**



Pattern Area: **Inner**
Housing Type: **Rowhouses**
Number of Units: **10**



Pattern Area: **Inner**
Housing Type: **Triplexes**
Number of Units: **6**



Pattern Area: **Inner**
Housing Type: **Apartments**
Number of Units: **12**

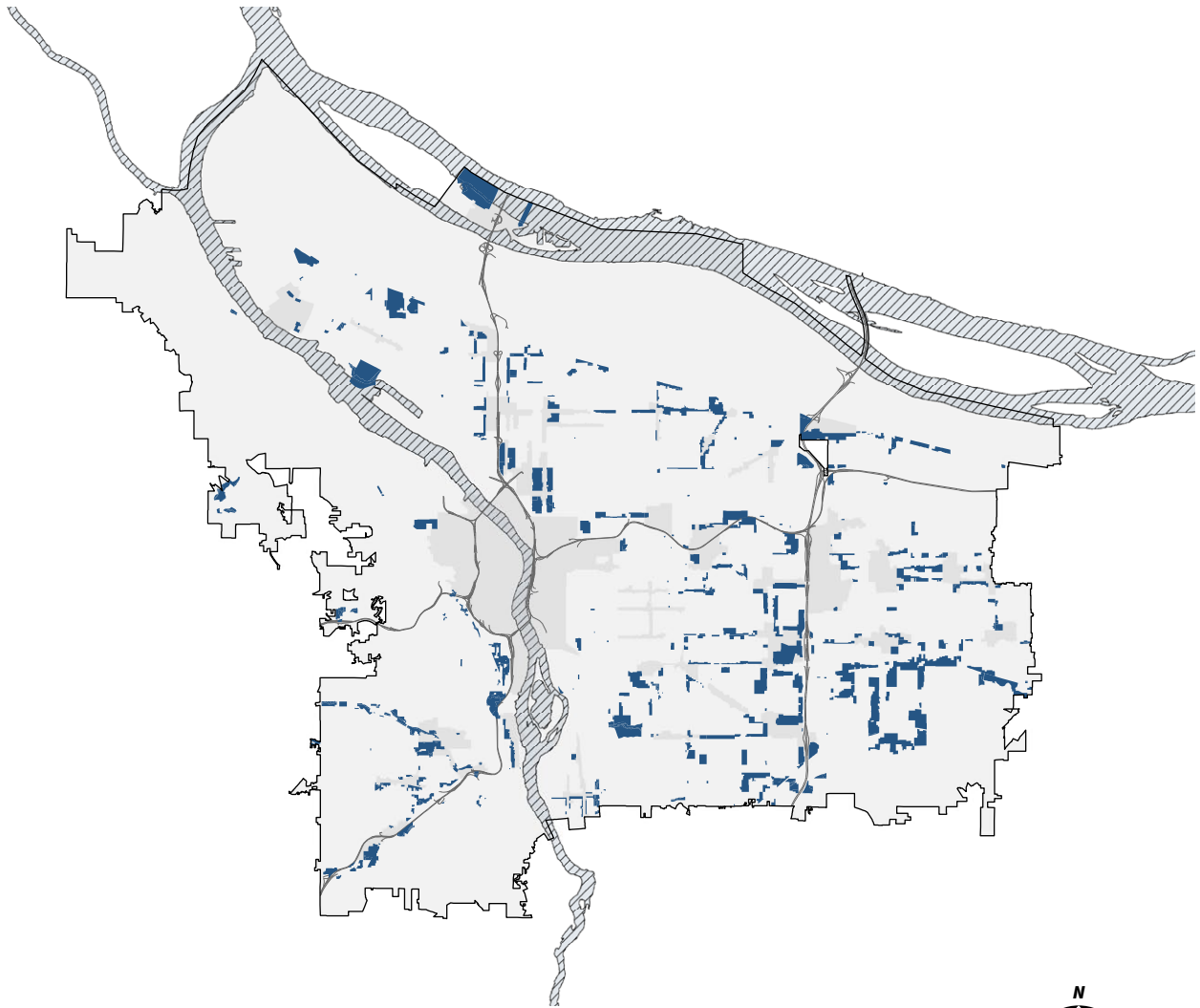


Pattern Area: **Eastern**
Housing Type: **Single-family homes**
Number of Units: **7**



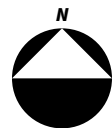
Pattern Area: **Eastern**
Housing Type: **Duplex / Apartment**
Number of Units: **11**

Map of R2 Zone

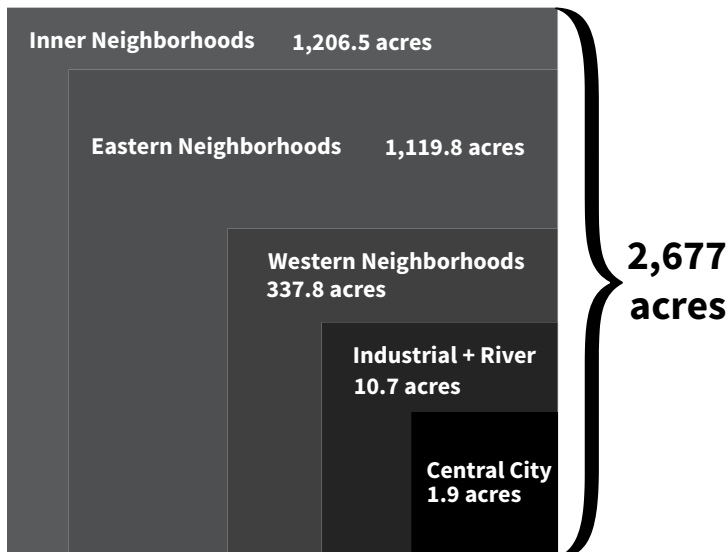


Legend:

- R2 Zoning
- City Centers
- Rivers



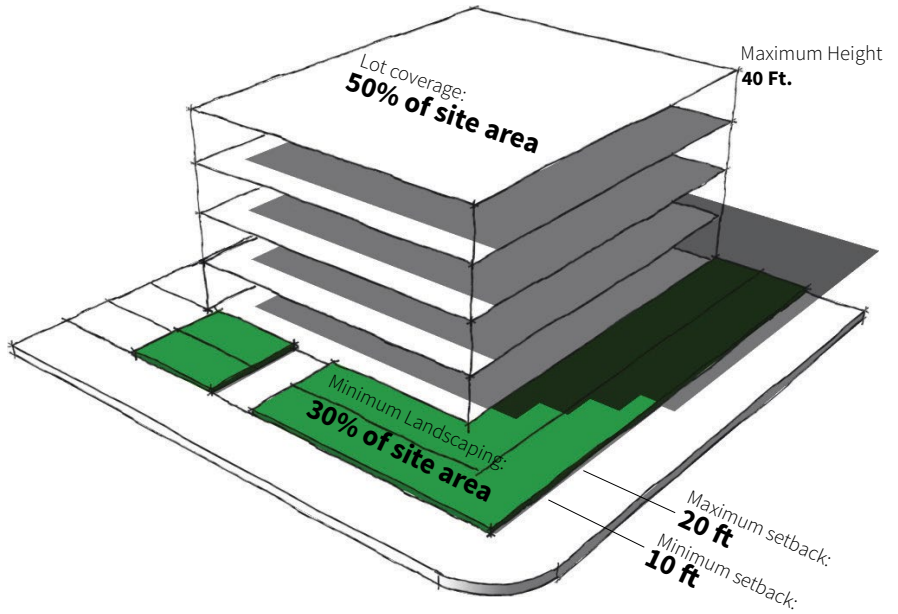
Land Area



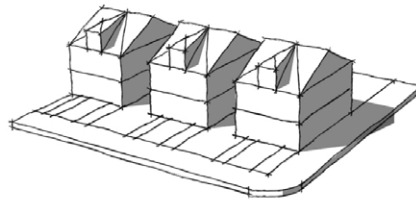
There is a total of 2,677 acres of R2 in Portland, distributed broadly across the city. According to the City's Buildable Land Inventory, roughly 5,187 units will be built in the R2 zone over the next 20 years.

R2: Building and Site Requirements

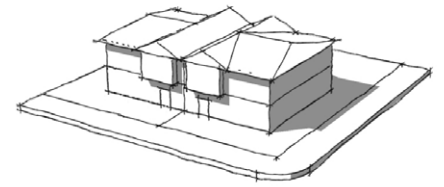
Primary permitted uses	Residential
Height	40 ft.
Maximum density	1 unit per 2000 ft²
Minimum density	1 unit per 2500 ft²
Maximum front setback	20 ft
Minimum front setback	10 ft
Maximum lot coverage	50% of site area
Maximum building length	100 ft
Minimum Landscaping	30% of site area
Required outdoor area	48 ft² / unit



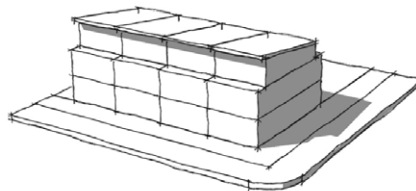
What housing types are found in the R2 Zone?



