FOREWORD

The Clinton Health Matters Initiative (CHMI) works to improve the health and well-being of people across the United States by activating individuals, communities, and organizations to make meaningful contributions to the health of others. CHMI works to implement evidence-based systems, environmental and investment strategies, with the goals of ultimately reducing the prevalence of preventable diseases, reducing health care costs associated with preventable diseases, and improving the quality of life for people across the country.

CHMI works to activate individuals to lead healthier lives by providing a platform to access local, scalable solutions for healthy change agents; advance community health by closing gaps in health disparities and focusing efforts in underserved areas; and, engage the private sector through pledges to improve the health and well-being of the nation. These successes are showcased at the annual Health Matters conference, Health Matters: Activating Individuals in Every Generation, where national thought leaders convene to discuss ways in which individuals, communities, and corporations can contribute to the health of others.

Through these approaches, CHMI’s goals are to activate wellness across all generations of people in the United States, reduce the prevalence of preventable disease, reduce health care costs associated with preventable diseases, and increase investment in health and economic impact of health contributions by organizations.

CHMI works intensively with selected communities to improve health outcomes, close gaps in health disparities, and facilitate Commitments to Action in communities across the United States. CHMI serves as a convener for regionally-based efforts to engage multiple sectors in improving unique health indicators for each community and lowering health care costs.

Geographically located in Central Arkansas, Pulaski County is known as the largest county and forms the core of Little Rock, North Little Rock, and Conway, one of Arkansas’ eight Metropolitan Statistical Areas it is defined by the United States Census Bureau, as a six-county area in central Arkansas, and anchored by state’s capital and largest city. With such a rich history of southern hospitality, culture, and diversity, Pulaski County has an evolving cadre of bustling economic developments, a rapid influx of diverse populations and cultures, a thriving community for the arts and sciences, and a deep appreciation for the natural state which 386,299 Pulaski County residents call home.

Home to President Bill Clinton, the state of Arkansas is best known for making a memorable imprint in one of the most historic moments in the civil rights movement with the desegregation of Little Rock Central High School in 1957. This event is often viewed as one of the most significant developments in civil rights history, not only for Arkansas, but also for the United States. Additionally, Arkansas is also known for being one of the first states to address childhood obesity by passing ambitious, comprehensive legislation.

Although progress has been made and the overall health of Arkansans has improved, the state continues to struggle with dramatically moving the needle when addressing healthcare disparities systemically, and still ranks near the bottom in many national health indicators. Specifically within Central Arkansas, where disparities exist among diverse communities, isolated regions, and some of the poorest citizens, the cost of poor health and poverty are high, with 23 percent of children living in poverty and 55 percent of Pulaski County children eligible for free or reduced lunch. Despite all the health challenges Arkansas faces, the state is also known for being one of the first states to address childhood obesity by passing ambitious, comprehensive legislation and was recently acknowledged for its efforts in successfully negotiating a public and private partnership that would increase health care access to an additional 200,000 residents of the state.1

Due in large part to these vast disparities, as well as the existing efforts accomplished through existing public and private partnerships that address these issues, stakeholders in Central Arkansas are in a unique position to begin the regional work of CHMI. Due to Pulaski County’s central location, and the extensive network of the CHMI partners, the outcomes of the “Blueprint for Action” will be realized throughout Central Arkansas and impact communities, families, and individuals beyond the geographic boundaries of Pulaski County.

Local government and nonprofit agencies, local businesses, local schools, and residents have been working together to create regional efforts to improve the economy, education, environment, community safety, and the health status in Central Arkansas. By building upon these efforts through a partnership with the community, elevating best practices, and providing national resources to address local disparities, together we will have a positive effect on local health indicators.

We know that better health is contagious – people, communities, and organizations have solutions to share and we are the platform for elevating their collective successes. In May
2013, the Clinton Health Matters Initiative (CHMI) convened more than 175 community leaders from Central Arkansas to determine key actions necessary to reduce health disparities in the region. By utilizing the *County Health Rankings* model, Bold Actions were developed for each of the health factors that contribute to individuals’ health and longevity. The *County Health Rankings* model provides an ideal structure on which to base CHMI’s work throughout Central Arkansas, as it offers a nationally-accepted and evidence-based framework for the contributing factors to morbidity and mortality.

