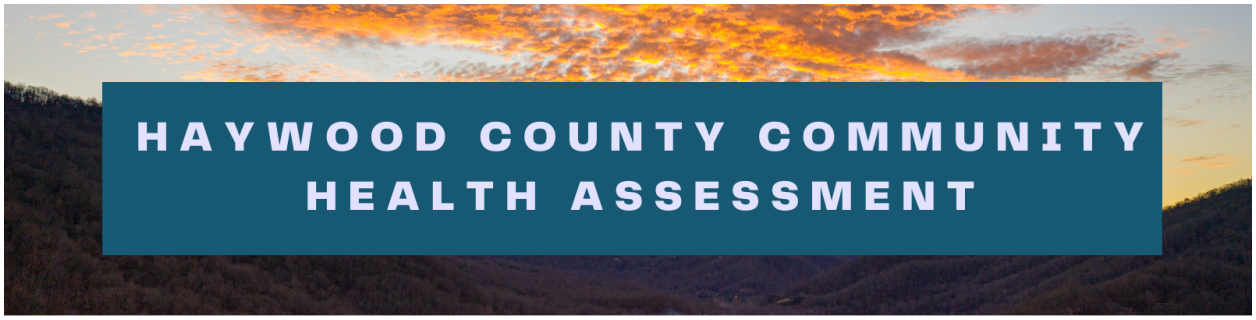
Haywood County Community Health Assessment

2021



This document was developed by Haywood County Health and Human Services in partnership with Haywood Regional Medical Center and Healthy Haywood member organizations as part of a local Community Health Assessment process. We would like to thank and acknowledge several agencies and individuals for their contributions and support in conducting this health assessment:

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Megan Hauser	Haywood County Health and Human Services	Public Health Education Supervisor/CHA Lead	Fall 2021-Spring 2022	https://www.haywoodcountync.gov/615/Health-Human-Services
Darion Vallerga	Haywood County Health and Human Services	Public Health Educator/CHA Support	Fall 2021-Spring 2022	https://www.haywoodcountync.gov/615/Health-Human-Services
Jeanine Harris	Haywood County Health and Human Services	Public Health Education Specialist/ Preparedness Coordinator/CHA Support	Fall 2021-Spring 2022	https://www.haywoodcountync.gov/615/Health-Human-Services
Sarah Henderson	Haywood County Health and Human Services	Public Health Services Division Director/CHA Prioritization	Fall 2021	https://www.haywoodcountync.gov/615/Health-Human-Services
Ira Dove	Haywood County Health and Human Services	Health and Human Services Agency Director/CHA Prioritization	Fall 2021	https://www.haywoodcountync.gov/615/Health-Human-Services
Greg Caples	Haywood Regional Medical Center	CEO/CHA Prioritization	Fall 2021	https://www.myhaywoodregional.com
Greg Christopher	Haywood County Sheriff's Office	Sheriff/CHA Prioritization	Fall 2021	https://www.haywoodncsheriff.com
Travis Donaldson	Haywood County Emergency Services	Emergency Services Director/CHA Prioritization	Fall 2021	https://www.haywoodcountync.gov/185/Emergency-Services

Shelly Foreman	Vaya Health	Community Relations Regional Director/CHA Prioritization	Fall 2021	https://www.vayahealth.com
Vicky Gribble	Mountain Projects, Inc.	Certified Application Counselor/CHA Data Team and Prioritization	Fall 2021	https://mountainprojects.org
Mandy Haithcox	Haywood Pathways Center	Executive Director/CHA Prioritization	Fall 2021/Spring 2022	https://www.haywoodpathwayscenter.org
Nita Kirkpatrick	Haywood County Health and Human Services	Board Member/CHA Prioritization	Fall 2021	https://www.haywoodcountync.gov/615/Health-Human-Services
Tobin Lee	MountainWise	Region 1 Tobacco Prevention Manager/Interim Project Manager/CHA Data Team	Fall 2021	https://mountainwise.org
Courtney Mayse	Meridian Behavioral Health Services	Haywood County Director of Services/ CHA Prioritization	Fall 2021	https://meridianbhs.org/
Jody Miller	Region A Partnership for Children	Community Engagement Coordinator/ CHA Prioritization	Fall 2021	https://rapc.org/
Debbie Ray	Great by Eight	Faith-Based Guiding Team Member/ CHA Prioritization	Fall 2021	Not applicable
Libby Ray	Mountain Projects, Inc.	Preventionist/CHA Data Team and Prioritization	Fall 2021	https://mountainprojects.org
Jessica Rodriguez	Vecinos, Inc.	Farmworker Health Program Manager/ CHA Prioritization	Fall 2021	https://www.vecinos.org
Julie Sawyer	Haywood County Cooperative Extension	Extension Agent/CHA Prioritization	Fall 2021	https://haywood.ces.ncsu.edu
Lindsey Solomon	Haywood Regional Medical Center	Marketing and Communications Coordinator/CHA Data Team and Prioritization	Fall 2021	https://www.myhaywoodregional.com
Jennifer Stuart	Haywood County Public Library	Branch Librarian/CHA Data Team and Prioritization	Fall 2021	https://www.haywoodlibrary.org
Florence Willis	Blue Ridge Community Health Services	Patient Navigator/CHA Prioritization	Fall 2021	https://www.brchs.com
Norm Hoffman	Evince Clinical Assessments	President/CHA Prioritization	Fall 2021	www.evinceassessment.com

Mary Ann Widenhouse	National Alliance on Mental Illness/ Vaya Health	NAMI Haywood President/Chair of Region 1 Consumer and Family Advisory Committee/Region 1 CFAC Representative for Vaya Health Board of Directors/CHA Prioritization	Fall 2021	namihaywood.com
Christy Yazan	NC Department of Health and Human Services	Infant Toddler Program Supervisor/CHA Prioritization	Fall 2021	https://beearly.nc.gov/index.php

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Haywood County 2021 Community Health Assessment Executive Summary

Community Results Statement

The ultimate goal for Haywood County is to build a healthy and resilient community.

Leadership for the Community Health Assessment Process

A data team of community partners and the public health education team from Haywood County Health and Human Services led the CHA process. Following internal review of both primary and secondary data, the data team received a condensed list. This team provided input to public health staff on which data to review during the prioritization process.

Name	Agency	Title	Agency Website
Megan Hauser	Haywood County Health and Human Services	Public Health Education Supervisor	https://www.haywoodcountync.gov/615/Health-Human-Services
Jeanine Harris	Haywood County Health and Human Services	Public Health Education Specialist/Preparedness Coordinator	https://www.haywoodcountync.gov/615/Health-Human-Services
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Vicky Gribble	Mountain Projects, Inc.	Certified Application Counselor	https://mountainprojects.org/
Tobin Lee	MountainWise	Region 1 Tobacco Prevention Manager/Interim Project Manager	http://mountainwise.org/
Libby Ray	Mountain Projects, Inc.	Preventionist	https://mountainprojects.org/
Lindsey Solomon	Haywood Regional Medical Center	Marketing and Communications Coordinator	https://www.myhaywoodregional.com/
Jennifer Stuart	Haywood County Public Library	Branch Librarian	https://www.haywoodlibrary.org/

Partnerships

Name	Agency	Title	Agency Website
Greg Caples	Haywood Regional Medical Center	CEO	https://www.myhaywoodregional.com
Greg Christopher	Haywood County Sheriff's Office	Sheriff	https://www.haywoodncsheriff.com
Travis Donaldson	Haywood County Emergency Services	Emergency Services Director	https://www.haywoodcountync.gov/185/Emergency-Services
Shelly Foreman	Vaya Health	Community Relations Regional Director	https://www.vayahealth.com
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Regional/Contracted Services

Our county received support from **WNC Healthy Impact**, a partnership and coordinated process between hospitals, public health agencies, and key regional partners in western North Carolina working towards a vision of improved community health. We work together locally and regionally to assess health needs, develop collaborative plans, take action, and evaluate progress and impact. This innovative regional effort is coordinated and supported by **WNC Health Network**. WNC Health Network is the alliance of stakeholders working together to improve health and healthcare in western North Carolina. Learn more at www.WNCHN.org.

Theoretical Framework/Model

WNC Health Network provides local hospitals and public health agencies with tools and support to collect, visualize, and respond to complex community health data through Results-Based Accountability™ (RBA). RBA is a disciplined, common-sense approach to thinking and acting with a focus on how people, agencies, and communities are better off for our efforts.

Collaborative Process Summary

Haywood County's collaborative process is supported on a regional level by WNC Healthy Impact.

Locally, our process began with an internal public health education team reviewing a large list of primary (newly collected) and secondary data (existing). The team narrowed the list before sharing with a data team of community partners. The data team further reviewed the information and arrived at a 'short list.' Before and during prioritization meetings, participants received opportunities to review this data. Following a data presentation, participants used a 'Local Rating and Prioritization' worksheet to rate the relevance, impact, and feasibility of addressing the key issues presented. After arriving at their top three scores, each participant selected their top three key issues using an online poll. The three top-scoring areas overall are the county's new health priorities.

Phase 1 of the collaborative process began in January, 2021 with the collection of community health data. For more details on this process see Chapter 1 – Community Health Assessment Process.

Key Findings

Findings that were particularly telling included:

- Chronic Disease
    - Over 72% of individuals are experiencing overweight or obesity (WNC Health Network, 2021), root causes for many chronic diseases. This was an increase from 2018.
- Substance Use and Mental Health
    - Over 88% reported feeling hopeful, but 23% of individuals experienced more than seven days of poor mental health in the past month, an increase from 2018. In addition, over 18% were unable to get necessary mental health care in the past year, also an increase from 2018 (WNC Health Network, 2021).
    - A decrease in all opioid use (prescription and non-prescription) was reported: 15.3% vs. 12.4% (WNC Health Network, 2021).
    - Alcohol continues to be a widely misused substance, with over 12% of adults reporting past-month binge drinking, an increase from 2018 This was defined as five or more drinks for a man or four or more for a woman during any occasion (WNC Health Network, 2021). In addition, Haywood County residents made over 500 emergency department visits in 2021 for 'alcohol abuse and dependence,' a decrease from over 600 visits in 2018 (North Carolina Disease Event Tracking and Epidemiologic Detection Tool*, 2022). **NC DETECT is a statewide public health syndromic surveillance system, funded by the NC Division of Public Health (NC DPH) Federal Public Health Emergency Preparedness Grant and managed through collaboration between NC DPH and UNC-CH Department of Emergency Medicine's Carolina Center for Health Informatics. The NC DETECT Data Oversight Committee does not take responsibility for the scientific validity or accuracy of methodology, results, statistical analyses, or conclusions presented.
- Violent Crime

    - A larger number of survivors were served by domestic violence shelters: 413 vs 320 (NC Department of Administration, 2021).
    - The community has experienced an increase in violent crime: 342.7 vs 326.8 per 100,000 (NC Department of Justice, 2021).
- Social Determinants of Health
    - Over 12% reported a loss of health Insurance during the pandemic, with 24% losing work hours or wages (WNCHN, 2021), affecting access to care. This is a point-in-time figure.
    - In spite of a pandemic, fewer people reported experiencing food insecurity: 3.4% vs. 18.9% (WNC Health Network, 2021).
    - While over 13% of residents live below the poverty level, this figure sharply increases to 33% for those under age 5. This data point is unchanged, as we reviewed a 2015-2019 estimate (U.S. Census, 2021).
- The top three health priorities identified through the Online Key Informant Survey were the same as those emerging from health prioritization meetings.

Health Priorities

1) Mental Health
2) Obesity
3) Substance Use

*Obesity and substance use received an equal number of votes during prioritization meetings.

Next Steps

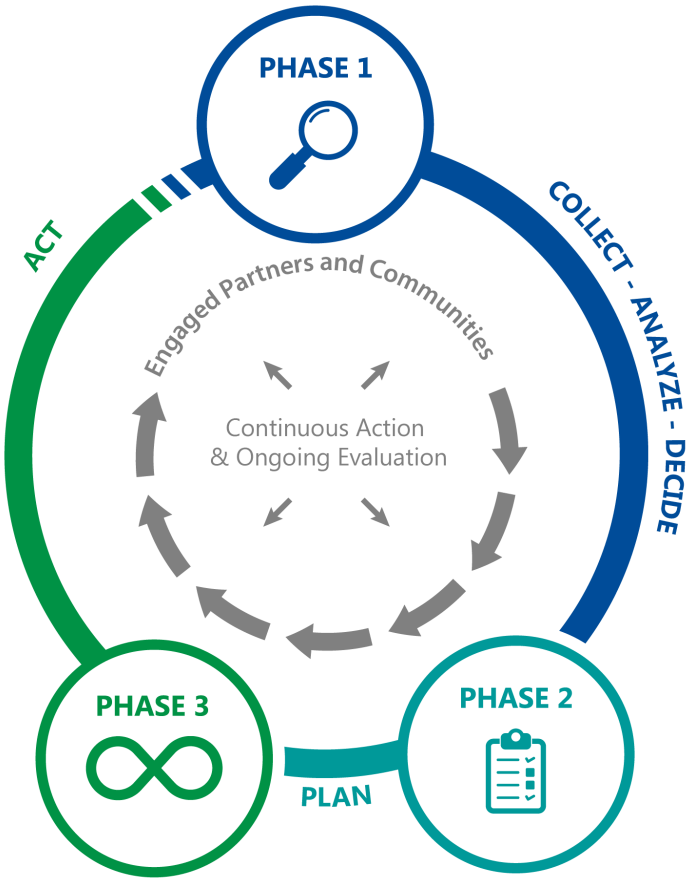
- Monthly action team meetings based on each health priority;
- Engage existing and new partners in health priority action teams;
- Select priority strategies and performances measures to help us evaluate community health improvement progress;
- The evidence-based strategy, Results-based Accountability (RBA), will be utilized to guide decision-making to create swift and effective health improvements;
- The county's health action teams will hold 'Getting to Strategies' meetings during spring 2022. These meetings will include discussing the quality of life conditions desired for the county, the county's progress on related data points, partners with a role to play, and possible evidence-based strategies.
- Following completion of strategy development for each priority area, the Community Health Improvement Plan (CHIP) will be published using electronic scorecard software. The scorecard allows anyone to monitor progress of the CHIP, the current plan shown here. A CHIP, built from evidence-based strategies, is submitted to the North Carolina Division of Public Health.
- To access the full data set(s) (primary and secondary data), community members are encouraged to contact megan.hauser@haywoodcountync.gov.

Chapter 1 – Community Health Assessment Process

Purpose

Community Health Assessment (CHA) is an important part of improving and promoting the health of county residents. A CHA results in a public report which describes the health indicators, status of the community, recent changes, and necessary changes to reach a community's desired health-related results.

Phases of the Community Health Improvement Process:

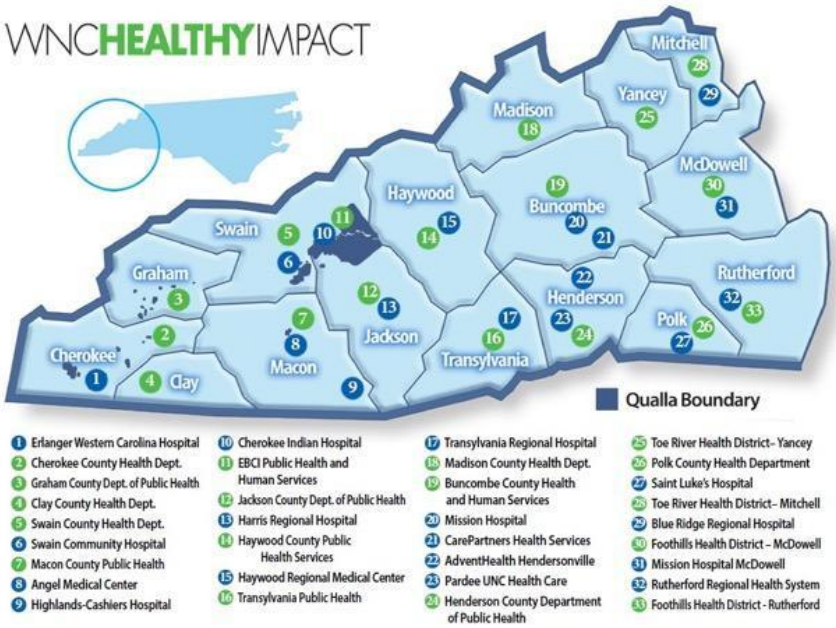


Definition of Community

Community is defined as "county" for the purposes of the North Carolina Community Health Assessment process. Haywood County is included in Haywood Regional Medical Center's community for the purposes of community health improvement, and as such they were key partners in this local level assessment.

WNC Healthy Impact

WNC Healthy Impact is a partnership among local and regional hospitals, public health agencies, and key regional partners towards a vision of improved community health. The vision is achieved by developing collaborative plans, taking action, and evaluating progress. More information is at www.wnchn.org/wnchealthyimpact.



Data Collection

Several sets of data were comprehensively reviewed for Haywood County's CHA. The CHA is composed of a general overview of health outcomes and influencing factors. Through a collaborative process with key community partners, priority issues were identified to help guide a targeted focus for improvement strategies. The CHA process also highlights some important successes, strengths, and resources to guide future efforts.

Core Dataset Collection

The data came from the WNC Healthy Impact regional data and local data. To ensure a comprehensive understanding, the dataset includes both secondary (existing) and primary (newly collected) data. The following data set elements and collection are supported by WNC Healthy Impact data consulting team, a survey vendor, and partner data needs and input:

- A comprehensive set of publicly available secondary data metrics with our county compared to the sixteen-county WNC region
- Set of maps using Census and American Community Survey (ACS) data
- WNC Healthy Impact Community Health Survey (cell phone, landline and internet-based survey) of a random sample of adults in the county
- Online Key Informant Survey

See **Appendix A** for details on the regional data collection methodology.

Additional Community-Level Data

Additional community level data was reviewed from the following sources: DATA USA, FRED ®,North Carolina Disease Event Tracking and Epidemiologic Collection tool database (NC DETECT), Haywood Pathways Center, the North Carolina Coalition to End Homelessness, the US Census Bureau, and the Kaiser Family Foundation.

Health Resources Inventory

We conducted an inventory of available resources of our community by reviewing a subset of existing resources currently listed in the 2-1-1 database for our county as well as working with partners to include additional information. See **Chapter 6** for more details related to this process.

Community Input & Engagement

Including input from the community is a critical element of the Community Health Assessment process. Our county included community input and engagement in a number of ways:

- Online Key Informant Survey- A group of community, social services, and public health leaders shared their perceptions about community resilience, a healthy community, social determinants of health, and health issue ratings.
- WNC Healthy Impact Community Health Survey (cell phone, landline and internet-based survey)- Primary survey data was collected from adults in all Western NC counties, including Haywood. Demographics for telephone survey respondents closely matched those of Haywood County, including age and gender makeup.
- A secondary data workbook was provided by WNC Healthy Impact which included information from local, regional, and state sources.
- Data team- After public health staff reviewed available primary and secondary data, a shortened list was shared with a data team formed from community agencies. The input of this team provided guidance on which data to share during prioritization meetings. The team included representatives from prevention/early intervention, library, healthcare, public health, and treatment agencies.
- Prioritization meetings- Two virtual prioritization meetings were held in November 2021. During meetings, data was shared from the following categories: chronic disease, healthcare access and quality, mental health, nutrition and physical activity, obesity, social determinants of health, and substance use. Following data review, participants attended breakout sessions to discuss their reflections on the information shared. Participants then completed a 'Rating and Prioritizations Worksheet,' followed by selecting their top three-scoring choices on a poll. The top three priorities overall will inform Haywood County's focus for the next three years.
- 'Getting to Strategy' meetings- These meetings will involve health action teams composed of community agencies and are planned for spring 2022.

In addition, community engagement is an ongoing focus for our community and partners as we move forward to the collaborative planning phase of the community health improvement process. Partners and stakeholders with current efforts or interest related to priority health issues will continue to be engaged. We also plan to work together with community-based organizations to help ensure that programs and strategies in Haywood County are developed and implemented with community members and partners.

At-Risk & Vulnerable Populations

Throughout Haywood County's Community Health Assessment process, our team focused on understanding general health status and related factors for all populations in our county as well as groups particularly at risk for health disparities or adverse health outcomes. The purpose of Haywood County's Community Health Assessment is to identify disparities in health outcomes, correlated variables affecting health outcomes, particularly among the medically underserved, low-income, and Historically Marginalized Populations (HMP), and other groups experiencing health disparities, and develop and implement strategies to improve equity.

Public health efforts in Haywood County continue to focus on understanding the general health status and related factors for all populations, especially populations at greater risk for health disparities and adverse outcomes. The Community Health Assessment process allowed data teams to identify cyclical differences in health outcomes and correlate variables of concern or interest, particularly among the medically underserved, low-income, and or minority populations. The COVID-19 pandemic is a grim reminder of how individuals in HMP have poorer health outcomes when compared to non-HMP individuals.

The at-risk and vulnerable populations of focus for our process and CHA report include:

- Groups identified as living in poverty
    - Individuals without health insurance
    - Children and seniors living in poverty
    - Possible literacy barriers
    - Health care access barriers
- Groups identified as Historically Marginalized Populations
    - Hispanic/LatinX populations
    - African-American/Black populations
    - Individuals without safe and stable housing
    - Veterans
    - Populations with disabilities
    - Farmworkers and transient workers
- Groups identified with poor mental health
    - Individuals with Substance Use Disorder
    - Individuals without safe and stable housing
- High number of individuals with overweight or obesity
    - Individuals with pre-diabetes
    - Individuals who are food insecure
- Individuals with multiple Adverse Childhood Experiences (ACEs)
    - Individuals experiencing divorce
    - Individuals experiencing poverty
    - Individuals experiencing food scarcity

- Individuals experiencing flooding or similar natural disasters with catastrophic outcomes
- Household member with mental illness
- Household members with substance use
- Household members of incarcerated individuals

The Health Department Accreditation Self-Assessment Instrument uses three basic definitions for at-risk populations. Some of the language was adjusted to better represent populations in Western North Carolina.

Underserved populations relate to those who can not access health care due to: lack of services, available providers, limiting factors such as income, literacy/language barriers, understanding how to access services, cultural competency of clinicians, trust, transportation, or other barriers to health.

At-risk populations are members of a particular group who are likely to, or have the potential to be at risk for a specified health condition. This could be from engaging in behavior (such as pregnant women who smoke) that could cause a specified health condition, having an indicator or precursor (high blood pressure) that could lead to a specified health condition or having a high ACEs score (traumatic experiences), which is associated with increased risk of specified health conditions.