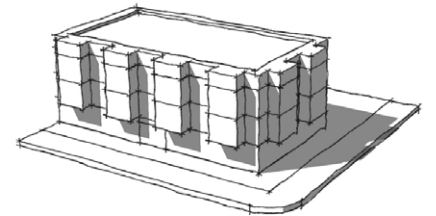
Single-family homes



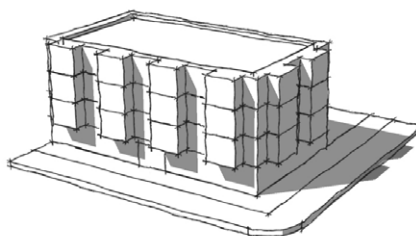
Duplex



Rowhouses / Townhouses



Low-rise apartments
(fewer than 20 units)

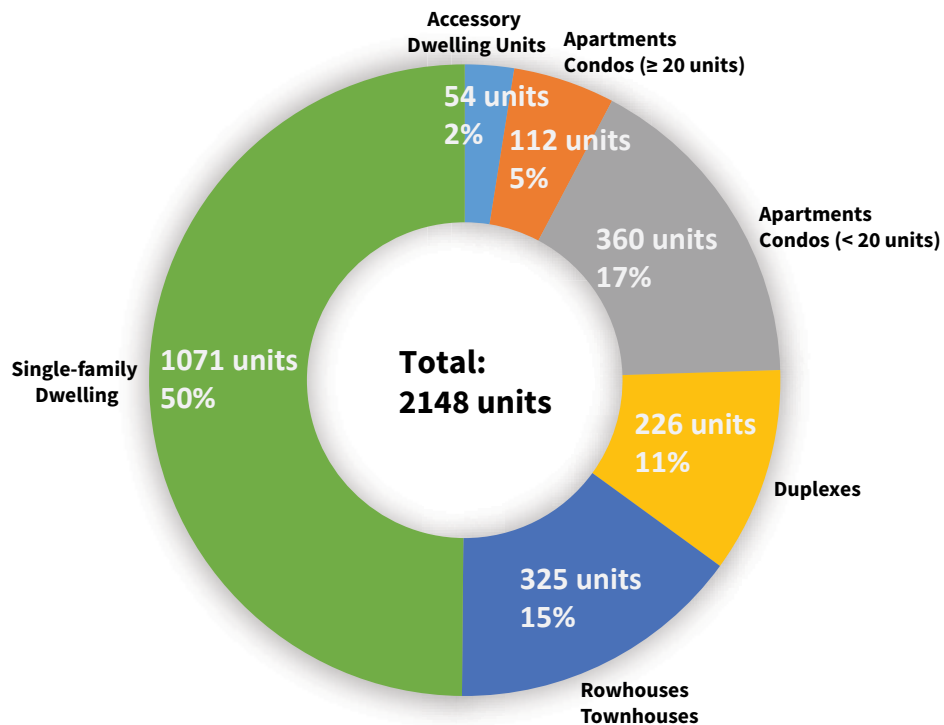


Mid-rise apartments (more than 20 units)

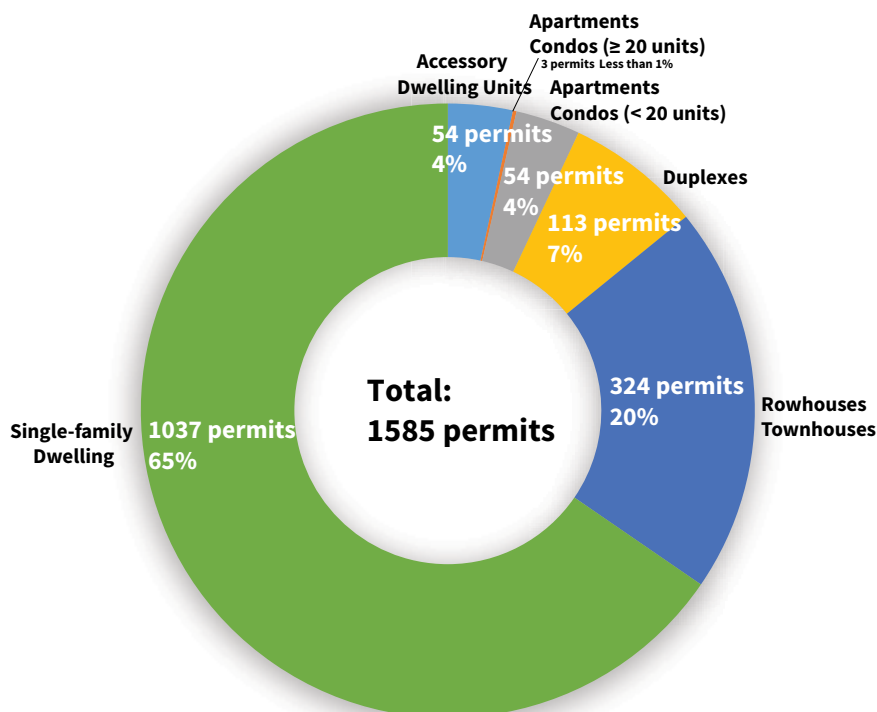
What is the data telling us?

- There is a diverse range of housing types in the R2 zone, mostly in smaller buildings.
- Single-family homes are the most prevalent housing type, often in the form of multiple houses on the same lot (especially in East Portland).
- The most common development types on typical 5000 square foot residential lots in inner neighborhoods are pairs of attached or detached houses and duplexes.

Number of units by zone and typology [2006 - 16]



Number of permits by zone and typology [2006 - 16]



R1: Residential 1000

Summary

R1 is a medium density multi-dwelling zone characterized by two to four story residential buildings and a high building coverage. The types of new development include multi-dwelling structures (condominiums and apartments), duplexes, townhouses, and rowhouses. Density is approximately 43 units per acre and as high as 65 units per acre if amenity bonus provisions are used. R1 zoning is applied near civic and neighborhood corridors and local streets adjacent to commercial areas and transit streets.

Community Examples

Examples of recent development in R1 zones throughout the city.



Pattern Area: **Eastern**
Housing Type: **Apartments**
Number of Units: **9**



Pattern Area: **Inner**
Housing Type: **Townhouses**
Number of Units: **7**



Pattern Area: **Inner**
Housing Type: **Apartments**
Number of Units: **7**



Pattern Area: **Inner**
Housing Type: **Rowhouses**
Number of Units: **18**

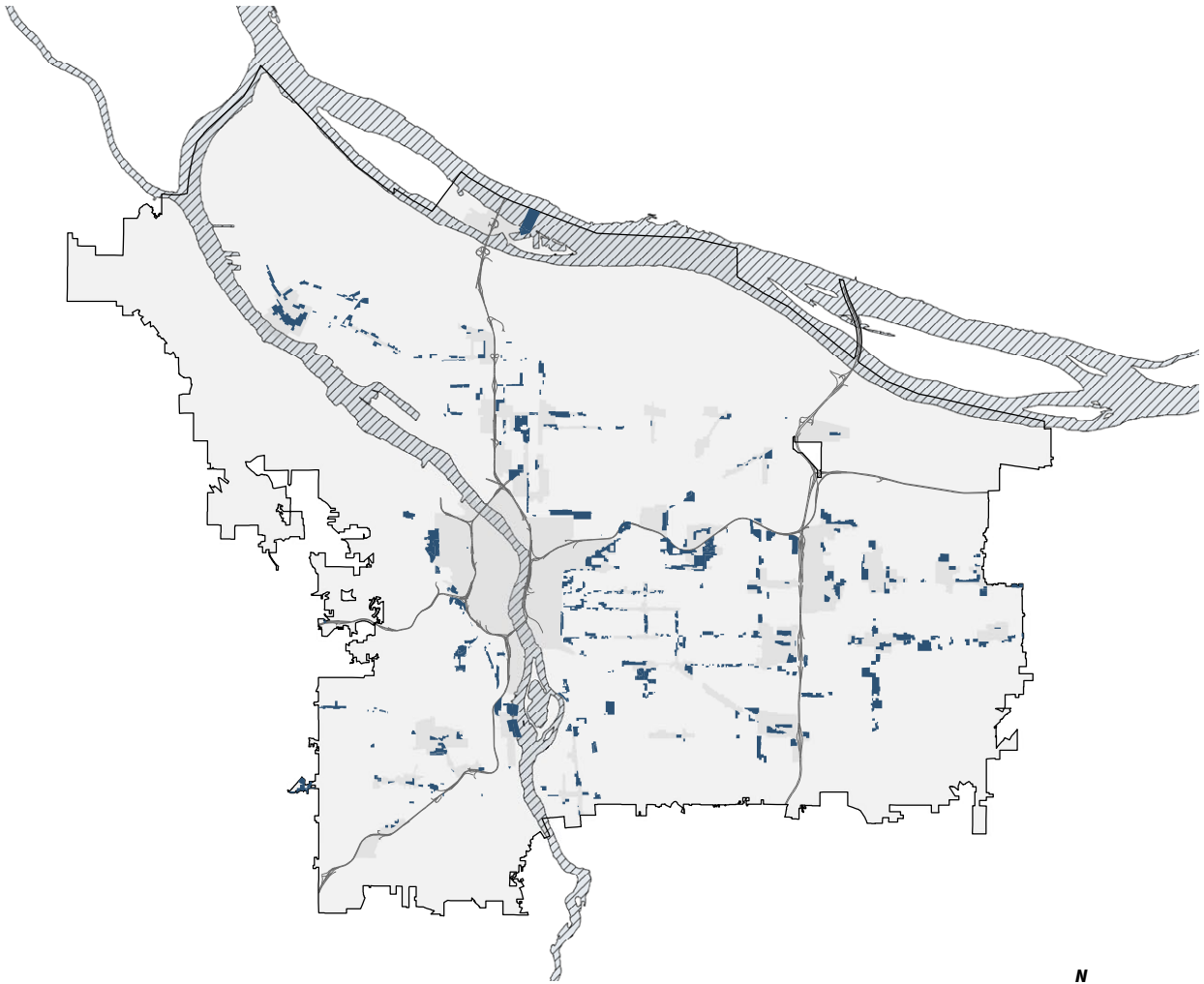


Pattern Area: **Eastern**
Housing Type: **Apartments**
Number of Units: **37**



Pattern Area: **Eastern**
Housing Type: **Apartments**
Number of Units: **112**

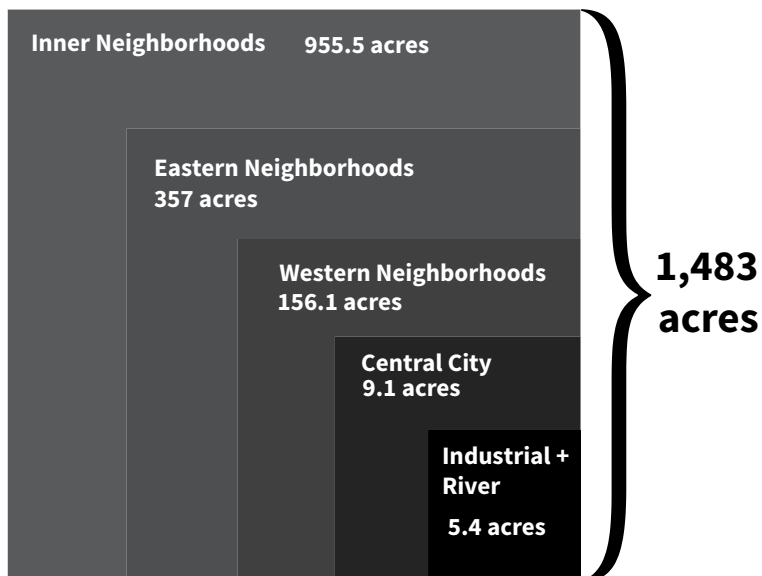
Map of R1 Zone



Legend:



