



2025 Geauga County Community Health Needs Assessment



**University
Hospitals**



Public Health
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Geauga Public Health

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Acronyms

AA – Alcoholics Anonymous

ACA – Affordable Care Act

ACAP – Association for Community Affiliated Plans

ACS – American Community Survey

BMI – Body Mass Index

BRFSS – Behavioral Risk Factor Surveillance System

CCA – Community Context Assessment

CDC – Centers for Disease Control and Prevention

CHNA – Community Health Needs Assessment

CHIP – Community Health Improvement Plan

CIT – Crisis Intervention Team

COVID-19 – Coronavirus Disease 2019

CPA – Community Partnership Assessment

CPAP – Continuous Positive Airway Pressure

CSA – Community Status Assessment

DAWN – Deaths Avoided with Naloxone

DARE – Drug Abuse Resistance Education

DFC – Drug-free Communities

EMS – Emergency Medical Services

ESCWR – Educational Service Center of the Western Reserve

F.A.S.T. – Face drooping, Arm weakness, Speech difficulty, Time to call 911

GCBDD – Geauga County Board of Developmental Disabilities

GCPL – Geauga County Public Library

GHTF – Geauga Hunger Task Force

GMHA – Geauga Metropolitan Housing Authority

HDAC – Health District Advisory Council

HMO – Health Maintenance Organization

HPSA – Health Professional Shortage Area

IRS – Internal Revenue Service

JFS – Job and Family Services

LEAP – Linking Employment, Abilities, and Potential

LGBTQ+ – Lesbian, Gay, Bisexual, Transgender, Queer (and others)

LGRC – Lake Geauga Recovery Centers

MAPP – Mobilizing for Action through Planning and Partnerships

MHRS – Mental Health and Recovery Services

NA – Narcotics Anonymous

NAMI – National Alliance on Mental Illness
ODH – Ohio Department of Health
OH – Ohio
ORC – Ohio Revised Code
PHAB – Public Health Accreditation Board
PSA – Prostate-specific Antigen
SHA – State Health Assessment
SHIP – State Health Improvement Plan
SNAP – Supplemental Nutrition Assistance Program
SOGI – Sexual Orientation and Gender Identity
SDOH – Social Determinants of Health
TRICARE – Military Health Insurance Program
UH – University Hospitals
US – United States
VA – Veterans Affairs
WHO – World Health Organization
WIC – Women, Infants, and Children Program
YAB – Youth Advisory Board
YCAPS – Youth Centered Approaches to Prevention and Support

Acknowledgements

The 2025 Geauga County Community Health Needs Assessment (CHNA) was guided by a Steering Committee composed of community-based organizations actively engaged in the county's health and human services landscape. Many of these partners had previously contributed to local planning efforts and seamlessly transitioned into the CHNA process beginning in late 2024 and continuing through the publication of this report.

Representing a diverse cross-section of agencies, including public health, healthcare, education, behavioral health, social services, housing, transportation, and aging services, members of the Geauga County CHNA Steering Committee brought vital community insight to the process. Their collaboration helped ensure that the 2025 CHNA was comprehensive, community-informed, and aligned with the shared goal of improving health outcomes and promoting health equity across Geauga County.

The Steering Committee provided contextual interpretation of both qualitative and quantitative data, validated local findings, and participated in a structured prioritization process to identify the most actionable health concerns emerging from the assessment.

Geauga Public Health and University Hospitals extend their sincere thanks to the local partners and community stakeholders who shared their time, knowledge, and perspectives to make this CHNA possible.

- Chagrin Falls Park Community Center
- Geauga County Board of Developmental Disabilities
- Geauga County Board of Mental Health & Recovery Services
- Geauga County Department on Aging
- Geauga County Educational Service Center
- Geauga County Jobs and Family Services
- Geauga County Planning Commission
- Geauga County Veteran's Services
- Geauga Metropolitan Housing Authority
- Geauga Park District
- Geauga Transit Department
- Kent-State Geauga
- Lake Geauga Recovery Centers
- Middlefield Care Center
- NAMI Geauga
- Ravenwood Mental Health
- United Way Services of Geauga County
- WomenSafe, Inc

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The 2025 Geauga County CHNA is available at the following locations:

Geauga Public Health

<https://gphohio.org/>

University Hospitals

<https://www.uhhospitals.org/about-uh/community-health/community-health-needs-assessment>

Written Comments

Community members are invited to share written feedback on this assessment by emailing communitybenefit@UHhospitals.org. Your insights help inform future assessments and implementation strategies by highlighting the diverse perspectives and priorities of the Geauga County community.

Assessment Adoption

University Hospitals adopted the 2025 Geauga County CHNA on September 11, 2025.

The Geauga County Board of Health adopted the 2025 Geauga County CHNA October 15th, 2025.

This assessment report was published on October 16th , 2025. All Internal Revenue Service, hospital, and local health department requirements are outlined in Section 9 (Compliance).

Core

1. Introduction and Purpose

The 2025 Geauga County Community Health Needs Assessment (CHNA) is a focused effort to understand the current health of Geauga County residents and identify the most significant challenges and opportunities for improving community health and well-being. This report was developed to support local planning, foster collaboration, and guide resources in ways that reflect both data and community voice.

The CHNA satisfies the following requirements:

- Internal Revenue Code Section 501(r), applicable to nonprofit hospital organizations
- Public Health Accreditation Board (PHAB) standards for community health assessments
- Ohio Revised Code 3701.981, which mandates assessments as the basis for community health improvement planning

The assessment process was led by the Geauga Public Health, University Hospitals Geauga Medical Center, and a diverse group of cross-sector stakeholders. Together, they collected and analyzed quantitative and qualitative data, engaged residents and community leaders, and worked to prioritize health concerns that are most pressing for the county.

This CHNA is intentionally designed to support decision-making and community-wide action. It emphasizes clarity over complexity, elevates the perspectives of those most affected by health disparities, and creates a shared foundation for planning and implementation. It will serve as the basis for the Geauga County Community Health Improvement Plan (CHIP) and aims to support efforts across public, private, and nonprofit sectors.

2. Community Served

Geauga County is located in Northeast Ohio, approximately 25 miles southeast of Cleveland, and is known for its rural character, strong agricultural tradition, modern innovative industry, and close-knit communities. With a population of just under 100,000 residents, the county comprises townships, villages, and small cities spread across a largely scenic, natural landscape.

Despite its rural community roots, Geauga County is economically diverse. It is home to a notable concentration of high-income households, particularly in the western and southern portions of the county. At the same time, Geauga County has one of the largest Amish populations in the United States, consisting of 21,530 Amish residents across 163 districts. As such, Amish cultural and health-related practices contribute to the county's distinct demographic and service delivery landscape.

Geauga County benefits from its proximity to major medical centers in surrounding counties, and it maintains a network of healthcare providers, small businesses, civic organizations, and educational institutions.

Public health challenges in Geauga are shaped by both geographic and demographic complexity. These include issues related to transportation access, aging, behavioral health, and housing affordability, alongside cultural considerations that influence engagement and care delivery. However, the county's strong sense of community, commitment to service, and tradition of civic engagement provide a foundation for responsive, collaborative solutions.

Geauga County is comprised of 23 cities, villages, and townships, including:

- Aquilla Village
- Auburn Township
- Bainbridge Township
- Burton Township
- Burton Village
- Chardon Township
- Chardon City
- Chester Township
- Claridon Township
- Hambden Township
- Hunting Valley Village
- Huntsburg Township
- Middlefield Township
- Middlefield Village
- Montville Township
- Munson Township
- Newbury Township
- Parkman Township
- Russell Township
- South Russell Township
- South Russel Village
- Thompson Township
- Troy Township

Table 1. Community Demographic Profile

	Geauga County	Ohio	United States
Age*			
0-19	25%	25%	25%
20-29	11%	13%	14%
30-49	21%	25%	26%
50-59	15%	13%	13%
60+	29%	24%	23%
Race, Ethnicity, and Cultural Group**			
White	93%	76%	60%
African American	1%	13%	12%
American Indian and Alaska Native	0.1%	0.3%	1%
Asian	1%	3%	6%
Hispanic/Latino	2%	5%	20%
Amish***	21,530	86,325	404,575
Sex at Birth**			
Male	50%	50%	50%
Female	50%	50%	50%
Marital Status*			
Married couple	60%	47%	48%
Never been married/ member of an unmarried couple	26%	33%	34%
Divorced/separated	8%	13%	12%
Widowed	6%	6%	6%
Educational Attainment**			
Less than high school diploma	3%	6%	6%
High school diploma	24%	29%	22%
Some college	19%	20%	20%
Bachelors degree or higher	40%	31%	35%
Household Income*			
\$14,999 and less	5%	10%	9%
\$15,000 to \$24,999	4%	8%	7%
\$25,000 to \$49,999	13%	20%	18%
\$50,000 to \$74,999	16%	17%	16%
\$75,000 to \$99,999	14%	13%	13%
\$100,000+	49%	32%	37%

* U.S. Census Bureau 2018-2022; ** ESRI 2024; ***Elizabethtown College 2025

Figure 1. Geauga County Population Density by Census Tract (2025)

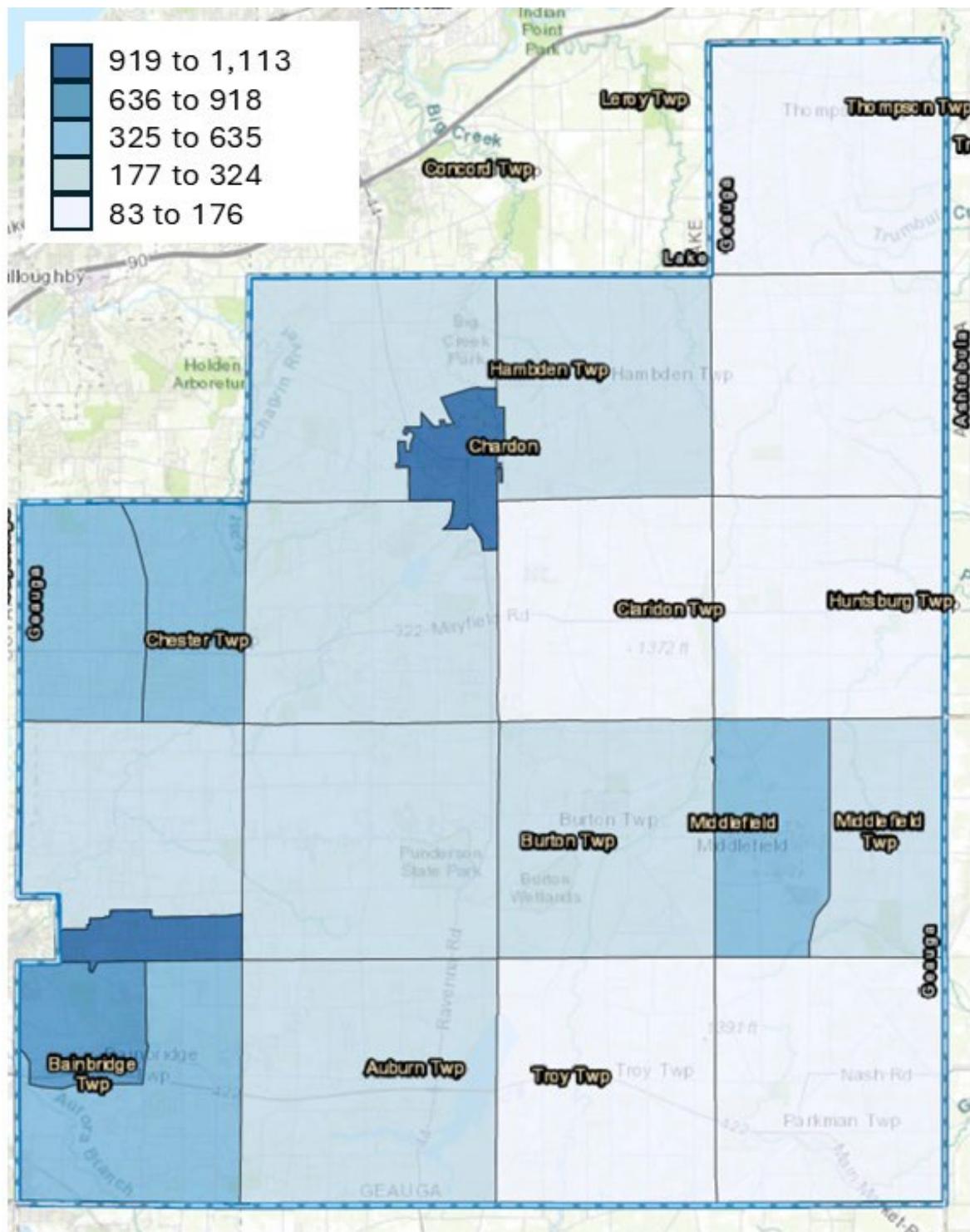


Figure 2. Geauga County Residents 65+ Years Old by Census Tract (2025)

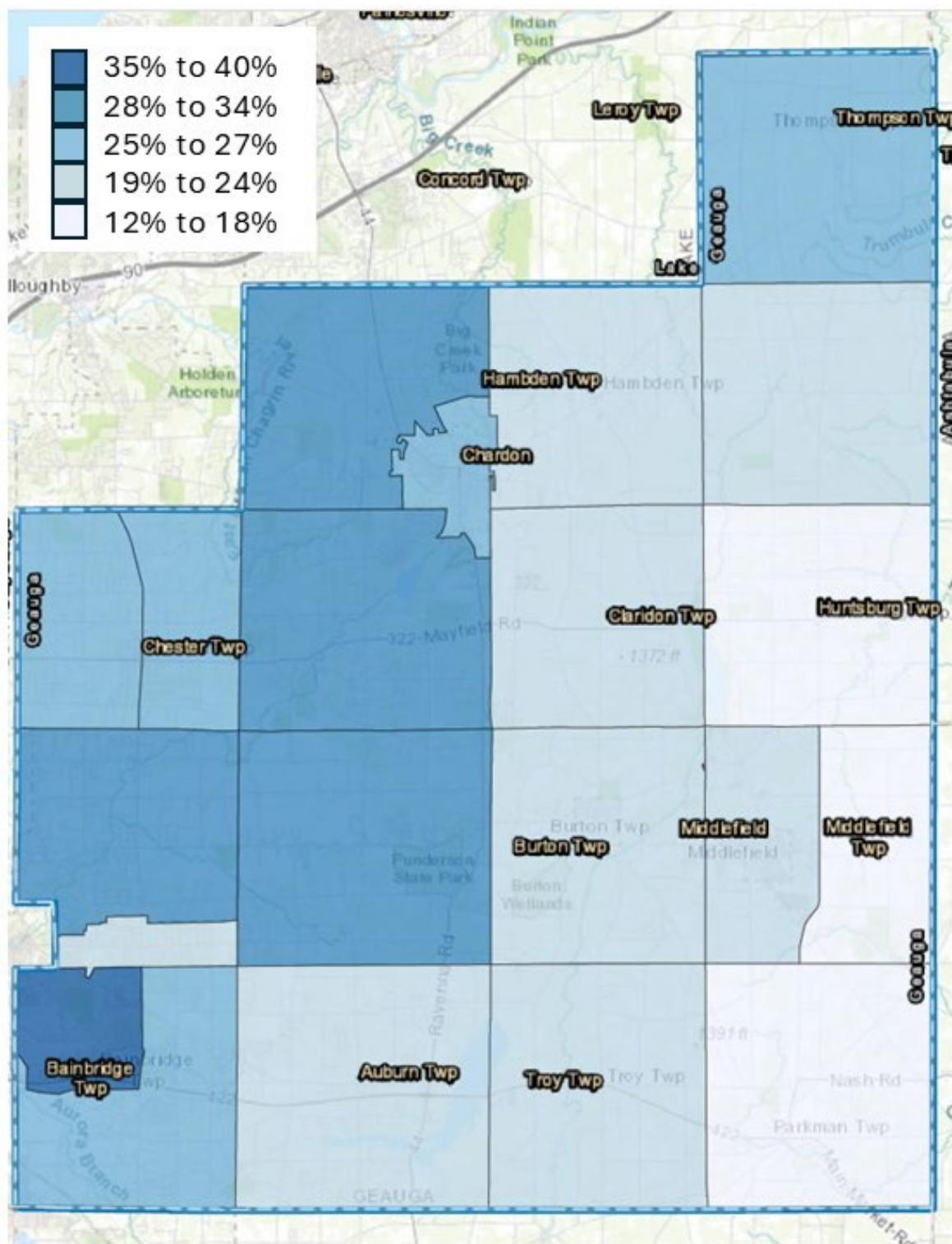


Figure 3. Geauga County Median Household Income by Census Tract (2025)

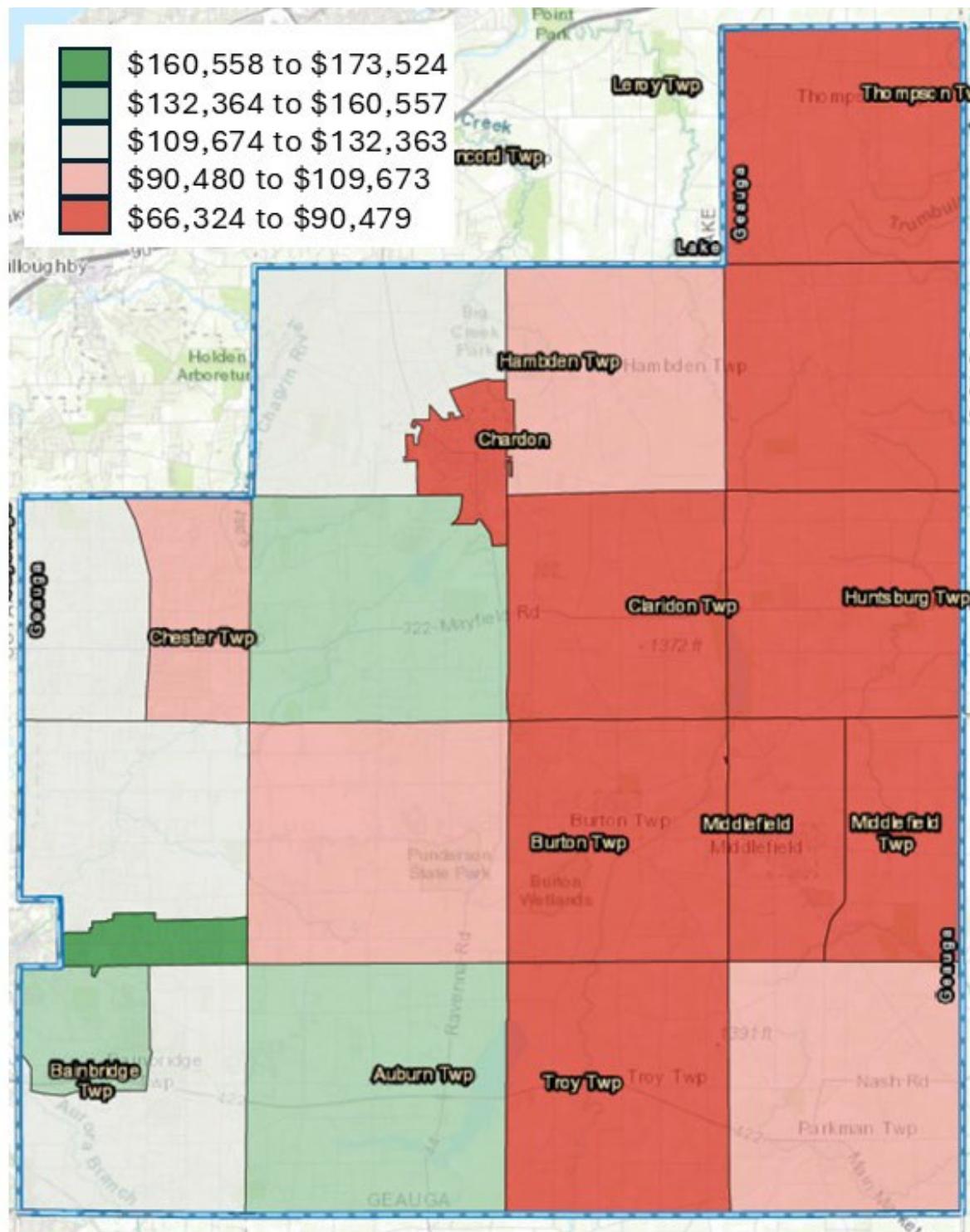
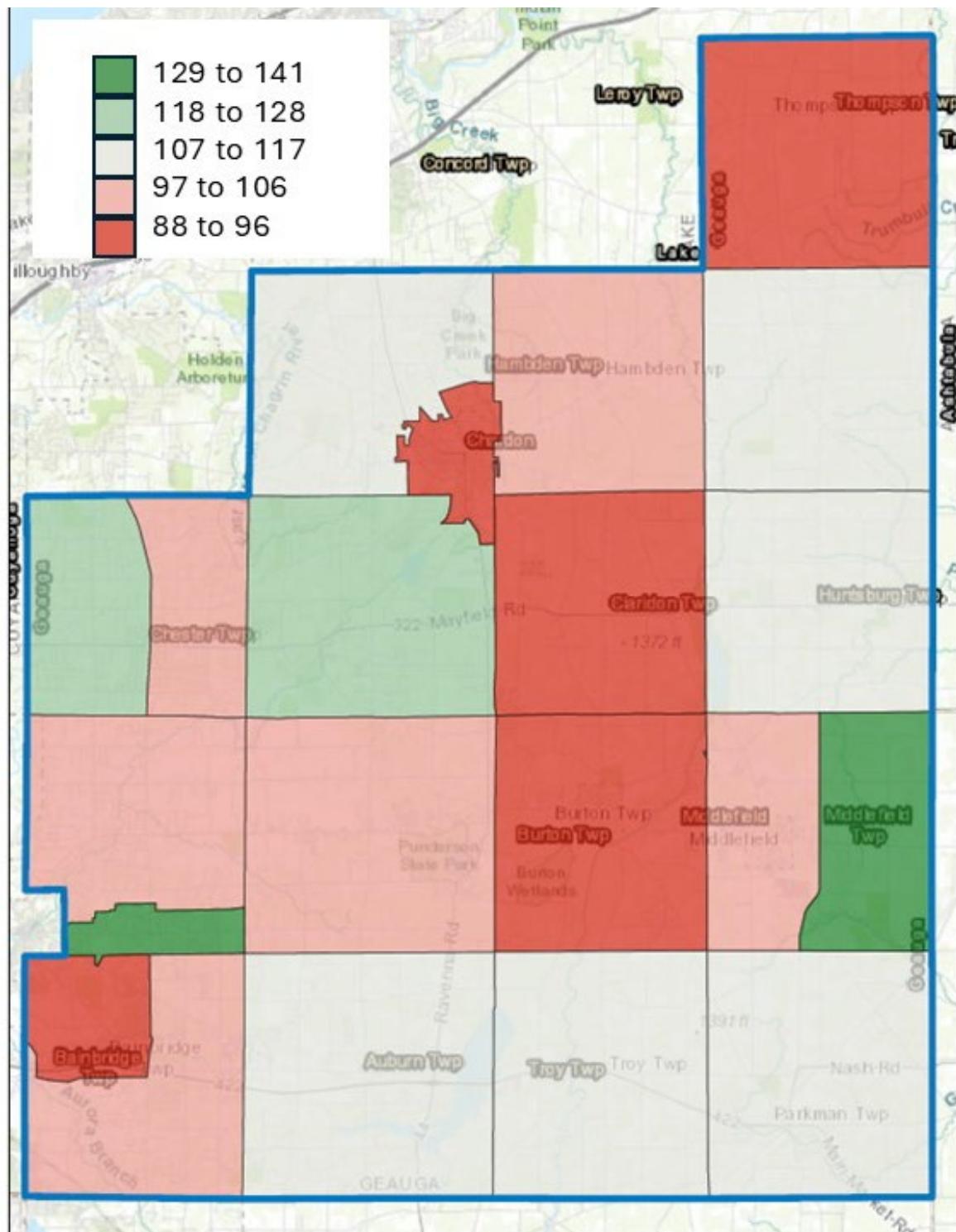


Figure 4. Geauga County Housing Affordability Index by Census Tract (2025)*



*Values > 100 indicate increasing affordability; values < 100 indicate decreasing affordability

3. Health Status and Key Findings

3.1 How We Identified Health Concerns

To support the identification of Geauga County's most important health issues, this report used a relative ranking approach to analyze and rank 245 secondary data measures. This method was chosen for its ability to clearly signal areas where Geauga may be falling behind on key measures of health and well-being. The approach draws from the framework proposed by Oglesby and Slenkovich (2014) and uses benchmark comparisons as a way to highlight concern areas.

Each indicator was compared to four standards:

- The Healthy People 2030 goal
- The national value
- The Ohio value
- Peer counties selected for regional comparability, as determined by total population size, age, and median household income

Indicators that performed worse than four or more of these benchmarks were designated as county-level health concerns. This process ensured that prioritization was based not just on severity or frequency, but on meaningful underperformance across multiple external benchmarks.