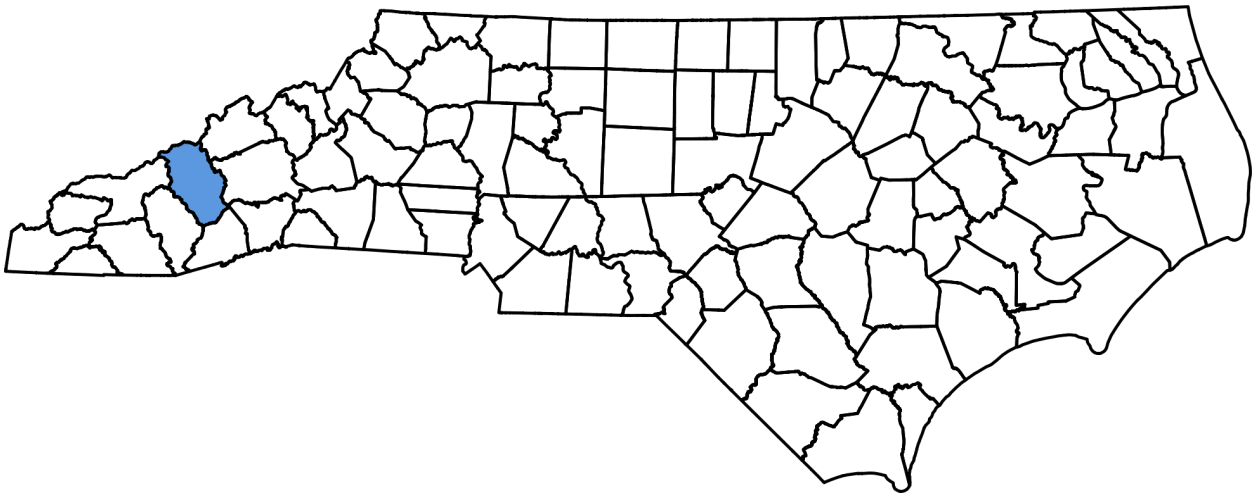
A vulnerable population is one that may be more susceptible than the general population to risk factors that lead to poor health outcomes. Vulnerable populations, a type of at-risk population, can be classified by such factors as discrimination/ prejudice based on race/ethnicity, socio-economic status, gender. cultural factors and age groups.

Health Department Self-Assessment Instrument (HDSAI) Interpretation Document v.7.0

Chapter 2 – Haywood County

Location, Geography, and History of Haywood County

Haywood County, founded in 1808, is located in the heart of mountainous Western North Carolina (WNC). The total area of Haywood County is 555 square miles, of which .9 square miles is water. Haywood County is popular among tourists, outdoor enthusiasts, and retirees. The average elevation for the county is 3600 feet and contains portions of the Great Smoky Mountains National Park, Nantahala National Forest and River Gorge, Cherokee and Pisgah National Forests, Balsam Mountains, and the Blue Ridge Parkway. Nearly 56% of the residents live in the rural, mountainous areas of the county. It is home to four towns: Waynesville, the county seat, Canton, Maggie Valley, and Clyde. It is the third largest county in WNC, after Buncombe and Henderson Counties. The most common industries in Haywood County are Healthcare and Social Assistance, followed by an unusually high number of Arts, Entertainment, and Recreation compared to other counties. (Datawheel & Deloitte, 2018) (Data USA Haywood County Economy Profile).



Population

Haywood County's population based on the 2019 American Community Survey/US Census Bureau was 61,053 compared with 59,577 in 2017 (map pictured below). The median age in Haywood County is 47.6 years, an increase from the 2010 Census, as well as older than Western North Carolina (46.5) and the state of North Carolina (39.4) (ASC, 2020).

Map: Haywood County Population Change (2019)

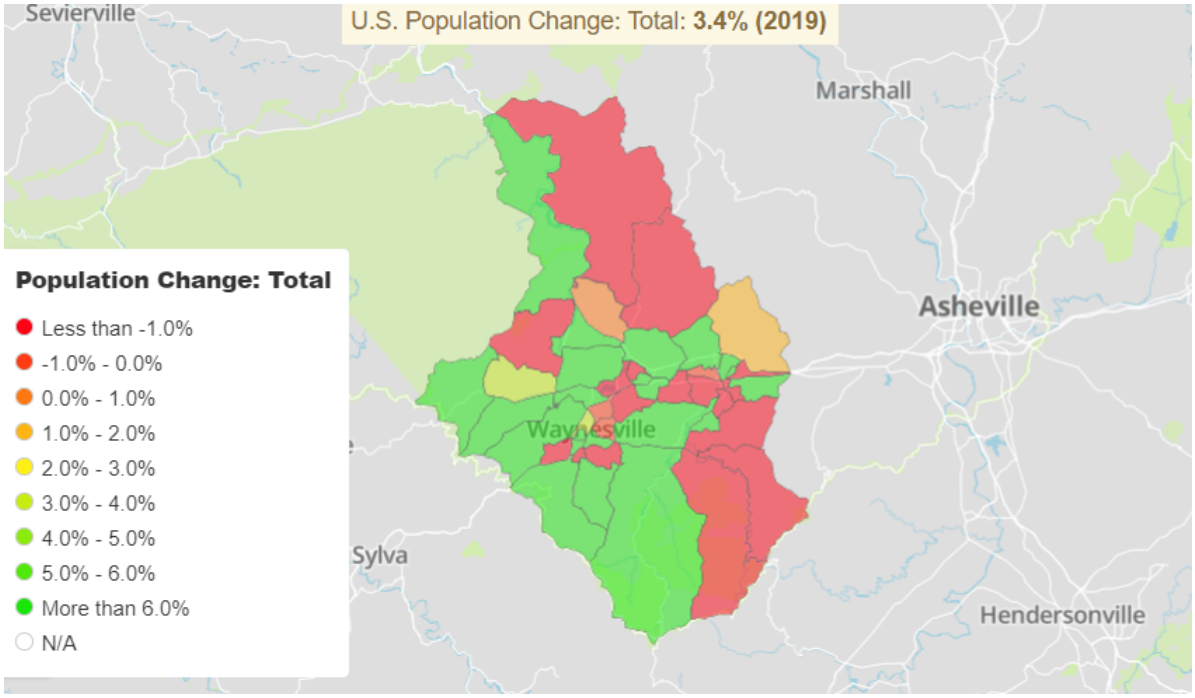
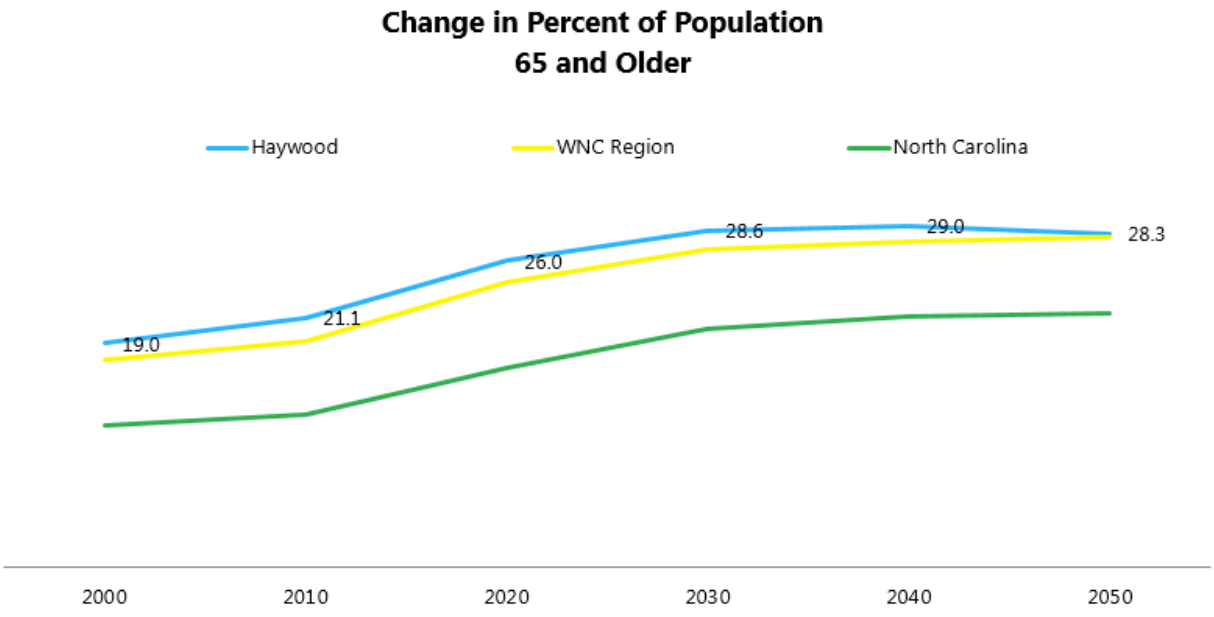


Chart 1



Sources: US Census Bureau, 2021; North Carolina Office of State Budget and Management, 2021

<u>Other Population Characteristics of Note</u>

- Compared with 14.7% of North Carolinians, 13.4% of the county lives in poverty. This is a slight decrease for the county as compared to previous five-year estimate. Disparities widen when comparing poverty data for Hispanic individuals in Haywood County (37.4%) to North Carolina

(12.9%). The poverty figure for Hispanic individuals is unchanged, as we reviewed a 2015-2019 estimate (ACS/US Census, 2019).

- Data from the US Census shows that 55.5% of the county's residents are in the workforce compared to 61.3% in North Carolina. This is a point-in-time estimate (ACS/US Census, 2019).
- According to FRED ®, unemployment rates in Haywood County fluctuated from a high of 16.2% in May 2020 to a low in November 2021 of 2.9% (2022).
- From 2017 to 2019, Haywood County saw a 36.6% decrease in individuals with no insurance coverage at 9.9% (ACS/US Census, 2019).
- The number of individuals earning a high school diploma or higher was 88%, an increase from 2016 (74.6% as reported in the 2018 Haywood CHA) and is equivalent to the national average (ACS/US Census, 2019).
- In 2021, Haywood Pathways Center (HPC) served 192 unduplicated individuals experiencing homelessness. In addition, 61% of individuals and 95% of families secured housing or moved back in with family. These are point-in-time figures provided by organization leadership (HPC, 2022). Data from North Carolina Coalition to End Homelessness (2021) reports there were 95 individuals experiencing homelessness in 2018 and 130 in 2020 (Point-in-Time county: North Carolina Balance of State by County).

Table 1: Haywood County Demographic Characteristics Breakdown by Percent (2021)

Population by Race/Ethnicity (%)		Population by Sex	
White alone	95.5	% Male	% Female
Black or African American	.9	48.3	51.7
American Indian, Alaskan Native	.5		
Native Hawaiian, or other Pacific Islander	0.0	Population by Age	
Other races	.9	% less than 5	4.9
Two or more races	1.5	% 5-19 years old	15
Hispanic or Latino (of any race)	4	% 20-64 years old	49.6
Total Population	61,053	% 65 and older	24.3

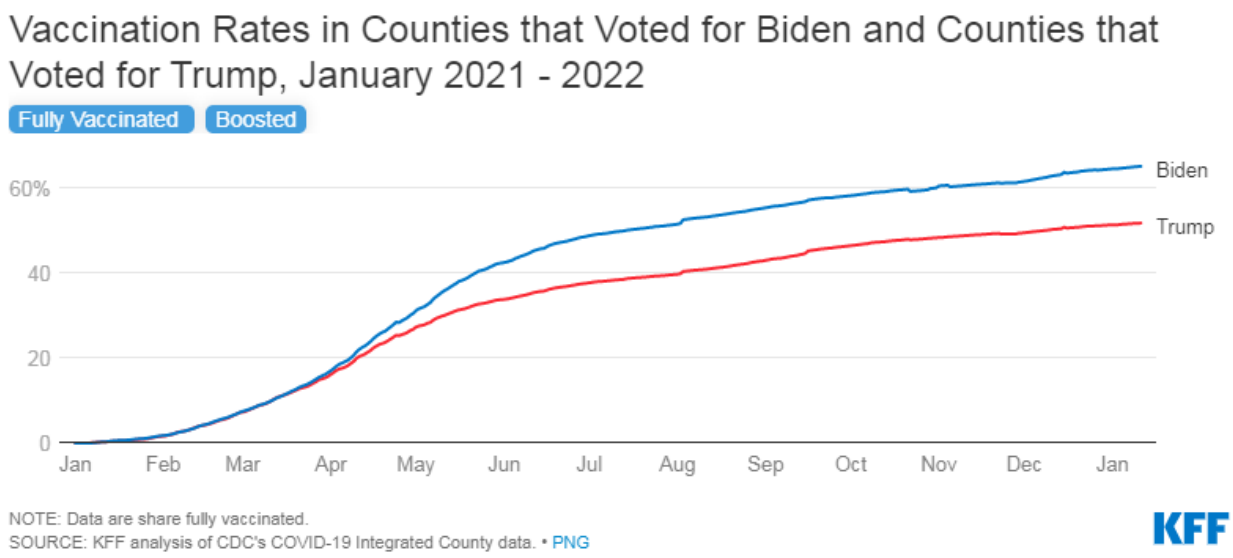
Source: ACS: Haywood County, NC, 2019

COVID-19 Pandemic

Haywood County declared a state of emergency on March 15, 2020. Public school campuses were closed and in-person access to county and city facilities was severely restricted. When the state of emergency was declared mid-March 2020, there were no confirmed COVID-19 cases in Haywood County. On April 2, 2020, Haywood County reported its first two cases. As of March 4, 2022, Haywood County COVID-19 cases totaled 12,795 confirmed cases with 193 deaths (Haywood County Government, 2022). The

majority of cases reported are in White populations (89%), with 11% of cases reported as “other” or “suppressed”. Only seven percent of cases in Haywood County identified as Hispanic. Based on COVID-19 disparity data from the nation and North Carolina, and data lacking for Haywood County Historically Marginalized Populations (HMPs), we concur that HMPs in Haywood County are disproportionately affected by COVID-19 infections. The majority of cases early in the pandemic were attributable to ages 65 and older. As the pandemic continues, those hardest hit are 25-49 years of age (37%) and 50-64 years of age (21%). Non-Hispanic Whites represent 65% of COVID-19 deaths. Information for 35% of deaths was suppressed. Before vaccines were available early 2021, outcomes were severe and mortality rates high for the elderly. Deaths for those 75 years of age and older make up 48% of all deaths, with 13% and 15% respectively for ages 50-64 and 65-74. Females make up the majority of cases (54%), but males make up the majority of deaths (53%).

In the last presidential election, 36% of Haywood County voted Democratic and 62.5% voted Republican. As the pandemic continues, Haywood County COVID-19 vaccine utilization mirrors political ideologies reported in other regions of North Carolina and the Nation as recent data from CDC reveals in graph below:



As of March 4, 2022, vaccine status for Haywood County residents is (Haywood County Government, 2022; NC Department of Health and Human Services, 2022):

- 37,488 are vaccinated with one dose.
- 35,499 are fully vaccinated with two doses mRNA or 1 dose J&J.
- 19,386 are up-to-date with at least one booster/additional dose.

Describe the local impact of the COVID-19 pandemic on the health of your community during the past CHA cycle 2018-2020 and continuing into the CHA cycle 2021-2023.

Results from a county-level survey indicate negative outcomes (WNC Health Network, 2021):

- 20% indicated “Fair” or “Poor” overall health compared with WNC (17.6%) and NC (19.4%), all up since 2018, with no change for Haywood County. 23% percent of individuals indicated more than seven days of poor mental health in the last month, an increase from 2018 and higher than WNC (22.4%).

- 24.4% indicated currently taking medications or receiving treatment for mental health, higher than the US (16.8%). This figure was not collected prior to 2021.
- 18.2% did not get mental health care or counseling needed in the past year, an increase for the county and higher than the US (7.8%).
- 10.9% reported having heart disease, a decrease for the county, though higher than WNC (7.6%), NC (6.8%), or the US (6.1%).
- 18.6% reported having diabetes, a decrease for the county, though higher than WNC (14.1%), NC (11.8%), or the US (13.8%).
- 19.2% lost a job during the pandemic, higher than WNC (15.3%). This is a point-in-time figure.
- 12.1% lost health insurance during the pandemic, higher than WNC (7.7%). This is a point-in-time figure.
- 41.2% have obesity, up from 2018 (32.5%) and higher than WNC (35.4%), NC (34%), or the US (31.3%).

- How did the pandemic impact availability of resources? Positive and Negative
    - Positive
        - Increased interagency collaboration.
        - Haywood County Schools led a massive effort to provide meals to any child 18 years and younger during the school year and throughout the summer of 2020.
        - Food distribution/coordination efforts
            - "The large number of food banks, drive-thru and support offered by local agencies and individuals." (WNCHN – OKIS, 2021).
        - "More emphasis on mental health than ever" (WNCHN – OKIS, 2021).
        - Improved resources for "job seeking" individuals (WNCHN – OKIS, 2021).
    - Negative
        - Lack of resources and referrals to address children with possible ACEs attributed from the pandemic.
        - Due to job losses, some Haywood County residents experienced decreased access to healthcare. Lack of in-person Medicaid enrollment assistance may have impacted this.
        - Many resources for unsheltered populations were limited in early 2020 due to the pandemic (including the Open Door and the Salvation Army).
        - Managing COVID-19 in unsheltered populations while in isolation
            - Haywood County contracted with a local motel for isolation of COVID-19 positive individuals. HHSA provided food and other resources during the isolation period.
- Data: Total 12,795 positive tests; 193 confirmed deaths; 37,488 first doses and 35,499 second doses were administered (Haywood County, March 4, 2022; NC Department of Health and Human Services, 2022).
- How did the pandemic impact your 2018 CHA/CHIP priorities? In March 2020, Haywood County HHSA staff were encouraged to work remotely and many did. Agency services were scaled back to only essential services, with restricted public access to the building. Many social services and most public health staff were deployed to work COVID-19 response, causing either a temporary pause of, or multitasking with pre-pandemic work, including CHA/CHIP priorities. Significant COVID-19 deployments for HHSA staff include:
    - COVID-19 call center
    - COVID-19 mass testing events
    - Case investigation and contact tracing

        - Delivering food and supplies to individuals in quarantine or isolation with no support
        - Finding alternate housing for unsheltered residents and those who could not quarantine or isolate at home
    - Data reporting for COVID-19 case to county leadership and residents
    - Increased food coordination to address food insecurity for school-aged children and out-of-work residents
        - Community partners worked tirelessly, ensuring increased access to pantries and other food distribution opportunities.
        - Public schools made food available to children 18 years of age and younger, including delivery three times per day and providing enough food for weekends.
    - Pushing out COVID-19 community resources to agency staff
        - Early in the pandemic, public health education staff consistently gathered appropriate resources and materials to 1) keep staff abreast of latest COVID-19 guidance and 2) address wellbeing, by sharing innovative and meaningful ways to connect safely.
    - Mass vaccination events
        - HHSA and Haywood Regional Medical Center (HRMC) held over 20 mass vaccination events, administering approximately 29,000 COVID-19 vaccinations from December 31, 2020 through December 14, 2021.
    - All meetings, if held, were held via teleconference. This includes all CHA planning meetings.

Throughout the pandemic, Haywood County HHSA has performed skillfully with all COVID-19 challenges, quickly adapting to ensure vital services are still provided to the community. Haywood County HHSA, with its community partners, models resilience.

Chapter 3 – Social & Economic Factors

As described by Healthy People 2030, economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social community and context are five important domains of social determinants of health. Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Office of Disease Prevention and Health Promotion, 2020).

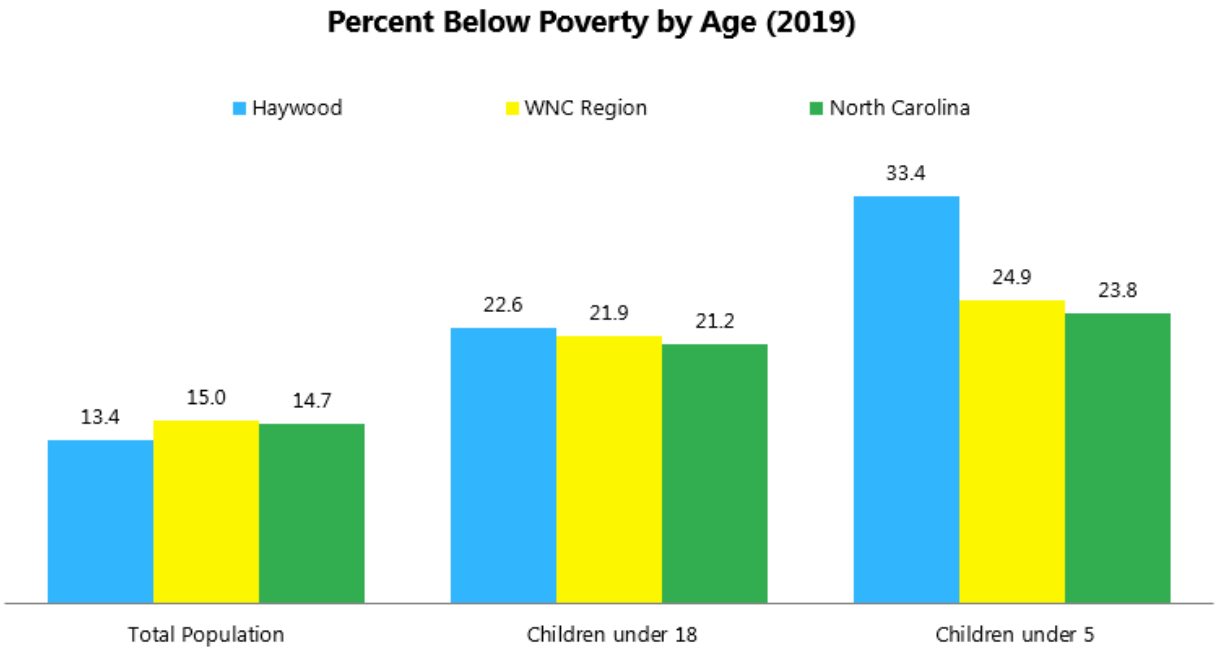
Income & Poverty

“Income provides economic resources that shape choices about housing, education, child care, food, medical care, and more. Wealth, the accumulation of savings and assets, helps cushion and protect us in times of economic distress. As income and wealth increase or decrease, so does health” (County Health Rankings, 2021).

- Median household income - $51,569, an increase from the previous estimate (US Census, 2021).
- Median family income - $66,176, an increase from the previous estimate (US Census, 2021).
- Per capita income - $30,490, an increase from the previous estimate (US Census, 2021).
- Poverty rate trend - 13.4%, a decrease from the previous estimate (13.9%) (US Census, 2019).

- Poverty levels by age comparison - Though 13.4% of the county's population lives below the poverty level, the figure increases when reviewing data below ages 5 and 18, 33.4% and 22.6%, respectively. Both age groups showed a decrease from the previous estimate (US Census, 2019).
- Poverty levels by race comparison- The disparity in poverty levels grows when viewed by race. The following figures represent those living below the poverty level: Black (31.8%), Hispanic/Latino (37.4%), and White (12.4%). Figures are derived from a five-year estimate with previous years not reviewed (US Census, 2019).
- Food and Nutrition Services participation - Over 4,500 households, a total of 8,930 residents, received Supplemental Food and Nutrition Services at the beginning of 2021. This increased from the prior year (UNC-CH, 2021).
- Free and reduced-price school meals - During the 2019-20 school year, an average of 7,131 students participated in these meals daily. This was a decrease from the previous year (NC Department of Public Instruction, 2021).

Chart 2



This bar chart demonstrates the poverty disparities in children under five when comparing Haywood County to the WNC Region and North Carolina (U.S. Census Bureau, 2021).

Employment

"Employment provides income and, often, benefits that can support healthy lifestyle choices. Unemployment and underemployment limit these choices, and negatively affect both quality of life and health overall. The economic condition of a community and an individual's level of educational attainment both play important roles in shaping employment opportunities'' (County Health Rankings, 2021).

