



2018



**Buncombe County
Community Health
Assessment**





ACKNOWLEDGEMENTS

This document was developed by Buncombe County Health & Human Services in partnership with Mission Health, Mountain Area Health Education Center (MAHEC), and WNC Health Impact Network as part of a local community health (needs) assessment process. We would like to thank and acknowledge several agencies and individuals for their contributions and support in conducting this health assessment:

Name	Agency	Role/ Contribution	Duration of Participant	Agency Website
Cathryn Chandler	Mission Health	Coordinator – Community Benefits	2016-2019	www.missionhealth.org
Sonya Greck	Mission Health	Vice President-Community Benefits	2016-2019	www.missionhealth.org
Deanna LaMotte	MAHEC	Health Improvement Specialist	2016-2018	www.mahec.net
Hannah Legerton	MAHEC	Health Improvement Specialist	2019	www.mahec.net
Lourdes Lorenz-Miller	MAHEC	Regional Services	2018	www.mahec.net
Ashley Maag	Mission Health	Manager – Community Benefits	2016-2019	www.missionhealth.org
Terri March	MAHEC	Health Improvement Specialist	2016-2019	www.mahec.net
Zo Mpofu	BCHHS	Coordinator -Community Health Assessment	2016-2019	www.buncombecounty.org
Kimberly Price	Lenoir-Rhyne University	Associate Professor	2018	www.lr.edu
Evan Richardson	MAHEC	Director - Population Health	2017-2019	www.mahec.net

Our community health assessment process and products were supported collaboratively by **WNC Healthy Impact**, a partnership between hospitals and health departments to improve community health in western North Carolina. This innovative regional effort is coordinated, housed and financially supported by **WNC Health Network**, the alliance of western NC hospitals working together to improve health and healthcare. Learn more at www.WNCHN.org.



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CHAPTER 1

Buncombe County 2018 Community Health Assessment EXECUTIVE SUMMARY

Community Results Statement

- 1. Everyone has access to the resources, skills, and supportive environments for resilience and well-being.**
 - *Mental Health:* Behavioral health resources for substance use and the provision of trauma-informed care is a high priority for community and leaders in Buncombe County. A coordinated, multi-sector approach to identify strategies, align resources, and use data-informed responses can improve the current rate of ACEs, suicide, and poor mental health days for residents in the county.
- 2. All babies have a healthy start with the opportunity to reach their full potential**
 - *Birth Outcomes & Infant Mortality:* Often used as a proxy for overall population health, the infant mortality rate (IMR), can provide insight to factors that influence the health status of the whole community, such as: economic development, living conditions, social well-being, rates of illness, or the built environment (*World Health Organization. The World health report 2000: health systems: improving performance. Geneva: WHO, 2000.*)

Leadership for the Community Health Assessment Process

The Buncombe County Community Health Assessment (CHA) process is the culmination of coordinated efforts by the CHIP Data Team with the guidance and input of the Buncombe County Community Health Improvement (CHIP) Advisory Council. Through a 12-month process, the Data Team reviewed data from multiple primary and secondary sources to identify strengths, opportunities to do better, capture worsening trends, compare previous results with current data, and evaluate how Buncombe County performs on similar indicators with regional counties or state data. Data reviewed for this process included:

- WNC Healthy Impact Secondary Data Workbook
- WNC Healthy Impact – PRC Telephone Survey
- Locally available data, community surveys and listening session feedback

CHIP Advisory Council Data Team

Name	Agency	Title	Agency Website
Christina Dupuch	VAYA Health	Chief Community Operations Officer	www.vayahealth.com
Emma Olson	NC Center for Health & Wellness	Director of Partnerships & Evaluation	www.ncchw.unca.edu
Evan Richardson	MAHEC	Director Population Health	www.mahec.net
Frank Castellblanco	MAHEC	Chair – Continuing Professional Development	www.mahec.net
Jaelyn Kiger, JD	Pisgah Legal	Managing Attorney	www.pisgahlegal.org
Jannine Shepard	BCHHS	Public Health Director	www.buncombecounty.org
Sonya Greck	Mission Health	Vice President – Community Benefits	www.missionhealth.org
Zo Mpofu	BCHHS	Community Health Assessment & Improvement Coordinator	www.buncombecounty.org

Partnerships

Name	Agency	Title	Agency Website
Evan Richardson	MAHEC	Director Population Health	www.mahec.net
Frank Castellblanco	MAHEC	Chair – Continuing Professional Development	www.mahec.net
Jannine Shepard	BCHHS	Public Health Director	www.buncombecounty.org
Sonya Greck	Mission Health	Vice President – Community Benefits	www.missionhealth.org
Zo Mpofu	BCHHS	Community Health Assessment & Improvement Coordinator	www.buncombecounty.org

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 hospitals 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 framework to thinking and acting with a focus on how people, agencies, and communities are better off for our efforts.

Through WNC Healthy Impact, all hospitals and their public health partners can access tailored RBA training and coaching; scorecard licenses and development (including the electronic Hospital Implementation Strategy); and scorecard training and technical assistance.

Collaborative Process Summary

Buncombe County's collaborative process is supported by WNC Healthy Impact, which works at the regional level. Locally, BCHHS completed the CHA in partnership with Mountain Area Health Education Center (MAHEC), Mission Health, North Carolina Center for Health & Wellness and WNC Healthy Impact. Phase 1 of the collaborative process began in January 2018 with the collection of community health data. For more details on this process see Chapter 1 – Community Health Assessment Process.

Key Findings

Health outcomes for the Buncombe County Community Health Assessment were evaluated using data for mortality (length of life) and morbidity (quality of life) accessed from the following primary, secondary and local data sources:

- **Data Workbook - (Survey and Secondary Data)**
Publicly available data (U.S. Census, NC State Center for Health Statistics, other state and federal departments) of 175+ primary and secondary data indicators including: demographics, morbidity and mortality, social determinants, environmental indicators, and others.
- **Community Health Survey**
Conducted by Professional Research Consultants (PRC) includes 75 core questions (3 additional local questions) including: demographic, morbidity, behavior, ACEs, etc.; 304 surveys collected from adults across Buncombe County.
- **Online Key Informant Survey**

Conducted by Professional Research Consultants (PRC), the Survey input (story data) from selected individuals to identify major health issues, gaps in services, and other factors that may contribute to health. Administered via email to 29 participants out of 41 invited.

- **Maps**

Community Commons and NC State Center for Health Statistics facilitated the inclusion of 23 maps including: selection of population, morbidity and mortality indicators.

Health Priorities

- Health Priority 1 – Mental Health
- Health Priority 2 – Birth Outcomes & Infant Mortality

Next Steps

Initial presentations announcing the determined health priorities have occurred following our data collection and prioritization presentations to the Buncombe County Health & Human Services Agency Senior Leadership, the Safety Net Council, and the Buncombe County Health & Human Services Board. A copy of this report will be available in the Buncombe County Public Library's Pack Memorial Branch- NC Collections. The Community Health Assessment Report will also be accessible on the Buncombe County Government, Mission Health, and WNC Healthy Impact websites. The Community Health Improvement Team will work with the Buncombe County CHIP Advisory to convene community input strategy sessions to determine programs, services and the appropriate social determinants of health domains drivers during this process.

We will use the RBA tool known as 'Whole Distance Exercise' to facilitate community action planning. This will help to identify culturally/regionally appropriate interventions, indicators, and partners as outlined in our local blue print for health.

The collective impact model will serve as a central organizing framework for how our CHIP Leadership steer appropriate policy, technical, and program resources to advance the efforts of the CHIP Advisory Council and its standing priority area workgroups.

COMMUNITY HEALTH ASSESSMENT PROCESS

Purpose

Community health assessment (CHA) is an important part of improving and promoting the health of county residents. A CHA is a process that results in a public report that describes the current health indicators and status of the community: what has changed and what still needs to change in order to reach a community's desired health-related results.

Key phases of the Community Health Improvement Process

In the **first phase** of the cycle, process leaders for the CHA determine what data is needed and how to make sense of it. Process leaders convene and review data to by determining which outcomes are most important for their population and by then determining local health priorities.

The **second phase** of the cycle is community health strategic planning. In this phase, process leaders work with partners to understand the root causes of the identified health priorities, both what's helping and what's hurting the issues. Together, they form workgroups around each strategic area, clarify their metrics for success for chosen populations and determine how they will know people are better-off because of their efforts.

In the **third phase** of the cycle, process leaders for the CHA take action and evaluate health improvement efforts. They do this by planning how to achieve customer results and putting the plan into action. Workgroups continue to meet, and monitor outcomes and make changes to the plan as needed. This phase is vital to helping work groups understand the contribution their efforts are making toward their desired community results.



Definition of Community

Community is defined as "county" for the purposes of the North Carolina Community Health Assessment Process. Buncombe County is included in Mission Health System's community for the purposes of community health improvement, and as such, they were a key partner in this local level assessment.

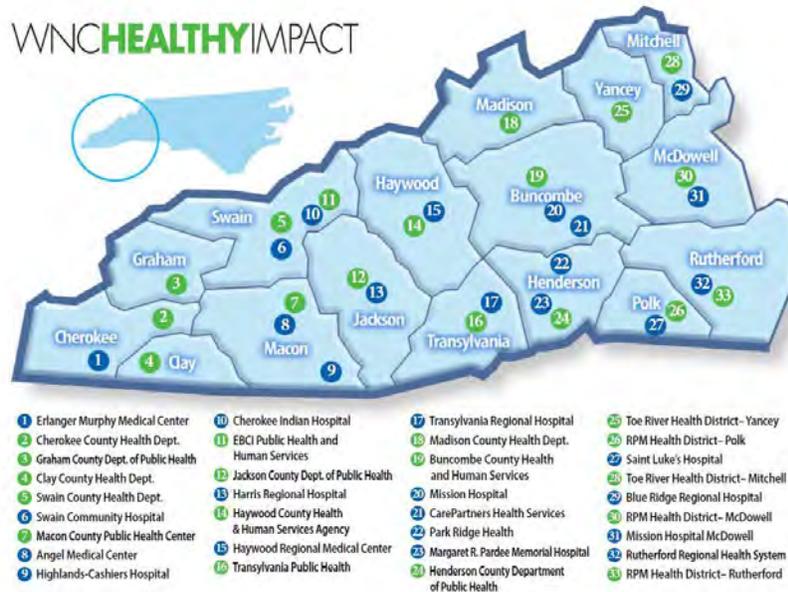
WNC Healthy Impact

WNC Healthy Impact is 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 regional initiative is designed to support and enhance local efforts by:

- Standardizing and conducting data collection,
- Creating communication and report templates and tools,
- Encouraging collaboration,
- Providing training and technical assistance,
- Addressing regional priorities, and
- Sharing evidence-based and promising practices.

This innovative regional effort is supported by financial and in-kind contributions from hospitals, public health agencies, and partners, and is coordinated by **WNC Health Network**. WNC Health Network, Inc. is an alliance of hospitals working together, and with partners, to improve health and healthcare. Learn more at www.WNCHN.org.



Data Collection

The set of data reviewed for our community health assessment process is comprehensive, though not all of it is presented in this document. Within this community health assessment we share a general overview of health and influencing factors, then focus more on priority health issues identified through a collaborative process. Our assessment also highlights some of our community strengths and resources available to help address our most pressing issues.

Core Dataset Collection

The data reviewed as part of our community's health assessment came from the WNC Healthy Impact regional core set of data and additional local data compiled and reviewed by our local CHA team. WNC Healthy Impact's core regional dataset includes secondary (existing) and primary (newly collected) data compiled to reflect a comprehensive look at health. 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
- Maps accessed from Community Commons and NC Center for Health Statistics
- 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 data was collected for Buncombe County from:

- Community listening sessions and a one-question survey taken via a mobile, PC or a comment card at venues throughout the county.
- Asheville Community Health Theatre - Youth theatrical improvisations of 'What health means to me'- Summer 2018
- A one question survey of Buncombe County Health & Humans Services Social Work

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. Where gaps were identified, we partnered with 2-1-1 to fill in or update this information when applicable. See **Chapter 7** for more details related to this process.

Community Input & Engagement

Including input from the community is a key element of the CHA process. Our county included community input and engagement in a number of ways:

- Results from a primary survey of 304 Buncombe County residents conducted by Professional Research Consultants, Inc. (PRC); as a technical assistance service through partnership with WNC Heathy Impact.
- This survey was conducted through the network at neighboring counties; with over 3,200 collected in the region for comparison.
- Surveys collected at community events that asked one question: "What's the most important thing you need for you or your family's health & wellbeing?"
- *State of Black Asheville* Report
- NC Center for Health Statistics Data on Birth Outcomes
 - NC Department of Health & Human Services – NC DETECT
 - Public Schools of North Carolina, Free & Reduced Meals Application Data (2016-2017)
- The CHIP Data Team includes representatives from BCHHS, MAHEC, Mission Health, NC Center for Health & Wellness, and Lenoir-Rhyne University. Together, we contribute to the health assessment process through primary data collection efforts (survey, key informant interviews, listening sessions, etc.)
- Direct community engagement is an ongoing focus for the Buncombe CHIP. Community visioning and voices will be a guiding cornerstone of the collaborative planning phase of the community health improvement process.



At-Risk & Vulnerable Populations

Throughout our community health assessment process, our team focused on understanding general health status and related factors for the entire population of our county, as well as the groups particularly at risk for poor outcomes due to disparities. For the purposes of the overall community health assessment, we aimed to understand differences in health outcomes and correlated variables, particularly among underserved, low-income, and/or minority populations, and others experiencing health disparities.

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

- Racial and ethnic minorities experiencing differences in health outcomes
- Those impacted by the “Pair of ACES” – Adverse Childhood Experiences and Adverse Community Environments
- Individuals with difficulty accessing medical care or needing help accessing transportation

Though there are not universally accepted definitions of the three groups, here are some basic definitions from the Health Department Accreditation Self-Assessment Instrument (in some cases definitions have been slightly altered to better represent our region).

Underserved populations relate to those who do not access health care either because there is a lack of services or providers available or because of limitations such as income, literacy/language barriers or understanding on how to access services, cultural competency of clinicians, trust, transportation, etc.

At-risk populations are the members of a particular group who are likely to, or have the potential to, get 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 ACE score (traumatic experiences), which is correlated 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 race/ethnicity, socio-economic status, cultural factors and age groups.



CHAPTER 2

BUNCOMBE COUNTY

Location, Geography, and History of Buncombe County

Buncombe County is nestled within the Blue Ridge Mountain range. The county seat, Asheville, is located at the confluence of the Swannanoa and the French Broad Rivers. It is the largest city in Western North Carolina and the 11th largest city in North Carolina with a population of 83,393 (2010 Census). Buncombe County encompasses 660 square miles along the Blue Ridge Mountains with six distinct municipalities: Asheville, Biltmore Forest, Black Mountain, Montreat, Weaverville and Woodfin. The county is mostly rural with historically different population demographics in urban and rural areas, although that is changing. In general, the city is politically more progressive/liberal, and the surrounding rural areas are more conservative.

Consistently a top performer in the County Health Ranking, Buncombe overall stands out for excellent health care. This is one of the reasons we have a growing number of older adults retiring to the area. Despite national recognition for quality care, there are huge health disparities among communities of color, and there are significant economic disparities. In an increasingly tourist and service-based economy the challenge of earning a living wage is exacerbated by our distinction of having the most unaffordable housing in the state. This creates significant barriers for a large percent of our population.

The land where Asheville now exists used to be within the boundaries of the Cherokee Nation and was established in 1793 on a plateau where two old Native American trails crossed. In 1890, George Vanderbilt began building Biltmore House, the largest private home in America. During this era (1890-1910), Buncombe County's cool, crisp mountain air made the area a popular location for tuberculosis sanatoriums. The area also became one of America's best-known tourist centers. Asheville prospered in the decades of the 1910s and 1920s and at one point was the third largest city in the state, behind Charlotte and Wilmington.

Buncombe County has a total population of 238,318 (2010 Census) with a median age of 40.6. Buncombe has significantly lower proportions of African Americans, American Indians, Asians and Hispanics than NC, but slightly higher proportions of African Americans and Hispanics than

the Western North Carolina (WNC) region. A double-digit rate of growth in Buncombe County is expected to continue for the next two decades, at nearly twice the rate of growth of WNC and surpassing the pace of growth for NC.

Population

BUNCOMBE COUNTY DEMOGRAPHIC PROFILE	
2017 5-Year Population Estimate	52,268
Median Age	41.9
Educational Attainment: Percent high school graduate or higher	90.8%
Total housing units	119,412
Median Household Income	48,464
Foreign Born Population	14,824
Individuals below poverty level	13.2%
White alone	224,099
Black or African American alone	15,871
American Indian and Alaska Native alone	999
Asian alone	3,152
Native Hawaiian and Other Pacific Islander alone	251
Some Other Race alone	2,015
Two or More Races	5,881
Hispanic or Latino (of any race)	16,254
White alone, Not Hispanic or Latino	211,110
Veterans	17,890

Interventions that address the conditions in the places where we live, learn, work, play and worship have the greatest potential impact on our health. By focusing on these “social determinants of health” (SDOH) and on “changing the context to make healthy choices easier,” we can help improve the health of everyone living in a community (Center for Disease Control). During our collaborative planning efforts and next steps, we will further explore these concepts and the results from our community feedback sessions

Key informants in the online survey were given a list of conditions in which people are born, grow, live, work, and age, as well as known factors that contribute to a person’s health. The following chart outlines the rank order of social determinants of health identified by key informants as critical to address:

Rank	Social Determinant of Health Issue	Identified as Critical to Address
1	Housing	20
2	Adverse Childhood Experiences (ACEs)	19
3	Access to Health Care	12
4	Employment Opportunities	12
5	Early Childhood Education	8
6	Food Insecurity	7
7	Transportation	5
8	Interpersonal Violence (IPV)	1

2018 WNC Healthy Impact Community Health Survey



CHAPTER 4

SOCIAL & ECONOMIC FACTORS

As described by [Healthy People 2020](#), economic stability, education, health and healthcare, neighborhood and built environment, and social community and context are five important domains of social determinants of health. These factors are strongly correlated with individual health. People with higher incomes, more years of education, and a healthy and safe environment to live in have better health outcomes and generally have longer life expectancies. Although these factors affect health independently, they also have interactive effects on each other and thus on health. For example, people in poverty are more likely to engage in risky health behaviors, and are also less likely to have affordable housing. In turn, families with difficulties in paying rent and utilities are more likely to report barriers to accessing health care, higher use of the emergency department, and more hospitalizations.

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, 2018).

INCOME & POVERTY	
Median household income	\$46,902
Median family income	\$54,981
Per capita income	\$25,665
Percent Below Poverty level	14.8%
Poverty rate by age comparison (children under 18)	20.5%
Food and nutrition services participation (Stamp/SNAP Benefits)	12,473
Quality For Free and reduced-price school meals (Buncombe County Schools)	55%

Employment

“Employment provides income and, often, benefits that can support healthy lifestyle choices. Unemployment and under employment 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, 2018).

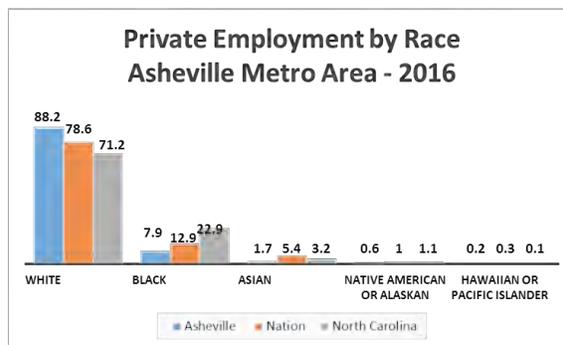
As of 2017, the top three employment sectors in Buncombe County are Health Care & Social Assistance, Manufacturing, and Retail Trade. The average weekly wages for these employees were:

- Health Care & Social Assistance: 20.57% (\$1,080)
- Accommodation & Food Services: 13.85% (\$394)
- Retail Trade: 13.54% (\$508)

Region-wide in 2017, the largest employment sector was Health Care and Social Assistance (18%), with an average weekly salary of \$714 per employee. Statewide the largest was Health Care and Social Assistance, with an average weekly salary of \$949 (North Carolina Department of Commerce, 2018).

Overall, the unemployment rate in Buncombe County is decreasing, with lower rates than both the WNC region and state. Despite these strong rates, in general, considerable employment disparities exist in Buncombe by race. In 2017, Buncombe County had the highest rate of unemployment for white workers in the state. Conversely, Buncombe County had the highest percentage of unemployed African-Americans workers than any other county in the state (Syneva Economics, 2017).

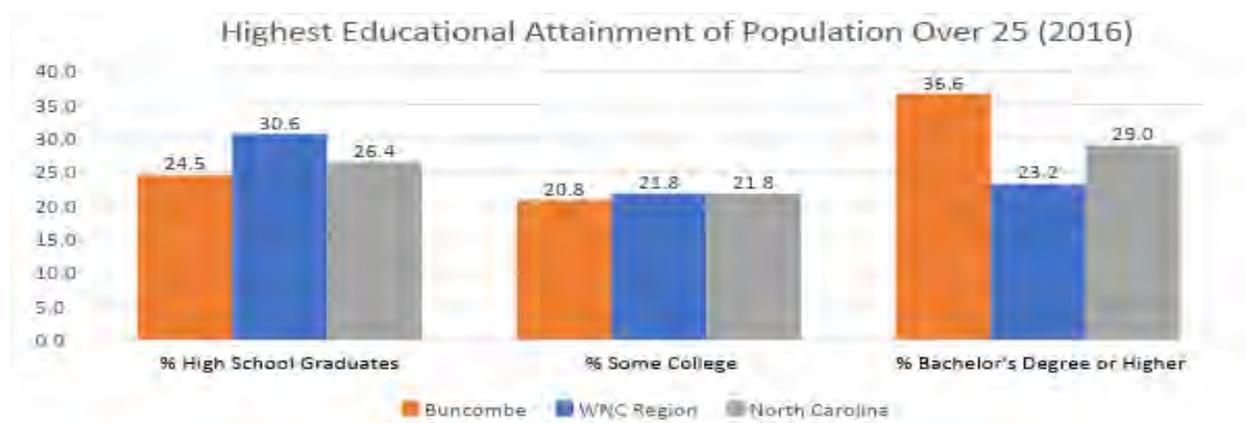
In 2017, The Western North Carolina New Economy Coalition requested an economic leakage study of the Asheville Metropolitan Statistical Area (Asheville, MSA). "Leakage" refers to areas within the economy where goods and services are procured or "imported" outside of the local region. The finding of this "leakage" can be instrumental for identifying existing opportunities for employment, which can serve to build a stronger economy, healthier and thriving communities (see appendix G for study summary).



(Syneva Economics, 2017)

Education

"Better educated individual's 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, 2018). Buncombe County has the highest level of educational attainment in Western North Carolina. As of 2016, 36% of adults over 25 year held a bachelor's degree or higher.



(2012-2016 American Community Survey 5-Year Estimates)

Despite the strong regional rate of adult attainment of college degrees, educational and proficiency indicators show the need to address the achievement gap by race. Community-based programs such as the United Way of Asheville are using the power of relationships to help foster student success. Since 2016, the Homework Diners have utilized a dynamic, comprehensive strategy that surrounds students and their families with a continuum of coordinated supports including: tutoring, opportunities to build parent-teacher relationships, a free and nutritious meal, connections to community resources and workforce readiness. All are open to any family with a K-12 student in the surrounding school district with an adult family member in attendance with the participating student (United Way of Buncombe County, 2019).

Education and Proficiency Indicators	Buncombe County Schools	Asheville City Schools
% 3rd Graders Grade Level Proficient on EOG Reading Test	59.7	67.9
% 3rd Graders Grade Level Proficient on EOG Math Test	65.8	68.4
% 8th Graders Grade Level Proficient on EOG Reading Test	57.7	61.4
% of All Students Grade Level Proficient on EOG Tests	61.7	65.2
% of AI/AN Students Grade Level Proficient on EOG Tests	55.8	70.0
% of Asian Students Grade Level Proficient on EOG Tests	85.5	81.8
% of Black Students Grade Level Proficient on EOG Tests	36.2	23.4
% of Hispanic Students Grade Level Proficient on EOG Tests	46.1	56.4
% of White Students Grade Level Proficient on EOG Tests	67.9	82.7
SAT Participation Rate	47%	63%
Average Total SAT Scores	1,114	1,115

(NC Department of Public Instruction, 2018)

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 1 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, 2018).

Crime Rate Index

The crime index is the sum of all violent and property crime. The index crime rate in Buncombe County was slighter higher than region, though lower than the comparable NC average in every year cited. The most frequently committed offenses included burglary and larceny.

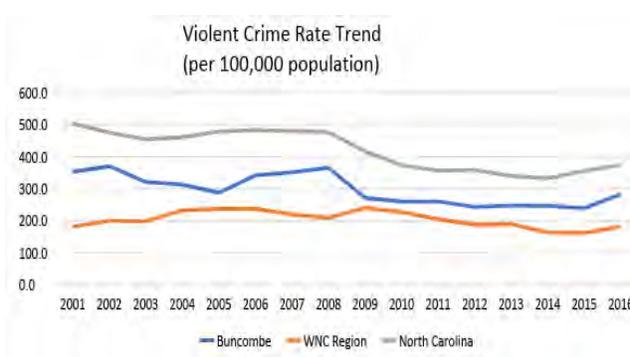
Crime Offenses

Buncombe County Index of Crime Offenses	2015	2016
Murder	11	14
Rape	51	59
Robbery	178	178
Aggravated Assault	359	467
Burglary	1,625	1,479
Larceny	4,770	4,613
Motor Vehicle Theft	392	420
Total	7,386	7,230

(North Carolina Department of Justice, 2018)

Violent Crime Rate Trend

Over the past decade, the number of calls in Buncombe County dealing with domestic violence increased from a low of 566 in 2007-2008 to a high of 3,013 in 2016-2017. The number of residents reporting domestic violence peaked at 1,760 in 2011-2012; with 1,675 in 2016-2017. The decrease in clients may be attributed to the opening of the Buncombe County Family Justice



Center (FJC), where anyone can access services from several partner agencies including: Helpmate, Our VOICE, Pisgah Legal Services, Mountain Child Advocacy Center, Mission Health, Asheville Police Department, Buncombe County Sheriff's Office, Buncombe County Health and Human Services and the District Attorney's Office.

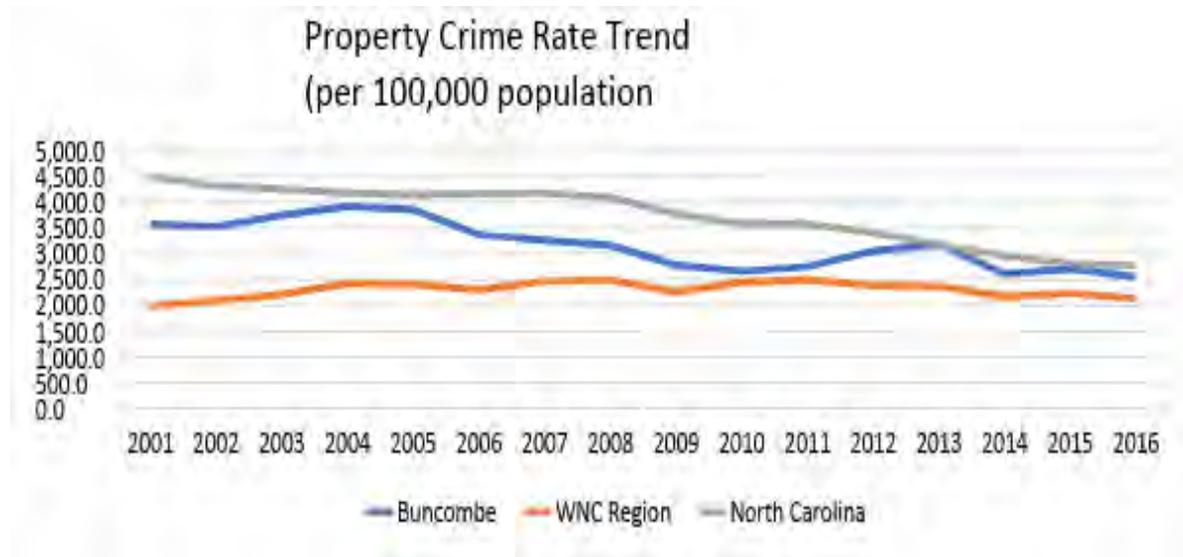
(North Carolina Department of Justice, 2018)

The Family Justice Center and partners convene eNOugh NC, a campaign committed to raising the public's awareness about the epidemic of intimate partner/domestic violence, contributing to prevention efforts in the county, across the state, and improving community response to survivors.

The domestic violence shelter serving Buncombe County was full 357 days in 2016-2017. In 2016-2017, 673 persons in Buncombe County were identified as victims of sexual assault. Locally, the most frequently reported specific type of sexual assault was adult rape (22%). Regionally, the most frequently reported type was adult survivor of child sexual assault (37%). Statewide, the most frequent reported type was child sexual offense (26%) (NC Dept. of Administration, Council for Women).

Property Crime Rate Trend

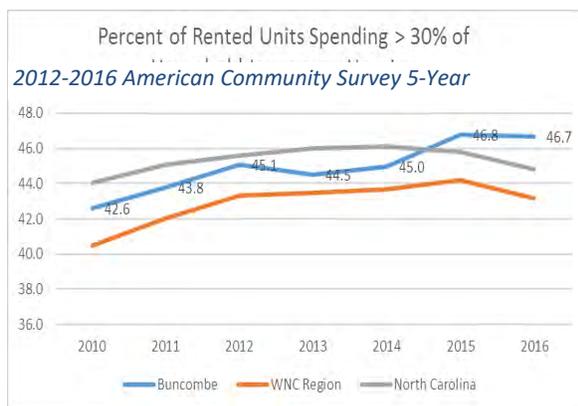
The property crime rate in Buncombe County was lower than the NC average but higher than the WNC average in every year cited except 2013, when the county rate exceeded both the WNC and NC rates.



(North Carolina Department of Justice, 2018)

Housing

“Where we live is at the very core of our daily lives. For most Americans, home represents a place of safety, security, and shelter, where families come together. Housing generally represents an American family’s greatest single expenditure, and, for homeowners, their most significant source of wealth. Given its importance, it is not surprising that factors related to housing have the potential to help—or harm—our health in major ways” (Robert Wood Johnson Foundation).

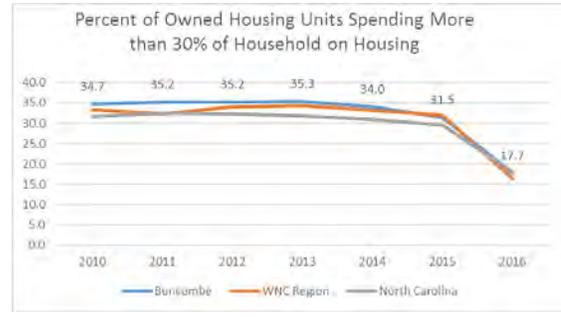


2012-2016 American Community Survey 5-year

from March 2015 through March 2016, making the Asheville Metro the most expensive renter’s market per capita in North Carolina.

2018 WNC Healthy Impact Community Health Survey One measure of economic burden in a community is the percent of housing units spending more than 30% of household income on housing. In 2010-2016, a higher proportion of Buncombe County renters, compared with a lower proportion of county mortgage holders, spent >30% of household income on housing than the average in WNC. Buncombe renters face a greater rate of rent burden than NC state averages. A 2016 report compiled by Bowen National Research demonstrated a 7.6% spike

Family Friendly Affordable Buncombe, a local coalition of key stakeholders, observes that “like many growing areas in the US, the increased costs of renting or buying a home have outpaced local wages .” Many households in Buncombe County have difficulty affording their homes: 47% of renters and 23% of homeowners are considered “cost burdened” - paying more than 30% of their income on housing.



2012-2016 American Community Survey 5-Year

The cost burden on renters as well as mortgage holders is also reflected by data from the 2-1-1 Counts Dashboard, where Buncombe ranks highest in the state in requests for housing and shelter by County.

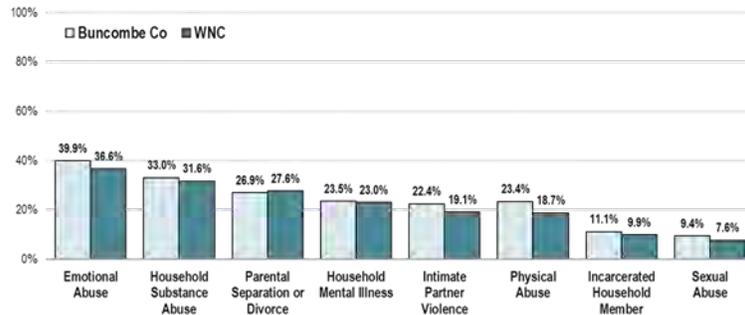
Family & Social Support

“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, 2018).

Research demonstrates a strong relationship between ACEs, substance use disorders, and behavioral problems. When children are exposed to chronic stressful events, their neurodevelopment can be disrupted. As a result, the child’s cognitive functioning or ability to cope with negative or disruptive emotions may be impaired. Over time, and often during adolescence, the child may adopt negative coping mechanisms, such as substance use or self-

Experienced Adverse Childhood Experiences (ACEs) Prior to Age 18 (2018)



2018 TOP 10: Highest rates of NC 2-1-1 Counts Requests for Low-cost housing by County

2018 WNC Healthy Impact Community Health Survey

Rank	County	Rank	County
1	Buncombe, NC	6	Transylvania, NC
2	Mecklenburg, NC	7	Cumberland, NC
3	Henderson, NC	8	Robeson, NC
4	Gaston, NC	9	Onslow, NC
5	Jones, NC	10	McDowell, NC

harm. Eventually, these unhealthy coping mechanisms can contribute to disease, disability, and social problems, as well as premature death.

When key informants were asked to Identify the resources and efforts contributing toward progress in addressing Adverse Child Experiences (ACEs), they responded with the following:

- *Awareness and Education:*
 - "Learning what it is [ACEs] and that it exists was huge for me. It helps me be in a better listening/empathetic posture."
 - "More awareness about this and the evidence supporting the need to address this in an upstream way."
- *Specific Efforts:*
 - "MAHEC is doing great work on this issue and bringing the annual conference to the area."
 - "The Family Justice Center"
- *Collaborative Efforts:*
 - "Greater use of ACEs screening for domestic violence and sexual trauma service providers to identify needs. "
 - "Focus on resiliency and protective factors."

When asked to identify "what factors getting in the way of addressing Adverse Child Experiences (ACEs)," online key informants responded with the following:

- *Awareness/Education:* We need a stronger focus on prevention of ACEs, and more information about how to ameliorate impacts of ACEs for adults that have high ACE scores."
- *Access to Care/Services:* "Resources to offer the training more widely" and "Breaking the Cycle of Trauma"



CHAPTER 5

HEALTH DATA FINDINGS SUMMARY

Mortality

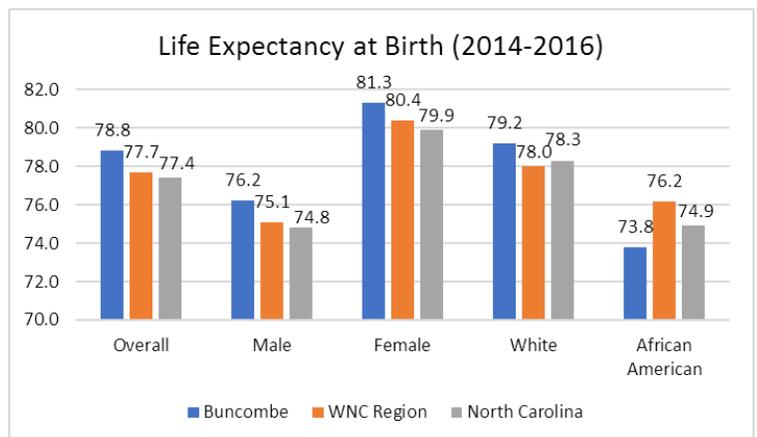
Residents of Buncombe County can expect to live longer than the WNC regional average and the state. The overall Life expectancy for residents is 78.8 years.

Life expectancy at Birth for Person Born in 2014-2016)

The table below depicts the leading causes of death in Buncombe County. According to the data, the people in Buncombe County have a lower mortality rate than the WNC regional average for twelve of the fifteen leading causes of death. Compared to statewide data, Buncombe County is lower in eleven of the fifteen leading causes of death. However, it is important to note that the mortality rates are higher than the state for Chronic Liver Disease and Cirrhosis, Chronic Lower Respiratory Diseases, and Suicide.

Compared to the region, Buncombe County has a higher rate of mortality of Acquired Immune Deficiency Syndrome (AIDS), this likely due to the greater concentration of AIDS/HIV clinical and social supports available in Buncombe

lacking elsewhere in WNC. Also of concern are the rates of Chronic Liver Disease and Suicide, both which continue to increase, and are higher than the region as well as the state.



Males in Buncombe County generally fare poorly compared to females in terms of mortality. Though this is not unique to Buncombe County, as this a long-standing trend that is present in the region and state. Total Cancer and Diseases of the Heart are the only two stable racially-stratified rates in Buncombe County; in both instances we see a mortality disparity with blacks experiencing worse outcomes than whites.

Leading Causes of Death in Buncombe County – 2012-2016

Cause of Death	Buncombe		Comparison to WNC Regional Average Rate		Comparison to NC Rate	
	# Deaths	Death Rate	Rate	% Difference	Rate	% Difference
Acquired Immune Deficiency Syndrome	20	1.4	0.9	64.7%	2.2	-36.4%
All Other Unintentional Injuries	555	36.8	45.8	-19.7%	31.9	15.4%
Alzheimer's disease	558	30.2	31.7	-4.6%	31.9	-5.3%
Cancer	2,679	155.8	165.5	-5.8%	166.5	-6.4%
Cerebrovascular Disease	744	41.7	40.2	3.8%	43.1	-3.2%
Chronic Liver Disease and Cirrhosis	179	11.1	13.6	-18.4%	10.3	7.8%
Chronic Lower Respiratory Diseases	813	47.2	54.3	-13.0%	45.6	3.5%
Diabetes Mellitus	312	18.4	22.4	-17.9%	23.0	-20.0%
Diseases of Heart	2,490	141.3	164.4	-14.1%	161.3	-12.4%
Homicide	53	4.2	4.1	2.8%	6.2	-32.3%
Nephritis, Nephrotic Syndrome, and Nephrosis	229	12.7	14.6	-12.9%	16.4	-22.6%
Pneumonia and Influenza	294	16.4	17.4	-5.9%	17.8	-7.9%
Septicemia	132	7.8	9.0	-13.1%	13.1	-40.5%
Suicide	227	17.0	19.0	-10.4%	12.9	31.8%
Unintentional Motor Vehicle Injuries	164	12.6	15.5	-18.9%	14.1	-10.6%
All Causes (some not listed)	12,557	737.1	800.7	-7.9%	781.8	-5.7%

Health Status & Behaviors

Overall Health Outcomes

State: North Carolina

For over nearly three decades, America's Health Rankings™, a project of the United Health Foundation, has tracked the health of the nation and provides a comprehensive perspective on how the nation – and each state – measures up. According to the 2018 America's Health Rankings™, the state of North Carolina ranked 33rd overall in country (a slight improvement from 35th in 2015). Notable from the rankings:

Strengths

- 14th Lowest prevalence of excessive drinking
- 22nd Highest percentage of high school graduation
- 10th Highest HPV immunization coverage among adolescent males

Challenges

- 5th Highest incidence of chlamydia
- 8th Highest percentage of uninsured population

- **7th Highest prevalence of low birthweight**

County: Buncombe

The County Health Rankings, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, are a yearly reporting on how healthy a community is using more than 30 measures – “providing a starting point for action on improving health for all (County Health Rankings).” According to the 2018 rankings, Buncombe is #14 among the 100 NC counties for overall Health Outcomes; this measure includes premature death rates as well as the number of days residents reported experiencing poor health.

Buncombe County also ranked:

Rank (of 100)

- 3rd for Clinical Care
- 23rd for Length of Life
- 10th for Quality of Life
- 8th for Social and Economic Factors
- 5th for Health Behaviors

Maternal & Infant Health

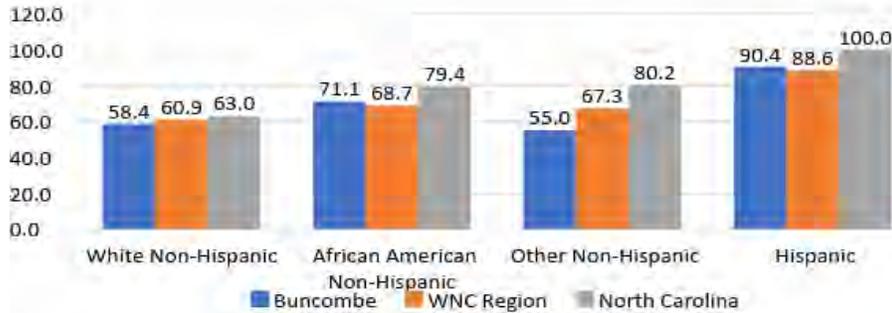
The total pregnancy rate in Buncombe, WNC, and NC has fallen overall since 2006 but appears to have stabilized recently. The teen pregnancy rates in Buncombe County, WNC, and NC have fallen significantly since 2006. Among Buncombe County women age 15-44, the highest pregnancy rates occur among Hispanics. Among teens age 15-19, the highest pregnancy rates occur most frequently among African Americans (North Carolina State Center for Health Statistics, 2018 County Health Data Book).

Generally, health factors that affect pregnancy outcomes are more favorable in Buncombe County when compared to WNC or NC,

Mothers in Buncombe have:

- Lower rates of tobacco use during pregnancy (8%)
- Lower prevalence of overweight and obesity among pregnant women (20.3%)
- Pregnancies receiving prenatal care in the first trimester (88.1%)

2016 Pregnancy Rate by Race (per 1,000 Women age15-44)



Breastfeeding

Considered the clinical “gold standard in infant nutrition,” breastfeeding provides unmatched health benefits for babies and mothers. Infants who are breastfed have reduced risks of asthma, obesity, Type 2 diabetes, and Sudden Infant Death Syndrome (SIDS).

