Portland is changing.
By 2035, the city will grow by approximately 123,000 households. About 20 percent of this growth is expected to be in single-dwelling residential zones. The composition and housing needs of the population are also changing. The city is becoming more diverse and older. The average household will be smaller with fewer children per household.

The Residential Infill Project was initiated to address overlapping concerns related to these changes:
- The number of demolitions and the size of infill houses.
- Increasing housing costs and the loss of affordability.
- Lack of housing choices, especially in high-opportunity neighborhoods.
- The impact of narrow lot development rules on both neighborhood character and the loss of opportunities for needed infill housing.

City Council will hold public hearings on the recommendations on Nov. 9 and 16, 2016. This report includes 10 concept recommendations for changes to the Zoning Code and Zoning Map. Based on City Council direction, specific code and map amendments will be developed for consideration through a separate legislative process in 2017 that will include the additional required public notice, review and hearings.
ACKNOWLEDGEMENTS

City Council
Charlie Hales, Mayor
Nick Fish
Amanda Fritz
Steve Novick
Dan Saltzman

Stakeholder Advisory Committee
Linda Bauer – East Portland Action Plan
Sarah Cantine – Scott Edwards Architects
Alan DeLaTorre, Ph.D. – Portland State University
Jim Gorton – Southwest Neighbors, Inc.*
John Hasenberg – JHA
Marshall Johnson—Energy Trust of Oregon
Emily Kemper—CLEAResult
Douglas MacLeod – Home Builders Association of Metropolitan Portland*
Mary Kyle McCurdy – 1000 Friends of Oregon
Maggie McGann – Habitat for Humanity
Rod Merrick—Merrick Architecture Planning
Rick Michaelson – Neighbors West/Northwest*
Mike Mitchoff – Portland Houseworks
Michael Molinaro – Southeast Uplift*
Danell Norby – Anti-displacement PDX
Douglas Reed – East Portland Neighborhood Office*
Vic Remmers – Everett Custom Homes
Young Sun Song (Former) – International Refugee Center of Oregon*
Brandon Spencer-Hartle, (Former) – Restore Oregon
Eli Spevak – Orange Splot, LLC and Planning and Sustainability Commissioner
Teresa St. Martin – Planning and Sustainability Commissioner
Barbara Strunk– United Neighborhoods for Reform*
David Sweet – Central Northeast Neighbors*
Eric Thompson– Home Builders Association of Metropolitan Portland*
Garlynn Woodsong – Northeast Coalition of Neighbors*
Tatiana Xenelis-Mendoza – North Portland Neighborhood Services*

* Appointed by agency or organization

Bureau of Planning and Sustainability
Susan Anderson, Director
Joe Zehnder, Chief Planner
Sandra Wood, Supervising Planner
Morgan Tracy, City Planner
Julia Gisler, City Planner
Todd Borkowitz, Associate Planner
Mark Raggett, Urban Design Studio
Tyler Bump, Senior Economic Planner
Brandon Spencer-Hartle, Historic Resources Planner
Desiree Williams-Rajee, Equity Specialist
Love Jonson, Community Service Aide Researcher
Pei Wang, Community Service Aide Illustrator
Deborah Stein, District Liaison Manager
Christina Scarzello, East Portland Liaison
Leslie Lum, North Portland Liaison
Nan Stark, Northeast Portland Liaison
Marty Stockton, Southeast Portland Liaison
Joan Frederiksen, West Portland Liaison

Bureau of Development Services
Kristin Cooper, Senior Planner
Matt Wickstrom, Senior Planner

Consultant Teams
EnviroIssues, Facilitation and Public Engagement
Anne Pressentin, Mandy Putney, Emma Sagor
Dyett and Bhatia, Planning and Design
Michael Dyett, Peter Winch
DECA Architects
David Hyman, Shem Harding
Johnson Economics
Jerry Johnson

Thanks also to Opticos Design and The Cottage Company for their gracious permission to use selected images.

For more information, please contact:
Portland Bureau of Planning and Sustainability
1900 SW 4th Avenue, Suite 7100
Portland, OR 97201

Morgan Tracy, Project Manager
morgan.tracy@portlandoregon.gov
(503) 823-6879

Julia Gisler, Public Involvement
Julia.gisler@portlandoregon.gov
(503) 823-7624
Residential Infill Project
Concept Report to City Council

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UNDER SEPARATE COVER

A. Economic Analysis of Proposed Changes to the Single-Dwelling Zone Development Standard, Memorandum from Johnson Economics, October 2016

B. Internal Conversion Report, DECA Architects, October 2016

C. Use of Floor Area Ratios (FARs) in Single Family Zoning, Dyett & Bhatia, June 2016
INTRODUCTION

123,000 new households are projected by 2035. Where will new housing be built?
According to Portland’s new Comprehensive Plan, most new residential and business growth will be in:
- Mixed-use zones along Centers (like Hollywood and Lents) and Corridors (like Interstate and Barbur).
- Inner Ring neighborhoods adjacent to downtown (like Buckman and Brooklyn).
- Central City (Downtown and the Lloyd District).

The new Comprehensive Plan directs growth in and around Centers and Corridors to best achieve community goals.

The new Comprehensive Plan finds that accommodating growth in and around Centers and Corridors is the best strategy
to achieve community goals:
- Increase access to the benefits of healthy neighborhoods while increasing equity through more housing options.
- Improve the market for local-serving businesses.
- Reduce the need to drive while increasing the use of and access to transit, protecting air and water quality and
  reducing carbon emissions.

The new Comprehensive Plan strategy guides growth to places where there is already good access to transit, bike
facilities and walkable streets. However, more action is needed to fully reach City goals. A greater variety of housing
types is needed to successfully meet the needs of households of different sizes, incomes and ages. This is especially so in
areas near schools, stores, jobs and parks, which are often in and near Centers and Corridors.