When these health concerns were presented for prioritization by community partners, complementary qualitative and quantitative findings from the community resident survey, community leader survey, and community focus groups were intentionally integrated to ensure a balanced and locally grounded process.

3.2 Overall Health and Burden

Geauga County continues to face a range of health challenges that reflect both chronic disease burden and broader population risk patterns. Based on benchmark comparisons, the following health outcomes were identified as significant areas of concern.

Cancer

- All-cause Cancer Death Rate
- Breast Cancer Death Rate
- Colon and Rectum Cancer Death Rate
- Bladder Cancer Incidence Rate
- Bladder Cancer Death Rate
- Esophagus Cancer Death Rate
- Hodgkins Lymphoma Incidence Rate
- Non-Hodgkins Lymphoma Death Rate
- Leukemia Incidence Rate
- Leukemia Death Rate
- Oral Cavity and Pharynx Cancer Incidence Rate
- Ovary Cancer Death Rate
- Thyroid Cancer Incidence Rate

Geauga County's cancer-related mortality and incidence rates are unfavorably high across a wide variety of cancer types. These findings point to gaps in early detection, treatment access, and risk reduction strategies, and underscore the need for multi-layered public health and clinical interventions. These concerns are further shaped by disparities in preventive care-seeking behaviors, particularly among Amish communities, where cultural preferences, limited transportation, and differing perceptions of health may reduce engagement with routine cancer screenings and early intervention.

Chronic Disease

- Stroke Death Rate

Stroke-related mortality in Geauga County is elevated, showing a combination of ongoing cardiovascular risk factors and possible delays in diagnosis or treatment. This trend highlights the importance of strengthening hypertension and stroke prevention efforts, expanding access to timely emergency care, and addressing barriers to ongoing disease management.

Diet and Exercise

- Access to Exercise Opportunities

Limited access to physical activity infrastructure may contribute to sedentary lifestyles and increased chronic disease risk among certain populations, particularly in rural or underserved areas.

Built Environment

- Average Commute to Work

Geauga residents report longer-than-average commute times, which can contribute to increased stress, reduced time for family or physical activity, and less opportunity for community engagement.

Housing

- Owner Households with No Vehicles (Motorized)
- Households with No Internet Access

Transportation and broadband access remain persistent barriers for many Geauga residents, limiting access to healthcare, household essentials, and reliable information, particularly for isolated or older adults. These barriers are further shaped by Amish cultural practices, including the retrain from conventional motorized vehicles and the absence of modern electrical infrastructure in the home. As a result, higher rates of households without motorized vehicles or internet access in Geauga County likely reflect both socioeconomic conditions and intentional lifestyle choices, each of which influences how certain communities engage with health and social service systems.

Air Pollution

- Particulate Matter (PM2.5)

High levels of fine particulate air pollution pose chronic respiratory and cardiovascular risks and have implications for long-term health, especially for vulnerable populations such as young children, older adults, and individuals with pre-existing respiratory or cardiovascular conditions.

Insurance and Healthcare Cost

- Prescription Drug Spending
- Uninsured Children

These indicators reflect both access and affordability concerns, with insurance gaps and elevated spending suggesting underinsurance or cost-related barriers to care and medications.

Healthcare Access and Utilization

- Dentists (Provider Ratio)

A low dentist-to-population ratio may reflect limited local capacity for oral health services and preventive care, especially in outlying communities.

Mental Health

- Depression Screening (Medicare Population)

Geauga residents' increasing rate of depression screening may suggest a need for expanded mental health integration and outreach, particularly for aging and vulnerable residents.

Obstetrics

- Child Mortality

Elevated mortality among children and adolescents signals structural and service-based gaps in maternal and child health systems.

Substance Use and Abuse

- Adult Smoking

The adult smoking rate in Geauga remains considerably higher than the national and state benchmarks. This behavior contributes to chronic disease and cancer risks and highlights the ongoing need for cessation programs and tobacco prevention efforts.

Behaviors

- Spending 10+ Hours Online (Excluding Email) Daily

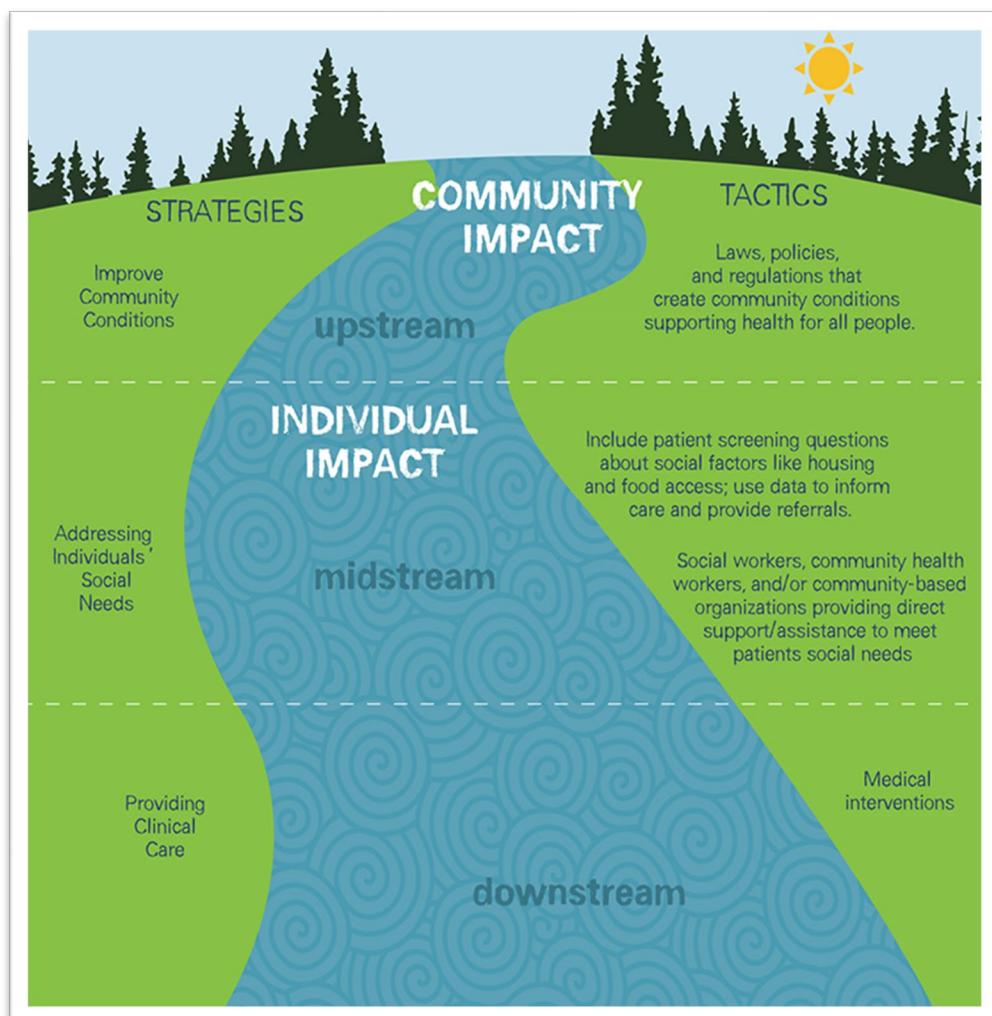
Extended online time, while reflective of modern digital lifestyles, can be associated with decreased physical activity, disrupted sleep patterns, and reduced social connectedness.

4. Prioritized Health Concerns

4.1 Process and Criteria

In order to prioritize the health needs identified by this assessment process, Geauga Public Health and University Hospitals organized the Geauga County CHNA Steering Committee for an in-person prioritization session on July 24, 2025. This prioritization session followed a comprehensive presentation of primary and secondary data findings from the 2025 Geauga County CHNA.

To support meaningful prioritization, identified health concerns were synthesized using a four-tier thematic framework that was paired with the included visual from Castrucci and Auerbach (2019) to illustrate how upstream determinants of health translate into downstream health outcomes and community impact.



1. **Upstream Drivers** – Structural and environmental conditions such as a lack of internet access, households with no vehicles, housing affordability challenges, uninsured youth, limited access to dental care, and exposure to air pollution. These factors shape opportunity, access, and daily living conditions for Geauga residents.
2. **Behaviors / Stress Response** – Individual behaviors and coping mechanisms that reflect or respond to upstream challenges. In Geauga County, these included adult smoking, extended screen time, elevated depression screening, and disproportionately high annual prescription drug costs. These responses often reflect adaptations to broader constraints.
3. **Health Outcomes** – Tangible conditions that reflect the cumulative impact of structural barriers and behavioral patterns. Geauga-specific measures included high rates of cancer incidence and mortality, stroke deaths, and child mortality. These serve as measurable indicators of the community's overall health and highlight areas of disproportionate burden.
4. **Community Consequences** – The broader societal and economic effects of the identified health outcomes and upstream factors, including decreased workforce productivity and rising healthcare expenditures. These impacts extend beyond individual health to influence long-term community resilience, economic vitality, and equity.

This framework was applied across both qualitative and quantitative findings, including resident and community leader surveys, focus groups, and secondary indicators to ensure that the prioritization process reflected both measurable trends identified by the secondary data and the lived experience of Geauga County residents.

Rather than focusing solely on the most severe health challenges, the committee prioritized those issues they are best collectively positioned to address, as evaluated through the lens of eight criteria designed to assess alignment with organizational mission, feasibility of action, and potential for community impact.

- **Strategic Fit** – *Is it in line with our strategic direction and intent?*
- **Will it Scale?** – *How many lives can be positively impacted?*
- **Maximizing Impact** – *Can we move the needle on the current state?*
- **Feasibility** – *Is it best possible, or best impossible?*
- **Competitiveness** – *Do we have an advantage to leverage?*
- **Risk** – *What unknowns or uncertainties are there? Are they reasonable?*
- **Sustainability** – *Can the initiative(s) remain viable after three years if needed?*
- **Return on Investment** – *Are the collective organizations getting the most health improvement for the resources committed?*

Each health issue was scored on a four-point alignment scale, as comprised of Low (1), Moderate (2), Adequate (3), and High (4). The scale was intentionally designed without a neutral midpoint to prompt participants to make a definitive judgment on each item's relative position and potential for impact.

Following the in-person scoring activity, results were compiled and reviewed by the CHNA Steering Committee (Tables 1-2). Final priority areas were selected based on a combination of aggregate quantitative scores and collective discussion, ensuring that decisions were grounded in data, informed by the committee's voice, and reflective of shared responsibility. The following priority areas will serve as the foundation for Geauga County's forthcoming 2026-2028 CHIP.

Table 2. Prioritization Results by Health Concern

Domain	Health Concern	Mean Score
Behaviors / Stress Response	Depression Screening	3.75
Upstream Drivers	Housing Affordability	3.00
Community Consequences	Workforce Productivity	3.00
Community Consequences	Community Resilience	3.00
Behaviors / Stress Response	Adult Smoking	2.86
Upstream Drivers	Uninsured Children	2.75
Behaviors / Stress Response	Prescription Drug Cost	2.75
Community Consequences	Healthcare Cost	2.75
Community Consequences	Health Inequity	2.75
Upstream Drivers	Households with No Vehicles	2.67
Upstream Drivers	Access to Exercise Opportunities	2.50
Health Outcomes	Child Mortality	2.38
Behaviors / Stress Response	Spending 10+ Hours Online	2.25
Health Outcomes	Stroke Deaths	2.25
Health Outcomes	Cancer Incidence	2.00
Upstream Drivers	Average Commute to Work	1.88
Upstream Drivers	Households with No Internet Access	1.78
Upstream Drivers	Limited Access to Dental Care	1.75
Health Outcomes	Cancer Mortality	1.75
Upstream Drivers	Air Pollution	1.63

Table 3. Prioritization Results by Domain

Health Concern	Mean Score	Mean Domain Score
Upstream Drivers		
Housing Affordability	3.00	2.25
Uninsured Children	2.75	
Households with No Vehicles	2.67	
Access to Exercise Opportunities	2.50	
Average Commute to Work	1.88	
Households with No Internet Access	1.78	
Limited Access to Dental Care	1.75	
Air Pollution	1.63	
Behaviors / Stress Response		
Depression Screening	3.75	2.90
Adult Smoking	2.86	
Prescription Drug Cost	2.75	
Spending 10+ Hours Online	2.25	
Health Outcomes		
Child Mortality	2.38	2.10
Stroke Deaths	2.25	
Cancer Incidence	2.00	
Cancer Mortality	1.75	
Community Consequences		
Workforce Productivity	3.00	2.88
Community Resilience	3.00	
Healthcare Cost	2.75	
Health Inequity	2.75	

4.2 Priority Health Concerns

The prioritization process conducted by the Geauga County CHNA Steering Committee prioritized four interrelated concerns that represent the county's most actionable and impactful opportunities for improvement. These priorities span behavioral health, upstream social determinants, and community-level outcomes, underscoring how individual experiences and systemic conditions together shape the health and resilience of the county.

Figure 5. Priority Health Concerns



1. Depression Screening



2. Housing Affordability



3. Workforce Productivity



4. Community Resilience

Depression Screening

Depression screening scored the highest of all prioritized health concerns, signaling the importance of mental health to Geauga residents and providers. Medicare data and survey findings confirm elevated rates of depression screening and mental health struggles, with more than half of residents reporting poor mental health at least 1–5 days in the past month, and 16% reporting suicidal ideation in the past year. The relatively high prevalence of mood disorders reinforce the need for expanded mental health screening and treatment access. Proactive screening within primary care, senior services, schools, and workplaces can identify issues earlier, reduce crisis situations, and improve long-term outcomes. Strengthening linkages between local providers, crisis hotlines, and peer supports is essential for making mental health care more timely and accessible.

Housing Affordability

Housing affordability was the top-rated upstream driver. Rising housing costs, property tax pressures, and zoning constraints have made it increasingly difficult for young families, seniors, and low-income residents to secure stable housing. Housing instability is strongly linked to poor health outcomes, including stress, anxiety, and reduced ability to afford other necessities such as food or medications. Community survey respondents indicated they struggled to balance housing costs with healthcare, utilities, and retirement planning. Expanding affordable housing development and increasing tenant support services, and mobilizing community resources to reduce homelessness will be critical for addressing this upstream determinant. Partnerships with the Geauga Metropolitan Housing Authority, Doors of Hope, and other local agencies provide existing infrastructure to build upon.

Workforce Productivity

Workforce productivity was also prioritized as a top health concern. Chronic health conditions, such as hypertension, arthritis, obesity, cancer, and chronic pain directly affect the ability of working-age residents to remain active and engaged in the labor force. Survey respondents indicated that nearly one in five experienced difficulty with stooping or kneeling, and 14% reported limitations in participating in social activities due to health problems. For Geauga’s small businesses, even a few employees out on medical leave can disrupt operations. This demonstrates that health and economic vitality are tightly interwoven. Promoting workplace wellness programs, prevention initiatives, and chronic disease management can reduce absenteeism, improve quality of life, and strengthen the county’s economic resilience.

Community Resilience

Community resilience reflects the county's capacity to adapt to crises and maintain health and well-being amid adversity. Chronic illness, housing instability, and access barriers reduce adaptive capacity, but Geauga also possesses strong social capital in trust, civic engagement, and community aid that helps buffer challenges. Focus group findings highlighted examples of mutual support, such as neighbors helping one another with errands or meal sharing. Building on these assets while reducing systemic vulnerabilities can strengthen resilience. By mobilizing both institutional resources and everyday acts of mutual aid, Geauga can foster a healthier, more adaptable community.

4.3 Priority Synthesis and Supporting Local Assets

Upstream Drivers

Geauga County's community health challenges are rooted in a web of upstream social and environmental determinants. Structural conditions, from gaps in digital connectivity to limited transportation, shape daily living opportunities for residents. For instance, approximately 12% of Geauga households lack high-speed internet and 8% of households lack access to a motorized vehicle, both of which are in part influenced by the county's large Amish population, who abstain from cars and home electricity. And despite reflecting intentional lifestyle choices for some, these deficits also pose practical barriers, such as limiting access to telehealth, health information, employment opportunities, and essential services. Access to information and resources via the internet is increasingly recognized as critical to health equity, with evidence that improved internet access can significantly boost overall health status and reduce health disparities by facilitating better healthcare access (Yu & Meng, 2022). Likewise, reliable transportation is critical for health maintenance. Nationally, about 5.8 million Americans (1.8%) delay medical care each year due to transportation barriers (Wolfe et al. 2020). Those lacking a vehicle, especially in rural areas, are at high risk of missed care and poorer outcomes (Wolfe et al. 2020). Geauga's disproportionately longer commute times further illustrate mobility challenges, as lengthy daily commutes cut into time for exercise, family, and community engagement.

Housing affordability has emerged as another upstream stressor. Rising housing costs and property taxes, coupled with zoning constraints on new development, mean many seniors, young families, and low-income residents struggle to find suitable, affordable homes. The impact of this shift is broad: housing stability, quality, safety, and affordability all affect health outcomes by influencing stress, exposure to environmental hazards, and the ability to afford other necessities (Taylor 2018). Research has linked unaffordable housing and the

threat of foreclosure to poor mental and physical health, manifesting in insomnia, anxiety, and even chest pains (Mehdipanah 2023).

Other foundational drivers in Geauga include limited local healthcare infrastructure. For example, there is one dentist for every 2,170 residents, a ratio that is higher than peer county, state, and national comparisons. Additionally, the county has a notable share of uninsured children, which, while partially explained by alternative Amish community-based coverage, still reflects gaps in conventional access to routine pediatric and preventive care. Children without insurance are more likely to have unmet medical needs (Haboush-Deloye et al. 2014, Flores et al. 2017), which can lead to poorer outcomes later in life. Environmental exposures like elevated fine particulate air pollution (PM2.5) also pose chronic risks for respiratory and cardiovascular illness, especially among children and adults 65 years of age and older (Brook et al. 2010). Each of these upstream drivers create a ripple effect on community health and well-being.

Community Assets to Address Upstream Drivers

- **Geauga County Public Library (GCPL)** – The county library system provides free access to books, digital resources, and public Wi-Fi through five branches and bookmobile services, benefiting rural and Amish residents lacking internet at home. GCPL also offers health information, technology literacy programs, and community resource navigation tools that help bridge the digital divide and reduce disparities in access to information.
- **Geauga Metropolitan Housing Authority (GMHA)** – GMHA provides safe, affordable housing for low-income families, older adults, and people with disabilities in Geauga County via its Public Housing developments and Housing Choice Voucher (Section 8 and Mainstream) programs. GMHA also runs a Family Self-Sufficiency program that helps tenants improve their economic stability. Public housing stock includes about 243 units across several developments. GMHA maintains waiting lists for many programs, and availability depends on program capacity. GMHA provides maintenance of its public housing units and offers informational & referral links to health, social services, and emergency assistance, though more formal case management or external home-repair assistance may be limited.
- **Doors of Hope Geauga** – Doors of Hope is a family-homelessness shelter serving Geauga County families with at least one child under age 18. The organization provides temporary shelter, meals, basic hygiene and daily living supplies, and works in partnership with families to develop a plan toward independent living.

Services include assessments of each family's needs, assistance with securing benefits, housing search support, employment and/or educational opportunities, enrichment for children, and referrals to mental health, substance use, and other social supports.

- **Geauga County Transit** – Geauga Transit operates a countywide demand-response public transportation system that provides door-to-door rides for any resident in a safe, professional manner. Operating on weekdays with flexible routing and scheduling, this service helps transit-dependent individuals (including seniors and those without vehicles) maintain mobility and reach medical appointments, workplaces, stores, and other essential destinations.
- **Geauga County Planning Commission** – The county Planning Commission guides local land use and development to support healthy, livable communities. It reviews proposed subdivisions and zoning changes and leads the creation of the county's comprehensive land use plan, while also providing census data and other community information for use in planning decisions.
- **Geauga County Department on Aging** – The Department on Aging supports positive aging for Geauga's seniors through programs and services that promote older adults' health, wellness, safety, independence, and dignity. It operates senior centers, in-home assistance (meals, homemaking, transportation vouchers, etc), adult day services, and supportive programs like Medicare counseling and home energy help to enable residents aged 60 years of age and older to remain healthy and self-sufficient in the community.
- **Geauga Hunger Task Force (GHTF)** – GHTF is a volunteer-driven coalition working to ensure no Geauga County resident goes hungry. It financially supports seven independent community food pantries across the county and mobilizes donations from residents, churches, schools, businesses, and others to provide food assistance for local families in need. Anyone in need can call 2-1-1 to be referred to a nearby pantry and its hours of operation. The pantries supported by GHTF provide approximately 10 days worth of food per visit, with no restrictions on age, employment status, or family size.
- **Chagrin Falls Park Community Center** – Formed to serve the low-income Chagrin Falls Park neighborhood on the edge of Bainbridge, this community center provides a wide range of supportive services for children, families, and seniors. Its programs include after-school tutoring for youth, a community food pantry, case management

and referrals, senior activities, and other resources to meet basic needs and foster stability in the community.

- **Educational Service Center of the Western Reserve (ESCWR)** – ESCWR supports local school districts in Geauga and Lake counties by developing programs and hiring specialized staff to enhance education services. By pooling resources across districts, the ESCWR offers options for students with special learning needs and helps improve instruction and student achievement throughout the region.
- **Kent State University at Geauga** – Kent State Geauga is the county's only institution of higher education, located centrally in Geauga County. The campus offers local residents access to college degree programs and is structured for commuter students. Kent State Geauga provides extensive advising, tutoring, and support services to promote student success, and its facilities and class schedules accommodate non-resident students who live and work in the community.
- **League of Women Voters of Geauga County** – A non-partisan, grassroots civic organization, the League of Women Voters empowers residents through voter education and advocacy. By registering voters, sponsoring candidate forums, studying policy issues, and encouraging informed participation in elections, the League helps community members engage in decisions that can impact local health and quality of life, such as public health levies, school funding, and environmental policies.
- **Geauga County Board of Developmental Disabilities (GCBDD)** – GCBDD (the Metzenbaum Center) serves about 1,000 Geauga County residents of all ages with developmental disabilities. It coordinates funding and services like early intervention therapies for infants and toddlers, special education support in schools, transition-to-work training for teens, 24/7 residential care for adults who need it, supported employment programs, recreation and integration activities, and more, all of which aimed at helping individuals with disabilities “live, learn, and earn” as part of the community.
- **Geauga Family First Council** – The Family First Council is a collaborative body of families, agencies, and service providers that works to improve outcomes for children with multi-system needs. It promotes safe, stable and healthy families by coordinating prevention and early intervention services; for example, bringing together schools, counselors, and social services to support a child (ages 0-21) with behavioral challenges, and by removing barriers between agencies so that families can access a holistic system of care.

- **Geauga County Job and Family Services (JFS)** – JFS administers local, state, and federal assistance programs to support the well-being of Geauga County residents. The agency encompasses four divisions: Social Services, which includes child protective services, elder protective services, foster care and adoption; Public Assistance, which provides food stamps, cash assistance, Medicaid, child care subsidies and other basic needs support; Child Support Enforcement, which establishes paternity and enforces child support orders; and OhioMeansJobs-Geauga, which offers job search assistance, job training, and employment programs to help individuals gain skills and find stable employment. By addressing financial hardship, safety from abuse, and employment, JFS plays a key role in reducing poverty and related health stresses.
- **Geauga County Veterans Services** – The Geauga County Veterans Service Commission (Veterans Services) provides support to local veterans and their dependents to reduce hardship. The office can provide temporary financial assistance for veterans, spouses, dependent children, or widows in need, and offers other services like transportation to and from Veterans Affairs medical facilities and help accessing VA benefits or counseling. By assisting veterans with basic needs, healthcare access, and benefits, the agency helps prevent economic strain and health crises among the county's veteran population.
- **LEAP's Mobile Produce Pantry** – Linking Employment, Abilities, and Potential (LEAP) operates a mobile produce pantry that delivers fresh fruits and vegetables to the doorsteps of over 400 seniors and people with disabilities in Geauga County who have limited transportation. This initiative specifically targets homebound or mobility-impaired residents, providing free healthy food on a regular basis to combat food insecurity and ensure vulnerable individuals have access to proper nutrition.

Behaviors / Stress Response

Under the strain of these upstream constraints, many Geauga residents exhibit health-related behaviors and stress responses that both reflect and exacerbate their challenges. Tobacco use remains a critical concern: Geauga's adult smoking rate of 18% exceeds comparison county and national values, as well as Health People 2030 targets. Smoking increases the risks of lung disease, cancers, and heart problems, and decades of public health research have demonstrated that smoking serves as a negative coping mechanism in the face of psychosocial stressors (Slopen et al. 2013). In other words, people under chronic financial or emotional strain may turn to nicotine for temporary relief, or as an act of self-medicating, even as the habit ultimately worsens their health (Slopen et al. 2013).

Similarly, excessive screen time is prevalent in the Geauga County community. Modern digital lifestyles and work-related duties have led some adult residents to spend more than 10 hours per day online. Research suggests that excessive screen-time is linked to numerous adverse outcomes: weight gain from inactivity, disrupted sleep cycles, and higher risks of anxiety and depression have all been observed with prolonged daily screen exposure (CDC 2023a).