Table 2: Haywood County Employment (2020)

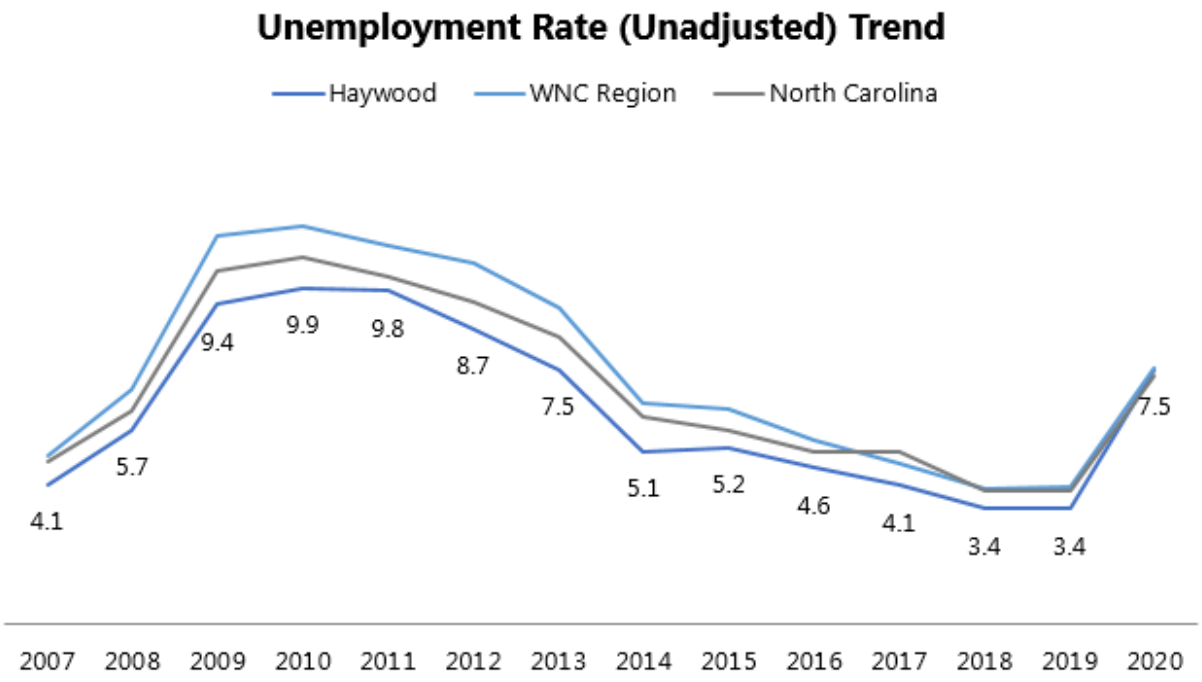
Sector	Annual Employment (# of workers)		Average Weekly Wage ($)	
	Haywood	North Carolina	Haywood	North Carolina
Accommodation & Food Services	2,085	365,961	$354	$370
Administrative & Waste Services	722	289,912	$659	$811
Agriculture, Forestry, Fishing & Hunting	*	26,318	*	$768
Arts, Entertainment & Recreation	270	59,932	$608	$702
Construction	835	229,239	$851	$1,139
Educational Services	1,411	367,197	$762	$980
Finance & Insurance	390	192,320	$1,112	$2,118
Health Care & Social Assistance	2,350	617,005	$805	$1,069
Information	103	74,439	$984	$1,836
Management of Companies & Enterprises	72	82,566	$1,161	$2,287
Manufacturing	2,494	452,389	$1,150	$1,217
Mining	*	3,141	*	$1,257
Other Services, Ex. Public Admin	531	109,066	$593	$767
Professional, Scientific & Technical Services	505	269,772	$1,023	$1,732
Public Administration	1,173	248,335	$813	$1,041
Real Estate & Rental & Leasing	160	59,749	$980	$1,077
Retail Trade	3,095	495,469	$469	$621
Transportation & Warehousing	197	179,932	$1,030	$988
Utilities	*	15,628	*	$1,839
Wholesale Trade	*	182,661	*	$1,568
TOTAL ACROSS ALL SECTORS	16,393	4,321,031	$835	$1,209

* - data estimates not available

N/A - data not applicable to geography
** Percent employed in sector - calculated by dividing "total number employed in sector" by "total number employed in all sectors" for each county

Source: Quarterly Census Employment and Wages, 2020

Chart 3



Source: NC Department of Commerce, 2021

The unemployment rate has steadily decreased since its peak in 2010. However, the pandemic led to another increase in the unemployment rate. In 2020, unemployment jumped from 3.4% to 7.5%, increasing by more than 100% (Chart 3, NC Department of Commerce, 2021).

Education

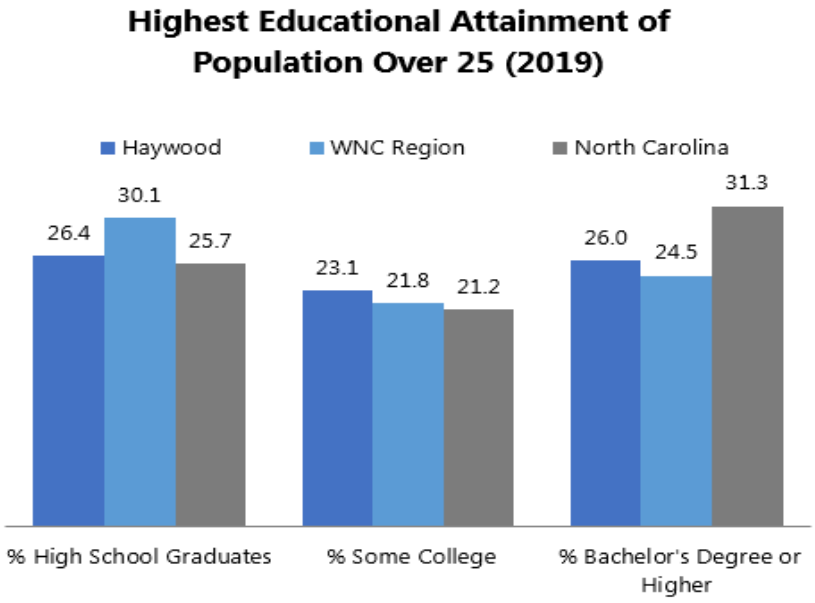
"Better educated individuals live longer, healthier lives than those with less education, and their children are more likely to thrive. This is true even when factors like income are taken into account" (County Health Rankings, 2021).

- School enrollments - As of the final month of the 2019-20 school year, 7,256 students were enrolled in the Haywood County school district, a decrease from the previous year (Chart 5, NC Department of Public Instruction, 2021).
- Drop-out and graduation rates - During the 2019-20 school year, the dropout rate was 1.04 (23 students/total students enrolled), a decrease from the previous year. For the same year, 89% of students graduated from high school. Data is derived from a four-year cohort of students beginning in 2016-17 (NC Department of Public Instruction, 2021).
- Other educational indicators
    - Disciplinary actions- 404 short-term suspensions for all grade levels during the 2019-20 school year, a decrease from the previous year (NC Department of Public Instruction, 2020).
    - Educational achievement during the 2018-19 school year (NC Department of Public Instruction, 2020):
        - 66.2% of students were proficient on End of Grade tests, a slight decrease from the previous year).
        - 29% of students participated in the SAT, unchanged from the previous year.
    - Math & reading proficiency levels (Chart 4, NC Department of Public Instruction, 2021):

- Third grade reading - 61.8% (decrease)
- Third grade math - 76.3% (decrease)
- Eighth grade reading - 63.5% (increase)
- Eighth grade math - 51.8% (decrease)

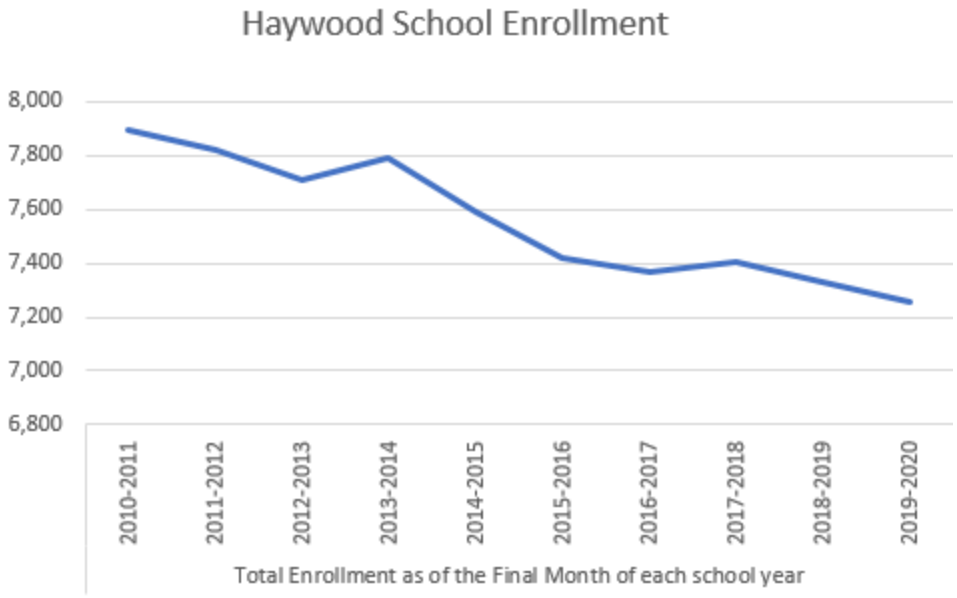
o Facilities with five-star ratings - Of the county's licensed facilities, 12 child care centers and one family child care home had five-star designations. This is a point-in-time figure (NC DHHS, 2021).

Chart 4



Source: US Census Bureau, 2021

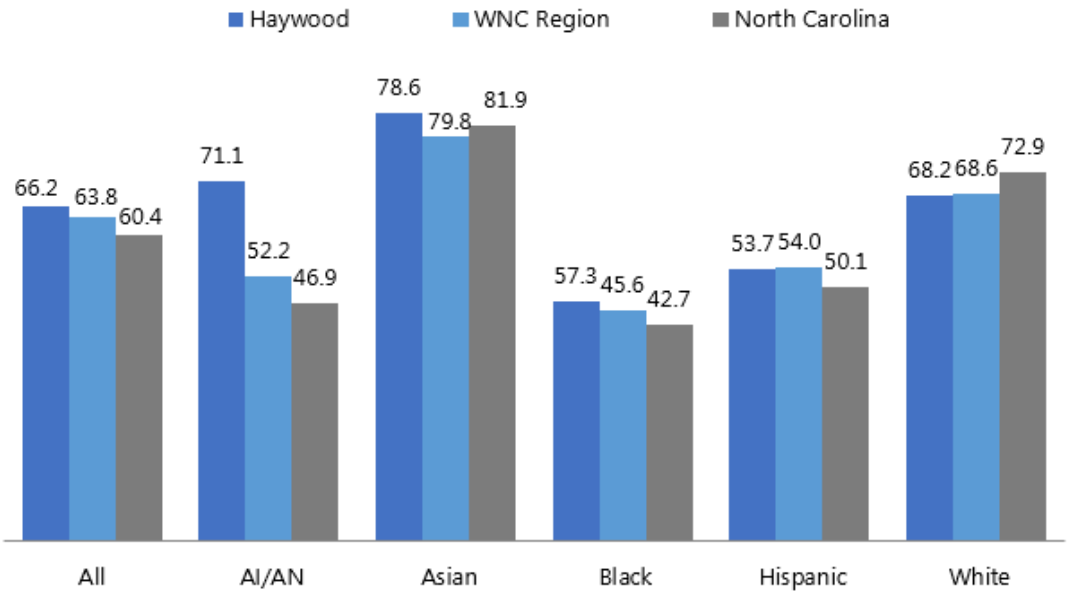
Chart 5



Source: NC Department of Public Instruction, 2021

Chart 6

Percent of Students Grade Level Proficient on EOG Tests (SY18-19)



Source: NC Department of Public Instruction, 2020

Table 3: Haywood County College Enrollment Frequency

Location	% Graduates Enrolled in College (2017)	# Graduates Enrolled in College (2017)
Haywood	60.0%	324
WNC (Regional) Average	58.2%	232.8235294
State of NC	60.0%	62961

Source: NC Department of Public Instruction, 2020

Racism and Discrimination

"Racism is an underlying or root cause of health inequities and leads to unfair outcomes between racial and ethnic groups. Different geographic areas and various racial and ethnic groups experience challenges or advantages that lead to stark differences in life expectancy, infant mortality, poverty, and more" (County Health Rankings, 2021).

- Population by race/ ethnicity, a point-in-time estimate (US Census Bureau, 2021)
    - Black - 1.4%
    - Hispanic/Latino - 4.3%
    - White - 95.9%
- Community welcoming place to all races/ethnicities - 18.5% do not agree with this statement, a point-in-time figure (WNC Health Network, 2021)

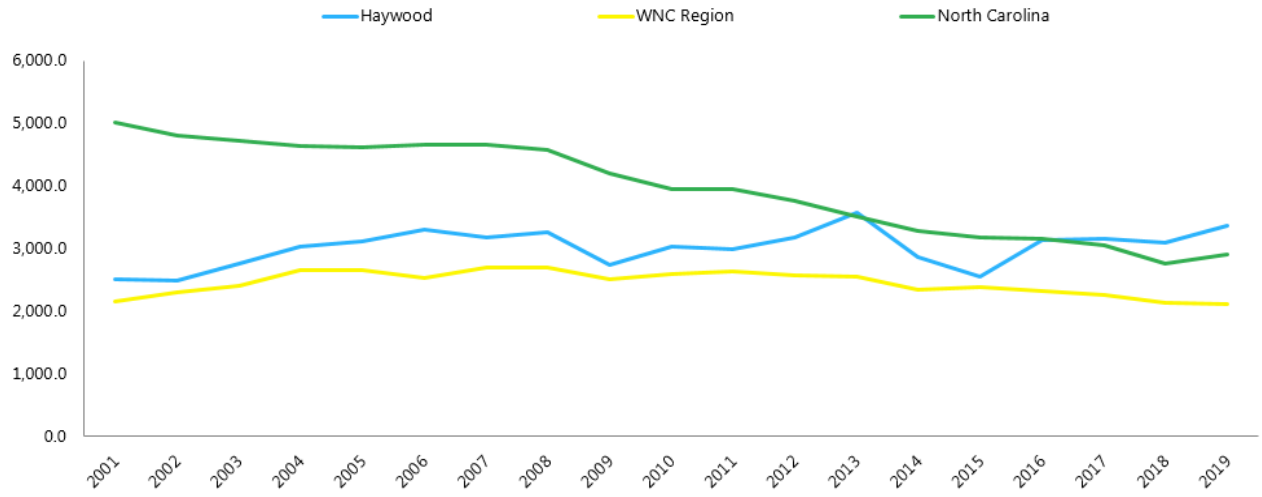
- Threatened or harassed because of race/ethnicity - 6.9%, a point-in-time figure (WNC Health Network, 2021)
- Treated unfairly when getting medical care - 3.2%, a point-in-time figure (WNC Health Network, 2021)
- Treated unfairly at school - 5.2%, a point-in-time figure (WNC Health Network, 2021)
- Criticized for accent - 30.5%, a point-in-time figure (WNC Health Network, 2021)

Community Safety

"Injuries through accidents or violence are the third leading cause of death in the United States, and the leading cause for those between the ages of one and 44. Accidents and violence affect health and quality of life in the short and long-term, for those both directly and indirectly affected, and living in unsafe neighborhoods can impact health in a multitude of ways" (County Health Rankings, 2021).

Chart 7

Index Crime Rate Trend (per 100,000 population)



Source: North Carolina Department of Justice, 2021

For all crimes in 2019, the rate is 3,365.5 per 100,000 residents (Chart 7, NC Department of Justice, 2019).

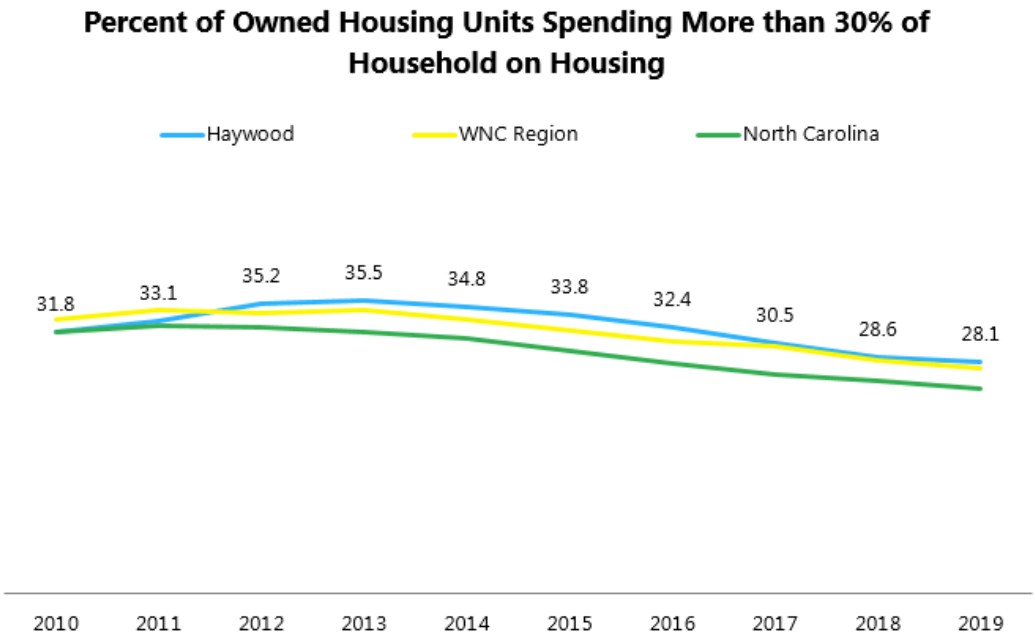
- Sexual assault - In the county, 54 calls were made to report sexual assault, with 108 clients impacted and all but two survivors knowing their attacker. This was a single-year data point (NC Department of Administration, 2019-2020)
- Domestic violence - Shelters served 413 clients (increase) and provided over 8,500 services (decrease) (NC Department of Administration, 2019-2020).
- Juvenile justice - During 2020, 142 complaints were received, which was an increase (NC Department of Public Safety, 2021).
- Child abuse and neglect - During 2019-20, two percent of reports, or five findings, were substantiated, which was a decrease. Conversely, 33 findings or 12% were found to be unsubstantiated, a decrease. A total of 285 children were linked to reports of abuse and neglect, an increase (UNC-CH, 2021).
- School violence - Per 1,000 students, 4.71 violent acts were documented, a point-in-time figure (NC Department of Public Instruction, 2021).

Housing and Transportation

"The housing options and transit systems that shape our communities' built environments affect where we live and how we get from place to place. The choices we make about housing and transportation, and the opportunities underlying these choices, also affect our health" (County Health Rankings, 2021).

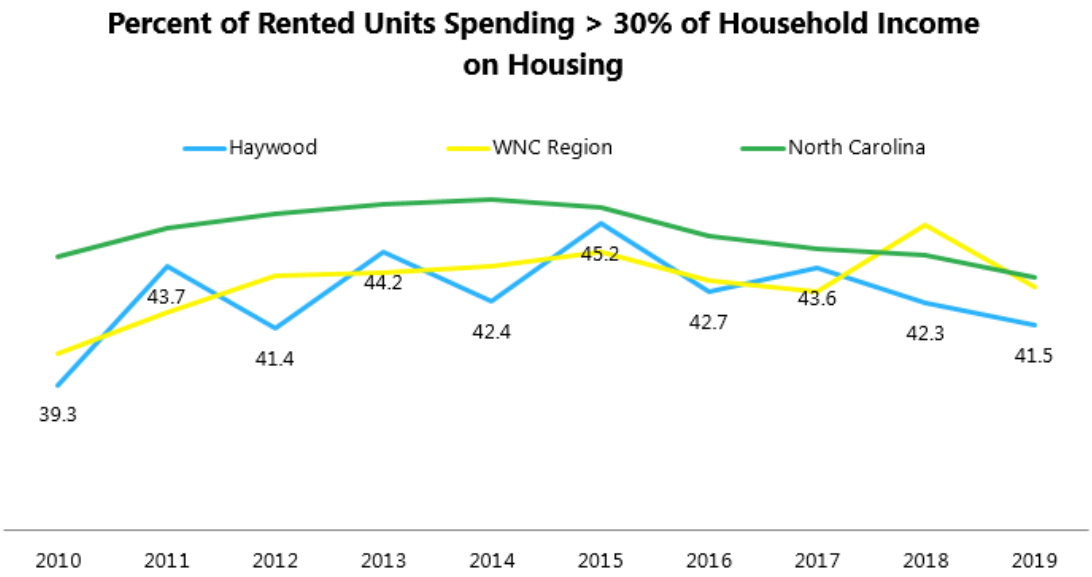
- Units spending more than 30% of household income on housing (rented and owned units) - Over 41% of rented units over 28% of owned units in the county spend more than 30% of household income on housing costs (Charts 8 and 9). Both figures decreased since 2014-2018 data collection. As household income grows, the likelihood of spending more than 30% decreases (US Census, 2021).
- Median gross rent and median monthly owner costs - Renters in Haywood County pay a median cost $785, with homeowners paying $912, both having increased (US Census, 2021).
- Housing adequacy - For both owned and rented units, 0.4% of households have incomplete plumbing, 0.4% have incomplete kitchens, and 0.2% have no heating fuel. This is a point-in-time estimate (US Census, 2021).
- Lack of utilities - In the past year, 8.7% of individuals reported having a time without electricity, water, or heating. This is point-in-time data (WNC Health Network, 2021).
- Worry over paying for housing - 26.6% of individuals reported experiencing this in the past year. This is point-in-time data (WNC Health Network, 2021).
- Housing emergency (living with friend/relative) - 7.7% reported experiencing this in the past three years. This is point-in-time data (WNC Health Network, 2021).
- Lived in temporary housing - 3.2% of individuals reported experiencing this in the past three years. This is point-in-time data (WNC Health Network, 2021).
- No household vehicle access - There are disparities between owner-occupied (2,817) and renter-occupied units (7,188), as well as age-related disparities. These are point-in-time estimates. Even among owner-occupied units, a disparity exists when comparing 15-35 year olds to 35-64 year olds (US Census, 2021).

Chart 8



Source: US Census Bureau, 2021

Chart 9



Source: US Census Bureau, 2021

Family & Social Support

"People with greater social support, less isolation, and greater interpersonal trust live longer and healthier lives than those who are socially isolated. Neighborhoods richer in social capital provide residents with greater access to support and resources than those with less social capital" (County Health Rankings, 2021).

- "Always/Usually" get needed social/emotional support - 76.2%, a decrease from 2018 (WNC Health Network, 2021).
- Have Someone to Rely on for Help or Support if Needed (e.g. Food, Transportation, Childcare, etc.) - 79.8%; this is point-in-time data (WNC Health Network, 2021).

