Summit County

COMMUNITY HEALTH ASSESSMENT

2016

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Acknowledgments

Summit County Public Health would like to thank the following organizations for participating in the planning sessions that led to the creation of this report.

Akron Area YMCA
Akron Canton Regional Foodbank
Akron Children's Hospital
Akron Metropolitan Area Transportation Study
Akron Metropolitan Housing Authority
Akron Region Interprofessional Area Health Education Center
Akron Summit County Public Library
American Cancer Society
Asian Services in Action, Inc.
AxessPointe Community Health Center
Child Guidance Family Solutions
City of Akron
Cleveland Clinic Akron General
Community Health Center
Community Legal Aid
County of Summit
County of Summit Alcohol Drug Addiction and Mental Health Services Board
Hattie Larlham
Infoline, Inc.
International Institute of Akron
Mature Services
Metro RTA
Mustard Seed Market & Café
Northeast Ohio Medical University
Ohio Guidestone
Open M
OSU Extension
Project Learn of Summit County
Social Services Advisory Board
Summa Health System
The Blick Center
The Ohio Affiliate of Prevent Blindness
U.S. Representative Marcia Fudge
U.S. Senator Sherrod Brown
United Way of Summit County
University of Akron: Nursing Center for Community Health

Introduction

In 2011, Summit County Public Health (SCPH) released its first Community Health Assessment (CHA). The original CHA included 29 indicators organized in four broad categories: Clinical Care, Health Behaviors, Social and Economic Factors and Physical Environment. In its current version, the 2016 CHA includes nearly 200 indicators and thirteen call out sections that dive deeper into Summit County's most pressing issues.

As readers move through the report, they will see that Summit County's collective health has changed over the past five years. Some outcomes have improved, while others have gotten worse. And in some cases, it is still too early to tell whether any progress has been made.

Good health starts with people taking care of themselves; eating good food and exercising, not smoking, getting all recommended immunizations and screenings, and seeing a doctor when sick or injured.

However, good health goes beyond maintaining a healthy lifestyle. It depends on several factors that on the surface may not seem to be linked to health. Many of the factors that impact health come from the outside; things like the kind of social and economic opportunities available; the physical condition of people's homes, schools and businesses, the safety and vitality of the neighborhoods they live in, the education they receive, and the work they do. People's health also depends on things like access to clean water, food and air, and effective and affordable health care.

The report that follows contains a great deal of statistics. Collectively, they show the complex web of personal, social, economic and environmental factors that help determine at a community-wide level who is healthy and who is unhealthy. But statistics alone do not tell the whole story. Health outcomes improve by combining individual commitment to healthier living with a commitment to the design and implementation of effective programming by public agencies and their private, non-profit, and faith-based partners.

In addition to statistics, this report highlights several critical areas impacting health in Summit County. These sections present the background of each issue and discuss the community partners engaged in addressing the issues. These sections also include some of the major challenges and opportunities that will help determine success in the years ahead. The goal is that the 2016 CHA and 2017 Community Health Improvement Plan will be a guiding document for the whole community, allowing for better coordination of the many resources that exist in Summit County and advancing the goal of maintaining healthy lives for all Summit County residents.

Background

The Roots of the CHA: The Summit 2010: A Quality of Life Project

In 2003, the Summit 2010: A Quality of Life Project began as a comprehensive health and social service planning initiative that would improve the economic competitiveness and quality of life of residents in Summit County. Started by then-Summit County Executive James B. McCarthy, and conducted under the oversight of the Summit County Social Services Advisory Board (SSAB), the purpose of Summit 2010 was to strengthen collaboration between the county's major public systems and smaller community partnerships in order to improve the quality of health and social service delivery. The organizing agencies include, but are not limited to: Department of Job & Family Services; Summit County Children Services; Alcohol, Drug and Mental Health Board; Board of Developmental Disabilities; Akron Metropolitan Housing Authority; Akron Metropolitan Transit Authority; Summit County Juvenile Court; Summit County Public Health; and Area Agency on Aging.

The high point of the first phase of the project was SSAB's creation in 2004 of ten major initiatives that had the goal of creating high-impact changes to the health and social services system. In addition, 20 priority indicators were created to monitor the community's health and social conditions over time. These initiatives and indicators became the foundation of the county's first Comprehensive Health and Social Services Plan. They were also the foundation for several other planning efforts, including the Workforce Development and Economic Opportunity Plan, the Partnerships for Success Plan, and three neighborhood-level strategic plans in Barberton, Buchtel, and Lakemore. Implementation of these plans began in 2004, and over the next six years the project took root in the community, with as many as 300 volunteers putting in hundreds of man-hours working on 15 separate committees. By 2010, all ten major initiatives were either accomplished or had made a great deal of progress. In addition, reports showing changes over time to the 20 priority indicators were released in 2007 and 2009.

Moving Forward to Summit 2020

As the new decade began, the SSAB held a planning retreat to review the Health and Social Services Plan, evaluate what was accomplished, consider changes to the priority indicators, and create a new vision for taking the community to 2020. New partner agencies were identified and invited to become a part of the planning process, including the GAR Foundation, Child Guidance and Family Solutions, Akron Community Foundation, Akron Public Schools, Summit for Kids and the Summit Education Initiative.

As the planning process unfolded, it became clear that the project needed a more streamlined and coordinated structure as it set goals for 2020. Therefore, the SSAB decided that the project, now renamed Summit 2020, would focus on five broad initiative areas, Economic Stability and Prosperity, First Things First, Older Adults, Health and Health Disparities, and Government Efficiency and Effectiveness. These priority areas would work differently than the old committee structure. Using a model originally developed in the First Things First initiative, each of the five priority areas would maintain an aggressive meeting schedule early in the planning process and produce its own strategic plan that would be implemented over time.

Methods

Public Health Accreditation status through the Public Health Accreditation Board (PHAB) requires Community Health Assessments to be completed every five years. PHAB standards highly recommend that national models of methodology are utilized in compiling CHAs. The 2016 CHA was completed using the National Association of County and City Health Officials (NACCHO) modified- Mobilizing Action through Partnerships and Planning (MAPP) process. MAPP is a community driven planning process for improving community health. This process was facilitated by SCPH and conducted with the Summit Coalition for Community Health Improvement (SCCHI). SCCHI is a 40+ member collaborative with the mission of identifying key health priorities in Summit County and coordinating action to improve population health and promote health equity for all. Furthermore, the 2016 CHA was modeled after other reports recognized by PHAB as meeting standards for comprehensive quality.

The 2016 CHA indicators are organized using the County Health Rankings model of population health, developed jointly by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. This model, outlined at right in a graphic reproduced from the County Health Rankings website, provides a methodology for understanding how a
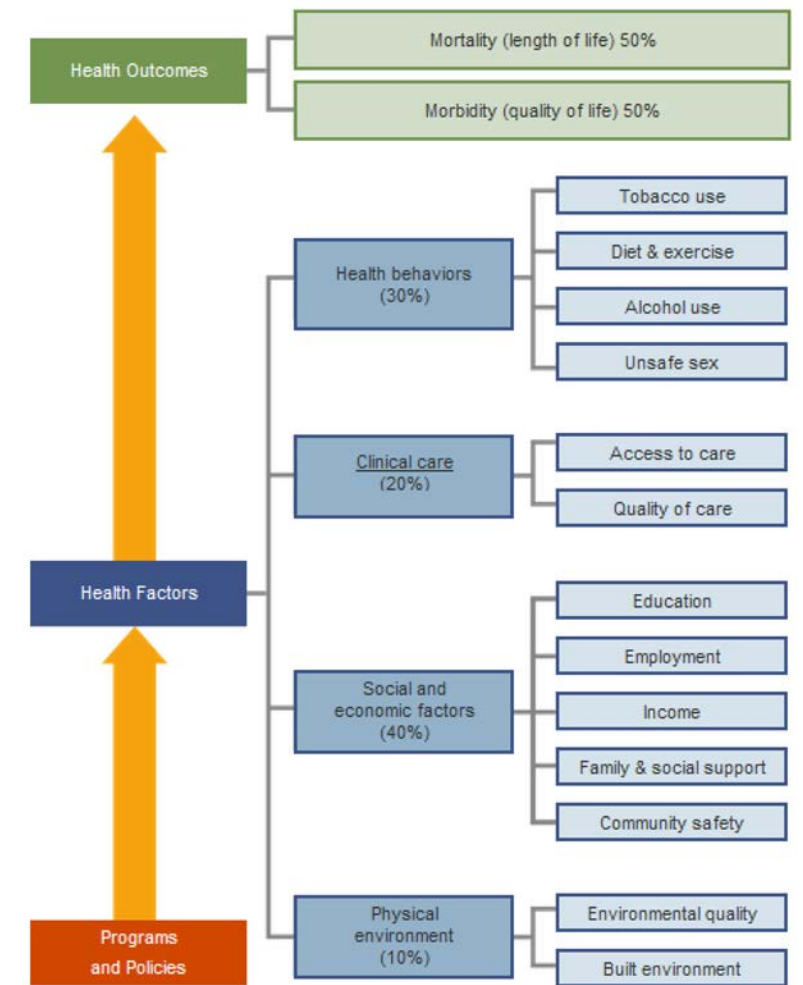
community's collective efforts to improve health and social conditions interacts with prevailing socioeconomic and health conditions to produce desirable (or undesirable) outcomes in a community's health and quality of life.

Using this methodology, SCCHI organized into four subcommittees: Clinical, Health Behaviors, Social/Economic and Physical Environment to discuss, recommend and vet indicators proposed for the 2016 assessment. Subcommittees met regularly for four months to complete this step of the process. SCCHI reconvened as a larger group to select the final list of indicators. From there, SCPH Epidemiology Department gathered data and started formulating the report.

SCPH Epidemiology consulted indicators tracked through the Summit 2020: Quality of Life Project and gathered additional data from a variety of sources including County Health Rankings, American Community Survey, and Community Health Status Indicators. SCPH also utilized the 2013 Youth Risk Behavioral Survey, the Ohio Department of Health Birth and Death Data, EpiCenter, Summit County PACE-EH Survey and the Explorys Platform, a new tool for obtaining prevalence data utilizing hospital electronic medical records (EMR).

The Explorys Platform contains de-identified patient data from medical and other sources. It allows for cohort building to evaluate a population of your choosing around disease profiles, medications and has potential for many other applications.[7] For the purpose of the Community Health Assessment, Explorys was used to build cohorts of people from the three digit zip codes found within Summit County 442 and 443.

Due to confidentiality, Explorys only allows for analysis among three digit zip codes. The combined 442 and 443 analyses were used for the purpose of this report, and are referred to as the greater Summit County region which also includes Medina, the majority of Portage and parts of Wayne and Geauga counties. By analyzing the greater Summit County region we are combining the mostly urban zip code of 443 and the mostly suburban zip code of 442, and this fact should be considered when evaluating indicators found with Explorys.

SCCHI and SCPH also worked to complete two qualitative MAPP assessments: Community Themes and Strengths and the Forces of Change. These assessments were modeled after the State of Ohio Regional Forum assessments and allowed SCPH to analyze the data using categories and definitions defined by the state. These assessments identified key themes regarding Summit County's strengths, weaknesses, opportunities and threats. An effort to identify the needs of the community was also apparent in the work of the Health in All Policies initiative, now the SCCHI Policy Committee. Focus groups were conducted throughout the community in 2015 and identified barriers and opportunities through the lens of the community member. All information obtained through both quantitative and qualitative data sources are presented in this report.

A Note on the American Community Survey

Many of the indicators in this report rely on data from the U.S. Census Bureau's American Community Survey (ACS). Readers should keep in mind that the ACS relies on a random sample rather than the full-count approach used in the 2010 census. This means that the ACS data presented here are estimates and have margins of error that should be taken into account, especially when looking at change over time. When using ACS data, we can be 90 percent confident that if all persons in the population were surveyed, the responses would fall within the margins of error. This concept is called the 90 percent confidence interval. We can say that there is a "statistically significant" difference between two ACS figures only if their margins of error do not overlap. However, while many of the differences between data presented here may not be statistically significant, they still may be meaningful, especially when considered in context with other indicators.

442 and 443 Three-Digit Zip Codes
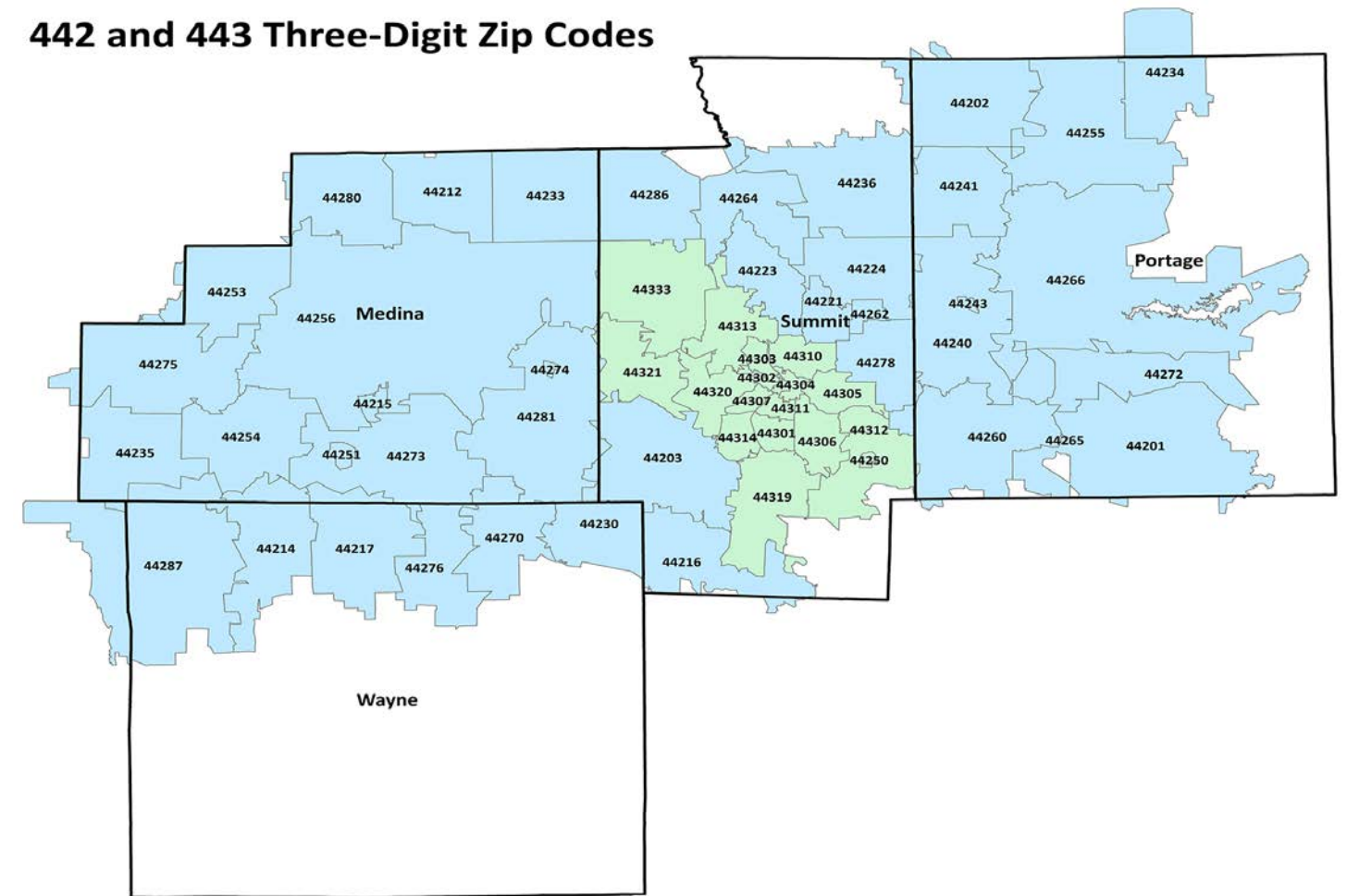
Community Engagement: Health in All Policies

Background

Summit County leaders, agencies and organizations have a decades-long history of collaborating to address the health needs of the community. In 2011, the Centers for Disease Control and Prevention (CDC) awarded a capacity-building Community Transformation Grant (CTG) to the Summit Partners for Accountable Care Community Transformation (Summit PACCT) in Summit County, Ohio. As a part of this work, a policy scan was completed that began to examine what types of policies already existed in Summit County with the goal of addressing health. While the CTG funding was terminated in 2014, the work continued.

Utilizing the information and partner momentum from that initial policy scan, and in collaboration with long-standing work from the Healthy Connections Network (HCN) and the Minority Health Roundtable Policy Advocacy Committee, a work group continued to explore the viability of a Health in All Policies (HiAP) approach and development of a health charter for Summit County.

The HiAP workgroup continued to explore the viability of a Health in All Policies approach. At the same time HCN continued its work with the ultimate goal of creating a Health Charter for the county. A Health Charter would require policy-makers to consider the health implications of their decisions, in an effort to elevate the health status of all members of the community and thereby work toward eliminating health disparities.

By the end of April 2014, both the HiAP Workgroup and the HCN core group had independently concluded that neither could proceed until they had brought the community into the conversation. Both groups realized that this step would be essential to the legitimacy of their efforts. Until the community had the opportunity to weigh in on priorities, deficiencies, and goals, how could either initiative speak about what the community wanted or needed? Thus, the two groups came together to develop and implement a community engagement plan.

Process

The Community Engagement Plan (CEP) utilized focus groups, paper surveys, a web-based survey distributed through social media, and a community forum. Two questions were at the center of these interactions. These questions were developed in order to best gather how the social determinants of health affected their lives both positively and negatively.

1. What about or in your community gives you joy, happiness or pleasure in your life?
2. What about or in your community keeps you from experiencing joy, happiness or pleasure in your life?

Results

There were a total of ten community gatherings where focus groups had been conducted, twenty locations where paper surveys were handed out or made available to the public, and eleven organizations that posted the survey link or directed people to the survey link from their websites. With these three modes of input, the CEP group collected survey responses from 528 community members.

From those who were engaged in the CEP efforts we learned, for example, that interpersonal connections (family, friends, a sense of community), community infrastructure (parks, services, arts and cultural events), a sense of meaning and purpose (e.g. church, spirituality) and the ability to meet basic needs were the most important conditions that support health and wellness. Impediments to living life to its fullest included some of the opposite factors --namely, broken connections, lack of infrastructure, racism and basic needs not being met. In addition, one message that is perhaps the single most important takeaway from participants is that they feel disconnected from policy-makers.

> **What about or in your community gives you joy, happiness or pleasure in your life?**

1. Relationships & Purpose

   Connections with family is the single most significant, positive element in peoples' lives that was mentioned in survey results. Connections with family, friends and neighbors, as well as having a sense of belonging and participating in community events and activities, accounts for more than 35% of the responses that were able to be categorized as the means through which respondents find joy in their lives. Respondents described these relationships with such detail as "being able to take my son to school and [do] homework with him after school," "companionship, friends, [and] strong relationships," and "community members working hard to create a thriving community." A closely related theme is the importance of having purpose and meaning in life, by prioritizing the well-being of others and by having a spiritual relationship.

2. Community Infrastructure, Built Environment, and Business Engagement

   Taken together, these areas that highlight community assets, both public and private, were specified in over a quarter of the categorized responses. People described these positive elements in their lives in a variety of ways. From neighborhood parks to the Summit County Metro Parks, to the Towpath, to the Cuyahoga Valley National Park, respondents made clear that the park system, with its hiking, walking, and biking trails, plays a conspicuous and affirming role in their lives. Many respondents expressed their pleasure in being outdoors, in the fresh air, engaging in outdoor activities, and communing with nature. Others identified access to recreational infrastructure like gyms, fitness centers, or community centers as instrumental in their lives. Moreover, when describing infrastructure elements that were working, respondents included specific concepts, such as "proximity

to downtown," "city is revitalized," and "walking to the store." Among the cultural institutions specifically identified were the Civic Theater, the Public Library, Lock3, and EJ Thomas Hall. In addition, a handful of respondents explicitly identified the business presence as essential to what is good in their communities. "Downtown Partnerships," "local businesses," and economic revitalization are part of what is working for residents.

3. Basic Needs Being Met

A third important theme people identified was the joy they feel when their basic needs are met. At least one of the following themes were identified by 145 respondents as having a positive impact on their lives : living in a safe, peaceful environment, accessing healthy food and health care, experiencing financial security, and appreciating the strong educational system. Of these, the joy that comes from feeling safe stands out as the basic need offered the most by respondents. Forum participants also emphasized the need for support to maintain physical and mental wellbeing. People specifically referenced needing access to safe and affordable food, and being both motivated and having time to be physically active and spend time outdoors. To encourage school-aged children and youth to be physically active, they need physical activities both during and after the school day, transportation to and from school, and safe, affordable opportunities to be outside.

> ### *What about or in your community keeps you from experiencing joy, happiness or pleasure in your life?*

1. Broken Connections with Individuals and Communities

Where connections are the most significant positive element, broken connections, whether with people or institutions, are the most significant people reported. Among these barriers to happiness is living in the midst of unlawful activities such as shootings and killings, drug activity and gangs. Racism, both personal and institutional is another example of a circumstance that represents a broken connection in the community. Additional barriers named included insufficient cultural competency, representative diversity, connection to communities and a lacking understanding of historical and root causes of poverty. Individual level broken connections identified included broken family relationships; broken relationships with neighbors and co-workers; and broken relationships with other individuals as evidenced by "apathy," "disrespect," and "rudeness."

2. Unmet Basic Needs

Insufficient income and jobs was a critical factor among unmet needs. Sixty-two survey respondents described this barrier, stating "need a job for everyone, this will result in less crime," "low-wage employment," fewer opportunities," and "difficulty obtaining gainful employment." Many forum participants also pointed to financial instability, as a result of high health care, medical, education, and childcare costs, among other things, as a significant barrier in their lives. Poverty, living with insufficient resources and the inability to earn enough money to alleviate the situation are leaving people stressed at a fundamental level.

3. Inhospitable Built Environment; Gaps in Community Infrastructure

The third theme people identified in their responses is dealing with an inhospitable built environment. "Speeding cars," "traffic," "not enough sidewalks," and "abandoned houses" were among the specifics mentioned. In addition, several people articulated dissatisfaction with the need to drive everywhere, stating, e.g., "I wish our community were more walkable," and "not enough things to do in walking distance." Closely related to the inhospitable built environment are gaps in community infrastructure. Respondents shared that there are not enough interesting restaurants, cafes, and locally-owned stores. Respondents also pinpointed difficulties meeting people, suggesting a need for more social opportunities.

4. Meaning and Purpose Lacking

The absence of meaning and purpose was a fourth theme that emerged from responses. This gap centered primarily on the struggle to have enough time after working long hours to do other things, perhaps spending time with family or having fun. The pressure people feel to find ways to meet their basic need for income likely detracts from their ability to have the relative luxury of having a life filled with meaning and purpose. As forum participants contributed, that luxury is also denied to people struggling with poor health. One person shared: "if you are sick, you cannot think of goals to fulfill." Another explained: "illness gets in the way; with illness, [you] can't focus on anything else." All the joy that people attain by having a meaning-filled and purposeful life, as respondents described in response to the previous question, is unavailable to those who instead are struggling with time and health constraints, and otherwise trying to meet basic needs.

5. Weather

While the weather remains outside the control of policy-makers, how our local institutions respond is not. For example, if local government facilitated a better system for clearing sidewalks in the winter, that system would improve the ability of residents to be more physically active during snowy months.

Conclusion

The results from the community engagement plan and subsequent report have informed the creation of the Health in All Policies Charter which was passed in both the City of Akron and County of Summit in May 2016, demonstrating the commitment of policy-makers and government officials to consider health when making decisions.

The work done to engage the community on what is important to them has contributed significantly to the 2016 Community Health Assessment. The themes identified through these focus groups are consistent with those found through both the Community Themes and Strengths and Forces of Change Assessments completed by community organizations, government officials and health care professionals.

The Health in All Policies Community Engagement Report can be accessed in its entirety on the SCPH website at www.scphoh.org.

Forces of Change Assessment

The Forces of Change Assessment was completed by the Summit Coalition for Community Health Improvement (SCCHI) during the September 2016 meeting. The group identified a list of 30 potential broad forces of change that had the potential to affect the health and quality of life of Summit County residents. After further analysis, 17 forces were identified as being broad enough to affect multiple systems and large populations. During the October 2016 meeting, SCCHI members were asked to select their top four forces of change in order to help narrow down the list. An Internet survey was also sent out to individuals that were not in attendance. The following are the most critical forces of change that were identified through the selection process.

Opiate Epidemic (18 votes)

As overdoses and overdose deaths continue to rise, the impact of the current opiate epidemic can be felt across multiple systems. Some of these systems such as police, fire and EMS are often the first responders when there has been a drug overdose. This is why there is an increasing push to obtain lifesaving naloxone to prevent unintentional deaths. Other systems, such as Summit County Children's Services, are finding that placement costs are rising due to the increasing amount of heroin and opiate use resulting in a child being taken into custody. Children removed from these situations can often present higher needs thus requiring more costly intervention. Providers are trying to balance the demands of the current crisis, while also working to prevent future drug use and abuse through programs that target children and policy level strategies around prescribing and monitoring.

Affordable Care Act (15 votes)

The 2010 Affordable Care Act (ACA), and the related expansion of Ohio's Medicaid program in 2014 have helped many in Summit County obtain access to health insurance coverage. However, adequate access to health services still remains a challenge for many who find that health insurance premiums and out of pocket costs continue to rise and Medicaid providers for some services, such as dental, are limited. Furthermore,   the viability of the ACA is highly dependent upon the political landscape, leaving the potential implication of millions finding themselves without coverage. Even if the ACA remains intact, rising costs and limited access will need to be addressed through community programs that can mitigate some of the cost issues, prevention programs that can prevent costly diseases and educational programs that can teach the proper utilization of health insurance.

Behavioral Health Redesign (11 votes)

The State Fiscal Year 2016/2017 budget continues the Kasich Administration's commitment to modernize Ohio's Medicaid program. At the center of this effort is a proposal to rebuild community behavioral health system capacity across the state. The legislation provides targeted investments to support he initiatives such as: developing new services for individuals with high intensity service and support needs; improving health outcomes through better care coordination; and recoding all of Medicaid behavioral health services to achieve alignment with national coding standards. This presents unique challenges to Summit County agencies as the proposed rates are often lower than those that have been utilized in the past. There is the potential for financial hardship when considering the large investment in Electronic Medical Records (EMR) systems. Furthermore, in 2018 behavioral health will be reimbursed by Medicaid Managed Care Organizations. Every agency will be grandfathered in during the first year but after, the MCO's will have the choice of what behavioral health and AOD agencies they wish to contract with.

Reduction in Federal & State Funding (11 votes)

An overall reduction in federal and state funding, coupled with increasing responsibility on local governments, directly affects programming and services delivered to Summit County's most vulnerable residents. Although this can provide ample challenges, it also allows for unique collaborations to address resource restraints and programmatic gaps. An example is the Adult Protective Services program through the Summit County Department of Job and Family Services. Reductions in state funding essentially made this program an unfunded mandate. Rather than reduce services, SCDJFS worked with Summit County Public Health and other community agencies to implement a model in which adults are protected from conditions of abuse, neglect, self-neglect and exploitation.

Increasing Refugee Population (10 votes)

The number of refugees in Summit County is expected to rise again in 2017 (U.S. Department of Health and Human Services). With this rise come both challenges and opportunities. According to a report commissioned by Partnership for a New American Economy and the Knight Foundation, immigrants and refugees held close to $137 million in spending power, which is defined as the net household income available to a family after paying federal, state, and local taxes. Additionally, between 2000-2013, foreign born residents increased the total housing value in Summit County by $207 million. Although the economic benefits to Summit County are great, there are challenges associated with a rising number of refugees. These include locating housing, ensuring physical and behavioral health care needs are met, and providing accurate and timely translation services for needed community services. Summit County's large public agencies currently spend a combined $865,000 on translation services annually (Summit County Public Health, 2015). These costs are often greater than the Medicaid reimbursement rate for medical services rendered. The cost issue is often compounded by issues regarding accuracy in translation due to the many dialects within each population. Issues regarding mental health status are also of increasing concern. The stress of assimilating in a new country, coupled with the potential trauma endured in the refugees' native country, can take a toll on an individual; behavioral health services for this population are not always accessible. Even when services are accessible, translation often comes from a member of that individual's own

community, possibly making them less likely to want to talk about sensitive matters. These identified barriers can only be addressed through coordination between primary care and behavioral health care, along with a culturally competent workforce and accessible and accurate translation services.

Growing Aging Population (7 votes)

It is estimated that there are 10,000 older adults who turn 65 every day in in the United States, a trend that is expected to continue for the next 13 years (Pew Research Center, 2010). There are several implications for a growing population of older adults, as identified by the Akron Community Foundation's 2015 Creating Measurable Community Impact report. First and foremost, capacity among service providers will be required to grow in order to address the needs of this population and to avoid waiting lists. Consequently, the demand for caregivers and transportation will increase. Secondly, there will be older employees in the workforce and a growing number of retirees. Lastly, a growing older adult population will impact tax collections as income taxes, expenditures and property taxes decline as people age.

Infrastructure/ Built Environment Changes (7 votes)

There is an increasing number of policy makers, government officials, and developers that are recognizing that place matters. The built environment certainly affects the health and quality of life for an individual and can have either positive or negative impacts on economic viability for a community. Summit County is seeing a rise in projects and policies to improve the built environment by increasing green space, improving walkability/ bikeability and reducing accidents. With these opportunities to improve the built environment come challenges such as gaining adequate community input, avoiding gentrification and incorporating health equity concepts into decision-making.

Community Themes & Strengths

The Community Themes and Strengths survey was completed via internet survey during the month of September by various community stakeholders. There were 56 individuals who completed the survey. The survey was modeled after the Community Themes and Strengths Survey that was distributed during the State of Ohio State Health Assessment (SHA) regional forums. Analysis of results also utilized the state's definitions and groupings. The top five answers for each question are represented below.

Question 1: What makes you most proud of our county?	
Collaboration & Alignment	28
Community Engagement (Sense of Community)	8
Active Living Environment (Park system)	8
Access to Health Care and Community Services	4
Education, Arts & Culture	3

Question 2: What do you believe are the 2-3 most important characteristics of a healthy county?	
Access to health care/ medical care	28
Economic Vitality	21
Education	16
Safety	12
Healthy Food Environment	10

Question 3: What do you believe is keeping our county from doing what needs to be done to improve health and quality of life?	
Lack of Funding and Resources	27
Lack of Collaboration/ Alignment	13
Political Climate	5
Poverty	4
Lack of Education	3

County Health Rankings, State and Healthy People 2020 Comparisons

County Health Rankings are based on a model of population health that emphasizes key factors to improve that could make communities healthier and safer. The rankings measure nearly all counties in the nation using both state and national data sources. These measures are standardized and then calculated based on weighted sums of standardized measures within each state. The lowest score is associated with the best health.

Following are tables with data to compare county, state and Healthy People 2020 health measures and goals. These comparisons help to identify potential challenges in the community that we may want to examine more closely and factors that are assets in are community already. However, comparing this data can be difficult due to a difference in data and population definitions. When comparing, it's important to keep these differences in mind. These differences are described below the tables as appropriate.

The rank column may be blank because the state of Ohio is not collecting the data to rank the counties, or because County Health Rankings didn't incorporate those particular health outcomes into their standardized calculations for overall ranking.

Clinical Care

Clinical Care | Ranked 24th of 88 counties overall				
Measure	Summit County	Ohio	Rank (of 88 total counties)	Healthy People 2020 Goal
Percentage of female Medicare enrollees ages 67-69 that receive mammography screening	59%	60%	24	76.8%
Late stage diagnosis of breast cancer	28.9%	29.3%	-	42.1 new cases per 100,000 females
Percent of pregnant women receiving 1st trimester prenatal care	71.4%	-	-	77.9%
Percent of babies born at a low birth weight	8.8%	8.6%	53	7.8%
Infant mortality rate	7.4 per 1,000 live births	7.6 per 1,000 live births	-	< 6 per 1,000 live births
Child mortality rate	42 per 100,000	60 per 100,000	-	-
Percent of adults 18-64 who had no health insurance	8.8%	-	-	0%
Primary care physicians	1,000:1	1,300:1	24	-
Mental health providers	530:1	640:1	24	-
Dentists	1,709:1	1,710:1	24	-
Preventable hospital stays (number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees)	73	72	24	-
Percent of adults 18+ who needed to see a doctor but could not because of cost	11%	13%	-	-
Percent of adults with diabetes (Type II)	13.9%	11.7%	-	-
Adults without diabetes with an elevated A1C	3.4%	5.3%	-	-
Chronic kidney disease death rate	14.9 per 100,000	17.8 per 100,000	-	-
Cancer rate	444.5 per 100,000	452.4 per 100,000	-	-
BMI of 30.0 kg/m2 or greater (Obesity)	25.6%	29.8%	21	30.5%

Regarding the Child Mortality Rate, there is no Healthy People 2020 Goal listed because they split their measure up into various age groups (1 to 4 and 5 to 9) whereas the Summit County and Ohio measures do not.[i]

Lack of health insurance coverage is a significant barrier to getting those the healthcare that they need and often adults without coverage go without care because of cost. Healthy People 2020 aims to have 100% of people covered by health insurance.

There is no direct comparison of Primary care physicians, mental health providers, and dentists because Healthy People 2020 aims to reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medications. This is different than the ratio of health care professionals to the population reported by the county and state, however this ratio is important to note for local improvements to health care access.[ii]

Preventable hospital stays include the hospitalization for diagnoses treatable in outpatient services. This suggests that the quality of care in the outpatient setting was less than ideal. This measure is valuable to track due to the dangers of catching hospital-acquired infections and because these instances are often preventable. Healthy People 2020 breaks down the measure into levels (immediate, emergent, urgent, semi-urgent and non-urgent) based on diagnosis codes, which is why there is no comparison in the table.[iii]

Healthy People 2020 has no direct comparison for percent of adults with diabetes (type II). Their objectives go into greater detail regarding diabetes care including lipid control, self-blood glucose monitoring, diabetes education and annual eye and foot exams.[iv]

Similar to the diabetes measure, Healthy People 2020 focuses on prevention behaviors such as increasing physical activity, weight management and calorie restriction, so there is no direct comparison with the Healthy People 2020 target goal for those that aren't diabetic, but have an elevated A1C.[v]

Healthy People 2020 is currently tracking data of number of deaths among persons with chronic kidney disease, with no target goal. If warranted, a target will be set during the decade. Data shows 22.2 deaths per 1,000 person years occurred among persons with chronic kidney disease from 1999-2004.[vi]

Healthy People 2020 divides their cancer data into types of cancer for their objectives, so there is no direct comparison. Regarding overall cancer, there is only a target for the death rate (161.4 deaths per 100,000 population), not overall prevalence.[vii]

Physical Environment

Physical Environment | Ranked 82nd of 88 counties overall				
Measure	Summit County	Ohio	Rank (of 88 total counties)	Healthy People 2020 Goal
Fine particulate matter pollution (PM 2.5, 24 hour average), @ East CLC, ug/m3	20.4%	13.5%	82	-

Air pollution particulate matter is defined as particles of air pollutants with a diameter of less than 2.5 micrometers. Negative health outcomes such as decreased lung function, chronic bronchitis and asthma, among other things have been associated with air pollution. Healthy People 2020 uses a separate air quality index which includes ground level ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide in combination with fine particulate matter and measures in number of days.[viii]

Healthy Behaviors

Health Behaviors | Ranked 36th of 88 counties overall				
Measure	Summit County	Ohio	Rank (of 88 total counties)	Healthy People 2020 Goal
Adult smoking	21%	21%	21	12%
Physical inactivity	23%	26%	21	32.6%
Excessive drinking	18%	18%	21	-
Alcohol-impaired driving deaths	52%	36%	21	-
Sexually transmitted infections (Chlamydia)	568 per 100,000	491.4 per 100,000	21	-
Sexually transmitted infections (Gonorrhea)	164 per 100,000	143.6 per 100,000	21	-
HIV/AIDS	7.6 per 100,000	12.4 per 100,000	-	12.4 per 100,000
Youth averaging eight or more hours of sleep - high school	26.8%	-	-	33.10%

Excessive drinking is the third leading lifestyle-related cause of death in the United States. For Summit County and Ohio data, County Health Rankings defines excessive drinking as the percentage of adults that report either binge drinking (consuming more than 4 (women)

or 5 (men) alcoholic beverages on a single occasion in the past 30 days) or heavy drinking (drinking more than one (women) or 2 (men) drinks per day on average). Healthy People 2020 aims to increase the proportion of at risk adolescents aged 12 to 7 years who, in the past year, refrained from using alcohol for the first time.[ix]

Binge/heavy drinkers account for most alcohol impaired driving. Summit County and Ohio data reports all alcohol-impaired driving deaths, whereas Healthy People 2020 aims to reduce the proportion of adolescents who report that they rode, during the previous 30 days, which a driver who had been drinking alcohol.[x]

Chlamydia is the most common sexually transmitted infection (STI) and is associated with increased risk of cervical cancer, infertility, and premature death. Summit County and Ohio data report all cases of chlamydia, while Healthy People 2020 targets females 15 to 24 years attending family planning clinics, and males 24 and under.[xi]

Gonorrhea is another very common STI that can cause serious health problems including ectopic pregnancy, infertility and long term pelvic and abdominal pain. Similar to chlamydia, Summit County and Ohio data report all cases of gonorrhea, while Healthy People 2020 goals target males and females 15 to 44 years and separate them by sex, making comparison of totals difficult.[xii]

Healthy People 2020 has a goal to increase public knowledge of how adequate sleep and treatment of sleep disorders improve health, productivity, wellness, quality of life, and safety on the roads and in the workplace. Sufficient sleep defined as 8 or more hours of sleep on an average school night for grades 9-12. Local and national data are available; however, the state of Ohio does not track comparable statistics.[xiii]

Social and Economic Factors

Social and Economic Factors	Ranked 48th of 88 counties overall			
Measure	Summit County	Ohio	Rank (of 88 total counties)	Healthy People 2020 Goal
High school graduation	88.8%	83.0%	48	-
Unemployment rate	7.2%	7.4%	48	-
Children in poverty	21.0%	23.0%	48	-
Owner housing affordability (% paying more than 30% of income on housing)	18.9%	23.8%	-	-
Percent of labor force that drives alone to work	87.0%	83.0%	82	-

Education level affects health outcomes. The Educational and Community–Based Program measure of Healthy People 2020 aims to increase the proportion of programs that provide health educations so there is no direct comparison with high school graduation rates.[xiv]

The unemployed population experiences worse health outcomes than the employed population. There is no Healthy People 2020 goal that has a comparable population to the Summit County and state data.[xv]

Healthy People 2020 is currently tracking data of children in poverty, with no target goal. If warranted, a target will be set during the decade. In 2010, 20.7% of children ages 0 to 17 were living in poverty.[xvi]

Healthy People 2020 is currently tracking data for owner housing affordability with no target goal. If warranted, a target will be set during the decade. In 2007, 34.6% of households spent more than 30% of income on housing.[xvii]

Transportation choices that communities and individuals make impact health through active living, air quality and traffic crashes. Currently Healthy People 2020 doesn't track this measure, but it is tracked at the county and state level.[xviii]

[i]HealthyPeople.gov. Maternal, Infant and Child Health. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives

[ii]HealthyPeople.gov. Access to Health Services. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services

[iii]County Health Rankings. Preventable hospital stays. Retrieved from http://www.countyhealthrankings.org/measure/preventable-hospital-stays

[iv]HealthyPeople.gov. Diabetes. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes/objectives

[v]HealthyPeople.gov. Diabetes. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes/objectives

[vi]HealthyPeople.gov. Chronic Kidney Disease. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/chronic-kidney-disease/objectives

[vii]HealthyPeople.gov. Cancer. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/cancer/objectives

[viii]County Health Rankings. Air pollution-particulate matter. Retrieved from http://www.countyhealthrankings.org/measure/air-pollution-particulate-matter

[ix]County Health Rankings. Excessive Drinking. Retrieved from http://www.countyhealthrankings.org/app/ohio/2015/measure/factors/49/map

[x]County Health Rankings. Alcohol-impaired driving deaths. Retrieved from http://www.countyhealthrankings.org/measure/alcohol-impaired-driving-deaths

[xi]County Health Rankings. Sexually transmitted infection rate. Retrieved from http://www.countyhealthrankings.org/measure/sexually-transmitted-infection-rate

[xii]Centers for Disease Control and Prevention. Gonorrhea-CDC Fact Sheet. Retrieved from http://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm

[xiii]HealthyPeople.gov. Sleep Health. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/sleep-health/objectives

[xiv]HealthyPeople.gov. Educational and Community Based Programs. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/educational-and-community-based-programs/objectives .

