

The R2.5 Zone and Achieving Higher Density in Portland's Single Family Zones, a Position Paper by the Portland Coalition for Historic Resources

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Introduction

The Residential Infill Project includes two Proposals intended to drive greater density into Portland's single family zones: 1) By applying new rules to the existing R2.5 zones (requiring one residence per 2500 square feet of lot area) and 2) By opening the floodgates of demolitions in R5 (1 residence per 5000 square feet of lot area) to achieve R2.5 type density in R5 zones where the underlying lots of record were originally 2500 square feet. While we feel that there is some merit in the first proposal (Proposal 6 in the RIP draft recommendations), the second approach (Proposal 7 in the RIP draft) is a dreadful and misguided solution to a real issue that Portland faces.

While much is currently being made about the shortage of affordable rental housing in Portland, it is equally true that single family home prices are escalating rapidly throughout the city. The City's mantra that the Millennial Generation prefers rental housing in the inner city is disproved by both local and national surveys that suggests Millennials want single family homes in walkable neighborhoods, regardless of whether they are in suburban or central urban areas. (See *What Millennials Want and Why It Doesn't Matter* at

http://www.planetizen.com/node/86755/what-millennials-want-and-why-it-doesnt-matter?utm_source=newsletter&utm_medium=email&utm_campaign=06092016)

Even if BPS projections of future increases in the share of multi-family housing in Portland prove true, there are also projections calling for 28,000 new single family residences (SFRs) to be built in Portland to accommodate that part of our expanded population who will demand their own stand-alone homes in the next 25 years. To accommodate that growth, Portland right now should be building a net 1200 additional houses each year. Instead, we are building roughly 900 per year, and demolishing 300 to do it, for a net gain of just 600 additional homes... an under-attainment of 50%, which can only lead to further dramatic run-ups in already-unaffordable home prices.

The approach Portland Comprehensive Plans and actual base zoning designations have taken is to expand the coverage of the R2.5 zone, gradually "upzoning" existing R5 zones to accommodate double the number of residences in a 5000 square foot land area. In effect, the City aspires to the potential demolition and replacement of houses in these upzoned areas to gain a 2-for-one replacement rate, for a net gain in the number of SFRs. As with all such "aspirational zoning", the actual accomplishment of the density goals has been left to the real estate marketplace, which has been slow to achieve the conversion. The RIP recommendations argue that a major reason for this slow rate of conversion to higher density has been the result of

rules requiring a single family home to be built on a 5000 square foot lot after a demolition in an R2.5 zone. That led to the proposal to require one house per 2500 square feet in R2.5 zones when new construction occurs. While the objective is laudable -- realizing the intended density of the zone -- the problem is largely theoretical, since there is a lot confirmation process that allows 5000 square foot lots of record to be subdivided into two 2500 square foot lots.

Still, frustrated by both the slow pace of densification in existing R2.5 zones and the affordability crisis in the SFR market, RIP proposals seek both to further expand density in existing, already dense R2.5 zones as well as to target selected lots in R5 zones for lot splitting without changing their R5 designation. Both of the strategies can lead to dramatic increases in demolitions, first in R2.5 zones themselves, and, without justification, in R5 zones as well, based on quirks of underlying historic plats.

In the latter case, RIP proposals have focused on the historic 2500 square foot lots of record in R5 zones as a way to expand R2.5 zoning rapidly without the tedious public process inherent in the Comprehensive Plan and without the need to acknowledge the amount of available capacity already provided by existing zoning. The issue comes down to the fundamental question: do we throw away 25 years of thoughtful city planning and, instead, scatter-shot effective R2.5 zoning around the city, randomly disrupting R5 zones in pockets determined by quirks of historic development, or do we pursue a rational expansion of the R2.5 zones where the infrastructure and proximity to true high frequency transit support it, using the tools already available to the City? And do we explore ways to densify these rationally upzoned areas sensitively and thoughtfully to preserve as much as possible of the historic charm and livability of these neighborhoods. In general, the RIP proposals fall short in both cases.