Infant Mortality

Infant mortality is an accepted indicator of a community’s general wellbeing. Between 2012 and 2016, there were 84 infant deaths in Buncombe County for an infant mortality rate of 6.4 deaths per 1000 live births. The overall infant mortality rate in Buncombe fell after 2002-2006 before stabilizing and then rising again in 2012-2016. Infant mortality rates for African-American babies are more than twice as high as rates for White and Hispanic babies. This trend is consistent across WNC and NC.

Chronic Disease

Chronic diseases including cancer, diabetes, diseases of the heart and lower respiratory are among the leading causes of death in Buncombe County. There are considerable racial disparities in mortality for kidney disease, lung disease, heart disease, and breast cancer.

Cancer is the leading cause of disease death in Buncombe County. 4.5% of Community Survey Participants reported having heart disease. This is lower than both the WNC region (8%) and the state average (8%).

Injury & Violence

From 2014 through 2016, 172 Buncombe County Residents died because of an unintentional fall. Of these, 163, or 94%, occurred in the population age 65 and older, and 51% occurred in the population age 85 and older.

The Buncombe rate of mortality from unintentional poisoning by medication and drug overdose is lower than both the region and the state average. Overall, the WNC region is experiencing a mortality rate higher than the state.

County	Unintentional Poisoning Deaths for Select Locations and Percent that are Medication/Drug Overdoses (2009-2013)*			Rate of Unintentional Medication/Drug Overdose Deaths (2009-2013)**	
	#	Rate per 100,000 NC Residents	% that are med/drug overdoses	#	Rate per 100,000 NC Residents
Buncombe	103	8.6	87	90.0	7
WNC (Regional) Total	560	14.8	90	506	13
State Total	5,309	11.0	91	4826	10

(NC Vital Statistics, 2018)

In 2016, Buncombe County experienced 5 homicides due to domestic violence. Local data showed that the domestic violence hotline received 2,997 calls 2016-2016, and 3,013 calls 2016-2017. There were 1,675 victims reporting domestic violence in 2016-2017, and the shelter was full for 357 days during that year. The increase in shelter stays, number of victims, reporting, and calls may be attributed to the 2016 opening of the Family Justice Center – a key resource for safety, legal support and resilience for survivors who are now more aware of the where they can turn for help and support.

Mental Health & Substance Abuse

In Buncombe County in 2018, 18.9% of residents reported having more than 7 days of poor mental health in the past month compared to 11.5% in 2015. In 2018, 74% of residents surveyed reported that they “always” or “usually” get needed social/emotional support compared to 77.5% in (2018 WNC Healthy Impact PRC Community Health Survey Results).

Standing as a key behavioral health stakeholder in the region, VAYA Health is a public managed care organization (MCO) that oversees Medicaid, federal, state and local funding for services and supports related to mental health, substance use, and intellectual/ developmental disability (IDD) needs. VAYA works with providers to employ safer opioid prescribing practices, advocate for medication-assisted treatment (MAT), train certified peer-to-peer specialists, and support distribution of Narcan© - which in 2017 proved successful in reversing over 1,000 opioid overdoses.

The organization has served as a key contributor in the design of a regional plan for clean syringe plan, following the NC legalization of needle exchange centers in 2016. Seen as effective public health intervention, syringe exchanges have the potential to connect individuals to much needed treatment and social services.

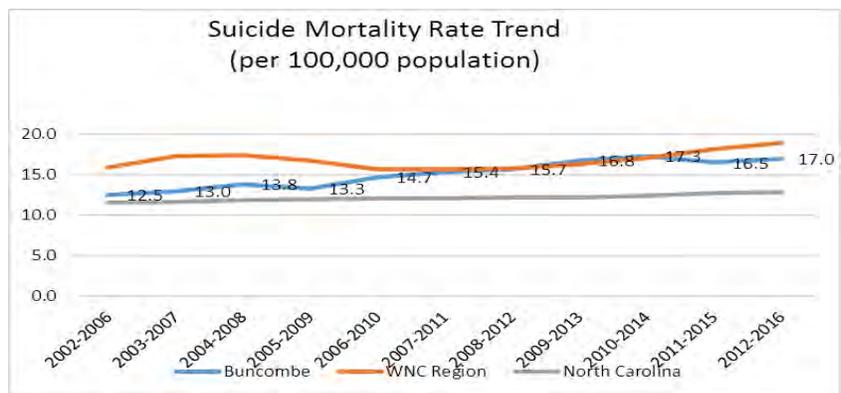
The following chart outlines the rank order of mental health conditions identified by key informants as critical to address:

Rank	Health Issue	Identified as Critical to Address
1	Substance Use	29
2	General Mental Health	23
3	Depression/Anxiety/Stress	23
4	Dementia/Alzheimer's Disease	8
5	Suicide	5

2018 WNC Healthy Impact Community Health Survey

Suicide

Buncombe County's age-adjusted suicide rate was 17 per 100,000 population during the 2012-2016 period. The Buncombe rate continues to trend up, yet slightly lower than the WNC and higher than NC rates (NC State Center for Health Statistics; WNC Healthy Impact, 2018).



(NC Vital Statistics, 2018)

Oral Health

When asked, 59.3% of the Community Survey participants reported having visited a dentist or dental clinic in the past year. This is a marked decline from 63.8% in 2015.

Only 59% of eligible children ages 1-5 years enrolled in Medicaid actually received dental services in the past year. Buncombe County's utilization was higher than both the region and NC (NC State Center for Health Statistics; WNC Healthy Impact, 2015).

Clinical Care & Access

Buncombe country is well-resourced in terms of clinical providers with: two major hospital systems, a veteran’s hospital, a children’s hospital, numerous federally qualified healthcare centers, as well as hospice and palliative care facilities. According to the County Health Rankings, Buncombe County has a higher clinical provider to resident ratio than the state and country, ranking 3rd in the state.

County Health Rankings 2018	Buncombe Value	NC Value	Top US Performers	Buncombe Rank
ACCESS TO CLINICAL CARE				3
Uninsured	13%	6%	13%	
Primary care physicians	710:1	1,030:1	1,420:1	
Dentists	1,370:1	1,280:1	1,830:1	
Mental health providers	190:1	330:1	460:1	
Preventable hospital stays	34	35	49	
Diabetes monitoring	90%	91%	89%	
Mammography screening	68%	71%	68%	

County Health Rankings, 2018

Health Insurance

While strong in access, Buncombe has a higher percentage of uninsured residents than the state average. The Affordable Care Act was passed in 2010, but North Carolina did not expand Medicaid, leaving many in the state in what is often referred to as the “coverage gap.”

County	Under 19 Years - 2016			40 to 64 years - 2016		
	Total	Uninsured		Total	Uninsured	
		#	%		#	%
Buncombe	50,028	2,276	4.5	84,763	14.2	
WNC Region	154,554	9,660	490	16,463	2,161	14.2
State of NC	2,376,148	110,577	4.7	3,305,117	405,371	12.3

County Health Rankings, 2018

Key Informant Survey on Self-Reported Access to Care

When asked “what are the most important characteristics of a healthy community,” key informants rated following a safe environment, then Access to Care/Services as most important

Telephone Survey Data on Access to Care:

From the telephone survey of 304 residents in Buncombe County:

- 17% were unable to get the needed care at some point in the past year, compared to 12.4% in WNC
- 79.2% stated they have a specific source of ongoing medical care, compared to 89.9% in WNC
- 70.4% have visited a physician for a checkup in the past year, compared with 73.3% in WNC

At Risk Populations

According to County Health Rankings, Buncombe County is 10th in the state of Quality of life.

Despite holding rank in this measure, segments of the population suffer poor health status:

- The Aging
- People of Color
- Those living in Poverty
- Adverse Childhood Experience



CHAPTER 6

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. Clean air and water support healthy brain and body function, growth, and development. Air pollutants such as fine particulate matter, ground-level ozone, sulfur oxides, nitrogen oxides, carbon monoxide, and greenhouse gases can harm our health and the environment.

Excess nitrogen and phosphorus run-off, medicines, chemicals, lead, and pesticides in water also pose threats to well-being and quality of life" (County Health Rankings, 2018). The County Health Rankings defines physical environment as another measure of the health factors that impact our health. Buncombe County ranks 49th out of 100 counties in this section, making this section our lowest ranking. This measure is worsening for the county despite the advocacy efforts of local conservation groups on this issue.

Air Quality

Air quality was measured for 365 days in 2017 as part of the Air Quality Index (AQI). The AQI showed Buncombe County having 328 days with "good" air quality and 29 days with "moderate" air quality. Ozone was present in 179 of the 365 monitored days. Buncombe County's results were slightly better than the rest of Western North Carolina. (US Environmental Protection Agency, 2014) (WNC Healthy Impact, 2015). Ozone is generated from components of automobile exhaust as well as the coal-powered energy plants, and our unique "valley" location contributes to air inversions that contribute to the impact of ozone.

Our biodiversity contributes to unusually high pollen counts. All these are particularly problematic for those with respiratory or other chronic health conditions. While Buncombe air quality has improved since the passage of the Clean Smokestacks Act in 2002 and reduction of

air emissions from the Tennessee Valley Authority, increasing automobile emissions and warming temperatures bare watching. One contributor to air quality concerns, the Duke coal-fired energy production facilitate will go offline and be converted to a natural gas facility soon.

Western North Carolina has the highest radon levels in the state. The arithmetic mean indoor radon level for the 16 counties of the WNC region is 4.1 pCi/L, 3.2 times the average national indoor radon level of 1.3 pCi/L. In Buncombe County, the current average indoor radon level is 3.5 pCi/L, 18% lower than the regional mean, but 2.7 times the average national level.

Water Quality

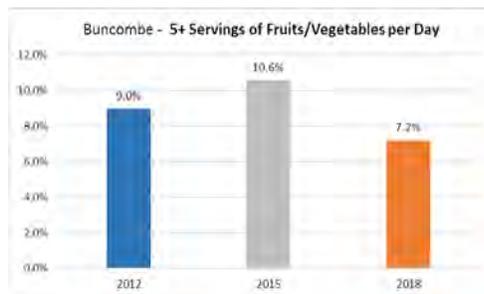
The County Health Rankings monitor drinking water violations and estimate the percent of the population getting drinking water from public water systems with at least one health-based violation. Buncombe County’s system had no violations. Buncombe County Community Water Systems include municipalities, subdivisions, and mobile home parks. Community water systems in Buncombe County serve an estimated 156,579 people, or 2018 Buncombe County Community Health Assessment 62% of the 2010 county population. The fraction of the Buncombe County population served by a community water system is 13.7% higher than the average for the WNC region and NC as a whole (US Environmental Protection Agency, 2018).

Access to Healthy Food & Places

“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 (Food and Agriculture Organization, 2006).



The environments where we live, learn, work, and play affect our access to healthy food and opportunities for physical activity which, along with genetic factors and personal choices, shape our health and our risk of being overweight and obese. As of 2013, 29 million Americans lived in a food desert, without access to affordable, healthy food. Those with lower education levels, already at-risk for poor health outcomes, frequently live in food deserts” (County Health Rankings, 2018).



USDA Food Atlas, 2018

Access and Proximity to Grocery Store

County	Grocery Stores <i>Table 1</i>				Households, no car & low access to store (2010)		Households, no car & low access to store (2015)	
	2009		2014		#	%	#	%
	#	# per 1,000 Population	#	# per 1,000 Population				
Buncombe	49	0.21	56	0.22	2,339	2.33	2,320	2.31

USDA Food Atlas, 2018

Access to Farmers' Markets

County	Farmers' Markets					
	2009		2016		% Change (2009 to 2016)	
	# Markets	# Markets per 1,000 Population	# Markets	# Markets per 1,000 Population	Farmers' markets	Farmers' markets/1,000 pop
Buncombe <i>USDA Food Atlas, 2018</i>	15	0.06	17	0.07	13.3	2.43



CHAPTER 7

HEALTH RESOURCES

Health Resources

WNC Healthy Impact provided 2-1-1 datasets that the Buncombe CHA Data Team reviewed to assure an updated resource list was accessible via phone and web 24/7. The key informant survey also asked about available health resources to better understand what services were the most difficult to access.

Findings

In the PRC Key Informant Survey, participants were asked “what are the most important characteristics of a healthy community?” They responded with following top three answers: Safe environment (28.8%), Access to Care/services (25%) and Economic and Social Justice for All (21.4%). All of these services were well represented in the 2-1-1 Database and the information was accurate.

Resource Gaps

From the PRC Key Informant Survey, community leaders identified affordable housing as the number one issue that must be addressed to improve the quality of life in Buncombe County. This issue also ranked as #1 in the prior 2015 Community Health Assessment. The chart below presents the most requested 2-1-1 services in Buncombe County between January 1 and December 31st, 2018; see Appendix F for additional details on 2-1-1 service requests.

2-1-1 TOP REQUEST CATEGORIES – BUNCOMBE COUNTY 2018

Housing & Shelter	15.3%
Food	6.2%
Utilities	4.8%
Healthcare	10.7%
Mental Health & Addictions	5.6%
Employment & Income	5.3%
Clothing & Household	2.3%
Child Care & Parenting	<1%
Government & Legal	12.3%
Transportation Assistance	2.9%
Education	1.0%
Disaster	1.0%
Other (Community Development, ADA Services, Advocacy)	32.0%
Total for top requests	100%



CHAPTER 8

IDENTIFICATION OF HEALTH PRIORITIES

Health Priority Identification

Process

Every three years we pause our work to improve community health so that we may step back and take a fresh look at all of the current data from our county that reflects the health of our community. We then use this information to help us assess how well we're doing, and what actions we need to take moving forward.

Beginning in April 2018, our CHIP Data team spent time understanding the data and uncovering what issues were affecting the most people in our community. We also interviewed community leaders to find out what they're most concerned about. To identify the significant health issues in our community, our key partners (see a full list in the Executive Summary) reviewed data and discussed the facts and circumstances of our community.

We used the following criteria to identify significant health issues:

- Data reflects a concerning trend related to size or severity
- Significant disparities exist
- Issue surfaced as a high community concern
- County data deviates notably from the region, state or benchmark

Once our team made sense of the data, we presented key health issues to a wide range of partners and community members. The participants used the information we presented to score each issue, and then vote for their top areas of concern. Some of the factors they considered were how much the issue impacts our community, how relevant the issue is to multiple health concerns, and how feasible it is for our community to make progress on this issue.

This process, often called health issue prioritization, is an opportunity for various community stakeholders, such as Mission, Mountain Area Health Education Center (MAHEC), and members of the Buncombe County Community Health Improvement Advisory Council to agree on the health issues and results we can all contribute to, which increases the likelihood that we'll make a difference in the lives of people in our community.

Identified Issues

During the above process, Buncombe County identified the following health issues or indicators:

- Birth Outcomes & Infant Mortality
- Childhood Obesity
- Asthma & COPD
- Total Cancer Mortality
- Heart Disease Mortality
- Diabetes Mortality by Race
- Alzheimer's & Dementia
- General Mental Health & Suicide
- Substance Use & Chronic Pain

Priority Health Issue Identification

Process

During our group process, the following criteria were applied to the issues listed above to select priority health issues of focus for our community over the next three years:

- **Criteria 1 – Relevant** – How important is this issue? (Urgency to solve problem; community concern; Focus on equity; 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)

The team also assessed if there was data missing and worked to secure additional local data to gather more information about health concerns. The Data Team worked to collect local data and needs assessments that other local organizations have done to understand what information others already had collected. Data Team met monthly with the CHIP Advisory & Mission Leadership to share information about the process and get feedback.

Participants used a modified Hanlon method to rate the priorities using the criteria listed above. Then dot-voting were used to narrow to the top 10 priority health issues.

Identified Priorities

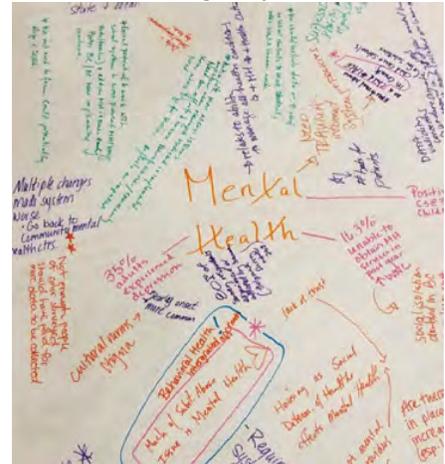
The following priority health issues are the final community-wide priorities for our county that were selected through the process described above:

- **Birth Outcomes & Infant Mortality:** Significant disparities are present in birth outcomes, infant mortality and preconception health for Black and Latinx residents
- **General Mental Health:** General mental health, as well as Depression/Anxiety/Stress were top concerns identified by community leaders

PRIORITY ISSUE #1: Mental Health

Mental Health in general, as well as Depression/Anxiety/Stress and Suicide were key issues of concern identified by community leaders in the Online Key Informant Survey. "Mental health is integral to overall health and well-being and should be treated with the same urgency as physical health" (US Department of Health & Human Services). Numerous studies show how mental illness can influence the onset, progression, and outcome of other illnesses and often correlates with health risk behaviors such as substance abuse, tobacco use, and physical inactivity.

Depression has emerged as a risk factor for such chronic illnesses as hypertension, cardiovascular disease, and diabetes and can adversely affect the course and management of these conditions. The challenges for public health are to identify risk factors, increase awareness about mental disorders and the effectiveness of treatment, remove the stigma associated with receiving treatment, eliminate health disparities, and improve access to mental health services for all persons, particularly among populations that are disproportionately affected by Adverse Childhood Experiences (ACES).



Studies show that people with high ACE scores (4+) have increased risk for most poor health outcomes, compared to individuals reporting no ACEs. Associations were:

- Weak or modest for physical inactivity, overweight or obesity, and diabetes;
- Moderate for smoking, heavy alcohol use, poor self-rated health, cancer, heart disease, and respiratory disease;
- Strong for sexual risk taking, mental ill health, and problematic alcohol use; and
- Strongest for problematic drug use and interpersonal and self-directed violence (.

What Change Do We Want to See?

Mental Health Result: Everyone has access to the resources, skills and environments for resilience and well-being.

What Do the Numbers Say?

Research shows that for every additional ACE score the rate of the following adverse outcomes are more:

- **Substance Abuse:** Prescription drugs used increased by 62%, according to a 2017 study of adverse childhood experiences and adolescent prescription drug use (SAHMSA). Each ACE increased the likelihood of early initiation into illicit drug use by 2- to 4-fold, according to a 2003 study on childhood abuse, neglect, and household dysfunction and the risk of illicit drug use.

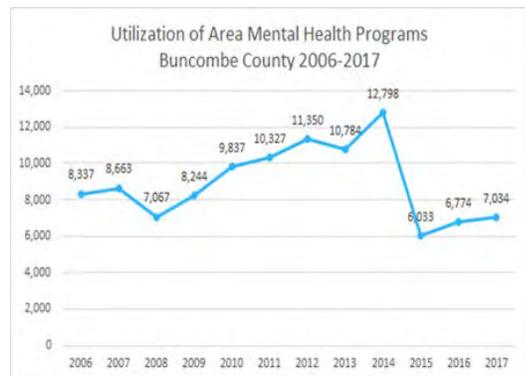
- **Suicide attempt:** ACEs in any category increased the risk of attempted suicide by 2- to 5-fold throughout a person’s lifespan, according to a 2001 study. According to a recent 2017 article, individuals who reported 6 or more ACEs had 24.36 times increased odds of attempting suicide (Lanset, 2017).
- **Depression:** Exposure to ACEs may increase the risk of depression

Data on mental health, risk behaviors, and comorbidity of mental illness and chronic disease are collected through various national surveillance initiatives. Primary data from Buncombe surveys reveal the following:

- **Adverse Childhood Experiences**
 - 39.9% of adults experienced Emotional Abuse during Childhood
 - 23.5% of adults experienced Household Mental Illness during Childhood - also considered an ACE
- **Depression/Anxiety**
 - 35.2% of adults reported they have experienced symptoms of Chronic Depression
 - 18.9% had >7 Days of Poor Mental Health in the Past Month
- **Access to clinical care and social support**
 - 16.3% were Unable to Obtain Needed Mental Health Services in the Past Year nearly double from 8.3% in 2015
 - 7,034 individuals were served by area mental health programs in 2017
 - Total Capacity of licensed mental health facilities in Buncombe County - 134 facilities total

Health Indicators

- Alcohol dependency
- Mental health related alcohol
- Mental health related drug deaths
- Percentage of Teens and adults diagnosed with Depression or Anxiety
- Psychiatric inpatient discharges
- Suicides



deaths

NC Office of State Budget and Management, 2018

What Did the Community Say?

Key Informant Survey Participates responded:

- **What’s helping?**
 - “One stop center at C3@356 with collaborative efforts”
 - “Good school counselors and social workers as well as school based mental health continuum of services”
 - “Primary care doctors are well versed in these common issues”
 -
- **What’s hurting?**

- "Lack of treatment and long-term care resources at large and safety net services"
- "Lack of resources, which is a statewide issue. Often when people can access care, the quantity/type of treatment available is insufficient."
- "Affordability for everyone, including those without insurance and those who have private insurance but cannot afford the copay."

Listening Session Contributors

▪ **What's helping?**

- " I think community wise, specifically to us, there are lots of places even for free music, or free art, you know if you wanted to get out to see things and be stimulated by different things, you can"
- "Being in the Foster Grandparent Program, it helps me to feel that I'm important again"
- One thing that helps is the coordination between agencies, Salvation Army, churches. They have pretty good communication, they help each other as much as they can.

▪ **What's hurting?**

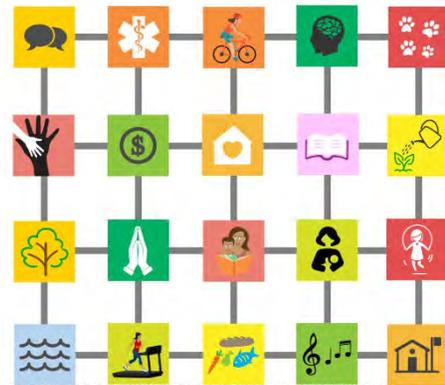
- "...Zero mental health therapists that will work with children birth to three in our network, zero."
- We also don't have enough black mental health providers. They don't understand there's a thing called racial trauma, and the black experience.
- "Lack of access to healthcare and mental healthcare to the uninsured."

What Else Do We Know?

Resiliency happens when communities have adequate public structures in place to assure we have a safe, stable and nurturing community. These are the foundations or building blocks all communities need. In addition, everyone needs community resources to support their wellbeing.

How our resources work together can be thought of as a grid. If this resource grid is patchy and not available to everyone equally, we have fewer opportunities to thrive.

By adding resources and supports, we are increasing the positive (or protective) factors and helping to reduce the negative stressors. Buncombe County has identified those populations with high ACE scores as priority populations to target.



What is Already Happening?

- **C3@356 Comprehensive Care Center Peer-to-Peer Living Rooms:** RHA Certified Peer Support Specialists (CPSS) support the Living Room's operation and are available to talk with individuals and to lead classes for group support and information sharing. Participants practice respect for each person's journey, participate in activities and learn more about community resources.

- **Caiyalynn Burrell Child Crisis Center** – The Caiyalynn Burrell Child Crisis Center is a planned 16-bed facility-based crisis and detox program for children and adolescents in Asheville, North Carolina. It provides an alternative to hospitalization for eligible children experiencing a mental health, substance abuse or intellectual or developmental disability (IDD) crisis for ages 6-17.
- **Resources for Resilience™ (RFR)** - This newly formed non-profit formed has a mission to offer trauma-informed and resiliency-focused classes and trainings. RFR was created in response to the public health crisis of Adverse Childhood Experiences (ACEs) and seeks to address the ongoing stress and trauma that many face every day.
- **Buncombe County Schools “Compassionate Schools” Initiative:** Using the model, schools create compassionate classrooms and foster compassionate attitudes of their school staff. The goal is to keep students engaged and learning by creating and supporting a healthy climate and culture within the school where all students can learn.
- **Sobriety Treatment and Recovery Team (START)** - The Buncombe County START program is based on the START Kentucky Model and considered a Promising Practice. START is a child welfare program for families with co-occurring substance use and child maltreatment delivered in an integrated manner with local addiction treatment services.

Service & Resource Gaps:

In 2018, North Carolina Department of Health and Human Services (DHHS) examined how behavioral health programs and delivery systems can be improved to better meet the needs of North Carolina’s most vulnerable citizens. Numerous public listening sessions and stakeholder meetings were held across the state that provided invaluable expertise. The finding from this State initiative are reflected locally in Buncombe as the data demonstrates, from our local listening sessions, Community Survey data and 2-1-1 service request data.

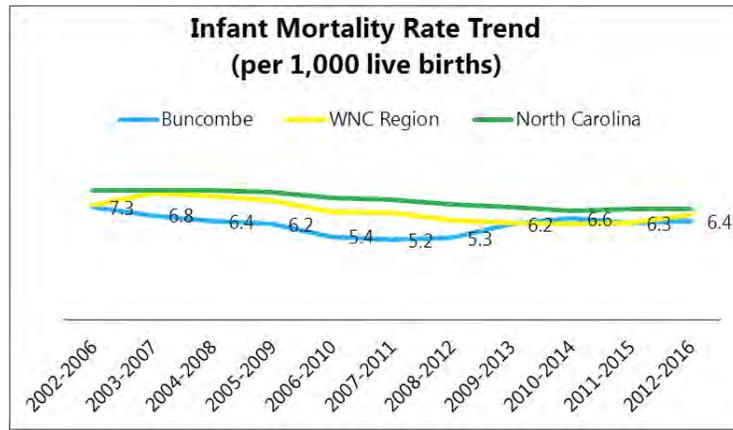
- There is considerable unmet need for uninsured individuals and those living in rural areas
- The continuum of services currently available in NC is inconsistently available, with a patchy service network
- Most of the funding is spent on inpatient, institutional, residential and facility-based treatment as opposed to community-based treatment focusing on peer programs and resilience.

PRIORITY ISSUE #2: Birth Outcomes & Infant Mortality

Infant and Child Health as well as Family Planning were issues of key concern among community leaders in the Online Key Informant Survey; Secondary data revealed significant disparities present in birth outcomes, infant mortality, and preconception

health for African American and Latinx residents. Infant mortality is most often caused by babies who are born too early (prematurity) and/or at a low birth weight.

Most often, babies born early have a low birth weight simply because they have not had adequate time to develop. The primary risk factors that cause or influence prematurity and birth weight relate to the health of the pregnant mother. These factors will not necessarily cause prematurity and low birth weights, but they significantly increase the risk of having these complications in pregnancy, thus increasing the risk of infant mortality.



(North Carolina State Center for Health Statistics, 2018)

The Buncombe 2015 Community Health Assessment identified infant mortality as a priority to address and since we have seen little change. While in the past in the overall trend and a racial disparity remains of worse outcomes for African-American birth and the maternal health. Where an opportunity is emerging is the growth interest in Social Determinants of Health focused interventions in addition to preconception and prenatal care that we know are key to supporting healthy women with healthy pregnancies.

Upstream policy and systems interventions can have a positive impact towards our desired result. By putting also social factors front and center, we will build the necessary protective factors against poverty, unemployment, and low education levels, which affect mothers and increase the risk of infant mortality. In addition, we are able to mitigate risks impacted by race and ethnicity biases that inform the disparities.

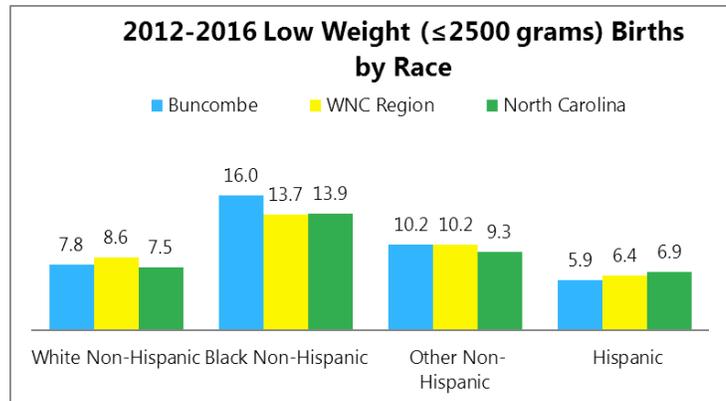
What Do the Numbers Say?

Health Indicators

- 6.4 infant deaths/1000 live births (NC State Center for Health Statistics, 2016)

- Preterm Births:** 20% overall
 - Preterm Birth Disparity 1.87 > Black (18%) and White (9.6%)

- Low Birth Weight:** 8.3% overall (2012-2016)
 - Low Birth Weight Disparity 2.0 > Black (16%) and White (7.9%)



(North Carolina State Center for Health Statistics, 2018)

- Infant Mortality:** 5.8 per 1,000 (2016)
 - With a rate of 4.4 for White births
 - Disparity 2.29 > Black (10.1)
 - Disparity 3.2 > Latinx (12.9)
- Teen Pregnancy:** 23.9 per 1,000 women 15-19 (2016)
 - Disparity >2.02 Black (41.1) White (20.3)

What Did the Community Say?

Key Informant Survey Participates responded:

- What's Helping?**
 - "Family-nurse partnerships, community-based parenting programs, mentoring and support for single and low-income mothers"
 - "Increased awareness of the disparities related to the mortality rate of our infants"
 - "Movement to increase awareness and need for services and supports"
 - "Planned Parenthood and the Health Department do a great job. More awareness is need to promote birth control and safe sex."
- What's hurting?**
 - "Inadequate childcare, ill-equipped parents, poverty, inadequate housing, more safety-net programs, unemployment"
 - "Generational trauma"
 - "Failure to expand Medicaid"
 - "Abstinence-only education in schools"

What Else Do We Know?

- The number of teen pregnancies that end in abortion has been steadily dropping since 2006 and Buncombe's rate is consistent with the region and state (6.1/1,000 women 15-19) (NC SCHS, 2018)

- In 8% of births the mother had gestational diabetes. In a large percentage of births, mothers were overweight (20%) or obese (17%). Black mothers were twice as likely to be obese, although not overweight. (NC SCHS, 2018)
- There was no Black /White disparity in the percent of women (87.9%) receiving care in their first trimester. Latinas were even more likely (91.6%) to receive care. (NC SCHS, 2018)

What is Already Happening?

- **Nurse-Family Partnership (NFP)**, established in Buncombe County in October 2009, has served over 500 families. NFP is an evidence-based community health program that helps transform the lives of vulnerable mothers who are pregnant with their first child. Each mother served by NFP is partnered with a registered nurse early in her pregnancy and receives ongoing nurse home visits that continue through her child's second birthday.
- **MAHEC – Centering Pregnancy** is an evidence-based model of group prenatal care recommended by the American College of Obstetricians and Gynecologists. It is based on studies that show group prenatal care can improve birth outcomes, patient education, social support, and patient satisfaction. Centering Pregnancy reduces risks for preterm delivery, low birth weight, and cesarean section. The group approach gives families more time with dedicated providers to explore healthy pregnancy and parenting information in a supportive environment with families at similar stages in their pregnancy journey
- **MotherLove** is a YWCA of Asheville program that aims to help pregnant and parenting teens stay in school and graduate, access higher education and vocational training, develop the skills and knowledge needed to become strong parents, and delay another teen pregnancy. Services and resources include: One-on-One Support for participants; case management and academic goal setting; home visits to help participants provide healthy, nurturing homes for their children; at "Lunch Bunch" gatherings held at eight area high schools program participants are provided a healthy lunch and receive information about parenting, healthy relationships, and get connected to community resources.
- **Medical-Legal Partnership with Pisgah Legal Services and MAHEC** - An attorney on a health care team helps address patients' social determinants of health. Through a medical-legal partnership, Pisgah Legal Services provides an attorney embedded within the Mountain Area Health Education Center clinical practices. The attorney impacts the Triple Aim of reducing costs by improving health, the patient experience, and conditions that directly impact health.
- **Community agencies partnering to address this issue include::**
 - Appalachian Mountain Community Health Centers
 - Asheville Buncombe Institute for Parity Achievement, (ABIPA)
 - Buncombe County Health and Human Services – WIC
 - Buncombe County Partnership for Children
 - Buncombe County Prenatal Safety Net
 - Child Protection/Fatality Prevention Team,
 - Children First/Communities in Schools of Buncombe County

- Community Care of Western North Carolina
- Family Nurse Family Partnership
- MAHEC
- Mission Health
- Mothering Asheville
- Pisgah Legal Service
- Sistas Caring 4 Sistas
- YWCA of Asheville
- Zion Community Development - Project NAF

What Change Do We Want to See?

- **Result: 2. All babies have a healthy start with the opportunity to reach their full potential**



CHAPTER 9

NEXT STEPS

Collaborative Planning

Collaborative planning with hospitals and other community partners will result 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.

The next step for the Buncombe County Community Health Improvement Process is to identify work teams to focus on the results identified:

- Everyone has access to resources, skills and supportive environments for resilience and well-being.
- All babies have a healthy start with the opportunity to reach their full potential.

The next step is to have “Whole Distance Exercise” conversations with community experts around the two results outlined to get their input on what we want to see and how we get there.

Sharing Findings

Buncombe County is embracing a results-focus that seeks to identify the condition of well-being for children, adults, families and/ or communities we hope to improve. By first focusing on population accountability, we determine what target (population) we will impact, what quality of life is desired (result) and if we are doing better (indicator). Then we develop an explanation of the data, or the “story behind the curve” and identify our partners who have a role to play in “turning the curve.” This group identifies “what works,” or what programs have shown evidence of effectiveness.

Where to Access this Report

- Buncombe County Public Health - www.buncombecounty.org/Governing/Depts/Health/Chip
- WNC Health Network: <https://www.wnchn.org>
- Buncombe County Pack Library – NC Collections Room, 67 Haywood St., Asheville, NC

For More Information and to Get Involved

- Buncombe County Public Health CHIP website:
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PHOTOGRAPHY CREDITS

- Photos used on the cover and in headers from www.pexels.com; accessed October, 2018.
- All WNC landscape photos used in the headers courtesy of Patrick Williams, [Ecocline Photography](http://EcoclinePhotography).

APPENDIX A – DATA COLLECTION METHODS & LIMITATIONS

Secondary Data from Regional Core

Secondary Data Methodology

In order 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; Log Into North Carolina (LINC); NC Department of Health and Human Services; NC Office of State Budget and Management; NC Department of Commerce; Employment Security Commission of NC; UNC-CH Jordan Institute for Families; NC Department of Public Instruction; NC Department of Justice; NC Division of Medical Assistance; 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 report was prepared. It was not possible to continually update the data past a certain date; in most cases that end-point was August 2018.

The principal source of secondary health data for this report was 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 was 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.

It is important to note that this report contains data retrieved directly from sources in the public domain. In some cases the data is very current; in other cases, while it may be the most current available, it may be several years old. Note also that the names of organizations, facilities, geographic places, etc. presented in the tables and graphs in this report 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

One area where there are gaps in data include specific maternal risk factors associated with infant deaths and maternal health. The CHA Data Team is working with the MAHEC to gather additional data on maternal and infant risk that may help us better track the risk factors associated with infant mortality and maternal. This will allow more targeted prevention efforts.

WNC Healthy Impact Survey (Primary Data)

Survey Methodology

The 2018 WNC Healthy Impact Community Health Survey was conducted from March to June. The purpose of the survey was to collect primary data to supplement the secondary core dataset, allow individual counties in the region to collect data on specific issues of concern, and hear from community members about their concerns and priorities. 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 survey methodology, which included a combination of telephone (both landline and cell phone) interviews, as well as an online survey. 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 questions included in the 2018 survey were:

- 1) Emotionally Upset in the Past Month Due to Race-Related Treatment?
- 2) Have Experienced Symptoms of Chronic Depression?
- 3) Frequency of Worry or Stress Over Having Enough Money to Pay Rent or Mortgage in the Past Year?

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 29 percent cell phone-based survey respondents and 71 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 also worked with a third-party provider to identify and invite potential respondents for an online survey for a small proportion (20%) 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.

About the Buncombe Sample

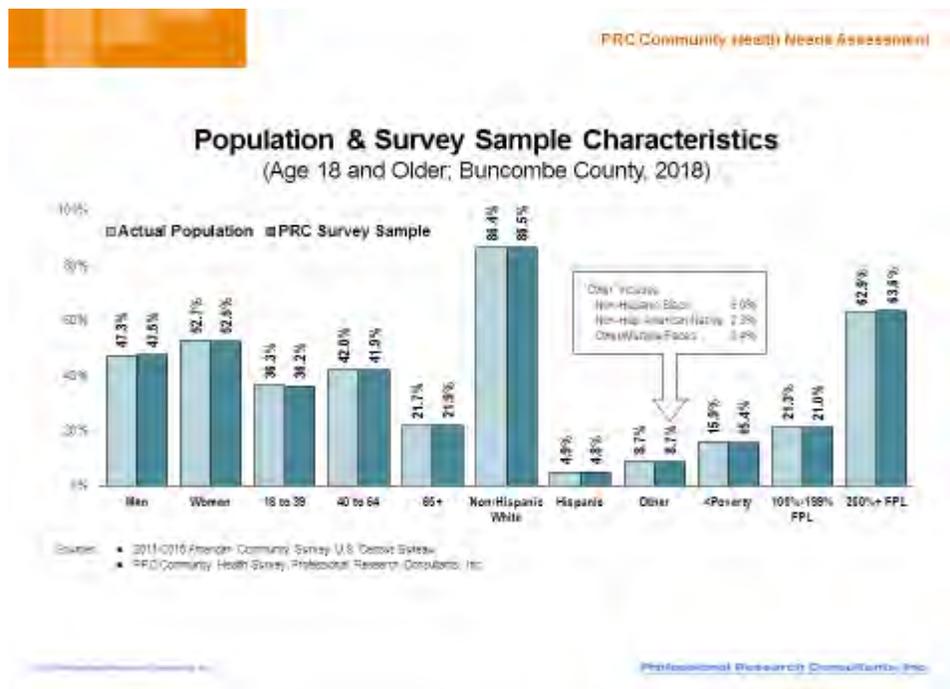
Size: The total regional sample size was 3,265 individuals age 18 and older, with 304 from our county. PRC conducted all analysis of the final, raw dataset.

Sampling Error: For our county-level findings, the maximum error rate at the 95% confidence level is 5.6+. Expected Error Ranges for a Sample of 304 Respondents at the 95 Percent Level of Confidence

Examples:

- If 10% of a sample of 200 respondents answered a certain question with a "yes," it can be asserted that between 5.8% and 14.2% ($10\% \pm 4.2\%$) 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% ($50\% \pm 6.9\%$) of the total population would respond "yes" if asked this question.

Characteristics: The following chart outlines the characteristics of the survey sample for our 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 2017 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 2020

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. The Healthy People initiative is grounded in the principle that setting national objectives and monitoring progress can motivate action. For three decades, Healthy People has established benchmarks and monitored progress over time in order to:

- Encourage collaborations across sectors.
- Guide individuals toward making informed health decisions.
- Measure the impact of prevention activities.

Healthy People 2020 is the product of an extensive stakeholder feedback process that is unparalleled in government and health. It integrates input from public health and prevention experts, a wide range of federal, state and local government officials, a consortium of more than 2,000 organizations, and perhaps most importantly, the public. More than 8,000 comments were considered in drafting a comprehensive set of Healthy People 2020 objectives.

Information Gaps

While this assessment is quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all of the community's health needs.

For example, certain population groups (such as the homeless, institutionalized persons, or those who only speak a language other than English or Spanish) are not represented in the survey data. Other population groups (for example, pregnant women, lesbian/gay/bisexual/transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups) might not be identifiable or might not be represented in numbers sufficient for independent analyses.

In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community. However, there are certainly a great number of medical conditions that are not specifically addressed.

Online Key Informant Survey (Primary Data)

Online Survey Methodology

Purpose and Survey Administration

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.

Online Survey instrument

The survey provided respondents the opportunity to identify critical health issues in their community, the feasibility of collaborative efforts around health issues, and what is helping/hurting their community’s ability to make progress on health issues.

Participation

In all, 29 community stakeholders took part in 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	19	15
Other Health Provider	10	7
Physician	1	1
Public Health Representative	2	1
Social Services Provider	9	5

Through this process, input was gathered from several individuals whose organizations work with low-income, minority populations, or other medically underserved populations.

Online 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.

Local Survey Data or Listening Sessions

Listening Session

Data Team reviewed data from Community Listening Session and One Question Survey Reports Data compiled with initial analysis from Lenoir Rhyne, Master of Public Health Program* Report organized comments of participants by themes and reported frequency in which health and social conditions were mentioned. Data was used to expand and highlight information provided on conditions to CHIP Advisory.

One Question Card and Text/Mobile Device Survey

Community members were asked to write or text an answer to the question to the prompt: “What is the most important thing you need for you & your family’s health and well-being?”

