

Puget Sound Clean Air Agency

Outreach Plan

January 2021

Background

Puget Sound Clean Air Agency (PSCAA) aims for all people to benefit from clean, healthy air and reduce our region's contribution to climate change.

Wood smoke generated by wood-burning heating devices is the primary contributor to wintertime air pollution in Puget Sound Clean Air Agency's jurisdiction which covers King, Kitsap, Pierce and Snohomish counties. Over 4.1 million people, more than half the state's population, reside in these four counties.

PSCAA has three initiatives focused on reducing wood smoke:

- **Wood stove program:** Incentives to help people shift away from wood-burning stoves/inserts (\$350 for removal/recycling; \$1500-\$2000 for replacement if in Snohomish County)
- **Clean burning practices:** Helping those not ready to switch take steps to reduce pollution
- **Burn ban notifications:** Informing local residents via email/SMS and earned media

This plan is focused on the primary initiatives (wood stove program and clean burning practices)

Purpose, Goals & Objectives

PURPOSE

Clean, healthy air for all Puget Sound residents

GOAL

Reduce Puget Sound air pollution related to wood smoke

OBJECTIVES

Drive wood stove program signups to meet recycling/replacement project completions goals. Encourage residents to adopt cleaning burning behaviors.

Goals & Priority Audiences

| | WOOD STOVE PROGRAM |
|--------------------------------|---|
| Key Goals & Metrics | Drive program sign ups to complete by June 2023: <ul style="list-style-type: none">- 180 replacement projects- 808 recycling/removal projects |
| Priority Audiences | Existing or new homeowners with wood stoves and wood-burning fireplace inserts. Piloting outreach to Hispanic community. Priority geography: <ul style="list-style-type: none">• Snohomish, especially Arlington, Darrington and Marysville• Tacoma-Pierce County Smoke Reduction Zone, especially Puyallup/Spanaway area• Lakewood and Algona/Auburn/Pacific |

Barriers

WOOD STOVE PROGRAM

Major:

- Upfront costs to remove/replace***
- For recycling, how to remove it from the house (big, heavy)**
- Perception that it is less expensive to heat older homes with wood, especially if you have access to free wood**

Minor:

- Want to be self-sufficient
- Suspicious of utilities and/or government
- Offers alternative heat source in case of power outages
- Preference for wood over other heat sources (aesthetics, smell, nostalgia)
- Competing priorities with concerns about air quality
- Doubts about impact of wood smoke on air quality

Motivators

WOOD STOVE PROGRAM

Major:

- Incentives to offset removal/replacement costs (for those eligible)*
- Replacement: Improved, more efficient heating source (and cooling source if adopting ductless heat pump)
- Easier and less work to heat home

Minor:

- For new homeowners: removing/replacing unsightly device left by previous owner
- Contribute to cleaner air

Message & Creative Strategy

Wood stove main message: *When I sign up for this program, I can save money while upgrading my home.*

- **Think:** This program helps me save money and makes it simple to upgrade my home heating system.
- **Feel:** It will be such a relief to no longer have an old wood-burning device in my home that is so much work to use and maintain.
- **Do (Desired Behavior Change):** I will sign up to participate in the program.

Visuals and design: Develop materials with similar look and feel leveraging PSCAA branding and iconography, but tailor messages and calls-to-action to each initiative.

PAID TACTICS

Advertising Overview

| | Wood Stoves |
|--------------------|--|
| Objective: | Conversions: get people to the website for more information and to sign-up |
| Priority Audience: | <ul style="list-style-type: none">• Primary: Homeowners with fireplace inserts/wood burning devices <u>ONLY</u> (no fireplaces since they aren't eligible)• Secondary: New Homeowners |
| Languages: | English + Spanish |
| Geography: | <ul style="list-style-type: none">• Snohomish County• Tacoma/Pierce County Smoke Reduction Zone |
| Key Message: | Cost savings |
| Seasonality: | Spring/Summer when people are less likely to be using wood stoves as a heat source and more open/receptive to making a change before the next winter. |

Recommended KPI Measurement

How will we measure success based on the objectives?

Wood Stoves

Conversions: get people to the website for more information and to sign-up

1. Website traffic (click throughs)
2. Quantity of conversions
3. Site engagement: time on site, pages visited, bounce rate, etc.
4. Secondary: Impressions, reach

WOOD STOVES

Media Approach & Tactics

Advertising Approach – WOOD STOVES

- **The campaign will focus on cost efficient clicks and conversions.**
- **Use digital as the exclusive media tactic.** Able to be highly segmented to the priority audience, gives people immediate access to PSCAA for more information and track performance.
- **Look for ways to be exceptionally segmented to priority audience, minimizing ad waste.** For example, we can target people who have wood burning devices in our geography.
- **Monitor campaign tracking, optimize toward tactics with better KPIs.** For example, the tactics with more cost-efficient click throughs (CPC, cost per click) and those with more cost-efficient site conversions.
- **Concentrate media in key flights to avoid spreading message too thin.** For example, focus ads over a four-week period in the Spring and a four-week period in the Summer.

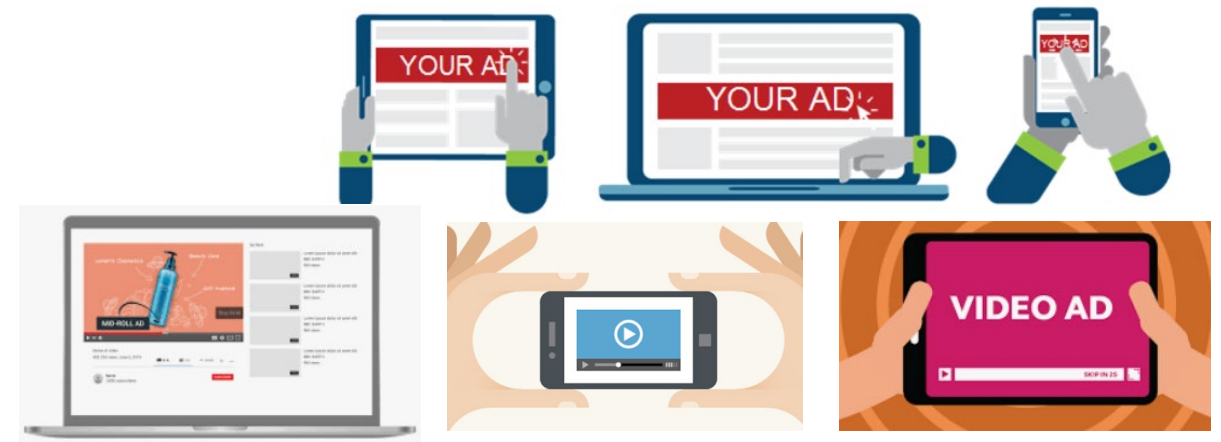
Advertising Approach – WOOD STOVES

If possible:

- **Consider leveraging high-impact video to communicate complex messages if budget and resources allow.** Gives an opportunity to really explain why someone should make a change.
- **Place tracking pixels on the PSCAA site** in order to (1) retarget messaging to people who have engaged with PSCAA site and to (2) optimize media toward conversions.
- **Monitor the campaign in PSCAA's Google Analytics (if applicable)** to help understand visitor sources and site engagement (e.g. time on the site, pages visited, etc.)

Video Ads and/or Banner Ads via Ad Network

- **Network Description:** Video ads and/or banners will be served across hundreds of sites on desktop, tablet and mobile devices. Ads will only be served to our target audience and within our determined geography.
- **Rationale:**
 - The ad network can be more targeted and cost efficient to our audience than any other tactic.
 - The media is trackable and optimizable.
 - We can link it to Google Analytics to understand website traffic patterns and conversions.
- **KPI:** Click Throughs (primary) Conversions (secondary)
- **Timing:** Spring and Summer
- **Asset:** Video and/or Banners (static or animated)



Ad Network Segmentation

Audience Targeting

- Use 3rd party data segments to find (1) homeowners who have fireplace inserts, wood burning devices (2) new homeowners. Include geo-targeting for location.

Keyword Targeting

- Target website pages with keywords that match our predetermined list of relevant keywords. Like “wood stoves,” “wood heating,” etc. Include geo-target.

Contextual Targeting (lower priority, not as targeted for Wood Stoves)

- Target web sites that fall into categories like home renovations, real estate, etc. Include geo-target.

Email List Targeting

- If available, use PSCAA email list to match people on the web who have those same email addresses and then serve them a banner or video ad. Anticipate a ~60% match rate. To be clear: this is a targeting method not us sending an email. Geo-targeting is optional.

Site Retargeting

- Using a PSCAA website pixel, serve ads to people who have been to the PSCAA program page (thereby expressing some level of interest) and then retarget ads to these people to help them convert. Can exclude people who have converted. Geo-targeting is optional.



Puget Sound Clean Air Agency

Wood Smoke Outreach – Secondary Research Report
November 2021

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Overall Audience Data Key Takeaways

| | Target Geography 1 Snohomish County, Arlington, Darrington, Marysville | Target Geography 2 Tacoma-Pierce County Smoke Reduction Zone | Target Geography 3 Lakewood, Auburn/Algona/Pacific, Duwamish Valley | Target Geography 4 Unincorporated King, Pierce, Kitsap and Snohomish |
|--|--|--|---|--|
| Areas with highest % of households using wood as primary heat source | X (Especially Darrington and Arlington) | X (not all areas) | | X (not all areas) |
| Areas with highest % of households below federal poverty level | X | | X | |
| Areas with highest % of households with limited English proficiency | | | X | |
| Areas with highest % of home ownership | X | X | | |
| Internet & Smartphone Penetration | High | High | High | High |
| Most Common Language Besides English | Spanish | Spanish | Spanish | Spanish |
| Negative Health Outcomes | 0 – 2% of pop (average estimate) | 0 – 2% of pop (average estimate) | 0 – 2% of pop (average estimate) | 0 – 2% of pop (average estimate) |

Programs and Geographies:

Wood Stove Program & Clean-Burning Outreach: Priority target geography 1, 2 and 3

Air Quality Burn Ban Outreach/Education: Target geography 1, 2, 3, and 4



Previous Audience Research Key Findings

Motivators

- **Clean burning** – Hotter fires, less wood used = reduced costs, less smoke in house, better wood storage system
- **Wood stoves** – Incentives to offset removal/replacement (for those who are eligible)

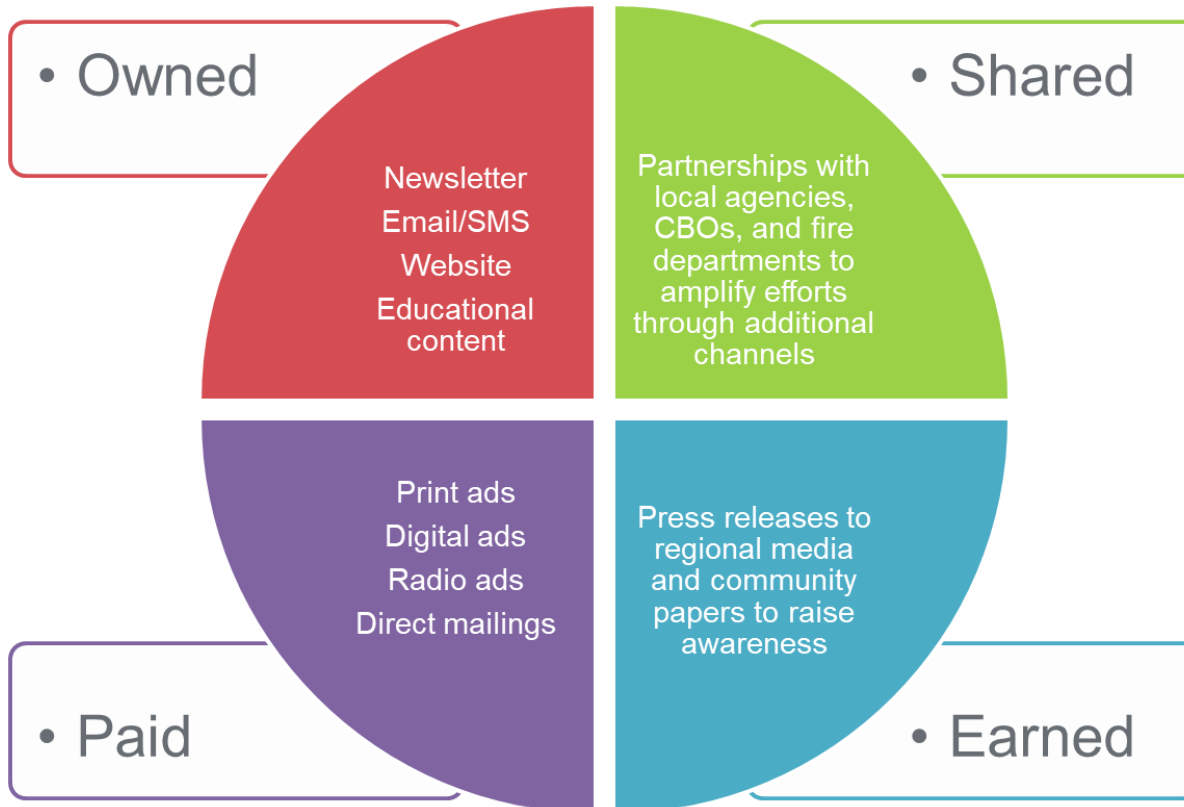
Barriers

- **All** – competing priorities with concerns about air quality, doubts about impact of wood smoke on air quality
- **Clean burning** – lack of knowledge/think doing correctly, lack of time (for wood storage/seasoning)
- **Wood stoves** - less expensive to heat older homes with wood, upfront costs to remove/replace, preference for wood over other heat sources, offers alternative heat source in case of power outage
- **Burn bans** – confusion about rules and misconceptions about what type of burning they mean/who they apply to, perceived lack of enforcement/consequences



Previous Outreach Key Findings

Tactics/channels previously used:



2020-2021 Top Sources for Wood Stove Program:

- Internet
- Heating contractors
- Email
- Word of mouth
- Direct mailing



Target Geography 1

Snohomish County, Arlington, Darrington, Marysville



Overall Key Takeaways

| | Target Geography 1 Snohomish County, Arlington, Darrington, Marysville | Target Geography 2 Tacoma-Pierce County Smoke Reduction Zone | Target Geography 3 Lakewood, Auburn/Algona/Pacific, Duwamish Valley | Target Geography 4 Unincorporated King, Pierce, Kitsap and Snohomish |
|--|--|--|---|--|
| Areas with highest % of households using wood as primary heat source | X (Especially Darrington and Arlington) | X (not all areas) | | X (not all areas) |
| Areas with highest % of households below federal poverty level | X | | X | |
| Areas with highest % of households with limited English proficiency | | | X | |
| Areas with highest % of home ownership | X | X | | |
| Internet & Smartphone Penetration | High | High | High | High |
| Most Common Language Besides English | Spanish | Spanish | Spanish | Spanish |
| Negative Health Outcomes | 0 – 2% of pop (average estimate) | 0 – 2% of pop (average estimate) | 0 – 2% of pop (average estimate) | 0 – 2% of pop (average estimate) |

Programs and Geographies:

Wood Stove Program & Clean-Burning Outreach: Priority target geography 1, 2 and 3

Air Quality Burn Ban Outreach/Education: Target geography 1, 2, 3, and 4



Key Takeaways: Arlington, Darrington, and Marysville

- *Darrington and Arlington have areas with higher percentage of households using wood as primary heating source*
- *Arlington and Marysville are more diverse than Darrington*
- *Besides English, Spanish is the most common language spoken in Arlington and Marysville*
- *Although internet penetration is high in the three cities, but it is lower in Darrington*
- *Homeownership rate in Marysville is higher than in Arlington and Darrington*
- *Marysville includes the Census block with more percentage of households with limited English proficiency out of the three areas*