Mental health indicators also signaled considerable stress among Geauga County residents. According to the community survey respondents, more than half (55%) reported one to five days of poor mental health in the past month, and 16% had seriously considered suicide in the prior year. These figures are parallel with healthcare data showing elevated rates of depression screening among Geauga residents 65 years of age and older.

Community survey respondents also highlighted financial insecurity as a source of stress, with survey respondents worrying about maintaining their standard of living amid rising costs (61%), having enough money to retire (59%), and being able to pay unplanned medical bills (55%). Such financial stress can erode mental well-being and impact the focus needed to maintain healthy habits. For instance, one in ten community survey respondents indicated that they went without needed dental care, medical care, or mental health care in the past year due to cost. The county also saw annual average prescription drug costs exceed comparison county, state, and national averages. These high out-of-pocket costs often force patients into "cost-related nonadherence", skipping doses or not filling prescriptions to save money, a practice firmly linked to worse health outcomes and higher mortality (Van Alsten & Harris, 2020).

Community Assets to Support Behaviors / Stress Responses

- **Geauga County Board of Mental Health & Recovery Services (MHRS)** – The MHRS Board provides leadership, funding, and coordination for a network of behavioral health services in the county. It plans and funds mental health and substance use prevention, treatment, and recovery programs, including 24/7 crisis intervention (the COPELine), outpatient counseling and case management, school-based prevention education, and peer recovery supports to ensure residents have access to care when dealing with stress, addiction, or mental illness. By investing in a continuum of services across multiple agencies, the board works to improve community mental health and reduce the impact of substance abuse.
- **NAMI Geauga County** – NAMI Geauga is the local affiliate of the National Alliance on Mental Illness, offering free support and education for individuals and families affected by mental health conditions. NAMI provides peer-led support groups for people living with mental illness and separate groups for family members, educational courses like Family-to-Family and youth programs, as well as community workshops and an annual awareness walk, all aimed at fostering understanding, coping skills, and hope for recovery.
- **Ravenwood Health** – Ravenwood Health is a private nonprofit behavioral health agency serving children, adults, and families in Geauga County. A trauma-informed organization, Ravenwood offers a broad continuum of mental health and addiction services: psychiatric care, individual and group counseling, dual diagnosis treatment, medication-assisted treatment (MAT), outpatient counseling, and prevention/outreach programs. For individuals in recovery, Ravenwood operates recovery housing (including sober housing options) and supportive housing programs (such as Permanent Supportive Housing, Shelter Plus Care, and Community Residences) for adults and families. Crisis support is available 24/7 via the COPELine hotline, and Ravenwood provides case management and support services to help link people to care and reduce barriers. Services are provided via multiple sites and accept private insurance, Medicaid, Medicare, and sliding-fee scale for eligible residents.
- **Catholic Charities** – Catholic Charities provides a broad set of human services in Geauga County across the lifespan, designed to strengthen families, promote mental health, and address urgent basic needs. Local services include counseling and mental health outpatient services, case management and self-sufficiency programs for clients facing multiple barriers, early childhood support, and programs for youth and family behavior/emotional support. Through its Emergency Assistance

Services, Catholic Charities offers help with rent, utilities, food, transportation, and other basic living costs to those experiencing sudden hardships.

- **OhioGuidestone** – OhioGuidestone is a statewide nonprofit that provides a wide spectrum of behavioral health, family support, and substance use services that Geauga County residents can access. Locally, OhioGuidestone offers job readiness and training programs for young adults in Geauga, outpatient counseling, assessments, and recovery supports, and access via telehealth. Across the state, they administer youth residential treatment, substance abuse residential and recovery housing for adults, early childhood mental health services, foster care and adoption supports, juvenile justice programs, and wraparound family-based services.
- **Family Pride of Northeast Ohio** – Family Pride is a behavioral health organization serving clients across Northeast Ohio, including Geauga County. Its services are built for flexibility and accessibility: counselors and case managers meet clients in the home, school, via telehealth, at their offices, or in community settings. They offer individual, couples, family, and group counseling, case management, parent education, school-based wellness programs, senior support, and Intensive Home-Based Treatment for children and youth experiencing serious emotional or behavioral challenges. By offering care in non-traditional settings, adjusting schedule and location, and reducing logistical and stigma-related barriers, Family Pride helps support family functioning, reduce distress, and improve capacity for coping and resilience.
- **Lake-Geauga Recovery Centers (LGRC)** – LGRC is a private, nonprofit agency serving Lake and Geauga counties. It offers a broad spectrum of mental health and substance use disorder services, with care settings to meet differing levels of need. Key services include outpatient counseling, dual diagnosis treatment, ambulatory detox, and medication-assisted treatment. For individuals requiring more intensive support, LGRC provides residential treatment, recovery housing options following primary treatment, and specialized adolescent services. Its family programs, grief support, prevention, and educational initiatives help both affected people and their loved ones. Across all these services, LGRC emphasizes relapse prevention, peer support, and skill building to help people maintain long-term recovery and improved quality of life, regardless of their ability to pay.
- **WomenSafe, Inc.** – WomenSafe is a free, confidential domestic violence shelter and resource center serving survivors (adults and children) in Geauga County and throughout Northeast Ohio. It provides emergency shelter for those escaping abuse,

a 24/7 hotline (COPELine) for crisis support and referrals, court advocacy, trauma-informed counseling and peer support groups, art and play therapy, safety planning and relocation assistance, aftercare support for individuals leaving shelter, and community education aimed at raising awareness about domestic violence, safety, and prevention. Some services also offer advocacy around employment-related barriers and referrals to broader social supports. By helping survivors meet immediate safety needs and heal emotionally, WomenSafe contributes to reducing long-term health consequences of domestic violence, such as chronic stress, trauma, and mental illness.

- **Torchlight Youth Mentoring Alliance** – Torchlight is a nonprofit organization that provides professionally supported mentoring services to youth facing adversity in Lake, Geauga, and Ashtabula counties. Youth are matched with screened adult mentors who meet with them regularly to offer guidance, friendship, and positive role modeling, which improves youth coping skills and resilience. In addition to one-on-one mentoring, Torchlight runs specialized programs; for example, it has provided Crisis Intervention Team training to local police and sheriff's deputies to improve their response to youth mental health crises, thereby contributing to a safer, more supportive environment for young people under stress.
- **Geauga SOGI Support Network** – This network was established by community volunteers and agency staff to create welcoming programs for LGBTQ+ individuals and their families in Geauga County. The SOGI Support Network hosts monthly peer support groups for LGBTQ+ youth and adults, offers family support meetings, and organizes community education and awareness events to promote understanding and reduce the isolation and stigma that LGBTQ+ community members may face. These efforts provide safe spaces and social support that improve mental well-being and coping for a population that can experience high levels of stress.
- **Geauga Youth Advisory Board (YAB)** – The Geauga Youth Advisory Board is a youth-led coalition that partners with local schools to address student behavioral health issues. YAB implements suicide prevention curricula and mental health awareness campaigns in schools, and it develops peer-led wellness initiatives (such as student-run clubs and outreach activities) to encourage healthy coping among teens. By engaging adolescents as leaders to confront problems like depression, bullying, or substance use stigma, the Youth Advisory Board aims to reduce stigma, build resilience, and ultimately prevent self-harm and drug use among Geauga's young people.

- **Geauga County Suicide Prevention Coalition** – The Suicide Prevention Coalition is a community group devoted to educating the public about suicide and how to prevent it. The coalition conducts awareness campaigns to inform residents about the warning signs of suicide and promotes available resources, like crisis hotlines and mental health services, for those who may be at risk. It encourages community members to openly talk about mental health and to intervene by persuading anyone experiencing suicidal thoughts to seek help; for example, by calling the 24/7 COPELine at 1-888-285-5665, or 988. Through these efforts, the coalition works to reduce the incidence of suicide and the stigma around seeking help in Geauga County.
- **Ohio Tobacco Quit Line** – The Ohio Tobacco Quit Line is a free statewide service that supports individuals in quitting smoking or vaping. It provides personalized quit coaching and telephone counseling at no cost to any Ohioan, regardless of insurance status. Eligible callers can also receive up to 8 weeks of free nicotine replacement therapy (patches, gum, or lozenges) mailed to them. By combining professional counseling with nicotine aids, the Quit Line and associated local tobacco cessation programs, such as classes offered by Geauga Public Health or local healthcare providers, help residents with tobacco addiction, lowering smoking rates and improving long-term health.
- **Geauga Park District** – The Geauga Park District manages over 10,000 acres of parks and trails, offering abundant opportunities for physical activity and stress reduction in nature. Through its parks, free recreational facilities, and year-round programs like guided hikes, outdoor fitness classes, and youth nature camps, the Park District encourages residents of all ages to be active and spend time outdoors. These activities help reduce sedentary screen time and provide healthy coping outlets for stress, which in turn improves mental and physical health in the community.

Health Outcomes

Over time, upstream drivers and behavioral patterns translate into measurable health outcomes in Geauga County that lag behind state and national benchmarks. Perhaps most prominent are Geauga's cancer statistics: the county's incidence and mortality rates are unfavorably high across a wide spectrum of cancer types, including all-cause cancer, colorectal, bladder, Hodgkin's and non-Hodgkin's lymphoma, esophageal, thyroid, leukemia, and both breast and ovary cancer among female residents. This broad elevation in both cancer prevalence and mortality suggests systemic gaps in prevention and early detection. These findings align with national studies showing that persistent disparities in cancer outcomes are closely linked to socioeconomic determinants, access barriers, and delayed screening, particularly in rural and suburban populations where outreach and tailored prevention strategies may be lacking (Hassmiller et al. 2022).

Overall, the data underscore a need for multi-layered interventions: increased community education about screening, mobile clinics or transportation to bring screening to remote residents, and stronger integration between healthcare providers and Amish leaders to encourage early treatment.

Similar patterns emerge with cardiovascular disease outcomes. The county's stroke mortality rate exceeds peer county and national values, as well as Healthy People 2030 targets, and is impacted by poorly controlled risk factors such as hypertension and smoking, as well as potential delays in recognizing stroke symptoms, and reaching emergency care in time. Indeed, 43% of community survey respondents had been diagnosed with high blood pressure and 34% with high cholesterol. With more than half of community survey respondents classified as obese (55%), the prevalence of such cardiovascular risk is probable, but also remediable. Through improved access to primary care, lifestyle interventions, and emergency response systems, more stroke events can be prevented or survived. The data signal an urgent need to strengthen local hypertension control programs, smoking cessation efforts, and public awareness of stroke warning signs, alongside ensuring that rural parts of the county have timely ambulance access.

Maternal and child health indicators further illustrate Geauga's outcome disparities. Child mortality rates (≤ 20 years of age) exceeded county, national, and Healthy People 2030 comparisons, and represent a fundamental measure of community health. Research has linked child mortality with gaps in prenatal, perinatal, and pediatric care (Bhutta et al. 2014), maternal and neonatal nutrition (Christian et al. 2015), poverty and substandard housing conditions (WHO 2020), poor immunization coverage (Kefale et al. 2024), and injury-related events (Vargas et al. 2024).

Community Assets to Support Health Outcomes

- **University Hospitals Geauga Medical Center (UH Geauga)** – UH Geauga Medical Center is a full-service acute care hospital in Chardon, providing a broad range of inpatient and outpatient medical services to the community. The hospital includes 24/7 emergency and urgent care, advanced imaging and surgical facilities, a birthing center for maternal/newborn care, and numerous specialty clinics (cardiology, oncology, orthopedics, etc), as well as a network of primary care and specialty physician offices throughout the county. In addition to clinical care, UH Geauga engages in community health improvement initiatives, such as free screenings or health fairs in order to address local health needs identified in the CHNA.
- **Geauga Public Health** – Geauga Public Health is the public health authority dedicated to protecting and improving community health. It provides preventive services like immunizations (including childhood vaccines and flu shots), infectious disease monitoring and outbreak response, environmental health inspections (of water, septic, restaurants), and health education programs on topics from injury prevention to chronic disease management. Public Health also administers the Women, Infants, and Children (WIC) nutrition program and other maternal-child health services like newborn home visits and car seat safety checks that directly improve maternal and infant outcomes. Through ongoing education and outreach, Geauga Public Health promotes healthy behaviors and works to control health hazards, thereby improving overall health outcomes in the county.
- **Alzheimer's Association (Cleveland Area Chapter)** – The Alzheimer's Association's Cleveland Chapter serves Geauga County and surrounding areas, supporting individuals and families facing Alzheimer's disease and other dementias. It provides free care and support services such as caregiver support groups, educational workshops, a 24/7 helpline, and early-stage engagement programs for those living with dementia. The Association also advocates for dementia research and public policies, all with the aim of improving quality of life and outcomes for people affected by Alzheimer's.
- **Middlefield Care Center** – The Middlefield Care Center is a freestanding, non-profit birthing center that primarily serves the Amish community in Geauga County. In operation since 1990, this exempt birth center delivers roughly 250 babies each year in a setting that aligns with the cultural values of Old Order Amish families. The center offers prenatal care, labor and delivery services, and postpartum/newborn care outside of a hospital environment, which has helped improve maternal and infant health outcomes in the Amish population. By providing accessible maternity

care and education, Middlefield Care Center contributes to healthier pregnancies and births in the community.

- **Lake-Geauga Women, Infants and Children (WIC) Program** – The Lake-Geauga WIC Program is a federally funded nutrition program for income-eligible pregnant women, new mothers, infants, and young children up to age five in Geauga and Lake counties. WIC provides participants with healthy foods through monthly nutrition vouchers, breastfeeding support and breast pumps, nutrition education, and referrals to healthcare and social services. By targeting nutrition in the critical early-life stages, WIC helps reduce low birth weight and infant mortality and improves child growth and development. The program has a proven impact on health outcomes, leading to healthier pregnancies, higher breastfeeding rates, and better long-term health for children in the community.
- **American Cancer Society & Local Cancer Coalitions** – The American Cancer Society (ACS), in partnership with University Hospitals and local health coalitions, supports cancer prevention and treatment initiatives in Geauga County. Efforts include public education on cancer screening guidelines, hosting screening events, and survivorship support programs for patients and families. By improving access to early detection and providing resources for those undergoing cancer treatment, the ACS and its partners aim to reduce cancer incidence and mortality in the county, especially for residents who might otherwise face barriers to screening or care.
- **Geauga County EMS & Stroke System** – Geauga County's Emergency Medical Services and its designated stroke care hospitals work together to improve outcomes for critical illnesses like heart attacks and strokes. Paramedics in Geauga EMS are trained in advanced life support and carry lifesaving medications and equipment, and they coordinate closely with regional stroke centers and cardiac centers to ensure rapid transport and specialized treatment for patients exhibiting stroke or cardiac arrest symptoms. This integrated emergency response system, including fast 9-1-1 dispatch, on-scene stabilization, and direct hospital communication, is essential to improving survival rates and reducing long-term disability from major health events. Quick intervention by EMS and hospital stroke teams has been shown to greatly improve recovery outcomes for patients in the community.
- **Long-Term Care Ombudsman Program** – Geauga County residents in nursing homes, assisted living, or receiving in-home care can turn to the Regional Long-Term Care Ombudsman for advocacy. Ohio's Long-Term Care Ombudsman program, which is operated regionally through the Area Agency on Aging, works to resolve

complaints and problems in long-term care facilities and home-care services on behalf of elders and their families. Ombudsman staff and volunteers regularly visit local nursing homes, investigate concerns about quality of care or residents' rights, and help families select care options by providing information on facility performance. By addressing issues like neglect, dietary problems, or dignity and rights violations, the Ombudsman program helps improve the quality of care and quality of life for older adults, leading to better health outcomes and satisfaction for one of the county's most vulnerable populations.

- **UH Geauga & County Stroke Coalition** – University Hospitals Geauga Medical Center and partners have established a local stroke coalition to improve stroke outcomes. The coalition provides community stroke education, teaching residents to recognize stroke signs and act F.A.S.T. (face drooping, arm weakness, speech difficulty, time to call 911), and ensures coordination of care from onset to rehabilitation.

Community Consequences

The final tier of Geauga County's prioritization framework incorporates the broad societal and economic consequences of the aforementioned (1) upstream drivers, (2) behavior and stress responses, and (3) health outcomes. Health in a community does not stop at individual wellness or illness. Rather, it has broad ripple effects that can impact the county's prosperity, equity, and resilience.

One major community-level impact is on workforce productivity. When chronic diseases sap residents' health, the local economy feels the strain in higher absenteeism, disability, and lost productivity (Carls et al. 2012, Rojanasarot et al. 2023). For example, the high rates of hypertension, obesity, and cancer in Geauga suggest that a significant share of working-age adults may be managing chronic conditions. In fact, among the 73% of community survey respondents who indicated they were currently employed, high blood pressure (48%), high cholesterol (34%), arthritis (20%), autoimmune disorders (14%), and chronic pain (13%) were reported. Moreover, 19% of this working population also reported difficulty with physically strenuous activities like stooping or kneeling, and 16% had trouble participating in social activities due to health limitations.

These functional limitations can translate into challenges maintaining employment or require workplace accommodations and mirror national trends: heart disease and stroke alone cost U.S. employers an estimated \$168 billion per year in lost productivity from premature deaths and missed work (CDC 2023b). For small businesses in Geauga, having just a few key employees out on extended medical leave can be very disruptive. This is why workforce wellness and prevention are not just personal matters but community economic priorities.

Another far-reaching consequence of the identified health needs is rising healthcare costs, which can lead to higher insurance premiums (Dieleman et al. 2020), increased out-of-pocket expenses and strain on the healthcare delivery system (Tikkanen & Abrams, 2020), and reduced access to preventive and specialty care (Woolf & Aron, 2013). These rising costs can also burden public health budgets (Dieleman et al. 2020), increase employer spending on health benefits (Song & Baicker, 2019), and contribute to delayed or foregone care among vulnerable populations (Clark et al. 2016).

The combination of chronic disease prevalence and cost-related care delays in Geauga is likely to spur greater long-term healthcare spending. For example, when residents skip preventive care or medications due to cost (as 10% of community survey respondents confirmed), they often end up with more severe illness that is costlier to treat. These expenses ultimately diffuse through the system, straining public and private resources. If

the community can improve management of diabetes, heart disease, cancer, and mental illness, it stands to also improve its collective economic outlook by avoiding some of these costs. Initiatives such as care coordination programs, patient navigation, and expanding insurance coverage for the uninsured (such as enrolling more eligible children in CHIP, given Geauga's relatively high rate of uninsured youth) are strategies aimed at bending this cost curve.

A number of factors contribute to health inequity in Geauga County, disproportionately impacting low-income, rural, and culturally distinct residents. Twelve percent (12%) of households lack broadband internet access, the latter of which limits opportunities for telehealth (Weigel et al. 2020), job opportunities and remote work (Katz & Callahan, 2020), virtual learning (Anderson & Perrin, 2018), access to public services (Whitacre et al. 2021), and timely health alerts. However, this figure must be viewed through the lens of Geauga's Amish community, Ohio's second-largest settlement, consisting of 21,530 Amish residents residing across 163 districts (YCAPS 2025). Many Amish families purposefully abstain from modern electricity and broadband use due to religious convictions, meaning the absence of internet reflects a cultural choice rather than a deficiency. Still, a lack of digital access poses challenges for healthcare outreach and emergency alerts in both Amish and non-Amish households.

Similarly, the measure indicating that 8% of households lack access to a vehicle refers specifically to motor vehicle ownership, and in some cases may overestimate barriers in Amish communities where horse-drawn buggies, self-powered scooters, and walking serve as primary modes of transportation. While these modes of transportation may meet daily, local needs, they nonetheless limit timely access to distant services or urgent medical care that requires motorized transport. Moreover, they compound already disproportionately high county daily work commute times, diminishing time available for family life, physical activity, and sleep.

Youth insurance coverage data reflect a parallel nuance. While the percentage of uninsured children in Geauga County exceeds peer county, state, and national benchmarks, many Amish many Amish families rely on internal, community-based medical funds that operate outside the conventional health insurance system (Rohrer & Dundes, 2016). These funds, which are often managed by Amish church district deacons, are used to cover routine medical care and emergencies; in the event of serious illness or injury, a community collection may be used to cover the total cost of care (Rohrer & Dundes 2016).

As such, bridging services across Amish and non-Amish residents requires sensitive and culturally informed strategies. Interventions might include strengthening local, community-based healthcare delivery through mobile clinics, expanding in-home services, offering

volunteer transportation compatible with buggy travel routes, and developing outreach systems that function across both digitally connected and disconnected populations.

Finally, the intersection of health, access, and socioeconomic barriers profoundly influences community resilience, the ability of Geauga County residents to bounce back from adversity, whether facing a health crisis, economic downturn, or public health emergency. Communities burdened by chronic illness or disability may struggle to respond effectively to new challenges due to reduced adaptive capacity and heightened vulnerability (Uscher-Pines et al. 2018). However, there is also evidence of strong social capital in the county, which serves as a critical asset. Social capital, characterized by trust, mutual aid, and civic engagement, is often a more powerful predictor of community recovery than financial or physical infrastructure (Aldrich & Meyer, 2015). For example, a focus group participant shared how a neighbor regularly helped her with errands and, *“if I can’t reach something, all I have to do is ask,”* allowing her to maintain independence despite mobility challenges. These everyday expressions of trust and compassion, paired with community-led efforts and civic engagement, form the backbone of a community’s resilience (Pfefferbaum et al. 2017).

Community Assets to Support Community Consequences

- **United Way Services of Geauga County** – United Way is a community impact organization that addresses the broad social and economic conditions affecting health. It uses its worldwide reach and local presence to “build stronger, more resilient, and more equitable communities where everyone can thrive.” In Geauga County, United Way convenes partners and funds programs to improve health, education, and financial stability; for example, initiatives to increase early childhood literacy, expand access to mental health care, or promote workforce development for low-income families. By investing in these upstream factors, United Way helps reduce community consequences of poor health, such as lost productivity and generational poverty, ultimately creating a healthier and more economically vibrant community.
- **Healthy Northeast Ohio (HealthyNEO)** – Healthy Northeast Ohio is a regional collaboration that provides a free web-based platform for population health data and evidence-based practices covering Geauga and eight other Northeast Ohio counties. It hosts up-to-date community health indicators, maps of disparities, and an index of proven intervention strategies, as well as directories of local health resources. By sharing data transparently and highlighting best practices, HealthyNEO enables cross-sector partners, hospitals, health departments, businesses, and nonprofits, to align their efforts and jointly address the upstream drivers of poor health in the region. This collective approach helps communities measure progress and target resources more effectively, thereby reducing duplicated efforts and easing the overall healthcare burden through collaborative prevention planning.
- **Collaborative Care Coordination Initiatives** – In Geauga County, healthcare providers and social service agencies are increasingly working together on care coordination programs that mitigate the costly consequences of unmanaged health conditions. For example, local hospitals and Geauga Public Health have implemented patient navigation services to help high-risk individuals, like those with diabetes or heart disease, adhere to treatments and access community supports. These initiatives, along with efforts to enroll all eligible children and adults in health insurance (expanding CHIP and Medicaid outreach), aim to reduce avoidable hospitalizations and emergency visits. Over time, better management of chronic illness and higher insurance coverage rates will lessen the economic strain on families and the healthcare system, improving workforce productivity and community prosperity.

- **Geauga Economic Leadership and Workplace Wellness** – Geauga County’s business community, through groups like the Geauga Growth Partnership and local chambers, recognizes the impact of employee health on productivity. Many employers have partnered with University Hospitals or the Geauga Safety Council to implement workplace wellness programs, offering resources such as smoking cessation classes, stress management workshops, and incentives for preventive care. By investing in employee health and safety, businesses see reduced absenteeism and higher productivity, and the community benefits from a healthier workforce and lower healthcare costs due to prevention.

Explore

5. Community Resident Survey

5.1 Methodology

The community resident survey was distributed both online via Qualtrics and in paper format beginning Tuesday, January 7, 2025. The survey remained open for 38 days, closing on Friday, February 14, 2025. During that time, 143 valid responses were collected. A press release was distributed on January 7, 2025, and the survey link was posted to Facebook the following day.

Outreach efforts included contact with three local newspapers, with one agreeing to share the post and the other two declining. Additional dissemination occurred through communication with area superintendents near the end of January to encourage school district participation. Public health representatives also contacted the Health District Advisory Council (HDAC), although many local jurisdictions lacked a Facebook presence or had inactive pages.

5.2 Community Resident Survey Findings

Unweighted survey respondents were predominately female (88%), Caucasian (100%), not Hispanic or Latino (100%), married (75%), held a Bachelor's degree (36%), were currently employed (53%), characterized their health as "Very Good" (45%), had a total annual household income ranging from \$40,000 to \$99,999 (38%), and ranged from 20 to 87 years of age, with an average age of 54.