The *County Health Rankings* model measures specific community health indicators, enabling a comparison of data in counties across the state and throughout the country.

**EXECUTIVE SUMMARY**

In May 2013, the Clinton Health Matters Initiative (CHMI) held a meeting of community leaders from Central Arkansas that convened to determine key actions necessary to reduce health disparities in the region. By utilizing the *County Health Rankings* model, Bold Actions were developed for each of the health factors that contribute to individuals’ health and longevity. The *County Health Rankings* model provides an ideal structure on which to base CHMI’s work in the Central Arkansas, as it provides a nationally-accepted and evidence-based framework for the contributing factors to morbidity and mortality.

By using the *County Health Rankings* model and its measurements, CHMI created a baseline data framework to work from, which led to working with community leaders to develop Bold Actions that address: improving health behaviors; clinical care issues; local, social, and economic factors; and physical environment issues that contribute to health outcomes within the Central Arkansas.

The resulting Blueprint for Action reflects key recommendations made by a diverse array of individuals, including local health and education practitioners, policy makers, hospital and clinic administrators, public health workers, philanthropists, non-profit organizations and local city leaders, among others. (*See Appendix C for a complete participant list.*)

**LONG-TERM MEASURES**

The *County Health Rankings* model measures specific community health indicators, enabling a comparison of the health data in counties across the state and throughout the country.

By using the same methodology (utilizing the latest data publicly available), data specific to the Pulaski County was calculated and compared the state of Arkansas, and the national benchmarks. (*See Appendix B for a complete list of measures.*) The success of the Central Arkansas Blueprint for Action will be tracked through these measurements, as well as process measures tracking the progress of each Bold Action.

The Centers for Disease Control and Prevention (CDC) estimates that 443,000 people die prematurely from smoking or exposure to secondhand smoke, and another 8.6 million live with a serious illness caused by smoking. Despite these risks, approximately 46.6 million U.S. adults smoke cigarettes. Smoking is identified as a cause in multiple diseases including various cancers, cardiovascular disease, respiratory conditions, low birth weight, and other adverse health outcomes.

Excessive drinking is a risk factor for a number of adverse health outcomes such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes.

Excessive drinking is defined as either binge drinking (defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days) or heavy drinking (defined as more than 1 (women) or 2 (men) drinks per day on average).

**TOBACCO USE**

In Arkansas, 22.3 percent of the adult population (age 18 years and older) – over 480,000 individuals – are current cigarette smokers. Across all states, the prevalence of cigarette smoking among adults ranges from 9.3 percent to 26.5 percent and Arkansas ranks 44th (Centers for Disease Control and Prevention, 2010).

Specifically within the Pulaski County adult population (age 18 years and older), of the 286,928 of those who do smoke, the highest percentage by age group is the 18 to 24 year old range. Generally, the percentages are high among all groups (19.6 percent of non-Hispanic Caucasians, 20.65 percent of African Americans and 19.3 percent of Hispanics) (Arkansas Department of Health, Health Statistics Branch, Survey Section, 2005-2010).

**ALCOHOL CONSUMPTION**

According to the County Health Rankings, Pulaski County is higher than the national benchmark for excessive drinking. And 11.5 percent of Pulaski County residents engaged in binge drinking during the previous 30 days (BRFSS 2010). The respondents varied by age group; however, all age groups, with the exception of those 55 and older, report numbers higher than the national benchmark (Arkansas Department of Health, Health Statistics Branch, Survey Section, 2005-2010).

When the respondents are broken down by race and ethnicity, the percentages remain high among non-Hispanic whites (15.3 percent) and Hispanic respondents (19.1 percent) that engaged in binge drinking in Pulaski County, with the highest percentage of reported binge drinking among the age ranges of 18-24 (24.3 percent) and 25-34 (21.1 percent) respectively.