Chapter 4 – Health Data Findings Summary

Mortality

- Haywood County's top three causes of death during 2015-2019 were identified as heart disease, cancer, and other unintentional injuries. This chart does not address the increase in communicable disease deaths due to the COVID-19 pandemic. The counts and rates listed are a single five-year aggregate (Table 4, NC State Center for Health Statistics, 2020).
- The overall life expectancy for all genders and races in Haywood County is 77.1, a single three-year aggregate (NC SCHS, 2021).

Table 4: Leading Causes of Death in Haywood County

Rank	Cause of Death	# Deaths	Death Rate (rate per 100,000 residents)
1	Diseases of Heart	893	172.1
2	Cancer	808	154.9
3	All Other Unintentional Injuries	233	58.1
4	Chronic Lower Respiratory Diseases	280	51.1
5	Cerebrovascular Disease	188	35.4
6	Pneumonia and Influenza	144	27.3
7	Alzheimer's disease	124	22.8
8	Suicide	67	20.5
9	Nephritis, Nephrotic Syndrome, and Nephrosis	91	17.4
10	Unintentional Motor Vehicle Injuries	60	16.8
11	Diabetes Mellitus	79	16.0
12	Chronic Liver Disease and Cirrhosis	61	14.8
13	Septicemia	66	13.7
14	Homicide	11	4.4

15	Acquired Immune Deficiency Syndrome	1	0.3
	All Causes (some not listed)	4,045	816.6

Health Status & Behaviors

Overall Health Status

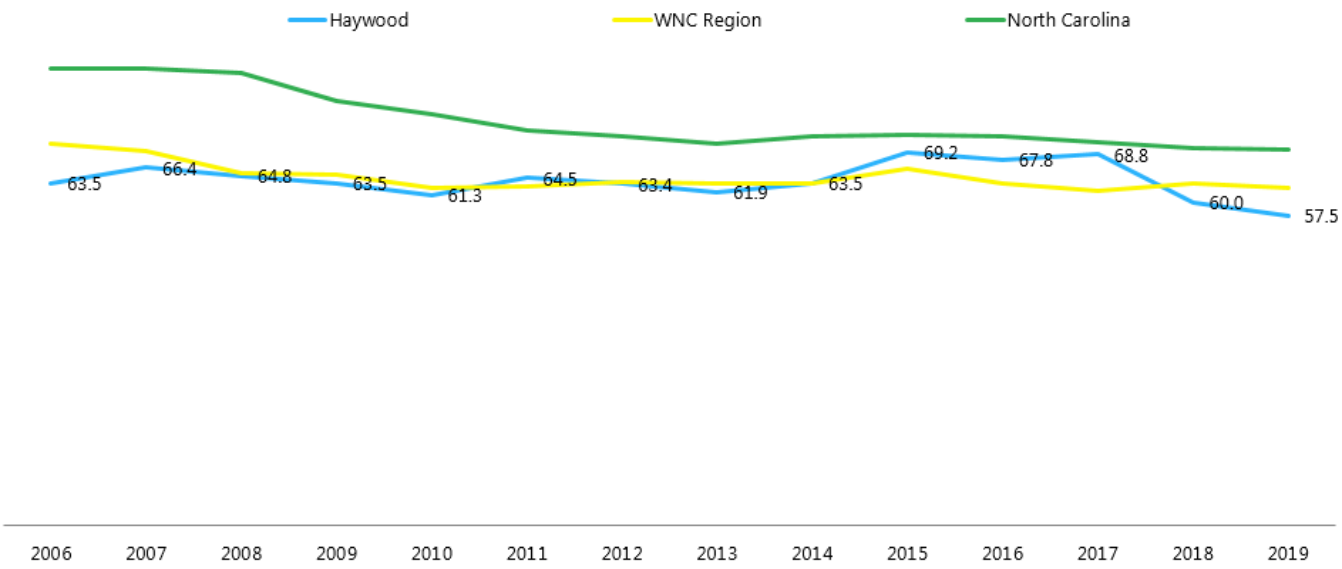
- In 2021, 80% of individuals who were asked “Would you say that, in general, your health is [excellent, very good, good, fair, or poor]” answered their health was either excellent, very good, or good, as compared to 79.9% of individuals in 2018 (WNC Health Network, 2021).
- Pregnancy and Births or Maternal/Infant Health
    - Haywood County’s pregnancy rate trend (2019) - 57.5 per 1,000, a decline from 2018 (Chart 8, NC State Center for Health Statistics, 2021).
- Infant Mortality Rate (IMR) is defined as the number of deaths in children under one per 1,000 live births in the same year. Infant mortality is regularly used and regarded as a national health indicator.
    - Haywood County had an IMR of 7.6 infant deaths per 1,000 live births during 2015 to 2019, an increase from the previous five-year aggregate. This is slightly higher than the state IMR of seven infant deaths per 1,000 live births during 2015-2019 (NC State Center for Health Statistics, 2021).

Chronic Disease

- In 2021, 10.9% of individuals reported ever being told by a health professional that they’d had a heart attack (Myocardial Infarction), Angina, or Coronary Heart Disease, a decrease from 2018 (WNC Health Network, 2021). This is significantly higher than the prevalence for North Carolina as measured in 2021 (6.8%) (WNC Health Network, 2021).
- In 2021, 41.2% of individuals who provided their height and weight were considered obese, an increase from 2018 [determined by derived variable] (WNC Health Network, 2021).

Chart 8

Pregnancy Rate Trend
(per 1,000 Women age 15-44)



Source: North Carolina State Center for Health Statistics, 2021

- In 2021, 8.5% of individuals reported ever having suffered from or been diagnosed with Chronic Obstructive Pulmonary Disease, Including Bronchitis, or Emphysema, a decrease from 2018 (WNC Health Network, 2021).
- In 2021, 18.6% of individuals reported ever having received a diabetes diagnosis from a doctor, an increase from 2018. This is significantly higher than the North Carolina diabetes prevalence (11.8%) (WNC Health Network, 2021).
- Haywood County had a cancer incidence rate of 530.2 per 100,000 population (age-adjusted to the 2000 US Census) during 2015-2019, an increase from the previous five-year aggregate. This is higher when compared to North Carolina's cancer incidence rate of 469.2 per 100,000 population (age-adjusted to the 2000 US Census) during 2015-2019 (NC State Center for Health Statistics, 2021).

Substance Use

- Tobacco Use
    - In 2021, 13.3% of individuals reported past 30 day cigarette use. Cigarette smoking prevalence has declined when compared to the 2018 prevalence of 17.6% (WNC Health Network, 2021).
    - In 2021, 3.2% of individuals reported past 30 day e-cigarette use. E-cigarette use has declined in comparison to the 2018 prevalence (5.6%) (WNC Health Network, 2021).
- Alcohol Use

    - In 2021, 12.5% of individuals reported engaging in binge drinking during the past 30 days, defined as five or more drinks for men or four or more for women on one occasion. This is significantly higher compared to binge drinking prevalence measured in 2018 (6%) (WNC Health Network, 2021).
- Opioid Use
    - In 2021, 12.4% of individuals reported using opiates in the past 30 days, with or without a prescription. This usage has moderately declined since last measured in 2018 (15.3%) (WNC Health Network, 2021).
    - In 2021, 36.3% of individuals agreed that their life has been negatively affected by theirs or someone else's substance use. This has slightly decreased since last measured in 2018 (38%) (WNC Health Network, 2021).

Mental Health

- In 2021, 6.7% reported considering suicide in the past year, a point-in-time figure (WNC Health Network, 2021).
- In 2021, 23% of individuals reported experiencing more than seven days of poor mental health in the past month. This has increased since last measured in 2018 (17.4%) (WNC Health Network, 2021).
- In 2021, 88.1% of individuals agreed that they are able to remain hopeful, even in difficult times. This is a point-in-time figure (WNC Health Network, 2021).
- In 2021, 24.4% of individuals who were asked "Are you now taking medication or receiving treatment, therapy, or counseling from a health professional for any type of mental or emotional health need?" answered 'Yes.' This is a point-in-time figure. This measure is similar to the average percentage in WNC (24.8%), however, significantly higher than for the United States (16.8%) (WNC Health Network, 2021).

Clinical Care & Access

Health Professionals

- Health Professional Ratio (Number of Active Health Professionals per 10,000 Population):
    - Physician: 19.42 [vs. North Carolina: 24.30]; increase from 2018.
        - 17.9% of physicians currently practicing in Haywood County are over the age of 65, a decrease from 2018 (NC State Center for Health Statistics, 2021).
    - Primary Care Physician: 7.11 [vs. North Carolina: 7.06]; increase from 2018.
        - 6.7% of primary care physicians currently practicing in Haywood County are over the age of 65, a decrease from 2018 (NC State Center for Health Statistics, 2021).
    - Dentist: 4.9 [vs. North Carolina: 5.18]; decrease from 2018.
        - 22.6% of dentists currently practicing in Haywood County are over the age of 65, an increase from 2018 (NC State Center for Health Statistics, 2021).
    - RN: 70.74 [vs. North Carolina: 98.9]; decrease from 2018.
        - 7.6% of registered nurses currently practicing in Haywood County are over the age of 65, an increase from 2018 (NC State Center for Health Statistics, 2021).
    - Nurse Practitioner: 4.26 [vs. North Carolina: 8.27]; increase from 2018.
        - 11.1% of nurse practitioners currently practicing in Haywood County are over the age of 65, a decrease from 2018 (NC State Center for Health Statistics, 2021).

Licensed Facilities

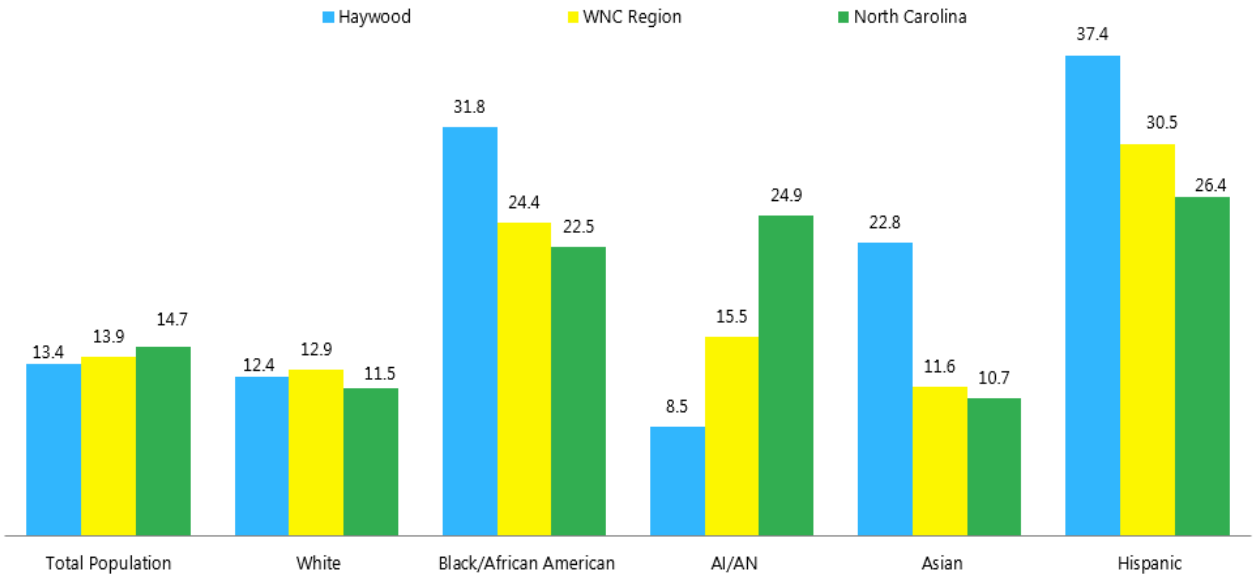
- Licensed Adult Care
    - Adult Care Homes/Homes for Seniors
        - 10 facilities, 290 maximum capacity (Point-in-Time count; NC State Center for Health Statistics, 2021)
            - 5 located in Waynesville
            - 3 located in Clyde
            - 2 located in Canton
    - Skilled Nursing Facility
        - 5 facilities, 488 maximum capacity (Point-in-Time count; NC State Center for Health Statistics, 2021)
            - 3 located in Waynesville
            - 1 located in Maggie Valley
            - 1 located in Canton
    - Licensed Home, Health, and Hospice Facilities (Point-in-Time count; NC State Center for Health Statistics, 2021)
        - 8 facilities (7 located in Waynesville, 1 located in Canton)
            - 3 offer hospice care
- Uninsured Population
    - In 2021, 20.2% of individuals reported not having health care coverage, including health insurance, a prepaid plan such as an HMO, or a government-sponsored plan such as Medicare or Indian Health Services. This was an increase from 2018 (WNC Health Network, 2021).
- Healthcare Access
    - In 2021, 9.5% of individuals reported being unable to get needed medical care during the past 12 months. This percentage has increased from 8.7% in 2018 (WNC Health Network, 2021).
    - During the state fiscal year 2020, 15,816 Medicaid-eligible individuals resided in Haywood County, a decrease since 2019. As of June 2021, 1,065 eligible individuals were over the age of 65 (decrease from June 2020), roughly 2,000 were disabled, roughly 2,500 were infants & children, and roughly 4,400 were Aid to Families with Dependent Children (NC State Center for Health Statistics, 2021).
- Mental Health Services
    - Licensed Mental Health Facilities [point-in-time count] (NC Department of Health and Human Services, 2020):
        - 20 facilities
            - 5 located in Clyde
            - 14 located in Waynesville
            - 1 located in Canton
- Mental Healthcare Access
    - In 2021, 18.2% of individuals reported being unable to get needed mental health care or counseling within the last 12 months. This is significantly higher since it was last measured in 2018 [9.4%] (WNCHN, 2021).

Health Inequities

- In 2021, 3.2% of individuals who were asked, “Over your entire lifetime, how often have you been treated unfairly because of your race or ethnicity when getting medical care?” selected either ‘often’ or ‘sometimes.’ This is a point-in-time count (WNC Health Network, 2021).
- In 2021, 5.2% of individuals who were asked, “Over your entire lifetime, how often have you been treated unfairly because of your race or ethnicity at school?” selected either ‘often’ or ‘sometimes.’ This is a point-in-time count (WNC Health Network, 2021).
- Poverty by Race - There are clear inequities displayed within the bar chart. Black/African American, Asian, and Hispanic populations were much more likely to live below poverty when compared to White and AI/AN. The data considered was a single five-year estimate (WNC Health Network, 2021).

Chart 9

Percent Below Poverty by Race (2019)



Source: US Census Bureau, 2021

Chapter 5 – Physical Environment

Air & Water Quality

“Clean air and safe water are prerequisites for health. Poor air or water quality can be particularly detrimental to vulnerable populations such as the very young, the elderly, and those with chronic health conditions.” (County Health Rankings, 2021).

- Air Quality Index (AQI) Summary - Of the 366 days where AQI was measured, 337 days were rated ‘good.’ This is a point-in-time summary (US Environmental Protection Agency, 2020).

- Toxic Release Inventory (TRI) Summary - The county disposed of more than 2 million pounds of toxic waste. This is a point-in-time summary (US Environmental Protection Agency, 2021).
- Community Water Systems (proportion of population served by CWSs) - Over 61,000 of Haywood County's residents are served by CWWs. This is a point-in-time figure (US Census, 2021; US Environmental Protection Agency, 2021).

Access to Healthy Food & Places

Food security, as defined by the United Nations' Committee on World Food Security, exists when all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (International Food Policy Research Institute, 2022).

- Food Insecurity - In the past 12 months, 18.9% of adults reported concern about running out of food before having money to buy more. This was a decline from 2018 (WNC Health Network, 2021)
- Farmer's Markets - During 2018, the county hosted four farmer's markets, a rate of 0.06 per 1,000 residents. No markets opened or closed from 2013-2018 (U.S. Department of Agriculture Economic Research Service, 2021).
- Grocery Stores - Data from 2016 shows 10 grocery stores in the county and 0.17 stores per 1,000 residents. From 2011-2016, the number of stores changed by -9.09% or 11.57% per 1,000 residents (US Department of Agriculture Economic Research Service, 2021).
- No car or low access to a grocery store - Nearly 700 households, or 2.73%, have no vehicle and limited grocery store access. The figures changed by -9.09 and -11.57%, respectively (US Department of Agriculture Economic Research Service, 2021).
- Fast food restaurants - Data from 2016 shows 41 fast food restaurants in the county, a 2.5% or -.30% change per 1,000 residents (US Department of Agriculture Economic Research Service, 2021).
- Access to recreational facilities - A 2021 report from the US Department of Agriculture Economic Research Service shows that during 2016, Haywood County was home to two 'Recreation and Fitness Facilities' per 1,0000 residents as defined by the North American Industry Classification System. There was no change from the 2011 data collection.

Chapter 6 – Health Resources

When asked about inspiration, confidence, and hopefulness over the past 12 months, a public health representative shared the following about community resources: ''Our community has worked incredibly hard to help residents with food security, as well as to link them with needed resources. This has included drive-through resource fairs, free school meals for all children (regardless of age or enrollment) and providing space for students to access wireless internet.'' (WNCHN – OKIS, 2021)

Health Resources

Process

- The process for reviewing health resources available in Haywood County included:
    - Examining gaps identified through the 2021 Online Key Informant Survey, such as:
        - Transportation
        - Childcare
        - Affordable rental housing

        - Health insurance
        - Employment
    - Reviewing resource lists available through the Healthy Haywood Coalition:
        - Physical Activity and Nutrition, including the Food Resource Guide
        - Substance Use
        - Mental Health

- NC 2-1-1, locally operated by United Way of Asheville Buncombe County, continues to serve as an updated resource list for Haywood County.

Findings:

Health-related Services in Haywood County

- What is available (WNCHN – OKIS, 2021)
    - ''Strong healthcare network program'' (Community Leader)
    - COVID-19 vaccinations (Community Leaders and Public Health Representative)
    - ''Increase in providers treating opioid use'' (Community Leader)
- Where community strengths are perceived (WNCHN – OKIS, 2021)
    - ''Strength of our community-based services that do not take no for any answer'' (Community Leader)
    - ''I have witnessed grassroots efforts to address the issues around food insecurity, addiction, and homelessness.'' (Community Leader)
    - ''The faith-based organizations' willingness to help citizens'' (Community Leader)
- Specific resources within the "priority area" sections of this report
    - Over 18% of adults in the county reported an inability to access mental health care or counseling in the past year. This is a sharp increase from under 10% in 2018 (WNC Health Network, 2021).
    - Nearly 80% of residents reported having support with food, transportation, and other areas if needed (WNC Health Network, 2021).
- Increased focus into addressing food insecurity.
    - A county food resource guide was created, distributed, and updated weekly in efforts to connect low socioeconomic status, underserved, and hard to reach populations with food resources, as well as additional county health and social services.

Resource Gaps

Reviewing available resources and examining data about gaps demonstrated:

- Limited housing options exist, especially when seeking affordable rental housing. Without meeting this need, individuals face barriers in addressing other needs, such as substance use or mental health challenges.
- Some community members exceed the Medicaid income threshold, but are unable to afford private insurance. Though some providers accept sliding scale payment, this affects accessing quality healthcare.
- Jobs that do not pay a living wage create countless barriers, such as struggles to pay for housing, food, and other necessities. To maintain employment, affordable childcare is also necessary. This impacts the health of both caregivers and children in their homes. Employment is often the linkage to life-saving health services.
- While an excellent public transit service exists, evening and weekend options are currently unavailable. This impacts accessing food, employment, and other services needed to promote health.

Chapter 7 – Identification of Health Priorities

Health Priority Identification

Every three years we pause our work improving community health, stepping back to take a fresh look at current county-level data that reflects the health of our community. We use this information to help us assess how well we're doing and what actions we need to take moving forward.

Three data sources used for the CHA process were:

1. Online Key Informant Survey findings from community leaders identifying their perceptions of community resilience, healthy community, social determinants of health and physical environment, and health issues.
2. WNC Healthy Impact telephone and internet-based survey of 247 Haywood County participants. The telephone survey included both cell and landline numbers.
3. Secondary data (existing sources)

Process

The CHA process is broken down into several phases, with critical accomplishments in each phase. All lead to the selection of data-driven health indicators for which focused improvement strategies will be developed. Community partnerships are invaluable to the CHA process. It would not be meaningful or possible without partners' participation and input.

Phase 1

The public health education team assimilated data into understandable formats for internal and external review

Haywood County's public health education team began planning in October 2021, reviewing and understanding the data, uncovering what issues were currently affecting the majority of people in our community, and discussing the facts and circumstances of our community. The goal of this initial phase was to assimilate current data into concise formats, facilitating the work in phases two and three.

Due to the ongoing COVID-19 pandemic, the decision was made to hold virtual data review and prioritization meetings.

Phase 2

Convene strategic community partners to review, assess, and develop a short list of health indicators

Haywood County's CHA Data Team, composed of strategic community partners, came together virtually in November 2021. They were tasked with developing a 'short list' after reviewing data from Online Key Informant Survey findings, 2021 WNC Healthy Impact telephone/internet survey and available secondary data (all listed above).

The CHA Data Team used the following variables to inform their short list selection of significant health issues:

- Data related to past health priorities
- Data reflects a concerning trend related to size or severity
- Significant disparities existed
- Issue surfaced as a topic of high community concern

- County data deviates notably from regional or state benchmarks

During this facilitated process, the CHA Data Team identified the following health indicators as a short list of possible priorities for future health outcome improvement:

- Chronic Disease and Conditions
- Nutrition and Physical Activity
- Healthcare Access and Quality
- Mental Health
- Substance Use
- Social Determinants of Health
- Obesity

Phase 3

Convene a larger group of community partners to prioritize short list into three key health indicators
Two separate community partner groups met virtually in November 2021 to review the seven health outcomes, listed above, and ranked each outcome using the following criteria:

- Criteria 1 – **Relevant** – How important is this issue? (Size of the problem; Severity of the problem; Focus on equity; Aligned with Healthy NC 2030; Urgency to solve problem; Linked to other important issues)
- Criteria 2 – **Impactful** – What will we get out of addressing this issue? (Availability of solutions/proven strategies; Builds on or enhances current work; Significant consequences of not addressing issue now)
- Criteria 3 – **Feasible** – Can we adequately address this issue? (Availability of resources (staff, community partners, time, money, equipment) to address the issue; Political capacity/will; Community/social acceptability; Appropriate socio-culturally; Can identify easy, short-term wins)

Using the 'Local Rating and Prioritization worksheet,' prioritization group participants scored and then submitted their top 3 health outcomes into an electronic voting system that allowed results to be seen by all immediately.

This prioritization process was an opportunity for community stakeholders, such as Haywood Regional Medical Center (HRMC), Vaya Health, and MountainWise to agree on which health issues and results we can all commit to addressing, increasing the likelihood we'll make a difference in the lives of people in our community.

Identified Priorities

The following priority health issues are the final community-wide priorities for our county, selected through the process described above:

- **Priority 1** - Mental Health continues to be a health outcome of concern.
    - 23% of residents reported poor mental health for more than 7 days in the past month (WNC Health Network, 2021).
    - 24% of residents indicated they did not always/usually get needed social, emotional support during the past year (WNC Health Network, 2021).
- **Priority 2**- Obesity is a new health priority and associated with known indicators of poor health outcomes.
    - 41% of those surveyed in 2021 met this criteria (WNC Health Network, 2021)
- **Priority 3** - Substance Use also continues to be a health outcome of concern,

- 36% of residents report being negatively affected by substance use (self or others) in 2021 (WNC Health Network, 2021)

Data presented during prioritization meetings may be viewed here.