CAT Tool Data

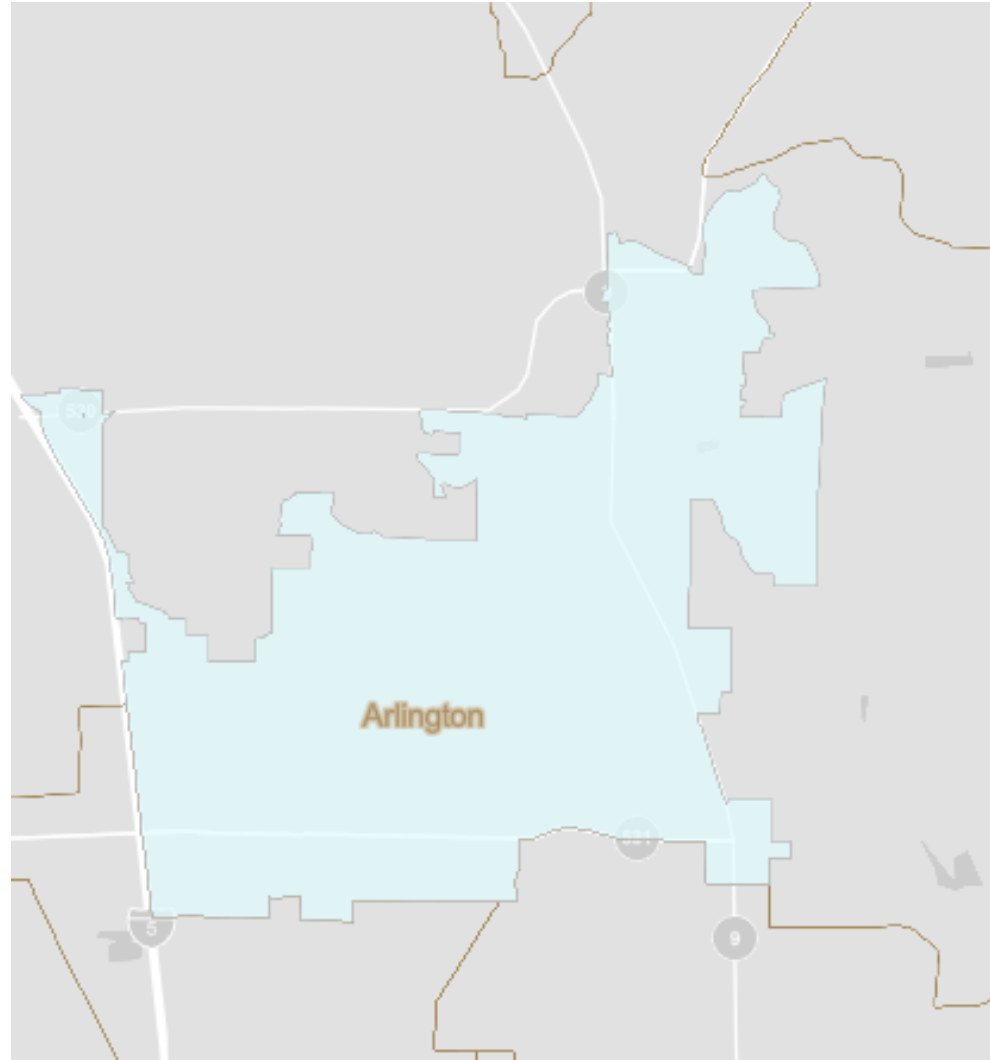
| Arlington | Census Block | | | | | | | | | |
|---|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| % of Households using Wood as Primary Heat Source | 1.1 | 5.1 | 11.2 | 11.8 | 2.1 | 1.8 | 0 | 3 | 3.7 | 5 |
| Asthma Hospitalizations (per million people) | 0 | 455 | 502 | 455 | 455 | 455 | 455 | 455 | 455 | 455 |
| Cardiac Hospitalizations (per million people) | 11,598 | 11,598 | 11,885 | 11,598 | 11,598 | 11,598 | 11,598 | 11,598 | 11,598 | 11,598 |
| COPD Hospitalization (per million people) | 752 | 752 | 640 | 752 | 752 | 752 | 752 | 752 | 752 | 752 |
| Median Income | \$48,889 | \$75,972 | \$50,461 | \$75,417 | \$84,511 | \$86,406 | \$97,857 | \$68,649 | \$41,941 | \$43,640 |
| % Households Below Federal Poverty Level | 16.8 | 20.3 | 10.7 | 12.5 | 1.6 | 3.3 | 5.1 | 3.8 | 11 | 27.3 |
| % Households with Limited English Proficiency | 3.2 | 0 | 4.8 | 4.9 | 1.1 | 0 | 1.5 | 0 | 0 | 0 |

| Darrington | Census Block |
|---|--------------|
| | 1 |
| % of Households using Wood as Primary Heat Source | 23.5 |
| Asthma Hospitalizations (per million people) | 1,165 |
| Cardiac Hospitalizations (per million people) | 17,364 |
| COPD Hospitalization (per million people) | 1,504 |
| Median Income | \$52,500 |
| % Households Below Federal Poverty Level | 20.4 |
| % Households with Limited English Proficiency | 2.7 |

| Marysville | Census Block | | | | | | | | | | | | | | | |
|---|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| % of Households using Wood as Primary Heat Source | 11.9 | 28.3 | 8.9 | 0 | 2.4 | 0 | 0 | 2 | 4.6 | 0 | 8.7 | 4.2 | 0 | 3.5 | 1 | 1.5 |
| Asthma Hospitalizations (per million people) | 527 | 330 | 525 | 369 | 369 | 369 | 369 | 369 | 369 | 369 | 369 | 369 | 369 | 369 | 369 | 369 |
| Cardiac Hospitalizations (per million people) | 12,147 | 9,771 | 12,171 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 | 13,712 |
| COPD Hospitalization (per million people) | 563 | 368 | 563 | 552 | 552 | 552 | 552 | 552 | 552 | 552 | 552 | 552 | 552 | 552 | 552 | 552 |
| Median Income | \$69,208 | \$97,841 | \$65,938 | \$51,157 | \$37,500 | \$39,702 | \$35,125 | \$42,045 | \$37,417 | \$41,462 | \$51,122 | \$112,059 | \$59,844 | \$41,694 | \$65,170 | \$66,950 |
| % Households Below Federal Poverty Level | 11.4 | 16.6 | 5.3 | 15.3 | 33.2 | 19.5 | 8.1 | 18.8 | 21.4 | 14.4 | 15.1 | 13.6 | 12.9 | 14.4 | 1.4 | 11 |
| % Households with Limited English Proficiency | 0 | 0 | 3.4 | 14 | 0 | 1 | 1 | 5 | 3 | 0 | 4 | 0 | 4 | 8 | 0 | 2.5 |

Arlington City

Census Geographic Breakdown



Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5302585&tid=ACSDP5Y2019.DP05>



Arlington City

Race and Ethnicity

| Total population | 19,483 | |
|--|--------|--------|
| White alone | 15,237 | 78.20% |
| Black or African American alone | 282 | 1.40% |
| American Indian and Alaska Native alone | 286 | 1.50% |
| Asian alone | 785 | 4% |
| Native Hawaiian and Other Pacific Islander alone | 70 | 0.40% |
| Some other race alone | 20 | 0.10% |
| Two or more races | 929 | 4.80% |
| Hispanic or Latino (of any race) | 1,874 | 9.60% |

Median age: 38.4

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5302585&tid=ACSDP5Y2019.DP05>



Arlington City Top Languages

| Total population | 17,597 | |
|-----------------------------|--------|--------|
| 1. English | 15,976 | 90.79% |
| 2. Spanish | 869 | 4.94% |
| 3. Tagalog (incl. Filipino) | 135 | 0.77% |
| 4. Russian | 97 | 0.55% |
| 5. Polish | 79 | 0.45% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5302585&tid=ACSDT5Y2015.B16001>



Arlington City

Computer and Internet Subscriptions

| | | |
|---|--------------|--------|
| Total households | 7,348 | |
| Households with Internet | 6,678 | 90.88% |
| Households with Desktop or Laptop | 6,141 | 83.57% |
| Households with Tablet or other Portable Wireless Computer | 4,579 | 62.3% |
| Households with Smartphone | 6,082 | 82.8% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=1600000US5302585&tid=ACSST5Y2019.S2801>



Arlington City Housing

| | |
|---|--------------|
| Total households | 7,348 |
| Home ownership Rate | 62.70% |
| Housing Type | |
| 1-unit structures | 73.70% |
| 2 or more unit structures | 24.00% |
| Mobile homes and all other types of units | 2.20% |

Source: <https://data.census.gov/cedsci/table?text=S1101&g=1600000US5302585&tid=ACSST5Y2019.S1101>



Darrington

Census Geographic Breakdown



Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5316690&tid=ACSDP5Y2019.DP05> (2015 census data)



Darrington

Race and Ethnicity

| Total population | 1,088 | |
|--|-------|-------|
| White alone | 877 | 80.6% |
| Black or African American alone | 10 | 0.9% |
| American Indian and Alaska Native alone | 25 | 2.3% |
| Asian alone | 0 | 0% |
| Native Hawaiian and Other Pacific Islander alone | 0 | 0% |
| Some other race alone | 12 | 1.1% |
| Two or more races | 69 | 6.3% |
| Hispanic or Latino (of any race) | 95 | 8.7% |

Median age: 47.5

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5316690&tid=ACSDP5Y2019.DP05> (2015 census data)



Darrington

Top Languages

| Total population | 1,381 | |
|---------------------------|-------|--------|
| 1. English | 1,346 | 97.47% |
| 2. German | 14 | 1.01% |
| 3. Spanish | 10 | 0.72% |
| 4. Hebrew | 8 | 0.58% |
| 5. Scandinavian languages | 3 | 0.22% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5316690&tid=ACSDT5Y2015.B16001> (2015 census data)



Darrington

Computer and Internet Subscriptions

| | | |
|--|------------|-------|
| Total households | 519 | |
| Households with Internet | 387 | 74.6% |
| Households with Desktop or Laptop | 320 | 61.7% |
| Households with Tablet or other Portable Wireless Computer | 207 | 39.9% |
| Households with Smartphone | 376 | 72.4% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=1600000US5316690&tid=ACSST5Y2019.S2801>



Darrington Housing

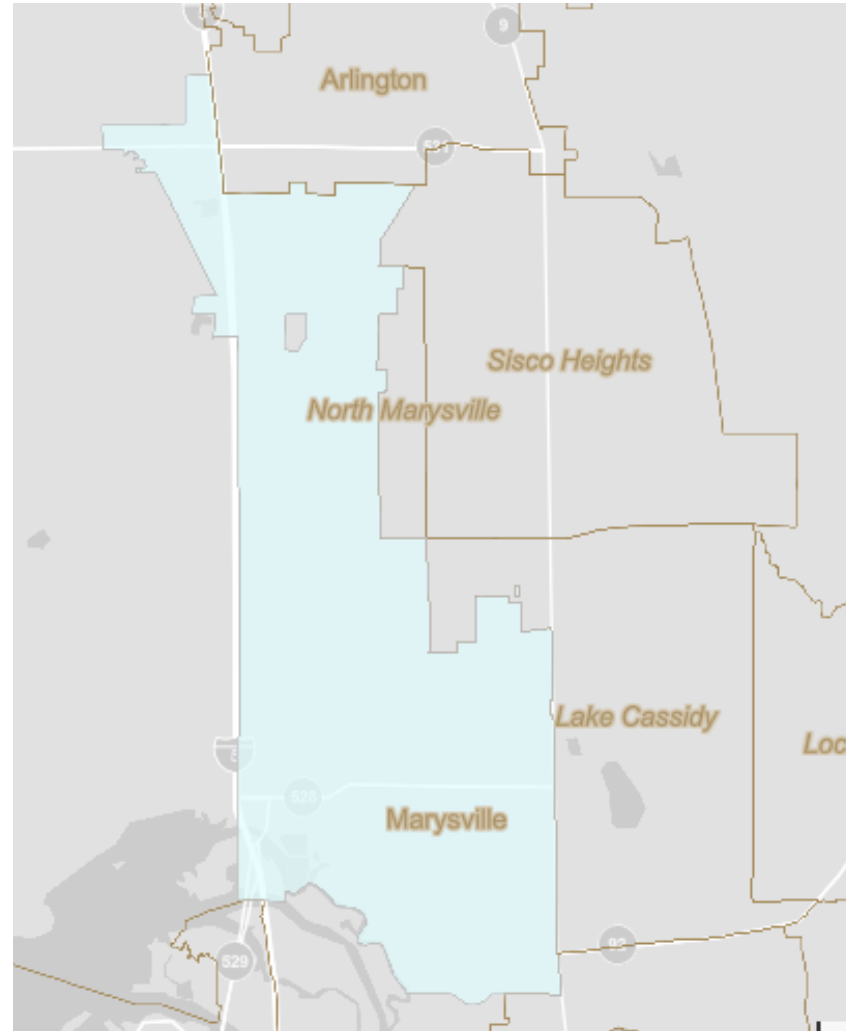
| | |
|---|------------|
| Total households | 519 |
| Home ownership Rate | 60.3% |
| Housing Type | |
| 1-unit structures | 72.4% |
| 2 or more unit structures | 7.5% |
| Mobile homes and all other types of units | 20% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=1600000US5316690&tid=ACSST5Y2019.S1101>



Marysville

Census Geographic Breakdown



Source: <https://data.census.gov/cedsci/table?text=dp05&g=1600000US5343955&tid=ACSDP1Y2019.DP05>



Marysville

Race and Ethnicity

| Total population | 70,306 | |
|--|--------|-------|
| White alone | 48,605 | 69.1% |
| Black or African American alone | 1,434 | 2% |
| American Indian and Alaska Native alone | 1,894 | 2.7% |
| Asian alone | 3,585 | 5.1% |
| Native Hawaiian and Other Pacific Islander alone | 636 | 0.9% |
| Some other race alone | 688 | 1% |
| Two or more races | 3,157 | 4.5% |
| Hispanic or Latino (of any race) | 10,307 | 14.7% |

Median age: 37.1

Source: <https://data.census.gov/cedsci/table?text=dp05&g=1600000US5343955&tid=ACSDP1Y2019.DP05>



Marysville

Top Languages

| Total population | 59,085 | |
|---------------------------|--------|--------|
| 1. English | 49,874 | 84.41% |
| 2. Spanish | 4,128 | 6.99% |
| 3. Other Slavic languages | 726 | 1.23% |
| 4. Russian | 720 | 1.22% |
| 5. Tagalog | 717 | 1.21% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5343955&tid=ACSDT5Y2015.B16001> (2015 census data)



Marysville

Computer and Internet Subscriptions

| | | |
|---|---------------|-------|
| Total households | 24,496 | |
| Households with Internet | 23,065 | 94.2% |
| Households with Desktop or Laptop | 21,554 | 88% |
| Households with Tablet or other Portable Wireless Computer | 18,721 | 76.4% |
| Households with Smartphones | 22,533 | 92.0% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=1600000US5343955&tid=ACSST1Y2019.S2801>



Marysville Housing

| | |
|---|---------------|
| Total households | 24,496 |
| Home ownership Rate | 71.60% |
| Housing Type | |
| 1-unit structures | 78.20% |
| 2 or more unit structures | 15.50% |
| Mobile homes and all other types of units | 6.30% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=1600000US5343955&tid=ACSST1Y2019.S1101>