Additionally, according to the Arkansas Prevention Needs Assessment Student Survey, a large percentage of the Pulaski County students (6th-10th grade), obtained access to alcohol from their home or someone else’s home. The availability of cigarettes, alcohol, marijuana, and other illegal drugs has been related to the use of these substances by adolescents.

**PRESCRIPTION DRUG MISUSE**

In recent years, there has been a dramatic increase in prescription drug misuse or abuse. This increase has led to a corresponding increase in visits to the emergency room because of accidental overdoses as well as admissions to drug treatment programs for drug addictions.

Arkansas has consistently ranked among the 10 states with the highest rate of non-medical use of pain relievers by 12 to 25 year old individuals since state estimates of this measure first began in 2002. Over-the-counter and prescription drug abuse is rapidly increasing at a younger age and at a rate comparable to, but faster than alcohol and cigarettes.
**OVERALL GOAL:** Reduce substance abuse, and tobacco and alcohol use to protect the health, safety and quality of life for all.

### BOLD STEPS:

| All higher education institutions will develop and implement education and training programs for campus staff, students, and other clinical providers on the symptoms and prevention of prescriptions, alcohol, and tobacco abuse/misuse. | All providers will utilize the prescription drug monitoring program (PDMP) and link that information to electronic medical records. | Develop a virtual comprehensive network of information and resources within the region that addresses substance abuse and prevention. | All anchor institutions will collectively work together and implement effective prevention programs and link services within the region. | Implement a multi-faceted visible campaign to address substance abuse/misuse and the stigma associated to decrease substance abuse, tobacco, and alcohol misuse. |

### INDICATORS OF SUCCESS BY 2018:

| 100 percent of higher education institutions will develop and implement education and training programs for campus faculty, staff, students, and clinical providers on the symptoms of prescriptions, alcohol, and tobacco abuse/misuse as part of the curriculum. | 100 percent of providers in the region will utilize the PDMP and link that information to electronic medical records. | There will be a “virtual” resource directory developed where educational information for prescriptions, alcohol, and tobacco abuse/misuse will be centralized in one location and readily accessible for distribution. | 100 percent of all anchor institutions will include substance abuse, tobacco, and alcohol misuse prevention and intervention as part of their employee orientation and continued training. | There will be an active media campaign focused on prevention and interventions on substance abuse, tobacco, and alcohol misuse that has yielded measurable results. |

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4. DBHS, Special Report on Over the Counter and Prescription Drug Use Among Arkansas Students, October 2009.
HEALTHY EATING AND FOOD QUALITY

Obesity is often the end result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, and osteoarthritis.

According to the 2012 “F as in Fat” report, by 2030 medical costs associated with treating preventable obesity-related diseases are estimated to increase by $48 billion to $66 billion per year in the United States, and the loss in economic productivity could be between $390 billion and $580 billion annually. Although the medical cost of adult obesity in the United States is difficult to calculate, current estimates range from $147 billion to nearly $210 billion per year.

States could prevent obesity-related diseases and dramatically reduce health care costs if they reduced the average body mass index (BMI) of their residents by just 5 percent by 2030.¹

It is estimated that if this trend continues, more than $42 billion will be spent in Arkansas on chronic diseases and related consequences of being overweight or obese by 2023 (Arkansas Department of Health, Center for Health Advancement Life Stage Health Branch, 2010).

Studies have shown that eating more fruits and vegetables can help reduce some types of cancer, cardiovascular disease, and hypertension, as well as maintain a healthy weight. However, according to the Arkansas Department of Health, the vast majority of men (82.6 percent) and women (74.7 percent) in Arkansas do not eat the recommended five servings of fruits and vegetables per day. These percentages are slightly higher than those reported nationally.⁶

Within Pulaski County, 77.9 percent of the adult population consumed fewer than five fruits and vegetables per day.⁷ Higher proportions of men (82.6 percent) do not eat the recommended number of servings of fruits and vegetables than women (74.7 percent) in both Arkansas and the United States. And in Pulaski County, 64.9 percent of adults are considered obese or overweight with a BMI of 25.0 or higher.

