## 2020 Census Reapportionment Study: Washington County




Fall colors in vines at the Tualatin Estate Vineyard (Oregon State Archives)

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
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## Background

The Washington County Charter, Chapter VIII, section 84 requires that Commissioner districts be reapportioned after the decennial reapportionment of the state legislative districts. The Oregon Supreme Court approved the reapportionment of the state districts effective January 1, 2022. A review of the 2020 Census data indicates Washington County commissioner districts must be reapportioned to achieve balance between districts. The Washington County Reapportionment Official requested from the Population Research Center (PRC) a proposal for five options for new boundaries that comply with the requirements in the County Charter, the Secretary of State directive dated 09/09/2021, and additional factors (see Appendix A). This preliminary study describes the data and methodology used to conduct the reapportionment analysis, along with the five proposals in preliminary form (item 1.g in the Statement of Work).

## Data and Methods

The Public Law 94-171 Redistricting Data File from the 2020 Census is the primary data source used for Washington County reapportionment. These data are limited to the total resident population by race/ethnicity and voting age ( $<18$ or $18+$ ). The 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 TIGER/Line mapping files. Blocks do not cross county lines, and no subdivision of blocks was necessary in the drawing of the proposals. PRC developed a Geographic Information System (GIS) workflow to determine the current population of each board member zone and the total population of the district, and to generate new boundary proposals that are as equal in population as feasible.

GIS data were consulted in development of the proposals, including UGB boundaries, school district boundaries, city limits, parks and recreation districts, and urban/rural areas (defined by the US Census Bureau from the 2010 census; new urban/rural classifications may come into effect in 2023 but were not available at time of writing). These data were obtained from the Washington County GIS or from the Oregon Spatial Data Library. Socioeconomic data were obtained from the 2016-2020 5-year summary file of the American Community Survey (ACS). Data are available at the county, city, tract, and block group level, not for individual blocks. The reliability of data and block group and tract levels varies due to the ACS sample size and design. To calculate income statistics for each current and proposed district, the ACS table B19001 was used from the 2016-2020 5-year ACS. Each tract was assigned to a single district based on its population weighted centroid, and statistics were combined for all tracts according to their assigned district. This method produces not an exact match, but an approximation.

## Current Population and Proposal Design

The population of Washington County as of the 2020 Census was 600,372 residents, translating into a target population district per district of 150,093 . District 2 deviates the most from that target, at more than 10,000 persons over, whereas the other districts are below by $3-4,000$ residents and will need to add population to achieve parity (Table 1).

Table 1: Population of Washington County Commissioner Districts (2020 Census)

| Baseline: Current Districts | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | TOTAL | AVERAGE |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| TOTAL Population | 147,203 | 160,402 | 146,891 | 145,876 | 600,372 | 150,093 |
| $\quad$ Deviation: | $-2,890$ | 10,309 | $-3,202$ | $-4,217$ |  |  |
| $\quad$ Percent | $-1.9 \%$ | $6.9 \%$ | $-2.1 \%$ | $-2.8 \%$ |  |  |
| Non-Hispanic, by race: |  |  |  |  |  |  |
| $\quad$ White | 83,586 | 92,927 | 102,850 | 85,869 | 365,232 | 91,308 |
| Black | 4,363 | 3,821 | 2,399 | 2,180 | 12,763 | 3,191 |
| American Indian/Alaska Native (AIAN) | 558 | 541 | 631 | 686 | 2,416 | 604 |
| Asian | 16,162 | 32,333 | 9,965 | 9,970 | 68,430 | 17,108 |
| Native Hawaiian or Pacific Islander (NHPI) | 923 | 596 | 1214 | 507 | 3,240 | 810 |
| Other | 826 | 877 | 652 | 741 | 3,096 | 774 |
| Two or more races, by race: |  |  |  |  |  |  |
| Black and White | 1,470 | 1,336 | 1,222 | 876 |  |  |
| AlAN and White | 1,943 | 1,694 | 2,051 | 2,290 |  |  |
| Asian and White | 3,184 | 3,835 | 3,092 | 2,097 |  |  |
| $\quad$ Other combinations | 3,198 | 3,418 | 3,035 | 2,812 |  |  |
| Hispanic or Latino: |  |  |  |  |  |  |
| $\quad$ (Any race) | 30,990 | 19,024 | 19,780 | 37,848 | 107,642 | 26,911 |