Health Priority Summaries
Begins on the following page:

Mental Health

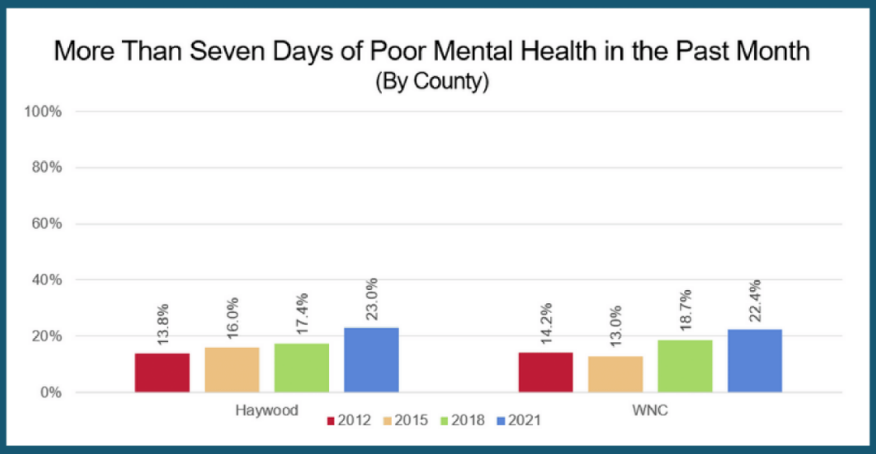
Community Health Assessment – Priority Setting
Data Summary

Haywood County

Mental Health

Data points reviewed for this area addressed areas including:, suicide, poor mental health days, social and emotional support, and mental health care. Following internal data review by public health staff, a data team of community partners helped shorten the list. The final data was presented to community partners during two priority-setting meetings. A regional telephone/internet survey, Online Key informant Survey, and secondary data were included in the review process.

WHAT THE NUMBERS SAY:



MORE INFORMATION:

- >17% of Haywood County adults report that they experienced more than 7 days of poor mental health in the past month
- >9% of adults did not seek mental healthtreatment when they needed it

Mental Health

WHO'S IMPACTED?

- Individuals affected by 4 or more Adverse Childhood Experiences
- Individuals with significant barriers to care

WHAT'S HURTING?

- Lack of priority/focus in school
- Lack of community awareness/resources
- Difficult to break the cycle
- Significant stigma around mental health

CURRENT ACTION

- Vaya Health covering/funding regional catchment area; Meridian Behavioral Health Services and Appalachian Community Services (ACS) offer a range of treatment and outreach services; Behavioral Health Unit at Haywood Regional Medical Center; National Alliance for Mental Illness (NAMI) services and support groups are available.
- Haywood Connect, a local collaborative, provides education about resilience and trauma-informed systems of care.

WHAT'S HELPING?

- Community partnerships/task forces
- More trauma-informed treatment, training in resilient skill-building
- Mental health awareness, specifically around suicide

CONSEQUENCES

- National costs associated with serious mental illness are estimated to be in excess of $300 billion (National Alliance on Mental Health, 2021).
- The direct links between trauma in childhood (ACES) and substance abuse, mental health and behavioral issues, risky behaviors and chronic health problems is well-established and intergenerational (Centers for Disease Control and Prevention, 2021).

Source: Unless otherwise noted, data is attributed to WNC Health Network, 2021 and Online Key Informant Survey, 2021.

Tool adapted by WNC Health Network from Haywood County CHIP data team –
Haywood County Health and Human Services, MAHEC, and Mission Health, October 2021. Revised in February 2022.

Obesity

Community Health Assessment – Priority Setting
Data Summary

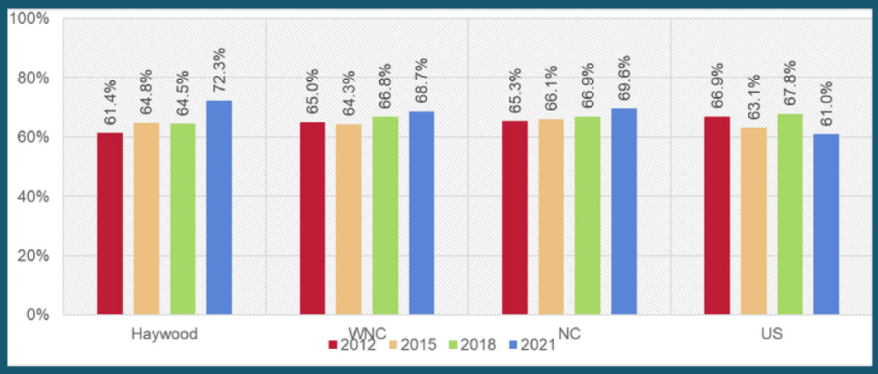
Haywood County

OBESITY

Data points reviewed for this area included adult overweight and obesity, adult healthy weight, and childhood obesity. Following internal data review by public health staff, a data team of community partners helped shorten the list. The final data was presented to community partners during two priority-setting meetings. A regional telephone/internet survey, Online Key informant Survey, and secondary data were included in the review process.

WHAT THE NUMBERS SAY:

Adult Overweight and Obesity Prevalence, WNC Health Network, 2021



MORE INFORMATION

- Past-month leisure time physical activity- 21.7%
- Receiving recommended physical activity- 22%
- Experiencing food insecurity- 18.9%
- No healthcare insurance- 20.2%
- Households with no vehicle- 1,360

OBESITY

WHO'S IMPACTED?

The 'working poor.' 'People making too much for Medicaid but not enough for ACA.'

WHAT'S HELPING?

- Increased awareness and education
- Recreational/outdoor opportunities
- Many resources for nutrition/food security

WHAT'S HURTING?

- Disparities in accessing fitness opportunities
- Transportation barriers
- Inaccessibility to affordable and healthy food options

WHAT ELSE DO WE KNOW?

- Childhood Obesity: 16%
- Only 5% of the adult population got the recommended 5 fruits/vegetables per day

CURRENT ACTION

- Haywood 4 Good Community Wellness Program
- Diabetes Prevention Program grant
- County Master Plan update and Greenways Feasibility Study
- Regular food distributions in the county

CONSEQUENCES

COSTS:

- Obesity: $147–$210 billion (nationwide) (The George Washington University, 2012)
- Child Obesity: $14 billion (nationwide) (The George Washington University, 2012)
- Other costs for other chronic diseases (heart disease, diabetes, etc.)

Source: Unless otherwise noted, data is attributed to WNC Health Network, 2021 and Online Key Informant Survey, 2021.

Tool adapted by WNC Health Network from Haywood County CHIP data team –
Haywood County Health and Human Services, MAHEC, and Mission Health, October 2021. Revised in February 2022.

Substance Use

Community Health Assessment – Priority Setting
Data Summary

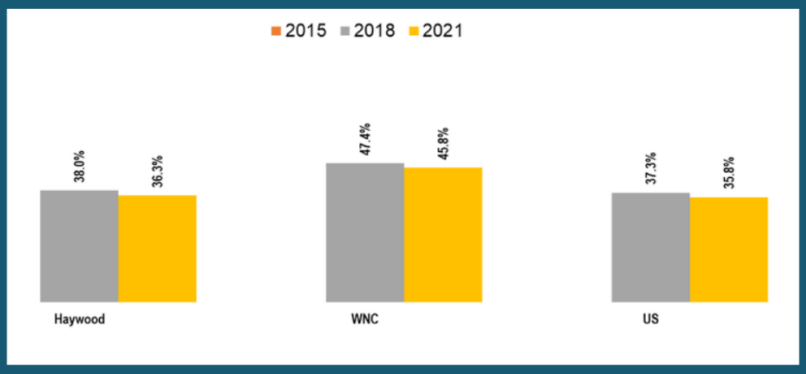
Haywood County

Substance Use

Data points reviewed for this area included alcohol, tobacco and other drug use (e.g. prescribed opioids, street drugs, etc). Following internal data review by public health staff, a data team of community partners helped shorten the list. The final data was presented to community partners during two priority-setting meetings. A regional telephone/internet survey, Online Key informant Survey, and secondary data were included in the review process.

WHAT THE NUMBERS SAY:

Life Has Been Negatively Affected by Substance Use (Self or Someone Else) (2021)



MORE INFORMATION:

- Alcohol: Emergency department visits for alcohol toxicity and alcohol abuse/dependence are many times higher than opioid overdose or methamphetamine-related visits (North Carolina Disease Event and Tracking Epidemiologic Collection Tool, 2022).
- Tobacco: ~17% smoking rate + e-cigarettes and smokeless tobacco (~13%, combined). E-cigarette use is on the rise, especially among youth.
- Other Substances:
  - 15.3% of surveyed adults used opioids in the previous month (prescription or non).

Substance Use

WHO'S IMPACTED?

Substance Use Disorder (SUD) can happen to anyone. However, some populations are affected more heavily, such as individuals without employment or who have a low socioeconomic status, previously incarcerated, and individuals who did not graduate high school.

WHAT'S HURTING?

- Limited resources for prevention, rehabilitation and long-term care
- Stigma and apathy
- Lack of adequate housing, jobs, poor mental health.

CURRENT ACTION

- Programs (e.g. Lock your Meds and Quitline campaigns; Naloxone distribution, etc.)
- Grant funding addressing Opioid Use Disorder
- Tobacco free ordinances
- Existing partnership/coalitions (e.g. Substance Use Prevention Alliance, Recovery Alliance Initiative, etc.)

WHAT'S HELPING?

- Law enforcement leadership, combined with government and healthcare leadership, to tackle the issue as a whole; collaboration.
- Widespread community focus on SUDs, treatment options available; community focus on recovery.

CONSEQUENCES

- Illegal drug use accounts for $181 billion in health care, productivity loss, crime, incarceration and drug enforcement, which includes $11 billion in health care costs alone (nationwide) (National Institute on Drug Abuse, n.d.).
- Substance use and misuse is of great community concern and a reflection of a variety of other factors, including mental health and social determinants of health.

Source: Unless otherwise noted, data is attributed to WNC Health Network, 2021 and Online Key Informant Survey, 2021.

Tool adapted by WNC Health Network from Haywood County CHIP data team –
Haywood County Health and Human Services, MAHEC, and Mission Health, October 2021. Revised in February 2022.

Chapter 8 – Next Steps

"The best way to predict the future is to create it." - Peter Drucker

Collaborative Planning

Collaborative planning with hospitals and other community partners results in the creation of a community-wide plan that outlines what will be aligned, supported and/or implemented to address the priority health issues identified through this assessment process.

During spring 2022, the Healthy Haywood Coalition will gather its action teams for a 'Getting to Strategies' process. Discussions will include the quality of life conditions desired for Haywood County, what these conditions would look like, how we can measure the conditions, how we are doing on the most important health measures, existing and potential partners, what works to do better, and proposed strategies. Following selection of strategies and the health measures to address, public health staff will create an electronic Community Health Improvement Plan (e-CHIP). The e-CHIP is submitted to the North Carolina Division of Public Health in September 2022.

Sharing Findings

In addition to the sources listed below, Community Health Assessment results are shared at a Haywood County Health and Human Services board meeting. This meeting is open to the general public.

Where to Access this Report

- WNC Health Network website - http://www.wnchn.org
- Haywood County Health and Human Services, Public Health Services Division front desk
- Haywood County Health and Human Services website - https://www.haywoodcountync.gov/615/Health-Human-Services
- Healthy Haywood website - http://www.healthyhaywood.com/events/community-health-assessment-2021
- Haywood County Public Library branches

For More Information and to Get Involved

To learn more about community health improvement work in Haywood County or connect to the local process, visit the above-listed Healthy Haywood website or call 828-452-6675.

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Photography Credits

I. *WNC CHA Cycle Graphic: Co-designed by WNC Healthy Impact, graphic design by Jessicca Griffin, 2021*
II. *All WNC landscape photos used in the cover page and headers courtesy of Ecocline Photography and Flying Horse Creative.*

Appendices

Appendix A – Data Collection Methods and Limitations

Secondary Data Methodology

To learn about the specific factors affecting the health and quality of life of residents of WNC, the WNC Healthy Impact data workgroup and data consulting team identified and tapped numerous secondary data sources accessible in the public domain. For data on the demographic, economic and social characteristics of the region sources included: the US Census Bureau; NC Department of Health and Human Services; NC Office of State Budget and Management; NC Department of Commerce; UNC-CH Jordan Institute for Families; NC Department of Public Instruction; NC Department of Justice; NC Division of Health Benefits; NC Department of Transportation; and the Cecil B. Sheps Center for Health Services Research. The WNC Healthy Impact data consultant team made every effort to obtain the most current data available at the time the WNC Healthy Impact Data Workbook was prepared. It is not possible to continually update the data past a certain date; in most cases that end-point is September 2021. Secondary data is updated every summer in between Community Health Assessment (CHA) years.

The principal source of secondary health data for the WNC Healthy Impact Data Workbook is the NC State Center for Health Statistics (NC SCHS), including its County Health Data Books, Behavioral Risk Factor Surveillance System, Vital Statistics unit, and Cancer Registry. Other health data sources included: NC Division of Public Health (DPH) Epidemiology Section; NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services; the Centers for Disease Control and Prevention; National Center for Health Statistics; NC DPH Nutrition Services Branch; and NC DETECT.

Environmental data were gathered from sources including: US Environmental Protection Agency; US Department of Agriculture; and NC Department of Environment and Natural Resources.

Because in any CHA it is instructive to relate local data to similar data in other jurisdictions, throughout this report representative county data is compared to like data describing the 16-county region and the state of NC as a whole. The WNC regional comparison is used as “peer” for the purposes of this assessment. Where appropriate and available, trend data has been used to show changes in indicators over time.

The WNC Healthy Impact data workbook contains only secondary data that are : (1) retrieved directly from sources in the public domain or by special request; and (2) are available for all 16 counties in the WNC Healthy Impact region. All secondary data included in the workbook are the most current available,

but in some cases may be several years old. Names of organizations, facilities, and geographic places presented in the tables and graphs are quoted exactly as they appear in the source data. In some cases, these names may not be those in current or local usage; nevertheless, they are used so readers may track a particular piece of information directly back to the source.

Gaps in Available Information

Secondary data used to inform this report may have inherent limitations due to factors such as missing or out-of-date data, inadequate sample sizes, challenges in community representation (notably residents under the age of 18), and limited control over data quality and bias.

WNC Healthy Impact Community Health Survey (Primary Data)

Survey Methodology

The 2021 WNC Healthy Impact Community Health Survey was conducted from March to June 2021. The purpose of the survey was to collect primary data to supplement the secondary core dataset, and allow individual counties in the region to collect data on specific issues of concern. The survey was conducted throughout the entire WNC Healthy Impact region, which includes the following 16 counties: Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania and Yancey.

Professional Research Consultants, Inc. (PRC) designed and implemented the mixed-mode survey methodology, which included a combination of telephone (both landline and cell phone) interviews, online survey, as well as a community outreach component promoted by WNC Health Network and its local partners through social media posting and other communications. The survey methodology was designed to achieve a representative sample of the regional population that would allow for stratification by certain demographic characteristics, while also maximizing data collection timeliness and efficiency. Survey sampling and implementation methodology is described in greater detail below.

Survey Instrument

The survey instrument was developed by WNC Healthy Impact's data workgroup, consulting team, and local partners, with assistance from PRC. Many of the questions were derived from the CDC Behavioral Risk Factor Surveillance System (BRFSS) and other validated public health surveys. Other questions were developed specifically by WNC Healthy Impact, with input from regional and local partners, to address particular issues of interest to communities in western North Carolina. Each county was given the opportunity to include three additional questions of particular interest to their county, which were asked only of their county's residents.

The three additional county-specific questions included in the 2021 survey were:

1. Was there a time during the past 12 months where you needed dental care but did not get it? (Yes/No)
2. What was the main reason you did not get this dental care? (open-ended)
3. Have you had two years or more in your life when you felt depressed or sad most days, even if you felt okay sometimes? (Yes/No)

Sampling Approach & Design

PRC designed the survey methodology to minimize sample bias and maximize representativeness by using best practice random-selection sampling techniques. They also used specific data analysis techniques, including poststratification, to further decrease sample bias and account for

underrepresented groups or nonresponses in the population. Poststratification involves selecting demographic variables of interest within the population (here, gender, age, race, ethnicity, and poverty status) and then applying "weights" to the data to produce a sample which more closely matches the actual regional population for these characteristics. This technique preserves the integrity of each individual's responses while improving overall representativeness.

In order to determine WNC regional estimates, county responses were weighted in proportion to the actual population distribution to appropriately represent Western North Carolina as a whole. Since the sample design and quality control procedures used in the data collection ensure that the sample is representative, the findings may be generalized to the region with a high degree of confidence.

Survey Administration

PRC piloted the survey through 30 interviews across the region and consulted with WNC Health Network staff to resolve substantive issues before full implementation. PRC used trained, live interviewers and an automated computer-aided telephone interviewing system to administer the survey region-wide. Survey interviews were conducted primarily during evening and weekend hours, with some daytime weekday attempts. Interviewers made up to five call attempts per telephone number. Interviews were conducted in either English or Spanish, as preferred by respondents. The final sample included 56 (56.4) percent cell phone-based survey respondents and 44 (43.6) percent landline-based survey respondents. Including cell phone numbers in the sampling algorithm allowed better representation of demographic segments that might otherwise be under sampled in a landline-only model.

PRC worked with a third-party provider to identify and invite potential respondents for an online survey for a small proportion (3.5%) of the sample population. The online survey was identical to the telephone survey instrument and allowed better sampling of younger and more urban demographic segments.

PRC also created a link to an online version of the survey, and WNC Health Network and its local partners promoted this online survey link throughout the various communities in order to drive additional participation and bolster overall samples. This yielded an additional 1,717 surveys, and locally an additional 247.

About the Haywood County Sample

Size: The total regional sample size was 4,861 individuals age 18 and older, with 247 from our county. PRC conducted all analysis of the final, raw dataset.

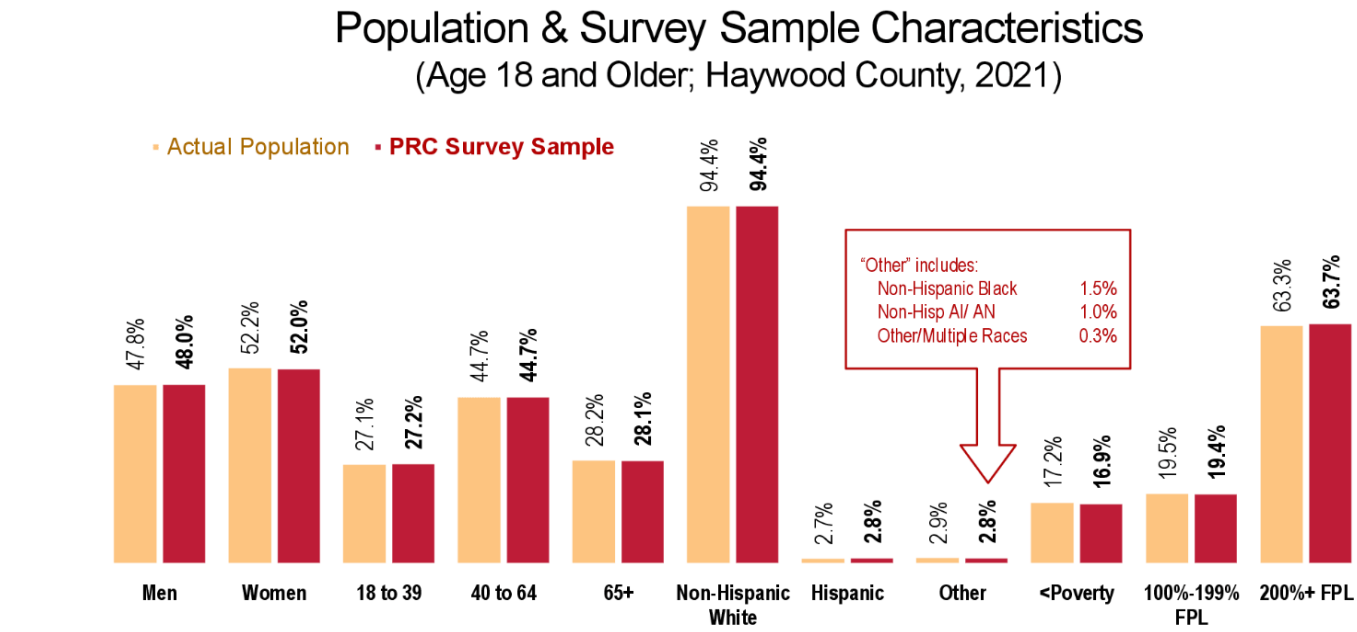
Sampling Error: For county-level findings, the maximum error rate at the 95% confidence level is approximately ±4.0% (Buncombe and Henderson counties), ±4.6% (Polk county), ±5.1% (Jackson and Madison counties), or ±6.9% (all other counties).

Expected error ranges for a sample of 247 respondents at the 95% confidence level.

The "response rate" (the percentage of a population giving a particular response) determines the error rate associated with that response. A "95 percent level of confidence" indicates that responses would fall within the expected error range on 95 out of 100 trials.

Examples:

- If 10% of a sample of 200 respondents answered a certain question with a "yes," it can be asserted that between 6.0% and 14.0% (10% ± 4.0%) of the total population would offer this response.
- If 50% of respondents said "yes," one could be certain with a 95 percent level of confidence that between 43.1% and 56.9% (50% ± 6.9%) of the total population would respond "yes" if asked this question.



2011-2015 American Community Survey. U.S. Census Bureau.
PRC Community Health Survey, Professional Research Consultants, Inc.

Characteristics: The previous chart outlines the characteristics of the survey sample for Haywood County by key demographic variables, compared to actual population characteristics from Census data. Note that the sample consists solely of area residents age 18 and older.

Benchmark Data

North Carolina Risk Factor Data

Statewide risk factor data are provided where available as an additional benchmark against which to compare local survey findings; these data are reported in the most recent BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trend Data published by the Centers for Disease Control and Prevention and the US Department of Health & Human Services.

Nationwide Risk Factor Data

Nationwide risk factor data, which are also provided in comparison charts where available, are taken from the 2020 PRC National Health Survey; the methodological approach for the national study is

identical to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence.

Healthy People 2030

Since 1980, the Healthy People initiative has set goals and measurable objectives to improve health and well-being in the United States. The initiative's fifth edition, Healthy People 2030, builds on knowledge gained over the past 4 decades to address current and emerging public health priorities and challenges.

An interdisciplinary team of subject matter experts developed national health objectives and targets for the next 10 years. These objectives focus on the most high-impact public health issues, and reflect an increased focus on the social determinants of health — how the conditions where people live, work, and play affect their health and well-being.

Survey Limitations and Information Gaps

Limitations

The survey methodology included a combination of telephone (both landline and cell phone) interviews, as well as an online survey. Limitations exist for these methods. For example, potential respondents must have access to a landline or a cell phone to respond to the telephone survey. In addition, the telephone survey sample included landlines (versus cell phones), which may further skew responses to individuals or households with landlines.