A paradigm shift – middle housing
The 2035 Comprehensive Plan Growth Scenarios Report identifies that the city has adequate capacity to accommodate
the projected growth of 123,000 new households over the next 20 years. The projected housing mix for 2035 indicates
this new housing will be in larger multi-unit apartments and condominiums (about 72 percent). One reason for this mix
is that the majority of surplus capacity is located in areas where these housing types are allowed (mixed-use and multi-
dwelling zones), whereas the capacity for additional detached single-dwelling units will be nearly fully utilized by the end
of the 20-year planning period.

A young couple living in a one-bedroom apartment may not be able to afford the leap to buy a house. But as the family
grows, they may look for additional living space and a yard within a walkable neighborhood. A duplex or triplex could
offer this opportunity. Or consider an “empty nester” couple who no longer wants to take care of their large house and
yard but want to remain in their familiar neighborhood with a sense of community support. Cottage cluster communities
and accessory dwelling units (ADUs) provide desirable alternatives. More options mean more variety in unit prices and
living arrangements.

What is zoning?
Zoning defines the way land within the city can be used and developed. Zoning maps specify areas where residential, industrial, recreational and commercial activities can occur. Zoning standards regulate the dimensional requirements for lots and buildings, and the number of allowed units.

Housing can be developed in Portland’s commercial zones, as well as within two types of residential zones: single-dwelling and multi-dwelling. Single-dwelling zones (R2.5, R5, R7, R10, R20 and RF) generally allow one house per lot; multi-dwelling zones (RX, RH, R3, R2 and R1) allow one or more units per lot.

What is an R5 zone?
R5 is the most common single-dwelling zone, comprising almost half of Portland’s single-dwelling area. The R stands for residential use and the 5 represents one residential lot allowed for every 5,000 square feet of site area. Numerous code exceptions allow for other uses, including home-based businesses, short term rentals and schools. Exceptions also include limited allowances for additional housing units, such as one ADU per house and duplexes on corner lots.
**SCALE OF HOUSES – BACKGROUND**

**Zoning Standards**
Portland uses clear and objective (essentially numerical) permit requirements to regulate the scale of structures in single-dwelling zones.

These standards are designed to meet City goals to make permit reviews predictable and efficient even during peak development periods. The City reviews approximately 400 new house permits and 5,000 applications for other types of residential work (remodels, additions, repair, etc.) in single-dwelling zones each year.

The table below highlights the key zoning standards that currently address the scale of a house in the R5 zone.

<table>
<thead>
<tr>
<th>STANDARD</th>
<th>CURRENT CODE (R5 ZONE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size – area within the house</td>
<td>The maximum amount of square feet of space allowed in a house is equal to the maximum “building coverage” multiplied by the maximum height allowed on the lot. Building coverage measures the two-dimensional “footprint” of a structure. The maximum allowed building coverage is expressed as a percent of the total size of the building’s site. It varies by site size and not by zone and generally ranges from 22 to 50 percent. (Example: On a 5,000 square foot site, up to 45 percent or 2,250 square feet, may be “covered” by the buildings)</td>
</tr>
<tr>
<td>Height</td>
<td>30 feet, measured from highest grade within 5 feet of the house to the midpoint (pitched roof) or top (flat roof)</td>
</tr>
<tr>
<td>Setbacks</td>
<td>10 feet front; 18 feet garage; 5 feet side(s); 5 feet rear yard Eaves and bay windows may project 20 percent (1 foot into side yards)</td>
</tr>
<tr>
<td>Outdoor Area</td>
<td>250 square feet (with a minimum 12 foot by 12 foot dimension)</td>
</tr>
</tbody>
</table>

The City’s current zoning standards for the scale of single-dwelling development are relatively unchanged since the Portland Zoning Code’s last adoption in 1991.
**SCALE OF HOUSES – BACKGROUND**

**House sizes have increased over time**
Over the last 40 years, the size of the average U.S. house increased by more than 1,000 square feet (61 percent). The average size was 1,660 square feet in 1973 and 2,679 square feet in 2013. The increase is attributed to consumer preference and an increase in land values. In Portland, the increase has raised concerns in some neighborhoods where the scale of new houses is often significantly larger than existing houses.

The Portland Zoning Code limits house size by measurable standards such as limits for height, lot coverage, setbacks and yard area. Together, these define a “building envelope” (shown as the yellow “box” below) that limits how large a house can be. They often vary based on zone.

New infill houses are generally larger than neighboring older houses. However, the maximum size that *could* be built by code is much larger than the average new infill houses being built today.

*The maximum allowed building envelope limits the overall scale of houses. While older houses may differ widely in form, they are generally smaller than houses built today and rarely attain the maximum parameters allowed by code.*
**SCALE OF HOUSES – SIZE**

**Current allowances for size of houses**
The scale of a house is a combination of the space in the house, the size of its footprint, its height and where it is located on its lot.

The Portland Zoning Code limits the maximum space that can be in a house by “building coverage” multiplied by the maximum height allowed on the lot. The building coverage is a percent of the total size of the building’s site. Building coverage varies by lot size, not zone.

Example: On a 5,000 square-foot lot, the maximum allowed building coverage is 2,250 square feet and the maximum allowed height is 30 feet (three stories). That makes the maximum size of a new or remodeled house on this size of lot 6,750 square feet (2,250 square feet times three stories).

Even though allowed, new houses typically are not being built to this maximum size. In 2013, the average house built in Portland on a 5,000 square-foot lot was 2,680 square feet, while the largest house built was 4,461 square feet.
Recommendation 1: *Limit the size of houses while maintaining flexibility*

a) Establish a limit on house size that is proportional to lot size and zone using a floor area ratio (FAR).
b) Exclude basements and attics with low ceiling heights from house size limits.
c) Allow bonus square footage for detached accessory structures (0.15 bonus FAR).
d) Maintain current building coverage limits.