[xv]County Health Rankings. Unemployment. Retrieved from http://www.countyhealthrankings.org/measure/unemployment

[xvi]HealthyPeople.gov. Social Determinants of Health. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health/objectives

[xvii]HealthyPeople.gov. Social Determinants of Health. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health/objectives

[xviii]County Health Rankings. Driving alone to work. Retrieved from http://www.countyhealthrankings.org/app/ohio/2015/measure/factors/67/map

Summit County Demographics

Summit County, Ohio is comprised of nine townships, nine villages and thirteen cities in the northeastern part of the state and covers about 413 square miles. As of 2015, it consisted of 541,968 persons, making it the 4th largest county in Ohio. Its county seat is Akron with a population of 197,542. Summit County is diverse and has two universities, world renowned medical facilities, parks, and churches.

Age and Gender

The largest proportion of Summit County residents are between the ages of 45 and 64 years. This group is closely followed those who are 18 to 34 years of age, under 18 years of age and 65 and older. The median age is 41 years. The smallest age group in Summit County consists of those who are 35 to 44 years of age making up about 12% of the population. Summit County is comprised of about 52% females and 49% males.
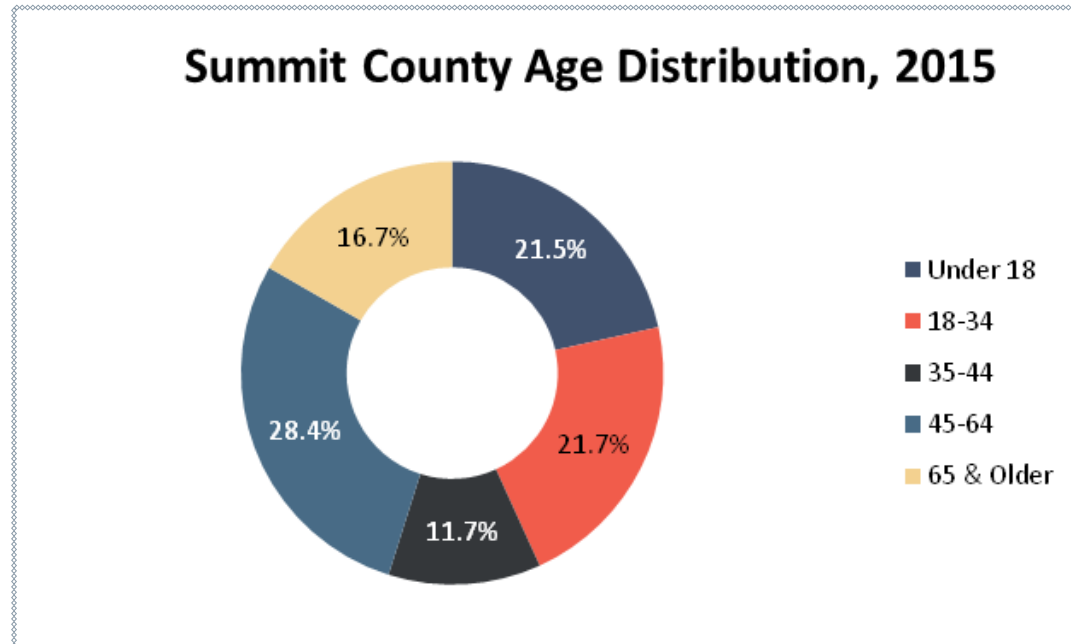
Race and Ethnicity

The largest number of residents in Summit County identify as white. This is followed by those who identify as black, those who identify as two or more races, those who identify as Asian and about 2% of the Summit County population identifying as being of Hispanic origin. Additionally, about 5% of Summit County residents are foreign born.
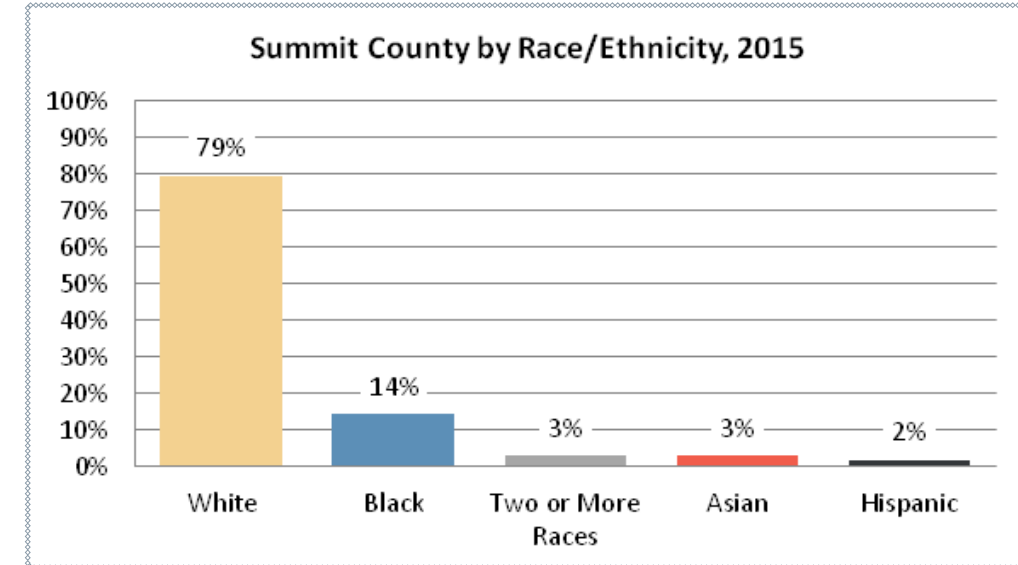
Education

The majority of Summit County residents age 25 years and older have at least a high school or equivalent degree. This is closely followed by those who have had some college or an associate's degree and those with a bachelor's degree. About an eighth of the population have a graduate degree, and those who have less than a high school degree make up the smallest percentage of the Summit County population with about 9%.
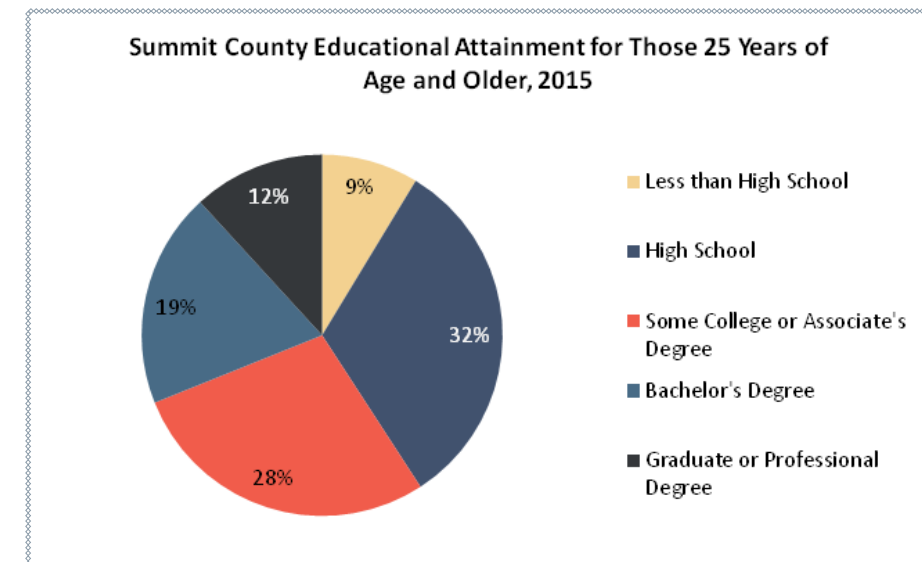
Income and Poverty

The majority of people in Summit County have an annual income between $10,000 to $49,000. The median income in the county is about $27,615. The smallest income category consisted of those who make $75,000 or more. Furthermore, about 14% of Summit County residents lived below 100% of the poverty level in 2015 ($12,082).

Income in the Last 12 Months for Those 15 Years of Age and Older in Summit County, 2015

Income Category	Percentage
$75,000 or Greater	10.9%
$50,000 to $74,999	13.1%
$25,000 to $49,999	24.4%
$10,000 to $24,999	24.5%
$1 to $9,999	16.3%
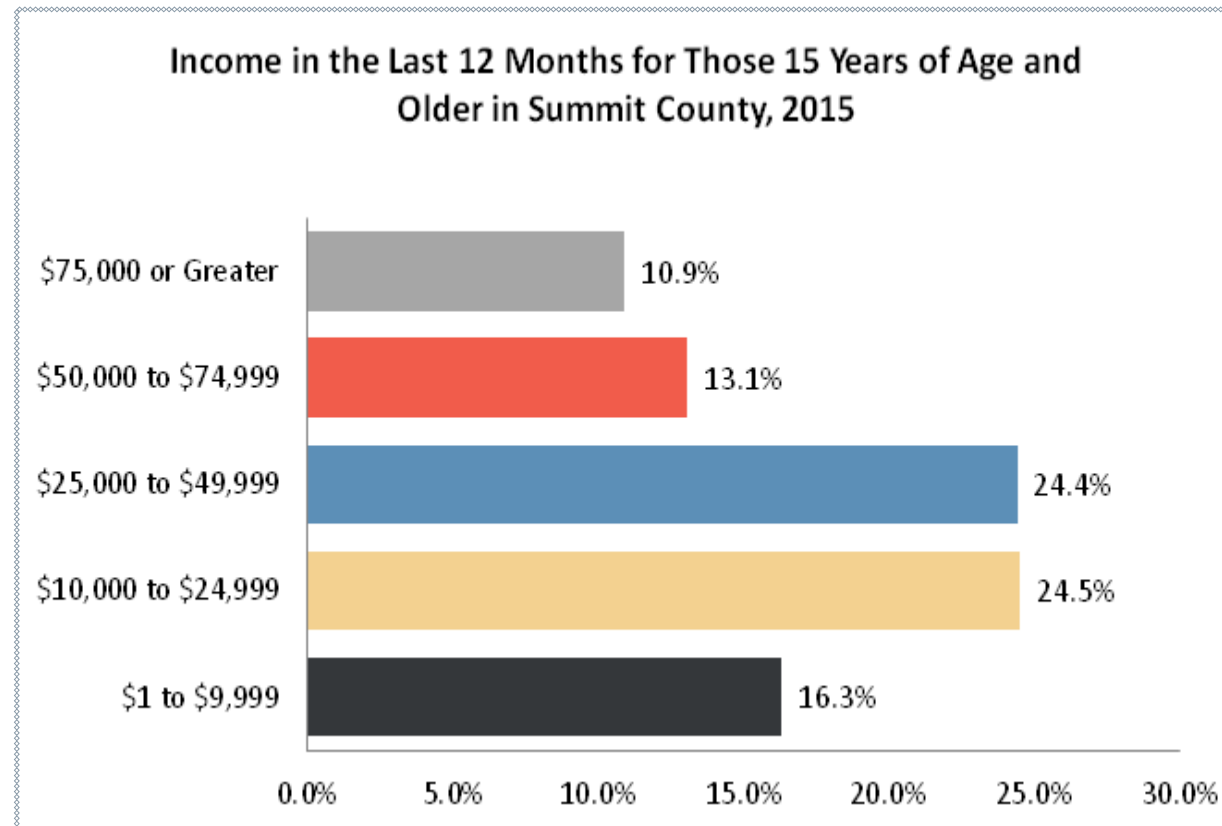
Leading Causes of Death in Summit County

The top five causes of death in Summit County are (in order) heart disease, cancer, chronic lower respiratory disease, stroke, and accidental death. Summit County shares the same top five causes of death with the nation as a whole, though in a somewhat different order.

However, when looking at 2014 data (the most current national figures available), Summit County's age-adjusted death rates are worse for all five top causes of death. The differences are especially big for the top two causes of death, cancer (161.2 for the US and 197.5 for Summit Co.) and heart disease (167.0 for the US and 194.9 for Summit County).

Age-Adjusted Death Rates for Top 5 Causes of Death in Summit County and U.S.

■ Summit County ■ United States

Cause	Summit County	United States
Cancer	197.5	161.2
Heart Disease	194.9	167
Chronic Low Respiratory	46.5	40.5
Accidents	43.8	40.5
Stroke	38.7	36.5
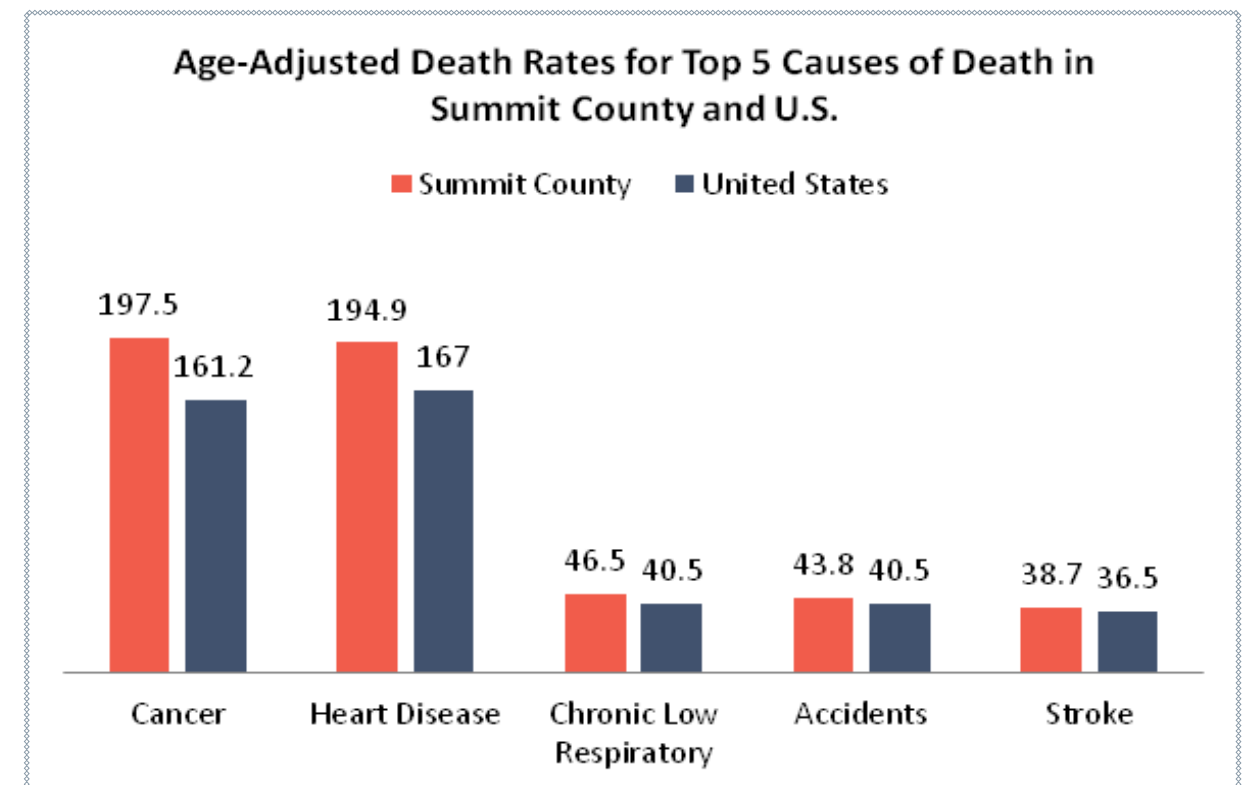
Source: Ohio Department of Health (ODH) Death Certificate Data, Centers for Disease Control and Prevention 2014

Looking longer-term at the top five causes from 2000-2015, heart disease is the most common cause of death, followed by cancer, chronic lower respiratory disease, stroke, and accidents/unintentional injuries.

Figure 2: Age-Adjusted Death Rates for Top 5 Causes of Death per 100,000
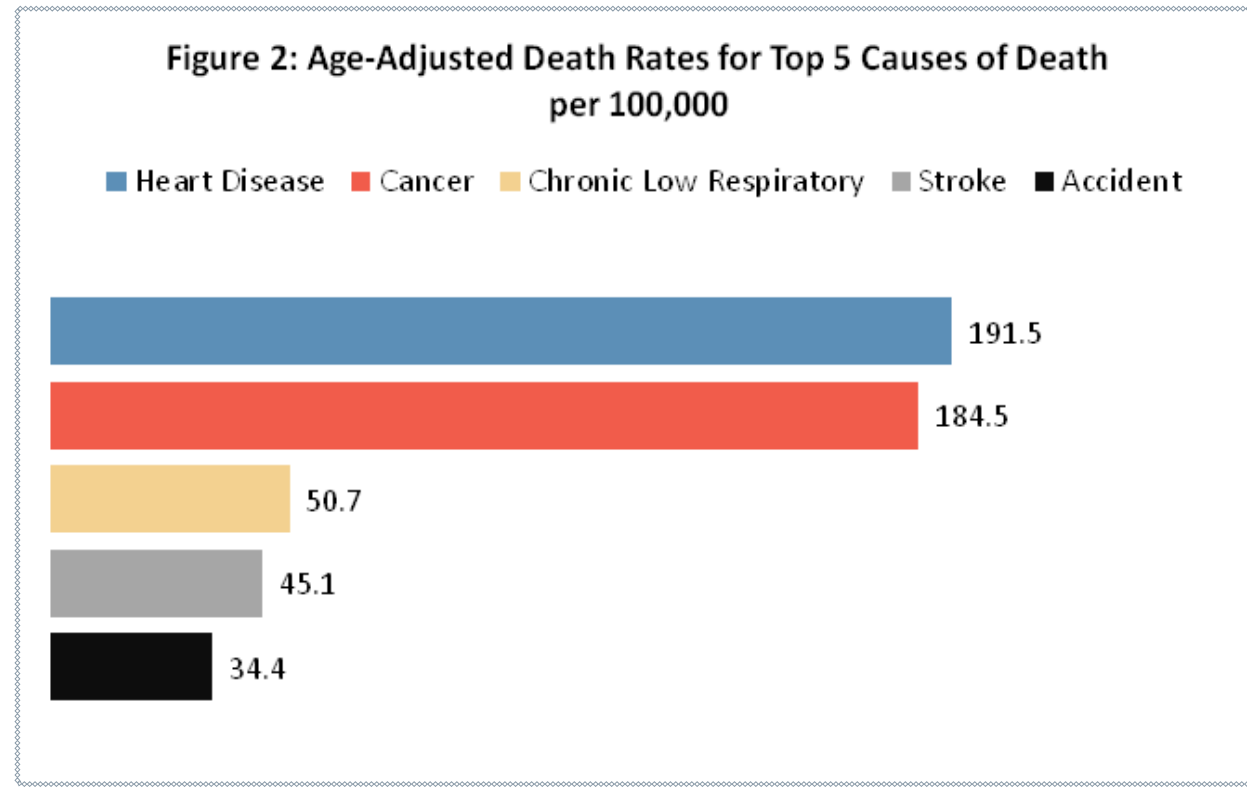
Source: Ohio Department of Health (ODH) Death Certificate Data 2000-2015

The table on the next page is based on a format originally designed by the CDC. It shows the top 10 leading causes of death for each of 10 age groups for people in Summit County. Some of the more common causes of death are color-coded so that readers can follow the progression of that disease throughout the age spectrum. For example, unintentional injuries are the third leading cause of death for children and infants under five years of age. However, unintentional injuries rise to become the most common cause of death for those age five to 44 years of age. In age groups older than 44, unintentional injuries begin dropping to lower relative rankings as diseases that frequently occur later in life such as cancer and heart disease begin to impact the health of the population.

Figure 3: Ten Leading Causes of Death Ranked for 10 Different Age Groups, 2000-2015

10 Leading Causes of Death by Age Group, Summit County, 2000-2015

Rank	Under 5 years	5 - 14 years	15 - 24 years	25 - 34 years	35 - 44 years	45 - 54 years	55 - 64 years	65 - 74 years	75 - 84 years	85 yrs & over
1	Condition originating in the perinatal period	Unintentional Injury	Unintentional Injury	Unintentional Injury	Unintentional Injury	Cancer	Cancer	Cancer	Heart disease	Heart disease
2	Congenital Anomalies	Cancer	Suicide	Suicide	Cancer	Heart disease	Heart disease	Heart disease	Cancer	Cancer
3	Unintentional Injury	Suicide	Homicide	Homicide	Heart disease	Unintentional Injury	Chronic Lower Respiratory Disease	Chronic Lower Respiratory Disease	Chronic Lower Respiratory Disease	Cerebrovascular diseases
4	Homicide	Heart disease	Cancer	Cancer	Suicide	Suicide	Diabetes	Cerebrovascular diseases	Cerebrovascular diseases	Alzheimer's Disease
5	Heart disease	Homicide	Heart disease	Heart disease	Homicide	Diabetes	Unintentional Injury	Diabetes	Alzheimer's Disease	Chronic Lower Respiratory Disease
6	Influenza or Pneumonia	Congenital Anomalies	Congenital Anomalies	Diabetes	Diabetes	Cerebrovascular diseases	Cerebrovascular diseases	Kidney Diseases	Diabetes	Influenza or Pneumonia
7	Cancer	Cerebrovascular diseases	Chronic Lower Respiratory Disease	Cerebrovascular diseases	Cerebrovascular diseases	Chronic Lower Respiratory Disease	Liver Disease	Influenza or Pneumonia	Influenza or Pneumonia	Diabetes
8	Kidney Diseases	Chronic Lower Respiratory Disease	Pregnancy complications	HIV	HIV	Liver Disease	Kidney Diseases	Unintentional Injury	Kidney Diseases	Unintentional Injury
9	Septicemia	Anemia	Cerebrovascular diseases	Congenital Anomalies	Liver Disease	Alcoholic liver disease	Suicide	Septicemia	Unintentional Injury	Lung Inflammation
10	Cerebrovascular diseases	4 causes tied for 10th place[1]	4 causes tied for 10th place[1]	Influenza or Pneumonia	Alcoholic liver disease	Septicemia	Influenza or Pneumonia	Alzheimer's Disease	Septicemia	Kidney Diseases

Note: Top 5 causes of death for all age groups are color-coded, as are suicide and homicide, so their impact can be followed through the life span

[1] One death each in this age group was caused by Diabetes, Influenza or Pneumonia, Meningococcal Infection, and Kidney Disease

[2] Three deaths each in this age group were caused by Diabetes, Influenza or Pneumonia, or Kidney Disease

Differences in Leading Causes of Death

While the county's two largest racial groups, whites and blacks, share the same top-five causes of death, the death rates for each racial group are different for each cause; sometimes very different. Age-adjusted death rates for blacks are higher than for whites on three of the five most common causes of death. More importantly, age- adjusted death rates for blacks are higher than for whites on the two most common causes of death, heart disease and cancer. As shown below , the rate of heart disease for blacks over the 2000-2015 period was 209.9 per 100,000 people, while the rate for whites was 188.9 per 100,000. For cancer, the rates were 206.4 for blacks and 195.0 for whites. Race differences are also very different for stroke, where the death rate for whites is 42.6 per 100,000 and 64.0 per 100,000 for blacks. Only accidental deaths and deaths due to chronic lower respiratory disease were higher for whites than blacks.

Disparities in Age-Adjusted Death Rates for 5 Causes of Death per 100,000 by Race and County Total, Summit County 2000-2015

Heart Disease — White 188.9, Black 209.9
Cancer — White 182.9, Black 206.4

Chronic Low Respir Disease — White 51.8, Black 41.4
Stroke — White 42.6, Black 64.0
Unintentional Injury — White 35.4, Black 31.7
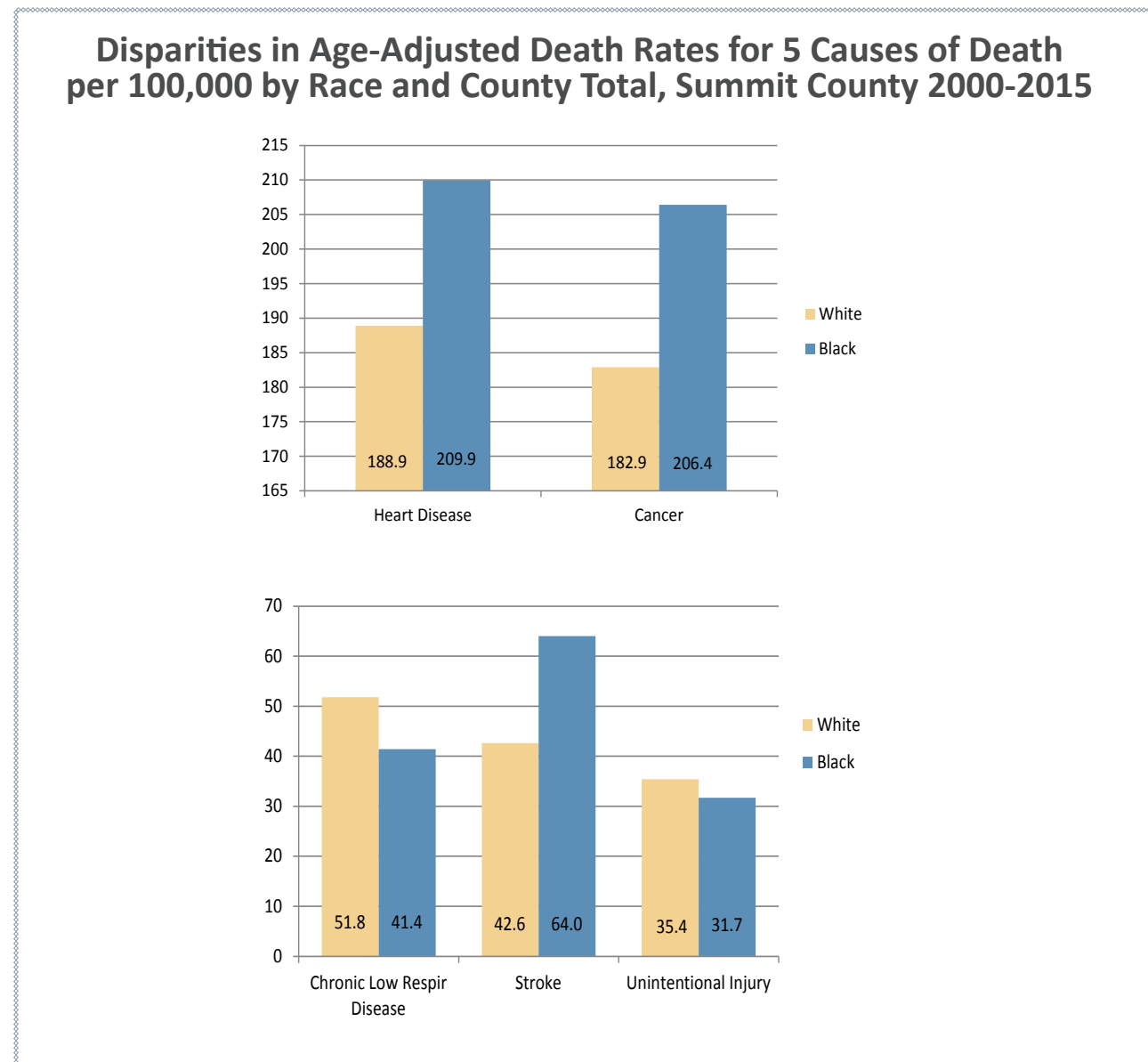
Indicators

2016
HEALTH OUTCOMES
Summit County, Ohio

life expectancy (years)

males **75.0**

females **80.1**

13.9%
percent of adults with type 2 diabetes
in the greater Summit County region

vaccine preventable disease rate
(includes influenza, measles, meningococcal disease, mumps, pertussis, rubella, and varicella)
63.5
cases per 100,000

overall infant mortality rate
7.4
per 1,000 live births

11.5
per 1,000 live births

Black infant mortality rate

suicide rate
16

per 100,000

Health Outcomes

General Health

2006-12
15.0%
Indicator direction:
N/A: BASE YEAR

Fair or Poor Health: The percentage of people in Summit County who answered the Behavioral Risk Factor Surveillance System (BRFSS) Survey question "In general, would you say that your health is excellent, very good, good, fair or poor?" as either "fair" or "poor" is 15%. This percentage is on par with the number of people who report fair or poor health in Ohio overall. (Source: County Health Rankings)

Mental Health

2006-12
3.6 days
Indicator direction:
N/A: BASE YEAR

Poor Mental Health: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" was a question on the BRFSS. Those in Summit County report about 4 days of poor mental health on average. (Source: County Health Rankings)

2013	
MS	HS
13.3%	16.9%
Indicator direction:	
N/A: BASE YEAR	

Suicide Attempts, Seriously Considered By Youth: In 2013, when Summit County surveyed high school (HS) and middle school (MS) children in the Youth Risk Behavioral Survey (YRBS), those 7th and 8th graders who reported seriously considering suicide in the last 12 months was around 13%. The number of high school students that seriously considered suicide was around 17% which was worse than the 2013 Ohio average of 14.3%. (Source: Summit County Youth Risk Behavior Survey)

Chronic Disease

2011-16
13.9%
Indicator direction:
N/A: BASE YEAR

Adults With Type II Diabetes: According to the Ohio Department of Health, type II diabetes or diabetes mellitus is the seventh leading cause of death in Ohio and in the United States. Additionally, it is the one of the top morbidities in the state and country. In the five year period of 2011 to 2016 the greater Summit County region has had a 13.9 percent prevalence of type II diabetes which is worse than the overall prevalence in Ohio of about 12% .[18] (Source: Explorys)

2007-09
14.8 per 10,000
Indicator direction:
N/A: BASE YEAR

Rate of Hospitalizations Due to Asthma: With treatment, asthma is a controllable disease. Only about 15 people per 10,000 Summit County residents were hospitalized due to asthma each year from 2007 to 2009. This is better than the Ohio rate of about 16 people per 10,000. (Source: Networkofcare.org)

2005-11
14.9 per 100,000
Indicator direction:
N/A: BASE YEAR

Chronic Kidney Disease Death Rate: Chronic kidney disease includes conditions such as nephritis, nephrosis and nephrotic syndrome. According to the Centers for Disease Control, chronic kidney disease is one of the top 10 leading causes of death in the United States. It is also a major cause of morbidity, and a risk factor for many other chronic diseases. From 2005 to 2011, Summit County has had about 15 deaths due to chronic kidney disease per 100,000 people each year.[19] (Source: Community Health Status Indicators)

2008-12
444.5 per 100,000
Indicator direction:
N/A: BASE YEAR

Cancer Rate: Cancer has been the leading cause of death in the United States since the early 1900s and currently ranks as second only to ischemic heart disease[20]. In 2014, it was estimated that more than 14 million Americans had been diagnosed with cancer[21]. From 2008-12 for every 100,000 residents in Summit County there were about 445 new cases (all types) of cancer each year. (Source: Ohio Cancer Incidence Surveillance System)

Communicable Disease

2011	2014
131.2	151.3
Indicator direction:	
GOT WORSE	

Number of People Living With HIV/AIDS: In Ohio the prevalence of HIV/AIDS equates to about 151.7 per 100,000. This is similar to the 2014 Summit County estimate of 151.3 per 100,000. However, this number has increased from previous years by about a 15 percent change. (Source: SCPH Communicable Disease Report)

2011	2015
700.0	837.5
Indicator direction:	
GOT WORSE	

All Communicable Diseases: A communicable disease is an infectious disease transmissible by direct contact with an affected individual or the individual's discharges or by indirect means. The number of people infected by a communicable disease in Summit County has increased in recent years from 700 infections per 100,000 residents to about 838 infections per 100,000 residents. (Source: SCPH Communicable Disease Report)

2011	2015
32.8	63.5
Indicator direction:	
GOT WORSE	

Number of Cases of Vaccine Preventable Diseases: Vaccinations are important to the health and well-being of each individual and contribute to the health of Summit County as a whole. Unfortunately, the cases of vaccine preventable diseases have increased in the last four years from 33 cases per 100,000 individuals to 64 cases per 100,000 individuals. Vaccine preventable diseases include influenza, measles, meningococcal disease, mumps, pertussis, rubella and varicella. (Source: SCPH Communicable Disease Report)

Birth Outcomes

2006-10	2011-15
8.8%	8.9%
Indicator direction:	
NO CHANGE	

Babies Born With Low Birth Weight: Low birth weight is considered a weight of less than 2,500 grams or 5 pounds 8 ounces at birth. Low birth weight is a predictor for premature morbidity and mortality as well as mental development problems throughout a child's life. Additionally, it may reflect maternal aspects such as access to health care and socioeconomic status. In recent years, low birth weights have increased in Summit County but changes are not statistically significant.[15] (Source: County Health Rankings)

Oral Health

2012
10.0%
Indicator direction:
N/A: BASE YEAR

Children with Untreated Dental Decay: Dental decay is one of the most common chronic diseases in childhood. An open-mouth screening survey conducted in Summit County revealed a 10% prevalence of children with untreated dental decay. This is better than the Ohio average of about 19%. (Source: Ohio Oral Health Surveillance System)

2008
74.8%
Indicator direction:
N/A: BASE YEAR

Children who Used the Oral Health System: This information came from the Ohio Medicaid Assessment Survey that used telephone surveys to assess the households in Ohio. This data is collected every four years and was reported in the 2012 Ohio Oral Health Surveillance System. 74.8% of households surveyed reported that their child has had a dental visit in the last year. (Source: Ohio Oral Health Surveillance System)

2008
58.7%
Indicator direction:
N/A: BASE YEAR

Adults who Used the Oral Health System: This information was also found with the Ohio Medicaid Assessment Survey. About 60% of the adults surveyed reported having a dental visit in the last year. (Source: Ohio Oral Health Surveillance System)

2012
1,232:1
Indicator direction:
N/A: BASE YEAR

Medicaid Population per Dentist Ratio: This represents the number of dentists who submitted at least one dental claim to Medicaid within the last year. The ratio was 1,232 Medicaid patients per one dentist that accepts Medicaid.. (Source: Ohio Oral Health Surveillance System)

2012
47
Indicator direction:
N/A: BASE YEAR

Schools Participating in Sealant Programs: This indicates the number schools that were served by the school-based sealant program that were locally funded or funded by the Ohio Department of Health. There were 47 schools out of 61 eligible schools in Summit county participating in the sealant program. (Source: Ohio Oral Health Surveillance System)

Premature Death

2008-12	2013-15
7,928	8,305
Indicator direction:	
GOT WORSE	

Years of Potential Life Lost: Year of potential life lost (YPLL) is a measure of premature death or those who died prior to the age of 75. Summit County's YPLL has increased by 5% in recent years from 7,928 to 8,305 per 100,000 Summit County residents. (Source: Ohio Department of Health Death Records, U.S. Census 2000 and 2010

2008-15	
Females	Males
80.1	75.0
Indicator direction:	
N/A: BASE YEAR	

Life Expectancy: Life expectancy is the average number of years that Summit County residents are expected to live. Estimates from years 2008 to 2015 show a disparity between males and females. Females are expected to live about five years longer than males on average. (Source: Ohio Department of Health Death Records)

2012	2015
13	16
Indicator direction:	
GOT WORSE	

Suicide Rate (Youth and Adults): The number of deaths due to suicide/intentional self-harm in Summit County has increased 23% in recent years from 13 deaths per 100,000 residents to 16 deaths per 100,000 residents. Additionally, Summit County had a greater rate in 2015 than Ohio's overall rate of 13 per 100,000. (Source: Summit County Mortality Data Dashboard, U.S. Census population estimates 2010)

2006-10	2011-15
45.0	42.0
Indicator direction:	
GOT BETTER	

Child Mortality Rate: Child mortality rate is the number of deaths of children under 18 in Summit County per 100,000 Summit County residents under 18. This number has improved in recent years from 45 per 100,000 children during the 2006-2010 period to 42 per 100,000 children during the 2011-2015. (Source: Ohio Department of Health birth certificate data)

Infant Mortality

2006-15
7.4 per 1,000
Indicator direction:
N/A: BASE YEAR

Infant Mortality Rate: From 2006-2015, there were 7.4 infant deaths per 1,000 live births among Summit County residents. The Healthy People 2020 target for infant mortality is less than 6.0 infant deaths per 1,000 live births. In order to reach the target by the year 2020, a 18.9% decrease in infant mortality among Summit County residents is needed. (Source: Ohio birth-death certificates)

2006-15
11.5 per 1,000
Indicator direction:
N/A: BASE YEAR

Black Infant Mortality Rate: Black infant mortality makes up a large proportion of the overall infant mortality in Summit County. From the years of 2006 to 2015 the rate of black infant deaths was about 11.5 per 1,000 live births. However, Summit County's rate is still better than Ohio's overall rate of 13.9 per 1,000 infants. (Source: Ohio birth-death certificates)

[13]Health Rankings. (2016). County Health Rankings & Roadmaps. Retrieved 12 October 2016, from http://www.countyhealthrankings.org/app/ohio/2016/rankings/summit/county/outcomes/overall/snapshot

[17]Ohio Department of Health,. (2013). 2013 Ohio Youth Risk Behavior Survey Mental Health (p. 4).

