Social Vulnerability and Beacon Hill Resilience Hub Network

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Background

Communities LEAP Technical Assistance

The Communities Local Energy Action Program (LEAP) Pilot aims to facilitate sustained community-wide economic empowerment through clean energy, improve local environmental conditions, and open the way for other benefits primarily through DOE's clean energy deployment work.

This opportunity is open to low-income, energy-burdened communities that are also experiencing either direct environmental justice impacts or direct economic impacts from a shift away from historical reliance on fossil fuels.

Map of LEAP Communities

Beacon Hill Stakeholders and Goals

A stakeholder task force working in the Beacon Hill neighborhood of Seattle applied for and was selected for the Communities LEAP program. The stakeholders include:

Community Stakeholders

- El Centro de la Raza
- Beacon Hill Council
- Bethany United Church of Christ.

Supportive Partners

- Seattle City Light
- Seattle Office of Sustainability and Environment.

Task force goals include:

- Health: Improve the health of Beacon Hill residents by improving indoor and outdoor air quality, reducing noise, and reducing the impacts of extreme heat
- Economy: Increase economic stability and mitigate displacement of Beacon Hill residents by reducing energy bills, exploring anti-displacement/stay-in-place policies, and providing job training and job opportunities
- Resilience: Improve community resilience in the face of climate change impacts such as extreme heat, extreme storms, power outages, and wildfire smoke
- Greenhouse gases: Reduce greenhouse gases and other environmental impacts from fossil fuel extraction and use.

Social Vulnerability and Beacon Hill Resilience Hub Network

Resilience Hubs Planning in Beacon Hill

Improving community resilience to climate change impacts is a core goal of the Beacon Hill stakeholder task force. Developing a network of resilience hubs in the community is a strategy the task force is pursuing to build this resilience.

This technical assistance aims to assist the task force in their resilience hub network planning by:

- Identifying hazards that the resilience hubs may address
- Providing background information on social vulnerability and climate impacts
- Identifying populations in Beacon Hill who are at risk of disproportionate climate impacts due to social isolation and physical vulnerability characteristics (e.g., lack of transportation or internet)
- Identifying the potential role of resilience hubs that align with best practices for reducing social vulnerability to climate impacts.

Relevant Climate Hazards

Hazards of focus for Beacon Hill community resilience hubs:

- Snow and ice, as well as windstorms, can cause power outages, leading to carbon monoxide poisoning and impeding transportation (OEM 2019).
- Extreme heat events are becoming more prevalent with climate change and could reach up to 10 events per year (OEM 2019). Only 53% of Seattle's homes have air conditioning (Weinberger 2022).
- Power outages are a hazard due to increased demand; climate and hydrologic changes will likely alter the hydroelectric supply, lowering it during summer (OEM 2019).
- Air pollution from more frequent wildfires will worsen respiratory illnesses already experienced at higher rates in frontline communities (King County 2020).

Other hazards in King County:

- Landslides
- Earthquakes and tsunamis
- Water shortages
- Flooding (OEM 2019).

For these types of hazards, resilience hubs can serve as communication centers.

Social Vulnerability and Climate Impacts

Research on social vulnerability and isolation in the following slides has been applied to Beacon Hill's context.

A study by Martin (2015), *A Framework to Understand the Relationship between Social Factors That Reduce Resilience in Cities: Application to the City of Boston*, defines social vulnerability as the susceptibility of social groups to the impacts of hazards such as:

- Suffering disproportionate death, injury, loss, or disruption of livelihood AND
- Resiliency, or ability to adequately recover from the impacts (or lack thereof).

The study further identifies what affects social vulnerability:

- Demographics (e.g., race/ethnicity)
- Health care access
- Social capital
- Access to lifelines.

Vulnerable populations have a higher likelihood of experiencing social isolation, which is supported by evidence to be an indicator of negative outcomes, including increased mortality, before and after disasters.

Source: Martin 2015

Identities and Demographics with Increased Vulnerability in Cities During Emergencies and Climate Events

- People of color
- Women
- LGBTQ people
- Single parents and single people
- Children and older adults (65 and over)
- Low-income people
- Homeless people
- Temporary populations such as tourists and commuters
- Outdoor workers and first responders.

Persons with:

- Physical and cognitive disability
- Substance dependency
- Medical illnesses.

Persons (with):

- Less than a high school diploma
- Limited English and limited literacy
- Living in group quarters (e.g., correctional facilities and student housing)
- Renting and living in multi-unit buildings
- Poor living conditions, including high-crime areas
- Lack of open spaces
- Lack of access to health care
- Lack of access to transportation
- Lack of access to technology
- Poor social connectedness such as social isolation and low civic engagement.

Source: Martin 2015

Social Determinants of Vulnerability Framework

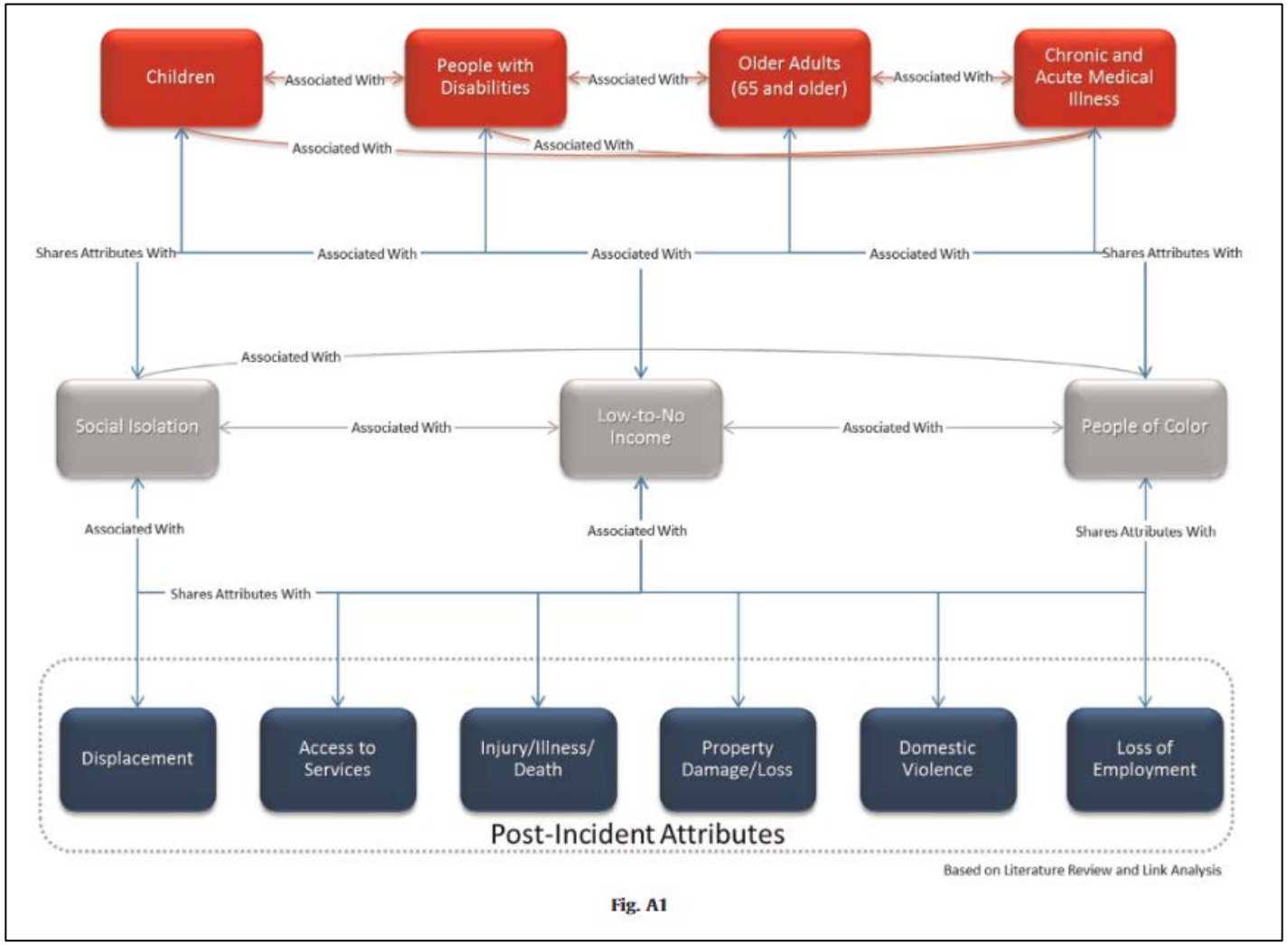


Fig. A1

The *Social Determinants of Vulnerability Framework* (left) was developed by Martin (2015) using the literature and link analysis "to identify the relationship between social factors that increase vulnerability in order to support inclusive emergency planning and social resilience." It shows the concurrent, pre-incident (red and gray) socially vulnerable characteristics and the associated post-incident (blue) outcomes.