Five proposals were developed in the course of the reapportionment study:

| Proposal <br> $\#$ | Conceptual Goals |
| :--- | :--- |
| 1 | Continuity with current boundaries. Minimal changes to achieve <br> balance, following physical geography. |
| 2 b | Concentration of rural/urban areas. This scenario would have District 1 <br> with no rural area and minimize combinations of rural and urban areas. |
| 3 | Diffusion of rural areas. This scenario would have rural areas within <br> each district. |
| 4 | Emphasis on geographic, political, and community boundaries: minimize <br> splits of school districts, park districts, UGBs, and avoid concentration <br> of population by SES. |
| 5 | Minimize city splits; consider UPAAs for delineating boundaries; <br> northwestern expansion of D2 and D3 and eastern expansion of D4; keep <br> North Plains, Gaston, Forest Grove, and Cornelius in one district. |

Proposal 1 ("Continuity") makes a minimal set of changes that attains balance, following physical or political boundaries as appropriate. District 1 adds the area between Farmington Rd and Tile Flat Rd west of Grabhorn Rd and the area south of Walker Rd that is within Beaverton city limits. District 3 adds some areas west of Hillsboro Hwy/219 south of Bald Peak Rd, and also some area in the Garden Home/Raleigh Hills neighborhood south of Fanno Creek. District 4 adds blocks west of Cornelius Pass Rd and expands slightly eastward between Jackson School Rd and Jackson Quarry Rd/Logie Trail Rd. District 2 cedes areas to District 1, 3, and 4 (Figure 1, panel A).

Proposal 2b ("Urban Concentration") attempts to increase the population density of the districts by concentrating urban areas into districts, with most rural area concentrated in District 4. District 1 expands to include the area south of Sunset Hwy/26 that is east of the Beaverton-Tigard Hwy/217, as well as some
of the Raleigh Hills and Whitford neighborhoods north Old Scholls Ferry Road and Montclair Elementary. District 2 adds some area south of the Nike campus (formerly in District 1), and expands its footprint in Orenco slightly to add several blocks around Orenco Station. District 3 becomes focused on the urban parts of southeast Washington County, including the city and UGB areas of Tigard and Sherwood. District 4 expands to meet District 2 at the edge of the Rock Creek area and North Bethany (NW $185^{\text {th }}$ Ave) and expands to include most of the non-urban area of District 3 that lies west of Ewert Rd /Roy Rogers Rd (Figure 1, panel B).

Proposal 3 ("Urban/Rural Balance") ensures that there is a balance of population and land area between rural and urban parts of the county. Each district covers part or whole of a city/UGB as well as significant unincorporated area. District 1 moves its eastern extent to the Beaverton-Tigard Hwy/217 and expands westward along River Rd and Laurel Rd on the south and following the Tualatin River and Tualatin Valley Hwy along its northern route, staying outside the cities of Hillsboro, Cornelius, and Forest Grove. District 2 cedes densely populated blocks southeast of Ronler Acres/Orenco Elementary and instead expands to include areas north of Evergreen Pkwy (north of Ronler Acres) westward to Glencoe Road, and all areas north of Sunset $\mathrm{Hwy} / 26$. District 3 expands to include additional area along the Yamhill county border, and also expands north to the Beaverton-Hillsdale Hwy (Figure 1, panel C).

