

Observations on Use Cases and Needs

2020 Census Data Products— Public Workshop on the Demographic and Housing Characteristics Files

June 22, 2022

Amy O'Hara

Workshop Objective

- Provide feedback on the DHC Demonstration data, showing where or how the current parameter settings harm your use case

Objective

- Provide feedback on the DHC Demonstration data, showing where or how the current parameter settings harm your use case



If you don't get a response, that doesn't prove that no feedback was needed. There could still be intelligent life out there.

Framing and Phrasing

How do you use
the DHC?

Framing and Phrasing

~~How do you use
the DHC?~~

How Do you use
the DHC?

Framing and Phrasing

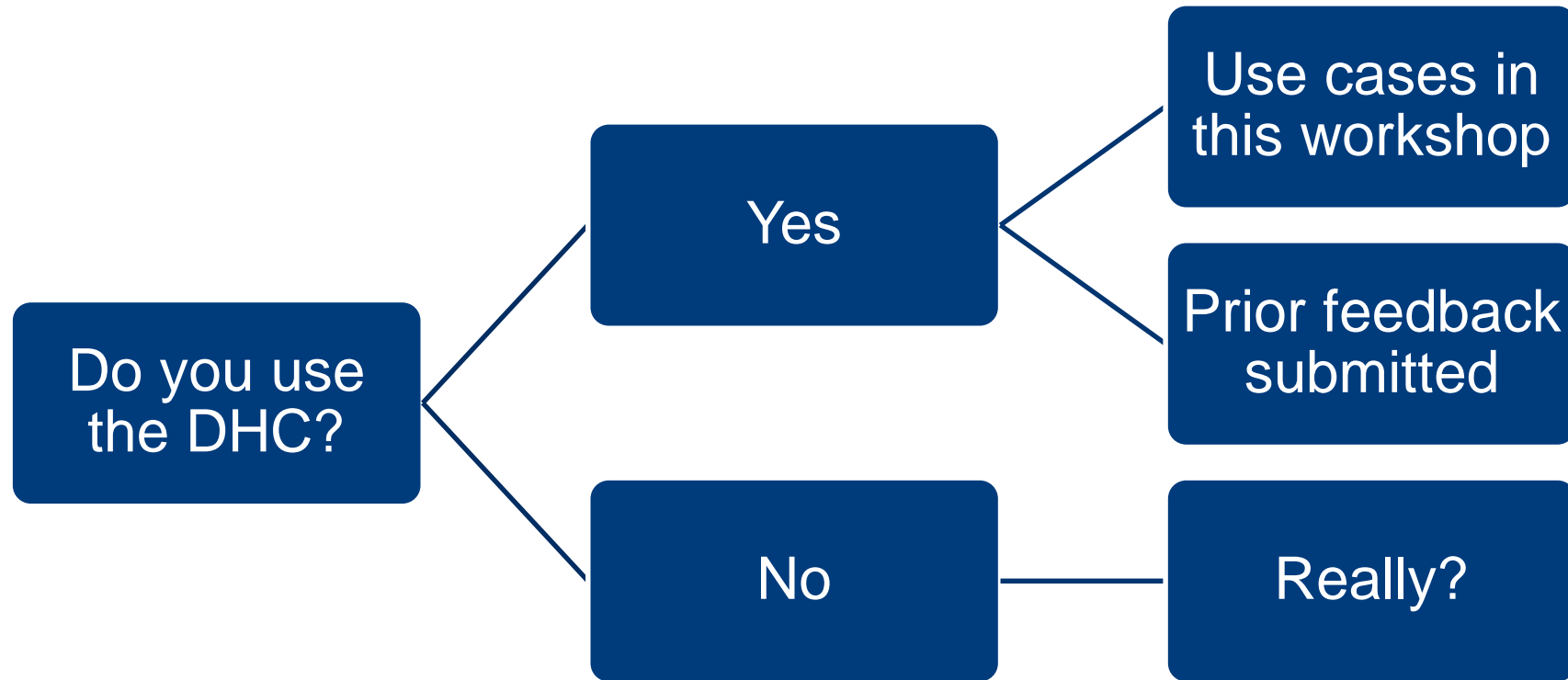
How do you use

How Do you use
the DHC?

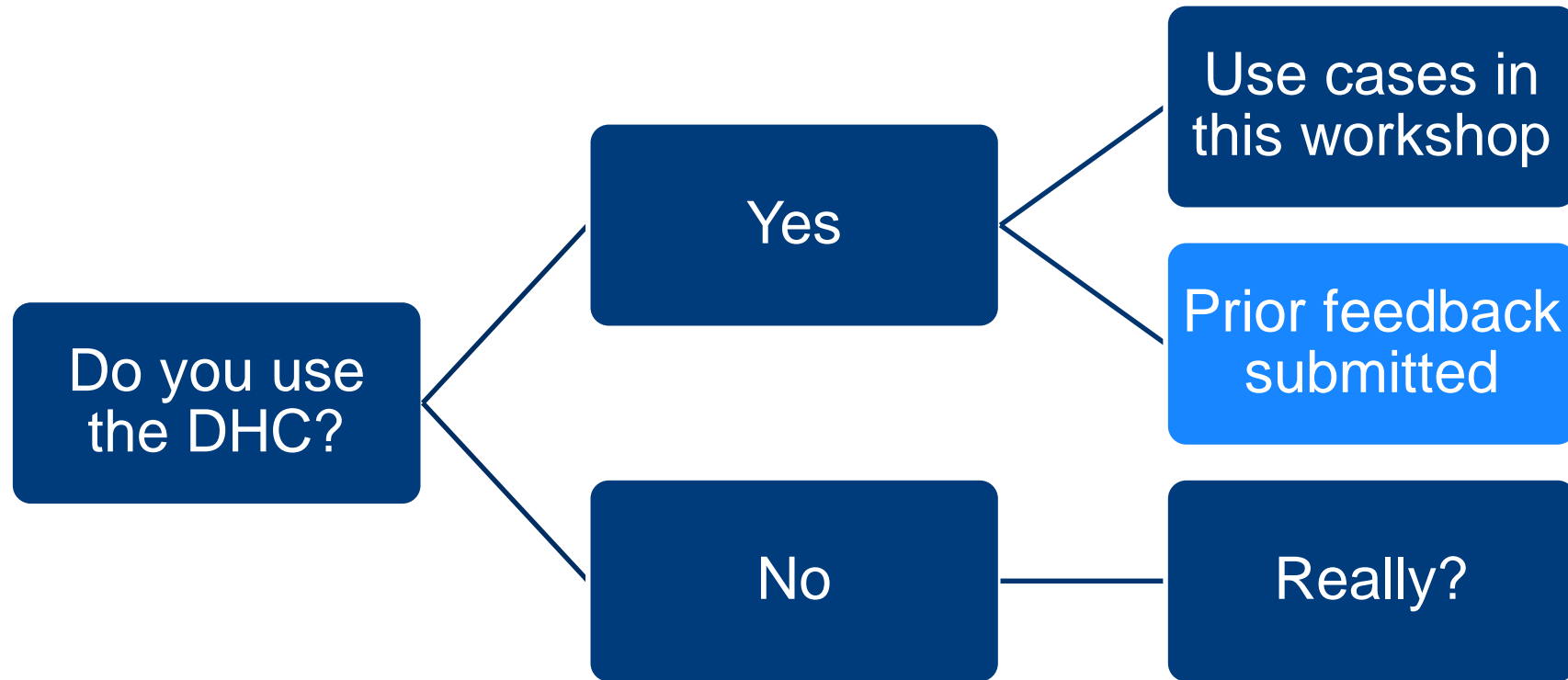
How did you use
the SF1?