Additionally, higher proportions of young people do not eat the recommended five servings of fruits and vegetables compared to older age groups in both Arkansas and the United States. And in Pulaski County, 20 to 30 percent of children are considered obese or overweight with a BMI of 27 percent or higher.⁸

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¹ F as in Fat Report. (2012). http://www.rwjf.org/content/dam/farm/reports/reports/2012/rwjf401318
**OVERALL GOAL:** Healthy and affordable food options will be available to all residents in the region.

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<td>Implement mobile fresh markets that increase access to locally grown fresh foods in the region and increase local market opportunities for farmers.</td>
<td>Establish a regional food hub within the region specifically targeting food deserts and/or underserved communities.</td>
<td>Strengthen public and private partnerships working to make communities the healthiest places to live.</td>
<td>Increase continued education units for educators that focus on health and wellness and healthy eating habits.</td>
<td>Implement a robust and visible campaign around the importance of healthy eating and food quality in the region utilizing local celebrities.</td>
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<td>There will be an increase of mobile fresh markets so that residents will have access to healthy food options within their communities.</td>
<td>At least 80 percent of the region's agricultural community will have committed the necessary resources needed to develop a regional food hub in targeted areas.</td>
<td>There will be an increase in employer and public support for community health and wellness in the region.</td>
<td>There will be a 25 percent increase of continued education units for educators on health and wellness and healthy eating habits.</td>
<td>There will be an active media campaign focused on healthy eating and food quality that has yielded measurable results.</td>
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Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. In addition, physical inactivity at the county level is related to health care expenditures on circulatory system diseases.

Obesity is often the end result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, and osteoarthritis.

In the 2010 report, “The Burden of Overweight and Obesity in Arkansas 2007-2008,” indicated that chronic diseases are steadily increasing the amount of health care dollars spent for diseases that are largely preventable. The Milken Institute has estimated that if the obesity trend continues to rise, up to one-fifth of healthcare expenditures will be required to take care of the consequences of obesity. If this trend continues, more than $42 billion will be spent in Arkansas on chronic diseases and other consequences of being overweight or obese by 2023. (Arkansas Department of Health, Center for Health Advancement Life Stage Health Branch, 2010).

According to the Arkansas Department of Health, women are less likely than men to participate in any physical activity both in Arkansas and in the United States. The percent of women in Arkansas who did not participate in any physical activity was 59.2 percent compared to 52.5 percent of women in the United States. In Arkansas 48.7 percent of men who did not participate in physical activity compared to 48.5 percent of men in the United States.

The highest percentage of Pulaski County adults who did not participate in regular exercise within the last 30 days were adult residents ages 40 to 64 and 65 and older (Pulaski County Adult Surveys, BRFSS, 2004). Nearly two-thirds of 12 to 18 years-old youths (64 percent) reported participating in moderate to vigorous physical activity for at least 30 minutes.

In Arkansas, 22 percent of boys, (Kindergarten-10th grade) are obese and 17 percent of boys are overweight. Twenty percent of girls (Kindergarten-10th grade) are obese and 18 percent are overweight. For both boys and girls, the highest prevalence of overweight was among 7th to 12th graders.

With regard to BMI classifications by ethnic group, 48 percent of Hispanic students had the highest obesity burden in comparison to students in Kindergarten – 10th grade.  

**OVERALL GOAL:** To improve, health, fitness and quality of life through daily physical activity opportunities.

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<td>Implement and strengthen school wellness policies and practices with a specific focus on increasing physical activity within the region.</td>
<td>Develop a county-wide, cross-sectorial group to develop and implement a comprehensive physical activity plan for the region.</td>
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<td>There will be an increase in the number of school wellness policies and practices implemented with a focus on increasing physical activity.</td>
<td>There will be a cross-sectorial physical activity plan that will yield measurable and actionable results for the region.</td>
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SEXUAL ACTIVITY

Sexually Transmitted Infections (STIs) are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, involuntary infertility, and premature death. Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain.

However, increases in reported chlamydia infections may reflect the expansion of chlamydia screening, use of increasingly sensitive diagnostic tests, an increased emphasis on case reporting from providers and laboratories, improvements in the information systems for reporting, as well as true increases in disease.