*To encourage detached garages and detached accessory dwelling units (ADUs), up to 0.15 FAR extra building area would be allowed on a lot. This helps break up the massing of a house by distributing the size throughout the lot.*

*Three possible configurations of equally sized houses: single level (left), wide two-story (middle) and a narrower, deeper two-story (right).* The floor area ratio size limit closely links building height and building coverage. Houses could either be taller with a larger yard or shorter and more spread, but not both.

*Maximum house size would be linked to lot size and zone. This graph shows the maximum allowed house size increasing in correlation with the size of its lot.*
SCALE OF HOUSES – HEIGHT

Current height requirements
Each single-dwelling zone has a maximum building height (30 feet in most zones and 35 feet for houses in R2.5). Two reference points are needed to determine a house’s height: a bottom base point and a top point, which do not have to be in alignment with one another. The top point is measured at either the highest point (on a flat roof) or the midpoint (on a pitched or “gabled” roof). On most lots, the bottom base point is measured from the highest grade 5 feet away from an exterior wall. This can result in a house that is much taller than the maximum height when viewed from the downhill side.

Recommendation: Measure from the lowest point to better relate the height limit for houses to the surrounding topography.

Current rules:
Height is currently measured from the highest point near the house.

Portland’s current code specifies that height measurements be taken from the highest grade next to the house, allowing for potential manipulations of grades to increase a house’s height.

Without limits, dormers (currently not measured when determining a house’s height) may begin to look and function like an entire additional story, resulting in a height that is taller than the maximum allowed.
Recommendation 2: *Lower the house roofline*

a) Restrict height to 2½ stories on standard lots.
b) Measure the basepoint from the lowest point 5 feet from a house, not from the highest point.
c) For down-sloping lots, allow use of average street grade as a basepoint alternative.
d) Ensure that dormers are a secondary roof mass.

**Recommendation:** Limit the height of houses on standard lots (36 feet and wider) to 2½ stories. A half story could either be a partial basement, or be contained within the gable of the roof.

**Recommendation:** Limit the size of dormers to ensure that they appear as secondary roof forms and do not significantly affect the overall scale of a house.
**SCALE OF HOUSES – SETBACKS**

**Purpose of setbacks**
Setback allowances provide flexibility when siting a house to better ensure compatibility with the lot’s neighborhood character and topography. Setbacks maintain light, air, privacy and separation for fire protection while reflecting nearby placement patterns of houses.

Setback allowances complement building coverage limits and outdoor area requirements to ensure that a residential lot is not completely covered by buildings and offers ample usable outdoor space for recreation and relaxation. In some areas, established minimum setbacks are less than those of existing houses on a block. When houses built to minimum allowed setbacks are out of alignment with houses on either side, block patterns can be disrupted. On other blocks, no uniform front setback pattern may exist, making the setbacks on new or remodeled houses less critical.

**Projections into setbacks**
Certain building features, such as eaves and bay windows, are allowed to project into setbacks to create articulation and accentuation that helps break up the building scale and allows for more diversity of building styles. Current code allows these features to project up to 20 percent (typically 1 foot) into side setbacks.

*Current minimum building setbacks and required outdoor area in R5 zones.*

*Narrow eaves – common in many new Portland houses – are often the result of current setback limits.*

*Wider eaves reduce the perceived scale of a house. Bay window projections can also help break up the massing of building walls.*
Recommendation 3: *Improve setbacks to better match adjacent houses*

a) Increase minimum front setback by 5 feet; provide an exception to reduce setback to match existing, immediately adjacent house.

b) Encourage building articulation by allowing eaves to project 2 feet into setbacks and bay windows to project 18 inches into setbacks.

Increasing minimum front setbacks for new or remodeled houses generally accommodates larger front yards and more landscaping. Allowing these houses to match the setbacks of existing, immediately adjacent houses also gives flexibility to better ensure compatibility with older houses on a block.

By reducing the required setback for minor building projections, greater roof and building wall articulation is possible.

Three feet from property lines is typically the minimum distance before additional building code rules apply.

The recommended projections ensure that eaves can still extend past the bay window wall and provide weather and sun protection, and more visual interest.
Housing needs for a growing city

Portland is growing and needs an increasing supply of diverse housing options to keep up with this growth. This is key to mitigating the rapid increase of housing costs. However, increasing housing supply is only part of what it takes to meet the housing needs of a changing city. Greater housing choice in terms of the size, type, location and cost is also critical to meeting Portland’s goals. It will help a diversity of households find housing that meets their everyday needs, supports their success and accommodates change. This is especially important for older adults seeking to age within their communities.

Portland once allowed for more types of housing in residential areas. Wandering through neighborhoods around Hawthorne or Irvington, one can see duplexes, bungalow courtyards and small apartments comfortably mixed among single-dwelling houses. These types of housing are part of what many call “middle housing.” Coined by urban planner Daniel Parolek, the term middle housing refers to housing in between single-family houses and larger multi-family buildings. It can include accessory dwelling units (ADUs), duplexes, triplexes, “small-plexes” and cottage clusters, as well as courtyard apartments and bungalow courts.

Today, only about 5 percent of the city’s housing stock is in these smaller forms of middle housing. Most of the housing supply is in detached houses (56 percent), many in areas that no longer allow this middle housing mix.

Why use an Overlay Zone?

Portland’s Zoning Code uses overlay zones and plan districts to modify the base zone allowances and limitations for specific places with unique needs or goals. Overlay zones and plan districts are identified on official City zoning maps and are part of a property’s zoning.