[18]The Impact of Chronic Disease in Ohio: 2015. Chronic Disease Epidemiology and Evaluation Section, Bureau of Health Promotion, Ohio Department of Health, 2015.

[19]Indicator. Wwwn.cdc.gov. Retrieved 25 October 2016, from https://wwwn.cdc.gov/CommunityHealth/profile/currentprofile/OH/Summit/50014

[20]Leading Causes of Death, 1900-1998. (2009, November 12). Retrieved October 25, 2016, from http://www.cdc.gov/nchs/nvss/mortality_historical_data.htm

[21]Simon, S. (2012, June 14). New Report Tracks Growing Population of Cancer Survivors in the US. Re-trieved October 25, 2016, from http://www.cancer.org/cancer/news/new-report-tracks-growing

2016

CLINICAL CARE

Summit County, Ohio

11.7% percent of women seeking maternal depression related postpartum care

late stage diagnosis of breast cancer

28.9%

percent of adults 18-64 with no health insurance
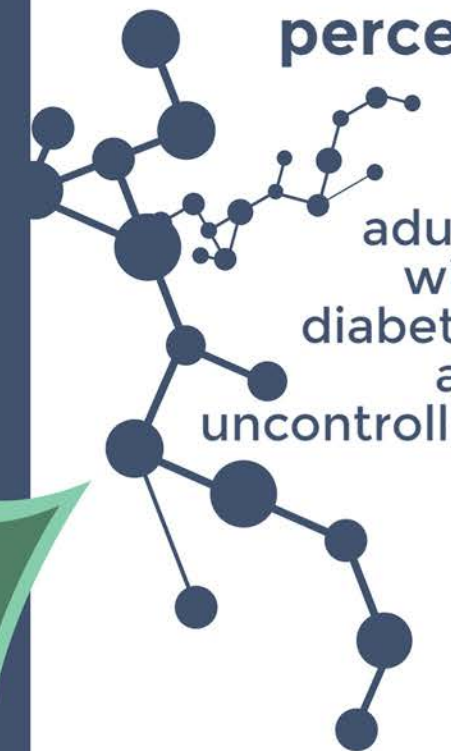
8.2%

down 48% since 2012

cost of translation services

$865,047

among large public Summit County institutions

14.8 percent

of adults with diabetes are uncontrolled

39

Clinical Care

Cancer Screening

2011	2013
58.8%	59.0%
Indicator direction:	
GOT BETTER	

Mammography Screening: Women on Medicare receiving a mammography screening in Summit County increased marginally in recent years. Summit County's 59% is on par with the overall rate for Ohio 60%. The increase in this number is important, because early breast cancer diagnosis is important for increased chance of survival and overall quality of life. (Source: County Health Rankings)

2008-12
28.9%
Indicator direction:
N/A: BASE YEAR

Late Stage Diagnosis of Breast Cancer: The percent of women who are diagnosed with late stage breast cancer is 29.8%. Catching cancer prior to this stage is crucial to the chances of survival. If cancer is diagnosed in the late stage only about one in five women will survive for at least five years after diagnosis.[8] (Source: Ohio Cancer Incidence Surveillance System)

2008-12
78.4%
Indicator direction:
N/A: BASE YEAR

Pap Test: Pap tests are important for predicting cervical cancer in women. In Summit County from the years 2006 to 2012 it was calculated that 63.3% of women had a pap test within the last three years. This number is still lower than the US median of 77.3%. (Source: Community Health Status Indicators)

2008
60.1%
Indicator direction:
N/A: BASE YEAR

Colorectal Cancer: In, 2008 the BRFSS recorded that 60.1% of Summit County citizens 50 years of age and older reported having a colorectal cancer screening based on current guidelines. According to the U.S. Preventative Services Task Force, people at average risk should begin screening at age 50 and earlier ages are recommended for those with higher risk.
(Source: Behavioral Risk Factor Surveillance System)

Prenatal Care

2011-16
59.7%
Indicator direction:
N/A: BASE YEAR

Pregnancy and Progesterone: Research suggests that the use of progesterone in preventing preterm birth in high-risk pregnancies is effective. Of those who have been considered a in the high risk pregnancy category, around 60% in the greater Summit County region are on progesterone or progestogen drugs. This amounts to around 63% in the 442 zip code and 54% in the 443 zip code.[10] (Source: Explorys)

2011-16
11.7%
Indicator direction:
N/A: BASE YEAR

Postpartum Depression: The Centers for Disease Control (CDC) reports that about 1 in 9 or 11% of women will experience depression after giving birth[14]. The trends in the greater Summit County region are similar to those reported by the CDC in that about 12% of postpartum women have had a diagnosis of depressive disorder in the past five years. This is further broken down into about 11% and about 13% in the 442 and 443 zip codes, respectively. (Source: Explorys)

2010	2015
74.9%	72.0%
Indicator direction:	
GOT WORSE	

First Trimester Prenatal Care: Prenatal care by the first trimester is associated with better birth outcomes. Pregnant women who start prenatal care later than the first trimester have an increased risk of poor birth outcomes. These outcomes include low birth weights, premature births, and infant and maternal mortality. Since 2011, the percentage of those women who are receiving prenatal care has decreased. (Source: Ohio Department of Health Birth Certificates)

Vaccination

2008	2015
68.1%	64.9%
Indicator direction:	
GOT WORSE	

Children Receiving Immunizations: This indicator represents the children in the WIC program, under 2 years of age, who received their "4:3:1" vaccinations. Though this is not representative of all children under the age of two, this is important when evaluating some of the most vulnerable children in Summit County. The vaccinations included in the 4:3:1 includes four doses of diphtheria, pertussis, and tetanus, three doses of polio, and one dose of measles, mumps and rubella vaccinations. This percentage has decreased since 2008. (Source: Summit County WIC Program)

Oral Health

2008	2012
70.0%	71.1%
Indicator direction:	
GOT BETTER	

Adults and Dental Visits: The amount of adults in Summit County who reported seeing a dentist, dental hygienist or dental clinic within the past year has increased slightly since from 2008 to 2012. This was reported via the Behavioral Risk Factor Surveillance System. (Source: Behavioral Risk Factor Surveillance System)

2013	
MS	HS
75.6%	71.5%
Indicator direction:	
N/A: BASE YEAR	

Middle School and High School Dental Visits: The CDC states that tooth decay is one of the most common chronic conditions from the ages of 5 to 19. Therefore, children and teenagers receiving regular dental care is an important factor to their health. The percentage of middle school and high school students who reported having a dental exam in the last 12 months was around 76% and 72%, respectively.[15] (Source: Youth Risk Behavioral Survey)

2015
33
Indicator direction:
N/A: BASE YEAR

Dentists and Medicaid: Dentists accepting Medicaid are an important aspect to the health care access to a community. According to the Ohio Department of Medicaid, there are 33 practices/locations that report accepting Medicaid. However, only 23 of the 33 locations reported that they were currently accepting new Medicaid patients. There were further stipulations on many of those who reported accepting new patients. (Source: Ohio Department of Medicaid)

Health Care Access

2011	2015
16.0%	8.2%
Indicator direction:	
GOT BETTER	

Percent of Adults without Health Insurance: Access to health insurance is the key to decreasing morbidity and mortality. According to the US Department of Health and Human Services, about 20 million people have gained health insurance from 2010 to the beginning of 2016 due to the Affordable Care Act. [12] This mirrors a decrease in the number of adults without health insurance between 2012 and 2015 in Summit County. (Source: American Community Survey)

2011	2015
6.5%	3.4%
Indicator direction:	
GOT BETTER	

Percent of Children without Health Insurance: The percent of children in Summit County without health insurance decreased by approximately half from 2011 to 2015. The Affordable Care Act, along with the Children's Health Insurance Plan, has helped reduce the number of uninsured children. (Source: American Community Survey)

2015-16
3.9%
Indicator direction:
N/A: BASE YEAR

Percentage of Dual Eligible Adults: Another benefit of the Affordable Care Act is that it ensures that those who are eligible for both Medicare and Medicaid may be dually enrolled to improve care and lower cost. From the months of September 2015 to August 2016 about 3.9% of Summit County adults, age 65 and older, were eligible for Medicare and Medicaid. (Source: Department of Job and Family Services)

2011	2013
1,061:1	1,001:1
Indicator direction:	
GOT BETTER	

Primary Care Physicians: The ratio of population to total primary care physicians has decreased in the last four years. There are about 60 less patients to every one primary care doctor in Summit County. This is a benefit, because access to primary care doctors is crucial to preventive care and overall care.[13] (Source: County Health Rankings)

2013	2015
799:1	530:1
Indicator direction:	
GOT BETTER	

Mental Health Providers: This category consists of psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care.[13] This indicator reflects the ratio of the Summit County population to total number of mental health providers. From 2013 to 2015 there has been a decrease in the ratio of population to physician by about a fourth. (Source: County Health Rankings)

2012	2014
1,695:1	1,720:1
Indicator direction:	
GOT WORSE	

Dentists: This category reflects the ratio of the Summit County population to the total number of dentists in Summit County. This number has increased in the past three years, which indicates less access to dentists among the county population. (Source: County Health Rankings)

2015	
Detox	Resid
Male: 9	Male: 62
Female: 6	Female: 32
Indicator direction:	
N/A: BASE YEAR	

Wait Times for Detox and Residential Treatment: In 2015, the average wait time for detox treatment was 9 days for males and 6 days for females. Wait times for residential treatment was 62 days for males and 32 days for females. Long wait times for detox and residential treatment are being directly impacted by the opiate epidemic in Summit County, because of increased demand. (Source: Alcohol, Drug and Mental Health Services Board)

2006-12
11.0%
Indicator direction:
N/A

Adults Who Could Not See Doctor Due to Cost: This is the percent of people who reported not being able to see a doctor because of being unable to afford it. (Source: County Health Rankings)

2011	2013
77	67
Indicator direction:	
GOT BETTER	

Preventable Hospital Stays: This indicator reflects the effectiveness of outpatient care in Summit County. It measures whether someone was admitted for a condition that could have been taken care of in an outpatient setting (ambulatory care-sensitive condition). These conditions include hypertension, pulmonary disease, diabetes, cellulitis, chronic obstructive pulmonary disease, congestive heart failure, kidney/urinary infection, etc. (Source: County Health Rankings)

Language Access

2015
$865,047
Indicator direction:
N/A: BASE YEAR

Cost of Translation Services: In 2015, the cost of translation services among large public institutions in Summit County last year exceeded three quarters of a million dollars, indicating the growing demand for translation services throughout Summit County. (Source: Summit County Public Health Survey)

2011	2015
37.8%	42.2%
Indicator direction:	
GOT WORSE	

English Spoken Less than Very Well: It is very important for those immigrating to Summit County to speak fluent English because it affects the health, job and earning potential of the immigrant population. Immigrants in Summit County who speak English less than very well at home has increased 11.6% in recent years. (Source: American Community Survey)

Health Screening

2013-16
34.9%
Indicator direction:
N/A: BASE YEAR

Hypertension: From 2013-2016, almost 35% of adults who were screened for high blood pressure in the greater Summit County region had a blood pressure reading greater than 140/90 (the threshold for high blood pressure). This was broken down further, revealing that 33% of adults in the mostly-urban 443- zip codes had a reading greater than 140/90, while in the mostly-suburban and rural 442- zip codes nearly 36% had readings greater than 140/90. (Source: Explorys)

2011-16
14.8%
Indicator direction:
N/A: BASE YEAR

Uncontrolled Diabetes: In 2011-2016, 14.8% of adults in the greater Summit County region who were diabetic and had their blood sugar levels checked (A1C test) and had a reading greater than 9 (the threshold for uncontrolled diabetes). This amounts to 13.6% in the 442- and 16.5% in the 443- zip codes. (Source: Explorys)

2011-16
3.4%
Indicator direction:
N/A: BASE YEAR

Adults without Diabetes with Elevated A1C: This is a measure of those adults who are not diabetic but had A1C test results that were in the pre-diabetic range of 5.7% to 6.4%. From 2011-2016, 3.4% of the greater Summit County region had an A1C measurement in the pre-diabetic range. This is equal to about 3% of adults in the 442- zip code and 4% of adults in the 443- zip code. (Source: Explorys)

2011-16
25.6%
Indicator direction:
N/A: BASE YEAR

Obesity: 25.6% of adults in the 442- and 27% of adults in the 443-zip codes had a Body Mass Index (BMI) over 30.0 in the last five years. A BMI of 30.0 and over is considered obese. This combines to 26% of the greater Summit County region who are obese. In 2012, the CDC reported that 29.2% of adults in Ohio were obese. Summit County's numbers are better than the state average.[16] (Source: Explorys)

2011-16
18.6%
Indicator direction:
N/A: BASE YEAR

Depressive Disorder: From 2011-2016, a total of 18.6% of the population of the greater Summit County region had been diagnosed with a form of depression and/or were on some sort of selective serotonin reuptake inhibitor (SSRI), the most common drugs for depression. This includes about 18% and 20% in the 442- and 443- zip codes, respectively. (Source: Explorys)

2011-16
20.0%
Indicator direction:
N/A: BASE YEAR

Anxiety Disorder: Within the five year span of 2011- 2016, about 20% of residents in the greater Summit County region were diagnosed with a form of anxiety and/or were on a form of anxiety medication. This is further broken down into about 19% of the 442- and 21% of the 443- zip codes. (Source: Explorys)

[7] The Explorys Platform. Explorys - Healthcare Big Data Analytics. Retrieved 26 October 2016, from https://www.explorys.com/the-platform.html

[8] American Cancer Society recommendations for early breast cancer detection in women without breast symptoms (n.d.). Retrieved October 7, 2016, from http://www.cancer.org/cancer/breastcancer/moreinformation/breastcancerearlydetection/breast-cancer-early-detection-acs-recs

[9] Colorectal cancer screening guidelines. (n.d.). Retrieved October 7, 2016, from http://www.cdc.gov/cancer/colorectal/basic_info/screening/guidelines.htm

[10] Norwitz, E., Lockwood, C., & Barss, V. (2016). Progesterone supplementation to reduce the risk of spontaneous preterm birth. Uptodate.com. Retrieved 7 October 2016, from http://www.uptodate.com/contents/progesterone-supplementation-to-reduce-the-risk-of-spontaneous-preterm-birth

[11] What You Should Know and Do this Flu Season If You Are 65 Years and Older| Seasonal Influenza (Flu) | CDC. (2016). Cdc.gov. Retrieved 21 October 2016, from http://www.cdc.gov/flu/about/disease/65over.htm

[12] 20 million people have gained health insurance coverage because of the Affordable Care Act, new estimates show. (2016). HHS.gov. Retrieved 12 October 2016, from http://www.hhs.gov/about/news/2016/03/03/20-million-people-have-gained-health-insurance-coverage-because-affordable-care-act-new-estimates

[13] Health Rankings. (2016). County Health Rankings & Roadmaps. Retrieved 12 October 2016, from http://www.countyhealthrankings.org/app/ohio/2016/rankings/summit/county/outcomes/overall/snapshot

[14] Maternal Depresssion. (2016). Centers for Disease Control and Prevention. Retrieved 17 October 2016, from http://www.cdc.gov/features/maternal-depression/index.html

[15] CDC - Children - Division of Oral Health. (2014). Cdc.gov. Retrieved 18 October 2016, from http://www.cdc.gov/oralhealth/children_adults/child.htm

[16] The Centers for Disease Control,. (2012). Ohio State Nutrition, Physical Activity, and Obesity Profile (p. 2). CDC.

2016

HEALTH BEHAVIORS

Summit County, Ohio

alcohol use in past 30 days
10.8% of middle school students
30.3% of high school students

568 per 100,000 sexually transmitted infections

HIV/AIDS **7.6** per 100,000

obesity rate **25.6%** in the greater Summit County region

18.9 per 1,000 overall teen birth rate

Black teen birth rate **20.1** per 1,000

5.2% of senior citizens visited the ER due to a fall

24.2 drug overdose deaths per 100,000

152% increase since **2011**

Smoking

2014
21.0%
Indicator direction:
N/A: BASE YEAR

Adult smoking: According to the Behavioral Risk Factor Surveillance Survey (BRFSS), 22% of Summit County adults were smokers in 2014. (Source: BRFSS)

2013	
HS	MS
13.5%	4.2%
Indicator direction:	
N/A	

Youth Smoking : According to the Youth Risk Behavior Survey (YRBS), 13% of high school students and 7.5% of middle school students are current cigarette users. (Source: Youth Risk Behavior Survey; ODH; Healthy People 2020)

Physical Exercise

2011	2012
23.0%	24.0%
Indicator direction:	
GOT WORSE	

Physical Inactivity: Physical inactivity is a risk factor for several diseases and health conditions. According to BRFSS, 23% of adults reported no leisure-time physical activity in 2011. The rate increased to 24% in 2012, a 4.3% increase. Source: County Health Rankings; Healthy People 2020)

2010-12	2014
91.0%	96.0%
Indicator direction:	
GOT BETTER	

Access to Exercise Opportunity : According to the County Health Rankings, 91% of Summit County residents reported to be living reasonably close to a location for physical activity, such as parks or recreational facilities in 2010-2012. This number increased by 5.0% by 2014 with 96% reporting living close to a location for physical activity. (Source: County Health Rankings; Healthy People 2020)

Alcohol Use

2010-12	2014
18.0%	16.0%
Indicator direction:	
GOT BETTER	

Adult Excessive Drinking: Excessive drinking is defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days , or drinking more than 1 (women) or 2 (men) drinks per day on average. According to BRFSS, 18% of Summit County adults reported excessive drinking in 2010-2012 and 16% in 2014, a decrease of 11%. (Source: County Health ranking; Healthy People 2020)

2013
16.5%
Indicator direction:
N/A

Youth Excessive Drinking: According to the Youth Risk Behavior Survey (YRBS), 16.5% of high school students reported having 5 or more alcoholic drinks within a timeframe of a couple of hours , on one or more days during the 30 days prior to the survey. (Source: Youth Risk Behavior Survey; ODH; Healthy People 2020)

2008-12	2010-14
49.0%	52.0%
Indicator direction:	
GOT WORSE	

Alcohol-Impaired Driving Deaths: Alcohol-impaired driving deaths refers to motor vehicle crash deaths with alcohol involvement. According to Fatality Analysis Reporting System (FARS), 49% of the driving deaths in 2008-2012 involved aclohol. In 2010-2014, alcohol-impaired driving deaths increased by 6.1% with a prevalence of 52%. (Source: County Health Rankings)

Sexual Behavior

2011	2015
364 per 100,000	405 per 100,000
Indicator direction:	
GOT WORSE	

Sexually Transmitted Infections (Chlamydia): *Chlamydia trachomatis* is the most prevalent of all STI in the U.S., and in Summit County as well. The incidence of new cases of chlamydia in Summit county in 2011 was 364 per 100,000 and it increased to 405 new cases per 100,000 in 2015. (Source: Annual communicable diasease report 2015; Ohio Department of Health (ODH); Centers for Disease Control and Prevention (CDC))

2011	2015
125.2 per 100,000	164 per 100,000
Indicator direction:	
GOT WORSE	

Sexually Transmitted Infections (Gonorrhea): *Neisseria gonorrhoeae* is the second most prevalent STI in the U.S., and in Summit County as well. The incidence of new cases of gonorrhea in Summit County in 2011 was 125.2 per 100,000 and it increased to 164 new cases per 100,000 in 2015, an increase of 31%. (Source: SCPH Annual Communicable Disease Report 2015; Ohio Department of Health (ODH); Centers for Disease Control and Prevention (CDC))

2011	2015
7.4 per 100,000	7.6 per 100,000
Indicator direction:	
GOT WORSE	

HIV/AIDS: In 2011, the incidence of new cases of HIV /AIDS in Summit County was 7.4 per 100,000 and in 2015, the incidence increased to 7.6 per 100,000. This Increase could be because of increase in HIV testing or because of actual new cases. (Source: SCPH Annual Communicable Disease Report 2015; Ohio Department of Health (ODH); Centers for Disease Control and Prevention (CDC))

Youth Sexual Behavior

2013	
HS	MS
58.2%	16.7%
Indicator direction:	
N/A	

Condom Use: According to the Summit County YRBS report, the percentage of high school students who used a condom during their last sexual intercourse was 58.2% and 16.7% among the middle school students. (Source: Summit County YRBS 2013; Ohio Youth Behavior Survey, 2013)

2013
6.8%
Indicator direction:
N/A

Had First Sexual Intercourse Before Age 13 Years: According to the Summit County YRBS report, 6.8% of high school students had their first sexual intercourse before 13 years. (Source: Summit County YRBS 2013; Ohio youth behavior survey, 2013)

2013
4.2%
Indicator direction:
N/A

Been Pregnant Or Gotten Someone Pregnant: According to the Summit County YRBS report, 4.2% of high school students have either been pregnant or gotten someone pregnant. (Source: Summit County YRBS 2013)

2011	2015
12.9 per 1,000	9.1 per 1,000
Indicator direction:	
GOT BETTER	

Teen Birth Rate: In 2011, the teen birth rate was almost 13 per 1,000. By 2015, this rate decreased by 29% to an incident rate of 9.1 per 1,000. (Source: Ohio Department of Health)

2011	2015
39.7 per 1,000	20.1 per 1,000
Indicator direction:	
GOT BETTER	

Black Teen Birth Rate: In 2011, the black teen birth rate was almost 40 per 1,000. By 2015, this rate decreased by 48% to an incident rate of 17.3 per 1,000. (Source: Ohio Department of Health)

Drug Use

Youth Drug Use: According to the Summit County YRBS, the prevalence of Summit County high school students who have ever used marijuana was 36.6%, which is slightly higher than state prevalence for high school students. Similarly, prevalence of Summit County high school students who have ever used cocaine or heroin was also higher than state prevalence. Marijuana use among high school students was also much more prevalent than other illicit drugs. (Source: Summit County YRBS 2013; Ohio Youth Behavior Survey, 2013)

	High School
Ever Used Marijuana	36.6 %
Ever Used Cocaine	5.8%
Ever Used Heroin	4.1%
Ever Used Methamphetamines	5.0%
Indicator direction: N/A	

2011	2015
9.6 per 100,000	24.2 per 100,000
Indicator direction: GOT WORSE	

Drug Overdose Deaths: In 2011, the incidence of drug overdose deaths for Summit County was 9.6 per100,000. In 2015, the incidence rate was 24.2 per 100,000. Drug overdose deaths in Summit County have increased by 152%. (Source: Ohio Department of Health; Healthy Ohio Annual Report)

Unintentional Injuries

2011	2015
8.5 per 100,000	5.2 per 100,000
Indicator direction: GOT BETTER	

Motor Vehicle Crash Deaths: Deaths related to motor vehicle crashes in Summit County were reported to be 8.5% in 2011. By 2015, that rate decreased by 29% with an incidence of 5.2 per 100,000. (Source: Summit County Dashboard; CDC Wonder)

2011	2015
49.7 per 100,000	39.0 per 100,000
Indicator direction: GOT BETTER	

Fall-Related Deaths Among Senior Citizens: Falls among senior citizens is a common cause of injury and death. In 2011, the incidence of fall-related deaths among senior citizens in Summit County was 49.7 per 100,000. This rate decreased by 21.5% in 2015 (39 per 100,000). (Source: Ohio Department of Health; CDC Wonder)

2011	2015
4.6%	5.2%
Indicator direction: GOT WORSE	

Fall-Related Emergency Room Visits Among Senior Citizens: In 2011, 46% of senior citizens visited an emergency room (ER) due to injuries related to a fall. In 2015, the incidence of fall-related ER visits among senior citizes was 52%, an increase of 11.5%. (Source: EpiCenter)

Traumatic Brain Injuries

2010
66.4 per 100,000
Indicator direction: N/A

Hospitalization Rate Resulting from TBI: According to the Summit County Injury Profile, the reported hospitalization rate for TBI in Summit County was 66.4 per 100,000 which is slightly lower than the state hopsitalization rate for TBI (68 per 100,000). (Source:Summit County Injury Profile; Ohio Special Emphasis Report : Traumatic Brain Injury 2010)

2010
17.4 per 100,000
Indicator direction: N/A

Death Resulting from Traumatic Brain Injury (TBI): TBI is a major cause of death and disability in the U.S. contributing to about 30% of all injury deaths.[1] According to the Summit County injury profile, the incidence of death resulting from TBI was 17.4 per 100,000 which is slightly lower than the state incidence of 18 per 100,000. (Source: Summit County Injury Profile; Ohio Special Emphasis Report: Traumatic Brain Injury 2010)

2011	2015
309.4 per 100,000	457.9 per 100,000
Indicator direction: GOT WORSE	

ER Visits from TBI, Concussion and Head Injury: ER visits resulting from traumatic brain injuries, concussions and head injuries increased 48% between 2011 and 2015. The incidence in 2011 was 309.4 per 100,000 population and 457.9 per 100,000 in 2015. (Source: EpiCenter)

Sleep

2011 - 2016
4.5%
Indicator direction: N/A

Insufficient Sleep: Insufficient sleep is associated with many chronic diseases and conditions.[1] From 2011 - 2016, 4.5% of adults living in the greater Summit County region were diagnopsed with sleep depreviation or prescribed with medications related to sleep depreviation. (Source: Explorys)

2013	
HS	MS
53.7%	26.8%
Indicator direction: N/A	

Youth Who Obtained an Average of Eight or More Hours Sleep on School Nights: According to Summit County YRBS, 53.7% of the middle school children and 26.8% of high school children of Summit County reported having an average of eight or more hours sleep on an average school night. (Source: Summit County YRBS 2013)

SOCIAL & ECONOMIC FACTORS

Summit County, Ohio

unemployment rate **6.0%**

14.3% poverty rate

Renter Housing Affordability

Owner Housing Affordability

46.3%

18.9%

of renters pay more than 30% of their income on housing

of owners pay more than 30% of their income on housing

Social & Economic Factors

Education

2009	2015
36.2%	40.0%
Indicator direction:	
GOT BETTER	

Adult Education Level: The percent of people age 25 and over who have a 2-year or higher degree in Summit County has been rising since 1990, when only 25% of Summit County residents had a 2-year or higher degree. The percentage with at least a 2-year degree rose to 30% in 2000 and again to 36% by 2009. Between 2009 and 2015, the rate rose again to 40.0% of the population. (Source: American Community Survey)

2013	2015
67.0%	65.0%
Indicator direction:	
GOT WORSE	

Kindergarten Readiness: In 2013, about two-thirds of Summit County preschool-age children were ready for kindergarten. This figure dropped slightly to 65% in 2015. According to the Summit Education Initiative, preschool-age children who are ready for kindergarten are more likely to do well on their 3rd grade reading scores. (Source: Summit Education Initiative)

2014	2015
70.0%	65.0%
Indicator direction:	
GOT WORSE	

3rd Grade Reading Proficiency: A total of 70% of 3rd graders who took the 3rd grade reading proficiency test scored in the "advanced" or "accelerated" categories in 2014 according to data published by the Summit Education Initiative. That figure dipped to 65% in 2015. According to the Summit Education Initiative, scoring in the advanced or accelerated categories helps put students on a path toward college readiness and increased academic success in the years leading up to college. (Source: Ohio Department of Education)

2011	2015
14.9	15.7
Indicator direction:	
GOT WORSE	

Student-Teacher Ratio: Average student-teacher ratios for Summit County's 17 public school districts rose from 14.9 in 2011 to 15.7 in 2015 according to data published by the Ohio Department of Education. Research has shown that smaller class sizes can have a positive long-term impact on student achievement, particularly for early grades and economically disadvantaged students. (Source: Ohio Department of Education)

2011	2016
16.0	10.3
Indicator direction:	
GOT BETTER	

Disciplinary Actions per 100 Students: The median number of disciplinary actions per 100 students for Summit County's 17 public school districts dropped from 16.0 in 2010-2011 school year to 10.3 in the 2015-2016 school year. However, meaningful disparities exist between white and black students; in 12 of the 16 districts with data, the ratio of black to white disciplinary incidents per 100 students is at least 2-1. Disproportionate discipline of black students isn't just a Summit County issue; the trend has been documented at both the state and national levels. (Source: Ohio Department of Education)

2005-09	2010-14
3.8%	3.5%
Indicator direction:	
GOT BETTER	

Disconnected Youth: Summit County's disconnected youth, defined as the percent of 16 to 19 year olds who are not in school and also not in the labor force, dropped from 3.8% in the 2005-2009 period to 3.5% in the 2010-2014 period. Though lower, the percent of disconnected youth still remains fairly steady. Both Ohio and national figures for these time periods show the same trends (Ohio, 4.1% down to 3.9%; U.S., 5.3% down to 5.2%). (Source: American Community Survey)

2011	2015
93.5%	95.2%
Indicator direction:	
GOT BETTER	

High School Graduation Rate: Twelve of Summit County's 17 public school districts saw the percentage of their 9th grade students graduating in 4 years rise between 2011 and 2015. The median 4-year graduation rate for all school districts rose from 93.5% in 2011 to 95.2% in 2015. (Source: Ohio Department of Education)

Employment

4th Quarter 2015	
Low	1.7%
Med	-0.4%
High	-1.3%
Indicator direction:	
N/A	

Underemployment: The underemployment indicator is defined as the percentage point difference between the supply and demand for workers at different skill levels. In Summit County, the supply of low-skill workers (a HS diploma or less) is 1.7% higher than the demand (making low-skill workers underemployed). The supply of medium-skill workers (some college or a 2-year degree) is 0.4% lower than demand, and the supply of high-skill workers (a 4-year degree or higher) is 1.3% lower than demand. Because the demand for medium and high skill workers is greater than the supply, there are currently more available jobs for those skill levels than people qualified to take them. (Source: Chmura Economics & Analytics)

2009	2011
11.1%	6.0%
Indicator direction:	
GOT BETTER	

Unemployment: In 2009, the unemployment rate was at 11.1%; slightly lower than it was at the height of the recession. By 2015, it dropped to 6.0%. Even though the unemployment rate went down, there are still over 8,000 fewer people in the labor force than in 2009. Many of those who left the labor force may have been discouraged workers; those who have been unemployed for long periods and who are currently discouraged from seeking employment. (Source: American Community Survey)

2009	2015
0.454	0.476
Indicator direction:	
GOT WORSE	

Income inequality: Income inequality in Summit County got slightly worse between 2009 and 2015 according to the Gini index.[iv]   The Gini index runs between 0 and 1, with higher scores meaning greater inequality and lower scores meaning greater equality. In 2009, the Gini index for Summit County was 0.456. The index then rose to 0.476 by 2015. (Source: American Community Survey)

2009	2015
$51,896	$51,309
Indicator direction:	
GOT WORSE	

Median Household Income: Summit County's median household income decreased between 2009 and 2015. The inflation-adjusted median income was $51,896 in 2009, which declined by 2015 to $51,309. Median household income includes all sources, such as wages, retirement, and public benefits. (Source: American Community Survey)

Category	Employees	%
Health Care and Social Assistance	46,458	16.5%
Retail Trade	31,923	11.3%
Manufacturing	29,978	10.6%
Indicator direction:		
N/A		

Types of Jobs: As of the 2nd quarter of 2016, Health Care and Social Assistance was the biggest job category in Summit County with 16.7% of all employees. Retail trade (nearly 32,000) accounted for 11.3%, closely followed by manufacturing with just under 30,000 employees, or about 10.6% of all employees. Taken together, these three categories account for 38.4% of all jobs in Summit County. (Source: Chmura Economics & Analytics)

Poverty

2010-11	2014-15
16.6%	14.3%
Indicator direction:	
GOT BETTER	

Poverty Rate – Total Population: Driven up by the 2002-2009 recession, poverty in Summit County peaked at 16.6% in 2011. Over the next four years, poverty began falling, hitting 14.3% by 2015. (Source: American Community Survey)

2005-09	2010-14
18.2%	21.2%
Indicator direction:	
NO CHANGE	

Poverty Rate – Children: Nearly one-fifth of Summit County children were living in poverty between 2005 and 2009 (18.2%). By the 2010-2014 period, the estimated child poverty rate had risen to just over 21%. The current estimate for child poverty is higher than 2005-2009 but the increase is not statistically significant. (Source: American Community Survey).

2005-09	2010-14
43.2%	42.6%
Indicator direction:	
NO CHANGE	

Poverty Rate - Female-Headed Households with Children: More than 43% of female-headed households in Summit County with children were living in poverty between 2005 and 2009. The poverty rate remained basically unchanged between 2010 and 2014, declining slightly to 42.6%. (Source: American Community Survey)

2011 Q2	2016 Q2
$41,571	$47,303
Indicator direction:	
GOT BETTER	

Average Wages: The average wage for all jobs in Summit County rose by nearly 14% from 2011-2016. Average wages rose from nearly $42,000 in the 2nd quarter of 2011 to just over $47,000 in the 2nd quarter of 2016. Both Ohio and the U.S. increased at about the same rate, but the national average wage was higher than in either Summit County or Ohio ($53,000 for the U.S. and $47,000 for the county and state).   (Source: American Community Survey)

2016
68.3%
Indicator direction:
N/A: BASE YEAR

WIC Participation: Just under 10,000 of the 14,000 people eligible to participate in the WIC program are currently participating (68%). (Source: Summit County Public Health)

2009-10	2014-15
5.31	4.68
Indicator direction:	
GOT BETTER	

Families in Emergency Shelter: Between October 2015 and September 2016 there were a total of 635 families that spent at least one night in an emergency shelter. That's about 4.7 families in shelters per 1,000 families in Summit County. This is a nearly 12% drop from the same figures from October 2009 to September 2010, when 730 families spent at least one night in a shelter (5.3 per 1,000). (Source: InfoLine, Inc.)

2009-10	2014-15
4.18	3.77
Indicator direction:	
GOT BETTER	

Individuals in Emergency Shelter: Between October 2015 and September 2016 2,042 individuals spent at least one night in an emergency shelter (4.2 per 1,000 people). This is a nearly 10% drop from October 2009 to September 2010, when 2,263 individuals spent at least one night in a shelter (3.8 per 1,000). (Source: InfoLine, Inc.)

2009-10	2014-15
21%	26%
Indicator direction:	
GOT WORSE	

Utility Assistance Requests: Between October 2015 and September 2016, 26% of calls for financial assistance to InfoLine's 211 service were for assistance for utility bills. This is an increase of nearly 24% from October 2009 to September 2010, when 21% of 211 callers were looking for help with their utility bills. (Source: InfoLine, Inc.)

Community Safety

2006-10	2010-13
833	862
Indicator direction:	
GOT WORSE	

Violent Crime: The violent crime rate in the City of Akron rose by about 3.4% between the 2006-10 and 2010-13 periods. Violent crimes rose from 833 per 100,000 people to 862 per 100,000 during those two periods. Violent crimes include any crime that involves force or threats of force (murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault). (Source: Ohio Department of Public Safety's Office of Criminal Justice Services, American Community Survey)

2010	2015
37.5	44.1
Indicator direction:	
GOT WORSE	

Injury Deaths: In 2010, 203 Summit County residents lost their lives due to an accidental injury; a rate of 37.5 deaths per 100,000 people. These injury-related deaths were caused by poisonings, falls, motor vehicle accidents, and a variety of other causes. In 2015, the accidental injury death rate had risen to 44.1 per 100,000 (239 people). In both years, the biggest single cause of accidental death was unintentional drug overdose (64 deaths in 2010; 131 deaths in 2015). (Source: EpiCenter)

2010	2015
4.4 per 100,000	5.5 per 100,000
Indicator direction:	
GOT WORSE	

Homicides: In 2010, 25 Summit County residents were victims of a fatal assault or homicide; a rate of 4.4 deaths per 100,000 people. In 2015, 30 people were the victim of a fatal assault or homicide; a rate of 5.5 per 100,000. (Source: EpiCenter)

2014	2016
8.3	9.7
Indicator direction:	
GOT WORSE	

Elder Abuse: In 2016, 9.7 residents age 60 or over were the victims of elder abuse, neglect, or exploitation per 1,000 persons age 60 and over. That is a 16.9% increase from the 8.3 per 1,000 in 2014. (Source: Summit County Adult Protective Services, Summit County Public Health)

2010	2014
59.0%	59.7%
Indicator direction:	
GOT WORSE	

Fall injuries for Senior Populations: In 2016, 59.7% of all emergency room visits for people age 65 and over were classified as a fall-related injury; a slight increase over 2010's figure of 59.0%. (Source: Health Monitoring Systems: EpiCenter software)

2014	2015
17.4	18.5
Indicator direction:	
GOT WORSE	

Children in Need of Protective Services: Just over 2,100 children in Summit County had either a case plan or an Alternative Response plan; a rate of 18.5 children per 1,000 children in the county. This rate was a slight increase from 17.4 per 1,000 in 2014. (Source: Summit County Children Services)

2010	2014
6.7	4.3
Indicator direction:	
GOT BETTER	

Hate crimes per 100,000 People: According to the FBI, there were 4.3 hate crimes per 100,000 people in Summit County in 2014; a decrease from 6.7 per 100,000 in 2010. The FBI defines a hate crime as a "criminal offense against a person or property motivated in whole or in part by an offender's bias against a race, religion, disability, sexual orientation, ethnicity, gender, or gender identity." *Note: only a handful of police departments reported hate crimes to the FBI, including the Akron, Barberton, Bath Township, Summit County Sheriff's Office, and Hudson police departments.* (Source: Federal Bureau of Investigation)

Transportation

2013	2014
9,998	10,074
Indicator direction:	
GOT BETTER	

Metro Ridership: In 2013, Akron Metro RTA had 9,998 unlinked passenger trips on its vehicles per 1,000 population. That figure increased to 10,074 per 1,000 in 2014.   (Source: Akron Metro Regional Transit Authority)

2009	2015
10.6%	11.0%
Indicator direction:	
GOT WORSE	

Commute Times: Just under 11% of Summit County's working age population (age 16+) had an average commuting to work time of 45 minutes or higher. That figure edged up slightly in 2015, to 11.0%. (Source: American Community Survey)

Housing

2011	2015
55.4%	46.3%
Indicator direction:	
GOT BETTER	

Renter Housing Affordability: The estimated percentage of renters paying 30% of their income or more for housing rose for three straight years after the start of the recession, hitting a 10-year high of 55% in 2011. Since then, rates have gone down for three straight years, returning to just over 46% by 2015. (Source: American Community Survey)

2009	2015
29.8%	18.9%
Indicator direction:	
GOT BETTER	

Owner Housing Affordability: The estimated percentage of homeowners paying 30% of their income or more for housing dropped from 29.8% in 2006 (a 10-year high) to 18.9% in 2015. (Source: American Community Survey)

2011	2015
4,435	17,044
Indicator direction:	
GOT WORSE	

AMHA Waiting List: The waiting list for AMHA low income public housing (LIPH) rose from 4,435 in 2011 to 17,044 in 2015. The waiting list for the Housing Choice Voucher Program (formerly known as Section 8) rose from 7,292 in 2011 to 20,090 in 2015. (Source: Akron Metropolitan Housing Authority)

Family Structure/Social Connectivity

2000	2010
66.0	59.7
Indicator direction:	
GOT BETTER	

Black-White Residential Segregation: Residential segregation in Summit County is improving over time, declining from 66.0 in 2000 to 59.7 in 2010 according to the Population Studies Center at the University of Michigan (PSR). The PSR defines the Segregation Index is an indicator that ..."measures the degree to which the minority group is distributed differently than whites across census tracts. They range from 0 (complete integration) to 100 (complete segregation) where the value indicates the percentage of the minority group that needs to move to be distributed exactly like whites." (Source: County Health Rankings)

2009	2015
31.5%	35.7%
Indicator direction:	
GOT WORSE	

Children in Single Parent Households: The percentage of children living in a single parent household rose from just over 31% in 2009 to nearly 36% in 2015. (Source: American Community Survey)

2014
3.0%
Indicator direction:
N/A: BASE YEAR

Seniors Enrolled in PASSPORT: In 2014, 3% of seniors age 65 and older in Summit County were enrolled in Ohio's PASSPORT program. PASSPORT is considered by many to be a lower-cost alternative to nursing home admission which also helps seniors stay in the community and living in their own homes longer. (Source: Direction Home of Akron and Canton)

2013	2015
22.6%	18.4%
Indicator direction:	
GOT BETTER	

Residents without Internet Access: Less than one-fifth of Summit County residents did not have access to the internet in 2015 (18.4%). That is a decrease from the 22.6% who did not have access to the internet in 2013. (Source: American Community Survey)

[i]Whitehurst and Chingos, Class Size: What Research Says and What it Means for State Policy, Brookings

[ii]Staats, C., & Contractor, D. (2014, May). Race and discipline in Ohio Schools: What the Data Say. Kirwan Institute Special Report. Retrieved September 29, 2016, from kirwaninstitute.osu.edu/wp-content/uploads/.../ki-data-report.pdf

[iii]Chmura Economics and Analytics, 4th Quarter 2015. Retrieved from www.jobseq.com

[iv]Gini index, American Community Survey (ACS), 2009 and 2015. According to the ACS, "A Gini coefficient of zero expresses perfect equality, where all values are the same (for example, where everyone has the same income). A Gini coefficient of 1 (or 100%) expresses maximal inequality among values (e.g., for a large number of people, where only one person has all the income or consumption, and all others have none, the Gini coefficient will be very nearly one.

