Washington State
Department of Health

# Health Equity Zones

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**Prepared By Evans Student Consultants:**

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# Health Equity Zones:

## A Washington State Department of Health Initiative

## Final Capstone Portfolio

### May 20, 2022

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EVANS SCHOOL
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Kalina Bathke is a current degree seeking student completing an MPA in Policy Analysis and Program Evaluation at the Evans School of Public Policy and Governance. She graduated from the University of Wisconsin-Madison in 2020 with a Bachelor of Science in Community and Nonprofit Leadership, particularly focusing on public health and public policy. Her experience and passion come from working with various health equity centered nonprofits across Wisconsin. For the past two years, Kalina has been working at UW's Office of Sustainability, assisting with the management of their Sustainability Action Plan.

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Maddi is a current degree seeking student completing an MPA at the Evans School of Public Policy and Governance. They grew up in rural Southern Pennsylvania and graduated from Carnegie Mellon University in 2014 with a B.S. in International Relations and Politics and a minor in Physics. They have professional experience as an educator and as an AmeriCorps VISTA. Maddi is passionate about a wide variety of subjects, including poverty policy, urban design, social justice, behavioral science, and Arabic language and cultural studies. They hope to find a career that centers equity and supports their desire to continuously learn and grow.

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Hillary Coleman is a current degree seeking student completing an MPA at the Evans School while focusing on policy analysis and local government management. She grew up in the Pacific Northwest and graduated from Connecticut College in 2014 with a B.A. in Psychology and Hispanic Studies. Hillary then worked at the Seattle/King County Coalition on Homelessness until she began classes at Evans in 2020. During her second year at Evans, Hillary worked in the Shoreline City Manager's Office. Hillary is now working as a management analyst for the City of Kirkland's Parks and Community Services Department.

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Varsha Krish is a current degree seeking student completing an MPA in Leadership and Decision-Making at the Evans School of Public Policy and Governance. After graduating from Barnard College of Columbia University in 2017 with a B.A in Neuroscience and Behavior, she moved from New York to Seattle to work as a data analyst at the Institute for Health Metrics and Evaluation. At Evans, Varsha focused on public and nonprofit management and worked in the Project Management office at King County's Office of Performance, Strategy and Budgeting. Going forward, she hopes to find a career which bridges her technical background with her management skills.

# Acknowledgements

## With Humility

We acknowledge the importance of recognizing our positionality as it pertains to our research and analysis for this report. Our team is predominantly white, with only one member identifying as a person of color, and predominantly woman-identifying, with one member identifying as non-binary. These identities provide us with a relatively narrow window of experiences in comparison to the diversity of all Washingtonians impacted by the Department of Health. Further, as members of a graduate program in public administration in the United States we understand that our education has been rooted in western, white supremacist epistemology and values.

While we have all experienced systemic biases in healthcare, and members of our team have utilized Apple Health, Washington's Medicaid system, most of us have not experienced major barriers to accessing healthcare in Washington State. We have worked to be cognizant of our biases and include diverse perspectives in this report in order to honor the local communities in Washington who will be impacted by this work.

## With Gratitude

This report was made possible through the ceaseless support from the Department of Health, our peers and faculty at the Evans School, and other allies in the fight for health equity.

We would like to thank our contacts at the Department of Health: Amy Sullivan, Kaeli Flannery, and Brynn Stopczynski, our advisor at the Evans School, Adrienne Quinn, and our peers at the Evans School for reviewing our work.

## With Solidarity

Washington is home to 29 federally recognized tribes and five tribes which are still fighting for federal recognition. We wrote this report from the University of Washington's Seattle Campus, which sits on the ancestorial, unceded lands of the Coast Salish People, which includes lands and shared waters of the Duwamish, Puyallup, Suquamish, Tulalip and Muckleshoot nations. The Department of Health works across Washington State on unceded lands of many nations. Notably, the Duwamish Tribe remains unrecognized and calls for support through their Petition for Federal Recognition and their Real Rent Program. They ask those benefiting from the theft of indigenous land to contribute to the revival and continued existence of one of this nation's First People.

We acknowledge that we, Washington State's public departments, and the University of Washington have benefited from the forceful enslavement of Black peoples. Much of the economic prosperity, infrastructure, and culture we take pride in today was made possible by enslaved African labor whose descendants still are subject to unjust systems across all fields, including healthcare. Systemic anti-Black bias has deep roots and any effort to improve the lives and wellbeing of Black communities must start with acknowledging this history.

# Glossary

## Key Acronyms

**ACA –** Affordable Care Act

**ACH –** Accountable Communities of Health

**ACS –** American Community Survey

**BMI –** Body mass index

**BRFSS –** Behavioral Risk Factor Surveillance System

**CAC –** Community Advisory Council

**CBO –** Community Based Organization

**CDC –** Centers for Disease Control and Prevention

**CDPH –** Chicago Department of Public Health

**CHA –** Community Health Assessment

**CHAG –** Community Health Assessment Group

**Chicago HEZ –** Healthy Chicago Equity Zones

**CHIP –** Community Health Improvement Plan

**CHNA –** Community Health Needs Assessment

**COF –** Tacoma-Pierce Communities of Focus

**COO –** King County Communities of Opportunity

**DCHS –** King County's Department of Community and Human Services

**DOH –** Washington State Department of Health

**HDCGP –** Colorado Health Disparities and Community Grant Program

**HEZ –** Health Equity Zone

**HYS –** Healthy Youth Survey

**IBL –** Information by Location

**IHP –** Indian Health Program

**IPV –** Intimate Partner Violence

**IRS –** Internal Revenue Service

**LCHE –** Louisiana Center for Health Equity

**LHJ –** Local Health Jurisdiction

**Louisiana OPH –** Louisiana Office of Public Health

**Maryland DHMH –** Maryland Department of Health and Mental Hygiene

**Maryland HEZ –** Maryland Health Enterprise Zones

**NVSS –** National Vital Statistics System

**OFM –** Office of Financial Management

**PA HEAT –** Pennsylvania Health Equity Analysis Tool

**Pennsylvania DHS –** Pennsylvania Department of Health Services

**Pennsylvania HEZ –** Pennsylvania Health Equity Zone

**PHAB –** Public Health Accreditation Board

**PHSKC –** Public Health Seattle-King County

**RAHC –** Regional Accountable Health Councils

**RFP –** Request for Proposal

**Rhode Island DOH –** Rhode Island Department of Health

**Rhode Island HEZ –** Rhode Island Health Equity Zones

**RHTP –** Regional Health Transformation Plan

**SB 5052 –** Washington State Legislature's Engrossed 2nd Substitute Senate Bill 5052: An Act relating to the creation of health equity zones

**SB12-234 –** Maryland Health Improvement & Disparities Reduction Act of 2012

**TPCHD –** Tacoma-Pierce County Health Department

**UCR –** Uniform Crime Reporting Program

**WIC –** Women, Infants & Children

# Key Terms

**Health factors** — The indicators that influence how well and how long we live; these are also predictors of how healthy a community can be in the future.

**Health disparities** — Preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.

**Health equity** — The condition wherein all people have the opportunity to achieve their full health potential, regardless of the color of their skin, where they were born, level of education, gender identity, sexual orientation, religious practice, occupation, language they speak, the neighborhood they live in, or whether or not they have a disability.

**Health Equity Zone** — (Washington SB 5052 definition) A contiguous geographic area that demonstrates measurable and documented health disparities and poor health outcomes.

**Health inequities** — Differences in health outcomes across different groups of people, which are caused by something systematic, avoidable, unfair and/or unjust.

**Health outcomes** — Representation of how healthy a person, county, or state is right now, typically measuring the length of life and quality of life.

**Metrics** — Areas of focus for improving health in a community and the measures used to track health status.

**Place-based approaches** — Long-term initiatives in specific locations or jurisdictions that strive to achieve better results for underserved peoples.

**Racism** — A system of oppression based on the socially constructed concept of race exercised by the dominant racial group over non-dominant groups. Racism is a system of oppression created to justify social, political, and economic hierarchy.

**Social determinants of health** — The economic and social conditions — based on where people are born, live, work, and play — that affect a person's health status.

# Executive Summary

Washington State's 2021 Senate Bill 5052 (SB 5052), An Act relating to the creation of health equity zones, "created an important foundation for the Washington State Department of Health (DOH) to support communities in addressing the disparities they want to prioritize" (WA DOH, 2022-a). The DOH will work with community members and organizations to define geographic Health Equity Zones (HEZs), based on data and metrics, and to support community leaders in each zone with their community health work. The Health Equity Zone Community Advisory Council (CAC) was created to ensure that the HEZ initiative "efforts are community-centered and health-equity driven, with focused attention given to communities experiencing the greatest health inequities" (WA DOH, 2022-a).

The DOH contracted with the authors, who are UW Evans School graduate student consultants, to prepare a report for the DOH and CAC with details about existing health metrics, especially those used by organizations in Washington State, that may be used as HEZ selection criteria.

We approached this project with three principal questions in mind to answer in the corresponding parts of this report, with the intent to synthesize all conclusions in **Part IV**:

1. What is the history and background that brought this Health Equity project to fruition at the DOH?
2. What data sources, such as ones pertaining to health outcomes and overall community wellbeing, are available for the DOH to use as selection criteria for identifying Health Equity Zones?
3. What processes have other jurisdictions or health-equity focused programs used to identify communities to focus resources on and decide on their data metrics?

**Part I** of this paper provides the context for current health equity work and the State's demography. This part discusses widening health inequities across the state, the value of place-based approaches for health equity, and the role systemic racism plays in perpetuating health inequities. A brief summary of SB 5052 provides the legislative definition of HEZs and related data requirements. Geography and demography information is provided for the CAC to use while determining what health data and metrics to use to identify geographically contiguous HEZs.

**Part II** reviews local health data and other data sources to provide key metrics for consideration in the development of HEZs and opportunities for further exploration. We identified 34 Community Health Needs Assessments (CHNAs) across the state as valuable, publicly available data sources created with community input. We reviewed and categorized over 800 community partners and 200 metrics from these CHNAs to better understand which community groups often, or rarely, were engaged and what metrics each community valued. Our results showed that the majority of community partners were either healthcare infrastructure organizations, or public government departments. Organizations that provide services to those in need or to specific, identity-based groups were rarely listed. The metrics identified by these CHNAs displayed regional trends, meaning CHNAs covering counties in the same region tended to identify similar health needs. We grouped all of Washington into eight regions, using county borders, and named the common metrics within each region. Our analysis of county-level CHNAs is followed by an overview of common data sources that produced metrics for all of Washington State.

**Part III** provides case studies of nine initiatives across the country that promote place-based health equity including Rhode Island Health Equity Zones, Maryland Health Enterprise Zones, Pennsylvania Health Equity Zones, King County Communities of Opportunity, Tacoma-Pierce Communities of Focus, King County Accountable Communities of Health: HealthierHere, Healthy Chicago Equity Zones, Colorado Health Disparities and Community Grant Program, and Louisiana Health Equity. Five of these initiatives created specific geographic zones as areas of focus for health equity work. Four initiatives did not create specific zones but are included as additional examples of place-based approaches to health equity. Monitoring and evaluation metrics used by each program are provided in a summary table as examples of possible metrics for WA HEZs. The most common type of evaluation metrics were those pertaining to social environment of a community.

**Part IV** presents a summary of key lessons learned from initiatives in the case studies from Part III. Our analysis of five place-based health equity initiatives that created specific geographic zones of areas of focus for health equity work suggests that there is an overarching four-step process involved with a HEZ type initiative: (1) define zone eligibility using general criteria and criteria metrics, (2) select zones with an iterative process of zip code/census tract mapping, community engagement & collaboration, and organizational capacity assessment, (3) designate zones, and (4) monitor and evaluate zones. Community engagement is important throughout every step of the HEZ process. In Part IV, we provide specific recommendations based on our research findings for DOH consideration while implementing HEZs in Washington State.

**Part V** contains four appendices, listed alphabetically. Appendix A provides a supplemental guide to SB 5052, expanding on the summary in Part I. It includes plain-language translations of the bill's text and designated roles where appropriate. Appendices B and C supplement Part II by providing information about the history of and requirements for community health assessments and our CHNA analysis methodology, respectively. Appendix D further discusses metrics consideration by analyzing the 15 metrics identified in the Rhode Island Health Equity Zone Initiative and presenting this analysis as a model for future work.

# History & Context

## *Health Equity Zone Creation in Washington State*

**PART I**

*Health Inequities*

*Value of Place-Based Approaches*

*Health Equity Zone Establishment*

*WA Geography & Demography*

## Introduction

Like many places across the country, Washington's population is changing in dynamic ways that are impacting health and wellbeing. As the population continues to grow, it is becoming more racially and ethnically diverse, and getting older (WA DOH, 2018). These population changes are exacerbating longstanding health disparities experienced by certain community members in Washington. Recently, COVID-19 exposed the disparities within the healthcare delivery system and how systemic health and social inequities have put racial and ethnic minority groups at an increased risk for COVID-19 (Pollack, H. & Kelly, C. 2020). In 2021, the Washington State Legislature passed Senate Bill 5052 (SB 5052), An Act relating to the creation of health equity zones. They recognized the importance of addressing longstanding health disparities and centering health equity in all health-related work and committed to more appropriately aligning Washington State's prevention and health improvement strategies with the DOH commitment to equity. This part of the report explores the context of where health inequities exist in Washington State, the purpose of SB 5052, how implementation of SB 5052 can address health inequities, and Washington's geography and demography so that it is evident where opportunities to create Health Equity Zones (HEZs) may exist.

# Health Inequities Across the State

In 2021, Washington State was ranked tenth nationwide for overall health factors, and twelfth for overall health outcomes (United Health Foundation, 2021). **Health factors** influence how well and how long we live; these are also predictors of how healthy a community can be in the future. Health factors are measured by health behaviors (rates of alcohol consumption, dieting, etc.), clinical care (access and quality of health care), social and economic factors (education, employment, income, etc.), and physical environment (air and water quality, housing, transit, etc.). **Health outcomes** represent how healthy a person, county, or state is right now, typically measuring the length and quality of life. (CHR&R, n.d.-a)

**Social Determinants of Health**

The economic and social conditions – based on where people are born, live, work, and play – that affect a person's health status.

However, these statewide measures often hide the underlying stories of what is taking place at the county and community level. Where you live and what your zip code is often determines the availability of resources and ultimately one's health status. This is due to the social determinants of health and other societal factors that influence individual and group health statuses (WA DOH, n.d.-a). *Figure 1* displays county-level health rankings across the state. The rankings demonstrate variability in health factors and health outcomes by county. This disparity in health status across the state may be due to these determinants of health as certain communities are disproportionately impacted by negative economic and social conditions. These trends are the result of generations of inequality as Black, Brown, Indigenous, and Asian communities and other historically disenfranchised groups are more likely to experience these poorer health outcomes. (Braverman, et. al., 2010)

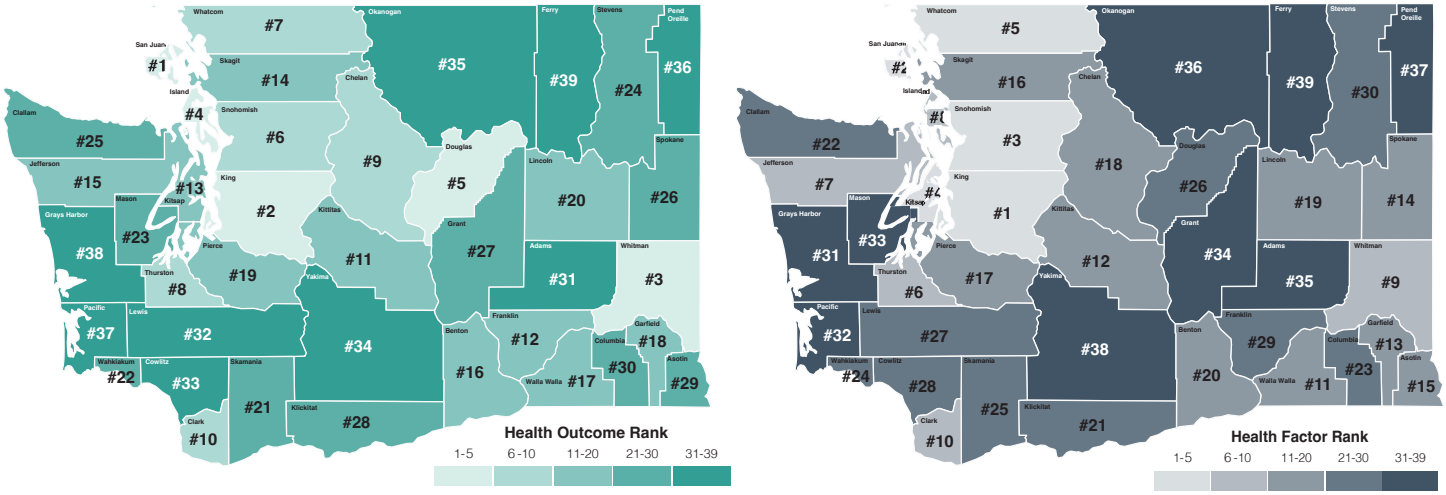



***Figure 1.*** Health Outcomes and Factor Rankings of Counties in Washington State as of 2021
Source: County Health Rankings

For more information pertaining to the health outcomes or factors relevant to each county please access the **County Health Rankings & Roadmap Toolkit**.

Additional resources regarding social determinants of health in Washington are available on the **DOH Social Determinants of Health Data website**.

# Health Disparities & Health Inequities

The efforts of SB 5052 through the HEZ initiative attempt to promote equity by requiring attention to the root causes of health issues and a focus on the communities that are most affected. The Washington State Department of Health (DOH) and their Health Equity workgroup use the following definition of health equity:

> Health equity exists when all people have the opportunity to achieve their full health potential, regardless of the color of their skin, where they were born, level of education, gender identity, sexual orientation, religious practice, occupation, language they speak, the neighborhood they live in, or whether or not they have a disability (WA DOH, n.d.-b).

**Health Disparities**

Preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations (CDC, n.d.).

**Health Inequities**

Difference in health outcomes across different groups of people and that difference is caused by something (a) systematic, (b) avoidable, (c) unfair and unjust (WA DOH, n.d.-b)

As a society, we have a role and a responsibility to promote equity. However, not everyone in Washington, or across the country, currently has the opportunity to achieve their full health potential. Various communities often experience drastically different health outcomes due to systems that have marginalized people based on their race, culture, identity or where they live. These differences in health statuses are generally referred to as “health disparities” or “health inequities.”

More information about Health Equity and DOH’s work to promote equity and strive against inequity can be found on the **DOH Health Equity Website**.

# Washington State DOH Vision, Mission, & Values

The goal of SB 5052 aligns with the DOH’s vision, mission, and values. It is evident through all three guiding principles that the department is actively working to address health inequities. Included below are the complete vision, mission, and values adopted by the DOH:

Vision: Equity and optimal health for all

Mission: The DOH works with others to protect and improve the health of all people in Washington state.

Values:

- **Human-centered**: We see others as people who matter like we do and take into account their needs, challenges, contributions, and objectives.
- **Equity**: We are committed to fairness and justice to ensure access to services, programs, opportunities, and information for all.
- **Collaboration**: We seek partnership and collaboration to maximize our collective impact. We cannot achieve our vision alone.
- **Seven Generations**: Inspired by Native American culture, we seek wisdom from those who came before us to ensure our current work protects those who will come after us.
- **Excellence**: We strive to demonstrate best practices, high performance, and compelling value in our work every day. (WA DOH, n.d.-c)

# The Value of Place Based Approaches for Health Equity

Place-based approaches are long-term initiatives in specific locations or jurisdictions – such as cities, towns, or neighborhoods – that strive to achieve better results for underserved peoples. Place-based approaches aim to bridge cross-sector organizations to more effectively address the underlying causes of complex social and systematic problems. They utilize a combination of assets, capacity, and the connectedness of local communities to support the improvement of opportunities and outcomes. These approaches vary due to the unique circumstances and opportunities present within a specific location but are an effective strategy in areas or communities that have been systematically disadvantaged or deprived of resources (Amobi, A. et al. 2019).

Place-based approaches focused on promoting health equity are not new to the U.S. or Washington State. In 2015, **Rhode Island** implemented an initiative that now works with 15 communities throughout the state to build the infrastructure needed to achieve a healthy populace through systemic changes at local levels. The purpose of this initiative is to honor the experiences of those who live and work in these communities while also challenging both the systems and structures that perpetuate health inequities.

Washington State is home to many county-level place-based initiatives. **Communities of Focus** (COF) in Pierce County and **Communities of Opportunity** (COO) in King County are place-based programs that recognize the value of local community experiences and provide resources and opportunities to support those most vulnerable. Each community served within the jurisdiction of COF and COO is uniquely different and has its own set of needs. These initiatives are designed with activities and programs to specifically meet the needs of each community being served. Read more about COF, COO, and Rhode Island's health equity work in Part III of this report.

Much of the power of place-based approaches is in their unique tailoring of programs to local challenges. Stand-alone or blanket policies and generalized models can be helpful, but the most effective strategies to improve outcomes are likely to be those that acknowledge the differences in communities and adapt to specific needs and challenges (Crew, M. 2020). The vast differences in health outcomes across Washington State indicate the need to develop adapted programming to improve health outcomes, create better opportunities, and listen to the experiences of communities.

# Race & Place

As noted above, health inequities disproportionately impact certain communities. It is important to note that the Centers for Disease Control and Prevention identifies **racism as a continuing major threat to the public's health** (CDC, 2021). Historically, policies and practices have explicitly supported the segregation of Black, Brown, Indigenous, and Asian communities, which have resulted in unfavorable health statuses. Due to systemic racism, people from these communities have been forced to live in areas with fewer opportunities and access to resources resulting in lower health outcomes (WA DOH, 2019). Until the passage of the Fair Housing Act of 1968, which made residential segregation illegal, communities of color were intentionally restricted from areas that had access to quality housing, health, and government investment. Despite the passage of this legislation, historically segregated neighborhoods still receive insufficient resources and services that would support healthier communities. Across the country, the disparities we see between neighborhoods are a result of discriminatory practices, structural racism, and deep-rooted inequities, especially related to health.

**Racism**

A system of oppression based on the socially constructed concept of race exercised by the dominant racial group (white people) over non-dominant racial groups (Black, Brown, Indigenous, and Asian). Racism is a system of oppression created to justify social, political, and economic hierarchy. (WA DOH, 2019)

# Changing the Narrative

While conducting health equity work and working with vulnerable communities, it is important to reframe questions from those focused on individual behavior to questions that address root causes and systemic issues related to health inequity. The key questions below were presented by the DOH Community Relations and Health Equity Director, Paj Nandi, during the 2021 legislative session as part of conversations with the committee that introduced the HEZ bill (SB 5052, 2021). The DOH has actively worked to reframe how they talk about health equity and questions like these are useful to ask while working on HEZ initiatives:

- What generates health inequity in the first place?
- What types of social change are necessary to confront health inequity?
- What kind of public collective action is necessary to confront health inequity across identifiable populations?
- How do we act on root causes of inequality to meet human need?
- What are the ways public health institutions collaborate with their allies to organize for social change directed to meeting human need for health and wellbeing? (NACCHO, 2018 in WA State Senate, 2021)

# Health Equity Zone Establishment Through SB 5052

Washington State's 2021 Engrossed 2nd Substitute Senate Bill 5052 (SB 5052), An Act relating to the creation of health equity zones, "created an important foundation for the DOH to support communities in addressing the disparities they want to prioritize" (WA DOH, 2022-a). The DOH will work with community members and organizations to define geographic HEZs based on data and metrics, and to support community leaders in each zone with their community health work. The Health Equity Zone Community Advisory Council (CAC) was created to ensure that the HEZ initiative "efforts are community-centered and health-equity driven, with focused attention given to communities experiencing the greatest health inequities" (WA DOH, 2022-a). The bill was signed by Governor Jay Inslee on May 12, 2021 with an effective date of July 25, 2021. SB 5052 is further outlined in Appendix A.

## Health Equity Zone Definition

SB 5052, Section 2.8 defines a Health Equity Zone as a:

> **Contiguous geographic area that demonstrates measurable and documented health disparities and poor health outcomes**, which may include but are not limited to high rates of maternal complications, newborn health complications, and chronic and infectious disease, is **populated by communities of color, Indian communities, communities experiencing poverty, or immigrant communities, and is small enough for targeted interventions to have a significant impact** on health outcomes and health disparities. Documented health disparities must be documented or identified by the department or the centers for disease control and prevention. (SB 5052, 2021)

## Community Leadership to Determine HEZ Selection Criteria & Metrics

Through this initiative, "the legislature intend[ed] to create health equity zones to address significant health disparities identified by health outcome data. The state intends to work with community leaders within the health equity zones to share information and coordinate efforts with the goal of addressing the most urgent needs" (SB 5052, 2021).