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

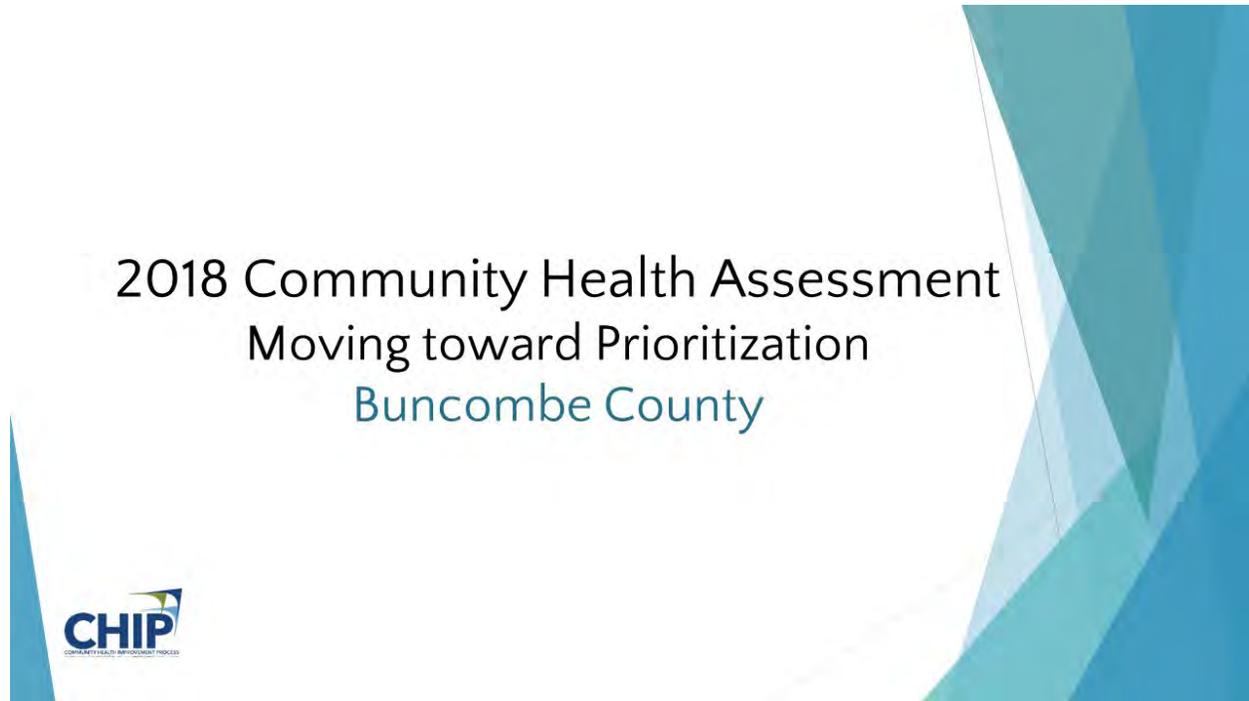
Fifthly, in describing differences in data of the same type from two populations or locations, or changes over time in the same kind of data from one population or location—both of which appear frequently in this report—it is useful to apply the concept of percent difference or change. While it is always 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 - Data Presentation Slides



Methodology

Product	Source	Description of type of data and source
Community Listening Sessions	Local Data Collection facilitated by Deanna, Zo, Terri, Land of Sky staff	12 Listening Sessions with xx participants LOS senior companions, ABCCM....
Questions:	For this community and/or Buncombe County... <ul style="list-style-type: none"> • Biggest strengths or the most positive things • Biggest problems or concerns • Things that most POSITIVELY affect health and well-being • Things that make it easier for you to be healthy 	<ul style="list-style-type: none"> • Things that most NEGATIVELY affect the health and well-being • Things that make it harder for you to be healthy • The most pressing health concerns in the community • The one thing you to improve the health of residents
One Question Survey	What is the most important thing you need for you & your family's health and well-being?	337 responses at 13 locations

Summary of Data Element Review & Findings			
Health Condition Size & Severity (Data Team Review)	Relevant, Impact & Feasibility (Scored by CHIP Advisory)	Community Voices (Listening Sessions & One Question Survey)	Social Determinants of Health Size & Severity (Data Team Review)
<ul style="list-style-type: none"> • Birth Outcomes & Infant Mortality • Childhood Obesity • Asthma & COPD • Cancer Mortality Disparity • Heart Disease Mortality Disparity • Diabetes Mortality Disparity • Alzheimer's • Substance Use & Chronic Pain • Mental Health • Dental & Oral Health 	<ul style="list-style-type: none"> • Mental Health • Substance Use & Chronic Pain • Birth Outcomes & Infant Mortality • Childhood Obesity • Asthma & COPD 	<ul style="list-style-type: none"> • Access to Health Care Services • Food Insecurity • General Mental Health • Housing • Legal Services • Substance Use • Suicide • Transportation 	<ul style="list-style-type: none"> • Food Insecurity • Domestic Violence/Homicides • Housing Affordability • Poverty • Grandparents caring for Grandchildren • Percent of county that is rural

Your input matters. . .narrowing the top 10 list

RELEVANT – How important is this issue?

IMPACTFUL – What will we get out of addressing this issue?

FEASIBLE – Can we adequately address this issue?



Low Priority



Medium Priority



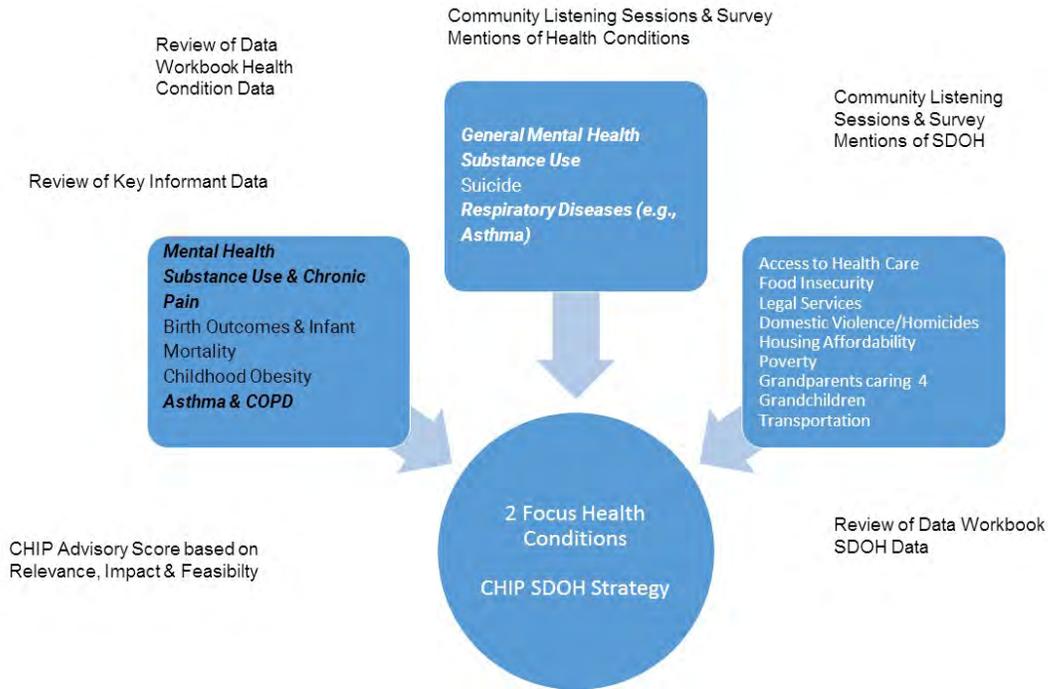
High Priority



Highest Priority



Appendix B – Data Profile



Buncombe County Leading Causes of Death

Rank	Cause of Death	Buncombe	
		# Deaths	Death Rate
1	Cancer	2,679	155.8
2	Diseases of Heart	2,490	141.3
3	Chronic Lower Respiratory Diseases	813	47.2
4	Cerebrovascular Disease	744	41.7
5	All Other Unintentional Injuries	555	36.8
6	Alzheimer's disease	558	30.2
7	Diabetes Mellitus	312	18.4
8	Suicide	227	17.0
9	Pneumonia and Influenza	294	16.4
10	Nephritis, Nephrotic Syndrome, and Nephrosis	229	12.7
11	Unintentional Motor Vehicle Injuries	164	12.6
12	Chronic Liver Disease and Cirrhosis	179	11.1
13	Septicemia	132	7.8
14	Homicide	53	4.2
15	Acquired Immune Deficiency Syndrome	20	1.4
All Causes (some not listed)		12,557	737.1

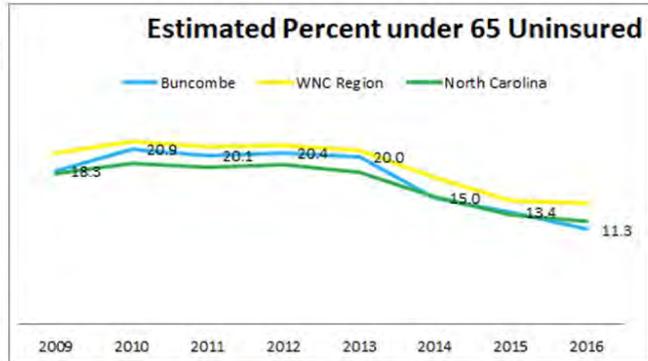


Access to Care

Access to Care was by a large majority the most frequently mentioned concern by those who participated in our listening sessions and responded to our one question survey and ranked as the 3rd most critical social determinant to address about the Key Informant Survey participants.

WNC Telephone Survey

- 17% Unable to Get Needed Medical Care in the Past Year (2018 telephone survey)
 - Up from 11.9 in 2012
 - Higher than WNC (12.4%)
- 70.4 % Have Had Routine Checkup in Past Year
 - Down from 71.8 in 2012
 - Lower than WNC (73.3%)
- 79.2% ≥ Age 18+ with a Specific Source of Ongoing Care
 - Down from 81.4 in 2015
 - Lower than WNC (80.9%)



What's impeding progress?

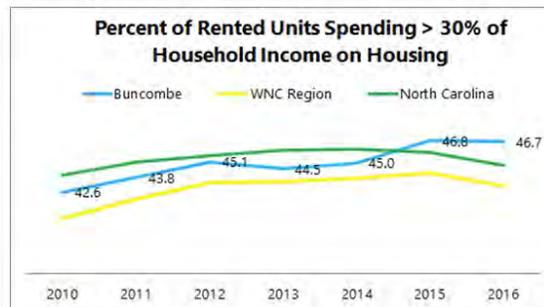
"Cost of care. Lack of insurance. Location of services. Hours of operation. – Community Leader (Buncombe County)
"More awareness [needed] about prenatal health. changes to laws, including ACA and Medicaid managed care, lack of expansion of Medicaid in North Carolina."
"Culture. Delaying care until a crisis. Transportation. Social isolation. Limited economic resources (income) Navigation of services"



Housing Access & Affordability

In the WNC Telephone Survey, Better/Affordable Housing was listed as one of the top three issues perceived as in most need of improvement. Housing was also identified by Key Informant Survey participants as the most important social determinant to address and by 53% of our listening session participants as a barrier to health and well-being in our community.

- In Households making < \$50,000/yr, ranges between 5.3%-12.5% of households spend >30% Income on Housing.
 - % of households spending >30% is higher than WNC & NC in all income brackets except < \$20,000/year.
- 46.7% of renting households spend >30% household income on housing
- Inadequate housing is found in many communities, (particularly rural). For example, in Big Ivy 43% heat with fuel oil, coal, kerosene or other fuels. In Sandy Mush, 5% lack complete plumbing facilities



Source: 2018 WNC Healthy Impact Data Workbook

What's impeding progress?

"High need for affordable housing but rents and sales prices continue to rise because of Asheville is a desirable place to live and especially retire"
"Many people are concerned about housing, few people are willing to take personal action"
"Development hasn't happened responsibly, and locals with deep roots in our community are frequently pushed out by people moving in who can afford to pay more for housing"



Legal Services

47% of Listening Sessions Participants indicated that lack of access to legal services was a barrier to health and well-being.

- When asked to talk about the biggest problems in Buncombe County by Listening Session participants, legal services were the 5th most frequently mentioned.
- General Legal Aid is ranked by Buncombe 211 as #8 in their Top 10 Needs with 369 calls for assistance in 2017
 - 12% of calls to 211 for legal aid were unmet in 2017.
- While little Community Health Assessment data directly informs us about the need for legal services, these services are linked with many other social determinants that impact health and well-being including:
 - Adequate and Affordable housing
 - Intimate Partner Violence
 - Access to Health Care
 - Employment & Economic Security
 - Access to Benefits related to Food Security, Health Care, Disability and Housing

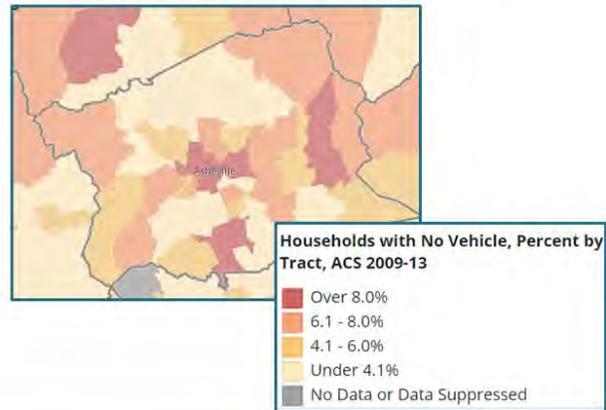
Source: 2018 WNC Healthy Impact Data Workbook



Transportation

Transportation is one of the more frequently cited barriers to health and well-being. 57% of Listening Session Participants mentioned Transportation as an important concern for health and well-being and it was rank 7th by key informant participants as critical social determinants to address

- 7.1 % of Buncombe Households do not have a car
- 2.3% % Households are without a car and have low access to a grocery store
- 6.8% of workers in Buncombe County rely on public transportation to get to work



What's impeding progress?

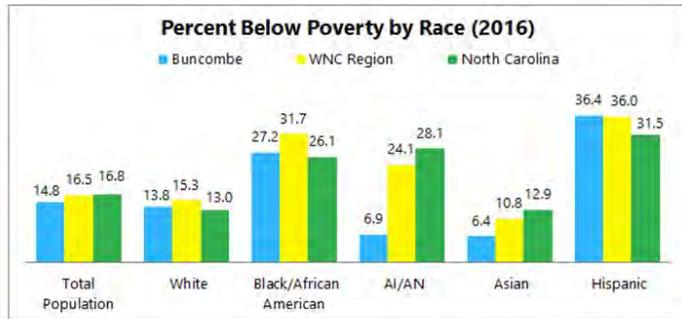
“Complex problem. Far flung areas need service, but it’s expensive and people can’t seem to agree on the solution. Buses don’t seem to be reliable and if that’s what people are depending on to get to work, then the transportation problem jeopardizes their employment!”
“County needs to engage with city to expand city bus routes to county”. “Within Asheville, frequency of buses needs to improve. Outside of Asheville, Buncombe County public transportation is challenging.”



Poverty

Poverty itself was not identified by key informants or community voices as a social determinant of health. However, it clearly is linked to many, if not most, of the conditions cited as negatively influencing health and well-being.

- Poverty Rate (2012–2016) 14.8%
 - Decreasing trend; slightly lower than regional (18.1%) and state (16.8%)
 - Disparity: **1.97** Black (27.2%) /White (13.8%): & **2.64** Latinx (36.4)/White
 - Poverty Rate for Children Under 18 (2012–2016) 20.5%
 - Decreasing trend; slightly lower than regional (27.6%), and state (23.9%).
- For those living in Poverty
 - 25.8% are below 150% Poverty
 - 36.5% below 200% Poverty
 - 56.2% below 300% Poverty



Source: 2018 WNC Healthy Impact Data Workbook

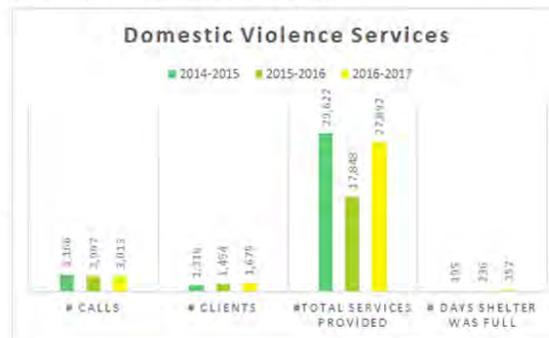
Key informant participants citing poverty as a factor in “Depression, Anxiety and Stress”, Food Insecurity, Injury & Violence and Infant and Child Health.



Intimate Partner Violence...

Intimate Partner Violence was raised as issues of high concern in both survey and secondary data. With the opening of the Family Justice Center and expansion of services, some of the indicators used to inform us about the status of Intimate Personal Violence are due to increased availability of awareness of services as well as a service environment that is far more responsive to needs of those impacted by IPV.

- Days Domestic Violence Shelter was Full - 357 (2016–2017) Increase from 236 in 2015–2016
- Domestic Violence Homicides - 5 (2016) Increase from 1 homicide in 2015, 2 in 2014.
 - Buncombe homicides accounted for 50% of total DV homicides in WNC in 2016.



Source: 2018 WNC Healthy Impact Data Workbook

What's impeding progress?

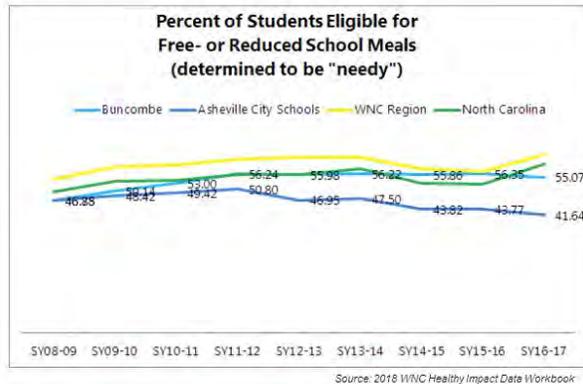
“Our community needs a public health focus on preventing domestic violence. If all of our strategies focus on victim services and criminal justice, then we will never make effective headway in stopping this violence that impacts so many families in our community.”



Food Security

Food Insecurity was identified by key informants as a social determinant critical to address and was identified as one of the biggest problems to address in our community in 53% of Community Listening Sessions.

- 14.3 % of Buncombe County residents were considered food insecure in 2014 (Feeding America)
- SNAP Participation - 32,205 individuals; 2,918 Older Adults (65+); 12,001 youth under 18.
- WNC Telephone Survey
 - 22.5% % "Often/Somewhat" Worried About Whether Our Food Would Run Out Before We Got Money To Buy More.(higher than WNC 21.4)
 - 21.3% % "Often/Sometimes" True That The Food We Bought Just Did Not Last, And We Did Not Have Enough Money To Get More. (WNC 19.3)



What's impeding progress?

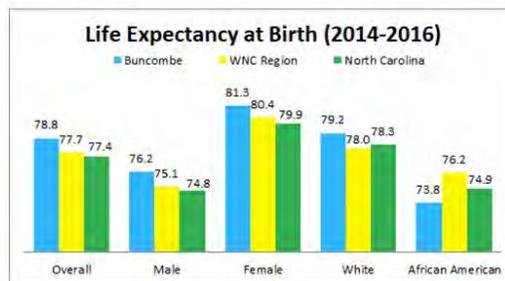
"Food deserts, unemployment, young mothers with no cooking skills and nutritional knowledge. Lack of resources and awareness of applicable resources. Hopelessness." *"Improper distribution of wealth, weather changes, underemployment, poverty."* *Lack of "Alignment of efforts. Strategic planning to focus on vulnerable populations."*



KEY ISSUE: Disparities in Life Expectancy & Mortality

Life Expectancy for a child born in Buncombe County is almost 80 years. But a black child born in Buncombe can expect to live 4 fewer years. Chronic Diseases where we see marked disparity are:

- Total Cancer Mortality: 156 per 100,000 (2012-2016)
 - Disparity 1.71 > Black (312) and White (186)
- Lung Cancer: 43 (2012-2016)
 - Disparity 1.58 > Black (68) and White (43)
- Stroke Mortality: 42 (2012-2016)
 - Disparity 1.7 > Black (71) and White (41.4)
- Diabetes: 18.4 per 100,000 (2012-2016)
 - Disparity 3.44 > Black (55) and White (16)
- Heart Disease: 141 per 100,000 (2012-2016)
 - Disparity 1.63 > Black (226) and White (139)



What's impeding progress?

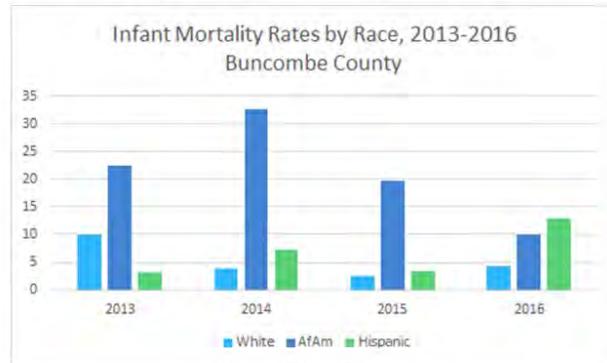
"Racism is a health issue. The lack of equity and inclusion on the highest levels impacts your life 24 hours a day, seven days a week, 12 months a year. It can be the root of all that is unhealthy. Without equity, there is not healthy community."



KEY ISSUE: Birth Outcomes & Infant Mortality

Significant disparities are present in birth outcomes, infant mortality and preconception health for Black and Latinx residents:

- Preterm Births: 20% overall (2012–2016)
 - Disparity **1.87** > Black (**18%**) and White (9.6%)
- Low Birth Weight: 8.3% (2012–2016)
 - Disparity **2.0** > Black (**16%**) and White (7.9%)
- Infant Mortality: 5.8 overall (2016)
 - Disparity **2.9** > Black (**10.1**),
 - Disparity **3.2** > Latinx (**12.9**), and White (4.4)
- Teen Pregnancy: 23.9 overall (2016)
 - Disparity **2.0** > Black (**41.1**) and White (20.3)



Source: 2018 WNC Healthy Impact Data Workbook

What's impeding progress?

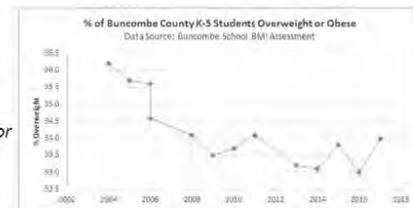
"Inadequate childcare, ill-equipped parents, poverty, inadequate housing, more safety-net programs, unemployment"
"More awareness [needed] about prenatal health"
"Generational trauma"



KEY ISSUE: Childhood Obesity

33.8% of students enrolled in Buncombe County public (non-charter) schools are overweight or obese, based on annual BMI screening; 18% percent of K-5 students are obese.

While we recognize that weight on an individual level may not always be an accurate indicator of health status, on a population level it strongly correlates with many serious health conditions.



- Related Indicators
 - 985 students obese (includes HS and MS)
 - Local data not available by race; national data higher in children of color
 - Chronic disease associated with obesity – 26 students had Type II diabetes & 59 students had hypertension
 - Child poverty 21% (trending down, lower than NC & WNC)
 - Free and Reduced Lunch 55% qualify (up from 50% in 2010)
 - 25.5% of adult survey respondents screened positive for food insecurity in phone survey

What's impeding progress?

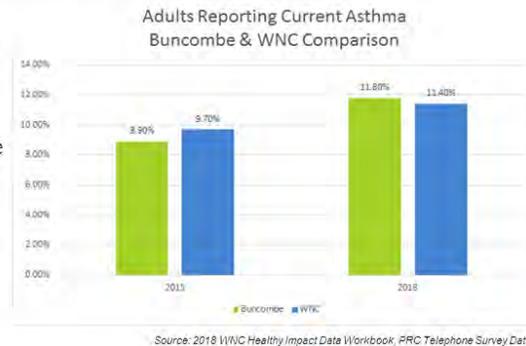
"Lack of education and affordable access to healthy food options" *"so many communities don't have safe, easily accessible spaces for daily activity"* *"Providers need a great deal of education about nutrition, food insecurity issues, and where to find fresh foods"*
"We see very clearly the ways in which the conditions and complications that show up most often in our adult population (diabetes, obesity and other chronic diseases exacerbated by malnutrition), can be prevented by more targeted work on ACEs and Early Childhood Education"



KEY ISSUE: Asthma & COPD

Asthma rates are increasing across WNC, and both Asthma and COPD were areas of high concern on the key informant survey. The data shows a similar increase in adults and children reporting having Asthma.

- Asthma & COPD are both increasing. The percent in Buncombe who report Asthma has increased from below, to now higher than the region.
- Rate of CLRD (Chronic Lower Respiratory Disease) **47.2** per 100,000 population; trending down slightly. 3rd leading cause of death in Buncombe and the US
- From Telephone Survey:
 - **11.8%** report having Asthma, increase from 8.9% in 2015
 - **12.3%** report having COPD, increase from 11.2% in 2015
- **7.4%** students in Buncombe County public schools (non-charter) have Asthma; increase from 6.5% in 15-16.



What's impeding progress?

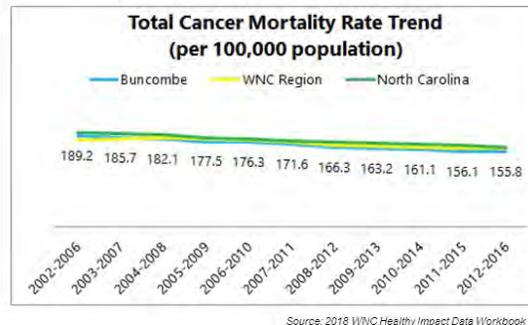
"Structural barriers, costs for better built environment, and poverty"
"Lack of funding for education and medication for serving uninsured and underinsured"



KEY ISSUE: Cancer Mortality

Cancer is the leading cause of death in Buncombe County. Despite cancer incidence and mortality trending down overall, significant disparities in Cancer Mortality exist in our county:

- Total Cancer Mortality: 156 per 100,000 (2012-2016)
 - Disparity **1.71** > Black (**312**) and White (186)
- Lung Cancer Mortality: 43 (2012-2016) highest single cancer mortality rate
 - Disparity **1.58** > Black (**68**) and White (43)
 - From the telephone survey
 - 19% Smokers
 - 17% Breathed smoke at work in last week
 - Radon - Buncombe is "Zone 1" county with average indoor levels above 4 pCi/L (EPA action level)
 - 2nd leading cause of lung cancer nationally



What's impeding progress?

"More education needed on the connection of environmental stressors that contribute, along with poor housing and nutrition"
"Financial resources, access to care, medication, and treatments...providers that are culturally competent..."
"Uncovered cost of life saving medications"



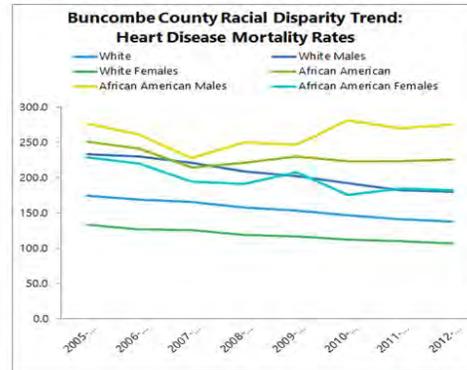
KEY ISSUE: Heart Disease Mortality

Heart Disease is the second leading cause of death in Buncombe County. Significant disparities exist in Heart Disease Mortality, and Heart Disease impacts a large portion of the population with roughly 353 deaths each year.

- Heart Disease Mortality: 141 per 100,000 (2012–2016)
 - Disparity 1.63 > Black (226) and White (139)

From Telephone Survey

- High Blood Pressure: 32%
- 92% taking steps to control BP
- 30% ever told they have high cholesterol



Source: 2018 WNC Healthy Impact Data Workbook

What's impeding progress?

"This is the number one health concern for women, which means it has major impacts on the family. Think we could do a better job of helping women realize this. More prevention and again, looking to social determinants."*

"Entrenched cultural misunderstanding of positive eating and exercise habits and food insecurity issues that lead to poor eating habits and lack of access to ongoing preventative health care and monitoring."

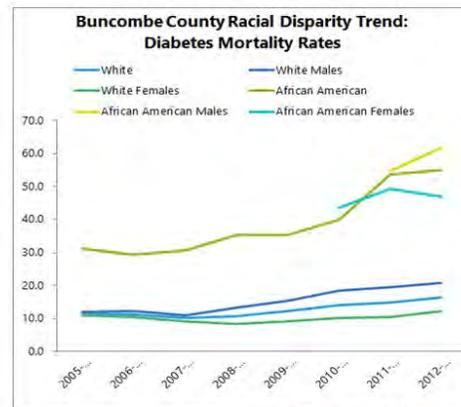
**Actually the 2nd leading cause of death for women*



KEY ISSUE: Diabetes Mortality

Diabetes was ranked as the second highest chronic disease of concern by community leaders. Data shows significant disparities in Diabetes Mortality in Buncombe County:

- Diabetes Mortality Rate: 18.4 per 100,000 (2012–2016), trending upward
 - Disparity 3.44 > Black (55.1) and White (16.4)
- Kidney Disease Mortality 12.7 per 100,000 (2012–2016)
 - Disparity 2.6 > Black (32.5) and White (11.9)



Source: 2018 WNC Healthy Impact Data Workbook

What's impeding progress?

"Perhaps a less clinical approach could be taken and social determinants take more of a focus."

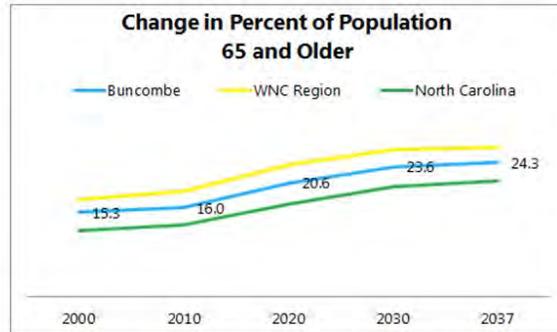
"Homelessness, addiction and mental illness get in the way of people following health/prescribed diet or consistently and appropriately using insulin."



KEY ISSUE: Alzheimer’s Mortality & Dementia

Alzheimer’s and Dementia were raised as issues of high concern in both survey and secondary data.

- Alzheimer’s Mortality – 30.2 (2012–2016), slightly lower than WNC region and state rates
- Alzheimer’s Disease is the 6th leading cause of death, overall, in Buncombe County
- Aging Population trend – currently 18% of county population is aged 65+, increasing steadily
- 12.6% of Buncombe Households are individuals aged 65+



Source: 2018 WNC Healthy Impact Data Workbook

What’s impeding progress?

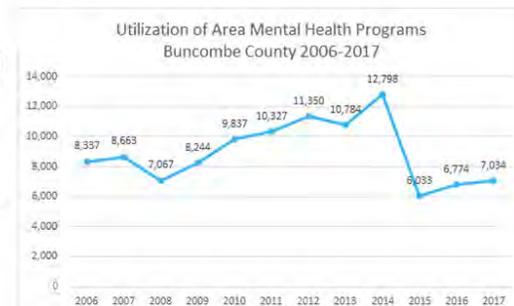
“Lack of funding to support aging at home, lack of funding to support caregivers, negative perceptions by those needing care about having “strangers” in their home helping care for them and help them age in place - lack of clear, comprehensive assessment of mental status in primary care”



KEY ISSUE: Mental Health

General mental health, as well as Depression/Anxiety/Stress were top concerns identified by community leaders; limited data available supports this concern.

- From Telephone Survey:
 - 39.9% of adults experienced Emotional Abuse during Childhood
 - #1 most commonly experienced Adverse Childhood Experience (ACE) in Buncombe County
 - 18.9% had >7 Days of Poor Mental Health in the Past Month, increased from 11.6% in 2015
 - 16.3% were Unable to Obtain Needed Mental Health Services in the Past Year, nearly doubled from 8.3% in 2015
- Suicide Rate (17) 2012–2016; below regional average.
- 7,034 individuals were served by area mental health programs in 2017



Source: 2018 WNC Healthy Impact Data Workbook

What’s impeding progress?

“Lack of treatment and long-term care resources at large and safety net services.”

“Lack of resources, which is a statewide issue. Often when people can access care, the quantity/type of treatment available is insufficient.”

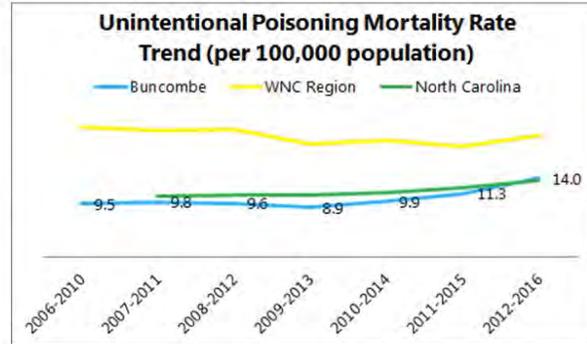
“Affordability for everyone, including those without insurance and those who have private insurance but cannot afford the copay.”



KEY ISSUE: Substance Use

Substance Use rose as a key concern among community stakeholders - particularly access to treatment options, and addressing chronic pain

- 50.2% of adults report their Life has been Negatively Affected by Substance Use (by self or someone else)
 - Higher than WNC (47.4%) and US (37.3%)
- 87 Unintentional Opioid-related deaths in 2017
- 748 - Individuals, either uninsured or Medicaid, served by a treatment program to address opioid use disorder in Q1 2018
- Limited Substance Abuse treatment options:
 - 132 inpatient beds,
 - 28 service providers/facilities



Source: 2018 WNC Healthy Impact Data Workbook

What's impeding progress?

"The root causes of addiction. Poverty, untreated mental illness, too few resources to treat substance use."

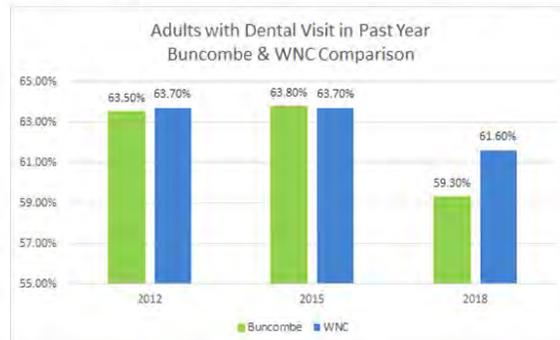
"Outside of the opioid crisis, not much attention is given to the needs of those suffering from addiction. There are not enough residential treatment facilities to meet the need, especially for uninsured people."



KEY ISSUE: Oral Health

Dental Care & Oral Health were identified as an issue of high concern by community leaders; limited available secondary data supports this concern:

- ▶ 59.3% had a Dental Visit in the Past Year (decreased from 63.8% in 2015)
- ▶ 14% of Kindergarteners had untreated tooth decay in 2015-2016
- ▶ Dentist Availability: 1 dentist per 1,370 residents
 - ▶ Only 77 General Practice Dentists billed Medicaid in 2017



Source: 2018 WNC Healthy Impact Data Workbook; PRC Telephone Survey Data

What's impeding progress?

"No coverage or inadequate coverage from third party payers (i.e. Medicare, Medicaid, commercial insurance)."

"Cost prohibitive care. Poor nutrition in kids contributes to early dental decay"

"There is not any clear initiative to expand dental care for the uninsured or underinsured."



“What’s the most important thing you need for you or your family’s health & wellbeing?”

Access to Health Care Services	45%
Obesity/Nutrition/Physical Activity	25%
Food Insecurity	19%
Housing	11%
Employment Opportunities	9%
Transportation	7%
General Mental Health	6%
Oral Health/Dental Care	5%
Justice and Law enforcement	4%
Legal Services	3%

Strengths or Assets that improve health in Buncombe County

Access to Health Care Services (many clinics and providers)	50%
Civic Engagement	42%
Transportation	42%
Food Insecurity (<i>*food banks/pantries/pop-up markets</i>)	33%
Early Childhood Education	25%
Obesity/Nutrition/Physical Activity (<i>*trails, parks, gyms</i>)	25%
Employment Opportunities	17%
General Mental Health	17%
Housing	17%
Equity and Inclusion	8%
Justice and Law enforcement	8%

Negatives/Barriers that hinder health in Buncombe County

Access to Health Care Services (cost of care/lack of insurance)	80%
Food Insecurity	53%
Housing	53%
Upper Respiratory Diseases (e.g. asthma)	53%
Legal Services	47%
Civic Engagement	27%
Early Childhood Education	20%
Employment Opportunities	20%
General Mental Health	20%
Intimate Partner Violence (IPV) or sexual violence	20%
Substance Use	20%
Equity and Inclusion	13%
Hearing and Vision Conditions	13%

Most pressing health issue in Buncombe County:

Access to Health Care Services	64%
Transportation	57%
General Mental Health	43%
Substance Use	43%
Food Insecurity	21%
Justice and Law enforcement	21%
Hearing and Vision Conditions	14%
Infant and Child Health	14%
Adverse Childhood Experiences (ACEs)	7%
Civic Engagement	7%

Appendix C – County Maps

Buncombe County Maps

Community Health (Needs) Assessment
2018

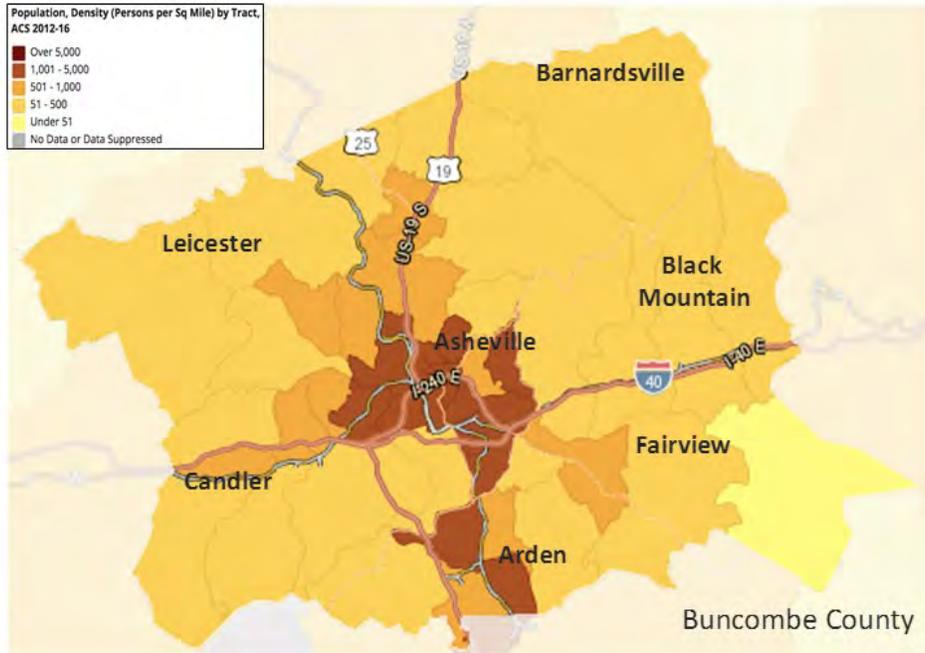
Maps are one piece of the data puzzle

- Maps can be misleading and are best used to highlight which communities to investigate further.
 - Reliability of data decreases as it is cut into smaller and smaller pieces. Therefore, maps of census tract data have greater margins of error than county statistics.
- Maps should be supported by talking with community members or service providers specific to the community of interest to learn more about the community's needs and opportunities.

Why use maps?

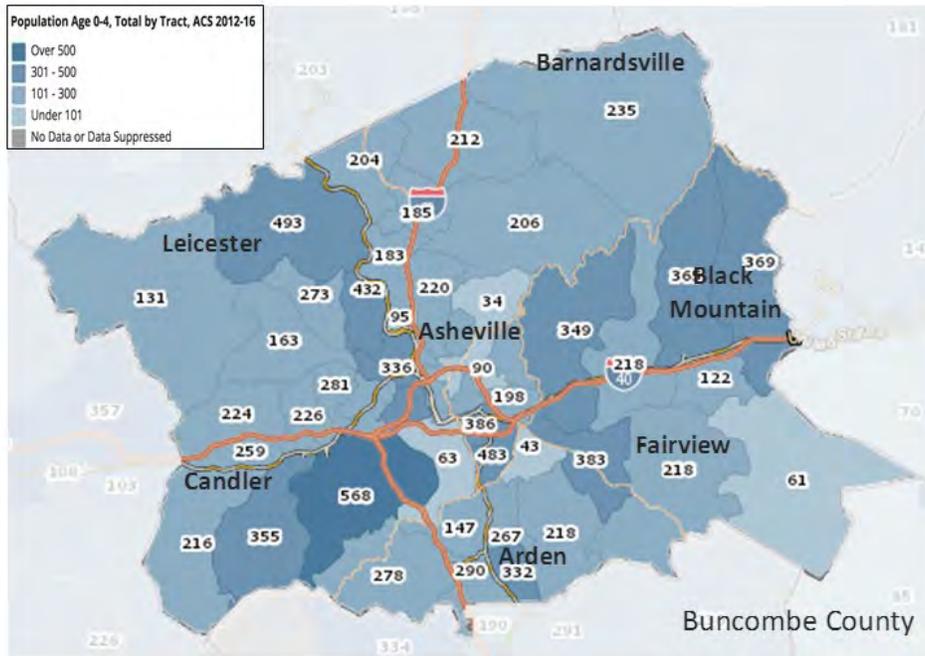
- To show variation across the county (or a lack of it)
 - Using only one number or statistic to describe the entire county can hide variation across communities. Maps can show if communities are different.
- To show vulnerable populations
 - Mapping demographic information can show us where our most vulnerable populations live.
- To show masked associations
 - Maps can show where specific factors occur simultaneously.

