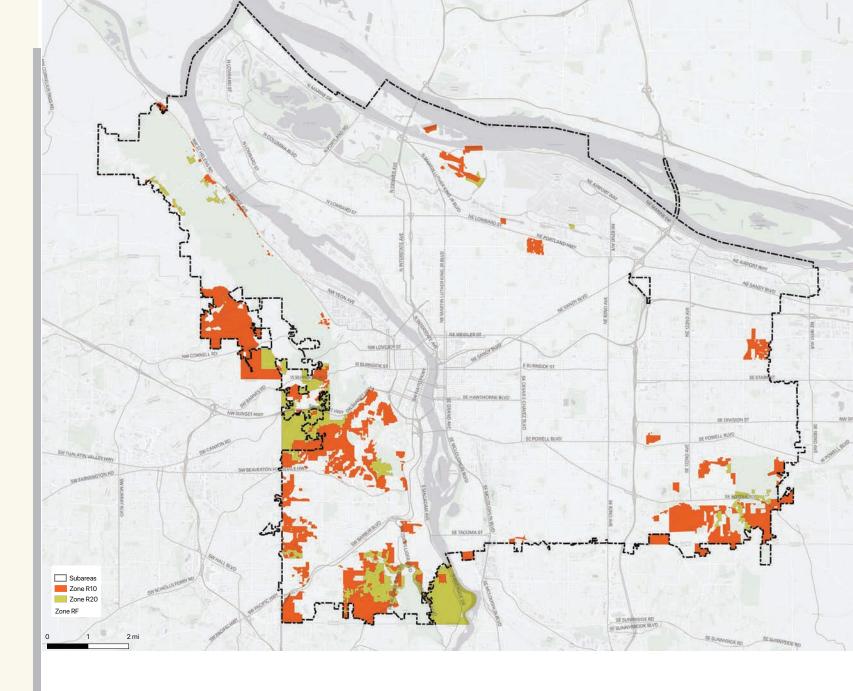
ATTACHMENT E

RIP #2: MIDDLE HOUSING FOR R10 AND R20 ZONES

Existing Conditions Report: maps and data

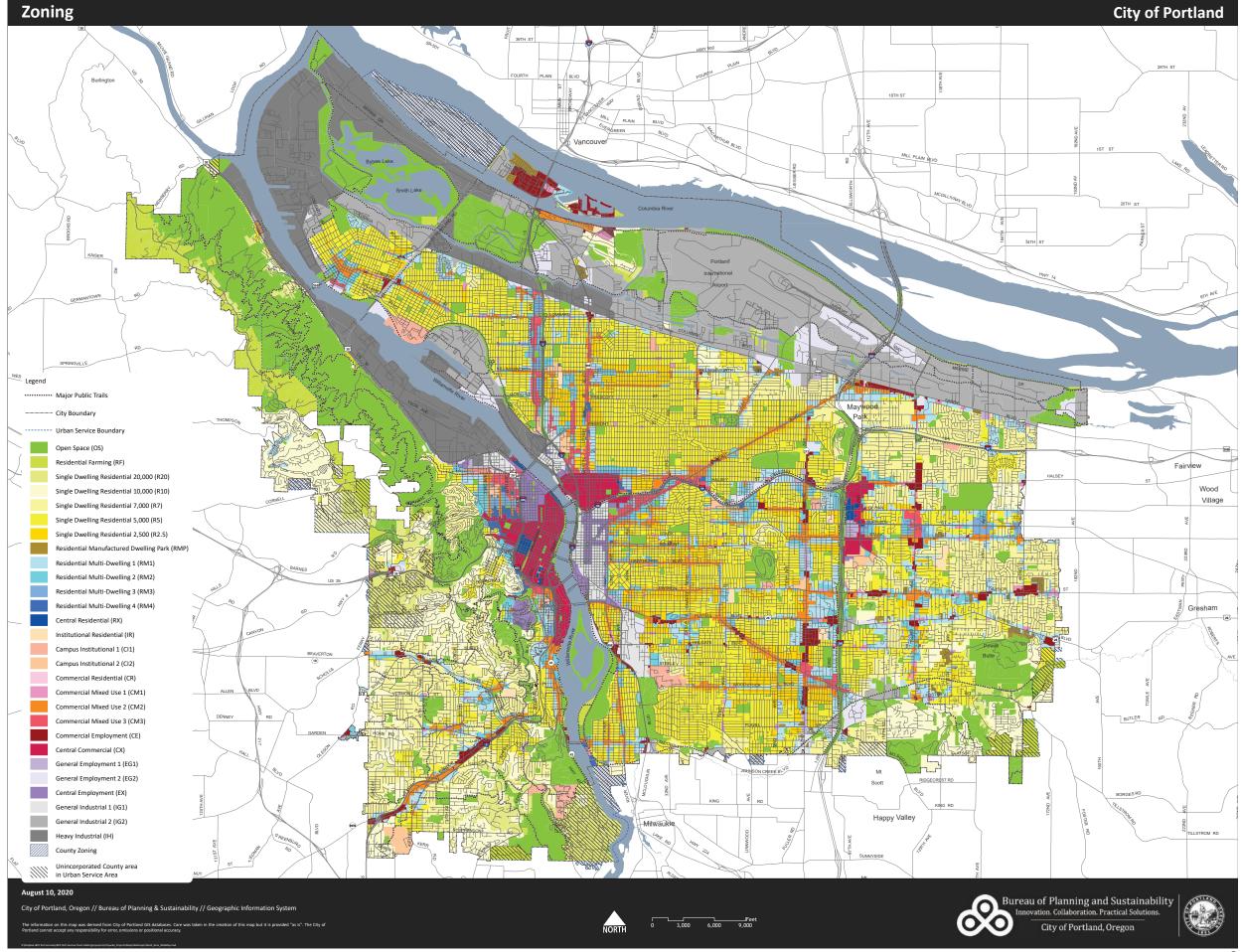
Prepared for Portland Bureau of Planning and Sustainability by Urbsworks, Inc.