The CAC was created to ensure that the HEZ initiative involves community leadership. Community leadership is especially important when supporting community health, as different people need different types of support. Leaders who have trusting relationships and connections in their communities can help identify areas for focus and design collaborative projects to implement in HEZs. The CAC will ensure:

> Efforts are community-centered and health equity-driven, with focused attention given to communities experiencing the greatest health inequities. Community representatives will also help identify and shape stories that provide insight on the health inequities facing communities in Washington, and the public health data that document how these groups are disproportionately impacted. (WA DOH, 2021-b)

These community leaders will determine what health data and metrics to use to identify HEZs, based on the data requirements in SB 5052. Once eligibility criteria metrics are determined, HEZs can be created either through identification by the CAC/DOH or self-identification by community.

# Washington State Geography & Demography

The main requirement of SB 5052 is that the HEZs are to be defined geographically. This section provides information about existing geographic groupings and demographic data within Washington State, with associated maps, that may be helpful in the identification of HEZs.

## Geographical/Physical Composition of Washington

Given the size of Washington, it is important to understand how the state can be divided in terms of geographic land formations, granularity of available data, and where people live.

### *Physical Geography of the Land*

Washington State's diverse geography impacts where people in Washington live and impacts travel around the state. It is important to understand that people may experience different health outcomes based on where they live given the physical land formations across the state. This map shows Washington's physiographic regions (Norman & Roloff, 2004). The Cascade Mountain Range generally divides the state into Eastern and Western Washington. The Puget Sound Waterways separate the Olympic and Kitsap peninsulas from the eastern parts of the Puget Lowlands.

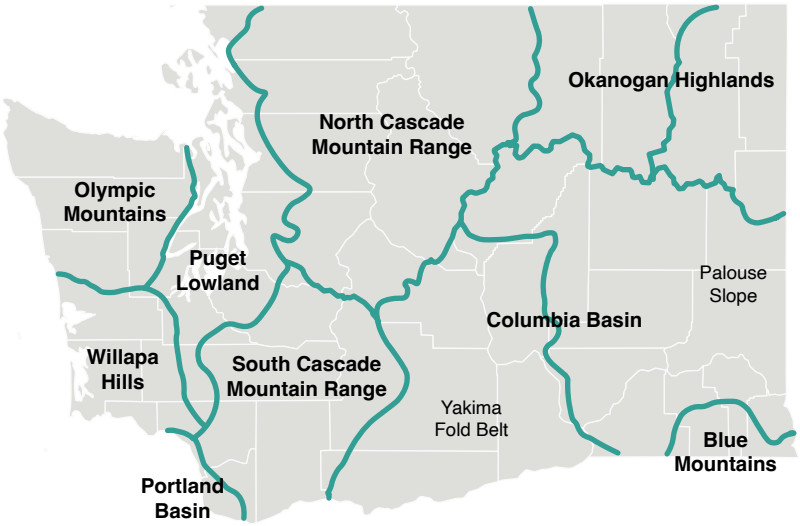



***Figure 2.*** Physical Geography of Washington
Source: Washington Department of Natural Resouces

### *Counties*

There are 39 counties in Washington State, thirty that are considered rural (green in this map), and nine that are considered urban (blue in this map). The urban counties are: Spokane, Benton, Clark, Whatcom, Snohomish, Kitsap, King, Pierce, and Thurston (WA DOH, 2017).

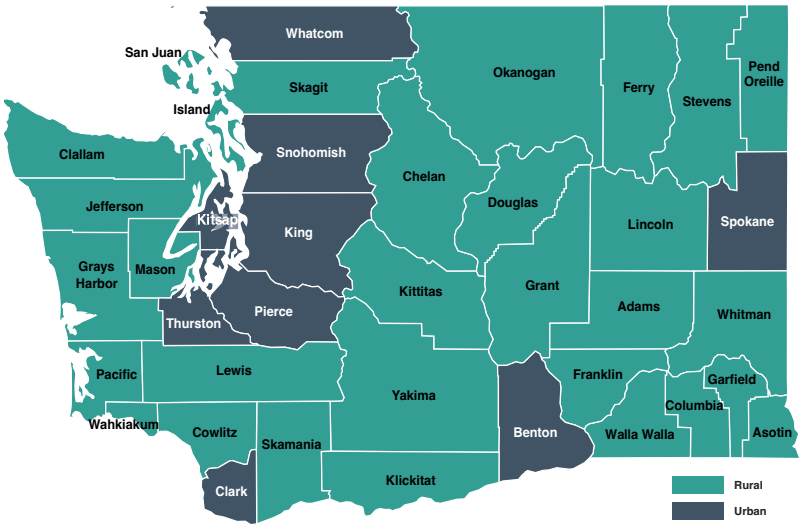



***Figure 3.*** Rural and Urban Washington Counties
Source: Washington State Department of Health

### *Zip Code & Census Tracts*

Washington state has 598 zip codes, 1,458 census tracts, and 195,574 census blocks (U.S. Census Bureau, 2021). Health data that are available at these granular levels can help identify how community health differs on a smaller scale. The **DOH Information by Location (IBL) tool** is an interactive map tool that provides a variety of census tract and zip code level health data.

## *Sovereign Tribal Nations & Indian Health Programs*

There are 29 federally recognized American Indian Tribes in Washington State (Washington Indian Gaming Association, 2021). Additionally, there are five tribes in Washington that are not federally recognized, including Chinook Nation, Duwamish Tribe, Snohomish Tribe of Indians, Snoqualmoo Nation, and Steilacoom Tribe (UW American Indian Studies, n.d.). It is important to note that all land in Washington is the ancestorial, unceded land of indigenous people. The **Native Land Digital website** provides an interactive tool for people to explore a map of indigenous territories and understand what land was part of which tribe(s) prior to land being taken by the U.S. Government.

Washington's public health system includes partners from Sovereign Tribal Nations and Indian Health Programs (IHP). The DOH consults and collaborates with tribal nations to "build infrastructure in cross-cutting capabilities and core programs to support system transformation" (WA DOH, n.d.-d). The DOH, as with other Washington State agencies, works under the **1989 Centennial Accord**, which "created a unique government-to-government relationship between many federally recognized tribal governments and the state of Washington" (WA DOH, n.d.-d). More information about these partnerships and the DOH commitments around consultation and collaboration is available on the **DOH Tribal Public Health website**. *Figure 4* provides a map of Tribal Reservations of federally recognized tribes, general locations of non-federally recognized tribes, Tribal Clinics, and Urban Indian Health Programs. It is important to note that indigenous people live across the entire state, not just in areas indicated on this map. Equity-focused approaches to health will consider the specific needs of indigenous people throughout state and tribal health programs.

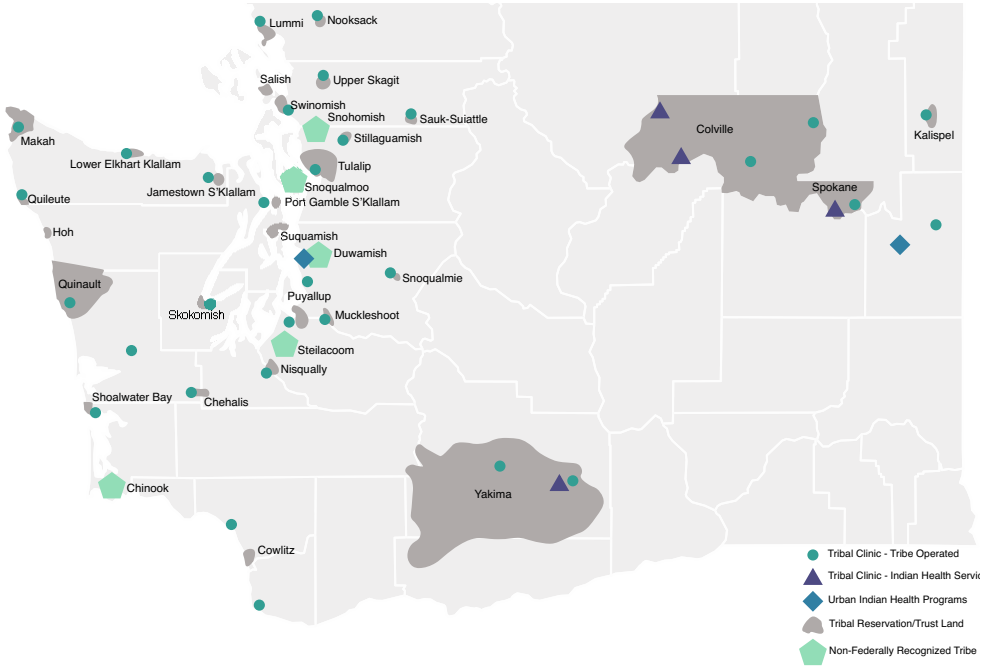



***Figure 4.*** Sovereign Tribal Nations and Indian Health Programs in Washington
Source: Washington Indian Gaming Assoication

# Existing Regional Health Divisions

Across Washington, there are many ways in which the state can be divided in order to implement planning and coordination activities, and to equitably distribute resources or services. Some of these examples of subdivisions rely on a lead organization or state-led department to coordinate efforts in the region. Each regional composition provides insight into how services and resources can be divided, while also communicating an understanding of what organizations may have influence over promoting health equity in their area.

## Local Health Jurisdictions

Each county in Washington is part of a local health jurisdiction (LHJ) that provides public health services throughout a defined geographic area. There are 35 LHJs in total, including 16 Public Health & Human Services Departments, eight Public Health Departments, eight Single County Health Districts, and three Multi-County Health Districts (WA DOH, 2021-a). The Washington State Association of Local Public Health Officials (WSALPHO) is a membership organization that includes all 35 LHJ (WSALPHO, n.d.). The **WSALPHO website** has a list with each LHJ that is frequently updated.

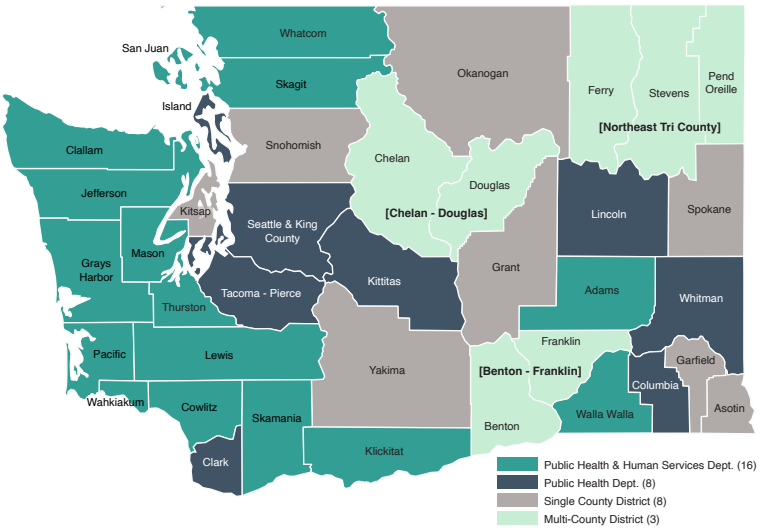



***Figure 5.*** Washington State Local Health Jurisdictions
Source: Washington State Department of Health

## Accountable Communities of Health

There are nine **Accountable Communities of Health** (ACH) in Washington. These are independent, regional organizations that work with communities on specific health and social needs-related projects. Specifically, they work with health care providers, LHJ, and community-based organizations to address community level public health needs by aligning resources, improving the Medicaid health care delivery system, and investing in community infrastructure. ACH was created and funded through the state's 1115 Medicaid waiver, with current ACH funding expiring at the end of 2022. Each ACH coverage area was defined based on the Medicaid population size, along with the concentration of available health and community organizations. (WA HCA, n.d.-a; WA HCA, 2020).

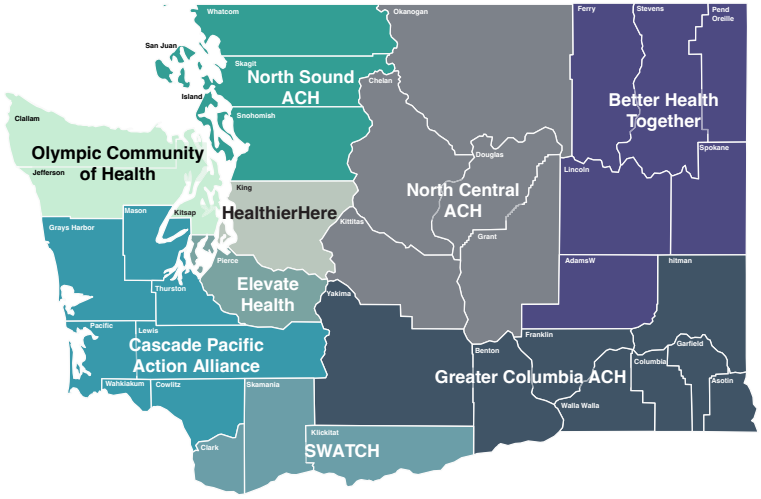



***Figure 6.*** Washington's Accountable Communities of Health
Source: Washington Accountable Communities of Health

## Public Health Emergency Preparedness Regions

DOH divides the state into nine Public Health Emergency Preparedness Regions. In each of these regions, one LHJ acts as the lead agency for emergency coordination (WA DOH, 2010).

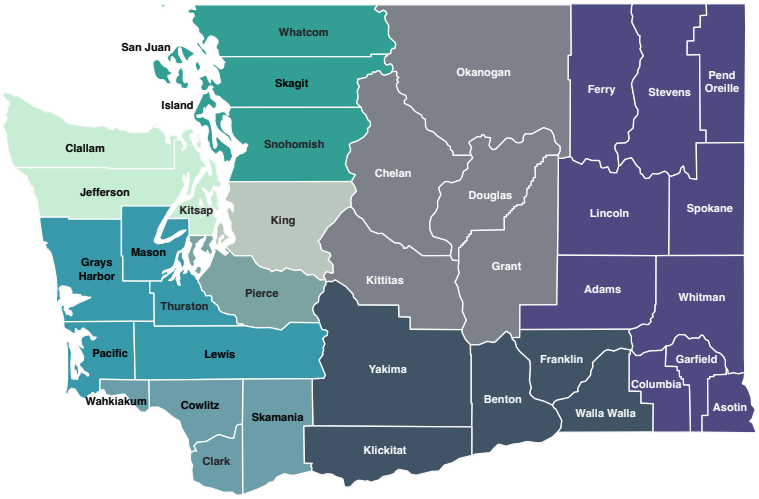



***Figure 7.*** Public Health Emergency and Response Regions
Source: Washington State Department of Health

# Washington State Demographics

Demographics including, but not limited to, population distribution, race and ethnicity, age, and immigration status are important to consider while implementing HEZs. This is due to the inextricable link between demographic identity and health outcomes. This relationship is discussed in detail as it pertains to race in the "Race and Place" section above. This section includes basic high-level demographic information that is useful to consider. It is even more important to use dashboards that incorporate geographic and demographic data in ways that can provide area-specific community experiences.

## *Population Distribution*

Population density differs based on geographic location in Washington State (WA OFM, n.d.). Counties surrounding Puget Sound are some of the most populated in the state with King County, Pierce County, and Snohomish County being the three leading counties by population. Areas in Central and Eastern Washington and on the Olympic Peninsula are less dense than those along the Puget Sound with some counties in the Northeast and Southeast of the state seeing less than five persons per square mile. The exception to this is Spokane County on the Eastern border. The City of Spokane makes this county the fourth most populous county. Clark County in the Southwest comes in at a close fifth with a population similar to that of Spokane County. However, due to Clark's small geographic size, it is one of the densest counties in the state.

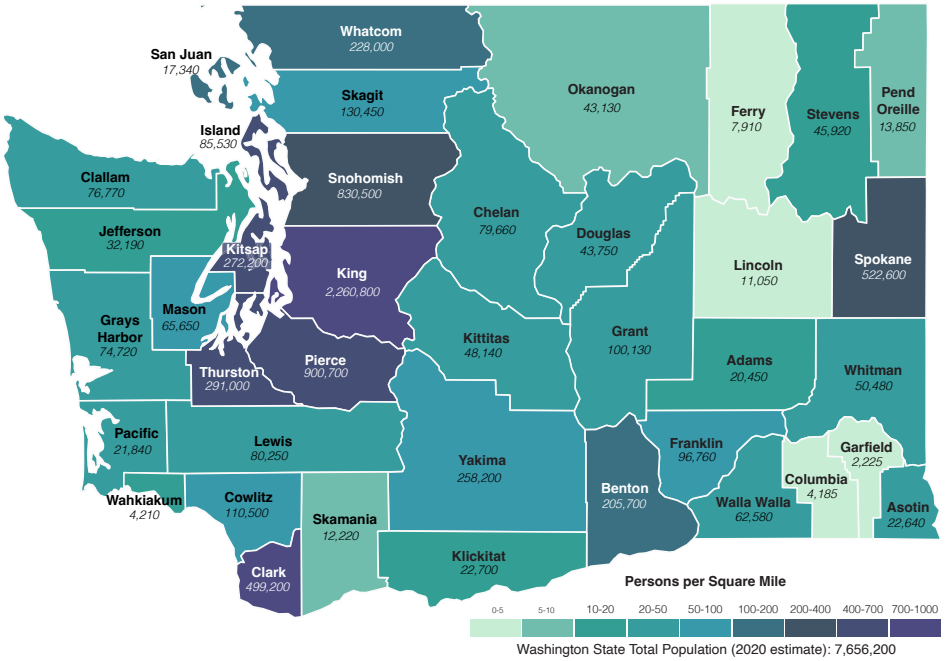



***Figure 8.*** Washington State Population Density 2020
Source: Washington State Department of Health

## *Race & Ethnicity*

Based on 2020 Census data, the Washington State Office of Financial Management (OFM) estimates the state's 2021 population to be 7,766,975 people (OFM, 2022). The primary race and ethnicity data for Washington State are from the American Community Survey (ACS), which has six categories for race and two categories for ethnic origin. Table 1 compares Census 2010 data to OFM's estimates for 2021 based on Census data (OFM, 2022). It is worth noting that Latino/Hispanic origin is a separate question on the Census from race identity, and while these data suggest that 14.22% of Washingtonians in 2021 identify as Latino/Hispanic, some people in that group may identify with another race as well.

***Table 1.*** Washington State Race and Ethnicity Demographic Breakdown 2021

| Race and Hispanic Origin | 2010 Percent of Population | 2021 Percent of Population |
|---|---|---|
| Native Hawaiian and Other Pacific Islander (alone) | 0.58% | 0.83% |
| American Indian and Alaska Native (alone) | 1.33% | 1.18% |
| Black or African American (alone) | 3.44% | 3.92% |
| Two or More Races (alone) | 3.57% | 6.56% |
| Asian (alone) | 7.13% | 9.63% |
| Hispanic or Latino | 11.24% | 14.22% |
| White (alone) | 72.7% | 63.65% |

Source: Washington State Office of Financial Management

It is important to find ways locally to disaggregate race and ethnicity data to deeply understand lived experiences. The 2021 Dismantle Poverty in Washington report created by the Governor's Poverty Reduction Work Group, includes important information about disaggregating data to tell a better story. As demonstrated in the **Dismantle Poverty in Washington Report**, while official measures showed that 25% of Washingtonians live below 200% of the Federal Poverty Limit, "disaggregating the data shows that Indigenous, Black, and Brown Washingtonians experience much higher rates [of poverty] than the state average (with significant variation within racial and ethnic groups), as do young children and youth, women, people with disabilities, immigrants and refugees, LGBTQIA+, and rural populations" (Dismantle Poverty in Washington, 2021, p. 10). This type of data disaggregation practice will be important for the DOH and CAC while looking at metrics to use to identify HEZs. Finding metrics that can be disaggregated as much as possible to report specific experiences of Washingtonians will benefit people in diverse communities.

## *Immigration Status*

Approximately 15% of Washingtonians were born outside of the U.S., 49% of who are naturalized U.S. citizens. An additional 15% of Washingtonians are U.S. born citizens with at least one immigrant parent. In 2016 there were 240,000 undocumented immigrants in Washington, representing three percent of the state's population. Immigrants make up over half of Washington's farmers, fishers, and foresters (American Immigration Council, 2020).

Recent immigrants often have a harder time accessing healthcare than U.S. citizens or immigrants with documents who have been in the U.S. for over five years. Children and pregnant individuals who meet income requirements qualify for Washington Apple Health coverage regardless of their immigration status, while the federal law requires most other immigrants to wait five years to be eligible for Medicaid (WA HCA, n.d.-b). In 2020, "an estimated 46% of undocumented individuals are uninsured in Washington, compared to just 7% uninsured in the overall population" (Northwest Health Law Advocates, 2020).

It is also important to understand and recognize the cultural practices and beliefs of immigrants and incorporate these into health care provision and health equity work. Since culture plays a significant role in how an individual defines health and wellbeing, recognizing the diversity in Washington's immigrant communities is essential to providing care that meets their needs. Understanding the hurdles in accessing comprehensive healthcare for Washington's immigrant communities can be helpful while creating HEZs.

## *Age*

The median age of persons living in Washington has increased from 37.3 years in 2010 to 38.5 years in 2020. The percentage of the population age 65 and above increased from 12.2% to 16.7% in the same time period. *Figure 9* demonstrates the estimated increasing trend percentage of population age 65 and above by county from 2010 to 2030 (WA OFM, 2021). With increases in the median age of Washingtonians, it is important to consider how health needs may shift. In the next 10 years Washington will need to prepare for, what has been dubbed, the "silver tsunami" as the sizable Baby Boomer generation reaches retirement age. The Washington State Office of Financial Management estimates that in 11 counties the 65+ population will soon make up a third of the entire county, at least. While these 11 counties may all be relatively rural with already sizable older populations already, the three most populous counties (King, Pierce, and Snohomish) are expected to see a 5-10% increase in their 65+ community. This natural aging-up of a generation paired with longer life-expectancies means aging and adult health services will become more important to meet this growing need.

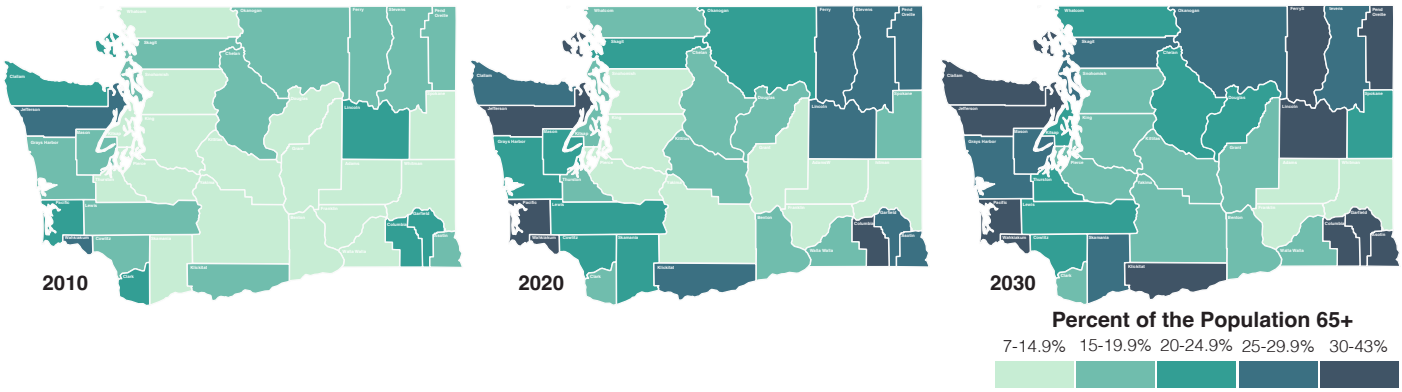



***Figure 9.*** Estimated Percentage Trend from 2010-2030 of Washington's Population 65 Years and Older
Source: Washington State Office of Financial Management

# Geographic & Demographic Data Dashboards

In this section are several geographic and demographic data dashboards. These helped our team understand the current landscape of Washington and are likely to be helpful for the DOH and CAC while determining zone selection.

## *DOH County Demographic Dashboard*

The DOH County Demographic Dashboard has data and information from 2011 to 2020 about people in each county. Highlights of available data include the county population, age and sex of residents, and the racial composition breakdown of the county population in comparison to the entire state: **County Demographic Dashboard | DOH**.