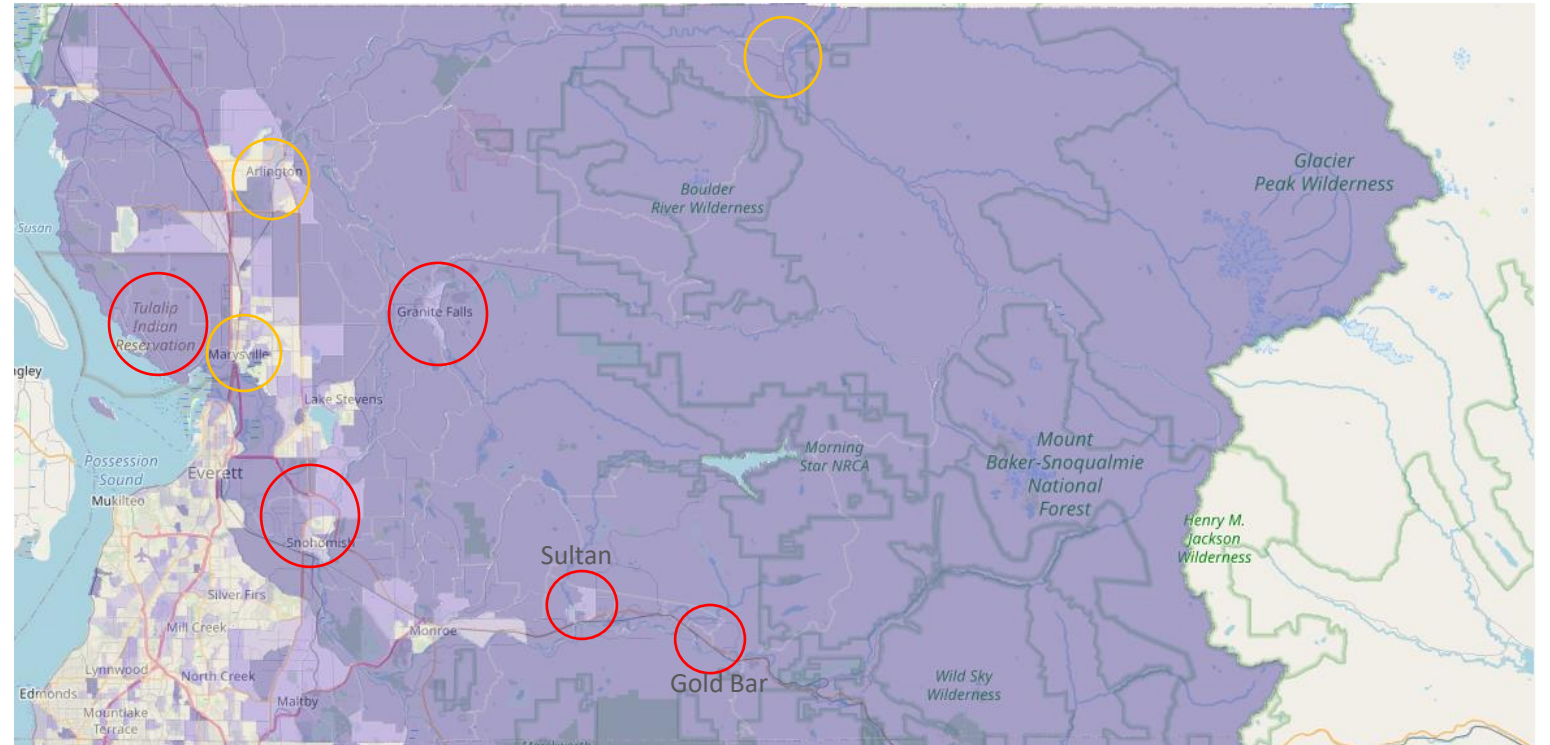
Snohomish County



CAT Tool Key Areas

Areas with high percentage of households using wood as primary heat source:

- Gold Bar
- Sultan
- North Snohomish
- East of Everett
- Granite Falls
- Tulalip Indian Reservation



○ Additional priority areas

○ Marysville, Arlington, and Darrington

Snohomish County

Race and Ethnicity

| Total population | 822,083 | |
|--|---------|--------|
| White alone | 557,507 | 67.82% |
| Black or African American alone | 27,267 | 3.32% |
| American Indian and Alaska Native alone | 8,483 | 1.03% |
| Asian alone | 97,895 | 11.91% |
| Native Hawaiian and Other Pacific Islander alone | 3,300 | 0.40% |
| Some other race alone | 2,184 | 0.27% |
| Two or more races | 38,280 | 4.66% |
| Hispanic or Latino (of any race) | 87,167 | 10.60% |

Source: <https://data.census.gov/cedsci/table?text=dp05&g=0500000US53061&tid=ACSDP1Y2019.DP05>

Median age: 38.2



Snohomish County Top Languages

| Total population | 770,021 | |
|--|---------|--------|
| 1. English | 594,112 | 77.16% |
| 2. Spanish | 53,523 | 6.95% |
| 3. Tagalog (incl. Filipino) | 13,651 | 1.77% |
| 4. Chinese (incl. Mandarin, Cantonese) | 13,069 | 1.70% |
| 5. Russian | 10,368 | 1.35% |

Source: <https://data.census.gov/cedsci/table?text=B16001&g=0500000US53061&tid=ACSDT1Y2019.B16001>



Snohomish County

Computer and Internet Subscriptions

| | | |
|---|----------------|--------|
| Total households | 299,827 | |
| Households with Internet | 279,562 | 93.20% |
| Households with Desktop or Laptop | 259,929 | 86.70% |
| Households with Tablet or other Portable Wireless Computer | 211,215 | 70.40% |
| Households with Smartphone | 272,537 | 90.9% |

Source: <https://data.census.gov/cedsci/table?q=S2801&text=S2801&g=0500000US53061&tid=ACSST1Y2019.S2801>



Snohomish County Housing

| | |
|---|----------------|
| Total households | 299,827 |
| Home ownership Rate | 66.70% |
| Housing Type | |
| 1-unit structures | 67.10% |
| 2 or more unit structures | 27.70% |
| Mobile homes and all other types of units | 5.20% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=0500000US53061&tid=ACSST1Y2019.S1101>



Target Geography 2

Tacoma-Pierce County Smoke Reduction Zone (includes Tacoma, Steilacoom, University Place, Lakewood, Spanaway, Frederickson, Puyallup, Fife, Milton and Edgewood)



Key Takeaways: Tacoma-Pierce County Smoke Reduction Zone

- *Areas near Puyallup and Summit have high percentage of households using wood as primary heating source*
- *Frederickson and Fife include Census blocks with more percentage of households with limited English proficiency out of the three areas*
- *Besides English, Spanish is the most common language spoken in the region (6.44 %) followed by Korean (1.44%)*
- *Internet penetration is high (above 80 percent)*
- *Homeownership rate is around 60 percent*



CAT Tool Data

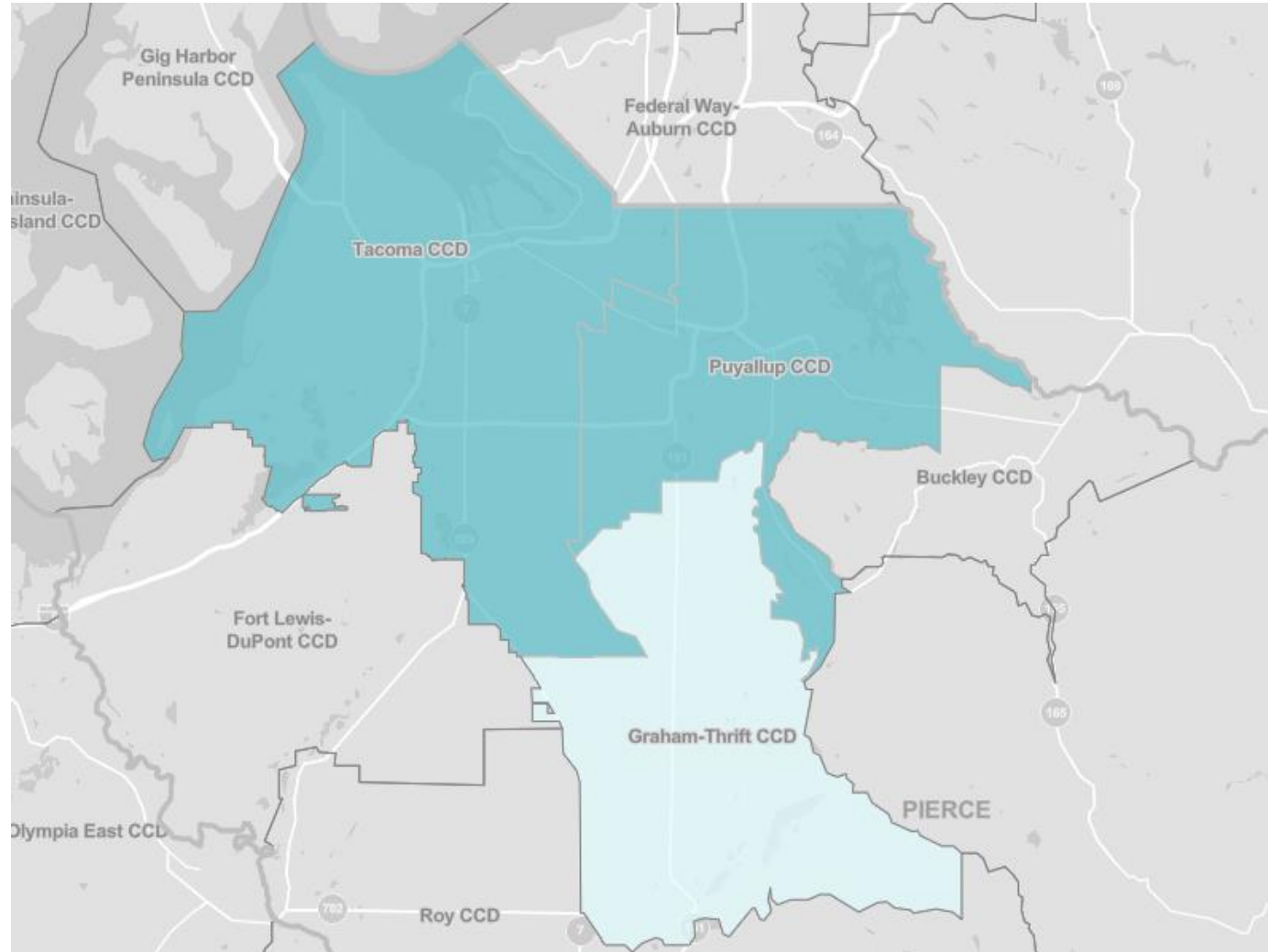
| Tacoma Smoke Reduction Zone | Census Block* | | | | | | | | | | |
|---|---------------|-------------|------------------|------------|--------------|--------------|------------|------------|-----------------------|-----------------|-----------|
| | Spanaway (1) | Allison (2) | Frederickson (3) | Summit (4) | Puyallup (5) | Edgewood (7) | Tacoma (8) | Milton (9) | University Place (10) | Steilacoom (10) | Fife (11) |
| % of Households using Wood as Primary Heat Source | 10.3 | 10.4 | 7 | 11.7 | 8.2 | 0 | 7.9 | 6.7 | 5.7 | 3.2 | 3.9 |
| Asthma Hospitalizations (per million people) | 987 | 830 | 826 | 838 | 821 | 756 | 646 | 607 | 697 | 983 | 884 |
| Cardiac Hospitalizations (per million people) | 15,979 | 13,571 | 15,087 | 13,912 | 17,567 | 16,013 | 12,648 | 19,469 | 12,879 | 11,095 | 15,075 |
| COPD Hospitalization (per million people) | 1,966 | 1,490 | 1,406 | 1,514 | 1,650 | 1,296 | 1,008 | 1,376 | 1,018 | 690 | 1,675 |
| Median Income | \$68,125 | \$71,375 | \$85,432 | \$62,500 | \$80,000 | \$83,170 | \$118,000 | \$59,781 | \$67,143 | \$86,563 | \$71,250 |
| % Households Below Federal Poverty Level | 9.5 | 1.5 | 6.4 | 12 | 0 | 8.2 | 7 | 12.1 | 3.8 | 1.6 | 7.7 |
| % Households with Limited English Proficiency | 0 | 5.5 | 6.8 | 1.2 | 0 | 0 | 3.7 | 0 | 0 | 3.2 | 7.7 |

*Census blocks with highest % of households using wood as primary heat source near desired cities. See appendix for more details



Tacoma-Pierce County Smoke Reduction Zone

Census Geographic Breakdown



Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=0600000US5305391280,5305392672,5305393376&tid=ACSDP5Y2019.DP05>



Tacoma-Pierce County Smoke Reduction Zone

Race and Ethnicity

| Total population | 724,478 | |
|--|---------|-------|
| White alone | 465,008 | 64.2% |
| Black or African American alone | 44,514 | 6.1% |
| American Indian and Alaska Native alone | 51,865 | 7.2% |
| Asian alone | 50,121 | 6.9% |
| Native Hawaiian and Other Pacific Islander alone | 11,179 | 1.5% |
| Some other race alone | 1,342 | 0.2% |
| Two or more races | 53,839 | 7.4% |
| Hispanic or Latino (of any race) | 83,164 | 11.5% |

Median age: 36.1

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=0600000US5305391280,5305392672,5305393376&tid=ACSDP5Y2019.DP05>



Tacoma-Pierce County Smoke Reduction Zone

Top Languages

| Total population | 634,551 | |
|------------------|---------|--------|
| 1. English | 530,577 | 83.61% |
| 2. Spanish | 40,873 | 6.44% |
| 3. Korean | 9,112 | 1.44% |
| 4. Tagalog | 6,544 | 1.03% |
| 5. Vietnamese | 6,149 | 0.97% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=0600000US5305391280,5305392672,5305393376&tid=ACSDT5Y2015.B16001> (2015 census data)



Tacoma-Pierce County Smoke Reduction Zone

Computer and Internet Subscriptions

| | | |
|--|----------------|-------|
| Total households | 270,002 | |
| Households with Internet | 235,753 | 87.3% |
| Households with Desktop or Laptop | 224,445 | 83.2% |
| Households with Tablet or other Portable Wireless Computer | 174,749 | 64.7% |
| Households with Smartphone | 226,163 | 83.8% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=0600000U5305391280,5305392672,5305393376&tid=ACSST5Y2019.S2801>



Tacoma-Pierce County Smoke Reduction Zone

Housing

| | |
|---|----------------|
| Total households | 270,002 |
| Home ownership Rate | 60.3% |
| Housing Type | |
| 1-unit structures (single family) | 68.0% |
| 2 or more unit structures | 26.0% |
| Mobile homes and all other types of units | 4.90% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=0600000US5305391280,5305392672,5305393376&tid=ACSST5Y2019.S1101>



Target Geography 3

Duwamish Valley, Auburn/Algona/Pacific, Lakewood



Key Takeaways: Duwamish Valley, Auburn/Algona/Pacific, Lakewood

- *Algona and Lakewood have high percentage of households using wood as primary heating source*
- *This target geography includes many Census blocks with more than 30 percent of households with limited English proficiency out of the three areas*
- *Besides English, Spanish is the most common language spoken in the region. Other languages follow, depending on the area. See detail in next slides for breakdown*
- *Internet penetration is high (above 80 percent)*
- *Homeownership rate in this areas is lower than in the other target geographies (40 – 50 percent)*

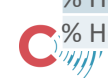


CAT Tool Data

| Duwamish Valley | Census Block | | | | | | | |
|---|--------------|----------|----------|----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| % of Households using Wood as Primary Heat Source | 0 | 0 | 0 | 0 | 0 | 0 | 1.9 | 1.1 |
| Asthma Hospitalizations (per million people) | 1,274 | 1,333 | 1,304 | 1,325 | 1,333 | 1,205 | 1,182 | 1,104 |
| Cardiac Hospitalizations (per million people) | 10,928 | 11,061 | 11,289 | 11,118 | 11,061 | 11,973 | 12,888 | 13,662 |
| COPD Hospitalization (per million people) | 800 | 750 | 845 | 773 | 750 | 993 | 947 | 1045 |
| Median Income | \$63,077 | \$48,846 | \$39,706 | \$52,109 | \$30,804 | \$27,878 | \$48,281 | \$52,375 |
| % Households Below Federal Poverty Level | 2.9 | 20.4 | 13.8 | 33.3 | 35.9 | 12.8 | 7.7 | 5.6 |
| % Households with Limited English Proficiency | 0 | 0 | 16.3 | 19.1 | 9 | 0 | 14.8 | 5 |

