

LAKE CHELAN HEALTH

2023 – 2025 Community Health Needs Assessment

Adopted by Chelan County Public Hospital District No. 2 Board of Commissioners
December 20, 2022



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Executive Summary

Lake Chelan Health (LCH), originally known as Lake Chelan Community Hospital opened in 1948; and became a Public Hospital District, Chelan County Public Hospital District No 2, in 1969. The current hospital facility opened in 1972 and became a Critical Access Hospital in 2004 after meeting the federal and state designation requirements in the Washington State Rural Health Plan and all applicable Medicare Conditions of Participation.

Mission:

To provide patient centered, quality healthcare with compassion and respect.

As our community grows, the elected Board of Commissioners and hospital leadership recognize the need for available, high quality, medical services close to home. Today, LCH offers a full range of medical services, including surgery, inpatient care, childbirth services, medical imaging, emergency department (ED), and community wellness programs. The District's Emergency Medical Services operates a full paramedic-level ambulance service and Community Paramedicine Program.

In the spring of 2017, District residents approved a bond to support the construction of a new hospital. Construction of the replacement hospital began in early 2021; and the official Ribbon Cutting Ceremony was conducted in October of 2022. The new hospital has private patient rooms, larger birthing rooms, increased ED and outpatient capacity, and improved space for physical and occupational therapy, laboratory, radiology, and surgery departments.

CHNAs became a federal requirement for not-for-profit hospitals under the Patient Protection Act and Affordable Care Act. It is now also a State requirement. Under the CHNA statutes, not-for-profit hospitals are required to conduct a comprehensive assessment of community health needs and a plan for meeting those needs at least once every three years. LCH finds great value in the process; and is committed to working in partnership with the community to plan for and achieve a healthy Lake Chelan Valley.

This CHNA is key to our commitment and includes a thorough evaluation of the numerous health and social factors impacting the length and quality of life of residents of the District, including health behaviors, social and economic factors, clinical care, and physical environment.

Importantly, the community had a strong voice in this process, both in terms of issues of importance and in identifying priorities for the next three years. The specific community engagement process and the results of that process are described in the Community Engagement Section at the end of this report.



2020-2022 Accomplishments and COVID-19 Response

In 2019, LCH participated in a regional Community Health Needs Assessment (CHNA) covering the North Central region of Washington State (including Chelan, Douglas, Grant, and Okanogan counties). This CHNA identified several key priorities that were agreed to by all participating providers for the 2020-2022 time period including: Access to Care, Affordable Housing, Chronic Disease, Education, and Substance Use.

While LCH’s commitment to these priorities remains, not too long after the publishing of that report, COVID-19 impacted the community and required LCH to redeploy its resources.

COVID’s Impact on the County was Significant and Cases, Hospitalizations and Deaths Were Higher than the in Rest of the State.

Exhibit 1. Rates per 100,000 Population of Cases, Hospitalizations and Deaths As of 8/8/2022				
	7-Day Case Rate	14-Day Case Rate	7-Day Hospitalization Rate	7-Day Death Rate
Chelan County	77.8	175.7	6.3	1.3
Washington	67.4	154.2	4.5	0.6

COVID’s impact on the County and Lake Chelan Valley has been both real and measurable. At the time of this writing, there have been over 1.8 million total cases of COVID-19 in Washington State, and over 23,000 in Chelan County, resulting in over 1,000 hospitalizations and nearly 200 deaths. As identified in **Exhibit 1**, as of October 2022, Chelan County continues to have COVID case, hospitalization and death rates that exceed that of Washington State.

2019 North Central Washington CHNA Priorities

Access to Care (Behavioral and Physical Health)

- *Insufficient number of providers (primary care, dental, and specialists)*
- *Lack of awareness of and how to access behavioral health resources*
- *High cost of healthcare*
- *Insurance challenges – high rate of those without insurance, and lack of providers (especially dentists) who accept Medicare/Medicaid*

Affordable Housing

- *Identified as the #1 most important factor that will improve the quality of life in the community*

Chronic Disease

- *Emphasis on overweight/obesity*

Education

- *Limited education levels and literacy, which includes health literacy*

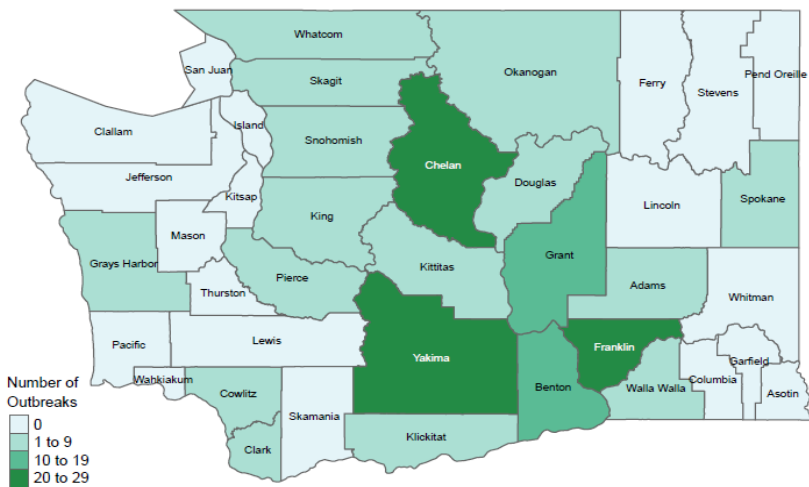
Substance Use

- *Drug abuse, alcohol abuse and Opioid use*



A June 2022 Washington State Department of Health report entitled *COVID-19 Outbreaks in Washington State Agriculture and Food Manufacturing Settings*, explained that Counties like Chelan that are heavily reliant on agriculture and food manufacturing and have employer-provided housing, produce packing areas, animal production and product settings where workers were in close proximity, experienced some of the highest COVID-19 outbreaks (see **Exhibit 2**).

Exhibit 2. Map of reported COVID-19 outbreaks in agricultural, employer-provided housing, and produce packing areas in Washington State from March 1, 2020 to December 31, 2020.



According to the report, agriculture and food manufacturing employees often live, socialize, commute, and work together, and State analysis showed that these cases were epidemiologically linked in the congregate setting (e.g., case-patients share a work shift or building, or benefit from employee sponsored transportation or housing). The study also found that the median age of those testing positive was 39, with 52.8% of cases being male. Disproportionately, 81.1% of the cases were from people of Hispanic origin.

On the Front Lines of the Pandemic: Access to Vaccines and a Commitment to Equity

To support broad access to vaccines, LCH provided vaccinations through multiple means, including setting up a drive-up vaccine clinic, implementing mass vaccination sites (in partnership with Public Health), and providing vaccinations in our clinics and at the hospital. Importantly, LCH was not only committed to the wide distribution of the vaccine, but also to ensuring equity. We advertised on radio, newspapers, signs, website, mailers, and in multiple languages. We used community-based organizations to help "find" people who needed help.



Also based on our strong determination to ensure equitable access to the COVID vaccine, we provided vaccinations through a mobile clinic. This allowed us to go to where people live, work and play. Mobile vaccines were delivered to the homeless, the jails, the orchards, agricultural packing sheds, all the adult family homes in the region, all the first responders in the region, nursing homes, businesses, schools, food banks and senior centers.

In addition to administering close to 10,000 vaccines, LCH also provided testing through mobile and curbside methods, in the ED, and at outbreak locations (e.g., adult family homes), providing more than 18,000 tests to date. LCH also distributed approximately 10,000 in home test kits via our express care walk-in clinic and the hospital, and to community organizations.

Lake Chelan EMS and Community Paramedicine Program also partnered with Care Connect Washington to help provide support for those affected by COVID-19 in our community. Support included providing personal care kits, nonperishable food kits, and fresh food orders delivered to homes of persons actively isolating. Financial assistance was also provided if needed.

LCH has also been on the front line in terms of infection control and treatment, and acted quickly to implement employee, patient and visitor screening and control mechanisms to keep employees and patients safe. To do so, required developing specific isolation and treatment plans, implementing universal masking and Personal Protective Equipment (PPE) plans, developing crisis PPE reuse protocols, and implementing high infectious disease care procedures.

Lake Chelan Health COVID-19 Vaccinations: A Commitment to Reach Every Segment of the Valley's Population

Administered nearly 10,000 vaccines

Held more than 300 vaccine events

Provided testing through mobile and curbside
means

Developed one of the most innovative and efficient
COVID vaccinations program in the state,
delivering vaccines to the packing sheds and to the
most rural spot in the continental USA- Stehekin
and Holden village,

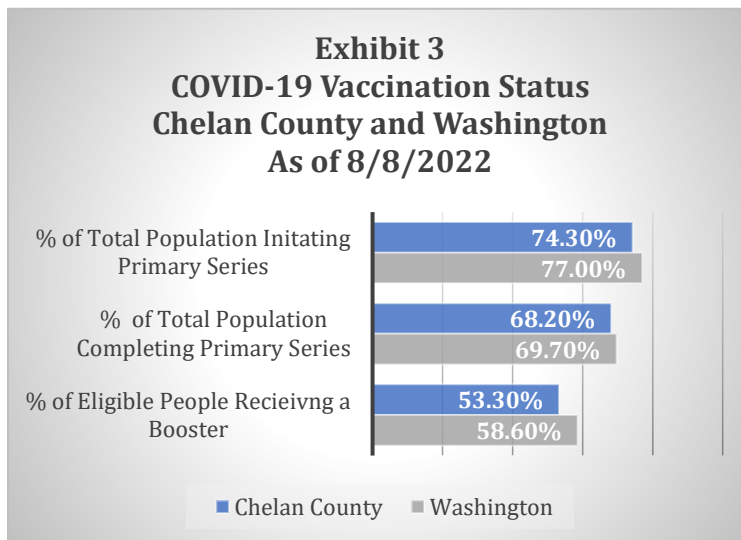
Efforts were recognized by CBS national news,
King 5 -Seattle, the Seattle Times, and Wenatchee
World.