## *DOH Washington Tracking Network Information by Location Dashboard*

The IBL mapping tool can be used to compare counties based on health-related measures and ranked using a decile system. These rankings display health information in a manner that protects confidentiality in communities with small populations. More information on the ranking system: **Information by Location | DOH.**

Highlights of health information provided in the IBL map include environmental health disparities, social vulnerability to COVID-19, and health disparities. Mapping tool and data collection methods: **Information by Location | Washington Tracking Network**.

## *County Health Rankings & Roadmaps*

The County Health Rankings Model looks at community health and emphasizes factors that influence a person's length and quality of life. The model utilizes over 30 measures to help communities understand their current health status and estimate future health outcomes. This model looks at health outcomes such as rates of premature death and percent of adults reporting poor or fair health, as well as health factors such as health behaviors, clinical care, social and economic factors, and physical environment. This model is produced by the University of Wisconsin Population Health Institute. Information about health measures and mapping model: **County Health Rankings**.

# Health Data & Metrics

## *Community Partners, Metrics, & Available Datasets*

**PART II**

*Community Health Assessments & Plans*

*Community Partner Engagement & Limitations*

*Key Metrics by Region*

*Publicly Available Data Sources*

## Introduction

Washington State Senate Bill 5052 (SB 5052), *An Act relating to the creation of health equity zones* mandates that Health Equity Zones (HEZs) be created "to address significant health disparities identified by health outcome data" (SB 5052, 2021). In Part II of this report we seek to provide a guide to the most relevant data sources and information about what communities in Washington have identified as their most pressing health needs. We used public data sources that were created with community engagement and involvement to ensure that community voices are incorporated in the HEZ creation process. These data sources include Community Health Needs Assessments (CHNAs), Community Health Assessments (CHAs), and Community Health Improvement Plans (CHIPs). The CHNAs and CHAs determine and evaluate the most pressing health-related needs of each community at the local level, and metrics for tracking them. CHIPs are created in conjunction with CHAs and focus exclusively on plans for improvement.

We analyzed 34 CHNAs and this part of our report provides our analysis and information about which community partners were solicited for input in the creation of the CHNAs. We also provide a synthesis of which metrics local jurisdictions name as the most important to track in order to improve the health of their local community. We grouped CHNAs by region and analyzed and reported on their shared metrics. Findings reported in CHNAs utilize data pertaining only to their local communities. While this is useful for reporting on metrics that are custom-made for the local region, they may not incorporate metrics that are applicable across the entire state. We reviewed the most commonly referenced state-wide and national surveys and registries to explore a variety of sources for these health and health-related metrics for all Washingtonians.

# Community Health Assessments & Plans

Nonprofit hospitals and local health jurisdictions (LHJ) continuously produce and update CHNAs, CHAs, and CHIPs for their respective areas. They solicit local community engagement as part of the legal requirements for completing these assessments, making the resulting documents a source of comprehensive knowledge tying qualitative community input to quantitative administrative data. Importantly, the same guidelines which mandate the production of CHAs, CHNAs and CHIPs mandate that they be kept publicly available, making them easily accessible data sources (IRS, n.d.).

*Figure 10* provides a high-level flow-chart of the creation process for CHNAs, CHAs, and CHIPs. Generally, nonprofit hospitals produce CHNAs to identify health disparities and key areas of improvement for the community around their hospital. They include integrated intervention strategies and goals for future improvement. LHJ such as health departments, Tribal entities, and military medical entities, produce CHAs and CHIPs for similar purposes. CHAs do not typically include recommendations for improvement because they are paired with an associated improvement plan (CHIP).

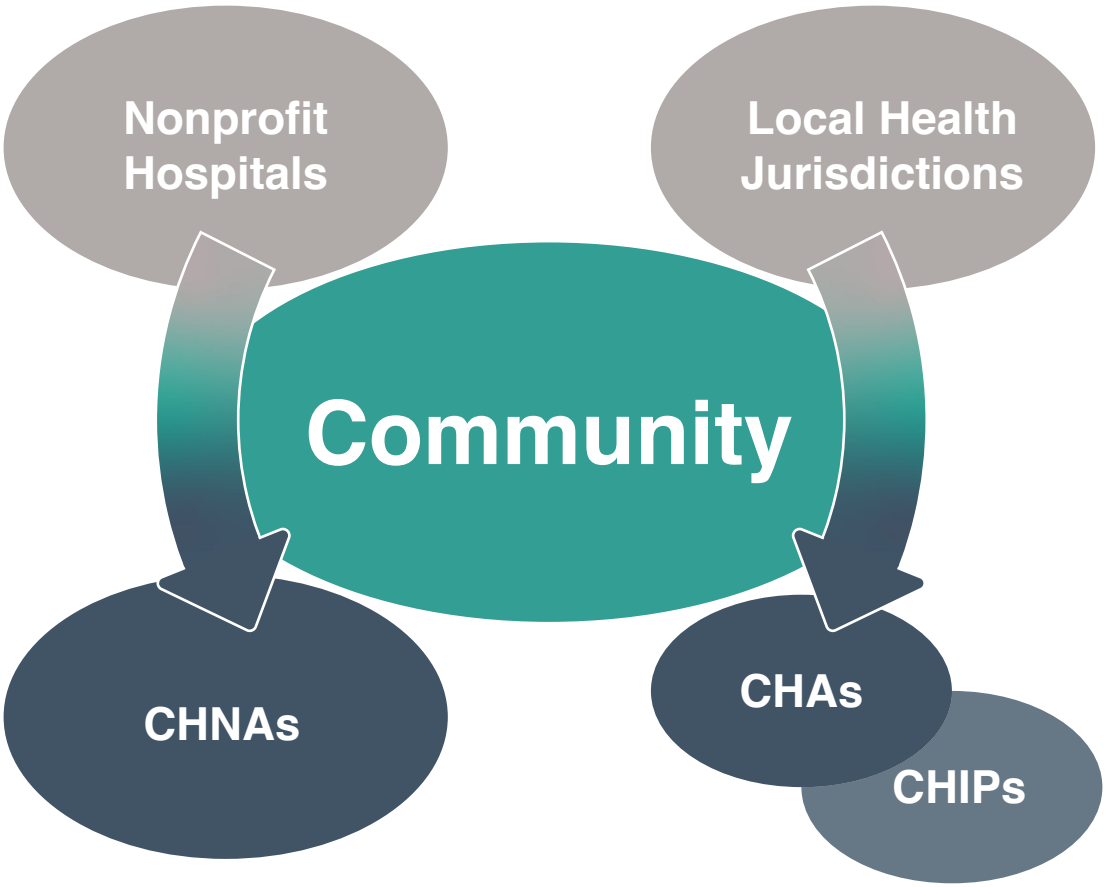



***Figure 10.*** An image depicting the CHNA, CHA/CHIP creation process with community engagement.

Both CHA/CHIP pairs and CHNAs require regular updating. CHA/CHIP pairs are updated every three to five years and CHNAs are updated every three years (WA DOH, n.d.-e). For more discussion on the inception of and legal requirements governing CHAs, CHNA, and CHIPs, see **Appendix B**.

The CHA and CHNA creation processes share three principal structural components — collecting data, soliciting input, and deciding on goals. Early in the process, LHJs and nonprofit hospitals collect and review pertinent, local data from large administrative datasets. They use these data to analyze how their communities compare to state, regional, and national averages. Next, they solicit community input, which can take a variety of forms (e.g., informational interviews, public assemblies). Finally, the respective LHJs and nonprofit hospitals decide on goals and metrics to use in measuring their progress relative to those goals.

When it comes to the demarcation of community representation, the nonprofit hospital systems producing CHNAs rarely adhere to municipal or county boundaries. In rural regions of the state where a single hospital system may often serve a large geographic region, a single CHNA may cover multiple counties (as seen with the Chelan-Douglas CHNA). In the more population-dense regions, however, a single CHNA may cover only a few neighborhoods (as in the Providence-Seattle assessment).

For this report we specifically focused on CHNAs. *Table 2* provides a comprehensive list of the 34 CHNAs analyzed, covering 26 of Washington's 35 counties. Some counties, such as Adams and Grant Counties, currently do not have any nonprofit hospitals producing CHNAs; instead they are solely represented by CHAs produced by their LHJs. Other counties, such as Jefferson and Kittitas Counties, historically produced CHNAs through nonprofit hospitals in the area but publicly available versions could not be found from the past five years.

***Table 2.*** Table of CHNAs by LHJs and County including nonprofit hospital, year of production, and access link

| Local Health Jurisdiction | Counties Covered | Hospital Group or Conducting Organization | Year |
|---|---|---|---|
| Adams | Adams | *Not Produced* | - |
| Asotin | Asotin | Greater Columbia ACH, Community Council, & Providence St. Mary's Medical Center District | 2018 |
| Benton-Franklin | Benton & Franklin | Kadlec Regional Medical Center, Benton-Franklin Health District | 2019 |
| Chelan-Douglas | Chelan & Douglas | Action Health Partners, Chelan-Douglas Health District, & Confluence Health | 2019 |
| Clallam | Clallam | Olympic Medical Center | 2019 |
| Clark | Clark | Clark County, WA Community Action Advisory Board | 2020 |
| | | Healthy Columbia Willamette Collaborative | 2019 |
| Columbia | Columbia | Greater Columbia ACH, Community Council, & Providence St. Mary's Medical Center District | 2018 |
| Cowlitz | Cowlitz | PeaceHealth St. John Medical Center | 2019 |
| Garfield | Garfield | Greater Columbia ACH, Community Council, & Providence St. Mary's Medical Center District | 2018 |
| Grant | Grant | *Not Produced* | - |
| Grays Harbor | Grays Harbor | Grays Harbor Community Hospital | 2020 |
| Island | Island | *Not Produced* | - |
| Jefferson | Jefferson | *Not Found* | - |
| Kitsap | Kitsap | Kitsap Community Action Agency | 2020 |
| Kittitas | Kittitas | *Not Found* | - |
| Klickitat | Klickitat & Skamania | Washington Gorge Action Programs (WAGAP) | 2020 |
| Lewis | Lewis & Thurston | Providence Centralia Hospital, Centralia/Providence St. Peter Hospital, Olympia | 2020 |
| Lincoln | Lincoln | *Not Produced* | - |
| Mason | Mason | *Not Found* | - |
| North East Tri-County | Ferry, Stevens & Pend Oreille | Providence Mount Carmel Hospital, Colville/Providence St. Joseph Hospital, Chewelah | 2019 |
| Okanogan | Chelan, Douglas, Grant & Okanogan | Action Health Partners, Chelan-Douglas Health District, Confluence Health & Okanogan County Public Hospital District No. 3 | 2020 |
| Pacific | Pacific | Wilapa Harbor Hospital | 2019 |
| Public Health Seattle-King County | King | King County Hospitals for a Healthier Community | 2021 |
| | | Providence Swedish/ Seattle | 2021 |
| San Juan | San Juan | *Not Found* | - |
| Skagit | Skagit | Island Hospital | 2019 |
| Skamania | Skamania & Klickitat | Washington Gorge Action Programs (WAGAP) | 2020 |
| Snohomish | Snohomish | Providence Regional Medical Center - Everett | 2019 |
| Spokane | Spokane | Providence Sacred Heart Medical Center, Children's Hospital, & Providence Holy Family Hospital | 2021 |
| | | MultiCare Health System Valley Hospital | 2019 |
| | | MultiCare Health System Deaconess Hospital | 2019 |
| Tacoma-Pierce | Pierce | Pierce County Community Action Programs | 2018 |
| | | MultiCare Health System Allenmore Hospital | 2019 |
| | | MultiCare Health System Mary Bridge Children's Hospital | 2019 |
| | | MultiCare Health System Tacoma General Hospital | 2019 |
| Thurston | Thurston & Lewis | Providence Centralia Hospital, Centralia/Providence St. Peter Hospital, & Olympia | 2020 |
| Wahkiakum | Wahkiakum | *Not Produced* | - |
| Walla Walla | Walla Walla | Greater Columbia ACH, Community Council, & Providence St. Mary's Medical Center | 2018 |
| Whatcom | Whatcom | PeaceHealth St. Joseph | 2019 |
| Whitman | Whitman | Pullman Regional Hospital | 2019 |
| Yakima | Yakima | Virginia Mason Medical Center | 2019 |

# Results of CHNA Analysis

For this report, we analyzed the 34 recently published CHNAs shown in Table 2 to identify two key pieces of information: (1) **community partners** that provided input in CHNA creation and (2) **metrics related to chosen health areas of focus**. We compiled and analyzed information from each CHNA to identify current state-wide health and health-related trends. This work adds to a collaborative body of work produced though the DOH, which provides detailed analyses on additional community assessments and improvement plans.

## Community Engagement

Accessible community input is foundational in efforts to promote health equity. As Washington State enters an era of increasingly data-driven decision making, it is important to be aware of the perennial gaps in health data. Low-income and rural communities continue to be underrepresented in health reporting. Only through community-based processes can we hope to holistically capture the health status of a region (Fernandez-Bou, et. al., 2021).

CHNAs (and CHAs) have been noted to strengthen community ties and serve as an incentive for more collaborative efforts. Collaboration in creating health assessments and intervention plans can bring a more diverse array of voices than are typically included in health-related initiatives (McCullogh, Eisen-Cohen, & Salas, 2016). This can lead to more thoughtful and responsive interventions in each locality than would be accomplished by organizations acting independently.

Our community partner analysis identified which groups, organizations, and people were given opportunities to have their voices represented in CHNAs by being involved in the community engagement processes of nonprofit hospitals across Washington. Each CHNA includes a list of partners that provided input. In some cases, a single listed partner may represent a group of residents, such as a public school board. For the purposes of our analysis, we counted each of these groups as a single data point. We did this in order to better understand the make-up of the communities involved with each assessment rather than the sheer quantity of community members.

We organized the community partners into 24 mutually exclusive community partner types. These 24 community partner types were further categorized into six categories. All community partner types and their categories are listed in *Table 3*, below. For a more detailed discussion on the categorization process, see **Appendix C**.

***Table 3.*** 24 Community partner types by 6 community partner categories

| Community Partner Categories & Community Partner Types | | | |
|---|---|---|---|
| **Healthcare Infrastructure** | | | |
| Alcohol & Drug Treatment | Community Health Entities | Health Insurance | Reproductive Health & Family Planning |
| Behavioral Health | Health Care Organizations | Hospital | |
| **Identity-Based Organizations** | | | |
| Aging & Adult Care Services | Faith Based Organizations | LGBTQIA+ Health & Community Services | Youth Services |
| **Need-Based Organizations** | | | |
| Financial Services | Food Services | Homelessness & Housing | Domestic Violence/IPV Services |
| **Public Service Organizations** | | | |
| Community Safety | County Health Districts | Education-Related Entities | Law Enforcement Entities |
| **Public Organizations** | | | |
| Public Government Entities | | Tribal Governments & Organizations | |
| **Indepented Voices** | | | |
| Businesses | Citizens/Resident Coalitions | Citizens | |

*Figure 11* summarizes all 845 unique community partners identified from the 34 assessments and shows the number of partners involved in each category.

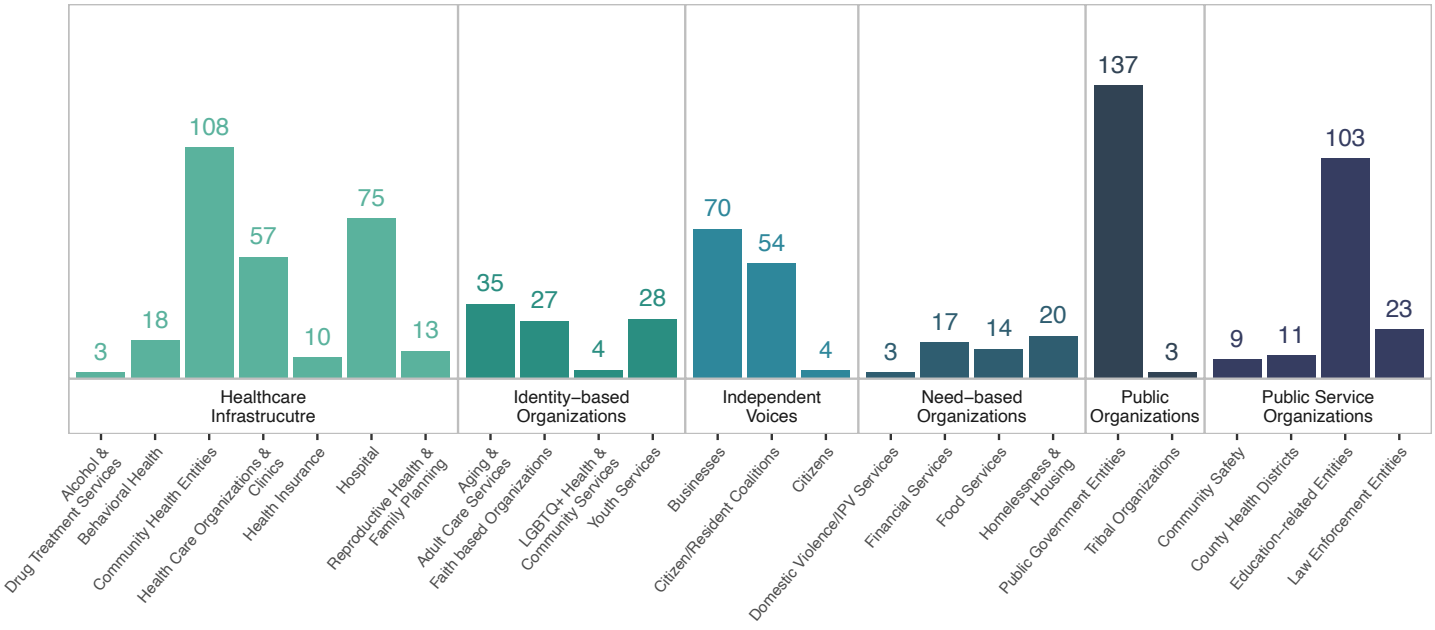



***Figure 11.*** A bar plot representing the distribution of community partners for all 34 CHNA assessments into 24 partner-types and 6 categories.

## Commonly Engaged Community Partners

The most commonly engaged community partners were entities related to public government, education, and community health. Fifty-nine percent of CHNAs engaged with partners from at least two of these three types. Of all the CHNAs we analyzed, only one, Virginia Mason Medical Center in Yakima, did not credit any of these three types of partners in its CHNA. The Virginia Mason Medical Center in Yakima instead opted to work with 63 distinct hospitals and clinics in the area, which ultimately comprised nearly 85% of all of the identified hospital community partners in our dataset.

## Rarely Engaged Community Partners

Organizations that focus on alcohol and drug treatment, domestic violence/intimate partner violence (IPV), and LGBTQIA+ health and outreach services were rarely included as community partners. Only 10 organizations from these three groups were identified across all of Washington. Notably, the Kadlec Regional Medical Center in Benton-Franklin County comprehensively engaged with its community; it listed 21 different community partner types, including one partner from each of these three rarely-engaged groups.

In Washington, there are 29 Federally Recognized Tribal Nations and two Urban Indian Health Organizations. However, Tribal Organizations were uncommonly referenced in the CHNAs. Only two Tribal Governments and one Urban Indian Health Organization were cited. Grays Harbor Community Hospital worked with the Quinault Nation, and King County Hospitals for a Healthier Community worked with the Snoqualmie Indian Tribe. Additionally, King County Public Health worked with the Urban Indian Health Institute, a division of the Seattle Indian Health Board. It is also important to recognize that Tribal sovereignty inherently implies the right to abstain from participation in efforts such as CHNAs.

## Group Trends of Community Partners

The category of organizations with the most representation in CHNAs were organizations that are part of Washington's Healthcare Infrastructure, which represented one-third of all community partners. Public Organizations and Public Service Organizations each comprised just over one-sixth of the total set of community partners. Only one-third of community partners came from Need-based Organizations, Identity-based Organizations, and Independent Voices – which are all community groups and coalitions without direct lines of access or structural authority over hospital systems and health departments.

# Limitations of Community Engagement

While community engagement is required during the creation of CHAs, CHIPs, and CHNAs, it is important to be aware of and acknowledge the limitations of the community engagement processes. For example, CDC guidelines for conducting a CHNA call for "proactive, broad, and diverse community engagement" as well as "a definition of community that encompasses both a significant enough area to allow for population-wide interventions and measurable results and includes a targeted focus to address disparities among subpopulations" (CDC, 2018). However, the CDC does not explicitly specify how to go about achieving these goals.

The CDC guidelines are commonly interpreted by community-based organizations (CBOs) and community health advocates as a call to hold public listening sessions, respectfully consider community voices as a source of information about community needs, and incorporate that information into evaluation and planning. However, without an explicit mandate, hospitals and institutions may utilize less rigorous community engagement practices and fall back on administrative data that are often criticized for being inadequately representative and in other ways flawed. Historically, data disaggregated by race, ethnicity, gender, sexual orientation, and other community identities have been used to misrepresent, profile, or exploit these communities (Sotero, 2006; Beskow, 2016).

The Healthy Columbia Willamette Collaborative CHNA in Clark County explicitly mentioned this concern in a section related to data representation and community trust:

> Due to small population sizes, and mistrust of data collection processes, [communities of color, LGBTQIA+ communities, immigrants and refugees, and women and children] are often misrepresented, inaccurately accounted for, or completely absent in quantitative data. (HCWC, 2019)

Further still, CHAs and CHNAs do not provide significant information about racial and ethnic identities of community partners who are engaged in the development of the assessments. If community members who have the most health-related needs are not engaged in the assessment process, their health needs may not be identified or understood. This underscores the importance of using multiple and diverse methods for gathering information about public and community health needs.

The discrepancy in scale between the health needs that communities have and the resources which are available for community health can also be problematic. While nonprofit hospitals are required to undertake CHNAs, they often do not have the needed resources to make meaningful change in any of the areas they want to improve. The effect is that sometimes costly assessments are undertaken every three years with little expectation that their recommendations will be enacted (Fos, et al., 2019). A similar pattern can be observed with LHJs and their CHAs. This process of gathering community input but not having resources to make meaningful change may dissuade some community members and groups from being involved in the process altogether.

Since CHIPs are created based on CHAs, any limitations regarding community engagement during the assessment phase will also be limitations in the planned interventions.

Despite these limitations, CHAs and CHNAs do provide a foundation for future health equity work in Washington State as every assessment was conducted with some amount of community input, as outlined throughout this report. Many CHNAs utilized listening sessions and town halls to solicit community input. While individual participants in these events were not listed as community partners, their input was used in concert with the cited community partners' feedback to identify key health needs for the community.

# Metrics

As previously noted, HEZs will be created by using health outcome data to identify geographic areas that experience health disparities (SB 5052). Washington is a large, diverse state with a variety of different health interests and outcomes. During HEZ creation, it is important to understand the health needs and concerns of communities across the state. However, many organizations report struggling to balance prioritization between 'magnitude of problem' and 'mutability of problem' when choosing how to commit resources and attention. Many health concerns, such as cancer rates, are so vast that a single hospital's efforts will have little impact. Other health concerns, such as the COVID-19 pandemic, are ever-changing and require more responsive attention than is available via an initiative undertaken every three years. CHNAs can be used to discern the interests of healthcare institutions and communities at the local level and to identify persistent health concerns that can be feasibly addressed by a local healthcare institution.

In each of the CHNAs we analyzed, reporting nonprofit hospitals identified a small list of areas of focus for improving health in their community. We called these areas of focus "metrics". Some of these metrics were broad (e.g., Culturally Responsive Care in Clark County) and others were highly specific (e.g., Life Expectancy & Leading Causes of Death in Yakima County). Many of the broader metrics required a number of measures to adequately capture their impact on the community, such as tracking availability of translation resources in hospitals and the number of bilingual and bicultural healthcare providers/community health workers, to make estimates about the availability of Culturally Responsive Care. Some more specific metrics implicitly identified their own measures, such as with Life Expectancy (in years).

**Metrics**

Areas of focus for improving health in a community and the measures used to track improvements by CHAs and CHNAs

We identified 241 unique metrics from all 34 CHNAs. We then sorted these metrics into 40 discrete categories called health topics. The 40 health topics were binned into 6 broad health domains. These health topic and domain categories are detailed in *Table 4*. For further discussion on metrics and topic/domain classification, see **Appendix C**.