Proposal 4 ("Community Boundaries") makes delineations using school districts and other public service areas. Neighborhoods are often associated with schools (for example, the City of Portland's Neighborhood Associations are often named after anchor elementary schools). Other community boundaries considered besides school districts are Fire \& Rescue and Parks \& Recreation districts. The boundaries are drawn in such a way that the population inside those public service areas are concentrated in as few commissioner districts as practicable. City boundaries were not used as guidance, but UGB boundaries were consulted when boundaries had to be drawn far away from a community boundary. Proposal 4 avoids splitting school districts and parks districts where possible, while also avoiding concentration of population by socioeconomic status (SES). District 4 gains densely populated blocks southeast of Ronler Acres/Orenco Elementary and cedes areas north of Evergreen Pkwy (north of Ronler Acres) westward to Glencoe Road, and all areas north of Sunset Hwy/26. The southern extent to District 4 contracts to follow the Tualatin River and Tualatin Valley Hwy along its southern route. The resulting allocation of neighborhoods, parks districts, and school districts is as follows:

| Proposed <br> District | School Districts | Parks and <br> Recreation <br> Districts | Neighborhoods |
| :--- | :--- | :--- | :--- |
| 1 | Beaverton SD <br> (southern part) | Tualatin Hills PRD <br> (southern part) | Garden Home-Raleigh Hillsboro; Cooper Mtn- <br> Aloha; West Beaverton; Vose; Hyland; <br> Greenway; Neighbors SW; South Beaverton; <br> Sexton Mountain; Central Beaverton; Denney <br> Whitford/Raleigh West |
| 2 | Beaverton SD <br> (northern part) | Tualatin Hills PRD <br> (northern part) | Cedar Hills-Cedar Mill N; Sunset West/Rock <br> Creek/Bethany; West Slope; Five Oaks/Triple <br> Creek |
| 3 | Tigard-Tualatin <br> SD; Sherwood SD; <br> Newberg SD; <br> Hillsboro SD <br> (southern part) | Tigard-Tualatin <br> Aquatic District | Bull Mtn-Metzger; Sherwood-Tualatin; East <br> Tualatin; Ibach; Martinazzi Woods; Midwest; <br> Riverpark |
| 4 | Gaston SD; Forest <br> Grove SD; Banks | N/A | North Plains/Helvetia/Mountaindale; <br> Hillsboro/Orenco; Gaston/Cherry |


|  | SD; Hillsboro SD <br> (northern part) | Grove/Laurelwood; Forest Grove; Roy/Verboort; <br> Banks/Buxton/Gales Creek/Manning/Timber |
| :--- | :--- | :--- | :--- |

Proposal 5 ("City and UPAA integrity" This plan was intended to meet the following goals: (1) move the border of D4 further east in Hillsboro; (2) keep Helvetia in D2; (3) minimize the number of splits of urban areas, so that each city has preferably only 1 split/2 commissioners; (4) consider UPAA boundaries; (5) allow D3 to move west; (6) keep Gaston, Forest Grove, Cornelius, and North Plains in the same district.

Proposal 5 boundaries are explicitly drawn to concentrate city populations (and their associated UPAAs) inside of a single commissioner districts. Exceptions to this are that Aloha (inside of the Hillsboro UPAA) is maintained in District 1 and that the City of Hillsboro had to be split between commissioner districts in order to maintain balance across the districts. These goals were mostly able to be met. Beaverton becomes divided between 2 districts (was 3); Hillsboro remains divided between 3 districts (was 3). A fundamental challenge is that Hillsboro, Forest Grove, and Cornelius together are too large for one single district. In this implementation, most of the Tanasbourne/Amberglen/Orenco/OHSU areas were moved from D2 to D4, except a small pocket of Tanasbourne. The tradeoff is that some southern parts of Hillsboro, south of the Tualatin Valley Highway, are moved into D3. D2 gains a more economically and racially diverse swath of Beaverton.

## Note on Proposals 4 and 5

Proposals 4 and 5 show similar characteristics because the community boundary types that were considered in Proposal 4 sometimes coincide with the city/UPAA boundaries consulted with Proposal 5. The differences are primarily around the outer perimeter of each commissioner district.

These are the changes that are similar in both plans:

- Garden Home/Whitford area move to D1 (Metzger becomes the northern border of D3).
- The southern border of D1 extends to include the area north of Old Barrows Road/Progress Ridge. This follows the topography and community/political boundaries better as it is part of Beaverton and THPRD.
- The portion of Hillsboro north of Sunset (Hwy 26) is excluded from D2.
- South Hillsboro is added to D3.