Why This Matters to PCHR

The Portland Coalition for Historic Resources is an ad hoc organization with representatives from the largest residential Historic Districts in Portland, preservation advocates, and representatives from the major heritage conservation organizations in the City. The group's objectives are to advocate for City policies that preserve and protect both the existing, designated Historic Districts, and facilitate the identification and protection of the many other areas potentially eligible for historic designation in Portland. This latter objective is important in Portland because of the unparalleled boom in population and streetcar suburb construction in Portland in the years from 1900 through 1915, when the population was more than doubling every decade, and upwards of 90% of all new homes being constructed were owner occupied.

Of all the single family zones in Portland (R2.5, R5, R7, R10, and R20), the oldest homes are found in the R2.5 zone (average of 83 years old) and the R5 zone (average of 74 years old). Many of the city's homes potentially deserving of, but not covered by, historic protections, are found in these zones. Ill-advised new zoning regulations threaten these character-defining parts of the city which epitomize what draws new residents to Portland in the first place.

This position paper first addresses the issue of lot splitting based on underlying “lots of record”, and concludes with a review of proposed changes in existing R2.5 zones, which further threaten historic structures and risk imposing radically increased density on areas that are already highly dense.

Lot Splitting and Historic Lots of Record

The basic, original lot size that has dominated in older parts of Portland since the 1880s is the 50’ X 100’ lot. Many areas once considered “suburban” when platted, like Ladd’s Addition, Laurelhurst, Alameda, Piedmont, Irvington, and others, were platted into such lots. In modern times, the City’s R5 zoning has ratified this lot size – 1 housing unit per 5000 square feet. Numerically, this type of housing layout dominates in Portland: there are 75,000 homes in R5 zones, and a total of over 100,000 homes on lots of sizes between 4000 and 7500 square feet.

The table below shows all residential zones in Portland from the highest density allowable to the lowest and the number of single family homes found in those zones as of 2011. It also shows the total number of square miles of land designated in each zone:

Zone	Lot Sq Feet per Housing Unit	Single Family House Counts in the Zone	Square Miles of Land in This Zone	Average Number of Homes per Square Mile	Average Age of Housing Stock in Years
RH	*	1,024	0.22		87
RX	*	73	0.02		83
R1	1000	3,894	0.80		83
R2	2000	8,495	1.94		71
R2.5	2500	13,506	2.53	5345.53	83
R3	3000	1,165	0.29	3953.91	37
R5	5000	75,009	16.39	4575.87	74
R7	7000	26,557	8.60	3086.53	54
R10	10000	10,107	4.86	2079.80	39
R20	20000	553	0.59	929.71	46
RF	100000	407	0.84	483.48	37

Note that the 13,486 homes in zones RH to R2 (all multi-family zones) are all at risk of demolition and replacement by multi-family housing as allowed by the current zoning.

However there are some early plats that were broken up into 25’ X 100’ lots in historic times. A good example of this phenomenon is the Irvington Park development now contained entirely in the Concordia Neighborhood (no relationship to Elizabeth Irving’s large tract to the west, which is now known as “Irvington”). Irvington Park was actually platted in the early 1880s, prior to the development of the electric streetcar. It was well over 3 miles from the Burnside Bridge, in an era when workers walked to their jobs (mostly available in Albina and on the West Side), and its marketing had to be targeted to folks looking for economical land and willing to walk an hour or more to work. Unsurprisingly, it failed to sell. It wasn’t until the advent of the electric streetcar and the 1909-1910 boom years, that new owners of the tract resumed marketing efforts, advertising its lots as “50 feet X 100 feet”, and bundling two or more lots together for sales. It is for this reason that of the 1240 homes in the old Irvington Park tract, 904 of them sit on at least 2

of the original 25 foot lots. Fundamentally, for more than 100 years, owners of property have viewed their homes in these areas as being effectively on 5000 square foot lots, and appropriately zoned as R5.

A glance at the RIP projects map of potentially splittable lots of record shows many instances of this pattern of original platting far from the City center. It can be assumed, based on patterns in known tracts, that the original marketing was followed by subsequent re-marketing of two lots at a time once streetcar transportation opened those areas up to practical development. Thus we would argue that singling these lots out for defacto rezoning into R2.5 has no basis in historic practice.