Low or no income, people of color, and social isolation were the most frequently recurring pre-incident characteristics (gray) tied to post-incident (blue) consequences.

Source: Martin 2015

Social Vulnerability Characteristics in Seattle and King County

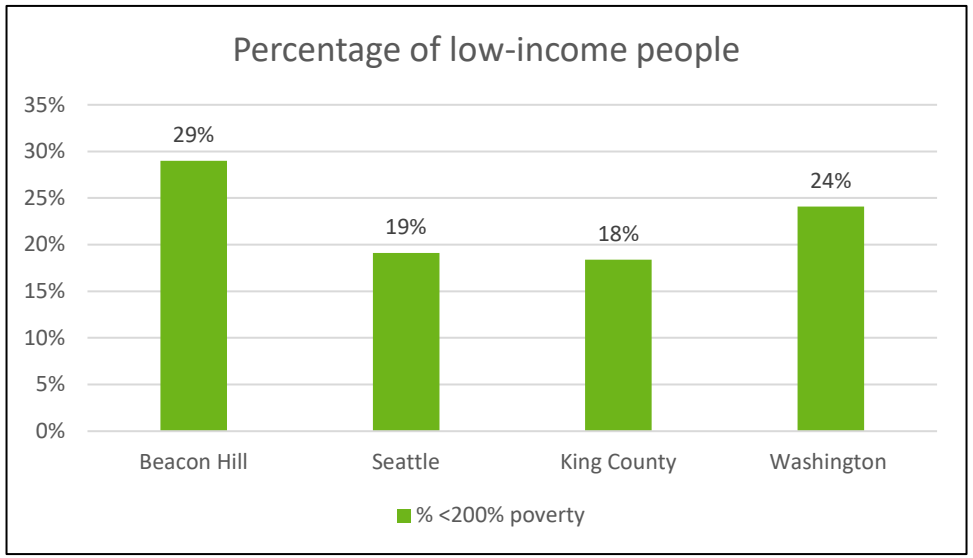
People at risk of disproportionate impacts during emergencies and climate events in Seattle and King County:

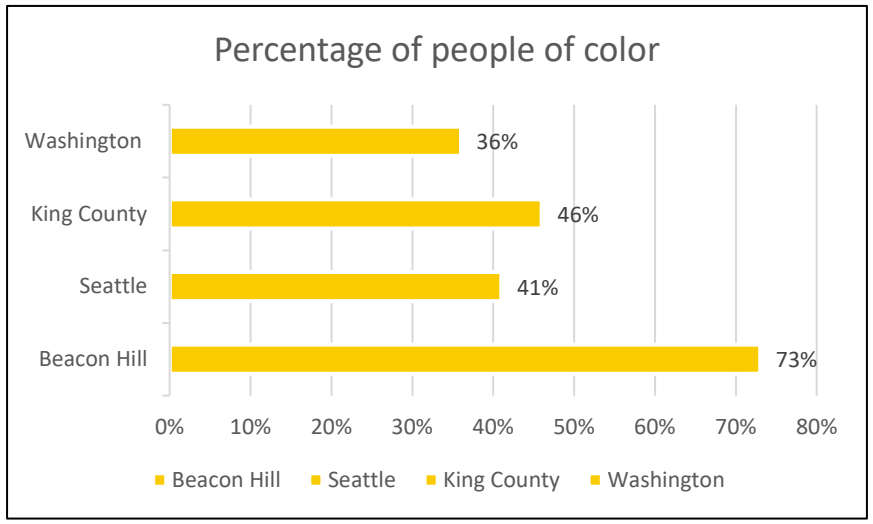
- Individuals with medical needs, disabilities, and mental health conditions
- Older adults and children
- Individuals with limited mobility
- Individuals who have experienced domestic violence
- Individuals experiencing homelessness or in transitional housing.
- Immigrant and refugee communities
- Individuals who are undocumented
- Individuals who are limited or non-English speaking
- Clients of the criminal justice system
- Individuals who are drug or alcohol dependent
- People of color

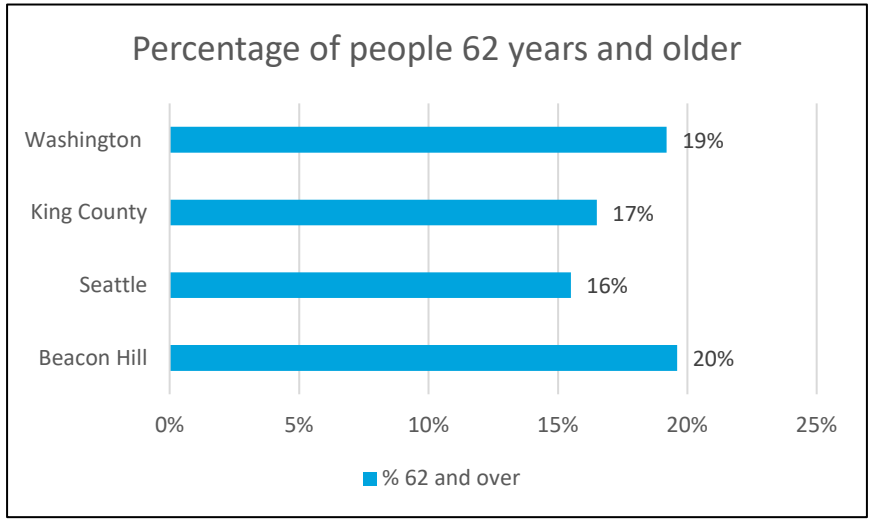
Older adults (65+) in Seattle have a higher risk of vulnerability due to potential social isolation, disability that prevents them from leaving the home, and/or barriers to information access.

