



Bureau of Planning and Sustainability
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EXHIBIT B

Appendix F Better Housing by Design - Displacement Risk Analysis

MEMO

DATE: May 31, 2018
TO: Bill Cunningham
FROM: Nick Kobel
Tom Armstrong
SUBJECT: Better Housing by Design displacement risk analysis

The 2035 Comprehensive Plan policy 5.15 directs City agencies to evaluate new plans and investments for the potential to cause displacement or increase housing costs in vulnerable communities. This analysis presents the methodology and findings to evaluate the potential for increased risk of displacement due to the proposed changes to the multi-dwelling zones in the Better Housing by Design project.

Key findings

- The most significant proposed change is in the R3, R2, R1 (RM1 and RM2) zones to move from regulating development intensity by unit density (units per acre of site area) to building scale (floor-area ratio, or FAR) that will allow for a broader range of housing types and potentially more units.
- Most of the development capacity in the multi-dwelling zones is through redevelopment of existing development. Only 16% of the future development capacity is on vacant land.
- The proposed changes could trigger a minor increase in redevelopment sites, especially in vulnerable communities, which could increase the risk of displacement.
- Most of the additional redevelopment sites are single-family houses, where about 60% are owner-occupied.
- The greatest risk for displacement would be with the redevelopment of multi-dwelling structures, but the analysis indicates that very few properties (10 to 24 sites with up to 67 units) have low enough values to be feasible for redevelopment.
- In addition, few (6 to 16) of these multi-dwelling structures are in vulnerable communities on larger lots (greater 8,000 square feet) that might be at greater risk of increased redevelopment.



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1900 SW 4th Avenue, Suite 7100, Portland, OR 97201 | phone: 503-823-7700 | fax: 503-823-7800 | tty: 503-823-6868

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Summary of proposed changes

The Better Housing by Design project is revising the design and development standards in Portland's multi-dwelling residential base zones outside the Central City. The proposed changes address four key concepts:

- Expand diversity of housing options and affordability
- Enhance outdoor space and green elements
- Adjust building design and scale
- Focus on East Portland standards and street connections

Multi-dwelling zones provide affordable housing opportunities. A large portion of Portland's new affordable housing is developed in the multi-dwelling zones. These medium- and higher-density zones will continue to play a critical role in providing a broad range of housing to meet the needs of all Portlanders.

The livability and quality of multi-dwelling housing has a disproportionate impact on the quality of life of people of color and low-income households because larger proportions of these populations live in multi-dwelling housing than the general population.

In general, the Better Housing by Design proposal promotes equity by providing incentives for the creation of new affordable housing and for preserving existing affordable housing. The proposals also contribute to equity through requirements for "visitable" housing that is physically-accessible to people with a range of abilities, provisions that address the need for street connections and outdoor spaces in East Portland.

The most significant change from current regulations is a proposal in the R3, R2, R1 (RM1 and RM2) zones to move from regulating development intensity by unit density (units per acre of site area) to an approach that regulates by building scale - primarily floor-area ratios (FAR) in combination with building height limits and other development standards.¹ Generally, the new zones continue the current zones' basic development parameters, such as building height, building coverage, and landscaping, but the shift to regulate by building scale creates more flexibility to develop a range of housing options, and potentially more units. Consequently, the ability to develop more units or a different housing type (townhouse versus apartments) could lead to more redevelopment which would increase the risk of displacement in vulnerable communities.

¹ The intensity of development in each zone is regulated by floor-area ratio or "FAR" (an FAR of 1 to 1 means 5,000 square feet of building floor area is allowed on a site with 5,000 square feet of land). Each zone includes a base FAR that will apply to most development, as well as a bonus FAR for projects that provide community benefits, such as affordable housing. The RH zone currently regulates intensity/density in this way.



Methodology and results

This analysis used a four-step approach to analyze the displacement risk of the Better Housing by Design project:

1. Identify recent development trends in multi-dwelling zones to derive a strike price (land valuation) for new development.
2. Model the proposed changes in the Buildable Lands Inventory (BLI) development capacity model.
3. Identify new sites that would be more likely redevelop from the BLI model results.
4. Analyze those sites by location, site size, tenure, and existing economic vulnerability.

This approach considers the redevelopment potential of a parcel based on the cost to purchase the land and the intensity of the existing use on the site. It is focused on identifying situations where displacement might occur if the redevelopment parcel is a renter-occupied home or multi-family unit. It is less concerned with homeowners, who could voluntarily sell their home.

Step 1: Developing a strike price using pre-development transactions

The change to the floor-area ratio (FAR) allowances in R3, R2, and R1 zones might make sites more attractive to redevelopment. This is because developers are generally able to pay a higher price to acquire the land due to the fact that more units could be developed.