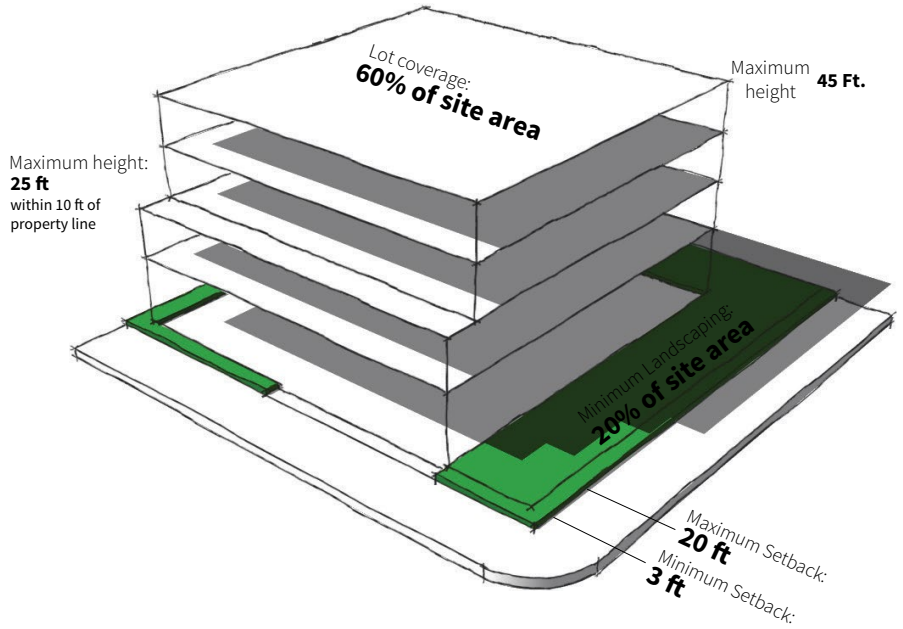
Land Area



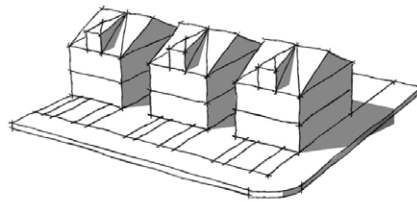
R1 has a total of 1,483 acres, distributed across the city. According to the City's Buildable Land Inventory, roughly 9,587 units will be built in the R1 zone over the next 20 years.

R1: Building and Site Requirements

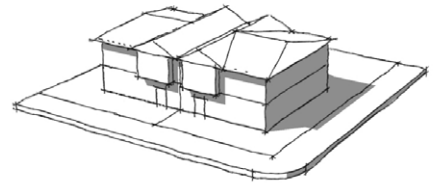
Primary permitted uses	Residential
Height	25 ft / 45 ft
Maximum density	1 unit / 1000 ft²
Minimum density	1 unit / 1450 ft²
Maximum front setback	20 ft
Minimum front setback	3 ft
Maximum lot coverage	60% of site area
Maximum building length	Yes / 100 ft
Minimum Landscaping	20% of site area
Required outdoor area	48 ft² / unit



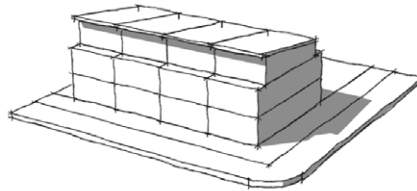
What housing types are found in the R1 Zone?



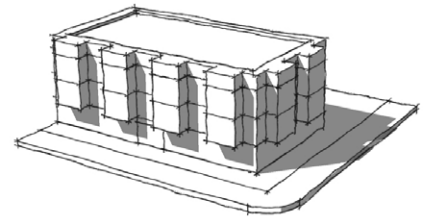
Single-family Homes



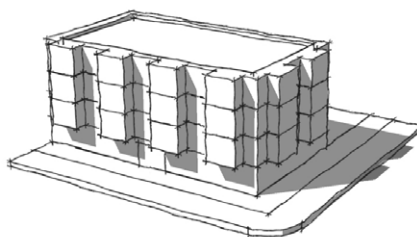
Duplex



Rowhouse / Townhouses



Low-rise apartments (fewer than 20 units)

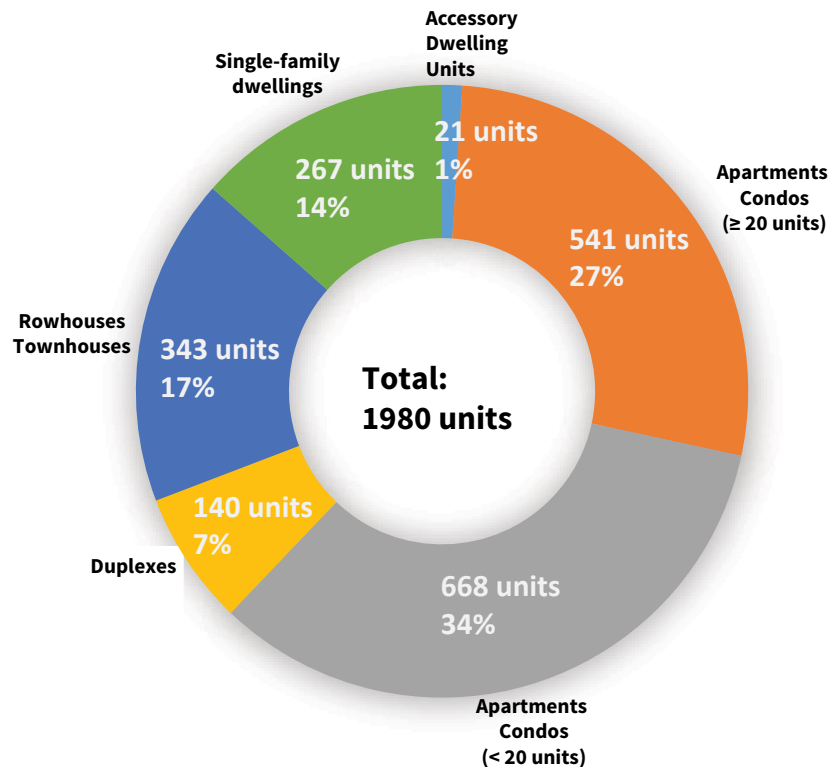


Mid-rise apartments (more than 20 units)

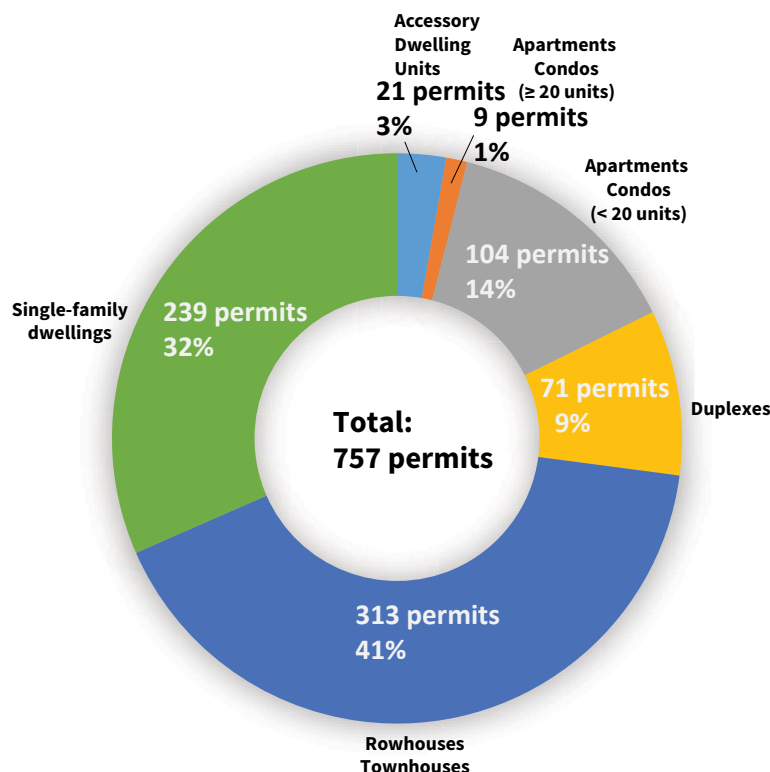
What is the data telling us?

- Over the last 10 years, apartment / condo complexes accounted for the most units (1209).
- A smaller number of larger buildings (just 9 permits) accounted for over 25 percent of total units.
- New single-family dwellings are less prevalent than in the R2 zone.

Number of units by zone and typology [2006 - 16]



Number of permits by zone and typology [2006 - 16]



RH: High Density Residential

Summary

RH is a high density multi-dwelling zone located in or within close proximity to the Central City or along frequent transit corridors. Housing is characterized by buildings up to six or seven stories and high building coverage. Often the types of new development will be medium and high-rise apartments and condominiums. Density is not regulated by a maximum number of units per acre. Rather, the maximum size of buildings and intensity of use is regulated by floor area ratio (FAR) limits and other site development standards. Generally, the density will range from 80 to 125 units per acre.

Community Examples

Examples of recent development in RH zones throughout the city.



