

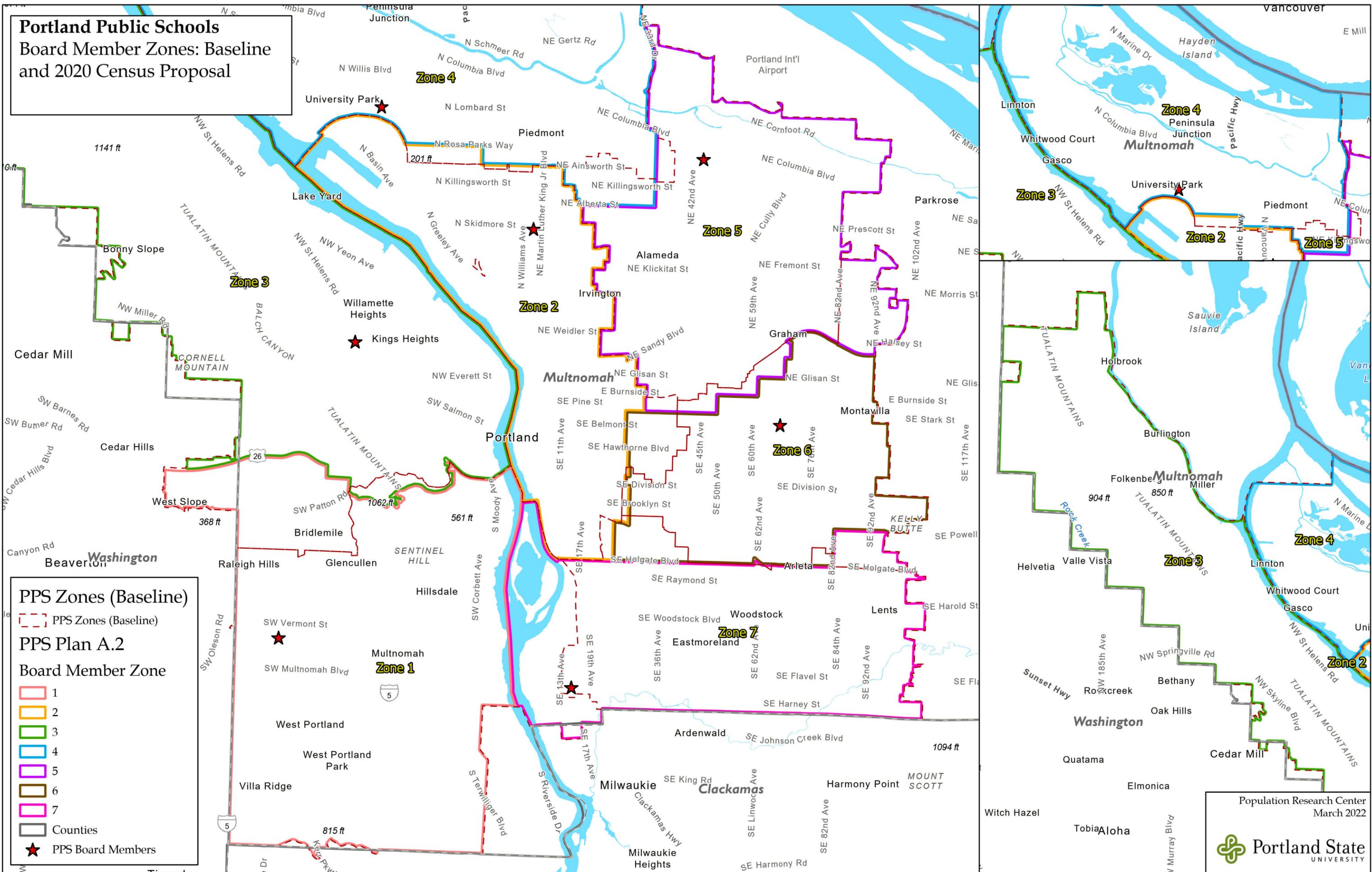
Board Elections Task Force Meeting  
Monday, March 14, 2022 4:30 PM