The PRC online survey component also has inherent limitations in recruitment and administration. Respondents were recruited from a pre-identified panel of potential respondents. The panel may not be representative of the overall population.

Additionally, PRC created an online survey link, which was promoted by WNC Health Network and its local partners through social media posting and other communications. The online survey link respondents might not be representative of the overall population.

A general limitation of using online survey technology is that respondents must interpret survey questions themselves, rather than have them explained by a trained, live interviewer. This may change how they interpret and answer questions.

Lastly, the technique used to apply post stratification weights helps preserve the integrity of each individual's responses while improving overall representativeness. However, this technique can also exaggerate an individual's responses when demographic variables are under-sampled.

Information Gaps

This assessment was designed to provide a comprehensive and broad picture of the health of the community overall. It does not measure all possible aspects of health in the community, nor does it represent all possible populations of interest. For example, due to low population numbers, members of certain racial/ethnic groups (e.g. Black, AI/AN, Hispanic/ Latinx, etc.) may not be identifiable or represented in numbers sufficient for independent analyses. In these cases, information gaps may limit the ability to assess the full array of the community's health needs.

Online Key Informant Survey (Primary Data)

Online Survey Methodology

Survey Purpose and Administration

The 2021 Online Key Informant Survey was conducted in June and July 2021. WNC Healthy Impact, with support from PRC, implemented an Online Key Informant Survey to solicit input from local leaders and stakeholders who have a broad interest in the health of the community. WNC Healthy Impact shared with PRC a list of recommended participants, including those from our county. This list included names and contact information for physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall.

Key informants were contacted through an email that introduced the purpose of the survey and provided a link to take the survey online. Reminder emails were sent as needed to increase participation.

Survey instrument

The survey provided respondents the opportunity to identify important health issues in their community, what is supporting or getting in the way of health and wellbeing in their community, and who in their community is most impacted by these health issues.

Participation

In all, 20 community stakeholders responded to the Online Key Informant Survey for our county, as outlined below:

Local Online Key Informant Survey Participation		
Key Informant Type	**Number Invited**	**Number Participating**
Community Leader	31	17
Other Health Provider	5	0
Physician	1	0
Public Health Representative	2	2
Social Services Provider	1	1

Through this process, input was gathered from several individuals whose organizations work with low-income, minority populations, or other medically underserved populations. Organizations represented were: Community Impact North Carolina, Drugs in Our Midst, Grace Episcopal Church, Haywood Community College, Haywood County Cooperative Extension, Haywood County Detention Center, Haywood County Emergency Services, Haywood County Health and Human Services Agency, Haywood County Schools, Haywood County Sheriff's Office, Haywood Healthcare Foundation, Haywood Pathways Center, Haywood Senior Resource Center, Mercy Urgent Care, Mountain Projects, Inc, Town of Clyde, and the Town of Waynesville Parks and Recreation.

Survey Limitations

The Online Key Informant Survey was designed to gather input from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are based on perceptions, not facts.

To collect this data, purposive sampling (a type of non-probability sampling which targets a specific group of people) was used. Unlike the random sampling technique employed in the telephone survey, the purpose is not to make generalizations or statistical inferences from the sample to the entire population, but to gather in-depth insights into health issues from a group of individuals with a specific perspective.

Data Definitions

Reports of this type customarily employ a range of technical terms, some of which may be unfamiliar to many readers. Health data, which composes a large proportion of the information included in this report, employs a series of very specific terms which are important to interpreting the significance of the data. While these technical health data terms are defined in the report at the appropriate time, there are some data caveats that should be applied from the onset.

Error

First, readers should note that there is some error associated with every health data source. Surveillance systems for communicable diseases and cancer diagnoses, for instance, rely on reports submitted by health care facilities across the state and are likely to miss a small number of cases, and mortality statistics are dependent on the primary cause of death listed on death certificates without consideration of co-occurring conditions.

Age-adjusting

Secondly, since much of the information included in this report relies on mortality data, it is important to recognize that many factors can affect the risk of death, including race, gender, occupation, education, and income. The most significant factor is age, because an individual's risk of death inevitably increases with age. As a population ages, its collective risk of death increases; therefore, an older population will automatically have a higher overall death rate just because of its age distribution. At any one time some communities have higher proportions of "young" people, and other communities have a higher proportion of "old" people. In order to compare mortality data from one community with the same kind of data from another, it is necessary first to control for differences in the age composition of the communities being compared. This is accomplished by age-adjusting the data.

Age-adjustment is a statistical manipulation usually performed by the professionals responsible for collecting and cataloging health data, such as the staff of the NC State Center for Health Statistics (NC SCHS). It is not necessary to understand the nuances of age-adjustment to use this report. Suffice it to know that age-adjusted data are preferred for comparing most health data from one population or community to another and have been used in this report whenever available.

Rates

Thirdly, it is most useful to use rates of occurrence to compare data. A rate converts a raw count of events (deaths, births, disease or accident occurrences, etc.) in a target population to a ratio representing the number of same events in a standard population, which removes the variability associated with the size of the sample. Each rate has its own standard denominator that must be specified (e.g., 1,000 women, 100,000 persons, 10,000 people in a particular age group, etc.) for that rate.

While rates help make data comparable, it should be noted that small numbers of events tend to yield rates that are highly unstable, since a small change in the raw count may translate to a large change in rate. To overcome rate instability, another convention typically used in the presentation of health statistics is data aggregation, which involves combining like data gathered over a multi-year period, usually three or five years. The practice of presenting data that are aggregated avoids the instability typically associated with using highly variable year-by-year data, especially for measures consisting of relatively few cases or events. The calculation is performed by dividing the sum number of cases or deaths in a population due to a particular cause over a period of years by the sum of the population size for each of the years in the same period.

Health data for multiple years or multiple aggregate periods is included in this report wherever possible. Sometimes, however, even aggregating data is not sufficient, so the NC SCHS recommends that rates based on fewer than 20 events—whether covering an aggregate period or not—be considered unstable. In fact, in some of its data sets the NC SCHS no longer calculates rates based on fewer than 20 events. To be sure that unstable data do not become the basis for local decision-making, this report will highlight and discuss primarily rates based on 20 or more events in a five-year aggregate period, or 10 or more events in a single year. Where exceptions occur, the text will highlight the potential instability of the rate being discussed.

Regional arithmetic mean

Fourthly, sometimes in order to develop a representative regional composite figure from sixteen separate county measures the consultants calculated a regional arithmetic mean by summing the available individual county measures and dividing by the number of counties providing those measures. It must be noted that when regional arithmetic means are calculated from rates the mean is not the same as a true average rate but rather an approximation of it. This is because most rates used in this report are age adjusted, and the regional mean cannot be properly age-adjusted.

Describing difference and change

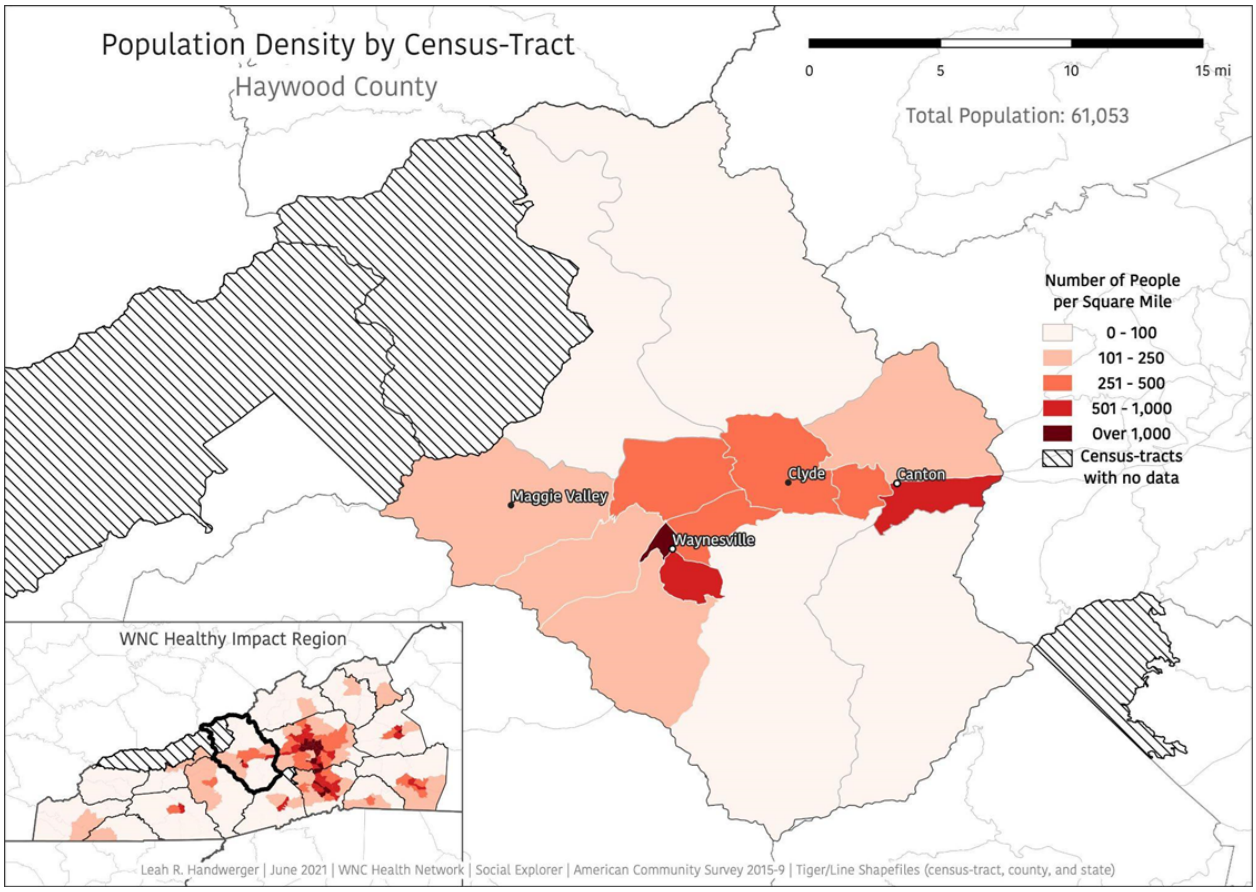
Fifthly, in describing differences in data of the same type from two populations or locations, or changes over time in the same kind of data from one population or location—both of which appear frequently in this report—it is useful to apply the concept of percent difference or change. While it is always possible to describe difference or change by the simple subtraction of a smaller number from a larger number, the result often is inadequate for describing and understanding the scope or significance of the difference or change. Converting the amount of difference or change to a percent takes into account the relative size of the numbers that are changing in a way that simple subtraction does not, and makes it easier to grasp the meaning of the change.

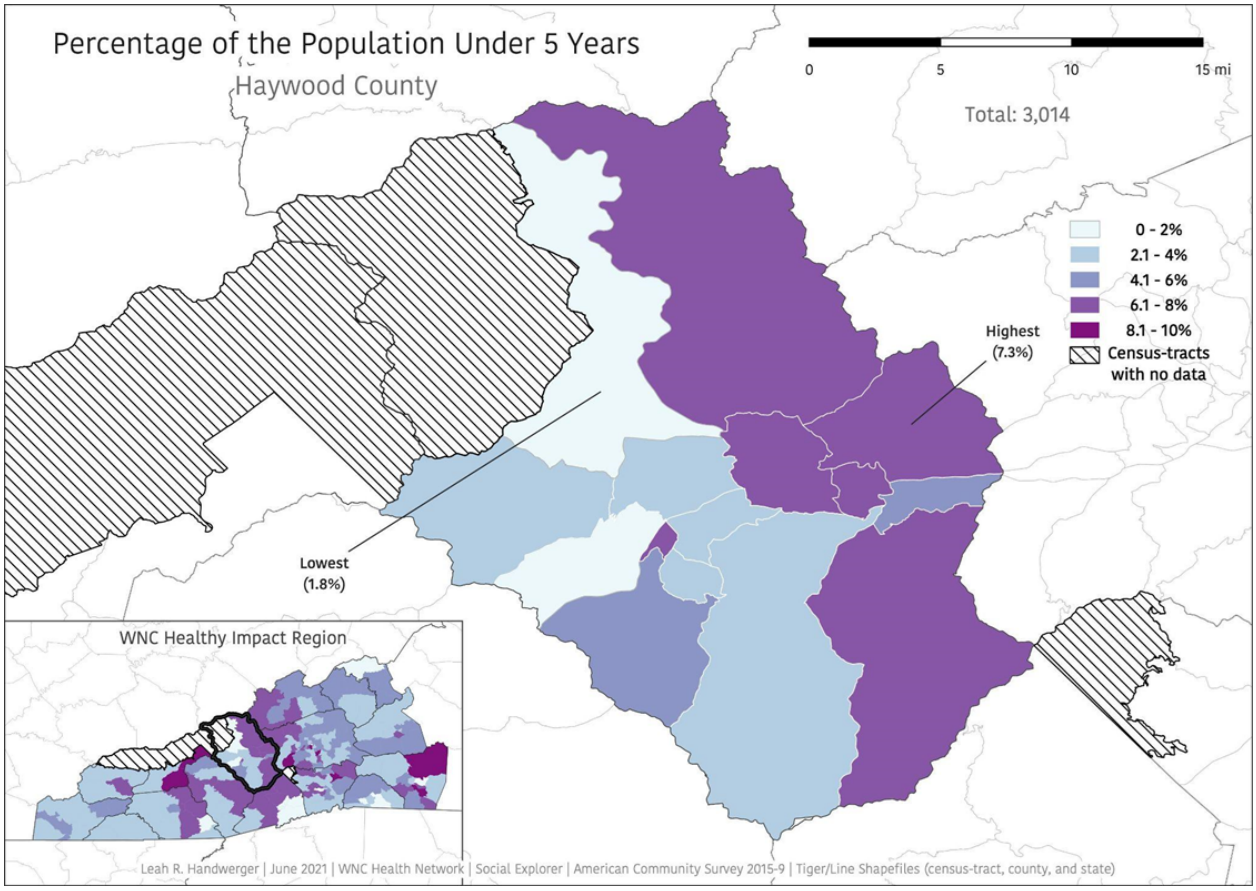
For example, there may be a rate of for a type of event (e.g., death) that is one number one year and another number five years later. Suppose the earlier figure is 12.0 and the latter figure is 18.0. The simple mathematical difference between these rates is 6.0. Suppose also there is another set of rates that are 212.0 in one year and 218.0 five years later. The simple mathematical difference between these rates also is 6.0. But are these same simple numerical differences really of the same significance in both instances? In the first example, converting the 6-point difference to a percent yields a relative change factor of 50%; that is, the smaller number increased by half, a large fraction. In the second example, converting the 6-point difference to a percent yields a relative change factor of 2.8%; that is, the smaller number increased by a relatively small fraction. In these examples the application of percent makes it very clear that the difference in the first example is of far greater degree than the difference in the second example. This document uses percentage almost exclusively to describe and highlight degrees of difference and change, both positive (e.g., increase, larger than, etc.) and negative (e.g., decrease, smaller than, etc.).

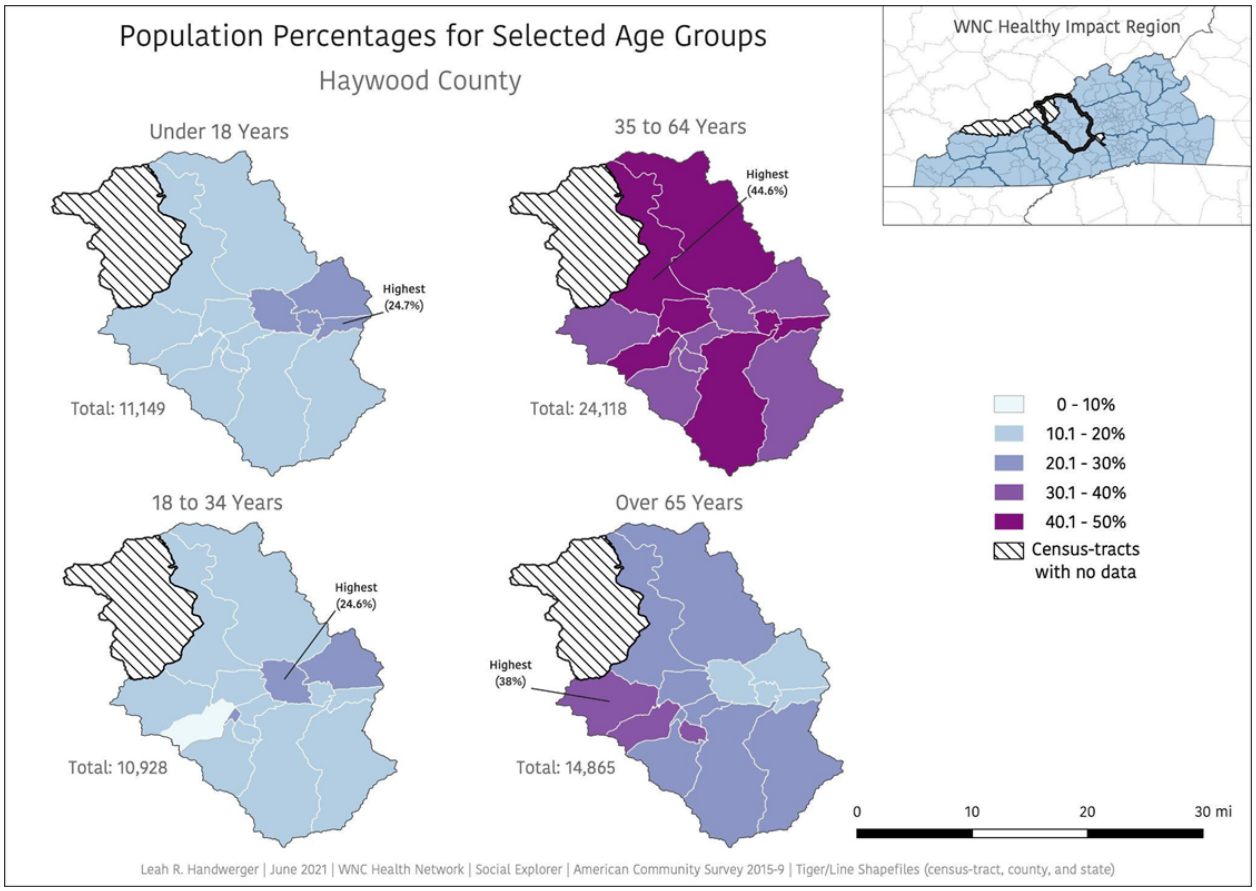
Data limitations

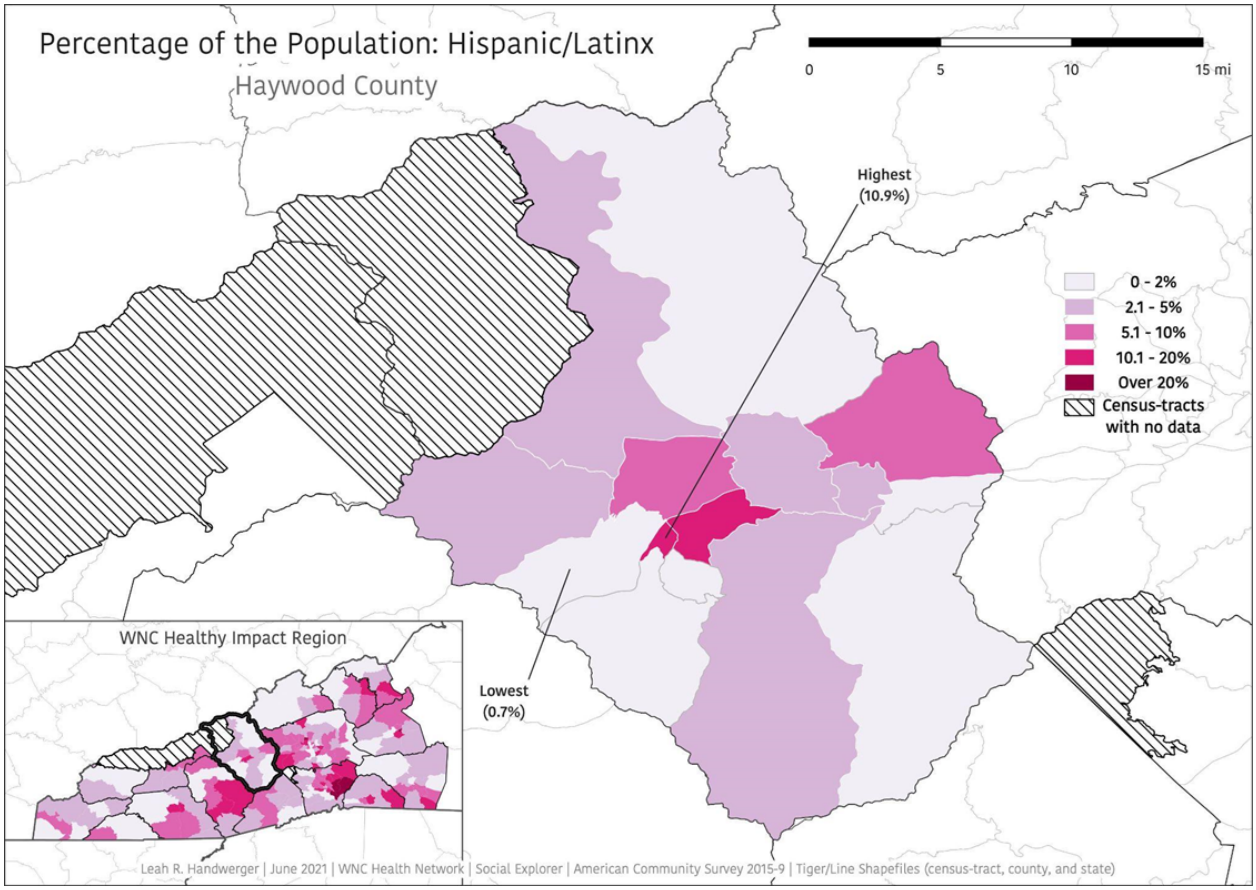
Some data that is used in this report may have inherent limitations, due to the sample size, its geographic focus, or its being out-of-date, for example, but it is used nevertheless because there is no better alternative. Whenever this kind of data is used, it will be accompanied by a warning about its limitations.