The major differences are these:

- In Plan 4, the western boundary of D1 includes more of the Farmington area (which is outside the city of Beaverton, but inside the Beaverton SD).
- In Plan 4, more of Hillsboro (Orenco/Amberglen/Tanasbourne) is included in D2, but Helvetia is not included in D2.
- In Plan 5, Helvetia remains in D2 (whereas in Plan 4, it moves to D4), and most of Hillsboro (except a small part of Tanasbourne) is out of D2.
- In Plan 4, the Beaverton Transit Center and Raleigh Park Elementary are in D1 (in Plan 5 they are in D2)
- In Plan 5, a greater share of land area in Aloha remains in D1 (in Plan 4, part of Aloha including the Intel Aloha campus and areas west of SW $198^{\text {th }}$ Ave and south of TV Hwy are in D3 and areas west of SW $198^{\text {th }}$ and north of TV Hwy are in D4).
- In Plan 5, D3 follows the Tualatin River further west, so some of the area around Gaston is in D3 (in Plan 4, it remains in D4).

All five proposals achieve balanced population, but the demographic characteristics of the resulting commissioner districts vary between proposals. Table 2 shows a comparison of each district at present to the county overall, where blue indicates higher representation of a race/ethnicity identity than the district overall, and red indicates lower. Significant differences are shaded more strongly.

To calculate the percentage distribution within any district, add the district percentages plus or minus the zone difference. For example, District 3 has a higher percentage of the population that is White alone, non-Hispanic or Latino ( $70.0 \%$, i.e. 9.2 percentage points higher than the average of $60.8 \%$ ), and District 2 has a higher concentration of Asian alone population ( +8.8 percentage points over the average of $11.4 \%$ ). Districts 1 and 4 have higher concentrations of Hispanic or Latino residents. There is no notable concentration of Black or NHPI residents.

Table 2: Comparison of Race/Ethnic Distribution between Districts (2020 Census)

| Baseline: District Differences from Average | County | Difference (Percentage Points) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Overall | 1 | 2 | 3 | 4 |
| Non-Hispanic, by race: |  |  |  |  |  |
| White | 60.8\% | -4.1\% | -2.9\% | +9.2\% | -2.0\% |
| Black | 2.1\% | +0.8\% | +0.3\% | -0.5\% | -0.6\% |
| American Indian/Alaska Native (AIAN) | 0.4\% | -0.0\% | -0.1\% | +0.0\% | +0.1\% |
| Asian | 11.4\% | -0.4\% | +8.8\% | -4.6\% | -4.6\% |
| Native Hawaiian or Pacific Islander (NHPI) | 0.5\% | +0.1\% | -0.2\% | +0.3\% | -0.2\% |
| Other | 0.5\% | +0.0\% | +0.0\% | -0.1\% | -0.0\% |
| Two or more races of which: | 6.3\% | +0.4\% | +0.2\% | +0.1\% | -0.7\% |
| Black and White | 0.8\% | +0.2\% | +0.0\% | +0.0\% | -0.2\% |
| AIAN and White | 1.3\% | -0.0\% | -0.3\% | +0.1\% | +0.2\% |
| Asian and White | 2.0\% | +0.1\% | +0.4\% | +0.1\% | -0.6\% |
| Other combinations | 2.1\% | +0.1\% | +0.1\% | -0.0\% | -0.1\% |
| Hispanic or Latino: |  |  |  |  |  |
| (Any race) | 17.9\% | +3.1\% | -6.1\% | -4.5\% | +8.0\% |

Table 3 shows the number of households in the current districts, and the deviations from the average distribution by income between districts. The distribution of income is mostly equal between districts, with each district having a balance of low, middle, and high income earners. District 2 has a slightly higher concentration of the highest household income bracket, and District 1 slightly lower.

