## RIP \#2: MIDDLE HOUSING FOR R10 AND R20 ZONES

Existing Conditions Report: maps and data
Prepared for Portland Bureau of Planning and Sustainability by Urbsworks, Inc.


## Existing Zoning

» R7, R5, and R2.5 single-dwelling zones represent $90 \%$ of the singledwelling residential lots in Portland, approximately 133,000 lots
» A small percentage of land is zoned R10 and R20, approximately 16,000 lots


## Purpose

» Urbsworks is tasked with addressing middle housing (cottage clusters and duplexes) for large-lot lower density zones R10 and R20
» Six subareas were defined in advance of this project
» We are looking at the built environment, demographics, and housing market
» Incorporating some of the previous IBTER mapping work
» Creating context-sensitive cottage cluster standards based on existing conditions and stakeholder feedback


## R10/R20 subareas

» 1 - Northwest Portland: From the NW city boundary to Hwy 26
» 2 - South of Hwy 26: between Hwy 26 and SW Barbur Boulevard

## » 3 - South of Barbur

Southwestern city boundary to Barbur Boulevard
» 4 - Columbia Corridor: North and northeast, near Columbia Boulevard
» 5 - Kelly Butte/Wilkes: North of NE Glisan Street, along eastern city boundary and areas adjacent to Kelly Butte Natural Area
» 6 - Johnson Creek: Southeast edge of City in areas adjacent to Powell Butte and along Johnson Creek


## DEMOGRAPHICS

## Demographics key findings

» East subareas are more similar demographically. Generally,
these areas are more racially diverse, have lower income-earners, and lower levels of education attainment.
»West subareas are similar demographically. Generally, these areas have more white people, higher incomes, and more people with advanced degrees.

## Race and Ethnicity

» East subareas including Columbia Corridor, Kelly Butte/Wilkes, and Johnson Creek have higher populations of people of color, while west subareas have higher percentages of white people
" West subareas are predominantly white: $88 \%$ South of Barbur, $86 \%$ in Southwest, and $82 \%$ in Northwest
" East subareas vary in population breakdown with greatest percentage of Black people in Columbia Corridor (13\%) with next greatest number of $7 \%$ in Kelly Butte/ Wilkes subarea
" Asian populations are highest in Kelly Butte/Wilkes and Johnson Creek subareas (both 12\%) and Northwest (11\%)
» Hispanic populations are highest in Kelly Butte/Wilkes (18\%) and Columbia Corridor (17\%)

Income
» Individual incomes in eastern subareas are substantially lower than those in the west, with over $35 \%$ of individuals earning 75,000 a year or greater as compared with eastern subareas at 15\% (Columbia Corridor) 12\% (Kelly Butte/Wilkes) and 18\% (Johnson Creek).
*All subarea data is from 2019 American Communities Survey 5-year estimates.

## Key to study areas

Key to study areas

| $\mathbf{1}$ | NW | Northwest | $\mathbf{4}$ | NE | Columbia Corridor |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2}$ | SW1 | South of Hwy 26 | $\mathbf{5}$ | OE | Kelly Butte/Wilkes (outer east) |
| $\mathbf{3}$ | SW2 | South of Barbur | $\mathbf{6}$ | SE | Johnson Creek |


|  | Study Areas |  |  |  |  |  | Portland$2019$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 \| NW | 2\|SW 1 | 3\|SW2 | 4\|NE | 5\|OE | 6\|SE |  |
| Population |  |  |  |  |  |  |  |
| Total population | 17,218 | 32,029 | 18,205 | 10,887 | 25,963 | 51,619 | 653,467 |
| Race and Ethnicity |  |  |  |  |  |  |  |
| Total people of color | 2,825 | 3,440 | 2,059 | 3,894 | 9,948 | 15,831 | 192,808 |
| People of color | 16\% | 11\% | 11\% | 36\% | 38\% | 31\% | 30\% |
| White | 82\% | 88\% | 86\% | 71\% | 73\% | 70\% | 70\% |
| Black | 1\% | 2\% | 2\% | 13\% | 7\% | 6\% | 6\% |
| Native American | <1\% | <1\% | <1\% | 1\% | 1\% | 1\% | 1\% |
| Asian | 11\% | 5\% | 4\% | 4\% | 12\% | 12\% | 8\% |
| Native Hawaiian / Pacific ls. | <1\% | <1\% | <1\% | 1\% | 1\% | 1\% | 1\% |
| Other | 5\% | 4\% | 6\% | 6\% | 5\% | 5\% | 5\% |
| Hispanic | 4\% | 4\% | 5\% | 17\% | 18\% | 11\% | 10\% |