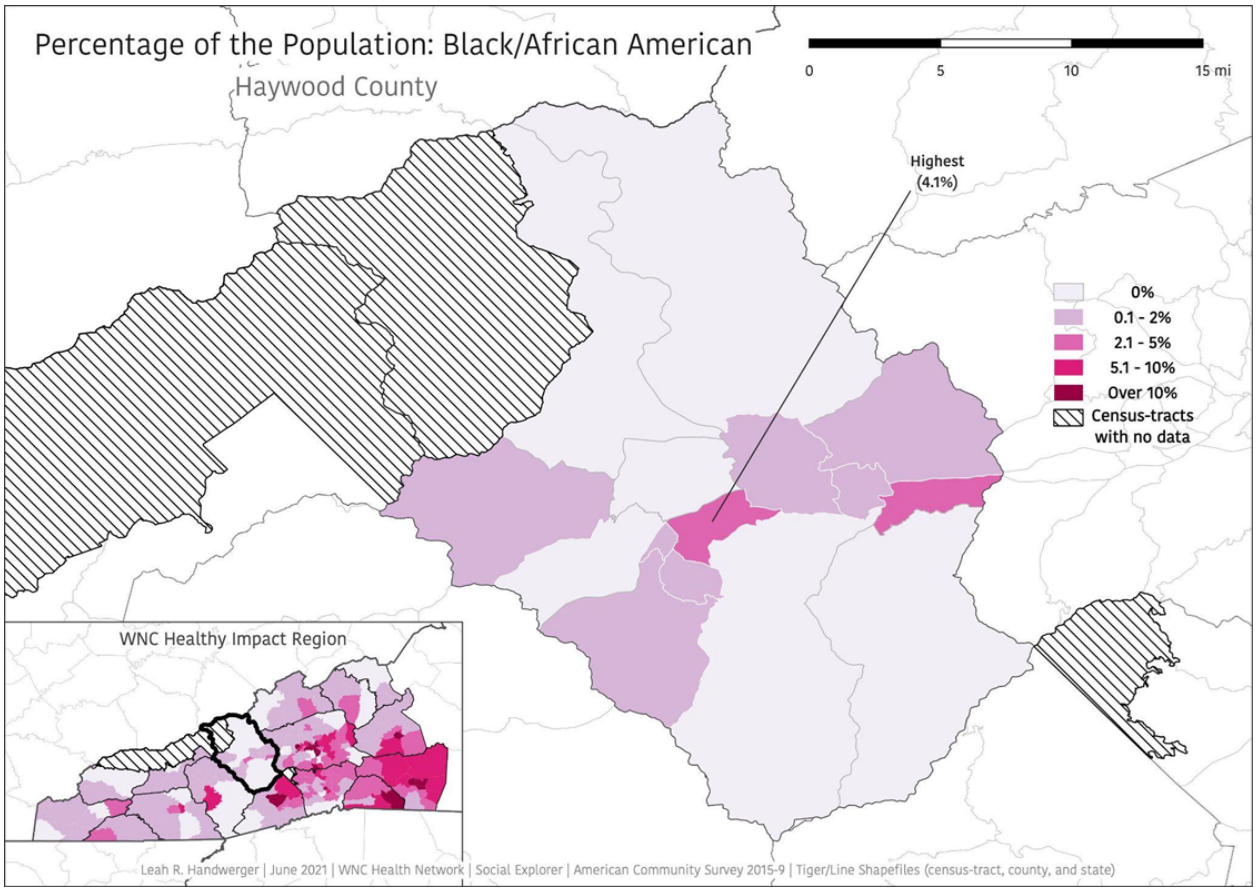
Appendix B – County Maps

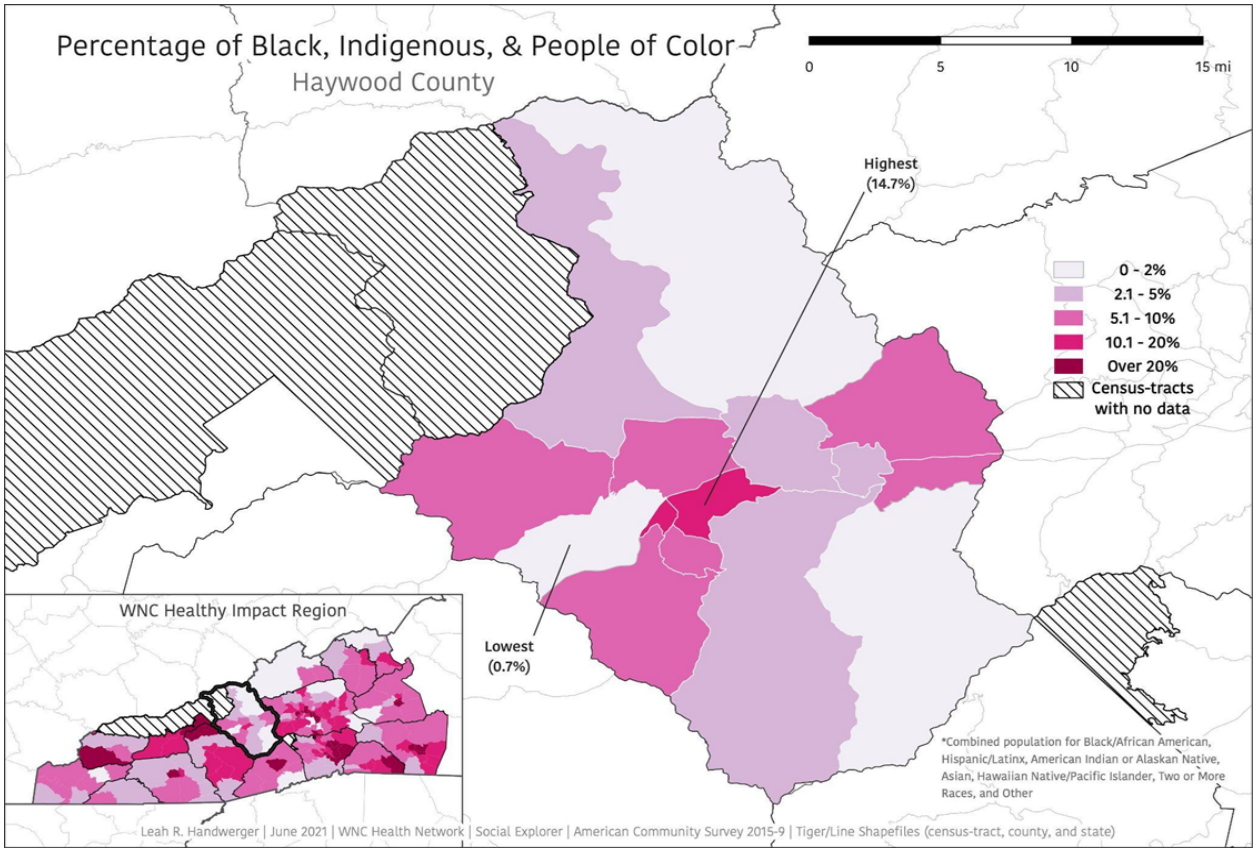


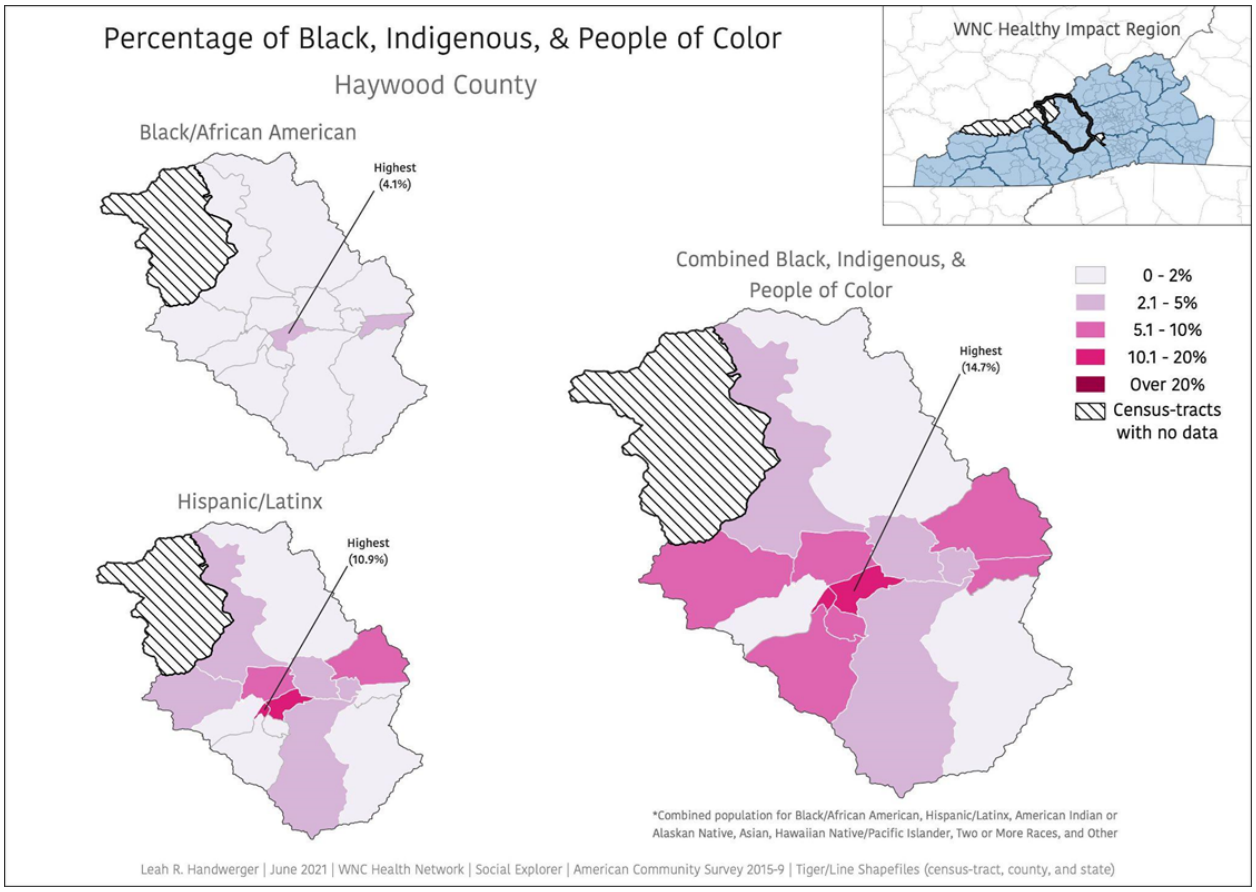

Percentage of the Population Under 5 Years
Haywood County
0
5
10
15 mi
Total: 3,014
0 - 2%
2.1 - 4%
4.1 - 6%
6.1 - 8%
8.1 - 10%
Census-tracts with no data
Highest (7.3%)
Lowest (1.8%)
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)

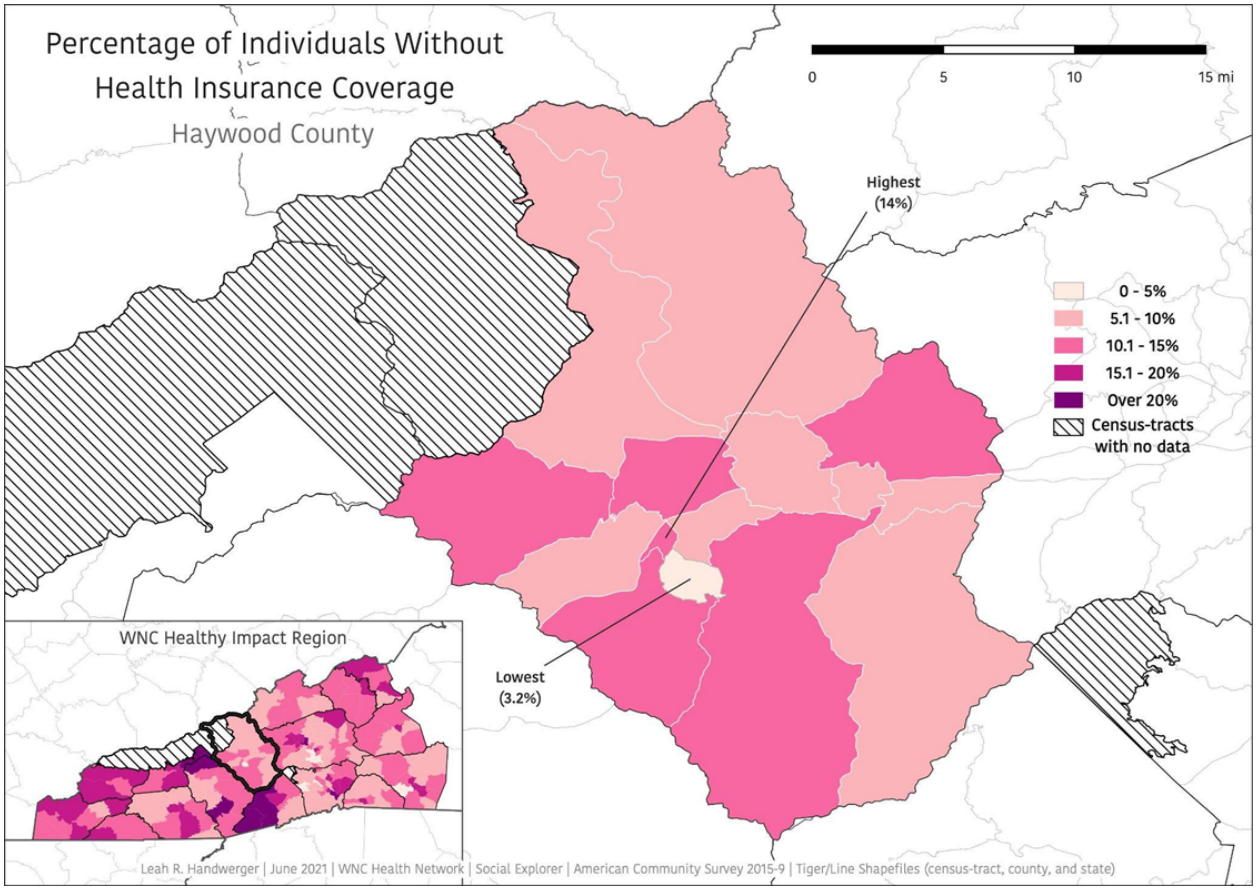

Population Percentages for Selected Age Groups
Haywood County
WNC Healthy Impact Region
Under 18 Years
Highest (24.7%)
Total: 11,149
35 to 64 Years
Highest (44.6%)
Total: 24,118
18 to 34 Years
Highest (24.6%)
Total: 10,928
Over 65 Years
Highest (38%)
Total: 14,865
0 - 10%
10.1 - 20%
20.1 - 30%
30.1 - 40%
40.1 - 50%
Census-tracts with no data
0
10
20
30 mi
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)

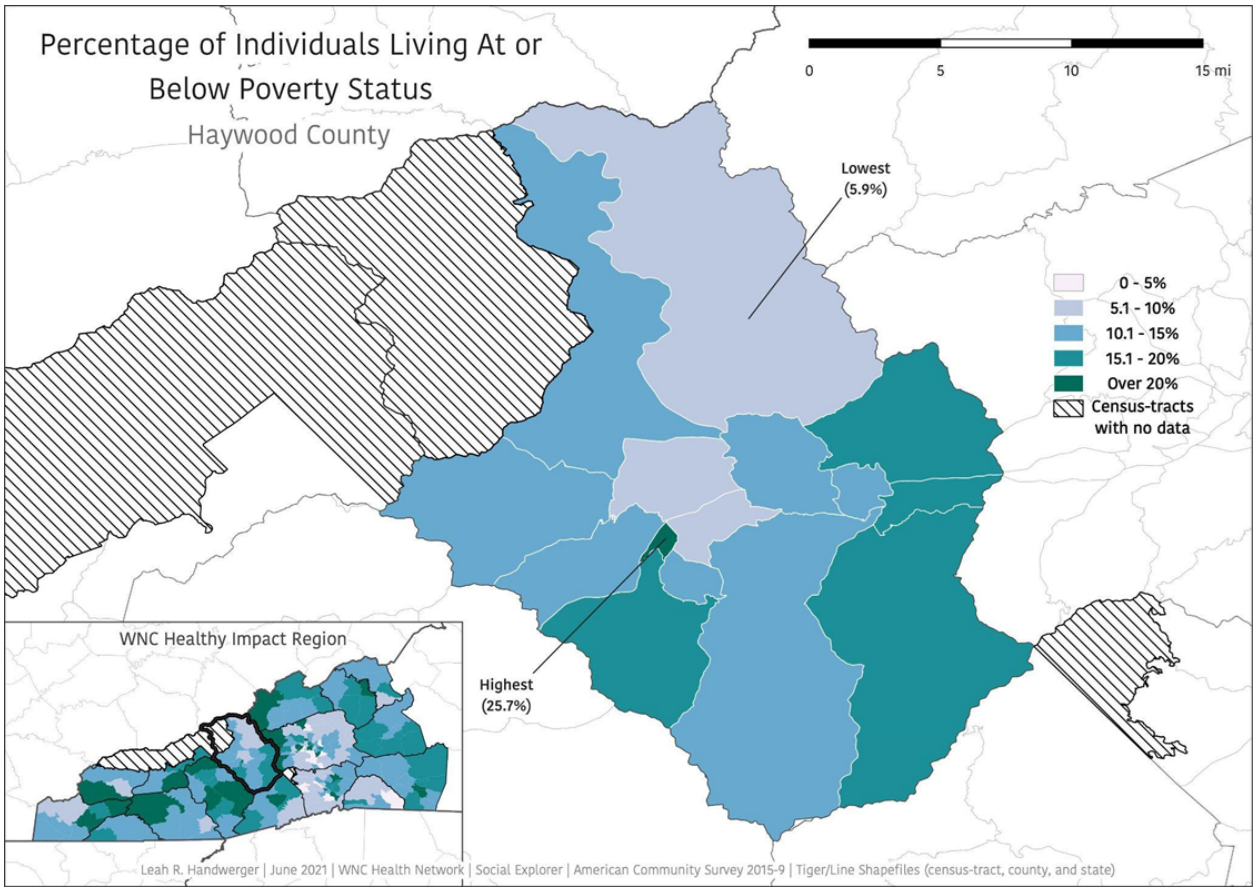

Percentage of the Population: Hispanic/Latinx
Haywood County
0
5
10
15 mi
Highest
(10.9%)
0 - 2%
2.1 - 5%
5.1 - 10%
10.1 - 20%
Over 20%
Census-tracts
with no data
WNC Healthy Impact Region
Lowest
(0.7%)
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)

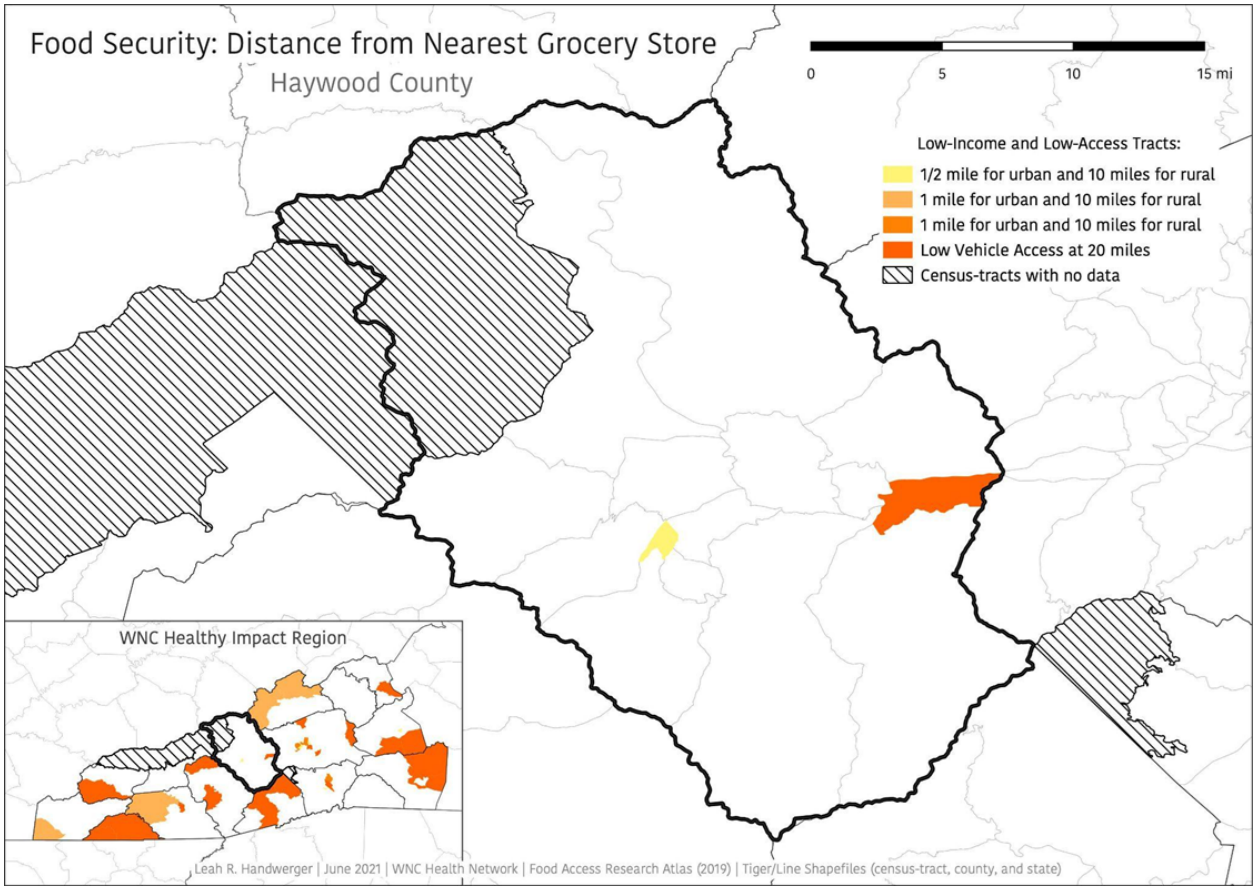

Percentage of the Population: Black/African American
Haywood County
0
5
10
15 mi
Highest
(4.1%)
0%
0.1 - 2%
2.1 - 5%
5.1 - 10%
Over 10%
Census-tracts
with no data
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)