Pattern Area: **Inner**
Housing Type: **Apartments**
Number of Units: **87**



Pattern Area: **Inner**
Housing Type: **Apartments**
Number of Units: **6**



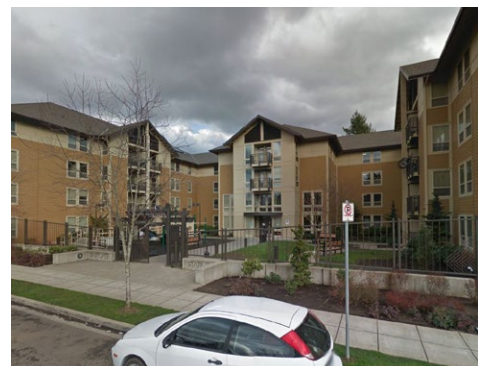
Pattern Area: **Inner**
Housing Type: **Apartments**
Number of Units: **19**



Pattern Area: **Western**
Housing Type: **Apartments**
Number of Units: **22**

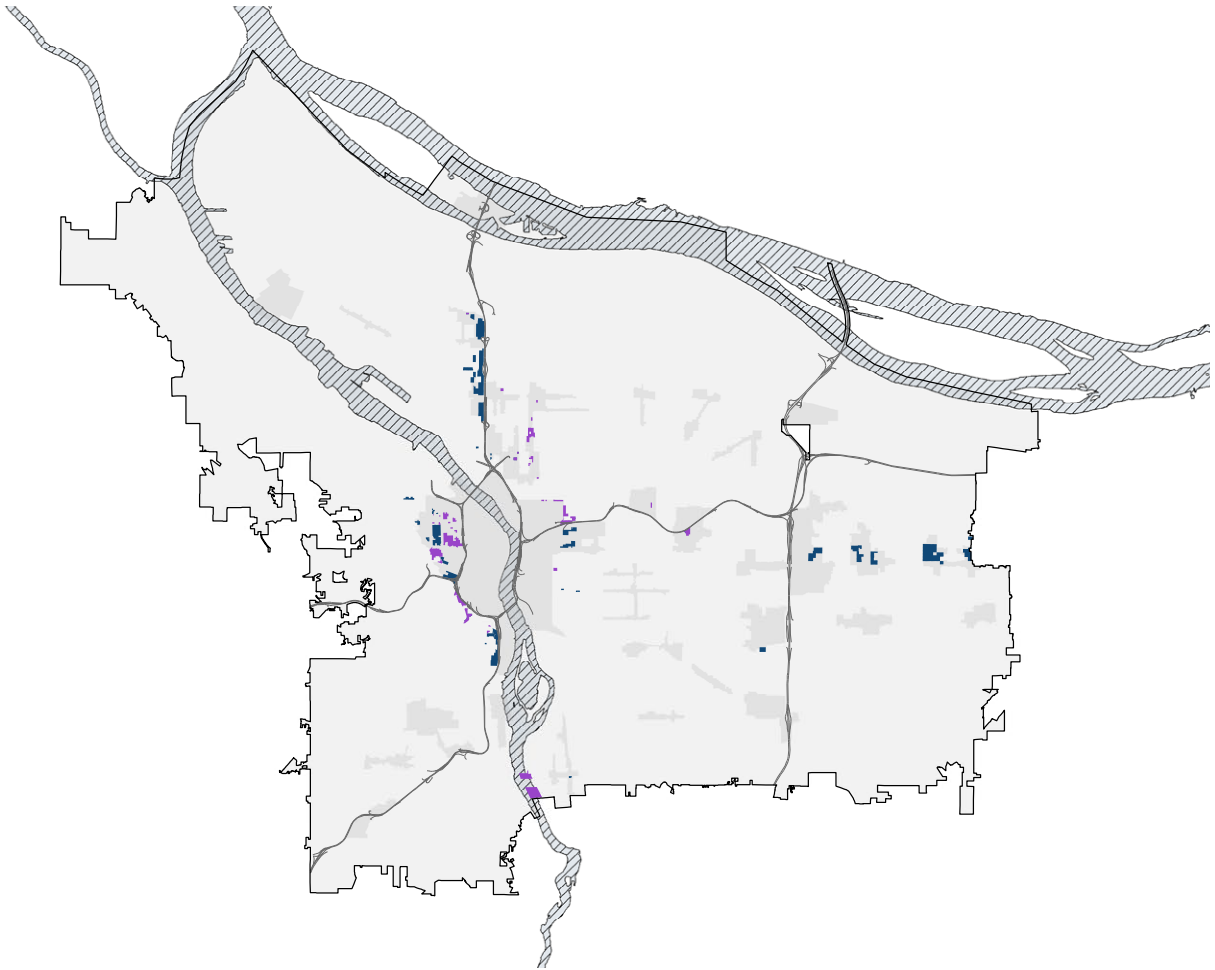


Pattern Area: **Eastern**
Housing Type: **Apartments**
Number of Units: **12**



Pattern Area: **Eastern**
Housing Type: **Apartments**
Number of Units: **61**

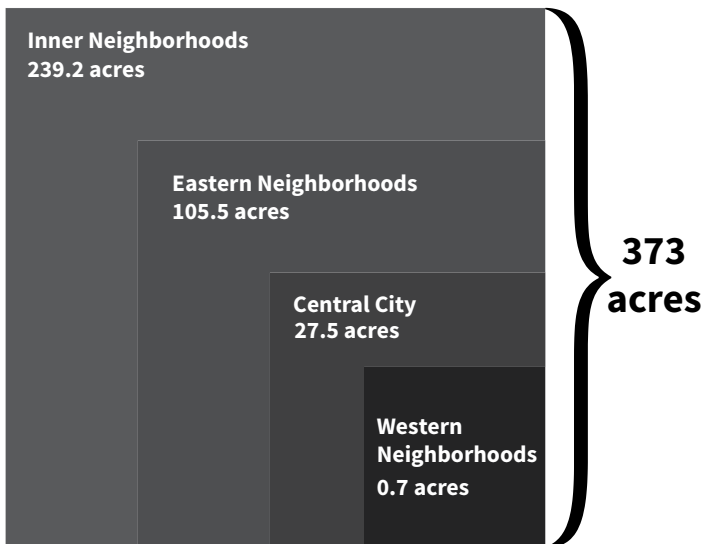
Map of RH Zone



Legend:



Land Area

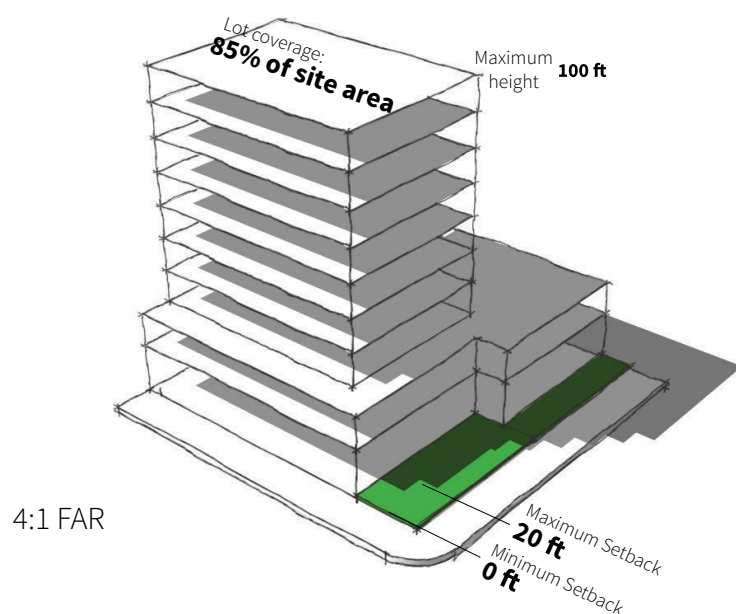
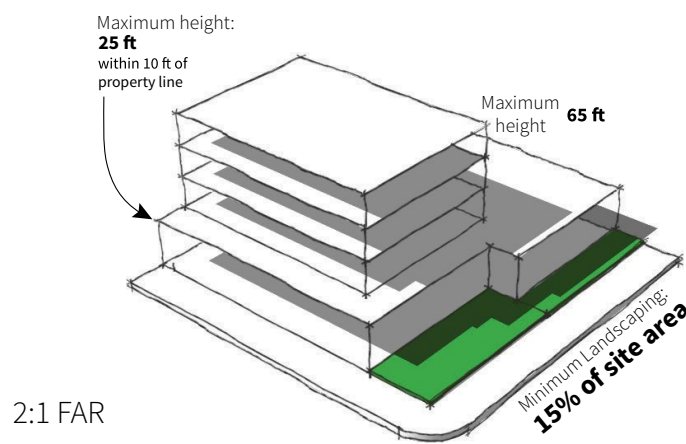


A total of 373 acres of RH is concentrated around select centers, corridors, and light rail stations across the city. According to the City's Buildable Land Inventory, the RH zone will grow by roughly 7,228 units over the next 20 years.

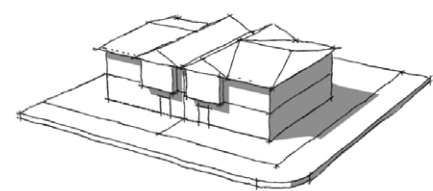
RH: Building and Site Requirements

Primary permitted uses	Residential
Height *	65 ft / 75 ft / 100 ft
Maximum density *	2:1 / 4:1 FAR
Minimum density	1 unit / 1000 ft²
Maximum front setback	20 ft
Minimum front setback	0 ft
Maximum lot coverage	85% of site area
Maximum building length	None
Minimum Landscaping	15% of site area
Required outdoor area	None

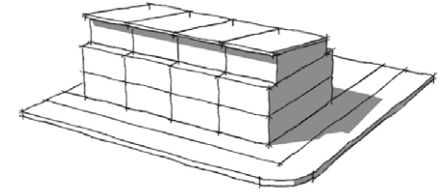
* Varies by mapped location



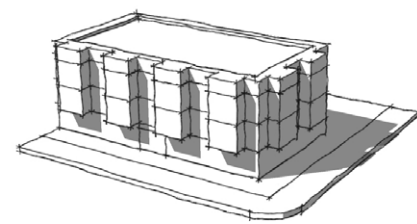
What housing types are found in the RH Zone?