June, 2021



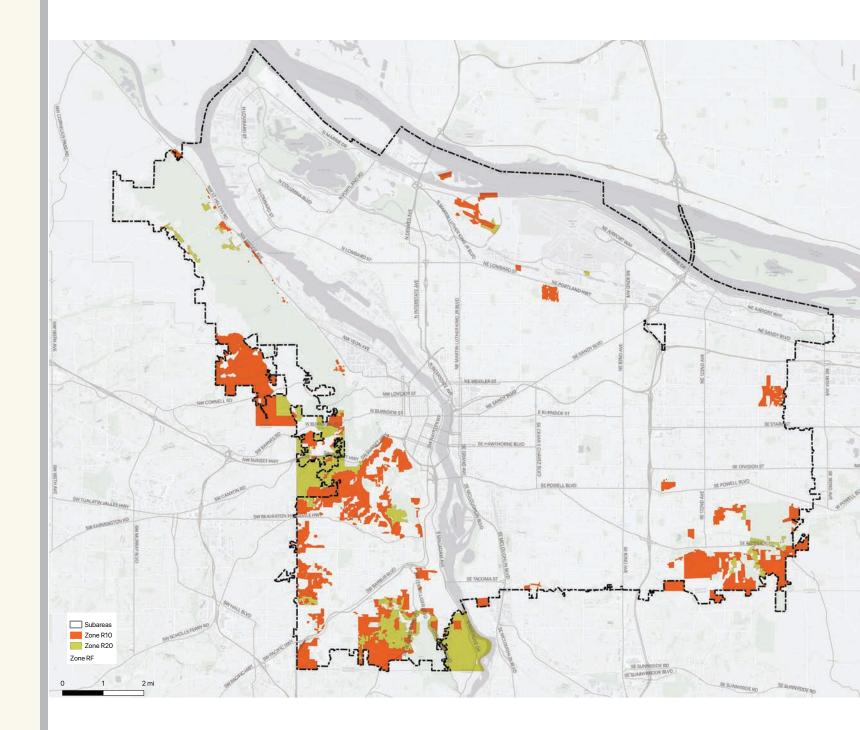
Existing Zoning

- » 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



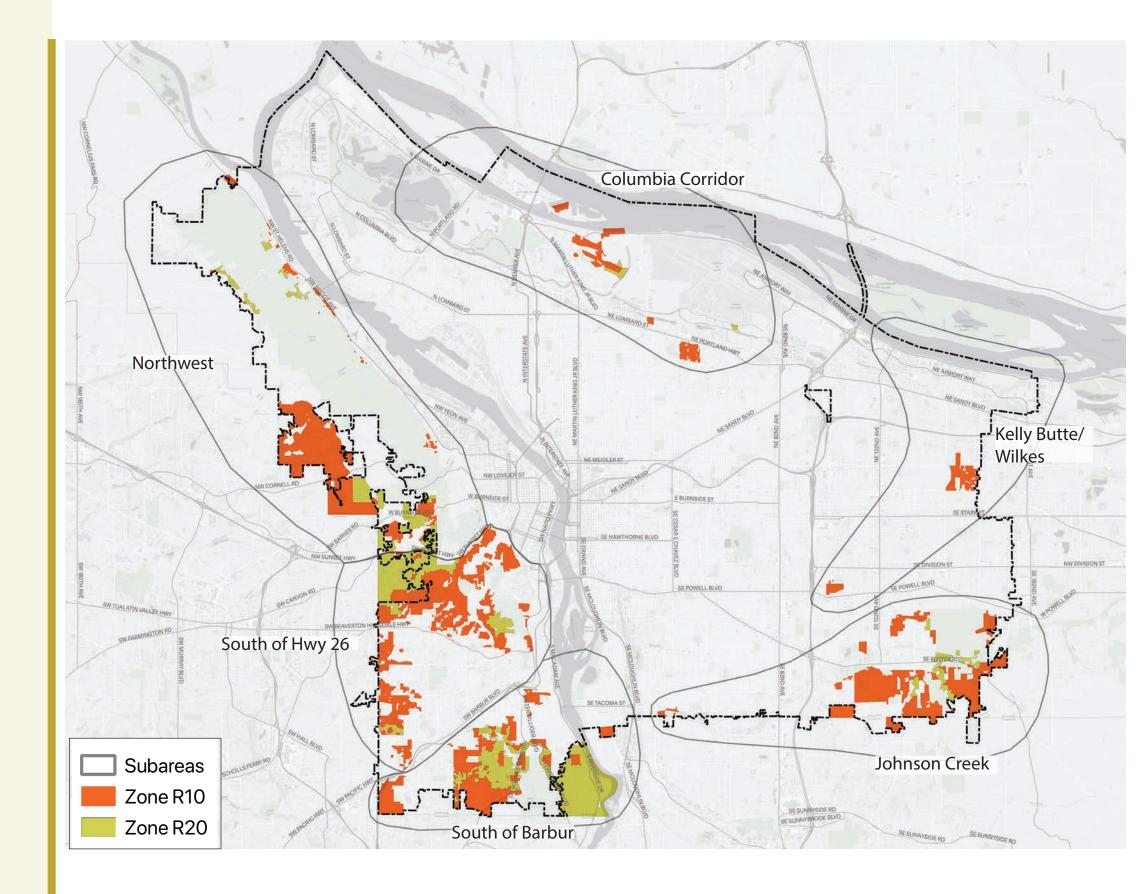
Purpose

- » 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).

Key to study areas

1	NW	Northwest	4	NE	Columbia Corridor
2	SW1	South of Hwy 26	5	OE	Kelly Butte/Wilkes (outer east)
3	SW2	South of Barbur	6	SE	Johnson Creek

	Study Areas						Portland
	1 NW	2 SW 1	3 SW2	4 NE	5 OE	6 SE	2019
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 Is.	<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	2 SW 1	3 SW2	4 NE	5 OE	6 SE	Portland 2019
	1 NW						
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%	

^{*}All subarea data is from 2019 American Communities Survey 5-year estimates.

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

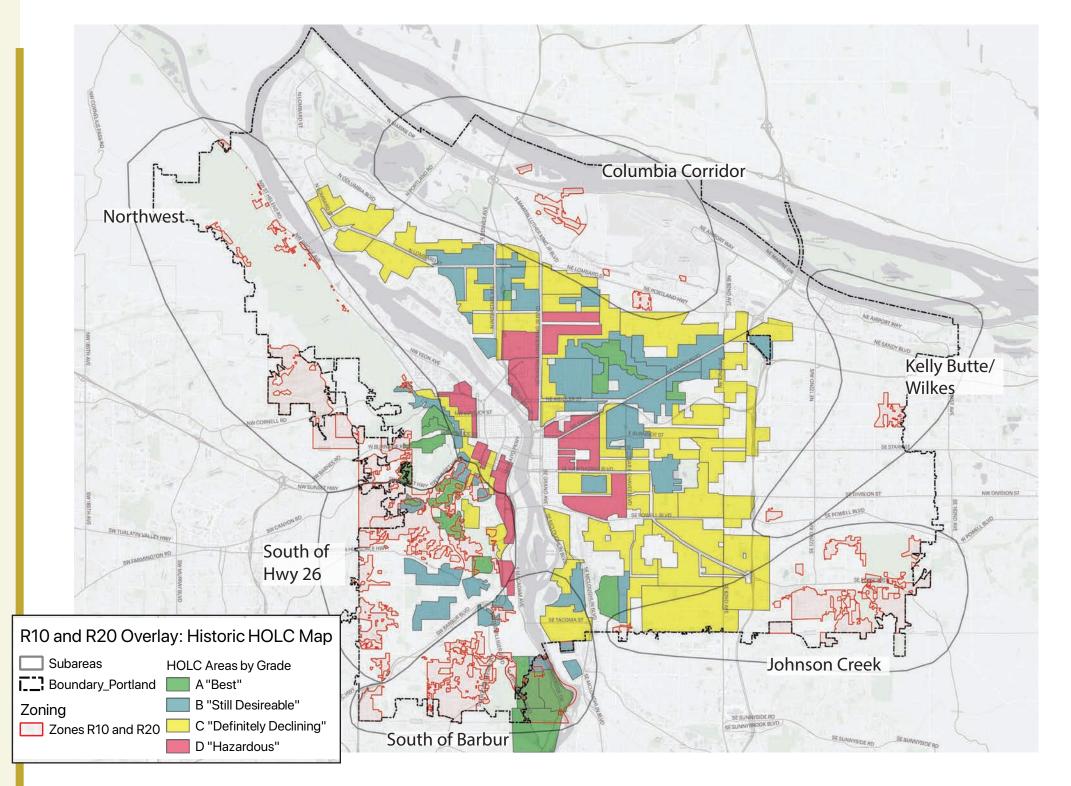
	Study Areas						Portland
	1 NW	2 SW 1	3 SW2	4 NE	5 OE	6 SE	2019
Age							
19 and under	22%	22%	24%	20%	22%	26%	20%
20 to 59	55%	51%	52%	59%	53%	54%	61%
60 - 69	13%	14%	15%	14%	12%	11%	10%
70 and over	10%	13%	9%	8%	12%	8%	9%
Highest education level completed							
Less than HS	<1%	1%	<1%	14%	18%	10%	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%

^{*}All subarea data is from 2019 American Communities Survey 5-year estimates.

OPPORTUNITY AND ACCESS

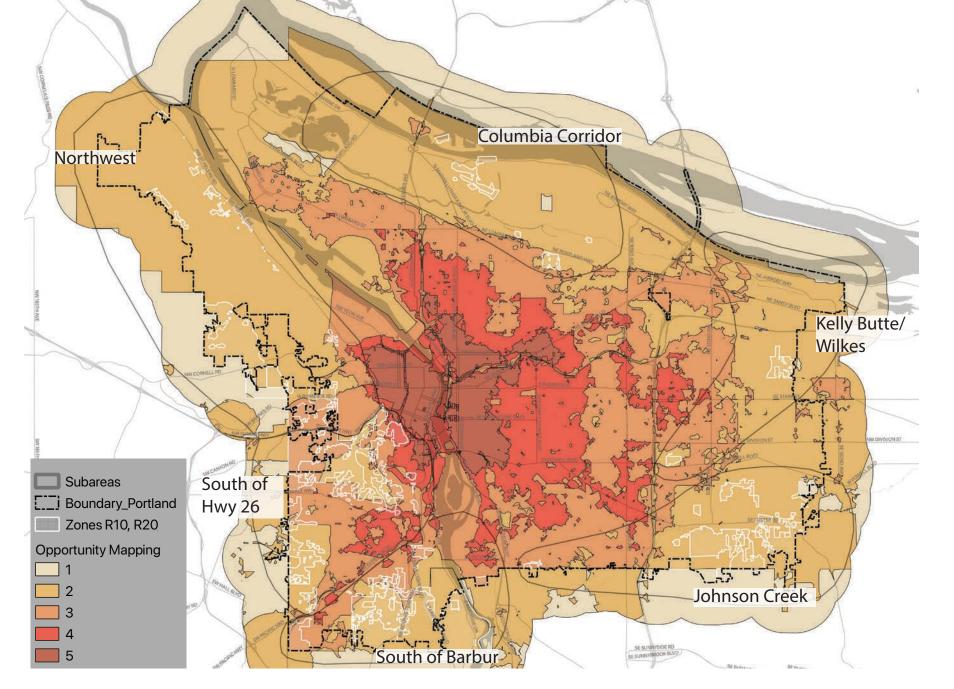
Home Owners' Loan Corporation (HOLC) Historic and Racist Redlining Maps