[v]Staats, C., & Contractor, D. (2014, May). Race and discipline in Ohio Schools: What the Data Say. Kirwan Institute Special Report. Retrieved September 29, 2016, from kirwaninstitute.osu.edu/wp-content/uploads/.../ki-data-report.pdf

[vi]FBI Hate Crimes web site. Downloaded at: https://www.fbi.gov/investigate/civil-rights/hate-crimes

2016

PHYSICAL ENVIRONMENT

Summit County, Ohio

child lead exposure — **1.5%** of children tested had elevated blood lead levels

11.9% of the population **lives in a food desert**

number of missed meals **15,700,000**

number of community gardens **80**

13.4% **recycling rate**

389.5 miles of biking & hiking trails

percent of residents that felt unsafe at night

summit county **28.2%**

akron **48.3%**

Physical Environment

Housing

2010	2016
6.62%	6.52%
Indicator direction:	
GOT BETTER	

Percent of Housing in Below Average or Worse Condition: The percentage of residential structures in Summit County that were rated in fair, poor or very poor condition decreased by 1.5% from 2010 to 2016. (Source: American Community Survey, Summit County Fiscal Office)

2016
24.5% Above Average
69.0% Average
Indicator direction:
N/A: BASE YEAR

Percent of Housing at Average and Above Average Condition: In 2016, approximately one quarter of residences were determined to be in good, very good or excellent condition, and nearly 70% were in average condition. (Source: Summit County Fiscal Office)

2016
81 years
Indicator direction:
N/A: BASE YEAR

Average Age of Housing in Low Income Census Tracts: Low income census tracts were defined as those with a median family income (MFI) that is 50% or less of the MFI for the Akron metropolitan statistical area. The average age of residences in these census tracts in 2016 was 81 years. Any home that exceeds the age of 38 years is at risk of containing lead-based paint. (Source: American Community Survey)

2010	2016
69.1%	64.9%
Indicator direction:	
GOT WORSE	

Percent of Housing that is Owner-Occupied: From 2010 to 2015, the rate of ownership among housing residents in Summit County fell by 6%. Home ownership increases the likelihood that the property will be maintained and in better condition. (Source: American Community Survey)

2012	2015
3.7%	1.5%
Indicator direction:	
GOT BETTER	

Lead Exposure Rate in Children (% testing with EBLs): The current CDC reference value for elevated lead blood levels (EBLs) is 5 µg/dL. The percentage of children in Summit County, aged 1 to 5 years old, who had lead testing completed with results above this reference level decreased nearly 60% from 2012 to 2015. (Source: CDC, ODH)

2010	2015
95	88
Indicator direction:	
GOT WORSE	

Number of Completed Lead Abatements: In 2010, 95 lead abatements on residential properties were permitted and completed in Summit County, and 88 lead abatements occurred in 2015. Summit County Public Health offers funding for lead based paint removal (via a HUD grants) to homeowners and landlords who own properties built before 1978. (Source: ODH, SCPH)

2016
72.8%
Indicator direction:
N/A: BASE YEAR

Housing Built Before 1978: Based on property data from the Summit County Fiscal Office, 72.8% of Summit County residences were built prior to 1978. These properties were constructed prior to the federal ban on consumer use of lead-containing paint. (Source: Summit County Fiscal Office)

2011	2015
1.58	1.40
Indicator direction:	
GOT BETTER	

Total Homelessness Rate (per 1,000 residents): The total homelessness rate decreased by 11% from 2011 to 2015. In addition, the chronic homelessness rate decreased by nearly 20% during the same time period, from 0.58 per 1,000 residents to 0.47 per 1,000 residents. (Source: 2015 Ohio Homelessness (PIT) Report, US Census Bureau population estimates.)

2011	2015
10.7%	7.5%
Indicator direction:	
GOT BETTER	

Rental Unit Vacancy Rate: The vacancy rate for rental units in Summit County decreased by 30% from 2011 to 2015. (Source: American Community Survey)

2010	2014
5.0%	5.3%
Indicator direction:	
GOT WORSE	

Percentage of Vacant or Abandoned Homes: Although the rental unit vacancy rate improved in Summit County, the percentage of vacant single family residential units increased by nearly 6% from 2010 to 2015. (Source: American Community Survey)

2016
147 demolitions
Indicator direction:
N/A: BASE YEAR

Number of Properties Demolished or Currently on Demolition List: According to the Summit County Land Bank, 132 blighted properties in the county had been demolished by October, 2016, and at least 15 more demolitions were anticipated by the end of 2016. Demolition of properties often included greening and beautification of the empty lot. (Source: Summit County Land Bank)

Air Quality

2011	2015
26.4	20.4
Indicator direction:	
GOT BETTER	

Fine Particulate Matter Air Pollution (PM2.5, $\mu g/m^3$): Particulate matter in the ambient that is less than 2.5 microns can be inhaled and are difficult to expel. This can cause physiological reactions and possible development of chronic disease. The data presented is from the air monitoring station at East CLC, and is the 4th highest 24 hour average for each year. The NAAQ standards for this indicator is 35 $\mu g/m^3$. (Source: 2015 ARAQMD Annual Report.)

2011	2015
1.2	3.5
Indicator direction:	
MET STANDARDS	

Carbon Monoxide (CO, ppm): Approximately 95% of CO found in urban ambient air is the result of incomplete combustion of fossil fuels. The CO levels are from the East CLC site, and are one hour maximum average concentration for each year. Although the increase in CO concentration from 2011 to 2015 may suggest a problem, the one hour averages for the past five years have consistently been in attainment of the NAAQ standard of 35 ppm. (Source: 2015 ARAQMD Annual Report.)

2011	2015
38	46
Indicator direction:	
MET STANDARDS	

Ambient Sulfur Dioxide (SO$_2$, ppb): Sulfur dioxide is the byproduct of the combustion of sulfur-containing fuels, such as coal. SO$_2$ can convert to sulfuric acid or sulfate, which can irritate the lungs when inhaled. One hour average concentrations of SO$_2$ measured from the East CLC site indicate that Summit County continues to meet the NAAQ standards of 75 ppb. (Source: 2015 ARAQMD Annual Report.)

2011	2015
76	65
Indicator direction:	
GOT BETTER	

Ambient Ozone Levels (O$_3$, ppb):   Ozone is the product of reactions between other pollutants, volatile organic compounds and oxides of nitrogen, in the presence of sunlight. Increased O$_3$ concentrations can have health effects. Ozone levels are measured for Summit County at the Patterson Park sampling site as eight hour averages. The NAAQ standard for O$_3$ is 70 ppb over a three year period. (Source: 2015 ARAQMD Annual Report.)

2015
88.5%
Indicator direction:
N/A: BASE YEAR

Percentage of Asbestos Investigations with Asbestos Present: In 2015, 705 property inspections for renovations or demolition were completed. Of these, 624 (88.5%) properties were determined to contain asbestos. (Source: Summit County Public Health)

2010	2015
104	504
Indicator direction:	
GOT BETTER	

Asbestos Mitigation Projects: This indicator is a record of licenses obtained by asbestos removal contractors from the Ohio Department of Health . In 2010, 104 licenses were issued for removal project, in 2015 504 licenses were issued, an increase of nearly 400%. (Source: ODH Asbestos abatement license database.)

1988-2016
34.0%
Indicator direction:
N/A: BASE YEAR

Radon, Percentage of Properties in Summit County that Test Above 4 pCi/l: Based on aggregate data on residential radon tests completed in Summit County (1988 to present) by the Air Chek, Inc., about one-third of the properties tested had levels that exceeded 4 pCi/L. (Source: ODH, University of Toledo)

2010	2015
393	496
Indicator direction:	
GOT BETTER	

Radon: Number of Mitigation Projects Completed: In 2010, 393 radon mitigation projects were completed on Summit County residences, and 496 were completed in 2015. An average of 298 radon mitigations per year were completed from 2010 to 2015. (Source: ODH, University of Toledo)

2015
141 investigations
Indicator direction:
N/A: BASE YEAR

Indoor Air Quality (smoking): In 2015, there were 141 investigations of reported violations of the Ohio Smoke-Free Workplace Act in Summit County. However, the statewide smoking ban applies only to places of employment and public places, and excluded private residences in Summit County. (Source: ODH.)

2015
39.3%
Indicator direction:
N/A: BASE YEAR

Percentage Reporting Daily Smoking in Residence: In a 2016 survey of 90 residents in Akron Metropolitan Housing Authority properties, nearly 40% reported that they or other co-habitants smoked within their residence on a daily basis. (Source: SCPH)

Water Quality

2016
23.9%
Indicator direction:
N/A: BASE YEAR

Percent of Residences Located in FEMA Flood Plain: Nearly one-quarter of Summit County homes are located in areas that are defined by FEMA as having an annual 1% chance of flooding. A home that has been flooded exposes its residents to many potential hazards, including pathogens, mold, physical hazards, and chemical exposures. (Source: American Community Survey and FEMA Flood Plain Maps

2015
15.2%
Indicator direction:
N/A: BASE YEAR

Septic System Failure Rate: In 2015, 475 residences with septic systems were inspected by private point of sale inspectors. Of these inspections, 72 systems, or 15%, failed and were not operating properly. Septic system failure may cause exposure to communicable disease or excessive nitrates, and also can cause contamination of drinking water or surface water. (Source: Summit County Public Health.)

2015
8.8%
Indicator direction:
N/A: BASE YEAR

Private Water: There are an estimated 19,674 private water wells in Summit County. The US Census Bureau reports the average household size in Summit County to be 2.41, so the number of residents using private water sources is estimated at 47,414 people, or nearly 9% of the county population. (Source: ODNR, US Census Bureau.)

2015
91.2%
Indicator direction:
N/A: BASE YEAR

Public Water Source: Based on the estimate of Summit County residents with private water sources, the remaining 91.2% of residents receive their drinking water from public municipal sources. (Source: ODNR, US Census Bureau.)

2012, 2014, or 2015
1.0 ppm
Indicator direction:
MET STANDARD

Fluoride (in Public Water Supply): Based on the most recent consumer confidence reports from Summit County municipal water suppliers, all of the suppliers (except Lakemore) reported fluoridating their water and maintaining levels of 1.0 ppm. (Source: Water quality reports from Akron, Cleveland, Hudson, Lakemore, Aqua Ohio, Baeberton, and Cuyahoga Falls.)

2015
88.0%
Indicator direction:
N/A: BASE YEAR

Percentage of Summit County Residents with Fluoride in Water Supply: An estimated 65,106 residents in Summit County (12%) do not use water that is fluoridated. This includes 47,414 residents with private water sources and 17,692 customers of Lakemore water utility. (Source: Water quality reports from Akron, Cleveland, Hudson, Lakemore, Aqua Ohio, Barberton, and Cuyahoga Falls.)

2012, 2014 or 2015
ND - 9.1 ppb
Indicator direction:
MET STANDARDS

Lead in Water: Consumer confidence reports from Summit County public water suppliers reported lead concentrations from none detected (ND) to 9.1 ppb, all of which were below the reference standard of 15.0 ppb. (Source: Water quality reports from Akron, Cleveland, Hudson, Lakemore, Aqua Ohio, Barberton, and Cuyahoga Falls.)

Food Access

2014	2015
4,893	5,534
Indicator direction:	
GOT WORSE	

Food Safety Reinspection: Number of Critical Violations for the Year: The number of critical violations issued during restaurant and food service inspections (which requires re-inspection to ensure compliance), increased by 14% from 2014 to 2015.   (Source: Summit County Public Health)

2010	2015
6.7	8.8
Indicator direction:	
GOT BETTER	

Amount of Food Distributed to Those in Need (millions of meals):   The number of meals served by various food banks in Summit County increased by over 30% from 2010 to 2015. (Source: Akron-Canton Food Bank)

2015
15,700,000
Indicator direction:
N/A: BASE YEAR

Number of Missed Meals: Also known as the meal gap, this is the estimated number of missed meals in Summit County in 2015. The estimated number of missed meals remained constant since 2014.   (Source: Akron-Canton Regional Food Bank)

2007	2014
Grocery: 84	Grocery: 85
Specialty: 37	Specialty: 31
Supercenter: 4	Supercenter: 6
Convenience: 42	Convenience: 54
Gas w/Conv: 145	Gas w/Conv: 146
Indicator direction:	
N/A	

Number of Food Retail Establishments by Category: The distribution of food retail establishments along different categories has remained fairly consistent. A modest increase was seen in the number of convenience stores and a decrease was observed in specialty grocery stores. In addition, there was an increase of 50% in the number of grocery supercenters or warehouse stores. (Source: US Census Business Pattern Survey)

2015
11.9%
Indicator direction:
N/A: BASE YEAR

Percent of Population Living in a Food Desert: Food deserts are defined by the USDA as low income areas that are located more than one mile from a full service grocery store in an urban area or 10 miles in a rural area. Analysis of the 2015 food retail landscape in the county determined that nearly 12%, or 64,363 residents lived in a food desert. (Source: Summit County Public Health, US Census Bureau)

2007	2014
58.1%	55.2%
Indicator direction:	
GOT BETTER	

Percent of Restaurants Classified as Fast Food: The proportion of Summit County restaurants that were categorized as fast food decreased about five percent from 2007 to 2014. This indicates a similar increase in full service restaurants, which may offer healthier choices. (Source: USDA Food Atlas, US Census Business Pattern Survey)

2016
67.6%
Indicator direction:
N/A: BASE YEAR

Food Commute less than 10 Minutes: According to the PACE-EH Survey, approximately two-thirds of Summit County residents report having a major food source within 10 minutes of their residence. The remaining third travels ten minutes or more to purchase food. (Source: PACE-EH)

2016
87.7%
Indicator direction:
N/A: BASE YEAR

Use of Own Motor Vehicle to Obtain Food: In early 2016, the Environmental Health division of SCPH conducted the PACE-EH study, which surveyed over 2,000 Summit County residents about local environmental issues. Several questions addressed the topic of food access and quality. Nearly 88% reported using their own vehicle, 5% borrowed a vehicle, 2% walked, and 2% used public transportation. (Source: PACE-EH)

2016
Summit County: 80
Akron: 65
Indicator direction:
N/A: BASE YEAR

Community Gardens: An online inventory of community gardens indicated that there are at least 80 gardens in Summit County, and 65 were located in the City of Akron. (Source: Let's Grow Akron, Summit Food Coalition, City of Akron, City Sprouts, and other Summit County organizations.)

Transportation

2010	2015
88.0%	86.0%
Indicator direction:	
GOT BETTER	

Percent of Labor Force that Drives to Work Alone: The percentage of Summit County residents who commuted to work alone in their own vehicle decreased slightly (2.3%) from 2010 to 2015. Although this is an improvement, it still does not meet the Ohio State goal of 84%. (Source: American Community Survey, I year estimates)

2010	2015
1.7%	2.1%
Indicator direction:	
GOT BETTER	

Public Transit Usage Rate for Work Commute: Although still a small portion of county residents, the percentage of those who used public transit for their work commute increased nearly 25% from 2010 to 2015. (Source: American Community Survey, I year estimates)

2010	2014
15,782	16,016
Indicator direction:	
GOT WORSE	

Vehicle Miles Travelled (kDVMT): Based on data from the Ohio Dept. of Transportation, the vehicle miles travelled in Summit County in 2010 was 15,782 kDVMT (thousand daily vehicle miles travelled). This indicator increased by 1.5% to 16,016 kDVMT in 2014. (Source: ODOT)

2010	2014
29.14	29.52
Indicator direction:	
GOT WORSE	

Vehicle Miles travelled, Daily Miles per Capita: To determine the rate of miles per Summit County resident, the county total for each of the indicator years was divided by the estimated US Census county populations for 2010 and 2014. The daily miles per resident was estimated at 29.1 miles in 2010, and increased by 1.3% to 29.5 miles per resident in 2014. (Source: ODOT)

2016
Summit Co: 28.2%
Akron: 48.3%
Indicator direction:
N/A

Felt Unsafe at Nght: Data from the PACE-EH Survey indicates that 6.4% of Summit County residents felt unsafe during the day, 15.1% during the evening, and 28.2% during the night. In the city of Akron, the proprtion of residents who felt unsafe increased to 11.6% during the day, 28.5% during the evening, and 48.3% during the night. (Source: SCPH 2016 PACE-EH Community Survey)

2011	2016
24.5%	38.5%
Indicator direction:	
GOT WORSE	

Number of Abandoned Commercial and Industrial Buildings: Based on second quarter data from 2011 and 2016, the percentage of commercial addresses that were classified by the USPS as vacant or non-deliverable increased by 57%. (Source: USPS, HUD)

2015
2,393 miles
Indicator direction:
N/A

Sidewalk Mileage: Based on a 2015 inventory from aerial images, the total sidewalk mileage in Summit County is 2,393 miles. Sidewalks are concentrated in the urban areas of Summit County, especially Akron, Cuyahoga Falls and Barberton. (Source: Akron Metropolitan Area Transit Study (AMATS))

2016
Serious Problem: 18.5%
Moderate/Minor Problem: 35.0%
Indicator direction:
N/A

Sidewalk Condition: Based on data from the PACE-EH study, over half (53.5%) of Summit County residents reported that the condition of their sidewalks was a problem for them. (Source: SCPH 2016 PACE-EH Community Survey)

2016
Serious Problem: 23.6%
Moderate/Minor: 32.5% Problem
Indicator direction:
N/A

Sidewalk Availablity: Based on data from the PACE-EH study, over half (56.1%) of Summit County residents reported that the availability of sidewalks was a problem for them. (ource: SCPH 2016 PACE-EH Community Survey)

Land Use

2016
1,016 businesses
Indicator direction:
N/A

Number of Retail Establishments that Sell Alcoholic Beverages: Currently, there are 416 carry out retail locations, and 600 restaurants, bars or nightclubs that sell alcoholic beverages in Summit County. In addition, there are 63 private clubs, 44 tasting rooms, and 35 unique locations (e.g. museums), that have permits to sell. 594 establishments also have permits for Sunday sales (Source: Ohio Div. of Liquor Control).

2016
474 licenses
Indicator direction:
N/A

Number of Retail Tobacco Licenses: As of December 2015, there were 474 retail tobacco permits issued in Summit County. A search on ReferenceUSA indicated that there are approximately 41 primary tobacco retail locations in Summit County. (Source: Summit County Fiscal Office, Department of Cigarette Licensing)

2016
11 stores
Indicator direction:
N/A

Number of E-Cigarette/Vape Stores: Although e-cigarettes usually do not contain tobacco, the effects of longterm exposure to other ingredients is poorly understood and regulated. E-cigarettes are popular with teenagers, who may eventually start using tobacco products. As of 2016, there are 11 retail locations in Summit County that specialize in e-cigarettes, known as "vape stores." (Source: Reference USA, CDC.)

2016
389.5 miles
Indicator direction:
N/A

Miles of Bike/Hike Trails: As of 2016, there are approximately 389.5 miles of bike and hike trails in Summit County including the Towpath, Freedom and Buckeye trails, Summit Metro Parks, and the Cuyahoga Valley National Park. These trails provide safe passageways for cyclists and pedestrians. (Source: AMATS)

2007	2014
10.0	9.6
Indicator direction:	
NO CHANGE	

Recreation Facilities per 100,000 Residents: The number of recreation and fitness facilities (defined by North American Industry Classification System (NAICS) code 713940), divided by the population estimate for Summit County for each year. (Source: U.S. Census Bureau, U.S.D.A.)

2016
14.2%
Indicator direction:
N/A

Percentage of Green Space: As of 2016,approximately 14% of Summit County is considered to be public green space. This includes Cuyahoga Valley National Park, Ohio State Parks, Summit County Metroparks, and municipal parks located throughout the county. (Source: AMATS)

2015
30 Curbside
13 Drop-off
Indicator direction:
N/A

Number of Recycling Facilities: As of 2015, every community in Summit County offered its residents some type of recycling service. Thirty communities offer curbside recycling, while thirteen maintain drop off facilities. (Source: Summit County Reworks 2015 Annual Report)

2012	2015
11.4%	13.4%
Indicator direction:	
GOT BETTER	

Recycling Rate, Based on Weight (Without Yard Waste): Consumer recycling rates (without yard waste) have increased 17.3%. When yard waste was included, the recycling rate for 2015 was 34.7%. Summit County Reworks reports that 30 Summit County communities offer curbside recycling, and 13 communities have drop off centers. (Source: Summit County Reworks 2015 Annual Report)

2009	2014
33,132	17,567
Indicator direction:	
GOT BETTER	

Toxic Release by Facility (pounds):   Reported release of toxic chemicals in the county decreased by 47% from 2009 and 2014. The greatest decrease was seen in emissions into the air, which decreased by 77%, while release to publicly owned treatment works (POTW) increased by 42%. The number of reporting facilities increased from 59 to 64 during that period. (Source: Ohio EPA Toxic Chemical Release Inventory 2014 Summit County Summary)

| 2016 |
|:---:|
| 40 sites |
| Indicator direction: |
| N/A |

Industrial Pollution, Number of Brownfield Sites:
Brownfields are abandoned/underutilized commercial or industrial properties contaminated with petroleum products and/or other hazardous substances. These pollutants may complicate the redevelopment of these properties.   Currently, there are at least 40 brownfields in Summit County, 28 of which have been reported to the Ohio EPA. (Source: Ohio EPA and Norteast Ohio Four County Regional Planning and Development Organization (NEFCO))

A Closer Look

Access to Health Services

Access to health services greatly affects the health and quality of life of the people in Summit County. With regular access to health services, health problems can be detected earlier and in their most treatable stages. When residents of Summit County have limited access to health services, it impacts the ability to reach full health potential and contributes to poor health outcomes over time. Having access to quality health services allows for disease prevention, illness detection and treatment, as well as a decreased chance of premature death. It also promotes overall physical, social, and mental health. There are many components to healthcare access such as access to insurance, general affordability of healthcare, and accessibility of providers.
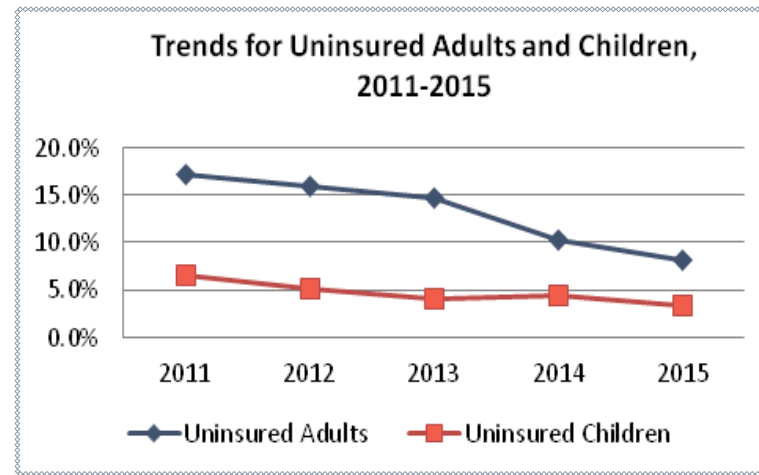
Since the Affordable Care Act was implemented in 2010 there have been decreasing trends in adults and children in Summit County who do not have insurance. This increase in health coverage is a great accomplishment for Summit County and improves health care access. However, just because there is access to health insurance does not mean that there is complete access to health care. For example, the ratios of Summit County population to physicians are still relatively high. For every 1,000 individuals in Summit County there is one primary care doctor and for every 1,700 individuals there is one dentist.

Likewise, simply because there are providers present, it does not necessarily mean there is complete access for those seeking care. For example, according to the Ohio Department of Medicaid, there are 33 dental locations that accept Medicaid in Summit County. However, a phone survey of those practices conducted by SCPH revealed that only 23 locations reported accepting Medicaid currently. Of those 23 locations, many had stipulations to the acceptance, for instance, one location reported only accepting Medicaid through nursing home patients. One reported only accepting Medicaid at two of their locations. Five practices reported only accepting certain types of Medicaid plans. One practice only accepted Medicaid with their orthodontic patients. One reported only accepting Medicaid in patients under the age of 10 and one of the locations that reported accepting Medicaid was an oral surgeon's office. This leaves 13 dental practices and one oral surgeon that currently accept Medicaid unconditionally. Additionally, access to optometrists in Summit County shows similar trends to dental access.

Percent of Adults Without Health Insurance, Summit County, by Census Tract, 2010-2014
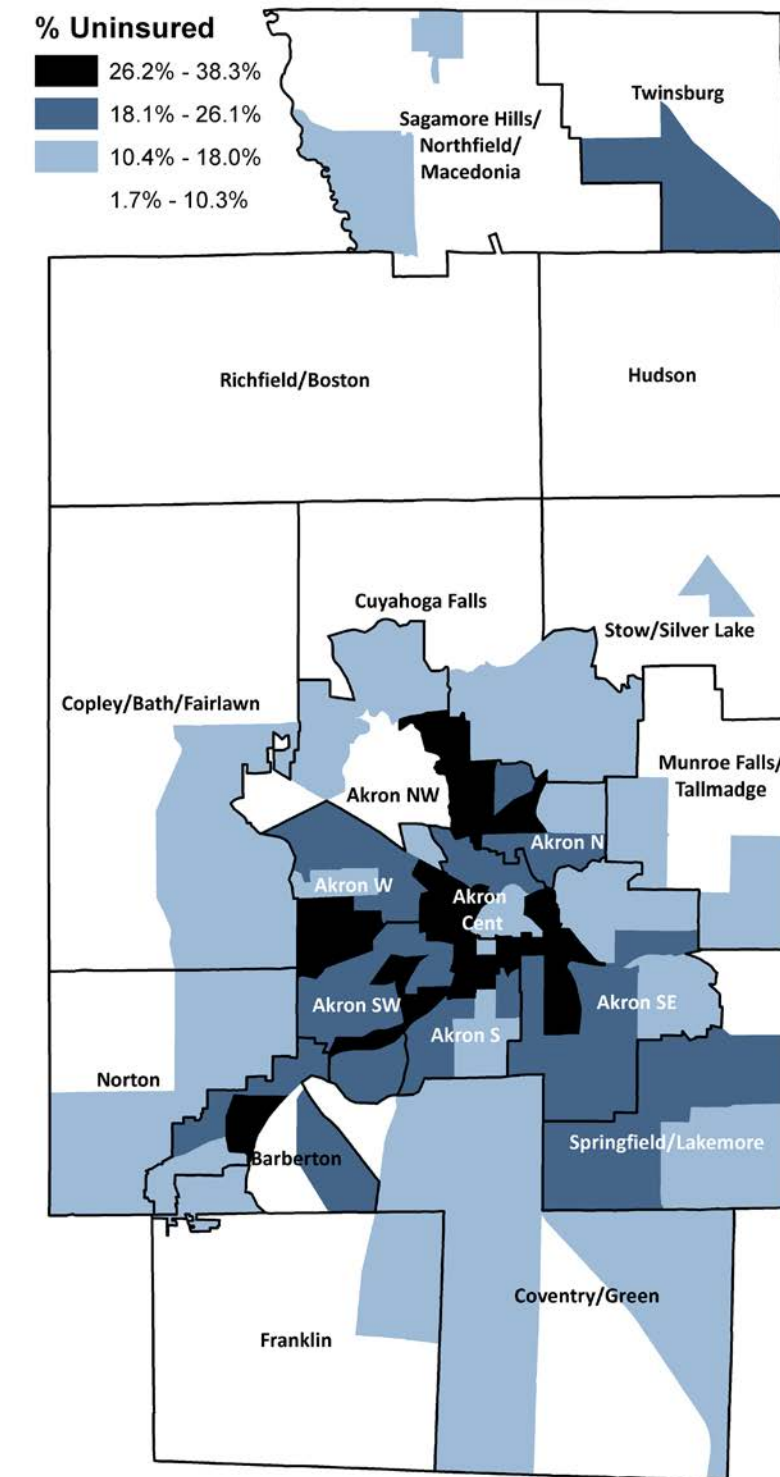
Chronic Disease

Chronic disease is an all-encompassing topic that includes not only the actual chronic diseases, but also the behaviors and risk factors that lead to them. The prevalence of chronic disease has an effect on the health outcomes, quality of life and increases the healthcare costs to the individual. It also puts a strain on overall health care costs and needs of the community. This section will focus on the behaviors/risk factors of tobacco use, physical activity, nutrition, obesity and pre-diabetes along with the chronic disease diabetes.[18]

Tobacco use leads to a number of chronic diseases including asthma, chronic lower respiratory disease, heart disease, cancer and diabetes. In 2014, the smoking rate for Summit County adults was about 21%. This still needs to reduce by a 75% change to meet the healthy people 2020 goal of 12% prevalence of adult smokers.

Physical inactivity is a health behavior that leads to many chronic diseases. The CDC recommends adults have at least 2 hours and 30 minutes of moderate-intensity aerobic activity such as brisk walking weekly or 1 hour and 15 minutes of vigorous-intensity aerobic activity such as walking or jogging weekly. There is an additional recommendation of muscle-strengthening activities on 2 or more days a week.[5] Only 22 minutes a day are necessary to meet these recommendations.[6] In Summit County the percent of adults who are 20 years of age and older who reported no leisure-time physical activity was about 24%. This is better than Ohio's overall rate of about 26%. The benefits of regular exercise include the reduction in risk for cancer, stroke, depression, hypertension, heart disease and diabetes.[6] By seeing a decrease in the number of people who are physically inactive in Summit County, we will likewise see a decrease in the risk for the aforementioned diseases.

Access to adequate foods is also an essential factor in decreasing chronic disease rates. Poor nutrition is a major risk factor not only for diabetes but also for many other chronic diseases. Food deserts consists of areas were fresh vegetables, fruits and other healthy foods are sparse due to lack of farmers markets, grocery stores and other establishments that sell healthy foods near residents.[4] In 2015, about 12% of the Summit County population was living a food desert. Almost a third of the residents have to drive more than 10 minutes to get to a store that sells groceries. The breakdown of retail food establishments consists of a large percentage of gas stations/ convenience stores followed by grocery stores, specialty stores and warehouses. Additionally, over half (55%) of the restaurants in Summit County are classified as fast food. This equates to a large percentage of Summit County who are unable to access healthy, adequate foods whether it be from stores or restaurants.

Obesity is defined as having a body mass index or BMI of greater than or equal to 30.0 kg/m². It is a risk factor leads to many other chronic diseases such as type II diabetes, cardiovascular disease, asthma and many other diseases. In the five year span of 2011-2016, there was a prevalence of obesity of about 26% throughout the population of the greater Summit County region. This compares to about 30% of all Ohioans who are obese. Though the greater Summit County region has a lower prevalence of obesity than the overall state average the presence of obesity still puts the residents

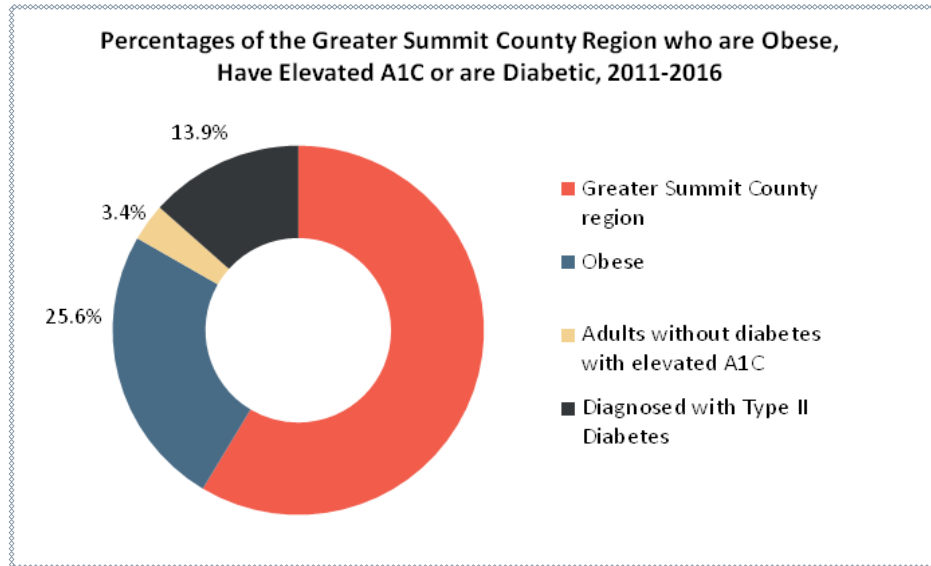Types of Retail Food Establishments in Summit County, 2014
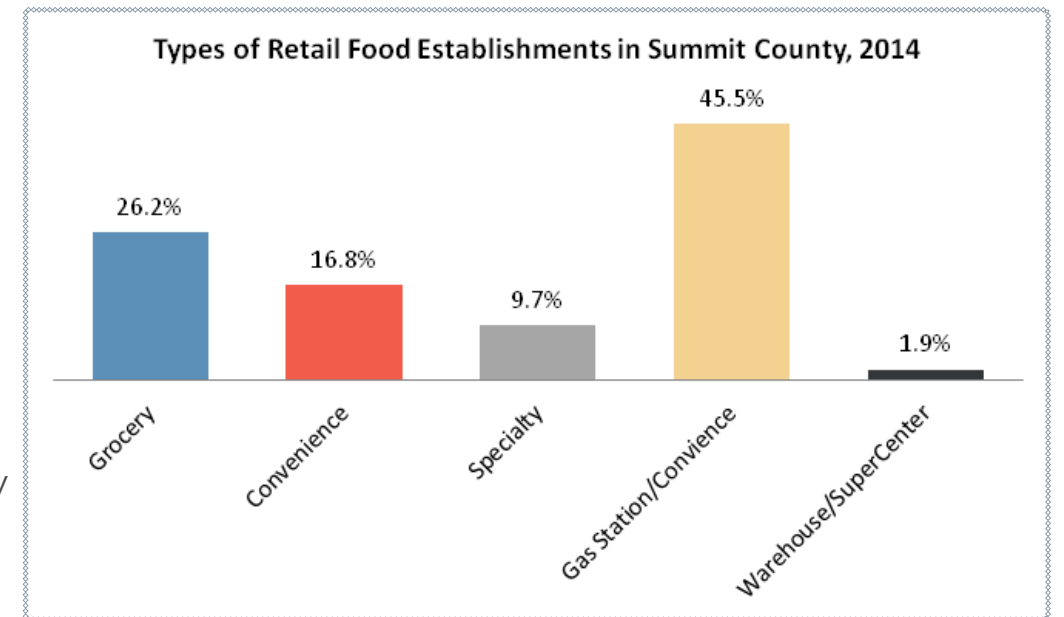
of greater Summit County region at risk for chronic diseases. In fact, the Ohio Department of Health states that, "Ohio adults who were obese had a 2.5 times higher estimated prevalence of heart disease and a 4.9 times higher estimated prevalence of diabetes than adults who were normal weight."[18]

Pre-diabetes One of the measures for identifying pre- diabetes is a hemoglobin A1C test between the measurements of 5.7 to 6.4%. This is an indicator of how many people had higher than normal glucose levels in their blood, but were not yet considered diabetic. About 3% of the greater Summit County region, who received an A1C test in the last 5 years, were in the pre-diabetic range. Those who are diagnosed with pre-diabetes have an advantage in that if they change their behaviors and alter their risk factors such as eating healthy or becoming more physically active they have a chance of bringing their blood glucose levels back to a normal range. However, without a lifestyle change, pre-diabetes is likely to become type II diabetes within 10 years. [3]

All the above mentioned risk factors can contribute to the disease outcome of diabetes. Type II diabetes is the seventh leading cause of death in Ohio and the United States, and is one of the top four non-communicable morbidities in the United States.18, 2 In the last five years the greater Summit County region has had about 13.9% type II diabetes prevalence. This is slightly higher than the overall Ohio prevalence of about 12%.