Source: OEM 2019

Demographics Related to Climate Vulnerability



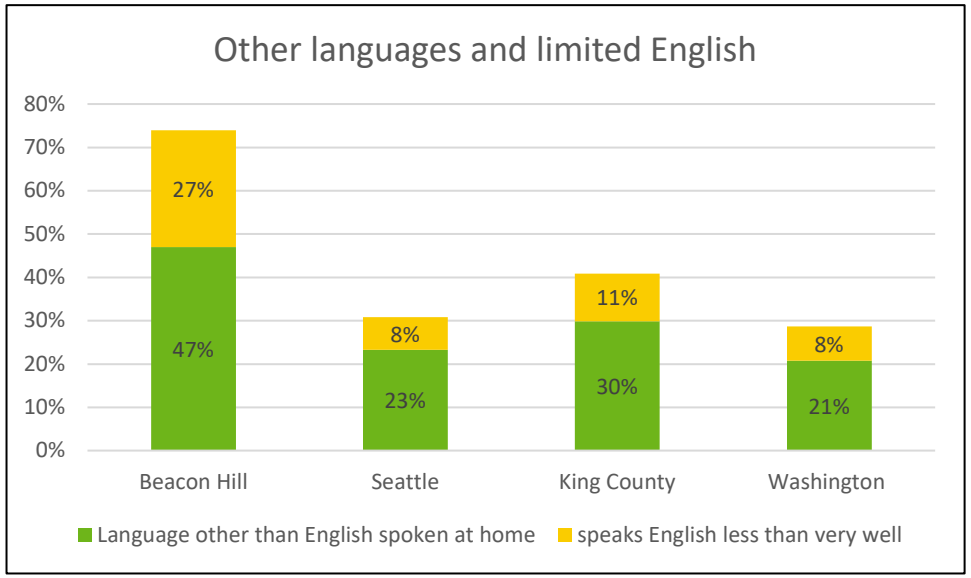


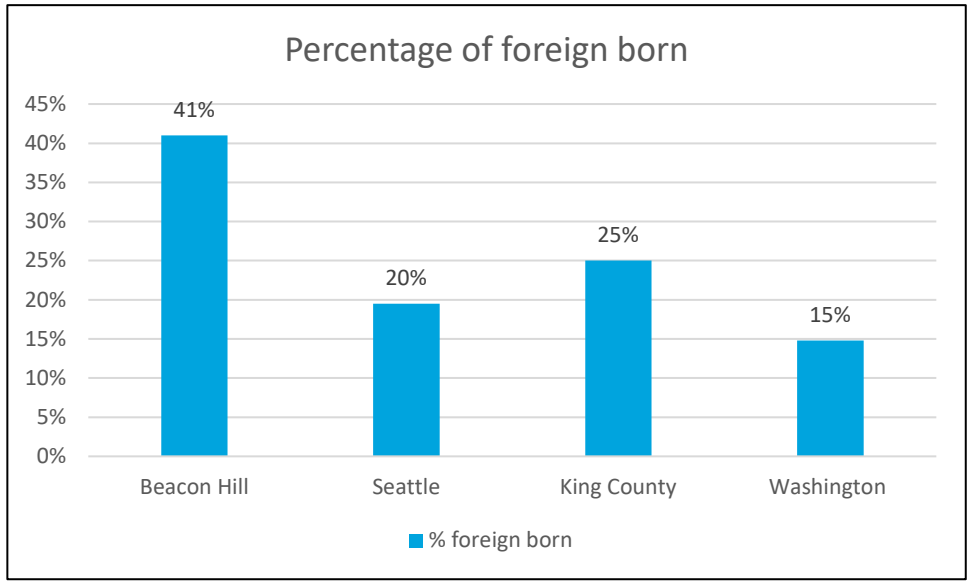


Beacon Hill has a higher percentage of low-income people, people of color, and older adults than its surrounding area. These groups are often cited as the most vulnerable.

Source: U.S. Census Bureau (American Community Survey 2020, 2021; Decennial Census 2020)

Demographics (cont.)

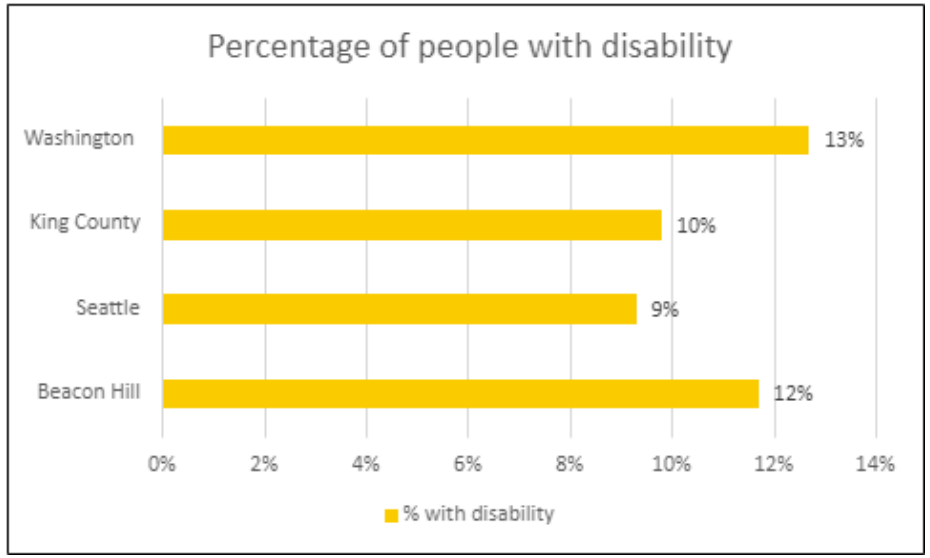


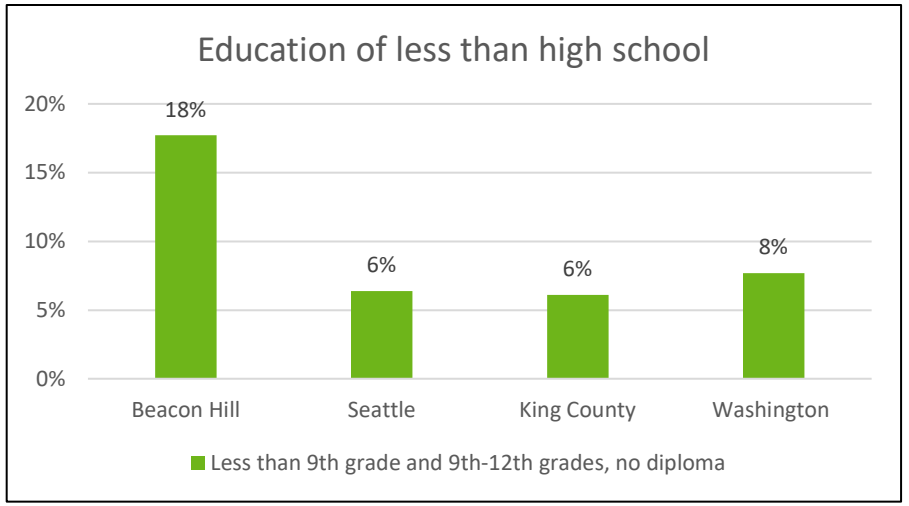


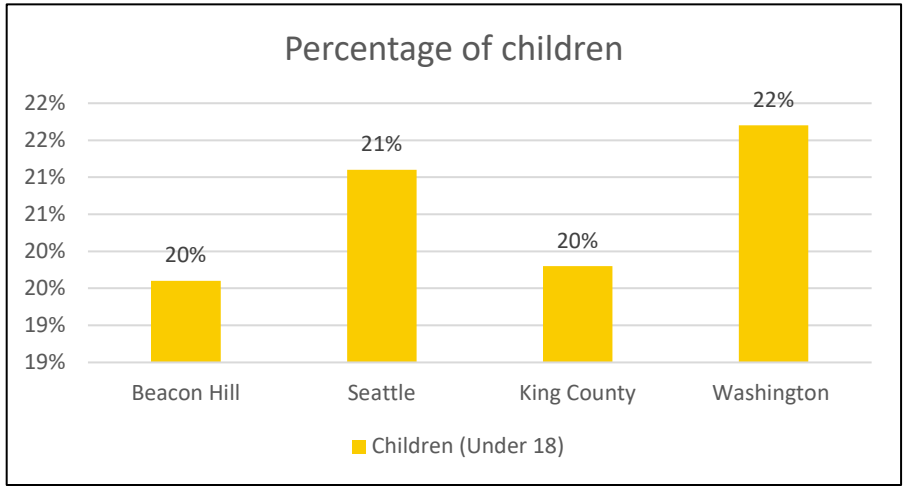
- Beacon Hill has a higher percentage of people that speak a language other than English at home, people who speak English less than very well, and people that were born abroad than its surrounding area. Having limited English is associated with social vulnerability in the literature and people with limited or no English along with immigrant and refugee communities were identified as at risk of disproportionate impact during emergencies in King County and Seattle.
- Martin (2015) links limited English proficiency and other vulnerability characteristics with social isolation, meaning that those populations experience a lack of engagement in social, community, and institutional connections. Hence, preparedness materials as well as post-incident resources should be made accessible to them.

Source: U.S. Census Bureau (American Community Survey 2020, 2021; Decennial Census 2020)

Demographics (cont.)