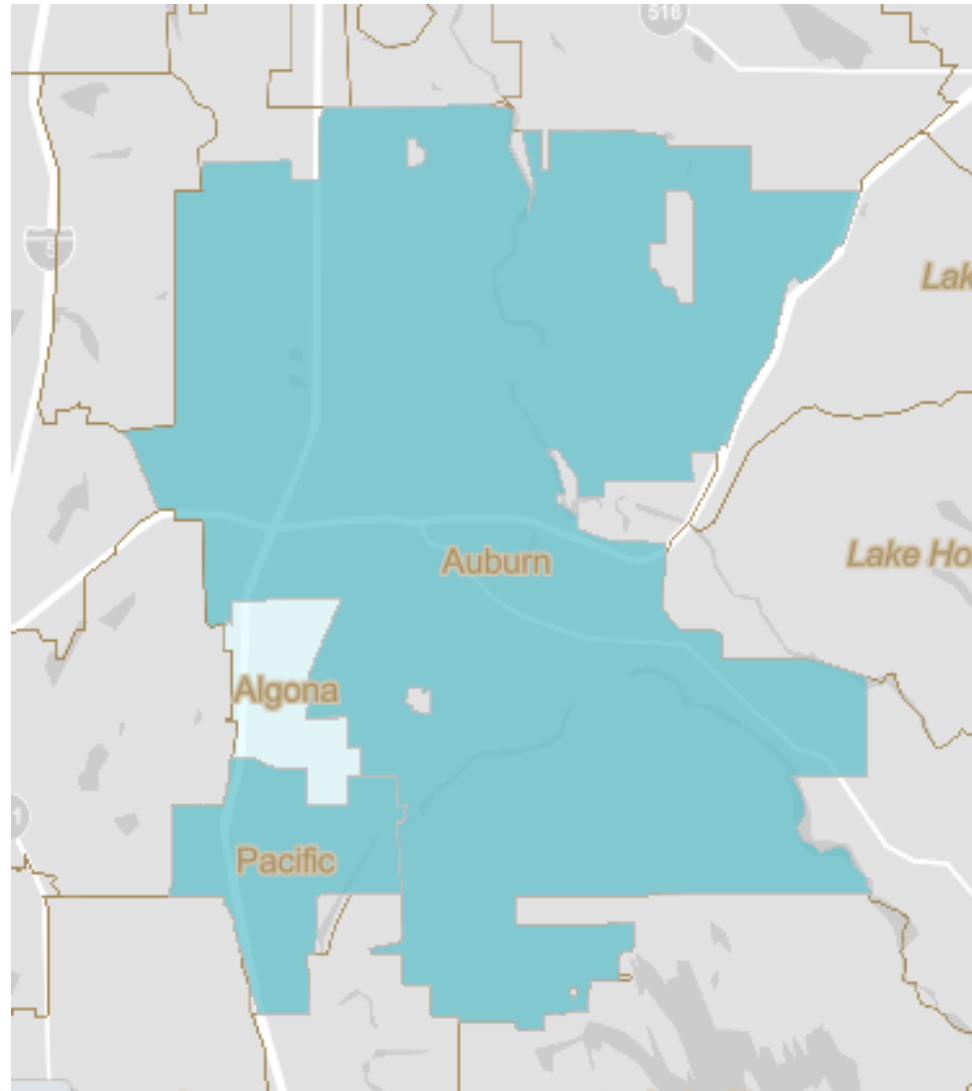
| Auburn/Algona/Pacific | Census Block | | | | | | | | | | | | | | | | |
|---|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| % of Households using Wood as Primary Heat Source | 3 | 3.2 | 1 | 5.1 | 3.9 | 6.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.1 | 1.3 | 3.1 | 1.1 |
| Asthma Hospitalizations (per million people) | 1,088 | 1,123 | 766 | 997 | 581 | 762 | 1,024 | 1,024 | 1,024 | 1,024 | 1,024 | 910 | 1,024 | 1,024 | 1,024 | 910 | 672 |
| Cardiac Hospitalizations (per million people) | 16,780 | 17,021 | 14,678 | 16,193 | 13,471 | 14,896 | 17,128 | 17,128 | 17,128 | 17,128 | 17,128 | 15,951 | 17,128 | 17,128 | 17,128 | 15,676 | 12,654 |
| COPD Hospitalization (per million people) | 2422 | 2545 | 1702 | 2247 | 1267 | 1620 | 2111 | 2111 | 2111 | 2111 | 2111 | 1842 | 2111 | 2111 | 2111 | 1779 | 1088 |
| Median Income | \$62,841 | \$49,352 | \$44,853 | \$51,859 | \$64,837 | \$39,196 | \$35,913 | \$51,288 | \$29,167 | \$47,220 | \$45,135 | \$106,442 | \$60,104 | \$44,063 | \$34,444 | \$29,726 | \$53,594 |
| % Households Below Federal Poverty Level | 0 | 16.4 | 12.4 | 13 | 8.3 | 19.9 | 13.2 | 8.3 | 29 | 19.8 | 15.5 | 3.5 | 15.7 | 14.5 | 33 | 18.4 | 13.7 |
| % Households with Limited English Proficiency | 0 | 3 | 11 | 7 | 4 | 12 | 13 | 4 | 9 | 12 | 15 | 1 | 2 | 0 | 4 | 5 | 6 |

| Lakewood | Census Block | | | | | | | | | |
|---|--------------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| % of Households using Wood as Primary Heat Source | 0 | 0 | 0 | 1.6 | 0 | 0.7 | 8 | 0 | 0 | 0 |
| Asthma Hospitalizations (per million people) | 1,306 | 1,306 | 1,306 | 1,306 | 1,306 | 1,071 | 910 | 910 | 1,009 | 1,019 |
| Cardiac Hospitalizations (per million people) | 17,767 | 17,767 | 17,767 | 17,767 | 17,767 | 15,059 | 13,218 | 13,218 | 20,467 | 21,192 |
| COPD Hospitalization (per million people) | 2,519 | 2,519 | 2,519 | 2,519 | 2,519 | 1,972 | 1,600 | 1,600 | 7,386 | 7,964 |
| Median Income | \$29,232 | \$26,021 | \$23,761 | \$29,188 | \$69,848 | \$111,797 | \$25,429 | \$41,316 | \$21,916 | \$21,900 |
| % Households Below Federal Poverty Level | 32.6 | 26 | 48.2 | 20.1 | 4.4 | 0 | 19.4 | 20.3 | 40.9 | 42.5 |
| % Households with Limited English Proficiency | 10 | 7 | 15 | 13 | 0 | 0 | 0 | 20 | 12 | 0 |



Auburn/Algona/Pacific

Census Geographic Breakdown



Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5301290,5303180,5352495&tid=ACSDP5Y2019.DP05>



Auburn/Algona/Pacific

Race and Ethnicity

| Total population | 90,560 | |
|--|--------|--------|
| White alone | 48,730 | 53.81% |
| Black or African American alone | 5,196 | 5.74% |
| American Indian and Alaska Native alone | 1,786 | 1.97% |
| Asian alone | 10,734 | 11.85% |
| Native Hawaiian and Other Pacific Islander alone | 1,677 | 1.85% |
| Some other race alone | 273 | 0.30% |
| Two or more races | 6,501 | 7.18% |
| Hispanic or Latino (of any race) | 15,663 | 17.30% |

Average Median Age: 32.5

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5301290,5303180,5352495&tid=ACSDP5Y2019.DP05>



Auburn/Algona/Pacific Top Languages

| Total population | 78,346 | |
|-----------------------------------|--------|--------|
| 1. English | 57,083 | 72.86% |
| 2. Spanish | 8,327 | 10.63% |
| 3. Other Slavic languages | 1,878 | 2.40% |
| 4. Other Pacific Island languages | 1,636 | 2.09% |
| 5. Russian | 1,505 | 1.92% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5352495&tid=ACSDT5Y2015.B16001> (2015 census data)



Auburn/Algona/Pacific

Computer and Internet Subscriptions

| | | |
|--|---------------|--------|
| Total households | 32,509 | |
| Households with Internet | 29,060 | 89.39% |
| Households with Desktop or Laptop | 26,580 | 81.76% |
| Households with Tablet or other Portable Wireless Computer | 20,517 | 63.11% |
| Households with Smartphone | 26,979 | 83.0% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=1600000US5301290,5303180,5352495&tid=ACSST5Y2019.S2801>



Auburn/Algona/Pacific Housing

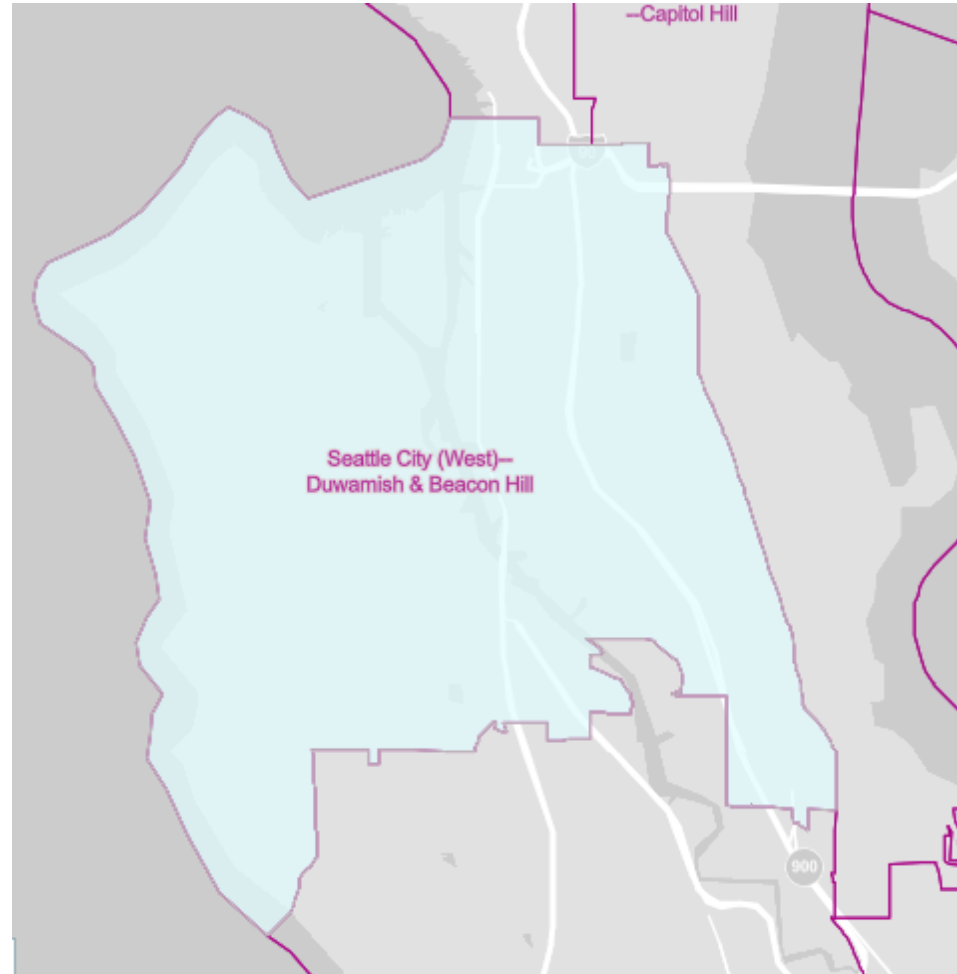
| | |
|---|---------------|
| Total households | 32,509 |
| Home ownership Rate | 57.01% |
| Housing Type | |
| 1-unit structures | 33.77% |
| 2 or more unit structures | 18.90% |
| Mobile homes and all other types of units | 4.34% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=1600000US5301290,5303180,5352495&tid=ACSST5Y2019.S1101>



Duwamish Valley

Census Geographic Breakdown



Source: <https://data.census.gov/cedsci/table?text=dp05&g=7950000US5311605&tid=ACSDP1Y2019.DP05>



Duwamish Valley

Race and Ethnicity

| Total population | 145,800 | |
|--|----------------|-------|
| White alone | 79,258 | 54.4% |
| Black or African American alone | 15,869 | 10.9% |
| American Indian and Alaska Native alone | 2,187 | 1.5% |
| Asian alone | 23,881 | 16.4% |
| Native Hawaiian and Other Pacific Islander alone | 1,853 | 1.3% |
| Some other race alone | 0 | 0% |
| Two or more races | 10,309 | 7.1% |
| Hispanic or Latino (of any race) | 12,443 | 8.5% |

Median age: 39.5

Source: <https://data.census.gov/cedsci/table?text=dp05&g=7950000US5311605&tid=ACSDP1Y2019.DP05>



Duwamish Valley

Top Languages

| Total population | 136,725 | |
|---|---------|--------|
| 1. English | 100,942 | 73.83% |
| 2. Spanish | 8,018 | 5.86% |
| 3. Chinese (incl. Mandarin, Cantonese) | 7,630 | 5.58% |
| 4. Amharic, Somali, or other Afro-Asiatic languages | 4,888 | 3.58% |
| 5. Vietnamese | 3,985 | 2.91% |

Source: <https://data.census.gov/cedsci/table?text=dp05&g=7950000US5311605&tid=ACSDP1Y2019.DP05>



Duwamish Valley

Computer and Internet Subscriptions

| | | |
|---|---------------|-------|
| Total households | 62,075 | |
| Households with Internet | 57,863 | 93.2% |
| Households with Desktop or Laptop | 52,874 | 85.2% |
| Households with Tablet or other Portable Wireless Computer | 44,639 | 71.9% |
| Households with Smartphone | 55,960 | 90.1% |

Source: <https://data.census.gov/cedsci/table?q=S2801&text=S2801&g=7950000US5311605&tid=ACSS1Y2019.S2801>



Duwamish Valley Housing

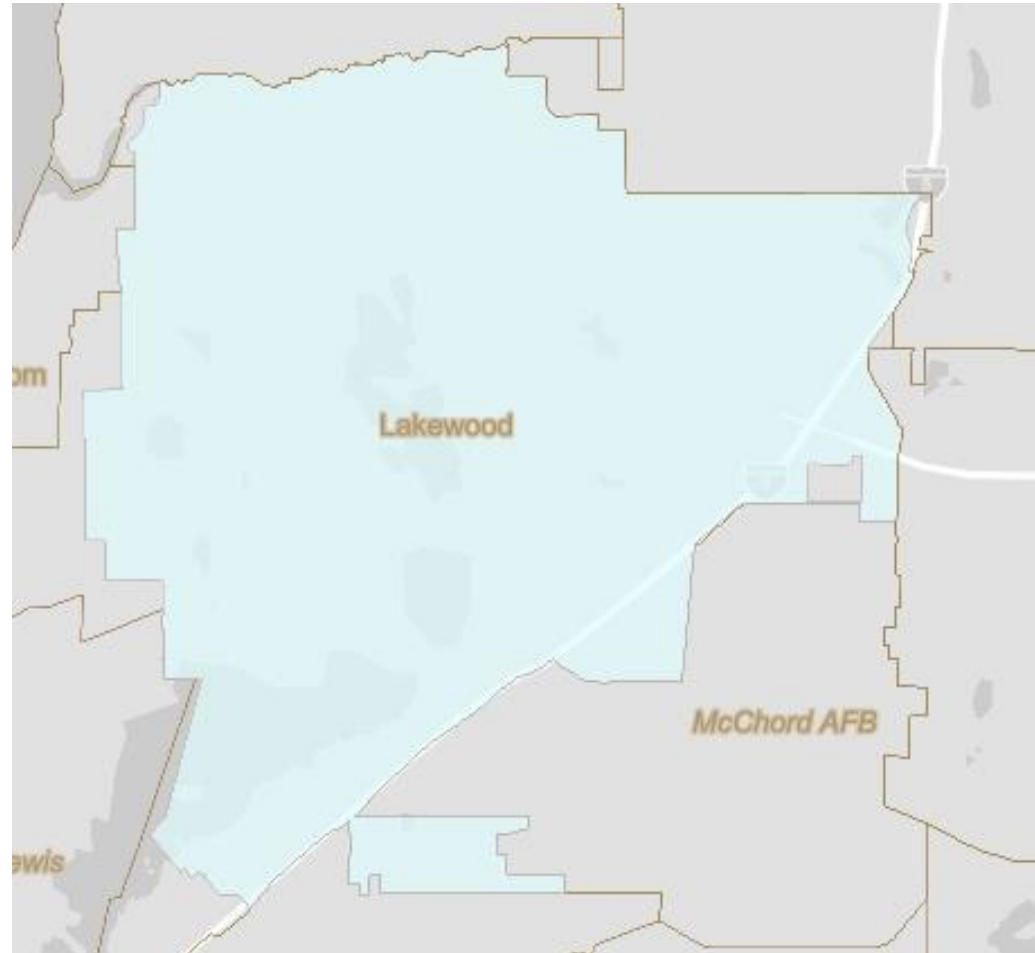
| | |
|---|---------------|
| Total households | 62,075 |
| Home ownership Rate | 55.20% |
| Housing Type | |
| 1-unit structures | 65.50% |
| 2 or more unit structures | 33.70% |
| Mobile homes and all other types of units | 0.70% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=7950000US5311605&tid=ACSST1Y2019.S1101>



Lakewood

Census Geographic Breakdown



Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5338038&tid=ACSDP5Y2019.DP05>