Teen pregnancy is associated with poor prenatal care and pre-term delivery. Pregnant teens are more likely to receive late or no prenatal care, have gestational hypertension and anemia, and achieve poor maternal weight gain. They are also more likely to have a pre-term delivery and low birth weight infants, increasing the risk of child developmental delay, illness, and mortality.

Additionally, HIV/AIDS prevalence in Arkansas continues to be a serious health issue. According to the Arkansas HIV/AIDS Minority Taskforce Report, nearly 70 percent of people living with HIV/AIDS in Arkansas are not receiving regular medical care, which is twice the national average and higher than the surrounding states. Arkansas also receives the least amount of federal HIV/AIDS funding of any southern state (Arkansas State Report: Arkansas HIV/AIDS Minority Taskforce, 2010).

The cumulative incidence of HIV/AIDS cases in the state of Arkansas is 8,132 as of December 2011. In Pulaski County there are 1,696 individuals living with HIV/AIDS. In 2011, there were 259 new HIV cases in Arkansas; Pulaski County has reported the highest number of new cases among African American males between the ages of 25-29.

In Arkansas, as well as in Pulaski County, the average age of persons living with HIV is 45 years old. The Centers for Disease Control and Prevention (CDC) estimate that 21 percent of the total number of people living with HIV/AIDS is not diagnosed and are unaware that they are HIV positive. The reported number of people living with HIV/AIDS includes only those that were diagnosed in Pulaski County; this does not include those who have yet to be tested. Additionally, the highest number of new reported cases in Arkansas for both chlamydia and gonorrhea are in Pulaski County.

11. HIV/AIDS refers to HIV diagnosis regardless of AIDS status
**OVERALL GOAL:** Residents will have access to comprehensive education and services that they need to maintain sexual health.

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<td>Implement district and school wide policies that support comprehensive and medically accurate sexual health education programs administered by highly qualified health education teachers.</td>
<td>There will be an active youth leadership council on sexual health, which will focus on peer leadership and social marketing efforts to help young adults make informed decisions about their sexual health.</td>
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<td>All schools will have implemented an age-appropriate sexual health education program taught by qualified health education teachers based on regional needs.</td>
<td>At least 65 percent of youth organizations within the region will have implemented age-appropriate sexual health education led by peer leaders.</td>
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Lack of health insurance coverage is a significant barrier to accessing needed health care.

According to the Centers for Disease Control and Prevention’s (CDC) National Survey Report, during the time of the interview 46.3 million persons of all ages (15.1 percent) were uninsured, 58.7 million (19.2 percent) had been uninsured for at least part of the year prior to interview, and 34.2 million (11.2 percent) had been uninsured for more than a year at the time of interview. In the state of Arkansas, about 520,500 (18 percent) did not have health insurance.

The uninsured adult population accounted for more than 12 percent of all adult (18 to 64 years old) hospital stays (21,659 of 174,423 stays). The top six causes of hospitalization were heart disease, including heart attacks, gall bladder disease, joint pain, back pain and arthritis, diabetes, infections including pneumonia, sepsis, and stroke.

Specifically within Pulaski County, additional findings pertaining to the uninsured among the 19 to 64 year-old population (242,289) are as follows:

- 20.5 percent of all income levels are uninsured
- 43.7 percent of those earning less than 138 percent below Federal Poverty Level (FPL) are uninsured
- 29.7 percent of those earning less than 400 percent below FPL are uninsured
- 12 percent of the residents are unable to see a physician due to cost

Access to care requires not only having financial coverage but also access to providers. More importantly, having access to primary care physicians ensures that people receive preventive and primary care services, and referrals to appropriate specialty care when needed.

Hospitalization for diagnoses amenable to outpatient services suggests that the quality of care provided in the outpatient setting is less than ideal. The measure may also represent the population’s tendency to overuse the hospital as a main source of care.

Regular HbA1c screening (a lab test for blood glucose levels) among diabetic patients is considered the standard of care and provides an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented.

Evidence suggests that mammography screening reduces breast cancer mortality, especially among older women. In a recent study, the death rate from breast cancer was 29 percent lower in the women who got mammograms compared to those who didn’t. The benefit was greater in women age 45-49 than in those age 40-44.