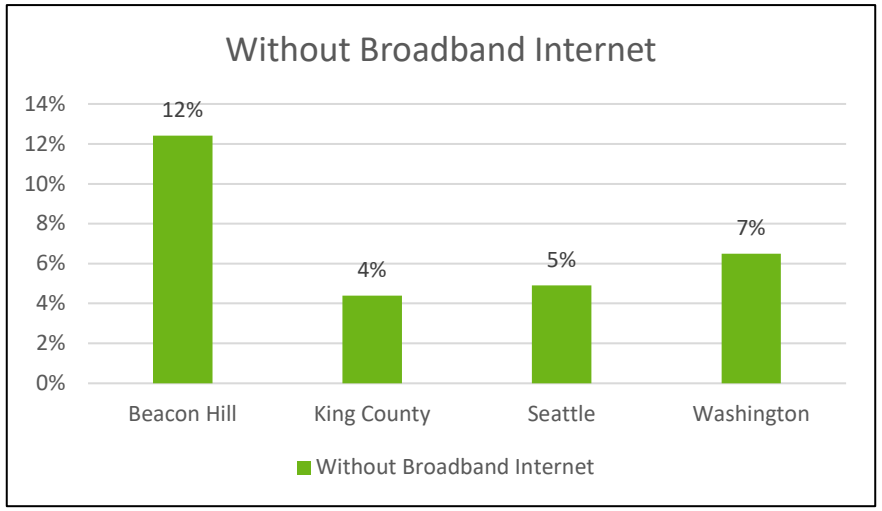


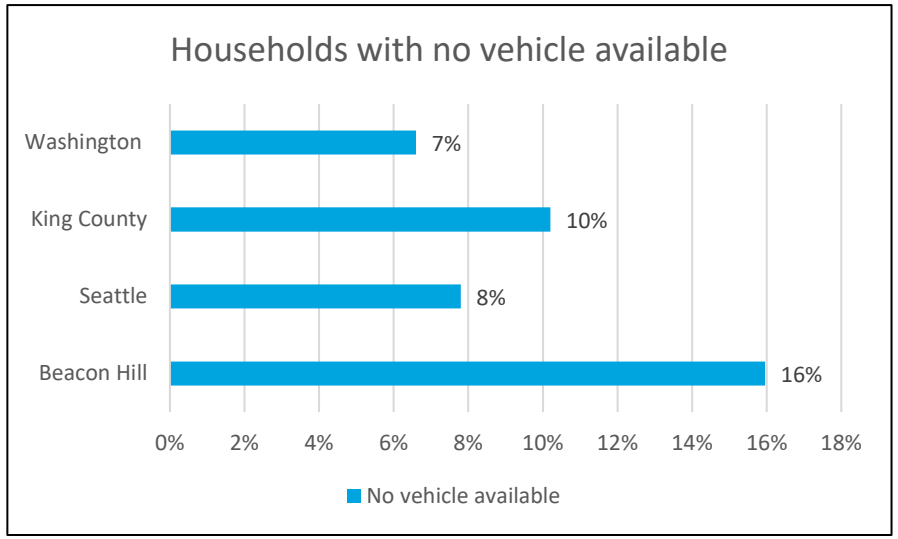


- 12% of Beacon Hill's population has a disability. People with disabilities are one of the most vulnerable groups during emergencies, being prone to social isolation.
- Beacon Hill has three times the percentage of people who have educational attainment of less than high school graduation compared to Seattle and King County as a whole.
- Beacon Hill's percentage of children is lower than those in the surrounding areas. However, its older adult population is higher.

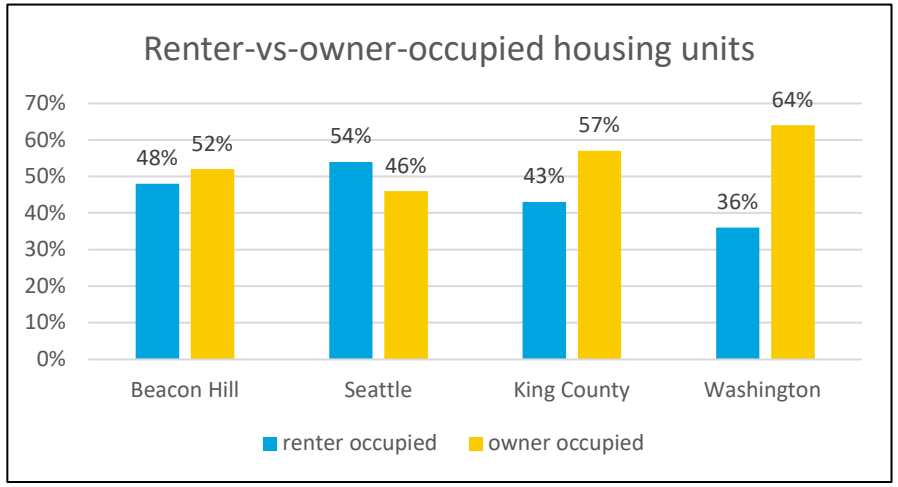
Source: US Census Bureau (American Community Survey 2020, 2021; Decennial Census 2020)

Material Vulnerability Factors





- In 2021, 53% of Seattle's homes had air conditioning, a substantial increase since 2019 (44%) and 2013 (31%) (Weinberger 2022). There is no data on air conditioning prevalence specific to Beacon Hill.
- Beacon Hill has a higher percentage of households without broadband internet access than those in neighboring areas.
- 48% of people in Beacon Hill rent rather than own their home.
- Beacon Hill has twice as many households that do not have a vehicle available compared to Seattle as a whole.



Source: U.S. Census Bureau (American Community Survey 2020, 2021; Decennial Census 2020)

Social Isolation

Social isolation is "a lack of engagement in social ties, institutional connections, or community participation." It is defined based on factors such as the presence of marriage or partnership, extent of religious participation, group membership, and prevalence of contact with friends and family (Martin 2015).

- Social isolation is a determinant of mortality both before and after a disaster (Martin 2015), such as during the 1995 heat wave in Chicago (Kafeety et al. 2020).
- Not knowing where to turn for help is a key constraint in peoples' capacities to prepare and respond to emergencies (Pyke and Wilton 2020).
- Social isolation has more severe effects on those already experiencing other forms of marginalization/social vulnerability, negatively affecting health outcomes (Lubik and Kosatski 2019) and access to post-incident resources (Martin 2015).
- Social isolation is either directly or indirectly correlated with all attributes of social vulnerability (Martin 2015).
- Social groups most at risk of social isolation in Beacon Hill are people of color, the elderly, people with limited English proficiency, and low-income people.

Best Practices to Reduce Social Isolation

Social connection is a tool to build community resilience (Kafeety et al 2020).

Social connection goes farther than the individual's close social networks to encompass public and private community-level networks and institutions (Martin 2015).