Feedback



Feedback, Feedback, Feedback



Prior Feedback Submitted

September 12, 2018

Karen Battle
Chief, Population Division
U.S. Census Bureau
4600 Silver Hill Road, Room 6H174
Washington, DC 20233

Ms. Battle,

This letter is submitted in response to your solicitation of feedback from users on 2020 Census data products through the Federal Register (Census Bureau Docket Identification Number USBC-2018-0009).

Each year, we develop current-year population estimates for our local communities. These are our most requested and accessed data. Our program has been in place since 1974. We use the housing unit method exclusively. For the base data, we use decennial census population and unit counts because they provides generally-accepted, consistent benchmarks. However, we need more detailed information regarding units and the population therein than is currently available in the decennial census. In the absence of the detail we need within the decennial census data, we develop base estimates based on other sources including ACS data, our own analysis of local data including data from appraisal districts, and data from local communities. Because the quality and availability of local data varies considerably, we would prefer to have a single consistent, authoritative source.

Our population estimates are made available on the Internet (<https://data-nctcoggis.opendata.arcgis.com/>). We do not track users; however, based on requests and comments we have received over the years, we do know that our data is used widely by local governments, researchers, media, non-profit organizations, students and educators, economic development corporations, real estate professional, residential developers, and businesses. We also know that our population estimates are used by some entities to determine representation and/or dues.

For our estimates, we need split-city (city by county) data, so block-level data would be the most useful. If block-level data were available, we could perform the aggregation to the geography we need. If this level of geography is too fine, whole-city level would suffice.

We use the data as a benchmark, so we really need a measure that captures conditions for a single year. Most of our communities do not meet the criteria for 1-year ACS data. The topics we need do not

From: Yujun He
To: POP 2020 Data Products
Subject: Feedback on Census 2020 data products
Date: Monday, September 27, 2018 at 12:35 PM
Attachments: 2020-Census-Data-Products-Feedback-Spreadsheet-His.xls

Dear Ms. Karen Battle,

Attached please find my feedback to the Summary File 1 and Summary File 2. If you have any questions, suggestions or need clarifications, please don't hesitate to let me know.

Thanks and have a great day.

Yujun He, Ph.D.
Demographer
America's Shared Futures Board
1700 W. Washington Street, Suite 104
Phoenix, AZ 85007
Tel: 602-942-6145
Fax: 602-942-6229

NORC
at the UNIVERSITY of CHICAGO

September 14, 2010

Feedback on 2020 Census Data Products

Karen Battle, Chief
Population Division
U.S. Census Bureau
4600 Silver Hill Road, Room 6H174
Washington, D.C. 20233

Dear Ms. Battle:

NORC at the University of Chicago is an objective non-partisan research institution that delivers reliable data and rigorous analysis to guide critical programmatic, business, and policy decisions. Since 1941, NORC has made a lasting impact on the fields of social science and survey research. NORC's U.S. clients include agencies of the federal government, state governments, foundations, and commercial businesses. Some of our largest projects provide data to policymakers in economics, education, and health.

Our work depends on Census Bureau data products. We conduct a variety of large-scale social surveys, including the General Social Survey (National Science Foundation), Survey of Consumer Finances (Federal Reserve Board), National Longitudinal Survey of Youth (Bureau of Labor Statistics), Medicare Current Beneficiary Survey (Centers for Medicare and Medicaid Services), National Survey of Early Care and Education (Administration for Children and Families), and AmeriSpeak national web panel. To build representative area probability samples for these surveys, we rely on data from Decennial Census Summary File 1 at the block, block group, and census tract levels. Our statisticians select areas to be surveyed using housing unit counts, household counts, and population counts. We use demographic or socio-economic characteristics of the population to target the sampling operations in select areas, so that we obtain adequate sample sizes for rare population subgroups of key policy interest to our clients. Moreover, we use custom tabulations of Public Use Microdata Sample data at the Public Use Microdata Area level, American Community Survey data at the tract level, and American Community Survey Public Use Microdata Sample data to obtain samples of households and people with rare characteristics. For the Assessment of American Indian, Alaska Native, and Native Hawaiian Housing Needs (U.S. Department of Housing and Urban Development), we used the 2010 Census American Indian and Alaska Native Summary File in similar ways.

Our company also conducts many large-scale telephone and mail surveys, including the world's largest telephone survey, the National Immunization Survey (Centers for Disease Control and Prevention). Again, decennial census data products such as Decennial Census Summary Files 1 and 2 are the critical inputs our statisticians use to develop representative and targeted samples of households and people. Census data at the tract level provide the essential link between telephone exchanges and political and census geography. Similarly, they provide the link between postal ZIP

 **insight** for informed decisions™

From: Yujun He
To: POP 2020 Data Products
Subject: Feedback on "Summary Feedback From Users on 2020 Census Data Products" from the Alaska Cancer Registry
Date: Monday, September 11, 2018 at 10:19 AM
Attachments: insight.xls
insight.xls
insight.xls

Dear Karen Battle,

I am providing some feedback on Document Number 2018-2545B, "Soliciting Feedback From Users on 2020 Census Data Products," which was published at this website address: <https://www.federalregister.gov/documents/2018/09/13/2018-2545B/soliciting-feedback-from-users-on-2020-census-data-products>

I am the data analyst for the Alaska Cancer Registry, Division of Public Health, Alaska Department of Health and Social Services. I have been in this position for the last 20 years.

The Alaska Cancer Registry is funded by the U.S. Centers for Disease Control and Prevention, National Program of Cancer Registries (NPCR-NPHR). It was established through these laws and regulations:

- Public Law 107-315: National Cancer Registry Amendment Act
- Alaska Statutes: AS 18.05.030: Cooperation with federal government; AS 18.05.040: Regulations; AS 18.05.04: Access to health care records; AS 18.15.370: Reportable disease list
- Alaska Administrative Code: 7 AAC 27.011: Reporting of cancer and brain tumors

One of the duties of the cancer registry is to perform cancer studies, often called "cancer cluster investigations", for communities that have expressed a concern about a potential increase in cancer rates in their area. Usually this concern is due to some sort of local environmental pollution. A major part of this study involves calculating the expected number of cancer cases, comparing them to the reported number of cancer cases, and evaluating the magnitude of the difference. To perform these studies, heavily depend on the population data in the P12 tables from Summary File 1 from the 2000 and 2010 census. I use the epidemiological "indirect method" to calculate the expected number of cancer cases using these population data. These tables are as follows:

- P12, P12A, P12B, P12C, P12D, P12E, P12F, P12G, P12H, P12I.