Washington's Governor visited our mobile vaccine
clinic at Chelan Fruit.



Our Work Continues

As identified in **Exhibit 3**, while Chelan County had high rates of uptake for initiation of the primary vaccination series (nearly 70% of the total population), lower rates are being experienced for both completion of the primary series (60%) and the booster (54%). This trend is also apparent in the statewide data; and we are in process of community outreach to increase the rate of boosters.



Other Community Impacts

While much of the focus over the last several years has been on COVID itself, LCH is increasingly aware of, and responding to, the pandemic’s other profound impacts. For example, the mental health effect of COVID in the State, County and Valley mirror trends seen across the United States. According to the US Centers for Disease Control and Prevention’s Youth Risk Behavioral Survey Data Summary & Trends Report, “*persistent feelings of sadness or hopelessness*” increased by 40% among US high school students. Mental health professionals and organizations have been vocal about how the uncertainty, anxiety, changes in routine, and increased stress and isolation, have exacerbated mental health conditions in youth and adults alike.

The COVID-19 pandemic has also put extreme stress on the health care workforce, leading to workforce shortages as well as increased health care worker burnout, exhaustion, and trauma. These pandemic-related challenges have taken place in a context of significant preexisting workforce shortages and maldistribution, as well as in a workforce where burnout, stress, and mental health problems (including an ongoing risk of post-traumatic stress disorder) were already significant problems. Even after the pandemic, many of the effects the pandemic has had on the health care workforce will likely persist.

Keeping Our Focus on Other Needed Services and Health Care Facilities

While LCH played a key leadership role in COVID mitigation, testing and vaccinations in the Valley, LCH also worked to maintain access to quality care throughout our community. Importantly, LCH continued its focus on the replacement hospital because of the access that it will create. In addition, LCH established an express care/primary care clinic and initiated a swing bed program to address the post-acute care needs of our seniors.

While many of the COVID activities and accomplishments were not anticipated in our 2019 CHNA, they were all necessary; and in some cases, the staff and resources needed to respond to COVID delayed or diverted strategies from the 2020-2022 CHNA. LCH remains proud of the work we were able to accomplish during this time period. **Exhibit 4** identifies the targeted strategies outlined in the 2020-2022 CHNA and their current status.



Exhibit 4: 2019-2022 Priorities and Accomplishments

Priority Area: Access to Care (Behavioral and Physical Health)	<ul style="list-style-type: none"> ▪ Provided adult outpatient behavioral health services (discontinued in 2022). ▪ Implemented Take Action to Better Health Challenge including free blood pressure and glucose checks and body composition scans, and free exercise and nutrition education to participants. ▪ Provided adult exercise classes at Chelan Senior Center and via Zoom. ▪ Promoted physical health at the Chelan Earth Day Fair.
Priority Area: Affordable Housing	<ul style="list-style-type: none"> ▪ Worked collaboratively with the Chelan Valley Housing Trust (CVHT), including assisting CVHT in community outreach (including to LCH staff).
Priority Area: Chronic Disease	<ul style="list-style-type: none"> ▪ Lake Chelan Health EMS and Community Paramedicine Program provided home visits including free blood pressure and glucose checks. ▪ Delayed Chronic Disease Self-Management courses and Diabetes Self-Management courses in 2020, 2021 and 2022 due to COVID.
Priority Area: Education	<ul style="list-style-type: none"> ▪ Until March 2020, LCH provided high school students with the opportunity to learn about healthcare careers and take part in mentorship/internship programs. Due to COVID, LCH currently only offers college level/certification healthcare program students the opportunity to intern at the hospital. ▪ Wenatchee Valley College nursing students are trained at LCH.
Priority Area: Substance Use	<ul style="list-style-type: none"> ▪ Lake Chelan Hospital provided Sanctuary at the Lake chemical dependency and co-occurring disorders 28-day inpatient stay treatment program until March of 2020. LCH shut down the treatment program July of 2020.

The District: the Lake Chelan Valley Community

Located where the rugged snow-capped North Cascades meet the Eastern Washington desert, the Lake Chelan Valley is known for its pristine lake, warm weather and small-town community. Apple orchards, vineyards, golf courses and wineries patchwork the foothills sloping to glacier-fed Lake Chelan. At more than 50 miles long, the lake is one of the largest natural lakes in the nation. Upon the completion of Lake Chelan Dam in 1927, the elevation of the lake was increased by 21 feet to its present maximum-capacity elevation of 1,100 feet. Two communities lie on the southern end of the lake, and a third sits at the far north end, providing a gateway to the North Cascades National Park. The name Chelan is an Indigenous Salish word, "*Tsi - Laan*" meaning '*Deep Water*'.

In the summer, tourists flock to the Valley to enjoy sun and water sports. Fall harvest and grape crushes at the local vineyards make way for snow skiing and snowmobiling in the winter. As the snow melts, spring welcomes apple blossoms and community festivals. Lake Chelan Health works hard to be a good neighbor, providing excellent healthcare for both locals and visitors and promoting wellness throughout the Valley.

Service Area Definition

The 2022 CHNA process reflects a “deep dive” into community data that reflects a focus on District-specific needs. Map 1 shows that the District is comprised of four communities: Chelan (98816), Chelan Falls (98817), Manson (98831), and Stehekin (98852).

In order to better understand the needs of the District, the smallest reliable unit of data available for each topic was sourced. Throughout the CHNA different geographical units are used based on the available data: state, county, District, and zip code.

Exhibit 5. Map of The District



Demographic Overview

The District grew by approximately 1,200 residents between 2010 and 2022 (11.5%).

Exhibit 6 shows that two cohorts primarily drove the change: those aged 65 and over (54.1%) and those of Hispanic/Latino origin (18.9%). Today, about 35% of the District is of Hispanic/Latino origin and about 22% is over the age of 65. Projections for 2027 show that the District itself is going to grow by another 642 residents (5.5% change from 2022); with again, the largest growth being in those age 65+ and the Hispanic community. By 2027, nearly one of every four residents will be age 65+.

Exhibit 6. Hospital District Demographic Changes Over Time, 2010-2027

	2010	Pct of Tot Pop	2022 Est	Pct of Tot Pop	Pct Chg 2010-2022	2027 Proj	Pct of Tot Pop	Pct Chg 2022-2027
Tot. Pop.	10,413	100.0%	11,606	100.0%	11.5%	12,248	100.0%	5.5%
Pop. By Age								
0-17	2,603	25.0%	2,693	23.2%	3.5%	2,774	22.6%	3.0%
18-44	2,959	28.4%	3,562	30.7%	20.4%	3,823	31.2%	7.3%
45-64	3,170	30.4%	2,760	23.8%	-12.9%	2,642	21.6%	-4.3%
65-74	962	9.2%	1,668	14.4%	73.4%	1,996	16.3%	19.7%
75-84	477	4.6%	684	5.9%	43.4%	744	6.1%	8.8%
85+	242	2.3%	239	2.1%	-1.2%	269	2.2%	12.6%
Tot. 0-64	8,732	83.9%	9,015	77.7%	3.2%	9,239	75.4%	2.5%
Tot. 65 +	1,681	16.1%	2,591	22.3%	54.1%	3,009	24.6%	16.1%
Hispanic	3,435	33.0%	4,085	35.2%	18.9%	4,431	36.2%	8.5%
Fem. 15-44	1,675	16.1%	1,916	16.5%	14.4%	2,042	16.7%	6.6%

Source: Nielsen Claritas, District is comprised of the following zip codes: 98816, 98817, 98831, 98852



Social Determinants of Health

Social determinants of health are conditions within the environment in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, and local emergency/health services.

Basic social and economic supports—good schools, stable family-wage jobs, and strong social networks—are foundational to achieving long and healthy lives. For example, employment providing family wage jobs shapes opportunities around housing, education, childcare, food, medical care, and more. In contrast, unemployment limits these choices and the ability to accumulate savings and assets that can help cushion in times of economic distress.

Poverty and ALICE Households

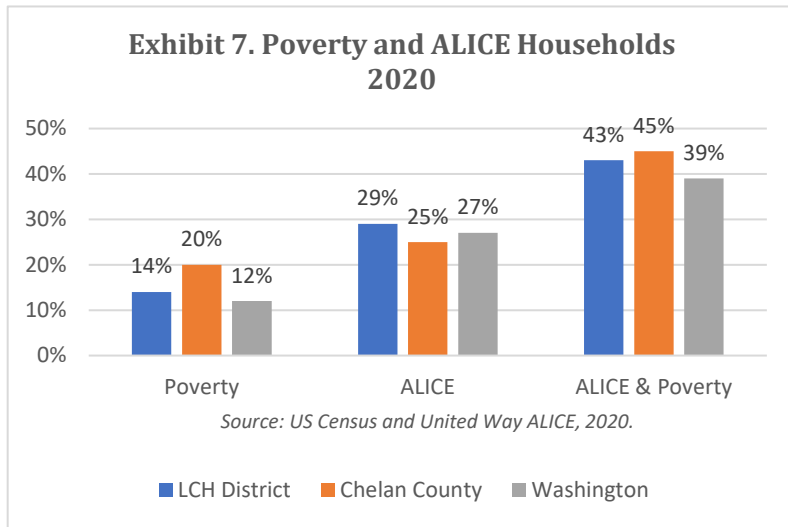
Poverty is defined by family size and income and is the primary measure of financial stability. However, many families living above the poverty line still struggle to make ends meet. As identified in **Exhibit 7**, the percent of the population in the LCH District below the Federal Poverty level is significantly lower than the Chelan County population and more in line with the State. However, in terms of households that are struggling to meet even their most basic needs (ALICE households), the District has a higher percent of these households, as does Chelan County.