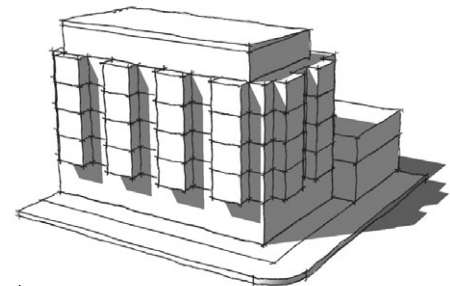
Duplex



Rowhouses / Townhouses



Mid-rise apartments (fewer than 20 units)

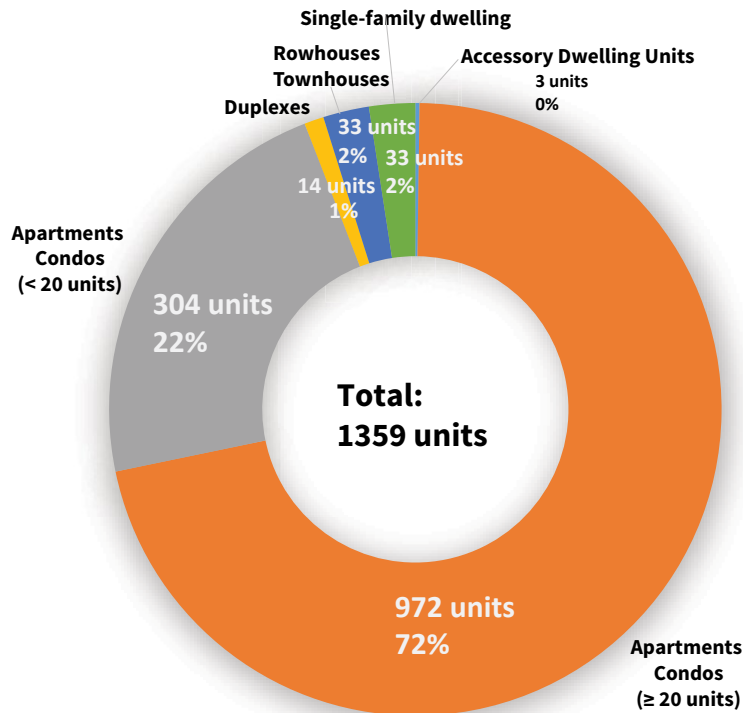


High-rise apartments (more than 20 units)

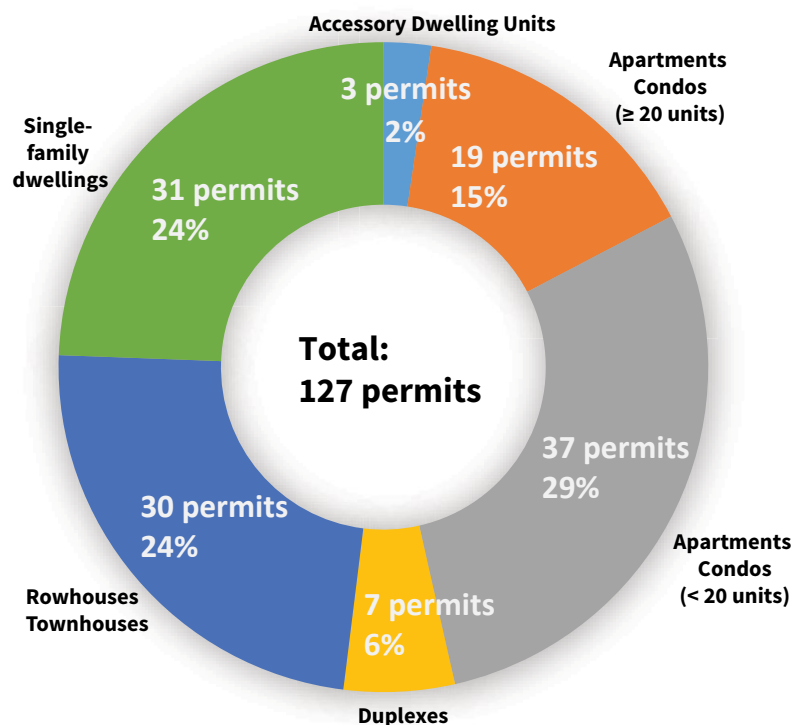
What is the data telling us?

- Over the last 10 years, apartment / condo buildings accounted for the most units (1,276).
- A relatively small number of permits (56) are producing the vast majority of new units.
- Lower density housing such as duplexes, rowhouses, and single-family homes were still built, but only account for 5% of total units.

Number of units by zone and typology [2006 - 16]



Number of permits by zone and typology [2006 - 16]



RX: Central Residential

Summary

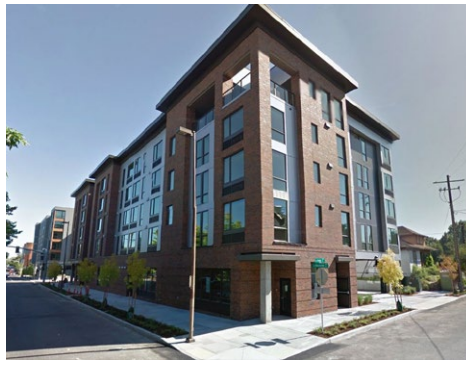
RX is a high density multi-dwelling zone for locations in the Central City and the Gateway Regional Center. Housing is characterized by nine to ten story buildings and high building coverage. Often the types of new development will be medium and high-rise apartments and condominiums. Density is not regulated by a maximum number of units per acre. Rather, the maximum size of buildings and intensity of use are regulated by floor area ratio (FAR) limits and other site development standards. The RX zone will not be a focus of the Better Housing by Design project, as regulations for this zone are to a large extent shaped by plan district regulations that apply in the Central City and Gateway.

Community Examples

Examples of recent development in RX zones throughout the city



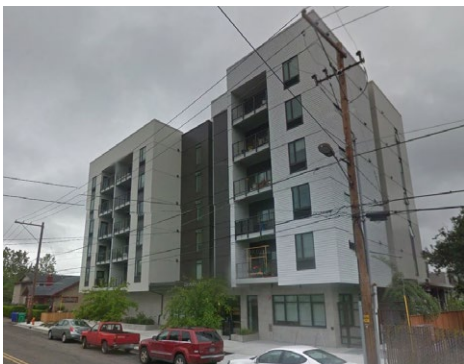
Pattern Area: **Eastern**
Housing Type: **Apartments**
Number of Units: **45**



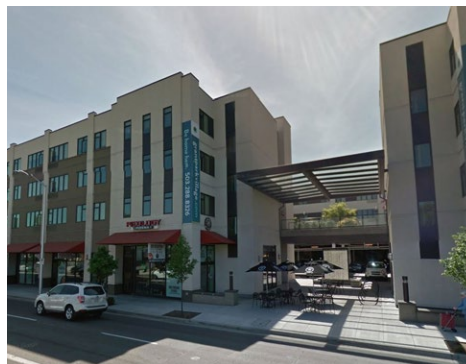
Pattern Area: **Inner**
Housing Type: **Apartments**
Number of Units: **104**