Lakewood

Race and Ethnicity

| | | |
|--|---------------|-------|
| Total population | 60,111 | |
| White alone | 30,330 | 50.5% |
| Black or African American alone | 7,305 | 12.2% |
| American Indian and Alaska Native alone | 643 | 1.1% |
| Asian alone | 5,152 | 8.6% |
| Native Hawaiian and Other Pacific Islander alone | 1,389 | 2.3% |
| Some other race alone | 59 | 0.1% |
| Two or more races | 5,053 | 8.4% |
| Hispanic or Latino (of any race) | 10,180 | 16.9% |

Median age: 36

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5338038&tid=ACSDP5Y2019.DP05>



Lakewood

Top Languages

| Total population | 54,854 | |
|-----------------------------------|--------|--------|
| 1. English | 41,585 | 75.81% |
| 2. Spanish | 6,296 | 11.48% |
| 3. Korean | 1,503 | 2.74% |
| 4. Tagalog | 1,334 | 2.43% |
| 5. Other Pacific Island languages | 945 | 1.72% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5338038&tid=ACSDT5Y2015.B16001>



Lakewood

Computer and Internet Subscriptions

| | | |
|---|---------------|-------|
| Total households | 24,725 | |
| Households with Internet | 21,050 | 85.1% |
| Households with Desktop or Laptop | 19,333 | 78.2% |
| Households with Tablet or other Portable Wireless Computer | 14,744 | 59.6% |
| Households with Smartphone | 20,133 | 81.4% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=1600000US5338038&tid=ACSST5Y2019.S2801>



Lakewood Housing

| | |
|---|---------------|
| Total households | 24,725 |
| Home ownership Rate | 43.40% |
| Housing Type | |
| 1-unit structures | 53.50% |
| 2 or more unit structures | 41.10% |
| Mobile homes and all other types of units | 5.40% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=1600000US5338038&tid=ACSST5Y2019.S1101>



Target Geography 4

Unincorporated King, Pierce, Snohomish and Kitsap counties



Key Takeaways:

- *Besides English, Spanish is the most common language spoken in all counties*
- *Internet and smartphone penetration is high in all counties (above 90 percent)*
- *Homeownership rate in King County is lower than in Pierce and Kitsap*
- *The northwest of Pierce County appears to have many communities in unincorporated areas with high percentage of households using wood as primary heat source*



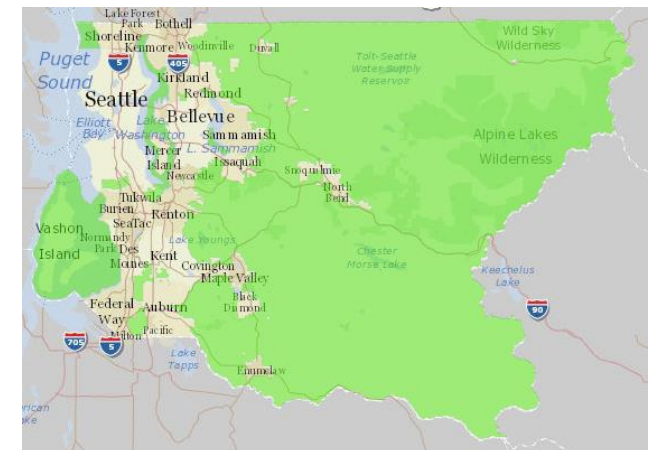
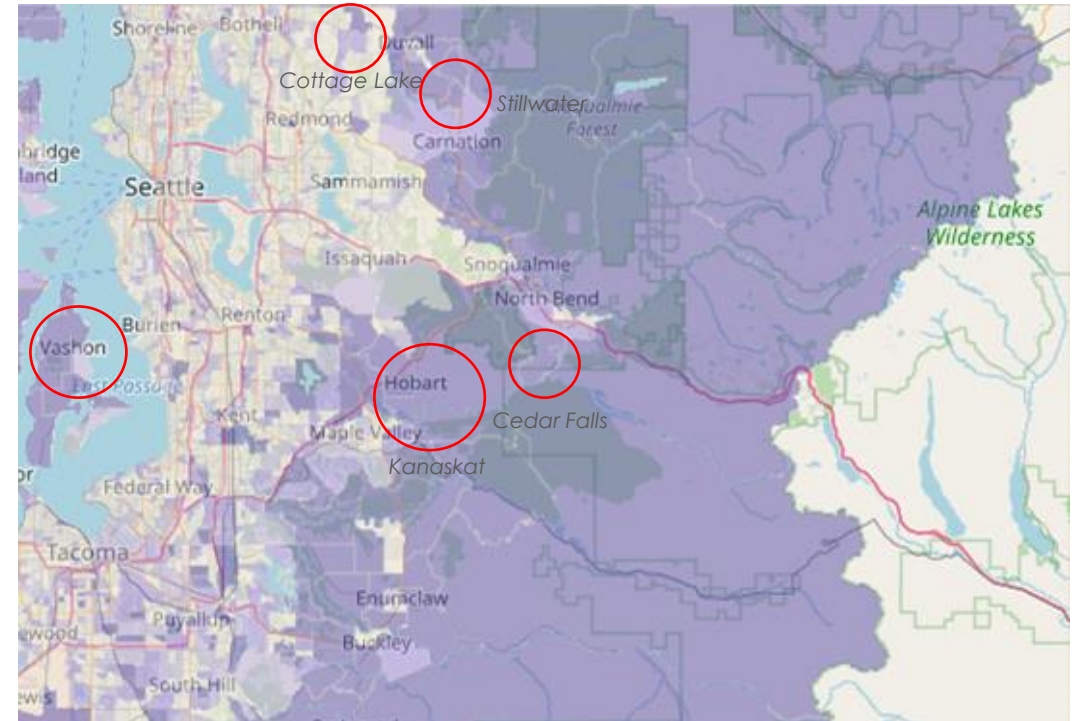
Unincorporated King County



Unincorporated King County

Communities with high percentage of households using wood as primary heat source:

- *Hobart / Kanaskat*
- *Vashon / Burton*
- *Cottage Lake*
- *Stillwater*
- *Cedar Falls*



Unincorporated King County (green)



King County

Race and Ethnicity

| Total population | 2,252,782 | |
|--|-----------|-------|
| White alone | 1,302,544 | 57.8% |
| Black or African American alone | 147,822 | 6.6% |
| American Indian and Alaska Native alone | 13,321 | 0.6% |
| Asian alone | 424,590 | 18.9% |
| Native Hawaiian and Other Pacific Islander alone | 15,702 | 0.7% |
| Some other race alone | 6,574 | 0.3% |
| Two or more races | 119,587 | 5.3% |
| Hispanic or Latino (of any race) | 222,642 | 9.9% |

Median age: 36.9

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=0500000US53033&tid=ACSDP1Y2019.DP05>



King County Top Languages

| Total population | 2,125,383 | |
|---|-----------|--------|
| 1. English | 1,499,312 | 70.54% |
| 2. Spanish | 154,437 | 7.27% |
| 3. Chinese (incl. Mandarin, Cantonese) | 99,096 | 4.66% |
| 4. Vietnamese | 41,373 | 1.95% |
| 5. Amharic, Somali, or other Afro-Asiatic languages | 35,080 | 1.65% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=0500000US53033&tid=ACSDT1Y2019.B16001>



King County

Computer and Internet Subscriptions

| | | |
|---|----------------|-------|
| Total households | 907,761 | |
| Households with Internet | 850,778 | 93.7% |
| Households with Desktop or Laptop | 804,755 | 88.7% |
| Households with Tablet or other Portable Wireless Computer | 641,733 | 70.7% |
| Households with Smartphone | 840,433 | 92.6% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=05000000US53033&tid=ACSST1Y2019.S2801>



King County Housing

| | |
|---|----------------|
| Total households | 907,761 |
| Home ownership Rate | 56.3% |
| Housing Type | |
| 1-unit structures | 58% |
| 2 or more unit structures | 40.3% |
| Mobile homes and all other types of units | 1.7% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=0500000US53033&tid=ACSST1Y2019.S1101>



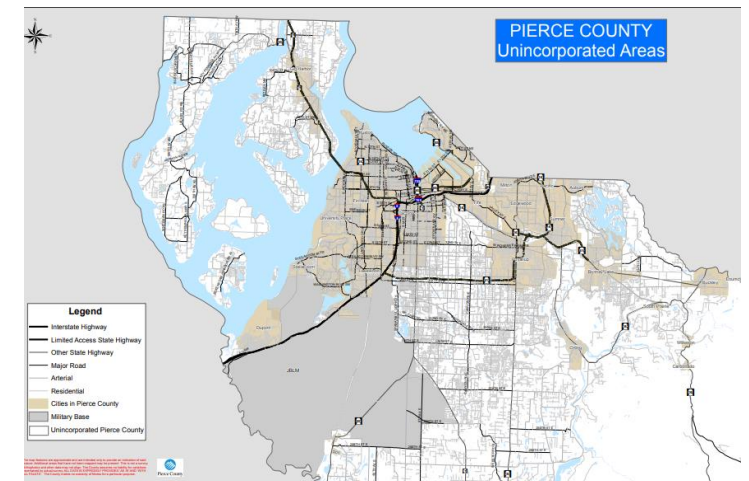
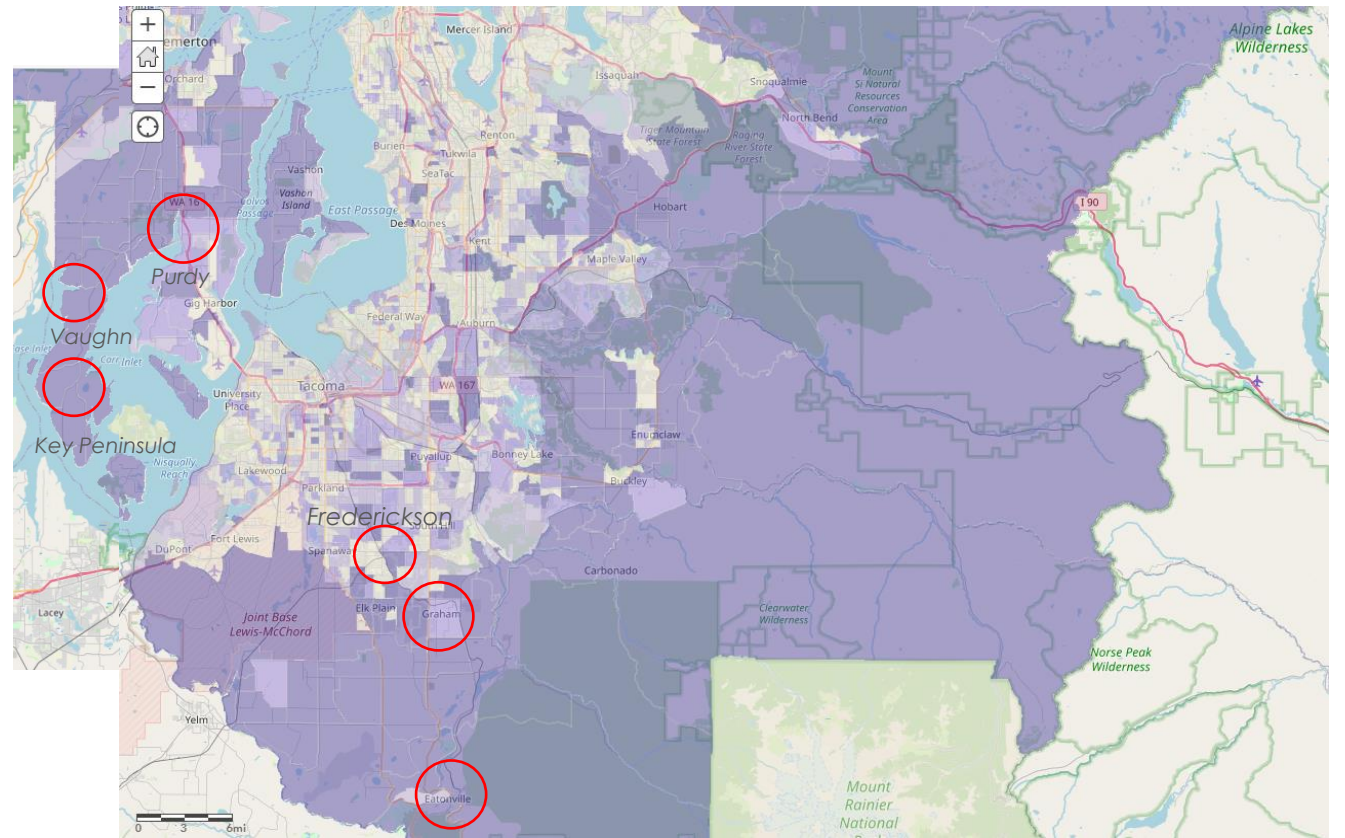
Unincorporated Pierce County



Unincorporated Pierce County

Communities with high percentage of households using wood as primary heat source:

- Graham
- Frederickson
- Purdy
- Vaughn
- Key Peninsula
- Areas surrounding Eatonville



Source: <https://www.piercecountywa.gov/133/Department-Overview---Staffing-Jurisdic>

Unincorporated Pierce County (white)



Pierce County

Race and Ethnicity

| Total population | 904,980 | |
|--|---------|-------|
| White alone | 593,630 | 65.6% |
| Black or African American alone | 58,902 | 6.5% |
| American Indian and Alaska Native alone | 8,368 | 0.9% |
| Asian alone | 56,388 | 6.2% |
| Native Hawaiian and Other Pacific Islander alone | 11,952 | 1.3% |
| Some other race alone | 1,805 | 0.2% |
| Two or more races | 70,908 | 7.8% |
| Hispanic or Latino (of any race) | 103,027 | 11.4% |

Median age: 36.4

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=0500000US53053&tid=ACSDP1Y2019.DP05>



Pierce County Top Languages

| Total population | 765,161 | |
|-----------------------------------|---------|--------|
| 1. English | 651,296 | 85.12% |
| 2. Spanish | 45,536 | 5.95% |
| 3. Korean | 9,480 | 1.24% |
| 4. Tagalog | 7,156 | 0.94% |
| 5. Other Pacific Island languages | 6,387 | 0.83% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=0500000US53053&tid=ACSDT5Y2015.B16001>



Pierce County

Computer and Internet Subscriptions

| | | |
|--|----------------|-------|
| Total households | 333,657 | |
| Households with Internet | 305,578 | 91.6% |
| Households with Desktop or Laptop | 276,993 | 83% |
| Households with Tablet or other Portable Wireless Computer | 226,579 | 67.9% |
| Households with Smartphone | 301,024 | 90.2% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=05000000US53053&tid=ACSST1Y2019.S2801>



Pierce County Housing

| | |
|---|----------------|
| Total households | 333,657 |
| Home ownership Rate | 62.8% |
| Housing Type | |
| 1-unit structures | 70.6% |
| 2 or more unit structures | 24.8% |
| Mobile homes and all other types of units | 4.6% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=0500000US53053&tid=ACSST1Y2019.S1101>



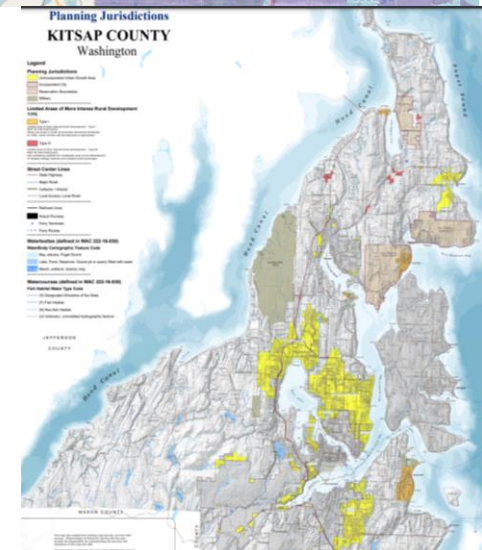
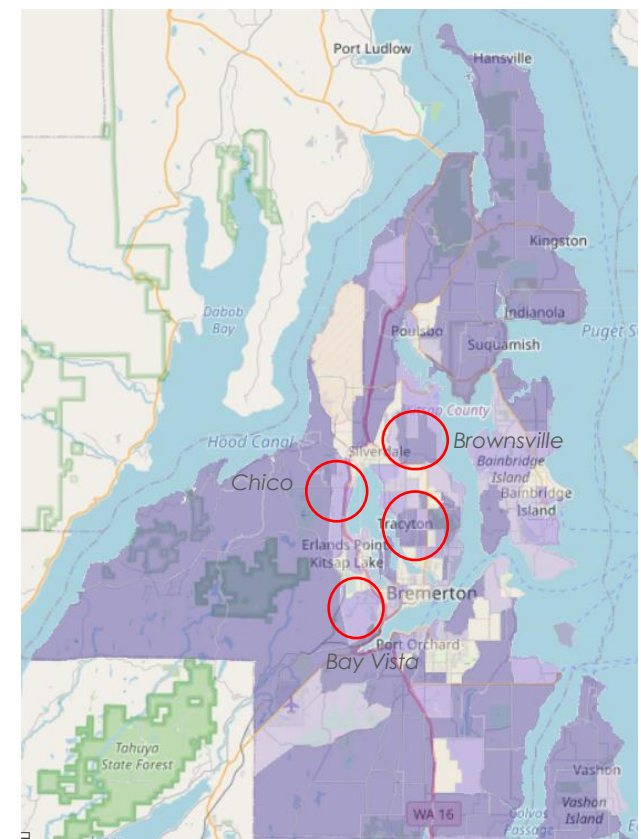
Unincorporated Kitsap County