These tables are titled "SEX BY AGE" and individual tables are population subdivisions of race and ethnicity.

I use these tables at the place name as well as the census tract level.

The results of these cluster studies have affected whole communities. For one study, it resulted in half of the entire female community population of screening age (ages 50-74) to be screened for breast cancer using mammography over a 3-month time period.

As a state public health office, we have requirements through state laws and regulations and federal grants to report health statistics and we have responsibilities for making such data available to those to public and private institutions, such as hospitals, who have legal requirements to compile health and social determinants of health statistics. Executive Order 552 (2014), which mandates each agency in the Commonwealth to develop an environmental justice strategy, requires environmental justice populations to be defined at the census block group level using the decennial census. Statutes that grant authority to state health programs to collect and disseminate data include the Lead Law, which requires records of lead poisoned children to "be geographically indexed in order to determine the location of areas of relatively high incidence of lead poisoning" (MGL ch. 111 s. 91) and the statute establishing the ALS Registry, which is to be organized "by areas and regions of the commonwealth, with specific data to be obtained from urban, low and median income communities and minority communities of the commonwealth." (MGL ch. 111 s. 25A). The data sets described above are used to meet regulatory and statutory obligations and to make decisions and develop policies using the most relevant and focused information to effectively identify populations at risk.

data and/or data from the American Community Survey. These data sources provided the foundation for denominators that are needed for the creation of several morbidity and mortality statistics used in public health surveillance. Additionally, they form the foundation for numerators and denominators for important population health statistics associated with community health assessments and/or program evaluation. They also provide critical information that is used in emergency preparedness work to identify persons with access and functional needs.

As resources continue to become more scarce because of declines in state and/or federal funding, now more than ever, there is a need to have data at the "micro" as opposed to the "macro" population level. This micro-level data allows us to understand that health burdens and health risks are disproportionately spread through our jurisdiction. Furthermore, having this micro-level data allows for the evaluation of targeted interventions. Using targeted interventions is a more efficient use of scarce resources.

Data from the census and American Community Survey is a critical source for social determinants of health information. There is a growing understanding that the social determinants of health play a huge role in shaping the health of our populations. As our understanding grows, it is paramount that we have these data to elucidate risk factors, identify disparities and inequities and equally important, be able to evaluate whether or not our interventions are having the desired outcome, namely a reduction in the disparities and inequities.

We use data from the census to establish per capita rates for the communities that we serve (which represent over 850,000 people living in 58 of the 59 communities in Cuyahoga County, Ohio). We also use census information to distribute grant funds to our sub-grantees on a per capita basis.

As for the lowest level of geography, we have found that data as far down as the census block level would be useful. The reason for this has been driven by the fact that municipality and/or neighborhood level boundaries change over time. As a result it is necessary to "create" the denominators for these new geographic areas by aggregating census blocks. Conversely, sometimes it is necessary to "re-create" old boundaries for municipalities and/or neighborhoods in order to make trending comparisons over time.

I am extremely hopeful that the census and American Community Survey data that we have heavily relied on over the years and critically need into the future response available for use as we can continue our public health surveillance, community health assessment, program evaluation, and emergency preparedness planning and response activities.

Respectfully,
Christopher Kippes, MS
Director of Epidemiology, Surveillance, and Informatics
Cuyahoga County Board of Health
5550 Venture Dr.
Parma, OH 44130
216.301.2000 / 3600
Fax: (216) 676-1336

- Providing city/town-level census metrics to hospitals and regional coalitions to engage in community health needs assessments and health impact assessments
- Providing city/town-level census metrics to local government officials and community partners to make data-informed policy decisions.
- All applications of Census Bureau products are processed in accordance with federal and state privacy requirements to ensure that the privacy of individuals in both the numerators and denominators of the health statistics generated is protected.
- Provided city/town-level census metrics to service providers to enhance service provider knowledge of service area characteristics and help inform planning.
- Provided city/town-level census metrics to hospitals and regional coalitions to engage in community health needs assessments and health impact assessments
- Provided city/town-level census metrics to local government officials and community partners to make data-informed policy decisions.

7. What is the lowest level of geography (e.g., county, census block, etc.) at which data need to be published for each specific table? Please explain why data are needed at this level of geography.

City-town level is essential. However, many programs also routinely use census zip code, block groups, and tract-level information for surveillance and prioritization purposes, especially to examine areas of need within a city or town. For example,

- Environmental justice population statistics are available at the block level, so being able to understand the data at the block-level is necessary.
- Food access work looks at census block or even census tracts to estimate individual's access to healthy foods.
- Block group data is routinely used by the tobacco program as part of surveillance efforts (e.g. mapping), and evaluation (neighborhood-level demographics, menthol modelling).
- Block data are used for community investigations, such a neighborhood environmental impacts, and health impact assessments of community development/improvements. Block group data are also used for the same reasons, depending upon the size definition of a neighborhood. Block group data also, by federal and state definition, used to define an environmental justice population. Census tract is used as to report health statics of all

types to the public and its partners for community needs assessment and program development. The National Environment Policy Act recommends that the unit of geographic analysis of environmental justice populations be at the census block group.

- From Summary File 1: Zip code counts are also used to obtain municipality counts.
- From 2010 Modified Race Data Summary File: County counts are used for rates we calculate at the county level.

Quotes from 2018 FRN*

“I depend heavily on the population data in the P12 tables from Summary File 1.”

“Our data use is limited to Summary File 1.”

“Much of our use of 2010 Census data involved producing control totals by tract or block group to use in normalizing American community survey summaries.”

“We rely on data from decennial census Summary File 1 at the block group and census tract levels. ... Our statisticians select areas to be surveyed using housing unit counts household counts and population counts.”

[We are mandated by state executive order to develop an environmental justice strategy that] “requires environmental justice populations to be defined at the census block group level using the decennial census.”