As described above, typically, the land as purchased was 50' X 100', but the original lots of record have remained in County tax records. Starting in 2003, the City began allowing these double 25' lots in R5 zones to be split along the original lot lines and two "skinny" houses to be built where one house originally stood. In 2010, after substantial losses and the construction of hundreds of "skinny" houses, the City changed the code to require a 5-year waiting period before a skinny house could be built where a house had been demolished. However, an exception for "dangerous" structures (defined officially as "public nuisance") left an opening for developers to demolish by neglect. These provisions in the code constitute a major attack on the concept of R5 zoning and many neighborhoods are potentially affected.

The top 26 neighborhoods with historically "splittable" lots in R5 zones are listed on the following page:

Statistics for Houses in R5 Zone Areas on lots over 4800 square feet and less than 7500 square feet	Counts of Single Family Residential Properties on Multiple Original Tax Lots			Estimated Percent of Homes by Neighborhood on Two or More Original 25' Tax Lots
	Singles	Multiple	Grand Total	
ROSEWAY	342	1344	1686	79.72%
CONCORDIA	841	946	1787	52.94%
KENTON	385	942	1327	70.99%
ST. JOHNS	1122	791	1913	41.35%
MONTAVILLA	1024	780	1804	43.24%
BRENTWOOD-DARLINGTON	1025	767	1792	42.80%
PORTSMOUTH	488	637	1125	56.62%
WOODSTOCK	1737	546	2283	23.92%
PIEDMONT	960	488	1448	33.70%
ROSE CITY PARK	1889	465	2354	19.75%
MADISON SOUTH	812	368	1180	31.19%
MT. TABOR	1350	346	1696	20.40%
BEAUMONT-WILSHIRE	1269	295	1564	18.86%
RICHMOND	1112	278	1390	20.00%
ARBOR LODGE	1227	275	1502	18.31%
SELLWOOD-MORELAND IMPROVEMENT LEAGUE	1481	269	1750	15.37%
UNIVERSITY PARK	653	256	909	28.16%
EASTMORELAND	769	169	938	18.02%
NORTH TABOR	386	138	524	26.34%
ALAMEDA	1041	136	1177	11.55%
CATHEDRAL PARK	372	125	497	25.15%
MILL PARK	330	120	450	26.67%
WEST PORTLAND PARK	20	119	139	85.61%
LENTS	837	116	953	12.17%
WOODLAWN	899	113	1012	11.17%
FAR SOUTHWEST	14	104	118	88.14%

These 26 neighborhoods have 10,933 homes on lots between 4800 and 7500 square feet which consist of multiple historic tax lots (as of 2011 – some of these may have already been lost as of 2016). This list is just neighborhoods with 100 or more such homes. The total across Portland is 12,510, suggesting that nearly 17% of all R5 homes in the city are subject to this kind of lot splitting and eventual demolition.

Given that in many of these neighborhoods, demolition and lot splitting can "pencil" for developers even at today's inflated single family home prices, eliminating the constraints on lot splitting within 1250 feet of "corridors" will ensure extensive demolition of single family residences scattered across these 26 neighborhoods and elsewhere. Is that really what Portland needs and wants? Shouldn't we first ask the question: "How many reasonably affordable single family homes are we prepared to sacrifice in the name of 'affordability'?" If we eliminate the parking requirement for these new homes, why shouldn't we focus the redevelopment in areas much closer to real high-frequency bus and MAX services? And finally, what will the impact be on Portland's vital tree canopy when thousands of smaller homes on 5000 square foot lots with

mature trees and landscaping are replaced with "skinny" houses with dramatically reduced open space on each lot?