Table 3: Income distribution of Washington County Commissioner Districts (2020 ACS)

| Baseline: Current Zones |  |  |  |  |  | District <br> Overall | Difference (Percentage Points) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | TOTAL |  | 1 | 2 | 3 | 4 |
| TOTAL Households | 55,315 | 59,481 | 56,635 | 51,609 | 223,040 | 100\% |  |  |  |  |
| by Income: |  |  |  |  |  |  |  |  |  |  |
| Less than \$ 25,000 | 6,861 | 5,221 | 6,561 | 5,309 | 23,952 | 10.7\% | +1.7\% | -2.0\% | +0.8\% | -0.5\% |
| \$25,000 to \$29,999 | 1,660 | 1,833 | 1,717 | 1,236 | 6,446 | 2.9\% | +0.1\% | +0.2\% | +0.1\% | -0.5\% |
| \$30,000 to \$34,999 | 1,874 | 1,696 | 1,956 | 1,903 | 7,429 | 3.3\% | +0.1\% | -0.5\% | +0.1\% | +0.4\% |
| \$35,000 to \$39,999 | 1,955 | 2,063 | 1,678 | 2,043 | 7,739 | 3.5\% | +0.1\% | -0.0\% | -0.5\% | +0.5\% |
| \$40,000 to \$44,999 | 1,753 | 2,099 | 1,833 | 1,720 | 7,405 | 3.3\% | -0.2\% | +0.2\% | -0.1\% | +0.0\% |
| \$45,000 to \$49,999 | 2,029 | 1,655 | 1,473 | 1,511 | 6,668 | 3.0\% | +0.7\% | -0.2\% | -0.4\% | -0.1\% |
| \$50,000 to \$59,999 | 4,217 | 3,867 | 3,793 | 3,470 | 15,347 | 6.9\% | +0.7\% | -0.4\% | -0.2\% | -0.2\% |
| \$60,000 to \$74,999 | 5,976 | 5,256 | 5,038 | 5,551 | 21,821 | 9.8\% | +1.0\% | -0.9\% | -0.9\% | +1.0\% |
| \$75,000 to \$99,999 | 7,811 | 7,584 | 7,977 | 7,085 | 30,457 | 13.7\% | +0.5\% | -0.9\% | +0.4\% | +0.1\% |
| \$100,000 to \$124,999 | 6,759 | 6,640 | 7,144 | 6,498 | 27,041 | 12.1\% | +0.1\% | -1.0\% | +0.5\% | +0.5\% |
| \$125,000 to \$149,999 | 4,803 | 5,064 | 4,748 | 5,095 | 19,710 | 8.8\% | -0.2\% | -0.3\% | -0.5\% | +1.0\% |
| \$150,000 to \$199,999 | 5,630 | 6,577 | 6,552 | 5,540 | 24,299 | 10.9\% | -0.7\% | +0.2\% | +0.7\% | -0.2\% |
| \$200,000 or more | 3,987 | 9,926 | 6,165 | 4,648 | 24,726 | 11.1\% | -3.9\% | +5.6\% | -0.2\% | -2.1\% |

The following tables highlight the differences between proposals in demographic makeup and income distributions. The differences in race/ethnicity distribution between districts in each proposal is shown in Table 4. All five plans show similar patterns as baseline, although there are several important differences. Proposals 2-4, for example, show reduced Hispanic representation in District 1, but Proposal 3 shows increased concentration in District 4. Proposal 5 shows reduced concentration of race/ethnic groups except for increased Hispanic representation in District 4.

Table 5 shows the deviations from the average distribution of income for each proposal. There are not many significant differences between proposals, except that proposals 2,4 , and 5 slightly reduce the concentration of highest-earning households in District 2.

A map of the boundary differences between the baseline district and each proposal is in Figure $\mathbf{1}$ (one panel for each proposal). Additional detailed maps of each proposal are included as PDF attachments, and as an interactive map application.

## Enclosures

1. PDF detail maps (5) of each proposal.
2. PDF detail maps (2) comparing proposals $4--5$.
3. Interactive mapping application (with GIS downloads) at https://arcg.is/09uqeq0
4. 2020 Census PL94-171 data for census blocks in the State of Oregon are available in repackaged form at https://pdx.edu/pre/census-data-oregon