Of those who had type II diabetes in the last five years in the greater Summit County region, 14.8% had a doctor's visit for uncontrolled diabetes. If diabetes is not controlled properly it can lead to severe and sometimes lasting damage to the many areas of the body such as

the blood vessels, eyes, kidneys and nerves.[18] This speaks to the need for every member in the community to maintain healthy behaviors, reduce or eliminate risk factors for diabetes and pre-diabetes and have adequate health care access.
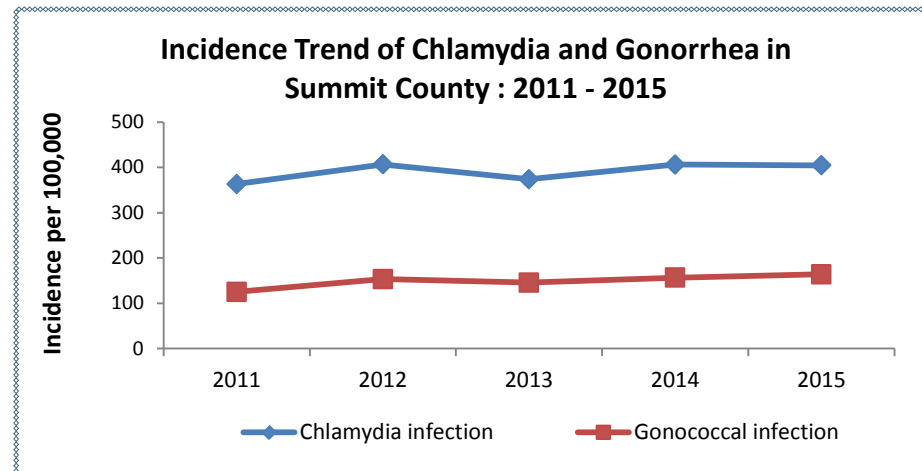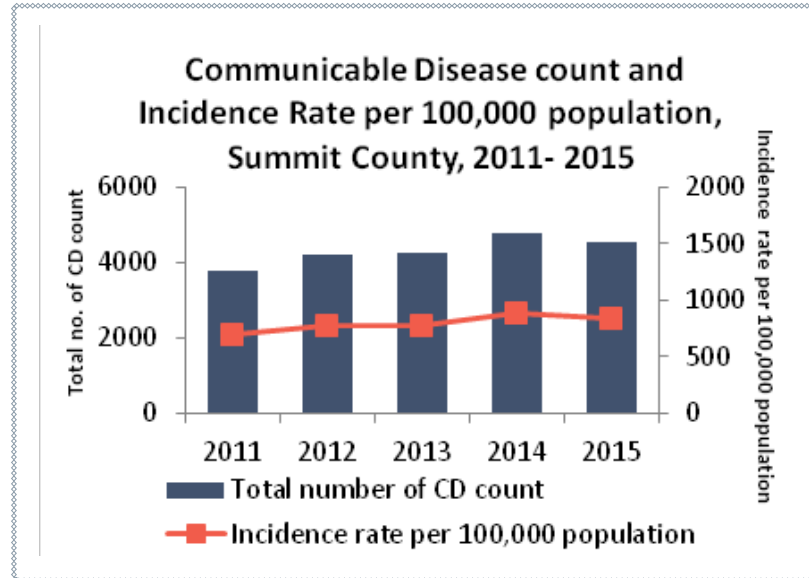
Percentages of the Greater Summit County Region who are Obese, Have Elevated A1C or are Diabetic, 2011-2016

13.9%
3.4%
25.6%

- Greater Summit County region
- Obese
- Adults without diabetes with elevated A1C
- Diagnosed with Type II Diabetes

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[1]Centers for Disease Control and Prevention. National Diabetes Statistics Report: Estimates of Diabetes and Its Burden in the United States, 2014. Atlanta, GA: U.S. Department of Health and Human Services; 2014.

[2]NCD mortality and morbidity. (2012). World Health Organization. Retrieved 2 November 2016, from http://www.who.int/gho/ncd/mortality_morbidity/en/

[3]Prediabetes - Mayo Clinic. (2014). Mayoclinic.org. Retrieved 2 November 2016, from http://www.mayoclinic.org/diseases-conditions/prediabetes/basics/definition/con-20024420

[4]USDA Defines Food Deserts | American Nutrition Association. (2015). Americannutritionassociation.org. Retrieved 2 November 2016, from http://americannutritionassociation.org/newsletter/usda-defines-food-deserts

[5]How much physical activity do adults need? | Physical Activity | CDC. (2015). Cdc.gov. Retrieved 2 November 2016, from https://www.cdc.gov/physicalactivity/basics/adults/

[6]Physical activity. (2016). World Health Organization. Retrieved 2 November 2016, from http://www.who.int/mediacentre/factsheets/fs385/en/

[18]The Impact of Chronic Disease in Ohio: 2015. Chronic Disease Epidemiology and Evaluation Section, Bureau of Health Promotion, Ohio Department of Health, 2015.

Population Living In A Food Desert, Summit County, 2015

- Large Retail Food Outlets (LRFE)
- Food desert areas
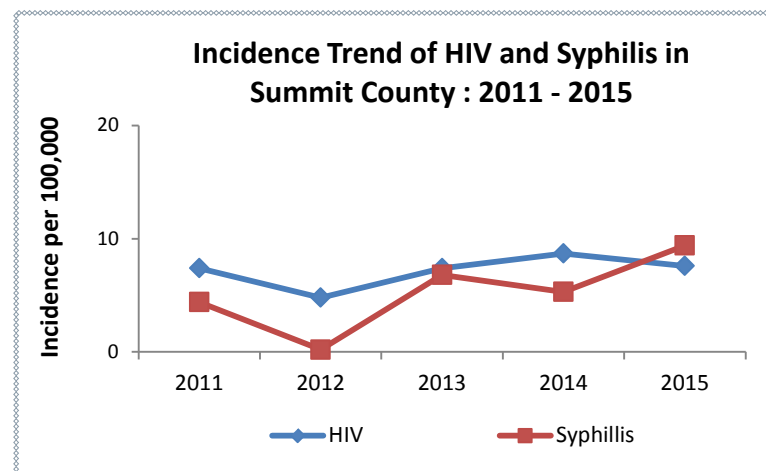- Blocks within 1 mile of an LRFE
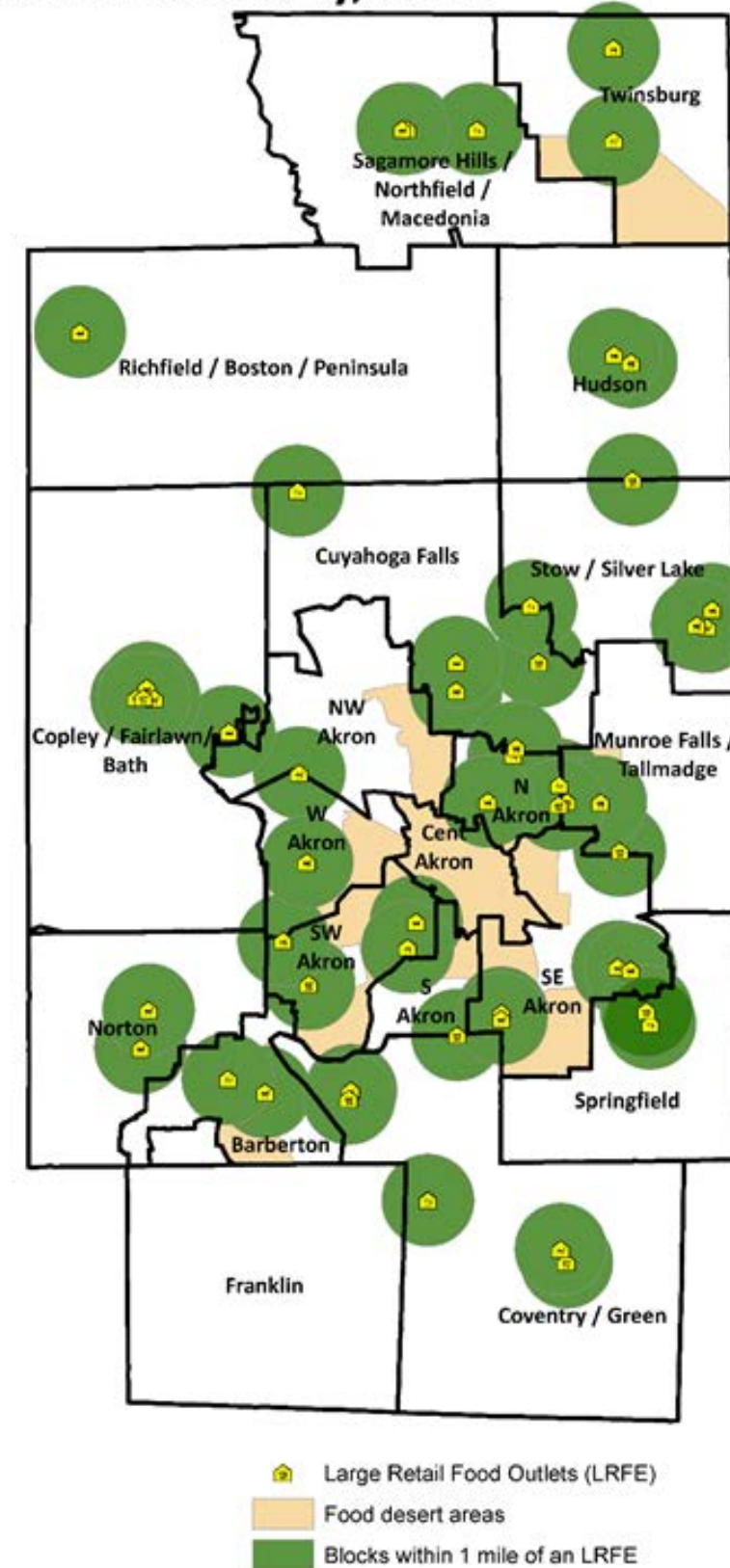
Communicable Disease

Infectious diseases are illnesses caused by pathogenic microorganisms, such as bacteria, viruses, parasite or fungi, which can be spread directly or indirectly from one infected person or animal to another. As per the 2013 Centers for Disease control and prevention (CDC), the incidence of reportable infectious disease were 642 per 100,000. The annual incidence of infectious disease in Summit County was 700 per 100,000 in 2011 and 837.5 per 100,000 in 2015. It increased by 19.7%.

Communicable Disease count and Incidence Rate per 100,000 population, Summit County, 2011- 2015

Incidence Trend of Chlamydia and Gonorrhea in Summit County : 2011 - 2015

Incidence Trend of HIV and Syphilis in Summit County : 2011 - 2015

For sexually transmitted infection (STI), chlamydia and gonorrhea are top two most prevalent STI in the U.S. as well as in Summit County. According to CDC, incidence of chlamydia and gonorrhea in the U.S. are 456 per 100,000 and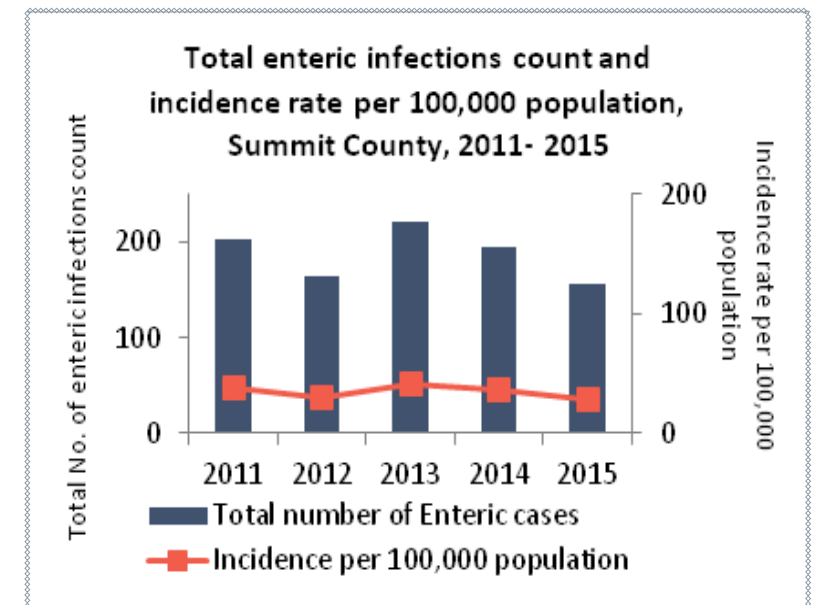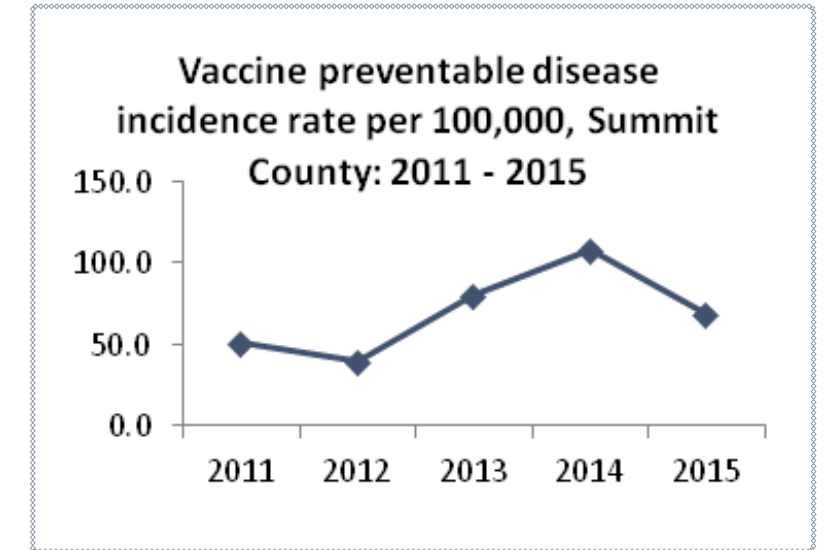 123.9 per 100,000 respectively. Summit County follows a similar trend. The figures on the left summarize the 5 years trend of STIs in Summit County. In the last 5 years, incidence of chlamydia cases increased by 11.4%, gonorrhea by 30.9%, HIV by 2.7% and syphilis by 114%. Regarding age distribution of STI cases, chlamydia and gonorrhea were highly prevalent among age group 18 to 44 years, syphilis among 25 to 44 years age group and HIV

among 25 to 64 years age group. As per Ohio Department of Health (ODH) STI report the prevalence rate of number of people living with HIV/AIDS in Summit County was 151.3 per 100,000 which increased by 15.3% compared to 2011.

Vaccine preventable diseases (VPD) include infectious diseases such as influenza, measles, meningitis, mumps, pertussis, rubella and varicella. In 2011, incidence rate of VPD was 32.8 per 100,000 which escalated in 2013 (70.9 per 100,000) and 2014 (74.2 per 100,000). In these two years, there were higher numbers of cases of influenza and pertussis. In 2015, the incidence rate dropped by 14% with an overall incidence rate of 63.5 per 100,000.

Enteric infections are diseases of the intestines which are usually spread through contaminated food and water or by contact with vomit or feces. Enteric infections include camphylobacteriosis, cryptosporidiosis, E.coli, Hepatitis A, shigellosis, salmonellosis, etc.). According to CDC, 1 in 6 Americans gets sick by consuming contaminated foods or beverages. In 2011, incidence rate of enteric infections were 39.1 per 100,000 and 31.9 per 100,000 in 2015. The overall incidence in 2015 decreased by 18.4% compared to 2011. Majority cases of enteric infections were children under 18 years of age and adults in age group 45 to 64.
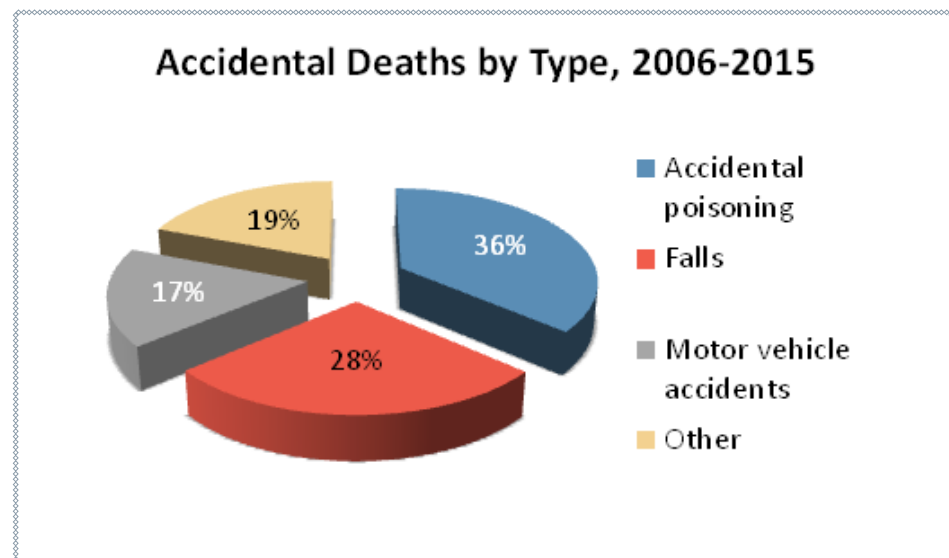

Vaccine preventable disease incidence rate per 100,000, Summit County: 2011 - 2015

Total enteric infections count and incidence rate per 100,000 population, Summit County, 2011- 2015

[1]Health, United States, 2015-Infectious Disease. (2016, April 27). Retrieved November 10, 2016, from http://www.cdc.gov/nchs/hus/infectious.htm#cases
[2]2015 Sexually Transmitted Disease Surveillance. (2016, October 18). Retrieved November 10, 2016, from http://www.cdc.gov/std/stats15/toc.htm
[3]U.S. Centers for Disease and Prevention. (2015). Foodborne Germs and Illnesses. Retrieved from http://www.cdc.gov/foodsafety/foodborne-germs.html

Community Safety

Community safety can be a difficult category to analyze, because there are many potential topics it could include. For purposes of this report, community safety includes the risk of violent crime, the abuse and neglect of the community's most vulnerable citizens, and the physical safety of our citizens.

Accidental Deaths by Type, 2006-2015

- 36% Accidental poisoning
- 28% Falls
- 17% Motor vehicle accidents
- 19% Other

Violent Crime
Of the nine jurisdictions that reported data to the FBI between 2006 and 2013, violent crimes were highest in the city of Akron, 862 per 100,000 population. Akron, Barberton, and Cuyahoga Falls all had higher five-year averages in the 2006-2010 and 2011-2013 periods, while Springfield, Stow, the Summit County Sheriff, Tallmadge, and Twinsburg City all had lower five-year averages.

Abuse and Neglect
The number of abused and neglected children in Summit County has been rising since 2012. The number of children in custody at Summit County Children Services (SCCS) dropped in 7 of the 8 years between 2004 and 2012, from 1,254 to 558. However, since then the number of children in custody rose by nearly 21%. As of May 2016, 674 children were in SCCS custody; the highest number since 2011. According to SCCS, the opiate epidemic is the biggest reason for the increase; as more parents become addicted to opiates, more children are at risk of being abused and/or neglected, leading to more children being placed in foster care or other outside placement. According to the Public Children Services Association of Ohio, "70% of infants in child protection custody are in care due to their parent's opiate addiction."

Elder abuse has also increased, from 8.3 cases per 1,000 people age 60 and over in 2014 to 9.7 cases per 1,000 in 2016. While elder abuse cases were up across almost the entire county, it is hard to say for certain whether the increase was caused by an actual increase in the number of incidents or because the county's adult protective services (APS) system (which adopted a new strategy and has more resources available) is better at finding and serving abused and neglected seniors than before.

Accidental Deaths
The number of accidental deaths among Summit County residents has also been rising.   Between 2006 and 2015, nearly 2,200 residents died of accidental injuries. As the chart above shows, accidental poisonings were the cause of 36% of all those who suffered an accidental death. Nearly all of those accidental poisonings were drug overdoses (748 of the 788 between 2006 and 2015 or 95%). Falls were the second biggest cause of accidental death; of the 599 deaths due to accidental falls between 2006 and 2015, 85% were by people over age 65. Motor vehicle accidents were responsible for nearly 17% of accidental deaths, while 19% were by all other causes combined.

Between 2006 and 2015, accidental poisonings rose by 62%, mostly driven by opiate-related overdoses. Deaths by accidental falls increased at a far lower rate, only 6%. Deaths due to motor vehicle accidents actually went down by 5% during these years, while accidental deaths from other causes were unchanged.. All told, Summit County's accidental death rate rose from 33.6 per 1,000 between 2006 and 2010 to 39.9 per 1,000 from 2011 to 2015.

Density Map of APS Cases Summit County, October 2015 - September 2016

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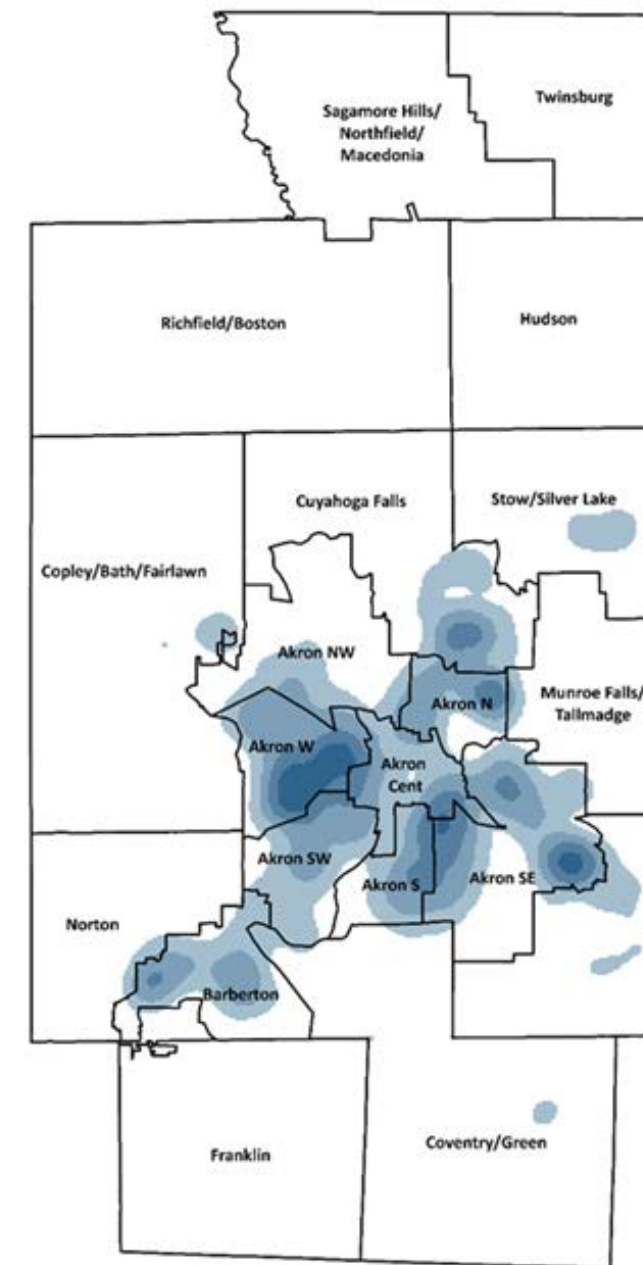
[1]Public Children Services Association of Ohio, "Ohio's Opiate Epidemic and Child Protection."
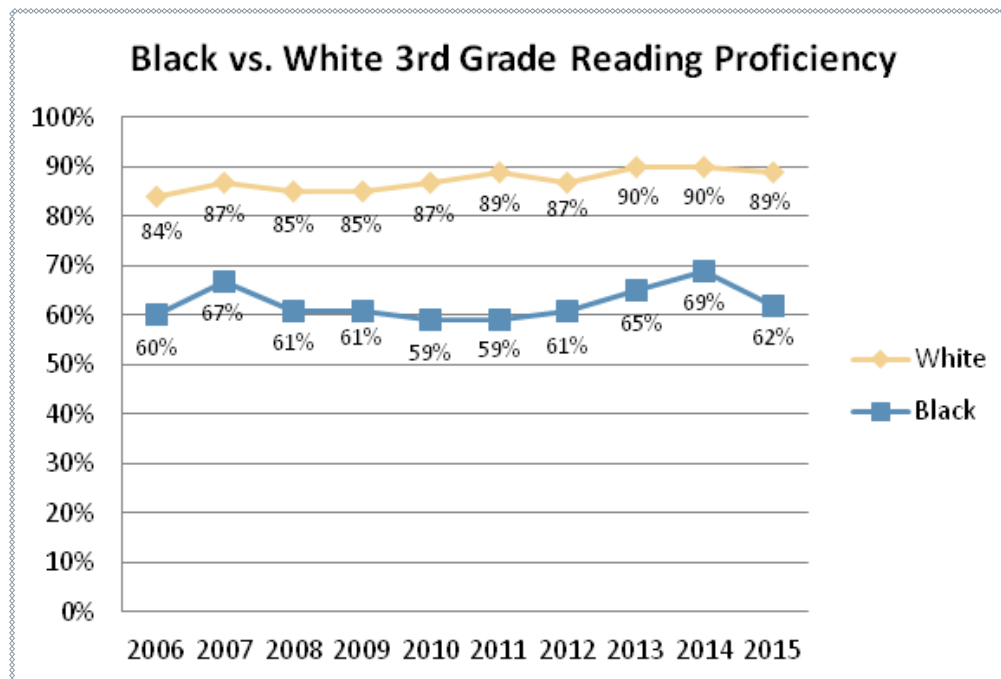
Education

The educational level of people in Summit County is being impacted by several changes in the education landscape. One of these changes is the No Child Left Behind Act of 2001 (NCLB), which tied federal dollars to targets for achievement and improvement. A second and related change was an increased focus on standards and accountability by the State of Ohio and local public school districts.

Here in Summit County, student performance on key proficiency tests such as 3rd grade reading proficiency have been improving, as has the 4-year graduation rate (the percentage of 9th graders who graduate on-time four years later).

Demographic and migration patterns are also changing the face of education in Summit County. Over the last few decades, more people with college degrees have moved into Summit County, and more people without college degrees have either moved out or passed away. Combined with improvements in the education system, these patterns have resulted in a more highly-educated population.

Despite the improvements we've seen, there are still major challenges to overcome. One of the biggest is addressing the difference in education by race. The chart above shows how big that difference is between blacks and whites in Summit County. The chart shows the changes in 3rd grade reading proficiency over the past 10 years. Educators nationwide recognize that 3rd grade reading proficiency is vital; high 3rd grade reading scores correlate strongly with higher academic achievement in later grades. As the chart shows, year after year black children lag white children by at least 20 percentage points. Because 3rd grade reading scores are so important, lagging behind here can hold a child back for the rest of their academic careers and for the rest of their lives.

The chart below shows the education level for all blacks and whites age 25 and over. On the left side of the chart, which shows lower educational attainment, black percentages are higher than white. That pattern holds until reaching 4-year and advanced degrees. For both of those categories, the white percentage is either double or more than double the black percentage. Combined, 33% of whites have at least a 4-year degree as compared to only 15% of blacks.

Once in the job market, the different earnings potential of each educational level then plays a big part in determining socioeconomic status. In 2015, the median earnings of Summit County employees with a 4-year degree was $50,624. The median for those with some college or a 2-year degree is only $32,942. For those with less than a high school diploma, the median earnings in 2015 were just $21,017. By way of comparison, the federal poverty level for a family of four is currently $24,300. In other words, having a good education is a great way to lock the door to poverty behind someone; not having one locks that same door in front of them.
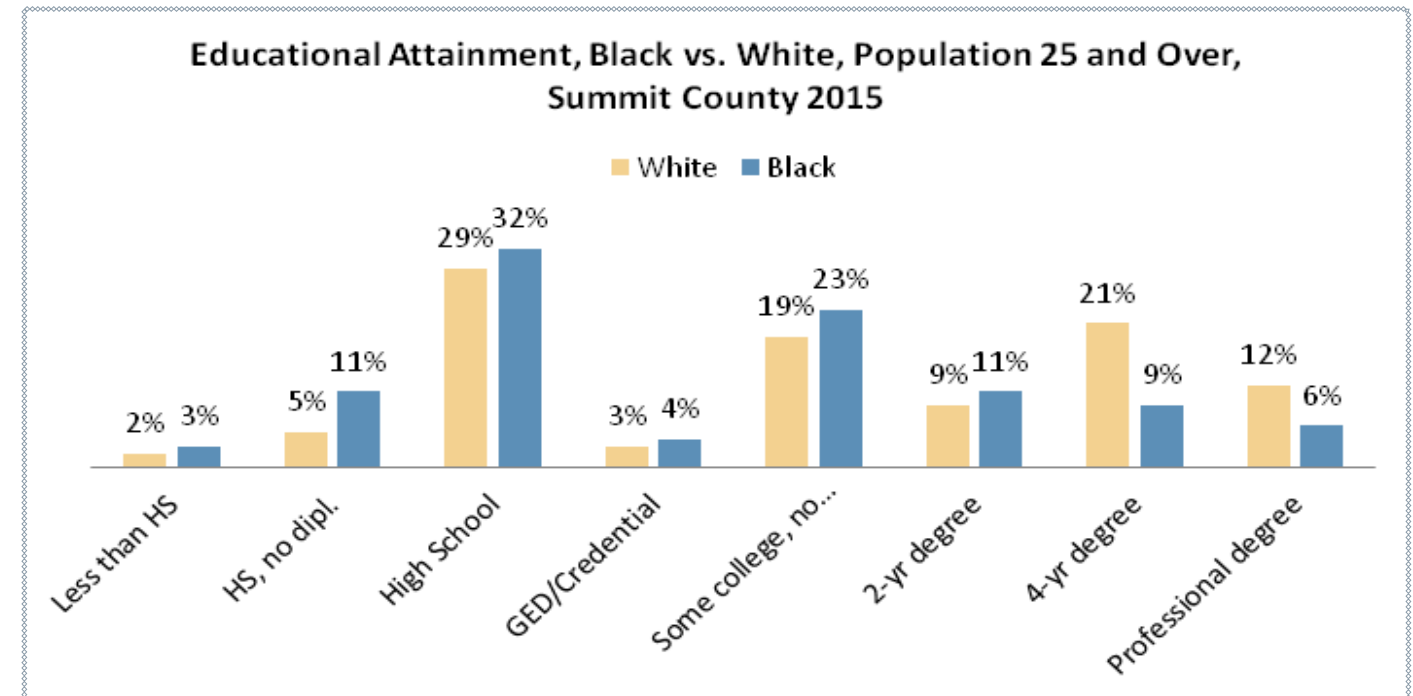
**Percentage Point Difference Between
Black-to-White 3rd Grade Reading Scores
Summit County by School District, 2015-16**
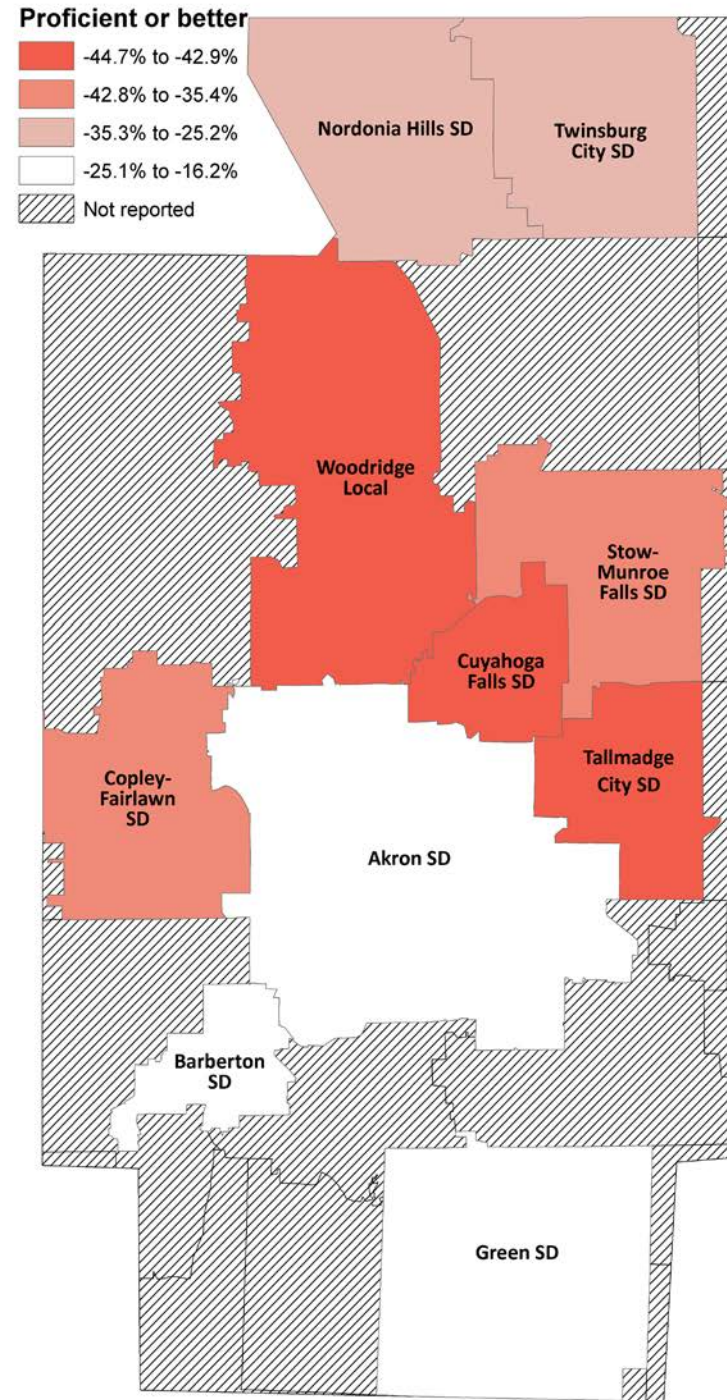
Housing

Housing Burden

The idea that housing burdens for renters are greater than for homeowners is not new. It has been a reality for a long time, beginning well before the Great Recession. The chart below shows just how much greater that burden is for those who rent than for those who own.
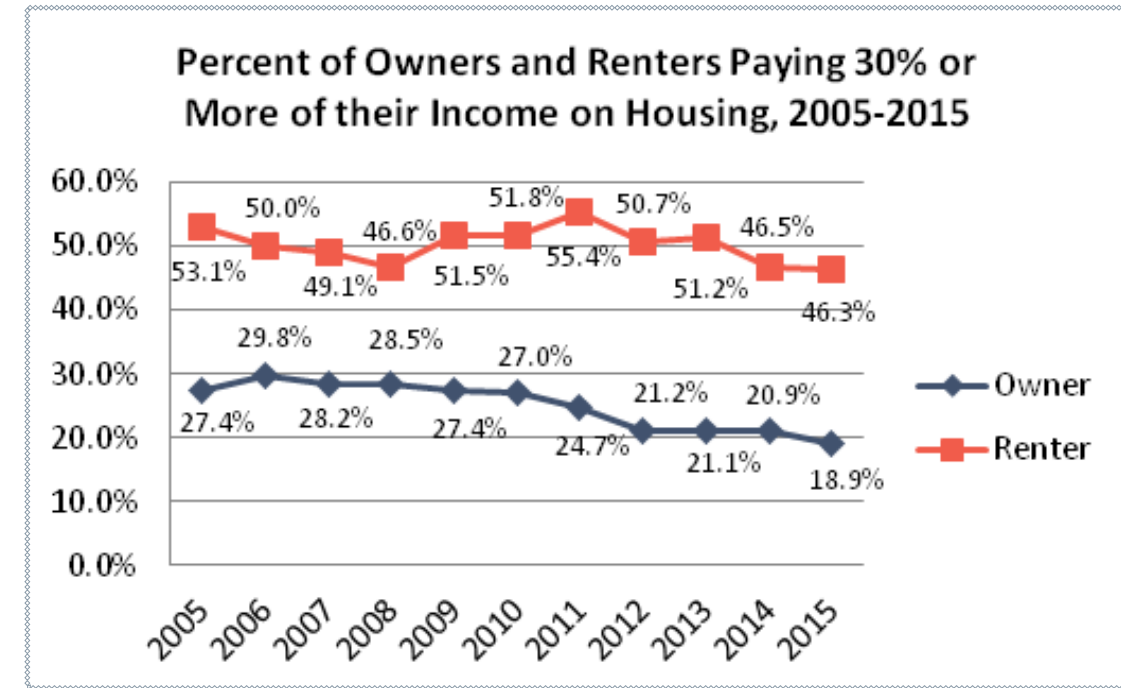
The percent of renters paying 30% or more for their housing rose from about 47% in 2008 to a high of 55% in 2011. Rental housing burdens began stepping down since then, returning in 2015 to about the same level they were at before the recession in 2007.

For homeowners, the greatest burdens actually came about 18 months before the recession. After topping out at 30%, the percent of homeowners paying 30% or more for housing dropped to just under 19% by 2015.

Why was the housing crisis so much harder on renters? One reason was that many people who lost their homes were forced to enter the rental market, driving up prices at the worst possible time. Many of those who were financially overwhelmed by their mortgage could still afford larger and better apartments than many of those already in the rental market. With prices rising, better quality units began flowing to the strongest renters, many of whom were former homeowners. This left lower-income people in an especially difficult situation; a dwindling choice of quality housing and rising prices for the lower-quality units that were still available.