Unincorporated Kitsap County

Communities with high percentage of households using wood as primary heat source:

- Bay Vista
- Brownsville
- Chico
- Areas surrounding Tracyton



Unincorporated Kitsap County (yellow)



Kitsap County

Race and Ethnicity

| Total population | 271,473 | |
|--|---------|-------|
| White alone | 205,840 | 75.8% |
| Black or African American alone | 7,478 | 2.8% |
| American Indian and Alaska Native alone | 2,799 | 1% |
| Asian alone | 13,428 | 4.9% |
| Native Hawaiian and Other Pacific Islander alone | 2,585 | 1% |
| Some other race alone | 276 | 0.1% |
| Two or more races | 16,690 | 6.1% |
| Hispanic or Latino (of any race) | 22,377 | 8.2% |

Median age: 39.5

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=0500000US53035&tid=ACSDP1Y2019.DP05>



Kitsap County Top Languages

| | | |
|-------------------------|----------------|--------|
| Total population | 240,712 | |
| 1. English | 221,883 | 92.18% |
| 2. Spanish | 6,474 | 2.69% |
| 3. Tagalog | 4,912 | 2.04% |
| 4. Japanese | 849 | 0.35% |
| 5. German | 844 | 0.35% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=0500000US53035&tid=ACSDT5Y2015.B16001>



Kitsap County

Computer and Internet Subscriptions

| | | |
|---|----------------|-------|
| Total households | 107,525 | |
| Households with Internet | 102,521 | 95.3% |
| Households with Desktop or Laptop | 95,301 | 88.6% |
| Households with Tablet or other Portable Wireless Computer | 74,787 | 69.6% |
| Households with Smartphone | 97,055 | 90.3% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=05000000US53035&tid=ACSST1Y2019.S2801>



Kitsap County Housing

| | |
|---|----------------|
| Total households | 107,525 |
| Home ownership Rate | 69.9% |
| Housing Type | |
| 1-unit structures | 76.7% |
| 2 or more unit structures | 17.6% |
| Mobile homes and all other types of units | 5.7% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=0500000US53035&tid=ACSST1Y2019.S1101>



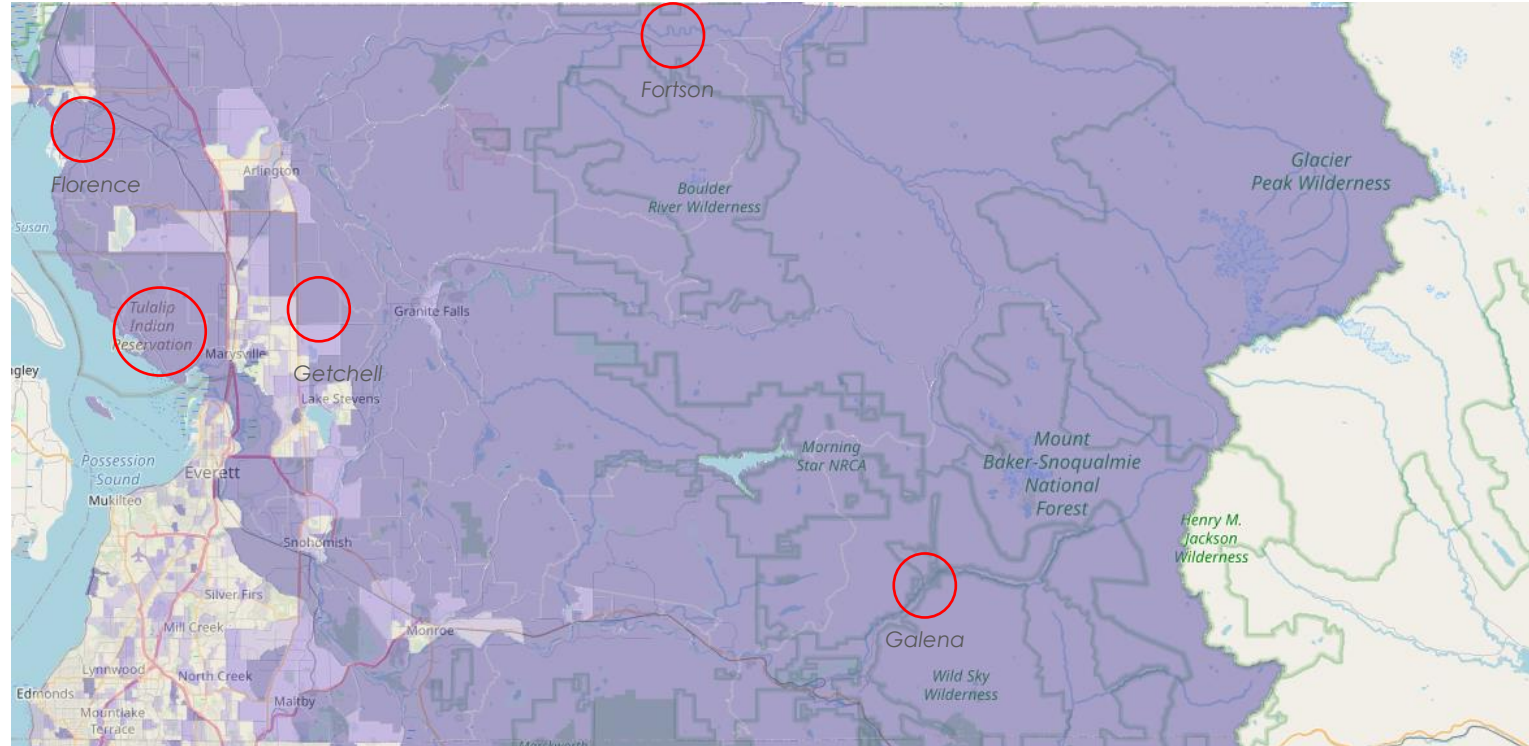
Unincorporated Snohomish County



Unincorporated Snohomish County

Communities with high percentage of households using wood as primary heat source:

- Florence
- Fortson
- Galena
- Getchell
- Tulalip Indian Reservation



Snohomish County

Race and Ethnicity

| Total population | 822,083 | |
|--|---------|--------|
| White alone | 557,507 | 67.82% |
| Black or African American alone | 27,267 | 3.32% |
| American Indian and Alaska Native alone | 8,483 | 1.03% |
| Asian alone | 97,895 | 11.91% |
| Native Hawaiian and Other Pacific Islander alone | 3,300 | 0.40% |
| Some other race alone | 2,184 | 0.27% |
| Two or more races | 38,280 | 4.66% |
| Hispanic or Latino (of any race) | 87,167 | 10.60% |

Source: <https://data.census.gov/cedsci/table?text=dp05&g=0500000US53061&tid=ACSDP1Y2019.DP05>

Median age: 38.2



Snohomish County Top Languages

| Total population | 770,021 | |
|--|---------|--------|
| 1. English | 594,112 | 77.16% |
| 2. Spanish | 53,523 | 6.95% |
| 3. Tagalog (incl. Filipino) | 13,651 | 1.77% |
| 4. Chinese (incl. Mandarin, Cantonese) | 13,069 | 1.70% |
| 5. Russian | 10,368 | 1.35% |

Source: <https://data.census.gov/cedsci/table?text=B16001&g=0500000US53061&tid=ACSDT1Y2019.B16001>



Snohomish County

Computer and Internet Subscriptions

| | | |
|---|----------------|--------|
| Total households | 299,827 | |
| Households with Internet | 279,562 | 93.20% |
| Households with Desktop or Laptop | 259,929 | 86.70% |
| Households with Tablet or other Portable Wireless Computer | 211,215 | 70.40% |
| Households with Smartphone | 272,537 | 90.9% |

Source: <https://data.census.gov/cedsci/table?q=S2801&text=S2801&g=0500000US53061&tid=ACSST1Y2019.S2801>



Snohomish County Housing

| | |
|---|----------------|
| Total households | 299,827 |
| Home ownership Rate | 66.70% |
| Housing Type | |
| 1-unit structures | 67.10% |
| 2 or more unit structures | 27.70% |
| Mobile homes and all other types of units | 5.20% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=0500000US53061&tid=ACSST1Y2019.S1101>



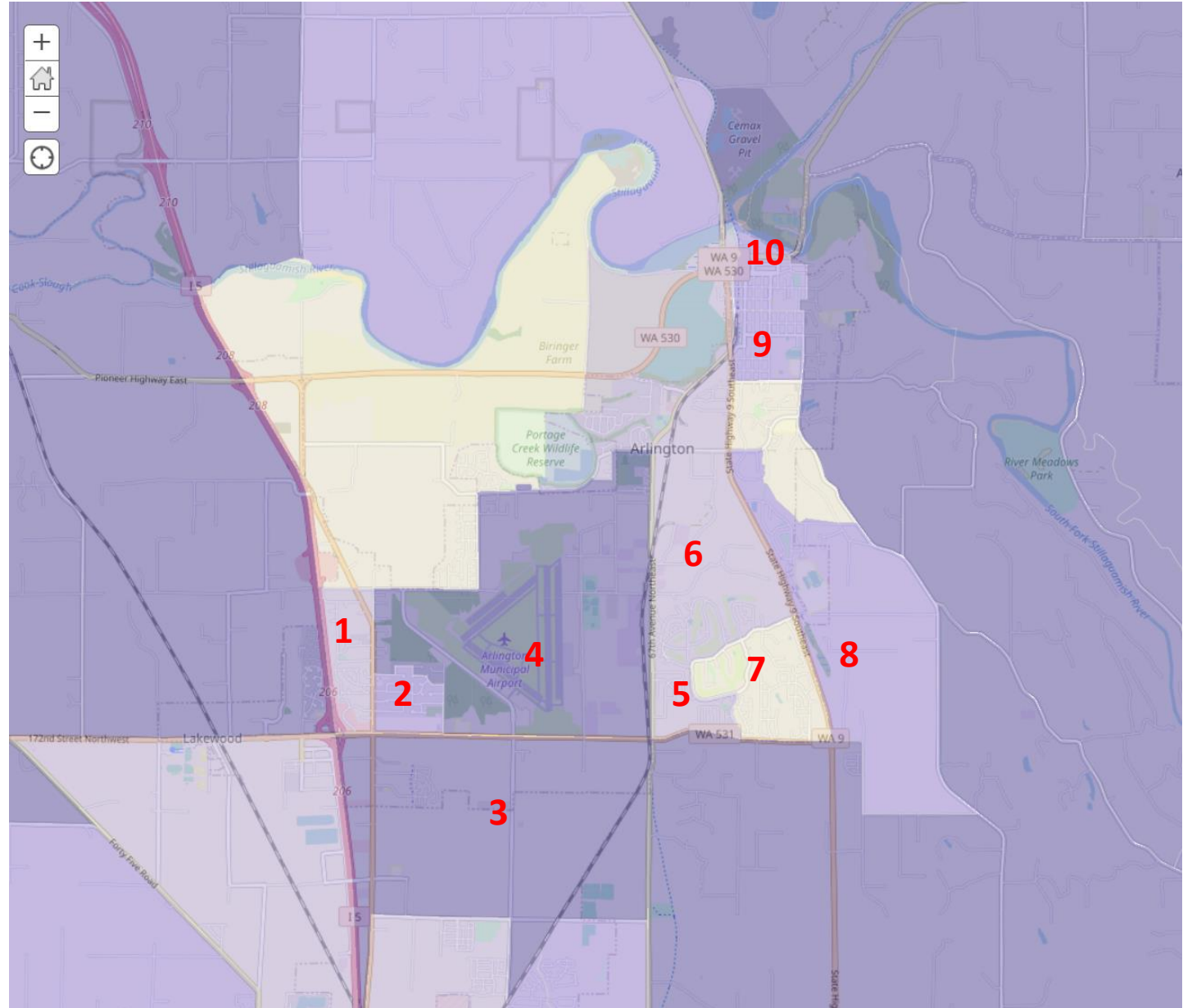
Appendix



CAT – Arlington Census Blocks

Source:

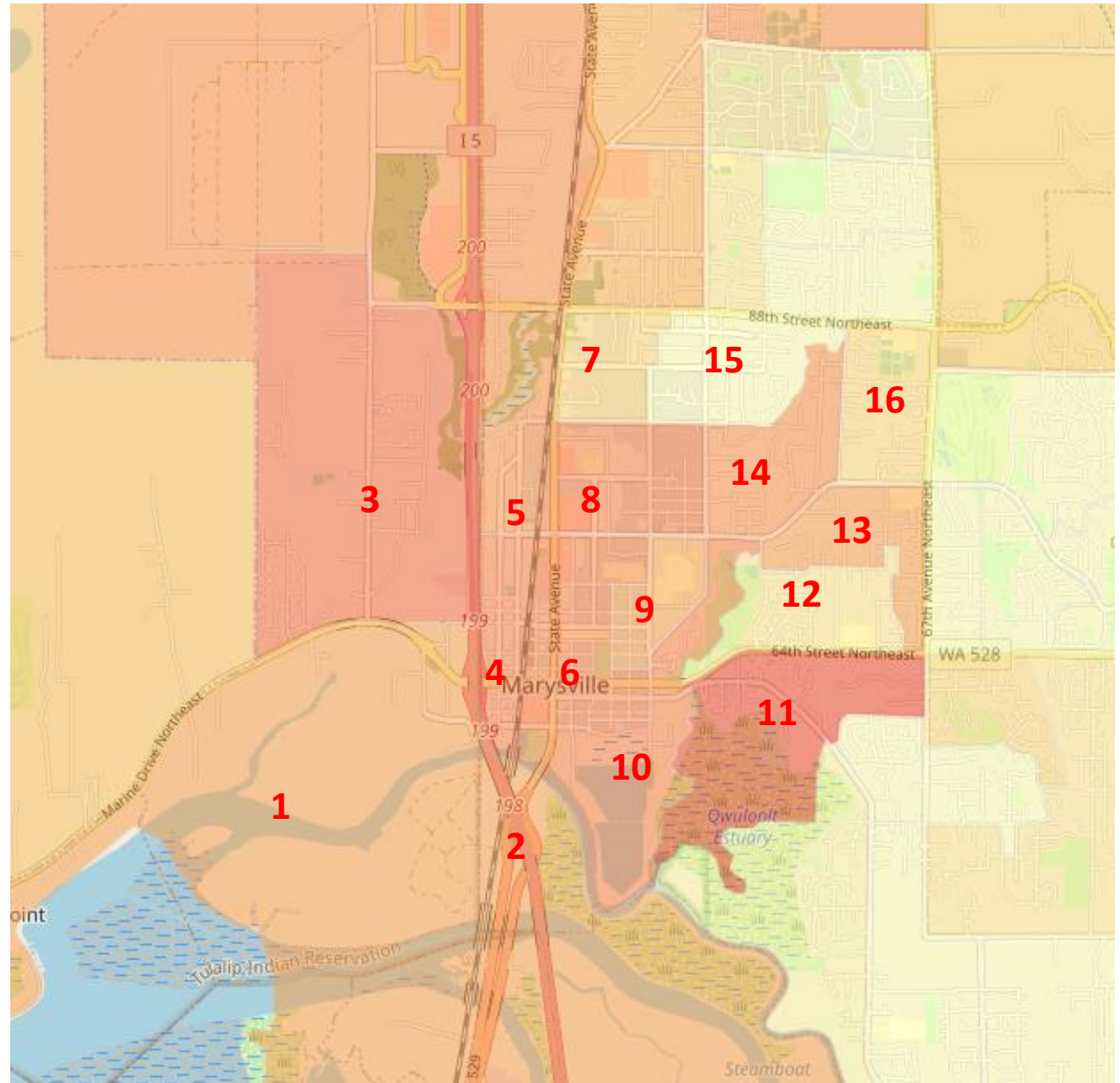
<https://www.arcgis.com/home/webmap/viewer.html?webmap=da5ea285d84644bf9ea3efe0ee3614fe&extent=-122.7454,47.0185,-122.0673,47.2956>