Table 4: Race/Ethnicity and Differentials per Districts by Proposal (2020 Census)

|  | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL Population | 150,092 | 150,090 | 150,088 | 150,102 | 150,179 | 150,025 | 150,087 | 150,081 | 150,082 | 50,116 | 50,104 | 50,070 | 150,024 | 149,436 | 150,969 | 149,943 | 149,982 | 149,923 | 49,894 | 50,573 |
| Deviation: | -1 | -3 | -5 | 9 | 86 | -68 | -6 | -12 | -11 | 23 | 11 | -23 | -69 | -657 | 876 | -150 | -111 | -170 | -199 | 480 |
| Percent | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | -0.4\% | 0.6\% | -0.1\% | -0.1\% | -0.1\% | -0.1\% | 0.3\% |
| Non-Hispanic, by race: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 85,062 | 86,800 | 105,381 | 87,989 | 88,707 | 82,038 | 104,227 | 90,260 | 87,951 | 87,751 | 106,307 | 83,223 | 90,565 | 83,469 | 103,986 | 87,212 | 90,246 | 85,468 | 103,677 | 85,841 |
| Black | 4,394 | 3,561 | 2,454 | 2,354 | 4,207 | 3,906 | 2,559 | 2,091 | 4,203 | 3,291 | 2,405 | 2,864 | 4,052 | 3,909 | 2,620 | 2,182 | 3,923 | 3,469 | 2,585 | 2,786 |
| American Indian/Alaska Native (AIAN) | 565 | 505 | 648 | 698 | 572 | 504 | 623 | 717 | 569 | 531 | 645 | 671 | 535 | 516 | 666 | 699 | 548 | 501 | 668 | 699 |
| Asian | 16,322 | 31,068 | 10,076 | 10,964 | 14,406 | 33,945 | 10,999 | 9,080 | 15,761 | 30,065 | 9,118 | 13,486 | 14,109 | 32,282 | 10,697 | 11,342 | 15,246 | 30,070 | 10,389 | 12,725 |
| Native Hawaiian or Pacific Islander (NHPI) | 931 | 542 | 1,226 | 541 | 906 | 590 | 1,235 | 509 | 857 | 523 | 1,229 | 631 | 852 | 578 | 1225 | 585 | 889 | 570 | 1,211 | 570 |
| Other | 840 | 822 | 662 | 772 | 849 | 816 | 651 | 780 | 835 | 849 | 664 | 748 | 816 | 839 | 685 | 756 | 792 | 869 | 682 | 753 |
| Two or more races (all combinations) | 9,951 | 9,599 | 9,630 | 8,373 | 9,865 | 9,605 | 9,733 | 8,350 | 9,972 | 9,475 | 9,565 | 8,541 | 9,951 | 9,646 | 9,498 | 8,458 | 10,068 | 9,588 | 9,369 | 8,528 |
| Hispanic (any race): | 32,027 | 17,193 | 20,011 | 38,411 | 30,652 | 18,704 | 20,060 | 38,226 | 29,934 | 17,631 | 20,171 | 39,906 | 29,144 | 18,197 | 21,592 | 38,709 | 28,270 | 19,388 | 21,313 | 38,671 |
| Difference from Average:Non-Hispanic, by race: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | -4.2\% | -3.0\% | +9.4\% | -2.2\% | -1.8\% | -6.2\% | +8.6\% | -0.7\% | -2.2\% | -2.4\% | 10.0\% | -5.4\% | -0.5\% | -5.0\% | +8.0\% | -2.7\% | -0.7\% | -3.8\% | +8.3\% | -3.8\% |
| Black | +0.8\% | +0.2\% | -0.5\% | -0.6\% | +0.7\% | +0.5\% | -0.4\% | -0.7\% | +0.7\% | +0.1\% | -0.5\% | -0.2\% | +0.6\% | +0.5\% | -0.4\% | -0.7\% | +0.5\% | +0.2\% | -0.4\% | -0.3\% |
| American Indian/Alaska Native (AIAN) | -0.0\% | -0.1\% | +0.0\% | +0.1\% | -0.0\% | -0.1\% | +0.0\% | +0.1\% | -0.0\% | -0.0\% | +0.0\% | +0.0\% | -0.0\% | -0.1\% | +0.0\% | +0.1\% | -0.0\% | -0.1\% | +0.0\% | +0.1\% |
| Asian | -0.5\% | +9.3\% | -4.7\% | -4.1\% | -1.8\% | +11.2\% | -4.1\% | -5.3\% | -0.9\% | +8.6\% | -5.3\% | -2.4\% | -2.0\% | +10.2\% | -4.3\% | -3.8\% | -1.2\% | +8.7\% | -4.5\% | -2.9\% |
| Native Hawaiian or Pacific Islander (NHPI) | +0.1\% | -0.2\% | +0.3\% | -0.2\% | +0.1\% | -0.1\% | +0.3\% | -0.2\% | +0.0\% | -0.2\% | +0.3\% | -0.1\% | +0.0\% | -0.2\% | +0.3\% | -0.1\% | +0.1\% | -0.2\% | +0.3\% | -0.2\% |
| Other | +0.0\% | +0.0\% | -0.1\% | -0.0\% | +0.0\% | +0.0\% | -0.1\% | +0.0\% | +0.0\% | +0.0\% | -0.1\% | -0.0\% | +0.0\% | +0.0\% | -0.1\% | -0.0\% | +0.0\% | +0.1\% | -0.1\% | -0.0\% |
| Two or more races (all combinations) | +0.4\% | +0.1\% | +0.2\% | -0.7\% | +0.3\% | +0.1\% | +0.2\% | -0.7\% | +0.4\% | +0.1\% | +0.1\% | -0.6\% | +0.4\% | +0.2\% | +0.0\% | -0.6\% | +0.5\% | +0.1\% | -0.0\% | -0.6\% |
| Hispanic (any race): | +3.4\% | -6.5\% | -4.6\% | +7.7\% | +2.5\% | -5.5\% | -4.6\% | +7.5\% | +2.0\% | -6.2\% | -4.5\% | +8.7\% | +1.5\% | -5.8\% | -3.6\% | +7.9\% | +0.9\% | -5.0\% | -3.7\% | +7.8\% |