What is an ALICE Household?

ALICE is an acronym for Asset Limited, Income Constrained, Employed. ALICE is a way of defining and understanding the struggles of households that earn above the Federal Poverty Level, but not enough to afford a bare-bones household budget.

For far too many families, the cost of living outpaces what they earn. These households struggle to manage even their most basic needs - housing, food, transportation, childcare, health care, and necessary technology.

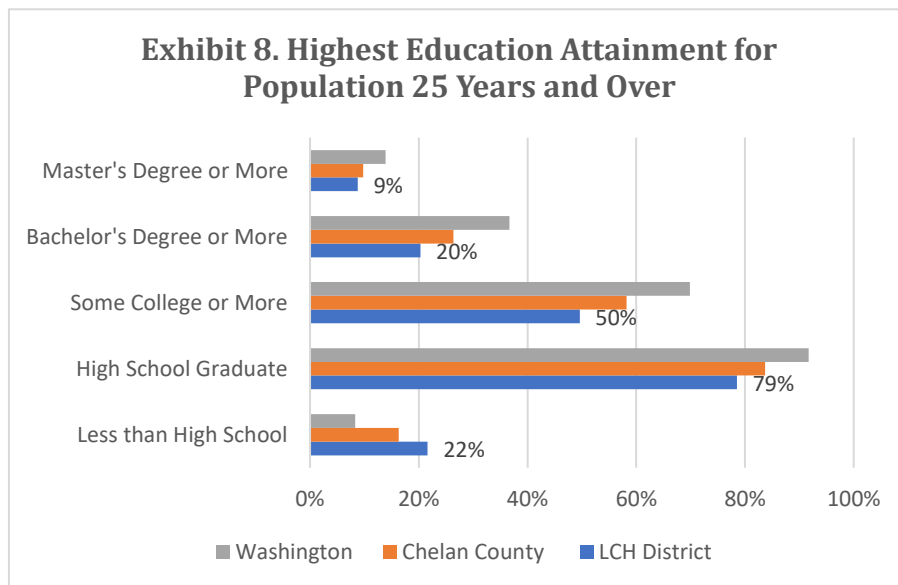
When funds run short, cash-strapped households are forced to make impossible choices, such as deciding between quality childcare or paying the rent, filling a prescription or fixing the car.



The United Ways of the Pacific Northwest, which produces the ALICE report has evaluated how poverty and ALICE affect different age groups. In the state of Washington, the age groups that have the largest portion of ALICE households are the under-25 and the over-65 age cohorts. The under-25 age cohort in Washington has an ALICE rate of 32%. The over-65 age cohort has a similar rate of 31% (compared to 27% overall).

Education

Education is a key factor in supporting child and youth development, skill-building for future jobs and/or secondary education, and for supporting adults in job training or career development. Poverty in early life can negatively impact educational outcomes. Higher educational attainment is linked to higher future income. Research also suggests education is one the strongest predictors of health.

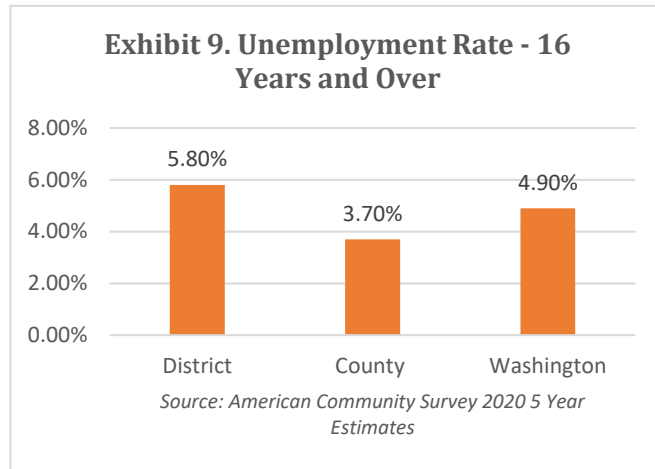


As identified in **Exhibit 8**, the District has lower educational attainment as compared to the County and State. 22% of the population 25 years of older in the District has less than a high school education, compared to 16% in the County and 8% Statewide. About 20% of the District population over 25 has a Bachelor's Degree or more, a rate nearly half the rate of the State.



Unemployment

A steady job in safe working conditions means more than simply a paycheck—employment can also provide numerous benefits critical to maintaining proper health. Conversely, job loss and unemployment are associated with a variety of negative health effects. Unemployment has been linked to poor health and stress related conditions such as stroke, heart attack, heart disease or arthritis. As seen in **Exhibit 9**, the unemployment rate in the District (5.8%) exceeds that of the County (3.7%) and the State (4.9%) in 2020.



Food Insecurity

Lacking consistent access to a nutritious, balanced, sufficient amount of food is called “Food Insecurity,” and it is related to negative health outcomes such as weight gain and premature mortality.

Exhibit 10. Food Related Indicators

	Washington State	Chelan County
Child Food Insecurity Rate	14%	16%
Overall Food Insecurity Rate	10%	11%
Food Environment Index*	8.3	8.2

Sources: Feeding America, US Census American Fact Finder, RWJF County Health Rankings

As identified in **Exhibit 10**, in Chelan County and Washington State, approximately 1 in 6 children are food insecure and about 10% of all residents are identified as food insecure. The Food Environment Index includes factors that contribute to a healthy food environment (proximity to healthy foods and income), from 0 (worst) to 10 (best). Chelan County and the State rank on the higher end in terms of the factors that contribute to a healthy food environment.



Housing

Housing cost burdened households are those that spend 30% or more of their household income on housing. As identified in **Exhibit 11**, in the District, nearly 25% of homeowners classify as cost burdened households, a rate higher than in both Chelan County (19.8%) and Washington (23.7%). 5.5% of District homeowners are additionally classified as “severe housing cost burdened households”, those that spend more than 50% of their household income on housing.

Severe housing problems refers to the percent of households that have at least 1 of 4 housing problems (overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities). As identified in **Exhibit 11**, 14% of Chelan County households are classified as having severe housing problems, a rate better than the state. This data is not available at the District level.

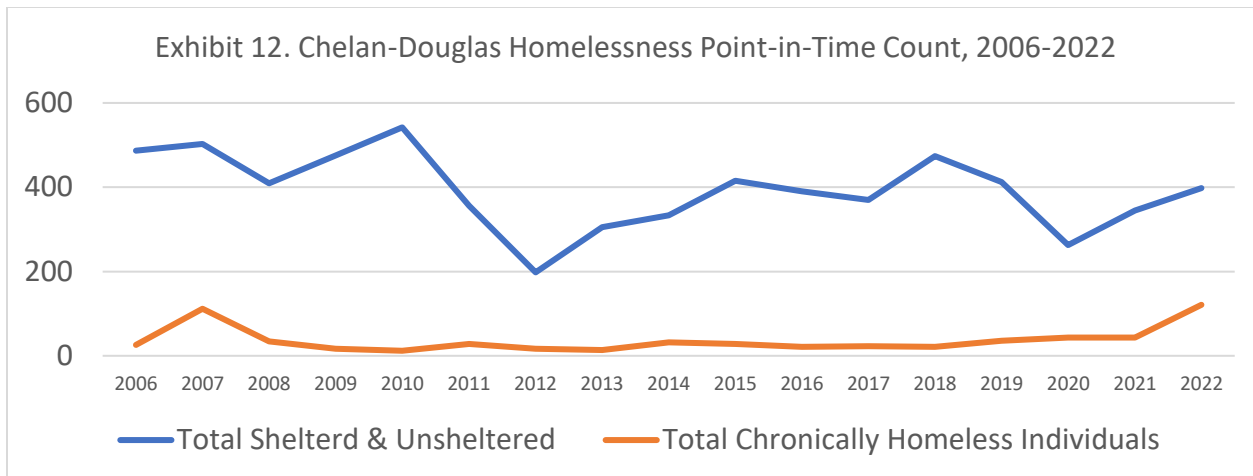
Exhibit 11. Housing			
Indicators	LCH District	Chelan County	WA
Cost Burdened Households	24.9%	19.8%	23.7%
Severely Cost Burdened Households	5.5%	7.1%	8.6%
Severe Housing Problems	NA	14%	17%
<i>Source: American Community Survey 2020 5-year estimates; RWJ County Health Rankings</i>			

Homelessness

The health of a community can be measured by the well-being of the least stable. Long-term homelessness cuts an average of 20 years off the lifespan of a person. It also reduces their productivity and increases the burden their presence places on the community. In short, homelessness exacts cost on everyone – those with shelter and those without.