***Table 3.*** 24 Community partner types by 6 community partner categories

| Health Domains & Health Topics | |
|---|---|
| **Access to Healthcare** | |
| Rates of Needs Going Unmet | Access to Mental Health Providers |
| Rates of Preventable Hospitalization | Access to Other Health Services |
| Rates of Access to Care (by type) | Access to Prenatal Care |
| Access to Dentists & Related Oral Health Care Providers | Access to Primary Care/Usual Source of Care |
| Access to Health Insurance | Access to Screenings |
| Access to Immunizations | Access to Substance Use Treatment |
| Access to Integrated Healthcare | |
| **Individual Behavior** | |
| Alcohol Dependence/Use | Physical Activity/Inactivity Levels |
| Healthy Eating Patterns | Sexual Activity |
| Illicit/Other Drug Use | Teen Pregnancy |
| Injury Prevention | Tobacco Use |
| Opioid & Prescription Drug Abuse/Addiction | |
| **Health-Related Quality of Life** | |
| Adult-Onset Diseases | Obesity |
| Child & Maternal Health | Sexually Acquired Infections & Sexually Transmitted Diseases (Including HIV/AIDS) |
| Mental Health | |
| **Physical Environment** | |
| Air Quality | Access to Exercise Opportunities, Public Transportation & Community Walkability |
| Access to Healthy Food | |
| **Social Environment** | |
| Domestic Violence | Other Civic Engagement |
| Family/Community Support | Poverty |
| High School Graduation & Drop Out Rate | Unemployment |
| Housing Security | Violent Crime |
| **Mortality** | |
| Adult Mortality | Suicide |

While there were no noteworthy trends across the entire state, we observed similarities in the reported metrics between many neighboring counties. We categorized Washington's counties into eight regional groups, utilizing geographic and demographic similarities in addition to existing regional health divisions (as listed in **Part I**), and identified common metric foci from the available CHNAs within each region.

Below are the summary findings from the metrics analyses, reported by regional groupings. The counties which were considered for each region are indicated below each region name as "CHNA Counties". The "Other Counties" listed are counties that are included in the region but did not publish a CHNA for review. The common metric domains are highlighted in the light-green ovals on the left and further elaborated on in the text to the right.

## South Puget Sound Region

*CHNA Counties: King & Pierce*

**Social Determinants of Health**

This region identified a greater number of metrics than any other region. This makes sense, as the two counties in this region are the two most heavily populated in the state. To address the health concerns of such a large population, the metrics were appropriately diverse. The six CHNAs all focused predominantly on health-related quality of life, physical environment, and social environment domains. These are all types of metrics that are considered **Social Determinants of Health** (SDH).

## Olympic Region

*CHNA Counties: Clallam & Kitsap*
*Other Counties: Jefferson*

**Social Environment & Access to Healthcare**

Due to the proximity of the southern counties of this region to the densely populated South Puget Sound region (where social determinants of health comprise the majority of tracked metrics) many of the metrics from these CHNAs were similarly concerned with social determinants of health. This is notably seen in Kitsap Community Action Agency's CHNA where two-thirds of their metrics pertained to the **Social Environment** of the community. The more rural northern areas, as exemplified by Clallam's Olympic Medical Center, were more concerned with **Access to Healthcare** and other healthcare metrics.

## Pacific Cascade Region

*CHNA Counties: Grays Harbor, Pacific, Thurston, Lewis, Cowlitz, Mason & Wahkiakum*

**Behavioral Health & Substance Abuse Services**

Nonprofit hospitals in the Pacific Cascade Region identified a broad set of metrics focusing equally on the Access to Healthcare and Social Environment domains. Within these two domains, this region saw a consistent focus on Behavioral Health, particularly with regards to substance abuse and addiction treatment. Three of the four assessments explicitly identified substance abuse services or the opioid epidemic as areas of focus for current improvement efforts. This focus on **Behavioral Health and Substance Abuse Services** may be in response to the disproportionate rates of drug-related deaths in Grays Harbor County and the neighboring Pierce County (WA DOH, 2022-b).

## Northwest Region

*CHNA Counties: Whatcom, Skagit & Snohomish*
*Other Counties: Island & San Juan*

**Behavioral Health & Substance Abuse Services**

This region produced three CHNAs which all focused on **Behavioral Health and Substance Abuse Services** through three different criteria. Whatcom chose to track access to substance use treatment while Snohomish chose to track rates of drug abuse and addiction cases. Skagit chose to approach the problem more broadly and included behavioral health as one of their two metrics. This pattern echoes work done by the CHNAs in the Pacific Cascade Region, which may be due to the similarly high rates of drug-related deaths in the Northwest counties over the past five years (WA DOH, 2022-b).

## Southwest Region

*CHNA Counties: Clark, Skamania & Klickitat*

**Social Equity**

Unlike the other regions, the Southwest Region's CHNAs focused heavily on nuanced, **Equity-Minded Metrics**. All three assessments acknowledge systemic social inequities – such as racism and discrimination – as drivers for health inequity. More traditional health-related quality of life indicators were a small proportion of the metrics identified in this region and were captured in aggregate as "health status," which underscores the idea that the Southwest Region focused more on tracking metrics related to social drivers of health than metrics related to health outcomes.

## Central-Southeast Region

*CHNA Counties: Yakima, Benton-Franklin, Walla Walla, Columbia, Garfield, Asotin, Whitman*

*Other Counties: Kittitas*

**Access to Healthcare & Health-Related Quality of Life**

This region is one of the largest regions, geographically. Many of these counties are rural and the area includes many of Washington's large agricultural farms. For that reason, the CHNAs we analyzed all shared a focus on **Access to Healthcare and Health-Related Quality of Life**. Many of the nonprofit hospitals in the area are still gathering evidence on the health status of their communities and have opted to focus on morbidity rates and availability of care for their metrics.

## Northeast Region

*CHNA Counties: Ferry, Stevens, Pend Oreille & Spokane*

*Other Counties: Adams & Lincoln*

**Family Planning & Materal & Child Care**

This region is heavily swayed by the interest of its urban center in Spokane. All but one of the CHNAs represent the greater Spokane area and have a clear focus towards the social environment domain, particularly maternal and child health. This focus on **Family Planning and Maternal and Child Care** carried into the rural counties surrounding Spokane, as evidenced by the Northeast Tri-jurisdiction CHNA's choice to track support for young families amidst their otherwise general metrics.

## North-Central Region

*CHNA Counties: Okanogan, Chelan-Douglas*

*Other Counties: Grant*

**Non-Specific**

This region had a remarkably even distribution of metrics across all categories. Both CHNAs were conducted by a third-party company called Action Health Partners, which identified 10 identical metrics for both Chelan-Douglas and Okanogan. The three social environmental criteria they identified were educational attainment, housing security, and employment status. Proportionally, access to healthcare and Individual health behavior metrics were given equal consideration as physical and social environment metrics.

Understanding regional dynamics across the state will serve to be useful in the process of defining HEZs. It is worth noting that utilization of a metric in a CHNA does not mean the metric is without flaw. The individual measures used in these assessments have strengths and weaknesses and **Appendix D** provides a framework for analyzing a metric using the 15 metrics identified in Rhode Island's HEZ work as examples.

# Additional Publicly Available Data Sources

In addition to the substantial amount of community-level data available through CHAs and CHNAs, there are valuable national and state-wide data sources available. CHNAs and CHAs use local data, which is often uniquely collected in each community by the hospital or health department producing the report. Findings reported in CHNAs focus on single LHJs and utilize data from single nonprofit hospital systems at a time. While this is useful for reporting on metrics that are custom-made for the local region, they may not incorporate more wildly applicable metrics. Access to comprehensive data about the wellbeing of all Washingtonians is integral to the success of the Health Equity Zone initiative.

We reviewed currently available public data and found several population surveys and national registries that provide state-wide health and health-related estimates. The surveys and registries listed below produce estimates at the county-, zip code-, or census-level and can help form a better picture of where efforts and resources to redress disparities may be directed. These data sources were highlighted due to their common presence in prior health equity work. Each of these data sources releases updated estimates annually or biannually for Washington State, ensuring the data is not only comprehensive but capable of showing historic trends in health and health-related factors.

Despite their comprehensiveness, it is crucial to acknowledge the limitations of these sources. Many health data surveys and registries privilege communities with access to existing health infrastructure for sampling and reporting purposes. Even publicly administered surveys tracking well over 1,000 unique indicators can fail to capture a holistic picture of disadvantaged communities' health. These data gaps underscore the need to pursue health equity work in collaboration with local communities rather than by relying on these data alone. (Puma, et. al., 2016)

# National & State-Wide Survey Datasets

The following four surveys are all administered annually or biannually by public organizations. The Centers for Disease Control and Prevention (CDC) is either responsible for or affiliated with three out of the four surveys and the fourth is conducted by the US Census Bureau. When a survey is released, only a fraction of the population will complete the survey. In order to produce results for the full population, the captured responses are inputted into statistical models which produce estimates for public use. Due to the time-consuming nature of this process, estimates are only released a year after the survey was conducted. The use of self-reported surveys allows these datasets to ask subjective questions about respondent's health and wellbeing alongside comprehensive demographic questions.

## *American Community Survey*

The US Census Bureau conducts the **American Community Survey** (ACS) and publishes estimates on an annual, five-year, and ten-year basis. The ACS is particularly notable for its level of granularity and breadth of collected data. It is predominantly used for demographic and "personal circumstance" information. While many of these factors are not explicitly health indicators, such as household income and educational attainment, they are social determinants that are inextricably linked to health outcomes. Despite its many strengths, one of the few areas of criticism for the ACS is its single-year updates. Due to relatively small sample sizes, the one-year estimates track larger geographic areas (i.e., state-level) than the more comprehensive 5- and 10-year iterations, which provide estimates down to individual census tracts (U.S. Census Bureau, n.d.).

## *The Behavioral Risk Factor Surveillance System*

The **Behavioral Risk Factor Surveillance System** (BRFSS) tracks health-related behavior, specifically behavioral health indicators. The CDC conducts the BRFSS survey nationally and publishes estimates at the local level for selected counties and metropolitan/micropolitan areas. The Washington State Department of Health (DOH) has partnered with the CDC to produce annual BRFSS surveys at an administrative level deeper than the national survey (WA DOH, n.d.-f).

## *Feeding America*

**Feeding America** is a US-based nonprofit organization with a 40-year history in food security. They built a nationwide system of food banks and are working to eliminate hunger in America by providing meals to individuals in need. Through its comprehensive network of food provision, Feeding America is the nation's leading reporter on food insecurity. The Map to the Meal Gap study is annually updated and publishes data on the individuals facing food insecurity by county and congressional district with specific estimates for children (Feeding America, n.d.).

## *The Healthy Youth Survey*

The **Washington State Healthy Youth Survey** (HYS) seeks to provide data about youth and adolescent risk behaviors in order to provide more responsive support for public schools. The survey is co-conducted with the DOH, Office of the Superintendent of Public Instruction, the Health Care Authority's Division on Behavioral Health and Recovery, and the Liquor and Cannabis Board. The HYS is typically conducted on a biannual basis and contains information related to "risky behaviors" and "constructive behaviors" by youth (HYS, n.d.).

# National Registries

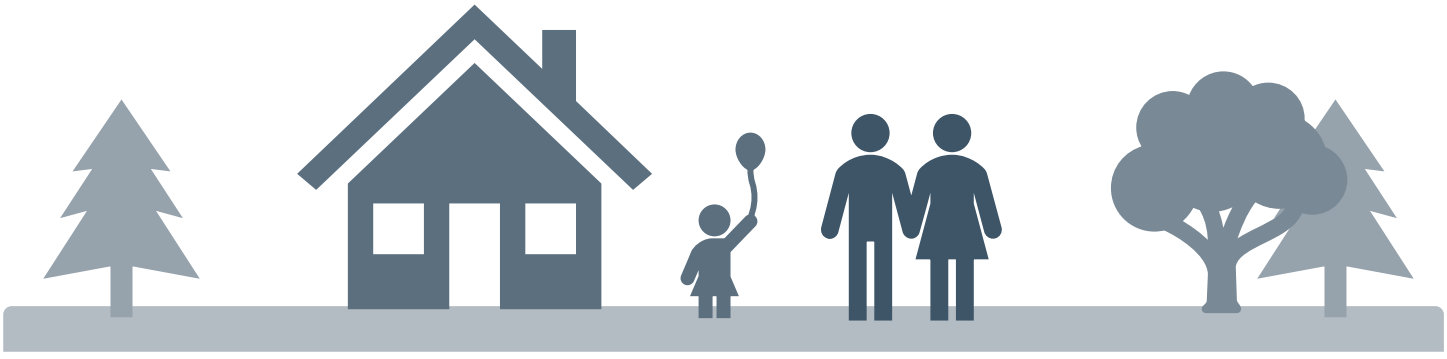
The following two registries are managed by national reporting systems. These registries differ from surveys in that they simply compile and report on data provided to them. While the departments may additionally produce annual estimates based on the data they collate, most of the information they report are not estimates but raw numbers. Both systems heavily rely on inter-organizational cooperation to collect and publish data from public, private and nonprofit organizations. If a local organization were to refuse to cooperate with the national system, the data produced by the registry would suffer.

## *National Vital Statistics System*

The National Center for Health Statistics at the CDC administers the **National Vital Statistics System** (NVSS). This system provides comprehensive, detailed information on all births and deaths in the United States. The system tracks demographic information on pregnancies, infant health, life expectancy, and mortalities - including cause of death. The NVSS also reports on all marriages and divorces in the United States at the state-wide level (CDC, n.d.).

## *Uniform Crime Reporting Program*

The **Uniform Crime Reporting Program** (UCR) was created in 1930. It began as a voluntary system to centralize crime statistics from local, county, state, tribal, and federal law enforcement agencies. Currently over 90% of Washington's law enforcement agencies contribute to the National Incident-Based Reporting System for the UCR. The UCR contains information on reported arrest and crime incidence by type and includes offender and victim demographics where applicable (FBI, 2017). While this program is the most widely accepted source for crime statistics, the validity of the reported data has been called into question due to two fundamental measurement problems. The first problem is the small percentage of crimes that actually get reported, much less result in a conviction; without a police report or conviction, many crimes go uncounted. The second problem is the inconsistency in definitions and reporting protocols between departments across the US. (NRC, 2003)



# Case Studies

## *Other Health Equity Initiatives*

**PART III**

*Nine Case Studies of Place Based Health Equity Initatives*

## Introduction

Across the nation, various initiatives are underway with goals of promoting health equity and eliminating health disparities. This part provides a case study analysis of nine initiatives that have implemented strategies for place-based health equity work similar to the Washington State HealthwEquity Zone (HEZ) initiative. Each case study provides information on how the initiative was implemented, including their process for identifying metrics. These case studies can help inform how HEZs are selected in Washington State.

Most of this information was gathered through a literature review. In addition, we had conversations with staff from King County Communities of Opportunity and the HealthierHere Accountable Community of Health.

There are two groupings of initiatives in this part:

The **first group** are examples of place-based initiatives that identified and **created specific geographic zones** as areas of focus for health equity work. These include:

1. Maryland Health Enterprise Zones
2. Rhode Island Health Equity Zones
3. Pennsylvania Health Equity Zones
4. King County Communities of Opportunity
5. Tacoma-Pierce Communities of Focus

The **second group** of examples are initiatives that currently use or plan to use place-based approaches to health equity but are distinct from initiatives that specifically identify geographic zones. These include:

1. King County Accountable Communities of Health: HealthierHere
2. Chicago: Healthy Chicago Equity Zones
3. Louisiana Health Equity
4. Colorado Health Disparities & Community Grant Program

# Reading Case Studies

Each case study of the five place-based initiatives that created specific geographic zones as areas of focus for health equity work follows the same format to provide helpful context about the process the initiative went through to identify health equity zones. These case studies highlight each initiative's work related to the following steps:

- **Defining Zone Eligibility**: The process of using general criteria and criteria metrics to define parameters that a zone needs to meet to be designated as a place-based zone. This definition encompasses two parts:
  - **General Zone Criteria**: Criteria such as population size or geographic area.
  - **Zone Criteria Metrics**: We use the term Criteria Metrics to refer to metrics and measures used to evaluate where to draw boundaries for a place-based zone. These can be any number of metrics that provide data about community and personal health. One of the first steps of a zone-based HEZ initiative is to select which criteria metrics will be used to define zone eligibility.
- **Zone Selection, Designation, & Action Planning**: Information about the process through which an initiative selected specific place-based zones.
- **Community Engagement**: Community engagement takes place at different steps of the zone creation process in each case study – commonly during zone criteria metric selection and zone selection. These case studies provide information about the community engagement related to metrics for each initiative. It should be noted that more broad community engagement is part of all of these initiatives; however, the scope of our project focused on community engagement specifically related to metrics and zone selection.
- **Monitoring & Evaluation**: Information about the monitoring and evaluation of work being done in place-based zones.
- **Resources Library**: Documents linked throughout each case study are also downloaded into the resource library, and this section provides the title of each linked document. The Resource Library can be accessed by contacting the DOH HEZ team.

# Maryland Health Enterprise Zones

In response to the widening health inequities across the state, the 2012 Maryland legislature passed into law **Senate bill 234** (SB12-234): Maryland Health Improvement & Disparities Reduction Act of 2012. This bill established the development of the **Maryland Health Enterprise Zones** (Maryland HEZ), a four-year pilot initiative to:

- Reduce health disparities among racial and ethnic minority populations and among geographic areas
- mprove health care access and health outcomes in underserved communities; and
- Reduce health care costs and hospital admissions and re-admissions (MD DHMH, n.d.-a)

The initial process of the Maryland HEZ began in 2011 with the convening of the Maryland Health Quality and Cost Council's Health Disparities workgroup. This workgroup acknowledged that existing disparities in health outcomes were in part due to inadequate access to medical care, and social and environmental risk factors. By the following spring, the Maryland Department of Health and Mental Hygiene (Maryland DHMH) began implementation of SB12-234 and opened a period of public comment to solicit feedback on zone selection criteria, use of funding, and outcome metrics for monitoring.

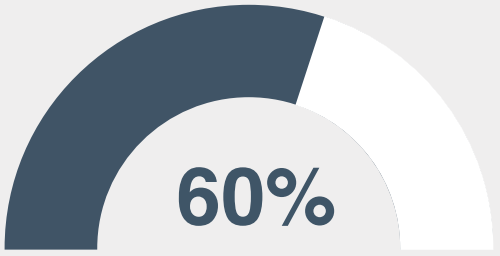
## Defining Zone Eligibility

Maryland defines a Health Enterprise Zone as "**a designated local community with documented poverty, health disparities and/or poor health outcomes, where special incentives and funding streams are available to address poor health outcomes by using healthcare-level, community-level and individual level interventions**" (HERC, 2021).

**Health Outcomes**
**#10**
Washington: #12

**Health Factors**
**#11**
Washington: #10

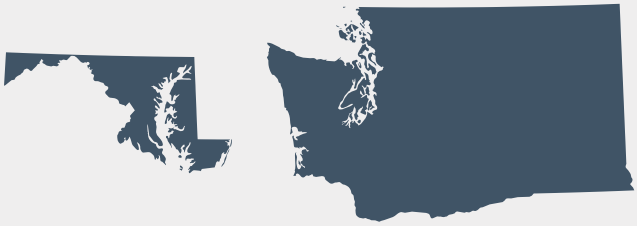
### Health Status



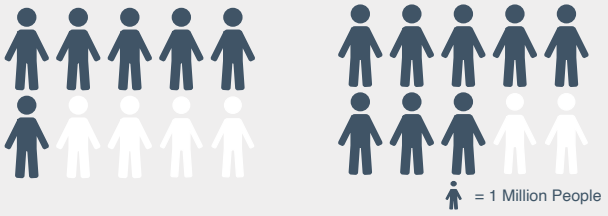

of adults in Maryland State Report very good health*

US Overall: 56.3% | Washington: 58.7%

* Self-reported health status, a measure of how an individual perceives their health



### Population




| Maryland | Washington |
|---|---|
| 6.2 Million | 7.7 Million |
| 594.8 People per Square Mile | 101.2 People per Square Mile |
| 6.9% of People are uninsured | 7.7% of People are uninsured |
| 1,510,290 Medicaid Population | 1,965,401 Medicaid Population |

Source: U.S. Census Bureau

### *General Zone Criteria*

Eligibility Criteria consisted of:

- Be a geographically defined community, or contiguous cluster of communities, defined by zip code boundaries
- Support a resident population of at least 5,000 people
- Demonstrate economic disadvantage
- Demonstrate poor health outcomes

### *Zone Criteria Metrics*

When understanding how to measure economic disadvantage to define a zone, Maryland DHMH chose to focus on the following metrics:

- Medicaid enrollment rates
- Women, Infants, Children (WIC) participation rates

When considering metrics for poorer health outcomes, their focus was primarily on:

- Life expectancy
- Percentage of low-birth-weight infants

## Zone Selection, Designation & Action Planning

In the fall of 2012, a request for proposal was issued to various community organizations and coalitions. From this process, 20 applications were received and reviewed by an independent Maryland HEZ Review Committee comprised of experts in the field of public health and health care delivery. Based on the committee's recommendations, five of the applicants were selected to be Maryland HEZs in the spring of 2014.

## Community Engagement

At the time of writing this summary, based on an online literature review, we were unable to confirm if there were any additional community involvement outside of the period of public comment following the signage of SB12-234. This information is included as an example of another state health jurisdiction using a zone approach for health equity.

## Health Domains & Topics

### Access to Healthcare

*Access to a Provider*

### Social Environment

*Community Supports for Self-Management*

### Other

*Quality Care*

*Patient-Provider Communcation & Patient Education*

# Monitoring & Evaluation

The Maryland HEZ initiative focused primarily on four factors to measure their ability to meet the three expectations of this pilot program:

- Access to a provider
- Quality of care
- Patient-provider communication and patient education
- Availability of community supports for self-management

This resulted in a four-year long implementation process that utilized a logic model, made up of a variety of metrics, that analyzed Maryland's health system performance each year. In year one, the Maryland HEZ initiative focused on expanding capacity of their system to increase access to a provider. This required tracking hospital utilization by demography and the number of health practitioners and providers in each Maryland HEZ – indicators that were not utilized when analyzing the quality of care provided. In year two, the Maryland HEZ initiative focused on the productivity of practitioners, programs, and community health workers. Year three focused on the quality of care provided and year four focused on health outcomes such as hospital utilization and cost reductions.

For more information regarding the annual metrics used, please reference the **Maryland HEZ 2016 Annual Report**.

While evaluating the Maryland HEZ initiative, the Maryland DHMH found successes in the following areas:

- Improved chronic disease management and patient health outcomes
- Decreased the number of 911 calls, ER visits, hospital admissions, and readmissions
- Increased focus on behavioral health topics such as diabetes, smoking prevention, hypertension, asthma, and adult/childhood obesity
- Expansion of primary and community health workforce in zone
- Cost savings from reduced inpatient stays outweighed the cost of the initiative (Gaskin, D.J., et al. 2018).

# Rhode Island Health Equity Zones

In 2015, the Rhode Island Department of Health (Rhode Island DOH) began their **Health Equity Zone** (Rhode Island HEZ) initiative, aiming to bring communities together to improve health and wellbeing (Asinof, R. 2016). This initiative was developed in collaboration with the Centers for Disease Control and Prevention. Rhode Island DOH based their work on previous community-driven approaches and developed a strategy that works to achieve health equity by eliminating health disparities and using place-based models to promote healthy communities.

The Rhode Island HEZ "are structured as community-led collaboratives, with a long-term goal of supporting each [Rhode Island] HEZ to develop into a self-sustaining, self-funding entity that can respond to evolving community needs and priorities" (ChangeLab Solutions & RI DOH, 2021). The Rhode Island DOH utilizes an innovative funding process that is unique to the state in which it braids funding from several sources, distinct from typical funding practices that separate and dedicate funding to specific programs. This process ultimately helps communities work together to achieve shared goals for sustained community health and economic wellbeing rather than pitting projects against each other.

## Defining Zone Eligibility

Rhode Island defines a Health Equity Zone as "**an economically disadvantaged, geographically defined area with documented health risks**" (Patriarca, M. & Ausura, C. 2016). Rhode Island has identified 15 Health Equity Zones across their state.