Pattern Area: **Eastern**
Housing Type: **Apartments**
Number of Units: **67**

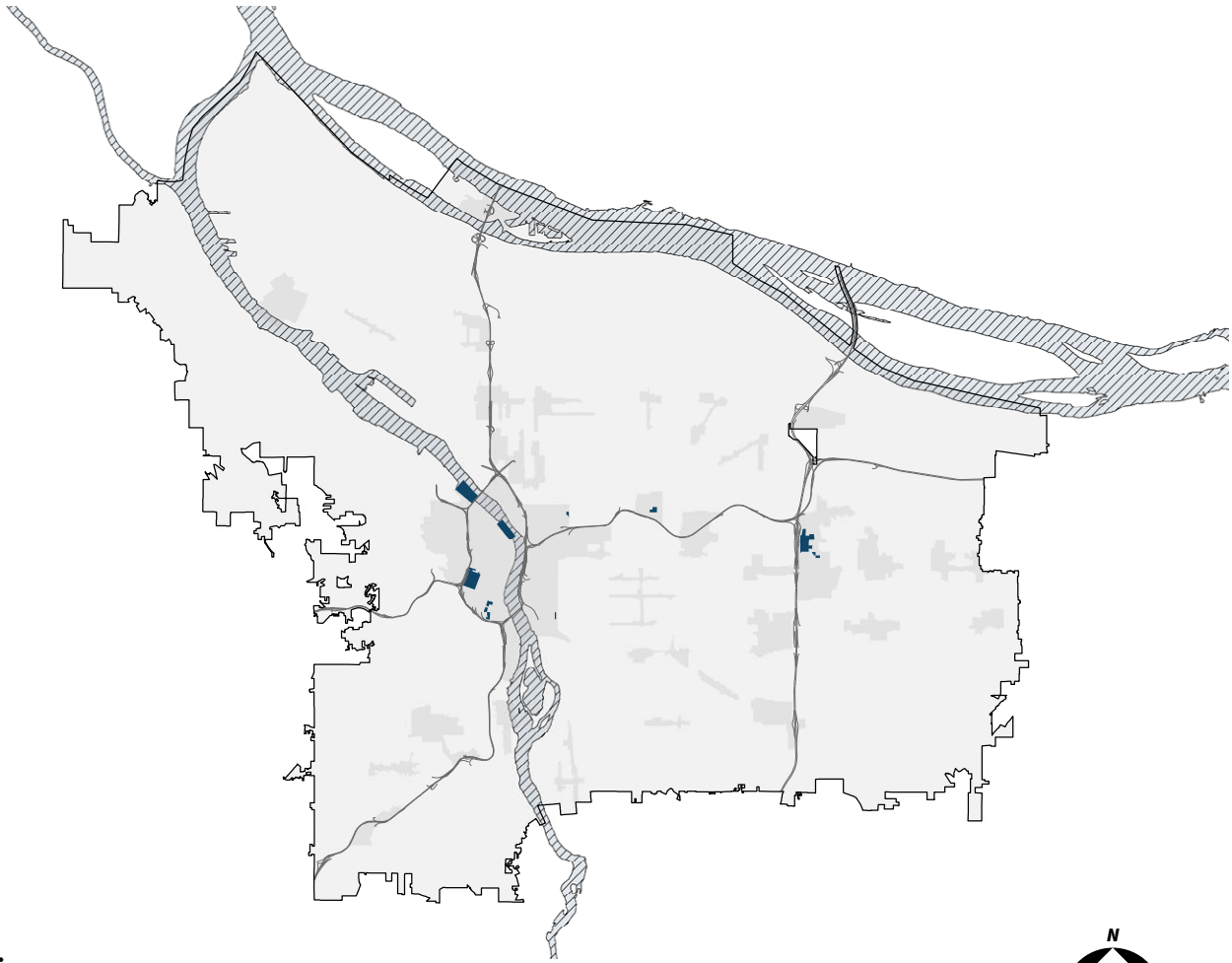


Pattern Area: **Eastern**
Housing Type: **Apartments**
Number of Units: **60**

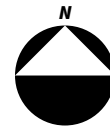


Pattern Area: **Inner**
Housing Type: **Apartments**
Number of Units: **211**

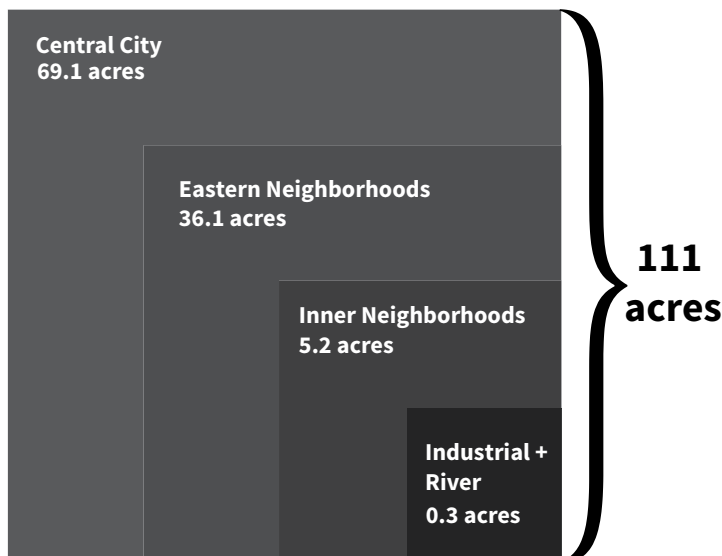
Map of RX Zone



Legend:



Land Area

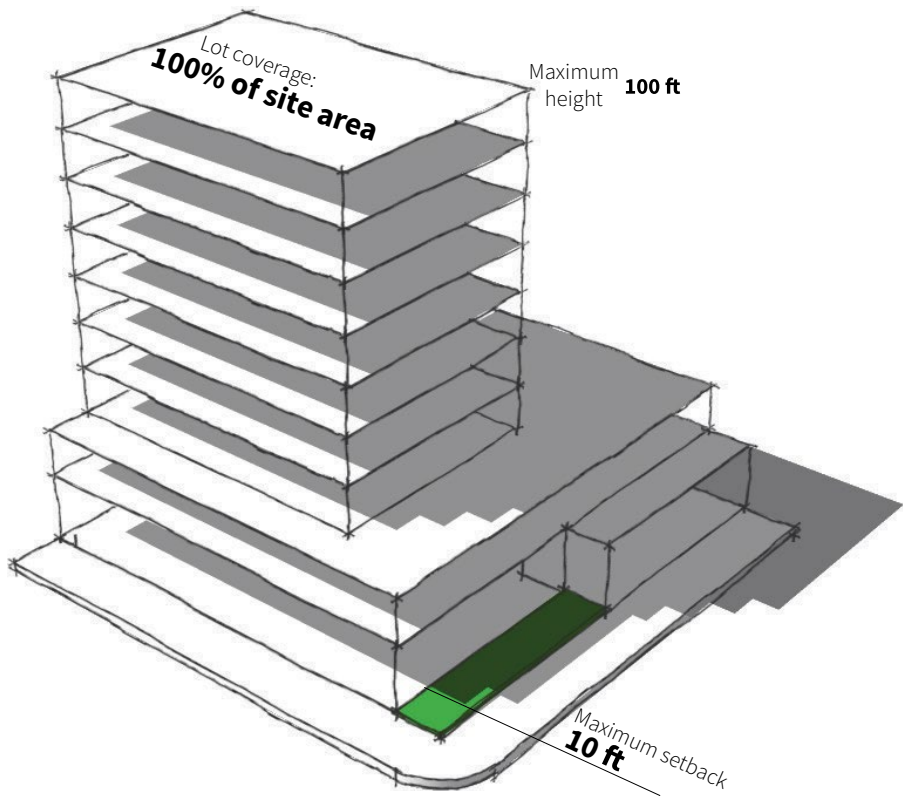


A total of 111 acres of RX is concentrated primarily in the Central City and Gateway Regional Center. According to the City's Buildable Land Inventory, the RX zone are anticipated to grow by 2,838 units outside of the Central City over the next 20 years, primarily in Gateway.

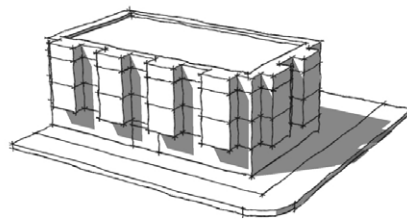
RX: Building and Site Requirements

Primary permitted uses	Residential Limited Commercial
Height *	100 ft.
Maximum density *	4:1 FAR
Minimum density	1 unit per 500 ft²
Maximum building setback	10 ft
Minimum building setback	0 ft
Maximum lot coverage	100% of site area
Maximum building length	None
Minimum Landscaping	None
Required outdoor area	None

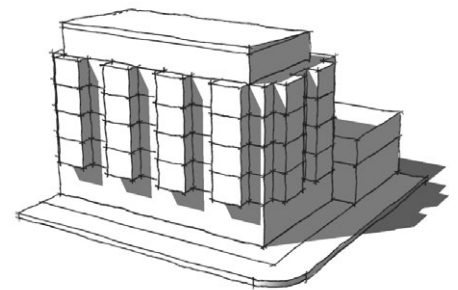
* Varies by plan district



What housing types are found in the RX Zone?



Mid-rise apartments
(fewer than 20 units)

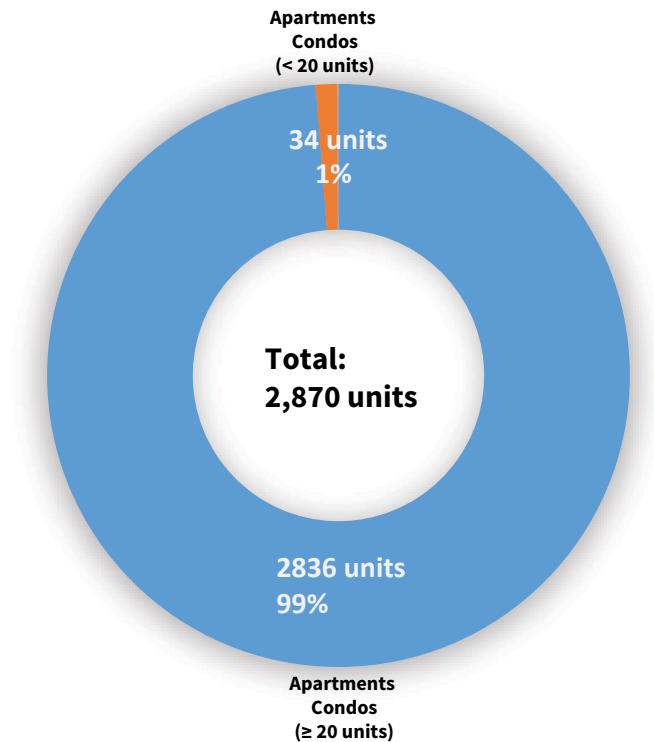


High-rise apartments
(more than 20 units)

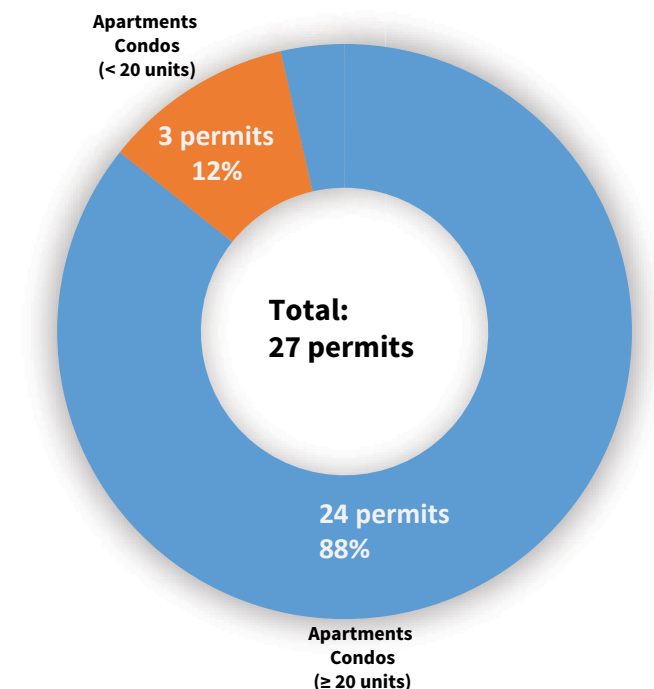
What is the data telling us?

- Over the last 10 years, large apartment / condo buildings with 20 or more units were the predominate housing type for the RX zone, primarily located in the Central City.
- A small number of large buildings (24 permits) in the RX zone have provided over a third of all units built in the multi-dwelling zones.

Number of units by zone and typology [2006 - 16]



Number of permits by zone and typology [2006 - 16]



Design and Development Issues

The first portion of this section summarizes some of the design-related standards that are part of the existing multi-dwelling Zoning Code regulations. This is followed by an assessment of design and development issues, not fully addressed by these regulations, that have been identified by BPS staff through analysis of projects built in the multi-dwelling zones over the past 10 years. Identification of these design and development issues was informed by Comprehensive Plan policy direction and community input from past projects.

Summary of Existing Design-Related Zoning Code Standards

Most of the development standards in the Multi-Dwelling Zones (Chapter 33.120, also known as the “base zone” regulations) play a role in shaping the design, form and characteristics of development. The following is a summary of a subset of design-related development standards that play key roles in shaping building form, street orientation, and residential amenities such as open space.