Point-in-time counts are done every year to better understand the population of individuals who are experiencing chronic and acute homelessness. Up until 2019, the counties of Chelan and Douglas did a joint point in time count. This was restarted in 2022. **Exhibit 12** shows the change over time in the number of people who are experiencing homelessness. In the 2020 combined measure, of the two Counties, Chelan County made up 94% of the total sheltered and unsheltered homeless individuals and 100% of the chronically homeless individuals. This means that it is expected that almost 375 people per day are homeless in Chelan County, 25% of which are chronically homeless.

Chronic homelessness refers to those who have been homeless while struggling with a serious mental illness, substance use disorder, or physical disability. These individuals live in impermanent and inhabitable places, and have been unhoused for at least a year, or four episodes over the last three years.

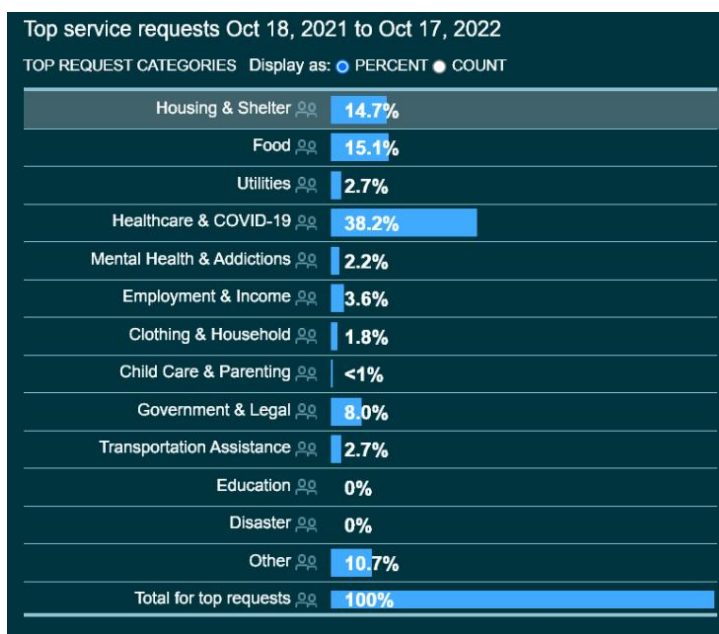


Source: Washington Department of Commerce.

2-1-1 Counts

Washington 2-1-1 is the state’s relatively new “go to” system for Washingtonians in need of accurate community health and human service information and referrals. 2-1-1- is a free confidential community service and one-stop connection to local services needed such as utility assistance, food, housing, health, childcare, after school programs, elder care, crisis intervention and more. The pandemic has radically changed the system given the increase in calls for vaccination appointments. **Exhibit 13** shows that between October 2021 and October 2022 over 1/3 of the 225 requests coming from the District were related to healthcare and COVID-19 (49.7%). The same data shows that of the 14.7% of housing and shelter requests over half (57.6%) were for rent assistance – highlighting the economic impact of the COVID-19 pandemic.

Exhibit 13: District 2-1-1 Count



Source: Washington State 2-1-1 Counts, 2022

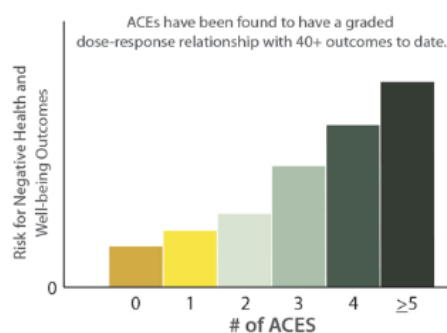
Adverse Childhood Experiences (ACEs) and Trauma

Adverse Childhood Experiences, or ACEs, are traumatic events that occur in childhood and cause stress that changes a child’s brain development. As identified in **Exhibit 14**, exposure to ACEs has been shown to have adverse health and social outcomes in adulthood, including but not limited to depression, heart disease, COPD, risk for intimate partner violence, and alcohol and drug abuse. ACEs include emotional, physical, or sexual abuse; emotional or physical neglect; seeing intimate partner violence inflicted on one’s parent; having mental illness or substance abuse in a household; enduring a parental separation or divorce; and having an incarcerated member of the household.

Exhibit 14: Association between ACEs and Negative Health Outcomes

ACEs can have lasting effects on....

-  Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)
-  Behaviors (smoking, alcoholism, drug use)
-  Life Potential (graduation rates, academic achievement, lost time from work)



*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.

Source: Centers for Disease Control & Prevention, “Association Between ACEs and Negative Outcomes”

The CDC’s Behavioral Risk Factor Surveillance System (BRFSS) is the nation’s premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.

Exhibit 15 indicates that the percent of Chelan County residents who report having three or more ACEs has increased since 2011 (16.3% to 24.2%). In 2019, over 24% of County residents reported having 3 or more ACEs, compared to approximately 26% in the State. The District (where responses are captured but represent an “n” of <25) shows that residents have reported slightly less ACEs between 2019 and 2021.

Exhibit 15. ACE Scores

Score	2011			2019		
	District	Chelan County	WA State	District	Chelan County	WA State
One to Two	30.4%	35.6%	35.6%	22.7%	26.8%	35.0%
Three to Five	17.4%	14.1%	19.7%	18.2%	21.0%	20.1%
6 or More	4.3%	2.2%	4.8%	0.0%	3.2%	5.8%
% 3 or more	21.7%	16.3%	24.5%	18.2%	24.2%	25.9%

Source: BRFSS 2011, 2019 Data. District n<25.



Health Status and Health Outcomes

Leading Causes of Death

Leading causes of death are widely used as an indicator of a population's overall health status or quality of life. Cause-of-death ranking is a useful tool for illustrating the relative burden of cause-specific mortality. Analysis of mortality by cause is essential for the development of prevention strategies. While the rates in Chelan County are lower than in the State, in 2020, cancer was the leading cause of death, followed by cardiovascular disease (see

Exhibit 16). Risks for each of these diseases can be reduced through controlling key risk factors (including smoking, obesity, lack of exercise). COVID-19 was the fifth leading cause of death in the County; and the third leading cause in the State.

Physical Health

Chronic conditions including obesity, diabetes, and high blood pressure, are known to have broad impacts on physical, social, and mental well-being and cause significant morbidity and mortality. The District performs better than the County and the State in terms of the self-reported prevalence of obesity and diabetes in the District. In terms of high blood pressure, the District is in line with both the County and State (see **Exhibit 17**).

Exhibit 16. Leading Causes of Death in Chelan County, Age-adjusted death rate per 100,000, 2020		
	Chelan County	Washington
Cancer	119.1	135.7
Cardiovascular Disease	106.3	131.3
Alzheimer's Disease	80.6	41.7
Accidents	43.0	51.4
COVID-19*	31.5	35.8
Chronic Lower Respiratory Disease	30.9	28.9
Cerebrovascular Disease	22.6	33.9
Diabetes Mellitus	18.5	22.2
Chronic Liver Disease and Cirrhosis	NA	28.9
<i>Source: Washington State Department of Health, All Deaths – County and State Dashboards. *COVID was only measured in 2020 data and beyond.</i>		



Exhibit 17: Chronic Health Conditions					
Indicators	Percentage	Geography	Better than WA	Equal to WA	Worse than WA
Adult obesity -Percentage of adults who report a body mass index (BMI) greater than or equal to 30 kg/m2	21%	The District	●		
	28%	Chelan County		●	
Diabetes - Have you ever been told you have diabetes?	8%	The District	●		
	10%	Chelan County			●
High Blood Pressure -Have you ever been told you have HBP?	38%	The District		●	
	37%	Chelan County	●		

Sources: Washington Behavioral Risk Factor Surveillance System 2011-2019, RWJF County Health Rankings 2022

Measuring health-related quality of life helps characterize the experience of people with disabilities and people living with chronic conditions. Self-reported days of feeling physically unwell are demonstrated in the data to be reliable estimates of recent health.

In addition, a study examining the validity of healthy days as a summary measure for county health status found that counties with more unhealthy days were likely to have higher unemployment, poverty, percentage of adults who did not complete high school, mortality rates, and prevalence of disability than counties with fewer unhealthy days. As identified in **Exhibit 17a**, Chelan County ranks worse than the state in terms of both the number of self-reported poor or fair health and in terms of the average number of poor physical health days in the last thirty days.

Exhibit 17a: Physical Health Indicators		
	Chelan County	Washington State
Poor or Fair Health	19.0%	16.0%
Poor Physical Health Days	4.2	3.9

Maternal and Infant Health

Early and regular prenatal care is vital to women and infants. Local access to prenatal services reduces out-of-pocket costs and transportation barriers for rural patients. When care is not local, we know that travel to services can and does result in delayed initial prenatal care visits, missed return visits, and late identification of obstetric complications.

As identified in **Exhibit 18**, Chelan County fares better than the State on key maternal health indicators, with the exception of a slightly higher percentage of underweight births.

Source: Washington State Department of Health Tracking Network (2017-2021).



Exhibit 18: Maternal Health Indicators		
	Washington	Chelan County
Underweight at Birth – less than 2,500 grams	2.2%	2.4%
Preterm births – babies born at less than 37 weeks of gestation (Rate per 1,000 live births)	8.7%	8.1%
Maternal smoking	6.4%	6.1%
1st trimester prenatal care percentage	74.4%	78.4%

Health Behaviors

Health behaviors are actions individuals take that affect their health. They include actions that lead to improved health, such as eating well and being physically active, and actions that increase one’s risk of disease, such as smoking and excessive alcohol intake.