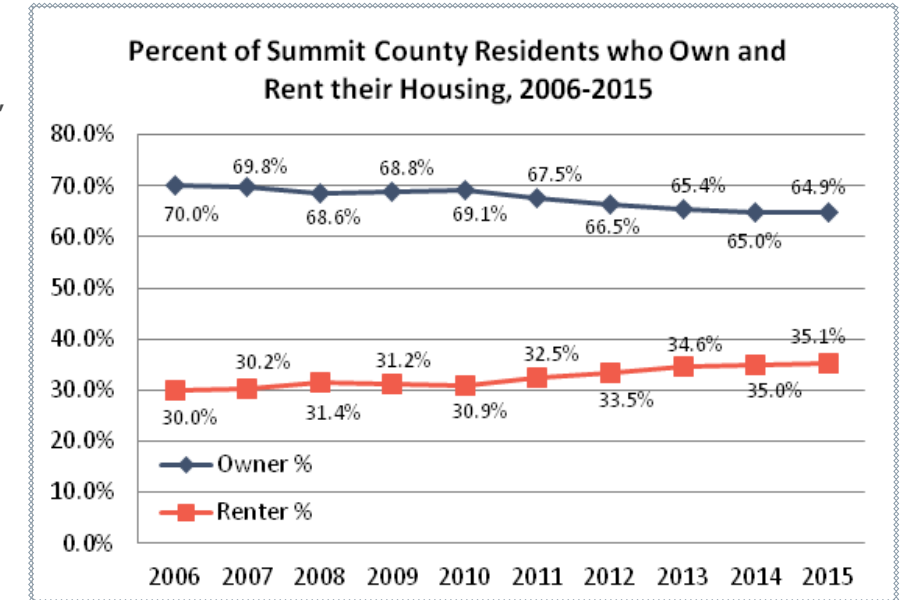Data from the National Low Income Housing Coalition (NLIHC) for Summit County highlights the challenge of being a low-income renter. The figure below shows the maximum rent a household can afford while earning the minimum wage and not spending more than 30% of total income on rent. For Summit County, that figure is $412. However, the cheapest zero bedroom unit available in Summit County is estimated by NLIHC to cost $494. For a single parent earning the minimum wage, that means that even the smallest and cheapest available living space will take them over the 30% threshold for excessive housing burden. The additional money it takes to afford even a low-end unit is money that can't be spent on food, transportation, savings, or other necessities.

Maximum Affordable Rent Compared to Fair Market Rent
(Minimum Wage Job Holders Summit County, 2015)

Affordable Rent @ min. wage	Zero bedroom	One bedroom	Two bedroom	Three bedroom	Four bedroom
$412	$494	$574	$776	$999	$1,037
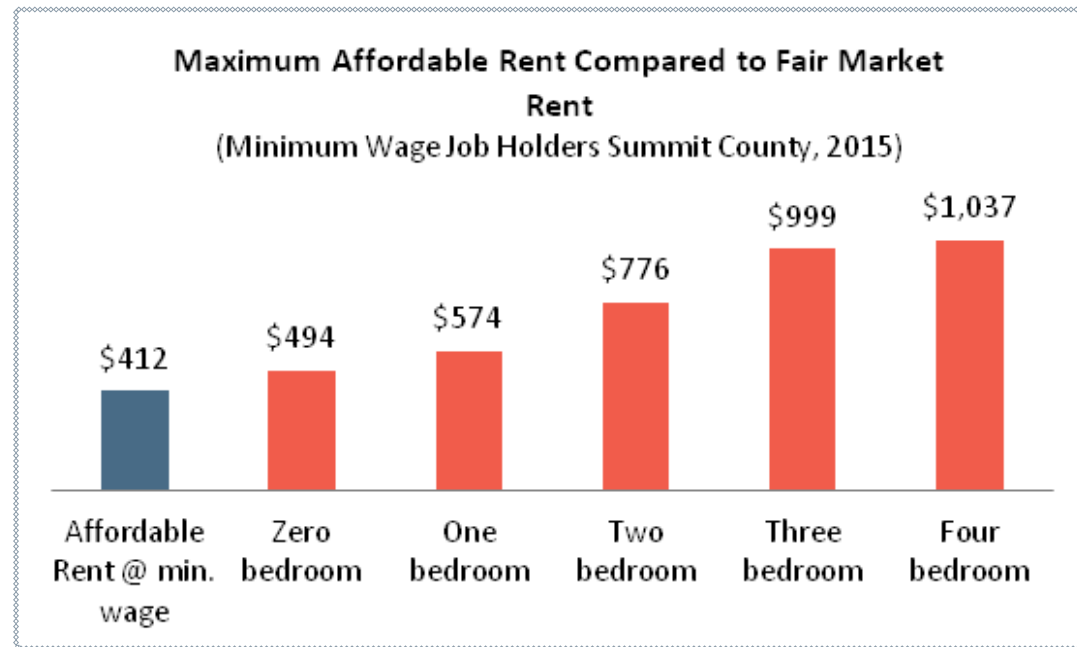
Having so many renter households trapped at the low end of the market reduces the number of affordable units, leading to higher rental prices. There aren't many good choices for households that don't make enough to afford better units. For many, public housing is a viable option. However, if a renter doesn't qualify for public housing there is little choice but to spend more than 30% of their income on housing.

Housing Conditions

The 2008 recession also had an impact on home ownership rates in Summit County. In 2006, homeownership rates were at 70%, and have decreased to 65% by 2015. As stated earlier, the the resulting increase of renters in the last ten years has also increased the competition for higher quality units. Lower income and/or minority renters who reside in the lowest quality units may be exposed to multiple hazards and also have the highest economic housing burden.

Percent of Summit County Residents who Own and Rent their Housing, 2006-2015

Owner %: 2006 70.0%, 2007 69.8%, 2008 68.6%, 2009 68.8%, 2010 69.1%, 2011 67.5%, 2012 66.5%, 2013 65.4%, 2014 65.0%, 2015 64.9%

Renter %: 2006 30.0%, 2007 30.2%, 2008 31.4%, 2009 31.2%, 2010 30.9%, 2011 32.5%, 2012 33.5%, 2013 34.6%, 2014 35.0%, 2015 35.1%

As of 2016, nearly 73% of Summit County housing was built prior to 1978, the year that lead-based paint was prohibited from consumer use in residential properties. Based on 2015 housing estimates, that translates to over 178,000 existing housing units in Summit County that are at risk for containing lead paint. Older dwellings are concentrated in the urban areas of the county, in the cities of Akron, Cuyahoga Falls, and Barberton. Lead abatements were completed in 95 properties in 2010 and 88 properties in 2015, and rental properties are less likely to be renovated.

Housing units in Summit County by year built, 2015
- Prior to 1978: 73%
- 1978 or later: 27%
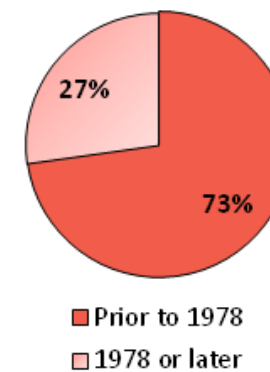
Tenure of pre-1950 housing in Summit County in 2015
- Owner occupied: 62%
- Renter occupied: 38%
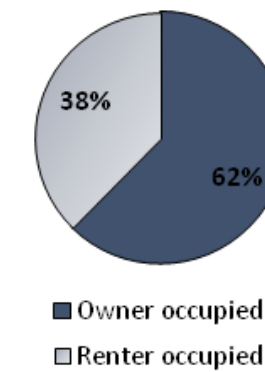
Although all housing built prior to 1978 are considered to be at risk for containing lead paint,those built prior to 1950 are considered to be the most hazardous for lead exposure, especially for children below the age of six. Housing built between 1950 and 1978 are usually only a problem if there is renovation or other visible disturbance of lead paint. As of 2015, there were an estimated 57,358 housing units built prior to 1950, and 38% were occupied by renters, which is higher than the overall proportion of renters for all housing units in 2015 (35%).

Lead is neurotoxin that has the greatest potential impact on young children, who have rapidly developing brains and nervous systems. Exposure can also occur during pregnancy. Currently, any child below the age of six in Summit County that is deemed to be at risk is recommended to be tested for lead exposure via a blood test. There is no safe exposure level for lead, and the CDC updated its lead guidelines in 2012. The reference level for lead testing results was decreased from 10 to 5 micrograms per deciliter to indicate elevated blood levels (EBLs). In 2015, 1.5% of children tested were determined to EBLs, a 60% decrease since 2012 and a nearly 80% decrease since 2010.

Percentage of Summit County children tested for lead, aged 1 to 5, with elevated blood levels (EBL: >5 µg/dl)
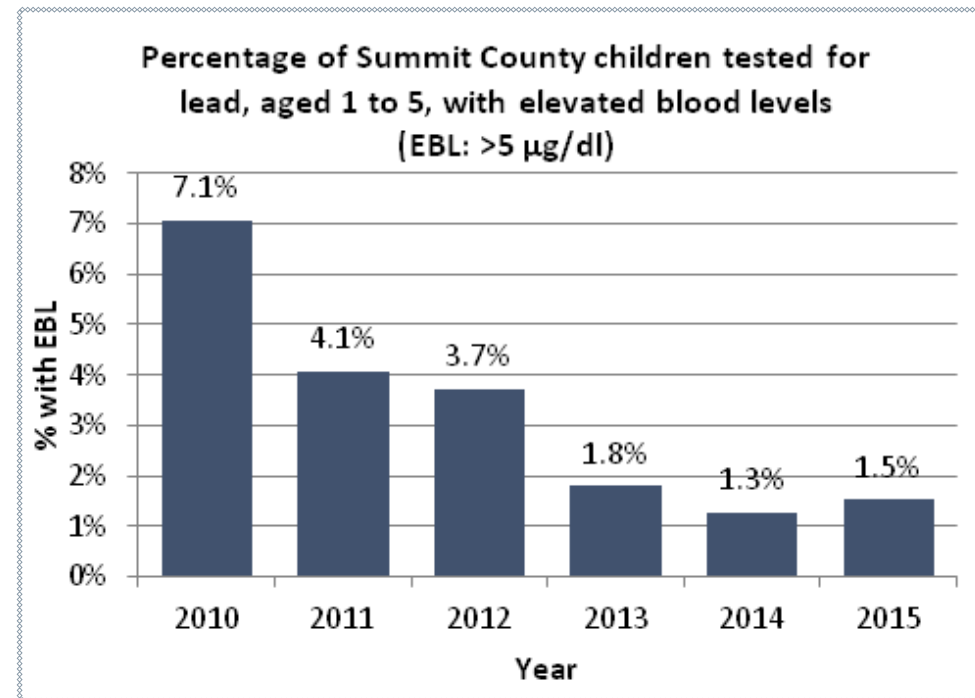
Percentage of Housing In Below Average or Worse Condition Summit County by Census Tract, 2015
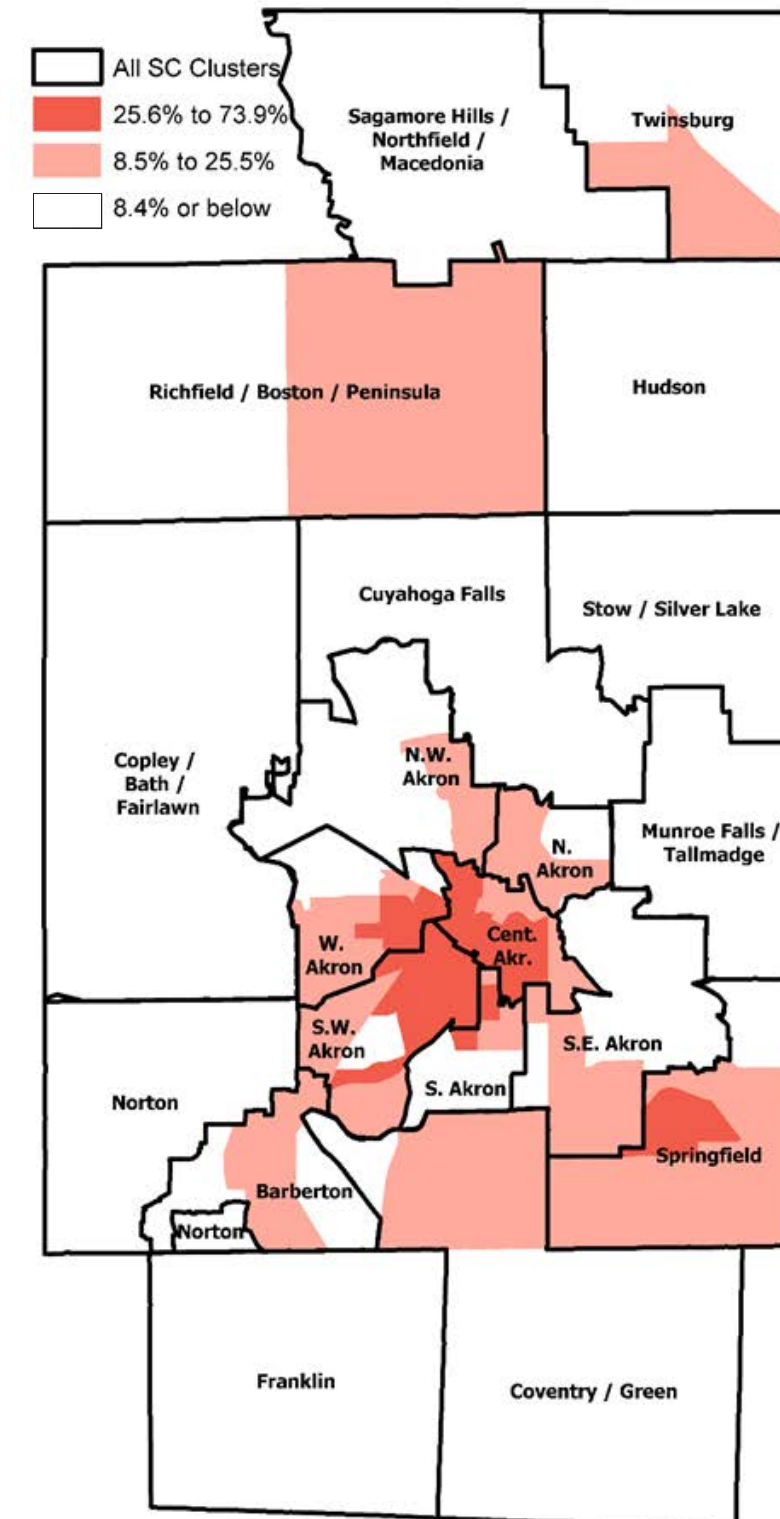
Internet Access

Computer ownership and access to the internet is having a major impact on our economy and society. The so-called "digital divide" between those with the resources to afford a computer and broadband connections to the internet and those who can't impacts areas such as education, health care, employment and more.

For example, a 2015 article by the Center for Budget and Policy Priorities notes the impact that internet access can have when looking for work, "Unemployed people conducting internet job searches between 2005 and 2008 found work about 25 percent faster than workers with comparable skill levels and other characteristics who did not search online." Other studies point out that the vast majority of school districts assign at least some homework online . In health care, a General Accounting Office study points out the rising impact of telemedicine, noting that it can "allow...patients to receive medical diagnosis or patient care, including from specialists who are located elsewhere."

These and other advances in technology are transforming society and the economy – for those who have access to them. Unfortunately, as in so many other areas, the digital divide shows up in at least two familiar areas; race and education level.

While current research is leading many experts to conclude that the racial divide in computer and internet access may be shrinking, the existing gaps are still real. The chart below shows the differences between computer ownership and broadband access for whites and blacks in Summit County. Blacks are 10 percentage points less likely than whites to own a computer, and black computer owners are 18 percentage points less likely than whites to have access to a broadband connection if they do.

Figure 1: Computer Ownership and Broadband Use by Race, Summit County, 2015
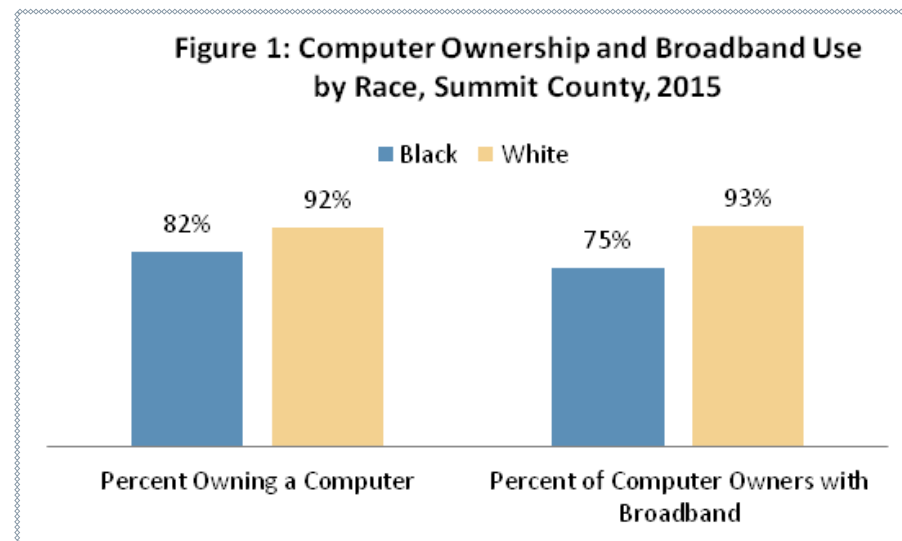
The differences by education are even bigger. Only 68% of Summit County residents who have less than a high school education own a computer as compared to 86% of high school graduates, those with some college, and those with 2-year degrees, and 97% of those with a 4-year degree or higher. Of those who do own a computer, only 81% of those with less than a high school education have broadband access, while their more educated neighbors have much greater access.

With modern technology holding so much potential to change our communities for the better, it is vital that we find ways as a community to make sure that all our citizens have the opportunity to benefit from those changes in the years ahead.

Figure 2: Computer Ownership and Broadband Use by Educational Attainment, Summit County, 2015

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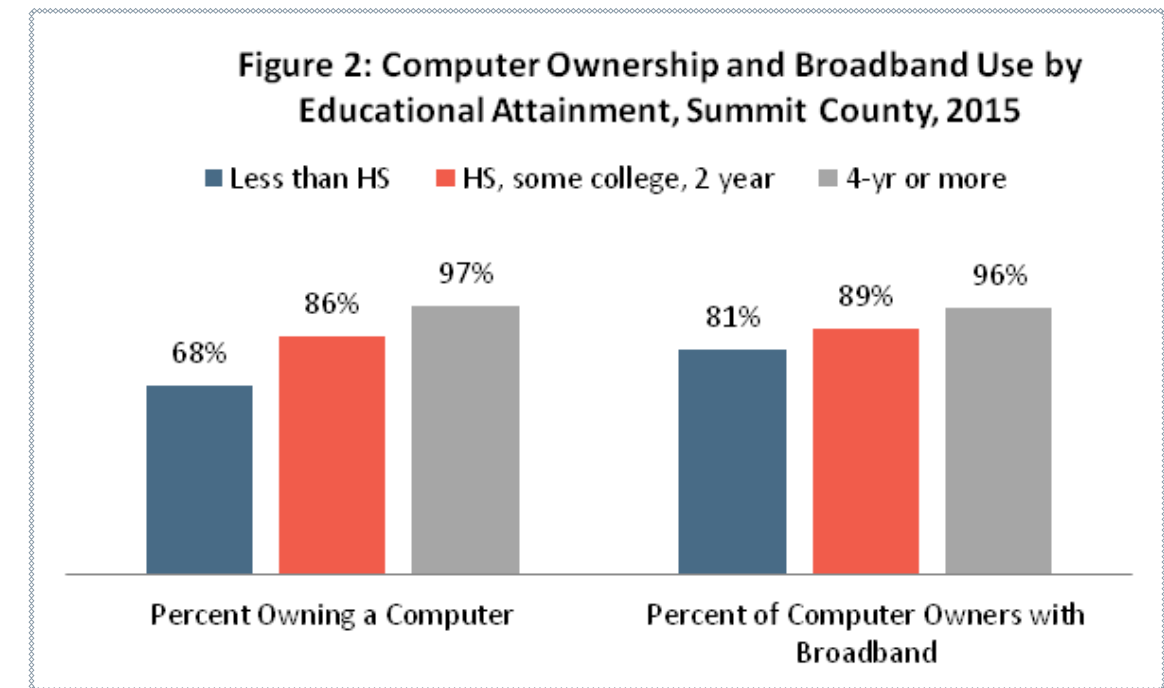
[i]Shapiro, Issac (2015), "FCC Broadband Initiative Could Reduce Barriers to Low-Income Americans' Advancement and Promote Opportunity"; Center for Budget and Policy Priorities; Retrieved from http://www.cbpp.org/research/poverty-and-inequality/fcc-broadband-initiative-could-reduce-barriers-to-low-income.

[ii]National School Boards Association (2007), "Creating & Connecting: Research and Guidelines on Online Social – and Educational – Networking," Retrieved from http://grunwald.com/pdfs/Grunwald_NSBA_Study_Kids_Social_Media.pdf

[iii]Government Accountability Office (2015), "Broadband: Intended Outcomes and Effectiveness of Efforts to Address Adoption Barriers Are Unclear," Retrieved from http://www.gao.gov/assets/680/670588.pdf

Poverty

Changes in the poverty rate have had a significant impact on Summit County's quality of life over the past 25 years. After a brief recession in 1991, the national economy began the longest expansion in U.S. history, with low unemployment, rising incomes and stock prices. Falling poverty rates brought prosperous times to Northeast Ohio for much of the decade, with . poverty in Summit County falling from 12% in 1990 to just under 10% in 2000.

Unfortunately, the economy fell into recession in 2001, which increased unemployment and drove poverty rates back up to 1990 levels by 2006. Just as the economy was beginning recover, the Great Recession hit in 2008. Despite the passage of the American Recovery

Poverty Rates in Summit County, 1990-2015
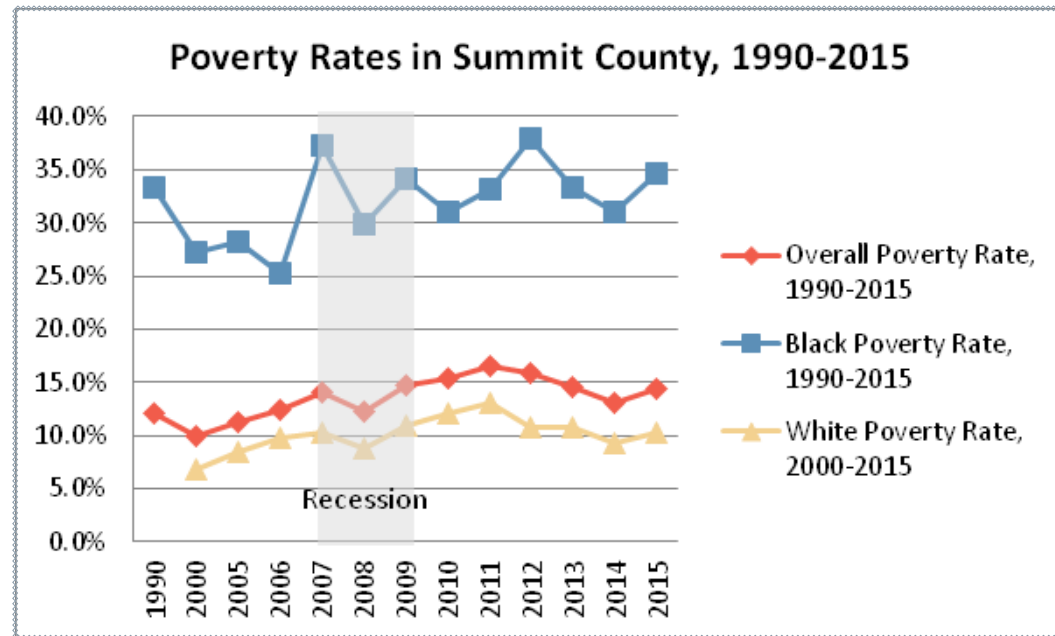
and Reinvestment Act of 2009 and other federal, state, and local government efforts, the recession hit the entire nation very hard. The next three years brought Summit County high unemployment, thousands of home foreclosures and steady increases in the poverty rate, which hit a high of 17% in 2011. Summit County's recovery began slowly, with poverty rates finally beginning to decline in 2012 and the number of jobs finally showing consistent growth in 2014.

Like unemployment, poverty isn't just one story. As the chart above shows, a person's racial background makes a big difference in whether he or she lives in poverty. The black poverty rate in Summit County has been double or more than double the countywide rate in every year since 1990.

Poverty rates for other important groups are also much higher. Nearly half of female-headed households with children are currently living in poverty, as are one-in-four foreign-born people, and one-in-five children. All of these rates are well above the overall poverty rate for the county. However, only about 8% of seniors are currently in poverty, thanks in part to programs such as Social Security and Medicare, which helps keep many seniors out of poverty.

While the senior poverty rate is low, the number of seniors living near poverty is not. According to the Kaiser Family Foundation, half of all people on Medicare were living on less than $23,500 per year in 2013. Racial disparities also impact senior poverty. According to Kaiser, "The official poverty rate in 2013 was nearly three times larger among Hispanic adults than among white adults ages 65 and older (20% versus 7%) and two and a half times larger among black adults ages 65 and older (18%)."

Poverty Rates for Different Groups in Summit County, 2010-2014
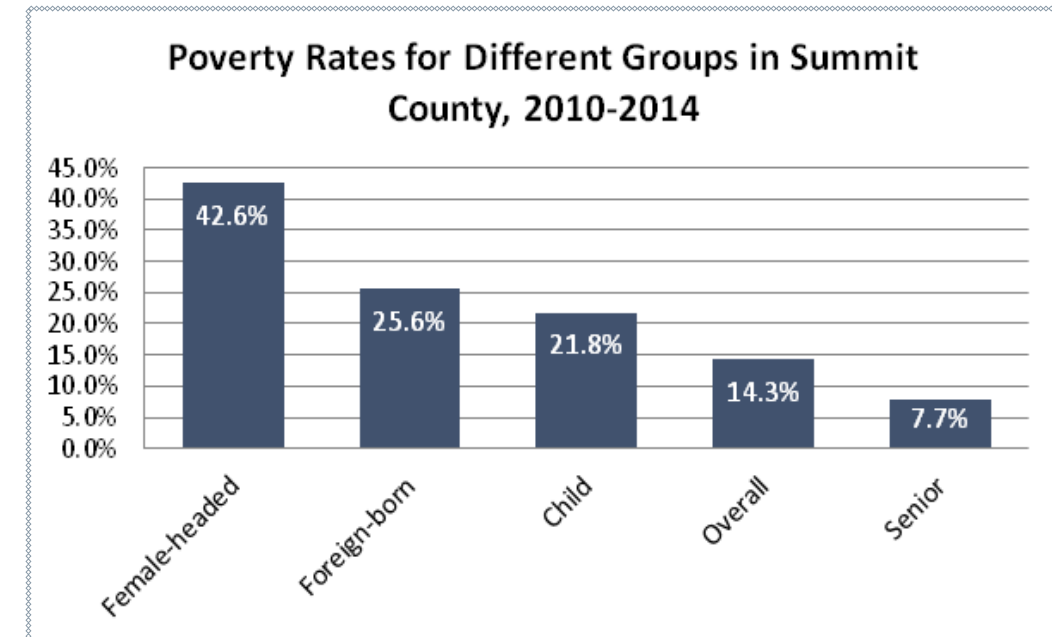
[i]Cubanski, Casillas, Damico, Poverty Among Seniors: An Updated Analysis of National and State Level Poverty Rates Under the Official and Supplemental Poverty Measures. Kaiser Family Foundation Issue Brief. June 2015

Poverty Rate By Cluster, Summit County, 2010-2014

Sexual Behaviors

Sexual and reproductive health is a key factor to the health outcomes of the individuals and overall health of the community. To evaluate it thoroughly, behaviors from adolescent age and beyond must be analyzed. Additionally, outcomes of the behaviors such as birth rates or sexually transmitted infections (STI's) must be assessed.

In 2013, Summit County high school (HS) and middle school (MS) students were given surveys called the Youth Risk Behavior Survey (YRBS) that asked about health risk behaviors. Within these surveys were questions regarding sexual behaviors and outcomes. Around 2.5% of MS students and 42% of HS students reported ever having had sexual intercourse. Those HS students who reported ever having sex were further asked how old they were at the first time they had intercourse. Overall, 6.8% of HS students reported having sex prior to the age of 13. The largest proportion of each race that reported having sexual intercourse prior to the age of 13 were of Hispanic ethnicity and the lowest proportion were those who identified as white.
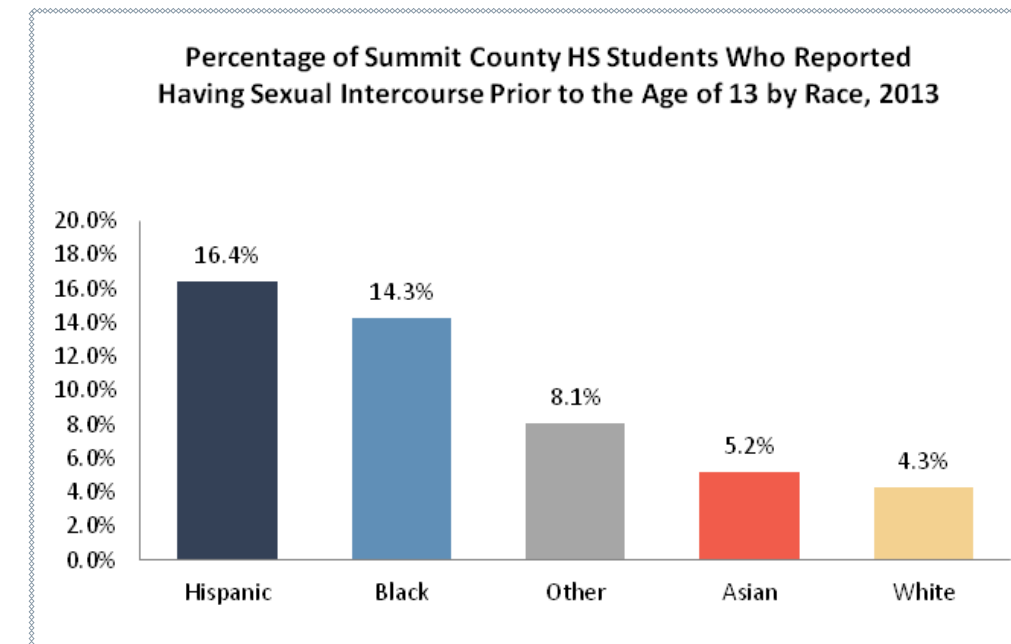
Additionally, those MS and HS students who reported being sexually active responded to a question regarding condom use that asked if they used condoms most of the time or always during sexual intercourse within the last three months. Seventeen percent of those in middle school and 58% of those in high school who were sexually active reported using a condom. Furthermore, HS students that reported having sexual intercourse were asked if they have ever been pregnant or gotten someone pregnant one or more times

during their life time. There was about a 4% prevalence of high school students who reported either having been pregnant or impregnated someone. The trend of overall teen birth rates in Summit County has declined between 2011 and 2015. However, black teen birth rates still remain relatively high compared to white teen birth rates.

The CDC estimates that even though young adults and adolescents ages 15 to 24 make up only about a fourth of the sexually active population, they account for half of all new STI infections.[22] About 84.9% of HS students in Summit County reported on the YRBS that they had learned about AIDS or HIV in school. The overall rate of new cases of HIV and AIDS in Summit County remained relatively the same from 2011 to 2015 with a rate of 7.4 and 7.6 new cases per 100,000 residents, respectively. However, there was an increase in chlamydia and gonorrhea rates over same time period (489 to 568 per 100,000 for chlamydia and 125 to 164 per 100,000 for gonorrhea).

Summit County Overall, Black and White Teen Birth Rates per 100,000, 2011-2015

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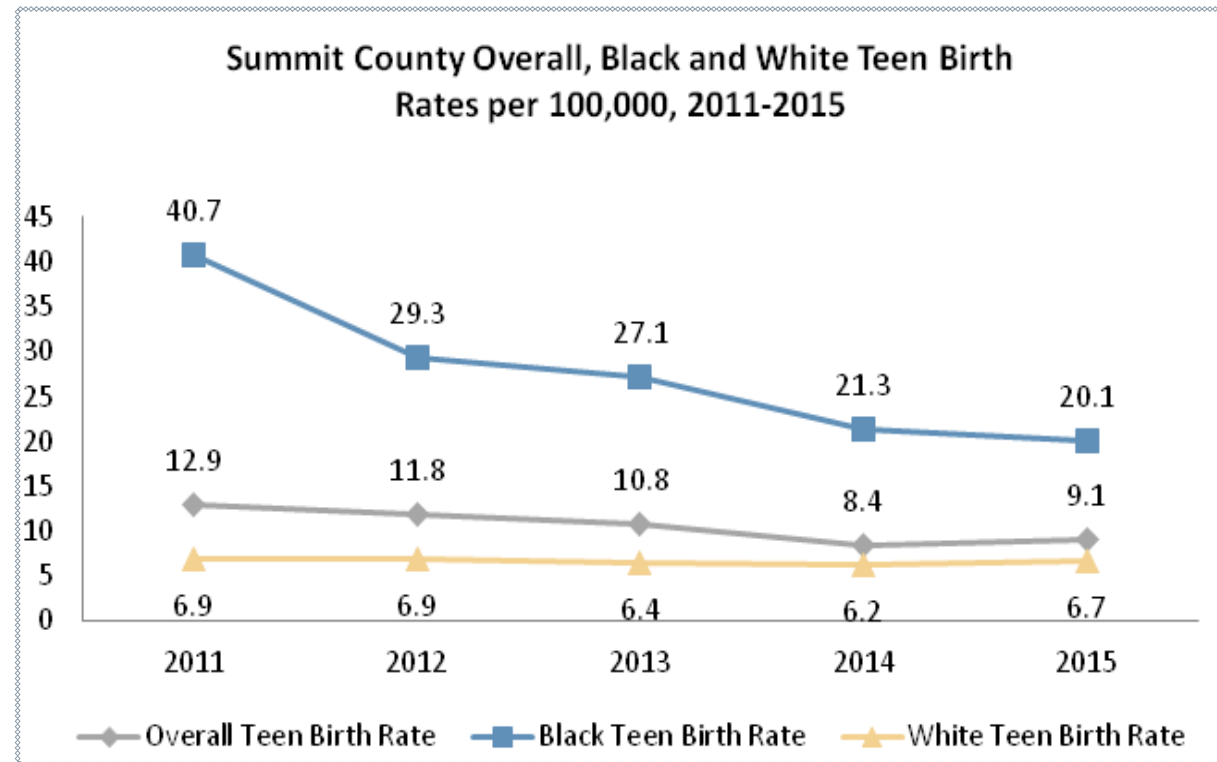
[22]Adolescents and Young Adults | Prevention | STDs | CDC. (2016). Cdc.gov. Retrieved 8 November 2016, from https://www.cdc.gov/std/life-stages-populations/adolescents-youngadults.htm

Density Map of Sexually Transmitted Diseases (Chlamydia & Gonorrhea), Summit County Year To Date As of November 2016
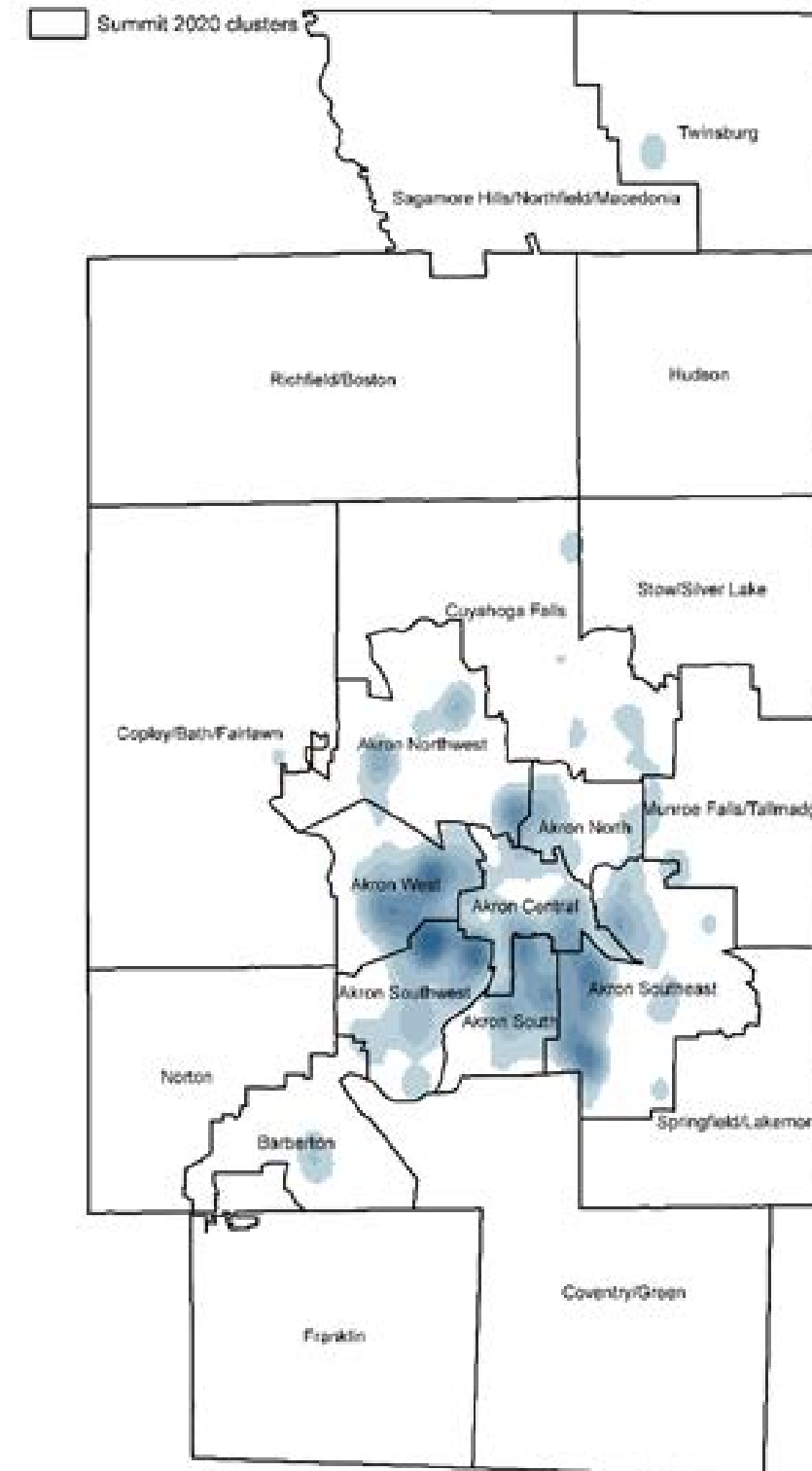
Opiates

Drug abuse has a major impact on our society. The financial impact alone is staggering. According to the National Institute on Drug Abuse, the combined cost of alcohol and drug abuse can run as high as $417 billion per year.