Overlay zones address specific subjects such as protecting environmental resources. They are applied to similar locations across the city. Plan districts address specific places, such as the Central City or Portland International Airport. Use of an overlay zone would make it clear to property owners and the public where duplexes, triplexes or additional ADUs are allowed beyond the base zone density.
Where to apply the Overlay Zone?
There is increasing demand for greater housing supply and types within single-dwelling zones. Residents typically balance price, size, number of units, location, homeownership options and accessibility in their housing decisions. In addition to helping accommodate the preferences of current and future residents, a broader range and supply of housing in these zones will increase the availability of more affordable options and help advance City equity goals.

With the adoption of the new Comprehensive Plan, City Council approved a policy to encourage “relatively smaller, less expensive units... within a quarter mile of designated centers, corridors with frequent transit, high capacity transit [MAX] stations, and within the Inner Ring [neighborhoods] around the Central City.” The conceptual boundary proposed for a new Housing Opportunity Overlay Zone is based on this policy and consideration of other new Comprehensive Plan policies as explained below.

Development in centers and along civic corridors is the preferred growth scenario in the new Comprehensive Plan. This growth management strategy performed the best across the measures used to evaluate the new Comprehensive Plan scenarios, such as transit and active transportation, reduced carbon emissions, and complete neighborhoods. This is why staff recommends linking the conceptual boundary for the Housing Opportunity Overlay Zone to centers and corridors.

The new Comprehensive Plan also identifies different housing opportunity areas. Higher opportunity neighborhoods are areas that already have assets that support the health and success of the residents who live there: walkability, transit, services, quality schools and parks and access to employment.

The proposed conceptual boundary includes approximately 64% of the single-dwelling zoned lots in the city.

Area within the David Douglas School District is proposed to be excluded until school enrollment capacity issues can be addressed through an updated master plan process.

The map on Page 14 shows the conceptual boundary that encompasses the quarter-mile distance (approximately five blocks or a 5-minute walk) from designated centers, corridors with frequent bus service and MAX stations. Also included are areas with higher opportunity neighborhoods that may be slightly farther from centers and corridors but are still proximate to downtown, have good transit access, have a well-connected street grid and are near schools, parks and jobs.

The conceptual boundary on this map represents a study area pending further and more detailed evaluation to determine a specific Housing Opportunity Overlay Zone. The final boundary will also need to consider significant physical barriers that limit convenient connections to centers and transit corridors, such as poor street connectivity, steep topography, natural features and other practical considerations.
What is currently allowed in single-dwelling zones?
In single-dwelling zones, generally only one house is allowed per lot. However, there are multiple exceptions. Any house may have a single Accessory Dwelling Unit (ADU) that is up to 75 percent of the floor area size of the primary house up to 800 square feet. ADUs can be created through a converted basement or attic, added on to an existing house or built as a separate, detached structure.

Additionally, duplexes (two units on a single lot) or attached houses (two units, each on its own lot but sharing a common wall on the property line) may be built on some single-dwelling zoned lots that would otherwise allow only one detached unit. They are currently allowed on corner lots and on lots that border lots zoned commercial. In the R2.5 zone, duplexes and attached houses are allowed on any lot that is at least 5,000 square feet in size.
Recommendation 4: *Allow more housing types in select areas and limit their scale to the size of house allowed*

- a) Within the Housing Opportunity Overlay Zone in R2.5, R5 and R7 zones, allow a:
  - House with both internal and detached accessory dwelling unit (ADU)
  - Duplex
  - Duplex with a detached ADU
  - Triplex on corner lots
- b) Establish minimum qualifying lot sizes for each housing type and zone.
- c) Require design controls for all proposed projects seeking additional units.

Recommendation 5: *Establish a Housing Opportunity Overlay Zone in select areas*

- a) Apply a Housing Opportunity Overlay Zone to the following areas:
  - Within a ¼ mile (about five blocks) of centers, corridors with frequent bus service, and high capacity transit (MAX) stations.
  - Within the Inner Ring neighborhoods and medium- to high-opportunity neighborhoods, as designated in the new Comprehensive Plan.
- b) Exclude areas within the David Douglas School District until school district capacity issues have been addressed.
- c) Prior to adopting any specific zoning changes, refine the Housing Opportunity Overlay Zone to produce a boundary that considers property lines, physical barriers, natural features, topography and other practical considerations.

Through subsequent study and analysis, additional refinements to the conceptual Housing Opportunity Overlay Zone boundary will be made to normalize the edge of the overlay zone.
Recommendation 6: *Increase flexibility for cottage clusters on large lots citywide*

a) On single-dwelling zoned lots at least 10,000 square feet in size, allow cottage clusters subject to Type IIx land use review.

b) Cap the total square footage on a cottage cluster site to the same FAR limit [see Recommendation 1], and limit each new cottage to 1,100 square feet.

c) Inside the Housing Opportunity Overlay Zone [see Recommendation 5], the number of cottages allowed equals the same number of units that would otherwise be permitted.

d) Outside the Housing Opportunity Overlay Zone, allow one ADU for each cottage.

e) Develop specific cottage cluster rules to ensure that development is integrated into the neighborhood.

f) Explore additional units when the units are affordable and accessible.

*What is a Cottage Cluster?*

Cottage clusters are groups of relatively small homes typically oriented around a shared common space such as a courtyard or garden and parking often relegated to the fringe. Planned Developments (PDs) provide opportunity for innovative development, while assuring that it is well-designed and complements neighborhood character. PDs are sometimes used in conjunction with a land division to allow lot configurations that preserve open space or create clusters of houses around common green spaces. While current PD allowances give design flexibility for cottage cluster proposals, the criteria are not tailored specifically to achieve cottage clusters. Currently, PDs cannot attain additional density and ADUs cannot be proposed where more than one house shares a lot on a PD site.