In the United States, many of the leading causes of death and disease are attributed to unhealthy behaviors. For example, poor nutrition and low levels of physical activity are associated with higher risk of cardiovascular disease, type 2 diabetes, and obesity. Tobacco use is associated with heart disease, cancer, and poor pregnancy outcomes if the mother smokes during pregnancy. Excessive alcohol use is associated with injuries, certain types of cancers, and cirrhosis.

Behavioral Health

Behavioral health includes both mental health conditions and substance abuse disorders. Behavioral health is an integral aspect of overall health. Data (**Exhibit 19**) show that Chelan County is similar to Washington state in several key behavioral health indicators, including poor mental health days and excessive drinking (includes binge and heavy drinking). The 2022 rankings show that drug overdose deaths are significantly higher in the County than the state.

While it is a positive sign that adults in Chelan County are not doing worse than Washingtonians overall on these measures, the data show that more than 1 in 6 Chelan adults drinks heavily—enough to negatively impact their health and wellbeing and put them at risk for alcohol dependence.



Exhibit 19. Adult Behavioral Health Indicators

	Chelan County	Washington State
Poor Mental Health Days (Average number of mentally unhealthy days reported in the past 30 days - age-adjusted)	4.4	4.4
Excessive Drinking (Percentage of adults reporting binge of heavy drinking - age-adjusted)	17%	16%
Smoking (Adult smoking is the percentage of the adult population who both report that they currently smoke every day or most days and have smoked at least 100 cigarettes in their lifetime)	15%	13%

Source: RWJF County Health Rankings 2022

Additional data from BRFSS (**Exhibit 20**), which allows for a look at District resident behavioral health indicators shows that District residents are less likely than Washingtonians to report a depressive disorder, are less likely to be receiving treatment, yet report worse mental health. This data illustrates a unique situation in the District where residents are reporting poorer mental health than Washingtonians but are not reporting more treatment. This data was collected pre-pandemic, which has been shown to have negatively affected mental health.

Table 20. Behavioral Health Indicators by District and Chelan County

Indicators	%	Geography	Better than WA	Equal to WA	Worse than WA
Adult depressive disorder (Adults who reported being told they have a depressive disorder)	3%	The District	●		
	14%	Chelan County	●		
Adult receiving mental health treatment - (Adults who reported that they are now taking medicine or receiving treatment from a doctor or health professional on mental health condition)	10%	The District			●
	22%	Chelan County		●	
Adult poor mental health -(Adults who reported that their mental health was "not good" between one and 30 days in the past 30 days)	7%	The District			●
	5%	Chelan County		●	

Sources: Washington Behavioral Risk Factor Surveillance System 2011-2019.

Youth

The National Institutes of Health (NIH) report that adolescents have the highest percent of any age cohort for anxiety and depression, as well as suicide being the second leading cause of death, for the same age cohort. A March 2022 CDC study provided data on the mental health of U.S. high school students during the COVID-19 pandemic. According to the new data, in 2021, more than a third (37%) of high school students reported experiencing poor mental health during the COVID-19 pandemic, and 44% reported they persistently felt sad or hopeless during the past year.



The Report also described some of the severe challenges youth encountered during the pandemic:

- More than half (55%) reported they experienced emotional abuse by a parent or other adult in the home, including swearing at, insulting, or putting down the student.
- 11% experienced physical abuse by a parent or other adult in the home, including hitting, beating, kicking, or physically hurting the student.
- More than a quarter (29%) reported a parent or other adult in their home lost a job.

According to the Report, the pandemic created traumatic stressors that have the potential to further erode students' mental wellbeing. The Report concluded that surrounding youth with the proper support can reverse these trends.

In Washington State, the Healthy Youth Survey (HYS) is a collaborative effort of the Office of the Superintendent of Public Instruction, the Department of Health, the Department of Social and Health Service's Division of Behavioral Health and Recovery, and the Liquor and Cannabis Board. It is intended to provide important information about youth in Washington. The information from the Healthy Youth Survey can be used to identify trends in the patterns of behavior over time. Questions are asked about safety and violence, physical activity and diet, alcohol, tobacco and other drug use, and related risk and protective factors.

When looking at behavioral health indicators by grade level in the County, the data shows that each indicator has a unique pattern. For example, cigarette smoking peaked in the 12th grade, current marijuana use peaked in the 9th grade, and alcohol use peaked in the 10th grade. Mental health patterns also varied: considered attempting suicide rates peaked in the 9th grade, while depressive feelings peaked in 11th and 12th grades. It is important to note that there are limitations on applying this data to the District, based on underreporting by each of the local school districts.

Older Adults

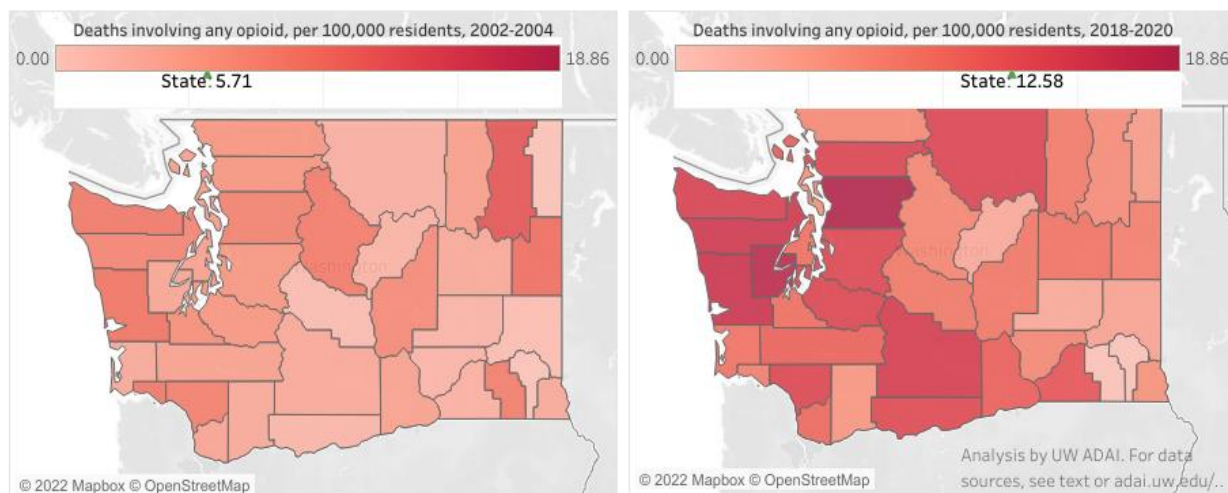
While adolescents have the highest rates of depression and anxiety, mental health needs among older adults are also pressing and often overlooked, sometimes due to generational differences in the perception of mental wellness. The CDC reports that "healthcare providers may mistake an older adult's symptoms of depression as just a natural reaction to illness or the life changes that may occur as we age, and therefore not see the depression as something to be treated. Older adults themselves often share this belief and do not seek help because they don't understand that they could feel better with appropriate treatment."

Nationwide, depression rates for older adults range from under 1% to about 5%, and increased to 11.5% in older hospital patients, and to 13.5% among those who require home care support.

The Opioid Epidemic

In the state of Washington, deaths involving any opioid, per 100,000 residents, was at 12.58 in 2018-2020. This is a 120% increase since 2002-2004. This trend is reversed in Chelan County, which has seen a drop in deaths involving any opioid by 14.0% in the same time period. **Exhibit 20** shows rates by county.

Exhibit 21. Opioid Death by County



Sources: University of Washington Alcohol & Drug Abuse Institute

While Chelan County has benefited from the drop in opioid-related mortality, the county has consistently had a higher opioid prescription rate than the state overall. According to Washington State Department of Health Data, between 2011 Q4 and Q3 of 2021 Chelan County has had a 45% reduction in the opioid prescription rate and has a similar prescribing rate as Washington overall. (In 2018, Chelan County had an opioid prescription rate 5.1% higher than the state.) Lowering the opioid prescription rate and putting in measures to reduce opioid mortality will benefit the Chelan County community.

Access to Care

Clinical care includes what people view as traditional medicine: primary care providers, vaccines, screenings, hospitals, etc. Access to these services means making sure all people can get these services in convenient, timely, and affordable ways; and data demonstrates that access to affordable, quality, and timely health care can prevent disease by detecting and addressing health concerns early. Understanding clinical care in our community helps us understand how we might improve the health of our neighbors.

Advances in clinical care over the last century, including vaccinations and preventive screenings, have led to significant increases in life expectancy. Clinical care and practice continue to evolve, with advances in care coordination leading to improved quality and availability of care.

Despite these advances, nationally, many individuals do not have access to a primary care provider and nearly 30 million Americans remain without health insurance, generally considered the entry portal to quality health care. In Washington State, the Affordable Care Act (ACA) initially led to a sharp decrease in the percentage of people who are uninsured.



However, a February 2021 report from Washington State Office of Financial Management indicates that there has been a slight increase in uninsured rates between 2016 and 2019 with rates going from 5.4% to 6.1% statewide. The same report shows an even greater increase in uninsured rates over the same timeframe in Chelan County (going from 6.2% to 10.4%). This data does not include the impact of job losses associated with the COVID-19 pandemic on these rates.

Even among individuals with health insurance, there are many barriers to accessing health care: high deductible costs, language barriers, long distance to a provider, or lack of specialists in their geographic area or health network. Those without regular access to quality providers and care are often diagnosed at later, less treatable stages of a disease than those with insurance, and, overall, have worse health outcomes, lower quality of life, and higher mortality rates.