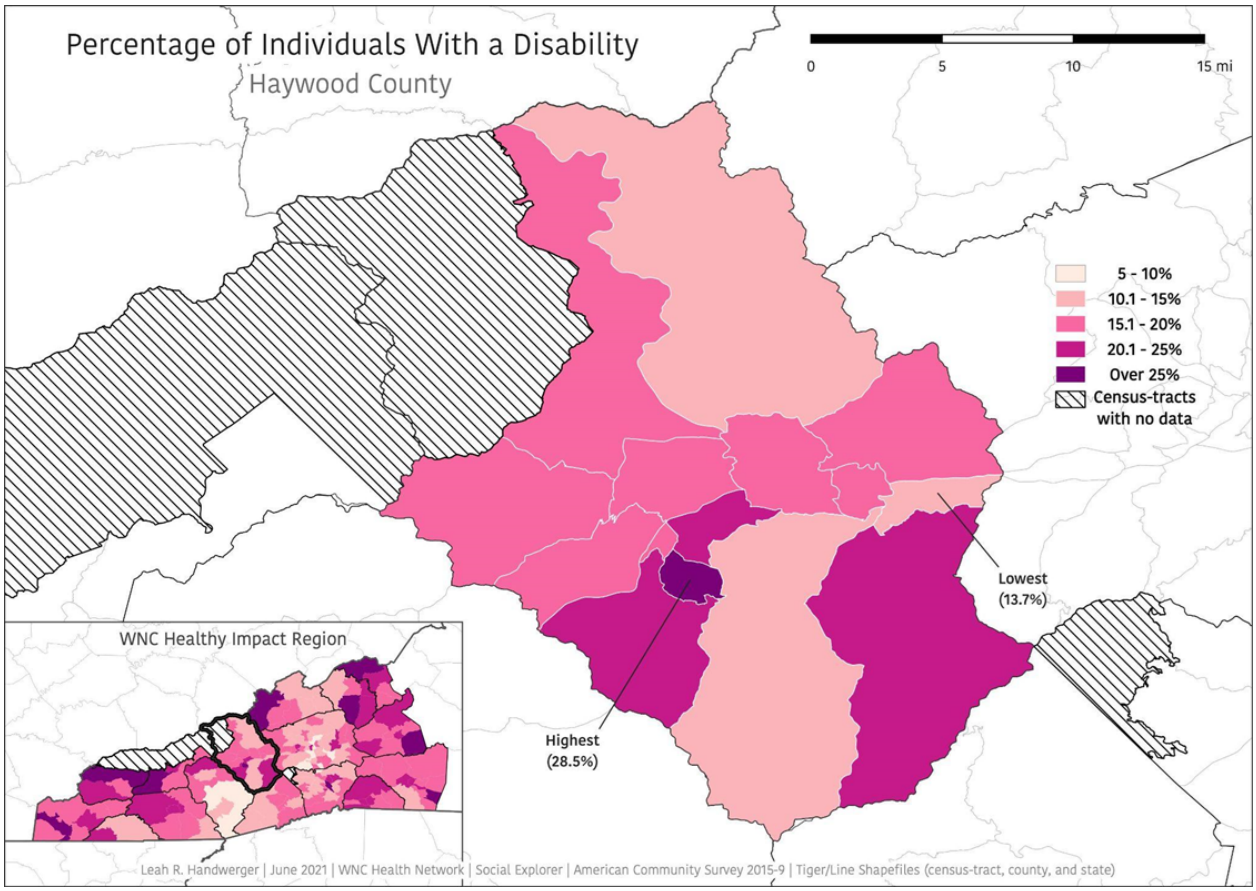

Percentage of Black, Indigenous, & People of Color
Haywood County
0
5
10
15 mi
Highest
(14.7%)
0 - 2%
2.1 - 5%
5.1 - 10%
10.1 - 20%
Over 20%
Census-tracts
with no data
WNC Healthy Impact Region
Lowest
(0.7%)
*Combined population for Black/African American, Hispanic/Latinx, American Indian or Alaskan Native, Asian, Hawaiian Native/Pacific Islander, Two or More Races, and Other
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)

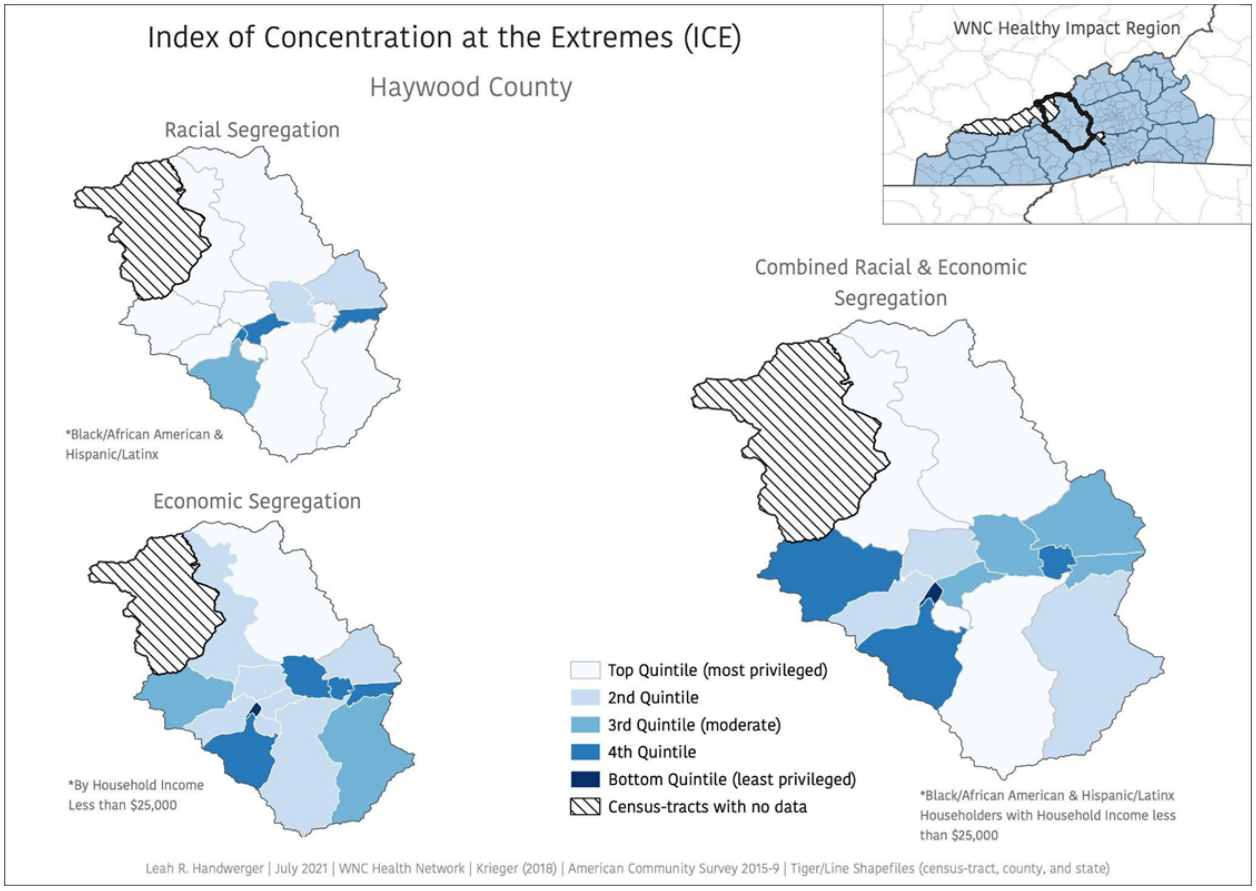

Percentage of Black, Indigenous, & People of Color
Haywood County
WNC Healthy Impact Region
Black/African American
Highest
(4.1%)
Hispanic/Latinx
Highest
(10.9%)
Combined Black, Indigenous, &
People of Color
Highest
(14.7%)
0 - 2%
2.1 - 5%
5.1 - 10%
10.1 - 20%
Over 20%
Census-tracts
with no data
*Combined population for Black/African American, Hispanic/Latinx, American Indian or Alaskan Native, Asian, Hawaiian Native/Pacific Islander, Two or More Races, and Other
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)

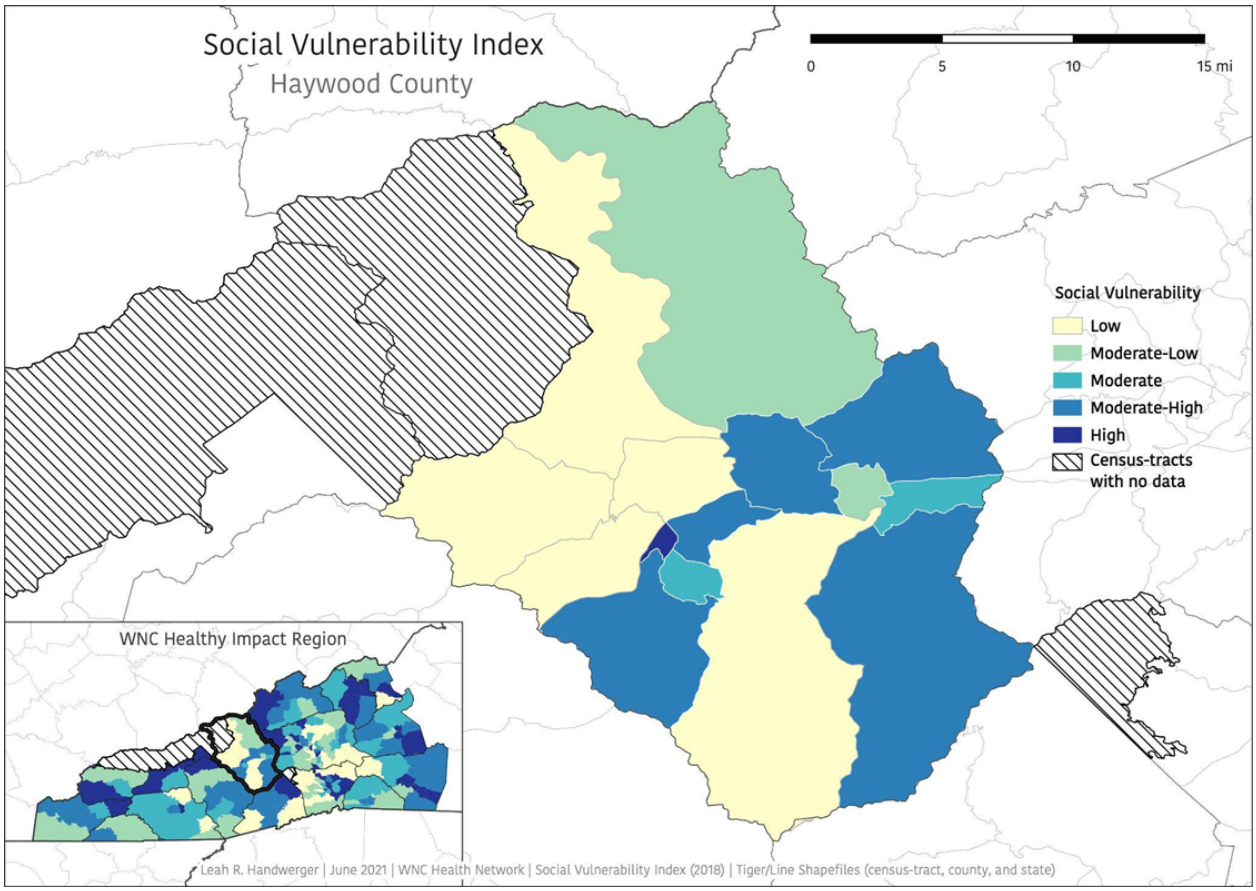

Percentage of Individuals Without
Health Insurance Coverage
Haywood County
0
5
10
15 mi
Highest
(14%)
Lowest
(3.2%)
0 - 5%
5.1 - 10%
10.1 - 15%
15.1 - 20%
Over 20%
Census-tracts
with no data
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)

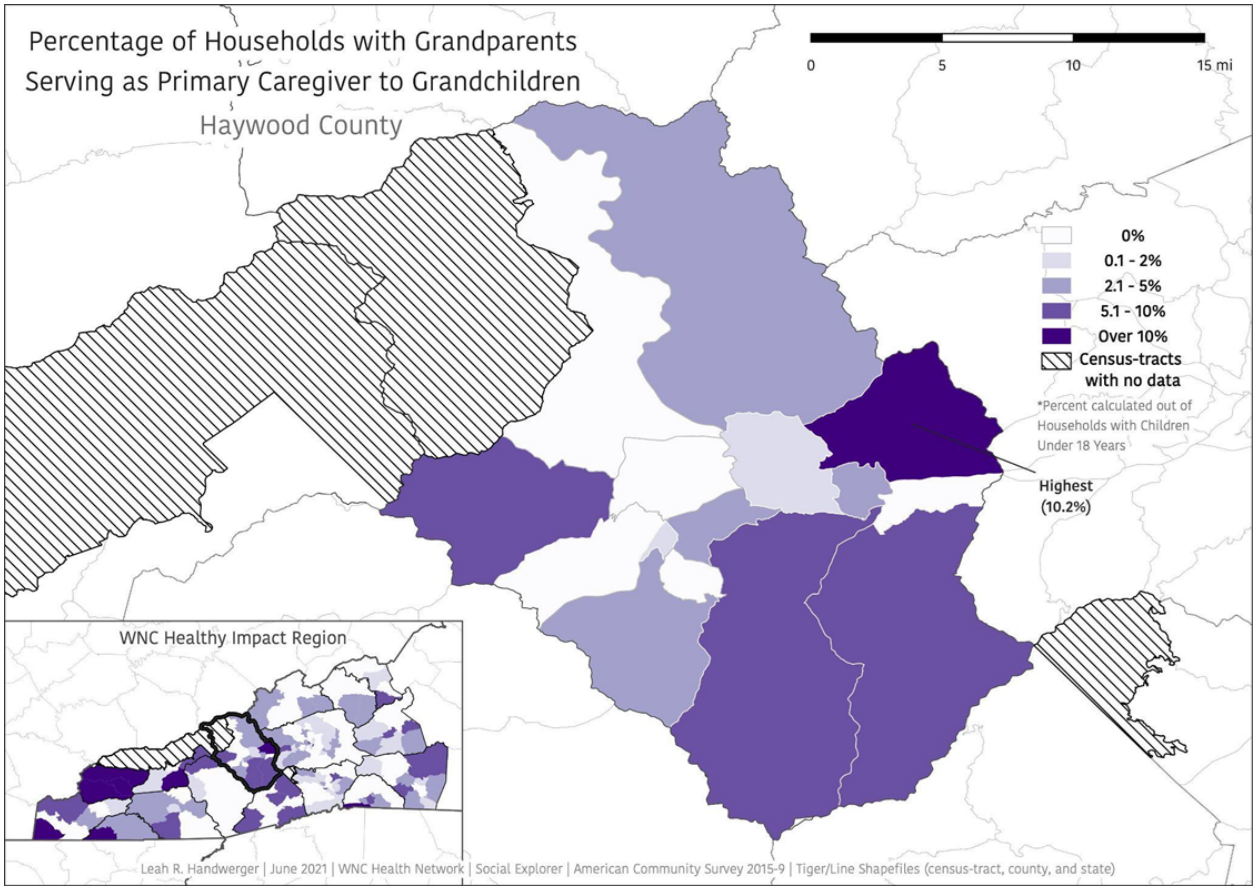

Percentage of Individuals Living At or
Below Poverty Status
Haywood County
0
5
10
15 mi
Lowest
(5.9%)
Highest
(25.7%)
0 - 5%
5.1 - 10%
10.1 - 15%
15.1 - 20%
Over 20%
Census-tracts
with no data
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)

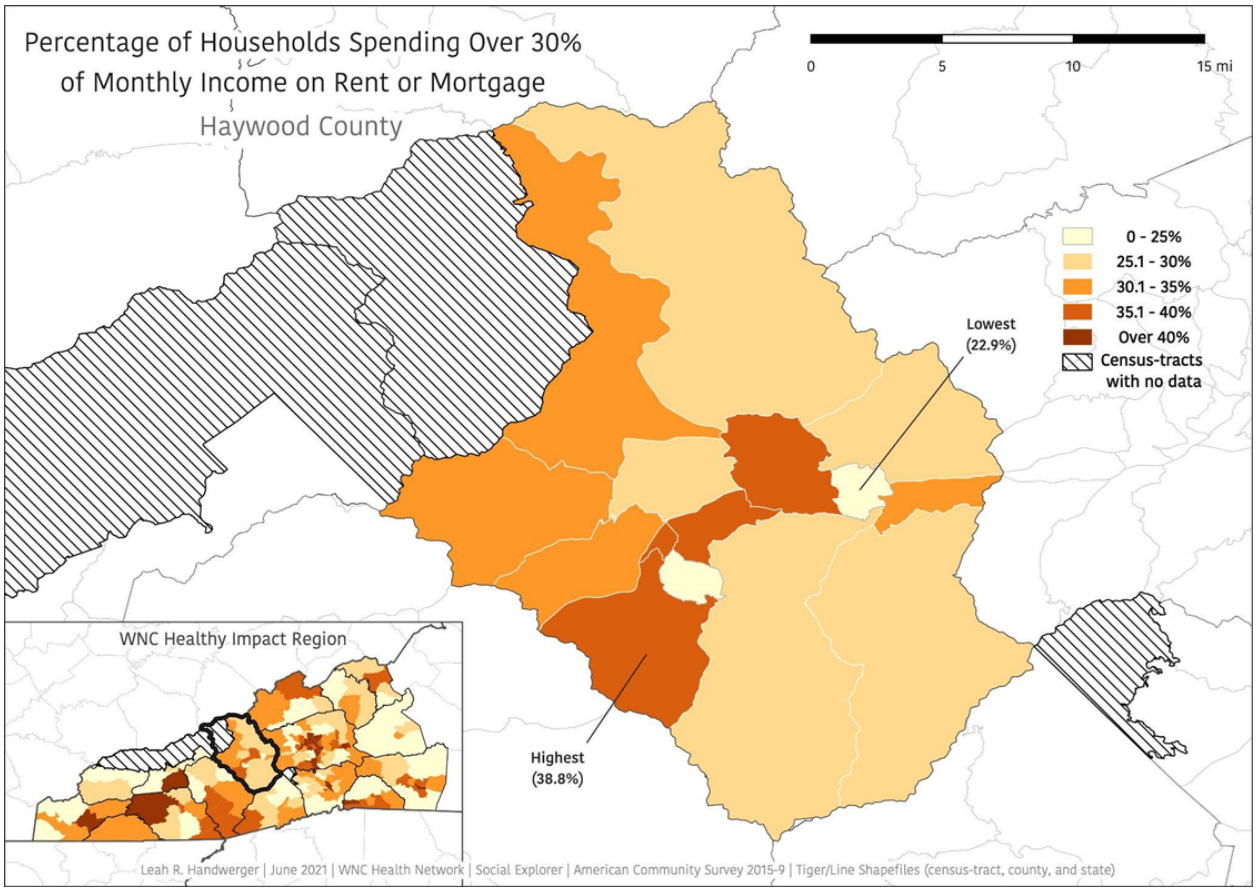

Food Security: Distance from Nearest Grocery Store
Haywood County
0
5
10
15 mi
Low-Income and Low-Access Tracts:
1/2 mile for urban and 10 miles for rural
1 mile for urban and 10 miles for rural
1 mile for urban and 10 miles for rural
Low Vehicle Access at 20 miles
Census-tracts with no data
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Food Access Research Atlas (2019) | Tiger/Line Shapefiles (census-tract, county, and state)

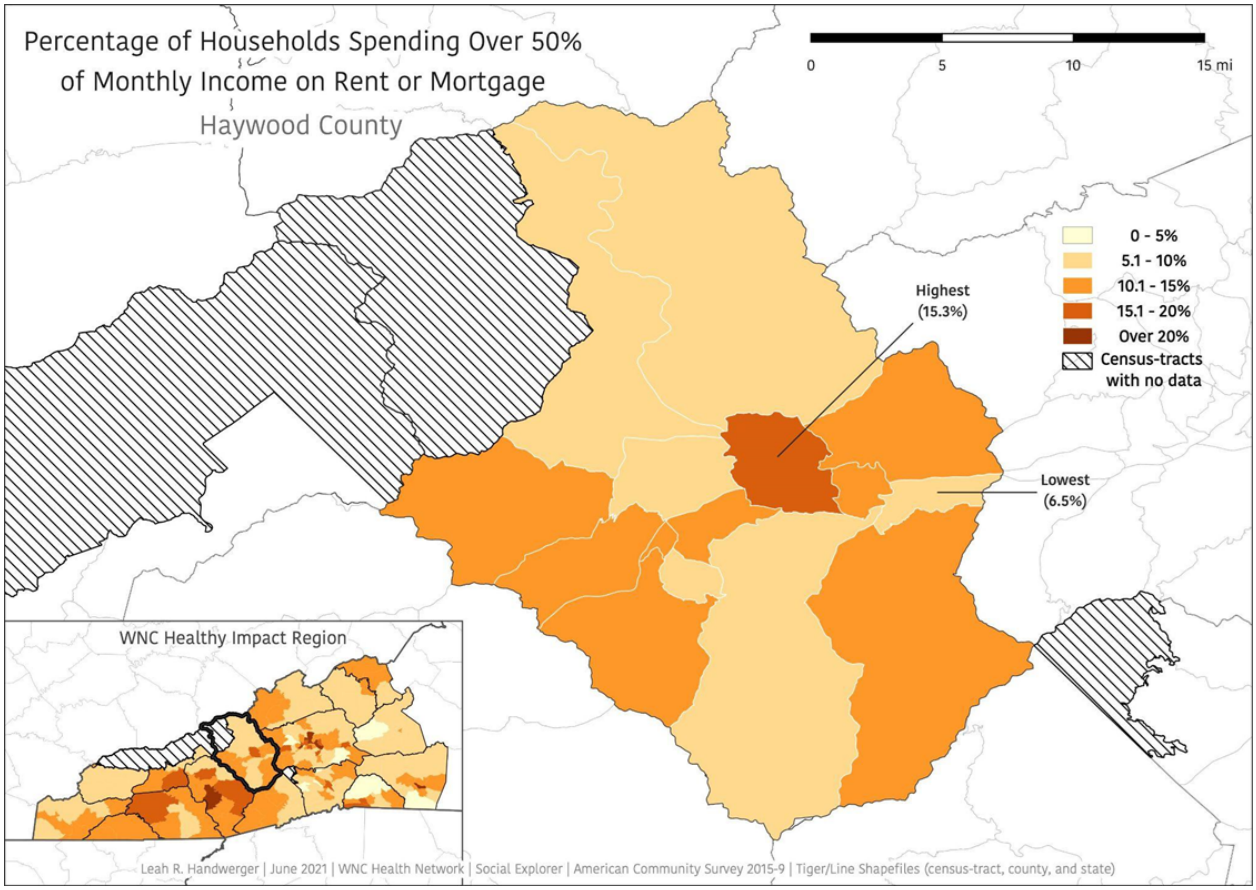

Percentage of Individuals With a Disability
Haywood County
0
5
10
15 mi
5 - 10%
10.1 - 15%
15.1 - 20%
20.1 - 25%
Over 25%
Census-tracts with no data
Lowest (13.7%)
Highest (28.5%)
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)


Index of Concentration at the Extremes (ICE)
Haywood County
WNC Healthy Impact Region
Racial Segregation
*Black/African American & Hispanic/Latinx
Economic Segregation
*By Household Income Less than $25,000
Combined Racial & Economic Segregation
*Black/African American & Hispanic/Latinx Householders with Household Income less than $25,000
Top Quintile (most privileged)
2nd Quintile
3rd Quintile (moderate)
4th Quintile
Bottom Quintile (least privileged)
Census-tracts with no data
Leah R. Handwerger | July 2021 | WNC Health Network | Krieger (2018) | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)


Social Vulnerability Index
Haywood County
0
5
10
15 mi
Social Vulnerability
Low
Moderate-Low
Moderate
Moderate-High
High
Census-tracts with no data
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Social Vulnerability Index (2018) | Tiger/Line Shapefiles (census-tract, county, and state)


Percentage of Households with Grandparents Serving as Primary Caregiver to Grandchildren
Haywood County
0
5
10
15 mi
0%
0.1 - 2%
2.1 - 5%
5.1 - 10%
Over 10%
Census-tracts with no data
*Percent calculated out of Households with Children Under 18 Years
Highest (10.2%)
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)


Percentage of Households Spending Over 30% of Monthly Income on Rent or Mortgage
Haywood County
0
5
10
15 mi
0 - 25%
25.1 - 30%
30.1 - 35%
35.1 - 40%
Over 40%
Census-tracts with no data
Lowest (22.9%)
Highest (38.8%)
WNC Healthy Impact Region
Leah R. Handwerger | June 2021 | WNC Health Network | Social Explorer | American Community Survey 2015-9 | Tiger/Line Shapefiles (census-tract, county, and state)



Appendix C – Quantitative Survey Findings

- 2021 Regional Phone and Internet Survey

Appendix D – Key Informant Survey Findings

- 2021 Online Key Informant Survey