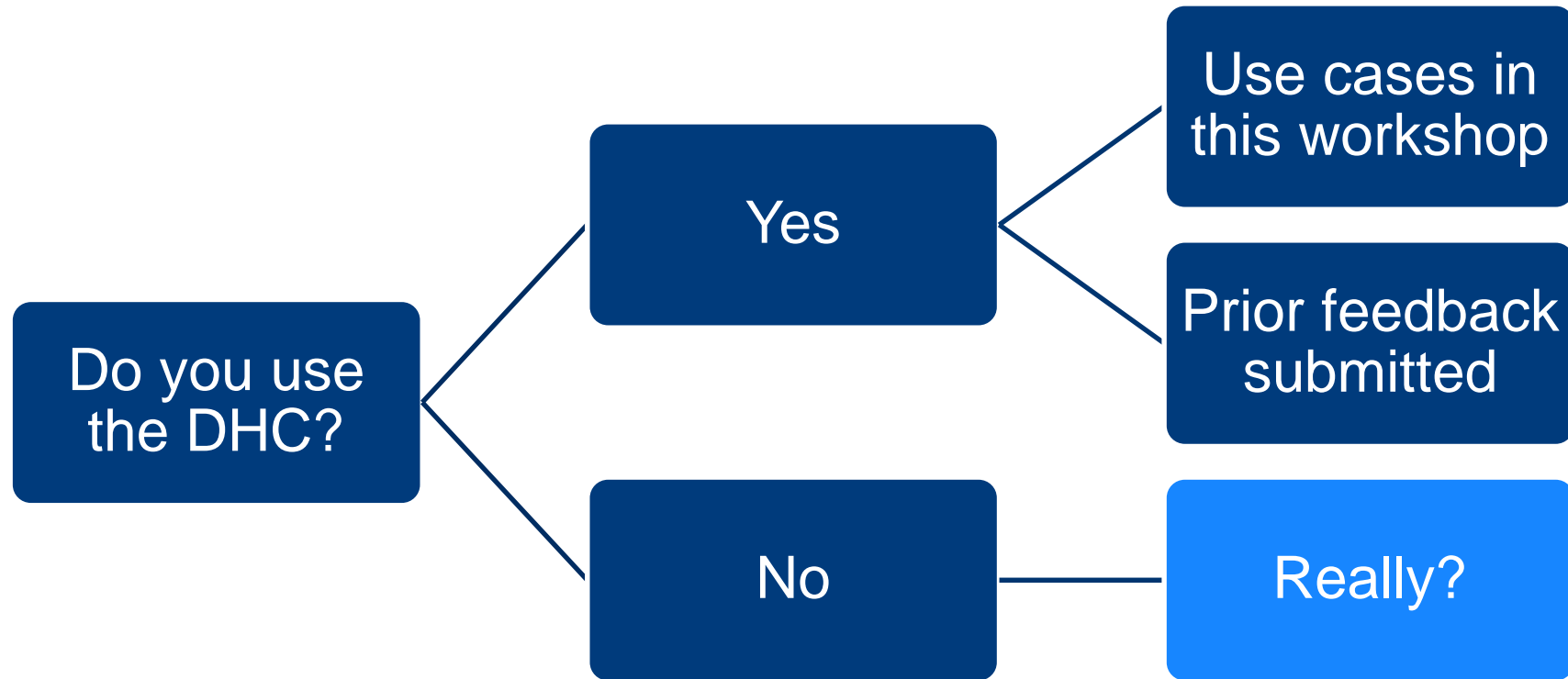
“Many programs also routinely use census ZIP Code, block groups, and tract level information for surveillance and prioritization purposes, especially to examine areas of need within a city or town.”

“Environmental justice population statistics are available at the block level, so being able to understand the data at the block level is necessary. Food access work looks at census block or even census tract to estimate individual’s access to healthy food. Block group data is routinely used by the tobacco program as part of surveillance efforts and evaluation. Block data are used for community investigations such as neighborhood environmental impacts and health impact assessment of community development/improvements.”

Offering more

- At least three submitters attached detailed information showing their uses of SF data
- Offered more information, examples
 - Never contacted
 - Instead, multiple requests for feedback
 - Is feedback catalogued? Acted upon?

Awareness



Columbia Generating Station, Richland, WA



Columbia Generating Station is the northwest's only commercial nuclear energy facility and is the third largest electricity generator in Washington state, behind Grand Coulee and Chief Joseph dams.

Quick Facts

Type: General Electric boiling water reactor

Generation: 1,207 megawatts

Thermal electric generating facility area population estimates

The Washington State Office of Financial Management produces annual population estimates for incorporated places, unincorporated areas, fire protection districts, and library districts within the Thermal Electric Generating Facility Area (TEGFA). This boundary is defined as the area lying within thirty-five miles of the most commonly used entrance of the Columbia Generating Station (formerly known as the Hanford Nuclear Reservation) and is south of the southern boundary of township fifteen north. Population estimates are used for the annual distribution of tax proceeds in accordance with RCW 54.28.055. These taxes are dispersed as part of the Public Utility District Privilege Tax.