Building massing and location

The maximum building heights, required building setbacks, and maximum building coverage allowances in the base zones set basic parameters that guide the scale and location of buildings on a site (see Profile of the Base Zones section). More detailed regulations that shape building form include the following:

In the R1 zone and some of the RH zoning, buildings are limited to a height of 25 feet within 10 feet of front property lines, while greater height (45 feet and 65 feet) is allowed beyond this distance. This limits buildings to a lower scale close to street frontages, which can be more in keeping with the scale of existing, lower-density.

Limits on building length. In the R2 and R1 zones, buildings are limited to a maximum length of 100 feet close to street lot lines. This requires larger buildings to be divided up into smaller components that are reflective of the fine-grain development patterns of residential neighborhoods.



R1 zone project with lower height close to the street frontage and building mass divided into two smaller components.

Minimum front setbacks. In the lower density multi-dwelling zones (R3 and R2) minimum required front setbacks of 10 feet guide development to include landscaped front setbacks that continue established patterns in residential neighborhoods. The high-density zones (R1, RH, and RX) require no or minimal front setbacks, acknowledging the more intensely urban characteristics intended for these zones.

Maximum setbacks. Along transit streets and in pedestrian districts, maximum buildings setback regulations require buildings to be located close to street lot lines (usually within 20 feet) to encourage building to be oriented to streets and contribute to the pedestrian environment of sidewalks.



Landscaped front setbacks, required in the lower density multi-dwelling zones, help continue established neighborhood patterns.

Limitations on front parking and garages

The Zoning Code includes regulations in the multi-dwelling zones that place limits on the location of parking areas and front garages to promote pedestrian-oriented street frontages, with requirements such as the following:

Vehicle area surfaces, including parking and driveways, are limited to 50 percent of the street frontage.

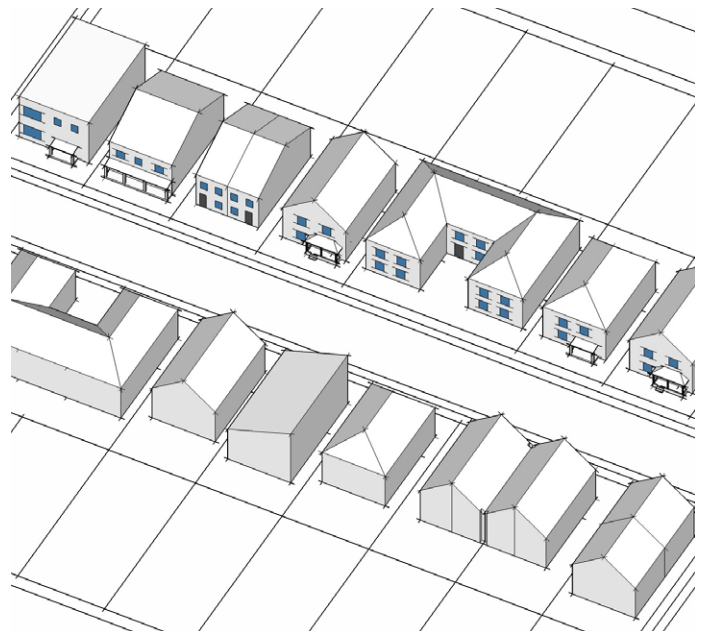
Front garages are limited to 50 percent of the length of street-facing facades for detached houses and duplexes, although an exception to this is that narrow houses are allowed to have a front garage of up to 12' wide (which can occupy more than 50 percent of the façade). Also, there are no limits to the width of front garages or ground-level structured parking for attached houses, townhouses, apartment buildings, or other multi-dwelling structures.



Street-oriented windows and front entrances

Residential buildings are required to have at least 15 percent of street-facing facades be windows or main entrance doors, in order to foster street-oriented buildings.

Houses, attached houses, and duplexes are required to have main entrances oriented to streets. However, multi-dwelling development, such as apartment buildings, townhouses, and clusters of detached houses on shared lots do not have requirements for street-oriented main entrances.



Residential outdoor spaces

48 square feet of outdoor area is required for each residential unit in the low- to medium-density zones (R3, R2, R1). This outdoor area can be in the form of private outdoor spaces (such as patios or balconies), or can be combined into shared outdoor spaces (such as courtyards or play areas), or can be a combination of private and shared outdoor spaces.

No outdoor space is required in the higher-density residential zones (RH and RX).



Landscaping and trees

Most of the multi-dwelling zones (all except for the RX zone) require some landscaping. The percentage of site area that must be landscaped ranges from 35 percent in the R3 zone to 15 percent in the RH zones (see Profile of the Base Zones section for more detailed information). Required landscaping must be at ground level. Raised landscaping, such as ecoroofs or landscaping in raised courtyards, do not count toward meeting these requirements.



Allowances for commercial uses in higher-density zones

Ground floor commercial uses are allowed by right in the RX zone, subject to size limitations. In the RH zone, commercial uses can be included as part of new development within 1,000 feet of a transit station when approved through a conditional use review. These allowances provide opportunities for needed commercial services and provide ground level activity in locations where close proximity to busy sidewalks can be problematic for ground floor residential units.



Multi-dwelling development with ground floor commercial space in the RH zone along NE Martin Luther King, Jr. Boulevard.

Pedestrian connections

The base zone regulations include requirements for pedestrian circulation systems within a development proposal. However, the Zoning Code does not include a requirement for the provision of public pedestrian connections or streets providing through connections when a development proposal does not involve a land division (the majority of proposals for multi-dwelling development do not involve a land division). For proposals for land divisions (such as rowhouses and houses on individual lots), approval criteria related to transportation impacts serve as a regulatory trigger for street connections. See the Connectivity Tools Analysis section of the Appendix for more information on issues related to street and pedestrian system connectivity.



Examples of design and development issues

The following are examples of design and development issues identified through analysis of multi-dwelling zones development built over the past 10 years, informed by Comprehensive Plan policy direction and community input from past projects. The issues identified through these representative examples reflect situations in which there are gaps between policy objectives and implementing regulatory tools (see the Policy Analysis section of the Appendix for a listing of Comprehensive Plan policy topics). Staff anticipates that these issues will be among the topics to be addressed by the Better Housing by Design project.

Site Design and Healthy Active Living

Residential outdoor spaces

Policies call for housing to include features supportive of healthy living, such as usable outdoor spaces that provide opportunities for activities such as recreation or gardening. The minimum requirement of 48 square feet per unit that applies in most multi-dwelling zones, such as shown in this example, may be insufficient for medium density development. Also, the high-density zones (such as RH) do not have any requirements for outdoor spaces (the Mixed Use Zones project added requirements for residential outdoor areas to comparable residential development in the mixed-use zones).



Urban green options

Policies call for integrating natural and green infrastructure, such as ecoroofs and trees, into the urban environment. Existing multi-dwelling zone regulations do not allow many types of urban green approaches that can be useful as part of compact development, such as ecoroofs or plantings in raised courtyards, to count toward meeting landscaping requirements.



Large paved vehicle areas

Policies call for minimizing impervious surfaces and avoiding urban heat island impacts that can result from large amounts of pavement. Zoning Code regulations limit proportions of sites that can be covered with buildings, but do not directly limit impervious surfaces. Multi-dwelling zone projects with large portions of site area devoted to paved vehicle areas are especially common on the deep sites of East Portland.



Physically-accessible housing

In the lower- and medium- density multi-dwelling zones, the most common types of development include houses, rowhouses, and townhouses, which usually feature multiple levels and stairs. This project will consider possibilities for incentives and other regulations that could increase the amount of housing that is designed to meet the needs of people with disabilities and older adults, for whom housing units with stairways can pose significant problems. See also Amenity Bonuses.



Rowhouses with tall entrance stairways in the R2 zone.

Building Design and Scale

Front garages

Street frontages dominated by front garages compromise policy objectives for pedestrian-oriented street environments, but Zoning Code regulations do not limit front garages for most types of development, including rowhouse, townhouse, and apartment projects.



Front entrances

Policies call for street-oriented development to enhance the pedestrian environment. While street-oriented entrances are required for single-dwelling development and duplexes, multi-dwelling projects (including townhouses and apartments) are not required to have street-oriented entrances.



Front setbacks and landscaping

Development in the medium- and higher-density R1 and RH zones allow for no or minimal front setbacks. This can compromise privacy for the residents of ground level units located next to sidewalks, especially along corridors with heavy traffic (along busy streets, policies encourage landscaped front setbacks and other approaches to buffer residents from street traffic). Landscaped setbacks can also help integrate higher-density development into the context of residential neighborhoods, which typically feature landscaped setbacks.



Urban form and context - differences between corridors and neighborhood side streets.

Policies call for focusing growth along corridors, while encouraging a greater degree of continuity with established characteristics and development patterns in residential areas. However, multi-dwelling zoning regulations do not differentiate between corridors and locations on neighborhood side streets.

For example, the same R1 zone regulations, such as 45-foot height, apply in both types of context. Along a neighborhood side street, the R1 zone provides the primary opportunity for triplexes and fourplexes, which have historically been of a house-like scale of 2-3 stories (see Historic Precedents section of the Appendix). While, along a transit corridor, the R1 density requirements (limited to 10 units on a 10,000 square foot site) often result in 3-story townhouse units, and do not allow for the continuation of historic types of multifamily housing common along transit corridors, such as Streetcar Era corridor apartments that were of similar 3-story scale, but often featured stacked units (frequently ranging from 20 to 30 units on a 10,000 square foot site). A potential approach to address these issues and opportunities could be to revise zoning code regulations so that they can be used to shape development to be more responsive to the differing contexts of corridors and neighborhood side streets.



Neighborhood infill-recent fourplex (R1 zone). Continues a historic middle-density housing type that provides density within a house-like form and scale.



Corridor apartments – historic examples (R1 zone). The R1 zone is often applied along transit corridors, where these historic examples are located. Although within the 45-height limit of the R1 zone, their densities exceed what is currently allowed.