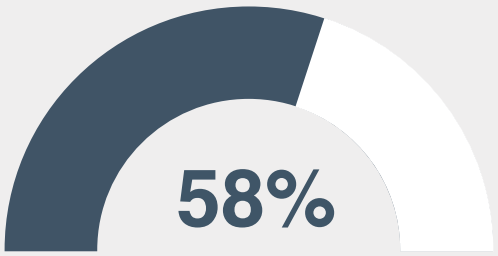
### *General Criteria*

- Be a geographically defined community
- Support a population of at least 5,000 people or include a justification for how a selected small community will meet initiative goals
- Demonstrate social, economic, or environmental disparities or inequities
- Demonstrate poor health outcomes

**Health Outcomes**
**#11**
Washington: #12

**Health Factors**
**#14**
Washington: #10

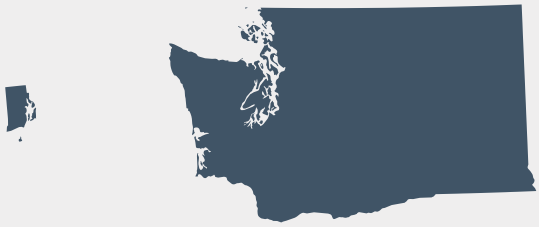
### Health Status



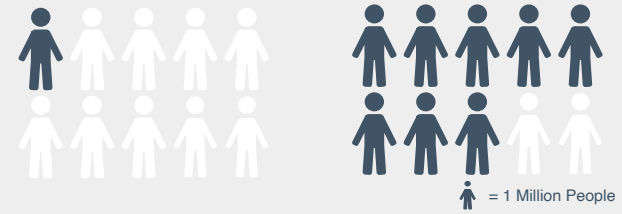

of adults in Rhode Island State Report very good health*

US Overall: 56.3% | Washington: 58.7%

* Self-reported health status, a measure of how an individual perceives their health



### Population




**1.1 Million**
**1,018** People per Square Mile
**4.8%** of People are uninsured
**305,208** Medicaid Population

**7.7 Million**
**101.2** People per Square Mile
**7.7%** of People are uninsured
**1,965,401** Medicaid Population

Source: U.S. Census Bureau

### *Zone Criteria Metrics*

According to their online documentation, Rhode Island did not explicitly call out additional criteria metrics other than those mentioned above. However, they did define 15 monitoring and evaluation metrics, which are highlighted below.

## Zone Selection, Designation & Action Planning

To establish the designation of the Rhode Island HEZ, the Rhode Island DOH issued requests for proposals (RFP) from various community entities such as hospitals and nonprofits. If selected, these organizations would serve as the backbone of a Rhode Island HEZ, functioning as community managers and point-of-contacts between the Rhode Island HEZ and the Rhode Island DOH (Patriarca & Ausura, 2016). Rhode Island DOH also developed a grading rubric to evaluate each RFP.

Rhode Island DOH's priority was to award RFPs that demonstrated that their organization or coalition has both the fiscal and administrative resources required to implement the initiative. More information regarding the RFP process, including the rubric and information about prioritization, can be found in the **Rhode Island HEZ Toolkit** in the Resource Library.

### *Community Engagement for Zone Selection*

Once zones were identified, the backbone organizations and the Rhode Island DOH worked with community members to establish a working relationship and conduct a community assessment to understand ongoing community health concerns. Rhode Island HEZ communities were encouraged by the Rhode Island DOH to conduct surveys and interviews. These assessments helped identify and describe specific inequities of interest and importance to the community. Based on the information provided in the assessment, each Rhode Island HEZ, in partnership with community members, developed an action plan after the first year to guide their process to address the root causes of health inequities.

## Health Domains & Topics

### Access to Healthcare
*Healthcare Access*

### Health-Related Quality of Life
*Social Vulnerability*

### Individual Behavior
*Behavioral Health*

### Physical Environment
*Social Services*
*Natural Environment*
*Transportation*
*Food Insecurity*
*Environmental Hazards*

### Social Environment
*Civic Engagement*
*Equity In Policy*
*Housing Cost Burden*
*Education*
*Discrimination*
*Public Safety*

### Other
*Criminal Justice*

# Monitoring & Evaluation

Performance evaluation for the Rhode Island HEZ uses the metrics provided, as outlined below, as well as other specific measures that were identified within individual communities.

Rhode Island identified 15 health metrics which they categorized into the following five domains:

- Integrated healthcare
  - Health care access, social services, and behavioral health
- Community resiliency
  - Civic engagement, social vulnerability, and equity in policy
- Physical environment
  - Natural environment, transportation, and environmental hazards
- Socioeconomics
  - Housing cost burden, food insecurity, and education
- Community trauma
  - Discrimination, criminal justice, and public safety

## *Additional Performance Measures*

Measures for the overall initiative provided by the Rhode Island HEZ Toolkit include:

- Evaluation Outputs
  - A high perception of trust and collaboration among collaborative members
  - Increased diversity among all Rhode Island HEZ collaboratives
  - A strong understanding of and adherence to the Rhode Island HEZ model throughout the initiative
  - Successful completion of action plan goals for a particular time period
  - An increase in the number of collaborative stakeholders and funding sources
  - Resident involvement in assessment, planning, and implementation stages of work
- Evaluation Process Measures
  - A percentage of Rhode Island HEZ collaborative members who report experiencing trust, collaboration, and effective communication during work
  - The number of sectors represented in the initiative as a whole
  - The percent of action plan projects directly addressing health inequities or the social determinants of health
  - The percentage of action plan projects completed on time
  - The number of new stakeholders and funders for an individual Rhode Island HEZ
  - The percentage increase in residents engaged during different stages of work

## *Community Engagement for Monitoring & Evaluation Metrics*

The development of Rhode Island's health metrics consisted of a community driven process led by the Rhode Island **Community Health Assessment Group** (CHAG) (RI DOH, n.d.-b). This group consisted of representatives from local and state government, academia, philanthropy, health care, community-based organizations, Rhode Island HEZ, nonprofit policy and advocacy organizations, and private sector entities. Over the course of two years, CHAG reviewed policy priorities and similar work nationally and internationally, ultimately examining over 180 potential measures. From this process they narrowed the list down to 15 determinants of health which were shared above.

# Pennsylvania Health Equity Zones

Given the presence of health disparities in the state of Pennsylvania, their Department of Health Services (Pennsylvania DHS) has developed several strategies to address health equity. Namely, in 2021, they launched five **Regional Accountable Health Councils** (RAHC) to provide strategic community-led efforts to improve health outcomes across the state. Given the size of the state and its scale of reach, regional designation supports the unique challenges which different areas of the state may experience. Within this collaborative regional approach, Pennsylvania DHS developed the Pennsylvania Health Equity Zone (Pennsylvania HEZ) initiative to focus on communities with a high burden of disease.

More information regarding the other health equity initiatives Pennsylvania DHS is implementing, please visit the **Pennsylvania DHS Health Equity website**.

## Defining Zone Eligibility

Across the five RAHCs, Pennsylvania defined 20 geographic zones for Pennsylvania HEZ designation. Pennsylvania DHS defines Health Equity Zones as "**geographic areas with profound inequities in health outcomes**" (PADHS, 2021). *Note: these zones were identified in the summer of 2021 and are still pending review and final approval at the time of this report.*

### *General Zone Criteria*

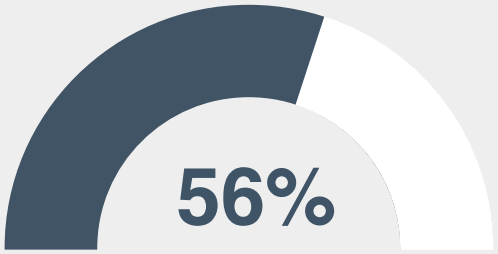
Pennsylvania DHS used an **iterative three-step process** to define up to four zones within each RAHC which included the following criteria considerations:

- Contiguous zip codes forming "clusters" that are reporting in the bottom 25% of Medicaid outcomes
- Medicaid population of at least 5,000 people
- Demonstrate social and economic disparities or inequities
- Demonstrate poor health outcomes

**Health Outcomes**
**#34**
Washington: #12

**Health Factors**
**#23**
Washington: #10

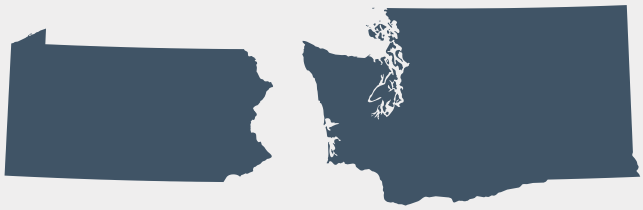
### Health Status



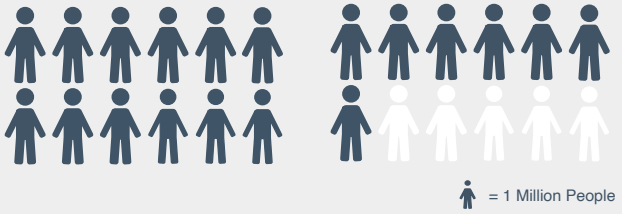

of adults in Pennsylvania State Report very good health*

US Overall: 56.3% | Washington: 58.7%

* Self-reported health status, a measure of how an individual perceives their health



### Population




**12.9 Million**
**283.9** People per Square Mile
**7.0%** of People are uninsured
**3,344,155** Medicaid Population

**7.7 Million**
**101.2** People per Square Mile
**7.7%** of People are uninsured
**1,965,401** Medicaid Population

Source: U.S. Census Bureau

## *Zone Criteria Metrics*

To demonstrate a zone's social, economic, and health outcomes, PADHS utilized the **Pennsylvania Health Equity Analysis Tool** (PA HEAT) to map various outcome measures along granular geographic areas. This interactive data tool is composed of nine dashboards consisting of:

- Population health statistics by census tract
- Social determinants of health statistics by census tract
- Environmental factors by census tract
- Medicaid outcomes dashboard
- County statistics dashboard
- Food insecurity statistics dashboard
- Historic redlining maps dashboard
- Zip code summary
- Census tract summary

## *Community Engagement for Zone Criteria Metric Selection*

Throughout the iterative process to determine a zone's eligibility, Pennsylvania DHS uses a community-led approach to identify the underlying factors that have the greatest impact on health outcomes and what systematically needs to change to address these factors. While the PA HEAT analyzes and maps each zip-code or census tract, this community approach helps further identify high priority geographic areas that are most impacted by disparities.

Each RAHC consists of several governing bodies to assist with zone eligibility and zone designation. Notably, the HEZ Analysis and Identification Committee focuses on defining zone eligibility criteria and uses data from the PA HEAT to identify potential areas for Pennsylvania HEZ designation. However, the HEZ Workgroups, which include community members, focus on what are the root causes of health inequities in each Pennsylvania HEZ after the zone has been designated. This workgroup then develops key partnerships and interventions to address these root causes, which will be compiled into a Regional Health Transformation Plan (RHTP).

## Health Domains & Topics

### Access to Healthcare

*Total 14, Examples:*

*Visits to Dentist or Dental Clinic Among Adults*
*Visits to Doctor for Routine Checkup*

### Health-Related Quality of Life

*Total 56, Examples:*

*Arthritis Among Adults*
*High Blood Pressure Among Adults*

### Individual Behavior

*Total 26, Examples:*

*Physical Activity Among Adults*
*Current Smoking Among Adults*

### Physical Environment

*Total 26, Examples:*

*Walkability Score*
*Food Insecurity Rates*

### Social Environment

*Total 39, Examples:*

*Poverty Rate*
*Single-Headed Households*

### Mortality

*Total 26, Examples:*

*Deaths of Despair*
*Life Expectancy*
*Young Adult Death Rate*

### Other

*Total 7, Examples:*

*Demographic Index*
*Total Population*

# Zone Selection, Designation & Action Planning

Each RAHC is given data reports from the state that include various Medicaid, health, and aggregated index measures, noting that this data in some areas range in granularity. Each RAHC is then responsible for analyzing the data and recommending zones. Below is the previously mentioned **iterative process** that each RAHC uses to select and then designate their Pennsylvania HEZ:

1. Using the Medicaid Index & PA HEAT
    - Define zip codes that are reporting in the bottom 25% of Medicaid outcomes
    - Contiguous zip codes that form “clusters” are then shortlisted for further consideration
2. Using U.S. Department of Agriculture Rural-Urban Community Area Codes
    - Define Medicaid population size per zone: aim for at least 5,000 people (overlayed urban versus rural classification)
    - Zip codes with the poorest outcomes were focused on for review in the third step
3. Using PA HEAT, CDC/ATSDR Social Vulnerability Index, & University of Wisconsin Area Deprivation Index
    - Overlay deprivation statistics such as employment and income (social vulnerability index and racial disparities were also evaluated)
    - Local community experts weighed in on the unique challenges of individual zip codes

# Monitoring & Evaluation

As mentioned previously, each RAHC develops a RHTP that identifies and responds to the health disparities in each of the Pennsylvania HEZs. These plans also consist of implementation strategies and plans for how the RAHC will continuously monitor the Pennsylvania HEZs. The RHTP are expected to be updated annually with the potential to designate additional HEZs with each update. At the time of this report, the Pennsylvania HEZs are still under review for designation and therefore these RHTP have not been published yet. However, linked here is an **RHTP template** that Pennsylvania DHS has on their website.

# King County Communities Opportunity

**Communities of Opportunity** (COO) began in 2014 when King County and the Seattle Foundation joined together to form a public/private/community-based partnership to "address economic and racial inequities through place-based work and systemic change" (COO, n.d.-a). Their work is relevant to that of Washington's Health Equity Zone initiative, as they used community-based approaches and knowledge to support community health.

## Defining Zone Eligibility

COO defined eligibility for geographic designation by:

1. Identifying a set of health and well-being indicators
2. Mapping the indicators individually and overlaying them into a composite by census tract
3. Prioritizing areas in the lowest quintile and second lowest quintile to be eligible for COO resources

### *General Zone Criteria*

COO looked at existing communities within King County that present documented disparities across a number of health and well-being indicators. COO focuses on four priority areas which influenced their choice in community and metric selection: quality affordable housing, the right to be healthy, increased economic opportunity, and strong community connections (COO, n.d.-a).

### *Zone Criteria Metrics*

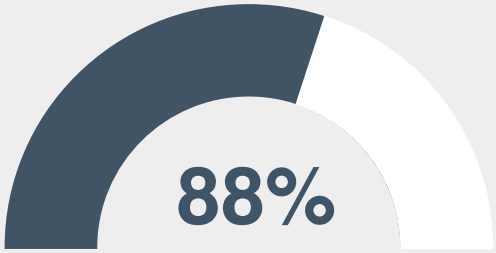
COO identified metrics through a literature review of available data relating to issues that impact community health. They included data that were not always considered to be "public health data" but provided important information related to community needs. Staff then narrowed the list of potential metrics to include those that were:

1. Publicly available
2. Inclusive of the whole population
3. Possible to update regularly (i.e., not one-time measures)
4. Reported at as granular a level as possible (i.e., zip code or census tract level data)

**Health Outcomes**
(County Rankings in WA)
**#2**
Washington: #12
(National Ranking)

**Health Factors**
(County Rankings in WA)
**#1**
Washington: #10
(National Ranking)

**Health Status**

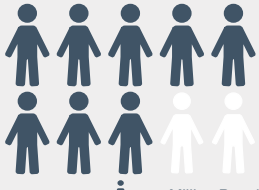



of adults in King County report very good health*

US Overall: 56.3% | Washington: 58.7%

* Self-reported health status, a measure of how an individual perceives their health

**Population**

| King County | Washington |
|---|---|
|  |  |
| | = 1 Million People |
| **2.2 Million** | **7.7 Million** |
| **912.9** People per Square Mile | **101.2** People per Square Mile |
| **6.3%** of People are uninsured | **7.7%** of People are uninsured |
| **430,977** Medicaid Population | **1,965,401** Medicaid Population |

Source: U.S. Census Bureau

Through an iterative process (see community engagement section below), 10 metrics were initially chosen to be used as the COO Composite Index, which was used to identify zones. In 2019, two of the metrics were dropped due changes in data collection, and another was added in 2021 to preplace one of the dropped metrics. The COO Composite Index now includes nine total metrics, which are bolded below.

Metrics used in the COO Composite Index:

- Life expectancy at birth
- Current smoker
- Obesity (Body Mass Index >= 30)
- Diabetes prevalence
- Frequent mental distress
- Income below 200% federal poverty level
- Unemployment rate
- Poor housing conditions
- Adults age 18-64 without health insurance*
- *Avoidable hospitalizations***
- *Adverse Childhood Experiences (ACEs)***

* Added in summer 2021 to replace previous avoidable hospitalizations measure.

** Dropped in 2019 due to changes in data collection. (Amy Laurent, Andrea Akita, and Roxana Chen, personal communication, February 2, 2022)

## *Community Engagement for Zone Criteria Metric Selection*

Stakeholders that chose metrics to become Composite Index were primarily internal and community engagement was used to check validity and relevance of the index after the criteria metrics were chosen. After narrowing the potential list of metrics, COO staff discussed the potential metrics with a group of stakeholders internal to COO. Stakeholders engaged included: upper-level staff from Public Health Seattle-King County (PHSKC), King County's Department of Community and Human Services (DCHS), the Seattle Foundation, and another organization. In a series of meetings, they discussed advantages and disadvantages of using various metrics and the potential outcomes that would be measured with the metrics. They also discussed what could be said about a community's health using each metric. This group decided on 10 metrics to use, a majority of which were available at census tract level, and a few available at zip code level. These metrics created the first iteration of the COO Composite Index.

# Health Domains & Topics

### Access to Healthcare

*Uninsured Age 18-24*

### Health-Related Quality of Life

*Obesity*

*Diabetes Prevalence*

*Mental Health*

### Individual Behavior

*Tabacco Use*

### Social Environment

*Poverty*

*Unemployment*

*Housing Security*

*Income*

### Mortality

*Adult Mortality*

After designing the Composite Index, the COO held a community function to share the information from the Composite Index with community members, it was agreed that there was clear evidence where COO investment was needed. After COO received funding, they began a community co-design process to engage with community members through conversations about the indicators. In these conversations they asked about what was important to community members and received feedback from community members about other data they hoped to collect on a more local level to measure need and change. Some potential metrics that community members may have been interested in using did not have enough data at the time, for example data on sidewalk locations throughout the County (Amy Laurent, Andrea Akita, and Roxana Chen, personal communication, February 2, 2022).

## Zone Selection, Designation & Action Planning

COO mapped Composite Index scores in the county and identified geographic areas falling in the lowest quintile for health and well-being. COO originally designated communities that were in the lowest quintile (lowest 20th percentile) as the priority for COO resources. Council broadened eligibility to the lowest 40th percentile in 2016. In 2021, COO with Council approval designated census tracts that fell in the lowest 20th percentile as the priority COO communities. They chose three place-based communities to focus their initial efforts, with the resources they had available. Since this first iteration, COO has expanded to include three additional place-based and three cultural community partnerships. Cultural communities are recognized as having similar health and well-being disparities, but without the same geographic or place-based zone designation.

## Monitoring & Evaluation

Performance evaluation for COOs uses the criteria metrics indicators from the Composite Index as well as additional community-identified measures. Some communities have collected their own information through surveys and community needs assessments to more meaningfully highlight where existing health and human services are needed and what communities need and want to change.

Additional outcome measures come from the **2020 Annual Report for Best Starts for Kids**, which include:

- How much did we do?
  - Number of events that COO partners held or participated in
  - Number of people participating in COO events
- How well did we do it?
  - Number of resident leaders developed through COO
- Is anyone better off?
  - Number of new partnerships developed in progress toward policy and/or system change
  - Number of new relationships or connections made in progress toward policy and/or system change
  - Number of policies changed
  - Number of people hired into jobs as a result of COO activities

# Tacoma-Pierce Communities of Focus

Tacoma-Pierce County Health Department (TPCHD) identified five public health issues facing Pierce County: access to healthcare, premature deaths, access to healthy food, safe, reliable, and affordable housing, and means to get around (TPCHD, n.d.-a.). To prioritize these issues, they developed the **Communities of Focus** (COF) to ensure the most vulnerable residents have an opportunity to be healthy. COF is improving health outcomes through customer service, cross-sector partnerships, investments, and community ownership.

For more information regarding Communities of Focus and other health equity work in Pierce County, visit the **Tacoma-Pierce County Health Department's website**.

## Defining Zone Eligibility

TPCHD defined six geographic locations throughout the county who have life expectancies of four years less than those who live in adjacent zip codes.

### *General Zone Criteria*

**COF** were assigned based on:

- Zip code and census tract boundaries
- Documented life expectancies of at least four years less than neighboring zip codes
- Documented poor health risk factors

### *Zone Criteria Metrics*

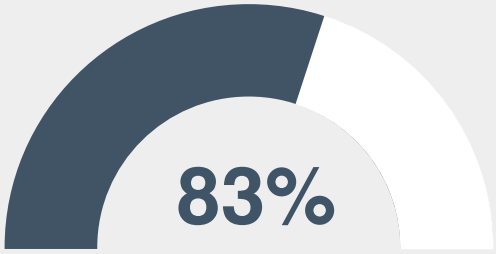
TPCHD based their process on the **Communities of Opportunity** (COO) model in King County, keeping in mind that the metrics chosen need to be:

1. Publicly available
2. Inclusive of the whole population
3. Possible to update regularly (i.e., not one-time measures)
4. Reported at as granular a level as possible (i.e., zip code or census tract level data

**Health Outcomes**
(County Rankings in WA)
**#19**
Washington: #12
(National Ranking)

**Health Factors**
(County Rankings in WA)
**#17**
Washington: #10
(National Ranking)

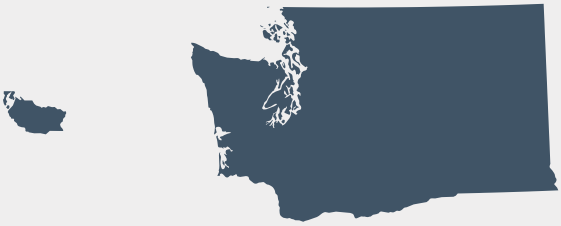
### Health Status



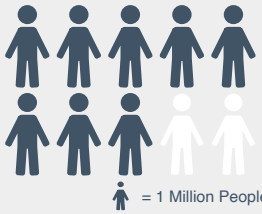

of adults in Pierce County Report very good health*

US Overall: 56.3% | Washington: 58.7%

* Self-reported health status, a measure of how an individual perceives their health



### Population

| Pierce County | Washington |
|---|---|
|  |  |
| | = 1 Million People |
| **0.9 Million** | **7.7 Million** |
| **476.3** People per Square Mile | **101.2** People per Square Mile |
| **7.6%** of People are uninsured | **7.7%** of People are uninsured |
| **230,000** Medicaid Population | **1,965,401** Medicaid Population |

Source: U.S. Census Bureau

In their processes, TPCHD revised the COO model slightly to reflect the availability of data in Pierce County, however, remained a level of consistency to ensure all data elements were as consistent as possible for the ability to coordinate programs and best practices across county lines.

Through the revised model of COO, TPCHD complied the following health metrics to be used to assign cumulative risk scores for each zip code:

- Life expectancy
- Poverty
- Unemployment
- High school graduation
- Frequency of mental distress
- Smoking
- Obesity
- Diabetes
- Adverse childhood experiences

## *Community Engagement for Zone Criteria Metric Selection*

In the process of metric and zone selection, TPCHD recognized the value that community has in decision-making regarding community investment. TPCHD first used Community Health Improvement Plans (CHIP) and Community Health Assessments (CHA) to address the most important public health problems and to help inform the selection process. They then involved various organizations and community members who were already invested in improving health outcomes. Between the assessments and community collaboration, they were then able to provide context to the available data and move the process forward in selecting the COF.

## Health Domains & Topics

### Access to Healthcare

*Uninsured Age 18-24*

### Health-Related Quality of Life

*Obesity*

*Diabetes Prevalence*

*Mental Distress Frequency*

### Individual Behavior

*Tabacco Use*

### Social Environment

*Poverty*

*Unemployment*

*Housing Security*

*Income*

### Mortality

*Life Expectancy*

# Zone Selection, Designation & Action Planning

The **intricate process** of selecting COF zones was similar to that of the King County COO. TPCHD mapped across zip codes the nine indicators listed above. Each health indicator was ranked based on relative risk. For example, the zip code with the highest rate of diabetes was given a "1", the second highest was given a "2", and so on. Scores of each health indicator were totaled for each zip code to give a cumulative risk score. The lower the score the higher the cumulative risk. The zip codes with the highest cumulative risk (or lowest score) were then prioritized for COF selection. Further community collaboration finalized six COF.