Population, Density



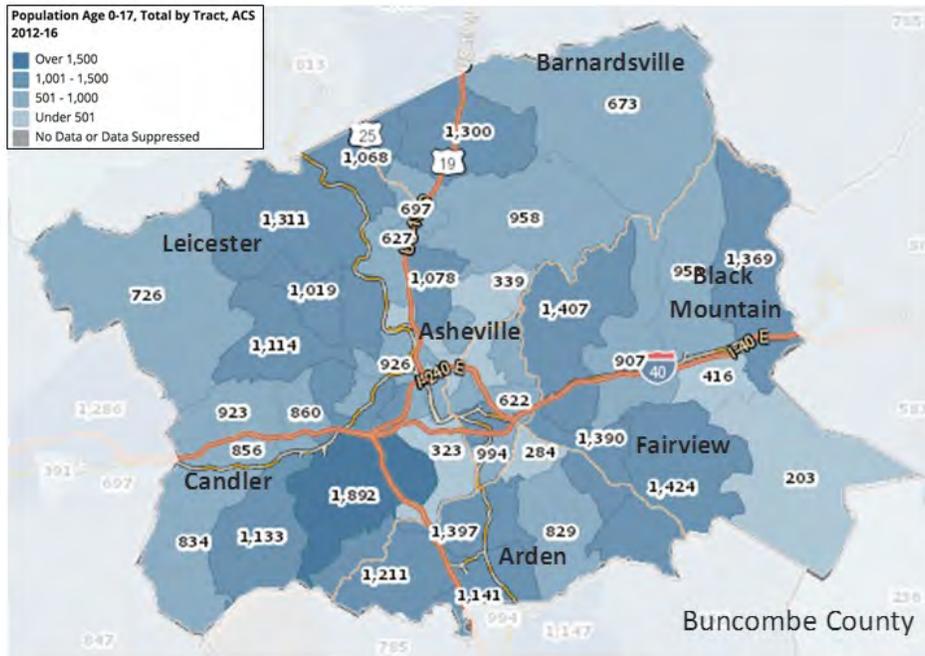
[Click to see map in Community Commons](#)

Population, Age 0-4



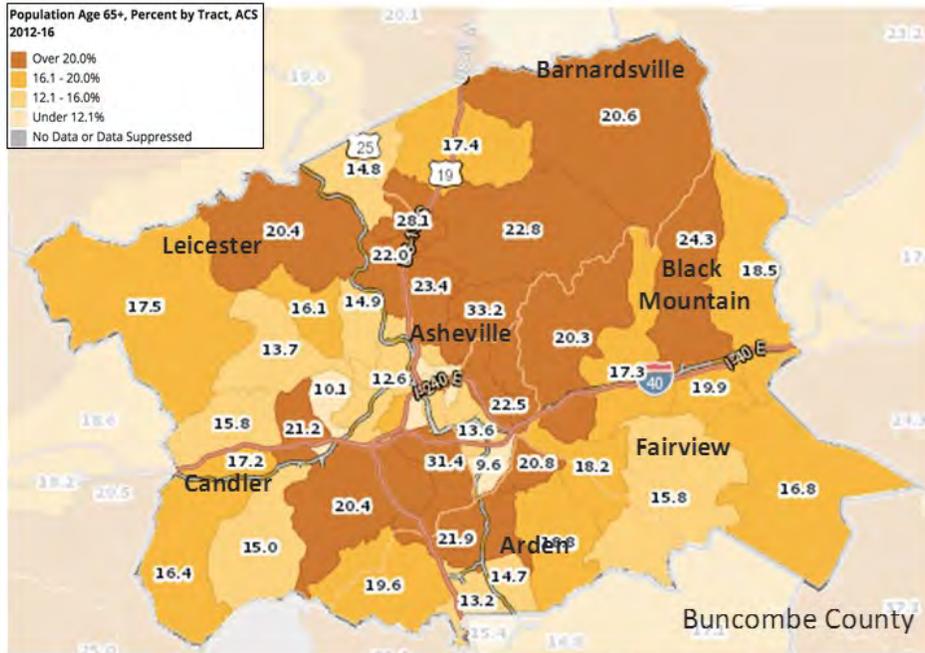
[Click to see map in Community Commons](#)

Population, Age 0-17



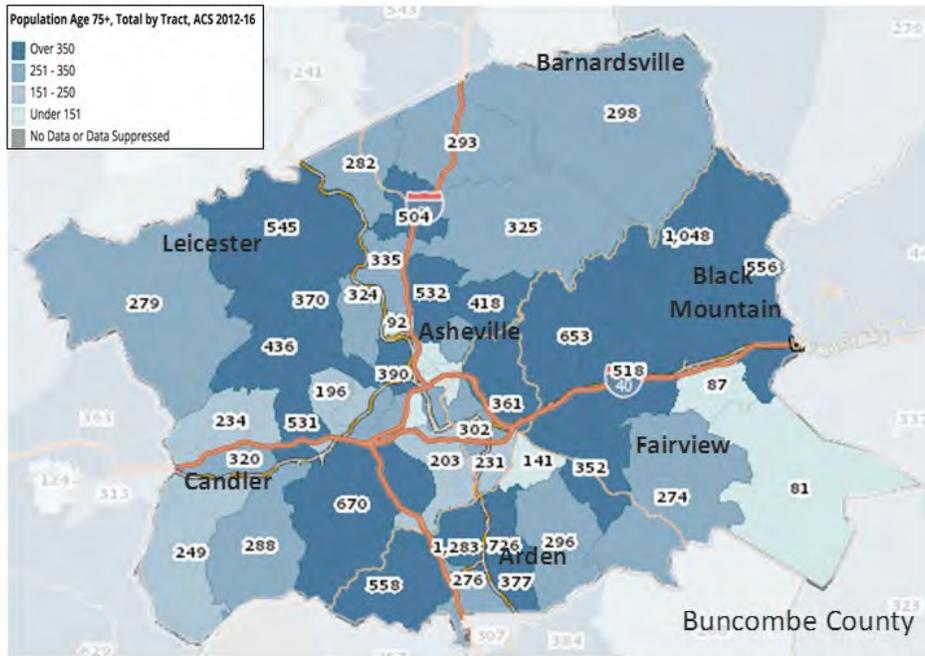
[Click to see map in Community Commons](#)

Percent of population, Age 65+



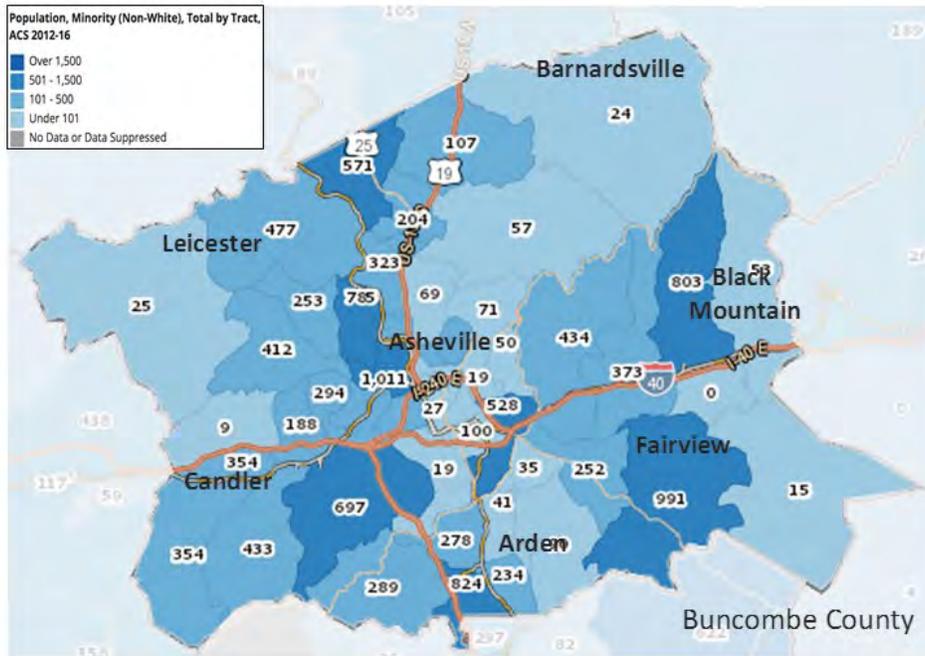
[Click to see map in Community Commons](#)

Population, Age 75+



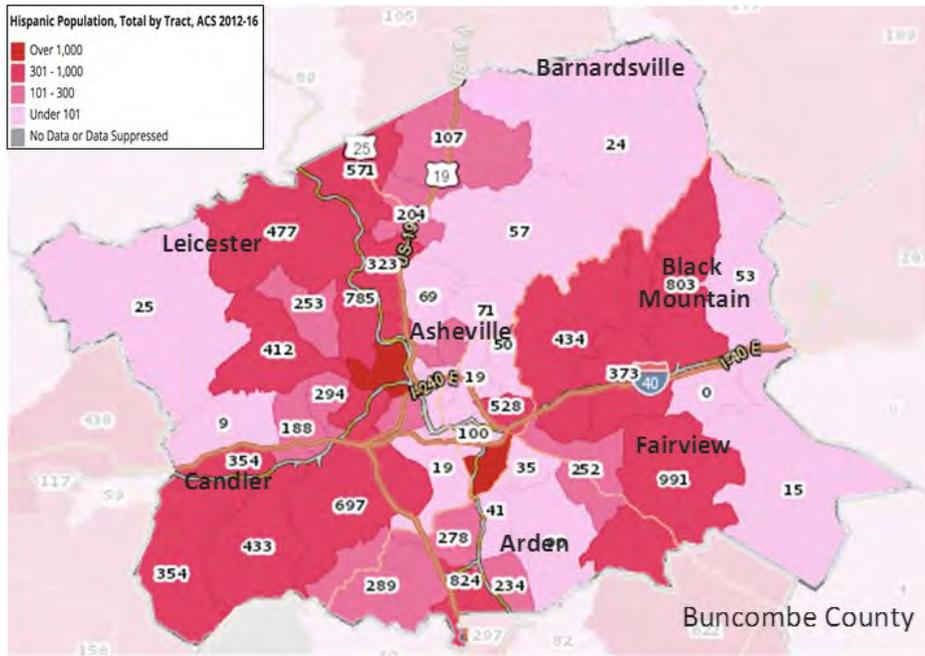
[Click to see map in Community Commons](#)

Population, Minority (Non-White)



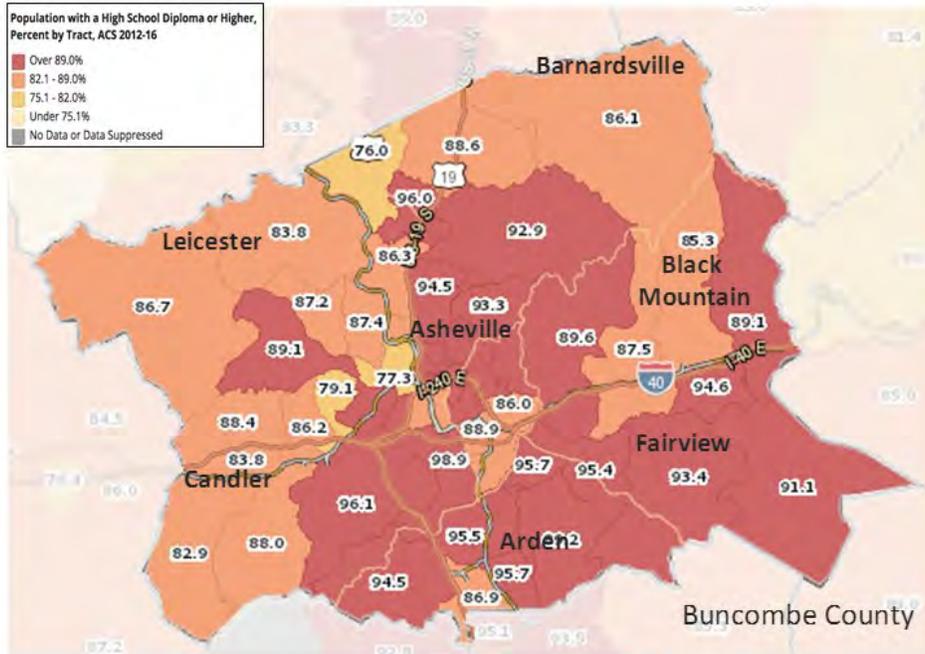
[Click to see map in Community Commons](#)

Population, Hispanic



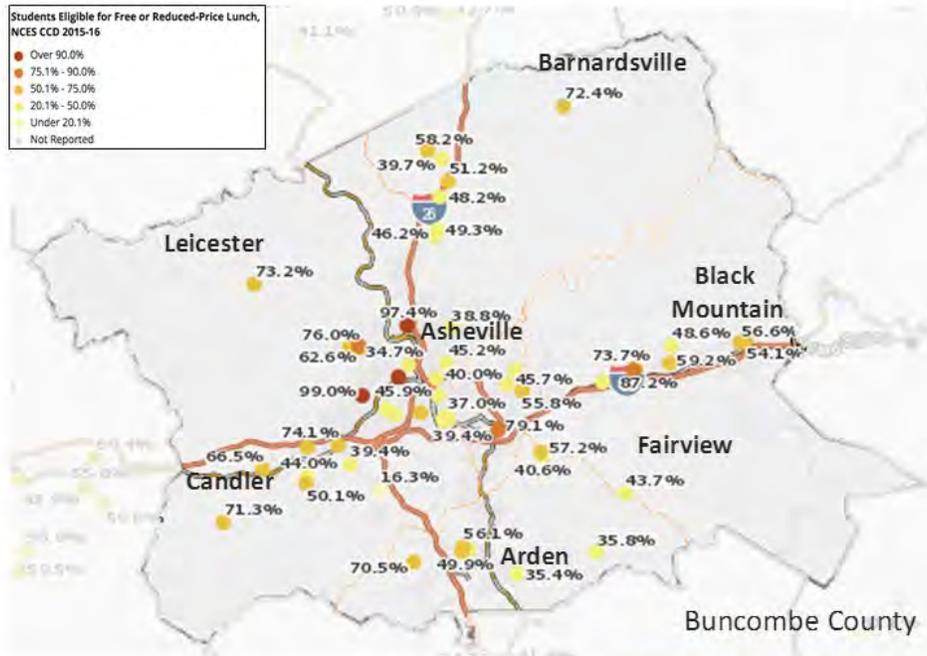
[Click to see map in Community Commons](#)

Percent of the Population with a High School Diploma or Higher Education Level



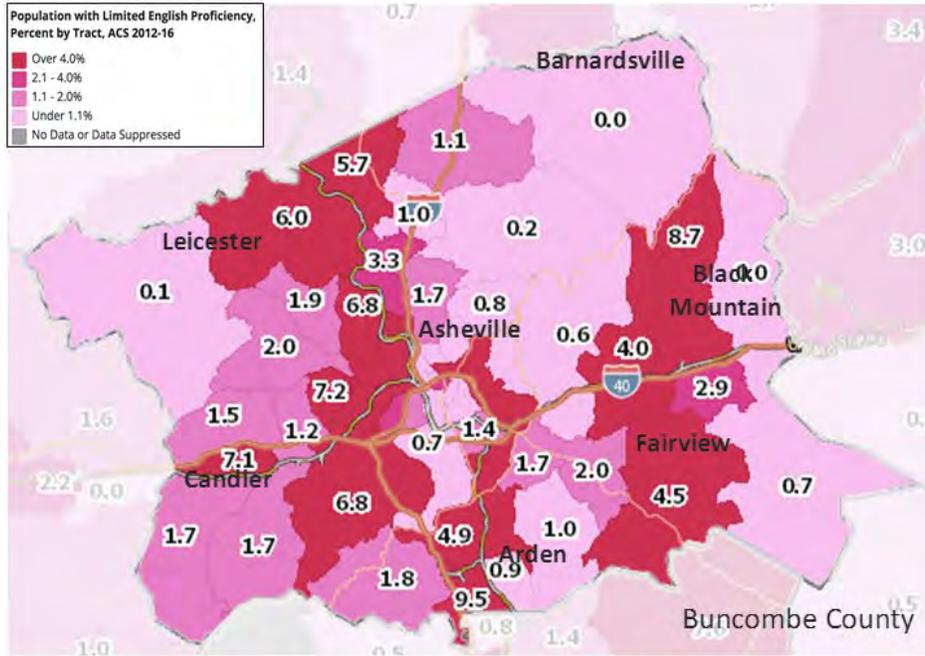
[Click to see map in Community Commons](#)

Percent of Students Eligible for Free or Reduced-Price Lunch



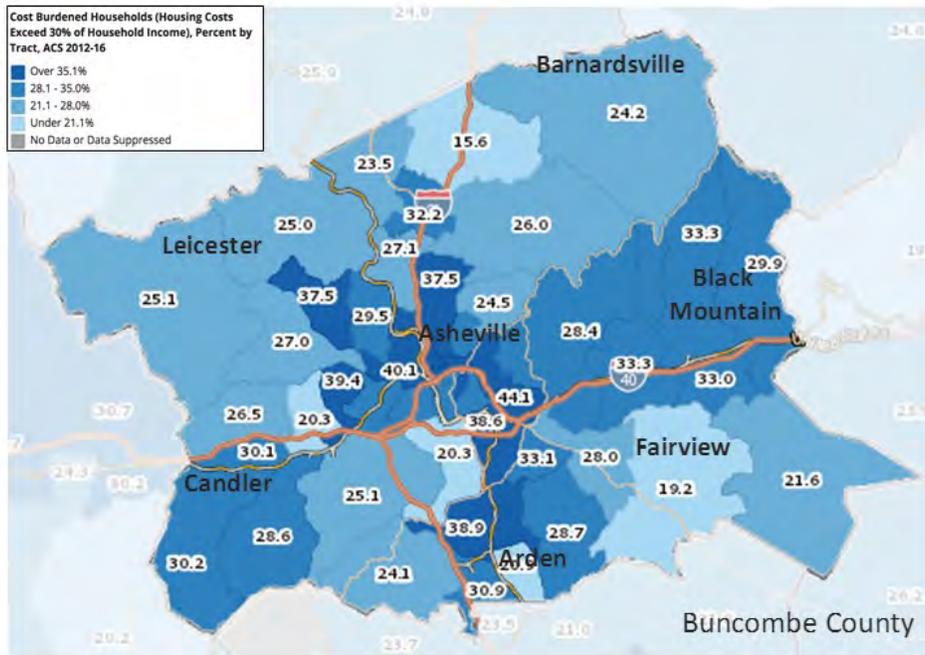
[Click to see map in Community Commons](#)

Percent of Population with Limited English Proficiency



[Click to see map in Community Commons](#)

Percent of Cost Burdened Households



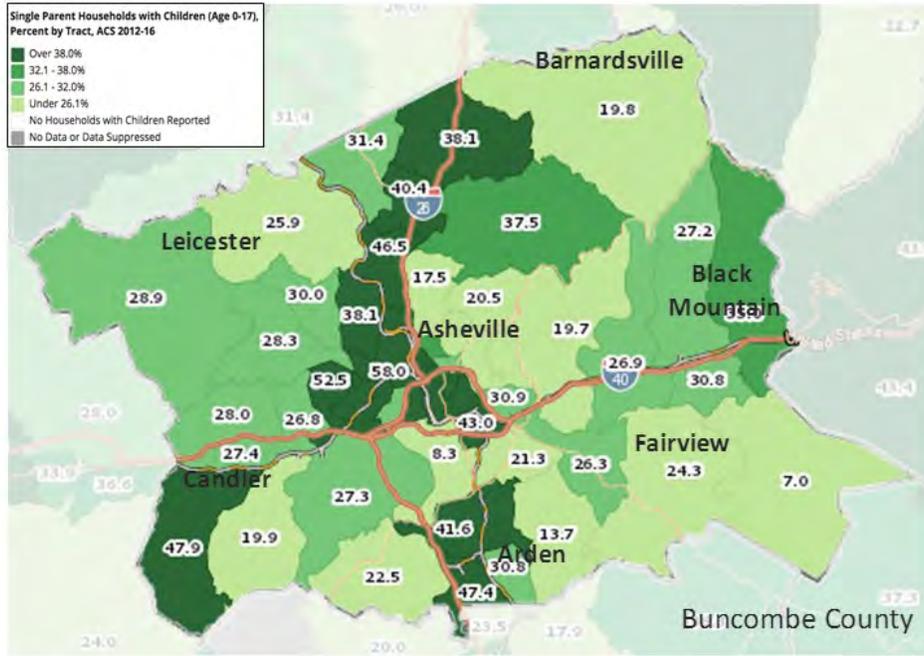
[Click to see map in Community Commons](#)

Percent of Overcrowded Households



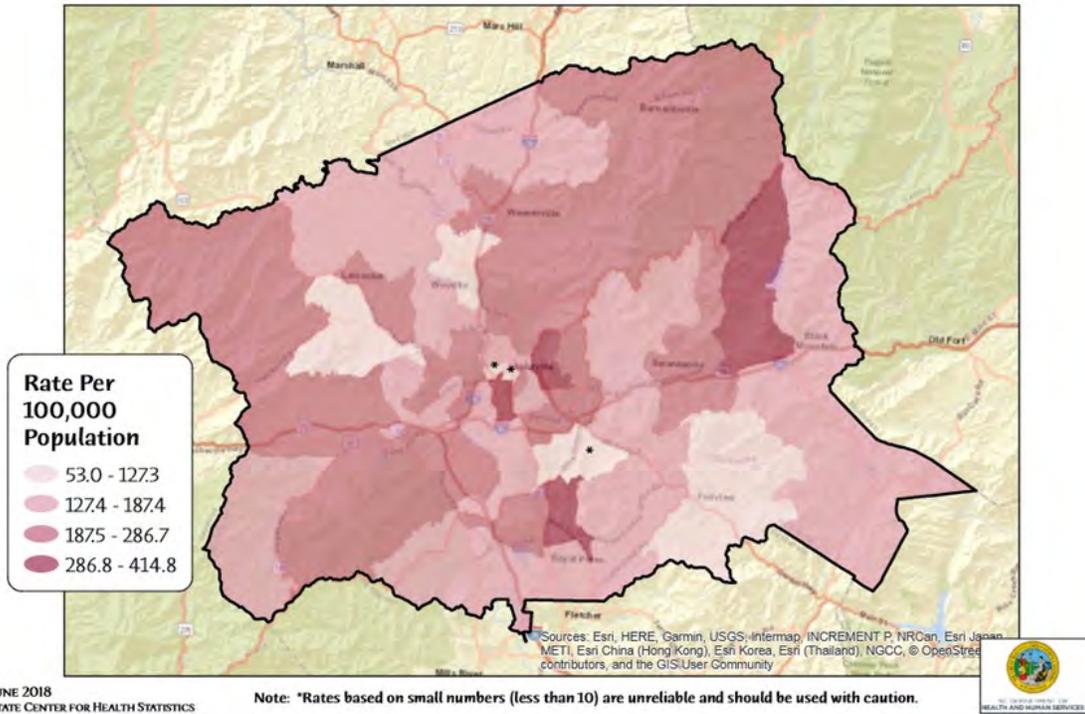
[Click to see map in Community Commons](#)

Percent of Single Parent Households

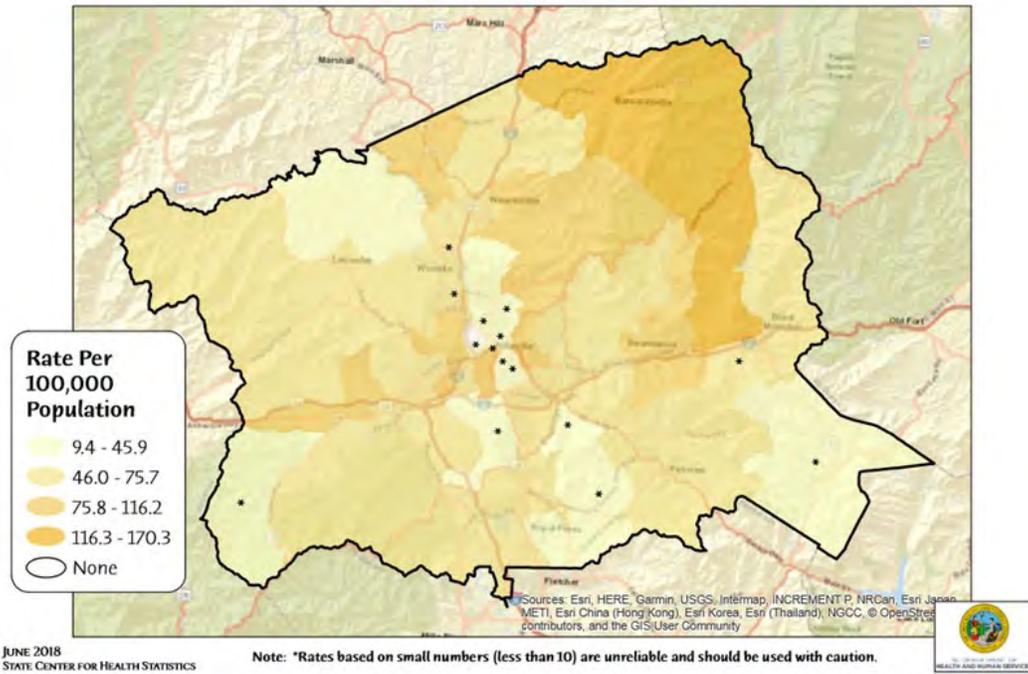


[Click to see map in Community Commons](#)

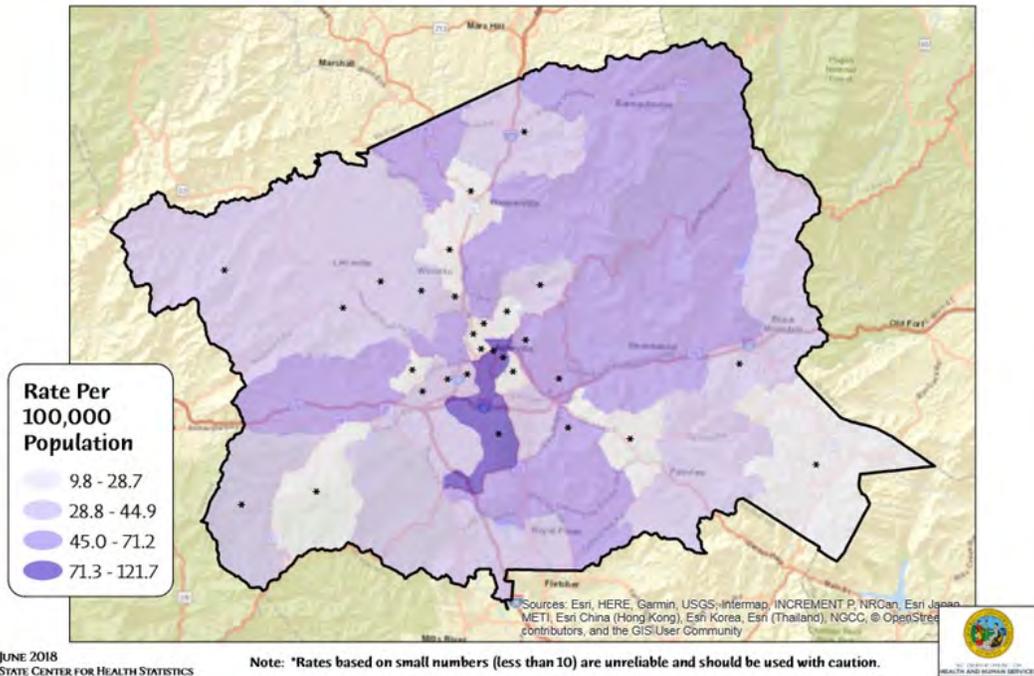
Heart Disease Mortality Rates



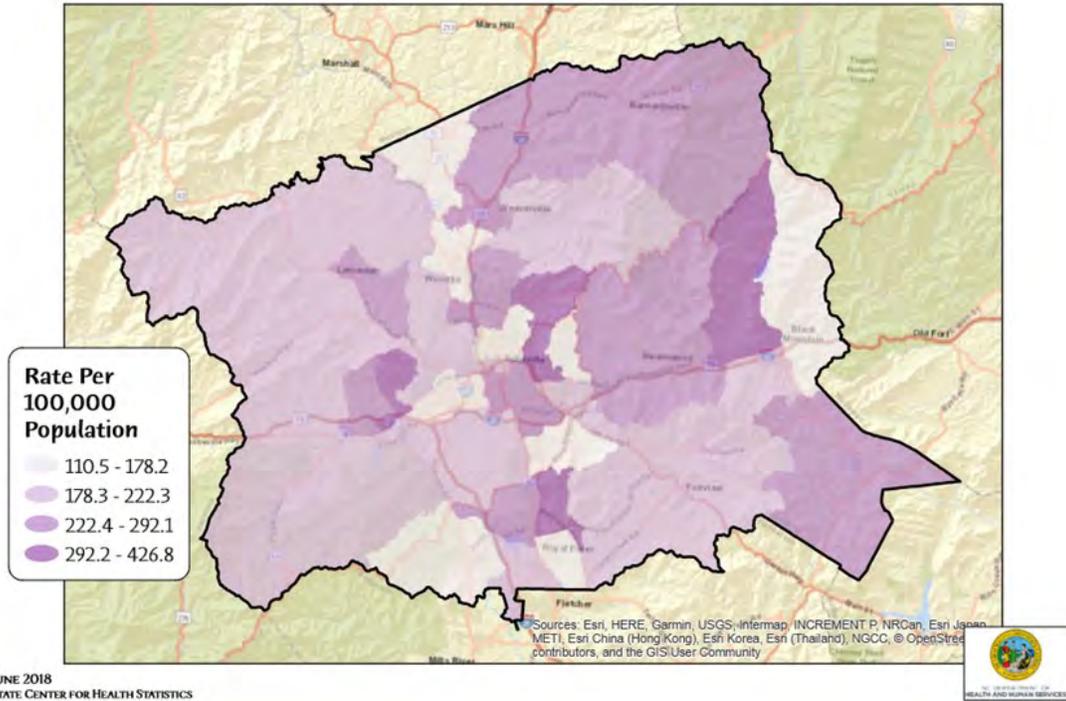
Chronic Lower Respiratory Disease Mortality Rates



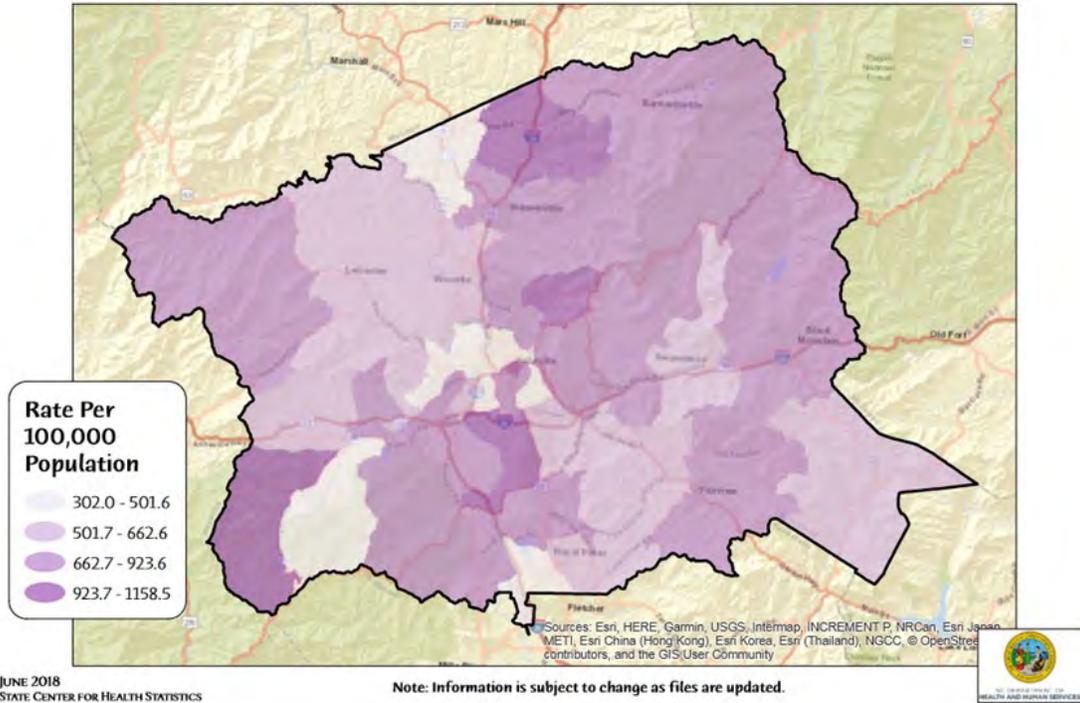
Other Unintentional Injuries Mortality Rates



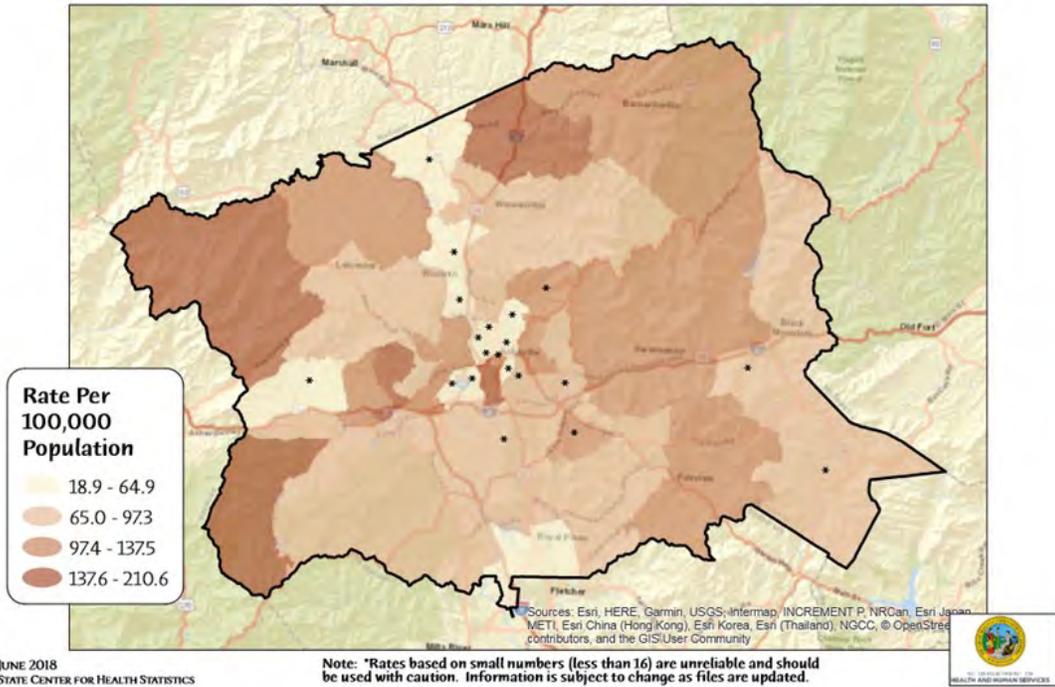
All Cancers Mortality Rates



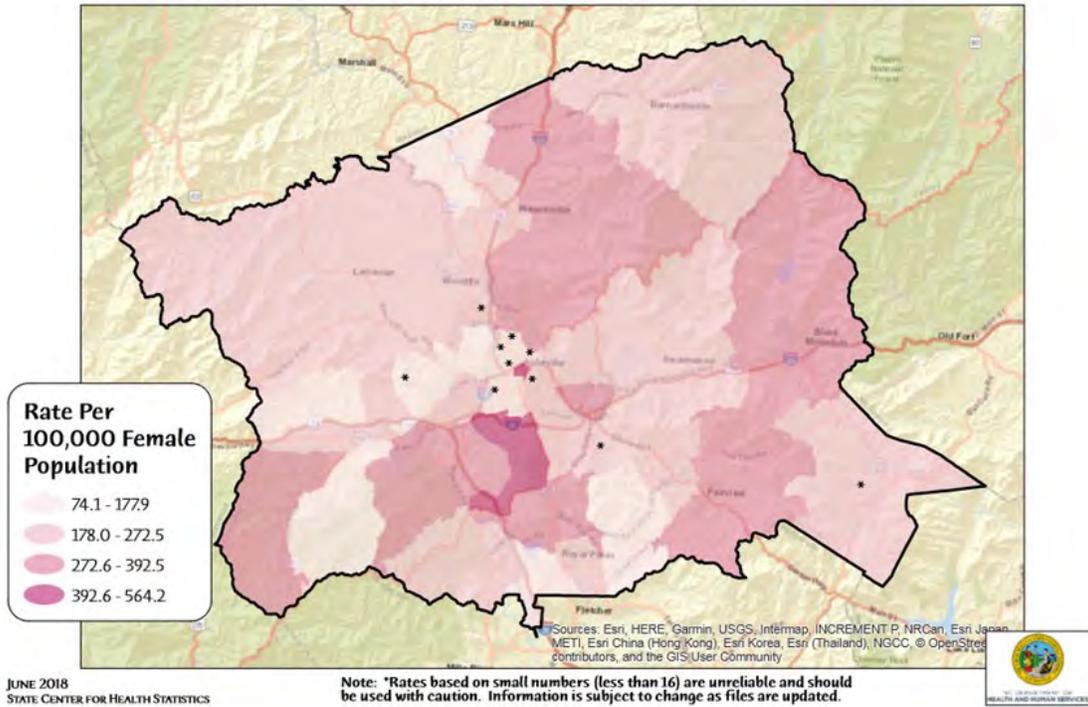
All Cancer Incidence Rates



Lung and Bronchus Cancer Incidence Rates



Breast Cancer Incidence Rates



**Appendix D – Survey Findings
WNC Healthy Impact Survey Instrument
Community Health Survey Results**



Professional Research Consultants, Inc.

2018 PRC Community Health Needs Assessment

Buncombe County, North Carolina

Prepared for:

WNC Healthy Impact

By Professional Research Consultants, Inc.

Custom Research
for Achieving Excellence
©2017 Professional Research Consultants, Inc.

WNCHEALTHYIMPACT

PRC Community Health Needs Assessment

Methodology

Survey methodology

- 2,602 surveys were completed via telephone (landline [71%] and cell phone [29%]); while 663 were completed online
- Allows for high participation and random selection
 - These are critical to achieving a sample representative of county and regional populations by gender, age, race/ethnicity, income
- English and Spanish





Methodology

3,265 surveys throughout WNC

- Adults age 18+
- Gathered data for each of 16 counties
- Weights were added to enhance representativeness of data at county and regional levels



Methodology

Individual county samples allow for drill-down by:

- Gender
- Income
- Other categories, based on question responses



Survey Instrument

Based largely on national survey models

- When possible, question wording from public surveys (e.g., CDC BRFSS)

75 questions asked of all counties

- Each county added three county-specific questions
- Approximately 15-minute interviews
- Questions determined by WNC stakeholder input



Keep in mind

Sampling levels allow for good local confidence intervals, but you should still keep in mind that error rates are larger at the county level than for WNC as a region

- Results for WNC regional data have maximum error rate of +1.7% at the 95% confidence level
- Results for Buncombe County have maximum error rate of +5.6% at the 95% confidence level
- Results for Graham County have maximum error rate of +7.8% at the 95% confidence level
- Results for other individual counties have maximum error rate of +6.9% at the 95% confidence level

PRC indicates in regional report when differences – between county and regional results, different demographic groups, and 2012 to 2015 – are statistically significant



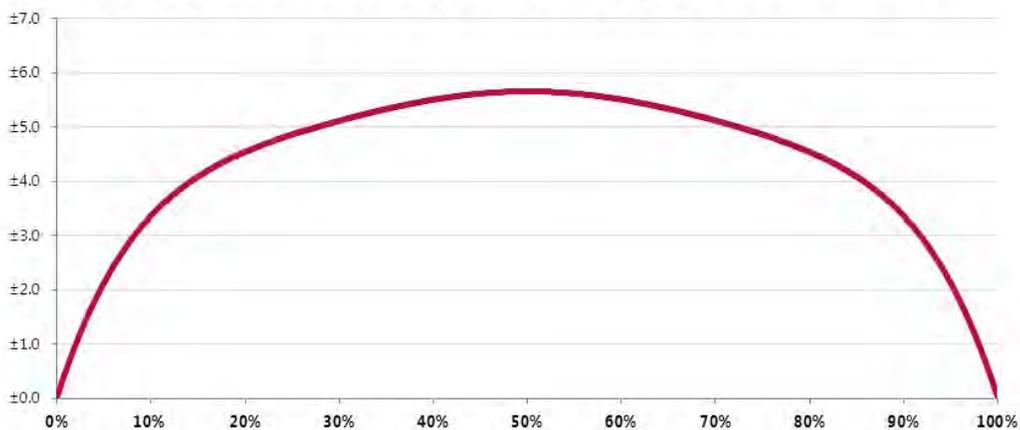
Keep in mind

For more detailed information on methods, see:

- PRC's Primary Data Collection: Research Approach & Methods document (2018)
- County-specific CH(N)A Templates



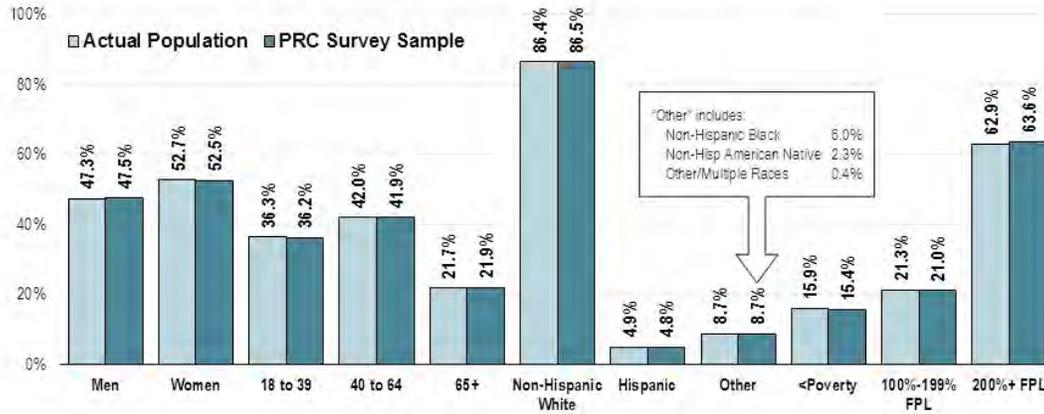
Expected Error Ranges for a Sample of 304 Respondents at the 95 Percent Level of Confidence



- Note:
- 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 the sample of 304 respondents answered a certain question with a "yes," it can be asserted that between 6.6% and 13.4% (10% ± 3.4%) 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 44.4% and 55.6% (50% ± 5.6%) of the total population would respond "yes" if asked this question.

Population & Survey Sample Characteristics

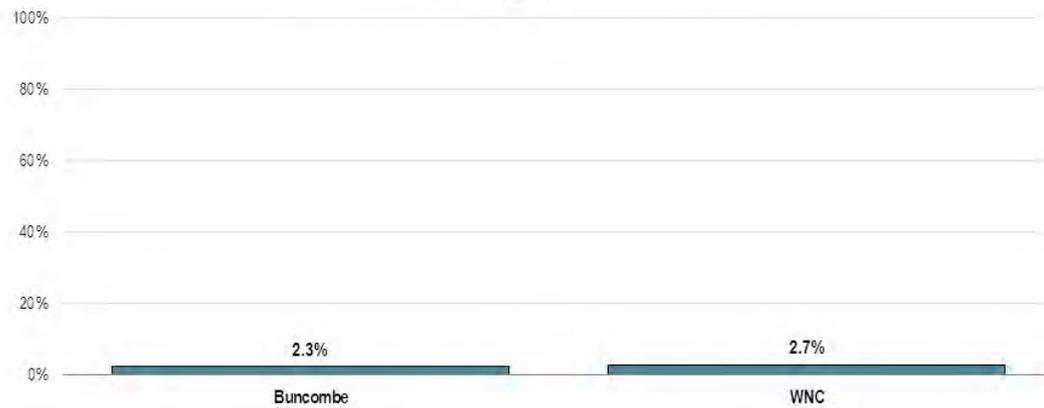
(Age 18 and Older; Buncombe County, 2018)



Sources:
 • 2011-2016 American Community Survey, U.S. Census Bureau.
 • PRC Community Health Survey, Professional Research Consultants, Inc.

Native American Sample

(2018)



Sources:
 • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 178, 321]
 Notes:
 • Asked of all respondents.