*Land Use Reviews*

A discretionary land use review involves judgement or discretion in determining compliance with the approval requirements. Review procedures, in order from least to greatest level of intensity, include Type I, Type IX, Type II, Type IIx, Type III and Type IV.

Under most circumstances, PDs must go through a Type III land use review process, which is decided by a Hearings Officer and, if appealed, by City Council. By comparison, a Type IIx land use review, which applies to most smaller land divisions, is less expensive and requires less time to process. Both reviews utilize the same approval criteria and provide opportunities for appeals at both the City and State level.
HOUSING CHOICE – EXISTING HOUSES

Recommendation 7: **Provide added flexibility for retaining existing houses**

a) Scale flexibility:
   - Allow modest additional floor area for remodels, additions and house conversions.
   - Allow modest additional height when an existing house’s foundation is being replaced or basement is being converted.

b) Housing choice flexibility:
   - Inside the Housing Opportunity Overlay Zone [see Recommendation 5], allow one additional unit when an older house is converted into multiple units or is retained with a new cottage cluster development.
   - Pursue additional flexibility for house conversions, such as parking exemptions, systems development charge (SDC) waivers or reductions, building code flexibility and City program resources that facilitate conversions.

**Encouraging house retention**

Houses are demolished for many reasons. Smaller houses may not suit the needs of property owners as families grow or their preferences change. Others may not have been well maintained over time, have been severely damaged by fire or water, or have reached the end of their lifespan with the cost to repair them is more than the cost to demolish and rebuild. Houses are also sometimes demolished when they cannot competitively compete with new construction for a return on the investment.

Options that allow owners to add value by improving existing houses, extending the lifespan of houses and making them more economically competitive compared to new construction also create incentives to preserve and reuse current housing. Portland’s zoning code could allow opportunities for greater density and flexibility for reuse of retained and renovated existing houses.

Even so, the State Building Code can add significant cost and complexity when converting existing houses (see Appendix B). Non zoning code incentives, like those identified in Appendix B, may be especially useful in further encouraging adaptive reuse of existing housing.

To facilitate future additions and provide incentive to continue investment of Portland’s current housing stock, these concept recommendations allow and encourage homeowners to create additional value in their houses, prolonging their lifespan and making them more competitive against new construction.

---

**697 single-family residence demolitions**
April 20, 2013 – April 20, 2016

- 464 demos on lots that could have yielded more units
- 234 demos on lots that could NOT have yielded more units
- 59 demos on corner lots
- 289 demos on lots with underlying lot lines
- 112 demos on lots that could have undergone a land division
- 4 demos on lots adjacent to a commercial zone

**How many houses are being demolished?**
Of the approximately 145,000 houses in Portland, 697 homes in single-dwelling zones were demolished over a 3-year period. Two-thirds of demolitions took place on lots that allowed for more units to be built, while one-third occurred on lots that did not allow for more units to be built.
Origin of historically narrow lots
Like most cities, Portland requires lots to be a minimum size to be developed. Standard lots in older parts of Portland are typically 50 feet wide by 100 feet deep. Lots less than 36 feet wide are considered “narrow” lots. But in some neighborhoods, lots were historically created in 25 foot wide increments. These are called “historically narrow lots.” The land was subdivided long ago into twice as many lots as is currently allowed in the R5 zone and do not meet current minimum lot size or width standards. However, State law requires cities to recognize these lots as “discrete parcels”.

Between 1991 and 2002, there was no minimum lot size for building on historically narrow lots. In 2003, Portland established a minimum lot size of 3,000 square feet and a minimum width of 36 feet for existing lots in the R5 zone to be developed. An exception was made for lots smaller or narrower than these dimensions, which can only be developed if they have been vacant for at least five years.

Historically narrow lots offer another housing type option: smaller lots for smaller houses. Two side-by-side narrow lots can accommodate two detached narrow houses, or two slightly wider attached houses.

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>CHALLENGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Increases the supply of housing</td>
<td>- Locations of historically narrow lots not distributed evenly throughout the city</td>
</tr>
<tr>
<td>- Increases opportunities for “fee-simple” homeownership</td>
<td>- Increases demolition pressures in some neighborhoods</td>
</tr>
<tr>
<td>- Promotes smaller, more energy-efficient houses</td>
<td>- Narrow houses often not reflective of neighborhood character of wider homes</td>
</tr>
<tr>
<td>- Smaller new homes on smaller lots are generally less expensive than new homes on larger lots</td>
<td>- Reduces scale and removes street facing garages on narrow houses to improve compatibility</td>
</tr>
<tr>
<td>- Rezoning to R2.5 is transparent and intuitive with lot size and density</td>
<td>- Under current rules, a new house can only be built on the lot if it has been vacant for five years</td>
</tr>
</tbody>
</table>

Example of a house on a site comprising three historically narrow lots (dashed lines).
Recommendation 8: **Rezone historically narrow lots to R2.5 in select areas**

a) Allow historically narrow lots to be built on by rezoning them to R2.5 if located within the Housing Opportunity Overlay Zone [see Recommendation 5].

b) Remove provisions that allow substandard lots to be built on in the R5 zone.

---

### Example of a house on a site comprised of three historically narrow lots (dashed lines).

### Within the Housing Opportunity Overlay Zone, allow detached houses on vacant lots and require attached houses where a house was removed.

### Allow narrow lots to be reconfigured with a flag lot through a property line adjustment when an existing house is being retained.

### Historically narrow lots outside the Housing Opportunity Overlay Zone could only be built upon if they meet new R5 dimension requirements.