Achieving Higher Density with Less Waste and Destruction

As described above, R2.5 zoning already provides a mechanism for increasing density in traditional single family zones. But absent more intelligent rules for achieving that density, massive numbers of existing historic homes are likely to be lost. A check with the 2011 data indicates the severity of this problem! Of 13,506 homes in R2.5 zones 8,654 are on 5000 square foot lots... All of these are potentially subject to demolition and replacement by two homes. The average age of these vulnerable homes is 83 years, with many past the century mark. However, complete demolition and replacement is the least attractive solution for increasing density:

- All the embodied energy in the historic homes is lost. Even with new deconstruction rules, substantial waste will be sent into landfills
- Not only the embodied energy, but also the sheer "improvement value" of those buildings is being discarded, ensuring that replacement homes will invariably cost more than they would have on a green-field site. ***The total improvement value (2011) of existing single family homes on 5000 square foot lots in R2.5 zones is over \$1.3 billion!*** Can Portland really afford to send that much value to the land fill before ever getting the replacement homes built?
- The new construction costs per square foot are invariably higher than the selling prices of the homes they replace
- Much of what makes these older inner neighborhoods appealing is the quirky, highly individualistic home designs from the late 19th and early 20th Centuries

Unfortunately, beyond this long-standing risk of demolition of single family homes on 5000 square foot lots in R2.5 zones, the RIP project proposes draconian increases in allowable density in the R2.5 zone, allowing, in effect greater density than currently allowed (without bonuses) in R1 zones. This proposal puts at risk nearly every single family residence in the zone – making a lie of its designation as a “single family zone” – and fails to recognize the density well above Portland average in most areas with R2.5 zoning.

Under the proposed new treatment of R2.5 zones, up to 4 housing units (including 1 bonus unit) would be allowed on a 2500 square foot lot in an R2.5 zone... a greater density than currently allowed in an R1 zone. Thus a single family house now sitting on a 5000 square foot lot in an R2.5 zone could be replaced with 8 new units with an average size (BPS estimate) of just 581 feet each. Such a radical alteration of allowable densities in this zone would tend to destabilize inner neighborhoods that are already well-above-average density. Further, it would imperil historic, affordable single family housing.

This table shows the neighborhoods most affected by these ill-conceived alterations to R2.5 zones:

Top 20 Neighborhoods by Number of R2.5 Homes										
July, 2011, Data										
Neighborhood	R2.5 Zone Single Family Homes				R5 Zone Single Family Homes				Neighborhood Population Density (Residents per Acre) All Zones	Notes
	Count of Homes	Average Age (2011)	Average House Size	Average Lot Size	Count of Homes	Average Age (2011)	Average House Size	Average Lot Size		
MT. SCOTT-ARLETA	1673	71.3	1184.0	5340	395	76.1	1224.5	5515	13.4	
KING	915	93.2	1479.9	4492	410	95.3	1688.7	5034	15.1	
MONTAVILLA	852	73.8	1249.0	5478	2358	71.5	1307.5	5577	11.6	
SUNNYSIDE	841	103.9	1551.3	4091	549	97.8	1529.1	4318	19.2	
LENTS	739	65.1	1161.4	4963	1717	58.5	1222.2	6868	8.7	
BRENTWOOD-DARLINGTON	592	62.1	1211.0	6635	3141	56.9	1209.6	6570	11.6	
HUMBOLDT	527	89.7	1477.1	4718	272	94.7	1892.8	5514	14.5	
FOSTER-POWELL	509	81.9	1302.0	5099	1364	74.3	1241.6	5313	12.9	
SELLWOOD-MORELAND	482	93.5	1523.4	5035	2105	88.1	1551.8	5099	10.1	
VERNON	469	91.8	1410.0	4768	259	88.8	1568.8	5021	13.7	
CONCORDIA	462	90.1	1381.8	4580	2715	75.7	1552.1	5490	11.2	
RICHMOND	416	95.5	1611.2	4807	3087	89.3	1532.7	4787	14.3	
HOSFORD-ABERNETHY	407	96.9	1503.0	4576	1277	88.2	1909.3	5073	9.5	
BOISE	406	96.4	1511.3	4557	0	0	0	0	12.0	
ROSEWAY	391	86.5	1401.3	5076	2147	76.7	1411.6	5164	11.8	
ROSE CITY PARK	330	95.7	1832.9	5196	2779	87.5	1660.3	5169	12.0	
BROOKLYN	326	97.1	1446.8	4640	347	89.1	1490.5	4751	5.0	Includes RR Land
BUCKMAN	313	106.2	1724.6	3921	313	104.1	1733.0	4112	12.2	
CRESTON-KENILWORTH	297	92.4	1389.1	5158	1078	77.8	1370.9	5436	16.0	
ST. JOHNS	258	62.9	1275.2	4836	2688	66.4	1208.3	5423	2.2	Includes open space and Industrial Land
Averages		87.3	1431.3	4898		77.8	1415.3	5012	12.8	Excluding Brooklyn and St. Johns