TEGFA Impacted Area

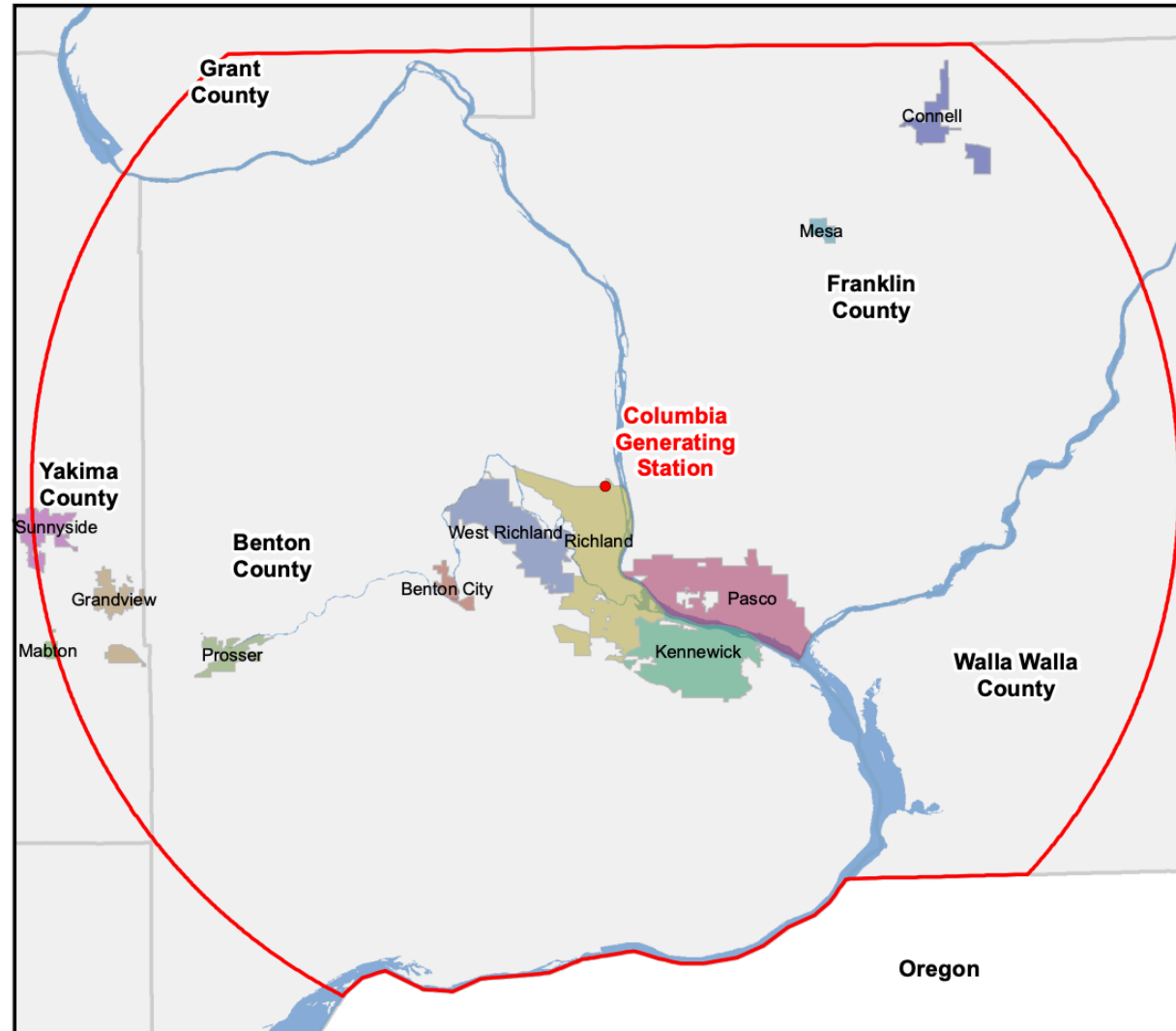


TABLE 1

Population Estimates for Cities and Unincorporated Areas to be Used for the 2022 Distribution of Thermal Electric Generating Facilities Tax Proceeds

Cities and Unincorporated Areas of Counties	2021 Population to be Used for the 2022 Distribution of Tax Proceeds	Proportion of Impacted Area Unincorporated Population by County	Proportion of Impacted Area Incorporated Population by City
Total Unincorporated	63,897	1.0000	1.0000
Total Incorporated	277,023		
<u>Benton County</u>	209,310		
Unincorporated Area	36,647	0.5735	
Benton City	3,500		0.0126
Kennewick	84,620		0.3055
Prosser	6,145		0.0222
Richland	61,328		0.2214
West Richland	17,070		0.0616
<u>Franklin County</u>	98,030		
Unincorporated Area	13,805	0.2161	
Connell	5,125		0.0185
Mesa	390		0.0014
Pasco	78,710		0.2841
<u>Grant County</u>	340		
Unincorporated Area	340	0.0053	
<u>Walla Walla County</u>	5,190		
Unincorporated Area	5,190	0.0812	
<u>Yakima County</u>	28,050		
Unincorporated Area	7,915	0.1239	
Grandview	10,960		0.0396
Mabton (Part)	0		0.0000
Sunnyside (Part)	9,175		0.0331

Notes:

While every effort has been made to ensure the accuracy of the information provided, population estimates are subject to errors arising from incomplete or inaccurate source data as well as modeling error.

According to RCW 54.28.010(7), the "impacted area" for a thermal electric generating facility on a federal reservation means that area in the state lying within 35 statute miles of the most commonly used entrance of the federal reservation and which is south of the southern boundary of Township 15 North. For the present analysis, the entrance at the intersection of Stevens Dr. and Horn Rapids Rd. is considered the most commonly used entrance.

The 2021 population includes city annexations through April 1, 2022.

Population estimates are rounded to the nearest 5.

Fund distribution based
on population estimates
for portions of
cities/counties
AND for fire protection
districts

TABLE 2

Population Estimates for Fire Protection Districts to be Used for the 2022 Distribution of Thermal Electric Generating Facilities Tax Proceeds

Fire Protection Districts	2021 Population to be Used for the 2022 Distribution of Tax Proceeds	Proportion of Impacted Area Fire Protection District Population
Total	77,035	1.000
<u>Benton County</u>	49,660	
1	20,220	0.262
2	7,615	0.099
4	20,790	0.270
5	440	0.006
6	595	0.008
<u>Franklin County</u>	14,185	
1	2,090	0.027
2	60	0.001
3	6,955	0.090
4	3,155	0.041
5	1,925	0.025
<u>Grant County</u>	340	
8	340	0.004
<u>Walla Walla County</u>	5,190	
1	0	0.000
3	1,015	0.013
5	3,965	0.051
6	205	0.003
7	5	0.000
<u>Yakima County</u>	7,660	
5	7,655	0.099
7	5	0.000

Notes:

While every effort has been made to ensure the accuracy of the information provided, population estimates are subject to errors arising from incomplete or inaccurate source data as well as modeling error.

According to RCW 54.28.010(7), the "impacted area" for a thermal electric generating facility on a federal reservation means that area in the state lying within 35 statute miles of the most commonly used entrance of the federal reservation and which is south of the southern boundary of Township 15 North. For the present analysis, the entrance at the intersection of Stevens Dr. and Horn Rapids Rd. is considered the most commonly used entrance.

Incorporated area populations are included in the fire protection district population estimates in cases where districts provide services to cities (RCW 52.04.071 and RCW 52.04.091). Incorporated area populations are included in the following fire protection district estimates: Benton City (Benton-2), West Richland (Benton-4) and Mesa (Franklin-1).

The 2021 population includes city annexations through April 1, 2022.

Population estimates are rounded to the nearest 5.

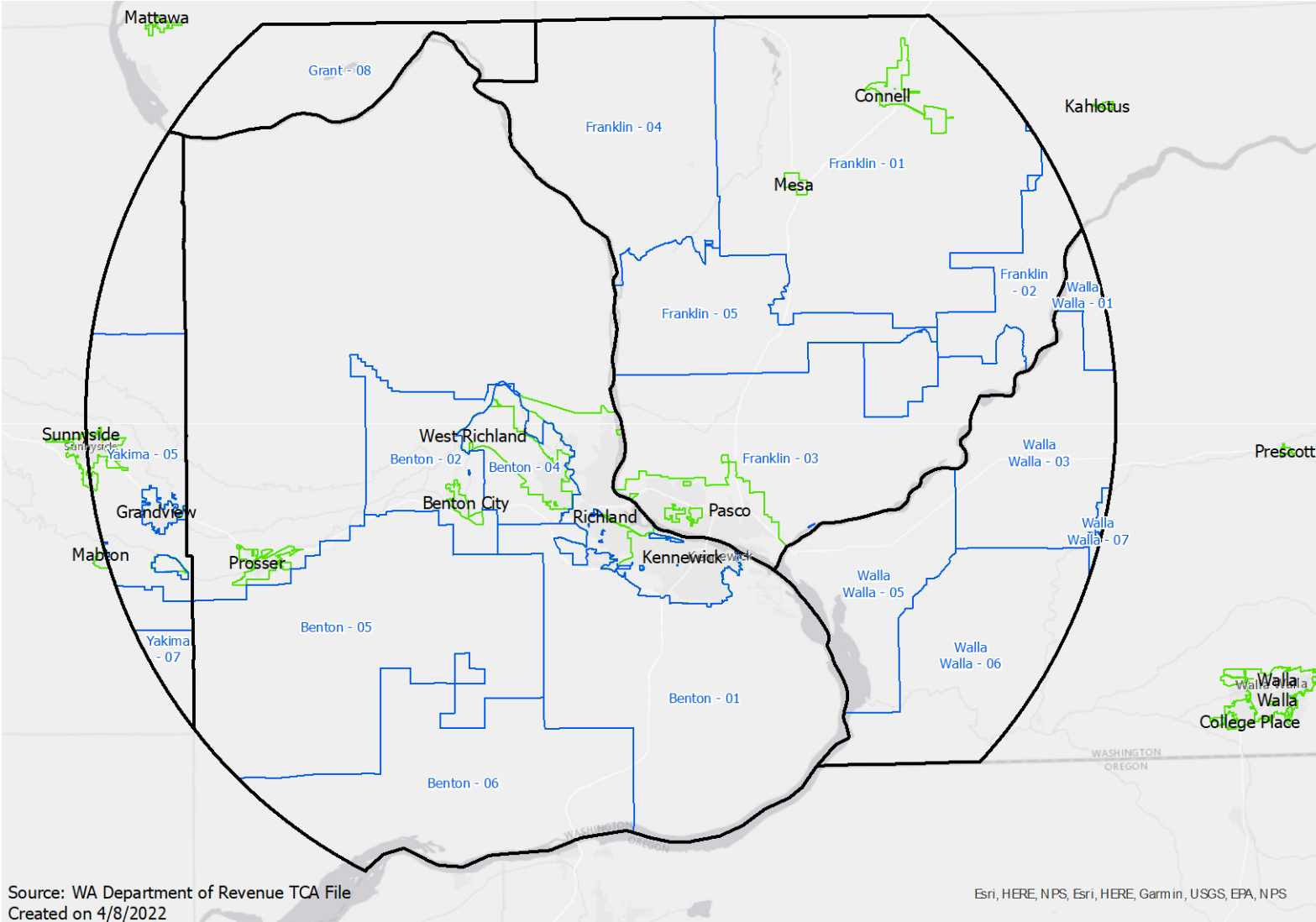
Total Population Estimates for Benton County Fire Protection Districts