With this logic in mind, BPS staff needed to understand what developers have been willing to pay to acquire land for multi-dwelling redevelopment. Staff first looked at all recent residential development permits that occurred in multi-dwelling zones since 2014. There were 606 new construction permits issued in multi-dwelling zones (R3, R2, R1 and RH) between January 2014 and January 2018 for multi-dwelling projects. These project types include duplexes, townhouses and apartments. Staff researched the sales history of each individual permit to determine the site purchase price prior to development. In cases of multiple transactions prior to permit issuance, care was taken to select the appropriate pre-development transaction that reflected what the developer paid for the parcel (land and existing structures). All transaction values were adjusted for inflation to 2017 dollars using CPI-U West. The resulting dataset contains 342 transactions.

Because the housing market varies across different parts of the city, the multi-dwelling zones were divided into ten subareas that have similar market characteristics. Staff then analyzed the pre-development transaction values in each market area (Figure 1). Due to sample size issues and the variability of values within the dataset, staff constructed a margin of error (at 90% confidence level) around the average transaction values. The upper and lower bounds of the margins of error were used to assess the redevelopment potential, discussed in Step 3 below.

In general, citywide transaction values ranged from \$25-\$75 per square foot of site area. As shown in Figure 1, these values vary by location and base zone. In general, inner Portland locations and higher density zones have higher transaction values. East Portland and along 82nd Avenue tend to have lower values in the \$30 range. To put it another way, developers are willing to pay up to \$100 per square foot for sites in Inner Portland, but less than \$25 per square foot in East Portland.



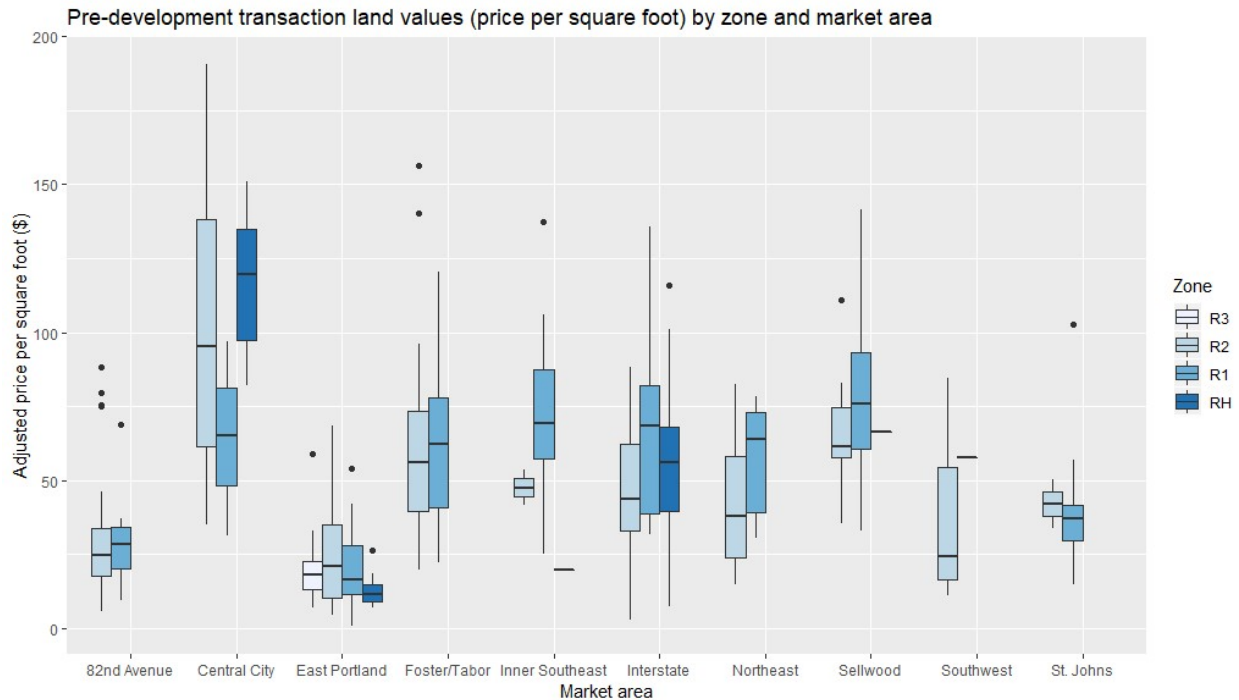


Figure 1: Distribution analysis of pre-development transaction land values by multi-dwelling zone and by market subarea. The shaded bars are the interquartile range (the 25th through the 75th percentile), the solid lines within each shaded box are the median of the distribution, the dots are outliers in the distribution, and the “whiskers” or line segments show the range of the data (minimum and maximum) excluding the outliers.