Drug Poisoning Deaths, 2000-2016

Here in Summit County and around the nation, opiate overdoses have been rising since at least 2013. In Summit County, there were 75 deaths due to overdoses in 2013; 118 in 2014, and 131 in 2015. In 2016, the number of verified overdose fatalities hit 2015's total by the end of August. The chart at top right shows the number of drug deaths from 2000-2015, and a projected total for 2016 of 198. If that projection is accurate, it would amount to at least a 51% increase in just one year. Because the death totals are only current through August, the projected figure will likely grow before 2017.
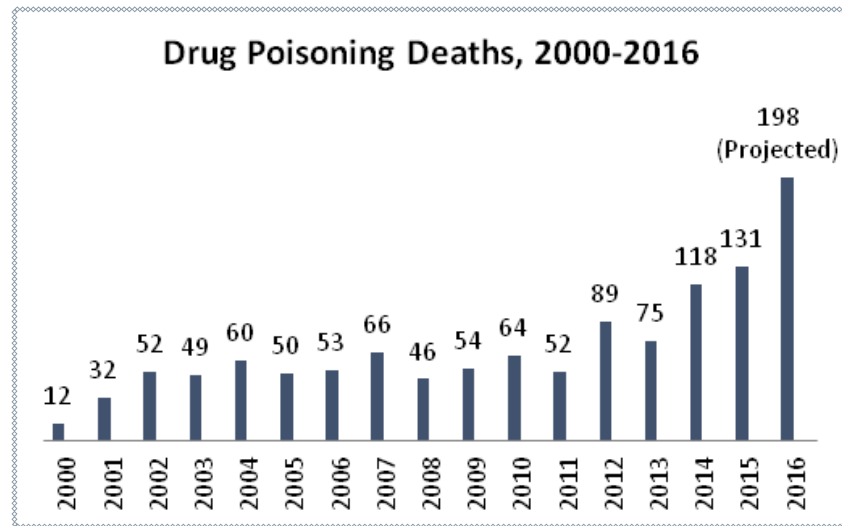
The following map, taken from death certificate data, shows where these overdose deaths are taking place. Hot spots include the Southwest, West, South, and Southeast clusters of Akron, as well as Barberton, Southeast Cuyahoga Falls, and the North Akron cluster.

What do people who die of drug overdoses look like? Two-thirds of overdose victims are male and are overwhelmingly white (88%). Overdose victims come from all age groups, with 52% between the ages of 15 and 44 and the remaining 48% age 45 or older.   Nearly all of that group (45% of the 48%) were between 45 and 64 years old.

Deaths are not the only issue in drug abuse. Overdoses that don't kill but do severely harm victims' health are also a big problem. From January to June of 2016, Summit County averaged about 3 overdose-related visits to an emergency room (ER) per day. However, drug-related ER visits hit double-digits on 69 of the 88 days between July 5 and September 30, reaching a high of 26 on September 2nd. All told, two-thirds of the year's total estimated overdose-related ER visits (69%) occurred between July and September.

What caused this spike in overdoses? A sudden increase of the powerful anesthetics fentanyl and/or carfentanil began showing up in the community mid-summer 2016. While the tidal wave of overdoses appears to be slowing, the opiate crisis in Summit County is far from over.

Density Map of Drug Overdose Deaths, Summit County, 2007-15
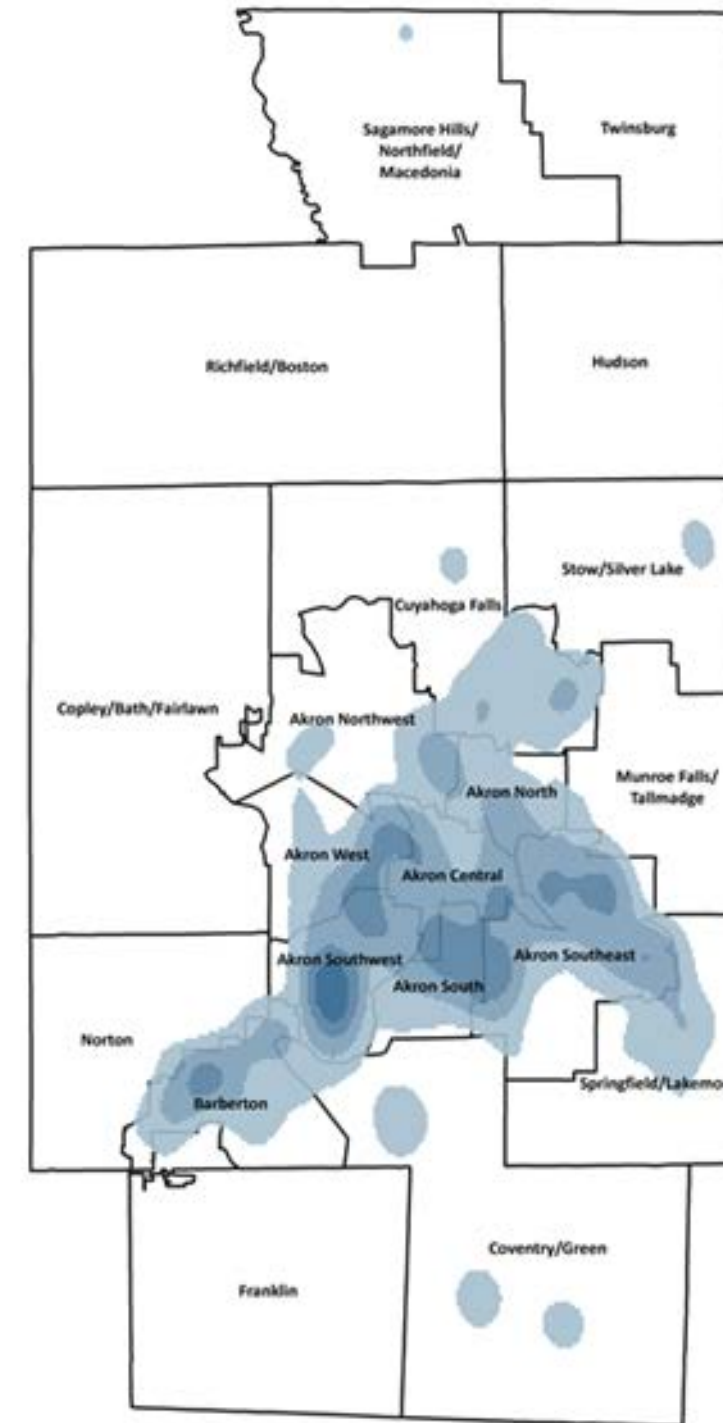
[1]National Institute on Drug Abuse, Trends and Statistics. Retrieved from https://www.drugabuse.gov/related-topics/trends-statistics.

Unemployment

The Great Recession ran from December 2007 to June 2009. Unfortunately, even though the recession ended, Summit County's employment problems didn't. The figure below shows how unemployment began to drop about a year after the recession ended.
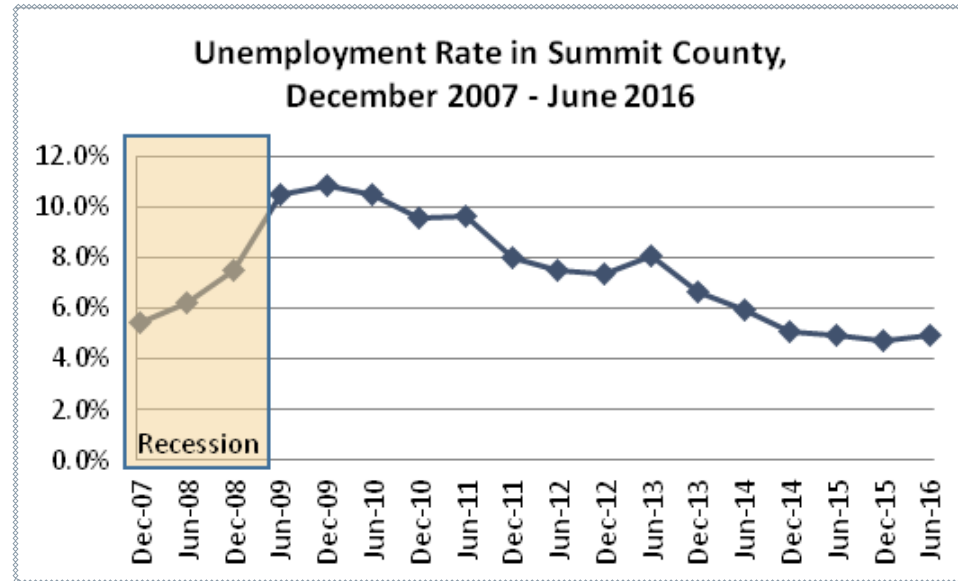
The following figure shows that the number of people in the labor force also dropped, and only began growing again about a year ago. Because of the way unemployment is calculated, people who leave the labor force aren't counted in the unemployment rate, which is why the unemployment rate was dropping at the same time fewer people were working or looking for work.
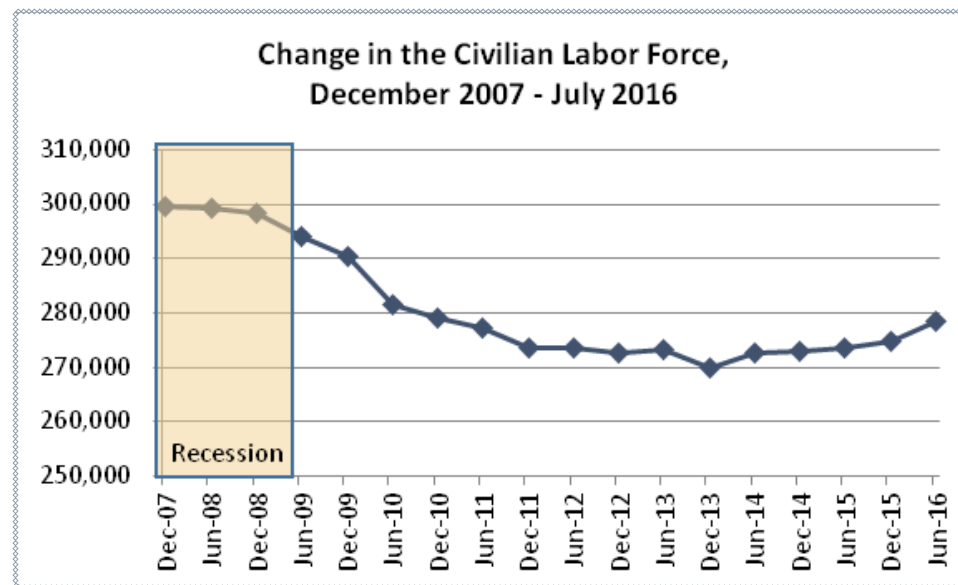
So why were people still leaving the labor force six years after the recession ended? One answer is that the recession didn't necessarily end for everybody. The following figure shows that labor force participation for workers with less than a HS diploma dropped from 60% in 2009 to just 50% in 2015 while labor force participation for those with a 4-year degree or higher only dropped from 88% to 87%.
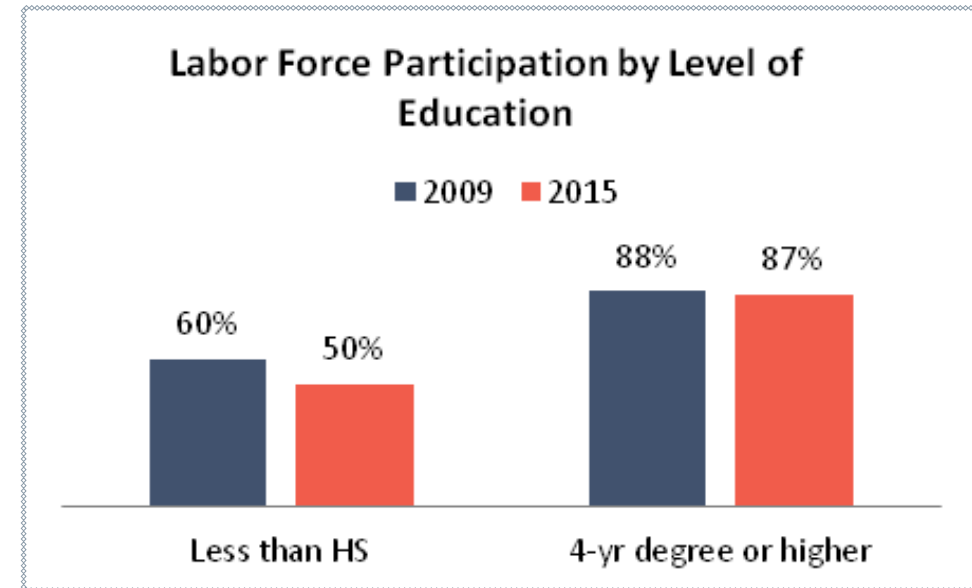
Labor force participation for those with less than a high school education was low to begin with, and dropped 10 times more than for those with a 4-year college degree or more. According to the Economic Policy Institute, "...the reason we are not seeing robust job growth is because businesses have not seen demand for their goods and services pick up in a way that would require them to significantly ramp up hiring." Supporting that conclusion is research that shows that labor force participation drops when wages and demand for lower-skilled workers both decline, a factor that is especially important for working-age men. Now that Summit County is finally seeing growth in the labor force once again, there might be hope that the recovery that began in 2009 might finally begin to reach everyone by 2017.

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[i]Economic Policy Institute, "Is There Really A Shortage of Skilled Workers", 2014

[ii]The Long-Term Decline In Prime-Age Male Labor Force Participation, June 2016; Executive Office of the President of the United States

Estimated Unemployment Rate, Summit County by Cluster, 2010-2014
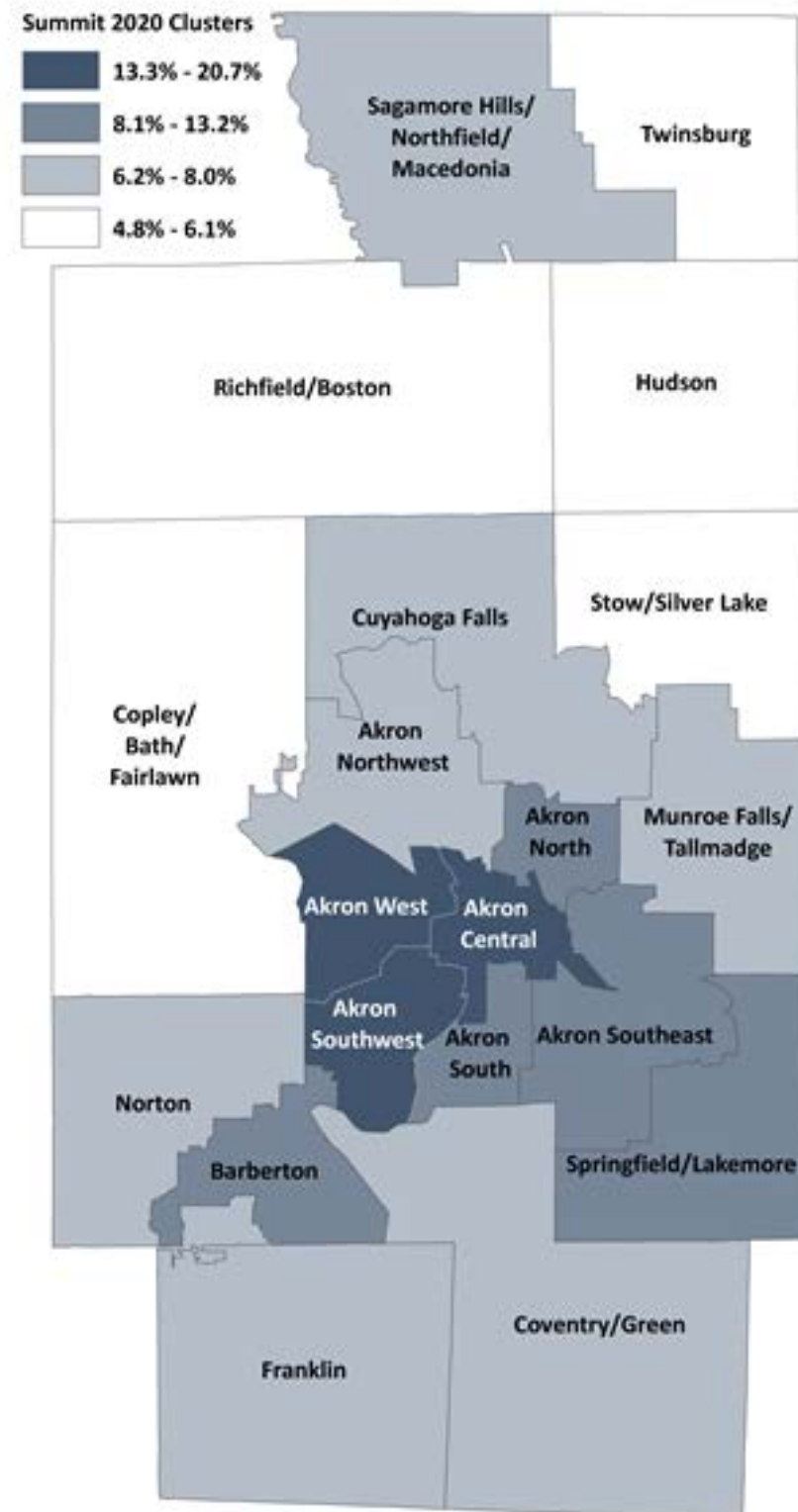
Maternal and Child Health

Infant Mortality

Infant mortality is defined as the death of a child before their first birthday. The infant mortality rate (IMR) is calculated by dividing the number of infant deaths during a time period by the number of live births during that same time period. Based on data from 2006 to 2015, the average infant mortality rate (IMR) in Summit County was 7.4 per 1,000 live births. This rate exceeds the Healthy People 2020 goal of 6.0 infant deaths per 1,000 live births. Infant mortality rates by year for Summit County can be seen in the graph below. Since black residents make up only about 14% of the population, the smaller sample size results in more variablility in the IMR by year, when compared to the total IMR and IMR for whites.

Infant mortality rate (IMR) per 1,000 live births, yearly rates from 2006 to 2015 and ten year average, 2006 to 2015.

Source: Summit County birth and death certificate data
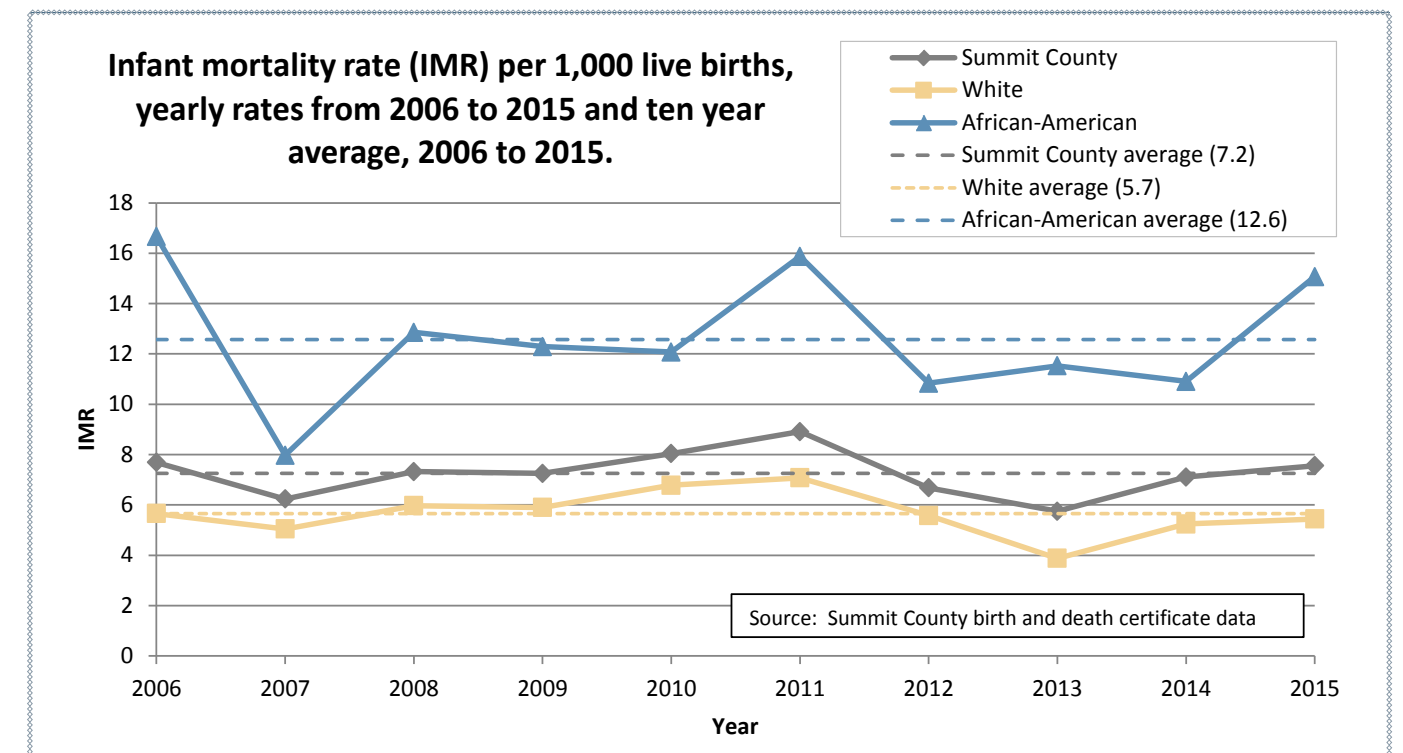
The leading causes of infant mortality in Summit County in the last ten years were prematurity, sleep-related death, congenital defects, and other causes (which include a variety of accidental, medical and undetermined causes). Safe sleep pratices and prevention of premature births are important interventions in the efforts to reduce infant death in Summit County. One promising method for reducing premature births is providing progesterone therapy to women with high-risk pregnancies. Between 2011 and 2016, almost 60% of high-risk pregnant women received progesterone therapy.

Causes of Infant Deaths in Summit County, 2006 to 2015

- Prematurity — 42%
- Other — 35%
- Sleep related deaths — 15%
- Birth defects — 7%

Source: Summit County Child Fatality Review Board
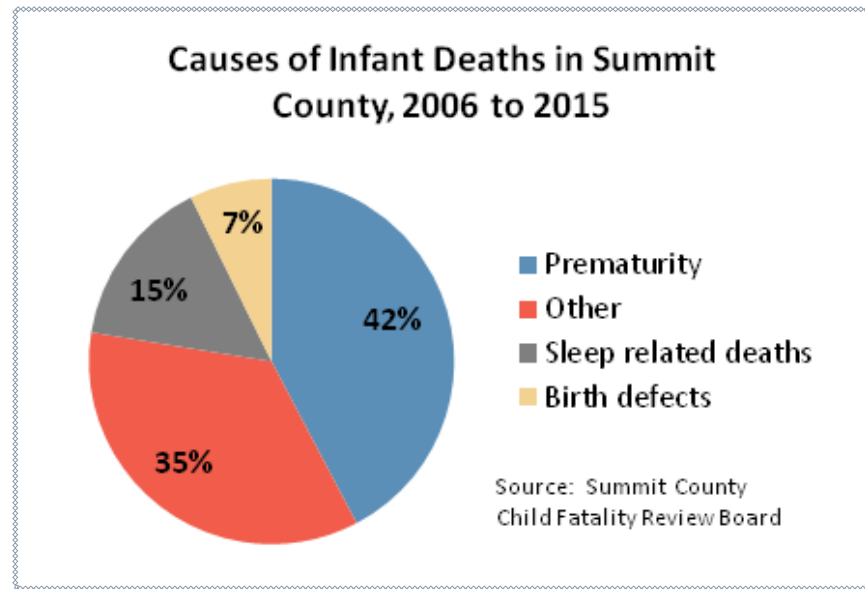
Racial disparities in the infant mortality rate exist in Summit County. From 2006 to 2015, the IMR for whites was 5.7, and the black IMR was more than double that rate at 12.6. Over 40% of infant deaths were due to premature birth, and black women in Summit County are also disproportionately affected by early birth. This disparity can also be seen in the racial demographics of Summit County births and infant deaths. From 2006-2015, 21% of all Summit County births were identified as black on the birth certificate, yet 37% of infant deaths were identified as black. In addition, infant mortality rates are highest in the areas of Summit County which have the highest proportions of black residents.

Racial Demographics for All Births and Infant Deaths in Summit County, 2006 to 2015

- Other
- Black
- White

Source: Birth Certificate Data and Summit County Child Fatality Review Board, 2006 to 2015
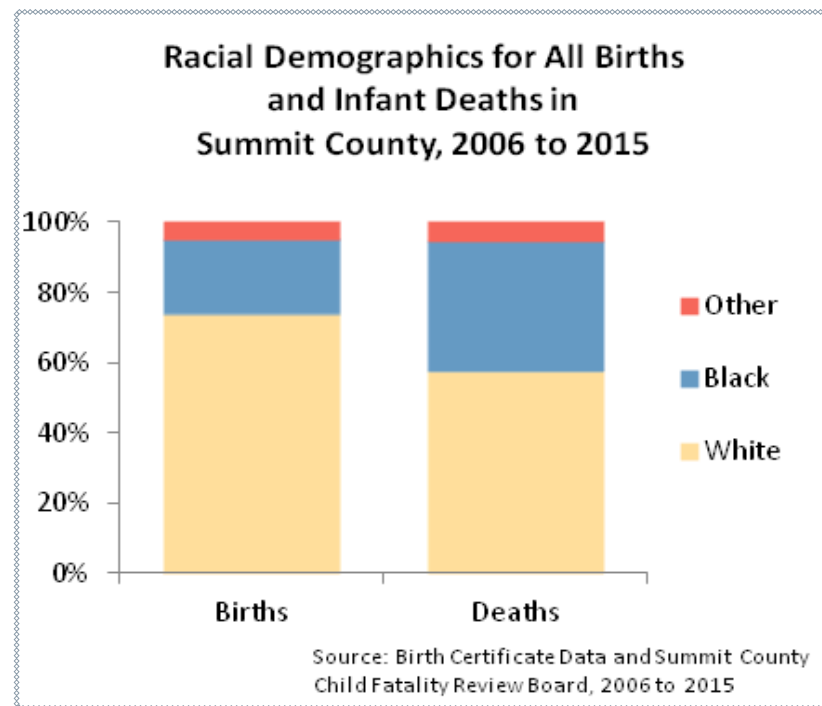
Infant Deaths Per 1,000 Live Births, Summit County, 2006-2015

- 8.9 - 12.7
- 6.8 - 8.8
- 4.5 - 6.7
- 1.6 - 4.4
- Fewer than 10 deaths*

Sagamore Hills/Northfield/Macedonia 3.9
Twinsburg 5.5
Richfield/Boston
Hudson
Cuyahoga Falls 6.2
Stow/Silver Lake 2.8
Copley/Bath/Fairlawn 7.6
Akron NW 7.4
Akron N 8.0
Munroe Falls/Tallmadge
Akron W 12.7
Akron Central 7.1
Akron SW 11.1
Akron S 5.9
Akron SE 9.9
Norton 8.8
Barberton 6.7
Springfield/Lakemore 7.4
Franklin
Coventry/Green 6.7

* Death rates calculated with fewer than 10 deaths per year fluctuate widely and are therefore too unstable to report

Mental Health, Alcohol and Drug Addiction

While the opiate overdose crisis has dominated the headlines, it is important to remember that other substances that cause physical and behavioral health problems haven't gone away.

The chart at right shows the top three substances that are related to people who are involved in the public alcohol, drug abuse, and mental health system. Opiates are responsible for more than one-third of the substance abuse issues of clients, but alcohol is the biggest single substance, at 44%. Cannabis rounds off the top three at 21%.
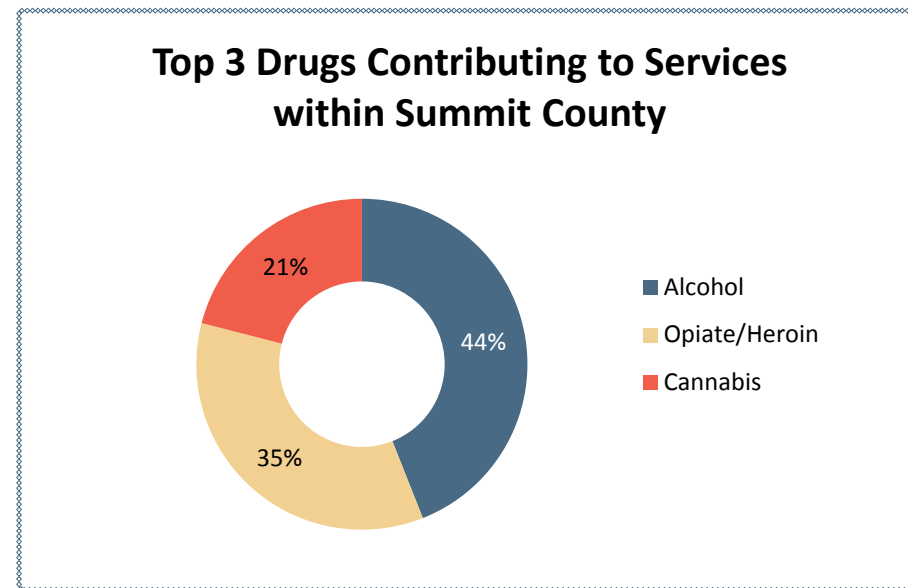
Looking at these top three by gender, it is clear that most of those who enter the system because of each of these substances are male, with cannabis and alcohol being the most male-dominated, while opiates are more balanced between males and females.

Top 3 Drugs Contributing to Services within Summit County

- Alcohol — 44%
- Opiate/Heroin — 35%
- Cannabis — 21%

Top 3 Drugs by Gender

	Men	Women
Alcohol	72%	28%
Opiate/Heroin	60%	40%
Cannabis	82%	18%
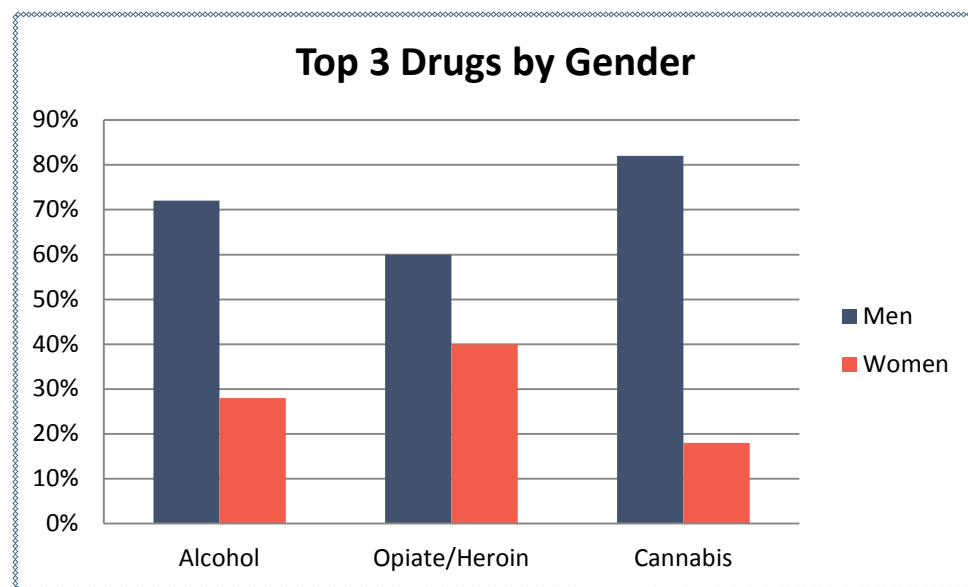
Summit County also experienced a significant increase in deaths by suicide in 2015. Between 2010 and 2014 there was an average of approximately 69 suicides per year. However, suicides rose in four of those five years. In 2015 this number rose to 87. The ADM Board started an analysis with the Summit County Medical Examiner's office in order to take a closer look at the demographics, trends and interactions with the healthcare system of those who were ruled as suicides during the previous five years. While the analysis continues, the research has shown some preliminary findings. Over the 2012-2015 time span, 75% of the deaths were among white, middle-aged (41-65) men. Eleven percent of those who died had an emergency room (ER) visit within the last month of their life, and 30% had visted an ER in the six months before their death. Furthermore, 35% had seen a physician for an outpatient visit within six months of their death. Stressors identified among those who died included: mental health diagnosis / family report of depressive symptoms (78%), alcohol use at time of death (33%), relationship / family problems (31%), and chronic pain / use of narcotic pain medicine (31%).

Whichever substance is the driving force behind a particular person's problems, it is important to remember that substance abuse and mental health disorders are often interrlated. That is why the Summit County Alcohol, Drug Addiction, and Mental Health Services Board (ADM) has increased their investments and programming around prevention and wellness activities for co-occurring substance abuse and mental health disorders. ADM programming isn't just focused on solving substance abuse and mental health disorders, but on building up protective factors as well.

One area in which this dual-focus on both fighting problems and building on strengths is in the area of suicides. Several ADM initiatives utilize this strategy, including: The Man Therapy awareness campaign which attempts to engage middle-age males, who are one of the most at-risk populations for suicide; programs such as the Crisis Text Line and school-based suicide prevention programs for youth that increases the protective factors and resiliency of Summit County's youth; the development and implementation of the Change Direction Campaign, which is designed to raise awareness about the how to recognize the signs of mental illnesses, and encourages those who need help to pursue it and; continued implementation of the Zero Suicide Initiative with emphasis on improving clinical care, and establishing suicide-specific clinical pathways and transitions in care.

Findings

The introduction to this report pointed out that good health comes from a combination of people taking care of themselves and of many factors that are beyond an individual person's direct control. The indicators presented in the previous sections describe many of those factors. That leads to the question, what do all of these factors have to say about the collective health of our citizens?

To begin answering that question, the focus needs to shift back to the health outcomes that were presented at the beginning of this report. In short, several key health outcomes are either unsatisfactory or moving in the wrong direction:

Population in fair or poor health – First, the percent of the population who say they are in fair or poor health has been rising, with one-in six Summit County residents saying their health was fair or poor by 2013. Even though these data are self-reported, a person's view of their own health has been linked in research to clinical health outcomes, with those saying that they were in fair or poor health often showing worse health outcomes than those saying their health is good or excellent. In fact, a 2016 study by the American Psychological Association noted that "...those adults who rate their health as fair or poor also report higher levels of stress and are more likely to report physical symptoms of stress than those who rate their health as excellent or very good."

Infant mortality – Infant mortality has been a major focus of health policy at both the state and local level for several years. The results presented earlier show that Summit County's infant mortality rates continue to be higher than the state's, and that the disparity between black and white infant mortality is high.

Suicide – While Summit County's suicide rates are more or less in line with state and national figures, the fact that one in six high school students have seriously considered committing suicide in the past year is also a high rate, whether that rate exists locally, state-wide, or nationally. Assuming the 2010 Census count of the population age 15-18 is correct (30,786), then a one-in-six rate would translate into roughly 5,200 children seriously considering suicide each year.

Communicable disease – Rates of HIV/AIDS, vaccine-preventable diseases, and the total number of communicable disease cases that must be reported to the state have all risen in the past several years. Among those reportable diseases, chlamydia and gonorrhea have risen at faster rates than all diseases combined. Only enteric diseases (gastrointestinal diseases) have dropped during that time.

Life expectancy – Finally, life expectancy has also been slowly declining. Though the overall life expectancy in Summit County for the period 2008-2015 is 77.8 years, the year-by-

year life expectancy during that period has been trending downward. In 2010 the county's life expectancy peaked at 78.3. Since then, life expectancy fluctuated annually, finally dropping by just over one year to 77.2 by 2015.

A related measure, years of potential life lost (YPLL) increased by 5% from 2008 to 2015. This indicator measures premature death; that is, the collective years of life lost by people who die before their normal life expectancy. By either measure, Summit County residents are not living as long as before, nor as long as they could be.

What factors are behind the outcomes in Summit County?

Health behaviors – In the Wisconsin County Health Rankings model, the health habits and behaviors of individual people account for 30% of the impact on a person's health. Unfortunately, several important health behavior indicators show that health behaviors are contributing to poor health outcomes.

- **Smoking**: Though smoking is declining, and the dangers of smoking have been common knowledge for a long time, nearly one-in-five Summit County residents still smoke. Comparing youth and adult smoking rates, the rates increase as age increases, from 4% of middle school students reporting they are current smokers, to 14% of high school students reporting the same, and 21% of adults who are also current smokers.

- **Physical activity**: Despite the fact that nearly everyone has access to at least some exercise opportunities (96%), one-in-four Summit County residents still report being physically inactive. A similar percentage of Summit County residents (one-in-four) have a BMI that classifies them as obese.

- **Alcohol use**: About one-in-six residents say they drink excessively. Alcohol use also happens among a significant minority of teens (more than 10% of middle school students and nearly a third of high school students). Finally, alcohol-impaired driving accounts for more than half of all deaths due to motor vehicle accidents.

- **Sexual behaviors**: chlamydia and gonorrhea infection rates have both increased, as has the incidence of HIV/AIDS. A small but important minority of teens engage in risky sexual behavior, with nearly 7% having their first sexual intercourse before age 13, more than 4% either being pregnant or getting someone else pregnant, while just over half of sexually-active teens report using a condom. One positive finding is that teen pregnancies have decreased significantly. This is consistent with national trends that also show reduced teen pregnancy rates.

- **Drug use**: Drug use among Summit County's population has been rising, as it has throughout the U.S. Abuse of both legal and illegal drugs, particularly opiates, has been significantly increasing death rates from overdoses. As pointed out earlier, overdose

deaths have more than doubled between 2011 and 2015. Overdose deaths already surpassed last year's totals by August 2016. More will surely follow.

Access to Clinical Health Services – Access to clinical care accounts for 20% of a person's health status according to the Wisconsin County Health Rankings model. Both access to care and the quality of that care have impacted the health of our community.

- **Access to health care services:** Even after two years of implementation of the Affordable Care Act (ACA), 8% of adults and 3% of children still do not have health insurance. Assuming that the incoming presidential administration follows through on its promise to repeal the ACA, that number is likely to rise once again.

  Having health insurance is only one part of the health access picture. Having access to a provider when they're needed is also important. Despite recent improvements, the availability of key medical providers such as primary care physicians and mental health providers still limit access for far too many Summit County residents.

  Language barriers also impact health care access. In this area, the recent influx of immigrant and particularly refugee populations from around the world has created challenges to health care access. The cost of translation services has risen quickly for many public and private service providers, creating resource problems for these agencies who have many competing needs to address.