- » 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
- » 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

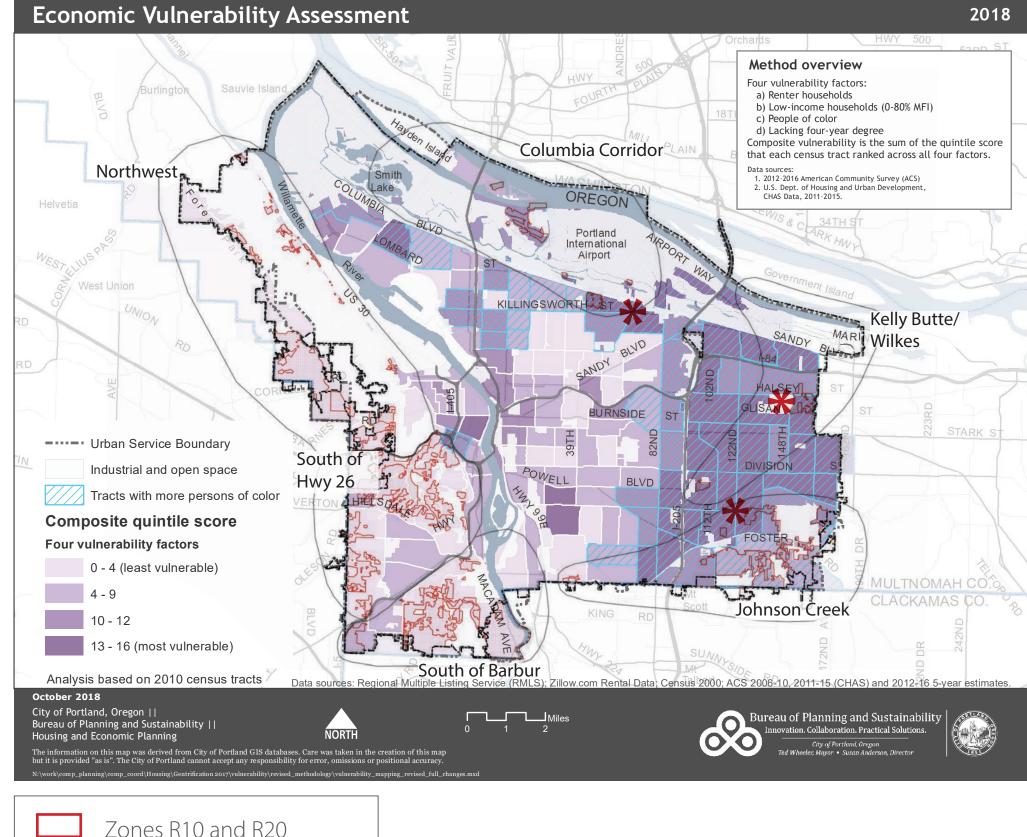
- » The 2035 Comprehensive Plan and the Portland Plan's Healthy Connected City provide guidance to expand opportunities for Portlanders to live in complete communities offering a mix of desirable services and opportunities.
- » The Opportunity Map categorizes Portland neighborhoods into varying levels 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.

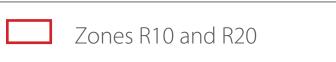
Opportunity Methodology includes five categories:

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

Economic Vulnerability Assessment

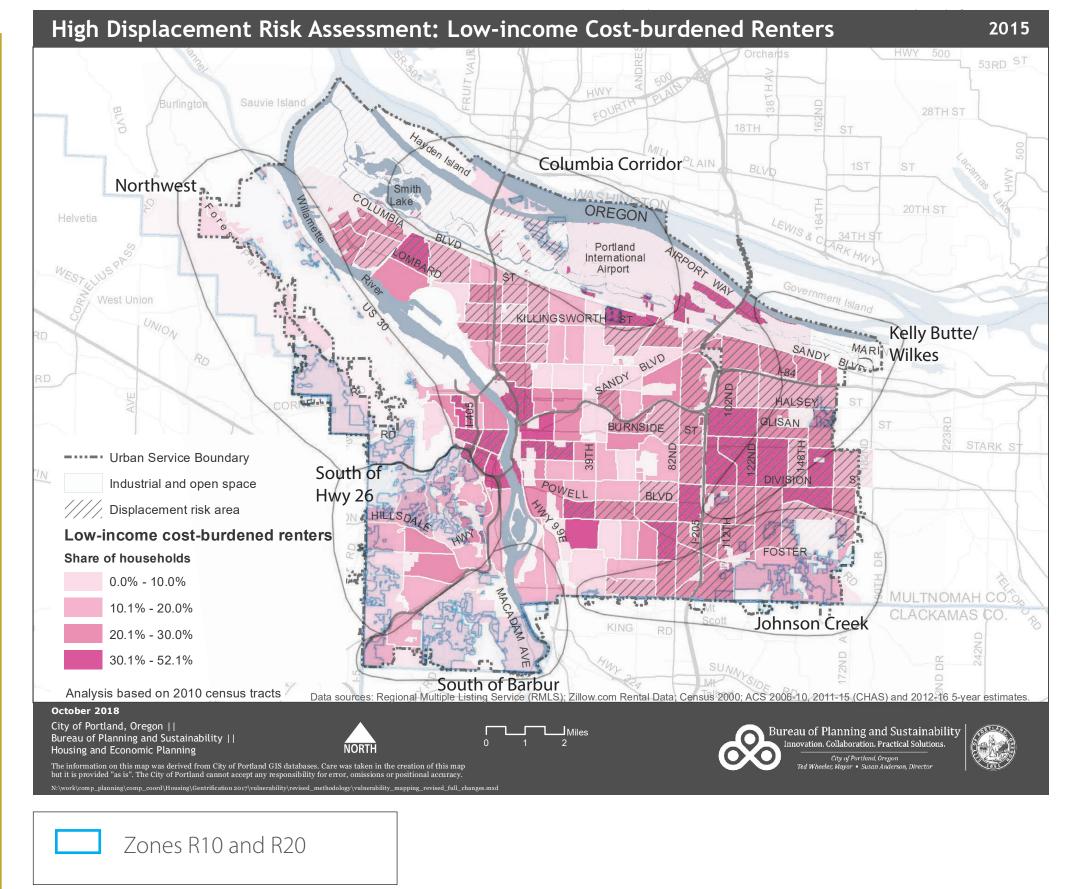
- » Four levels of vulnerability from light (least vulnerable) to dark (most vulnerable)
- » Red outline shows R10 and R20 overlay
- » East subareas are substantially more vulnerable than those on the west
- » Kelly Butte/Wilkes subarea is most vulnerable, with pockets also in Columbia Corridor and some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





Displacement Risk Assessment

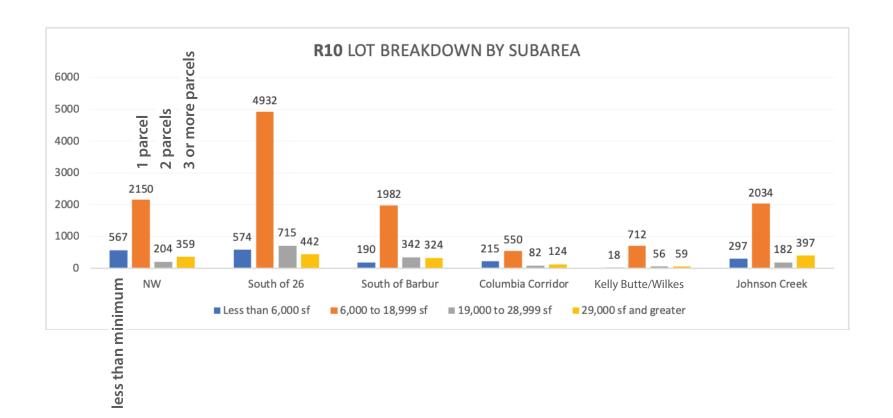
- » Four levels of low income costburdened renters show share of households by percentages low (light) to high (dark)
- » "Cost burdened" means households that are paying more than 30% of their income on housing
- » Blue outline shows R10 and R20 overlay
- » West subareas have significantly fewer low-income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