The survey results to follow are weighted to reflect the actual demographic composition of the county, adjusting for sex, age, race, ethnicity, total annual household income, and education level, except when reporting any one of these individual characteristics, in which case the corresponding weight was deactivated to ensure respondent representation. Because 383 survey responses are required to ensure generalizable findings across Geauga County residents, the results presented here reflect only the perspectives of those who responded.

Demographics and Neighborhood Characteristics

Survey respondents from Geauga County represented a cross-section of cities, villages, and townships, with the greatest concentration residing in Auburn Township (28%), Chester Township (18%), Chardon City (9%), Bainbridge Township (8%), Middlefield Village (6%), and Hambden Township (5%). Smaller but notable representation came from Troy,

Thompson, Middlefield, Russell, Munson, South Russell, Chardon, Parkman, Huntsburg, Claridon, and Newbury Townships, respectively.

Respondents demonstrated a high degree of residential stability, with 53% reporting that they had lived in their current neighborhood for more than 20 years (Figure 6). Nearly half (42%) of respondents were between 50 and 64 years of age (Figure 7).

Figure 6. Time in Present Neighborhood

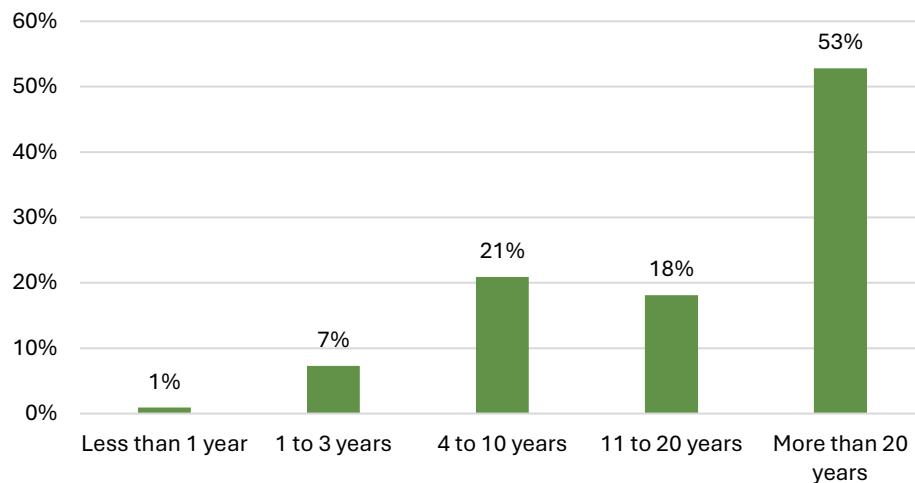
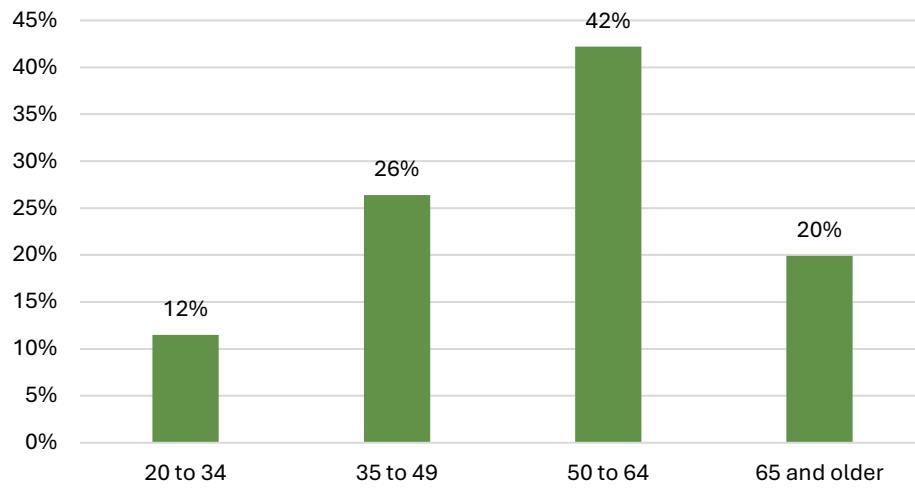
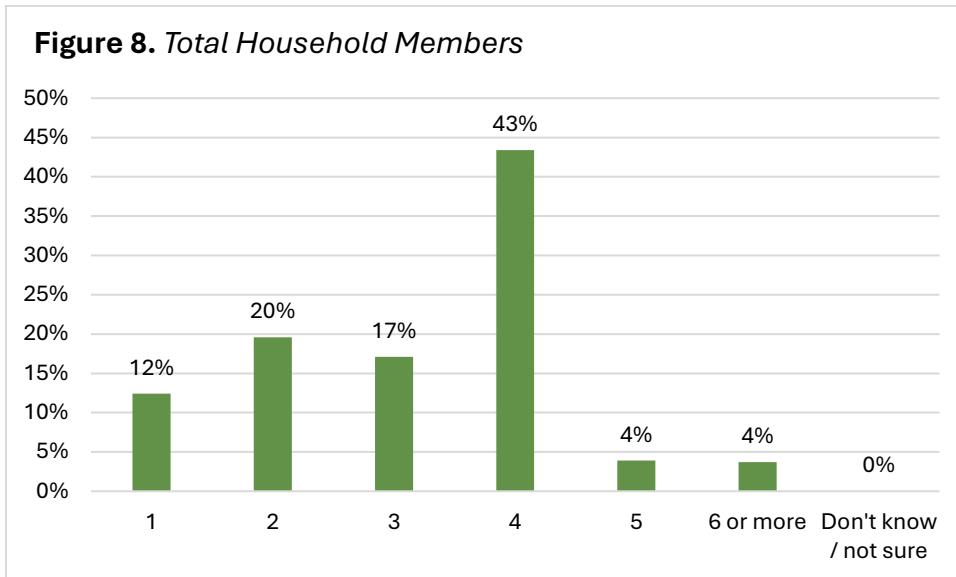


Figure 7. Age Category



Household structures reflected both diversity and density (Figure 8), with nearly half (43%) of respondents residing in four-person households, with additional representation from households of two (20%) and three (17%). Notably, 45% of respondents reported that at least one child under the age of 18 resided in the home, while 16% had two to four children in the home. More than three-quarters (77%) of respondents were currently married, while 15% were never married, 5% were widowed, and 2% had been divorced.



Race, Ethnicity, and Language

Geauga County respondents were overwhelmingly Caucasian (99%), with 98% identifying as non-Hispanic or Latino. All respondents reported English as the primary language spoken at home.

Sex, Gender Identity, and Communication

The overwhelming majority of survey respondents identified as female (87%), with 13% identifying as male. A small percentage (1%) identified as transgender male-to-female, while no respondents reported being transgender female-to-male or gender nonconforming. Five percent (5%) of respondents either indicated uncertainty or preferred not to disclose their gender identity.

When asked about communication challenges in their primary language, 95% of respondents reported no difficulty understanding or being understood. However, 1% reported some difficulty, and 4% reported having a lot of difficulty communicating.

Healthcare Access and Coverage

Most Geauga County respondents reported having health care coverage, with the majority (61%) receiving insurance through an employer or union-sponsored plan. Seven percent (7%) indicated they purchased their health insurance independently, and 19% were covered by Medicare. A smaller proportion of respondents were covered by Medicaid or other state programs (6%), while 2% reported military-related coverage such as TRICARE or VA benefits. Only 1% of respondents reported having no health care coverage.

Geauga County respondents report strong engagement with routine and preventive care (Table 4). Eighty-seven percent (87%) of Geauga County respondents had a routine doctor's visit in the past year, and 63% visited a dentist within the same timeframe. More than half of respondents (66%) received regular care from a doctor's office or HMO, while 32% reported using a clinic or health center as their primary source for routine care.

Table 4. Healthcare Providers Visits in the Past 12 Months

A general doctor who treats a variety of illnesses (a doctor in general practice, family medicine, or internal medicine)	75%
An optometrist, ophthalmologist, or eye doctor	64%
A doctor who specializes in women's health (an obstetrician/gynecologist)	39%
A medical doctor who specializes in a particular medical disease or problem (like diabetes, cancer, or heart disease)	28%
A nurse practitioner, physician assistant, or midwife	27%
A mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker	22%
A foot doctor	13%
A physical therapist, speech therapist, respiratory therapist, audiologist, or occupational therapist	11%
A chiropractor	9%
None of the above	3%

While cost-related access issues were relatively low, 6% of respondents reported not filling a prescription, and 9% did not receive necessary medical care due to cost.

Participation in routine cancer screenings generally aligned with clinically recommended screening frequency. Seventy-six percent (76%) of respondents 45 to 75 years of age received a colonoscopy within the past 10 years, with 1% reporting screening 10 or more years ago; 23% of this cohort had never received a

colonoscopy. Among male respondents 50 to 70 years of age, 91% had received a PSA test in the past two years (Figure 9).

Among female respondents, 94% of those 40 to 74 years of age had received a mammogram in the past two years, while 71% of those 21 to 65 years had received a pap test in the past three years (Figure 9).

Irrespective of sex, nearly three-quarters (73%) of respondents received a flu shot in the past year. Lifetime vaccination history was moderate across common vaccines (Table 5).

Figure 9. PSA, Mammogram, and Pap Screenings

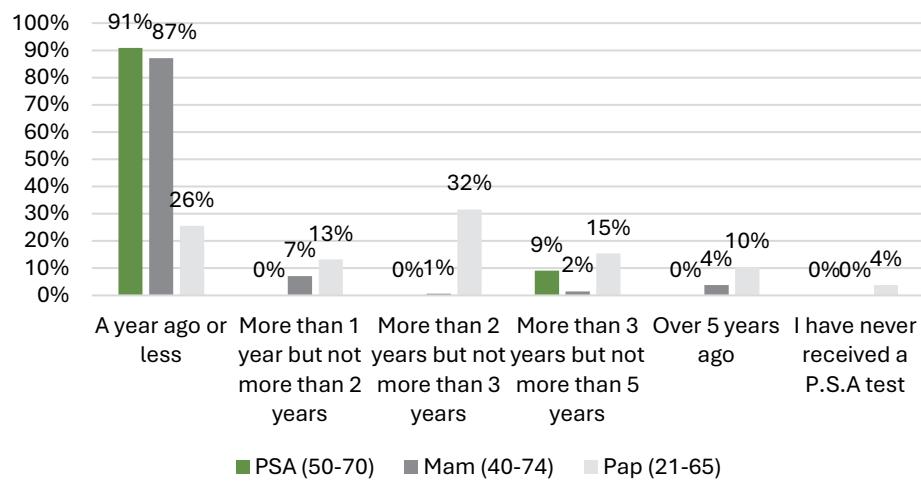


Table 5. Lifetime Vaccines

Measles (MMR)	77%
COVID-19	75%
Polio	72%
Tetanus, Diphtheria, and Pertussis (Tdap)	59%
Hepatitis B	58%
Hepatitis A	53%
Shingles	47%
Pneumonia	44%
Human Papillomavirus (HPV)	37%
Chicken pox	29%
Respiratory Syncytial Virus (RSV)	9%
None of the above	7%
Rabies	5%
Don't know / not sure	0%

Regarding barriers to care, only 6% of Geauga respondents indicated they went without needed prescription medications due to cost in the past year, while 3% cited cost barriers to over-the-counter medication and 5% to medical supplies.

The majority of respondents (61%) reported receiving health coverage through an employer, while 19% were covered by Medicare and 6% by Medicaid; approximately 1% indicated they were uninsured (Table 6).

Table 6. Primary Source of Health Care Coverage	
A plan purchased through an employer or union (including plans purchased through another person's employer)	61%
Medicare	19%
A plan that you or another family member buys on your own	7%
Medicaid, or other state program	6%
Some other source	4%
TRICARE (formerly CHAMPUS), VA, or Military	2%
I do not have health care coverage	1%
Alaska Native, Indian Health Service, or Tribal Health Services	0%
Don't know / not sure	0%

Health Conditions, Cancer History, and Functional Limitations

Geauga County respondents most commonly reported high blood pressure (43%) and high cholesterol (34%), while additional chronic conditions (Table X) included arthritis (22%), chronic pain (18%), mood disorders (17%), autoimmune disease (16%), asthma (14%), and anemia (12%).

Six percent (6%) of respondents reported a history of cancer. Among them, frequently identified cancer diagnoses included skin cancer (33%), breast (28%), cervical (15%), and ovarian (14%) among female respondents, respectively, as well as non-Hodgkin's lymphoma (15%). Lesser reported cancer diagnoses include Hodgkin's lymphoma (10%), and colon (9%), uterine (6%), liver (5%), and head and neck (4%) cancers, respectively.

Seven percent (7%) of respondents indicated that they currently rely on special equipment such as a cane, wheelchair, CPAP machine, or other assistive device. However, a notable portion reported functional limitations that could affect daily living, including difficulty stooping, bending, or kneeling (19%), participating in social activities (14%), standing for extended periods (13%), and walking a quarter mile (12%).

Table 7. Lifetime Chronic Disease Diagnosis

High blood pressure	43%
High cholesterol	34%
Arthritis	22%
Chronic pain	18%
Mood disorder	17%
Autoimmune disease	16%
Asthma	14%
Anemia	12%
Diabetes	6%
Cancer	6%
Endocrine disease	5%
Heart disease	3%
Hepatitis A, B, or C	3%
Pneumonia	2%
Osteoporosis	2%
Fibromyalgia	1%
Epilepsy	1%
Other	10%
None of the above	8%

Body Mass Index (BMI)

BMI classifications demonstrated a mixed distribution of weight categories:

- Normal Weight (18%)
- Overweight (27%)
- Class I Obesity (15%)
- Class II Obesity (29%)
- Class III Obesity (12%)

These findings point to an elevated prevalence of obesity-related risk, particularly in the more severe obesity classifications, which may carry higher health burdens and demand targeted interventions.

Mental Health and Adverse Experiences

Sixteen percent (16%) of Geauga County respondents reported having seriously considered suicide within the past 12 months; while no respondents reported having made a suicide attempt during that time, this signals a critical need for accessible mental health support and early intervention services.

In terms of adverse childhood experiences (ACEs), several respondents reported early life exposures to trauma and instability (Table 8).

Table 8. Adverse Childhood Experiences	
You lived with someone who was a problem drinker or alcoholic	29%
You lived with someone who was depressed, mentally ill, or suicidal	28%
A parent or adult in your home swore at you, insulted you, or put you down	27%
Your parents were separated or divorced	17%
Someone at least 5 years older than you or an adult touched you sexually	8%
You lived with someone who used illegal street drugs or who abused prescription medications	7%
A parent or adult in your home hit, beat, kicked, or physically hurt you in any way (not including spanking)	7%
You lived with someone who served time or was sentenced to serve time in a prison, jail, or other correctional facility	5%
Someone at least 5 years older than you or an adult tried to make you touch them sexually	2%
Someone at least 5 years older than you or an adult forced you to have sex	2%
Your parents or adults in your home slapped, hit, kicked, punched, or beat each other up	1%
None of the above	44%

Health Behaviors and Beliefs

The majority of Geauga County respondents described their diet as good (42%) or very good (39%), with only 6% reporting a poor overall diet (Figure 10). More than half (54%) reported eating fruits or vegetables every day during the previous week. Physical activity levels were modest, with just 11% reporting being active for at least 60 minutes on all seven days, while 26% reported no such activity (Figure 11).

Figure 10. Overall Diet

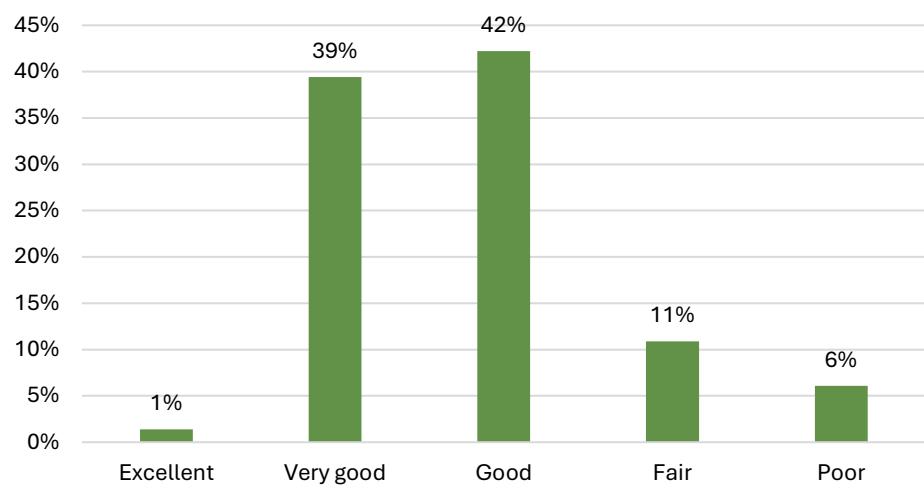
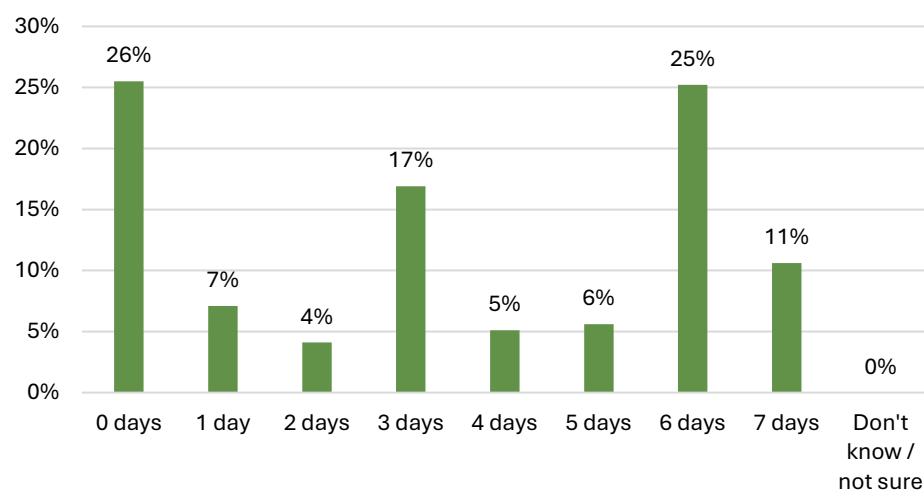


Figure 11. Physically Active for 60 Minutes in the Past Week



Alcohol consumption behaviors varied. While 38% reported no alcohol consumption in the previous month, 34% drank one day per week, and 12% drank two days per week (Figure 12). Reports of binge drinking in the past 30 days, as defined as five or more drinks for men or four or more for women, were rare, with 74% indicating no such episodes. However, 23% of respondents reported at least one binge drinking occasion in the past month, and 12% reported driving afterward.

Tobacco and cannabis use patterns reflected a range of behaviors (Table 9). The majority of respondents did not use smokeless tobacco (96%), cigarettes (75%), or e-cigarettes (71%). Still, nearly one-third (29%) reported vaping some days, and 29% reported occasional marijuana use, though only 1% reported daily use. Self-reported use of illicit drugs (5%) and abuse of prescription medications (4%) were notable.

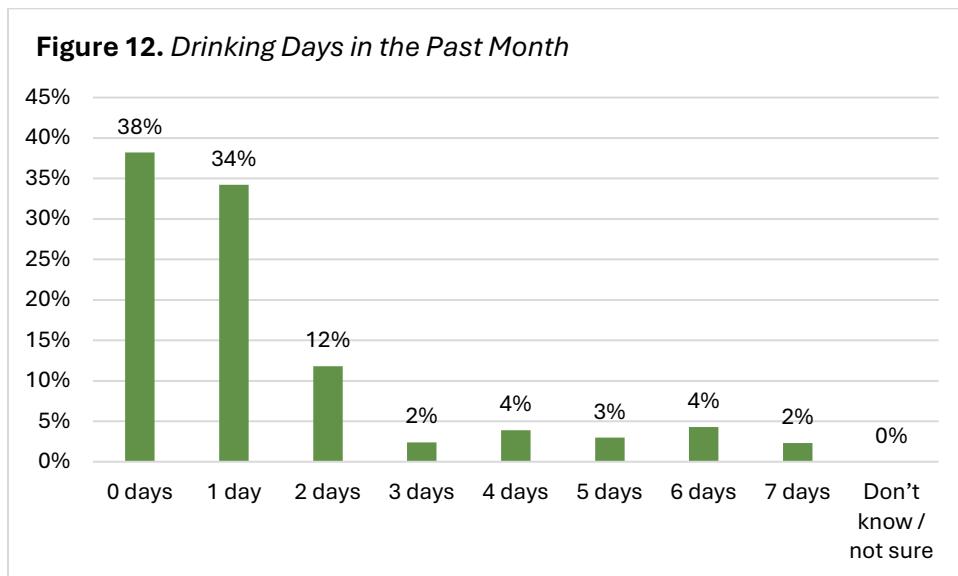


Table 9. Smoking, Smokeless, Vape, and Prescription / Illicit Substance Use			
	Every Day	Some Days	Not at All
Cigarettes	6%	19%	75%
Smokeless Tobacco	0%	4%	96%
E-cigarettes / Vape	1%	29%	71%
Marijuana	1%	29%	71%
Prescription Drug Abuse	3%	1%	96%
Illicit Drugs	1%	4%	96%

When asked about vaccine-related beliefs, Geauga County respondents largely affirmed the importance and safety of vaccines; notably, no respondents endorsed the belief that vaccines cause learning disabilities in children (Table 10).

Table 10. Vaccine Beliefs	
I could get a serious disease if I am not vaccinated	72%
It is important for me to get vaccinated in order to prevent the spread of disease in my community	71%
The benefits of vaccination outweigh the risks	64%
Vaccines may cause chronic disease (such as diabetes, asthma, or immune system problems)	14%
Vaccines are given to prevent diseases I am not likely to get	8%
Vaccines are not tested enough for safety	5%
Vaccines may cause learning disabilities in children (such as autism)	0%
None of the above	9%

Socioeconomic Status and Social Determinants of Health

The majority of Geauga County respondents reside in single-family homes (91%), with minimal representation from mobile homes (4%), transient hotels or motels (4%), and apartments (1%). Nine percent (9%) of respondents reported calling the police in the past six months to report a crime, while 5% experienced an incident they considered a crime but chose not to report it.

With respect to employment status, 73% of respondents were currently employed and only 1% reportedly unable to work. Respondents also indicated that they were retired (17%), self-employed (4%), serving as a homemaker (3%), or currently a student (2%). More than half of respondents reported annual household incomes exceeding \$80,000 (Figure 13), and 47% held a bachelor's degree or higher. Only 1% had less than a 12th-grade education.

Despite elevated annual household income and education levels, financial concern was a pervasive theme (Table 10). Transportation access among respondents was high, with 88% driving their own vehicle to the grocery store, while 6% relied on someone else's vehicle, and 4% relied on someone else to deliver their groceries, respectively.

Food assistance usage was relatively low, with only 4% of respondents reporting WIC benefits and 7% reporting SNAP/food stamp usage in the past year.

These indicators collectively describe a relatively affluent and well-educated population, though pockets of economic vulnerability persist.

Figure 13. Annual Household Income

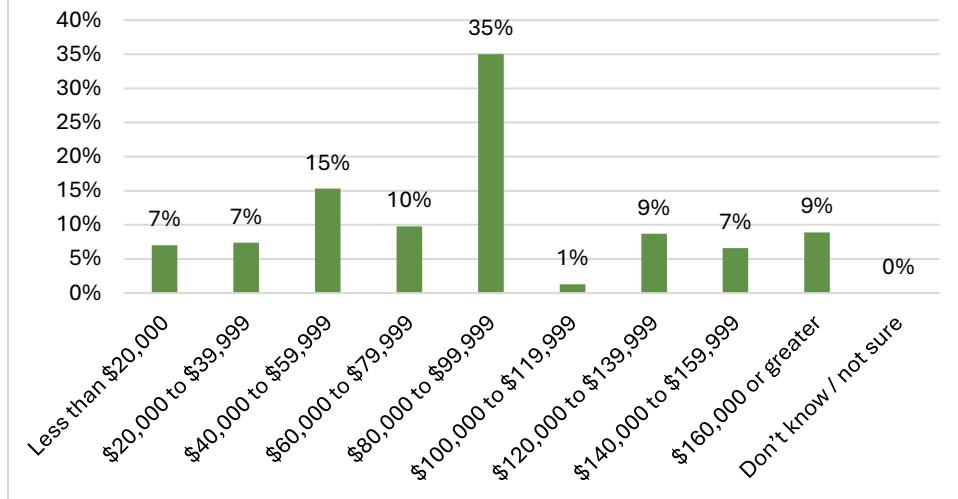


Table 11. Current Financial Stressors

Being able to maintain the standard of living I enjoy	61%
Not having enough money for retirement	59%
Being able to pay medical costs of a serious illness or accident	55%
Being able to pay medical costs for normal healthcare	48%
Not having enough money to pay for my children's college	37%
Not having enough to pay my normal monthly bills (gas, electricity, water, insurance)	27%
Not having enough money to pay for daycare or childcare	26%
Not being able to make the minimum payments on my credit cards	19%
Not being able to pay my rent, mortgage, or other housing costs	18%
Not being able to afford the food I need	17%
None of the above	23%

6. Community Leader Survey

6.1 Methodology

An electronic community leader survey was distributed to 48 Geauga County community leaders representing a diverse set of Geauga County organizations, including local governments, public health agencies, healthcare providers, emergency services, nonprofit organizations, and educational institutions. The survey instrument gathered input on organizational roles, community engagement practices, perceived health inequities, capacity for collaboration, and strategies to improve health and advance equity. Community leaders responded to questions grouped by five core domains: partnership engagement, public health system roles, organizational capacity, partnership landscape, and opportunities for broader engagement.