QUALITY OF LIFE

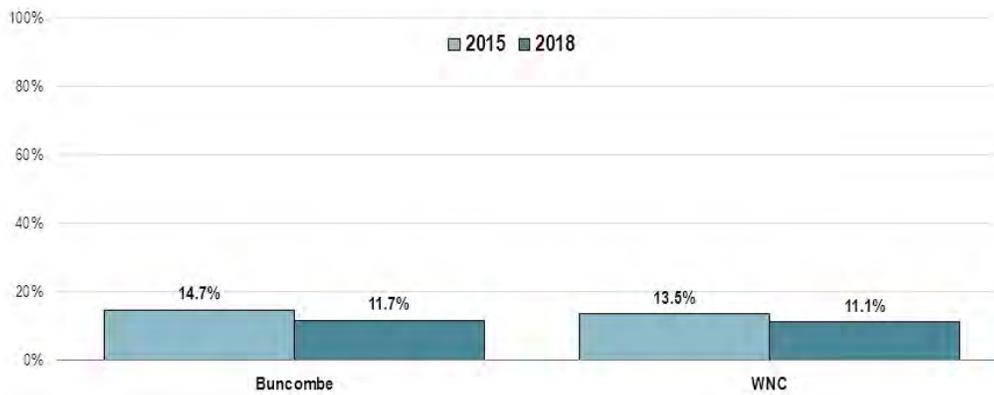


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PRC Community Health Needs Assessment

County Is a “Fair/Poor” Place to Live



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 301]
Notes: • Asked of all respondents.

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Top Three County Issues Perceived as in Most Need of Improvement (2018)

	Buncombe	WNC
Availability of Employment		✓
Road Maintenance	✓	✓
Affordable/Better Housing	✓	✓
Government	✓	

Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 302]
 Notes: • Asked of all respondents.

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SELF-REPORTED HEALTH STATUS



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Overall Health

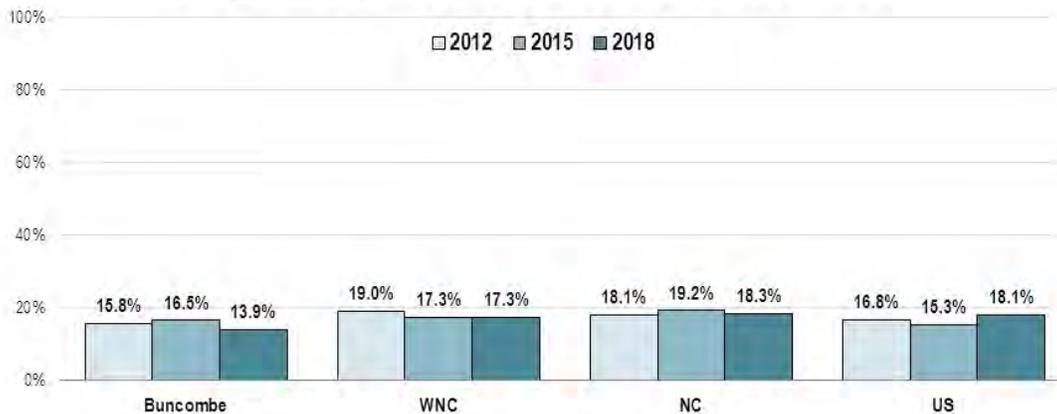


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PRC Community Health Needs Assessment

Experience “Fair” or “Poor” Overall Health



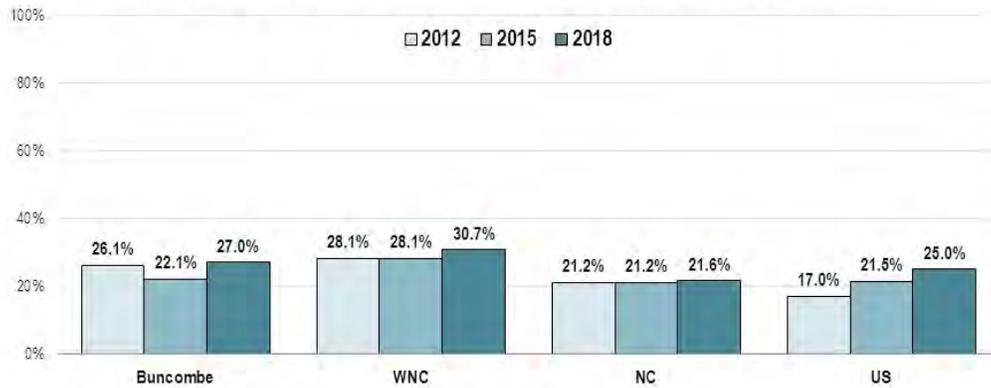
Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
- Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

- Asked of all respondents.

Limited in Activities in Some Way Due to a Physical, Mental, or Emotional Problem



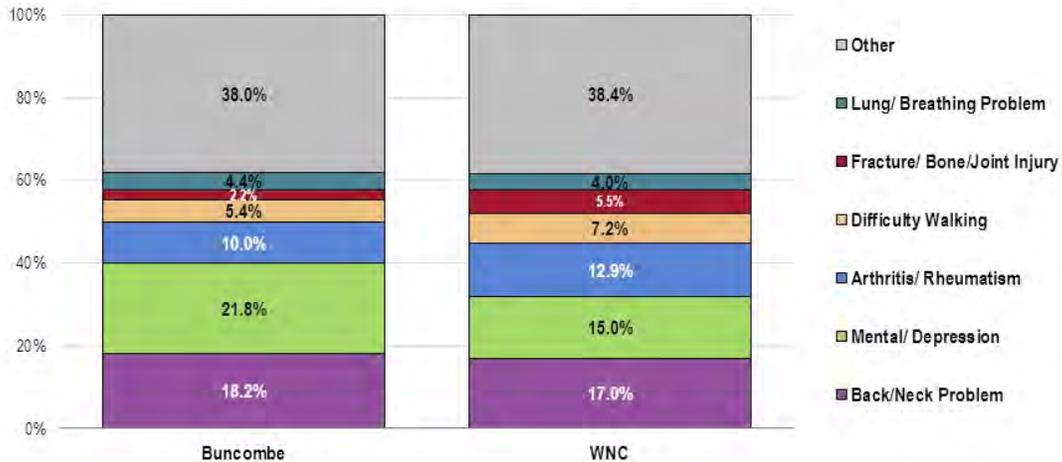
Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]
- Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

- Asked of all respondents.

Type of Problem That Limits Activities (Among Those Reporting Activity Limitations: 2018)



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 110]

 Notes:

- Asked of respondents who noted some type of activity limitation.



Mental Health & Mental Disorders

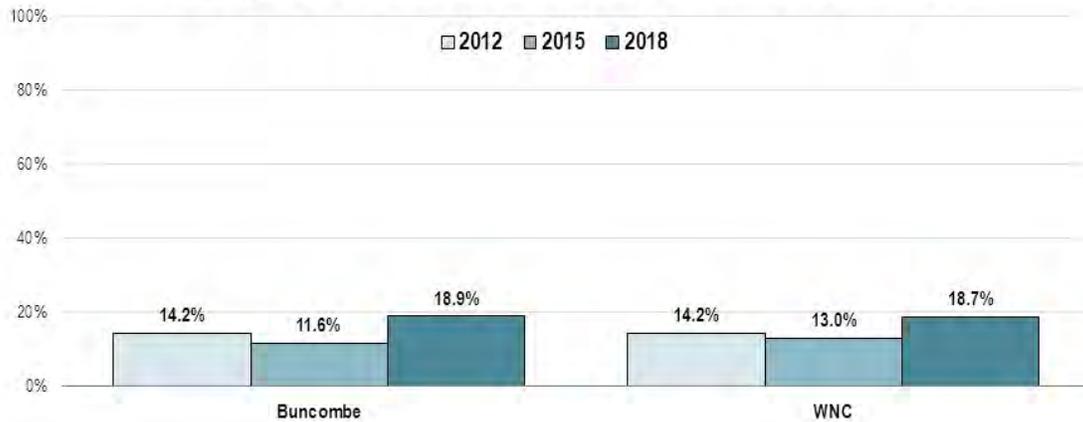


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PRC Community Health Needs Assessment

>7 Days of Poor Mental Health in the Past Month



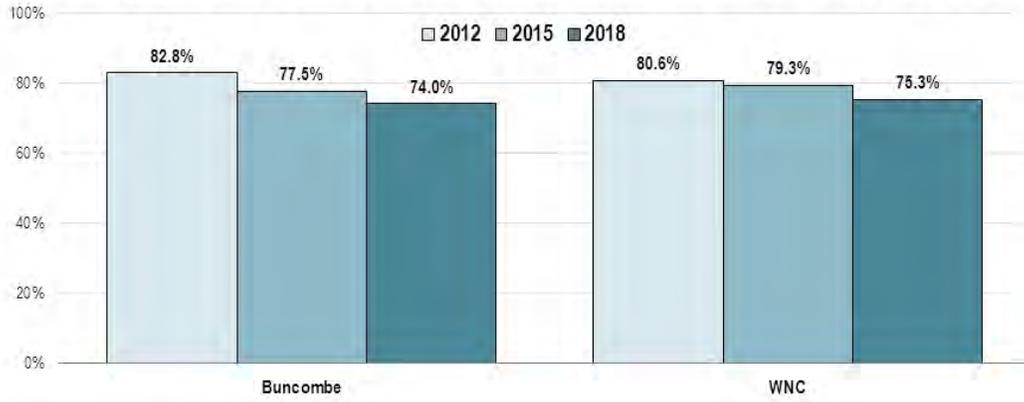
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 337]
Notes: • Asked of all respondents.

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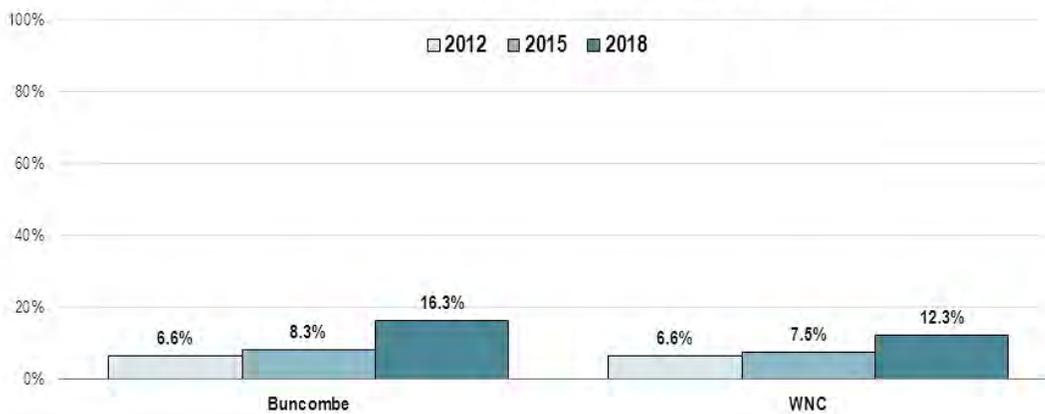
“Always” or “Usually” Get Needed Social/Emotional Support



Sources: 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 336]
 Notes: Includes "always" and "usually" responses.

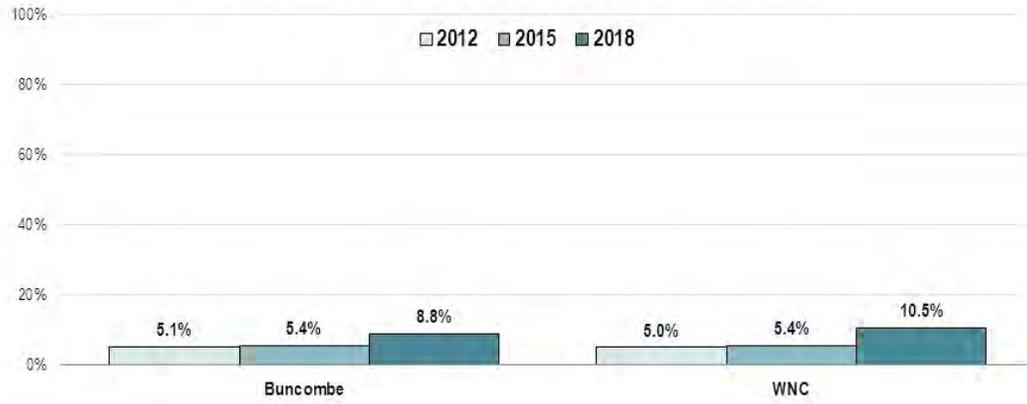


Did Not Get Mental Health Care or Counseling that was Needed in the Past Year



Sources: 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 105]
 Notes: Asked of all respondents.

Dissatisfied with Life ("Dissatisfied" and "Very Dissatisfied" Responses)



Sources: 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 335]
Notes: Asked of all respondents.

ACEs

Adverse Childhood Experiences (ACEs)

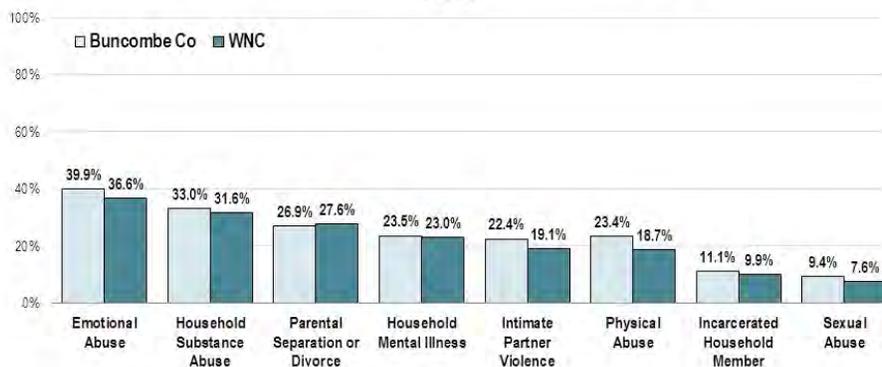
Category	Question
Household Mental Illness	Before you were 18 years of age, did you live with anyone who was depressed, mentally ill, or suicidal?
Household Substance Abuse	Before you were 18 years of age, did you live with anyone who was a problem drinker or alcoholic?
	Before you were 18 years of age, did you live with anyone who used illegal street drugs or who abused prescription medications?
Incarcerated Household Member	Before you were 18 years of age, did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
Parental Separation or Divorce	Before you were 18 years of age, were your parents separated or divorced?
Intimate Partner Violence	Before age 18, how often did your parents or adults in your home slap, hit, kick, punch or beat each other up?
Physical Abuse	Before age 18, how often did a parent or adult in your home hit, beat, kick, or physically hurt you in any way? Do not include spanking.
Emotional Abuse	Before age 18, how often did a parent or adult in your home swear at you, insult you, or put you down?
Sexual Abuse	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you touch you sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you try to make you touch them sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you force you to have sex?

Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 339-349, 351-360]
 Notes: • Reflects the total sample of respondents.

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Experienced Adverse Childhood Experiences (ACEs) Prior to Age 18 (2018)



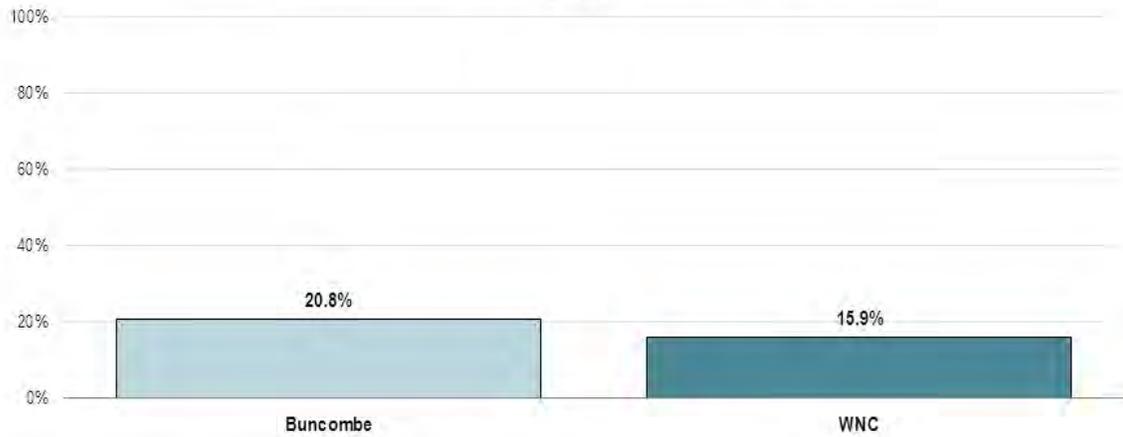
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 351-358]
 Notes: • Asked of all respondents (Adults 18+).
 • ACEs are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts.

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Prevalence of High ACE Scores (4 or More) (2018)



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 359]

Notes:

- Asked of all respondents (Adults 18+).

- ACEs are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts.
- Adults with at least one adverse childhood experience (ACE) are categorized as having a low ACE score (1-3 ACEs) or a high score (4+ ACEs).



CHRONIC CONDITIONS





Cardiovascular Risk

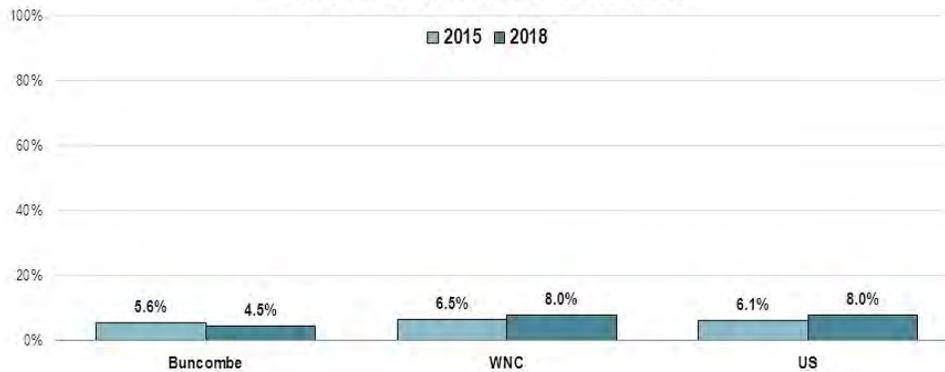


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PRC Community Health Needs Assessment

Prevalence of Heart Disease



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 309]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

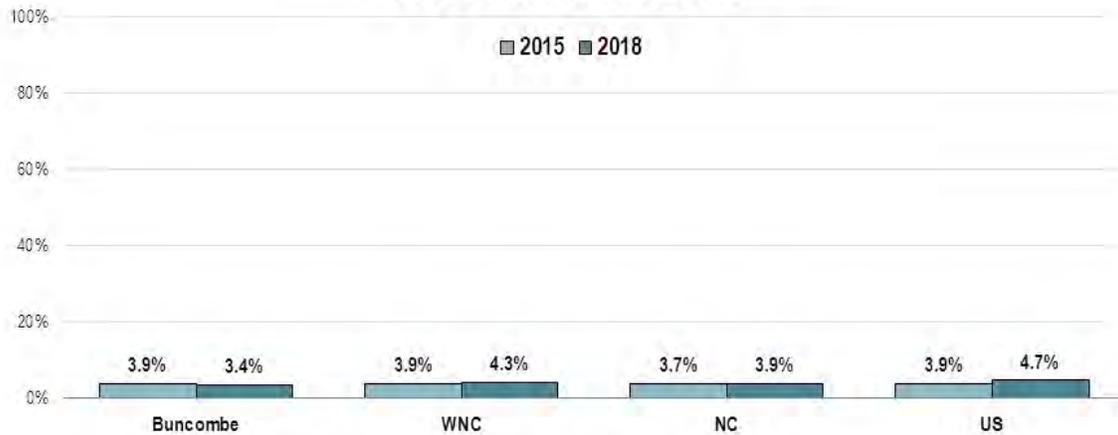
- Asked of all respondents.

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Prevalence of Stroke



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

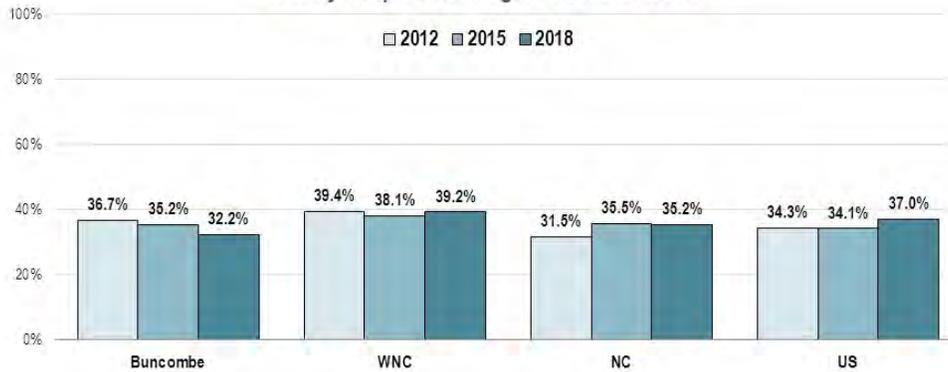
 Notes:

- Asked of all respondents.



Prevalence of High Blood Pressure

Healthy People 2020 Target = 26.9% or Lower



Sources:

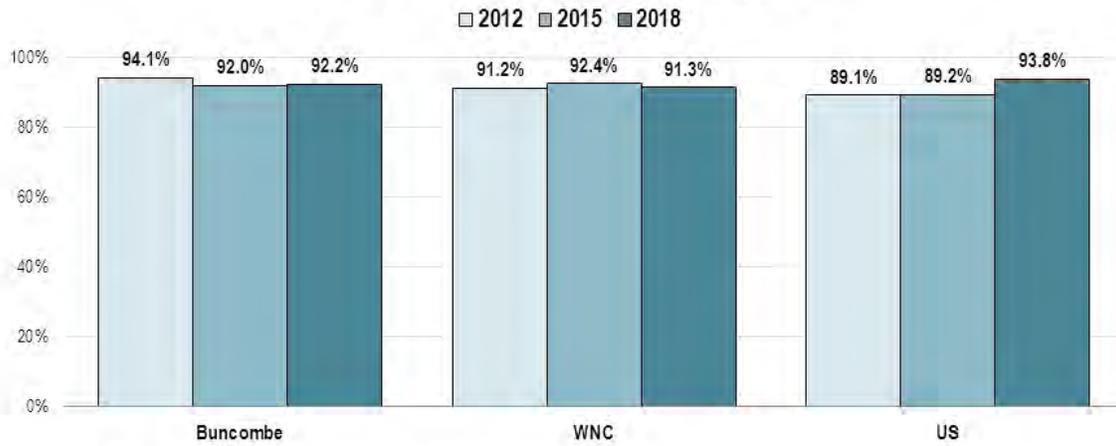
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 39]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

- Asked of all respondents.



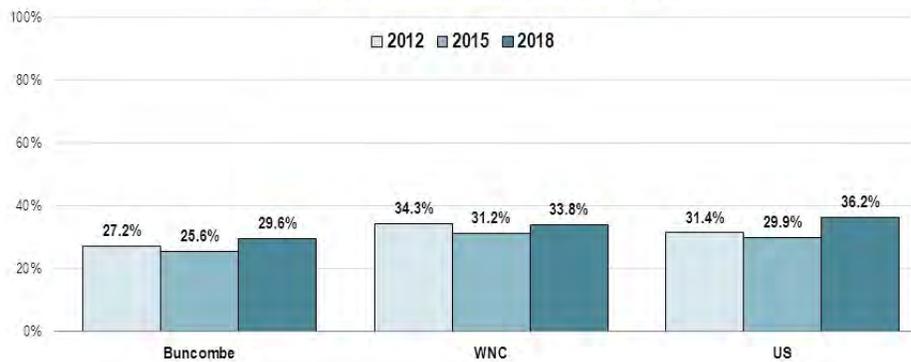
Taking Action to Control High Blood Pressure (Among Adults with High Blood Pressure)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 41]
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of respondents reporting having ever been diagnosed with high blood pressure.

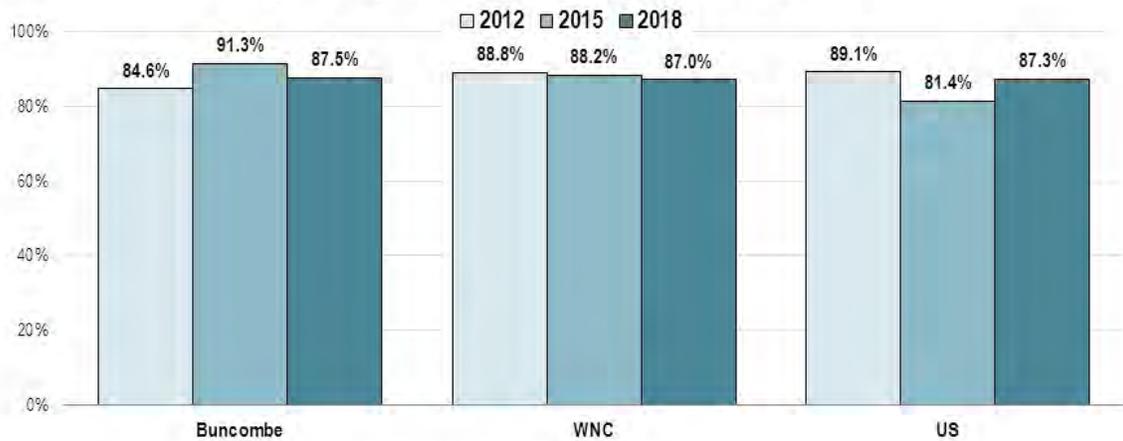


Prevalence of High Blood Cholesterol Healthy People 2020 Target = 13.5% or Lower



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents.

Taking Action to Control High Blood Cholesterol (Among Adults with High Blood Cholesterol Levels)

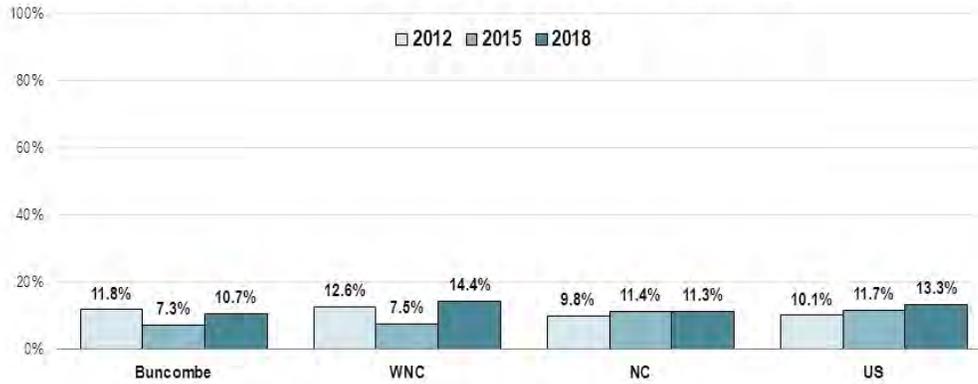


Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of respondents reporting having ever been diagnosed with high blood cholesterol.

Diabetes



Prevalence of Diabetes (Ever Diagnosed)



Sources:

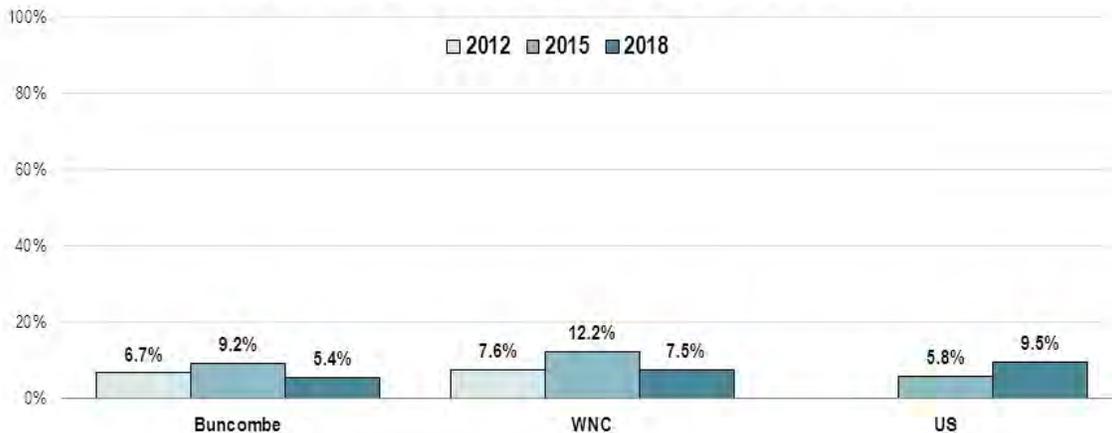
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]
- Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

- Asked of all respondents.



Prevalence of Borderline or Pre-Diabetes



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

- Asked of all respondents.

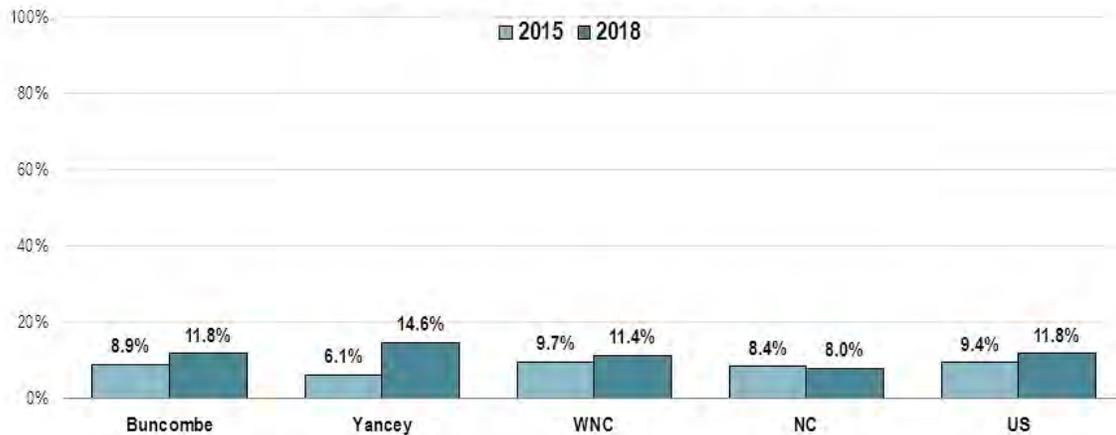
Respiratory Conditions



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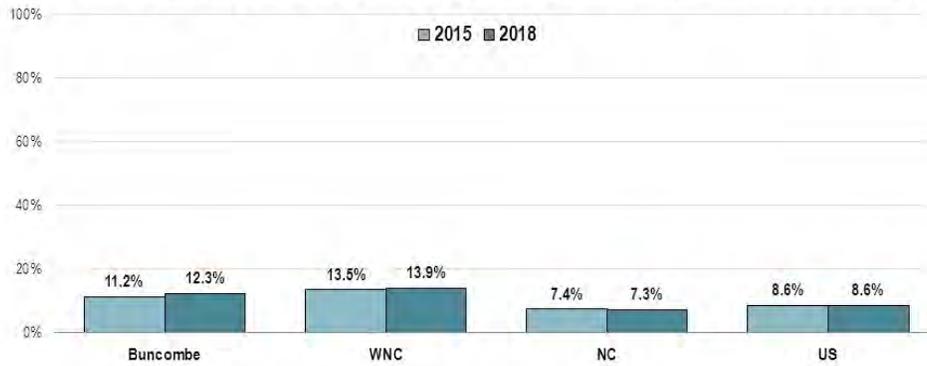
PRC Community Health Needs Assessment

Prevalence of Current Asthma



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 138]
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 North Carolina data.
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.

Prevalence of Chronic Obstructive Pulmonary Disease (COPD)



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 24]
- Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

- Asked of all respondents.

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MODIFIABLE HEALTH RISKS



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Nutrition

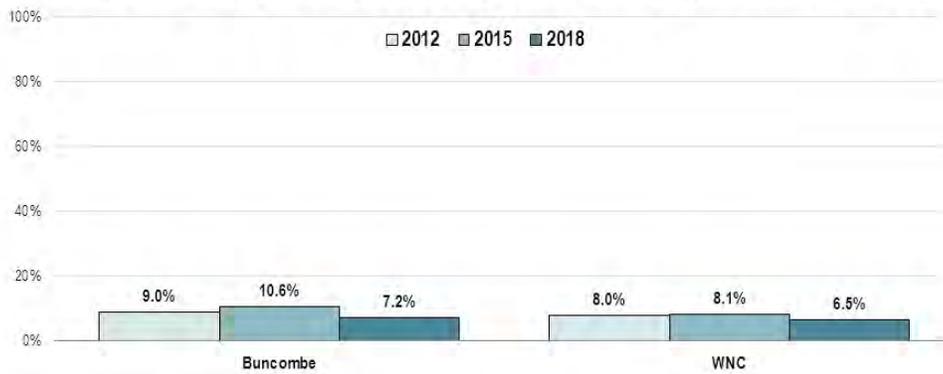


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PRC Community Health Needs Assessment

Consume Five or More Servings of Fruits/Vegetables Per Day



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]

Notes:

- Asked of all respondents.

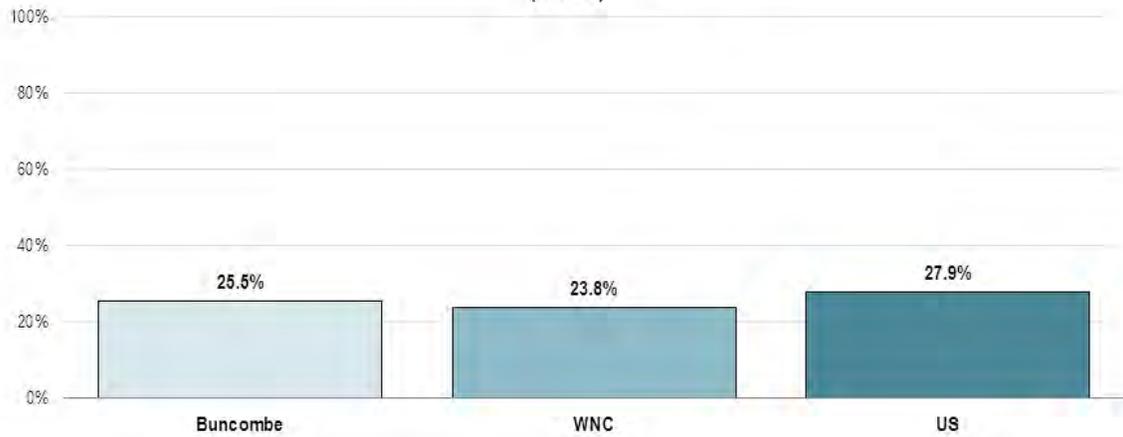
- For this issue, respondents were asked to recall their food intake during the previous week. Reflects 1-cup servings of fruits and/or vegetables in the past week, excluding lettuce salad and potatoes.

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Food Insecurity (2018)



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 149]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

- Asked of all respondents.
- Includes adults who A) ran out of food at least once in the past year and/or B) worried about running out of food in the past year.



Physical Activity & Fitness

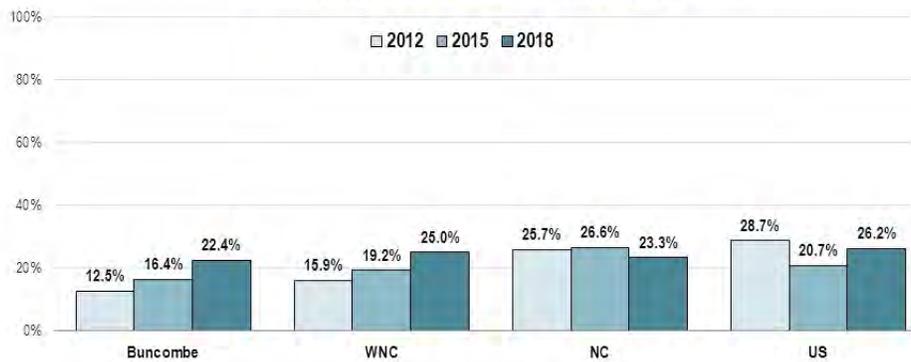


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PRC Community Health Needs Assessment

No Leisure-Time Physical Activity in the Past Month Healthy People 2020 Target = 32.6% or Lower



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 89]
- Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

Notes:

- Asked of all respondents.

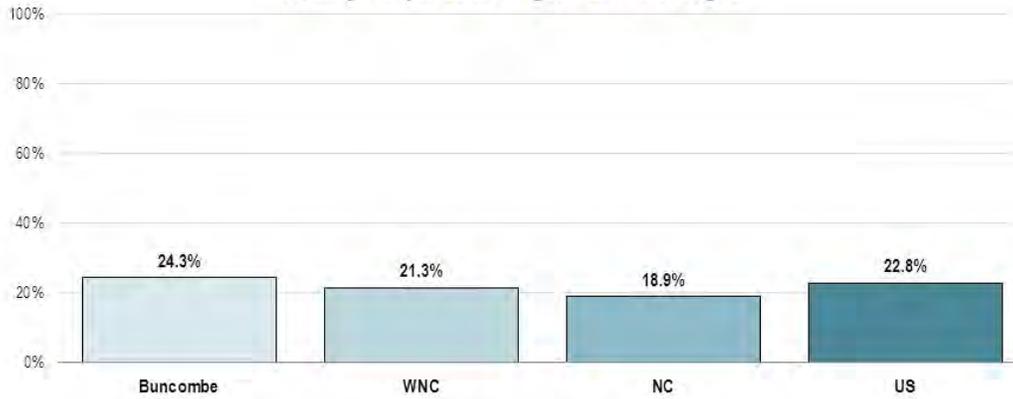
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Meets Physical Activity Recommendations (2018)

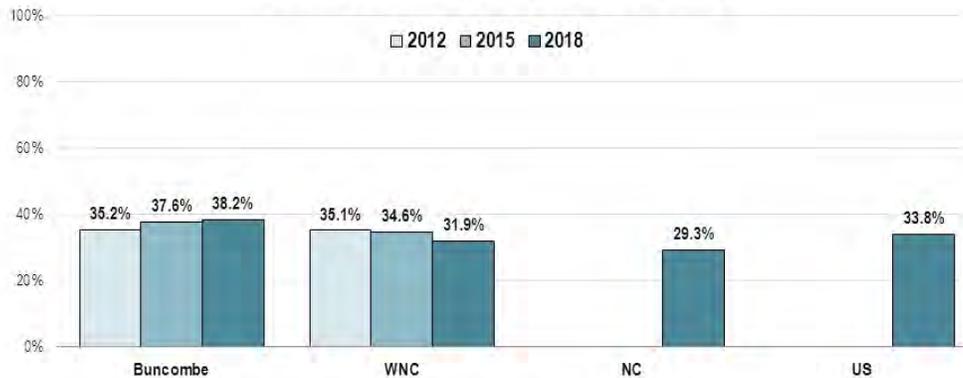
Healthy People 2020 Target = 20.1% or Higher



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 North Carolina data.
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective: PA-2.4]
- Notes:
- Asked of all respondents.



Strengthening Physical Activity



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 151]
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 North Carolina data.
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
 - Takes part in physical activities or exercises that strengthen muscles at least 2 times per week.



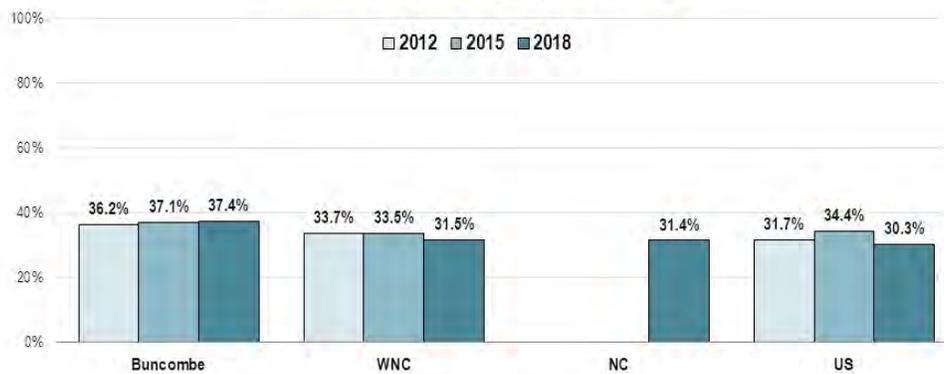
Body Weight



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PRC Community Health Needs Assessment

Healthy Weight (Body Mass Index Between 18.5 and 24.9) Healthy People 2020 Target = 33.9% or Higher



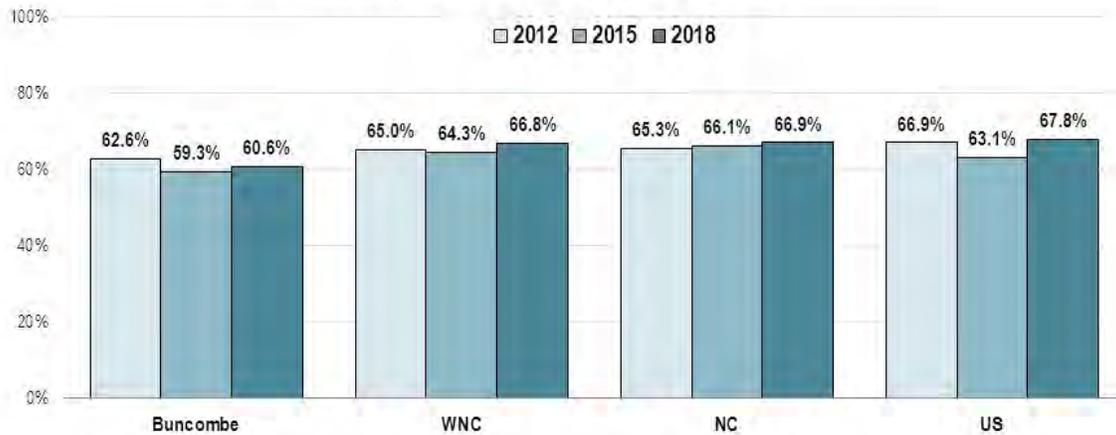
- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective: NWS-8]
- Notes:
- Based on reported heights and weights; asked of all respondents.
 - The definition of healthy weight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), between 18.5 and 24.9.