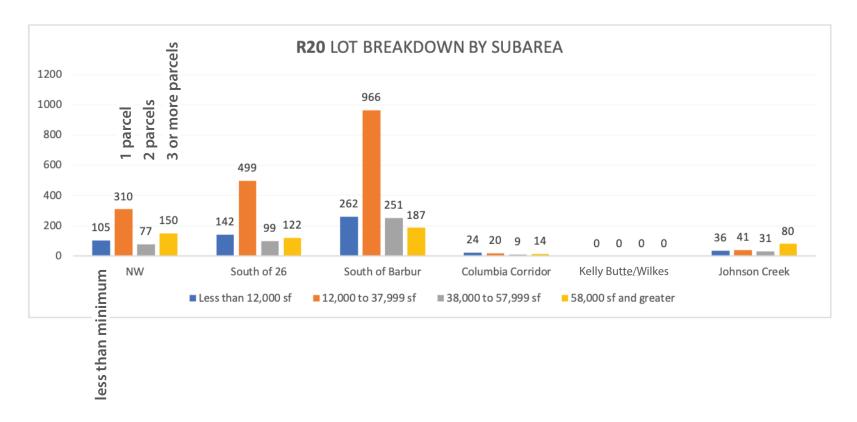


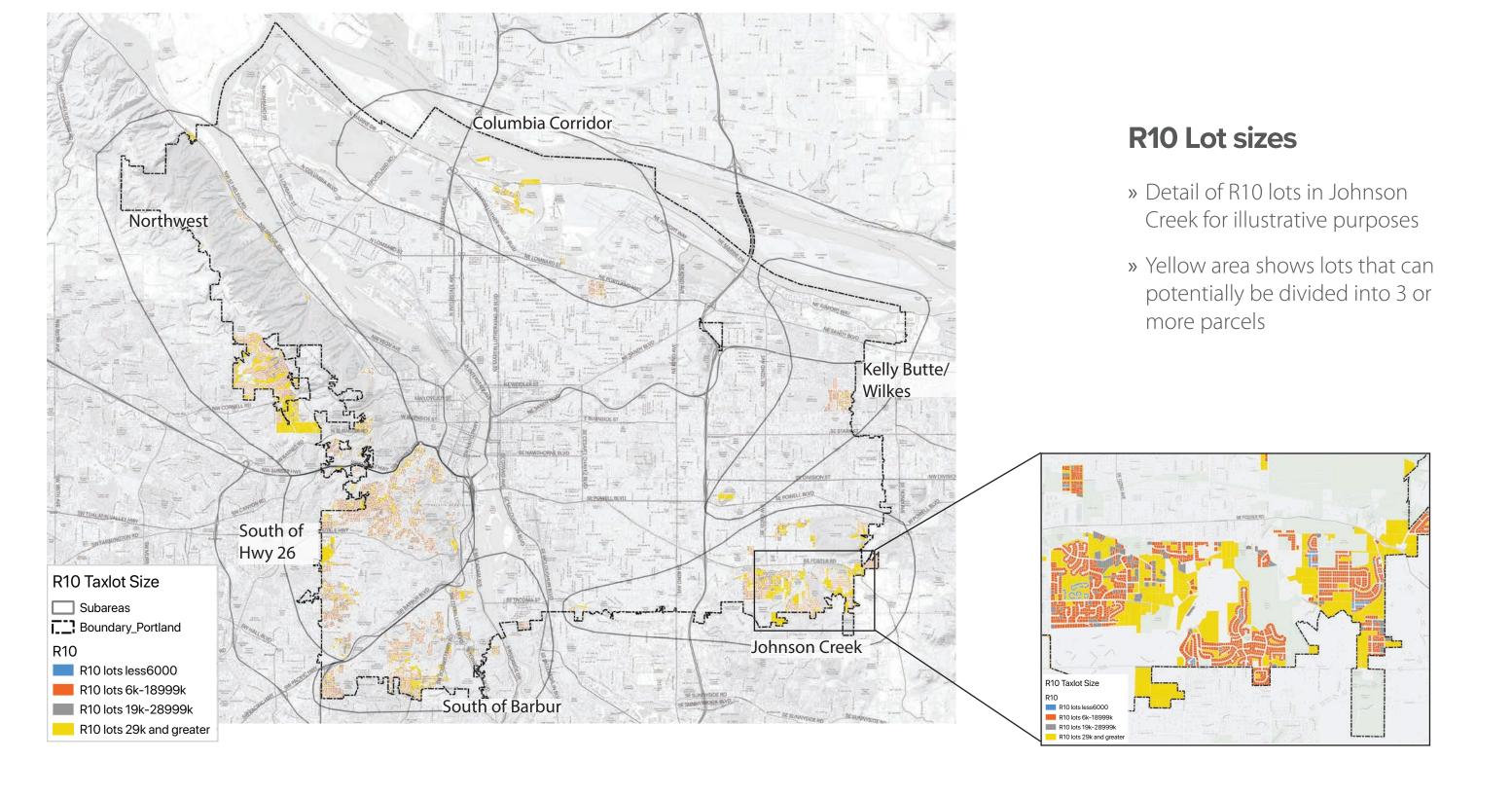
LOT SIZES

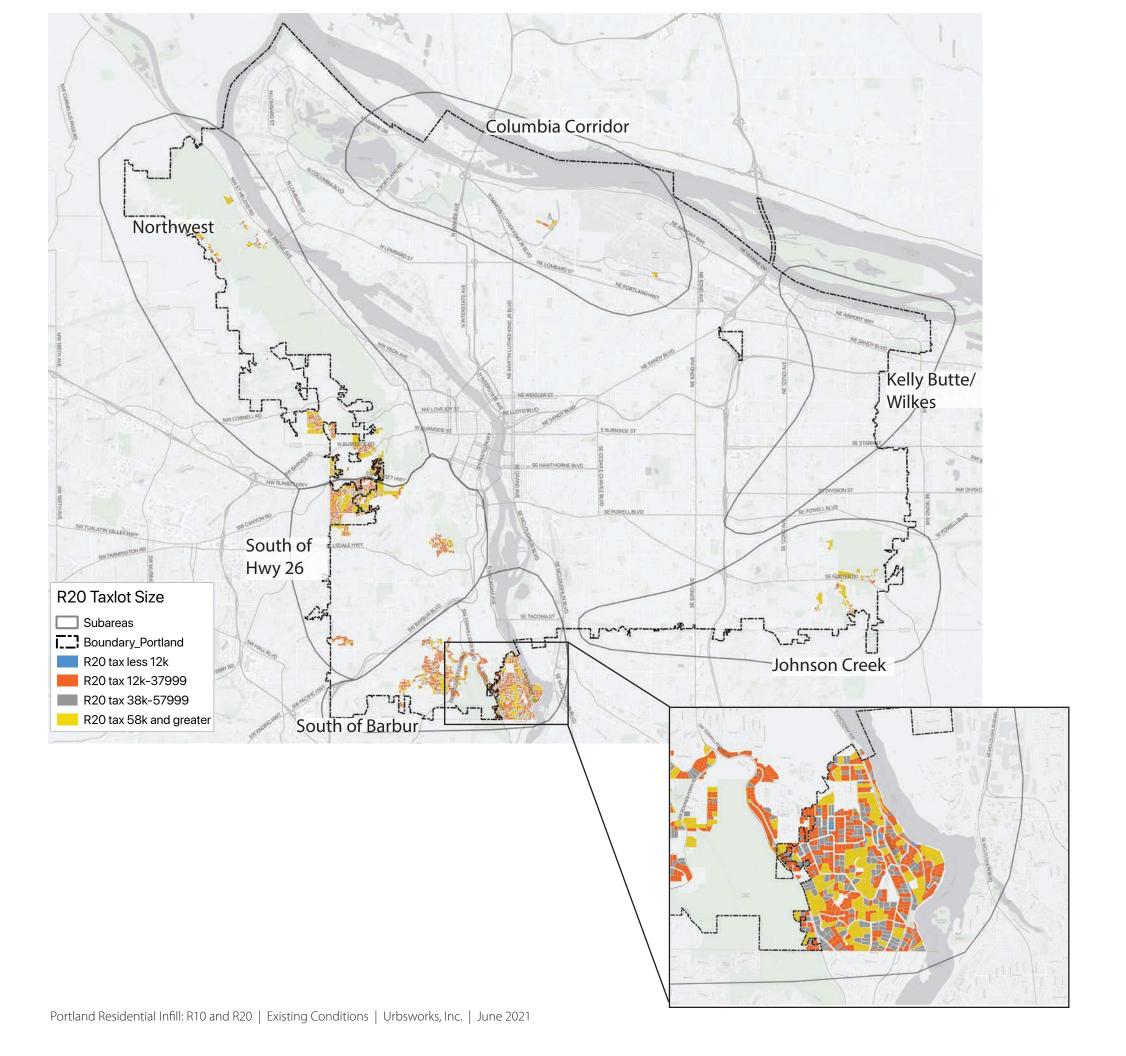
Lot sizes

- » 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









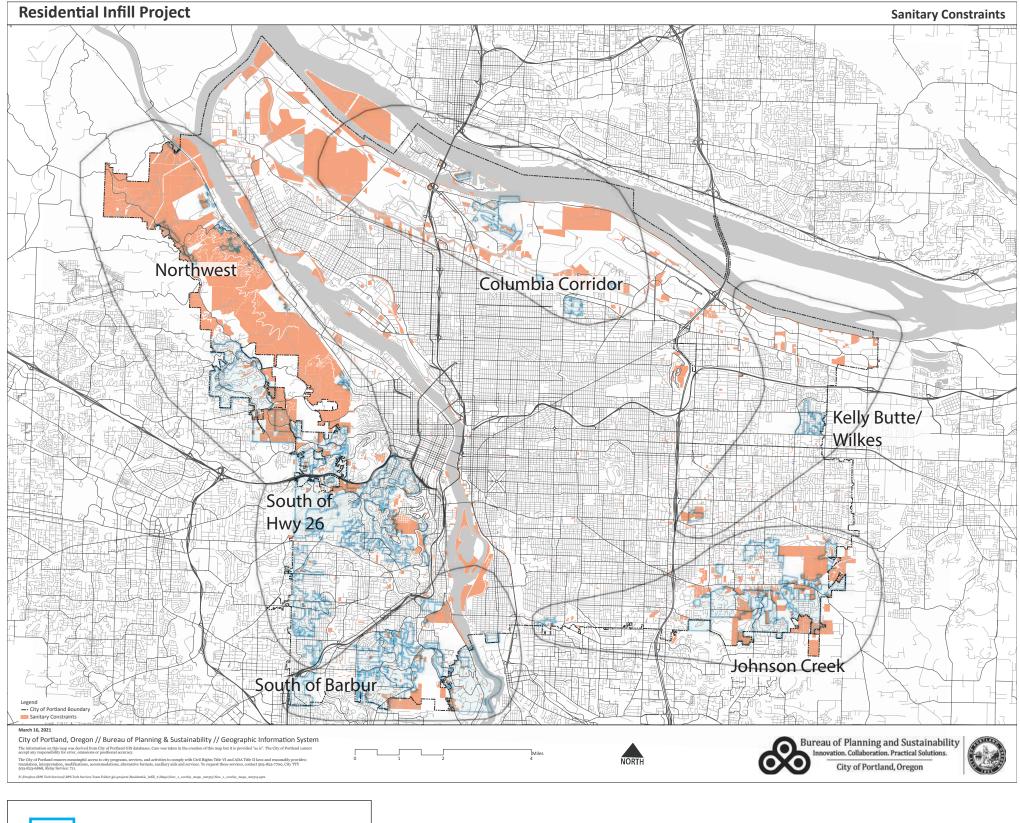
R20 Lot sizes

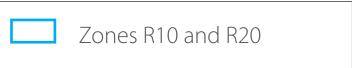
- » Detail of R20 lots in Dunthorpe for illustrative purposes
- » Yellow area shows lots that can potentially be divided into 3 or more parcels

INFRASTRUCTURE CONSTRAINTS

Infrastructure Constraints: Sanitary

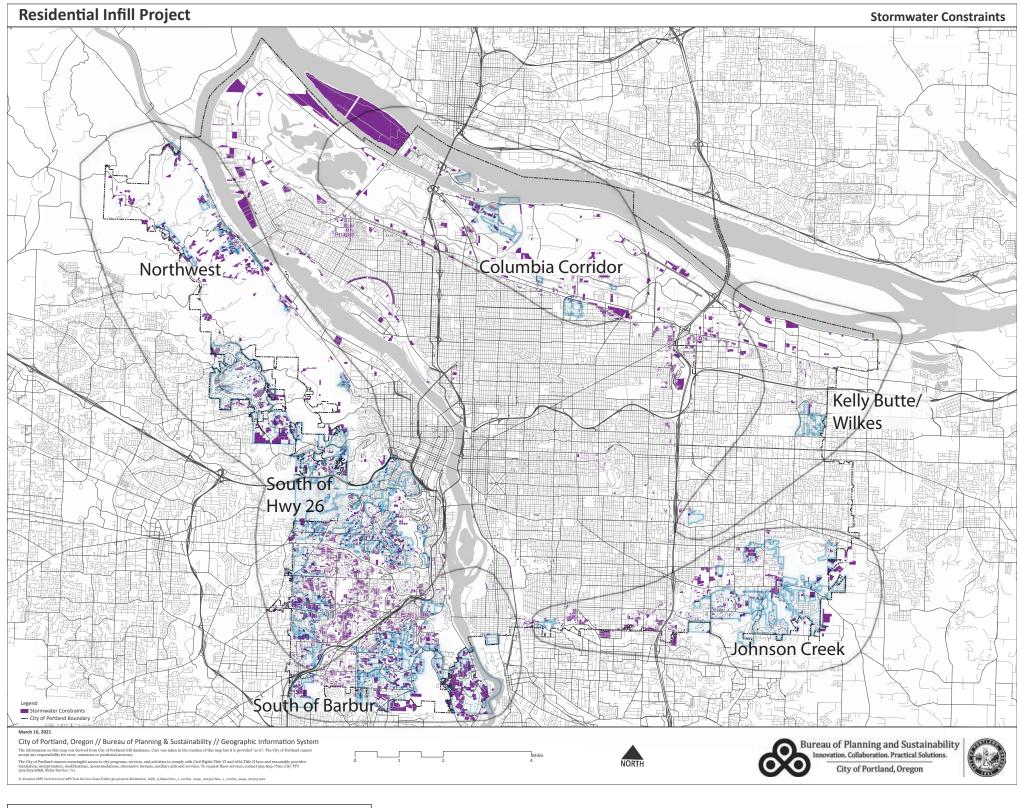
- » Lots are shown as constrained if they have been identified as not able to connect to the public sewer system