- **Preventive health screenings**: Too few female Medicare patients receive mammographies, and as a result, many women don't receive a diagnosis of breast cancer until that cancer is in its late stages. Less than three-quarters of adults have visited a dentist in the past 12 months. In addition, about one-in-ten residents say they needed to see a doctor but could not because of cost.

Social and economic factors – Factors such as education, employment, and income make up the largest single share of individual health, 40% in the County Health Rankings model. Unfortunately, the recession of 2007-2009 has had a huge impact on the socioeconomic landscape of the entire nation. Both in Summit County and around the nation, economic hardship has made itself felt in a number of key areas.

- **Employment**: The recession was difficult for many Summit County residents, many of whom were still recovering from the 2001 recession. Unemployment rose sharply and many disaffected workers dropped out of the workforce. Recovery has been slow and incomplete, and many people who lost jobs in the recession have either not yet found work or have had to accept jobs at significantly lower wages than their previous work.

- **Income and poverty:** The recession's impact on the job market helped poverty rise sharply, ultimately peaking at nearly twice the level seen in 2000. Poverty rates have begun to decline since then, but significant portions of the community have unacceptably high

poverty rates that have either not improved or have not improved enough. Although the recession ended in 2009, median household incomes didn't show any meaningful improvement until 2012. There hasn't been any significant improvement in Summit County's median household income since then, and the gap between the county's median household income and national median household income is increasing.

- **Housing**: During the recession, housing affordability got much worse, particularly for renters. Nearly half of renters pay at least 30% of their income on housing alone, putting severe pressure on other vital household expenditures such as food, clothing, and medical care.

- **Social Connectivity:** The percentage of Summit County households that do not have broadband access has declined, indicating greater potential for social connectivity.

Physical environment –Physical environmental conditions related to air and water quality, as well as housing quality and public transit usage makes up 10% of individual health in the County Health Rankings model.

- **Housing condition**: The percent of housing in Summit County that is in below average or worse condition is beginning to move in the right direction. However, there is more than a two decade difference in the average age of housing between those in older, lower income census tracts and newer, higher income census tracts.

  Lead in housing is still a big potential problem, with nearly three-quarters of homes in Summit County being built before 1978, the last year that lead-based paint could be sold for residential purposes. Fortunately, the number of children testing positive for lead exposure per 1,000 has improved over the past six years.

- **Air quality:** Air quality has improved by a couple of measures, fine particulate matter and Ozone levels. Other kinds of air pollution that are monitored, such as carbon monoxide and sulfur dioxide, have remained within standards.

  Other problems remain, however. About one-third of homes tested for Radon exposure in Summit County are above recommended Radon levels, while dozens of investigations for indoor smoking violations occur annually. Also, more than one third of AMHA residents are estimated to smoke in their residences daily, despite the agency's official smoke-free policy.

- **Transportation:** Like many places, Summit County is very automobile-dependent, with a vast majority of residents reliying on their own vehicles to travel to and from work. Public transit usage is low, with only 2% of commuters relying on public transit to get to and from work. Vehicle miles travelled have continued to increase over the past several years.

- **Land use:** Summit County's network of stores that sell alcohol and/or tobacco potentially has direct contact with a high percentage of the county's population. Over 1,000

establishments (bars, restaurants and stores) are currently licensed to sell alcohol, while nearly 500 are licensed to sell tobacco. Together, about one-third of Summit County residents live within a quarter mile of a store that sells alcohol, tobacco, or both. The rise of e-cigarettes has also been observed, with 11 retail outlets currently licensed to sell these products.

Toxic releases from sources located in Summit County also have an impact on the health of county residents. Collectively, over 1,000,000 pounds of toxic waste was released into the environment in 2014. While that amount is an improvement from five years earlier, it still amounts to 2.1 pounds of toxic waste for every Summit County resident. Finally, Summit County is home to 40 officially-designated Brownfield sites. These sites and the industrial pollution that they contain, will require a significant investment of resources if the land they occupy is ever to be put back into productive use.

Health disparities – There is one final impact on the health of Summit County's population to note; the impact of disparities in health between one type of people and another. According to Healthy People 2020, a health disparity is "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."

When looking at the many indicators chosen to be part of this assessment, the one type of disparity that stands out above the others is racial disparity. While different types of disparity can be found in one or more subject areas, racial disparities can be found in nearly all subject areas where data is available.

For example, the following chart reviews data from a variety of social determinants of health. The chart presents the data as a ratio of black-to-white figures for each indicator. The white figure is set to a benchmark of one, while the black figure is compared to that number. In all seven areas shown below, the ratio of black-to-white is always 2:1 or higher; that is, the black rate is at least twice as bad as the white rate for all seven indicators. These seven indicators are just examples; at least that many more examples could be found where the disparity between white and black outcomes is meaningful.
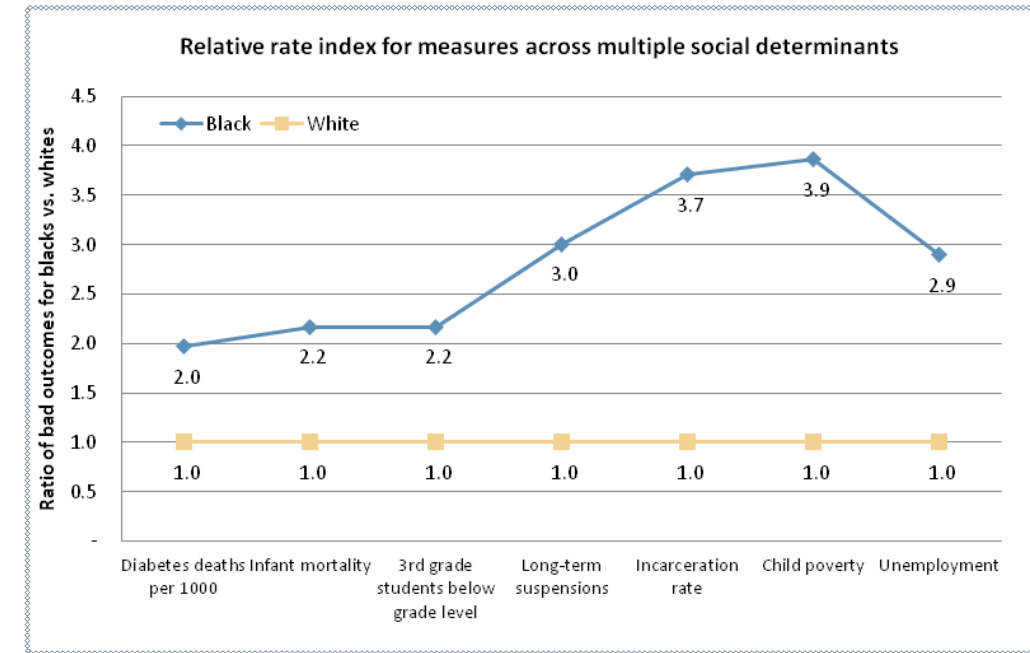
The causes of racial disparities are difficult to nail down precisely. A great deal of research has shown that racial differences in morbidity rates (how often people are ill or suffer from medical conditions) and mortality rates (how often people die and from what causes) are caused by socioeconomic conditions. More recently, a growing body of research is beginning to show the opposite as well, that such differences cannot be explained by socioeconomic conditions alone, but that race itself is often the primary cause.

These findings aren't necessarily as contradictory as they seem. If anything, they highlight the complex nature of how health is determined; partly by people's own behavior, partly by the environment they live in, and partly by the way they are treated by others.

How to go about addressing these disparities will be one of the tasks involved in creating the Community Health Improvement Plan. For purposes of the Community Health Assessment, it is enough to say that important health disparities by race do exist in Summit County, and that addressing them will require the community to consider issue-by-issue whether race is a cause of the disparity or a result of other factors.

[i]American Psychological Association (2016). Stress in America: The impact of discrimination. Stress in America™ Survey

[ii]Healthy People 2020 (2016). Retrieved from https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities.

[iii]https://www.racialequityinstitute.org/

Appendices

Appendix A

The breakdown of the greater Summit County region indicators (442- and 443-) were found using Explorys. All indicators were found at five year intervals except hypertension which was found at a three year interval.   Denominators were found using population estimates in Explorys.

Indicators	442 Zip Codes	443 Zip Codes
Adults with Type II Diabetes	12.4%	16.8%
Pregnancy and Progesterone	62.8%	53.9%
Postpartum Depression	10.7%	12.9%
Hypertension	36.2%	32.6%
Uncontrolled Diabetes	13.6%	16.5%
Adults without Diabetes with Elevated A1C	3.2%	3.7%
Obesity	24.9%	27.0%
Adults with Depressive Disorder	17.8%	20.1%
Adults with Anxiety Disorder	19.2%	21.6%
Insufficient Sleep	4.8%	4.1%

Adults with Type II Diabetes:
- Demographic of age 18 and older
- Diagnosis of Type II Diabetes Mellitus

Pregnancy and Progesterone:
- Finding of one or multiple of the following:
  - Pregnant planned
  - High risk pregnancy
  - Intrauterine pregnancy
  - Normal pregnancy
  - Multigravida
  - Unplanned pregnancy
- AND drug pharm class of one or multiple of the following:
  - Hydroxyprogesterone
  - Progesterone derivative
  - Synthetic progestogen and progestogen

- AND finding of one or multiple of the following:
  - Abnormal vaginal bleeding
  - Finding of vaginal bleeding
  - Pre-eclampsia or eclampsia with pre-existing hypertension
  - Pre-eclampsia
  - Polyhydraminos
  - Cigarette smoker
  - High risk pregnancy due to history of preterm labor
  - Cervical incompetence
  - Fetal or neonatal effect of incompetent cervix
  - History of gestational diabetes mellitus
  - Gestational diabetes mellitus
  - Stage 2 hypertension
  - Stage 1 hypertension
  - Multiple pregnancy

Postpartum Depression
- Diagnosis of depressive disorder
- AND finding of one or multiple of the following:
  - Postpartum
  - Postpartum state
  - Pregnancy
  - Finding related to pregnancy

Hypertension
- Demographic of age 18 and older
- AND finding of one or multiple of the following:
  - Stage 1 hypertension (systolic 140-159, diastolic 90-99)
  - Stage 2 hypertension (systolic ≥ 160, diastolic ≥100)

Uncontrolled Diabetics
- Demographic of age 18 and older
- AND diagnosis of Type II Diabetes Mellitus
- AND observation of A1C/Blood-Serum-Plasma measured in percent, of ≥ 7.

Pre-diabetics
- Demographic of age 18 and older
- AND diagnosis of Diabetes Mellitus (excluded)
- AND observation of A1c/Blood-Serum-Plasma measured in percent, of 5.7 to 6.4.

Obesity
- Demographic of age 18 and older
- AND observation of BMI measured in kg/m^2 of ≥ 30.0

Insufficient Sleep
- Demographic of age 18 and older
- AND finding of sleep deprivation
- AND/OR drug brand name of Ativan
- AND/OR drug generic name of Zolpidem

Adults with Depressive Disorder
- Demographic of age 18 and older
- AND diagnosis of one or multiple of the following:
  - Depressive Disorder
  - Severe Depression
  - Recurrent Depression
  - Minor Depressive Disorder
  - Moderate Depression
  - Reactive Depression
  - Agitated Depression
  - Atypical Depression
  - Chronic Depression
  - Dysthymia
  - Endogenous Depression
  - Major Depressive Disorder
- AND/OR Drug brand name of one or multiple of the following:
  - Zoloft
  - Prozac
  - Celexa
  - Lexapro
  - Paxil
  - Luvox
  - Oleptro
- AND/OR drug generic/pack name of one or multiple of the following:
  - Sertraline
  - Fluoxetine
  - Citalopram
  - Escitalopram
  - Paroxetine
  - Fluvoxamine

Adults with Anxiety Disorder
- Demographic of age 18 and older
- AND finding of one or multiple of the following:
  - Anxiety
  - Panic
  - Anxiety State
  - Anticipatory Anxiety
  - Anxiety Attack

- AND/OR diagnosis of one or multiple of the following:
  - Anxiety Disorder
  - Posttraumatic Stress Disorder
  - Phobic Disorder
  - Generalized Anxiety Disorder
  - Dream Anxiety disorder
  - Separation Anxiety
  - Panic Disorder
  - Organic Anxiety Disorder
  - Mixed Anxiety and Depressive Disorder
  - Acute Distress Disorder
  - Physical and Emotional Exhausted State
- AND/OR drug brand name of one or multiple of the following;
  - Xanax
  - Klonopin
  - Ativan
  - Valium
- AND/OR drug generic/pack name of one or multiple of the following:
  - Alprazolam
  - Clonazepam
  - Lorazepam

Appendix B

	Base Year	Current Year	Base Year Data	Current Year Data	Which Way Should Indicator Move?	Which Way Did It Actually Move?	Percent Change	Got Better/ Got Worse/ No Significant Change/ NA
CLINICAL HEALTH								
CANCER SCREENING								
Percentage of female Medicare enrollees ages 67-69 that receive mammography screening	2011	2013	58.8%	59.0%	Up	Up	0.3%	Got better
Late stage diagnosis of breast cancer	-	2008-2012	-	28.90%	Down	-	NA	NA
Percent of women age 18+ that report pap test in the last three years	2008-2012	-	78.4%	-	Up	-	NA	NA
Percent of adults 50 and over who have had colorectal cancer screening as recommended	2008	-	60.1%	-	Up	-	NA	NA
PRENATAL CARE								
Percent of high risk pregnant women on progesterone therapy	-	2011-2016	-	59.7%	-	-	NA	NA
Percent of women seeking maternal depression related postpartum care	-	2011-2016	-	11.7%	Down	-	NA	NA
Percent of pregnant women receiving 1st trimester prenatal care	2010	2015	74.9%	72.0%	Up	Down	(3.9%)	Got worse
VACCINATION								
Percent of WIC children up to date immunizations by their second birthdays	2008	2015	68.1%	64.9%	Up	Down	(3.6%)	Got worse
ORAL HEALTH								
Percent of adults who have been to a dentist in the past 12 months	2008	2012	70.0%	71.1%	Up	Up	1.6%	Got better
Percent of students that saw dentist for routine check up:								NA
Middle School	-	2013	-	75.6%	Up	-	NA	NA
High School	-	2013	-	71.5%	Up	-	NA	NA
Proportion of children and adolescents who used the oral health system within the past year	-	2008	-	74.8%	Up	-	NA	NA
Proportion of adults (age 18-64) who used the oral health system within the past year	-	2008	-	58.7%	Up	-	NA	NA
Ratio of Medicaid population per dentist who treats Medicaid patients	-	2012	-	1232:1	Up	-	NA	NA
Number of schools particpating in school-based sealant programs	-	2012	-	47	Up	-	NA	NA
Number of dentists and oral surgeon practices that accept Medicaid	-	2015	-	33	Up	-	NA	NA
HEALTH CARE ACCESS								
Percent of adults 18-64 who had no health insurance	2012	2015	16%	8.2%	Down	Down	(48.4%)	Got better
Percentage of dual eligible adults in Summit County Medicaid/Medicare	-	2015-2016	-	3.9%			NA	NA
Percentage of children under 18 without health insurance	2011	2015	6.5%	3.4%	Down	Down	(47.7%)	Got better
Ratio of Primary care physicians to population	2011	2013	1061:1	1000:1	Down	Down	(5.7%)	Got better
Ratio of Mental health providers to population	2013	2015	799:1	530:1	Down	Down	(33.7%)	Got better
Average waiting times (days) for detox and residential treatment:								
Detox	-	2015	-	9 for males; 6 for females	Down	-	NA	NA
Residential treatment	-	2015	-	62 for males; 32 for females	Down	-	NA	NA
Ratio of Dentists to population	2012	2013	1695:1	1709:1	Down	Up	0.8%	Got worse
Preventable hospital stays (Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees)	2011	2013	77	67	Down	Down	(13.0%)	Got better
Percent of adults 18+ who needed to see a doctor but could not because of cost	-	2006-2012	-	11.0%	Down	-	NA	NA
LANGUAGE ACCESS								
Cost of translation services among Summit County large public institutions	-	2015	-	$865,047	Down	-	NA	NA
Language other than English spoken at home, percent of persons age 5 years +. (out of those who reportedly speaks English less than very well)	2011	2015	37.8%	42.2%	Down	Up	11.6%	Got worse

	Base Year	Current Year	Base Year Data	Current Year Data	Which Way Should Indicator Move?	Which Way Did It Actually Move?	Percent Change	Got Better Got Worse No Significant Change
HEALTH SCREENING								
Hypertension Systolic blood pressure ≥140, dystolic blood pressure ≥ to 90	-	2013-2016	-	34.9%	Down	-	NA	NA
Adults with Uncontrolled Diabetes whose A1C is greater than or equal to 9%	-	2011-2016	-	14.8%	Down	-	NA	NA
Adults without Diabetes with elevated A1C	-	2011-2016	-	3.4%	Down	-	NA	NA
BMI of 30.0 kg/m^2 or greater (Obesity)	-	2011-2016	-	25.6%	Down	-	NA	NA
Adults diagonsed with depressive disorder	-	2015	-	18.6%	Down	-	NA	NA
Adults diagonsed with anxiety disorder	-	2015	-	20.0%	Down	-	NA	NA
HEALTH BEHAVIORS								
SMOKING								
Adult smoking	-	2014	-	21.0%	Down	-	NA	NA
Youth smoking - Middle School (current cigarette user)	-	2013	-	4.2%	Down	-	NA	NA
Youth smoking - High School (current cigarette user)	-	2013	-	13.5%	Down	-	NA	NA
PHYSICAL ACTIVITY								
Physical inactivity	2011	2012	23%	24.0%	Down	Up	4.3%	Got worse
Access to exercise opportunities	2010, 2012	2014	91.0%	96.0%	Up	Up	5.5%	Got better
ALCOHOL USE								
Excessive drinking	2006-2012	2014	18.0%	16%	Down	Down	(11.1%)	Got better
Youth current alcohol use - Middle School (last 30 days)	-	2013	-	10.8%	Down	-	NA	NA
Youth current alcohol use - High School (last 30 days)	-	2013	-	30.3%	Down	-	NA	NA
Alcohol-impaired driving deaths	2014	2015	49.0%	52.0%	Down	Up	6.1%	Got worse
SEXUAL BEHAVIORS								
Sexually transmitted infections:								
Chlamydia	2011	2015	489 per 100,000	568 per 100,000	Down	Up	16.2%	Got worse
Gonorrhea	2011	2015	125.2 per 100,000	164 per 100,000	Down	Up	31.0%	Got worse
Youth sexual behaviors:								
Condom use (middle school)	-	2013	-	16.7%			NA	NA
Condom use (high school)	-	2013	-	58.2%			NA	NA
Had first sexual intercourse before age 13 years (high school)	-	2013	-	6.8%			NA	NA
Been pregnant or gotten someone pregnant (high school)	-	2013	-	4.2%			NA	NA
HIV/AIDS	2011	2015	7.4 per 100,000	7.6 per 100,000	Down	Up	2.7%	Got worse
Black teen birth rate	2011	2015	40.7 per 1,000	20.1 per 1,000	Down	Down	(50.6%)	Got better
Teen birth rate	2011	2015	12.9 per 1,000	9.1 per 1,000	Down	Down	(29.5%)	Got better
DRUG USE								
Drug overdose deaths per 100,000	2011	2015	9.6 per 100,000	24.2 per 100,000	Down	Up	152.1%	Got worse
Youth drug use: High School (ever used at least one type of illicit drug)	-	2013	-	22.6%	Down	-	NA	NA
Ever used marijauna (High School)	N/A	2013	-	36.6%	Down	-	NA	NA
Ever used cocaine (High School)	N/A	2013	-	5.8%	Down	-	NA	NA
Ever used heroin (High School)	N/A	2013	-	4.1%	Down	-	NA	NA
Ever used methamphetamines (High School)	N/A	2013	-	5.0%	Down	-	NA	NA

	Base Year	Current Year	Base Year Data	Current Year Data	Which Way Should Indicator Move?	Which Way Did It Actually Move?	Percent Change	Got Better Got Worse No Significant Change
UNINTENTIONAL INJURIES								
Motor vehicle crash deaths per 100,000	2011	2015	8.5 per 100,000	5.2 per 100,000	Down	Down	(38.8%)	Got better
Falls among senior citizens leading to death	2011	2015	82 per 100,000	39 per 100,000	Down	Down	(52.4%)	Got better
ER visit rate resulting from fall among senior citizens	2011	2015	4.6%	5.2%	Down	Up	13.0%	Got worse
Death resulting from traumatic brain injuries	-	2010	-	17.4 per 100,000	Down	-	NA	NA
Hospitalization rate resultuing from traumatic brain injuries	-	2010	-	66.4 per 100,000	Down	-	NA	NA
ER Visit from TBI, Concussion and Head Injury (all ages)	2011	2015	309.4 per 100,000	457.9 per 100,000	Down	Up	48.0%	Got worse
SLEEP								
Insufficient sleep (diagnosed with "sleep deprivation" or on medication for sleep)	-	2011-2016	-	4.5%	Down	-	NA	NA
Youth average eight or more hours of sleep - Middle School	-	2013	-	53.7%	Up	-	NA	NA
Youth average eight or more hours of sleep - High School	-	2013	-	26.8%	Up	-	NA	NA
SOCIAL AND ECONOMIC FACTORS								
EDUCATION								
Percent of persons age 25+ with a 2-year or higher degree	2009	2015	36.2%	40.0%	Up	Up	10.5%	Got better
Percent scoring "advanced" or "accelerated" on 3rd grade reading proficiency test	2014	2015	70%	65%	Up	Down	(7.1%)	Got worse
Average teacher to student ratios by district	2011	2015	14.9	15.7	Down	Up	5.4%	Got worse
Kindergarten Readiness	-	2015	70.0%	65.0%	Up	Down	NA	Got worse
Disciplinary actions per 100 students	2011	2016	16	10.3	Down	Down	(35.6%)	Got better
Not in school and not working	2005-2009	2010-2014	3.8%	3.5%	Down	Down	(7.9%)	Got better
High-school graduation	2011	2015	89.6%	88.8%	Up	Down	(0.9%)	Got better
EMPLOYMENT								
Under employment	-	2015 4th quarter	-	1.7% / -0.4% / -1.3% (high / medium / low)	Down	-	NA	NA
Unemployment rate	2009	2015	11.1%	6.0%	Down	Down	(45.9%)	Got better
Income inequality	2009	2015	0.454	0.476	Down	Up	4.8%	Got worse
Median household income	2009	2015	$51,896	$51,309	Up	Down	(1.1%)	Got worse
Types of jobs:					NA	NA	NA	NA
Health care and social assist	2012 q2	2016 q2	16.3%	16.5%, $48,530	NA	NA	NA	NA
Retail trade	2013 q2	2016 q2	11.6%	11.3%, $29,992	NA	NA	NA	NA
Manufacturing	2014 q2	2016 q2	10.7%	10.6%, $55,464	NA	NA	NA	NA
Retail trade	2013 q2	2016 q2	11.6%	11.3%, $29,992	NA	NA	NA	NA
Manufacturing	2014 q2	2016 q2	10.7%	10.6%, $55,464	NA	NA	NA	NA

	Base Year	Current Year	Base Year Data	Current Year Data	Which Way Should Indicator Move?	Which Way Did It Actually Move?	Percent Change	Got Better Got Worse No Significant Difference
POVERTY								
Families in Emergency Shelter per 1,000 families	2009-2010	2014-2015	5.31	4.68	Down	Down	(11.9%)	Got better
Individuals in Emergency Shelter per 1,000 population	2009-2010	2014-2015	4.18	3.77	Down	Down	(9.8%)	Got better
Poverty rate	2009	2014	14.7%	14.3%	Down	Down	(2.7%)	Got better
Children in poverty	2005-2009	2010-2014	18.2%	21.2%	Down	Up	16.5%	No Sig Difference
Female head of household poverty rate	2005-2009	2010-2014	43.2%	42.6%	Down	Down	(1.4%)	No Sig Difference
Average wages	2011 Q2	2016 Q2	$41,571	$47,303	Up	Up	13.8%	No Sig Difference
WIC participation	-	**2016**	-	68.3%	**Up**	**NA**	**NA**	**NA**
Percent of InfoLine calls asking about utility payment assistance	2009-2010	2014-2015	21.02%	26.02%	Down	Up	23.8%	Got worse
COMMUNITY SAFETY								
Violent crime per 100,000	2006-2010	2011-2013	833	862	Down	Up	3.4%	Got worse
Injury Deaths per 100,000	2010	2015	37.5	44.1	Down	Up	(17.6%)	Got worse
Homicides per 100,000	2010	2015	4.6	5.5	Down	Up	(19.6%)	Got worse
Elder abuse neglect & exploitation cases opened per 1,000	2014	2016	8.3	9.7	Down	Up	(16.9%)	Got worse
Hate crimes per 100,000	2010	2014	6.7	4.3	Down	Down	(35.8%)	Got better
Fall injuries for senior populations	2011	2016	59.0%	59.7%	Down	Up	1.2%	Got worse
Children in need of protective services per 100,000 children	2010	2015	18.1	18.5	Down	Up	2.2%	Got worse
TRANSPORTATION								
Unlinked passenger trips per 100,000 population	2013	2014	9,998	10,074	Up	Up	0.8%	Got better
Commute Times (% travelling an average of 45 minutes or more to work)	2009	2015	10.6%	11.0%	Down	Up	3.8%	Got worse
HOUSING								
Renter Housing Affordability (%paying more than 30 percent of income on housing)	2011	2015	55.4%	46.3%	Down	Down	(16.4%)	Got better
Owner Housing Affordability (%paying more than 30 percent of income on housing)	2011	2015	24.4%	18.9%	Down	Down	(22.5%)	Got better
AMHA waiting list	**2011**	**2015**	4,435	17,044	**Down**	**Up**	(73.9%)	**Got worse**
FAMILY STRUCTURE/SOCIAL CONNECTIVITY								
Children in single parent households	2009	2014	31.2%	35.7%	Down	Up	14.4%	Got worse
Residential segregation - black/white	2000	2010	66.0	59.7	Down	Down	(9.5%)	Got better
Number of seniors on home health (PASSPORT enrollment as a % of seniors 65+)	-	2014	-	3.0%			NA	NA
Residents without internet access	2013	2015	22.6%	18.4%	Down	Down	(18.6%)	Got better

	Base Year	Current Year	Base Year Data	Current Year Data	Which Way Should Indicator Move?	Which Way Did It Actually Move?	Percent Change	Got Better Got Worse No Significant Difference
PHYSICAL ENVIRONMENT								
HOUSING								
% of Housing in Below Average or Worse Condition	2010	2016	6.62%	6.52%	Down	Down	(1.5%)	Got better
Housing Quality Standard Inspection:								
Above average	-	2016	-	24.5%	Up	-	NA	NA
Average	-	2016	-	69.0%	Up	-	NA	NA
Average age of housing in low income census tracts (years)	-	2016	-	81	Up	-	NA	NA
Percentage of owner-occupied vs rental housing (Owned %)	2010	2015	69.1%	64.9%	Up	Down	(6.1%)	Got worse
Lead Data: Summit County children testing positive for lead (% of those tested)	2012	2015	3.7%	1.5%	Down	Down	(59.5%)	Got better
Lead Data: Number of lead abatements	2010	2015	95	88	Up	Down	(7.4%)	Got worse
Lead Data: % of housing built before 1978	-	2016	-	72.8%	Down	-	NA	NA
Homelessness and county housing stock:								
Total Homelessness rate (per 1,000 residents)	2011	2015	1.58	1.40	Down	Down	(11.4%)	Got better
Rental Vacancy Rate	2011	2015	10.7%	7.5%	Down	Down	(29.9%)	Got better
# of Properties Demolished or currently on Demolition List	-	2016	-	147			NA	NA
# of Abandoned or Vacant Homes	2010	2015	5.0%	5.3%	Down	Up	5.6%	Got worse
AIR QUALITY								
Fine Particulate Matter Pollution (PM 2.5, 24 hour average), @ East CLC, µg/m³	2011	2015	26.4	20.4	Down	Down	(22.7%)	Got better
Fine Particulate Matter Pollution (PM 2.5, 24 hour average), @ 5 Points, µg/m³	2011	2015	23.0	21.3	Down	Down	(7.4%)	Got better
Carbon Monoxide, Patterson Park station, ppm (1 hour max average concentration for each year)	2011	2015	1.2	3.5	Down	Up	191.7%	Within standards
Carbon Monoxide, Downtown Akron station, ppm (1 hour max average concentration for each year)	2011	2015	1.6	2.6	Down	Up	62.5%	Within standards
Daily Sulfur Dioxide: Downtown Akron station	2011	2015	45	39	Down	Down	(13.3%)	Within standards
Daily Sulfur Dioxide: East HS station	2011	2015	38	46	Down	Up	21.1%	Within standards
Ozone Levels, Patterson Park station in Akron (8 hour avg, ppb)	2011	2015	76	65	Down	Down	(13.3%)	Got better
Asbestos: Investigations in Summit County	-	2015	-	624 investigations positive for asbestos			NA	NA
Asbestos: Removal work completed per year	2010	2015	104 asbestos removal projects	504 asbestos removal projects	Up	Up	384.6%	Got better
Radon: % of tested properties in Summit County that test above 4 pCi/l	-	1988-2016	-	34.0%	Down	-	NA	NA
Radon: Mitigation jobs completed per year	2010	2015	393	426	Up	Up	8.4%	Got better
Indoor Air (Smoking): Public space violations/investigations	-	2015	-	141 investigations	Down	-	NA	NA
Indoor Smoking: (AMHA Survey) Percent that smoke in residence daily	-	2016	-	39.3%	Down	-	NA	NA
WATER								
Percent of residences located in flood plain	-	2016	-	23.9%	Down	-	NA	NA
Septic Systems failures	-	2015	-	15.2%	Down	-	NA	NA
Private Water (% of residents based on estimated number of households)	-	2016	-	18.1%	-	-	NA	NA
Public Water (est. % of residents/households)	-	2016	-	81.9%	-	-	NA	NA
Percent of households without fluoride in drinking water	-	2014	-	21.4%			NA	NA
Fluoride (in public water supply)	-	2014/2015	-	1.0 ppm			NA	NA
Lead in Water	-	2012, 2014. 2015	-	ND - 9.1 ppb	Down	-	NA	NA

Indicator	Base Year	Current Year	Base Year Data	Current Year Data	Which Way Should Indicator Move?	Which Way Did It Actually Move?	Percent Change	Got Better Got Worse No Significant Difference
FOOD SAFETY								
Food Safety Re-Inspection- number of critical violations for the year	2014	2015	4,853	5,534	Down	Up	14.0%	Got worse
FOOD ACCESS								
# of Missed Meals	-	2015	-	15,700,000	Down	-	NA	NA
Number of meals distributed to those in need	2010	2015	6,698,708	8,793,209	Down	Up	31.3%	Got worse
Number of retail food establishments by Summit Food Coalition categories:								
Grocery	2007	2014	84	85	NA	NA	NA	No change
Convenience	2007	2014	42	54	NA	NA	NA	No change
Specialty	2007	2014	37	31	NA	NA	NA	No change
Gas Station with Convenience	2007	2014	145	146	NA	NA	NA	No change
Warehouse//Supercenter	2007	2014	4	6	NA	NA	NA	No change
% of Population Living in Food Desert	-	2015	-	11.9%	Down	-	NA	NA
% of Restaurants Classified as Fast Food	2007	2014	58.1%	55.2%	Down	Down	(4.9%)	Got better
Community gardens (# of gardens throughout Summit County)	-	2016	-	80 (65 in Akron)	Up	-	NA	NA
Food commute to major food source:					Down			
Less than 10 minutes	-	2016	-	67.6%	Down	-	NA	NA
Greater than 10 minutes	-	2016	-	32.4%	Down	-	NA	NA
TRANSPORTATION								
Mode of Transportation for Food (% that use their own vehicle)	-	2016	-	87.7%		-	NA	NA
% of Labor Force that Drives Alone to Work	2010	2015	88.0%	86.0%	Down	Down	(2.3%)	Got better
Public Transit Usage / Access	2010	2015	1.7%	2.1%	Up	Up	23.5%	Got better
Vehicle miles travelled (kDVMT)	2010	2014	15782	16016	Down	Up	1.5%	Got worse
Vehicle miles travelled (daily miles per capita)	2010	2014	29.1	29.5	Down	Up	1.3%	Got worse
# of Abandoned Commercial / Industrial Buildings	2011, Q2	2016, Q2	24.5%	38.5%	Down	Up	57.3%	Got worse
Sidewalk mileage (miles)	-	2016	-	2,393	Up	-	NA	NA
Sidewalk condition: Serious problem	-	2016	-	18.5%		-	NA	NA
Moderate or minor problem	-	2016	-	35.0%		-	NA	NA
Not a problem or N/A	-	2016	-	46.5%		-	NA	NA
Sidewalk availability: Serious problem	-	2016	-	23.6%		-	NA	NA
Moderate or minor problem	-	2016	-	32.5%		-	NA	NA
Not a problem or N/A	-	2016	-	43.9%		-	NA	NA
Neighborhood Safety (street lights, crime):								
Feel unsafe during the day:						-	NA	NA
Summit County	-	2016	-	6.4%		-	NA	NA
Akron	-	2016	-	11.6%		-	NA	NA
Feel unsafe during the evening:								
Summit County	-	2016	-	15.1%		-	NA	NA
Akron	-	2016	-	28.5%		-	NA	NA
Feel unsafe at night:								
Summit County	-	2016	-	28.2%		-	NA	NA
Akron	-	2016	-	48.3%		-	NA	NA

	Base Year	Current Year	Base Year Data	Current Year Data	Which Way Should Indicator Move?	Which Way Did It Actually Move?	Percent Change	Got Better Got Worse No Significant Difference
LAND USE								
# of Current Retail Liquor Licenses	-	2016	-	2891		-	NA	NA
Carry- out locations	-	2016	-	416		-	NA	NA
Restaurants, bars and night clubs	-	2016	-	600		-	NA	NA
Locations with Sunday sales	-	2016	-	594		-	NA	NA
# of Tobacco Retail:						-	NA	NA
Primary tobacco retail outlets	-	2014	-	18		-	NA	NA
Current tobacco lisenses	-	2015	-	474		-	NA	NA
Primary e-cigarette / vape retail outlets	-	2016	-	11		-	NA	NA
Miles of Bike path and hiking trails	-	2016	-	88.7		-	NA	NA
Recreation Facilities per 100,000 Residents	2010	2014	10	9.6	Up	Down	(4.0%)	Got worse
# Community recycling programs								
Drop off facilities	-	2016	-	13	Up	-	NA	NA
Communities that offer curbside pickup (number of)	-	2016	-	30	Up	-	NA	NA
Summit County Recycling Rate (based on weight):								
Recycling rate, with yard waste	2012	2015	30.7%	34.7%	Up	Up	12.9%	Got better
Recycling rate, not including yard waste	2012	2015	11.4%	13.4%	Up	Up	17.3%	Got better
Green Space (acres)	-		-	38,067 acres (61.3 mi2) - includes CVNP	Up	-	NA	NA
Toxic release by facility (lbs)	2009	2014	33132	17567	Down	Down	(47.0%)	Got better
Industrial Pollution (# of brownfield sites)	-	2016	-	40 sites	Down	-	NA	NA
HEALTH OUTCOMES								
GENERAL HEALTH								
Percent of adults reporting fair or poor health	-	2006-12	-	15.0%	Down	-	NA	NA
MENTAL HEALTH								
Percent of adults who report poor mental health for at least two weeks during the past month	-	2006-2012	-	3.6%	Down	-	NA	NA
Suicide attempts, seriously considered suicide (youth):								
Middle School	-	2013	-	13.3%	Down	-	NA	NA
High School	-	2013	-	16.9%	Down	-	NA	NA
BIRTH OUTCOMES								
Percent of babies born with low birth weight	2006-2010	2011-2015	8.8%	8.9%	Down	Up	0.1%	No Sig Difference
CHRONIC DISEASE								
Percent of adults with diabetes (type II)	-	2011-2016	-	13.9%	Down	-	NA	NA
Rate of hospitalizations due to asthma	-	2007-2009	-	14.8 per 10,000	Down	-	NA	NA
Chronic kidney disease death rate	-	2005-2011	-	14.9 per 100,000	Down	-	NA	NA
Cancer rate	-	2008-2012	-	444.5 per 100,000	Down	-	NA	NA
Cancer rate	-	2008-2012	-	444.5 per 100,000	Down	-	NA	NA

	Base Year	Current Year	Base Year Data	Current Year Data	Which Way Should Indicator Move?	Which Way Did It Actually Move?	Percent Change	Got Better Got Worse No Significant Difference
COMMUNICABLE DISEASE								
Number of people living with HIV/AIDS	2011	2014	131.2 per 100,000	151.3 per 100,000	Down	Up	15.3%	Got worse
All communicable diseases tracked by SCPH	2011	2015	700.0 per 100,000	837.5 per 100,000	Down	Up	19.6%	Got worse
Number of cases of vaccine preventable diseases	2011	2015	32.8 per 100,000	63.5 per 100,000	Down	Up	93.6%	Got worse
Number of enteric disease cases	2011	2015	39.1 per 100,000	31.9 per 100,000	Down	Down	(18.4%)	Got better
ORAL HEALTH								
The proportion of children and adolescents with untreated dental decay	-	2012	-	10.0%	Down	-	NA	NA
INJURY								
Rate of hospitalization due to unintentional injury	-	2010	-	331 per 100,000	Down	-	NA	NA
PREMATURE DEATH								
Years of potential life lost	2008-12	2013-15	7,928 per 100,000	8,305 per 100,000	Down	Up	4.8%	Got worse
Suicide rate (youth and adults)	2012	2015	13 per 100,000	16 per 100,000	Down	Up	23.1%	Got worse
Life expectancy:								
Females	-	2008-2015	-	80.1	Up	-	NA	NA
Males	-	2008-2015	-	75.0	Up	-	NA	NA
Child mortality rate	2006-2010	2011-2015	45.0 per 100,000	42.0 per 100,000	Down	Down	(6.5%)	Got better
INFANT MORTALITY								
Infant mortality rate	-	2006-2015	-	7.4 per 1,000	Down	-	NA	NA
Black infant mortality rate	-	2006-2015	-	11.5 per 1,000	Down	-	NA	NA

* "No significant difference" means that the change between the base year value and the current year value is not large enough to be considered statistically valid and should be viewed with caution.

SUMMIT COUNTY PUBLIC HEALTH
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