6.2 Community Leader Survey Findings

A total of six Geauga County community leaders completed the survey, representing a spectrum of sectors including nonprofit, public service, local government, behavioral health, and public health organizations. Participating entities included Linking Employment, Abilities, and Potential (LEAP), Geauga County Public Library, Torchlight Youth Mentoring Alliance, Geauga County Mental Health and Recovery Services Board, Geauga Metropolitan Housing Authority, and Lake-Geauga Women, Infants, and Children (WIC).

Table 12. Engagement with Other Organizations to Improve Community Health

Collaborating on health fairs, screenings, awareness campaigns, or community wellness programs	100%
Partnering to provide integrated health services or referral systems	100%
Sharing or pooling physical or financial resources	75%
Attending workshops, seminars, or conferences	75%
Partnering in community-based health research	50%
Holding regular meetings with community or organizational leaders	50%
Serving on health planning and policy committees	50%
Leading or supporting education or training programs	50%
Collaborating on community surveys, focus groups, or assessments	50%
Codeveloping care plans for high-need populations	50%
Exchanging data and information to better understand community health needs	25%
Providing technical or logistical support	25%
Conducting shared outreach initiatives for underserved populations	25%
Organizing community health promotion events	25%
Collaborating on health-related advocacy efforts	25%

Barriers to collaboration include financial constraints (75%), a lack of shared goals (50%), insufficient communication (25%), organizational capacity (25%), and a lack of buy-in (25%). The majority described their role in the public health system as a partner organization (75%).

To address health inequities, local stakeholders emphasized partnerships with community leaders (75%), while half (50%) of organizations targeted outreach, partnership with community advocates, educational programming, and direct support in areas such as housing and employment. However, actions like cultural competency training, multilingual communication, or formal community feedback collection remain underutilized.

Mental health disparities were the most commonly addressed inequity (75%), followed by un- or under-employment (50%), access to healthcare (25%), and substance use and abuse (25%). To evaluate effectiveness in improving community health, all of the respective organizations participated in community health assessments, while half (50%) tracked community health outcomes and service utilization. Determining programmatic cost-effectiveness, benchmarking performance, and achieving accreditation were cited by a quarter (25%) of the respective organizations.

In order to measure progress made to advance health equity, most organizations reported participating in community health improvement planning (75%), while 25% of organizations also evaluated available healthcare services, and reviewed the impact of current or future policies, current cultural competency training, and organizational partnerships.

Opportunities identified for improving the local partnership network included greater resource sharing (75%) and more consistent engagement (75%). Half (50%) of organizations also identified improved communication, collaboration frequency, and data sharing. Twenty-five percent (25%) also acknowledged improved service coordination and stakeholder engagement as strategies for expanding local partnership.

Half of the included organizations (50%) indicated there were additional stakeholders that should be engaged, and these recommendations were specifically focused on doctors' offices.

When asked to identify unique resources and competencies that community leaders' respective organizations provide to the community, the following qualitative themes emerged.

1. Volunteerism and Community Outreach

- The Geauga County Public Library connects with diverse residents, including the Amish community, through bookmobiles and outreach services
- Lake Geauga WIC highlighted access to both youth and adult volunteers that expand service capacity across multiple demographics
- LEAP identified a broad volunteer base that supports local nonprofits and a mobile produce pantry serving approximately 400 seniors

2. Health and Behavioral Health Services

- Torchlight Youth Mentoring Alliance provides Crisis Intervention Training (CIT) to Patrol Deputies, Correctional Staff, and Dispatchers, enhancing their ability to respond effectively to behavioral health crises
 - Jail-based services include Narcotics Anonymous (NA), Alcoholics Anonymous (AA), bible studies, church services, and mental health counseling, offering supportive resources to incarcerated individuals

3. Equity and Accessibility

- Geauga County Mental Health and Recovery Services Board works with individuals with disabilities to advocate for inclusive services and highlight unmet needs of often-overlooked populations
 - An emphasis was placed on enabling individuals to live independently and with dignity by promoting equal access to programs and services

4. Convening and Coordination

- The Geauga County Public Library highlighted their ability to act as neutral conveners, fostering collaboration and dialogue among stakeholders from different sectors
- The Geauga Metropolitan Housing Authority provides outreach services to connect senior residents with a variety of resources

7. Community Resident Focus Groups

7.1 Methodology

A total of five community resident focus groups were conducted between December 17, 2024, and January 29, 2025, in partnership with local institutions and community leaders. Locations for the respective focus groups included:

- **Thompson Public Library** (December 17, 2024) – 4 participants
- **Geauga WIC** (December 18, 2024) – 1 participant
- **Middlefield Senior Center** (December 19, 2024) – 6 participants
- **Amish Community Residence** (January 28, 2025) – 8 participants
- **University Hospitals Geauga Medical Center** (January 29, 2025) – 4 participants

These sessions ranged from 45 minutes to one hour. Each session was guided by a structured discussion guide, composed of four key questions and eight primer questions that explored local strengths, barriers to health, access to care, housing and affordability, and anticipated future challenges. Questions were broad and designed to prompt community-level insights, including themes such as joy, resilience, mutual aid, well-being, and trusted sources of local information. Participants were compensated for their time with a \$20 gift card to a local Geauga County business.

7.2 Community Resident Focus Group Findings

The focus group sessions not only highlighted areas of concern but also surfaced a range of strengths and aspirations that contribute to community resilience in Geauga County.

Several key themes emerged across all five focus groups:

1. Joy and Daily Life

Participants across multiple focus groups shared experiences that brought meaning and joy to their daily lives, emphasizing the importance of modest, grounding pleasures such as time with pets, family interactions, and engagement with hobbies. These sources of well-being were not only personally fulfilling but served as protective factors against stress and isolation. Both Amish and non-Amish groups highlighted these relational activities as vital to emotional health and spiritual balance.

“Not needing help getting up in the morning, staying healthy and thankful, having the first cup of coffee, and getting started I guess...”

2. Mental and Physical Well-being

Participants described how mental and physical health were interconnected and supported through accessible community-based programs. Activities such as free yoga sessions, NAMI walks, and participation in restoration or support teams were viewed as meaningful avenues for wellness, stress relief, and connection. Churches and libraries were also identified as trusted spaces for accessing mental health resources and wellness information. These insights reflected a broad interest in resilience-building activities that promote holistic health, particularly in communities with limited formal infrastructure.

“...I think if we’re specifically talking about Geauga County...we are just really lucky in Geauga County to have as many opportunities to be outside”

3. Healthcare Access

Participants reported a variety of challenges in accessing or understanding healthcare services. Common concerns included long appointment wait times, difficulty locating primary care or pediatric providers, and confusion around when to use urgent care versus emergency services. Residents also described issues with insurance coverage, such as unexpected billing errors and unclear benefits. These barriers contributed to delays in care and increased frustration, especially among seniors and families navigating complex health needs.

“One of the biggest things we hear is, our people are just not able to call a doctor and get an appointment when it’s needed...you almost have to schedule and (then) get sick...”

4. Housing and Affordability

Participants voiced concern over the availability and cost of housing, particularly for seniors, young families, and low-income residents. A shortage of affordable options, combined with high property taxes and senior living costs exceeding \$3,000 per month, was cited as a growing burden. In rural areas, zoning restrictions and space limitations were additional barriers to developing new housing that meets community needs. These challenges were seen as deeply tied to health equity, aging, and long-term stability.

“...our elderly population, they do not have a home that is conducive for them to live in. We’ve pushed for, like, one level thing, and there’s just not enough or not around and not affordable”

5. **Food Access and Affordability**

Participants shared concerns about the consistent availability and affordability of healthy food options in their communities. Many described a dependence on food banks and pantries, especially during times of financial strain, as well as seasonal access to fresh produce from farmers markets. Affordability at local grocers was a recurring issue, and some residents reported relying on convenience stores like Dollar General to purchase staples. These challenges were especially pronounced in rural areas, where transportation barriers further limited access to nutritious food.

“I gotta say, you know, if you’re on a really tight budget, fresh around here is not affordable”

6. **Community Support**

Participants highlighted the importance of informal support systems, such as neighborly help with snow removal and meal sharing, as vital to community well-being. Faith communities played a key role in organizing assistance, while volunteer-driven efforts offered essential support during times of crisis. Social media platforms like Facebook were commonly used to exchange resources and connect residents with local help. These grassroots efforts were often seen as more approachable and effective than formal service agencies.

“I have a neighbor who helps me quite often. Like, if I can’t reach something, or I can’t get down to get something, all I have to do is ask...”

7. **Communication and Information Sharing**

Participants described a strong reliance on informal communication channels such as community bulletin boards, word of mouth, local newspapers, church announcements, and neighborhood apps like Facebook and Ring. These tools were commonly used to learn about events, services, and resources, especially in the absence of centralized or official sources. While effective in some cases, this approach was also seen as inconsistent and unreliable, particularly for those without regular internet access. Participants emphasized the need for more coordinated, accessible, and proactive information-sharing systems.

“...if we knew that a newsletter was going to go out on the same Friday every month, then at least you have in your head, like, oh, I can see what’s going on. So the consistency is huge to cut through the noise...”

8. **Transportation**

Transportation was frequently cited as a barrier to daily functioning and health, particularly due to the lack of public transit in rural areas. Participants described a heavy reliance on personal vehicles, with limited alternatives for those without one. Arranging rides to healthcare appointments was a common challenge, and the availability of community transport, such as 14-passenger vans, was described as limited or inconsistent.

“I think that the issue, out in this area anyways is, you can’t, to be elderly (and) to not have transportation, you can’t be out here...you have to be able to drive, and you have to have a way to a car”

8. Secondary Data

Table 13. Secondary Data Measure Values, Definitions, and Relative Ranking – Population

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Total Population	2024	Estimate of the total population in the geographic area. Total population includes population living in households, active duty in the armed forces, and living in group quarters such as correctional facilities, skilled nursing facilities, juvenile facilities, college dorms, and military barracks. (Source: ESRI)	NA	338440954	11827635	95792	234832	185449	NA
Civilian Employed Population Age 16+	2018-2022	Five-year estimate of the civilian employed population age 16+ in the geographic area. Employed civilian population includes those who are not on active duty in the armed forces or are self-employed, including those who work 15 hours or more for a family business (paid or unpaid) or those who are temporarily absent from work due to illness, vacation, or other personal reasons. (Source: U.S. Census Bureau)	75%	77%	67%	69%	67%	69%	NA
Male Population	2024	Estimate of the male population in the geographic area. (Source: ESRI)	NA	50%	50%	50%	50%	50%	NA
Female Population	2024	Estimate of the female population in the geographic area. (Source: ESRI)	NA	50%	50%	50%	50%	50%	NA
Households with Population Age <18	2018-2022	Estimate of the number of households with population age <18 in the geographic area. (Source: U.S. Census Bureau)	NA	30%	28%	29%	41%	31%	NA
Population Age 0-4	2024	Estimate of the population age 0-4 in the geographic area. Total population includes population living in households, on active duty in the armed forces, and living in group quarters such as correctional facilities, skilled nursing facilities, juvenile facilities, college dorms, and military barracks. (Source: ESRI)	NA	5%	6%	5%	6%	5%	NA

Table 14. Secondary Data Measure Values, Definitions, and Relative Ranking – Population (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Population Age 5-9	2024	Estimate of the population age 5–9 in the geographic area. Total population includes population living in households, on active duty in the armed forces, and living in group quarters such as correctional facilities, skilled nursing facilities, juvenile facilities, college dorms, and military barracks. (Source: ESRI)	NA	6%	6%	6%	7%	6%	NA
Population Age 10-14	2024	Estimate of the population age 10–14 in the geographic area. Total population includes population living in households, on active duty in the armed forces, and living in group quarters such as correctional facilities, skilled nursing facilities, juvenile facilities, college dorms, and military barracks. (Source: ESRI)	NA	6%	6%	6%	8%	6%	NA
Population Age 15-19	2024	Estimate of the population age 15–19 in the geographic area. Total population includes population living in households, on active duty in the armed forces, and living in group quarters such as correctional facilities, skilled nursing facilities, juvenile facilities, college dorms, and military barracks. (Source: ESRI)	NA	6%	6%	6%	7%	6%	NA
Senior Population	2024	Estimate of the total senior population (age 65+) in the geographic area. (Source: ESRI)	NA	18%	19%	24%	16%	21%	NA
Median Age	2024	Estimate of the median age of the population in the geographic area. (Source: ESRI)	NA	39	40	46	40	44	NA
Generation Alpha Population	2024	Estimate of the generation alpha population (born 2017 or later) in the geographic area. (Source: ESRI)	NA	9%	9%	9%	10%	9%	NA
Generation Z Population	2024	Estimate of the generation Z population (born 1999–2016) in the geographic area. (Source: ESRI)	NA	23%	23%	22%	25%	21%	NA
Millennial Population	2024	Estimate of the millennial population (born 1981–1998) in the geographic area. (Source: ESRI)	NA	24%	23%	18%	21%	21%	NA

Table 15. Secondary Data Measure Values, Definitions, and Relative Ranking – Population (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Generation X Population	2024	Estimate of the generation X population (born 1965–1980) in the geographic area. (Source: ESRI)	NA	19%	19%	20%	23%	21%	NA
Baby Boomer Population	2024	Estimate of the baby boomer population (born 1946–1964) in the geographic area. (Source: ESRI)	NA	20%	21%	25%	17%	23%	NA
Silent & Greatest Generations Population	2024	Estimate of the silent and greatest generations population (born 1945 or earlier) in the geographic area. (Source: ESRI)	NA	5%	5%	7%	4%	5%	NA
Population 18-64 Speak Spanish/ No English	2018-2022	Estimate of the population age 18–64 who sometimes or always speak Spanish at home and report speaking no English in the geographic area. (Source: ESRI)	NA	1%	0%	0%	0%	0%	NA
Population 65+ Speak Spanish/ No English	2018-2022	Estimate of the population age 65+ who sometimes or always speak Spanish at home and report speaking no English in the geographic area. (Source: ESRI)	NA	0%	0%	0%	0%	0%	NA
White Population	2024	Estimate of the White population in the geographic area. (Source: ESRI)	NA	60%	76%	93%	79%	91%	NA
Black Population	2024	Estimate of the Black/African American population in the geographic area. (Source: ESRI)	NA	12%	13%	1%	4%	1%	NA
Asian Population	2024	Estimate of the Asian population in the geographic area. (Source: ESRI)	NA	6%	3%	1%	10%	1%	NA
American Indian Population	2024	Estimate of the American Indian/Alaska Native population in the geographic area. (Source: ESRI)	NA	1%	0%	0%	0%	0%	NA
Pacific Islander Population	2024	Estimate of the Pacific Islander population in the geographic area. (Source: ESRI)	NA	0%	0%	0%	0%	0%	NA

Table 16. Secondary Data Measure Values, Definitions, and Relative Ranking – Population (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Hispanic Population	2024	Estimate of the Hispanic population in the geographic area. Hispanic population self-identify with Hispanic, Latino, or Spanish origins and may belong to any U.S. Census-designated race category. (Source: ESRI)	NA	20%	5%	2%	4%	3%	NA
Non-Hispanic Population	2024	Estimate of the non-Hispanic population in the geographic area. Non-Hispanic population self-identify with no Hispanic, Latino, or Spanish origins. (Source: ESRI)	NA	80%	95%	98%	96%	97%	NA
Urban Population	2020	U.S. Census 2020 count of the urban population. An urban population consists of areas that have a greater population density than rural areas and are overall more compact than rural areas. Most often urban population refers to people living in cities. (Source: U.S. Census Bureau)	NA	80%	76%	21%	80%	66%	NA
Rural Population	2020	U.S. Census 2020 count of the rural population. A rural population consists of all territory, population, and housing units not included within an urban area and reflects populations that live outside of cities. Rural population areas have a lower population density than urban areas and are spread over a larger area than urban centers. (Source: U.S. Census Bureau)	NA	20%	24%	79%	20%	34%	NA
Population Density	2024	Estimate of population density reflects the number of people per square mile in the specified geographic area. It is calculated by dividing the total population by the total land area (in square miles). (Source: ESRI)	NA	96	290	239	530	440	NA
Voter Turnout	2016-2020	Percentage of citizen population aged 18 or older who voted in the 2020 U.S. Presidential election. (Source: County Health Rankings)	NA	68%	67%	78%	88%	77%	Unfavorable to 1

Table 17. Secondary Data Measure Values, Definitions, and Relative Ranking – Education

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Population 3+ Enrolled in School	2018-2022	Estimate of the population age 3+ enrolled in any school in the geographic area. Includes enrollment in any public or private primary or secondary education program. Secondary school tutoring or correspondence are included if credit can be obtained, including public or private schools or colleges. Those enrolled in "vocational, technical, or business school" such as postsecondary vocational, trade, hospital school, and on-site job training were not reported as enrolled in school. (Source: U.S. Census Bureau)	NA	25%	24%	22%	28%	23%	NA
Population 3+ in Nursery/Preschool	2018-2022	Estimate of the population age 3+ enrolled in nursery or preschool in the geographic area. This includes population enrolled in any type of public or private nursery or preschool education program. (Source: U.S. Census Bureau)	NA	1%	1%	1%	2%	2%	NA
Population 3+ in Kindergarten	2018-2022	Estimate of the population age 3+ enrolled in kindergarten in the geographic area. This includes population enrolled in any type of public or private primary education program. (Source: U.S. Census Bureau)	NA	1%	1%	1%	1%	1%	NA
Population 25+: Some High School	2018-2022	Estimate of the population age 25+ whose highest educational attainment is 9th to 12th grade (no diploma) in the geographic area. (Source: U.S. Census Bureau)	NA	6%	6%	3%	2%	4%	NA
Population 25+: High School Diploma	2018-2022	Estimate of the population age 25+ whose highest educational attainment level is a high school diploma in the geographic area. (Source: U.S. Census Bureau)	NA	22%	29%	24%	15%	27%	NA

Table 18. Secondary Data Measure Values, Definitions, and Relative Ranking – Education (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Population 25+: GED	2018-2022	Estimate of the population age 25+ whose highest educational attainment level is a GED or other alternative high school diploma equivalent credential in the geographic area. (Source: U.S. Census Bureau)	NA	4%	4%	2%	1%	3%	NA
Population 25+: Some College	2018-2022	Estimate of the population age 25+ whose highest educational attainment level is some college/no degree in the geographic area. (Source: U.S. Census Bureau)	NA	20%	20%	19%	17%	20%	NA
Population 25+: Associate's Degree	2018-2022	Estimate of the population age 25+ whose highest educational attainment level is an Associate degree in the geographic area. (Source: U.S. Census Bureau)	NA	9%	9%	7%	7%	9%	NA
Population 25+: Bachelor's Degree	2018-2022	Estimate of the population age 25+ whose highest educational attainment level is a Bachelor's degree in the geographic area. (Source: U.S. Census Bureau)	NA	21%	19%	25%	35%	24%	NA
Population 25+: Master`s Degree	2018-2022	Estimate of the population age 25+ whose highest educational attainment level is a Master's degree in the geographic area. (Source: U.S. Census Bureau)	NA	10%	9%	10%	17%	10%	NA
Population 25+: Professional School Degree	2018-2022	Estimate of the population age 25+ whose highest educational attainment level is a Professional School degree in the geographic area. (Source: U.S. Census Bureau)	NA	2%	2%	3%	4%	1%	NA
Population 25+: Doctorate	2018-2022	Estimate of the population age 25+ whose highest educational attainment level is a Doctorate degree in the geographic area. (Source: U.S. Census Bureau)	NA	2%	1%	2%	2%	1%	NA

Table 19. Secondary Data Measure Values, Definitions, and Relative Ranking – Economic Status

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Household Income Below Poverty Level	2018-2022	Estimate of the number of households with income below the poverty Level in the geographic area. (Source: U.S. Census Bureau)	8%	12%	13%	6%	5%	7%	Unfavorable to 1
Children in Poverty	2019-2023	Percentage of people under age 18 in poverty. (Source: County Health Rankings)	NA	16%	18%	6%	6%	9%	Unfavorable to 0
Per Capita Income	2024	Estimate of the per capita income in the geographic area. Per capita income is calculated by dividing aggregate income by the total population for the area. (Source: ESRI)	NA	\$43,829	\$40,032	\$52,313	\$61,528	\$47,998	NA
Households with Public Assistance Income	2018-2022	Estimate of the number of households with public assistance income in the geographic area. (Source: U.S. Census Bureau)	NA	3%	3%	1%	1%	1%	Unfavorable to 0
Median Household Income	2018-2022	Estimate of the median household income in the geographic area. Median household income is the income amount that divides household income (annual income for all household earners age 15+) into two equal groups: half of the population will have income higher than the median, and half will have income lower than the median. (Source: U.S. Census Bureau)	NA	\$75,149	\$66,990	\$97,162	\$123,995	\$89,968	NA
Unemployment Rate	2024	Estimate of the unemployment rate of population age 16+ in the geographic area. The unemployment rate represents the total number of unemployed persons as a percentage of the civilian labor force. (Source: ESRI)	NA	4%	3%	2%	2%	2%	Unfavorable to 0
Households with Food Stamps/SNAP	2018-2022	Estimate of the number of households receiving food stamps or SNAP in the geographic area. (Source: U.S. Census Bureau)	NA	12%	12%	4%	4%	6%	Unfavorable to 0

Table 20. Secondary Data Measure Values, Definitions, and Relative Ranking – Economic Status (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Gini Index	2024	Gini Index of household income inequality quantifies the dispersion of household income or the deviation of household incomes from perfect equality. The Gini Index ranges from 0 to 100, where: 0 = perfect equality, and 100 = total inequality. (Source: ESRI)	NA	41	41.5	35.8	32.7	37.2	Unfavorable to 1
Income Inequality	2019-2023	Ratio of household income at the 80th percentile to income at the 20th percentile. (Source: County Health Rankings)	NA	4.9	4.6	4.1	3.9	3.9	Unfavorable to 2
Gender Pay Gap	2019-2023	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers, presented as "cents on the dollar". (Source: County Health Rankings)	NA	0.81	0.8	0.83	0.72	0.77	Unfavorable to 0
Living Wage	2024	The hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children. (Source: County Health Rankings)	NA	NA	\$48	\$53	\$56	\$52	Unfavorable to 2
Area Deprivation Index	2022	A population-weighted average score (ranging from 1 to 100) that reflects socioeconomic disadvantage in a given area, based on 17 measures across education, income, employment, housing, and household characteristics, and is benchmarked at national or state percentiles. The state percentile has been used for this reporting. (Source: Community Commons)	NA	51	48	20	14	26	Unfavorable to 1
Average Child Care Costs	2024	Esri 2024 estimates of total average amount spent per household on childcare in the geographic area. Includes expected spending on babysitting, childcare in own or others' homes, daycare, nurseries, and preschools. (Source: ESRI)	NA	\$553	\$452	\$676	\$907	\$604	Unfavorable to 3

Table 21. Secondary Data Measure Values, Definitions, and Relative Ranking – Economic Status (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Child Care Cost Burden	2023-2024	Childcare costs for a household with two children as a percent of median household income. (Source: County Health Rankings)	NA	28%	32%	28%	22%	31%	Unfavorable to 1
Children Eligible for Free or Reduced-Price Lunch	2022-2023	Percentage of children enrolled in public schools that are eligible for free or reduced-price lunch. (Source: County Health Rankings)	NA	55%	35%	15%	14%	18%	NA
Population Receiving SNAP	2022	The average percentage of the population receiving SNAP benefits during the month of July during the most recent report year. (Source: Community Commons)	NA	13%	12%	3%	3%	5%	NA

Table 22. Secondary Data Measure Values, Definitions, and Relative Ranking – Housing

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Renter Occupied HUs	2024	Estimate of the percentage of renter-occupied housing units in the geographic area. All occupied housing units not owned by the occupant, whether rented or occupied without rent payment, are classified as renter occupied. This includes houses, apartments, mobile homes, groups of rooms, and single rooms (if occupied or intended for occupancy as separate living quarters). (Source: ESRI)	NA	36%	33%	12%	22%	19%	NA
Housing Affordability Index	2024	Housing affordability index evaluates a typical resident's ability to purchase a home in a specific geographic area. The index uses a base of 100, which represents the threshold where the median household income is just enough to qualify for a mortgage on a median-priced home, assuming the homeowner is not cost-burdened (i.e., spending no more than 30% of income on housing). Values greater than 100 suggest increasing affordability. Values less than 100 indicate decreasing affordability. (Source: ESRI)	NA	85	109	108	94	113	Unfavorable to 2
Household Gross Rent 50% of Income	2018-2022	Estimate of the percentage of renter households whose gross rent equals or exceeds 50% of household income. Gross rent includes contract rent plus estimated average monthly costs of utilities (electricity, gas, water/sewer), fuels (oil, coal, kerosene, wood, etc.), if paid by the renter. Household income includes all sources. (Source: U.S. Census Bureau)	NA	23%	21%	18%	15%	17%	Unfavorable to 2