Step 2: Buildable Lands Inventory (BLI) capacity model output

The [Buildable Lands Inventory](#) (BLI) development capacity analysis is a GIS model that quantifies the future development capacity in Portland under current or proposed zoning regulations. It identifies sites that are vacant or developed that significantly underutilize their allowed development capacity. This model was used throughout the 2035 Comprehensive Plan process to assess alternative development standards. The model consists of three steps:

1. Calculate existing development and allowed development limits.
2. Identify constrained properties that are not likely to develop (e.g., natural or historic resources).
3. Identify development parcels that significantly underutilize their allowed development capacity.

Using the proposed development standards in the Better Housing by Design project, staff identified sites that significantly underutilize their allowed development capacity. These sites are compared to sites that are identified as likely to redevelop under the adopted 2035 Comprehensive Plan. The difference between these two model outputs served as the basis for analysis in Step 3. In other words, this exercise identified the *new* sites that were flagged as underutilized under the proposed development standards.



Step 3: Apply the strike price analysis to the BLI capacity model output

With the land values for market subareas established in Step 1 and the underutilized sites identified in Step 2, staff were able to identify the sites that were more likely to redevelop under the proposed development standards. If the real market value (RMV) per square foot of an underutilized site (Step 3) in a given zone and market area was below the land value strike price (Step 1), then the site was flagged as more likely to redevelop under the proposed development standards. For example, consider R2-zoned land in East Portland. The average strike price was \$24 per square foot. If the RMV per square foot of a parcel identified as underutilized from Step 3 fell below \$24 per square foot, that parcel was flagged as more likely to redevelop under the proposed development standards of the Better Housing by Design project.

Because of the variability in the dataset, staff used the margins of error from Step 1 to construct a confidence interval showing the reasonable range of the number of parcels that are more likely to redevelop under the project's revised standards. This method allows the measurement of displacement risk to be more sensitive to variations within the data, and it is a more conservative approach that helps mitigate potential under-counting.

Step 4: Deeper dive into redevelopable parcels

Once parcels were identified as having an increased risk of redevelopment, staff looked more closely into the sites. They examined the property type (e.g., single-family, multi-family, or another use), the probable tenure (i.e., renter- or owner-occupied houses), site sizes, the number of units in multi-family developments, and the demographic composition (i.e., economic vulnerability) of the areas that were affected most.

	Owner-occupied single-family			Rented [†] single-family			Multi-dwelling sites		
	LB	Est.	UB	LB	Est.	UB	LB	Est.	UB
82nd Avenue	8	27	47	7	29	44	0	1	2
Central City	1	3	4	1	6	7	1	2	5
East Portland	1	17	68	2	13	37	0	3	12
Foster/Tabor/Powell	3	15	26	2	11	19	0	1	2
Inner Southeast	0	0	0	0	0	0	0	0	0
Interstate/MLK	0	1	4	2	2	4	0	0	0
Northeast	1	5	12	4	8	12	0	1	1
Sellwood	0	0	1	0	0	2	0	0	0
St. Johns/Peninsula	0	0	2	0	0	1	0	0	0
Westside	1	2	10	1	5	13	0	1	1
Grand Total	15	70	174	19	74	139	1	9	23

Table 1: Lower-bound (LB) and upper-bound (UB) estimates for the number of sites that would be at increased risk of redevelopment under the proposed Better Housing by Design development standards, disaggregated by building type and market subarea. [†] Rented single-family units may include vacant units and those whose homeowners have a PO box.



Table 1 above shows the number of residential parcels with an increased risk of redevelopment by property type and tenure. Overall, it shows that single-family homes are more likely to redevelop. It shows that between 19 and 139 renter-occupied homes have land values low enough that make it attractive for redevelopment. It also shows that up to 23 multi-dwelling structures have low enough values to support redevelopment.

Economic vulnerability

Staff also looked at the results based on the economic vulnerability of the neighborhood in which the parcel is located. Economic vulnerability is measured across four variables: households that rent; people who identify with a community of color; people without four-year degrees; and low-income households. These socioeconomic factors indicate a reduced ability to withstand housing market price increases caused by gentrification, making them more vulnerable to displacement.