Dr. Matthew Prophet Education Center -  
Windows Cafeteria / Conference Room (Floor  
2)  
501 N. Dixon St.  
Portland, OR 97227

## **Agenda**

1. Opening
2. Continued discussion on PPS Board District Re-zoning
3. Decision making criteria to change zone elections
4. Timeline for medium and long-term electoral changes
5. Public comment

# Portland Public Schools Board Member Zones: Baseline and 2020 Census Proposal



**PPS Zones (Baseline)**

PPS Zones (Baseline)

**PPS Plan A.2**

**Board Member Zone**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- Counties
- PPS Board Members

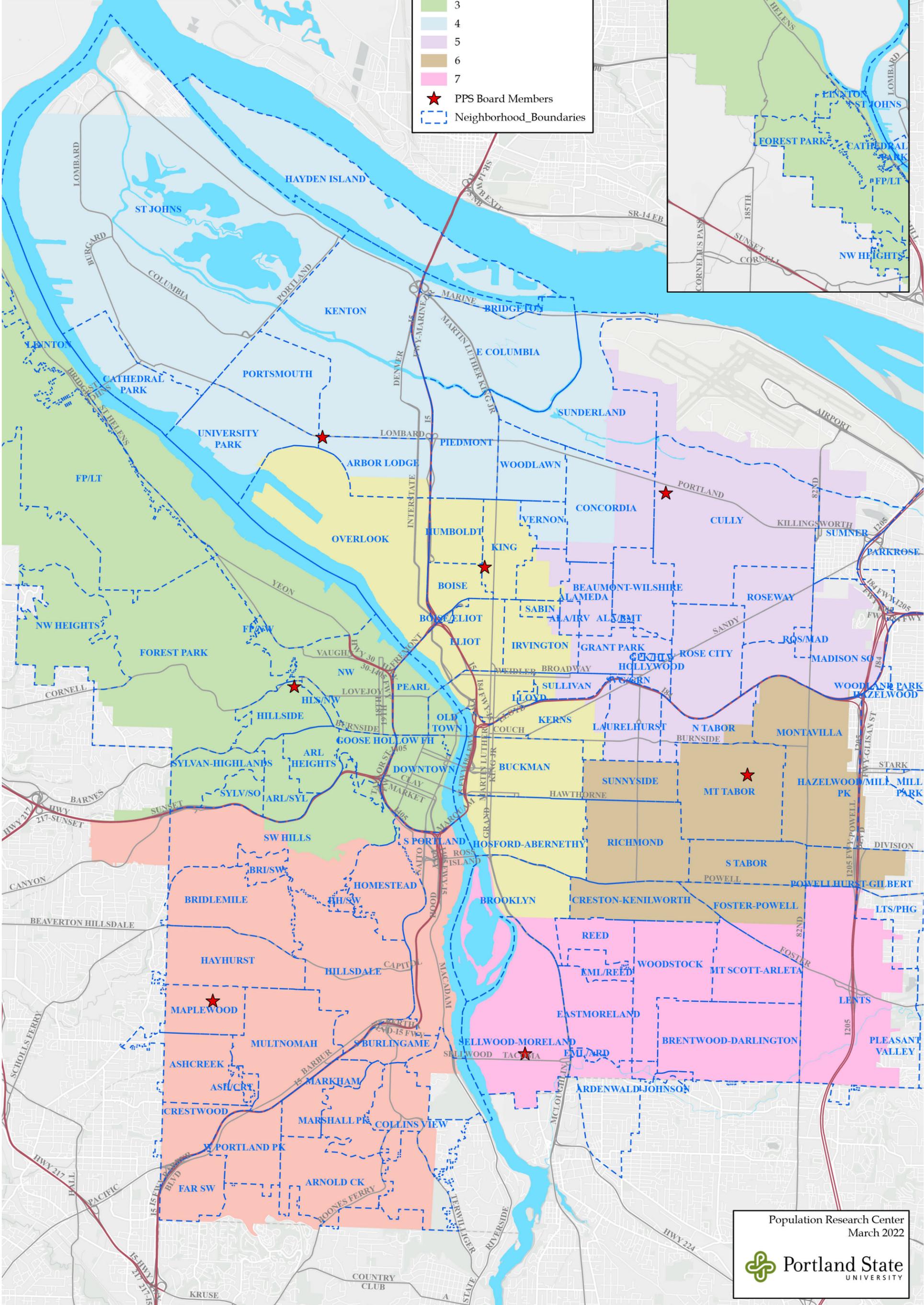
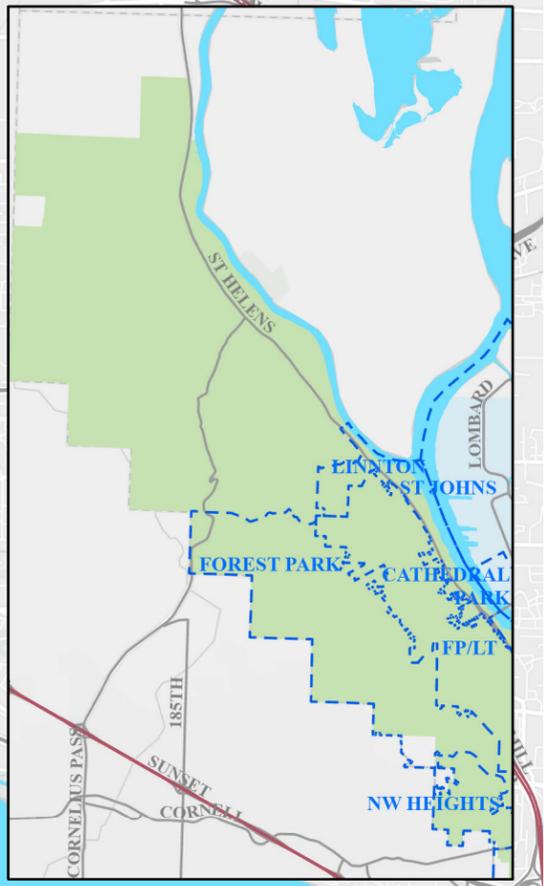
**Portland Public Schools  
Board Member Zones  
2020 Census Redistricting  
Proposal A.2**