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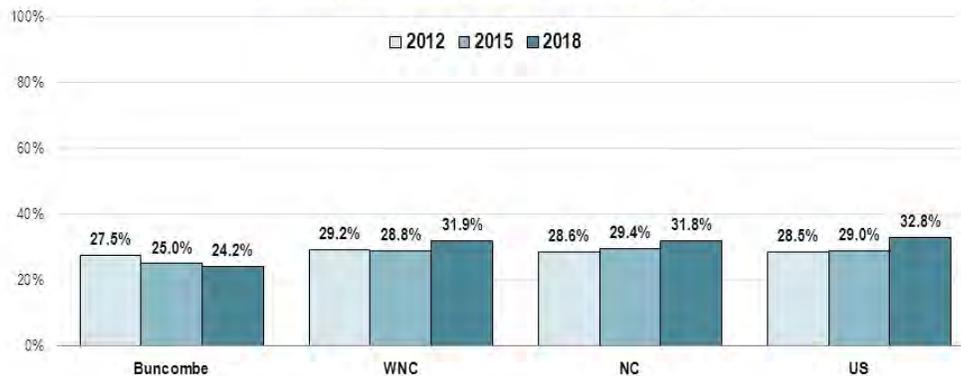
Total Overweight (Overweight or Obese) (Body Mass Index of 25.0 or Higher)



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Based on reported heights and weights; asked of all respondents.
 - The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.



Obesity (Body Mass Index of 30.0 or Higher) Healthy People 2020 Target = 30.6% or Lower



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services: Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]
- Notes:
- Based on reported heights and weights; asked of all respondents.
 - The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.



Substance Abuse

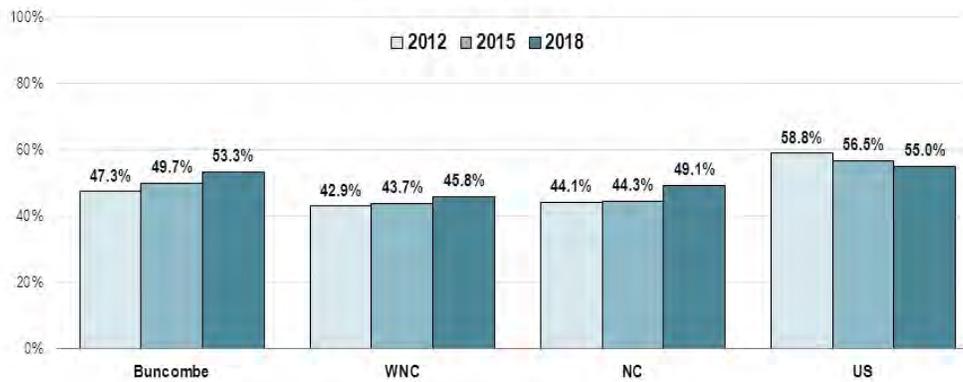


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PRC Community Health Needs Assessment



Current Drinkers



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 164]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2016 North Carolina data.
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
 - Current drinkers had at least one alcoholic drink in the past month.

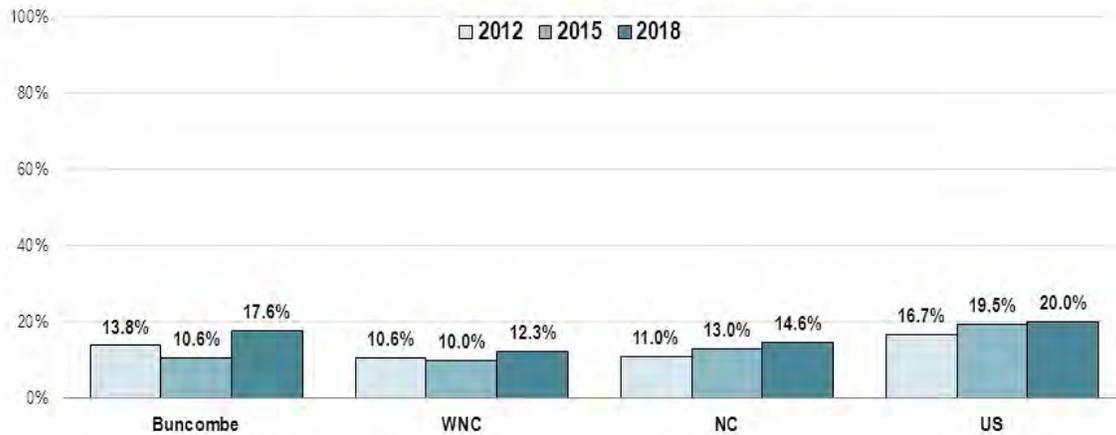
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Binge Drinkers

Healthy People 2020 Target = 24.2% or Lower



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 166]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-14.3]
- Notes:
- Asked of all respondents.
 - Binge drinkers are defined as men consuming 5+ alcoholic drinks on any one occasion in the past month or women consuming 4+ alcoholic drinks on any one occasion in the past month.
 - Previous survey data classified both men and women as binge drinkers if they had 5+ alcoholic drinks on one occasion in the past month.

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Excessive Drinkers

Healthy People 2020 Target = 25.4% or Lower



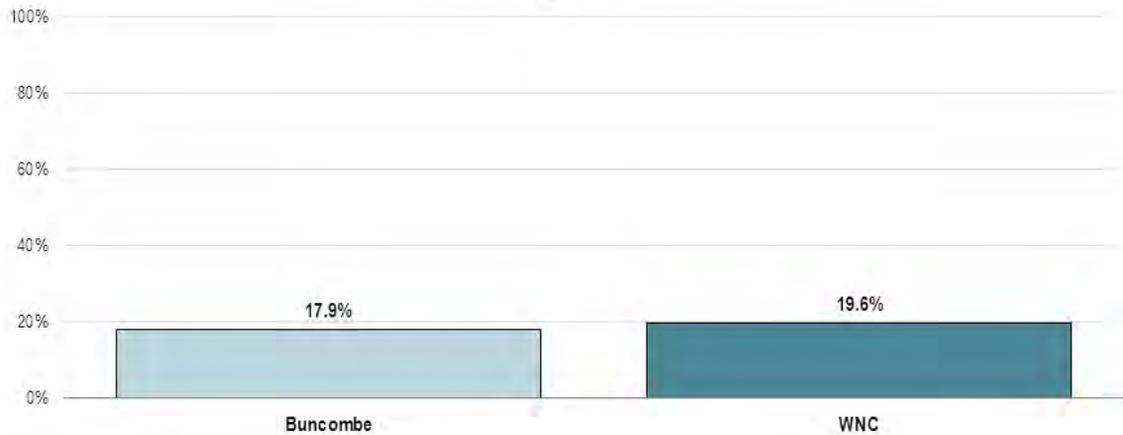
- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-15]
- Notes:
- Asked of all respondents.
 - Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

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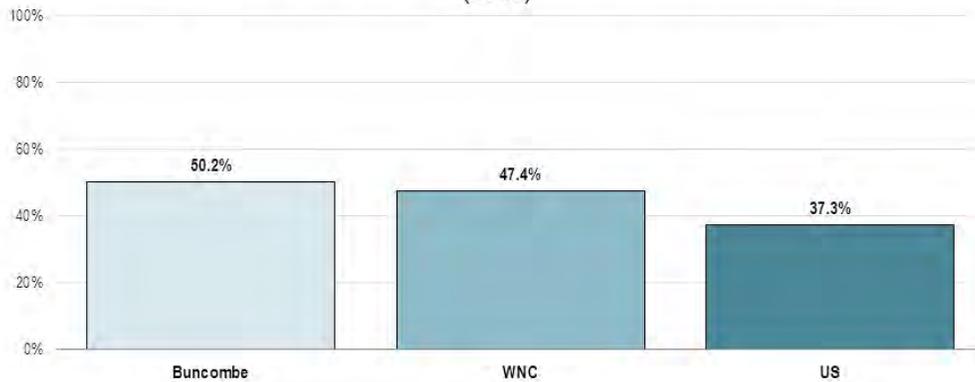
Used Opiates/Opioids in the Past Year, With or Without a Prescription (2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 316]
Notes: • Asked of all respondents.



Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else) (2018)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 61]
• 2017 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.



Tobacco Use

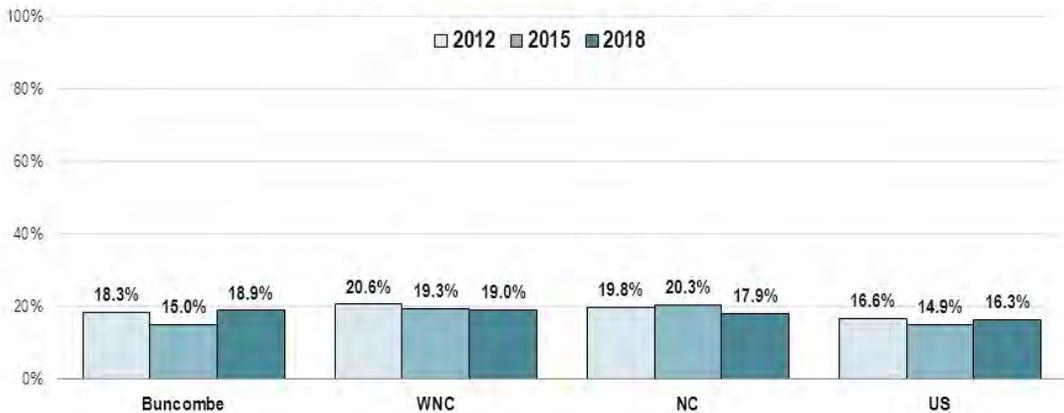


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PRC Community Health Needs Assessment

Current Smokers Healthy People 2020 Target = 12.0% or Lower



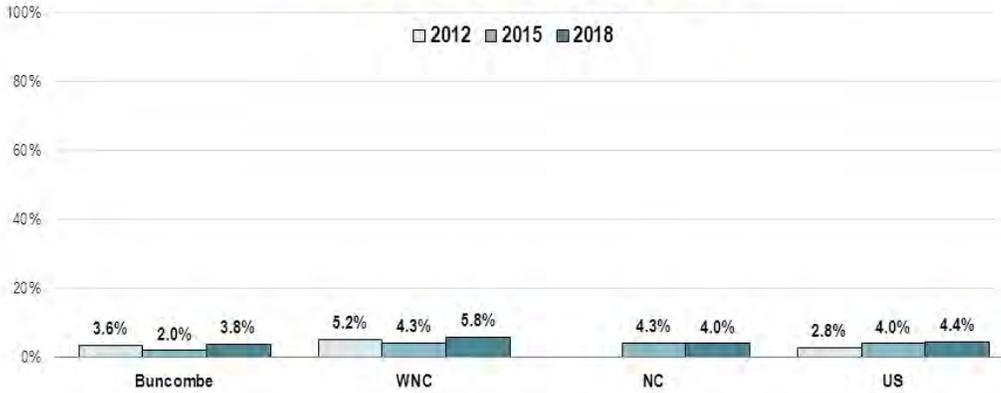
- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 49]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective: TU-1.1]
- Notes:
- Asked of all respondents.
 - Includes regular and occasional smokers (everyday and some days).

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Currently Use Smokeless Tobacco Products Healthy People 2020 Target = 0.3% or Lower



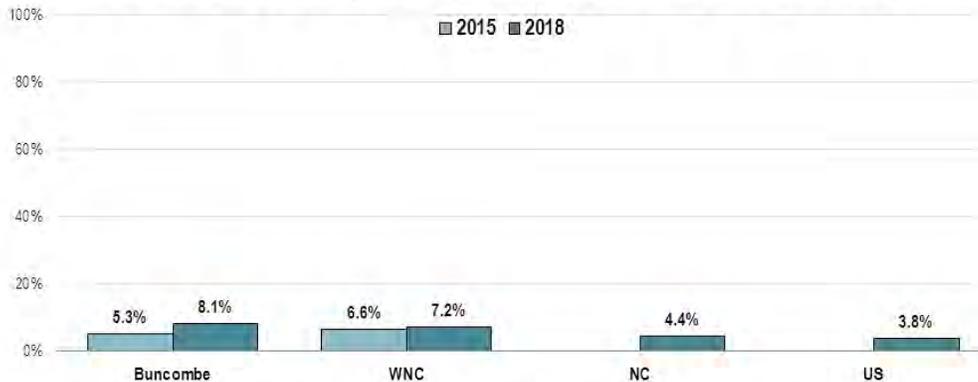
- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 313]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1,2]
- Notes:
- Asked of all respondents.
 - Includes regular and occasional smokers (everyday and some days).

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Currently Use Vaping Products (Such as E-Cigarettes)



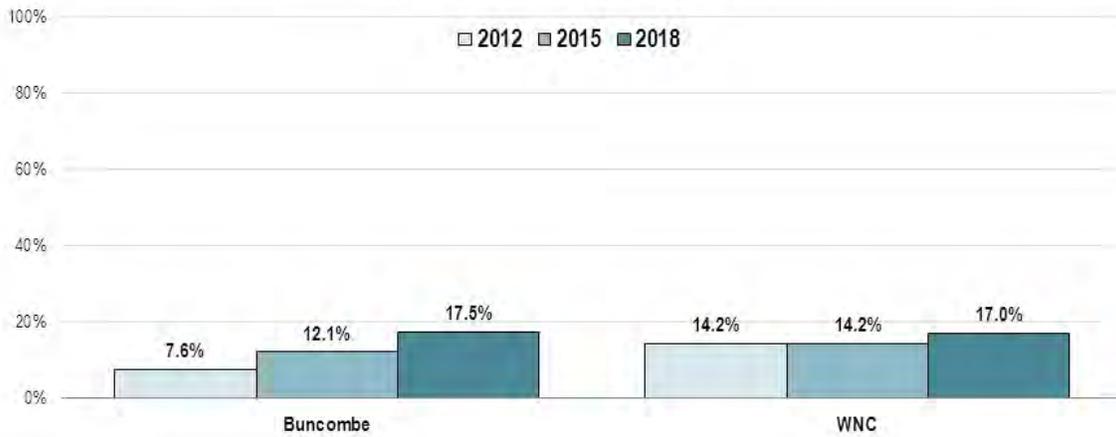
- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 54]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
- Notes:
- Asked of all respondents.
 - Vaping products (such as electronic cigarettes or e-cigarettes) are battery-operated devices that simulate traditional cigarette smoking but do not involve the burning of tobacco. The cartridge or liquid "e-juice" used in these devices produces vapor and comes in a variety of flavors.
 - Includes regular and occasional smokers (everyday and some days).

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Have Breathed Someone Else's Smoke at Work in the Past Week (Employed Respondents)



Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 312]
Notes: • Asked of employed respondents.

Health Insurance Coverage



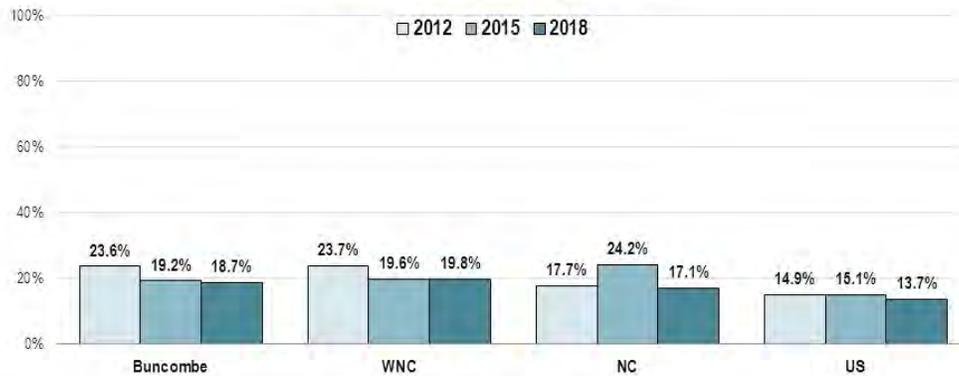
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PRC Community Health Needs Assessment

Lack of Healthcare Insurance Coverage

(Adults Age 18-64)

Healthy People 2020 Target = 0.0%

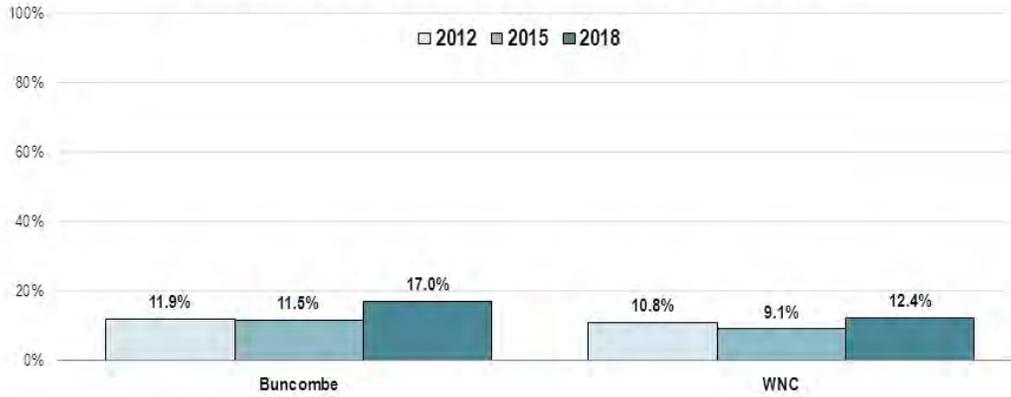


- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 326]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]
- Notes:
- Reflects all respondents under the age of 65.
 - Includes any type of insurance, such as traditional health insurance, prepaid plans such as HMOs, or government-sponsored coverage (e.g., Medicare, Medicaid, Indian Health Services, etc.).

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Was Unable to Get Needed Medical Care at Some Point in the Past Year



Sources: 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 303]
Notes: Asked of all respondents.



Primary Care Services



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PRC Community Health Needs Assessment

Have a Specific Source of Ongoing Medical Care

Healthy People 2020 Target = 95.0% or Higher



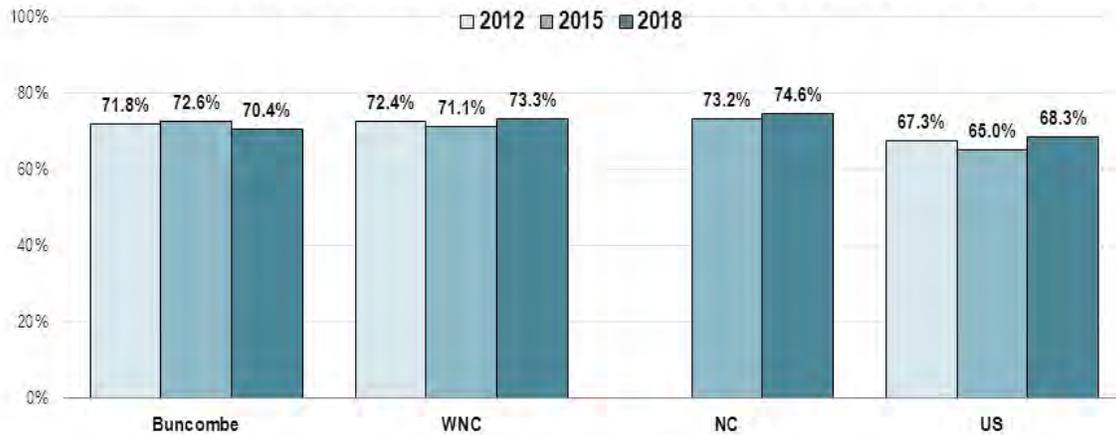
- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 170]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services, Healthy People 2020, December 2010. <http://www.healthypeople.gov> [Objective AHS-5.1]
- Notes:
- Asked of all respondents.

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Have Visited a Physician for a Checkup in the Past Year



Sources:

- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]
- 2017 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.

Notes:

- Asked of all respondents.



Preventive Screenings



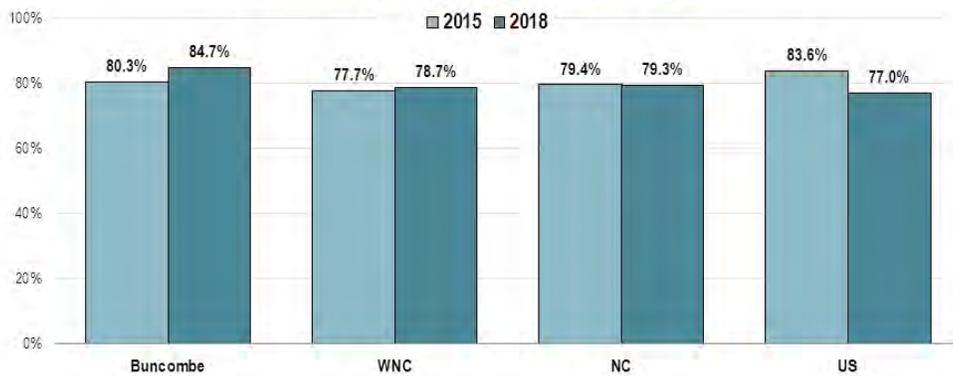
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PRC Community Health Needs Assessment

Have Had a Mammogram in the Past Two Years (Women Age 50-74: 2018)

Healthy People 2020 Target = 81.1% or Higher



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 133]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - US Department of Health and Human Services, Healthy People 2020, December 2010, <http://www.healthypeople.gov> [Objective C-17]
- Notes:
- Reflects female respondents age 50-74.

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Oral Health



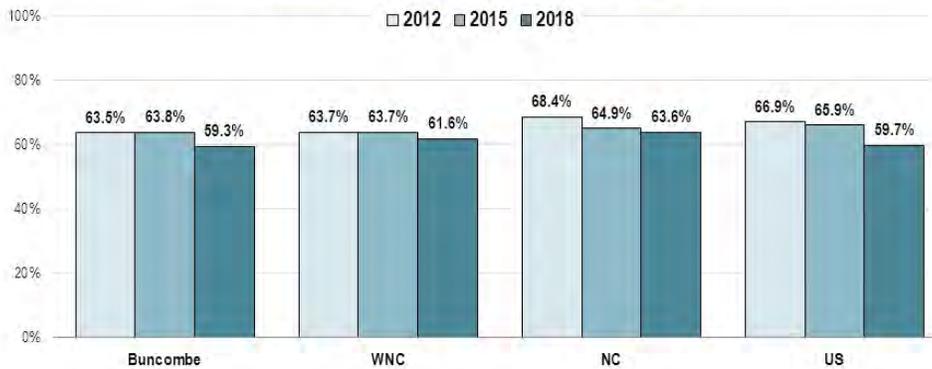
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PRC Community Health Needs Assessment

Have Visited a Dentist or Dental Clinic Within the Past Year

Healthy People 2020 Target = 49.0% or Higher



- Sources:
- 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
 - 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2016 North Carolina data.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]
- Notes:
- Asked of all respondents.

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COUNTY-SPECIFIC QUESTIONS

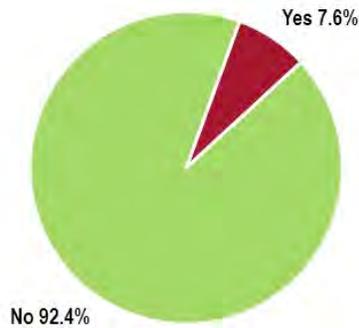


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PRC Community Health Needs Assessment

Emotionally Upset in the Past Month Due to Race-Related Treatment (Buncombe County, 2018)



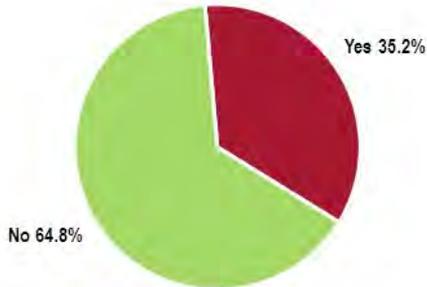
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 320]
Notes: • Asked of all respondents.

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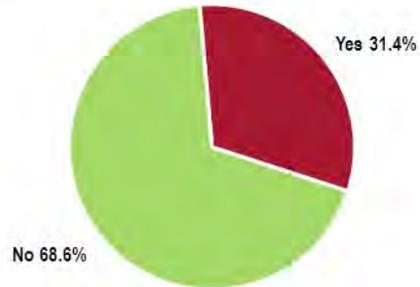
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Have Experienced Symptoms of Chronic Depression (Buncombe County, 2018)



Buncombe County

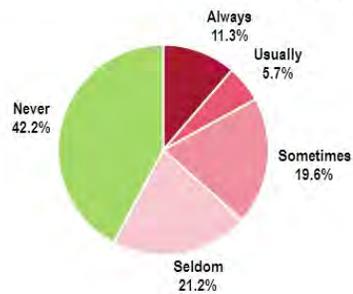


US

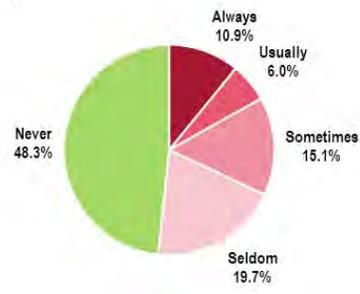
Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 100]
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Reflects the total sample of respondents.



Frequency of Worry or Stress Over Having Enough Money to Pay Rent or Mortgage in the Past Year (Buncombe County)



2015



2018

Sources: • 2018 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 71]
 Notes: • Asked of all respondents.

**Appendix E –
2-1-1 Counts - 2018
Buncombe County Service Request Summary**



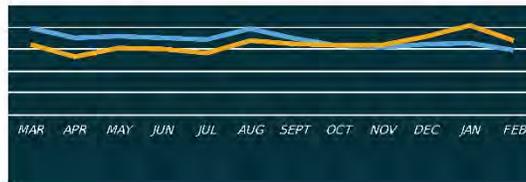
NC 2-1-1
 Jan 01, 2018 to Dec 31, 2018
 TOTAL CALLS **149,340**
 TOTAL REQUESTS **163,862**
FOR COUNTIES: Buncombe, NC



Top Request Categories

Housing & Shelter	15.2%
Food	6.3%
Utilities	5.0%
Healthcare	10.8%
Mental Health & Addictions	5.7%
Employment & Income	5.3%
Clothing & Household	2.4%
Child Care & Parenting	<1%
Government & Legal	12.2%
Transportation Assistance	2.8%
Education	1.0%
Disaster	1.0%
Other	31.6%
Total for top requests	100%

ALL TOP REQUESTS IN THE LAST YEAR AND PRIOR YEAR





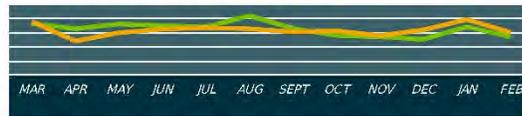
NC 2-1-1
 Jan 01, 2018 to Dec 31, 2018
 TOTAL CALLS **149,340**
 TOTAL REQUESTS **163,862**
FOR COUNTIES: Buncombe, NC



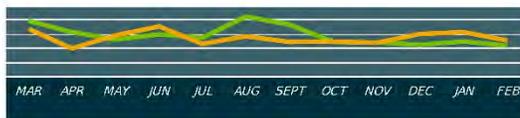
Housing & Shelter 15.2%

Shelters	34.1%
Low-cost housing	30.6%
Home repair/ maintenance	13.0%
Rent assistance	18.3%
Mortgage assistance	1.7%
Landlord/ tenant issues	1.7%
Contacts	<1%
Other housing & shelter	0%

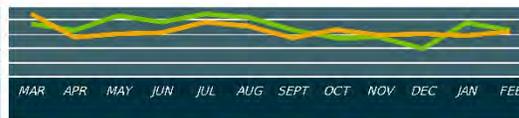
Housing & Shelter requests in the last year and prior year



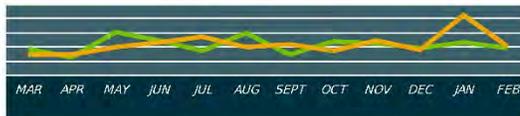
Shelters requests in the last year and prior year



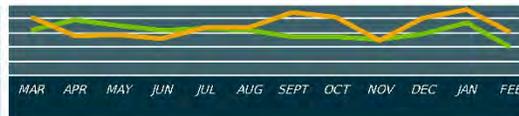
Low-cost housing requests in the last year and prior year



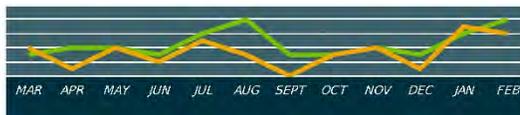
Home repair/ maintenance requests in the last year and prior year



Rent assistance requests in the last year and prior year



Mortgage assistance requests in the last year and prior year



Landlord/ tenant issues requests in the last year and prior year





NC 2-1-1
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Food	6.3%
Help buying food	16.2%
Food pantries	62.9%
Soup kitchens	12.4%
Feeding children	<1%
Home-delivered meals	5.5%
Holiday meals	2.6%
Contacts	0%
Other food	<1%

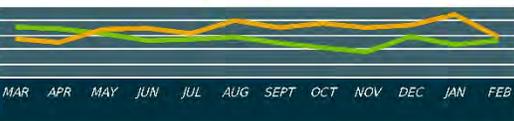
Food requests in the last year and prior year



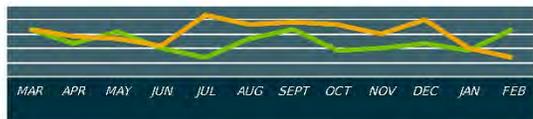
Help buying food requests in the last year and prior year



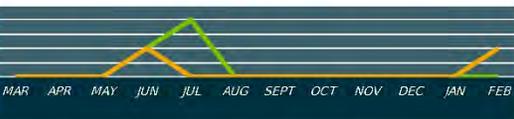
Food pantries requests in the last year and prior year



Soup kitchens requests in the last year and prior year



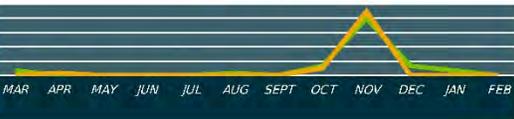
Feeding children requests in the last year and prior year



Home-delivered meals requests in the last year and prior year



Holiday meals requests in the last year and prior year





NC 2-1-1
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Utilities

5.0%

Electric	44.2%
Gas	2.9%
Water	8.2%
Heating fuel	9.4%
Trash collection	Not Available
Utility payment plans	Not Available
Utility deposit assistance	7.6%
Disconnection protection	Not Available
Phone	8.2%
Contacts	16.2%
Other utilities	3.4%

Utilities requests in the last year and prior year



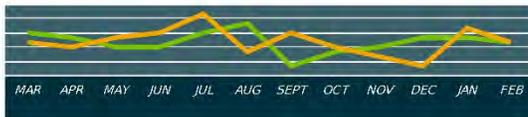
Electric requests in the last year and prior year



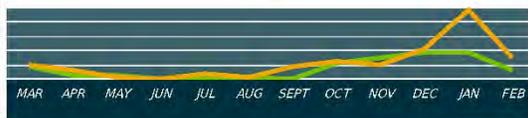
Gas requests in the last year and prior year



Water requests in the last year and prior year



Heating fuel requests in the last year and prior year





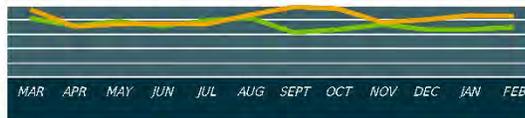
NC 2-1-1
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Healthcare 10.8%

Health insurance	9.9%
Medical expense assistance	2.7%
Medical providers	31.0%
Dental care	9.9%
Eye care	4.7%
Prescription medications	7.3%
Medical equipment	4.2%
Nursing homes & adult care	19.4%
Reproductive health	1.5%
Death related	1.0%
Contacts	2.5%
Other health services	5.9%
Other healthcare	0%

Healthcare requests in the last year and prior year



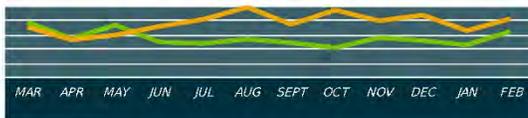
Health insurance requests in the last year and prior year



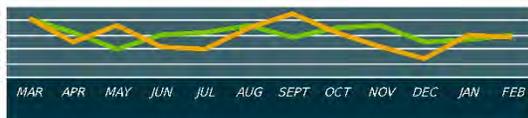
Medical expense assistance requests in the last year and prior year



Medical providers requests in the last year and prior year



Dental care requests in the last year and prior year





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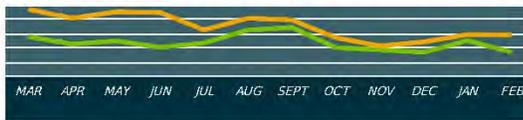


Mental Health & Addictions

5.7%

Substance abuse & addictions	21.0%
Marriage & family	1.1%
Crisis intervention & suicide	33.1%
Mental health services	35.0%
Mental health facilities	9.8%
Other mental health & addictions	0%

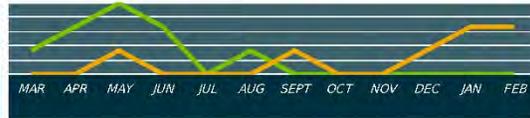
Mental Health & Addictions requests in the last year and prior year



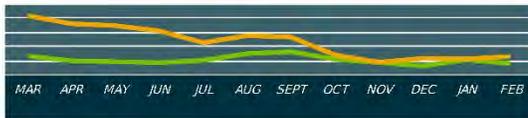
Substance abuse & addictions requests in the last year and prior year



Marriage & family requests in the last year and prior year



Crisis intervention & suicide requests in the last year and prior year



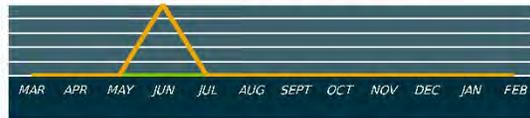
Mental health services requests in the last year and prior year



Mental health facilities requests in the last year and prior year



Other mental health & addictions requests in the last year and prior year





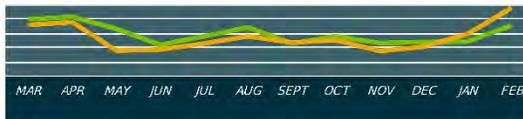
NC 2-1-1
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Employment & Income 5.3%

Job search	15.8%
Job development	3.3%
Unemployment benefits	2.0%
Tax preparation	18.0%
Financial assistance	42.5%
Money management	10.0%
Contacts	4.5%
Other employment & income	3.8%

Employment & Income requests in the last year and prior year



Job search requests in the last year and prior year



Job development requests in the last year and prior year



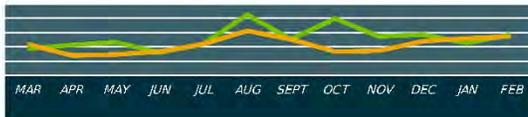
Unemployment benefits requests in the last year and prior year



Tax preparation requests in the last year and prior year



Financial assistance requests in the last year and prior year



Money management requests in the last year and prior year





NC 2-1-1
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Clothing & Household 2.4%

Clothing	26.2%
Personal hygiene products	10.6%
Appliances	13.8%
Home furnishings	12.4%
Thrift shops	13.8%
Seasonal/ holiday	17.5%
Contacts	0%
Other clothing & household	5.7%

Clothing & Household requests in the last year and prior year



Clothing requests in the last year and prior year



Personal hygiene products requests in the last year and prior year



Appliances requests in the last year and prior year



Home furnishings requests in the last year and prior year



Thrift shops requests in the last year and prior year



Seasonal/ holiday requests in the last year and prior year





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Child Care & Parenting | **<1%**

Child care	75.4%
Parenting	24.6%
Other child care & parenting	0%

Child Care & Parenting requests in the **last year** and **prior year**



Child care requests in the **last year** and **prior year**



Parenting requests in the **last year** and **prior year**



Other child care & parenting requests in the **last year** and **prior year**





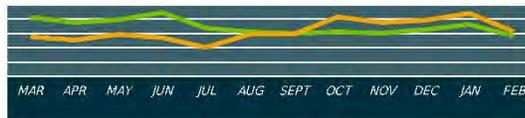
NC 2-1-1
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Government & Legal 12.2%

Legal assistance	19.5%
Child & family law	7.1%
Immigration assistance	<1%
Government	23.2%
Contacts	49.9%
Other government & legal	0%

Government & Legal requests in the last year and prior year



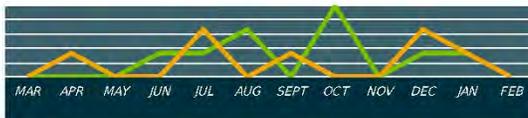
Legal assistance requests in the last year and prior year



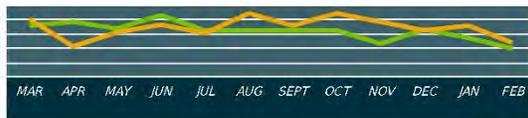
Child & family law requests in the last year and prior year



Immigration assistance requests in the last year and prior year



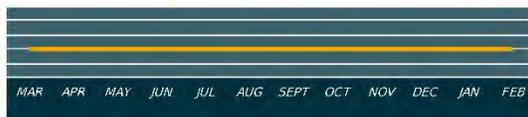
Government requests in the last year and prior year



Contacts requests in the last year and prior year



Other government & legal requests in the last year and prior year





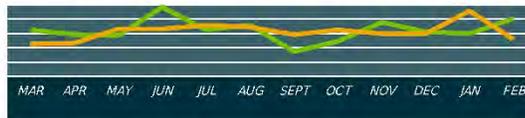
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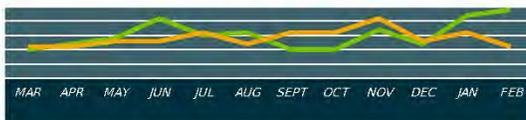
Transportation Assistance **2.8%**

Medical transportation	27.9%
Public transportation	31.5%
Automobile assistance	20.3%
Long-distance travel	0%
Contacts	0%
Other transportation assistance	20.3%

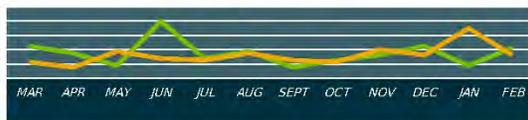
Transportation Assistance requests in the last year and prior year



Medical transportation requests in the last year and prior year



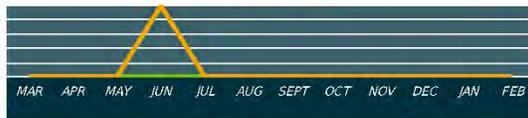
Public transportation requests in the last year and prior year



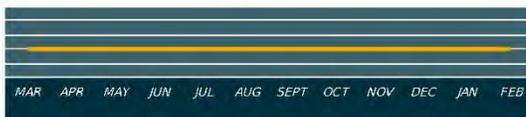
Automobile assistance requests in the last year and prior year



Long-distance travel requests in the last year and prior year



Contacts requests in the last year and prior year



Other transportation assistance requests in the last year and prior year





NC 2-1-1
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Education 1.0%

Early childhood education	8.8%
Adult education	9.2%
Literacy	<1%
ESL/ citizenship	3.2%
Tutoring	<1%
School supplies	23.0%
Scholarships & aid	7.4%
Other education providers	44.2%
Contacts	2.3%
Other education	0%

Education requests in the last year and prior year



Early childhood education requests in the last year and prior year



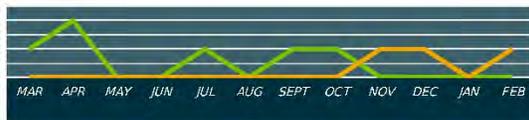
Adult education requests in the last year and prior year



Literacy requests in the last year and prior year



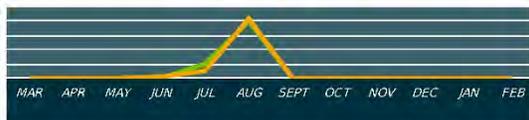
ESL/ citizenship requests in the last year and prior year



Tutoring requests in the last year and prior year



School supplies requests in the last year and prior year





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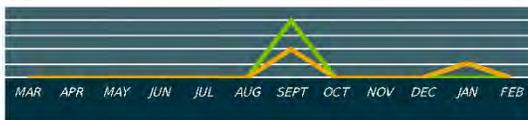


Disaster	1.0%
Food/ water	2.3%
Housing/ shelter	20.0%
Transportation/ fuel	5.6%
Health/ safety	<1%
Utility outage	7.0%
Contacts	<1%
Evacuation/ preparedness information	19.1%
Emergency property protective measures	0%
Other disaster	44.2%

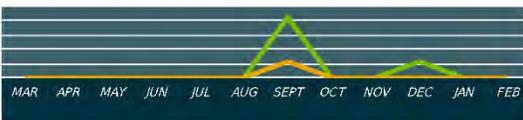
Disaster requests in the last year and prior year



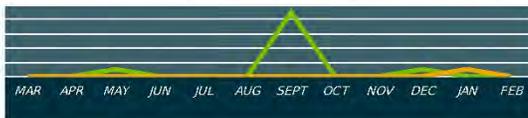
Food/ water requests in the last year and prior year



Housing/ shelter requests in the last year and prior year



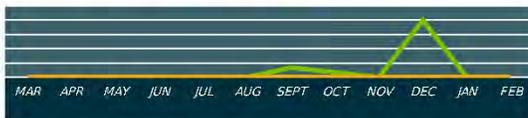
Transportation/ fuel requests in the last year and prior year



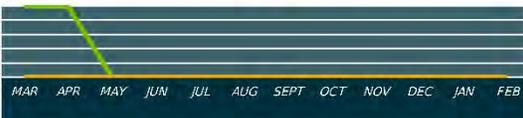
Health/ safety requests in the last year and prior year



Utility outage requests in the last year and prior year



Contacts requests in the last year and prior year





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Other	31.6%
Agency & other contact information	<1%
Community development & enrichment	3.2%
Volunteering & donations	3.3%
Support & advocacy	3.7%
Complaints	<1%
Special population services	4.7%
Special populations	0%
All other requests	84.4%

Other requests in the last year and prior year



Agency & other contact information requests in the last year and prior year



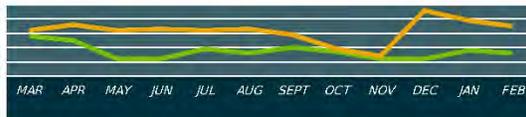
Community development & enrichment requests in the last year and prior year



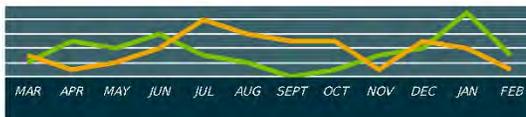
Volunteering & donations requests in the last year and prior year



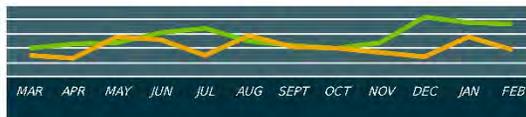
Support & advocacy requests in the last year and prior year