Table 5: Income Distribution Differentials per District by Proposal ( 2020 ACS)

Household Income: Less than $\$ 25,000$ \$25,000 to \$29,999 $\$ 30,000$ to $\$ 34,999$ $\$ 35,000$ to $\$ 39,999$ $\$ 40,000$ to $\$ 44,999$ $\$ 45,000$ to $\$ 49,999$ $\$ 50,000$ to $\$ 59,999$ $\$ 60,000$ to $\$ 74,999$ $\$ 75,000$ to $\$ 99,999$ $\$ 100,000$ to $\$ 124,999$ $\$ 125,000$ to $\$ 149,999$ $\$ 150,000$ to $\$ 199,999$ $\$ 200,000$ or more

| Proposal 1 |  |  |  | Proposal 2b |  |  |  | Proposal 3 |  |  |  | Proposal 4 |  |  |  | Proposal 5 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| +1.7\% | -2.1\% | +0.9\% | -0.5\% | +1.5\% | -1.9\% | +0.8\% | -0.7\% | +0.9\% | -2.3\% | +1.0\% | +0.5\% | +1.3\% | -2.1\% | +0.4\% | +0.2\% | +0.8\% | -1.9\% | +0.6\% | +0.5\% |
| +0.1\% | +0.3\% | +0.0\% | -0.5\% | +0.4\% | -0.1\% | +0.0\% | -0.3\% | -0.2\% | +0.8\% | -0.0\% | -0.6\% | +0.3\% | +0.0\% | -0.1\% | -0.3\% | -0.2\% | +0.7\% | -0.1\% | -0.3\% |
| +0.1\% | -0.5\% | +0.1\% | +0.3\% | +0.3\% | -0.8\% | -0.0\% | +0.4\% | -0.2\% | -0.3\% | +0.3\% | +0.2\% | +0.5\% | -0.8\% | -0.2\% | +0.5\% | +0.2\% | -0.4\% | -0.1\% | +0.3\% |
| +0.1\% | +0.1\% | -0.5\% | +0.4\% | +0.0\% | -0.3\% | -0.1\% | +0.4\% | +0.4\% | -0.3\% | -0.4\% | +0.5\% | +0.2\% | +0.1\% | -0.2\% | -0.2\% | -0.3\% | +0.1\% | -0.2\% | +0.4\% |
| -0.2\% | +0.4\% | -0.2\% | -0.0\% | +0.3\% | -0.1\% | -0.1\% | -0.1\% | -0.2\% | +0.2\% | +0.0\% | -0.1\% | +0.2\% | +0.0\% | -0.3\% | -0.0\% | -0.2\% | +0.4\% | -0.2\% | -0.0\% |
| +0.7\% | -0.2\% | -0.3\% | -0.1\% | +0.6\% | -0.2\% | -0.3\% | -0.2\% | +0.5\% | -0.3\% | -0.1\% | -0.2\% | +0.6\% | -0.3\% | -0.1\% | -0.2\% | +0.2\% | -0.1\% | -0.1\% | +0.0\% |
| +0.7\% | -0.7\% | -0.1\% | +0.1\% | +0.5\% | -0.3\% | +0.2\% | -0.4\% | +0.7\% | -1.5\% | -0.0\% | +1.0\% | +0.8\% | -0.8\% | -0.2\% | +0.2\% | +0.9\% | -1.8\% | -0.1\% | +1.0\% |