-  Freeways
-  Major Roads
-  Water Bodies

**Board Member Zone**

-  1
-  2
-  3
-  4
-  5
-  6
-  7

-  PPS Board Members
-  Neighborhood\_Boundaries



# 2020 Census Redistricting Study: Portland Public Schools

Date: 2022-03-14



---

PRC's mission is to be a world-class center of training and knowledge for solutions to problems in applied demography, including population estimates, projections, geospatial analysis, and census-taking.



**Population Research Center**, College of Urban and Public Affairs, Portland State University  
Mail Code PRC, PO Box 751, Portland, OR 97207  
Phone: +1 503-725-3922, Email: [askprc@pdx.edu](mailto:askprc@pdx.edu), Website: [pdx.edu/prc](http://pdx.edu/prc)

## Background

---

ORS 332.132 provides that, if a school district is zoned, it “shall divide the district into the necessary number of zones as nearly equal in population, as shown by the latest federal census, as practicable, taking into account attendance areas where possible.” Portland Public Schools (PPS) requested from the Population Research Center (PRC) a proposal for two scenarios for new boundaries for its board member electoral districts (“zones”) that meet these requirements. This summary report describes the data and methodology used to conduct the redistricting analysis, along with final results.

## Data

---

ORS requires use of the latest federal census data, which motivated the use of the Public Law 94-171 Redistricting Data File from the 2020 Census, released during August, 2021.<sup>[1]</sup> The redistricting analysis was conducted during census tabulation block level geography, which is the smallest geographic unit at which population and housing counts are available. Block boundaries for the 2020 Census were obtained from the US Census Bureau.<sup>[2]</sup> Building footprints from the Oregon Department of Geology and Mineral Industries (DOGAMI) Statewide building footprints for Oregon (SFBO) dataset were also used to model spatial population distribution.<sup>[3]</sup>

## Methodology

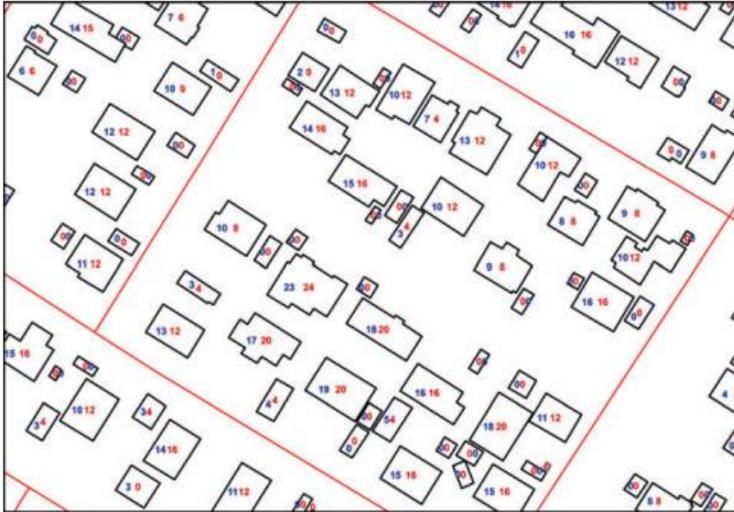
---

PRC developed a Geographic Information System (GIS) workflow to accomplish the following tasks:

- Determine the current population of each board member zone and the total population of the district;
- Adjust boundaries of the current districts so as to make zones as equal in population as feasible, and such that the spread between the lowest and highest population zones is under 10 percent.

These goals were accomplished by adjusting boundaries inside the perimeter of the district by following existing geographic and political boundaries such as major roads, parks or public spaces, neighborhood association and coalition boundaries, city and UGB boundaries, and school attendance zones.

In some cases, census blocks do not align with the boundaries of PPS’s jurisdiction. When this occurred, the total population of a census block was allocated into building footprints within the block, in proportion to the square footage of the building footprints. Then, the population on either side of a line drawn through a block was included with the population of the other blocks wholly contained on either side (Figure 1). This methodology yields more accurate estimates of population than simpler methods.<sup>[4]</sup>



**Figure 1:** Example population estimation per building footprint within a block. Red boundaries indicate a census block. Black boundaries indicate a building. Numbers indicate an actual (if known) or estimated population per building within the block (summing to the block population as reported from the 2020 Census). Figure adapted from [4].

## Results

In the current boundaries, the 2020 Census found that Zones 1 and especially 2,3 grew more quickly than average, and as a result would need to contract. Zones 4,5,6,7 grew less than average and would need to add population (Table 1). The total population of the PPS district is 519,967, translating to a target population (average) of 74,281 persons per district.