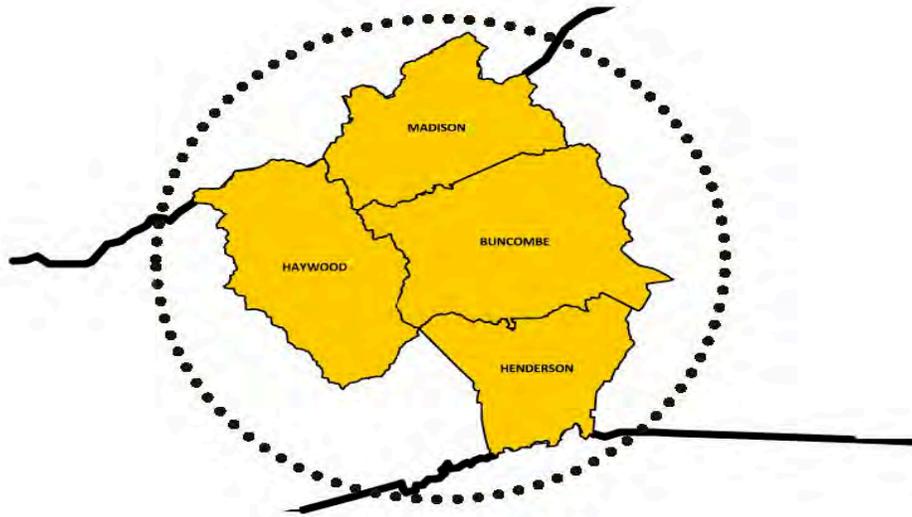
Complaints requests in the last year and prior year



Special population services requests in the last year and prior year



Four-County Asheville Metro



Slide 3

What We're Going to Do

Take a Quick Fact-Based Look at Asheville's Workforce by:

1. **Race**
2. **Ethnicity**
3. **Gender**
4. **Age Groups**



Slide 2

North Carolina Metros



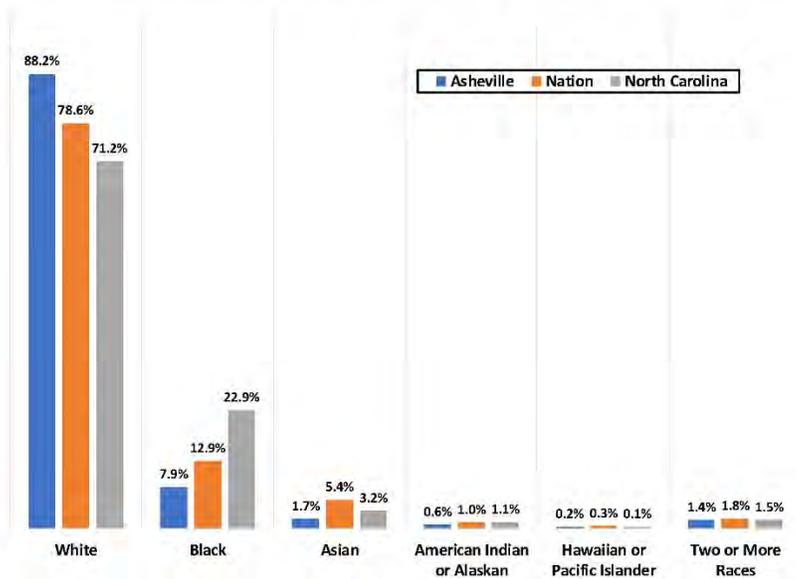
Slide 4

Asheville's Workforce by: **RACE**



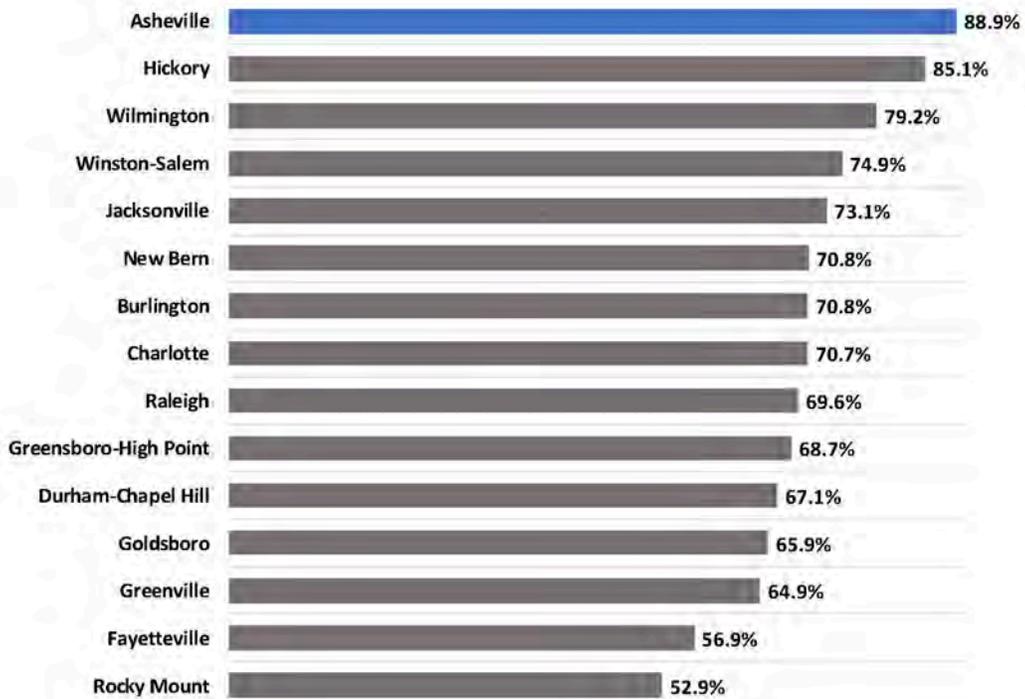
Slide 5

Private Employment by Race (%) - 2016



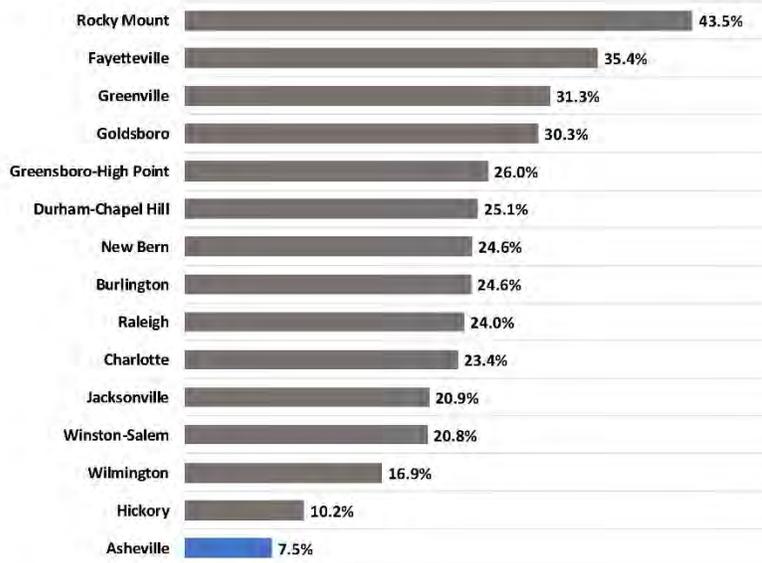
Slide 6

Total Employment by White Race (%) - 2016

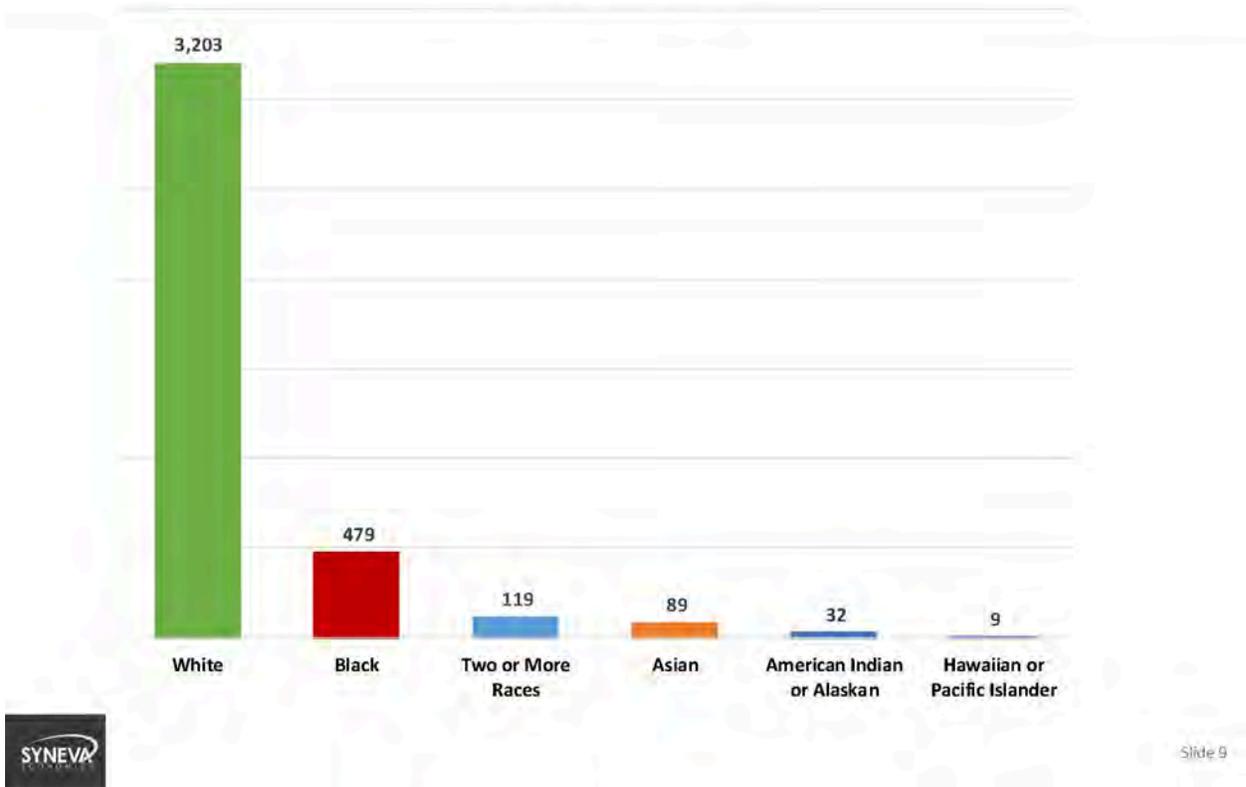


Slide 7

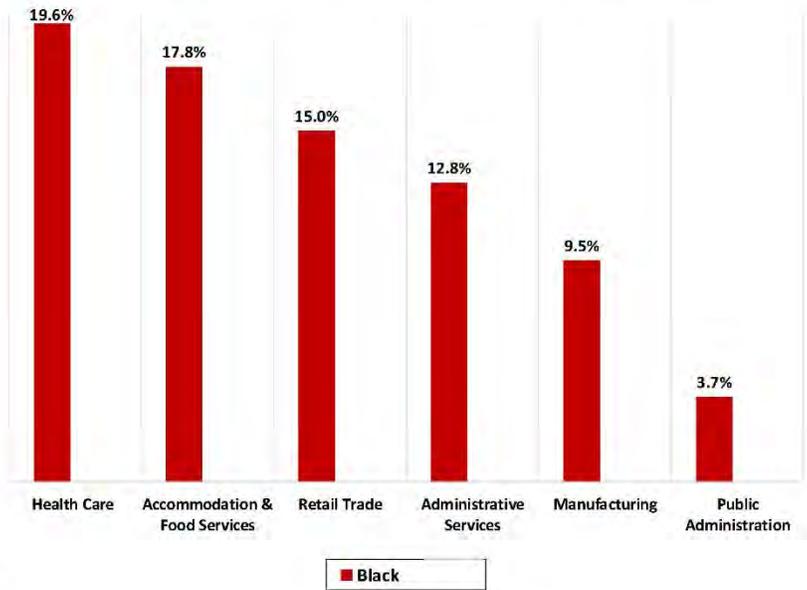
Total Employment by Black Race (%) - 2016