- » Sewer constraints are most prominent in Northwest for both zones
- » Johnson Creek subarea also has a large number of sanitaryconstrained lots

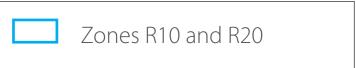




Stormwater Constraints

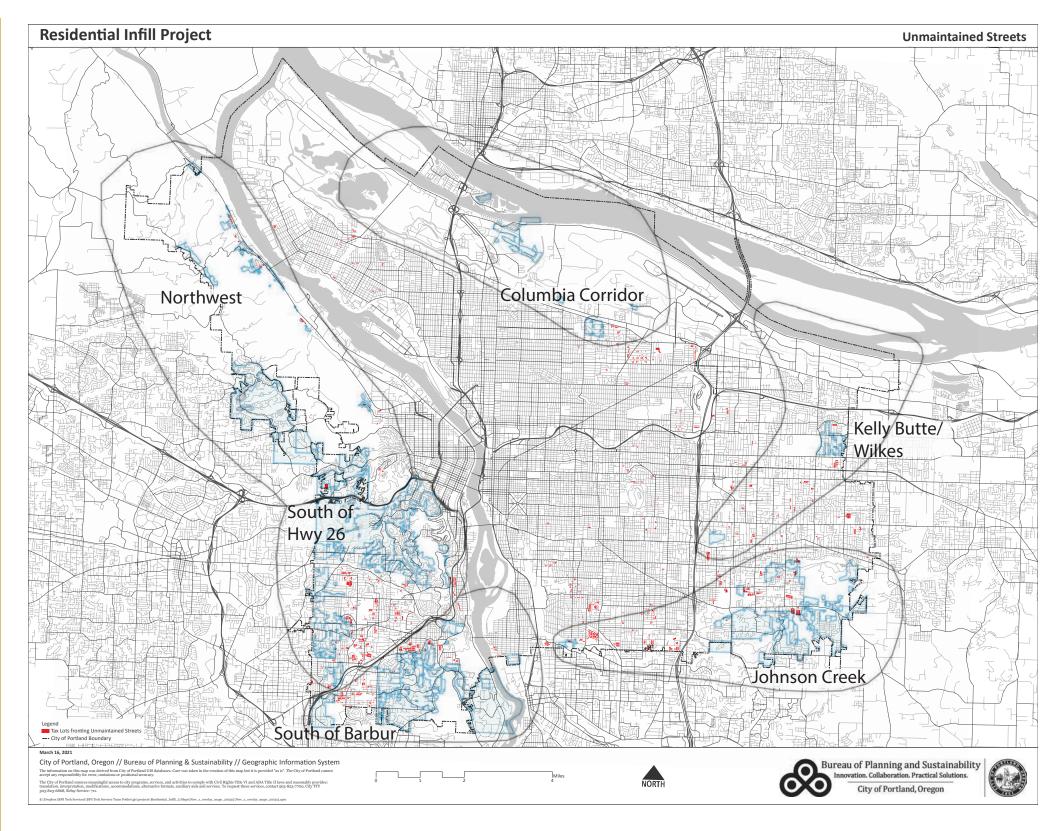
- » Lots are shown as constrained if they are more than 50' from a mapped stormwater pipe or culvert, combined sewer pipe, sump, or stream/river/ drainageway, AND meet one or more of the following conditions:
 - » are less than 10' to seasonal high groundwater
 - » are identified as not suitable for 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