---

**LEGEND**

- Housing Opportunity Overlay study boundary
- R2.5, R5, R7 zones inside study area
- Other zones inside study area
- Historically narrow R5 lots inside study area
- Historically narrow R5 lots outside study area
- Outside study area
Recommendation 9: **Citywide improvements to the R2.5 zone**

a) On vacant R2.5 lots of at least 5,000 square feet, require at least two units when new development is proposed. Allow a duplex or a house with an Accessory Dwelling Unit (ADU) to meet this requirement.

b) Reduce minimum lot width from 36 feet to 25 feet for land divisions.

c) Allow a property line adjustment to form a flag lot when retaining an existing house.

d) Require attached houses when a house is demolished.

e) Allow 3-story attached homes and limit detached houses on narrow lots to 2 stories.

**More efficient use of land zoned R2.5**

While the R2.5 zone has the most flexibility of Portland’s single-dwelling zones in terms of allowed housing types, there are not many areas of the city (less than 4 percent) that are currently zoned R2.5. Rezoning historically narrow lots would increase the total land area of this zone by a little less than 2 percent.

The R2.5 zone allows one housing unit for each 2,500 square feet of lot area. However, when a single house is demolished on a 5,000 square foot lot (large enough for two units), it can currently be replaced with a single house. This is a lost opportunity for adding housing in high-amenity areas.

The R2.5 zone allows attached houses, yet the current land division rules require that lots be at least 36 feet wide unless an exception can be justified. This is especially cumbersome for lots that are 50 feet wide and tends to favor creating flag lots. However, where there is already a house that straddles two historically narrow lots, the current property line adjustment rules do not allow properties to be configured as flag lots, even if retaining an existing house.

**Improved height transitions**

The R2.5 zone often functions as a transition between higher intensity zones (commercial or multi-dwelling) and lower intensity single-dwelling zones. That is why the current height allowances in R2.5 zones is taller than the other single-dwelling zones. However, when detached houses are built on narrow lots, their width to height relationship makes the detached house appear even taller.

Reducing the allowed height for detached houses on narrow lots, as proposed, maintains a better height to width relationship. Maintaining taller height limits for attached houses provides a better transition between higher and lower intensity zones.
Recommendation 10: Revise parking rules for houses on narrow lots citywide

a) Allow, but don’t require parking on narrow lots.
b) When a lot abuts an alley, parking access must be provided from the alley.
c) Allow front-loaded garages on attached houses on narrow lots if they are tucked under the first floor of the house and the driveways are combined.
d) Do not allow front-loaded garages for detached houses on narrow lots.

Garages and parking for houses on narrow lots

On 15-foot wide houses, 12-foot wide garages dominate front façades, reducing ground level living space and street facing widows on ground floors. The additional area needed for garages also increases the overall size and depth of narrow houses. Driveway curb cuts also remove space available for on-street parking and increase potential hazards for people walking on sidewalks.

Attached houses can be better suited for garages with an overall wider form, and opportunities to share curb cuts and retain on street parking are afforded. However, the potential exists for garages on these homes to dominate the first floor, resulting in long stairways to reach the main entrance on the second floor.

The recommended change would disallow front-loaded garages on narrow lots, which improves street facing façades and leaves more room for landscaping and on-street parking.
Seeking to optimize performance against eight key measures

Portland’s new Comprehensive Plan helps define objectives [see accompanying diagram, right] towards achieving the goal of the Residential Infill Project. Each objective includes questions to help assess and optimize project performance.

These objectives show the range of public interests and highlight sometimes inevitable trade-offs. Some objectives work together, such as providing diverse housing opportunities and supporting housing affordability. Other objectives may conflict with each other. The Residential Infill Project considers the impacts of each objective, and balances the final results in terms of the positive and negative impacts on the whole.

Fit neighborhood context

Would the proposed approach to development standards for infill houses better produce buildings that fit with the form - scale, massing, street frontage, and transitions to adjacent houses – of blocks on which they are located?

This Concept Report significantly limits the potential of new houses from overwhelming neighboring properties. While new residential construction may be larger or taller than nearby older homes, these proposed size limits offer greater certainty that the scale of new homes and additions will better complement neighborhood context.

These proposed size limits are also flexible to allow for a variety of home styles and not be an impediment to continued neighborhoods investment. In situations where most houses on a block are larger, the current code provides for an adjustment process that can allow house sizes greater than the prescribed limit on a case-by-case basis.

Proposed increases to the front setback help situate homes to better match neighborhood patterns. The new front setback may also be reduced to match neighboring houses to ensure that the new development is not out of the line with existing houses.

The proposed changes to height are tailored to have more consistency in the look of a block from the street. In general the concept is to allow homes up to 2½ stories. Narrow homes would be limited to 2 stories. In R2.5 zones, additional height allowances are proposed to encourage attached home development, which is more consistent with the intended character of the R2.5 zone as a transition zone.

This Concept Report also recognizes the inherent value of existing houses. Provisions to retain existing houses allow their current or increased use as an alternative housing types to further preserve neighborhood context.
Provide diverse housing opportunities

Would the proposed approach help to produce housing types that accommodate diverse needs and preferences of future and current residents?

Portland’s demographics are changing. The housing supply is not necessarily well suited for this change. Yet, its diversity of housing supply is not sufficient in successfully meeting these changing needs.

Approximately 56 percent of Portland’s housing supply is in detached single dwelling buildings. Another 39 percent is in multi-dwellings buildings. Middle housing types – multiple units in building forms compatible with existing houses – are in short supply. Further diversifying Portland’s housing supply better positions the City to more effectively respond to these changes.

More types of housing in more neighborhoods supports greater household diversity. It gives residents options to stay in their neighborhood as their needs change, especially in allowing older adults to age amongst familiar resources within their current communities.

Houses should be adaptable over time

Would the approach yield additional housing that can be adapted over time to accommodate changing household needs, abilities and economic conditions, and help older adults “age in place”?

Allowing more accessory dwelling units (ADUs) could benefit homeowners seeking to leverage their home’s equity and gain supplemental rental income, make space for other family members or friends or create opportunity to downsize and retain a primary house to rent to a larger household.