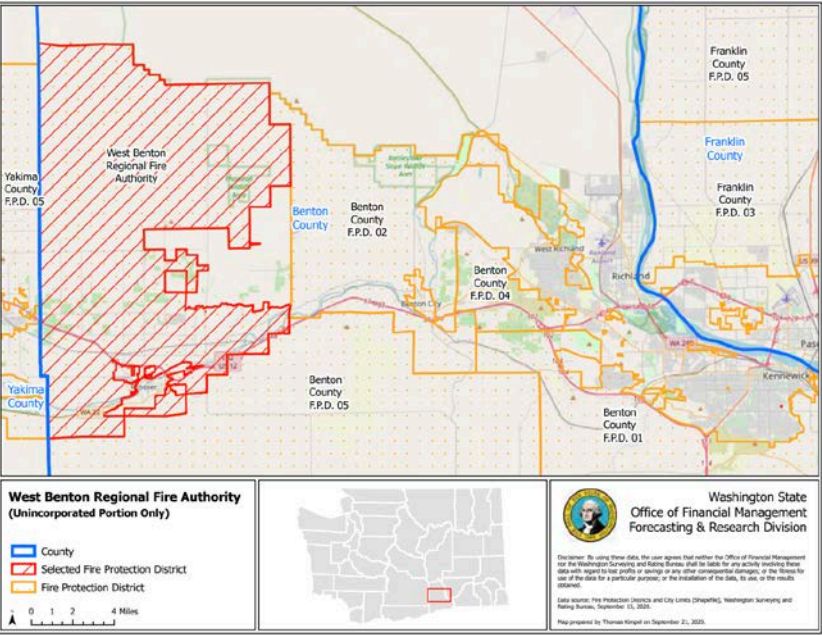
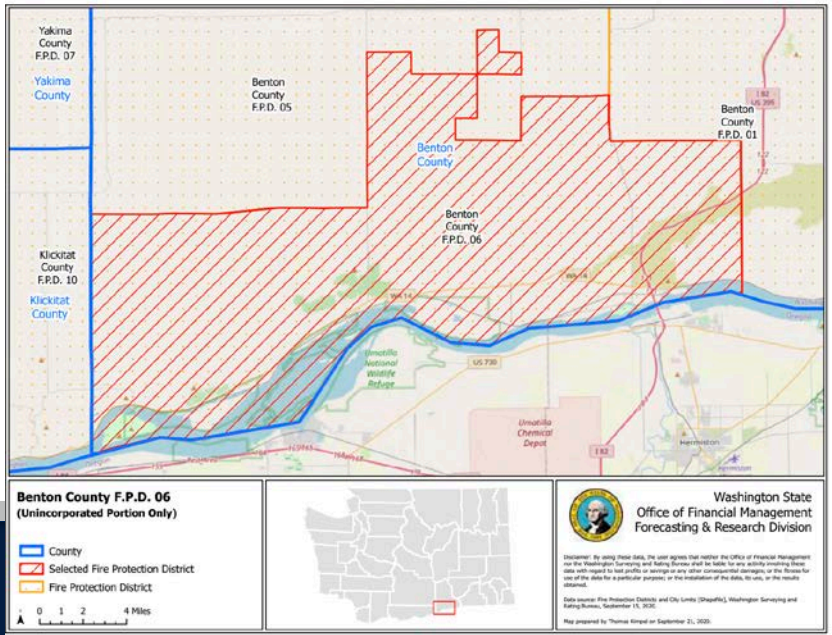
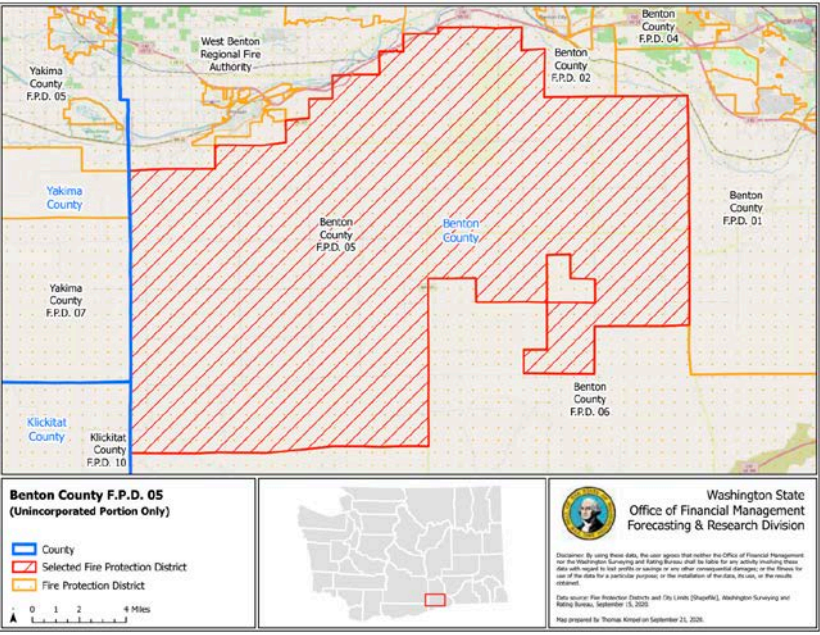
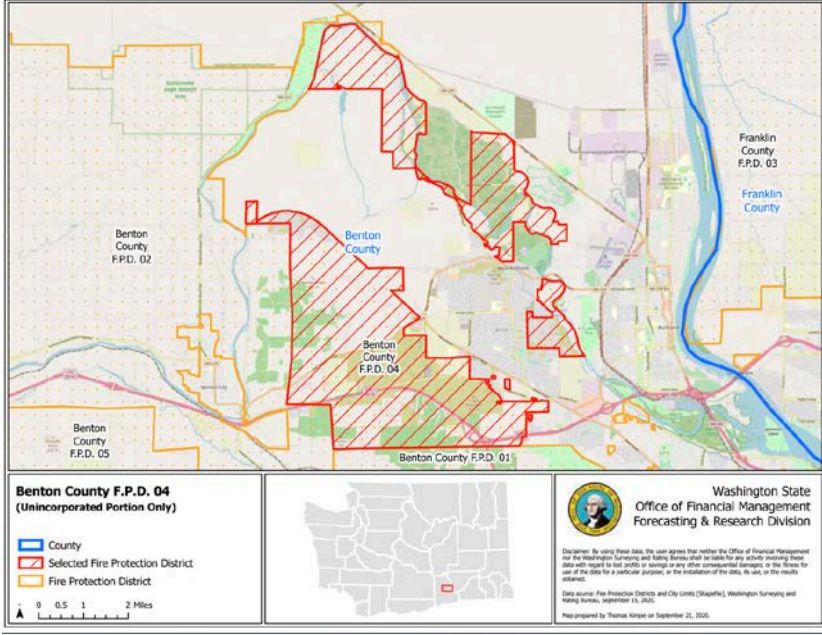
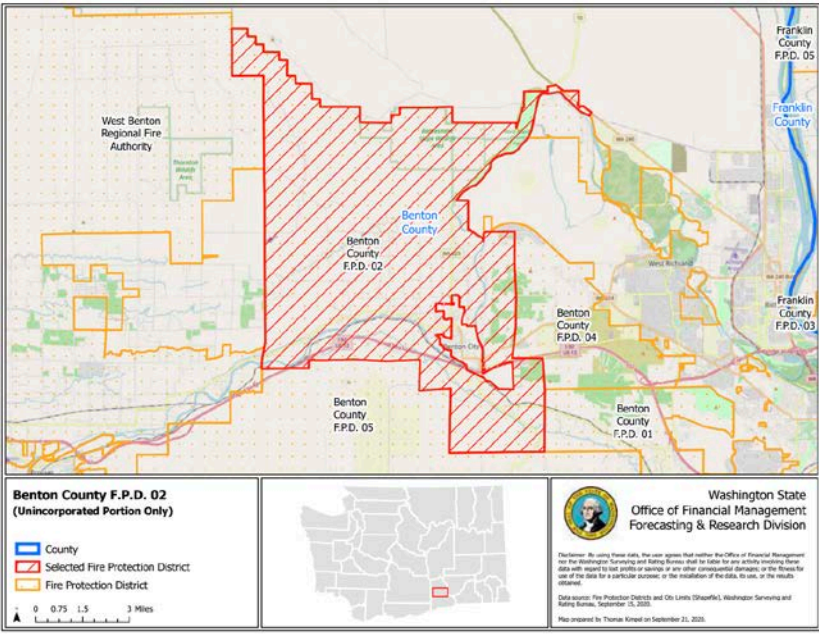
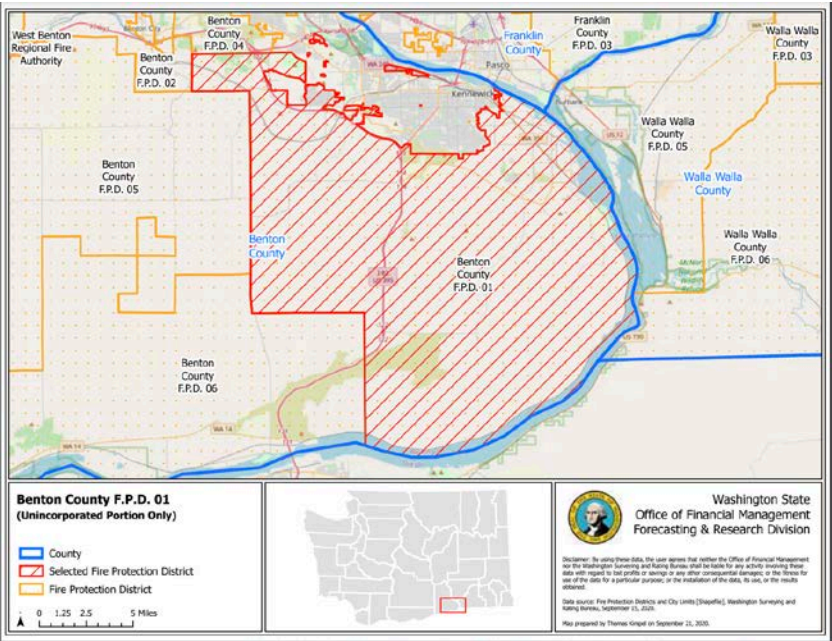
County Name	Fire Protection District	Fire Protection District Name	Estimated Total Population 2010	Estimated Total Population 2011	Estimated Total Population 2012	Estimated Total Population 2013	Estimated Total Population 2014	Estimated Total Population 2015	Estimated Total Population 2016	Estimated Total Population 2017	Estimated Total Population 2018	Estimated Total Population 2019	Estimated Total Population 2020	Numeric Change in Total Population 2010 to 2020	Percent Change in Total Population 2010 to 2020
Benton	Benton County F.P.D. 01	Benton County Fire District 1	16,249	16,475	16,633	16,891	17,119	17,266	17,479	17,979	18,271	18,940	19,142	2,893	17.80
Benton	Benton County F.P.D. 02	Benton County Fire District 2	3,839	3,886	3,926	3,973	4,027	4,013	4,030	4,098	4,123	4,280	4,393	554	14.43
Benton	Benton County F.P.D. 04	Benton County Fire District 4	3,357	3,395	3,436	3,490	3,502	3,524	3,540	3,572	3,566	3,687	3,720	363	10.81
Benton	Benton County F.P.D. 05	Benton County Fire District 5	307	312	315	317	328	326	332	335	338	370	383	76	24.76
Benton	Benton County F.P.D. 06	Benton County Fire District 6	775	785	789	795	794	790	790	801	810	837	841	66	8.52
Benton	West Benton Regional Fire Authority	West Benton Fire & Rescue	6,985	7,052	7,085	7,141	7,176	7,170	7,184	7,299	7,310	7,504	7,574	589	8.43