|  | Study Areas |  |  |  |  | Portland | $\mathbf{1 \| N W}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 2\|SW 1 | 3\|SW2 | 4\|NE | 5\|OE | 6\|SE | $\mathbf{2 0 1 9}$ |
| Income |  |  |  |  |  |  |  |
| Median HH Income |  |  |  |  |  |  | $\$ 76,231$ |
| Per Capita Income |  |  |  |  |  |  | $\$ 45,035$ |
| \% of people with income | $90 \%$ | $92 \%$ | $91 \%$ | $87 \%$ | $87 \%$ | $86 \%$ |  |
| $\%$ people without income | $10 \%$ | $8 \%$ | $9 \%$ | $13 \%$ | $13 \%$ | $14 \%$ |  |
| $\$ 1$ to \$15,000 | $19 \%$ | $18 \%$ | $21 \%$ | $27 \%$ | $30 \%$ | $24 \%$ |  |
| $\$ 15,000-\$ 34,999$ | $16 \%$ | $17 \%$ | $17 \%$ | $29 \%$ | $31 \%$ | $28 \%$ |  |
| $\$ 35,000-\$ 49,999$ | $10 \%$ | $9 \%$ | $11 \%$ | $14 \%$ | $13 \%$ | $15 \%$ |  |
| $\$ 50,000-\$ 74,999$ | $14 \%$ | $14 \%$ | $13 \%$ | $15 \%$ | $16 \%$ | $15 \%$ |  |
| $\$ 75,000$ and above | $42 \%$ | $41 \%$ | $37 \%$ | $15 \%$ | $12 \%$ | $18 \%$ |  |

## Demographics key findings

## Age

» Age groups are not drastically different across subareas ; however, the share of seniors (60 and up) is higher than the city as a whole.

## Education

» West subareas are highly educated with almost $3 / 4$ of the population with bachelor's or advanced degree ( $71 \%$ in northwest, and $72 \%$ in both southwest subareas). This is almost $20 \%$ higher than Portland as a whole
» East subareas have lower educational attainment. College or advanced degree is $22 \%$ in Kelly Butte/Wilkes subarea and $32 \%$ in Columbia Corridor and Johnson Creek areas

## " Housing

" Homeowners comprise a much higher share of housing in all subareas (59-83\%) than the city as a whole (54\%)
» More renters are found in east subareas, more owners in west subareas
» Columbia Corridor subarea has the highest percentage of renters (41\%) which is closer to the city as a whole ( $46 \%$ renters) while Northwest subarea has the highest percentage of home ownership (76\%).

## Commute Mode

» Higher than average share of the population commute by single occupancy vehicles
» A greater percent of people work from home in west subareas

|  | Study Areas |  |  |  |  |  | Portland |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1\|NW | 2\|SW 1 | 3\|SW2 | 4\|NE | 5\|OE | 6\|SE |  |
| Age |  |  |  |  |  |  |  |
| 19 and under | 22\% | 22\% | 24\% | 20\% | 22\% | 26\% | 20\% |
| 20 to 59 | 55\% | 51\% | 52\% | 59\% | 53\% | 54\% | 61\% |
| 60-69 | 13\% | 14\% | 15\% | 14\% | 12\% | 11\% | 10\% |
| 70 and over | 10\% | 13\% | 9\% | 8\% | 12\% | 8\% | 9\% |
| Highest education level completed |  |  |  |  |  |  |  |
| Less than HS | <1\% | 1\% | <1\% | 14\% | 18\% | 10\% | 7\% |
| HS diploma | 7\% | 8\% | 7\% | 21\% | 27\% | 23\% | 15\% |
| Some college | 15\% | 15\% | 14\% | 27\% | 26\% | 24\% | 26\% |
| BA/BS degree | 35\% | 36\% | 39\% | 21\% | 15\% | 18\% | 31\% |
| Advanced degree | 36\% | 36\% | 33\% | 11\% | 7\% | 14\% | 21\% |
| Housing tenure |  |  |  |  |  |  |  |
| Total HH | 7,254 | 13,547 | 6,914 | 4,065 | 9,274 | 16,865 | 280,176 |
| Share HH Own | 76\% | 74\% | 83\% | 59\% | 65\% | 70\% | 54\% |
| Share HH Rent | 24\% | 26\% | 17\% | 41\% | 35\% | 30\% | 46\% |
| Commute mode |  |  |  |  |  |  |  |
| Total Workers | 9,197 | 16,029 | 9,848 | 5,325 | 10,481 | 24,873 | 366,463 |
| Share SOV | 73\% | 65\% | 65\% | 65\% | 68\% | 69\% | 56\% |
| Share Non SOV | 27\% | 35\% | 35\% | 35\% | 32\% | 31\% | 44\% |
| Share Carpool | 6\% | 8\% | 10\% | 8\% | 12\% | 14\% | 8\% |
| Share Transit | 3\% | 6\% | 6\% | 11\% | 8\% | 8\% | 13\% |
| Share Bicycle | 2\% | 2\% | 2\% | 3\% | 1\% | 1\% | 5\% |
| Share Walk | 3\% | 5\% | 5\% | 4\% | 2\% | 1\% | 6\% |
| Share Other | 1\% | <1\% | <1\% | 1\% | 1\% | 1\% | 1\% |
| Share Telework | 11\% | 13\% | 11\% | 7\% | 4\% | 6\% | 9\% |