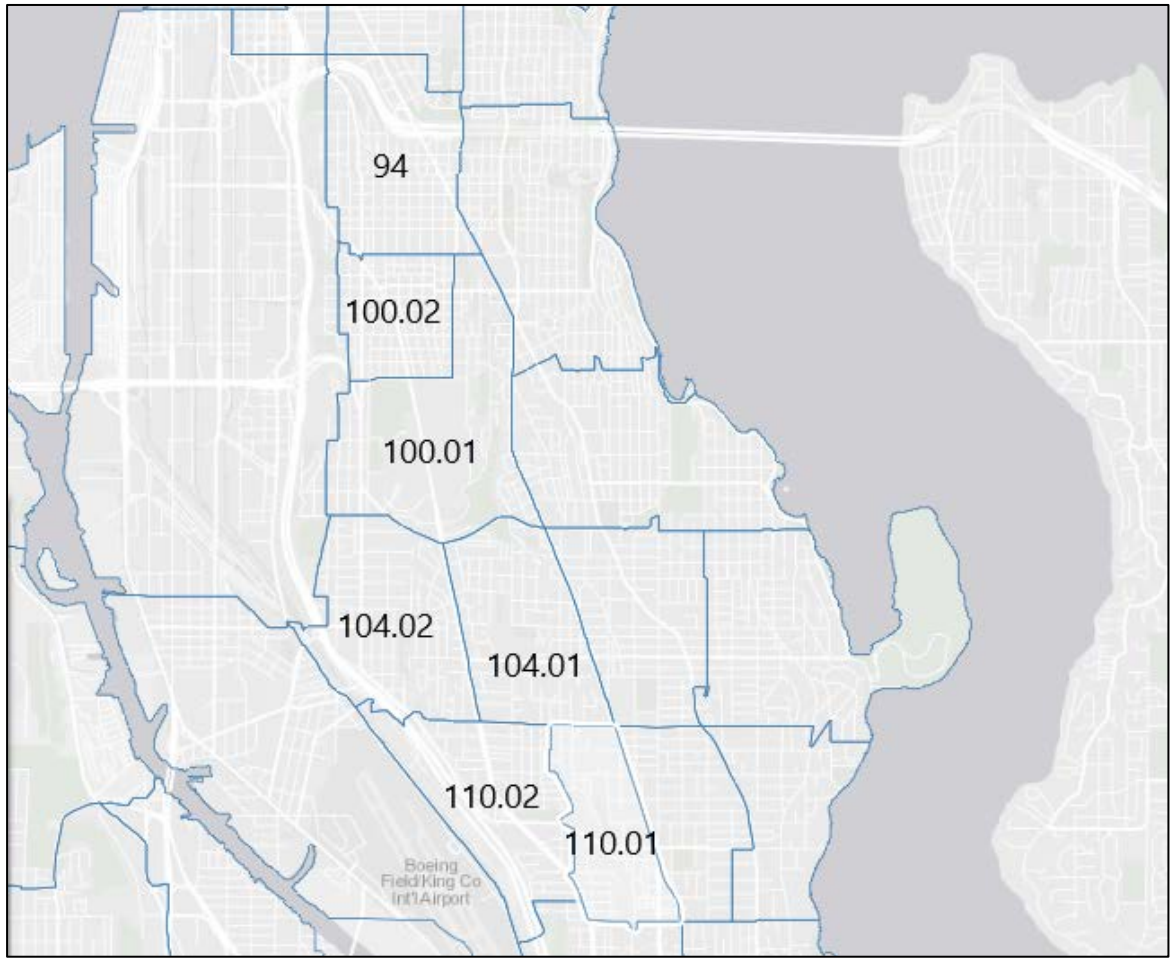
Best practices to reduce social isolation include:

- Addressing the root causes of social vulnerability to reduce systemic inequities (King County 2020) and the impact of socio-economic and environmental disadvantages (Horton et al. 2010)
- Creating partnerships with local, intersectoral organizations and networks (Kafeety et al. 2020)
- Including the voice of vulnerable groups in the design of emergency plans (Lubik and Kosatski 2019)
- Having responder awareness of vulnerable groups (Kafeety et al. 2020)
- Developing social connections in communities for overall and climate resilience (Kafeety et al. 2020)
- Creating place-based climate interventions such as a chill room during extreme heat events (Kafeety et al. 2020)
- Building environments designed for social cohesiveness (such as places to meet and walkable neighborhoods) (Lubik and Kosatski 2019)
- Developing educational materials and workshops on emergency preparedness (Kafeety et al. 2020)
- Ensuring that preparedness materials are accessible to all (Martin 2015)
- Providing resilience messaging and outreach to civic leaders who are trusted by the community (Martin 2015).

Potential Resilience Hub Network Role in Reducing Social Isolation

- Including the voice and input of vulnerable groups (Lubik and Kosatski 2019) and community organizations (Kafeety et al. 2020) in the design of emergency plans
- Developing social connections in the community (Kafeety et al. 2020)
- Creating place-based climate interventions such as a cooling center (Kafeety et al. 2020)
- Delivering education and workshops on emergency preparedness (Kafeety et al. 2020)
- Providing resilience messaging and outreach for response and recovery (Martin 2015)
- Ensuring that preparedness materials are accessible to all, such as those with limited English proficiency, the elderly, and people with disabilities (Martin 2015).

Beacon Hill Census Tracts



Highest vulnerability characteristics per census tract:

- Census Tract 94 has the highest percentage of people with disabilities (18%) and renters, along with 100.01 (59%).
- Census Tract 104.02 has the highest percentage of residents age 65+ (19%).
- Census Tract 110.02 has the highest percentage of residents under 18 (27%), people of color (89%), and people under 200% of the poverty level (53%).
- Census Tract 110.01 has the highest percentage of residents who are foreign-born (52%), people with less than a high school diploma (30%), people with no vehicle (28%) and no internet (20%), and of residents with limited English proficiency, along with 110.02 (37%).

Map Source: Seattle GEO Data
https://data-seattlecitygis.opendata.arcgis.com/datasets/census-tracts-2010/

Beacon Hill Potentially Vulnerable Population Sizes by Census Tract

Census Tract	Over 65	Under 18	People of color	Foreign-born	Limited English	People with disabilities	Renter-occupied units	<High School	No vehicle	Without internet	<200% poverty
94	1,190	645	4,021	2,079	1,157	1,152	1,816	695	639	389	1,178
100.01	534	787	3,024	1,334	875	475	956	572	371	307	1,744
100.02	747	1,227	2,977	1,318	890	505	985	422	130	185	942
104.01	629	937	3,466	2,144	1,520	448	423	523	96	127	803
104.02	899	972	3,720	2,032	1,308	405	420	584	86	103	617
110.01	854	1,009	4,084	2,667	1,782	833	990	1088	511	365	2,057
110.02	672	1,220	4,098	2,257	1,596	324	487	524	210	113	2,423
Total	**5,525**	**6,797**	**25,390**	**13,831**	**9,128**	**4,142**	**6,077**	**4,408**	**2,043**	**1,589**	**9,764**

Source: US Census Bureau (American Community Survey 2020, 2021; Decennial Census 2020)

Beacon Hill Potentially Vulnerable Population Sizes by Census Tract (%)

Census Tract	Over 65	Under 18	People of color	Foreign-born	Limited English	People with disabilities	Renter-occupied units	<High school	No vehicle	Without internet	<200% poverty
94	18%	10%	61%	31%	18%	18%	59%	13%	21%	13%	18%
100.01	13%	20%	67%	33%	22%	12%	59%	21%	23%	19%	44%
100.02	15%	15%	61%	27%	19%	10%	50%	11%	7%	9%	19%
104.01	14%	21%	77%	48%	36%	10%	31%	16%	7%	9%	18%
104.02	19%	20%	73%	42%	29%	8%	26%	16%	5%	7%	13%
110.01	17%	20%	85%	52%	37%	16%	54%	30%	28%	20%	40%
110.02	15%	27%	89%	49%	37%	7%	38%	19%	16%	9%	53%

Source: US Census Bureau (American Community Survey 2020, 2021; Decennial Census 2020)

Conclusion

- Climate hazards in Beacon Hill and King County are likely to increase in frequency and intensity due to climate change.
- Socially vulnerable populations are susceptible to experiencing disproportionate adverse effects during and after climate emergencies.
- The prominent socially vulnerable groups in Beacon Hill include people of color, the elderly, people with limited English proficiency, and low-income people.
- Social isolation exacerbates the effects of climate emergencies on those already experiencing marginalization and is linked to poor health outcomes and lack of access to resources.
- A resilience hub network aligns with several best practices to reduce social isolation, fostering social connection and climate preparedness and resilience.