# Monitoring & Evaluation

Performance evaluation for COF uses a combination of the health outcome indicators used to develop the cumulative risk scores and other specific measures that were identified within individual communities. COF based their additional outcome measures on those that took place in **King County COO**, including:

- How much did we do?
  - Number of events that COF partners held or participated in
  - Number of people participating in COF events
- How well did we do it?
  - Number of resident leaders developed through COF
- Is anyone better off?
  - Number of new partnerships developed in progress toward policy and/or system change
  - Number of new relationships or connections made in progress toward policy and/or system change
  - Number of policies changed
  - Number of people hired into jobs as a result of COF activities

# Summary of Monitoring & Evaluation Metrics

Each of the five place-based initiatives detailed the metrics they would use for monitoring and evaluating health outcomes and health equity work in their zones. For this summary, we identified and categorized each metric using the Health Topic and Health Domain classifications identified in **Part II**. *Figure 12* below illustrates the proportional composition of each initiative's set of metrics by Health Domain.

Across the five initiatives, the most common type of evaluation metric was that pertaining to the **Social Environment** of the community. Pennsylvania's HEZ initiative was the only one where Social Environment was not the leading domain. Instead, it was ranked second most common after **Health-related Quality of Life**.

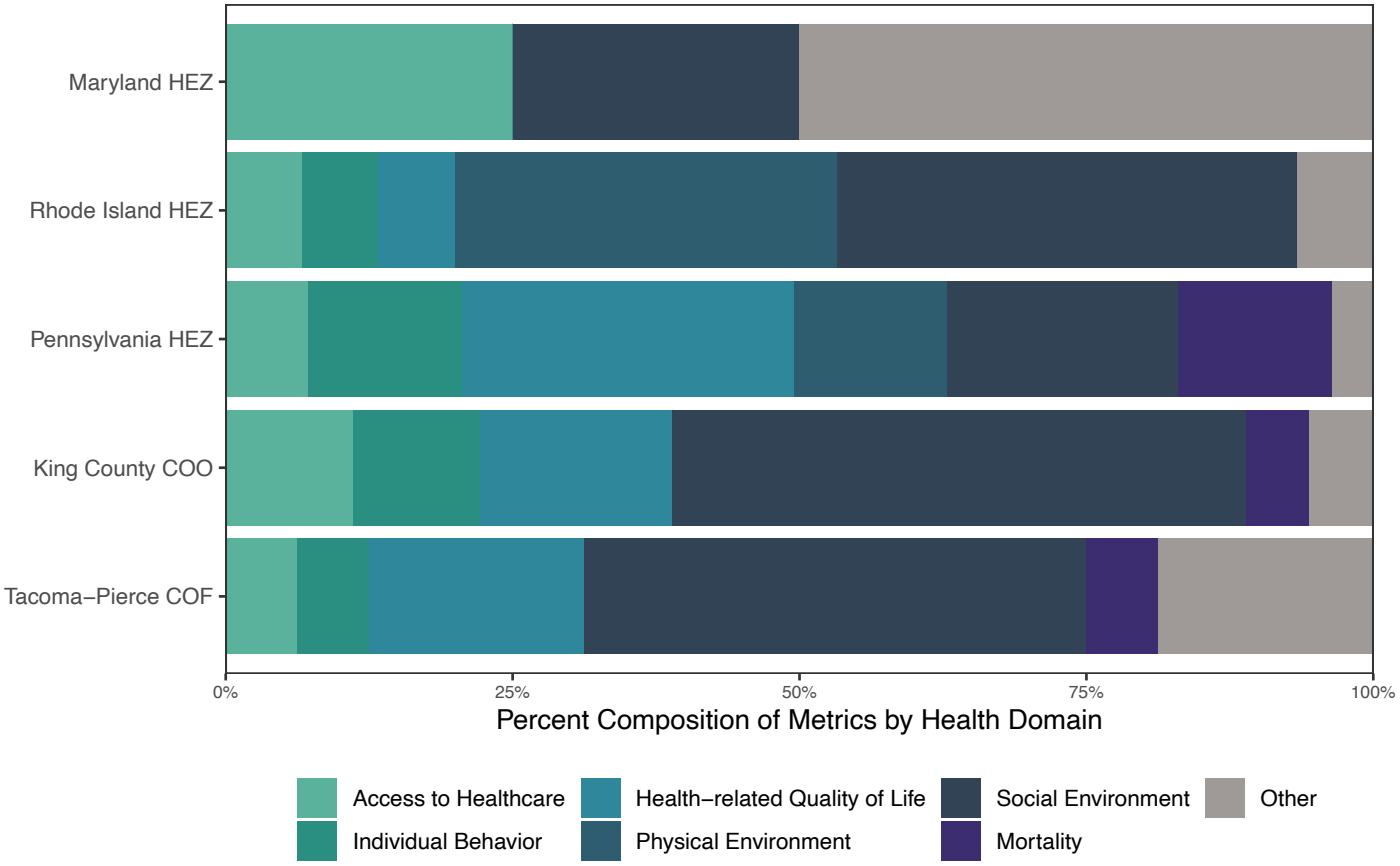



***Figure 12.*** Zone-Based Case Study Summary of Monitoring and Evaluation Metrics
Source: Washington State Department of Health

While most of the initiatives identified a small list of evaluation metrics (15 metrics or fewer), Pennsylvania opted to use their Health Equity Assessment Tool, which is a dashboard tracking 175 metrics across the state. This means the exact number of metrics identified in each domain differ greatly between initiatives. While Social Environment was the most common domain, no single initiative listed more than 10 Social Environment metrics except for Pennsylvania HEZ, which listed 39.

Between all five place-based initiatives, we identified 247 unique metrics. All metrics were analyzed for their Health Topic/Health Domain classification as well as level of geographic granularity, frequency of update, whether the metric was disaggregated by race/ethnicity, sex, and age breakdown, and the source of estimate.

In addition to the five place-based initiatives outlined in this section, we conducted the same analysis on the evaluation metrics for four additional health equity projects. These are King County's Accountable Communities of Health: HealthierHere, Healthy Chicago Equity Zones, Colorado Health Disparities and Community Grant Program, and Louisiana Health Equity

The full list of monitoring and evaluation metrics with their health topic/health domain classifications and further demographic and access details can be found in Supplemental Tables 9-11. ***Please contact the DOH for access to the complete datasets.***

# Other Place-Based Initiatives

The following four initiatives are ones that currently using or plan to use place-based approaches to health equity but are distinct from initiatives that specifically identify geographic zones. These initiatives provide helpful information about the types of metrics and community engagement processes related to health equity work that were used within each initiative. Two of the initiatives in this section, Chicago and Louisiana, are in the beginning phases of exploring this type of work.

## King County Accountable Communities of Health: HealthierHere

Washington consists of nine regional **Accountable Communities of Health** (ACH) working with cross-sector partners to improve health and wellbeing as part of the Washington State Medicaid Transformation 1115 Waiver. Each regional ACH is hosted through an independent organization that works directly with the communities on specific health care and social needs-related programming. In King County, **HealthierHere** serves as the regional ACH.

HealthierHere, along with the other ACH recognized that our health care systems often work in silos, failing to address the socioeconomic factors that affect health behaviors, conditions, and outcomes. Their goal was to design an approach that not only addresses physical health but also looks more closely at underlying factors and social determinants of health. They developed four innovation targets on which to center community-based initiatives and the allocation of resources. These four targets include: physical and behavioral health integration, safe and successful transitions, prevention and management of chronic conditions, and reduced opioid use (HealthierHere, 2021).

### *Community Engagement*

HealthierHere recognized the value of centering community voices early on in their process by working with the Community Grants Listening Project. By working with this project, HealthierHere was able to provide resources to community-based organizations (CBO) in communities that have been most impacted by health disparities. The collaboration cultivated culturally appropriate methods of gathering information from community members about their needs. HealthierHere's initial community process also led to the involvement of community members in the creation of an equity definition and guidelines for the organization.

To engage with community members, HealthierHere compiled administrative data and shared with members of the community about what the data suggested about their community. Staff then asked community members what they thought about the story the data told, and what might be missing but important to understanding the community's health needs (HealthierHere, 2021).

### *Project Selection*

While HealthierHere did not identify specific zones the way that other initiatives do, they do use criteria metrics to help determine how to allocate resources and support the community.

When evaluating how to allocate resources, HealthierHere uses an internal administrative tool to evaluate proposals with an equity lens, broadly considering who the project will touch, what part of the region it will serve, and what health disparities will be addressed. In their process, the HealthierHere board – consisting of more than 50% consumers, community-based organizations, social services, and tribal representatives – used a collaborative process to develop health equity measures. These measures, described below, go beyond metrics prescribed by the state's 1115 Medicaid waiver and meaningfully include local perspectives of what is important to measure related to equity.

### *Monitoring & Evaluation*

HealthierHere uses a set of **equity measures** that focus across different parts of the healthcare system. Measures are related to patient experience, Medicaid transformation, social determinants of health, health literacy, healthcare delivery, community engagement, and HealthierHere's advancement of equity through funding (HealthierHere & PHSKC, 2021). Additionally, Washington State ACHs use specific performance measures to evaluate progress on goals, which HealthierHere reports via an **interactive data dashboard**. They also engage in continual community feedback through the **Consumer Voice Listening Project**.

## Chicago: Healthy Chicago Equity Zones

In September 2020, the Chicago Department of Public Health (CDPH) launched their **Healthy Chicago 2025 plan**. This plan works with the city and community partners across sectors to particularly support Black and Latine communities, and address the root causes of health inequities, including structural racism. To further promote health and racial equity, the CDPH established the Healthy Chicago Equity Zones (Chicago HEZs) initiative, which defined six geographic regions that collectively cover the entire city. Each of the six Chicago HEZs are led by a regional organization that provides backbone financial, administrative, and project management support.

This initiative builds on the **Racial Equity Response Teams** and **Protect Chicago Plus** programs that were designed to reach communities that were most impacted by the COVID-19 pandemic. Following from these other initiatives, Chicago HEZs continue to focus on COVID-19 disparities while evolving efforts to confront factors that contribute to racial health disparities. These factors include healthcare and social services access, food access, housing conditions, community safety, and the physical and built neighborhood environment.

At the time of this report, it is unclear what criteria and metrics were used to divide the city of Chicago into six regions. However, as this initiative evolves, it can serve as an example of a regional collaboration to address health inequities.

More information on Healthy Chicago Equity Zones and other Health Equity initiatives in Chicago, please visit the **City of Chicago Health Equity website**.

# Louisiana Health Equity

Louisiana has a number of organizations which focus on collaborative approaches to health equity. The **2016-2020 Louisiana State Health Assessment and Improvement Plan**, created with community stakeholders across the state's nine health regions, included six priorities. A priority related to work similar to that of Washington's HEZ initiative is: to "build public health system infrastructure", with an objective to "address long-standing health inequities through collaboration with diverse partners and community members" and a strategy to "engage a system of community improvement zones, whereby the private sector targets a particular section of the community with various innovative actions" (Louisiana OPH, 2017, pp. 96-97). Indicators related to social determinants of health were used to develop Louisiana's State Health Assessment. The state's Office of Public Health (Louisiana OPH) process to identify indicators included convening "an internal committee with Louisiana OPH epidemiologists, regional medical directors and administrators, and specialists in health promotions, chronic disease, and maternal and child health" (Louisiana OPH, 2017, p. 35). They also worked with external partners such as the Louisiana Public Health Institute. The criteria for indicator selection were:

- Impact on health (proportion of population impacted)
- Availability of benchmarks (national and/or state benchmarks)
- Availability of meaningful measurements (reliable and valid data available)
- Alignment with emergent community priorities
- Demographic availability (disaggregated data available by race/ethnicity and age) (Louisiana OPH, 2017, p. 35).

At the time of writing this summary, based on an online literature review, consultants were unable to confirm if any type of community improvement zone system has been implemented in Louisiana. This information is included as an example of another state health jurisdiction considering a zone approach to health equity.

The **Louisiana Center for Health Equity** (LCHE) is a partner of the Louisiana Department of Health. The LCHE annual Health Summit serves as a place for these and other entities to join together to discuss the state's progress on outcomes from the state's Community Health Improvement Plan (CHIP), as reported in their **2020 Health Summit Report** and a **2022 Health Summit Press Release**.

# Colorado Health Disparities & Community Grant Program

The Colorado Health Disparities and Community Grant Program (HDCGP), through the Colorado Office of Health Equity and Health Equity Commission, was developed to provide funding for projects that affect the social determinants of health that continue to exacerbate health disparities among underrepresented populations (CDPHE, n.d.). HDCGP authorizes the Office of Health Equity to reduce health disparities through policy and systems change, specifically targeting areas that address social and economic factors such as: education, employment, social support, community safety, housing, transportation, food security, access to healthcare, and environmental concerns. This grant program was recently amended through the Colorado State's 2021 **Senate Bill 181** (SB21-181), Equity Strategic Plan to Address Health Disparities, requiring the Department of Public Health and Environment with the Health Equity Commission to conduct and publish an assessment of the impact of social determinants of health on health disparities. This report is required to be published by July 1, 2022, continuing every two years thereafter. Following the first report, the bill requires the governor to convene the Health Equity Commission and develop a strategic plan ensuring the coordination of equity-related work to address the social determinants of health.

# Health Equity Initiative Findings

## *Lessons Learned & Considerations*

## PART IV

*Zone Criteria Definition*

*Zone Selectino*

*Zone Designation*

*Monitoring and Evaluation Metrics*

## Introduction

The final part of our report provides a summary of lessons learned from our research on the five place-based health equity initiatives that created specific geographic zones as areas of focus for health equity work. We synthesized our research about how other initiatives created zones into an overarching four-step process as indicated in *Figure 13*. These steps are: (1) define zone eligibility using general criteria and criteria metrics, (2) select zones with an iterative process of zip code/census tract mapping, community collaboration, and organizational capacity assessment, (3) designate zones and action planning (4) monitor and evaluate zones. Each step is detailed in the following sections.

Community leadership and collaboration are an important part of every step of a Health Equity Zone (HEZ)-type initiative process. All initiatives that we highlighted with case studies in **Part III** of this report had a coordinating body that incorporated stakeholders in decision making processes. In Washington, the Community Advisory Council (CAC) holds this important role.

We provide recommendations to the Washington State Department of Health (DOH) related to each step of the process outlined in *Figure 13*. We acknowledge that there is no singular "right" way to identify and establish HEZs in the state, and in fact there may be many "right" ways. The following recommendations are grounded in our research and understanding of the current context of the DOH and CAC.


***Figure 13.*** Health Equity Zone Selection Process Map

# Defining Zone Eligibility

## General Zone Criteria

Based on other examples, we have found that most places define the geographic size of their zones based on two specific requirements. (1) Zip code boundaries: inclusive of clusters of entire zip codes. The smallest zone is one zip code. (2) Population size: Rhode Island, Maryland, and Pennsylvania specify that populations of at least 5,000 residents are needed for an area to qualify for HEZ designation. Pennsylvania specifically accounts for differences between urban and rural areas when identifying zones.

While Senate Bill 5052 (SB 5052), An Act relating to the creation of health equity zones defines HEZs as contiguous geographic areas, it does not define minimum size or population for a HEZ.

***We recommend*** that the CAC use criteria that other health equity zone initiatives have used to remain consistent and practical and for future replicability and collaboration. A HEZ in Washington could be defined by:

- Zip code or census tract boundaries
- Population of at least 5,000 people, with specific considerations for rural areas.
    - Either general population or Medicaid populations

## Zone Criteria Metrics

General criteria are helpful to establish a baseline of the existing health landscape of Washington. Criteria metrics, which are metrics and measures used to evaluate where to draw boundaries for a place-based zone, are also important. Other states have used additional metrics and criteria such as Medicaid populations and social determinants of health to understand areas that need more support. Criteria metrics used for zone selection are related to but can be distinct from monitoring and evaluation metrics. Mapping these criteria metrics can help the CAC and DOH visualize and identify geographic areas that demonstrate measurable and documented health disparities and poor health outcomes.

Rarely do health measures indicate contradictory health needs for a particular community. As communities with greater access to resources tend to perform well on health outcomes, communities with greater need tend to perform poorly. When Communities of Opportunity (COO) mapped performance on 10 health metrics by census tract, most communities consistently had the same relative rankings (indicating which areas needed the most support to increase community health).

The use of community health assessments can help identify the most important health problems that communities in Washington are already working to address. Data that are available from other sources are also good candidates for criteria metrics. Many examples of other health equity initiatives use rates of Medicaid enrollment as a key criterion while identifying zones, since Medicaid enrollment demonstrates social and economic disparities.

***We recommend*** that identified metrics should be mapped for both the selection and the monitoring and evaluation processes. Any metrics chosen as criteria metrics for HEZ selection meet the four requirements used in the COO metric selection process.

Metrics should be:

1. Publicly available
2. Inclusive of the whole population
3. Possible to update regularly (i.e., not one-time measures)
4. Reported at as granular a level as possible (i.e., zip code or census tract level data)

These metric requirements will support DOH in identifying initial HEZs now and ensuring equitable zone selection in future years by using the same criteria across the state. Metrics that meet these requirements will also be beneficial for the monitoring and evaluation of HEZ work after selection and designation. Additional processes to finalize criteria metrics would include involving key community stakeholders to provide insight and feedback on what other metrics are important to their communities. We recommend following a process similar to COO or Communities of Focus (COF) to involve stakeholders in finalizing criteria metrics; the method for this is to present findings and conclusions of metric-based analyses of communities to community members and solicit feedback. In other words, tell people what the metrics say about their communities and check to see if there is missing information about the community's story.

In reviewing Washington State's Community Health Needs Assessments (CHNA) and other place-based initiatives for health equity, we have identified criteria from these projects we believe deserve specific acknowledgement.

## *Metrics That May **Promote** Health Equity Efforts*

The Healthy Columbia Willamette Collaborative in Clark County assessed a unique set of nine metrics in their 2019 CHNA. These nine metrics were divided into two drivers of inequality – Discrimination/Racism and Trauma – and seven resulting factors and outcomes. **Community Representation**, **Culturally Responsive Care**, and **Isolation** were the three resulting social factors, and all introduce equity-minded consideration to health and wellbeing assessments. Due to the qualitative nature of many of these metrics, The Healthy Columbia Willamette Collaborative utilized town hall and listening session quotes to measure the impact on the local community.

A more quantitative example comes from King County. The King County COO initiative produces annual reports on community wellbeing and opportunity. As part of a larger King County initiative, Best Starts for Kids, COO directs their work through the lens of family and child welfare. Due to this focus, COO identified unique metrics that spoke to the psychological security and opportunities for development in King County. Specifically, they consider a measure that tracks the **percentage of adolescents who have an adult they can talk with**. This metric is uncommon as it values community and family support as fundamental to the health of kids – a step that has yielded successful results in the county. For more on this initiative in general, see **Part III**.

Similarly, Rhode Island incorporates unique, equity-focused metrics into its HEZ initiative. The Rhode Island HEZ initiative tracks a balanced set of 15 indicators equally divided into five domains. The domains cover topics from integrated healthcare to community resilience. One of the unique measures seen in this initiative is the measure which tracks civic engagement. The Rhode Island Department of Health classified this measure as a factor of community resilience, which speaks to the value of this metric. While the proportion of eligible adults registered to vote may be a metric susceptible to political and generational trends, the intent to track political engagement and awareness may be a useful strategy to track general community engagement.

## *Metrics That May **Impede** Health Equity Efforts*

Some metrics have such a high correlation with race or socioeconomic class that they are effectively just proxies for that data. When there are systemic health problems which drive quantifiable poor health outcomes, it may be more effective to measure and address the root problem, where possible, than to spend efforts fighting symptoms. For example, rates of **teen parenthood** and **tobacco use** are strongly negatively correlated with income level (Kremler, 2004; Hunter, 2012; Kearney and Levine, 2014; CDC, n.d.-d).

Some metrics might be used to justify policies that disproportionately burden less empowered or marginalized populations. Initiating health equity zones initiatives means funding interventions to address perceived health problems. If an initiative uplifts metrics like rates of tobacco use – as mentioned above – or **violent crime**, the subsequent interventions may exacerbate inequities in the communities the work seeks to aid. Punitive measures like increased cigarette taxes or increased policing of high-crime areas have been shown to have little effect beyond levying further financial burdens on already poor communities and introducing further police presence in already highly policed neighborhoods (Esposito, 2021; Kremler, 2004).

Some metrics are inherently flawed measures in understanding the health of a community. CHAs and CHNAs commonly track and report the proportions of their population who are classified as obese. **Obesity** is a categorization determined by an individual's body-mass index (BMI) and is purely a measure of body fat accumulation heedless of fat type or distribution on the body. Worse still, the BMI will conflate fat and other body mass – like muscle – categorizing some of the world's greatest athletes as obese. (Schwab, 2015) In recent years, BMI has come under scrutiny as an unethical and structurally racist indicator for physical health (Humphreys, 2010; Dougherty et. al., 2020). Measures such as body fat percentage and total body fat – while also flawed (Burkhauser, 2008) – may be more reliable indicators for risk of morbidity than BMI and its classifications (Humphreys, 2010).

***We recommend*** that while identifying metrics for HEZs, the CAC utilizes measures that acknowledge the social and structural forces acting on an individual's health and stays aware of the history and measuring practices of the chosen metrics.

# Zone Selection

Our research identified three aspects important to zone selection: mapping zip codes/census tracts, identifying local organizational capacity, and collaborating with community members and stakeholders. Through our research we have found that each case has a different approach to zone selection. Through analysis of each approach, we have outlined a process that we think would be most appropriate for the CAC to use for HEZ selection.

***We recommend*** that the CAC iterate over the three processes of: (1) zip code/census tract mapping, (2) need and organizational capacity assessment, and (3) community collaboration to adequately and equitably assess where specific zones should be in Washington State.

## Zip Code/Census Tract Mapping

Zip code or census tract mapping was used by COO, COF, and Pennsylvania. COO and COF both mapped performance on each criteria metric by zip code and/or census tract, depending on availability of data, and created a scoring system to compare the overall status of each zip code/census tract. Zip codes/census tracts with the poorest health outcomes were prioritized for zone designation through each initiative. Pennsylvania incorporated a multi-step metric criteria process and maps specific health indicators at each step to help narrow down zones. This iterative mapping process can help identify specific geographic clusters to define public health gaps and narrow down the possible areas where HEZs could be designated.

## Need & Organizational Capacity Assessment

Maryland and Rhode Island used a request for proposal (RFP) process and invited community-based organizations (CBO) who were already invested in improving health outcomes to apply. Selected CBOs would serve as backbone organizations, which are coordinating leaders for collaborative community work within a designated zone. Based on criteria for zone selection, these CBOs defined the zip codes they wanted to be designated as specific zones. COO and COF operated as the backbone organizations for communities they worked with, to ensure there was enough capacity among partner organizations.

The success of health equity work is reliant on collaboration with community members to accurately define health needs in a zone and to facilitate intervention strategies. Historically, participatory practices with communities were exploitative, as underfunded organizations and overtaxed community leaders were expected to volunteer their time and effort towards well-meaning initiatives (Black et. al., 2013). While today there is greater awareness about the dangers of requesting collaborative work without fair compensation, limited public funding for emerging initiatives may tempt public managers back towards old, flawed practices. SB 5052 was not funded in a manner that can provide significant funds to local communities. For that reason, it is important for the DOH to consider collaborating first with community groups with greater capacity to participate with minimal compensation.

***We recommend*** DOH explore alternative strategies to secure more dedicated funding for HEZs, to allow a greater number of community groups to participate in the work. An example of a funding strategy that WA could consider is RI's innovative braiding-and-blending technique.

# Community Collaboration

Data do not tell the whole story of community need. Community members and community organizations provide direct insight into understanding what is happening on the ground and how they think a broader public health entity can support their community. Every initiative we researched involved some level of community collaboration and community engagement when identifying zones. All initiatives had a coordinating body that incorporated stakeholders.

***We recommend*** that community collaboration should be part of every step of the HEZ process, not just zone selection.

# Additional Considerations for Zone Selection

Pennsylvania's iterative process for zone selection provides important insight for a state of similar geographic size. They first divided the state regionally into five Regional Accountable Health Councils (RAHC) and then mapped health metrics by zip code within each RAHC to identify 20 specific health equity zones overall. Additionally, these RAHC serve as the governing organizations and coordinating bodies for collaboration with communities within each zone and connection between the zones and the state's department of health.

While each case study provides important and useful information for the Washington HEZ process, the scopes of the initiatives differ significantly. The initiative most comparable to WA, based on geographic size and population, is Pennsylvania. The Rhode Island and Maryland health departments are more comparable in size and scope to local health jurisdictions or counties in Washington, specifically Tacoma-Pierce and King County.