Asheville Average Annual Employment Change by Race 2012 to 2016

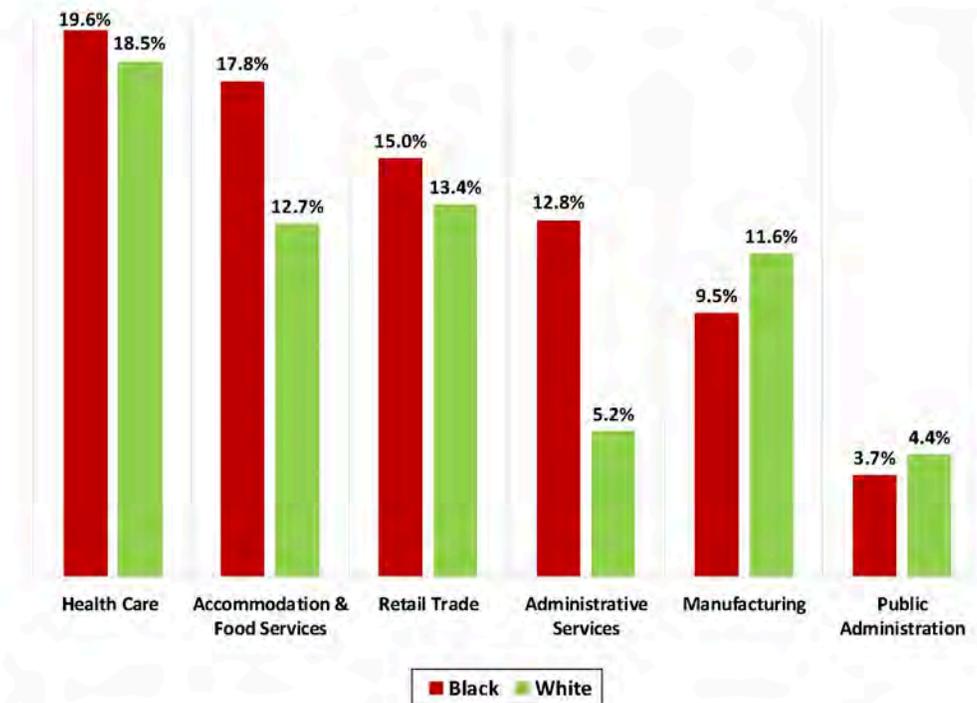


Asheville Top Industry Employment Percent of Total Race Workforce 2016



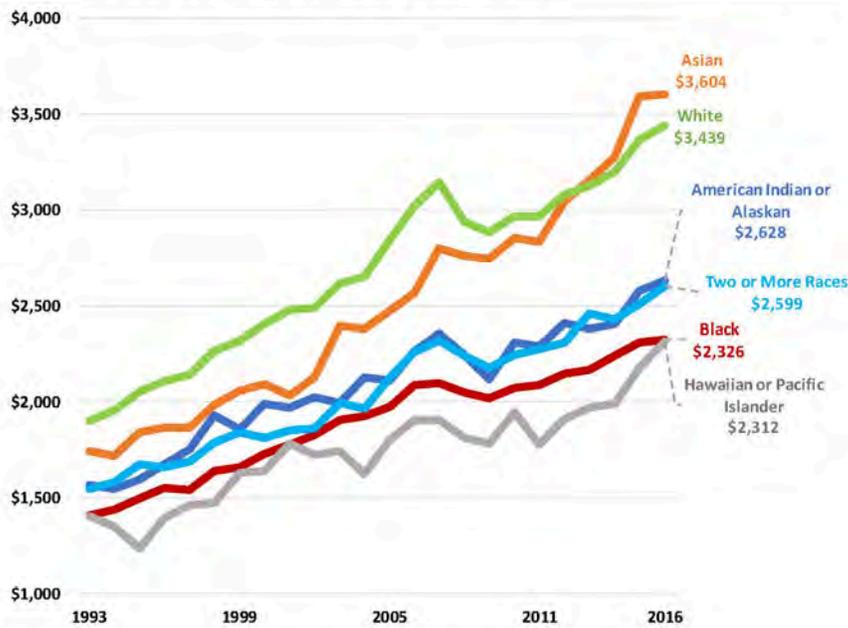
Slide 10

Asheville Top Industry Employment Percent of Total Race Workforce 2016



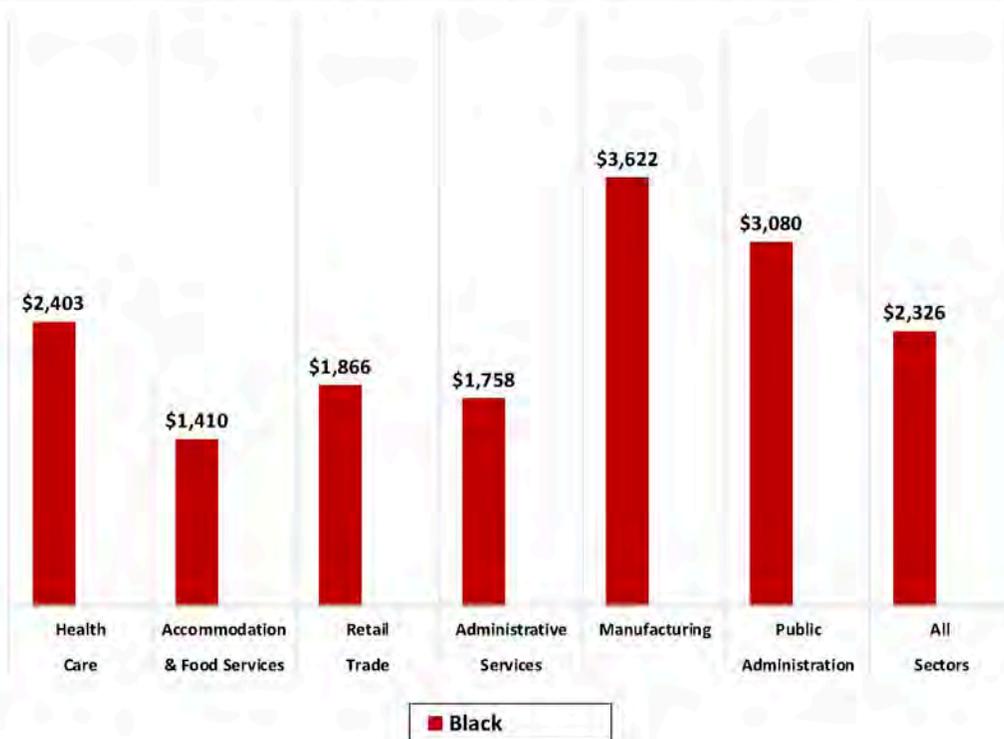
Slide 11

Asheville Average Monthly Earnings by Race 1993-2016



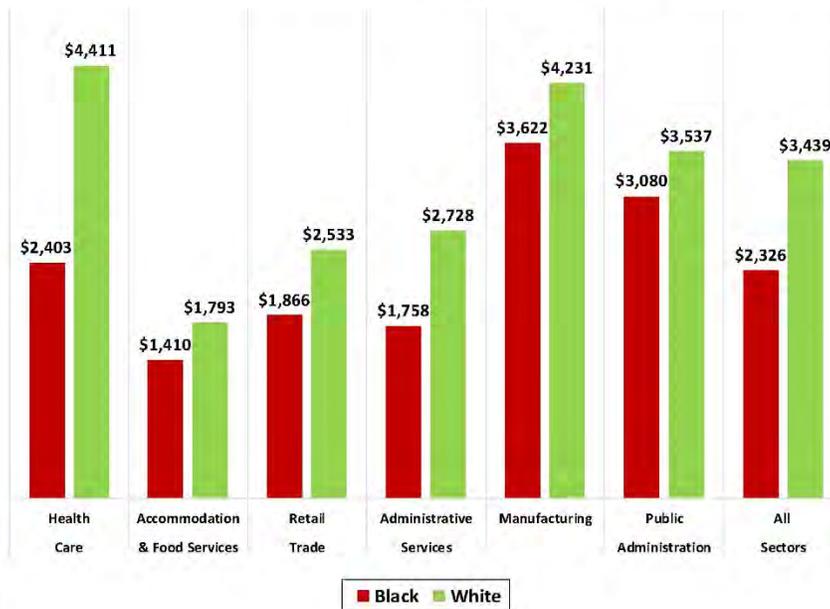
Slide 12

Asheville Top Industry Employment Monthly Earnings by Race 2016



Slide 13

Asheville Top Industry Employment Monthly Earnings by Race 2016



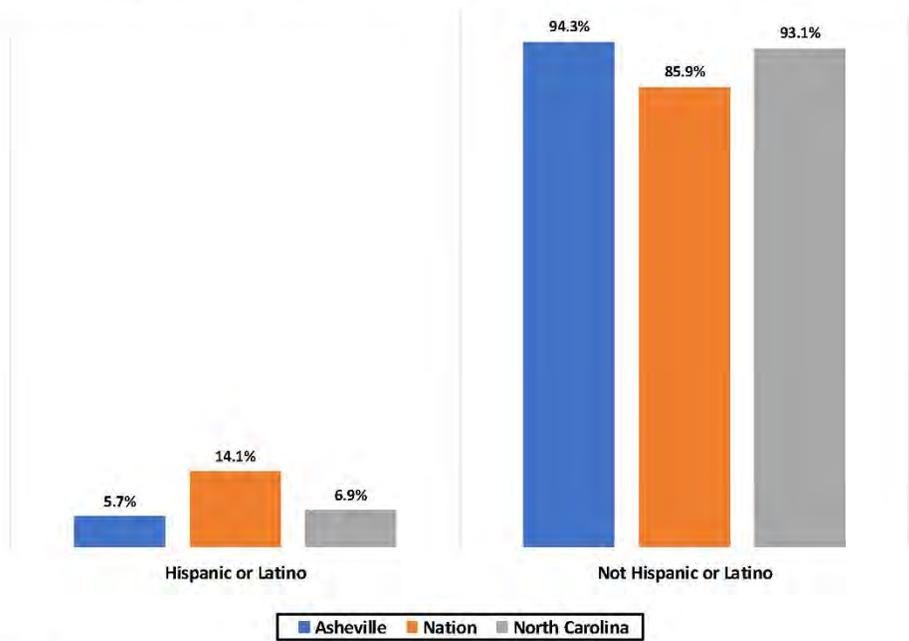
Slide 14

Asheville's Workforce by: **Ethnicity**



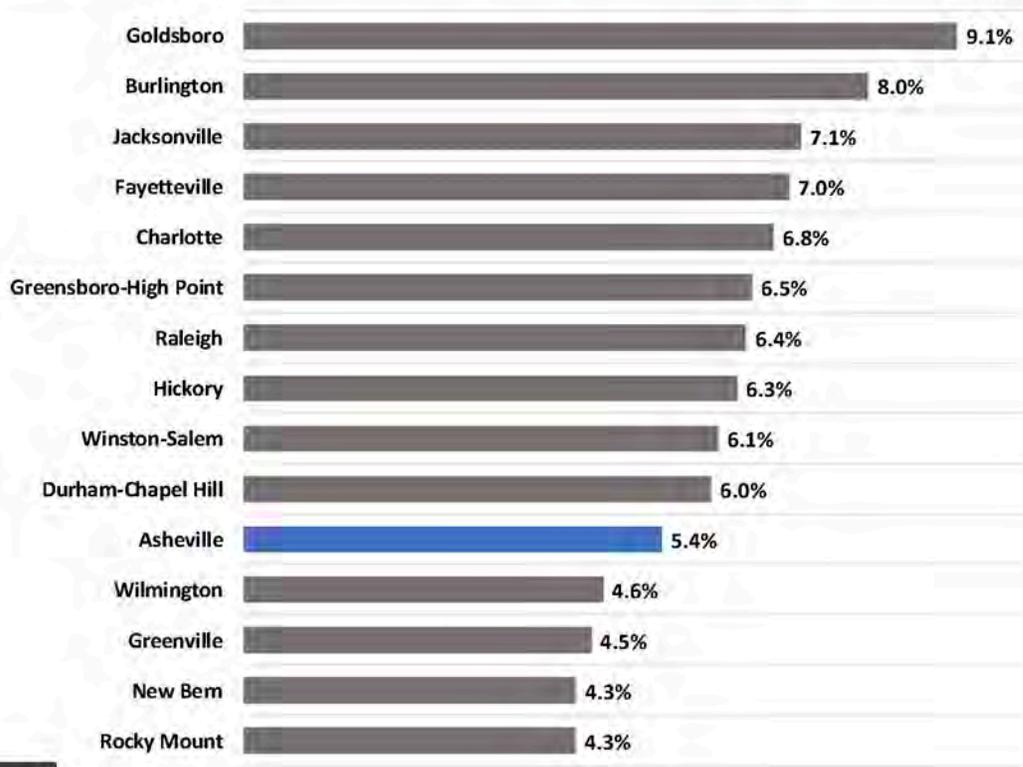
Slide 15

Private Employment by Ethnicity (%) 2016



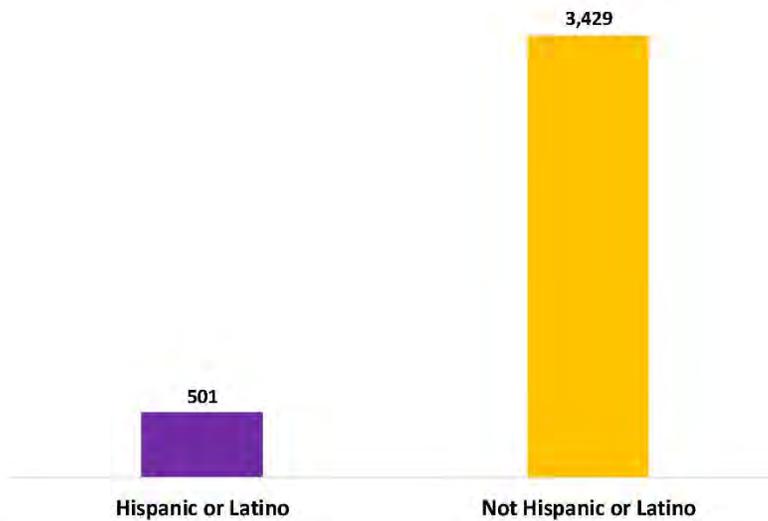
Slide 16

Total Employment by Hispanic or Latino (%) 2016



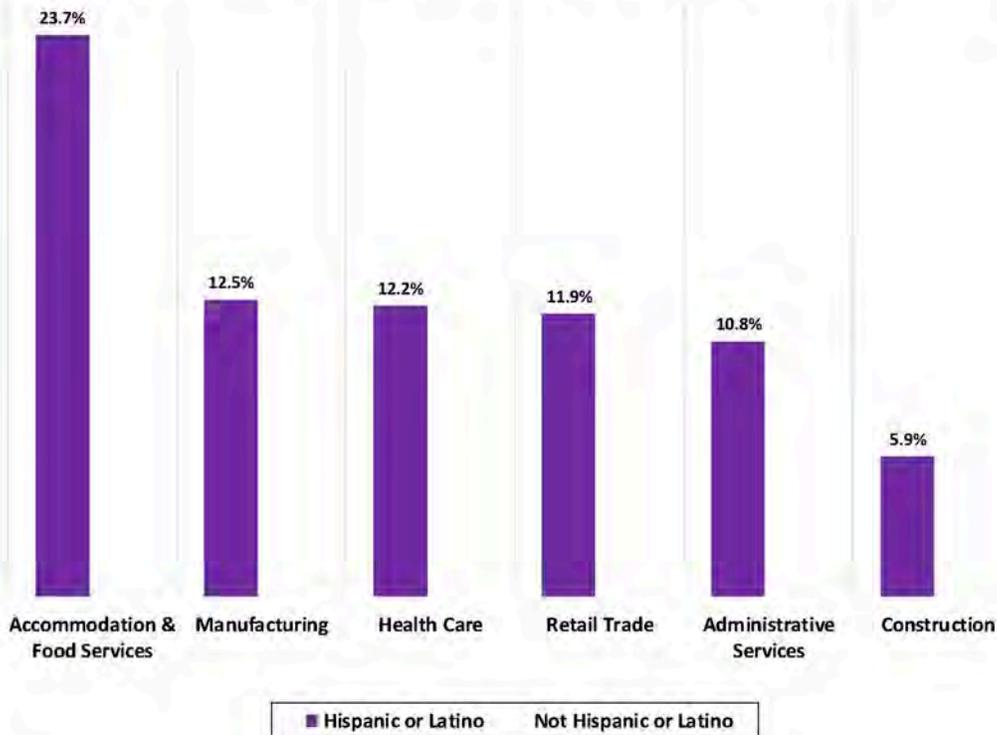
Slide 17

Asheville Average Annual Employment Change by Ethnicity 2012 to 2016



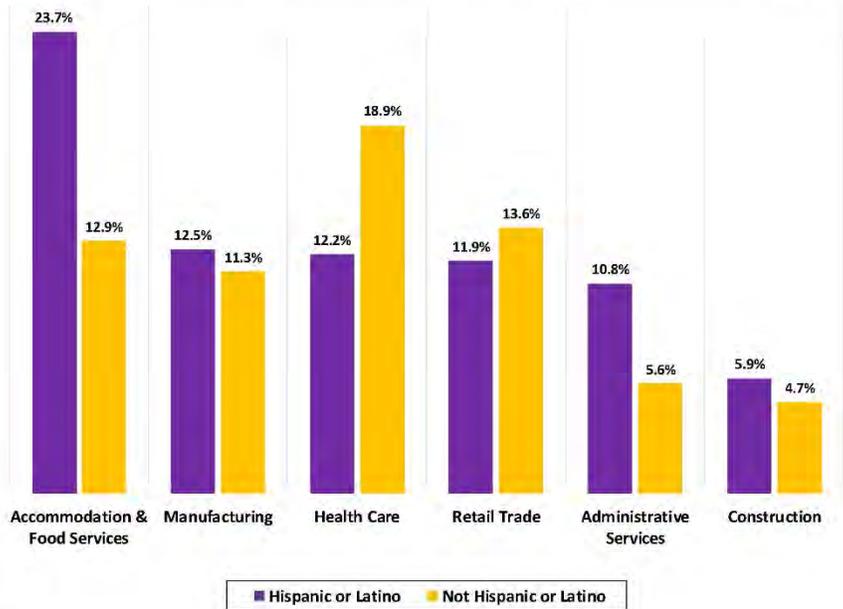
Slide 18

Asheville Ethnic Employment (%) by Top Industries 2016



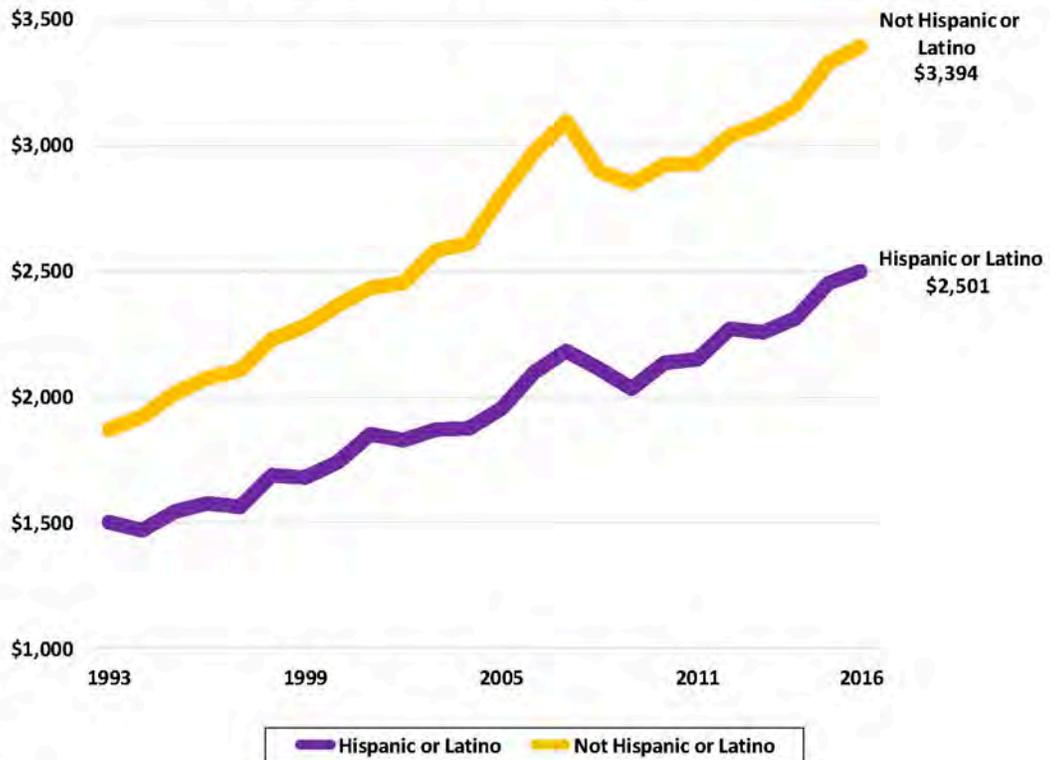
Slide 19

Asheville Ethnic Employment (%) by Top Industries 2016



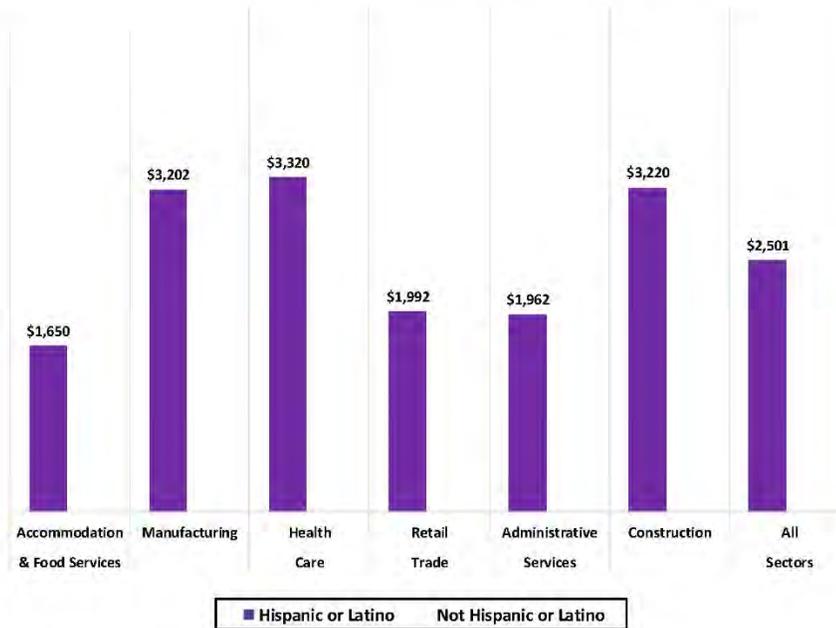
Slide 20

Asheville Average Monthly Earnings by Ethnicity 1993-2016



Slide 21

Asheville Top Industry Employment Monthly Earnings by Ethnicity 2016



Slide 22

Asheville Top Industry Employment Monthly Earnings by Ethnicity 2016



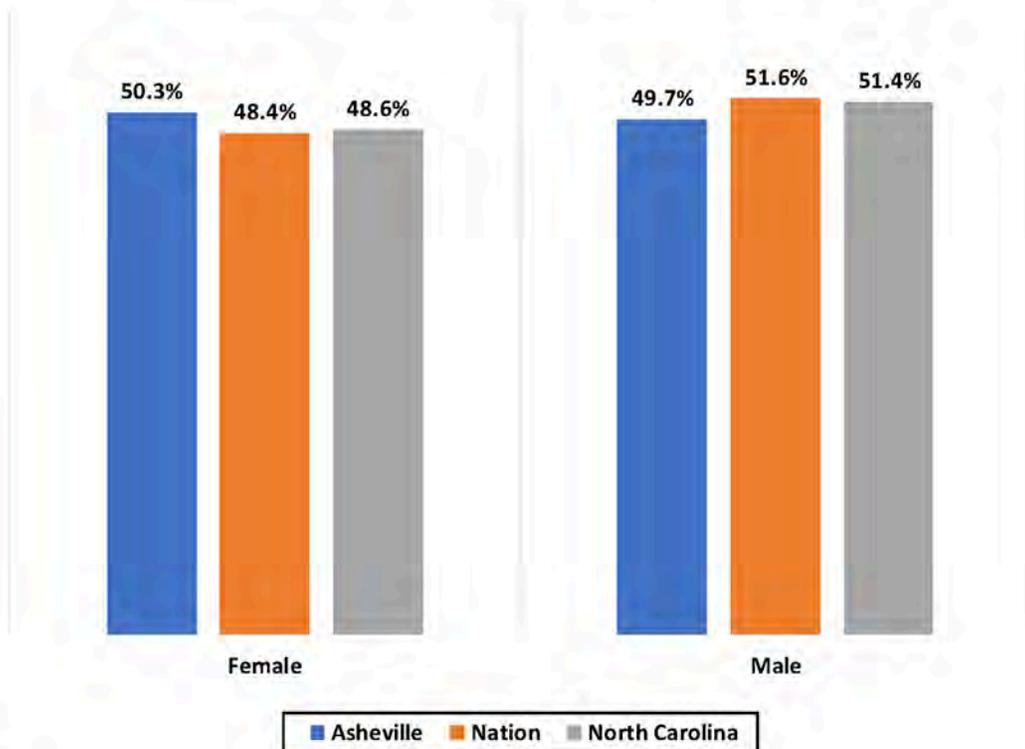
Slide 23

Asheville's Workforce by: **Gender**



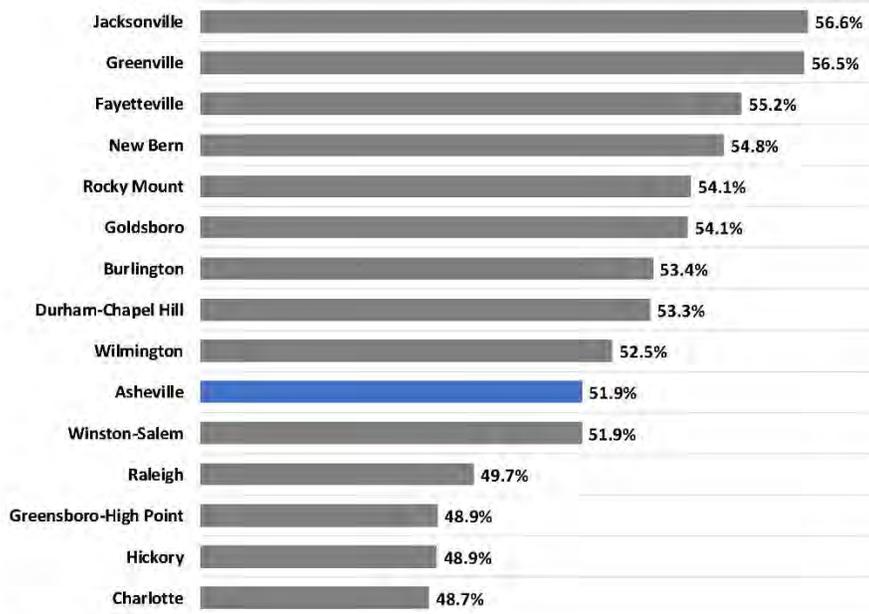
Slide 24

Private Employment by Gender (%) 2016



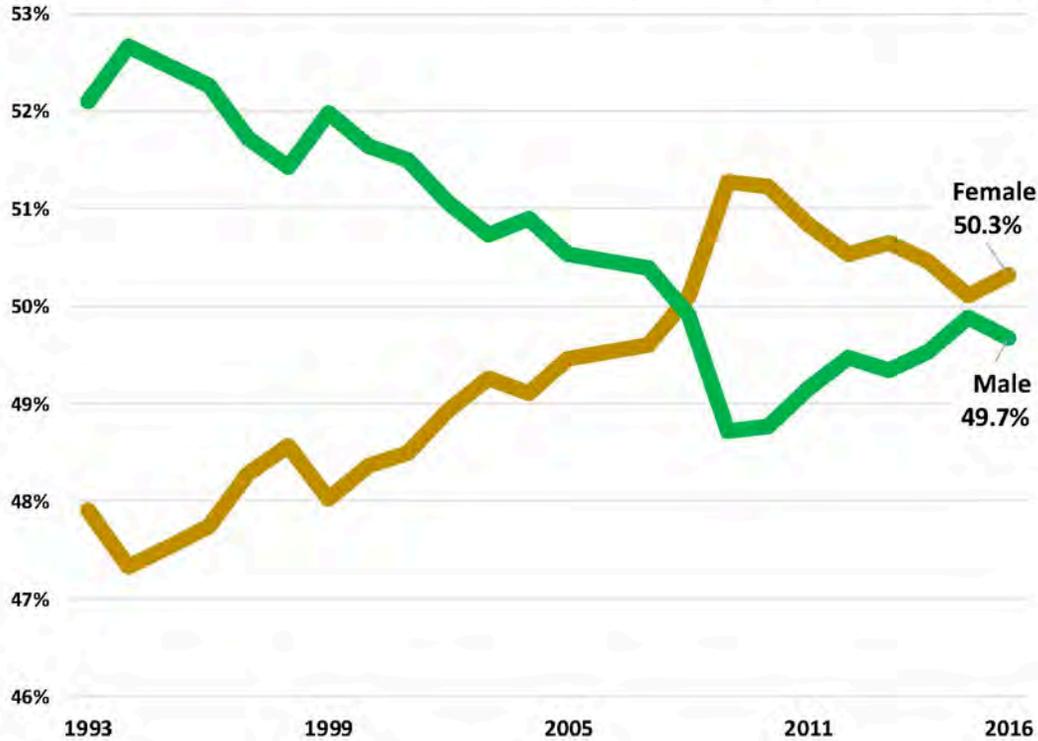
Slide 25

Total Employment by Gender (%) 2016



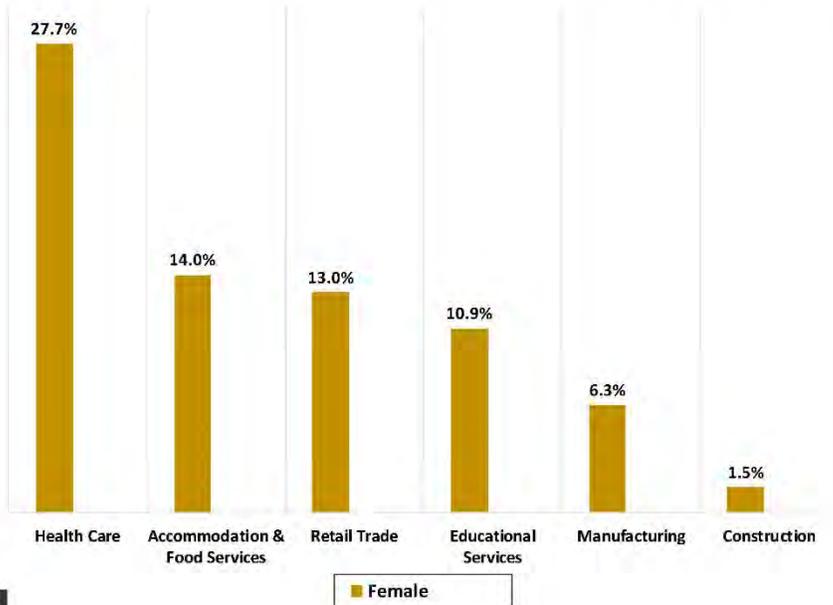
Slide 26

Asheville Total Employment by Gender (%) 1993-2016



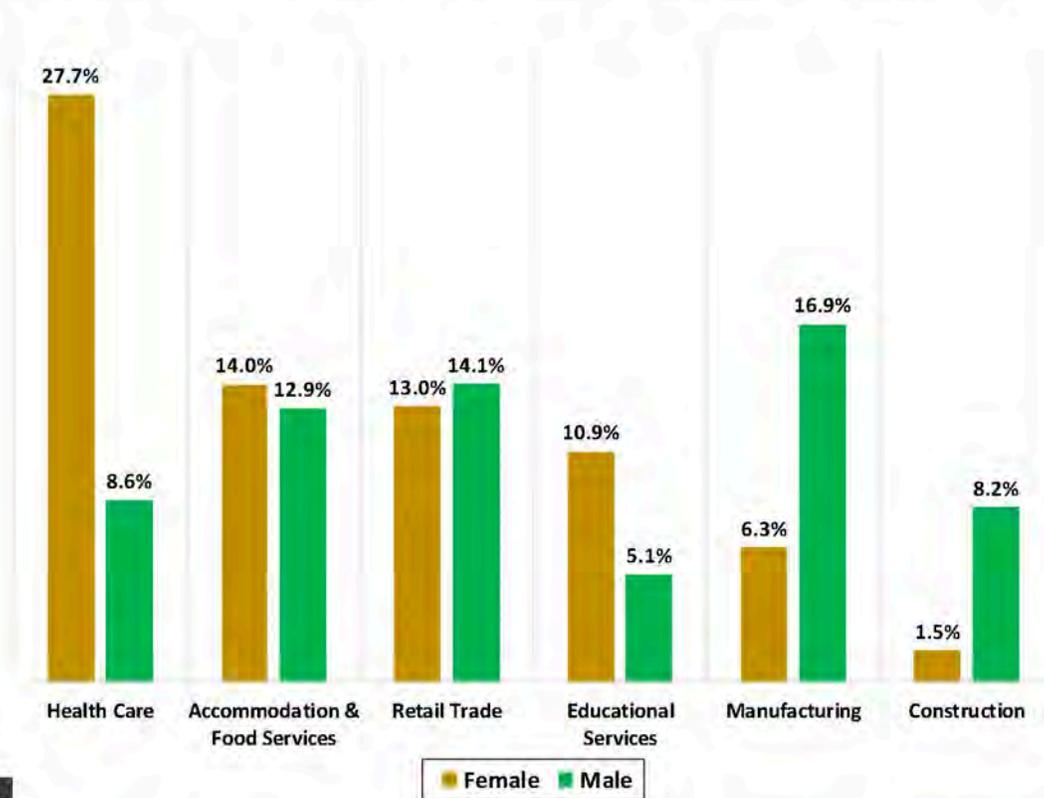
Slide 27

Asheville Gender Employment (%) by Top Industries 2016



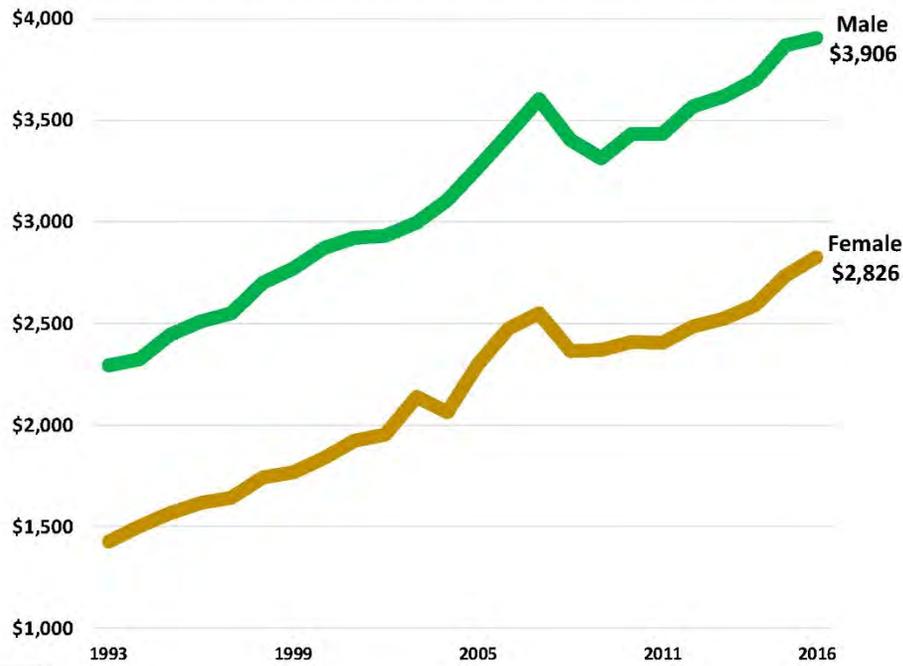
Slide 28

Asheville Gender Employment (%) by Top Industries 2016



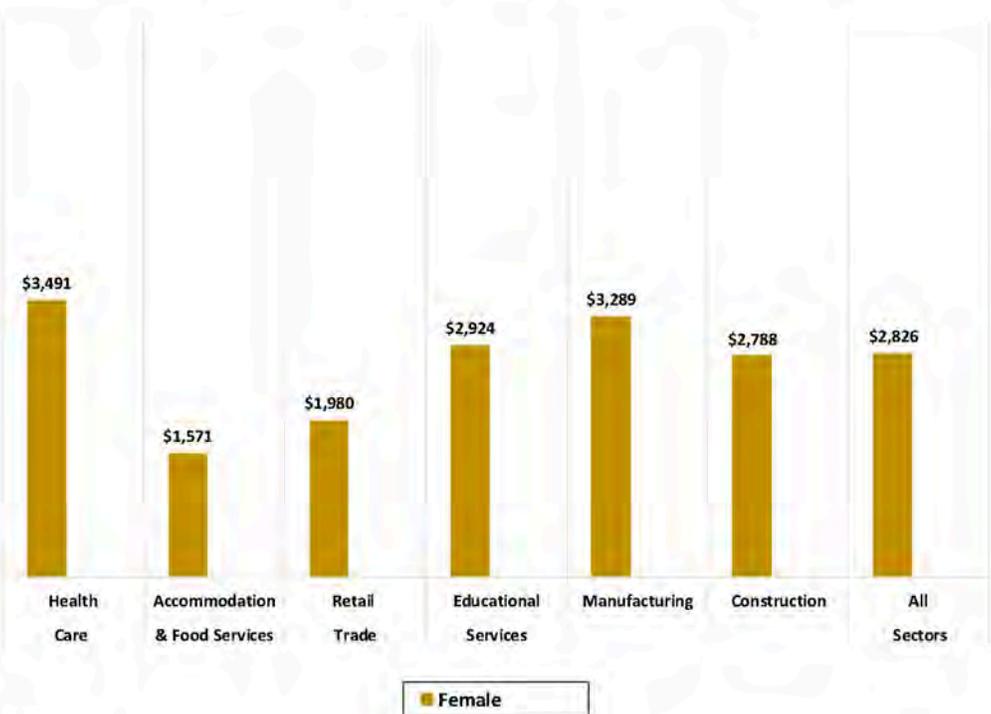
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Asheville Average Monthly Earnings by Gender 1993-2016



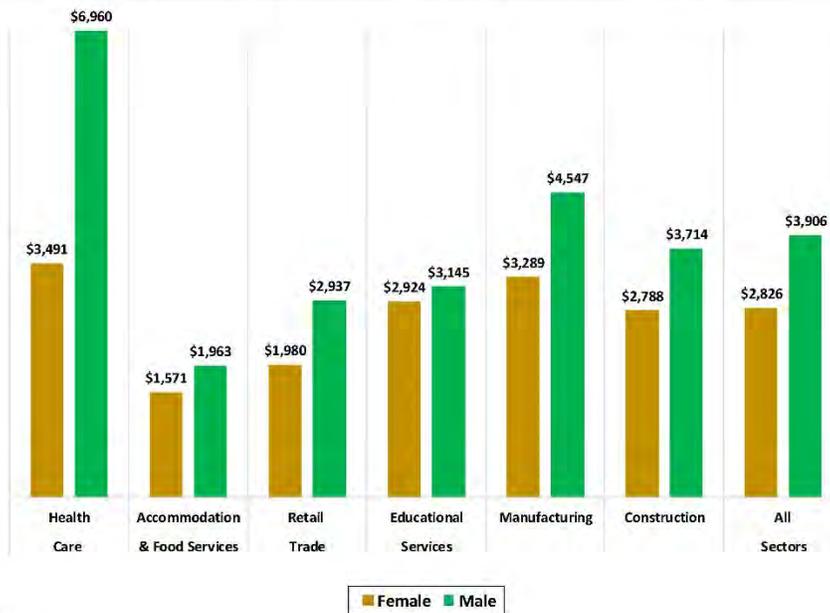
Slide 30

Asheville Top Industry Employment Monthly Earnings by Gender 2016



Slide 31

Asheville Top Industry Employment Monthly Earnings by Gender 2016



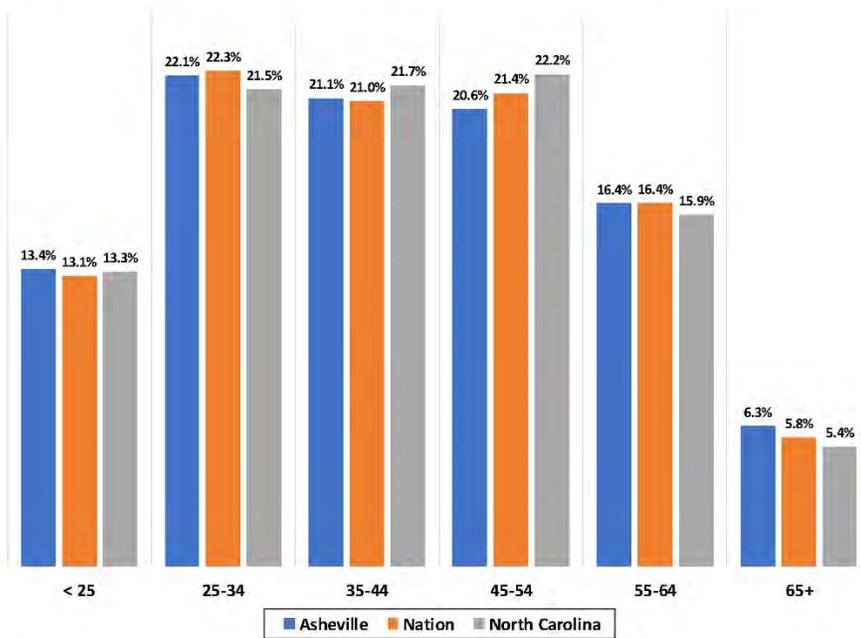
Slide 32

Asheville's Workforce by: **Age Groups**



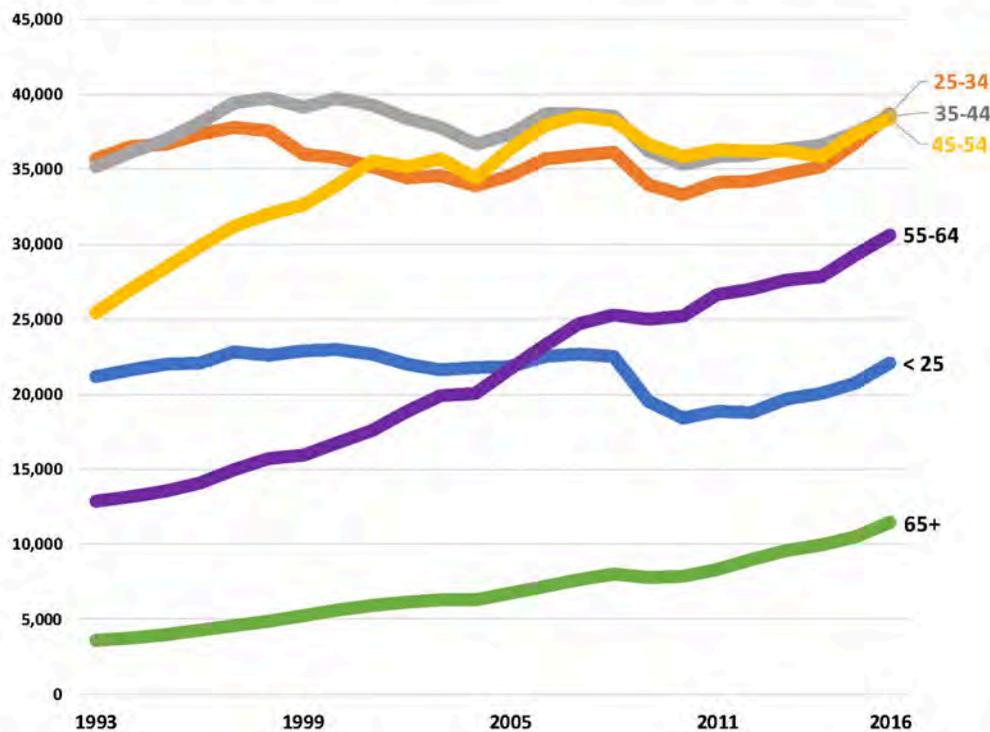
Slide 33

Private Employment by Age Groups (%) 2016



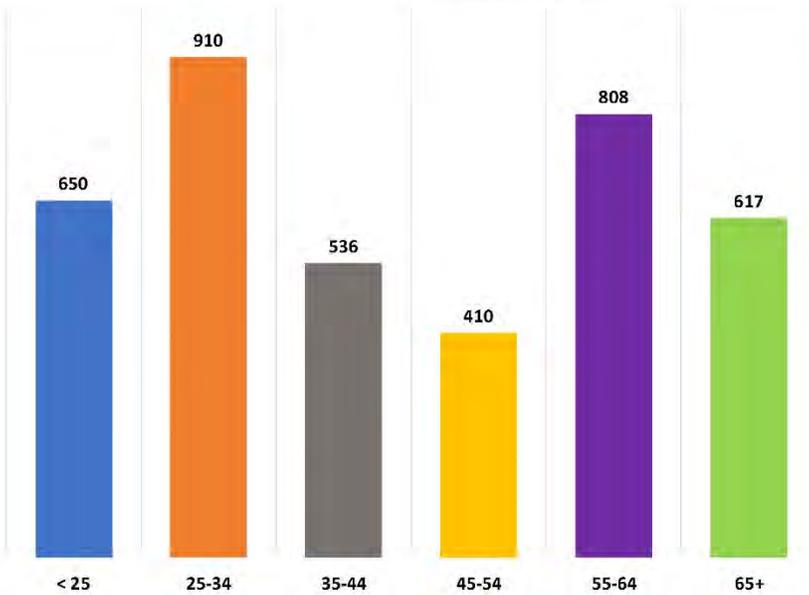
Slide 34

Asheville Total Employment by Age Groups 1993-2016



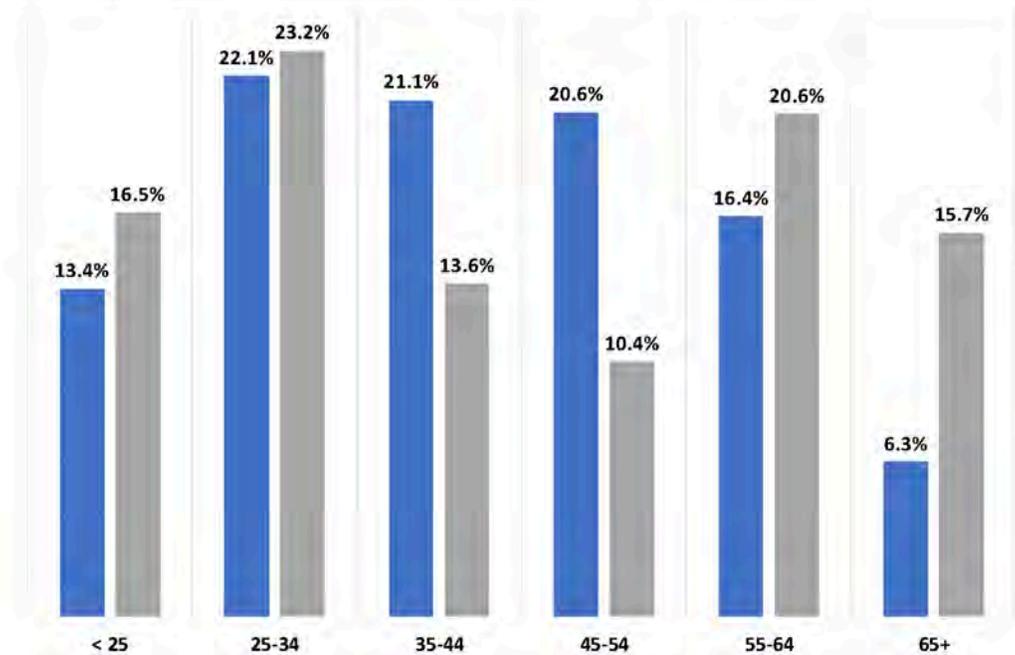
Slide 35

Asheville Average Annual Employment Change by Age Groups 2012 to 2016



Slide 36

Asheville Total Employment Proportion & Growth by Age Groups



■ Percent of Current Workforce ■ Percent of Current Workforce Growth



Slide 37

A Few Observations of Asheville's Workforce

By Race

- **Highest proportion of White workers**, lowest proportion of Black workers
- Compared to White workers; Black workers are more likely to be employed in **Accommodation & Food Services** and **Administrative Services**
- On average the workforce is **annually adding 3,203 White workers** and **479 Black workers**
- Overall, average **monthly earnings for Black workers are 32% (\$1,113) lower** than for White workers
- No major industry sector has Black worker earnings higher than White worker earnings

A Few Observations of Asheville's Workforce

By Ethnicity

- Compared to the Nation and State, **lower proportion of Hispanic workers**
- 24% of Hispanic workers are in **Accommodation & Food Services**
- Compared to Non-Hispanic workers; Hispanic workers are more likely to be employed in **Accommodation & Food Services** and **Administrative Services**
- On average the workforce is **annually adding 501 Hispanic workers**
- Overall, average **monthly earnings for Hispanic workers are 26% (\$893) lower** than for Non-Hispanic workers
- No major industry sector has Hispanic worker earnings higher than Non-Hispanic worker earnings

A Few Observations of Asheville's Workforce

By Gender

- Currently Females comprise a **larger proportion of the workforce**
- Compared to the Nation and State, a higher proportion of Female workers
- **28% of Female workers are in Health Care**
- Compared to Male workers; Female workers are more likely to be employed in **Health Care** and **Educational Services**
- Overall, average **monthly earnings for Females workers are 28% (\$1,080) lower** than for Male workers
- No major industry sector has Female worker earnings higher than Male worker earnings



Slide 40

A Few Observations of Asheville's Workforce

By Age Groups

- Compared to the Nation and State, a **higher proportion of workers are Ages 65+** and a **lower proportion are Ages 45-54**
- All Age Groups are adding workers
- Workers in **Age Groups 55-64, 65+, and < 25** are **expanding their share of the workforce**
- Workers in **Age Groups 35-44 and 45-54** are **decreasing their share of the workforce**



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Appendix G
The New Economy Coalition:
2017 The Local Economy Gap Analysis Study

The New Economy Coalition: A Catalyst For Change

Founded: 2015

Mission: Collaborating to look at alternative economic models to help our community thrive, especially people of color and members of marginalized communities.

Members:

Green Opportunities, Self-Help Credit Union,
Just Economics, Neighborhood Economics,
Center for Local Economies, Mountain BizWorks,
Bountiful Cities, Eagle Market Sts. Development
Corp.



THE LOCAL ECONOMY GAP ANALYSIS STUDY

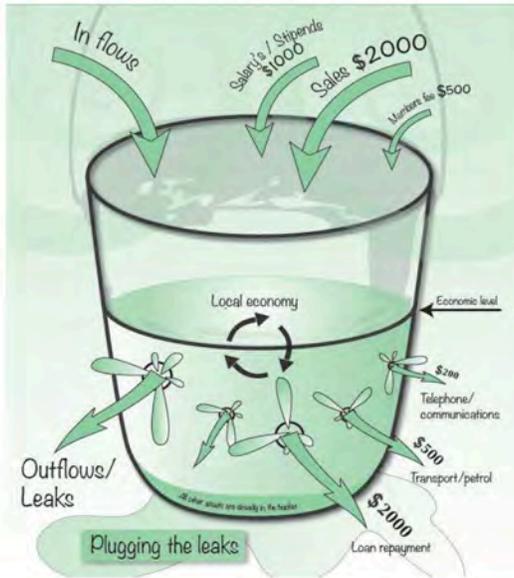
OPPORTUNITIES IN OUR LOCAL ECONOMY

Study Background

Purpose

- Led by the WNC New Economy Coalition
- Economic “leakage” or “gaps”
- Areas within economy where goods and services are procured or “imported” outside of local region
- Examine potential local market opportunities for new minority business creation/expansion and cooperative development
- Addition: Examination of entrepreneurial ecosystem
- Funded by City of Asheville
- Lead consultant: TEQuity (Debra Jones)
- Scope: **Asheville Metropolitan Statistical Area (MSA)**

What is economic leakage or gap?



Asheville MSA Demographics

Total Firms

44,937

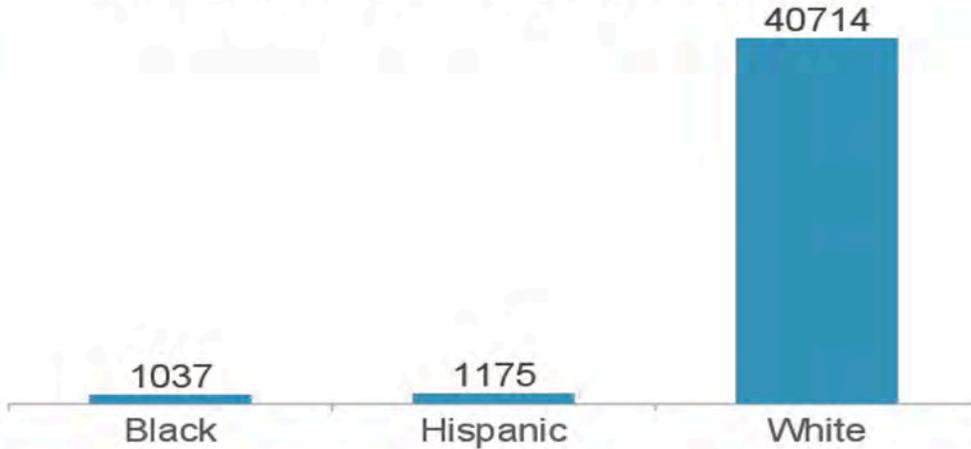
total businesses in Asheville MSA

Asheville MSA Demographics

Total Firms by Race/Ethnicity



Businesses Owned by Race/Ethnicity



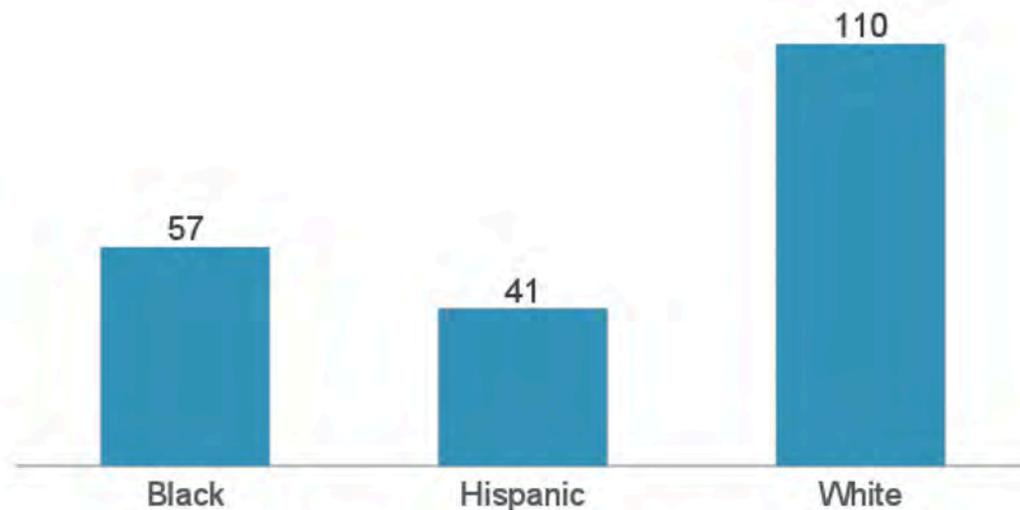
Asheville MSA Demographics

Total Firms by Race/Ethnicity



Rates of Business Ownership

(Businesses Owned Per 1000 Individuals)



Finance

Asheville MSA Interviews



- Capital is the number one challenge for minority businesses
- Need more creative sources of capital. Criteria (i.e. credit, collateral) is too great of a hindrance.
- Funding may be available, however navigating the system and overcoming barriers is a challenge
- Need to explore more acquisition opportunities of existing businesses with a solid track record.

Culture

Asheville MSA Interviews



- Need more minority entrepreneur leadership in advancing minority entrepreneurship.
- There is low minority participation in events and trainings. Minority business owners fault the organization for not having effective outreach or training.
- Need to find a way to create “space” for innovation.
- Long-term mentors are needed. Try to do more to keep professionals of color in the community.

Culture (cont.)

Asheville MSA Interviews



- The Asheville region's minority business culture needs to also be understood from a **historical perspective**. Most of the business class has come from outside of the area. A divide exists in the community that needs to be bridged.
- Minority businesses need more resources they can access for **practical advice** from other business owners.

Supports

Asheville MSA Interviews

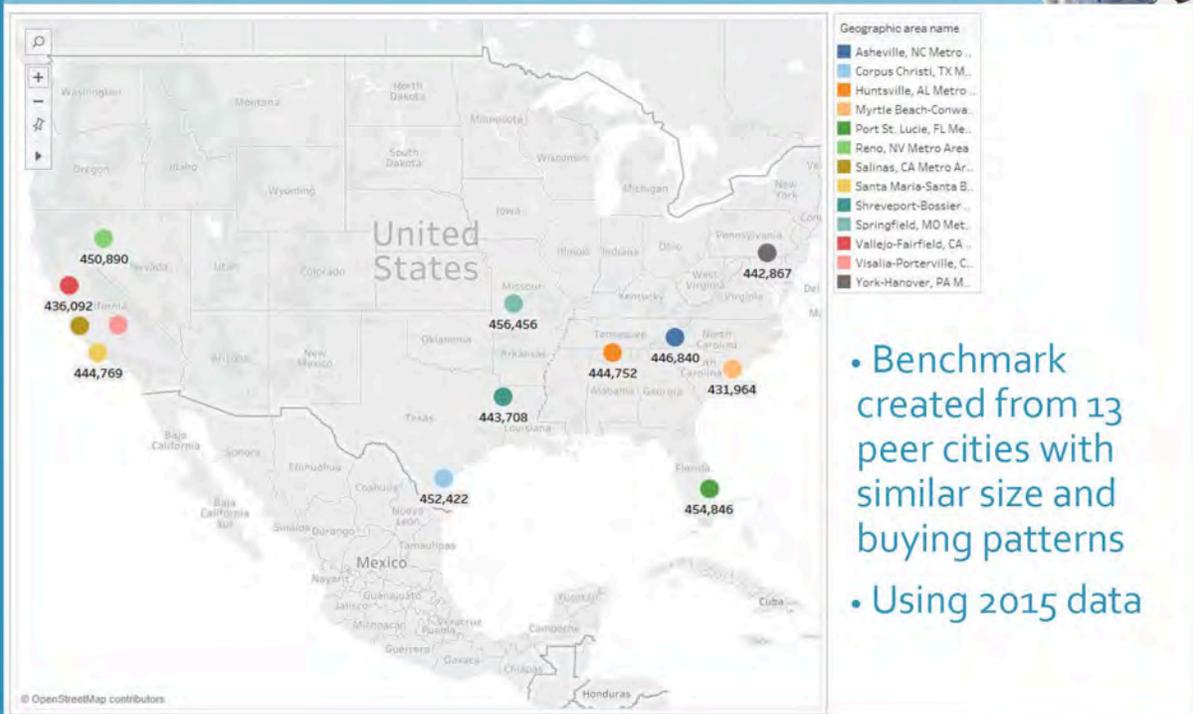


- Minority businesses **do not feel welcome at the Chamber of Commerce**
- It is **difficult to establish a connection within the Chamber** culture unless you are extremely successful
- Minority startups need to **see other successful minority businesses** and learn from them.
- It might be helpful to create a **coalition of minority businesses**. A minority chamber would be nice, however, it would be great if the existing Chamber could establish a program that placed more of an emphasis on inclusion.

QUANTITATIVE FINDINGS

Local Economy Gap Analysis

Methodology



- Benchmark created from 13 peer cities with similar size and buying patterns
- Using 2015 data

A Few Notes of Caution

Methodology



The study identifies several areas that may be ripe for new business activity, however these should be treated as preliminary indications and not as “shovel-ready” or “investment-ready” opportunities.

- Additional data is available in the full study
- Areas of interest should be subjected to further analysis (feasibility study, business plan, personal goals & strengths, etc.)
- Two special workshops on this topic as well as one-on-one coaching are available from Mountain BizWorks

Industries We're Rich In

Results



Compared to our peer cities, we have 125% or more activity in the following industries:

- Retirement communities (338%)
- Re-upholstery & furniture repair (286%)
- Mental health practices (275%)
- Pet care (247%)
- Book stores (219%)
- Supermarkets (198%)
- Auto transmission repair (184%)
- Commercial photography (176%)
- Nursing care facilities (163%)
- Cafeterias and buffets (158%)
- Tobacco stores (146%)
- Beer wholesalers (145%)
- Siding contractors (138%)
- Home health equipment rental (133%)
- Full service restaurants (130%)
- Home health care services (128%)
- Building inspection services (126%)
- Caterers (117%)

Fun Fact : Did you know that the construction trades are an area of significant economic leakage in our region?



Many aspects of construction has major leakage from laying the foundation to finishing the roof and everything in between.

Defining a few terms

Results



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Armored car services	22%	51	\$ 34,351	0%	6

Our major local economy gaps will be presented in tables like this

Defining a few terms

Results



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Armored car services	22%	51	\$ 34,351	0%	6

This is the overall Industry Category

Defining a few terms

Results



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Armored car services	22%	51	\$ 34,351	0%	6

- Sectors within the Industry will be listed here.
- Sectors are defined by the North American Industry Classification System (NAICS)

Defining a few terms

Results



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Armored car services	22%	51	\$ 34,351	0%	6

Import Index = how much of the sector we have compared to what is expected for an economy our size.

- We only have 22% of the expected amount of armored car services (suggesting we may be importing the other 78%)
- The lower the number, the bigger the gap

Defining a few terms

Results



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Armored car services	22%	51	\$ 34,351	0%	6

Jobs Potential = the number of jobs it would take to bring the sector to 100% of the benchmark.

- In other words, the number of sector jobs we're missing out on.
- This is an indicator of the "scale" of the gap. The greater the Jobs Potential, the greater the indicated opportunity.

Defining a few terms

Results



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Armored car services	22%	51	\$ 34,351	0%	6

Average Wages = the average wages for the Industry Sector in the Asheville MSA area

Defining a few terms

Results



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Armored car services	22%	51	\$ 34,351	0%	6

Growth % = how much the Sector grew from 2010-2015 in the Asheville MSA

- In this case (0%) the industry was flat
- In general, a growing industry (in Asheville as well as US) may indicate a stronger business opportunity

Defining a few terms

Results



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Armored car services	22%	51	\$ 34,351	0%	6

Import Index + Jobs Potential + Wages + Growth % = **Opportunity Score**

- Scale of 1-10: 1 suggests a little opportunity, 10 suggests a LOT of opportunity



TRANSPORTATION

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
School and employee bus transportation	1%	348	\$ 39,031	58%	10
Armored car services	22%	51	\$ 34,351	0%	6
Security guards and patrol services	40%	326	\$ 34,351	0%	9
Specialized freight (except used goods) trucking, long-distance	13%	407	\$ 41,193	-36%	8
Parking lots and garages	53%	32	\$ 36,063	100%	9
Ambulance services	55%	103	\$ 39,031	58%	10
Bus and other motor vehicle transit systems	65%	49	\$ 39,031	58%	10



LAUNDRY & LINEN SUPPLY

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Linen supply	4%	149	\$ 34,351	-23%	4
Drycleaning and laundry services (except coin-operated)	74%	47	\$ 34,351	-23%	1



AUTOMOTIVE REPAIR, MAINTENANCE, AND PARTS

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Automotive exhaust system repair	10%	103	\$ 36,063	-8%	5
Motor vehicle parts (used) merchant wholesalers	9%	26	\$ 36,063	17%	7
Automotive glass replacement shops	30%	21	\$ 36,063	-8%	4
Other automotive mechanical and electrical repair and maintenance	40%	15	\$ 36,063	-8%	3
Car washes	63%	83	\$ 36,063	-12%	4
Automotive body, paint, and interior repair and maintenance	70%	84	\$ 36,063	-8%	3



BUSINESS SERVICES

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Document preparation services	11%	369	\$ 34,351	6%	10
Court reporting and stenotype services	48%	7	\$ 34,351	6%	7
Other business service centers (including copy shops)	67%	8	\$ 34,351	6%	7
Sign manufacturing	41%	42	\$ 34,351	-18%	3



BUSINESS SERVICES

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Document preparation services	11%	369	\$ 34,351	6%	10
Court reporting and stenotype services	48%	7	\$ 34,351	6%	7
Other business service centers (including copy shops)	67%	8	\$ 34,351	6%	7
Sign manufacturing	41%	42	\$ 34,351	-18%	3



CLOTHING AND ACCESSORY RETAIL AND RENTALS

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Formal wear and costume rental	11%	21	\$ 24,552	14%	7
Clothing accessories stores	27%	64	\$ 18,807	9%	6
Children's and infants' clothing stores	65%	31	\$ 18,807	9%	4
Other clothing stores	73%	56	\$ 18,807	9%	4
Sporting goods stores	73%	128	\$ 22,973	11%	6
Optical goods stores	60%	39	\$ 50,660	-17%	4



CLOTHING AND ACCESSORY RETAIL AND RENTALS

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Formal wear and costume rental	11%	21	\$ 24,552	14%	7
Clothing accessories stores	27%	64	\$ 18,807	9%	6
Children's and infants' clothing stores	65%	31	\$ 18,807	9%	4
Other clothing stores	73%	56	\$ 18,807	9%	4
Sporting goods stores	73%	128	\$ 22,973	11%	6
Optical goods stores	60%	39	\$ 50,660	-17%	4



EQUIPMENT REPAIR AND MAINTENANCE

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Home and garden equipment repair and maintenance	12%	28	\$ 34,351	-36%	3
Consumer electronics repair and maintenance	13%	14	\$ 28,355	-40%	1
Communication equipment repair and maintenance	16%	114	\$ 28,355	-40%	1
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	27%	268	\$ 34,351	-36%	5
Appliance repair and maintenance	64%	8	\$ 34,351	-36%	1
Other personal and household goods repair and maintenance	66%	15	\$ 24,552	-46%	1
Locksmiths	44%	13	\$ 34,351	-36%	1



HAIR AND NAILS

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Barber shops	14%	16	\$ 24,552	6%	5
Nail salons	23%	43	\$ 24,552	6%	5



CONSTRUCTION AND BUILDING CONTRACTING

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Drywall and insulation contractors	28%	220	\$ 41,448	-11%	5
Other concrete product manufacturing	28%	93	\$ 41,448	-14%	5
Brick, stone, and related construction material merchant wholesalers	29%	19	\$ 41,448	-20%	4
Framing contractors	32%	106	\$ 41,448	-11%	3
Other foundation, structure, and building exterior contractors	32%	62	\$ 41,448	-11%	3
Sheet metal work manufacturing	35%	119	\$ 41,448	-11%	3
Tile and terrazzo contractors	36%	76	\$ 41,448	-11%	3
Other building finishing contractors	45%	19	\$ 41,448	-11%	2
Poured concrete foundation and structure contractors	46%	129	\$ 41,448	-11%	3
Masonry contractors	50%	80	\$ 41,448	-11%	2
Flooring contractors	50%	46	\$ 41,448	-11%	2
All other specialty trade contractors	50%	239	\$ 41,448	-11%	4
New multifamily housing construction (except for-sale builders)	60%	8	\$ 41,448	-1%	4



FOOD RETAILERS

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Convenience stores	31%	82	\$ 22,049	41%	10
Baked goods stores	33%	20	\$ 22,049	41%	10
Meat markets	37%	31	\$ 22,049	41%	10
Retail bakeries	54%	39	\$ 22,049	6%	3
Confectionery and nut stores	64%	12	\$ 22,049	41%	10
Commercial bakeries	47%	53	\$ 22,049	6%	4
Mobile food services	10%	83	\$ 22,049	-12%	3



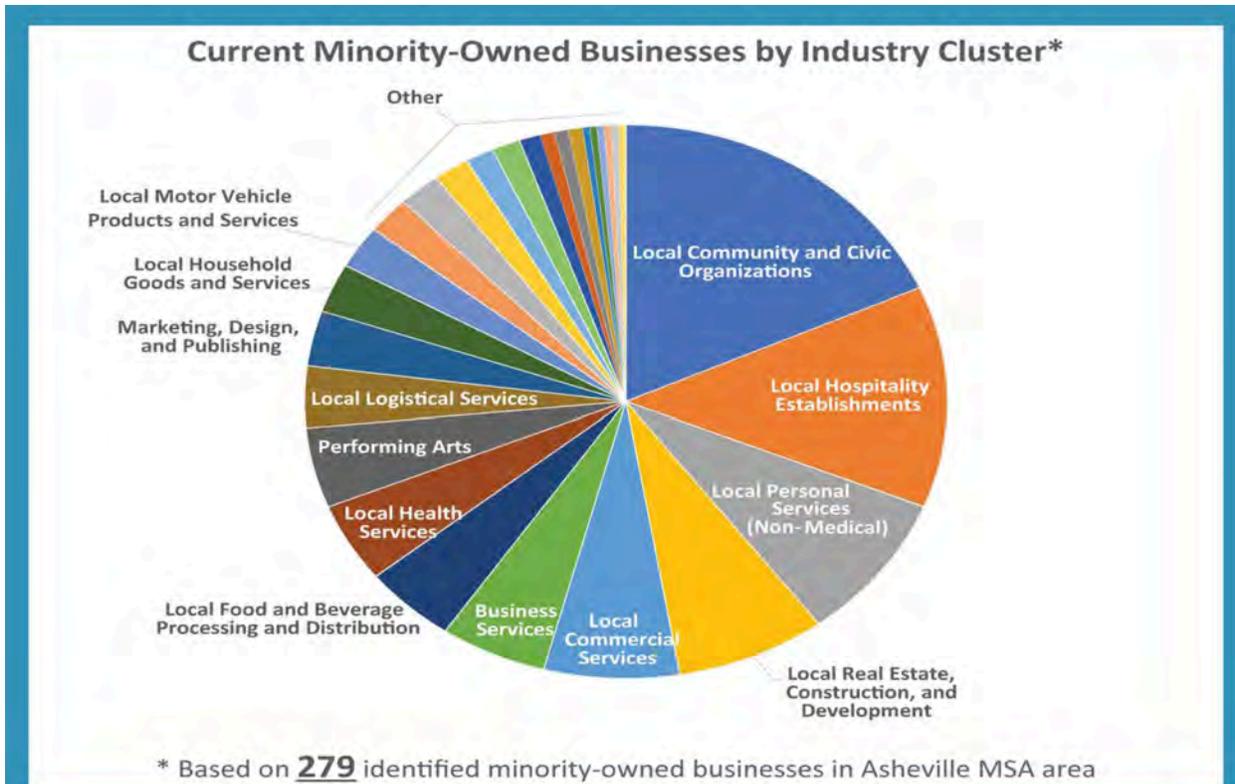
PROPERTY MANAGEMENT

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Other similar organizations (except business, professional, labor, and political organizations)	33%	134	\$ 23,176	-5%	4
Nonresidential property managers	40%	78	\$ 41,448	-18%	3
Lessors of other real estate property	44%	38	\$ 41,448	-18%	2
Residential property managers	51%	272	\$ 41,448	-18%	5



HEALTH CARE: CLINICS, LABS, AND STORES

Industry Sector	Import Index	Jobs Potential	Average Wages (Avl)	Growth % (2010-15)	Opportunity Score
Family planning centers	36%	38	\$ 50,660	8%	10
Psychiatric and substance abuse hospitals	39%	276	\$ 50,660	2%	10
Diet and weight reducing centers	52%	14	\$ 24,552	14%	5
All other health and personal care stores	58%	43	\$ 24,552	8%	5
Food (health) supplement stores	86%	8	\$ 22,049	41%	9
Optical goods stores	60%	39	\$ 50,660	-17%	4
Testing laboratories	47%	133	\$ 34,351	86%	10



Q&A



What do you see as the top business needs or gaps in your neighborhood?

Are those businesses highlighted in this study, or are they parts of other areas of industry?

Which areas of the study did you find most interesting and why?

Data Into Action Activity



How is this Data Useful In Order to...

- Start a new business?
- Expand an existing business?
- Explore a cooperative model for a new or existing business?
- Support more equitable community economic development?