Understanding access requires consideration of a wide range of factors: health of the community, provider ratios, health insurance rates, and socioeconomic factors.

As shown in **Exhibit 22**, even with the significant increase in those with health insurance, Chelan County still lags behind the state in health insurance rates.

Exhibit 22. Clinical Access Measures

	Chelan County	Washington State
Uninsured	12.0%	8.0%
Uninsured Adults	14.3%	8.9%
Uninsured Children (under 19 years)	3.0%	2.8%

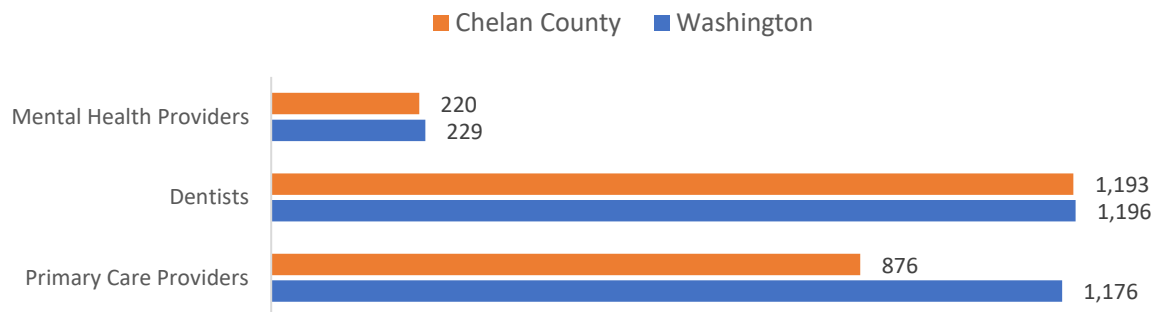
Sources: RWJF County Health Rankings 2022, US Census 2020 5-year estimates

[Health Care Workforce](#)

While uninsured rates are high for Chelan County, the county historically did well in a key component of access to health care: the ratio of primary care physicians to population. In the latest 2022 County Health Rankings (which used 2019 data), Washington has a primary care provider ratio of 1,218:1, whereas Chelan County has a ratio of 858:1, meaning there are more primary care physicians per capita in Chelan County than the state. Having more physicians per capita can improve access to primary care and lessens a community’s reliance on emergency services. **Exhibit 23** shows that Chelan County is on par with the state in regard to mental health provider ratio and is slightly worse than the state in the dentist to population ratio.



Exhibit 23. Ratio of Population to Healthcare Providers - 2019



Source: RWJF County Health Rankings 2022

Even though data is not available for the District, we know that there has been at least a disruption in primary care in the District, caused in part from the downsizing of LCH’s primary care. Data from the community survey, provided in the Community Engagement Section, shows that residents perceive a diminishment of access in the Valley and see recruitment and retention of a quality health care workforce as a key factor to health and wellbeing in the District. LCH will continue to work with Columbia Valley Community Health (CVCH); a federally recognized Community Health Center located in Chelan, and a longstanding partner, in addressing access.

Preventive Care

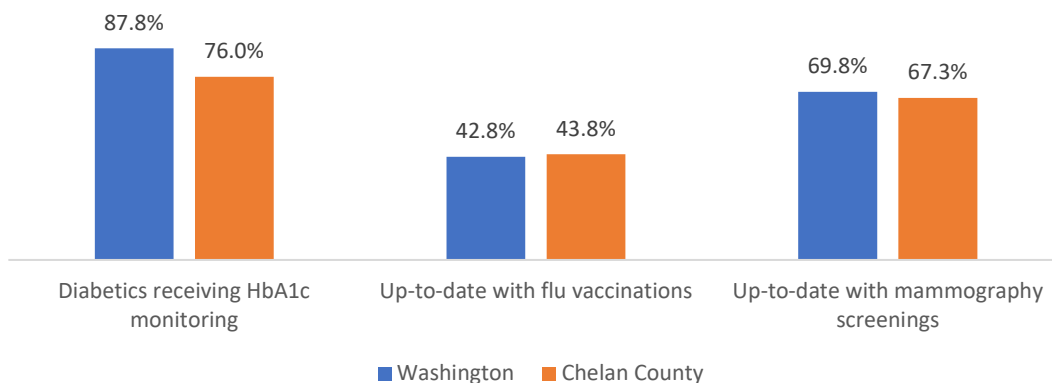
Key markers of access to health care in a community are the rates of preventive screenings and vaccines. Getting vaccinated prevents many life-threatening illnesses from ever occurring, and preventive screenings catch disease processes early so that treatments are more effective.

Chelan County’s rate of mammography screenings is slightly lower than the state (67.3% compared to 69.8%) and its rate for diabetic monitoring is much lower the state rate (**Exhibit 24**). It is important to note that disparities arise in these rates when broken down by race. Among Medicare recipients in Chelan County, white residents are more likely than Hispanic/Latino residents to have an up-to-date mammogram (40% vs. 34%).

Yearly influenza outbreaks can prove deadly to seniors, children, pregnant women, and people with asthma or who are immunocompromised, and vaccines prevent people from getting severe flu. The County and state have similar rates of flu vaccinations among fee-for-service Medicare recipients with approximately 44% vaccinated in the County compared to 43% in the state. Significant racial/ethnic disparities in flu vaccination exist, with only a quarter of Hispanic/Latino residents receiving a flu vaccine, compared with 32% of white residents.



Exhibit 24: Proportion of Medicare enrollees receiving appropriate preventive care



Source: Washington Behavioral Risk Factor Surveillance System 2011-2019.

Per Washington State Department of Health data, 67.3% of 18–35-month-old residents in Chelan County are up to date on immunizations in 2021, compared to 57.4% of 18-35-month-old residents in Washington state overall. The state and national goal is 80% for this population. Increasing efforts to improve immunization compliance at all ages will help safeguard Chelan County’s most vulnerable members.

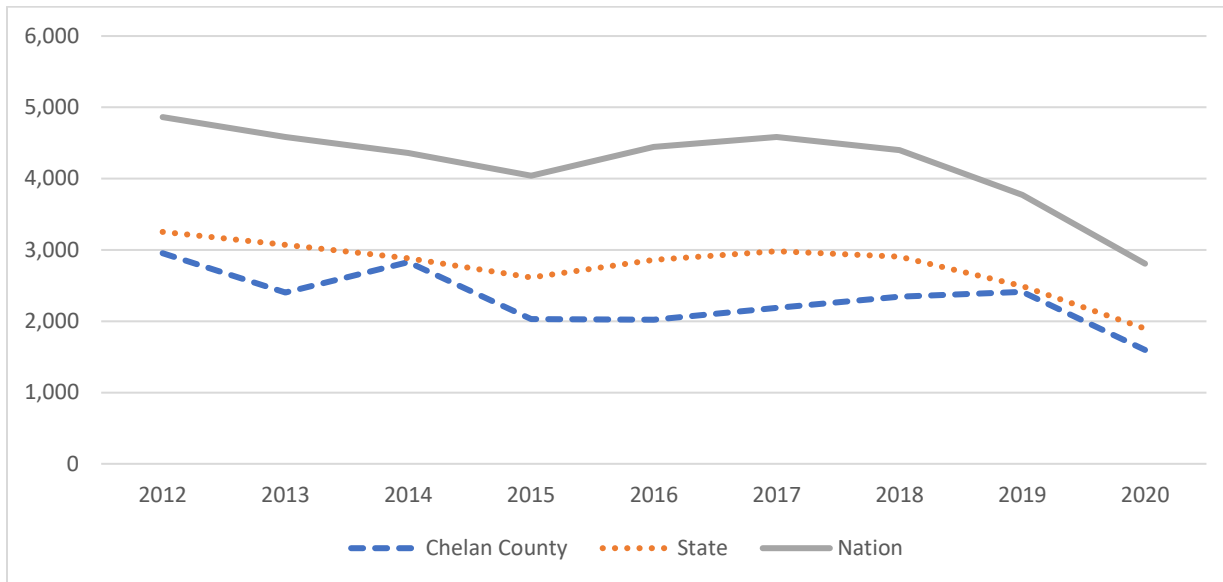
Preventable Hospital Stays

One measure to understand preventable hospital stays is the rate of hospitalizations for ambulatory care sensitive conditions (ACSC), which are conditions treatable in outpatient settings. Hospitalizations for these conditions, including diabetes and asthma, suggests inadequate care and management of these conditions in outpatient settings. This measure can also signify an overuse of hospitals as a main source of care. Hospitalization rates for ambulatory care sensitive conditions are often used as a proxy measure of access to primary health care in a community.

Prevention Quality Indicators, or PQIs, are used to identify ambulatory care sensitive conditions. **Exhibit 25** shows that for all PQIs Chelan County is below, or better, than either the state and national levels in 2017, meaning that it has fewer hospitalizations for ambulatory care sensitive conditions (ACSC). This 2017 number shows the continuance of trends across all levels, as Chelan County remains better than the state and national rates over time. When broken down further by age group, Chelan County continues to have fewer hospitalizations for ACSCs, indicating that Chelan County is doing better than the state and nation at treating these conditions outside of the hospital settings.