***We recommend*** using a similar regional-based process to Pennsylvania by subdividing Washington State into regions prior to HEZ selection. As shared in Part I: History & Context, Washington already has various health related subdivisions that could be used for example, Local Health Jurisdictions, Accountable Communities of Health, and Public Health Emergency Preparedness Regions. We provide an additional, alternative regional breakdown of Washington State in Part 2: Health Data & Metrics, delineated by shared health topic interests as reported by Washington's CHNAs. Regional entities could help with zip code/census tract mapping and community engagement to identify specific HEZs within their regions. Regional entities can rely on already existing connections with local experts and community members to understand the unique challenges of individual zip codes and identify HEZs.

# Zone Designation & Action Planning

After the iterative process of zone selection, Rhode Island and Maryland worked with CBOs selected through their RPF processes to lead their zones. Both initiatives began work in the zones by conducting community needs assessments. These assessments gathered information about what the most pressing issues were in each of the zones, to shape action plans and priority areas for health equity work in each zone. In order to address inequities and grow capacity for progress, the needs assessments also identified what assets were in place in communities. Community engagement for the purpose of developing action plans was widespread, and communities were encouraged to focus on addressing root causes of health inequities. The action plan process utilized this community engagement to identify evaluation metrics to be used to measure progress.

***We recommend*** the DOH support CBOs in conducting community needs assessments and developing action plans with key community stakeholders, following HEZ designation.

# Monitoring & Evaluation

As most initiatives have been running for less than three-years, clear documentation about future monitoring and evaluation metrics was not available for all initiatives. Of the programs that did detail the metrics they intend to use, COO and COF expanded on their criteria metrics to develop a broader list of monitoring and evaluation metrics. RI identified a set of 15 metrics which we believe they are using to monitor and evaluate progress in their zones. PA uniquely identified their state-run dashboard, which tracks over 200 unique metrics, as a potential source for monitoring and evaluating their zones. In addition to identifying metrics, COO, COF, and RI provide sample questions to consider while monitoring and evaluating HEZs.

***We recommend*** identifying a single set of health metrics that can be used for both initial zone selection and ongoing monitoring and evaluation. Additionally, we recommend engaging with community members to identify other questions that can be used in tracking the direction and success of the initiative. Using a consistent set of metrics as criteria for identifying zones and for monitoring and evaluation of the same zones will both help the state measure changes within identified zones.

# Appendices & Sources

## PART V

# Appendix A: SB 5052 Overview

The following table provides text of Engrossed 2nd Substitute Senate Bill 5052: An Act relating to the creation of health equity zones by section with notes about what each section means and roles related to SB 5052's mandates as specified in the bill as well as in a DOH presentation about the CAC in December 2021. ***Please contact the DOH for access to this table in an Excel format***.

| Lines | Section | Bill Text | What This Means | Roles |
|---|---|---|---|---|
| **Page 1 Lines 4-11** | 1.1 | Findings and Intent (1) The legislature finds that people of color, Indian, people experiencing poverty, and immigrant populations experience significant health disparities compared to the general population, including more limited access to health care and poorer health outcomes. The legislature finds that these circumstances result in higher rates of morbidity and mortality for persons of color and immigrant populations than observed in the general population. | Background and reason that the legislature enacted HEZ bill. | |
| **Page 1 Lines 12-16** | 1.2 | (2) Therefore, the legislature intends to create health equity zones to address significant health disparities identified by health outcome data. The state intends to work with community leaders within the health equity zones to share information and coordinate efforts with the goal of addressing the most urgent needs. | DOH will work with community leaders in identified HEZs to support community leaders' on-the-groundwork. | • DOH<br>• HEZ Community Leaders |
| **Page 1 Lines 16-21** | 1.2 | Health equity zone partners shall develop, expand, and maintain positive relationships with communities of color, Indian communities, communities experiencing poverty, and immigrant communities within the zone to develop effective and sustainable programs to address health inequity. | Population groups that need to be centered in the development of work within HEZs | • HEZ partners |
| **Page 2 Lines 3-4** | 2.1 | (1) Subject to the availability of amounts appropriated for this specific purpose, | $1.4 million was allocated for 2021-2022? | |
| **Page 2 Lines 4-6** | 2.1 | the department, in coordination with the governor's interagency council on health disparities, local health jurisdictions, and accountable communities of health, | Groups required to be involved in reviewing of population health data to support identification of HEZs<br><br>Primary work area of the CAC | • DOH<br>• CAC<br>• Governor's Interagency Council on Health Disparities<br>• LHJs<br>• ACHs |
| **Page 2 Lines 6-10** | 2.1 | must share and review population health data, which may be related to chronic and infectious diseases, maternal birth complications, preterm births and other newborn health complications, and any other relevant health data, including hospital community health needs assessments, | Data related to individual and community health will be used. These are some examples of data that the CAC can use, and other population health data not specifically listed in the bill can be used as well.<br><br>From 12/8/21 DOH presentation about CAC: CAC members will determine which metrics/data to use to use as selection criteria and a decision-making process.<br><br>DOH staff will provide technical support and information about the possible metrics, as well as data requested by CAC | • CAC<br>• DOH |

| Lines | Section | Bill Text | What This Means | Roles |
|---|---|---|---|---|
| **Page 2 Lines 10-13** | 2.1 | to identify, or allow communities to self-identify, potential health equity zones in the state and develop projects to meet the unique needs of each zone. | Two available methods for a HEZ to be identified.<br><br>1: CAC process - CAC will identify 2-3 geographic HEZs in Washington state (this number was chosen by the DOH in recognition of limited resources available for the implementation of HEZs).<br><br>2: Communities can self-identify HEZs. | • - CAC<br>• - DOH |
| **Page 2 Lines 13-15** | 2.1 | The department must provide technical support to communities in the use of data to facilitate self-identification of health equity zones. | DOH must provide technical support related to health data for communities | • DOH |
| **Page 2 Lines 16-17** | 2.2 | (2) Communities' uses of data must align with projects and outcomes to be measured in self-identified zones. | | • HEZ Partners |
| **Page 2 Lines 18-20** | 2.3 | (3) The department must use the first 12 months following July 25, 2021, to develop a plan and process to allow communities to implement health equity zone programs statewide. | The planning year for HEZ implementation started on July 25, 2021 and runs through July 25, 2022.<br><br>Implementation of HEZ is at the community level. | • CAC<br>• DOH |
| **Page 2 Lines 20-22** | 2.3 | The department has authority to determine the number of health equity zones and projects based on available resources. | With the realities of constrained funding and staff resources, it is likely that the number of HEZs will be limited.<br><br>From 12/8/21 DOH presentation about CAC: CAC will identify 2-3 geographic HEZs in Washington state | • CAC<br>• DOH |
| **Page 2 Lines 23-27** | 2.4 | 4) Communities that self-identify zones or the department must notify relevant community organizations in the zones of the health equity zone designation and allow those organizations to identify projects to address the zone's most urgent needs related to health disparities. | Collaboration of organizations working in HEZ areas (see list) is hoped for in HEZ implementation. | • HEZ Partners |
| **Page 2 Lines 27-39** | 2.4 a-i | Community organizations may include, but are not limited to:<br>(a) Community health clinics;<br>(b) Local health providers;<br>(c) Federally qualified health centers;<br>(d) Health systems;<br>(e) Local government;<br>(f) Public school districts;<br>(g) Recognized American Indian organizations and Indian health organizations;<br>(h) Local health jurisdictions; and<br>(i) Any other nonprofit organization working to address health disparities in the zone. | This is an example list. If a community organization is not considered one of these nine specific types, that does not prohibit them from being involved in HEZ collaboration. | • CAC<br>• HEZ Partners |
| **Page 3 Lines 1-5** | 2.5 | (5) Local organizations working within zones may form coalitions to identify the needs of the zone, design projects to address those needs, and develop an action plan to implement the projects. Local organizations may partner with state or national organizations outside the specific zone designation. | The HEZ model relies on on-the-ground community organizations and partners to coordinate work that is needed in their specific communities. | • HEZ Partners |
| **Page 3 Lines 5-13** | 2.5 a-d | Projects may include, but are not limited to:<br>(a) Addressing health care provider access and health service delivery;<br>(b) Improving information sharing and community trust in providers and services;<br>(c) Conducting outreach and education efforts; and<br>(d) Recommending systems and policy changes that will improve population health. | This is an example list. The hope of the HEZ program is that communities will use their knowledge of what people in the community need to support their health, and create projects based on this. | • HEZ Partners |

| Lines | Section | Bill Text | What This Means | Roles |
|---|---|---|---|---|
| **Page 3 Lines 14-20** | 2.6 | (6) The department must provide:<br>(a) Support to the coalitions in identifying and applying for resources to support projects within the zones;<br>(b) Technical assistance related to project management and developing health outcome and other measures to evaluate project success; and<br>(c) Subject to availability, funding to implement projects. | | • DOH<br>• HEZ Partners |
| **Page 3 Lines 21-26** | 2.7 | (7) Subject to the availability of amounts appropriated for this specific purpose, by December 1, 2023, and every two years thereafter, the department must submit a report to the legislature detailing the projects implemented in each zone and the outcome measures, including year-over-year health data, to demonstrate project success. | Metrics chosen by the CAC should be reported often enough to track year-over-year health data.<br><br>HEZ communities share information with DOH which compiles and reports. | • DOH Staff<br>• HEZ Partners |
| **Page 3 Lines 27-35** | 2.8 | (8) For the purposes of this section "health equity zone" or "zone" means a contiguous geographic area that demonstrates measurable and documented health disparities and poor health outcomes, which may include but are not limited to high rates of maternal complications, newborn health complications, and chronic and infectious disease, is populated by communities of color, Indian communities, communities experiencing poverty, or immigrant communities, and is small enough for targeted interventions to have a significant impact on health outcomes and health disparities. | While the bill names a few specific health indicators that may be considered when defining a HEZ, it leaves space for other metrics to be considered, which is the work of the CAC in conjunction with the DOH.<br>A HEZ needs to include people with at least one of these identities. However, the bill does not specify how much of an identified geographic zone needs to have these experiences.<br><br>There is not a definition of how to determine what is small enough for targeted interventions. The CAC can determine this in their work. | |
| **Page 3 Lines 36-37** | 2.8 | Documented health disparities must be documented or identified by the department or the centers for disease control and prevention. | Health disparities need to be DOH or CDC identified. This does not limit metrics to only those produced by the DOH or CDC, but data must be analyzed at one of those levels. | • DOH |

# Appendix B: Community Health Assessments & Plans

Community Health Assessments (CHAs) and Community Health Needs Assessments (CHNAs) have related but distinct histories. CHAs were introduced in 2011, when the Public Health Accreditation Board (PHAB) officially launched their accreditation program and participating health departments were required by the Centers for Disease Control (CDC) to submit both a CHA and a CHIP as part of application prerequisites (PHAB, n.d.-a). High-ranking public health professionals in the U.S. had been working for nearly a decade to standardize and improve public health infrastructure, and the accreditation system was a major part of their design. (PHAB, n.d.-b) Separately, CHNAs were introduced with the passage of the Affordable Care Act (ACA) in 2010 as an alternative to prior methods of hospital qualification for nonprofit status the Internal Revenue Service (IRS). Prior to the ACA, a major qualification was that hospitals grant charity care to uninsured patients. Since the ACA was predicted to eliminate or severely diminish the number of uninsured people in the U.S., hospitals needed a new pathway to qualification.

The IRS mandates that each CHNA take the step of defining its community inclusively, with subsequent steps of seeking out and incorporating representative input from that community (IRS, n.d.). As the regulations state, "a hospital facility may not define its community in a way that excludes medically underserved, low-income, or minority populations who live in the geographic areas from which it draws its patients" (IRS, n.d.). They go on further to discuss guidelines for identifying community health needs:

[A] hospital facility may use any criteria to prioritize the significant health needs it identifies, including, but not limited to the:

- Burden, scope, severity, or urgency of the health need,
- Estimated feasibility and effectiveness of possible interventions,
- Health disparities associated with the need, or
- Importance the community places on addressing the need. (IRS, n.d.)

CHA/CHIP pairs have even more stringent regulations, as the PHAB is much more tightly focused than the IRS. "[T]he PHAB Standards and Measures require the involvement of representatives of 'two or more populations that are at higher risk or have poorer health outcomes.' This requirement refers to residents who are community members, not service providers" (Wilcox, 2019). These high-standard requirements lend themselves to more equitable product output.

Evidence suggests that these processes are having positive effects on communities. Research conducted by Kronstadt, et al. (2018) found that accredited health departments and communities are tracking outcomes that focus on a range of health indicators; access to health care, substance abuse, mental health services are included, as well as individual behaviors and the physical environment. Their research discusses the importance of partnership and increasing knowledge of community needs, which will contribute to eventual improvements in community health status (Kronstadt, et al., 2018). Abarca et al. (2009) found that community partners increasingly take lead roles when completing CHIPs while health departments take on much of the CHA work. Research has also found that the larger the partnership network, the greater the possibility for their effectiveness to decrease (Abarca et. al., 2009).

# Appendix C: CHA & CHNA Analysis

The Washington State Department of Health (DOH) requested that consultants introduce Community Health Needs Assessments (CHNAs) and Community Health Assessment/Community Health Improvement Plan (CHA/CHIP) pairs as data sources and that they analyze and present data collected from these reports, which would be useful in the Health Equity Zone (HEZ) designation process. We consultants, in collaboration with a DOH representative, determined that the most relevant and valuable information from the CHAs and CHNAs was:

- **Community Partners** – What entities, factions and/or individuals were called upon to give input about the community's health status and health challenges?
- **Chosen Areas of Focus** – What ultimate goals were chosen to be addressed within each community for the most recent assessment cycle?
- **Metrics** – What metrics were consulted/investigated in order to initially get an idea of the community's wellbeing, especially compared to larger-area averages? What metrics were chosen to be tracked, as indicators of progress toward chosen goals?
- **Secondary Research Sources** – What survey datasets or other data registries were utilized in each CHA or CHNA?
- **Processes** – By what processes did each CHA or CHNA production team execute the required steps of developing their report?

***Note***: *We (consultants and the DOH representative) collaboratively decided that chosen areas of focus and the measures used to measure status in those areas would be treated as the same information and collected, organized, and analyzed together.* ***For the purposes of this report, this data would collectively be called "metrics"****. This was done for two reasons: (1) The two concepts were often conflated in CHA and CHNA reports. (2) We collaboratively decided that a metrics-centered approach would be most useful for the Community Advisory Committee.*

We identified data pertaining to (1) community partners and (2) "metrics" as being the most important. We collected this data from CHAs and CHNAs and organized it into relevant categories, as part of the process of data analysis. We based the initial category designations for both types of data on a DOH-recommended article (Kronstadt, 2018) which suggested 36 sub-categories unevenly distributed among 6 major/overarching categories for the "metrics" (called "objectives" in the article) and 11 categories for community partners.

During the process of data collection and organization, we continuously monitored, added, eliminated, and altered categories so as to maintain groups of categories that were meaningful in both topic area and granularity. We deprecated unutilized categories and broke heavily utilized categories out into multiple, more specific categories, where it was appropriate. We particularly altered the community partner categorization, which went from 11 flat categories to a system of 24 sub-categories unevenly distributed among 6 major categories.

We sourced all community partner data from the "acknowledgements" section of each report. It should be noted that this methodology for gleaning community partner data from CHAs and CHNAs excludes community listening sessions, town halls, and other meetings that were not included in the reports' lists of credited partners. CHAs and CHNAs whose creation involved public participation often didn't include mention of the citizen engagement in their acknowledgements sections; this may have resulted in a less than comprehensive summary of all community engagement. In the few cases where individuals or citizens were listed in the acknowledgements section, we counted the noted party as a single community partner under the "Citizens (Individuals)" category.

We produced graphical representations of the analyzed data from the datasets and included them in this report, where it was beneficial.

We determined that collecting, organizing and analyzing the three other types of data that had initially been identified as valuable (metrics not directly related to areas of focus, secondary research sources, and summaries of community engagement processes) was outside the scope of the Evans School Consulting project. Future work may consider exploring these data for information to support the HEZ process.

We made all data relating to "metrics" and community partners available in Supplemental Tables 5-8. ***Please contact DOH for access to the complete datasets***

# Appendix D: Health Metrics Audit - Rhode Island

Included below is an example of a comprehensive analysis we performed of the metrics used in Rhode Island's Health Equity Zone initiative. All 15 measures are presented with the domain, indicator, and measure/metric as reported by Rhode Island (RI DOH, 2020). We then analyzed for their individual strengths and potential weaknesses. This example is included to both present the tradeoffs of these 15 metrics and present a model for discussing metric selection for Washington.

| Domain | Indicator | Measure/Metric | Strengths | Weaknesses |
|---|---|---|---|---|
| **Integrated Healthcare** | Healthcare Access | Percentage of adults who reported not seeking medical care or dental care due to cost | • Regularly updated indicator<br>• Comprehensive indicator that speaks to healthcare access | • Aggregate of two indicators, hard to parse<br>• Does not include mental healthcare as part of access |
| | Social Services | Ratio: Number of individuals receiving to number of individuals eligible for SNAP benefits, based income | • Regularly updated indicator<br>• Comprehensive indicator that speaks to access to social services<br>• Highly reliable data source<br>• Easy to understand<br>• Proxy indicator for both food security and disposable income for additional health needs | • Not comprehensive of all food insecure or financially struggling families<br>• Does not provide info about diet or SNAP eligible products in each area<br>• Does not correspond to familial dietary needs or suggest that they are met/ unmet<br>• Hard to use to speak to the health of individuals on SNAP |
| | Behavioral Health | Ratio: Number of naloxone kits distributed to number of overdose deaths | • Locally produced metric, quality of data source can be closely tracked<br>• Can be provided with granularity<br>• Responsive to local opioid epidemic<br>• Can be used to track the severity of the epidemic based on community preparedness | • Hard to interoperate - high ratio may mean there is a glut of Naloxone kits distributed to unchanging underlying epidemic trends or a reduction in overdose deaths<br>• May be useful if raw numbers to produce ratio included; but the extra numbers defeats the purpose of a combined metric |
| **Integrated Healthcare** | Civic Engagement | Percentage of registered voters participating in the most recent presidential election | • Easily captured indicator<br>• Comprehensive indicator that is easy to understand<br>• Can be provided with geographic granularity<br>• Proxy indicator for public sentiment/trust of public works & servants | • Potential for confounding factors (e.g., age) to influence the measure more than the indicator itself<br>• Infrequently gathered data<br>• May not measure the indicator (civic engagement) DOH necessarily wants. Instead, it may be a better reflection of systemic barriers to voter registration and broader generational zeitgeists |
| | Social Vulnerbility | Index score that reacts the social vulnerability of communities | • Comprehensive index that captures many facets of indicator<br>• Highly reliable data source estimated at granular geographic level<br>• Can be used to direct policy during times of crisis and emergency | • Not regularly calculated from census data (every few years)<br>• Composite indicator of many different elements, makes it hard to tell specific needs in a more vulnerable community with simply a high SVI score |

| Domain | Indicator | Measure/Metric | Strengths | Weaknesses |
|---|---|---|---|---|
| **Integrated Healthcare** | Equity in Policy | Ratio: Number of low to moderate-income housing units to number of low to moderate-income households | • Locally produced metric, quality of data source can be closely tracked<br>• Can be provided with geographic granularity<br>• Can indicate where specific policy solutions (more low income housing) may be needed | • Divorced ratio from need for housing in each community; a high ratio may be appropriate depending on the community needs and may not necessarily need to be lowered<br>• Availability of housing does not mean the housing is used; gatekeeping around low-income housing means number of housing units may not actually provide equitable housing (intent vs impact dissonance in this policy) |
| **Physical Environment** | Natural Environment | Percentage of overall landmass with tree canopy cover | • Comprehensive index that is captured annually<br>• Easy to understand<br>• Can be provided with geographic granularity | • The tool is not very easy to access or use<br>• Not ideal indicator for access to green spaces because it does not differentiate between public and private land. There is no accounting for access to these green spaces in this metric |
| | Transportation | Index score that reacts the affordability of transportation for renters | • Comprehensive index that captures many facets of indicator<br>• Highly reliable data source done at granular geographic level | • Unclear what indicator(s) from the HUD Low-cost Transportation index were used<br>• Not regularly calculated from census data (every few years)<br>• Composite indicator of many different elements<br>• Does not capture the access/ safety hurdles to using public transportation |
| | Environmental Hazards | Number and percentage of children with blood lead levels higher than 5 micrograms per deciliter | • Locally produced metric, quality of data source can be closely tracked<br>• Can be provided with geographic granularity<br>• Can indicate where specific, urgent intervention is needed<br>• Clearly understood metric | • Unclear about the comprehensibility of this program |
| **Socioeconomic** | Housing Cost Burden | Percentage of cost-burdened renters and owners | • Comprehensive indicator<br>• Regularly captured from a reliable data source<br>• Better indicator than “Equity in policy” that speaks to threat in housing costs | • Unclear what “cost-burdened” means in this indicator. Providing a definition along with the metric would be beneficial. |
| | Food Insecurity | Percentage of population who are food insecure | • Comprehensive indicator<br>• Easy to understand metric<br>• Proxy indicator for both psychological security and disposable income for additional health needs | • Does not speak to dietary needs met or unmet<br>• Measure just tracks SNAP eligibility vs SNAP ineligibility to reproduce similar metric as above (Social Services) |

| Domain | Indicator | Measure/Metric | Strengths | Weaknesses |
|---|---|---|---|---|
| **Socioeconomic** | Education | Percentage of high school students graduating with a regular diploma within four years | • Locally produced metric, quality of data source can be closely tracked<br>• Reliably produced metric that is also captured in ACS surveys<br>• Can be provided with geographic granularity<br>• Time restriction & distinction between GED/ regular diploma means the measure speaks more the robustness of public education system than education level of community | • Does not consider possibility for alternative paths/ tracks for education (e.g., home schooling or 5 year graduation) as equally valid ways to learn<br>• Over biases the education of children as achievement of diploma over other measures (such as literacy or college matriculation) to speak to quality of education |
| **Community Truma** | Discrimination | Percentage of adults reporting racial discrimination in healthcare settings in the past 12 months | • Comprehensive, regularly captured data source<br>• Easy to understand metric | • Useful indicator but lacks information about source of discrimination to orient redressing policy (e.g., in hospitals, private practice, mental healthcare?) |
| | Criminal Justice | Number of non-violent offenders under Rhode Island probation and parole (per 1,000 residents aged 18 and older) | • Locally produced metric, quality of data can be closely tracked<br>• Comprehensive, regularly captured data<br>• Tracks an implicit equity consideration about incarceration practices<br>• Can be used to speak to changes both in public safety and reducing recidivism rates | • Implicitly assumes violent crime arrests are less concerning to community trauma<br>• Potential to be mis-understood as a metric that should be reduced by offering fewer probational opportunities. However, it is better for community and individual health to reduce the number of people who are incarcerated. |
| | Public Safety | Violent crime rate and non-violent crime rate (per 100,000 people | • Locally produced metric, quality of data can be closely tracked<br>• Can be provided with geographic granularity | • Assumes police crime reports are accurately capturing all crime (both violent and nonviolent) across all communities<br>• Potential to be mis-understood as a call for greater police presence in areas with higher “crime rates” which may be already over-policed areas |

# Sources

Abarca C, Grigg CM, Steele JA, Osgood L, Keating H. Building and measuring infrastructure and capacity for community health assessment and health improvement planning in Florida. J Public Health Manag Pract. 2009; 15(1):54-8.

American Immigration Council. (2020, June 8). Immigrants in Washington. Retrieved April 4, 2022, from https://www.americanimmigrationcouncil.org/research/immigrants-in-washington

America's Health Rankings. (n.d.). 2021 Annual Report. https://www.americashealthrankings.org/learn/reports/2021-annual-report

Amobi, A., Plescia, M., & Alexander-Scott, N. (2019. December). The Business Case for Investing in Place-Based Public Health Initiatives. Public Health Management and Practice. 25(6); 612-615. Doi:10.1097/PHH.0000000000001059

Asinof, R. (2016. April 25). Health Equity Zones March Ahead. ConvergenceRI. Retrieved March 3, 2022, from http://newsletter.convergenceri.com/stories/Health-Equity-Zones-march-ahead,2323.