CAT – Marysville Census Blocks

Source:

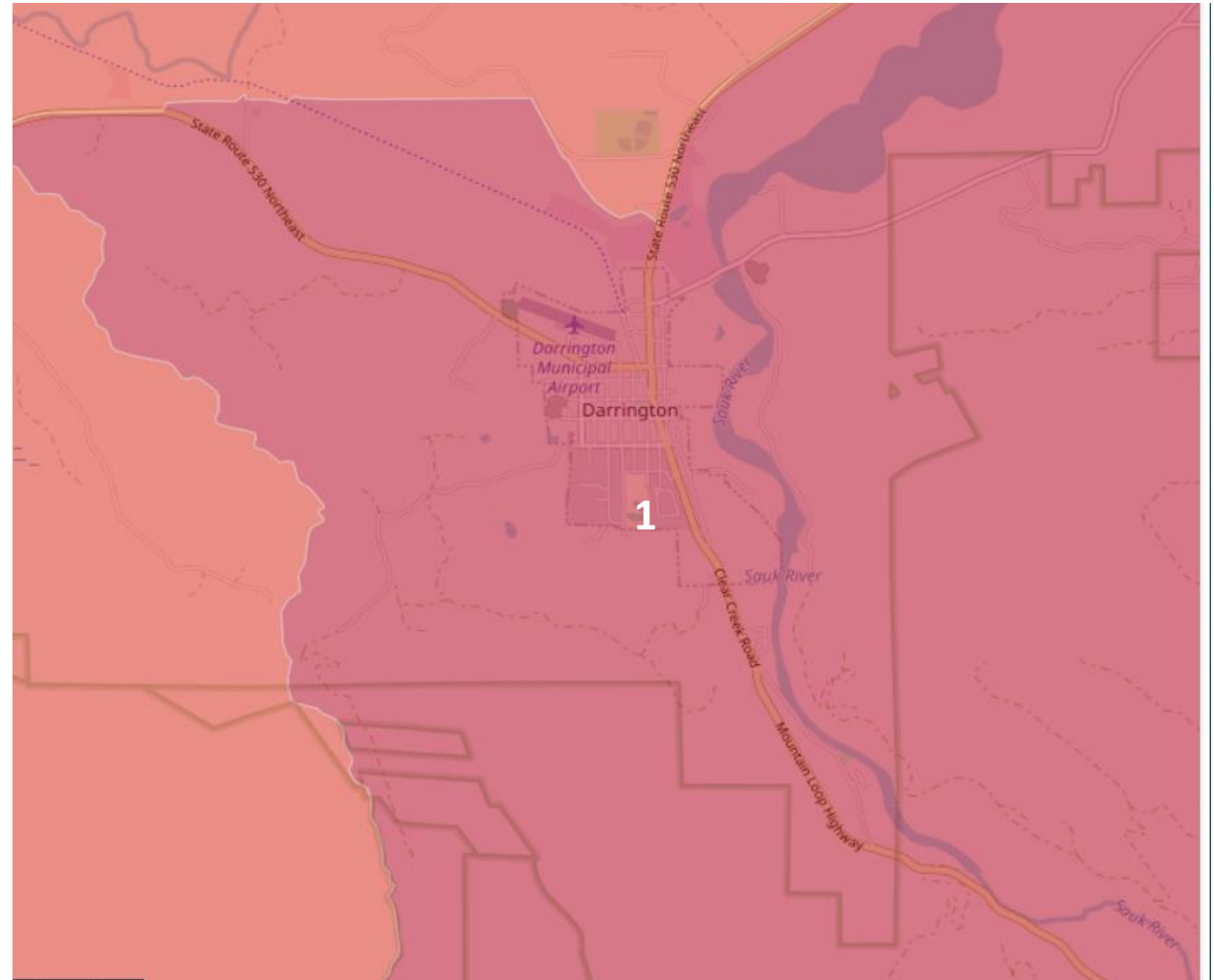
<https://www.arcgis.com/home/webmap/viewer.html?webmap=da5ea285d84644bf9ea3efe0ee3614fe&extent=-122.7454,47.0185,-122.0673,47.2956>



CAT – Darrington Census Blocks

Source:

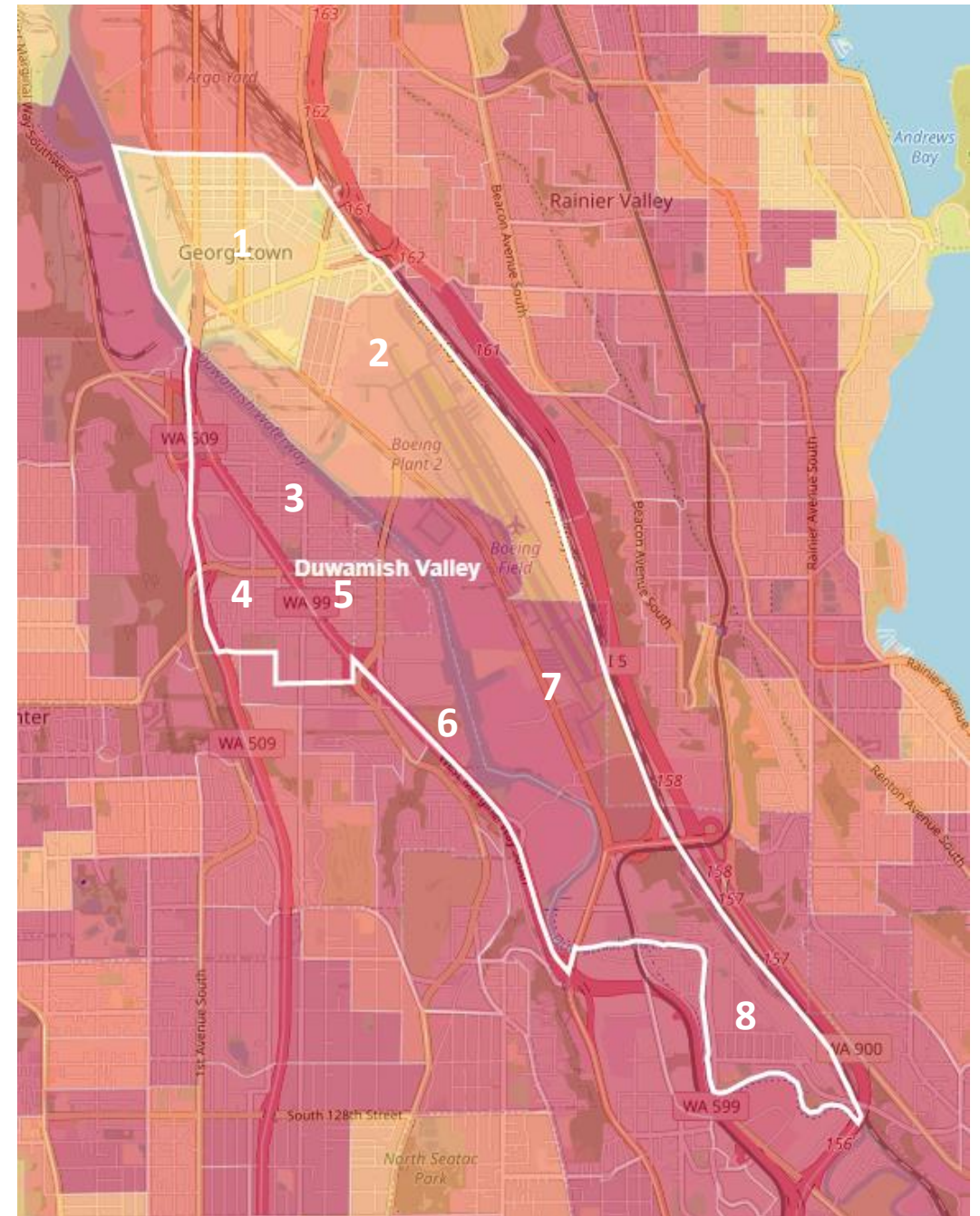
<https://www.arcgis.com/home/webmap/viewer.html?webmap=da5ea285d84644bf9ea3efe0ee3614fe&extent=-122.7454,47.0185,-122.0673,47.2956>



CAT - Duwamish Valley Census Blocks

Source:

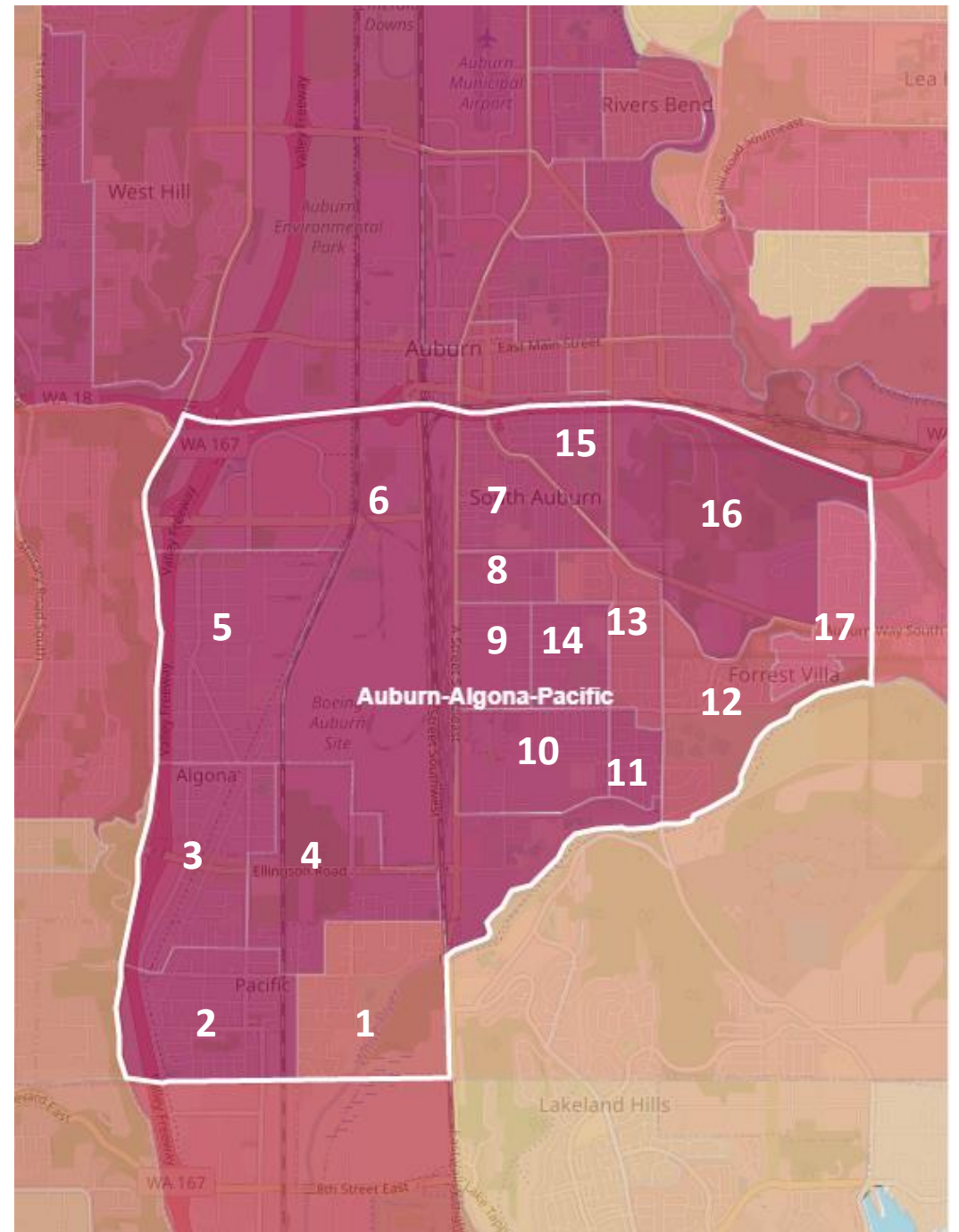
<https://www.arcgis.com/home/webmap/viewer.html?webmap=da5ea285d84644bf9ea3efe0ee3614fe&extent=-122.7454,47.0185,-122.0673,47.2956>



CAT - Auburn/Algona/Pacific Census Blocks

Source:

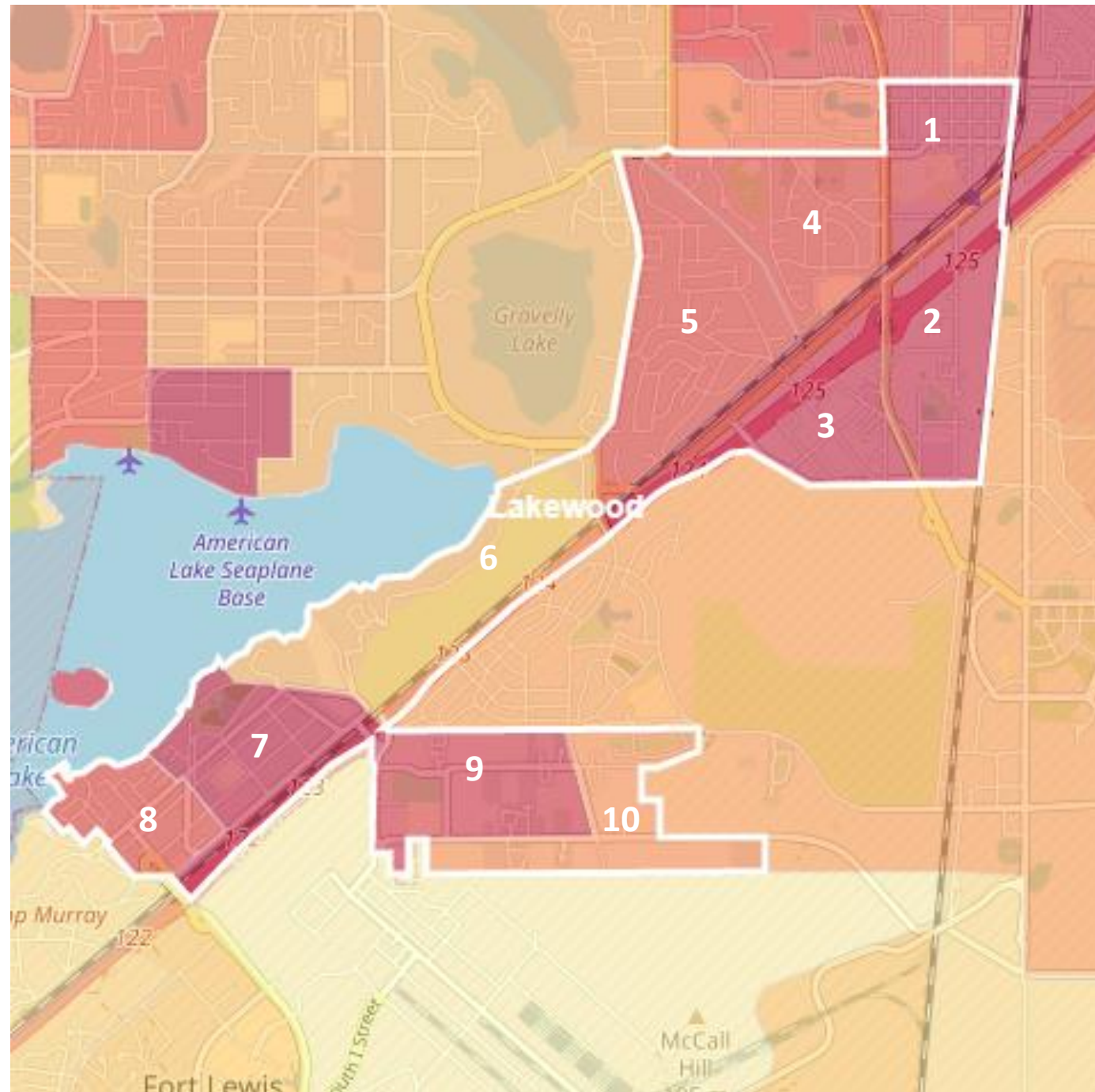
<https://www.arcgis.com/home/webmap/viewer.html?webmap=da5ea285d84644bf9ea3efe0ee3614fe&extent=-122.7454,47.0185,-122.0673,47.2956>