Exhibit 25. Prevention Quality Indicators (per 100,000 Medicare beneficiaries, per year)



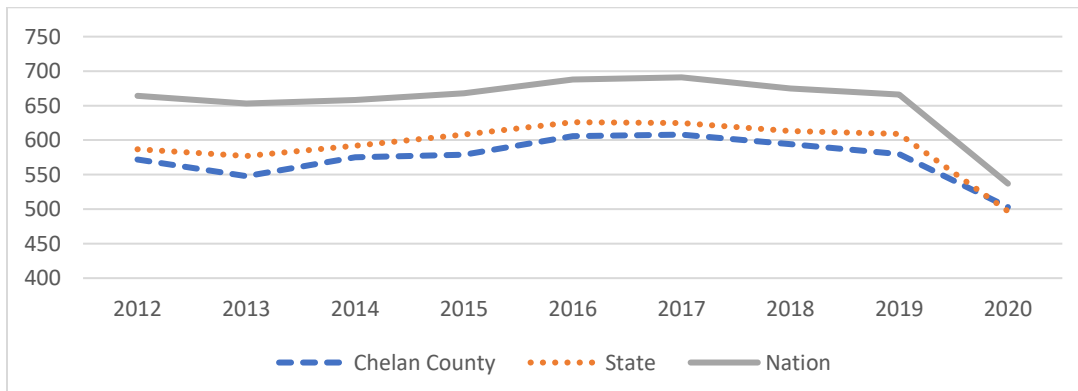
Source: Centers for Medicare & Medicaid Services Mapping Medicare Disparities Tool (PQI#90)

Emergency Department Visits

Emergency department (ED) visit rates is another measure that sheds light on the healthcare utilization of an area. Many people use the emergency department as a means of primary care. Per the CDC, 12.5% of nationwide ED visits in 2018 resulted in hospital admission.

Among Medicare recipients in 2020, ED visits have significantly dropped, likely attributable to COVID-19. Chelan County has a lower rate of ED visits than the nation and a similar rate to the state (**Exhibit 26**). This remains true for several age cohorts among older adults (<64, 65-74), except for the age groups of 75-84 and 85+. Chelan County’s ED visit rate for residents aged 85+ is higher than both the state and national rates, suggesting that injury (e.g., falls) prevention services for very elderly or other services to support aging in place may be lacking in Chelan County.

Exhibit 26. Emergency Department Visit Rate (per 1,000)



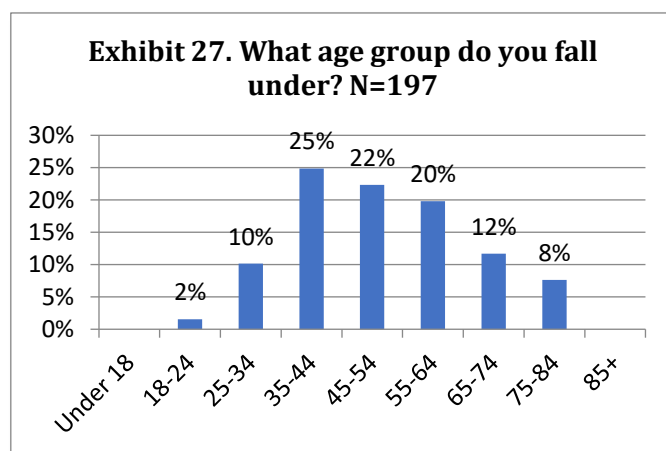


Community Engagement and Prioritized Community Health Needs

In May of 2022, LCH embarked on a community outreach/engagement effort to support data collection for this CHNA. We developed a survey, translated it into Spanish and asked our community partners to help distribute the survey via their social media sites, websites, and via their email listservs. Both school districts widely distributed the survey. We also distributed to staff and posted flyers in the community, as well as having hard copies of the survey in English and Spanish available in the Clinic.

LCH received 256 completed responses. Of those responses, 86% said they were responding personally, another 11% said they were responding on behalf of a community organization or personally and on behalf of a community organization (3% responded that they did not know or preferred not to answer). Of those that said they were responding on behalf of an organization, 67% said they were responding on behalf of a health care organization, 20% said on behalf of education, and 3% were from other community organizations.

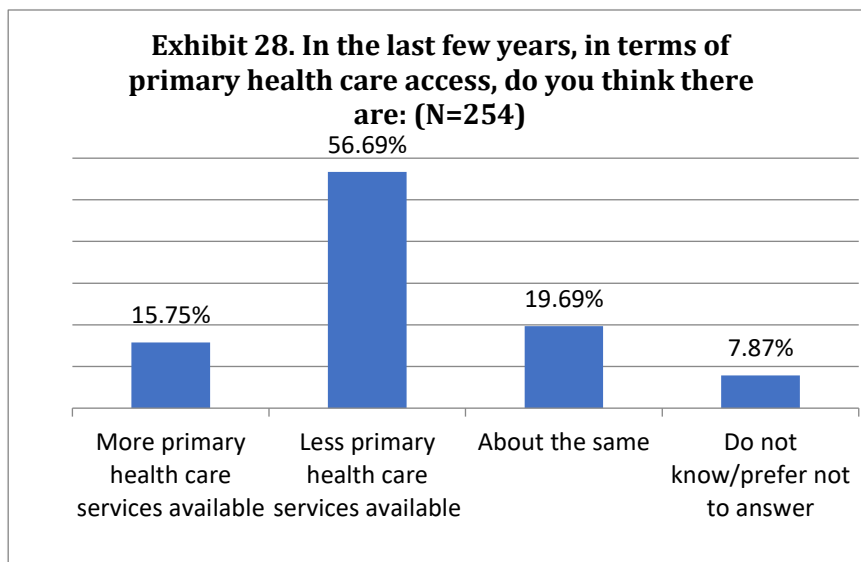
As shown in **Exhibit 27**, Respondents reported age ranged from 18 to 84 years old, with nearly 70% aged 35-64, very close to the distribution of this population within the District with the exception of those 18-34.



While specific community outreach focused on the Hispanic/Latino community; respondents were disproportionately white (71%). The Hispanic/Latino population represented 16% of respondents (significantly less than the Hispanic population’s percentage of the total population of 35%); and a total of 20% of respondents stated they spoke a language other than English at home.

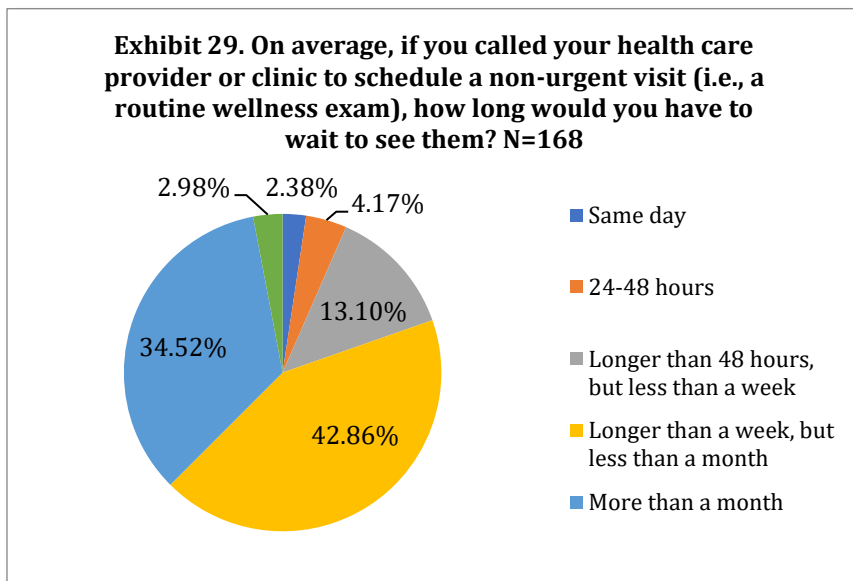
As LCH looks toward development of implementation strategies for this CHNA, we will engage the Hispanic community and further define strategies to outreach and engage.

One section of the survey focused on primary care access, asking the community for their perceptions on primary care access and availability. The results demonstrated significant community concerns in terms of both availability and access to care in the District. As identified in **Exhibit 28**, 57% of respondents thought there was less access to primary care in the community, with only 16% identifying there was more. Importantly, nearly 70% of respondents thought wait times to get into primary care services are getting worse.



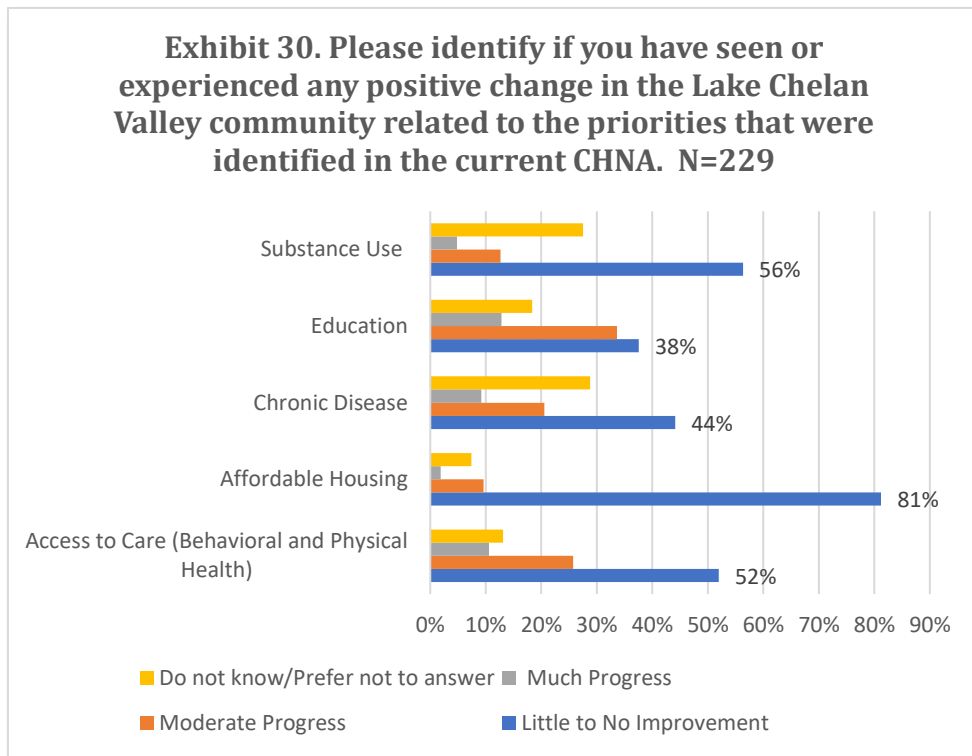
When respondents were asked if they had a regular health care provider, 86% said yes, and of those, 68% said their provider was located in Chelan and another 23% said Wenatchee. The Clinics most named by respondents as used for their regular health care needs were CVCH in Chelan or Wenatchee (71%) or Confluence Health Wenatchee Valley Clinics (21%).