Table 23. Secondary Data Measure Values, Definitions, and Relative Ranking – Housing (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Households with Mortgage 50% of Income	2022	Estimate of the percentage of owner-occupied households with a mortgage whose monthly owner costs (MOC) are ≥50% of household income. Monthly Owner Costs (MOC) include: mortgage payments and other debt payments related to the property, real estate taxes, fire, hazard, and flood insurance, utilities (electricity, gas, water/sewer), fuels (oil, coal, kerosene, wood, etc), and condominium or mobile home fees. Income includes all sources. (Source: U.S. Census Bureau)	NA	7%	5%	5%	5%	5%	Unfavorable to 0
Median Contract Rent	2024	The median contract rent is the midpoint of contract rent values in a given geographic area. This value divides rent-paying households into two equal groups: half pay less than the median, half pay more than the median. If the median exceeds \$3,500, it is capped and reported as \$3,501+. Contract rent includes only the cash rent paid for housing (excluding utilities and other costs). (Source: ESRI)	NA	\$1,295	\$855	\$904	\$1,286	\$937	Unfavorable to 1
Vacant Housing Units	2024	Estimate of the percentage of housing units in a geographic area that are unoccupied. A unit is classified as vacant if no one is living in it at the time of census data collection, unless the residents are temporarily absent (vacation, business travel) and are expected to return. Units occupied entirely by people whose primary residence is elsewhere (temporary workers) are also classified as vacant. (Source: ESRI)	NA	10%	8%	5%	5%	4%	Unfavorable to 1

Table 24. Secondary Data Measure Values, Definitions, and Relative Ranking – Housing (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Home Ownership	2019-2023	Percentage of owner-occupied housing units. (Source: County Health Rankings)	NA	65%	67%	87%	78%	80%	Unfavorable to 0
Owner Households with 0 Vehicles	2018-2022	Estimate of the number of owner-occupied households with no vehicles in the geographic area. A housing unit is considered owner-occupied if the owner or co-owner lives in the unit, regardless of whether it is mortgaged or fully paid for. This estimate includes only households with zero available vehicles. (Source: U.S. Census Bureau)	NA	3%	3%	8%	1%	1%	Unfavorable to 4
Renter Households with 0 Vehicles	2018-2022	Estimate of the number of renter-occupied households with no vehicles available in the geographic area. A housing unit is considered renter-occupied if the occupants do not own the unit they occupy. The estimate reflects households where no car, truck, or van is available for regular use by any member of the household. (Source: U.S. Census Bureau)	NA	18%	16%	14%	7%	12%	Unfavorable to 2
Households with Population <18: Family	2018-2022	Estimate of the percentage of family households that have one or more individuals under the age of 18 living in them in a given geographic area. A family household consists of two or more people living together who are related by birth, marriage, or adoption. (Source: U.S. Census Bureau)	NA	30%	28%	29%	40%	31%	NA
Households with Population <18: Nonfamily	2018-2022	Estimate of the percentage of nonfamily households with at least one resident under age 18. Nonfamily households include individuals living alone, unmarried partners, roommates, foster children, or other nonrelatives sharing a residence. (Source: U.S. Census Bureau)	NA	0%	0%	0%	0%	0%	NA

Table 25. Secondary Data Measure Values, Definitions, and Relative Ranking – Housing (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Households with Population 65+	2018-2022	Estimate of the percentage of households in a given geography with at least one resident aged 65 or older. This variable is useful for assessing aging populations and tailoring services such as healthcare, transportation, and senior housing. (Source: U.S. Census Bureau)	NA	31%	31%	37%	27%	32%	NA
Households with Broadband Internet	2018-2022	Estimate of the percentage of households with a broadband internet subscription in a given geographic area. Broadband includes cable, fiber-optic, DSL, or satellite internet services. (Source: U.S. Census Bureau)	61%	73%	73%	74%	87%	80%	Unfavorable to 2
Households w/No Internet Access	2018-2022	Estimate of the percentage of households without any form of internet access in the geographic area. This includes households that report having no broadband, cellular data, satellite, or dial-up connections. (Source: U.S. Census Bureau)	NA	9%	10%	12%	3%	7%	Unfavorable to 4
Male Householder: Own Kids <18	2020	This variable represents the 2020 U.S. Census count of households in which the male householder has no spouse or partner present and lives with own children under the age of 18. “Own children” includes sons or daughters by birth, stepchildren, or adopted children of the householder. (Source: U.S. Census Bureau)	NA	2%	1%	1%	1%	1%	Unfavorable to 0
Female Householder: Own Kids <18	2020	This variable reports the 2020 Census count of households with a female householder, no spouse or partner present, and own children under age 18. “Own children” refers to sons or daughters by birth, stepchildren, or adopted children of the householder. (Source: U.S. Census Bureau)	NA	5%	5%	2%	3%	3%	Unfavorable to 0

Table 26. Secondary Data Measure Values, Definitions, and Relative Ranking – Housing (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Male Householder: Living Alone 65+	2020	Percentage of households where the householder is a male aged 65 or older, and lives alone (no spouse or partner is present in the household). (Source: U.S. Census Bureau)	NA	4%	4%	4%	2%	3%	Unfavorable to 2
Female Householder: Living Alone 65+	2020	Percentage of households where the householder is a female aged 65 or older, and lives alone (no spouse or partner is present in the household). (Source: U.S. Census Bureau)	NA	7%	8%	8%	6%	8%	Unfavorable to 2
Total Households	2024	Total number of households in the geographic area. A household includes all individuals who occupy a housing unit (such as a house, apartment, or mobile home) as their usual residence. A household may include a single person living alone, a family (related members), or a group of unrelated individuals (roommates, cohabiting partners). (Source: ESRI)	NA	130.7 M	4864083	35859	85762	73821	NA
Average Household Size	2024	Estimate of the average number of persons per household in a geographic area. It is calculated by dividing the total number of people living in households by the total number of households in the current year. Households include all people who occupy a housing unit (house, apartment) as their usual residence. (Source: ESRI)	NA	3	2	3	3	2	NA
Severe Housing Problems	2017-2021	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities. (Source: County Health Rankings)	NA	17%	13%	11%	8%	9%	Unfavorable to 2
Evictions	2018	The eviction filing rate is the ratio of total evictions filed to the number of renter-occupied homes in the respective area. (Source: Community Commons)	NA	8	6	2	3	3	Unfavorable to 0

Table 27. Secondary Data Measure Values, Definitions, and Relative Ranking – Pollution

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Particulate Matter	2020	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5). (Source: County Health Rankings)	NA	7.3	7.9	8.4	8.2	6.5	Unfavorable to 4

Table 28. Secondary Data Measure Values, Definitions, and Relative Ranking – Built Environment

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Average Commute to Work	2017-2021	The average commute to work for workers age 16+ in a geographic area. It is calculated by dividing the aggregate commute to work by the total number of workers. (Source: U.S. Census Bureau)	NA	27	24	28	26	27	Unfavorable to 4
Commute to Work: 60-89 Minutes	2022	Estimate of the percentage of workers aged 16+ whose commute time to work is between 60 and 89 minutes. Commute time includes travel between home and work (one way), time spent waiting for or using public transportation, carpooling activities (pickup/drop-off), and activities like purchasing transit tickets or sitting in traffic. Respondents include civilian workers and members of the Armed Forces (excludes those who work from home). (Source: U.S. Census Bureau)	NA	6%	3%	5%	3%	5%	Unfavorable to 2
Commute to Work: 90+ Minutes	2022	Estimate of the number of workers aged 16+ whose commute time to work is 90 minutes or more. Commute time is the total one-way travel time between home and work, including waiting for or riding public transportation, carpooling time (passenger pickup/drop-off), and traffic delays and related activities (purchasing transit tickets). Respondents include Civilians and Armed Forces members (excluding those who work from home). (Source: U.S. Census Bureau)	NA	3%	2%	2%	1%	2%	Unfavorable to 1
Food Environment Index	2019-2022	Index of factors that contribute to a healthy food environment, from worst (0) to best (10). (Source: County Health Rankings)	NA	7	7	9	9	9	Unfavorable to 0
Grocery Stores	2022	The total number of grocery stores per 100,000 population. (Source: Community Commons)	NA	19	16	22	9	9	Unfavorable to 0

Table 29. Secondary Data Measure Values, Definitions, and Relative Ranking – Built Environment (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Limited Access to Healthy Foods	2019	Percentage of population who are low-income and do not live close to a grocery store. (Source: County Health Rankings)	NA	6%	7%	4%	5%	4%	Unfavorable to 0
Population Living in a Food Desert	2019	Percentage of the population living in a census tract classified as a food desert. (Source: Community Commons)	NA	13%	13%	5%	2%	2%	Unfavorable to 2
SNAP-authorized Food Stores	2025	The total number of SNAP-authorized food stores per 10,000 population. (Source: Community Commons)	NA	8	8	7	5	7	Unfavorable to 2
Food Insecurity	2022	Percentage of the population who lack adequate access to food. (Source: County Health Rankings)	6%	14%	14%	11%	9%	11%	Unfavorable to 1
Liquor Stores	2022	The number of liquor stores per 100,000 population. (Source: Community Commons)	NA	11	6	3	4	3	Unfavorable to 1
Fast Food Restaurants	2022	The total number of fast-food restaurants per 100,000 population. (Source: Community Commons)	NA	80	87	64	99	72	Unfavorable to 0
Number of Child Care Centers	2010-2022	Number of childcare centers per 1,000 population under 5 years old. (Source: County Health Rankings)	NA	7	8	8	10	8	Unfavorable to 1

Table 30. Secondary Data Measure Values, Definitions, and Relative Ranking – Healthcare Access and Utilization

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Visited Doctor in the Past 12 Months	2024	Estimate of the expected number of adults who reported visiting a doctor within the past 12 months in the geographic area. (Source: ESRI)	84%	80%	80%	84%	83%	83%	Unfavorable to 0
Visited Dentist in the Past 12 Months	2024	This variable estimates the expected number of adults who visited a dentist in the past 12 months in a given geographic area. (Source: ESRI)	NA	43%	42%	48%	47%	47%	Unfavorable to 0
Flu Vaccinations	2022	Percentage of fee-for-service Medicare enrollees who had an annual flu vaccination. (Source: County Health Rankings)	NA	48%	51%	55%	59%	55%	Unfavorable to 1
Primary Care Physicians	2021	Ratio of population to primary care physicians. (Source: County Health Rankings)	NA	1330:1	1330:1	1450:1	680:1	1610:1	Unfavorable to 1
Dentists	2022	Ratio of population to dentists. (Source: County Health Rankings)	NA	1360:1	1530:1	2170:1	1580:1	1800:1	Unfavorable to 4
Preventable Hospital Admissions	2022	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees. (Source: County Health Rankings)	NA	2666	3033	2538	1596	2493	Unfavorable to 2
Mammography Screening	2022	Percentage of female Medicare enrollees ages 65-74 who received an annual mammography screening. (Source: County Health Rankings)	80%	44%	47%	49%	55%	49%	Unfavorable to 2
Pap Test	2023	Age-adjusted female dual and non-dual eligible Medicare fee-for-service patients who received a pap test in the reporting year. (Source: Centers for Medicare and Medicaid Services)	NA	4%	4%	2%	4%	2%	Unfavorable to 3
Cardiovascular Disease Screening	2023	Age-adjusted dual and non-dual eligible Medicare fee-for-service patients who received a cardiovascular disease screening in the reporting year. (Source: Centers for Medicare and Medicaid Services)	NA	59%	61%	59%	66%	63%	Unfavorable to 3

Table 31. Secondary Data Measure Values, Definitions, and Relative Ranking – Healthcare Access and Utilization (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Colorectal Cancer Screening	2023	Age-adjusted dual and non-dual eligible Medicare fee-for-service patients who received a colorectal cancer screening in the reporting year. (Source: Centers for Medicare and Medicaid Services)	74%	6%	6%	6%	7%	6%	Unfavorable to 2
Prostate Cancer Screening	2023	Age-adjusted male dual and non-dual eligible Medicare fee-for-service patients who received a prostate cancer screening in the reporting year. (Source: Centers for Medicare and Medicaid Services)	NA	19%	23%	20%	30%	21%	Unfavorable to 1
Pelvic Exam	2023	Age-adjusted female dual and non-dual eligible Medicare fee-for-service patients who received a pelvic exam in the reporting year. (Source: Centers for Medicare and Medicaid Services)	NA	5%	7%	6%	9%	6%	Unfavorable to 2
Diabetes Screening	2023	Age-adjusted dual and non-dual eligible Medicare fee-for-service patients who received a diabetes screening in the reporting year. (Source: Centers for Medicare and Medicaid Services)	NA	4%	4%	5%	8%	2%	Unfavorable to 1
Annual Wellness Visit	2023	Age-adjusted dual and non-dual eligible Medicare fee-for-service patients who completed an annual wellness visit in the reporting year. (Source: Centers for Medicare and Medicaid Services)	NA	43%	47%	49%	56%	48%	Unfavorable to 1
All Cause Readmissions	2023	All cause readmissions among age-adjusted dual and non-dual eligible Medicare fee-for-service patients. (Source: Centers for Medicare and Medicaid Services)	NA	15%	16%	NA	14%	15%	NA

Table 32. Secondary Data Measure Values, Definitions, and Relative Ranking – Insurance and Healthcare Cost

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Health Care	2024	This variable estimates total average spending per household for health care in a given geographic area. It includes projected household spending on health insurance, medical services, prescription and non-prescription drugs, medical supplies, and eyeglasses/contact lenses. (Source: ESRI)	NA	\$7,727	\$7,102	\$10,122	\$10,990	\$8,492	Unfavorable to 3
Dental Services	2024	Estimate of total average household spending on dental services within a geographic area. (Source: ESRI)	NA	\$501	\$433	\$635	\$718	\$531	Unfavorable to 3
Eyecare Services	2024	Estimate of total average household spending on eyecare services within a geographic area. Included services: exams, optometry, vision therapy, and possibly routine care at vision centers. (Source: ESRI)	NA	\$94	\$83	\$122	\$139	\$105	Unfavorable to 3
Eyeglasses or Contact Lenses	2024	The total average amount spent per household on eyeglasses and contact lenses. (Source: ESRI)	NA	\$126	\$117	\$170	\$180	\$139	Unfavorable to 3
Nonprescription Drugs	2024	The total average amount spent per household on nonprescription drugs in the geographic area. This includes consumer expenditures on over-the-counter (OTC), medications (e.g., pain relievers, cold/allergy meds, digestive aids), vitamins, supplements, and similar products not requiring a prescription. (Source: ESRI)	NA	\$177	\$163	\$224	\$257	\$194	Unfavorable to 3
Prescription Drugs	2024	Estimate of the total average amount spent on prescription drugs per household for the geographic area. (Source: ESRI)	NA	\$414	\$426	\$599	\$575	\$497	Unfavorable to 4

Table 33. Secondary Data Measure Values, Definitions, and Relative Ranking – Insurance and Healthcare Cost (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Medical Supplies	2024	Estimates of total aggregate amount spent per household in the geographic area. Includes spending on eyeglasses and contact lenses, hearing aids, topical and wound dressings, general-use, supportive, and convalescent medical equipment. (Source: ESRI)	NA	\$265	\$248	\$356	\$373	\$292	Unfavorable to 3
Population <19: No Health Insurance	2018-2022	Estimate of the population under age 19 without any health insurance coverage in the geographic area. Individuals are considered uninsured if they only receive care through the Indian Health Service, or are covered only for specific conditions (e.g., cancer) or long-term care. Population includes noninstitutionalized U.S. civilians (not active duty military). (Source: U.S. Census Bureau)	NA	1%	1%	3%	1%	0%	Unfavorable to 4
Population 19-34: No Health Insurance	2018-2022	Estimate of the population age 19-34 without any health insurance coverage in the geographic area. Individuals are considered uninsured if they only receive care through the Indian Health Service, or are covered only for specific conditions (e.g., cancer) or long-term care. Population includes noninstitutionalized U.S. civilians (not active duty military). (Source: U.S. Census Bureau)	NA	3%	2%	3%	1%	1%	Unfavorable to 3
Population 35-64: No Health Insurance	2018-2022	Estimate of the population age 35-64 without any health insurance coverage in the geographic area. Individuals are considered uninsured if they only receive care through the Indian Health Service, or are covered only for specific conditions (e.g., cancer) or long-term care. Population includes noninstitutionalized U.S. civilians (not active duty military). (Source: U.S. Census Bureau)	NA	4%	3%	3%	2%	2%	Unfavorable to 2

Table 34. Secondary Data Measure Values, Definitions, and Relative Ranking – Insurance and Healthcare Cost (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Population 65+: No Health Insurance	2018-2022	Estimate of the population age 65+ without any health insurance coverage in the geographic area. Individuals are considered uninsured if they only receive care through the Indian Health Service, or are covered only for specific conditions (e.g., cancer) or long-term care. Population includes U.S. civilians (not active duty military) and individuals not residing in institutional group quarters. (Source: U.S. Census Bureau)	NA	0%	0%	0%	0%	0%	Unfavorable to 0
Uninsured	2022	Percentage of population under age 65 without health insurance. (Source: County Health Rankings)	NA	10%	7%	9%	4%	6%	Unfavorable to 3
Uninsured Children	2022	Percentage of children under age 19 without health insurance. (Source: County Health Rankings)	NA	5%	4%	8%	2%	4%	Unfavorable to 4

Table 35. Secondary Data Measure Values, Definitions, and Relative Ranking – Health Status and Quality of Life

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Premature Death	2020-2022	Years of potential life lost before age 75 per 100,000 population (age-adjusted). (Source: County Health Rankings)	NA	8400	9700	5600	4300	5800	Unfavorable to 1
Life Expectancy	2020-2022	Average number of years people are expected to live. (Source: County Health Rankings)	NA	77	75	80	81	79	Unfavorable to 1
Premature Age-adjusted Mortality	2020-2022	Number of deaths among residents under age 75 per 100,000 population (age-adjusted). (Source: County Health Rankings)	NA	410	470	273	230	302	Unfavorable to 1
Poor Physical Health Days	2022	Average number of physically unhealthy days reported in past 30 days (age-adjusted). (Source: County Health Rankings)	NA	4	4	4	3	4	Unfavorable to 1
Frequent Physical Distress	2022	Percentage of adults reporting 14 or more days of poor physical health per month (age-adjusted). (Source: County Health Rankings)	NA	12%	13%	12%	10%	12%	Unfavorable to 1
Poor Mental Health Days	2022	Average number of mentally unhealthy days reported in the past 30 days (age-adjusted). (Source: County Health Rankings)	NA	5	6	6	5	6	Unfavorable to 2
Frequent Mental Distress	2022	Percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted). (Source: County Health Rankings)	NA	16%	19%	18%	17%	18%	Unfavorable to 2
Poor or Fair Health	2022	Percentage of adults reporting fair or poor health (age-adjusted). (Source: County Health Rankings)	NA	17%	18%	16%	12%	15%	Unfavorable to 2
Residents with a Disability	2019-2023	Percentage of the total civilian non-institutionalized population with a disability. (Source: Community Commons)	NA	13%	14%	10%	8%	13%	Unfavorable to 1
Insufficient Sleep	2022	Percentage of adults who report fewer than 7 hours of sleep on average (age-adjusted). (Source: County Health Rankings)	<27%	37%	40%	36%	33%	36%	Unfavorable to 2
Social Associations	2022	Number of civic, political, religious, sports, and professional membership associations per 10,000 population. (Source: County Health Rankings)	NA	9	11	10	9	8	Unfavorable to 1

Table 36. Secondary Data Measure Values, Definitions, and Relative Ranking – Health Status and Quality of Life (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Disconnected Youth	2019-2023	Percentage of teens and young adults ages 16-19 who are neither working nor in school. (Source: County Health Rankings)	NA	7%	6%	7%	2%	4%	Unfavorable to 3
Lack of Social and Emotional Support	2022	Percentage of adults reporting that they sometimes, rarely, or never get the social and emotional support they need. (Source: County Health Rankings)	NA	25%	24%	20%	18%	23%	Unfavorable to 1
Social Vulnerability Index	2022	The Social Vulnerability Index (SVI) is a composite measure ranging from 0 to 1 that quantifies the degree of social vulnerability in U.S. counties and neighborhoods, with higher values indicating greater vulnerability. (Source: Community Commons)	NA	0.58	0.46	0.10	0.02	0.01	Unfavorable to 2
Premature Death	2020-2022	Years of Potential Life Lost (YPLL) before age 75 per 100,000 population for all causes of death. (Source: Community Commons)	NA	8367	9740	5581	4329	5777	Unfavorable to 1

Table 37. Secondary Data Measure Values, Definitions, and Relative Ranking – Diet and Exercise

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Access to Exercise Opportunities	2024	Percentage of population with adequate access to locations for physical activity (2020, 2022, 2024). (Source: County Health Rankings)	NA	84%	84%	81%	95%	93%	Unfavorable to 4
Physical Inactivity	2022	Percentage of adults ages 18 and over reporting no leisure-time physical activity (age-adjusted). (Source: County Health Rankings)	22%	23%	24%	21%	18%	22%	Unfavorable to 1
Went to Fast Food/Drive-In Rest 9+ Times/30 Days	2024	Esri's 2024 estimate of the expected number of adults for frequent fast-food consumption, defined as 9 or more visits in the last 30 days, in the geographic area. (Source: ESRI)	NA	40%	40%	36%	39%	39%	Unfavorable to 0

Table 38. Secondary Data Measure Values, Definitions, and Relative Ranking – Injury and Accidents

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Alcohol-impaired Driving Deaths	2018-2022	Percentage of driving deaths with alcohol involvement. (Source: County Health Rankings)	28%	26%	32%	26%	36%	24%	Unfavorable to 1
Motor Vehicle Crash Deaths	2016-2022	Number of motor vehicle crash deaths per 100,000 population. (Source: County Health Rankings)	10 per 100,000	12	11	9	6	8	Unfavorable to 2
Drug Overdose Deaths	2020-2022	Number of drug poisoning deaths per 100,000 population. (Source: County Health Rankings)	21 per 100,000	31	45	13	16	19	Unfavorable to 0
Injury Deaths	2018-2022	Number of deaths due to injury per 100,000 population. (Source: County Health Rankings)	43 per 100,000	84	101	65	52	69	Unfavorable to 2
Firearm Fatalities	2018-2022	Number of deaths due to firearms per 100,000 population. (Source: County Health Rankings)	11 per 100,000	13	15	9	6	9	Unfavorable to 1

Table 39. Secondary Data Measure Values, Definitions, and Relative Ranking – Crime and Violence

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Total Crime Index	2024	The total crime index provides an assessment of the relative risk of experiencing any of the following seven major crime types: murder, rape, robbery, assault, burglary, larceny, and motor vehicle theft. The index is modeled using data from the FBI Uniform Crime Report, census data, and AGS demographic data. A higher index score indicates greater relative risk compared to the national average (which is set to 100). For example, a value of 120 indicates a 20% higher risk than the U.S. average. (Source: ESRI)	NA	100	92	44	56	43	Unfavorable to 1
Personal Crime Index	2024	The personal crime index provides an assessment of the relative risk of experiencing any of the following four major personal crimes: murder, rape, robbery, and assault. The index is modeled using data from the FBI uniform crime report, census data, and AGS demographic modeling. Like other AGS crime indexes, this is a relative index, where a value of 100 represents the national average risk. A value of 120 means 20% higher risk than the U.S. average. (Source: ESRI)	NA	100	77	28	32	25	Unfavorable to 1
Property Crime Index	2024	The property crime index provides an assessment of the relative risk of experiencing three major property crimes: burglary, larceny, and motor vehicle theft. The index is modeled using data from the FBI uniform crime report, census data, and AGS demographic modeling. The index value is relative to the national average (U.S. = 100). A value of 150 would imply a 50% greater risk than average. (Source: ESRI)	NA	100	95	47	60	47	Unfavorable to 0