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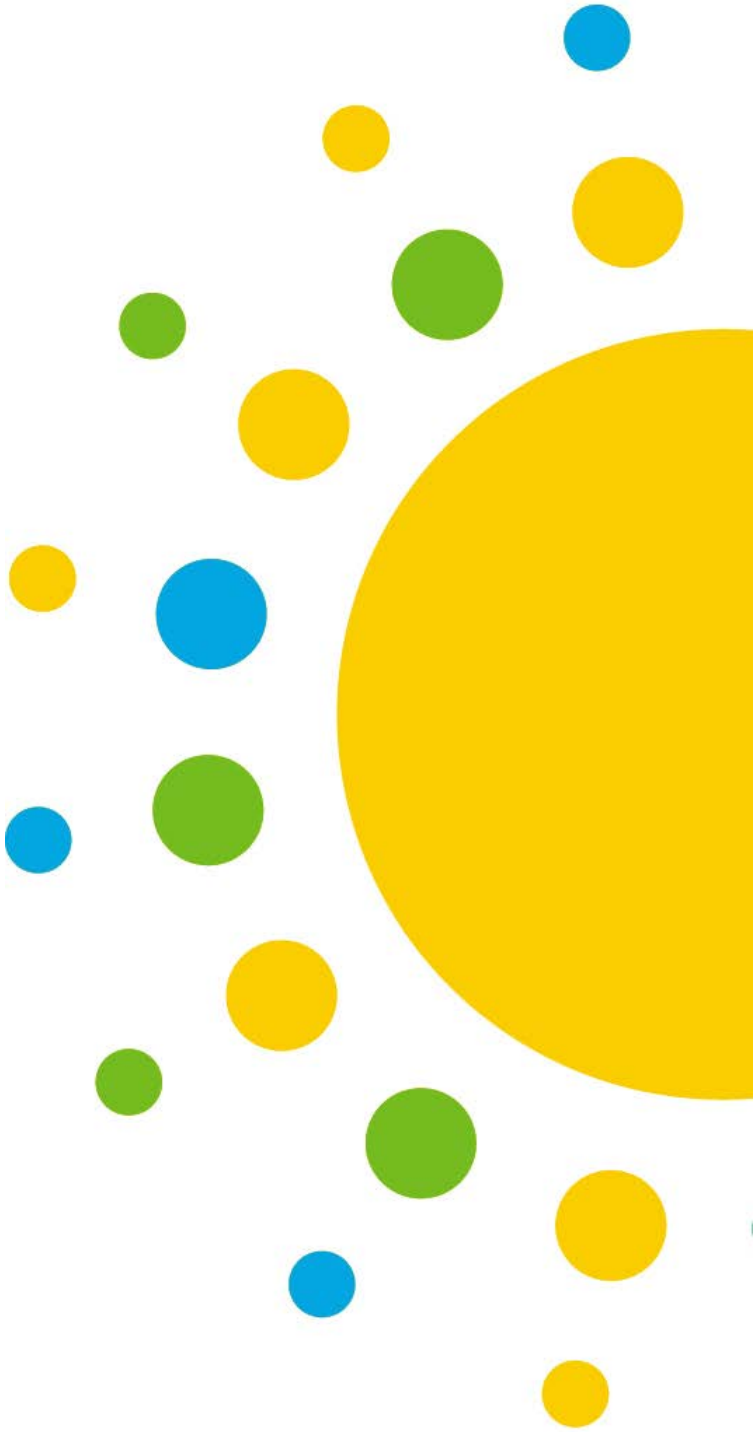
Climate Resilience in Health Care Systems



Health Care and Resilience in Beacon Hill

The main campus of the VA Puget Sound Health Care System is located in Beacon Hill; hence, the Beacon Hill Stakeholder Coalition is interested in knowing how to utilize and interact with the local health care system in a manner that supports the community's resilience.

This section aims to:

- Provide a literature review and case studies of how hospitals engage in community climate resilience
- Provide publicly available information about the VA Puget Sound Health Care System to inform the Coalition of the hospital's capacity and resources
- Provide census data on the veteran population of Beacon Hill.

Climate Change and Health Care Systems

Key Points

- Climate change will exacerbate health effects such as respiratory and cardiovascular conditions, injuries and premature deaths, changes in the availability and distribution of food, water-borne illnesses, different infectious diseases, and poor mental health (CDC 2022).
- Vulnerable groups will be disproportionately impacted by the increase in health effects due to climate change (Brannman 2022).
- The U.S. health sector comprises 27% of the global health care footprint and 8.5% of the total domestic emissions (Gibbons and Wolff 2022).
- Because hospitals consume more than most other buildings, disruptions in power, water supply, and transportation can have considerable adverse effects on their operations (Seltenrich 2018).
- The changes in climate are anticipated to raise the total cost of health care services and supply delivery (Baca et al. 2022).

Source: Health Care Without Harm (2018)

Climate Resilience for Health Care Systems and the Communities They Serve

The medical research community sees climate change as the "greatest threat" to global public health (Baca et al. 2022).

Because health care systems are considered anchor institutions (nonprofit organizations linked to their communities), they have "both a responsibility and an economic self-interest in making sure their communities are healthy, safe, and climate resilient" (Gibbons and Wolff 2022).

Essential hospitals—those serving socially vulnerable populations—can impact the health of the communities they serve by influencing their lived environments and social factors (Frentzel et al. 2019).

Gibbons and Wolff (2022) in *Climate Resilience For Health Care and Communities* identify three types of health care climate resilience that are inter-connected:

- Healthcare facility resilience: the capacity to adapt to changing conditions and to maintain or regain functionality and vitality in the face of stress or disturbance.
- Public infrastructure resilience: critical infrastructure such as transportation, clean water, and electricity should withstand disaster. Health systems should partner with local governments to ensure infrastructure can support patients and staff during disasters.
- Community health resilience: hospitals can strengthen social connections through support programs and resources that meet the public's need.

Gibbons and Wolff (2022) describe a climate-smart health care system as one that:

- Maximally reduces negative impacts of operations
- Prepares facilities and communities for climate impacts
- Actively engages in climate policy
- Invests deeply and equitably in community resilience.

Hospitals Can Help Build Climate Resilient Communities

Health care institutions can build and support climate and social resilience in the following ways:

- Procure from local, diverse, and sustainable businesses, creating a resilient and equitable supply chain (Gibbons and Wolff 2022)
- Support local workforce development through upskilling and education, supporting economic resilience in the community (Gibbons and Wolff 2022)
- Identify and address community health needs that make people more vulnerable to climate impacts such as lack of access to air conditioning (Gibbons and Wolff 2022)
- Invest in community infrastructure such as energy efficiency, affordable housing, clean transportation, and the local food economies (Gibbons and Wolff 2022).
- Pilot the co-development of community resilience hubs with community health centers (Balbus 2022)
- Implement Community Health Needs Assessments focused on resilience (Balbus 2022)
- Co-develop climate-centered health system resilience tools (Balbus 2022)
- Collaborate with Medicaid and states to identify program flexibilities to support resilience among beneficiaries (Balbus 2022).

A study by the Essential Hospitals Institute (Frentzel et al. 2019) found that:

- Leadership support is critical for enhancing and determining community engagement and driving climate resilience and mitigation in hospitals.
- Community engagement activities identified by hospital staff and community members include:
  - Leading community cleanups
  - Trainings on recycling, waste management, and other environmental sustainability activities
  - Supporting alternative transportation
  - Presentations to students on sustainability
  - Holding Earth Day gatherings.

Case Studies of Climate Resilience in Communities via Health Care Systems

Boston Medical Center (BMC)

BMC identified housing instability and food insecurity as the main challenges affecting its patient population.

- Partnering with 12 community-based organizations and other healthcare facilities, BMC invested $7M targeted at preserving housing affordability.
- BMC's Nourishing Our Community program grows 25 crops in a 2,658-acre farm to serve its hospitalized patients, cafeterias and food pantry which fills "food prescriptions."
- BMC provided a $1M no-interest loan to partner organization Nuestra Comunidad to outfit a local market location in a predominantly Black, Latinx, and Asian community.

Live Well Springfield (LWS)

LWS is a multi-sector community-based coalition founded by the Public Health Institute of Western Massachusetts and underwritten by Mercy Medical Center, Baystate Health, and Health New England.

- Examples of its achievements include the creation of a farm-to-preschool program, founding the food policy council, and expanding the city's zoning ordinance to include urban farming.
- In 2021, the Kresge Foundation awarded LWS a $600,000 grant to support the Springfield Climate Justice Initiative through their grassroots partner Arise for Social Justice, aimed at addressing the health impacts of climate change on low-income residents.

Kaiser Permanente

Because of California's extreme wildfires, the state authorized the utilities to implement public safety power shutoffs during extreme weather conditions that increase the risk of fires.