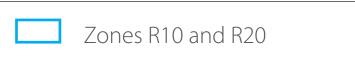




Unmaintained streets

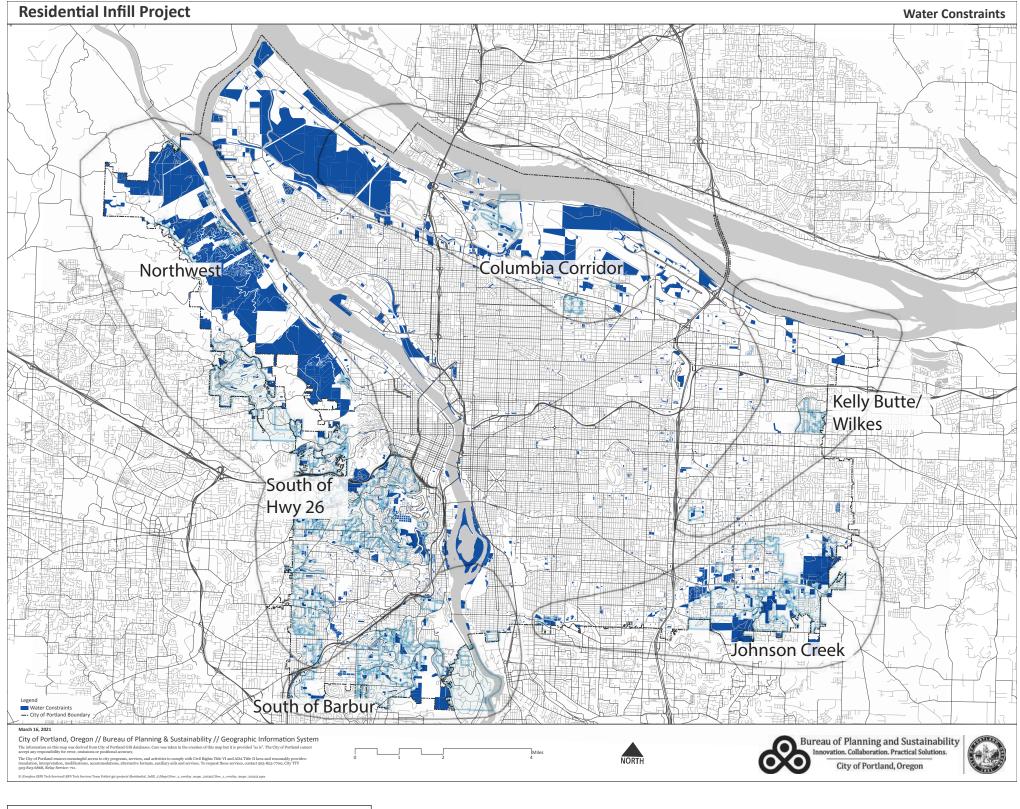
- » Lots are constrained if they only front on streets that have not been accepted for maintenance. These streets either do not or have not been confirmed as meeting the weight bearing and road surface requirement for fire trucks.
- » Minimal transportation constraints in R10/R20 zones throughout all subareas