## OPPORTUNITY AND ACCESS

## Home Owners' Loan Corporation (HOLC) Historic and Racist Redlining Maps

» Historical and racist practice of redlining has been layered with existing R10 and R20 zones to understand impacts for this project
» Most R10 and R20 were not included in the HOLC map
» No R10 and R20 areas on the east side were mapped
» West subareas have patches of green areas, though minimal. This includes all of Dunthorpe and smaller SW areas close to downtown
» South of Barbur: no areas zoned R10/ R20 were redlined
s South of Hwy 26 subarea has the greatest mix of neighborhood grading, with patches of blue, yellow and green


HOLC data from Mapping Inequality:
Robert K. Nelson, LaDale Winling, Richard Marciano, Nathan Connolly, et al.,"Mapping Inequality," American Panorama, ed. Robert K. Nelson and Edward L. Ayers, accessed February 17 2021, https://dsl.richmond.edu/panorama/redlining/\#loc=12/45.544/-122.771\&city=portland-or.


## Key findings

» Levels of opportunity scaled low (1) to high (5). White overlay shows zones R10 and R20
» Areas zoned R10 and R20 are mostly on the outskirts of the City, with less access to walkable neighborhood centers and other amenities, therefore they have a lower rating on the opportunity scale.
» East subareas are all Level 2, with the exception of one small area in Johnson Creek
" West subareas are mostly Level 2, with some Level 3 and Level 4, especially the Southwest subarea.

## Opportunity mapping

» The 2035 Comprehensive Plan and the Portland Plan's Healthy Connected City provide guidance to expand opportunities for Portlanders to live in complete communities offering a mix of desirable services and opportunities
» The Opportunity Map categorizes Portland neighborhoods into varying levels of opportunity, scored Low to High, with market-rate housing in high-opportunity neighborhoods tending to be expensive compared to more affordable housing in areas that offer fewer opportunities.

## Opportunity Methodology includes five categories:

» Childhood Education
» Employment
» Transportation
» Access to Family Wage Jobs
» Healthy Eating/Active Living

## Economic Vulnerability Assessment

» Four levels of vulnerability from light (least vulnerable) to dark (most vulnerable)
» Red outline shows R10 and R20 overlay
» East subareas are substantially more vulnerable than those on the west
» Kelly Butte/Wilkes subarea is most vulnerable, with pockets also in Columbia Corridor and some in Johnson Creek
» West subareas are primarily in least vulnerable category

Economic Vulnerability Assessment


Zones R10 and R20

## Displacement Risk Assessment

» Four levels of low income costburdened renters show share of households by percentages low (light) to high (dark)
" "Cost burdened" means households that are paying more than $30 \%$ of their income on housing
» Blue outline shows R10 and R20 overlay
» West subareas have significantly fewer low-income cost-burdened households
» Johnson Creek, Kelly Butte/Wilkes, and Columbia Corridor have displacement risk areas; none present in west subareas

High Displacement Risk Assessment: Low-income Cost-burdened Renters


Zones R10 and R20

## LOT SIZES

## Lot sizes

» Evaluated Lot sizes to understand how many were below the minimum size, met the minimum, or were large enough to be divided into 2 or 3 or more parcels.
» Largest portion of lots that are immediately developable (shown in orange)
» Range of additional lots that could potentially be divided into 2 or 3 or more parcels across subareas





## R20 Lot sizes

» Detail of R20 lots in Dunthorpe for illustrative purposes
» Yellow area shows lots that can potentially be divided into 3 or more parcels

## INFRASTRUCTURE CONSTRAINTS

## Infrastructure <br> Constraints: Sanitary

» Lots are shown as constrained if they have been identified as not able to connect to the public sewer system
» Sewer constraints are most prominent in Northwest for both zones
» Johnson Creek subarea also has a large number of sanitaryconstrained lots
Zones R10 and R20

## Stormwater Constraints

» Lots are shown as constrained if they are more than 50' from a mapped stormwater pipe or culvert, combined sewer pipe, sump, or stream/river/ drainageway, AND meet one or more of the following conditions:
» are less than 10' to seasonal high groundwater
» are identified as not suitable for infiltration based on soil and slope
» in a mapped wellhead protection area
» Most stormwater constraints are concentrated on the west side, with some pockets in the Johnson Creek subarea
Zones R10 and R20

## Unmaintained streets

» Lots are constrained if they only front on streets that have not been accepted for maintenance. These streets either do not or have not been confirmed as meeting the weight bearing and road surface requirement for fire trucks.