Similarly, allowing opportunities for internal conversions within existing houses to create multiple units could add additional value and longevity to older larger houses while giving greater flexibility towards meeting changing household needs.

Would it provide flexibility within the building envelope for future additions?

Portland residents expressed concerns that restrictions on future additions could result in disinvestment and lead to more demolition of older homes.

The proposed rules include some allowance for the expansion of existing houses beyond the proposed limits on house scale. They would allow additional floor area for home additions and flexibility when foundations or basements are upgraded or replaced.

The proposed rules balance resident concerns about house scale and siting with more flexibility for future additions and remodels.

They also do not prescribe particular house styles (modern, traditional, etc.) or mandate design uniformity, as such regulation can unnecessarily increase project complexity and cost.
**Maintain privacy, sunlight, open space and natural features**

*Would the standards result in development that responds to positive qualities of the natural setting and site conditions? Would they accommodate sustainable stormwater solutions and help meet tree canopy goals?*

Tree canopy and stormwater retention can be advanced through increased front yard setbacks and smaller house footprints. While total building coverage limits would remain, the proposed floor area limits may result in two-story houses covering less yard than is currently allowed.

In addition, the proposed rules that govern new cottage cluster development take advantage of the added flexibility afforded by smaller footprint houses and create a more flexible discretionary review to better ensure architectural compatibility and site layouts for more privacy, sunlight, open space and preservation of natural features.

*Would the approach preserve the comfort and privacy of living areas, and provide adequate and usable yard area for gardening and enjoyment of the outdoors?*

The proposed rules balance privacy and sunlight access with retention of open space and natural features. However, retaining open space and trees on a lot generally equates to taller and more upright houses. While increasing shade and privacy is often best achieved with single-story houses more spread out on a lot. The proposed rules for house size offer Portland residents flexibility to do either (build more upright or spread out) to best achieve more privacy or usable outdoor space, but not both concurrently (as is presently allowed).

**Be resource-efficient**

*Would the approach encourage the development and preservation of compact, resource- and energy-efficient homes?*

*Would it support the use of technologies, techniques, and materials that result in less environmental impact over the life cycle of the structure?*

The Concept Report supports resource efficiency in two main ways.

First, it includes provisions that encourage reuse of existing homes thereby reducing the waste stream into landfills.

Second, it includes allowances for smaller, less energy and material intensive dwelling units to be built in space normally occupied by only a single house.

*Would it better utilize surplus capacity in existing public infrastructure?*

In areas where infrastructure is available and surplus capacity exists, the proposed rules make better use of available capacity by allowing additional dwelling units within the building envelope of single-dwelling houses.

In areas where surplus capacity does not exist, the proposed approach will restrict additional units where infrastructure is insufficient to handle additional development (in accordance with Portland’s new Comprehensive Plan).
Support housing affordability

Would the standards help to reduce the cost of housing for homeowners and renters by increasing the availability of housing citywide that is affordable to a wide spectrum of household types and sizes?

The proposed rules promote additional housing availability in areas that are highly desirable to many residents due to proximity and good access to services and amenities.

Allowing additional and smaller dwelling units in these areas could increase housing supply and choice citywide, thereby potentially helping reduce some long-term pressure from Portland’s current imbalance between supply and demand.

Would the approach promote equity and environmental justice by reducing disparities, minimizing burdens, affirmatively furthering fair housing, proactively fighting displacement and improving socio-economic opportunities for under-served and under-represented populations?

Overall, the potential increase in housing units of various sizes, types and locations promotes more opportunities for residents to relocate and age within communities they or their families may have lived in for years or generations.

There are areas that fall outside the Housing Opportunity Overlay Zone that would not be able to utilize this added flexibility. However, these are also areas that are not well served by transit or support services and retailers. While housing costs could potentially be lower in these areas, these savings would likely be offset by increased transportation costs.

Be economically feasible

Would the approach allow for a reasonable return on investment for homeowners and developers, allowing the market to produce needed new housing to sufficiently accommodate the city’s growing population?

A feasibility analysis was conducted by Johnson Economics (see Appendix A) to confirm that the recommendations on size of houses and additional housing types will still allow for a reasonable return on investment for homeowners and developers and would not stifle the market from producing this needed new housing. This analysis found that existing single-family houses will maintain their value as the result of the recommendations. Longer term value increases for existing larger single-family homes might occur as the new construction market will be limited to .5:1 FAR single-family infill development.

The analysis indicates that the housing choice recommendations advance the project goal to increase the supply of diverse housing types. Development feasibility analysis conducted for the alternative housing prototypes indicates that these development types would be more attractive than large lot single-family new construction. Additionally, the analysis indicates that these housing types could be delivered to home owners at lower costs than the large single-family prototype.

Would it catalyze desired development while minimizing undesired development and demolition of existing sound housing?

A common theme that emerged from public feedback was concern about potential increased demolitions of existing housing. While demolitions will continue to occur (regardless of the project recommendations) in response to market pressures or as the consequence of deferred maintenance, the recommendations add more allowances and incentives to encourage home
reinvestment and retention, such as additional unit bonuses for converting existing homes, and added flexibility to remodel and expand older homes.

The economic analysis indicates a general reduction in redevelopment activity in a one for one single-family redevelopment scenario as the result of the .5:1 FAR house size limitation. However, the alternative housing type proposal increases housing production opportunities over the long term at a price point lower than is currently being delivered with larger single family new construction. Additionally, the depth of the market for the lower price point alternative housing types exceeds the amount of buyers that can afford larger single-family homes that are currently being delivered in the market.