Corridor townhouses (R1 zone). Current R1 density limits often result in townhouse-type development, such as these 3-story examples, which limits opportunities for accessible, single-level units.

Allowances for commercial uses near light rail stations and along corridors

Recent Zoning Map changes, which changed zoning from RX to RH outside the Central City and Gateway, reduced the flexibility for including ground-floor commercial uses as part of multi-dwelling zone development near light rail stations and along corridors (in the RH zone, commercial uses in locations near light rail stations [but not corridors] can be approved through a Conditional Use review, providing less certainty than the more liberal RX zone allowances). Past projects in East Portland have identified community interest in facilitating commercial development near light rail stations. In other multi-dwellings zones, limited ground-floor commercial uses, such as live-work spaces (allowing residents to have a business space in a portion of their unit), could also provide an opportunity to address the negative impacts to residents of housing in the multi-dwelling zones located along East Portland's multi-lane corridors. This project could reconsider allowances for limited commercial uses near light rail stations and along corridors.



Multi-dwelling development near the 148th Avenue light rail station (RH zone)



Housing along SE Division in East Portland.

Scale transitions

Policies call for transitions in scale when higher-density zoning is adjacent to smaller-scale, single-dwelling zoning. Currently, higher-density multi-dwelling zoning (allowing 4 to 6 stories) is sometimes located adjacent to single-dwelling zones, with no requirements for transitions in building scale. A potential approach is to apply requirements for buildings to step down in height adjacent to single-dwelling zones (see image), an approach that was recently adopted for the mixed use zones.



Street Connectivity

Multi-dwelling zoning is a key part of many centers, such as the St. Johns Town Center and the Jade District, providing opportunities for housing that makes it possible for more people to live close to shopping and community services. Policies call for fostering centers as places with frequent street connections that make it easy to walk and bike to local destinations. However, in some centers that currently lack good street connectivity, especially in East Portland, new multi-dwelling development has often not been contributing to the creation of a well-connected street and pedestrian system. New implementation approaches are needed to ensure that, as development continues to occur in and around centers, they contribute to creating centers with good street and pedestrian connectivity that makes it easier to reach local destination and transit (see the Block Patterns and Connectivity section of the Appendix for more detail on this topic).

The Better Housing by Design project is being coordinated with the Bureau of Transportation's Connected Centers Street Plan project, which is creating street plans for the Jade District and Rosewood/Glenfair centers in East Portland. An objective of this coordinated approach is to create new implementation approaches for achieving greater street and pedestrian connectivity that can be used citywide, not only in East Portland, but in other areas such as Southwest Portland that also lack good street connectivity.

Dead end accessways

This detail of the circulation system in the Jade District shows accessways (dark dashed lines, a mix of driveways and private streets) that fail to provide additional connectivity in an area where some blocks are over 1,000 feet in length.



Driveway design

Many detached house and townhouse projects in the medium-density zones in East Portland are served by dead-end driveways, such as this, that do not contribute to connectivity. This example is directly adjacent to commercial services, but residents must make a quarter-mile detour to access the adjacent retail. Such driveways look similar to streets, but are not required to have features such as street trees that are expected components for both public and private streets.



East Portland Issues

The Better Housing by Design Project will include a major focus on multi-dwelling design and development issues in East Portland for reasons such as the following:

- East Portland has large amounts of multi-dwelling zoning, especially in and around its light rail station areas; centers such as the Jade District, Division-Midway, and Rosewood-Glenfair; and along its major street corridors, such as 122nd Avenue, Division, Powell, and Stark.
- Portland's Zoning Code standards have evolved over the past decades to a large extent in response to the development patterns of the inner neighborhoods (such as patterns of 5,000 square foot residential lots on relatively small blocks). They are less calibrated toward the very different development patterns of East Portland, much of which did not become part of the City of Portland until the 1980s.
- Many areas in East Portland with multi-dwelling zoning have large blocks with deep lots (the latter often ranging from 180 feet to over 300 feet deep), creating challenges to the design of development, fire access, and street connectivity. In the Rosewood-Glenfair center and light rail station area (primarily RH zoning), for example, blocks are typically over 600 foot wide by over 1,000 feet long. These areas also typically lack continuous sidewalks.
- East Portland's centers include larger proportions of families with children, lower-income households, and multi-family units than Portland as a whole (see the Demographics and Housing Market Conditions section of the Appendix). This means that the design of multi-dwelling development, such as the availability of outdoor spaces and pedestrian connections, has disproportionate impacts on these populations, which also include higher proportions of communities of color than the rest of Portland.
- East Portland has distinct characteristics, such as groves of Douglas Firs, that are valued; while its large blocks could provide opportunities for open spaces that are difficult to achieve on the small blocks of Portland's inner neighborhoods. However, it is less clear as to how the design of multi-dwelling dwelling development can be guided to enhance the area's positive characteristics and better meet the needs of residents. Also, a large amount of the area's multi-dwelling zoning is located along street corridors with heavy vehicle traffic, creating challenges to providing quality living environments for residents.



Apartment building and Douglas Firs near the Division Midway town center.

East Portland Examples

As indicated above, many of the design and development issues identified in this section are of particular relevance to East Portland, especially those issues related to street connections and design along busy corridors. Below are some additional examples of East Portland design and development issues.

Development on deep lots

This development in the Jade District is representative of a common medium-density configuration in East Portland. Built in the R2 zone on a residential lot over 200 feet deep, it features a pre-existing house preserved at the front of the lot and closely spaced, newer detached houses filling in toward the rear of the lot, served by a driveway (typically 20-feet wide, required in part for fire access) and parking that occupies much of the rest of the site. Relatively little site area is left for usable outdoor space or for trees. Narrow sites, such as this, often have insufficient site area to provide space for a street connection, meaning that additional street connections are not provided in conjunction with new development on these small sites.



Side-by-side driveways

When each lot develops independently, each with its own driveway, an outcome that results in multiple separate driveways, typically separated by a narrow strip of required landscaping, as in this example. The combined driveway width of 40 feet is wider than would typically be required for a street roadway, with the end result of multiple similar developments over time creating large areas of paved surfaces. A potential solution, supported by Comprehensive Plan polices for East Portland, is to require small properties to be combined into larger sites before development can occur, providing opportunities for street connections and improved site design. An alternative approach for small sites could be to require accessways to be shared by adjacent properties to minimize the creation of driveways and paved areas.



Detached house development along SE 122nd Avenue (R1 zone)

This development consists of detached houses on a shared lot oriented to a private driveway system. This example highlights a number of issues related to development in East Portland:

Unbuilt space is primarily devoted to driveways and small setbacks between houses, leaving little usable outdoor space (green rectangle is a fenced-off stormwater facility).

Fronts of houses and their entrances all face away from 122nd Avenue, not contributing to fostering a transit- and pedestrian-oriented street environment. The multi-lane street configuration is common on East Portland's major corridors, raising questions regarding how multi-dwelling zone housing along such streets can be designed to provide a quality living environment for residents.

Because the development did not involve a land division and its circulation system is a private driveway rather than a street, it was not subject to requirements for street trees, which could otherwise have contributed to a greener "street" environment. A potential approach is to regulate lengthy driveways to provide design elements, such as street trees, similar to what would be required for streets.



Amenity Bonuses

The Multi-Dwelling chapter of the Zoning Code (Title 33, 33.120) provides a range of amenity bonus that allow for increased density for projects that include specified features that improve the livability of multi-dwelling development. These bonuses include a variety of options, which can be packaged together or used individually. The types of bonuses range from unit size, to health and sustainability benefits, to recreational areas. The bonuses are available to projects of various sizes, but are generally more feasible for larger projects because of the small percentage of bonus density provided for each type of amenity (see list below).

As part of the update to the Multi-Dwelling Zoning Code, the Amenity Bonuses section of the code will be examined closely to ensure their effectiveness and to assess whether they meet current priorities. As part of the Inclusionary Housing Zoning Code Project, the development bonuses for the multi-dwelling zones were revised to provide incentives for development that includes affordable housing units, including but not limited to development that will be subject to Portland's mandatory Inclusionary Housing Program.

The recently adopted Inclusionary Housing regulations require new development with more than 20 dwelling units in one building to provide either 20 percent of the dwelling units to be affordable at 80 percent of median family income (MFI) or 10 percent of the dwelling units to be affordable at 60 percent MFI (or pay a fee-in-lieu). Besides affordable housing, another priority from the updated Comprehensive Plan that is not addressed by the current amenity bonuses or any other incentive is physically-accessible housing. Policies call for the provision of accessible housing to meet the needs of older adults and people with disabilities, especially in centers and other locations close to services and transit. The amount of the bonus currently provided for each option is a result of balancing several factors. These include the likelihood that the amenity will be provided without the use of incentives; the potential cost to the developer; and the importance of the amenity. Existing amenity bonus options are summarized below (the percentage of additional density provided for each option is indicated in parentheses):

- **Outdoor recreation facilities (maximum of 10 percent).** Outdoor recreational facilities may include a tennis or basketball court, ball field, swimming pool, horseshoe pit, gazebo, permanent picnic tables, and similar items.
- **Children's play areas (5 percent).** The bonus must meet certain size requirements, containing specific play equipment, along with fencing.
- **Three bedroom units (5 – 10 percent, depending on number of three bedroom units).** Bonuses are allowed if 10 to 20 percent of units in a building contain three bedrooms.
- **Storage areas (5 percent).** The bonus is allowed if all units are provided with interior storage and additional storage for large items.
- **Sound insulation (10 percent).** To qualify for this bonus, the interior noise levels of residential structures must be reduced in three ways. The reductions address noise from adjacent dwellings and from outdoors, especially from busy streets.
- **Crime prevention (10 percent).** The bonus is allowed if all units have security features which comply with Portland Police Bureau Residential Security Recommendations.
- **Solar water heating (5 percent).** The bonus is allowed if solar-heated water is provided to all units. Systems may be active or passive.
- **Larger required outdoor areas (5 percent).** To qualify for this amenity, at least 96 square feet of outdoor area is required for each dwelling unit.
- **Tree preservation (5 percent per each additional preserved tree).** Development proposals that preserve more than the required number or percentage of the trees on the site may use this amenity bonus option.