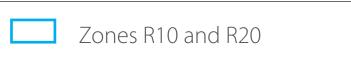




Water Constraints

- » 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

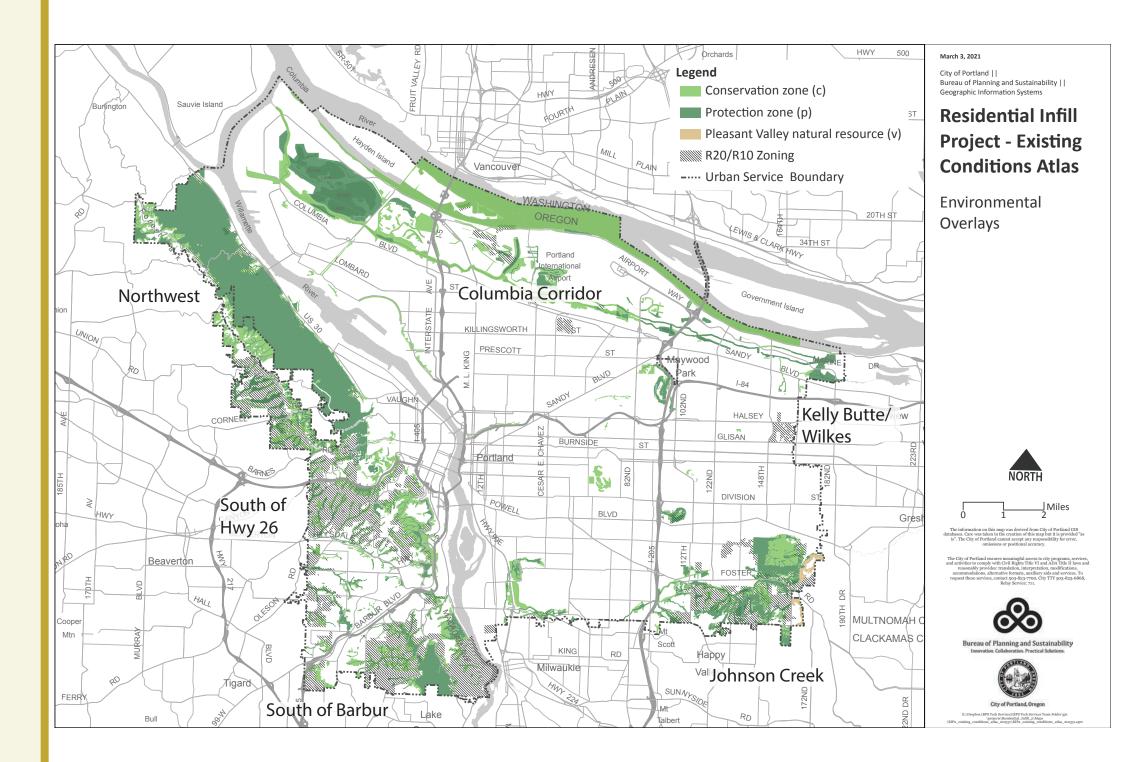




GOAL PROTECTED AREAS

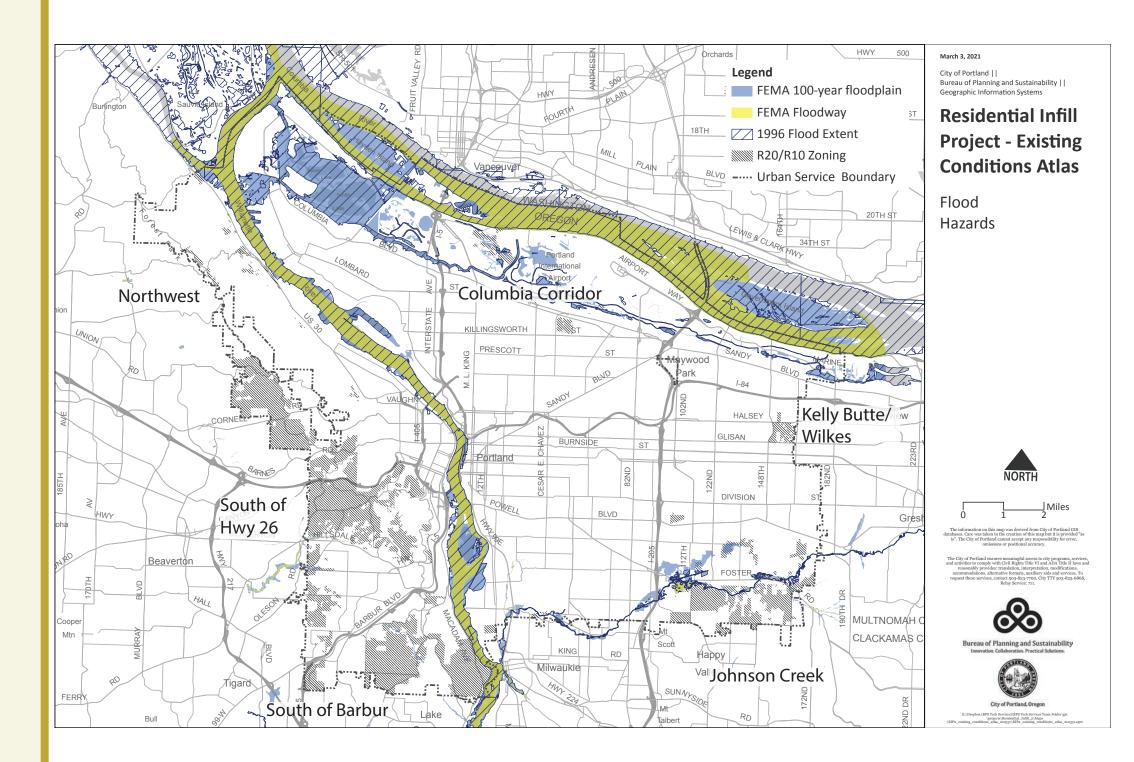
Environmental Overlays

- » 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



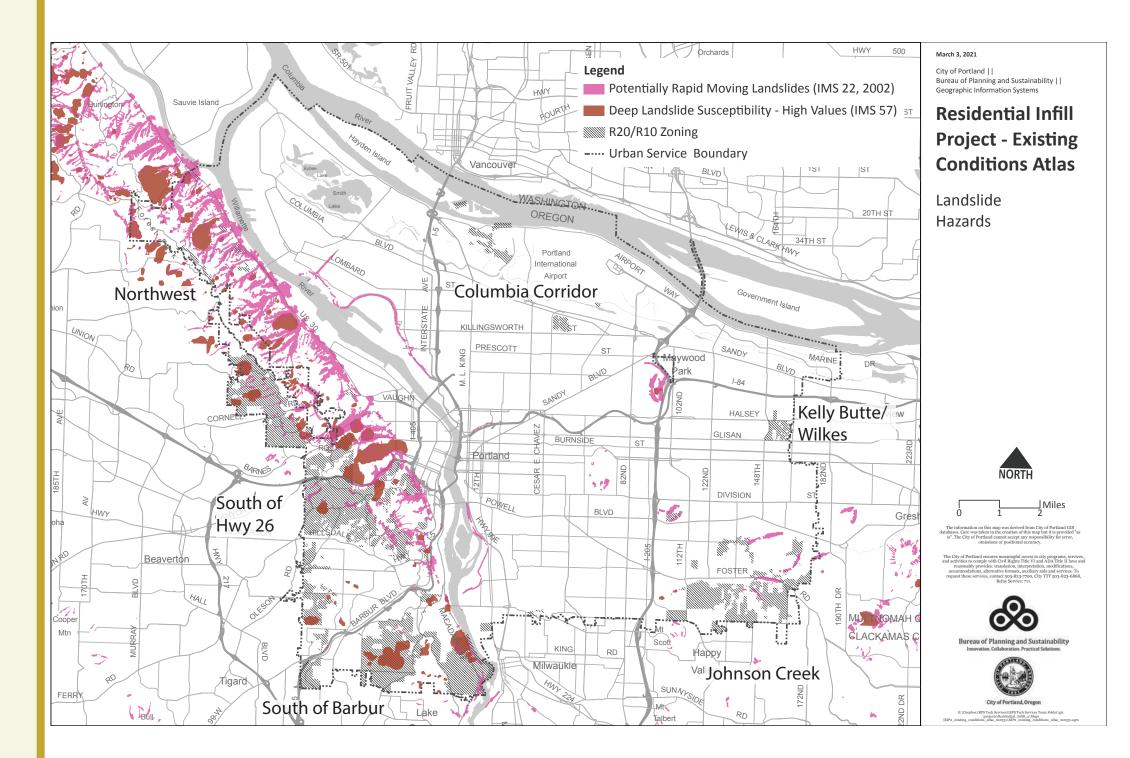
Flood Hazards

- » 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.



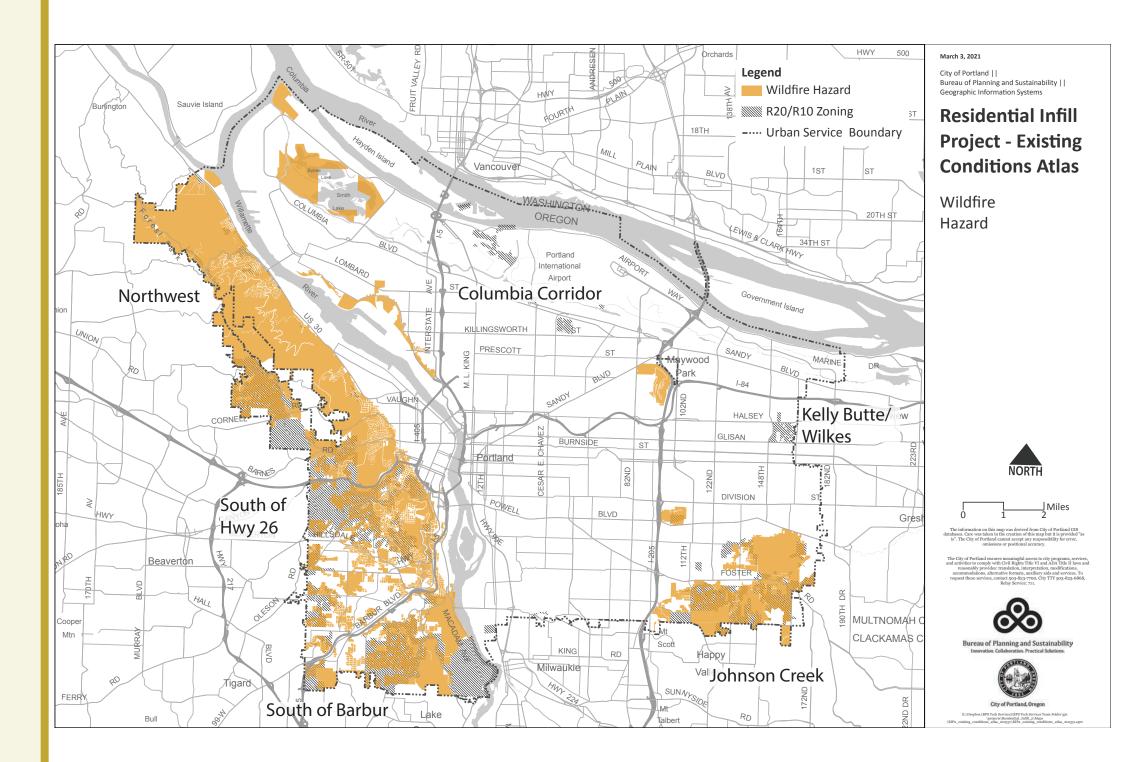
Landslide Hazards

- » 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.