**Provide clear rules for development**

**Would the proposed standards be easy to use and understand, and be consistently applied?**

Clear and consistent rules are imperative to help facilitate plan preparation and reduce delays in permit reviews. The recommendations make strategic changes to existing already well-understood clear and objective development requirements relating to building heights and setbacks. While the introduction of a proposed floor area ratio (FAR) standard to limit house sizes is a new standard for Portland’s single-dwelling zones, it has for many years been in Portland’s Zoning Code in other areas, such as the Central City and commercial zones.

The varied house styles, architectural variations and odd spaces that are more common with single-dwelling development introduce a need to be more explicit about how floor area is counted and calculated (see Appendix C). This will be addressed more explicitly during code drafting and refinement.

Additionally, the allowances for additions to and conversions of existing homes as well as incentives for ADUs will add some degree of complexity, which will also need to be further evaluated during the subsequent code drafting phase of the project.

**Would the zoning districts be clearly reflective of the neighborhood character they would produce?**

“A one size does not fit all” theme emerged during the public outreach phase of the Residential Infill Project, suggesting that the proposed rules do not go far enough in recognizing the unique character attributes of Portland’s neighborhoods, blocks or pattern areas.

Yet, zoning and development standards are only one of many ingredients for defining neighborhood character. Street layout, topography, existing vegetation and the mix of zoning (residential, commercial, open space, etc.) also have a strong influence in establishing neighborhood character. In addition, a neighborhood’s “historical narrative,” such as influences from major infrastructure or institutional investments or changing socio-economic economic compositions also, over time, add significant definition to attributes inherent in different neighborhoods. Thus, the variety and uniqueness within the city that many observe as desirable characteristics was actually developed over time not through fastidious zoning rules, but rather broad parameters that allow for individual innovation and cultural expression.

In recognition of the role that zoning and development standards do play, the proposed rules were revised to differentiate house size limits based on a combination of both lot size AND zoning district, and not tying strictly to lot size – which could have resulted in a greater blending of zoning districts than desired. In addition, proposed height limits in the R2.5 zone were retained for attached houses or rowhouse development, forms more consistent with this zone and serving as a transition between single-dwelling and higher intensity zones. Lastly, certain pattern area characteristics may be reflected in new development through introduction of new design controls - measures that will promote the preservation and future integration of key, iconic architectural features that help define neighborhoods and make these areas special.
DEVELOPING DRAFT PROPOSALS (DECEMBER 2015 – JUNE 2016)

- **Online questionnaire.** More than 7,200 people participated in an online questionnaire that provided an opportunity for Portlanders to share their thoughts about residential infill issues. The questionnaire was not a scientifically-representative survey, but offered an additional way for residents to provide input. Project staff used the results along with information gathered from public meetings, to help identify key community values and focus additional outreach to people not well represented from the questionnaire results. An analysis of the results and a summary of the nearly 8,600 individual comments received is available in the Summary Report on the project website.

- **Public open house after Stakeholder Advisory Committee (SAC) charrette.** After a day-long charrette, the public was invited to view the graphics and flipcharts, learn more about the project and provide feedback.

- **Ongoing communication.** Regular communications about the Residential Infill Project were made available through the project website, monthly e-mail updates to the project mailing list, Bureau of Planning and Sustainability newsletters, social media sites (Facebook, NextDoor and Twitter) and media releases.

PUBLIC REVIEW OF DRAFT PROPOSALS (JUNE 2016 – AUGUST 2016)

- **Open houses and questionnaire.** Nearly 550 people attended six open houses held in various locations across the city. Additionally, an online version of the open house materials was viewed by over 8,600 people. A questionnaire, which sought feedback on the specific draft proposals, was available for on line and written responses with over 2,375 people responding. An analysis and summary of the results from over 1,500 individual comments received from questionnaires, comment forms, flipchart notes, emails and letters is available in a summary report on the project website.

- **Meetings and hosted forums.** In addition to the open houses, staff met with groups and organizations to gather feedback and help them get the word out about the draft proposals to their networks. Roughly 200 people attended meetings and hosted forums with district neighborhood coalitions, Oregon Opportunity Network, Elders in Action, Anti-displacement PDX, and several city commissions among others.

STAKEHOLDER ADVISORY COMMITTEE (SAC)

A Stakeholder Advisory Committee (SAC) was established from September 2015 through October 2016 to advise project staff on issues related to the project and participate in the development of these draft proposals. Twenty-six SAC members were appointed by Mayor Charlie Hales to represent those who live in the neighborhoods, those involved in construction or selling of houses and those representing interests such as housing equity, historic preservation, seniors and sustainability. Members were chosen to ensure the committee provided a balance of age, gender and geographic distribution.

Committee members shared their advice, insight and expertise and provided project updates to their diverse group of networks and organizations. In addition to 16 meetings, SAC members also participated in neighborhood walks (October and November 2015) and an all-day charrette (January 2016). The SAC also exchanged ideas, photos and key articles on a Facebook group page, visible to the public.

The culmination of the SAC’s work and discussions is included in detailed meeting minutes and summarized in the SAC Final Report (see project website). All SAC meetings were open to the public and included time for public comment.
Regular communications about the Residential Infill Project are available through the project website (see below), monthly e-mail updates to the project mailing list, Bureau of Planning and Sustainability newsletters, social media sites (Facebook, NextDoor and Twitter) and media releases.

Visit [www.portlandoregon.gov/bps/infill](http://www.portlandoregon.gov/bps/infill) to:
- Learn more about the project and view maps, reports and documents.
- Review Stakeholder Advisory Committee discussions, including the SAC Summary Report.
- Read about the public feedback received from the earlier draft proposals.
- Sign up to receive future updates and notices of upcoming public hearings.

**Contact Bureau of Planning and Sustainability staff:**

Morgan Tracy, Project Manager - 503-823-6879
Julia Gisler, Public Involvement - 503-823-7624
Email questions to project staff at: residential.infill@portlandoregon.gov