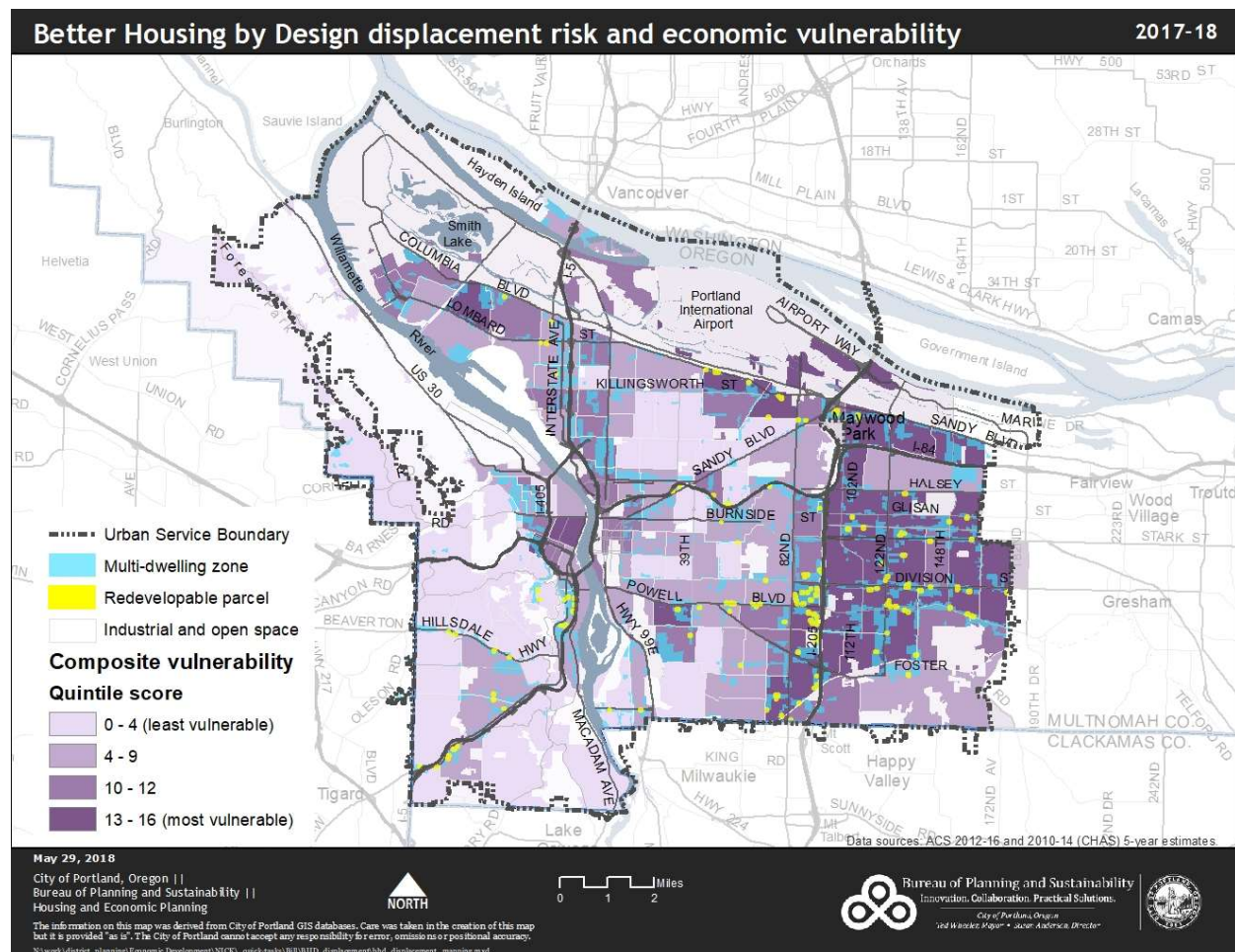


Figure 2: Parcels at risk for redevelopment and displacement in multi-dwelling zones under proposed Better Housing by Design project, with economic vulnerability shown in purple. Included are multi-dwelling unit types and single-family rental units. The conservative, upper-bound estimate is depicted here.



Figure 2 above shows the distribution of parcels that are at risk for redevelopment relative to vulnerable areas in the city. It shows that the highest concentration of parcels is in more vulnerable areas, primarily East Portland, 82nd Avenue, Foster-Powell, and parts of Cully.

Finally, staff looked at site size. Sites larger than 8,000 square feet offer potential developers more flexibility and increase the likelihood that a site would be redeveloped. The number of single-family rental units that are on larger lots that are in tracts identified as vulnerable range from 10 to 55, while the share of multi-family structures ranges from 1 to 16 (Table 2).

Site size > 8,000 ft ²	In a vulnerable community			Not in a vulnerable community		
	LB	Est.	UB	LB	Est.	UB
Multi-dwelling structures	1	6	16	1	4	5
Single-family rental	10	35	55	3	6	10
Single-family ownership	8	37	77	4	9	15
Total	19	78	148	8	19	30

Table 2: Lower-bound (LB) and upper-bound (UB) estimates for the number of parcels identified as redevelopable on sites larger than 8,000 square feet.

In conclusion, the proposed changes to development standards from the Better Housing by Design project will have a minimal increase in displacement risk. Although most of the likely redevelopment potential falls within vulnerable communities (70% to 83%), the magnitude of the impact is not significant (up to 65 single-family rentals on large lots and up to 67 multi-dwelling units). The increased affordable housing development bonuses in the Better Housing by Design proposal helps to mitigate this increased risk.