**Table 1:** Population of PPS Board Member Zones as of 2020 Census

<b>Baseline: Current Zones</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
TOTAL Population	75,048	79,330	79,540	72,145	70,934	71,346	71,624
Deviation:	767	5,049	5,259	-2,136	-3,347	-2,935	-2,657
Percent	1.0%	6.8%	7.1%	-2.9%	-4.5%	-4.0%	-3.6%
Non-Hispanic, by race:							
White	58,295	56,596	57,356	44,825	50,907	48,637	48,353
Black	1,752	5,455	2,395	6,545	3,916	2,728	2,135
American Indian/Alaska Native (AIAN)	495	447	520	511	376	380	425
Asian	3,635	3,185	6,622	2,941	3,253	7,170	6,919
Native Hawaiian or Pacific Islander (NHPI)	183	185	155	672	153	316	342
Other	513	584	583	462	425	533	422
Two or more races, of which:	5,288	5,839	5,524	5,494	4,863	5,128	5,285
Black and White	689	803	724	1,079	841	681	752
AIAN and White	920	1,182	964	1,119	848	1,064	1,075
Asian and White	1,927	1,816	2,037	1,312	1,498	1,614	1,655
Other combinations	1,752	2,038	1,799	1,984	1,676	1,769	1,803
Hispanic:							
(Any race)	4,887	7,039	6,385	10,695	7,041	6,454	7,743

To generate the redistricting proposal, two alternatives were generated:

- Plan A attempts to preserve the current boundaries as much as possible.
  - Plan A.1 was the initial version presented on February 22, 2022, and
  - Plan A.2 was a new version presented on March 14, 2022, which modifies Zones 4 and 5 in order to keep the Cully neighborhood within one zone.
- Plan B reconfigures board member zones to accord to high school attendance zones.

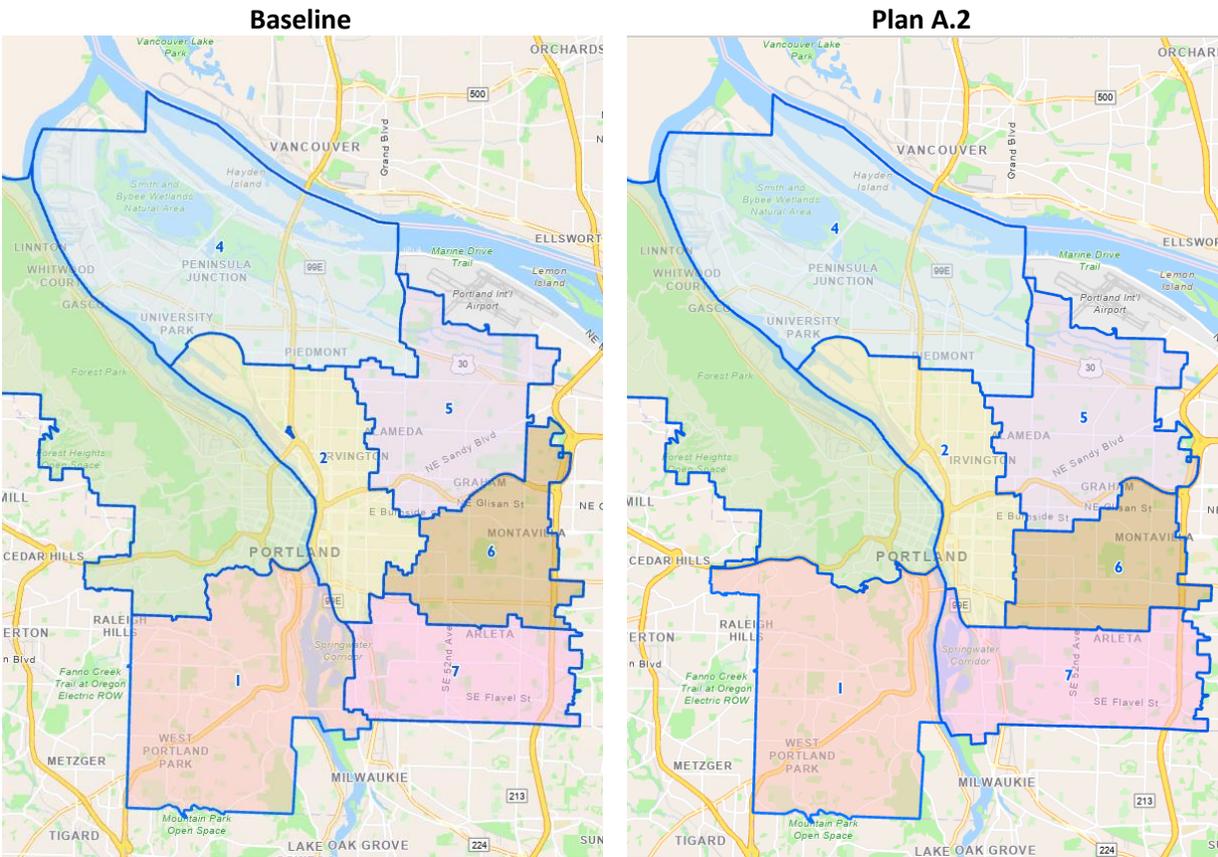
After consideration at the February 22 meeting and a follow up work session on February 28, the PPS Board opted to pursue Plan A.2. Where changes to the current board member zones were needed, they were done in consideration of neighborhood association boundaries, and natural boundaries such as water or major roads. PRC determined that under both plans, the proposed zones did not cause any incumbent member of the board to reside in a different zone from the one in which they were elected.