When asked on average how long they have to wait to see their health care provider for a non-urgent visit, 43% of respondents said they had to wait more than a week, but less than a month. Another 35% said they had to wait more than a month. (Exhibit 29). Nearly 60% of respondents reported that these wait times were not reasonable, and 57% thought that wait times are getting worse.



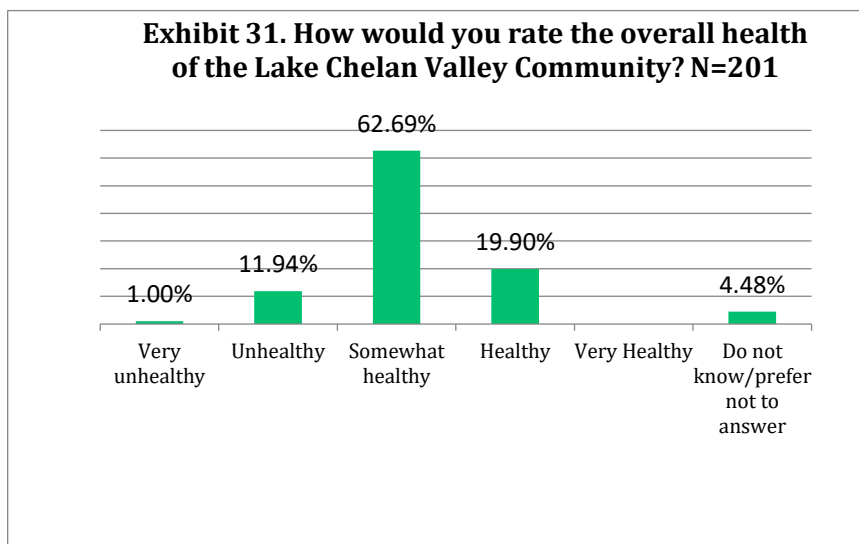


The survey also assessed respondents' insights on the regional priorities established in the 2020-2022 North Central Washington Regional CHNA. **Exhibit 30** demonstrates that a significant percentage of respondents had seen little to no improvement on the priorities identified in the last CHNA. More than 80% reported little improvement related to affordable housing. 56% reported seeing no to little improvement in substance use, and over half of respondents indicated that they had seen no to little improvement related to access to care. Note that respondents answering "do not know/prefer not to answer" was as high as 25%.



Survey respondents were also asked to rank the overall health of the Lake Chelan Community (**Exhibit 31**). The majority of respondents rated the community as somewhat healthy (62%); and 13% rated the community as unhealthy or very unhealthy.

To ensure an understanding of the community's perspective around health disparities in the Valley, respondents were asked the open-ended question: "Are you aware of any populations in the communities served by LCH that are less healthy or experiencing greater disparities?"



This question was open-ended with respondents writing in a response rather than responding to a list. As identified in **Exhibit 32**, nearly half of the responses identified the Hispanic/Latino population (25%) and the low-income population (20%) as experiencing greater disparities. 15% identified Youth and Seniors as experiencing inequalities.



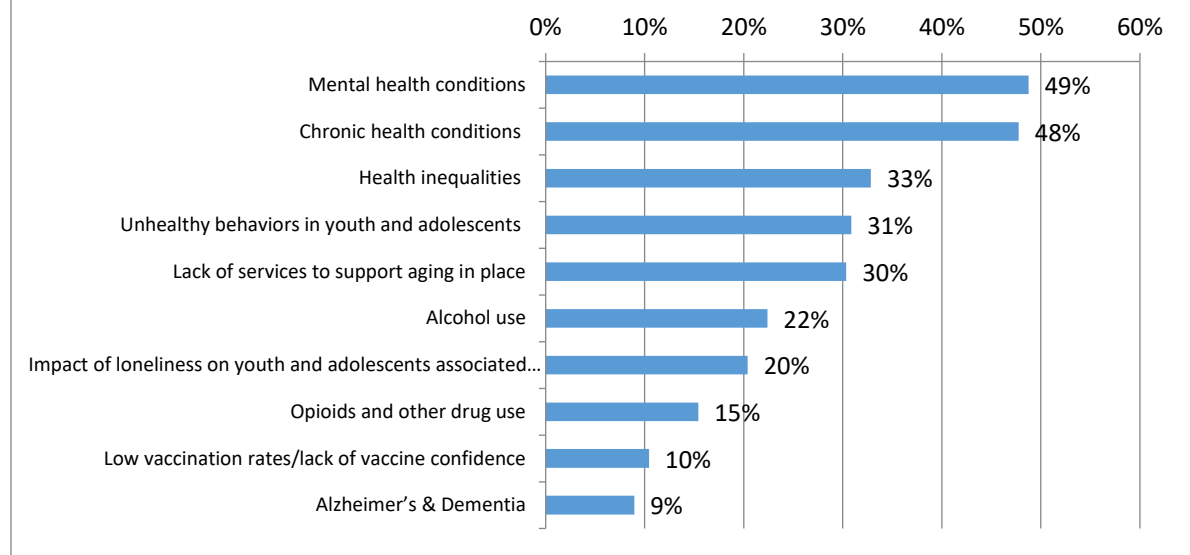
When asked to rank the three greatest health problems in the Valley (**Exhibit 33**), nearly half of respondents chose mental health conditions and chronic conditions as the greatest health problems. About one third of respondents saw health inequalities, unhealthy behaviors in youth and lack of services to support aging in place as one of the three greatest health problems.

When asked what the top three most important factors that will improve the health and quality of life in the community, two factors rose to the top: the ability to recruit and retain a quality healthcare workforce (65%) and affordable housing (55%). Other factors that were identified as important to improving the health and quality of life of the Valley were: better access to behavioral health services (38%), improved access to health care (32%), infrastructure that will support a healthy future - wellness centers, walking trails, exercise facilities (21%), and school connectedness.

Exhibit 32. Are you aware of any specific populations in the Lake Chelan Valley that are less healthy or are experiencing greater inequalities? N=180

Hispanic/Latino Population	25%
Low-Income Population	20%
People experiencing barriers to care (e.g., cost, availability, transportation, insurance status, immigration status)	18%
Youth	15%
Seniors/the Elderly	15%
People with Mental Health Issues	10%
Agricultural/Migrant Workers	10%

Exhibit 33. What do you think are the three greatest “health problems” in the Lake Chelan community?





Finally, participants were asked if they had any final thoughts regarding the health of their community. 79 respondents used this opportunity to draw attention to areas of concern. There was no limit to the number of concerns per response. As identified in **Exhibit 34**, 75% of the responses focused on struggles accessing care due to long wait times and not enough resources and a need for increased healthcare staffing. Need for more mental health supports and housing affordability were also in the top four responses provided.

Exhibit 34. Additional Thoughts Regarding the Healthcare Community	
Struggles Accessing Care due to long wait times and not enough resources	41%
Need for Increased Healthcare Staffing	34%
Need more Mental Health Support	16%
Housing Affordability	10%
Alcohol Culture is Problematic	8%
Youth Need More Supports	6%
Elderly Need More Supports	5%
Health Education is Needed	5%
Negative Impact of Tourism	5%
Transportation Services Needed	3%

Community Priorities

With a clear focus on ***access to care (with a particular focus on primary care), behavioral health services and supports (particularly for youth), recruitment and retention of quality workforce (including a focus on affordable housing), and support for aging in place for seniors***, the results of the community engagement process and data in this CHNA provide targeted priorities to support LCH’s Strategic Planning efforts and will guide the development of the CHNA Implementation Plan.

Implementation Plan

Over the next several months LCH will begin to laser focus on incorporating each of the prioritized community health needs into its strategic planning efforts. These efforts will focus on developing specific strategies for addressing each identified priority and will serve as the basis for the final CHNA Implementation Plan.

Consistent with 26 CFR § 1.501(r)-3, LCH will adopt its CHNA Implementation Plan on or before the 15th day of the fifth month after the end the taxable year in which the CHNA is adopted, or by May 15, 2023. Prior to this date, the Implementation Plan will be presented to the Board for review. Once approved, the Implementation Plan will be appended to this CHNA and widely disseminated. It will serve as LCH’s guidance for the next three years in prioritizing and decision-making regarding resources.