CAT – Lakewood Census Blocks

Source:

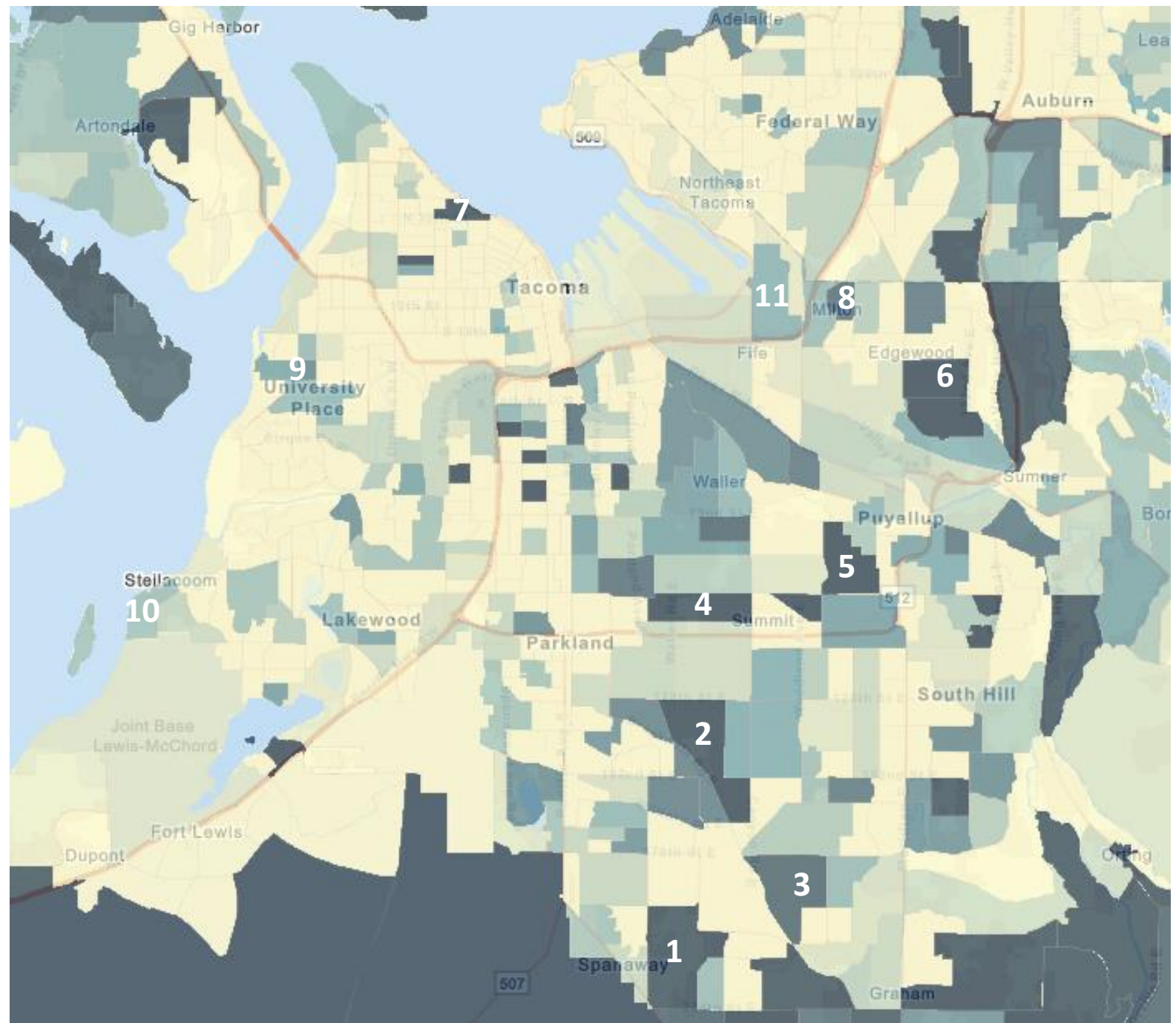
<https://www.arcgis.com/home/webmap/viewer.html?webmap=da5ea285d84644bf9ea3efe0ee3614fe&extent=-122.7454,47.0185,-122.0673,47.2956>



CAT Tacoma Smoke Reduction Zone

Source:

<https://www.arcgis.com/home/webmap/viewer.html?webmap=da5ea285d84644bf9ea3efe0ee3614fe&extent=-122.7454,47.0185,-122.0673,47.2956>



Pierce County Detail



Graham-Thrift CCD, Pierce County

Race and Ethnicity

Median age: 35.1

| Total population | 93,161 | |
|--|--------|-------|
| White alone | 65,431 | 70.2% |
| Black or African American alone | 4,049 | 4.3% |
| American Indian and Alaska Native alone | 1,314 | 1.4% |
| Asian alone | 4,949 | 5.3% |
| Native Hawaiian and Other Pacific Islander alone | 1,100 | 1.2% |
| Some other race alone | 153 | 0.2% |
| Two or more races | 7,174 | 7.7% |
| Hispanic or Latino (of any race) | 8,991 | 9.7% |

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=0600000US5305391280&tid=ACSDP5Y2019.DP05>



Graham-Thrift CCD, Pierce County

Top Languages

| Total population | 77,216 | |
|------------------|--------|--------|
| 1. English | 69,073 | 89.45% |
| 2. Spanish | 3,449 | 4.47% |
| 3. German | 901 | 1.17% |
| 4. Korean | 768 | 0.99% |
| 5. Tagalog | 598 | 0.77% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5343955&tid=ACSDT5Y2015.B16001> (2015 census data)



Graham-Thrift CCD, Pierce County

Types of Computer and Internet Subscriptions

| | | |
|--|---------------|-------|
| Total households | 30,207 | |
| Households with Internet | 27,624 | 91.4% |
| Households with Desktop or Laptop | 26,926 | 89.1% |
| Households with Tablet or other Portable Wireless Computer | 21,625 | 71.6% |
| Households with Smartphone | 25,836 | 85.5% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=06000000US5305391280&tid=ACSST5Y2019.S2801>



Graham-Thrift CCD, Pierce County

Housing Situation

| | |
|---|---------------|
| Total households | 30,207 |
| Home ownership Rate | 80.60% |
| Housing Type | |
| 1-unit structures | 81.10% |
| 2 or more unit structures | 4.70% |
| Mobile homes and all other types of units | 14.20% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=0600000US5305391280&tid=ACSST5Y2019.S1101>



Puyallup CCD, Pierce County

Race and Ethnicity

Median age: 37.4

| Total population | 171,378 | |
|--|---------|-------|
| White alone | 131,706 | 76.9% |
| Black or African American alone | 3,302 | 1.9% |
| American Indian and Alaska Native alone | 1,857 | 1.1% |
| Asian alone | 7,771 | 4.5% |
| Native Hawaiian and Other Pacific Islander alone | 1,067 | 0.6% |
| Some other race alone | 269 | 0.2% |
| Two or more races | 10,005 | 5.8% |
| Hispanic or Latino (of any race) | 15,401 | 9% |

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=0600000US5305392672&tid=ACSDP5Y2019.DP05>



Puyallup CCD, Pierce County

Top Languages

| | | |
|-------------------------|----------------|--------|
| Total population | 148,669 | |
| 1. English | 135,064 | 90.85% |
| 2. Spanish | 5,695 | 3.83% |
| 3. Korean | 799 | 0.54% |
| 4. Tagalog | 770 | 0.52% |
| 5. German | 713 | 0.48% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=0600000US5305392672&tid=ACSDT5Y2015.B16001> (2015 census data)



Puyallup CCD, Pierce County

Types of Computer and Internet Subscriptions

| | | |
|--|---------------|-------|
| Total households | 62,893 | |
| Households with Internet | 56,820 | 90.3% |
| Households with Desktop or Laptop | 53,953 | 85.8% |
| Households with Tablet or other Portable Wireless Computer | 43,613 | 69.3% |
| Households with Smartphone | 53,604 | 85.2% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=0600000US5305392672&tid=ACSST5Y2019.S2801>



Puyallup CCD, Pierce County

Housing Situation

| | |
|---|---------------|
| Total households | 62,893 |
| Home ownership Rate | 68.00% |
| Housing Type | |
| 1-unit structures | 72.70% |
| 2 or more unit structures | 21.30% |
| Mobile homes and all other types of units | 6.10% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=0600000US5305392672&tid=ACSST5Y2019.S1101>



Tacoma CCD, Pierce County

Race and Ethnicity

Median age: 35.7

| Total population | 459,939 | |
|--|---------|-------|
| White alone | 267,871 | 58.2% |
| Black or African American alone | 44,514 | 9.7% |
| American Indian and Alaska Native alone | 4,789 | 1% |
| Asian alone | 37,401 | 8.1% |
| Native Hawaiian and Other Pacific Islander alone | 9,012 | 2% |
| Some other race alone | 920 | 0.2% |
| Two or more races | 36,660 | 8.0% |
| Hispanic or Latino (of any race) | 58,772 | 12.8% |

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=0600000US5305393376&tid=ACSDP5Y2019.DP05>



Tacoma CCD, Pierce County

Top Languages

| Total population | 408,666 | |
|------------------|---------|--------|
| 1. English | 326,440 | 79.88% |
| 2. Spanish | 31,729 | 7.76% |
| 3. Korean | 7,545 | 1.85% |
| 4. Vietnamese | 5,706 | 1.40% |
| 5. Tagalog | 5,176 | 1.27% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=0600000US5305393376&tid=ACSDT5Y2015.B16001> (2015 census data)



Tacoma CCD, Pierce County

Types of Computer and Internet Subscriptions

| | | |
|--|----------------|-------|
| Total households | 176,902 | |
| Households with Internet | 151,309 | 85.5% |
| Households with Desktop or Laptop | 143,566 | 81.2% |
| Households with Tablet or other Portable Wireless Computer | 109,511 | 61.9% |
| Households with Smartphone | 146,723 | 82.9% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=0600000US5305393376&tid=ACSST5Y2019.S2801>



Tacoma CCD, Pierce County Housing Situation

| | |
|---|----------------|
| Total households | 176,902 |
| Home ownership Rate | 54.10% |
| Housing Type | |
| 1-unit structures | 65.80% |
| 2 or more unit structures | 31.30% |
| Mobile homes and all other types of units | 2.90% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=06000000US5305392672&tid=ACSST5Y2019.S1101>



Auburn Detail



Auburn

Race and Ethnicity

Median age: 35

| Total population | 82,021 | |
|--|---------------|-------|
| White alone | 39,267 | 47.9% |
| Black or African American alone | 6,939 | 8.5% |
| American Indian and Alaska Native alone | 2,705 | 3.3% |
| Asian alone | 9,532 | 11.6% |
| Native Hawaiian and Other Pacific Islander alone | 353 | 0.4% |
| Some other race alone | 63 | 0.1% |
| Two or more races | 6,861 | 8.4% |
| Hispanic or Latino (of any race) | 16,301 | 19.9% |

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5303180&tid=ACSDP1Y2019.DP05>



Auburn Top Languages

| Total population | 69,000 | |
|---------------------------|--------|--------|
| 1. English | 50,699 | 73.48% |
| 2. Spanish | 7,341 | 10.64% |
| 3. Other Slavic languages | 1,736 | 2.52% |
| 4. Russian | 1,239 | 1.80% |
| 5. Tagalog | 1,206 | 1.75% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5303180&tid=ACSDT5Y2015.B16001> (2015 census data)



Auburn

Types of Computer and Internet Subscriptions

| | | |
|---|---------------|-------|
| Total households | 29,665 | |
| Households with Internet | 26,600 | 89.7% |
| Households with Desktop or Laptop | 23,688 | 79.9% |
| Households with Tablet or other Portable Wireless Computer | 18,005 | 60.7% |
| Households with Smartphone | 26,881 | 90.6% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=1600000US5303180&tid=ACSST1Y2019.S2801>



Auburn

Housing Situation

| | |
|---|---------------|
| Total households | 29,665 |
| Home ownership Rate | 56.80% |
| Housing Type | |
| 1-unit structures | 55.60% |
| 2 or more unit structures | 38.70% |
| Mobile homes and all other types of units | 5.80% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=1600000US5303180&tid=ACSST1Y2019.S1101>



Algona Detail



Algona

Race and Ethnicity

Median age: 31

| Total population | 3,211 | |
|--|-------|-------|
| White alone | 1,574 | 49% |
| Black or African American alone | 191 | 5.9% |
| American Indian and Alaska Native alone | 34 | 1.1% |
| Asian alone | 502 | 15.6% |
| Native Hawaiian and Other Pacific Islander alone | 61 | 1.9% |
| Some other race alone | 0 | 0% |
| Two or more races | 305 | 9.5% |
| Hispanic or Latino (of any race) | 544 | 16.9% |

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5301290&tid=ACSDP5Y2019.DP05>



Algona Top Languages

| Total population | 2,921 | |
|---------------------------|-------|--------|
| 1. English | 2,026 | 69.36% |
| 2. Spanish | 393 | 13.45% |
| 3. Other Slavic languages | 107 | 3.66% |
| 4. Russian | 86 | 2.94% |
| 5. Tagalog | 81 | 2.77% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5301290&tid=ACSDT5Y2015.B16001> (2015 census data)



Algona

Types of Computer and Internet Subscriptions

| | | |
|--|------------|-------|
| Total households | 908 | |
| Households with Internet | 825 | 90.9% |
| Households with Desktop or Laptop | 791 | 87.1% |
| Households with Tablet or other Portable Wireless Computer | 602 | 66.3% |
| Households with Smartphone | 735 | 80.9% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=1600000US5301290&tid=ACSST5Y2019.S2801>



Algona Housing Situation

| | |
|---|------------|
| Total households | 908 |
| Home ownership Rate | 78.40% |
| Housing Type | |
| 1-unit structures | 77.50% |
| 2 or more unit structures | 3.60% |
| Mobile homes and all other types of units | 18.80% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=1600000US5301290&tid=ACSST5Y2019.S1101>



Pacific City Detail



Pacific City

Race and Ethnicity

Median age: 31

| Total population | 7,215 | |
|--|-------|-------|
| White alone | 3,329 | 46.1% |
| Black or African American alone | 309 | 4.3% |
| American Indian and Alaska Native alone | 55 | 0.8% |
| Asian alone | 1,085 | 15% |
| Native Hawaiian and Other Pacific Islander alone | 346 | 4.8% |
| Some other race alone | 0 | 0% |
| Two or more races | 436 | 6% |
| Hispanic or Latino (of any race) | 1,655 | 22.9% |

Source: <https://data.census.gov/cedsci/table?q=&text=dp05&g=1600000US5352495&tid=ACSDP5Y2019.DP05>



Pacific City

Top Languages

| Total population | 6,425 | |
|-----------------------------------|-------|--------|
| 1. English | 4,358 | 67.83% |
| 2. Spanish | 593 | 9.23% |
| 3. Other Pacific Island languages | 576 | 8.96% |
| 4. Other Indic languages | 219 | 3.41% |
| 5. Russian | 180 | 2.80% |

Source: <https://data.census.gov/cedsci/table?q=&text=B16001&g=1600000US5352495&tid=ACSDT5Y2015.B16001> (2015 census data)



Pacific City

Types of Computer and Internet Subscriptions

| | | |
|--|--------------|-------|
| Total households | 2,355 | |
| Households with Internet | 2,003 | 85.1% |
| Households with Desktop or Laptop | 1,915 | 81.3% |
| Households with Tablet or other Portable Wireless Computer | 1,645 | 69.9% |
| Households with Smartphone | 1,851 | 78.6% |

Source: <https://data.census.gov/cedsci/table?q=&text=S2801&g=1600000US5352495&tid=ACSST5Y2019.S2801>



Pacific City Housing Situation

| | |
|---|--------------|
| Total households | 2,355 |
| Home ownership Rate | 51.10% |
| Housing Type | |
| 1-unit structures | 61.30% |
| 2 or more unit structures | 35.80% |
| Mobile homes and all other types of units | 2.90% |

Source: <https://data.census.gov/cedsci/table?q=&text=S1101&g=1600000US5301290&tid=ACSST5Y2019.S1101>



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