Compared to baseline, the proposed boundaries have a maximum spread between largest and smallest districts of 0.9% (was: 11.6%).

**Table 2:** Population of PPS Board Member Zones under 2020 Census Redistricting Proposals

<b>Plan A.2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
TOTAL Population	73,994	74,373	74,142	74,632	74,131	74,631	74,064
Deviation:	-287	92	-139	351	-150	350	-217
Percent	-0.4%	0.1%	-0.2%	0.5%	-0.2%	0.5%	-0.3%
Non-Hispanic, by race:							
White	57,219	52,568	53,045	46,263	53,001	52,488	50,385
Black	1,767	5,492	2,324	7,046	3,722	2,500	2,075
American Indian/Alaska Native (AIAN)	476	433	512	533	436	334	430
Asian	3,693	3,001	6,387	2,937	3,920	6,573	7,214
Native Hawaiian or Pacific Islander (NHPI)	182	198	151	666	195	246	368
Other	490	537	560	497	441	553	444
Two or more races, of which	5,327	5,474	5,081	5,677	5,111	5,441	5,310
Black and White	694	793	674	1,122	868	686	732
AIAN and White	887	1,127	920	1,127	925	1,074	1,112
Asian and White	1,998	1,647	1,841	1,377	1,527	1,857	1,612
Other combinations	1,748	1,907	1,646	2,051	1,791	1,824	1,854
Hispanic:							
(Any race)	4,840	6,670	6,082	11,013	7,305	6,496	7,838

A basic map of the proposed zones under Plan A.2 is provided below (Figure 2). Additional maps are included as attachments with additional detail.



**Figure 2:** Proposed PPS Board Member Zones (see attachments for further detail).

**Enclosures**

1. GIS format (shapefile) boundaries
2. PDF format maps
3. 2020 Census PL94-171 data for census blocks in the State of Oregon are available in repackaged form at <https://pdx.edu/prc/census-data-oregon>

**References**

[1] U.S. Census Bureau. 2020 Census: P.L. 94-171 Redistricting Data File. August 16, 2021. URL: <https://www.census.gov/programs-surveys/decennial-census/about/rdo/summary-files.html>

[2] U.S. Census Bureau. 2020 Census: P.L. 94-171 Redistricting Data Shapefiles. January 25, 2021. URL: <https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.2020.html>

[3] Williams, M. “Statewide building footprints for Oregon: Release 1.0 (SFBO-1)”. Oregon Department of Geology and Mineral Industries (DOGAMI), 2021. URL: <https://www.oregongeology.org/pubs/dds/p-SBFO-1.htm>

[4] Lwin, K and Murayama, Y. “A GIS Approach to Estimation of Building Population for Micro-spatial Analysis”. *Transactions in GIS*, 2009, 13(4): 401-414. doi: 10.1111/j.1467-9671.2009.01171.x