- In October 2019, a power shut off impacted 14 Kaiser Permanente health facilities, forcing them to close or restrict operations.
- Because their diesel power generation backup causes pollution and emits greenhouse gases, the leadership of Kaiser implemented a groundbreaking green microgrid based on solar energy and battery systems in its Richmond campus.
- This green microgrid provides a carbon-free backup, provides service every day as opposed to mostly idle diesel generators, and mitigates power outages in the community by reducing strain on the grid.

Source: Gibbons and Wolff (2022)

Initiatives and Resources for Health Care Systems

Examples of established initiatives

- Anchors in Resilient Communities: its goal is to engage hospitals and other anchor institutions to work in collaboration with their communities to develop strategies for how anchor assets and procurement can influence upstream interventions for health (Gibbons and Wolff 2022).
- Impact Purchasing Commitment: its goal is to integrate health system strategies on local, equitable, and environmentally sustainable procurement (Gibbons and Wolff 2022).
- Tree Campus Healthcare: the program provides a framework for health care facilities to invest in tree planting on their campuses and in their communities to reduce health and equity impacts of extreme heat (Gibbons and Wolff 2022).
- The Medical Society Consortium on Climate and Health: brings together associations representing over 700,000 clinical practitioners to advocate for addressing climate change for health benefits (Medical Society Consortium n.d.).
- Northwest Healthcare Response Network: A coalition formed between the Seattle and King County Public Health Department and local hospitals. During the pandemic, they coordinated to balance COVID-19 patients in each hospital (Hostetter and Klein 2022).

Examples of available resources

- U.S. Climate Resilience Toolkit: https://toolkit.climate.gov/topics/human-health/building-climate-resilience-health-sector
- Hospital Preparedness Program: https://aspr.hhs.gov/HealthCareReadiness/HPP/Pages/default.aspx
- Climate Resilience for Frontline Clinics Toolkit: https://www.americares.org/what-we-do/community-health/climate-resilient-health-clinics/
- Practice Greenhealth: https://practicegreenhealth.org/
- Health Care Without Harm: https://noharm.org/
- Climate Change Resilience and Healthcare System Considerations: https://files.asprtracie.hhs.gov/documents/climate-change-resilience-and-healthcare-system-considerations-summary.pdf
- Community Lighthouse Project (a resilience hub network which includes a clinic): https://www.togethernola.org/home.

Key Data from the VA Puget Sound Health Care System for Resilience Planning

This information was publicly available in the *VA Puget Sound Health Care System Annual Report Fiscal Year 2022* and the health care system's website.

- VA Puget Sound provides health care services at 10 locations in Western Washington, serving a 14-county area around Puget Sound and the Pacific Northwest. Facilities include the Seattle and American Lake campuses (VA 2023).
- In FY22, it served a total of 1,093,961 outpatient visits, 4,331 inpatient admissions, performed 4,267 surgeries, and had 408 operational beds and an average daily census of 205 (VA 2022).
- In FY22, the system saw a growth over 2 years of 6.7% in patients, 12.4% in women veterans, and 16.7% in outpatient visits (VA 2022).
- In FY22, it had a total 4,458 full-time employees and trained 1,600 health professionals (VA 2022).
- The Seattle Medical Center alone served 622,283 outpatient visits (VA 2022).
- VA Puget Sound's Women's Health Program enrolled over 17,000 women veterans (VA 2023).
- VA Puget Sound's Fisher House (Seattle campus) provides a cost-free "Home Away from Home" for veterans, active-duty service members, and their families and caregivers, while they are hospitalized or receiving care. Guests have come from 48 states around the nation and 14 countries around the globe (VA 2023).
- In FY22, the Fisher House served 556 guests and 396 families in an average 9-day stay, saving the visiting families $346,900 (VA 2022).
- The Community Outreach and Housing Services Program and Justice Outreach provide veterans with transitional housing, emergency housing, drop-in services, a call resource center, HUD housing vouchers, and transportation and rideshare (VA 2022).

Veteran Population in the Beacon Hill Area

	Beacon Hill		Seattle		King County		Washington	
	Population	%	Population	%	Population	%	Population	%
Allocated Veteran Status (18 years and over)	3,060	11%	199,330	7%	118,098	7%	375,990	7%

	Census Tract 94		Census Tract 100.01		Census Tract 100.02		Census Tract 104.01		Census Tract 104.02		Census Tract 110.01		Census Tract 110.02		Total	
	Population	%	Population	%	Population	%	Population	%	Population	%	Population	%	Population	%	Population Total	% Total
Allocated Veteran Status (18 years and over)	551	9%	356	11%	413	10%	433	12%	421	11%	521	13%	365	11%	3,060	11%

Source: U.S. Census Bureau (Table B99211, American Community Survey; 2021 for Beacon Hill and 2018 for the rest)

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Thank You

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Appendices

Community Data Summary (Population)

	Beacon Hill	Seattle	King County	Washington	Source
Total population	34,944	737,015	2,269,675	7,705,281	Table P2, Decennial 2020 Census
Not identified as "White alone"	25, 390	298,846	1,039,087	2,786,461	Table P2, Decennial 2020 Census
Foreign born	13,831	802,357	562,077	1,143,311	Table DP02 ACS 2021
Individuals with income below 200% of the poverty line	9,764	137,902	403,224	1,780,174	Table S1701, ACS 2020 for all, but 2021 for Beacon Hill
With disability	4,142	434,383	216,031	515,036	Table DP02, ACS 2021 for all, but Table S1810, ACS2021 for Beacon Hill
62 and over	5,226	114,670	366,586	1,440,814	Table S0101, ACS 2020
Under 18	6,797	846,236	445,848	1,675,782	Table S0101, ACS 2021
Language other than English spoken at home	16,451	943,598	637,824	1,520,637	Table DP02 ACS 2021
Speaks English less than very well	9,128	358,181	235,174	578,749	Table DP02 ACS 2021
Renter occupied	6,077	617,805	401,459	1,088,354	Table DP04, ACS 2021
Owner occupied	6,729	966,991	523,304	1,933,901	Table DP04, ACS 2021
No vehicle available	2,043	124,193	94,753	200,944	Table DP04, ACS 2021
Less than high school graduate	4,408	183,094	99,593	413,305	Table DP02, ACS 2021
With a broadband internet connection	1,589	1,507,771	883,739	2,825,261	Table DP02, ACS 2021

Source: US Census Bureau (American Community Survey 2020, 2021; Decennial Census 2020)

Beacon Hill includes the following King County Census tracts: 94, 100.01, 100.02, 104.01, 104.02, 110.01, 110.02.

*Total population from which each category was taken varies from the total population of the neighborhood.

Community Data Summary (%)

	Beacon Hill	Seattle	King County	Washington	Source
Total population	34,944	737,015	2,269,675	7,705,281	Table P2, Decennial 2020 Census
% Not identified as "White alone"	73%	41%	46%	36%	Table P2, Decennial 2020 Census
% Foreign born	41%	20%	25%	15%	Table S0501, ACS 2021 for all but Beacon Hill and DP02 ACS 2020 for Beacon Hill
% Individuals with income below 200% poverty level	29%	19%	18%	24%	Table S1701, ACS 2020
% With a disability	12%	9%	10%	13%	Table S1810, ACS2020
% 62 years and over	20%	16%	17%	19%	Table S0101, ACS 2020
% under 18 years	20%	21%	20%	22%	Table S0101, ACS 2021
% Language other than English spoken at home	47%	23%	30%	21%	Table S0501, ACS 2021 for all but Beacon Hill and DP02 ACS 2020 for Beacon Hill
% Speak English less than very well	27%	8%	11%	8%	Table S0501, ACS 2021 for all but Beacon Hill and DP02 ACS 2020 for Beacon Hill
% Renter-occupied housing units	48%	54%	43%	36%	Table S0501, ACS 2021 for all but Beacon Hill, Table S2502 ACS 2020 for Beacon Hill
% Owner-occupied housing units	52%	46%	57%	64%	Table S0501, ACS 2021 for all but Beacon Hill, Table S2502 ACS 2020 for Beacon Hill
% No vehicles available	16%	8%	10%	7%	Table DP04, ACS 2021
% Less than high school graduate attainment	18%	6%	6%	8%	Table DP02, ACS 2021
% With broadband internet subscription	88%	95%	96%	94%	Table DP02, ACS 2021

Beacon Hill includes the following King County Census tracts: 94, 100.01, 100.02, 104.01, 104.02, 110.01, 110.01.