Occupied Housing Unit Estimates for Benton County Fire Protection Districts

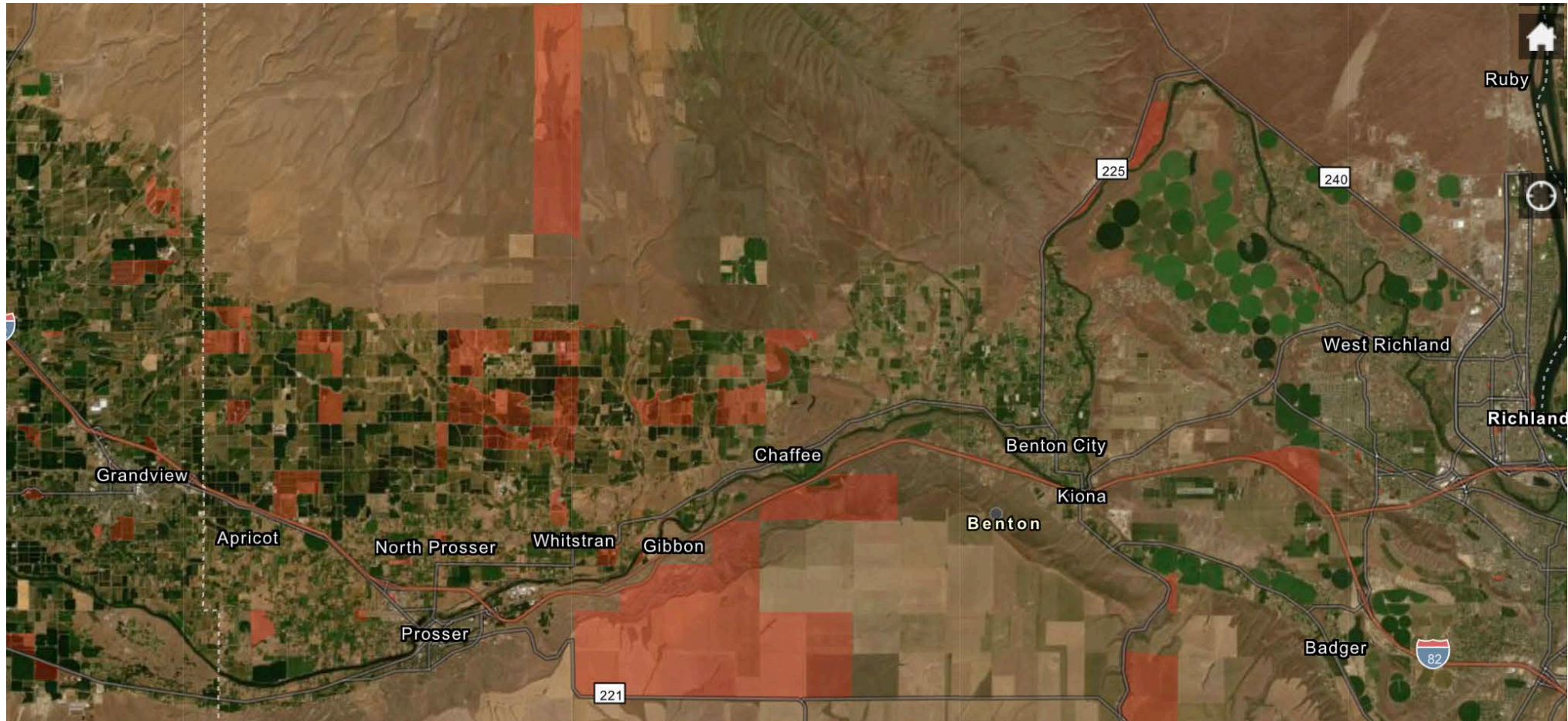
County Name	Fire Protection District	Fire Protection District Name	Estimated Occupied Housing Units 2010	Estimated Occupied Housing Units 2011	Estimated Occupied Housing Units 2012	Estimated Occupied Housing Units 2013	Estimated Occupied Housing Units 2014	Estimated Occupied Housing Units 2015	Estimated Occupied Housing Units 2016	Estimated Occupied Housing Units 2017	Estimated Occupied Housing Units 2018	Estimated Occupied Housing Units 2019	Estimated Occupied Housing Units 2020	Numeric Change in Occupied Housing Units 2010 to 2020	Percent Change in Occupied Housing Units 2010 to 2020
Benton	Benton County F.P.D. 01	Benton County Fire District 1	5,583	5,649	5,711	5,761	5,847	5,916	6,014	6,174	6,333	6,453	6,510	927	16.60
Benton	Benton County F.P.D. 02	Benton County Fire District 2	1,395	1,408	1,424	1,430	1,449	1,447	1,460	1,481	1,502	1,531	1,567	172	12.33
Benton	Benton County F.P.D. 04	Benton County Fire District 4	1,234	1,246	1,261	1,271	1,277	1,287	1,299	1,308	1,317	1,337	1,345	111	9.00
Benton	Benton County F.P.D. 05	Benton County Fire District 5	120	122	123	122	126	126	129	129	132	140	144	24	20.00
Benton	Benton County F.P.D. 06	Benton County Fire District 6	261	264	265	266	266	265	267	270	276	281	281	20	7.66
Benton	West Benton Regional Fire Authority	West Benton Fire & Rescue	2,139	2,158	2,172	2,178	2,193	2,200	2,214	2,250	2,274	2,303	2,323	184	8.60

TEGFA Fire Protection District Boundaries





Problem Blocks* in Benton County



*Occupied but zero population, no occupied housing units but pop>0, and persons per household<1
I. Youngs & R. Prevost, 2020 Redistricting Data File analysis

OFM's Disclaimer

Estimates of Total Population for Fire Protection Districts (Unincorporated Portion Only)
Washington State Office of Financial Management, Small Area Estimate Program (SAEP)

By using these data the user agrees that the Washington State Office of Financial Management shall not be liable for any activity involving these data with regard to lost profits or savings or any other consequential damages; or the fitness for use of the data for a particular purpose; or the installation of the data, its use, or the results obtained.

Estimates are approximations. Accuracy evaluation for Washington's small area estimates is still in progress. However, based on other evaluations of small area estimates, the error for areas of about 1,000 in population may range from 5 to 15 percent. Variances for smaller areas may be considerably higher. Furthermore, all SAEP estimates are subject to change due to data updates and revisions. Use these data with caution.

Data Source: Fire Protection Districts and City Limits [Shapefile]. Washington Surveying and Rating Bureau, September 15, 2020.

Data users are encouraged to review the maps on OFM's website at <http://bit.ly/2zEnHUO> in order to better understand the geography behind this particular estimate series.

Framing and Phrasing – and Blaming?

~~How do you use
the DHC?~~

How Do you use
the DHC?



Why would you
use blocks?

Why Use Blocks

- Necessity
 - Legal requirements to use Census data
 - Off-spine geographies
 - Custom geographies
- Legacy
 - Systems and models use blocks
 - Granular information needed for estimate and projection methods

Recap

- Knowledgeable users have provided feedback, repeatedly
- Other knowledgeable users couldn't respond on the DHC Demo timeline
- Less knowledgeable users may not know that they need DHC data and were unaware of the call for feedback
- Many users will have to use whatever data are published

Asks

- Improve the engagement process
- Be transparent about feedback received
- Provide tools, code, viewers to help users evaluate data
- Assume that DHC will lack utility for some users
 - How can utility of other Decennial Census products (population estimates and American Community Survey) be preserved and enhanced?