## » Minimal transportation

 constraints in R10/R20 zones throughout all subareas
$\square$ Zones R10 and R20

## Water Constraints

» Lots are shown as constrained if they meet one or more of the following conditions:
» 1 | greater than 50' from a water main;
»2 | less than 50' from a 2" water distribution main AND not within 50' of a distribution main larger than 2"
» Water constrained lots are scattered throughout all subareas, but remains minimal overall

$\square$ Zones R10 and R20

GOAL PROTECTED AREAS

## Environmental Overlays

" These areas show the City's environmental zones, including the 'p' protection zone, 'c' conservation zone, and 'v' Pleasant Valley Natural Resources zone.
» R10/R20 areas on the west have many conservation and protection zone overlays as well as the Johnson Creek subarea


## Flood Hazards

» These areas reflect the FEMA special flood hazard area, floodway, and 1996 Flood Inundation area
» Most flood hazards are on the east side, with pockets in Johnson Creek and Columbia Corridor.


## Landslide Hazards

» These areas reflect Potential Rapidly Moving Landslide Hazard Zones as shown in the DOGAMI IMS-22 publication and High Susceptibility Deep Landslide, Landslide Deposit or Scarp as shown in the DOGAMI IMS-57 publication.
" Landslide hazards are overwhelmingly present on the west side, throughout all three subareas.


## Wildfire Hazards

» These areas are shown in the Wildfire Hazard Zone Map which is based on topography, weather vegetation type and fuel density.
» All west subareas along with Johnson Creek have substantial wildfire hazard risk
» Minimal to no wildfire hazards present in Columbia Corridor and Kelly Butte/Wilkes subareas


## Employment Area

» These areas are designated Industrial Sanctuary and are an important part of meeting the City's future employment needs.
» No employment areas are designated on R10/R20 zoned lands


## Airport Noise

» This area shows the 68 decibel and higher noise contour for the Portland International Airport. Residential densities are limited within this area.
» Columbia Corridor is the only impacted subarea and it includes several small patches within the airport noise overlay


## DEVELOPMENT



Single dwelling permit activity


ADU permit activity

Residential permit activity
» Heat maps show permit activity for single dwellings (left) and ADUs (right) in a range from low to high
» More permit activity on the east side
» R10 and R20 areas make up 10\% of total single dwelling permit activity in the last 10 years
»ADU permit activity accounts for 3\% of total activity in the last 10 years

R10 and R20 residential permits 2011-2020

| Year | New SFR | \% of total | New ADU | \% of total |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 1 1}$ | 38 | $13 \%$ | 2 | $4 \%$ |
| 2012 | 27 | $7 \%$ | 3 | $4 \%$ |
| 2013 | 50 | $9 \%$ | 2 | $3 \%$ |
| 2014 | 58 | $11 \%$ | 6 | $7 \%$ |
| 2015 | 63 | $11 \%$ | 5 | $3 \%$ |
| 2016 | 40 | $7 \%$ | 5 | $2 \%$ |
| 2017 | 42 | $9 \%$ | 6 | $2 \%$ |
| 2018 | 55 | $11 \%$ | 10 | $3 \%$ |
| 2019 | 45 | $12 \%$ | 5 | $3 \%$ |
| 2020 | 18 | $8 \%$ | 10 | $7 \%$ |
| Total | $\mathbf{4 5 7}$ | $\mathbf{1 0 \%}$ | $\mathbf{5 4}$ | $\mathbf{3 \%}$ |

## Existing structures

» Looking at floor area ratio distribution and age of structures
» Trend towards larger structures over time, with the exception of southwest, where FAR was high before 1945
"Structures built in the last 20 years have the highest FAR
» Johnson Creek and Northwest have the highest existing median FARs

Distribution of Floor-Area Ratio by Study Area by Era Built R10 and R20 Zones


Distribution of Floor-Area Ratio by Study Area
R10 and R20 Zones

White dot = mean. Black bar $=$ median .

## Home Sales

» Large discrepancy between sales prices in east subareas vs. west subareas
» East Subareas are about 10\% lower on average than Citywide median sales price of \$495,000
» West Subareas are about 60\% higher than the Citywide median sales price
» Columbia Corridor subarea has the lowest median sales prices at roughly \$440,000
» Highest median sales prices are in the Northwest subarea at over \$845,000