Table 40. Secondary Data Measure Values, Definitions, and Relative Ranking – Crime and Violence (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Murder Index	2024	Assessment of the relative risk of murder in a given area. It is modeled using data from the FBI uniform crime report, census data, and AGS demographic modeling. The index includes murder, nonnegligent manslaughter, and manslaughter by negligence. It excludes deaths due to negligence, accidental deaths not resulting from gross negligence, and traffic fatalities. As with other AGS indexes, the national average is 100. (Source: ESRI)	NA	100	106	32	27	27	Unfavorable to 2
Homicides	2016-2022	Number of deaths due to homicide per 100,000 population. (Source: County Health Rankings)	6 per 100,000	7	7	0	1	1	Unfavorable to 0
Rape Index	2024	Assessment of the relative risk of rape in the geographic area. It is modeled using data from the FBI uniform crime report, U.S. Census data, and AGS demographic modeling. The national average is typically benchmarked at 100, with higher values indicating greater relative risk. (Source: ESRI)	NA	100	115	41	76	58	Unfavorable to 0
Robbery Index	2024	Assessment of the relative risk of robbery in a geographic area. It is modeled using data from the FBI uniform crime report, U.S. census data, and AGS demographic modeling. Robbery is defined as the taking or attempting to take anything of value from the care, custody, or control of a person by force or threat of force, violence, or instilling fear in the victim. The index measures how a given area compares to the national average (benchmark = 100). Higher scores indicate elevated relative risk. (Source: ESRI)	NA	100	90	26	39	13	Unfavorable to 1

Table 41. Secondary Data Measure Values, Definitions, and Relative Ranking – Crime and Violence (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Assault Index	2024	Assessment of the relative risk of assault in a given area. It is modeled using FBI uniform crime report data, demographic data from the U.S. Census, and AGS demographic modeling. An assault is defined as an unlawful attack by one person upon another with the intent to inflict severe or aggravated bodily injury, typically involving a weapon or means likely to cause death or serious harm. Simple assaults (those not involving serious injury or a weapon) are excluded. (Source: ESRI)	NA	100	66	26	23	23	Unfavorable to 2
Burglary Index	2024	Assessment of the relative risk of burglary in the geographic area. It is modeled using data from the FBI uniform crime report, demographic data from the U.S. Census, and AGS demographic modeling. Burglary is defined as the unlawful entry of a structure to commit a felony or theft. Attempted forcible entry is also included. (Source: ESRI)	NA	100	105	43	48	35	Unfavorable to 1
Larceny Index	2024	Assessment of the relative risk of larceny in the geographic area, excluding motor vehicle theft. It is modeled using FBI uniform crime report data, demographic data from the U.S. Census, and AGS demographic modeling. Larceny is defined as the unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another. Includes theft, attempted theft, or stealing of any item not taken by force or fraud. Excludes embezzlement, forgery, confidence games, and fraud-related offenses. (Source: ESRI)	NA	100	97	51	68	53	Unfavorable to 0

Table 42. Secondary Data Measure Values, Definitions, and Relative Ranking – Crime and Violence (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Motor Vehicle Theft Index	2024	Estimates the relative risk of motor vehicle theft in the geographic area. It is derived using data from the FBI uniform crime report, demographic data from the U.S. Census, and AGS demographic modeling. It includes both theft and attempted theft of a motor vehicle (defined as a self-propelled vehicle that runs on land surfaces but not on rails). Excluded categories include motorboats, construction equipment, airplanes, and farming equipment. (Source: ESRI)	NA	100	75	32	28	23	Unfavorable to 2

Table 43. Secondary Data Measure Values, Definitions, and Relative Ranking – Substance Use and Abuse

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Excessive Drinking	2022	Percentage of adults reporting binge or heavy drinking (age-adjusted). (Source: County Health Rankings)	25%	19%	21%	23%	21%	23%	Unfavorable to 3
Adult Smoking	2022	Percentage of adults who are current smokers (age-adjusted). (Source: County Health Rankings)	6%	13%	18%	18%	12%	16%	Unfavorable to 4
Smoked 7+ Packs of Cigarettes in the Past 7 Days	2024	Estimate of the expected number of adults smoking seven or more packs of cigarettes in the past 7 days within a geographic area. (Source: ESRI)	NA	3%	4%	3%	2%	3%	Unfavorable to 1
Used Vaping Device in the Past 12 Months	2024	Estimate of the expected number of adults having used a vaping device in the past 12 months in the geographic area. (Source: ESRI)	NA	3%	4%	3%	2%	3%	Unfavorable to 1

Table 44. Secondary Data Measure Values, Definitions, and Relative Ranking – Behaviors

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Have Savings Account	2024	Estimate of the expected number of adults having a savings account in the specified geographic area. (Source: ESRI)	NA	73%	72%	78%	79%	77%	Unfavorable to 1
Have Interest Checking Account	2024	Estimate of the expected number of adults having an interest-bearing checking account in the geographic area. (Source: ESRI)	NA	31%	31%	33%	33%	33%	Unfavorable to 0
Spend 2-4.9 Hours Online Daily	2024	Estimates of the expected number of adults spending 2 to 4.9 hours online per day (excluding email) in the geographic area. (Source: ESRI)	NA	23%	22%	20%	23%	21%	Unfavorable to 0
Spend 5-9.9 Hours Online Daily	2024	Estimate of the expected number of adults who spend 5 to 9.9 hours per day online (excluding email). (Source: ESRI)	NA	11%	10%	8%	11%	9%	Unfavorable to 0
Spend 10+ Hours Online Daily	2024	Estimate of the expected number of adults spending 10 or more hours online per day (excluding email) in a specific geographic area. (Source: ESRI)	NA	39%	39%	46%	45%	45%	Unfavorable to 4
Usually or Always Carry Credit Card Balance	2024	Estimate of the expected number of adults usually or always carrying a credit card balance in the geographic area. This estimate is based on consumer self-reported financial behavior. (Source: ESRI)	NA	18%	18%	16%	16%	17%	Unfavorable to 0

Table 45. Secondary Data Measure Values, Definitions, and Relative Ranking – Mental Health

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Suicides	2018-2022	Number of deaths due to suicide per 100,000 population (age-adjusted). (Source: County Health Rankings)	13 per 100,000	14	15	14	11	13	Unfavorable to 3
Feelings of Loneliness	2022	Percentage of adults reporting that they always, usually, or sometimes feel lonely. (Source: County Health Rankings)	NA	33%	34%	31%	28%	35%	Unfavorable to 1
Depression	2023	Age-adjusted prevalence of depression among the Medicare fee-for-service population. (Source: Centers for Medicare and Medicaid Services)	NA	18%	20%	18%	22%	20%	Unfavorable to 0
Depression Screening	2023	Age-adjusted depression screening prevalence among the dual and non-dual eligible Medicare fee-for-service population. (Source: Centers for Medicare and Medicaid Services)	NA	8%	7%	13%	1%	9%	Unfavorable to 4
Mental Health Providers	2024	Ratio of population to mental health providers. (Source: County Health Rankings)	NA	300:1	290:1	370:1	630:1	520:1	Unfavorable to 2

Table 46. Secondary Data Measure Values, Definitions, and Relative Ranking – Obstetrics

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Child Mortality	2019-2022	Number of deaths among residents under age 20 per 100,000 population. (Source: County Health Rankings)	18 per 100,000	50	60	51	27	32	Unfavorable to 4
Infant Mortality	2016-2022	Number of infant deaths (within 1 year) per 1,000 live births. (Source: County Health Rankings)	5 per 1,000	6	7	4	4	3	Unfavorable to 1
Low Birth Weight	2017-2023	Percentage of live births with low birth weight (< 2,500 grams). (Source: County Health Rankings)	NA	8%	9%	7%	7%	6%	Unfavorable to 1
Teen Births	2017-2023	Number of births per 1,000 female population ages 15-19. (Source: County Health Rankings)	NA	16	17	5	3	5	Unfavorable to 1
Preterm Birth	2020-2023	Preterm birth is defined as a live birth before 37 completed weeks gestation. (Source: March of Dimes)	9%	10%	11%	7%	9%	8%	Unfavorable to 0

Table 47. Secondary Data Measure Values, Definitions, and Relative Ranking – Sexual Behavior and STIs

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Chlamydia Incidence	2022	Number of newly diagnosed chlamydia cases per 100,000 population. (Source: County Health Rankings)	NA	495	463	131	193	156	Unfavorable to 0
Gonorrhea Incidence	2023	Number of newly diagnosed gonorrhea cases per 100,000 population. (Source: Community Commons)	NA	179	168	20	46	26	Unfavorable to 0
Syphilis Incidence	2023	Number of newly diagnosed syphilis cases per 100,000 population. (Sources: Ohio Department of Health, Centers for Disease Control and Prevention)	NA	61	42	6	16	7	Unfavorable to 0
HIV Prevalence	2022	Prevalence of HIV per 100,000 population over the age of 13. (Source: Community Commons)	NA	386	246	49	79	73	Unfavorable to 0

Table 48. Secondary Data Measure Values, Definitions, and Relative Ranking – Infectious Disease

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Hepatitis A Incidence	2024	Incidence too low to report (Source: Ohio Department of Health)							NA
Salmonella Incidence	2024	Incidence too low to report (Source: Ohio Department of Health)							NA
Meningitis Incidence	2024	Incidence too low to report (Source: Ohio Department of Health)							NA
Pertussis Incidence	2024	Incidence too low to report (Source: Ohio Department of Health)							NA
Mumps Incidence	2024	Incidence too low to report (Source: Ohio Department of Health)							NA
Varicella Incidence	2024	Incidence too low to report (Source: Ohio Department of Health)							NA
West Nile Virus Incidence	2024	Incidence too low to report (Source: Ohio Department of Health)							NA
Lymes Disease	2024	Incidence of Lymes disease per 100,000 population. (Source: Ohio Department of Health)	NA	26	15	14	5	12	Unfavorable to 1

Table 49. Secondary Data Measure Values, Definitions, and Relative Ranking – Cancer

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Cancer Incidence	2017-2021	Age-adjusted incidence rate of cancer (all sites) per 100,000 population. (Source: Community Commons)	NA	444	470	466	453	489	Unfavorable to 2
Cancer Deaths	2019-2023	Five-year average rate of death due to cancer per 100,000 population. (Source: Community Commons)	123 per 100,000	183	212	216	138	197	Unfavorable to 5
Bladder Cancer	2022	Age-adjusted incidence rate of bladder cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	16	20	25	18	19	Unfavorable to 4
Bladder Cancer Deaths	2021-2023	Crude rate of bladder cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	5	6	8	4	6	Unfavorable to 4
Brain/CNS Cancer	2022	Age-adjusted incidence rate of brain and central nervous system cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	6	6	8	7	10	Unfavorable to 3
Brain/CNS Cancer Deaths	2020-2023	Crude rate of brain and central nervous system cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	5	6	6	5	7	Unfavorable to 2
Breast Cancer	2022	Age-adjusted incidence rate of breast cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	135	84	94	94	87	Unfavorable to 2
Breast Cancer Deaths	2022-2023	Crude rate of female breast cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	15 per 100,000	13	14	20	10	13	Unfavorable to 5
Cervix Cancer	2022	Age-adjusted incidence rate of cervix cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	7	4	NA	3	3	NA

Table 50. Secondary Data Measure Values, Definitions, and Relative Ranking – Cancer (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Colon and Rectum Cancer	2022	Age-adjusted incidence rate of colon and rectum cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	35	37	35	29	38	Unfavorable to 1
Colon and Rectum Cancer Deaths	2022-2023	Crude rate of colorectal cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	9 per 100,000	15	16	19	10	13	Unfavorable to 5
Esophagus Cancer	2022	Age-adjusted incidence rate of esophagus cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	4	6	7	4	5	Unfavorable to 4
Esophagus Cancer Deaths	2021-2023	Crude rate of esophagus cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	5	6	8	5	8	Unfavorable to 3
Hodgkins Lymphoma	2022	Age-adjusted incidence rate of Hodgkins Lymphoma per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	2	2	7	2	5	Unfavorable to 4
Kidney and Renal Cancer	2022	Age-adjusted incidence rate of kidney and renal cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	15	18	15	19	18	Unfavorable to 0
Kidney and Renal Cancer Deaths	2019-2023	Crude rate of kidney and renal cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	4	5	5	4	4	Unfavorable to 3
Larynx Cancer	2022	Age-adjusted incidence rate of larynx cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	2	4	3	NA	3	Unfavorable to 1

Table 51. Secondary Data Measure Values, Definitions, and Relative Ranking – Cancer (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Leukemia	2022	Age-adjusted incidence rate of leukemia cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	14	13	17	11	14	Unfavorable to 4
Leukemia Deaths	2022-2023	Crude rate of leukemia-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	7	8	14	6	10	Unfavorable to 4
Liver Cancer	2022	Age-adjusted incidence rate of liver cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	8	7	6	8	7	Unfavorable to 0
Liver Cancer Deaths	2021-2023	Crude rate of liver cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	9	9	10	6	10	Unfavorable to 3
Lung and Bronchus	2022	Age-adjusted incidence rate of lung and bronchus cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	38	60	41	42	53	Unfavorable to 1
Lung and Bronchus Cancer Deaths	2022-2023	Crude rate of lung and bronchus cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	25 per 100,000	39	51	38	28	48	Unfavorable to 2
Melanoma	2022	Age-adjusted incidence rate of melanoma per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	25	57	73	74	83	Unfavorable to 2
Multiple Myeloma	2022	Age-adjusted incidence rate of multiple myeloma per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	7	7	4	9	5	Unfavorable to 0
Non-Hodgkins Lymphoma	2022	Age-adjusted incidence rate of non-Hodgkins lymphoma per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	18	18	22	18	25	Unfavorable to 3

Table 52. Secondary Data Measure Values, Definitions, and Relative Ranking – Cancer (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Non-Hodgkins Lymphoma Deaths	2020-2023	Crude rate of non-Hodgkins lymphoma-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	6	7	8	5	7	Unfavorable to 4
Oral Cavity and Pharynx Cancer	2022	Age-adjusted incidence rate of oral cavity and pharynx cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	11	13	15	12	11	Unfavorable to 4
Ovary Cancer	2022	Age-adjusted incidence rate of ovary cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	10	5	10	5	7	Unfavorable to 3
Ovary Cancer Deaths	2019-2023	Crude rate of ovary cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	4	4	5	3	4	Unfavorable to 4
Pancreas Cancer	2022	Age-adjusted incidence rate of pancreatic cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	13	13	12	14	15	Unfavorable to 0
Pancreas Cancer Deaths	2022-2023	Crude rate of pancreas cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	15	17	19	14	21	Unfavorable to 3
Prostate Cancer	2022	Age-adjusted incidence rate of prostate cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	120	57	75	59	59	Unfavorable to 3
Prostate Cancer Deaths	2021-2023	Crude rate of male prostate cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	17 per 100,000	10	11	10	8	11	Unfavorable to 1

Table 53. Secondary Data Measure Values, Definitions, and Relative Ranking – Cancer (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Stomach Cancer	2022	Age-adjusted incidence rate of stomach cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	8	6	5	5	7	Unfavorable to 0
Testicular Cancer	2022	Age-adjusted incidence rate of testicular cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	6	3	NA	3	5	NA
Thyroid Cancer	2022	Age-adjusted incidence rate of thyroid cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	14	13	17	15	15	Unfavorable to 4
Uterus Cancer	2022	Age-adjusted incidence rate of uterine cancer per 100,000 population. (Source: Ohio Department of Health, National Cancer Institute)	NA	29	16	18	15	15	Unfavorable to 3
Uterus Cancer Deaths	2020-2023	Crude rate of uterine cancer-attributed deaths per 100,000 population. (Source: Centers for Disease Control and Prevention WONDER)	NA	5	6	6	2	6	Unfavorable to 2

Table 54. Secondary Data Measure Values, Definitions, and Relative Ranking – Chronic Disease

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Asthma	2018	Percentage of the Medicare fee-for-service population with asthma. (Source: Community Commons)	NA	5%	5%	5%	4%	5%	Unfavorable to 1
Diabetes	2023	Age-adjusted prevalence of diabetes among the Medicare fee-for-service population. (Source: Community Commons)	NA	26%	26%	19%	23%	23%	Unfavorable to 0
Heart Disease	2023	Age-adjusted prevalence of ischemic heart disease among the Medicare fee-for-service population. (Source: Community Commons)	NA	21%	22%	21%	21%	21%	Unfavorable to 0
Heart Disease Deaths	2019-2023	Five-year average rate of death due to coronary heart disease per 100,000 population. (Source: Community Commons)	71 per 100,000	111	132	119	66	119	Unfavorable to 3
High Blood Pressure	2023	Age-adjusted prevalence of high blood pressure among the Medicare fee-for-service population. (Source: Community Commons)	42%	65%	67%	61%	65%	65%	Unfavorable to 1
Lung Disease Deaths	2019-2023	Five-year average rate of death due to chronic lower respiratory disease per 100,000 population. (Source: Community Commons)	NA	45	58	44	28	50	Unfavorable to 1
Stroke Deaths	2019-2023	Five-year average rate of death due to cerebrovascular disease (stroke) per 100,000 population. (Source: Community Commons)	33 per 100,000	48	60	58	37	47	Unfavorable to 4
HIV	2022	Number of people aged 13 years and older living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population. (Source: County Health Rankings)	NA	387	246	49	79	73	Unfavorable to 0
Obesity	2022	Percentage of the adult population (age 18 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m ² (age-adjusted). (Source: County Health Rankings)	36%	34%	38%	36%	32%	36%	Unfavorable to 3

Table 55. Secondary Data Measure Values, Definitions, and Relative Ranking – Chronic Disease (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Alzheimer's Disease	2023	Percentage of the age-adjusted Medicare fee-for-service population with Alzheimer's disease, related disorders, or senile dementia. (Source: Centers for Medicare and Medicaid Services)	NA	7%	7%	6%	7%	7%	Unfavorable to 0
Anemia	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with anemia. (Source: Centers for Medicare and Medicaid Services)	NA	21%	20%	17%	17%	21%	Unfavorable to 0
Atrial Fibrillation	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with atrial fibrillation. (Source: Centers for Medicare and Medicaid Services)	NA	14%	15%	14%	14%	15%	Unfavorable to 0
Chronic Kidney Disease	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with chronic kidney disease. (Source: Centers for Medicare and Medicaid Services)	NA	18%	20%	16%	18%	20%	Unfavorable to 0
Chronic Obstructive Pulmonary Disease	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with chronic obstructive pulmonary disease (COPD). (Source: Centers for Medicare and Medicaid Services)	NA	12%	14%	11%	10%	12%	Unfavorable to 1
Heart Failure / Heart Disease	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with heart failure and/or heart disease. (Source: Centers for Medicare and Medicaid Services)	NA	12%	13%	11%	10%	12%	Unfavorable to 1
Peripheral Vascular Disease	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with peripheral vascular disease. (Source: Centers for Medicare and Medicaid Services)	NA	12%	13%	10%	12%	15%	Unfavorable to 0

Table 56. Secondary Data Measure Values, Definitions, and Relative Ranking – Chronic Disease (continued)

Variable	Year	Definition / Source	HP2030 Target	US	Ohio	Geauga	Delaware	Medina	Ranking
Parkinson's Disease	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with Parkinson's Disease. (Source: Centers for Medicare and Medicaid Services)	NA	2%	2%	2%	2%	2%	Unfavorable to 0
Rheumatoid Arthritis / Osteoarthritis	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with rheumatoid arthritis and/or osteoarthritis. (Source: Centers for Medicare and Medicaid Services)	NA	34%	38%	38%	38%	38%	Unfavorable to 1
Fibromyalgia, Chronic Pain, and Fatigue	2023	Percentage of the age-adjusted dual and non-dual eligible Medicare fee-for-service population with fibromyalgia, chronic pain, and fatigue. (Source: Centers for Medicare and Medicaid Services)	NA	23%	24%	23%	22%	24%	Unfavorable to 1

9. Compliance

9.1 Regulatory and Accreditation Alignment

State of Ohio Requirements (ORC §3701.981)

In 2016, the State of Ohio enacted ORC §3701.981, requiring all tax-exempt hospitals to collaborate with their local health departments on community health assessments and community health improvement plans. The intent of this legislation was to reduce duplication of effort and promote a more coordinated, comprehensive approach to improving population health. In addition, hospitals are required to align their efforts with Ohio's State Health Assessment and State Health Improvement Plan. Alignment with the state's timeline and indicators became effective on January 1, 2020.

In response to these requirements, the Geauga County CHNA Steering Committee worked collaboratively to produce a single, countywide CHNA that represents the shared priorities of University Hospitals and the Geauga Public Health. This unified approach reflects a common definition of community, aligned data collection and analysis processes, and joint identification of priority needs. It also demonstrates a collective commitment to improving efficiency, reducing redundancy, and aligning local health planning efforts with broader statewide strategies.

Hospital IRS Requirements

Under Section 501(r) of the Internal Revenue Code, nonprofit hospitals are required by the Internal Revenue Service to conduct a CHNA and adopt an associated implementation strategy at least once every three years. This requirement, established by the Patient Protection and Affordable Care Act (ACA) of 2010, also mandates that hospitals clearly identify the facilities covered by the CHNA and ensure that all collaborating entities define their community consistently.

The most recent CHNA completed in Geauga County by University Hospitals prior to this assessment was approved December 2022. The current 2025 Geauga County CHNA meets all 501(r) requirements for University Hospitals Geauga Medical Center by providing a jointly developed assessment with clearly defined community boundaries and full alignment with federal compliance standards.

PHAB Accreditation Requirements

In order to obtain and maintain accreditation through the Public Health Accreditation Board (PHAB), local health departments are required to lead or actively participate in a collaborative process that produces a comprehensive community health assessment. While partnerships are encouraged, the resulting assessment must clearly reflect the health status of the jurisdiction served by the local health department. This CHNA satisfies PHAB requirements for community health assessment.

Shared Definition of Community

The community served by this CHNA is defined as all of Geauga County, Ohio. This geographic scope reflects the shared service area of Geauga Public Health and University Hospitals Geauga Medical Center. All collaborating entities defined their service area consistently, in alignment with both PHAB and IRS requirements.

9.2 Strategic Alignment with Statewide Initiatives

The 2023 Ohio State Health Assessment (SHA) provides a strategic, data-informed foundation for addressing population health priorities across the state. The SHA integrates quantitative indicators and qualitative input to examine disparities, upstream drivers of health, and cross-cutting conditions impacting all Ohioans.

The 2023 SHA identifies the following priority health factors:

- Unmet need for mental healthcare
- Local access to healthcare providers
- Housing
- Poverty
- Health insurance
- Nutrition
- Physical activity
- Adverse Childhood Experiences
- K-12 education
- Tobacco use
- Chronic disease
- Maternal and infant health

In addition, the 2023 SHA highlights the following prioritized health outcomes:

- Depression
- Diabetes
- Heart disease
- Drug overdose deaths
- Suicide
- Youth drug use
- Childhood conditions
- Infant mortality
- Preterm births
- Maternal morbidity

This Geauga County CHNA aligns with the 2023 SHA framework by prioritizing areas that reflect both state-level strategy and local needs (Table 57).

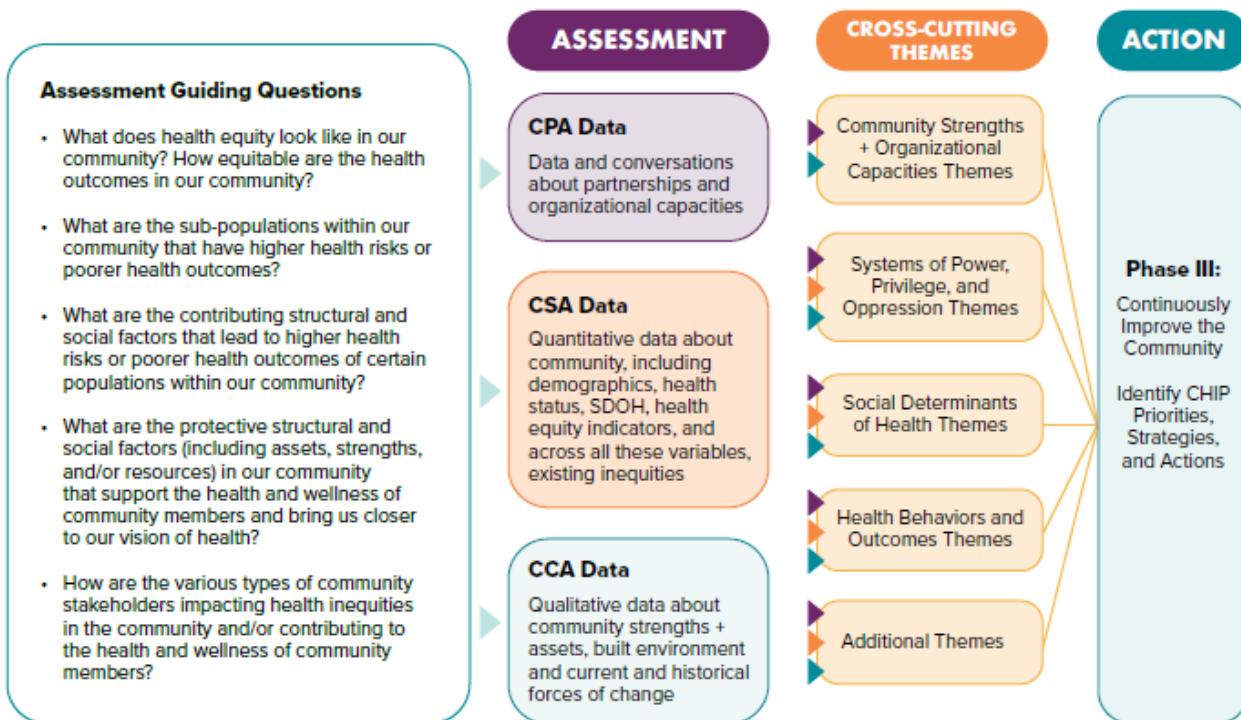
Table 57. Alignment of Geauga County and State Priorities		
2025 Geauga CHNA Priority	2023 SHA Health Factor	2023 SHA Health Outcome
Depression screening	Unmet need for mental healthcare	Depression
Housing affordability	Housing, poverty	--
Workforce productivity	Poverty	--
Community resilience	Adverse Childhood Experiences, nutrition, physical activity	Suicide, drug overdose deaths, childhood conditions, youth drug use

9.3 Alignment with MAPP 2.0

Qualitative and quantitative data collection tools used to conduct the 2025 Geauga County CHNA were purposefully designed to align with the Mobilizing for Action through Planning and Partnerships (MAPP) 2.0 framework (Figure 14). Specifically, the focus group discussion guide, community leader survey, and community resident survey were cross walked with MAPP 2.0's core assessments: the Community Context Assessment (CCA), Community Status Assessment (CSA), and Community Partnerships Assessment (CPA).