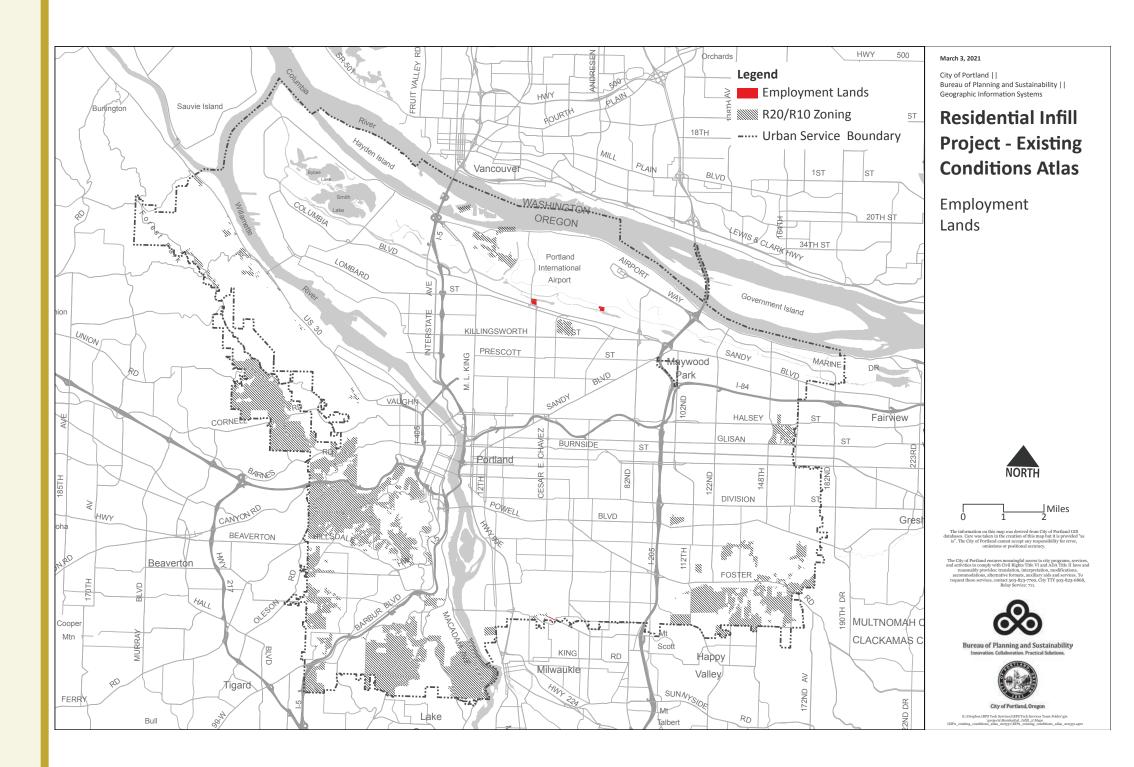
Wildfire Hazards

- » 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



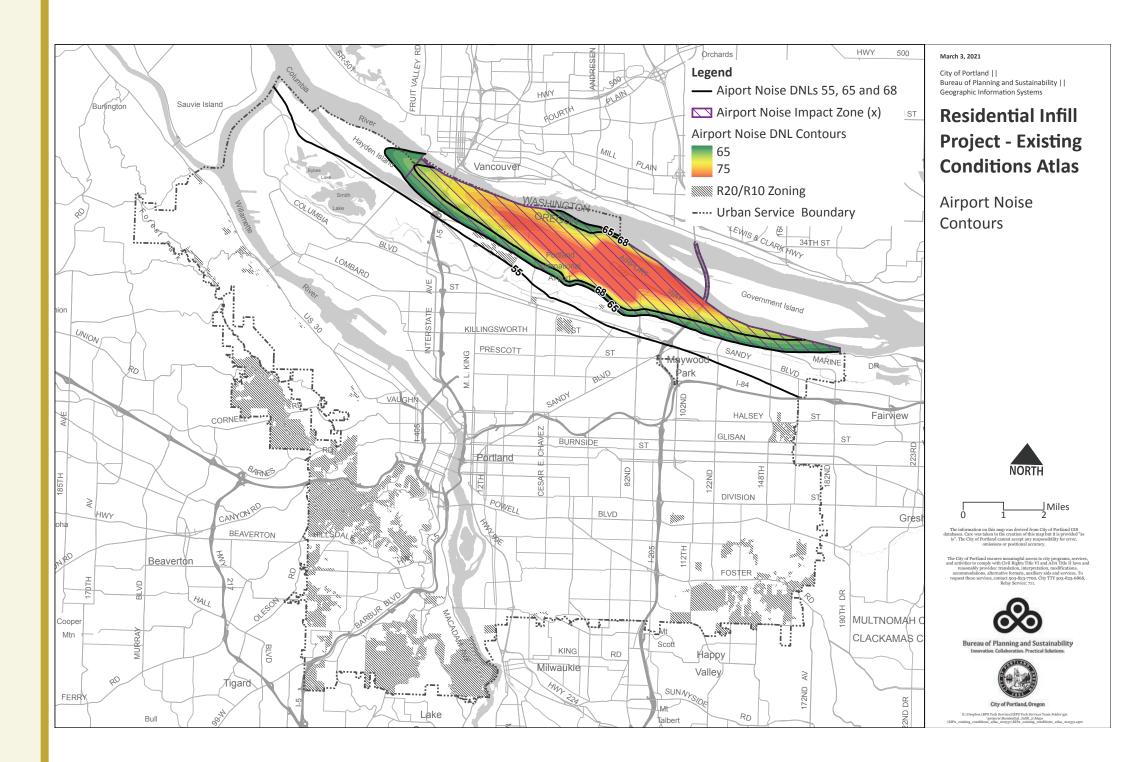
Employment Area

- » 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

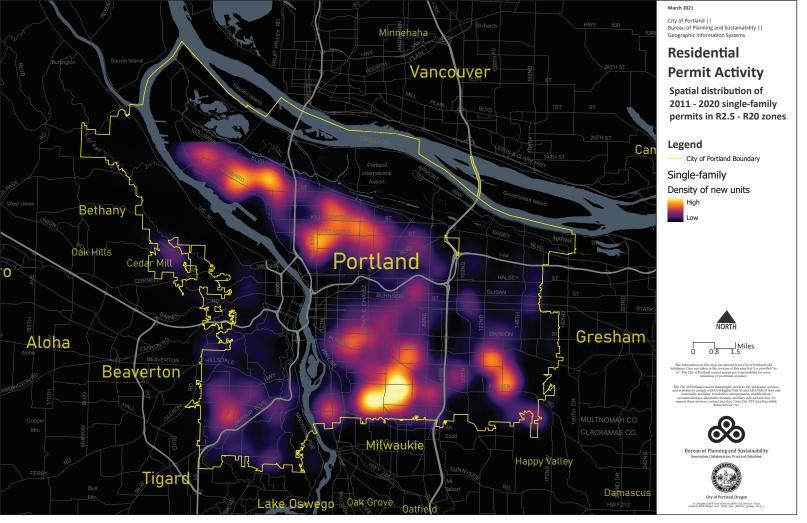


Airport Noise

- 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



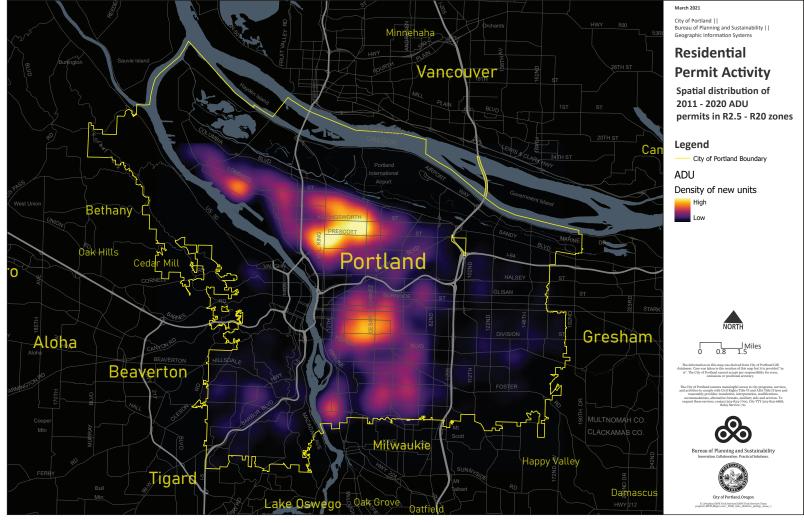
DEVELOPMENT



Single dwelling permit activity

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



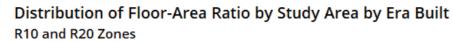
ADU permit activity

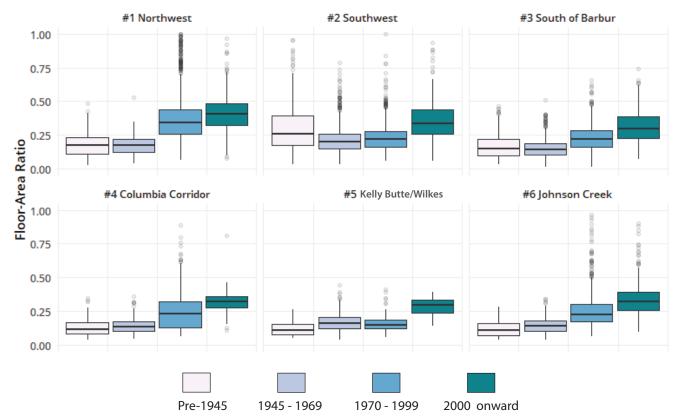
R10 and R20 residential permits 2011 - 2020

Year	New SFR	% of total	New ADU	% of total
2011	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	457	10%	54	3%

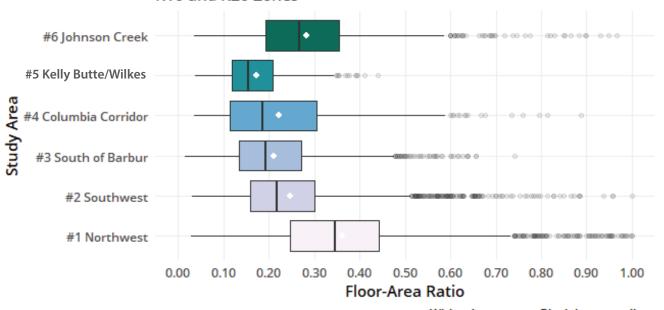
Existing structures

- » 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 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