Best Starts for Kids [BSK]. (2021). 2020 Annual Report Best Starts for Kids. https://kingcounty.gov/~/media/depts/community-human-services/best-starts-kids/documents/Best_Starts_for_Kids_2020_Annual_Report.ashx?la=en

Beskow, L. M. (2016). Lessons from HeLa Cells: The Ethics and Policy of Biospecimens. Annual Review of Genomics and Human Genetics, 17(1), 395–417. https://doi.org/10.1146/annurev-genom-083115-022536

Black, KC, et. al. (2013). Beyond Incentives for Involvement to Compensation for Consultants: Increasing Equity in CBPR Approaches. Progress in Community Health Partnerships. 7(3). 263-270. https://doi.org/10.1353/cpr.2013.0040

Braverman, P., Egerter, S., Williams, D. (2010. April) The Social Determinants of Health: Coming of Age. Annual Review of Public Health. 32. 381-398. Doi: 10.1146/annurev-publhealth-031210-101218

Burkhauser, B., Cawley, J. (2008). Beyond BMI: the value of more accurate measures of fatness and obesity in social science research. Journal of Health Economics. 27(2). 519-529. https://doi.org/0.1016/j.jhealeco.2007.05.005

Centers for Disease Control and Prevention [CDC]. (2018, July 24). CDC - Assessment and plans - community health assessment - STLT gateway. Centers for Disease Control and Prevention. Retrieved February 11, 2022, from https://www.cdc.gov/publichealthgateway/cha/plan.html

Centers for Disease Control and Prevention [CDC]. (2021, November 24). Racism and Health. Centers for Disease Control and Prevention. https://www.cdc.gov/healthequity/racism-disparities/index.html

Centers for Disease Control and Prevention [CDC]. (n.d.-a). Health Disparities. Centers for Disease Control and Prevention. Retrieved March 17, 2022 from https://www.cdc.gov/healthyyouth/disparities/index.htm.

Centers for Disease Control and Prevention [CDC]. (n.d.-b). National Center for Health Statistics – About NVSS. CDC. Retrieved April 4, 2022, from https://www.cdc.gov/nchs/nvss/about_nvss.htm

Centers for Disease Control and Prevention [CDC]. (n.d.-c). NVSS - National Vital Statistics System Homepage. CDC. Retrieved April 4, 2022, from https://www.cdc.gov/nchs/nvss/index.htm

Center for Disease Control and Prevention [CDC]. (n.d.-d) "Cigarette Smoking and Tobacco Use Among People of Low Socioeconomic Status." Retrieved from: https://www.cdc.gov/tobacco/disparities/low-ses/index.htm

ChangeLab Solutions & Rhode Island Department of Health. (2021). Health Equity Zones: A Toolkit for Building Healthy and Resilient Communities. ChangeLab Solutions. https://health.ri.gov/publications/toolkits/health-equity-zones.pdf

City of Chicago. (2020-a). Healthy Chicago 2025: Closing Our Life Expectancy Gap 2020-2025. Chicago Department of Public Health.

City of Chicago. (2020-b. April 20). Mayor Lightfoot and the Racial Equity Rapid Response Team Announce Latest Efforts to Address Racial and Health Disparities Among Minority Communities. City of Chicago Office of the Mayor.

City of Chicago. (n.d.-a). Protect Chicago: Chicago's Ongoing Equity Strategy. City of Chicago. Retrieved April 26, 2022, from https://www.chicago.gov/city/en/sites/covid-19/home/protect-chicago.html.

City of Chicago. (n.d.-b). Health Chicago Equity Zones. City of Chicago. Retrieved April 26, 2022, from https://www.chicago.gov/city/en/sites/covid-19/home/healthy-chicago-equity-zones.html.

Colorado Department of Public Health & Environment [CDPHE]. (n.d.) Health Disparities and Community Grant Program. CDPHE. Retrieved April 8, 2020 form https://cdphe.colorado.gov/hdcgp.

Communities of Opportunity [COO]. (n.d.-a). Communities of Opportunity: About Us. COO. Retrieved March 3, 2022, from https://www.coopartnerships.org/about-coo.

County Health Rankings & Roadmaps [CHR&R]. (n.d.-a). Health Factors. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors

County Health Rankings & Roadmaps [CHR&R]. (n.d.-b). Washington State County Health Rankings. CHR&R. https://www.countyhealthrankings.org/app/washington/2021/overview

County Health Rankings & Roadmaps [CHR&R]. (n.d.-c). Maryland County Health Rankings. CHR&R. https://www.countyhealthrankings.org/app/maryland/2021/overview

County Health Rankings & Roadmaps [CHR&R]. (n.d.-d). Rhode Island County Health Rankings. CHR&R. https://www.countyhealthrankings.org/app/rhode-island/2021/overview

County Health Rankings & Roadmaps [CHR&R]. (n.d.-e). Pennsylvania County Health Rankings. CHR&R. https://www.countyhealthrankings.org/app/pennsylvania/2021/overview

Crew, M. (2020. April). The Effectiveness of Place-Based Programmes and Campaigns in Improving Outcomes for Children. National Literacy Trust.

Dismantle Poverty in Washington. (2021, January). Blueprint for a Just & Equitable Future: The 10-Year Plan to Dismantle Poverty in Washington. https://dismantlepovertyinwa.com/wp-content/uploads/2020/12/Final10yearPlan.pdf

Dougherty, G., Golden, S., Gross, A., Colantuoni, E., Dean, L. T. (2020). Measuring Structural Racism and Its Association With BMI. American Journal of Preventative Medicine. 59(4). 530-537. https://doi.org/10.1016/j.amepre.2020.05.019

Engrossed 2nd Substitute Senate Bill 5052 [SB 5052], 2021-22 Biennium, 2021 Reg. Sess. (WA. 2021). https://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Senate%20Passed%20Legislature/5052-S2.PL.pdf?q=20220128085844

Esposito, E., Larimore, S., Lee, H. (April 20, 2021). "Aggressive Policing, Health, And Health Equity." Retrieved from: https://www.healthaffairs.org/do/10.1377/hpb20210412.997570/

Federal Bureau of Investigation [FBI]. (May 2017). Uniform Crime Reporting Statistics: Their Proper Use. Retrieved April 4, 2022, from https://ucr.fbi.gov/ucr-statistics-their-proper-use

Feeding America (n.d.). Map the Meal Gap. Retrieved April 4, 2022, from https://map.feedingamerica.org/

Fernandez-Bou, A S., Ortiz-Partida, J. P., Dobbin, K. B., et. al. (2021) Underrepresented, understudied, underserved: Gaps and opportunities for advancing justice in disadvantaged communities. Environmental Science & Policy. 122, 92-100. https://doi.org/10.1016/j.envsci.2021.04.014

Fos, E. B., Thompson, M. E., Elnitsky, C. A., & Platonova, E. A. (2019). Did Performing Community Health Needs Assessments Increase Community Health Program Spending by North Carolina's Tax-Exempt Hospitals?. Population health management. 22(4), 339–346. https://doi.org/10.1089/pop.2018.0140

Gaskin, D.J., Vazin, R., McCleary, R., & Thrope, R.J. (2018. October). The Maryland Health Enterprise Zone Initiative Reduced Hospital Cost and Utilization in Underserved Communities. Health Affairs. 10(2018): 1546-1554. Doi: 10.1377/hlthaff.2018.0642.

Federally Recognized Indian Tribes in Washington State and the State of Washington. (1989, August 4). Centennial Accord | Governor's Office of Indian Affairs. GOIA. https://goia.wa.gov/relations/centennial-accord

Health Equity Resource Community Advisory Committee [HERC]. (2021. August 21). Maryland's Health Enterprise Zone Initiative [Presentation]. John's Hopkins Bloomberg School of Public Health.

HealthierHere. (2021, May 3). HealthierHere - Accountable Community of Health for King County, WA. https://www.healthierhere.org/medicaid-transformation/

HealthierHere. (n.d.-a) Consumer Voice Listening Project & Community Grants Program. Retrieved April 26, 2022, from https://www.healthierhere.org/listen/#cgp-tableau.

HealthierHere & Public Health Seattle & King County [PHSKC]. (2021, February 22). HealthierHere Equity Measures [Slides]. HealthierHere. https://www.healthierhere.org/wp-content/uploads/2021/02/HH-Equity-Measures_work-overview.pdf

Healthy Columbia Willamette Collaborative [HCWC]. (2019). 2019 Community Health Needs Assessment. [Community Health Needs Assessment]. Retrieved from https://clark.wa.gov/media/document/55670

Healthy Youth Survey [HYS]. (n.d.). HYS Fact Sheets. Retrieved February 20, 2022, from https://www.askhys.net/FactSheets

Humphreys, S. (2010). The unethical use of BMI in contemporary general practice. British Journal of General Practice. 60(578). 696-697. https://doi.org/10.3399/bjgp10X515548

Hunter, L. (April 26, 2012) "U.S. Teen Birth Rate Correlates with State Income Inequality." PRB. Retrieved from: https://www.prb.org/resources/u-s-teen-birth-rate-correlates-with-state-income-inequality/

Internal Revenue Service [IRS]. (n.d.). Community Health Needs Assessment for Charitable Hospital Organizations - section 501(r)(3). Retrieved February 8, 2022, from https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3

Kearney, M., Levine, P. (2014). Income Inequality and Early Nonmarital Childbearing. Journal of Human Resources. 49(1). 1-31. Retrieved from: https://www.jstor.org/stable/23799075

Kremler, D. D. (2004). Poor Smokers, Poor Quitter, and Cigarette Tax Regressivity. Am J Public Health. 94(2). 225-229. Retrieved From: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448232/

Kronstadt, J., Chime, C., Bhattacharya, B., Perrenati, N. (2018). Accredited Health Department Partnerships to Improve Health: An Analysis of Community Health Assessments and Improvement Plans. The Journal of Public Health Management and Practice. 24(3). S35-S43.

Louisiana Department of Health: Office of Public Health [Louisiana OPH]. (2017, March). State Health Improvement Plan, Creating a Blueprint For Our Future: Revised edition. https://ldh.la.gov/assets/oph/SHA_SHIP/LASHIP_3August17.pdf

Louisiana Center for Health Equity. (2020. December 11). 2020 Health Summit: Advancing Health Equity for Children and Families [Summary Report]. https://lahealthequity.org/wp-content/uploads/2020/12/2020-Health-Summit-Report-Final-12-11-2020.pdf

Louisiana Center for Health Equity. (2022. March 10). 2022 Health Summit Outlined Policy Solutions to Build More Resilient Communities. Louisiana Center for Health Equity. https://mailchi.mp/5332d543a8f5/lahealthequity-4951690?e=c69d2e56cd&fbclid=IwAR2d31OYrBBwGmUJZdA9gX-uc1vpcrWKDew4Flxi0yapNAk-pNO4-GqTGcA

McCullogh, J., Eisen-Cohen, E., Salas, SB. (2016). Partnership capacity for community health improvement plan implementation: findings from a social network analysis. BCM Public Health. 566. https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3194-7

Maryland Department of Health and Mental Hygiene. (n.d.-a). Health Enterprise Zones. MD DHMH. Retrieved March 3, 2022, from https://health.maryland.gov/healthenterprisezones/Pages/home.aspx.

Maryland Department of Health and Mental Hygiene. (2017. March 28). Maryland Health Enterprise Zones (HEZ) Program 2016 Annual Report. MD DHMH.

National Association of County & City Health Officials [NACCHO]. (2018). Advancing Public Narrative for Health Equity & Social Justice. http://publichealth.lacounty.gov/CenterForHealthEquity/PDF/advancing%20public%20narrative%20for%20health%20equity%20and%20social%20justice_NACCHO.pdf

National Research Council [NRC]. (2003). Overview. In J.V. Pepper & C.V. Petrie. (Eds.), Measurement Problems in Criminal Justice Research : Workshop Summary. (pp. 1-9). National Academies Press.

Native Land Digital. (2021, October 8). Native Land Digital Map. Native-Land.Ca. https://native-land.ca/

Norman, D., & Roloff, J. (2004, March). A Self-Guided Tour of the Geology of the Columbia River Gorge—Portland Airport to Skamania Lodge, Stevenson, Washington. Washington Division of Geology and Earth Resources. https://digitalarchives.wa.gov/do/3f9f3cf42d5d9798ec01a643a13f9f2c.pdf

Northwest Health Law Advocates. (2020, December 22). New data confirms that immigrants face stark inequities in Washington State. Retrieved April 8, 2022, from https://nohla.org/index.php/2020/12/21/new-data-confirms-that-immigrants-face-stark-inequities-in-washington-state/

Patriarca, M. & Ausura, C. (2016. November). Introducing Rhode Island's Health Equity Zones. Rhode Island Department of Health. RIMJ Archives.

Pennsylvania Department of Human Services. (2021-a, June). Regional Accountable Health Councils: Health Equity Zone Update. https://www.dhs.pa.gov/HealthInnovation/Documents/RAHC%20HEZ%20Update%20Newsletter%206.7.pdf

Pennsylvania Department of Human Services. (2021-b, September). Regional Accountable Health Councils (RAHCs) Program Description. https://www.dhs.pa.gov/HealthInnovation/Documents/RAHC%20Program%20Description%20Final%20.pdf

Pennsylvania Department of Human Services. (n.d.-a). Health Equity. Department of Human Services. https://www.dhs.pa.gov/HealthInnovation/Pages/HealthEquity.aspx

Pennsylvania Department of Human Services. (n.d.-b). Pennsylvania Health Equity Analysis Tool User Guide. https://www.dhs.pa.gov/HealthInnovation/Documents/PA%20Health%20Equity%20Analysis%20Tool%20User%20Guide%20%20v2.0.pdf

Pennsylvania Department of Human Services. (n.d.-c). Regional Accountable Health Councils Regional Health Transformation Plan Template. https://www.dhs.pa.gov/HealthInnovation/Documents/RAHC%20Regional%20Health%20Transformation%20Plan%20Template.pdf

Pollack, H. & Kelly, C. (2020. October, 27). COVID-19 and Health Disparities: Insights from Key Informant Interviews. Health Affairs. Doi: 10.1377/forefront.20201023.55778.

Public Health Seattle-King County [PHSKC]. (2022. February). HealthierHere Performance Measurement Dashboard. Tableau. https://tableaupub.kingcounty.gov/t/Public/views/HealthierHerePerformanceMeasurementDashboard/FrontPage?%3Aembed=y&%3AisGuestRedirectFromVizportal=y.

Public-Health-Accreditation-Board [PHAB]. (n.d.-a). What is Public Health Department Accreditation? Public Health Accreditation Board. Retrieved February 4, 2022, from https://phaboard.org/what-is-public-health-department-accreditation/

Public-Health-Accreditation-Board. (n.d.-b). Accreditation Background. Public Health Accreditation Board. Retrieved April 8, 2022, from https://phaboard.org/accreditation-background/

Puma, J. E., Belansky, E. S., Garcia, R., Scarbro, S., Williford, D., & Marshall, J. A. (2016). A Community-Engaged Approach to Collecting Rural Health Surveillance Data. The Journal of Rural Health, 33(3), 257–265. https://doi.org/10.1111/jrh.12185

Remler, D. D. (2004). Poor Smokers, Poor Quitter, and Cigarette Tax Regressivity. Am J Public Health. 94(2). 225-229. Retrieved From: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448232/

Rhode Island Department of Health [RI DOH]. (2020). Health Equity Measures Factsheet. https://health.ri.gov/publications/factsheets/HealthEquityIndicators.pdf

Rhode Island Department of Health [RI DOH]. (n.d.-a). Rhode Island's Health Equity Zone (HEZ) Initiative. RI DOH. Retrieved March 3, 2022, from https://health.ri.gov/programs/detail.php?pgm_id=1108.

Rhode Island Department of Health [RI DOH]. (n.d.-b). The Rhode Island Health Equity Measures. RI DOH. Retrieved April 6, 2022, from https://health.ri.gov/publications/factsheets/HealthEquityIndicators.pdf.

SB 181, 2021 Biennium, 2021 Reg. Sess. (CO. 2021). https://leg.colorado.gov/sites/default/files/2021a_181_signed.pdf

SB 284, 2012 Biennium, 2012 Reg. Sess. (MD. 2012). https://health.maryland.gov/mhhd/Documents/Maryland%20Health%20Improvement%20and%20Disparities%20Reduction%20Act%20o.pdf

Schwab, A. (August 19, 2015). "The Failure of BMI as a medical Metric". WBOI Public Radio. Retrieved from: https://www.wboi.org/health-science/2015-08-19/the-failure-of-bmi-as-a-medical-metric

Sotero M. A (2006). Conceptual Model of Historical Trauma: Implications for Public Health Practice and Research. Journal of Health Disparities Research and Practice. Vol. 1, No. 1; 93-108. 2006. https://papers.ssrn.com/sol3/paperscfm?abstract_id=1350062

Tacoma-Pierce County Health Department [TPCHD]. (2016. February). Fairness Across Places? Your Health in Pierce County: 2015 Health Equity Assessment. https://www.tpchd.org/home/showpublisheddocument/196/636419715046230000.

Tacoma-Pierce County Health Department [TPCHD]. (n.d.-a). Community Health Assessment. TPCHD. Retrieved March 30, 2022, from https://www.tpchd.org/healthy-places/public-health-data/community-health-assessment.

Tacoma-Pierce County Health Department [TPCHD]. (n.d.-b). Communities of Focus. TPCHD. Retrieved March 30, 2022, from https://www.tpchd.org/healthy-people/health-equity/communities-of-focus.

Tacoma-Pierce County Health Department [TPCHD]. (n.d.-c). Communities of Focus. https://www.tpchd.org/home/showpublisheddocument/4724/637459718045570000.

United Health Foundation. (2021). America's Health Rankings 2021 Annual Report: Washington [Report]. United Health Foundation.

U.S. Census Bureau. (2021, October 8). Washington. Census.Gov. https://www.census.gov/geographies/reference-files/2010/geo/state-local-geo-guides-2010/washington.html

U.S. Census Bureau. (2021-a). U.S. Census Bureau QuickFacts: Washington. Census Bureau QuickFacts. https://www.census.gov/quickfacts/WA

U.S. Census Bureau. (2021-b). U.S. Census Bureau QuickFacts: Maryland. Census Bureau QuickFacts. https://www.census.gov/quickfacts/MD

U.S. Census Bureau. (2021-c). U.S. Census Bureau QuickFacts: Rhode Island. Census Bureau QuickFacts. https://www.census.gov/quickfacts/RI

U.S. Census Bureau. (2021-d). U.S. Census Bureau QuickFacts: Pennsylvania. Census Bureau QuickFacts. https://www.census.gov/quickfacts/PA

U.S. Census Bureau. (2021-e). U.S. Census Bureau QuickFacts: King County, WA. Census Bureau QuickFacts. https://www.census.gov/quickfacts/kingcountywashington

U.S. Census Bureau. (2021-f). U.S. Census Bureau QuickFacts: Pierce County, WA. Census Bureau QuickFacts. https://www.census.gov/quickfacts/piercecountywashington

U.S. Census Bureau. (n.d.). About the American Community Survey. Retrieved February 20, 2022, from https://www.census.gov/programs-surveys/acs/about.html

UW American Indian Studies. (n.d.). Nations and Tribes of Washington State | American Indian Studies | University of Washington. Nations and Tribes of Washington State. Retrieved February 25, 2022, from https://ais.washington.edu/nations-and-tribes-washington-state

Washington State Association of Local Public Health Officials (WSALPHO). (n.d.). Local Health Jurisdiction Directory. WSALPHO. Retrieved April 7, 2022, from https://www.wsalpho.org/lhj-directory/

Washington Indian Gaming Association. (2021, July 23). Washington Tribes. Washington Tribes. https://www.washingtontribes.org

Washington State Department of Health [WA DOH]. (2010). Emergency Preparedness Regions | Washington State Department of Health. WA DOH. https://doh.wa.gov/about-us/programs-and-services/emergency-preparedness-and-response/emergency-preparedness-regions

Washington State Department of Health [WA DOH]. (2017). Rural and Urban Counties [Map]. https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs//609003.pdf

Washington State Department of Health [WA DOH]. (2018). Washington State Health Assessment [Publication 78945]. WA DOH.

Washington State Department of Health [WA DOH]. (2019. March 28.) Reaffirming the Department of Health's Commitment to Diversity, Inclusion and Cultural Humility [Secretary's Directive 19-01]. WA DOH.

Washington State Department of Health [WA DOH]. (2021-a). Maps | Washington State Department of Health. WA DOH. https://doh.wa.gov/public-health-healthcare-providers/public-health-system-resources-and-services/public-health-washington/local-public-health/maps#item101493

Washington State Department of Health [WA DOH]. (2021-b). Health Equity Zones Community Advisory Council Application Overview. https://doh.wa.gov/sites/default/files/2022-02/HEZApplOverviewAndSelectionCriteria.pdf

Washington State Department of Health [WA DOH]. (2022-a). Health Equity Zones Initiative | Washington State Department of Health. WA DOH. https://doh.wa.gov/community-and-environment/health-equity/health-equity-zones

Washington State Department of Health [WA DOH]. (2022-b). R Markdown. Washington State Drug Overdose: Monthly Updates.

Washington State Department of Health [WA DOH]. (n.d.-a). Social Determinants of Health Data | DOH. WA DOH. Retrieved April 8, 2022, from https://doh.wa.gov/data-statistical-reports/washington-tracking-network-wtn/social-determinants-health#:~:text=According%20to%20Healthy%20People%202020,status%20and%20health%20insurance%20access.

Washington State Department of Health [WA DOH]. (n.d.-b). Health Equity | DOH. WA DOH. Retrieved February 6, 2022, from https://doh.wa.gov/community-and-environment/health-equity

Washington State Department of Health [WA DOH]. (n.d.-c). Vision, Mission and Values | DOH. WA DOH. Retrieved February 5, 2022, from https://doh.wa.gov/about-us/vision-mission-and-values

Washington State Department of Health [WA DOH]. (n.d.-d). Tribal Public Health | Washington State Department of Health. WA DOH. https://doh.wa.gov/about-us/washingtons-public-health-system/tribal-public-health

Washington State Department of Health [WA DOH]. (n.d.-e). Community Health Assessment and Improvement. Washington State Department of Health. Retrieved: February 4, 2022. https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServices/CommunityHealthAssessmentandImprovement

Washington State Department of Health [WA DOH]. (n.d.-f). Behavioral Risk Factor Surveillance System (BRFSS). Retrieved February 20, 2022, from https://doh.wa.gov/data-statistical-reports/data-systems/behavioral-risk-factor-surveillance-system-brfss

Washington State Department of Health [WA DOH]. (n.d.-g). Information by Location (IBL) | Washington State Department of Health. WA DOH. https://doh.wa.gov/data-statistical-reports/washington-tracking-network-wtn/information-location

Washington State Department of Health [WA DOH]. (n.d.-h). County Demographic Dashboard | Washington State Department of Health. WA DOH. https://doh.wa.gov/data-statistical-reports/washington-tracking-network-wtn/demographics/county-dashboard

Washington State Health Care Authority [WA HCA]. (n.d.-a). Accountable Communities of Health. Retrieved February 18, 2022, from https://www.hca.wa.gov/about-hca/medicaid-transformation-project-mtp/accountable-communities-health-achs

Washington State Health Care Authority [WA HCA]. (n.d.-b). Noncitizens | Washington State Health Care Authority. Retrieved April 8, 2022, from https://www.hca.wa.gov/health-care-services-supports/apple-health-medicaid-coverage/non-citizens

Washington State Health Care Authority [WA HCA]. (2020, May). ACH Regions Map [Map]. https://www.hca.wa.gov/assets/program/ach-map.pdf

Washington State Office of Financial Management [OFM]. (n.d.). Population density by county. Retrieved March 14, 2022, from https://ofm.wa.gov/washington-data-research/population-demographics/population-estimates/population-density/population-density-county#slideshow-12

Washington State Office of Financial Management [OFM]. (2021). Population by age, mapped by county. Office of Financial Management. https://ofm.wa.gov/washington-data-research/statewide-data/washington-trends/population-changes/population-age-mapped-county

Washington State Office of Financial Management [OFM]. (2022). Preliminary county data: Race and Hispanic Origin: 2010, 2020, 2021 [Dataset]. https://ofm.wa.gov/washington-data-research/population-demographics/population-estimates/estimates-april-1-population-age-sex-race-and-hispanic-origin

WA State Senate. (2021, January 18). Senate Health & Long Term Care – 1/18/2021 Meeting [Video]. TVW. https://app.leg.wa.gov/committeeschedules?eventID=2021011348#/Senate/28241/01-18-2021/01-18-2021/Schedule///Bill/

Wilcox, R. (2019). Standards and Measures Documentation: Tips for Success: April-May 2019. PHAB. Retrieved February 26, 2022, from https://phaboard.org/wp-content/uploads/Standards-Measures-Documentation-Tips-for-Success-April-May-2019-1.pdf