This alignment ensures that each tool contributed meaningfully to one or more MAPP goals, while centering equity, lived experience, and systems understanding.

Figure 14. MAPP 2.0 Assessment to Action Framework



Community Leader Survey – CPA Alignment

The community leader survey was built around the five goals of the CPA (Figure 15). Each CPA goal included two to three structured and open-ended questions designed to document the landscape, roles, capacities, and reach of local organizations engaged in health improvement efforts.

Figure 15. MAPP CPA Goals

- 1.** Describe why community partnerships are critical to community health improvement (CHI) and how to build or strengthen relationships with community partners and organizations.
- 2.** Name the specific roles of each community partner to support the local public health system (LPHS) and engage communities experiencing inequities produced by systems.
- 3.** Assess each MAPP partner's capacities, skills, and strengths to improve community health, health equity, and advance MAPP goals.
- 4.** Document the landscape of MAPP community partners, including grassroots and community power-building organizations, to summarize collective strengths and opportunities for improvement.
- 5.** Identify whom else to involve in MAPP and ways to improve community partnerships, engagement, and power-building.

CPA Goal 1–2 questions explored how organizations collaborate, the barriers they face, their role in the public health system, and how they engage communities affected by inequities.

CPA Goal 3 assessed organizational capacities, including strengths, competencies, and measurement strategies related to health equity and community outcomes.

CPA Goals 4–5 asked respondents to identify existing grassroots partners, gaps in engagement, and emerging opportunities to expand collaboration and power-building.

Community Resident Survey – CSA Alignment

The community resident survey was designed to align directly with the MAPP 2.0 CSA and its three core domains: (1) Health Status, Behaviors, and Outcomes, (2) Social Determinants of Health, and (3) Systems of Power, Privilege, and Oppression. The instrument was intentionally structured to reflect the complexity of community health, integrating both epidemiological indicators and an equity-focused lens.

1. Health Status, Behaviors, and Outcomes

This domain is represented through items assessing physical and mental health status, chronic and infectious disease burden, cancer, injury and accidents, sexual health, substance use, and obstetrics. The survey also includes behavioral data related to diet, exercise, and preventive practices.

2. Social Determinants of Health

The survey explores a range of structural factors influencing health, including economic status, education, housing quality and affordability, characteristics of the built environment, and exposure to pollution and violence.

3. Systems of Power, Privilege, and Oppression

This domain is addressed through questions about healthcare access, affordability, insurance status, and utilization patterns.

Focus Group Discussion Guide – CCA Alignment

The focus group discussion guide was developed to align with the MAPP 2.0 CCA domains and subdomains, which emphasize lived experiences, structural conditions, and community voices that shape health and well-being. The guide includes four structured open-ended questions, each accompanied by two primer prompts, which were intentionally designed to elicit participant perspectives across three core domains: Community Strengths and Assets, Built Environment, and Forces of Change.

- **Community Strengths and Assets** were explored through questions that surface the sources of individual and collective joy, resilience, mutual aid, and care. Participants were invited to reflect on how their communities support mental and physical well-being, how residents come together in times of need, and the informal networks that sustain everyday life. Prompts also addressed effective communication pathways, helping to identify trusted messengers and modes of information sharing.
- **Built Environment** questions focused on the accessibility and affordability of essential resources, including housing, grocery stores, and healthcare facilities. These questions provided insight into how physical infrastructure, and the systems governing access to it, contribute to or hinder well-being, particularly for marginalized residents.
- **Forces of Change** are investigated through broad and forward-looking prompts that encourage participants to consider emerging social, economic, political, technological, legal, and environmental trends. Participants were asked to identify key issues likely to shape their communities over the next five years and reflect on how local leadership and community responses may need to evolve.

Each question and primer was tagged to a relevant CCA domain and subdomain, ensuring fidelity to the MAPP framework.

9.4 Partner Organization Profiles

Geauga Public Health

Geauga Public Health is the sole public health authority for Geauga County. Accredited by the Public Health Accreditation Board (PHAB) in 2021, Geauga Public Health is dedicated to providing quality health services to its respective community members.

Services:

- Environmental Health
- Environmental Health
- Health Education, Promotion, and Injury Prevention
- Epidemiology and Communicable Disease
- Emergency Preparedness
- Vital Statistics
- Women, Infants, and Children (WIC)
- Immunizations

Mission: Geauga Public Health is dedicated to improving public health services by monitoring, educating, and promoting community and environmental health services in Geauga County, Ohio.

Vision: Working together to promote a healthy community.

Values:

1. The basics of trust, integrity, and honesty
2. Professionalism
3. Fiscal responsibility
4. Competency
5. Compassion
6. Communication
7. Partnership
8. Advocacy
9. All centered on and for the community we serve

University Hospitals

University Hospitals Geauga Medical Center is a full-service acute care community-based hospital located in Chardon, OH, within the county of Geauga. Equipped with urgent and emergency care services, a wide array of surgical and imaging services, a birthing center, and a Level III trauma center, University Hospitals Geauga Medical Center provides specialized medical care to Geauga County and Northeast Ohio residents by way of its main campus and two community health centers in Concord and Middlefield, respectively.

University Hospitals Mission: To Heal. To Teach. To Discover.

Vision: Advancing the Science of Health and the Art of Compassion.

Values:

- Service excellence
- Integrity
- Compassion
- Belonging
- Trust

9.5 Community Engagement and Inclusion

Inclusion of Vulnerable Populations

This process intentionally prioritized the inclusion of vulnerable and historically underserved populations throughout the data collection and engagement process. A community resident survey captured a wide range of community perspectives. Qualitative engagement efforts further ensured representation from diverse populations and lived experiences. Focus group participants reflected a broad cross-section of the community, including individuals from marginalized racial and ethnic groups, older adults, and populations facing systemic barriers to care. Additional perspectives were gathered through input from local community leaders across Geauga County.

Methods to Engage the Community

Residents, community leaders, and community partner organizations were engaged through a combination of social media, newsletters, press releases, public postings, and targeted outreach efforts. Community input was collected using online and paper surveys, in-person focus groups, and community leader surveys with local leaders. Final CHNA findings will be shared publicly, with opportunities for residents to provide additional feedback through an open digital comment process.

9.6 Evaluation of Impact

University Hospitals Geauga Medical Center

University Hospitals Geauga Medical Center, herein referenced as UH Geauga, is a full-service acute care community-based hospital located in Chardon, OH, within the county of Geauga. Equipped with urgent and emergency care services, a wide array of surgical and imaging services, a birthing center, and a Level III trauma center, UH Geauga provides specialized medical care to Geauga County and Northeast Ohio residents by way of its main campus and two community health centers in Concord and Middlefield, respectively.

Characterized by a diverse rural, agricultural, and business-oriented landscape, Geauga County is home to the second largest Amish population in the United States.

University Hospitals Geauga Medical Center Community Health Improvement Efforts

The following evaluation of impact pertains to the actions taken since the last Geauga County CHNA in 2022. The assessment was conducted jointly between UH Geauga, Geauga Public Health, and Geauga County Community Health Partners, in alignment with Ohio's State Health Assessment (SHA) and State Health Improvement Plan (SHIP). The 2022 CHNA was adopted by University Hospitals in September of 2022, and the 2023-2025 Implementation Strategy was adopted in March of 2023. This evaluation report covers the period of January 2023 to December 2024. Outcomes from the 2023-2025 period will be further analyzed in early 2026, in order to include 2025 progress in total, and to further inform prospective 2026 implementation strategies.

Upon review of the 2022 CHNA, hospital leadership for UH Geauga isolated four top priority community health needs:

1. Behavioral health (mental health and substance use and misuse)
2. Healthcare access and quality
3. Chronic conditions (breast cancer and heart disease)
4. Community conditions (housing and transportation)

Within these areas, in consideration of the hospital's expertise and it being a community-based hospital, the following objectives were established:

- Increase access to mental health services, enabling improved mental health outcomes for Geauga County residents
- Reduce disease and death associated with alcohol, tobacco, and drug use through evidence-based prevention and treatment efforts
- Increase access and knowledge of cardiovascular services, enabling improved heart health outcomes for Geauga County
- Reduce disease and death associated with breast cancer and promote health and well-being for women in Geauga County
- Increase access and knowledge of cardiovascular services, enabling improved heart health outcomes for Geauga County
- Increase access and quality of healthcare for all Geauga County residents

Impact

UH Geauga has made significant strides in advancing community health through its 2023–2024 Community Health Improvement Strategies. Over the course of two years, the hospital hosted 49 community screening events, resulting in over 4,500 individuals screened for chronic conditions including hypertension, diabetes, and high cholesterol. These efforts were paired with 242 chronic disease-focused educational events, which collectively reached more than 6,500 community members. Through both senior outreach and general community engagement, UH Geauga has demonstrated a strong commitment to increasing early detection and prevention of chronic illness, directly addressing its CHNA priority to improve health outcomes across diverse age groups and populations.

In response to growing behavioral health needs, UH Geauga led 38 education-focused events targeting alcohol, tobacco, and other drug misuse prevention. Additionally, through its pharmacy and Project Dawn initiatives, the hospital distributed or supported the use of over 324 Narcan doses. These interventions included programming for both youth and seniors and reflected a multi-generational approach to behavioral health awareness and harm reduction. By embedding behavioral health education into events like the National Alliance on Mental Illness (NAMI) Walk, senior classes, and school programs, UH Geauga has positioned itself as a trusted hub for stigma-free education and life-saving resources.

The hospital's focus on health equity was further demonstrated through its dedicated outreach to the Amish community. Across 26 culturally relevant health events, UH Geauga provided vital screenings and wellness education in trusted, community-appropriate formats. The hospital also facilitated 14 well-child and immunization clinics, which delivered over 330 vaccines to children with limited access to traditional care. Collaborative meetings with the Amish Communications Committee and regional partners ensured that messaging and care coordination were culturally sensitive and consistent. This targeted approach strengthened trust and helped bridge longstanding gaps in access for this underserved population.

In addition to addressing chronic disease and behavioral health, UH Geauga led efforts to promote women's health through 6,458 mammograms, a major contribution to breast cancer prevention and awareness in the county. Screenings remained consistently available at hospital locations, ensuring continuity of care for women regardless of scheduling challenges.

Overall, UH Geauga's initiatives have made a measurable and meaningful impact across Geauga County. By aligning strategy with CHNA priorities and embracing partnerships with schools, senior services, public health departments, and cultural leaders, the hospital continues to strengthen its role as a central pillar of community health and wellness.

Hospital Staff Interviews

In order to provide a qualitative context regarding UH Geauga's successes and opportunities for improvement related to the implementation strategies, a discussion guide comprised of four anchor questions was utilized to frame an interview with University Hospitals Geauga Medical Center leadership and caregivers on May 1, 2025.

1. What were the most significant successes and strategies in program implementation and community engagement?
2. What strategies experienced barriers to implementation, or were unable to be implemented?
3. How have community partnerships strengthened program implementation and community engagement?
4. Are there any opportunities that could potentially be leveraged in the future to improve the community's health?

As a result of this conversation, the following qualitative themes emerged pertaining to UH Geauga's community health implementation strategy from 2023-2025: behavioral health, healthcare access and quality, chronic conditions, and community conditions.

Behavioral Health

The behavioral health strategy for UH Geauga focuses on increasing access to mental health services and reducing disease and death associated with alcohol, tobacco, and drug use through evidence-based prevention and treatment. In 2023, the center prioritized building collaborative relationships with local organizations such as Geauga Public Health, Ravenwood Health, and the Suicide Prevention Coalition.

These partnerships facilitated the sharing of behavioral health updates and resources, with the coalition serving as a central platform for communication. A mental health resource list was created for youth and distributed to schools, while efforts to compile a comprehensive adult list are ongoing.

Throughout 2023, a total of 38 behavioral health-related events were held, including Drug Abuse Resistance Education (DARE) classes, vaping and nicotine prevention programs, and senior outreach sessions. These events also included the distribution of Narcan through Project DAWN and pharmacy exchanges. The center also engaged the Amish community through four meetings with providers and hosted 26 health events tailored to their needs. A list of mental health providers serving the Amish population was developed and shared with the Amish Communications Committee.

In 2024, the center continued its momentum by maintaining active participation in the Suicide Prevention Coalition and expanding its outreach. A total of 25 behavioral health events were conducted, including vaping diversion and prevention programs, DARE classes, and mental health awareness events in schools and public spaces. These efforts reached hundreds of students and community members.

Overall, the behavioral health initiatives in both years demonstrate a consistent and strategic approach to improving mental health outcomes in Geauga County. Through collaboration, education, and culturally sensitive engagement, UH Geauga is making measurable progress toward its 2025 objectives.

Healthcare Access and Quality

The healthcare access and quality strategy at UH Geauga is centered on increasing access to preventive services, screenings, and education, particularly for underserved populations such as the Amish community. In 2023, the center made significant strides in expanding outreach and improving health outcomes through a variety of initiatives. A total of 49 screening events were held, resulting in over 4,500 individual health screenings, each including chronic disease education. Additionally, 242 educational events were conducted, reaching thousands of community members with information on cardiovascular health, cancer prevention, and general wellness.

Efforts to reach the Amish population were a key focus. The center hosted 26 health events specifically for Amish residents, including screenings and educational sessions. Quarterly meetings were held with Amish leaders and community boards such as the Association for Community Affiliated Plans (ACAP) to ensure alignment with community needs. Immunization clinics were also prioritized, with 14 events held in 2023 in collaboration with Geauga Public Health, resulting in hundreds of childhood vaccinations.

In 2024, the center continued to build on this momentum. By the end of the year, 56 screening events had been conducted, yielding over 5,700 total screenings. Educational outreach remained strong, with 136 events reaching more than 16,000 attendees. The mammogram van initiative also saw significant use, with 7,183 total mammograms performed across the two years, including both screening and diagnostic services.

The center maintained consistent engagement with the Amish community, conducting five health events in 2024 and continuing quarterly meetings with community leaders. Immunization efforts expanded further, with 25 clinics held over the two years, resulting in more than 800 vaccinations administered to children.

Chronic Conditions

UH Geauga has prioritized the prevention and management of chronic conditions, particularly cardiovascular disease and breast cancer, through increased access to screenings, education, and outreach. In 2023, the center hosted 49 screening events and 242 educational events, many of which focused on chronic disease education. These efforts reached thousands of residents, including seniors and underserved populations, with information on managing conditions such as high blood pressure, cholesterol, and diabetes. Specific to the senior population, engagement with the Age Well, Be Well program were improved.

The mammogram van initiative played a key role in breast cancer prevention, with 6,458 mammograms conducted in 2023 alone. These included both screening and diagnostic

services, helping to identify and address breast health concerns early. Additionally, the center worked closely with the Amish community, conducting 26 health events and establishing regular meetings with community leaders to ensure culturally appropriate care. Immunization clinics were also held in partnership with Geauga Public Health, contributing to the prevention of vaccine-preventable diseases.

In 2024, the center expanded its efforts, conducting 56 screening events and 136 educational events, with over 7,000 mammograms performed across both years. Outreach to the Amish community continued, with five targeted health events and 25 immunization clinics resulting in hundreds of childhood vaccinations. These initiatives reflect a strong commitment to reducing the burden of chronic disease through early detection, education, and equitable access to care.

Community Conditions

Community conditions were addressed through UH Geauga's targeted outreach and engagement strategies, particularly in rural and underserved areas. The center's work with the Amish community exemplifies this approach, with consistent efforts to build trust, provide culturally sensitive care, and address barriers to health access. For example, auctions held by Amish leaders are also popular screening events. Quarterly meetings with Amish leaders, participation in community events, and tailored health education have helped bridge gaps in care and improve health equity.

The center's collaboration with public health departments and local organizations has also strengthened its ability to respond to community needs. By integrating social determinants of health into its programming, such as transportation, education, and preventive services, UH Geauga is addressing the broader conditions that influence health outcomes. These efforts are embedded in the center's strategic goals and are essential to creating a healthier, more resilient community.

Looking forward, the UH Geauga team remains committed to building on its momentum by exploring innovative, community-driven strategies that foster long-term health and equity. With continued emphasis on collaboration, cultural responsiveness, and adaptability, UH Geauga aims to deepen its impact and reinforce its role as a reliable and proactive leader in advancing the health and well-being of Geauga County residents.

10. References

Aldrich, D. P., & Meyer, M. A. (2015). Social capital and community resilience. *American behavioral scientist*, 59(2), 254-269.

Anderson, M., & Perrin, A. (2018). Nearly one-in-five teens can't always finish their homework because of the digital divide. Pew Research Center. Retrieved from <https://www.pewresearch.org/internet/2018/10/26/teens-and-the-homework-gap/>

Bhutta, Z. A., Das, J. K., Bahl, R., Lawn, J. E., Salam, R. A., Paul, V. K., ... & Walker, N. (2014). Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost? *The Lancet*, 384(9940), 347-370.

Brook, R. D., Rajagopalan, S., Pope III, C. A., Brook, J. R., Bhatnagar, A., Diez-Roux, A. V., ... & Kaufman, J. D. (2010). Particulate matter air pollution and cardiovascular disease: an update to the scientific statement from the American Heart Association. *Circulation*, 121(21), 2331-2378.

Carls, G. S., Roebuck, M. C., Brennan, T. A., Slezak, J. A., Matlin, O. S., & Gibson, T. B. (2012). Impact of medication adherence on absenteeism and short-term disability for five chronic diseases. *Journal of occupational and environmental medicine*, 54(7), 792-805.

Centers for Disease Control and Prevention (CDC). (2023a). Call for papers: Effects of screen time on health across the life course. Preventing Chronic Disease. Retrieved from https://www.cdc.gov/pcd/call_for_papers/Screen_Time_Effects.htm

Centers for Disease Control and Prevention (CDC). (2023b). *Chronic disease facts*. U.S. Department of Health & Human Services. <https://www.cdc.gov/chronic-disease/data-research/facts-stats/index.html>

Christian, P., Mullany, L. C., Hurley, K. M., Katz, J., & Black, R. E. (2015). Nutrition and maternal, neonatal, and child health. In *Seminars in perinatology* (Vol. 39, No. 5, pp. 361-372). WB Saunders.

Clark, C. R., Ommerborn, M. J., Coull, B. A., Pham, D. Q., & Haas, J. S. (2016). Income inequities and Medicaid expansion are related to racial and ethnic disparities in delayed or forgone care due to cost. *Medical care*, 54(6), 555-561.

Dieleman, J. L., Cao, J., Chapin, A., Chen, C., Li, Z., Liu, A., ... & Murray, C. J. (2020). US health care spending by payer and health condition, 1996-2016. *Jama*, 323(9), 863-884.

Flores, G., Lin, H., Walker, C., Lee, M., Currie, J. M., Allgeyer, R., ... & Massey, K. (2017). The health and healthcare impact of providing insurance coverage to uninsured children: A prospective observational study. *BMC Public Health*, 17(1), 553.

Haboush-Deloye, A., Hensley, S., Teramoto, M., Phebus, T., & Tanata-Ashby, D. (2014). The impacts of health insurance coverage on access to healthcare in children entering kindergarten. *Maternal and child health journal*, 18(7), 1753-1764.

Hassmiller Lich, K., McGowan, M., Philpott, S. E., Hallgren, E., Hohl, S. D., Meissner, H. I., ... & DeGroff, A. (2022). Improving Cancer Screening and Prevention Through a Community-Based Intervention: A Social Determinants of Health Approach. *Preventing Chronic Disease*, 19, E22.

Katz, R., & Callahan, B. (2020). Broadband for all: Charting a path to economic recovery. Benton Institute for Broadband & Society.

Kefale, B., Jancey, J., Gebremedhin, A. T., Nyadanu, S. D., Belay, D. G., Pereira, G., & Tessema, G. A. (2024). Risk factors of under-five and infant mortality: An umbrella review of systematic reviews and meta-analyses. *Journal of Global Health*, 14, 04260.

Mehdipanah R. (2023). Without Affordable, Accessible, and Adequate Housing, Health Has No Foundation. *The Milbank quarterly*, 101(S1), 419–443.

Oglesby, W. H., & Slenkovich, K. (2014). A mixed-methods approach to conducting Internal Revenue Service-compliant community health needs assessments: a case example for nonprofit hospital leaders. *Journal of Healthcare Leadership*, 67-74.

Pfefferbaum, B. J., Reissman, D. B., Pfefferbaum, R. L., Klomp, R. W., & Gurwitch, R. H. (2007). Building resilience to mass trauma events. In *Handbook of injury and violence prevention* (pp. 347-358). Boston, MA: Springer US.

Rohrer, K., & Dundes, L. (2016). Sharing the load: Amish healthcare financing. In *Healthcare* (Vol. 4, No. 4, p. 92). MDPI.

Rojanasarot, S., Bhattacharyya, S. K., & Edwards, N. (2023). Productivity loss and productivity loss costs to United States employers due to priority conditions: a systematic review. *Journal of Medical Economics*, 26(1), 262-270.

Slopen, N., Kontos, E. Z., Ryff, C. D., Ayanian, J. Z., Albert, M. A., & Williams, D. R. (2013). Psychosocial stress and cigarette smoking persistence, cessation, and relapse over 9-10 years: a prospective study of middle-aged adults in the United States. *Cancer causes & control : CCC*, 24(10), 1849–1863.

Song, Z., & Baicker, K. (2019). Effect of a workplace wellness program on employee health and economic outcomes: a randomized clinical trial. *Jama*, 321(15), 1491-1501.

Taylor, L. (2018). Housing and health: an overview of the literature. *Health Affairs Health Policy Brief*, 10(10.1377).

Tikkanen, R., Abrams, M. (2020). U.S. health care from a global perspective, 2019: Higher spending, worse outcomes? The Commonwealth Fund. Retrieved from <https://www.commonwealthfund.org/publications/issue-briefs/2020/jan/us-health-care-global-perspective-2019>.

Uscher-Pines, L., Chandra, A., Acosta, J., & Kellermann, A. L. (2018). Health and community resilience: Lessons from the literature for the Department of Homeland Security. RAND Corporation. Retrieved from https://www.rand.org/pubs/technical_reports/TR915.html.

Vargas, E. W., Stallworth, P., Carter, P. M., & Goldstick, J. E. (2024). State-to-state variation in rates and causes of child and adolescent mortality in the US. *JAMA pediatrics*, 178(11), 1223-1227.

Van Alsten, S. C., & Harris, J. K. (2020). Cost-related nonadherence and mortality in patients with chronic disease: a multiyear investigation, National Health Interview Survey, 2000–2014. *Preventing chronic disease*, 17, E151.

Weigel, G., Ramaswamy, A., & Sobel, L. (2020). Opportunities and barriers for telemedicine in the U.S. during the COVID-19 emergency and beyond. Kaiser Family Foundation.

Whitacre, B. E., Gallardo, R., & Strover, S. (2021). Broadband's contribution to economic health in rural areas: A causal analysis. *Telecommunications Policy*, 45(3), 102019.

Wolfe, M. K., McDonald, N. C., & Holmes, G. M. (2020). Transportation Barriers to Health Care in the United States: Findings from the National Health Interview Survey, 1997–2017. *American journal of public health*, 110(6), 815–822.

Woolf, S. H., & Aron, L. (2013). *U.S. Health in International Perspective: Shorter Lives, Poorer Health*. National Academies Press (US).

World Health Organization (WHO) (2020). *Levels & Trends in Child Mortality*. Retrieved from <https://www.who.int/publications/i/item/9789240010352>.

Young Center for Anabaptist and Pietist Studies (YCAPS). (2025). *Twelve largest Amish settlements, 2025*. Elizabethtown College. Retrieved from <https://groups.etown.edu/amishstudies/twelve-largest-amish-settlements-2025/>

Yu, J., & Meng, S. (2022). Impacts of the Internet on Health Inequality and Healthcare Access: A Cross-Country Study. *Frontiers in public health*, 10, 935608.