*Total population from which each category was taken from varies from the total population of the neighborhood.

Source: U.S. Census Bureau (American Community Survey 2020, 2021; Decennial Census 2020)

Race and Ethnicity by Census Tract

	Census Tract 94		Census Tract 100.01		Census Tract 100.02		Census Tract 104.01		Census Tract 104.02		Census Tract 110.01		Census Tract 110.02		Total	
Race/Ethnicity	Population	%	Population	%	Population	%	Population	%	Population	%	Population	%	Population	%	Population Total	% Total
Hispanic or Latino	888	14%	468	10%	845	17%	351	8%	539	11%	249	5%	252	5%	3,592	10%
White alone	2,581	39%	1,502	33%	1,884	39%	1,048	23%	1,377	27%	706	15%	492	11%	9,590	27%
Black or African American alone	467	7%	1,006	22%	300	6%	426	9%	338	7%	1,548	32%	1,168	25%	5,253	15%
American Indian and Alaska Native alone	37	1%	25	1%	23	0%	13	0%	18	0%	16	0%	14	0%	146	0%
Asian alone	2,048	31%	1,178	26%	1,349	28%	2,379	53%	2,412	47%	2,047	43%	2,456	54%	13,869	40%
Native Hawaiian and Other Pacific Islander alone	27	0.41%	5	0.11%	16	0.33%	10	0.22%	19	0.37%	8	0.17%	21	0.46%	106	0.30%
Some other race alone	35	1%	16	0.35%	23	0.47%	27	1%	21	0.41%	30	1%	10	0.22%	162	0.46%
Two or more races	519	8%	326	7%	421	9%	260	6%	373	7%	186	4%	177	4%	2,262	6%

Source: U.S. Census Bureau (Table P2, Decennial Census 2020)

Population by Spoken Languages

	Census tract 94		Census tract 100.01		Census tract 100.02		Census tract 104.01		Census tract 104.02		Census tract 110.01		Census tract 110.02		Total	
Language	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Total Population**	**% Total**
Spanish	635	10%	109	3%	506	11%	343	8%	280	6%	223	5%	197	5%	2,293	7%
Spanish: Speak English less than "very well"	341	5%	27	1%	345	7%	167	4%	207	5%	40	1%	124	3%	1,251	4%
Other Indo-European languages	202	3%	41	1%	46	1%	44	1%	71	2%	97	2%	12	0.30%	513	2%
Other Indo-European language: Speak English less than "very well"	39	1%	0	0.00%	0	0.00%	3	0.10%	24	1%	45	1%	0	0.00%	111	0%
Asian and Pacific Islander languages	1,264	20%	700	18%	906	19%	1,620	38%	1,976	43%	1,562	32%	1,840	42%	9,868	30%
Asian and Pacific Islander languages: Speak English less than "very well"	710	11%	368	9%	545	12%	995	24%	1,042	23%	909	19%	1,189	27%	5,758	17%
Other languages	288	5%	1,023	26%	0	0.00%	580	14%	65	1%	1,025	21%	796	18%	3,777	11%
Other languages: Speak English less than "very well"	67	1%	480	12%	0	0.00%	355	8%	35	1%	788	16%	283	7%	2,008	6%
English only	4,040	63%	2,064	52%	3,281	69%	1,645	39%	2,169	48%	1,928	40%	1,510	35%	16,637	50%

Source: US Census Bureau (Table DP02, American Community Survey 2021)

Population Under the Poverty Level

	Census Tract 94		Census Tract 100.01		Census Tract 100.02		Census Tract 104.01		Census Tract 104.02		Census Tract 110.01		Census Tract 110.02		Total	
Below poverty level	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population**	**%**	**Population Total**	**% Total**
Total	454	7%	973	25%	422	9%	420	9%	308	6%	1,574	31%	749	16%	4,900	14%
Under 18	45	7%	265	34%	65	9%	74	8%	118	13%	445	44%	264	22%	1,276	20%
65 and over	219	18%	140	27%	70	9%	97	15%	62	7%	365	43%	92	14%	1,045	19%
Less than high school	302	44%	206	40%	138	33%	138	26%	98	17%	545	50%	101	19%	1,528	40%
Not identified as "White alone"	447	10%	958	32%	454	14%	401	10%	291	7%	1,447	32%	712	16%	4,710	17%
White alone	208	4%	222	9%	181	4%	197	9%	76	3%	478	26%	96	15%	1,458	8%
Female	231	8%	120	9%	211	10%	188	8%	189	8%	868	32%	506	20%	2,313	14%
Male	223	6%	458	23%	211	8%	232	11%	119	5%	706	29%	243	12%	2,192	12%

Source: U.S. Census Bureau (Table S1701, American Community Survey 2021)

Homeownership by Area and Race

	North Beacon Hill		Mid Beacon Hill		South Beacon Hill	
Homeownership status	**Population**	**%**	**Population**	**%**	**Population**	**%**
Owner-occupied	2,277	45%	2,807	61%	16,45	53%
Renter-occupied	2,801	55%	1,799	39%	1,477	47%

Source: US Census Bureau (Table DP04, American Community Survey 2021)

	North Beacon Hill		Mid Beacon Hill		South Beacon Hill	
Owner-occupied housing by race/ethnicity	**Population**	**%**	**Population**	**%**	**Population**	**%**
White alone	1,918	51%	2,203	68%	662	60%
Asian alone	2,324	63%	4,737	73%	3,006	66%
Hispanic/Latino alone	155	10%	242	25%	173	40%
Black alone	306	33%	675	37%	460	18%
Two or more races	138	35%	267	51%	151	42%
Some other race	65	7%	108	22%	100	47%
Total non-White alone	2,988	40%	6,029	59%	3,890	48%

Source: U.S. Census Bureau (Decennial Census 2010)

Homeownership Summary Tables

	Census Tract 94		Census Tract 100.01		Census Tract 100.02		Census Tract 104.01		Census Tract 104.02		Census Tract 110.01		Census Tract 110.02			
Status	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Total	% Total
Renter-occupied	1,816	58.50%	956	58.80%	985	49.90%	423	30.50%	420	26.40%	990	54.20%	487	37.60%	6,077	47.45%
Owner-occupied	1,287	41.50%	671	41.20%	990	50.10%	965	69.50%	1,171	73.60%	836	45.80%	809	62.40%	6,729	52.55%

Source: US Census Bureau (Table DP04, American Community Survey 2021)

	North Beacon Hill				Mid Beacon Hill						South Beacon Hill						
	Census Tract 94		Census Tract 100.02		Census Tract 100.01		Census Tract 104.01		Census Tract 104.02		Census Tract 110.01		Census Tract 110.02		Total		
Homeownership by Race/Ethnicity	Population	%	Population	%	Population	%	Population	%	Population	%	Population	%	Population	%	Population Total	% Total	Source
White alone	986	48%	932	56%	764	68%	604	71%	835	66%	359	56%	303	66%	4,783	59%	Table H11A Decennial Census 2010
Asian alone	1,160	57%	1,164	69%	667	49%	2,088	80%	1,982	79%	1,151	58%	1,855	73%	10,067	68%	Table H11D Decennial Census 2010
Hispanic/Latino alone	76	8%	79	13%	29	7%	106	57%	107	32%	120	48%	53	29%	570	20%	Table H11H Decennial Census 2010
Black alone	164	27%	142	46%	153	19%	332	53%	190	47%	295	21%	165	15%	1,441	27%	Table H11B Decennial Census 2010
Two or more races	55	28%	83	43%	72	49%	77	53%	118	50%	69	37%	82	47%	556	43%	Table H11G Decennial Census 2010
Some other race	35	6%	30	9%	15	6%	39	43%	54	37%	60	56%	40	39%	273	17%	Table H11F Decennial Census 2010