The table above accounts for roughly 83% of all R2.5 single family homes in Portland. It illustrates that average populations densities of 12.8 residents per acre (excluding some industrial land in two neighborhoods), are more than double the density of Portland as a whole (using the same metric from ONI, the Portland average is 6.21 residents per acre). Further, Buckman, already identified as a National Register eligible neighborhood, stands out as having an average age of its R2.5 residences of over a century. (Both Buckman and Hosford Abernethy in the above table, while exhibiting above-average density, actually have effectively even greater density because of their inclusion of part of the Central East Side Industrial District which is dominated by commercial and industrial structures.)

We would argue that proposed blanket revisions of current regulations in R2.5 zones are so extreme, put so much historic fabric at risk, and represent so complete a repudiation of the goals and principles of the 2035 Comprehensive Plan as to be completely inappropriate coming from the RIP Task Force, given its charter and legal scope for action.

We'd also point out that several of the top neighborhoods with R2.5 zoning are far east-side areas that still have issues with paved streets and sidewalks, and are well outside of the "inner ring" of neighborhoods. There appears to have been little thought given by the RIP Task Force as to how driving still greater density into far eastern neighborhoods benefits those neighborhoods without major infrastructure improvements in streets and sidewalks, not to mention water, sewer, schools, and real high-frequency transit – especially given the extreme nature of the proposed new R2.5 density.

Possible Solutions

Two diametrically opposed approaches can be taken to deal with the risks of demolition and high-cost replacement presented by the zoning concerns detailed above. One is by altering the zoning rules to remove all incentives for demolition and replacement. An alternative would be finding strategies for non-destructive density increases in R2.5 zones far more sensitively than proposed by RIP.

In anti-demolition summits organized by United Neighborhoods for Reform, attendees proposed several solutions of the first type:

- 1) Adopt language in the code that sets minimum lot sizes at the nominal sizes for each zone. This means no lots under 5000 square feet in an R5 zone. Period.**
- 2) Repeal the code allowing duplexes on corner lots.
- 3) Eliminate density bonuses on R5 and R2.5 lots adjacent to commercial zones
- 4) Downzone R2.5 zones to R5 where the predominant pattern is historic 5000 square foot lots
- 5) Prevent lot splitting along historic plat lot lines of 25' lots if the 50' or wider lot has been a single property for 50 years or more. (This rule has been adopted by other municipalities to deal with the same concerns that Portland now faces.)**

Alternatives that can promote density less destructively in R2.5 zones would include:

- 1) Counting ADUs in R2.5 zones on 5000 square foot lots as meeting the density requirement (Per Proposal 6 in the RIP recommendations)**
- 2) Allowing sale and transfer of zoning capacity from houses in R2.5 zones on 5000 square foot lots to other higher zoned properties (consider creating a marketplace for unused zoning capacity) where bonus zoning capacity is permitted (R1, RH, etc.)
- 3) Eliminate System Development Charges for any 2nd unit built on a 5000 square foot lot in a R2.5 zone, up to 1200 square feet, providing that the original structure is preserved.**
- 4) Eliminate lot confirmation charges by BDS for splitting a 5000 square foot lot in a R2.5 zone if no house has stood on that site in the last 5 years.**
- 5) Allow a second ADU in R2.5 zones where a single family home stands on a lot at or above 7000 square feet (of which there are nearly 1500 across the city) in areas within 500 feet of high-frequency transit.**
- 6) Tailor the above rules to apply more broadly in areas where density goals of R2.5 zones have NOT been met based on the current zoning, to relieve pressure on already very dense neighborhoods.**

PCHR argues that a combination of these approaches can be employed to protect existing viable housing while facilitating density increases in R2.5 zones that have already been designated. We'd recommend a combination of the items above that are in bold face as a place to start with a non-destructive density enhancement program.