| +1.0\% | -0.7\% | -1.0\% | +0.8\% | +1.5\% | -0.9\% | -1.0\% | +0.4\% | +1.1\% | -0.9\% | -1.0\% | +0.9\% | +1.2\% | -0.8\% | -1.4\% | +1.0\% | +0.7\% | -1.0\% | -1.1\% | +1.5\% |
| +0.5\% | -1.1\% | +0.5\% | +0.1\% | +0.1\% | +0.1\% | +0.1\% | -0.3\% | +1.0\% | -1.4\% | -0.1\% | +0.6\% | +0.3\% | -0.5\% | +0.3\% | -0.1\% | -0.4\% | -0.9\% | +0.5\% | +0.8\% |
| +0.1\% | -0.8\% | +0.3\% | +0.4\% | -0.5\% | -0.3\% | +0.1\% | +0.8\% | +0.2\% | -1.0\% | +0.1\% | +0.8\% | -1.1\% | -0.1\% | +0.7\% | +0.7\% | -1.5\% | +0.2\% | +1.1\% | +0.4\% |
| -0.2\% | -0.3\% | -0.4\% | +0.9\% | -0.4\% | +0.1\% | -0.4\% | +0.7\% | +0.0\% | +0.4\% | -0.4\% | -0.0\% | -0.7\% | -0.2\% | -0.1\% | +1.1\% | -0.4\% | -0.2\% | +0.1\% | +0.7\% |
| -0.7\% | +0.1\% | +0.5\% | +0.0\% | -1.5\% | +0.4\% | +0.6\% | +0.6\% | -0.3\% | +1.0\% | +0.2\% | -1.1\% | -0.9\% | +0.6\% | +1.1\% | -0.8\% | -1.2\% | +0.3\% | +1.2\% | -0.1\% |
| -3.9\% | +5.5\% | +0.1\% | -1.9\% | -2.9\% | +4.3\% | +0.2\% | -1.2\% | -3.9\% | +5.6\% | +0.4\% | -2.4\% | -2.5\% | +4.7\% | +0.1\% | -2.3\% | -3.2\% | +5.1\% | +0.2\% | -2.0\% |

Figure 1: Current and Proposed Boundary Changes for Washington County Commissioner Districts


## Approved Factors Referred to PSU for Proposal Development

## State Factors (as nearly as practicable) :

> Be contiguous
> Utilize existing geographic or political boundaries
> Not divide communities of common interest
> Be connected by transportation links
> Be of equal population
> Not drawn to favor person or partisan concerns
> Not drawn to dilute voting strength of any language or ethnicity

## Additional Factors:

BCC:
> Consider Park Districts, School Districts, Urban Growth Boundary, Urban Service Agreements, Urban Reserves, keep Aloha and Beaverton in one district
> Maintain District 1 as the only district that is exclusively urban/suburban

Provide an option that includes rural areas in each district

Community:
> Consider Socio-Economic Status (SES)

Consider rural/urban divide