A physician’s recommendation or referral – and satisfaction with physicians – are major facilitating factors among women who obtain breast cancer screenings. The percentage of women ages 40 to 69 receiving a mammogram is a widely endorsed quality of care measure.

Clinical care includes dental coverage, of which many children don’t have access to within Central Arkansas. Medicaid is the primary source of dental coverage for children in low-income families. However adult dental coverage is not provided under Arkansas Medicaid. Arkansas, Medicaid pays for a wide range of medical services inclusive of dental services for children who are eligible (ARKid First, Part A and Part B). However, only about one-third of the state’s dentists participate in Medicaid program. Currently, Arkansas Medicaid only pays for adult services in the case of a life-threatening condition.
OVERALL GOAL: Improve access to comprehensive quality healthcare services and systems that support a healthy lifestyle.

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<td>Increase the number of community health workers and the use of technology to assist in care coordination, chronic disease management, and health and wellness services within the region.</td>
<td>Create a healthy workplace culture that promotes policies that enhance employee health and productivity.</td>
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<td>Establish criteria aimed at new businesses to adhere to promoting health and wellness policies and practices within the workplace.</td>
<td>There will be the integration of health content and skill development into the curriculum of the Common Core Standards in education.</td>
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<td>All residents will have access to a health resource directory in order to make well-informed decisions about their health and well-being.</td>
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<td>100 percent of community health workers will be trained on how to efficiently navigate through the system as it pertains to care coordination, chronic disease management, and health and wellness services within the county in order to better educate the residents they serve.</td>
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<tr>
<td>100 percent of businesses within the region will create and implement effective employee wellness policies that enhance employee health and productivity.</td>
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<td>There will be guiding principles and criteria developed on health and wellness policies and practices within the workplace for new businesses to implement within the region.</td>
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<td>Health and wellness content will be integrated into Arkansas Common Core standards of education and reflected in activities and projects for students within the district.</td>
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<tr>
<td>There will be a health and wellness directory developed for all residents within the region allowing residents to make informed decisions about their health and well-being.</td>
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The relationship between increased education and improved health outcomes is well known, with years of formal education correlating strongly with improved work and economic opportunities, reduced psychosocial stress, and healthier lifestyles.

Unemployment may lead to physical health responses ranging from self-reported physical illness to mortality, especially suicide. It has also been shown to lead to an increase in unhealthy behaviors related to alcohol and tobacco consumption, diet, exercise, and other health-related behaviors, which in turn can lead to increased risk for disease or mortality.

Poverty can result in negative health consequences, such as increased risk of mortality, increased prevalence of medical conditions and disease incidence, depression, intimate partner violence, and poor health behaviors. While negative health effects resulting from poverty are present at all ages, children in poverty have greater morbidity and mortality due to an increased risk of accidental injury and lack of health care access.

Children’s risk of poor health and premature mortality may also be increased due to the poor educational achievement associated with poverty. The child poverty rate in Arkansas is higher than the national average and shows a disturbing upward trend that is likely to continue as the state experiences the effects of the recession (Arkansas Child Poverty Report, 2012).

Additionally, in Central Arkansas, the data shows that children of minority, African Americans (39.1 percent) and Latinos (40.5 percent) children from single-parent homes are much more likely to live in poverty. Research shows that the economic well-being of a person is inextricably linked with the education attainment level. In Arkansas about 81 percent of all students graduate from high school with a diploma within four years; however, there are significant graduation gaps and inequities among students of different races, ethnicities, family incomes, disabilities, and with limited English proficiency.

The impact of individuals not graduating from high school is grave. Non-graduates are more likely to be unemployed, live in poverty and rely upon public assistance. Research shows that investments in early grade level reading may reduce these risks. Additionally, reading proficiency by the third grade is the most important predictor of high school graduation and career success.

In Arkansas, there are approximately 312,000 households that are cost-burdened, and although there is an adequate supply of housing within the state, the crux of the issue is affordability for residents. In general, people with lower levels of income tend to rent, rather than buy, the properties in which they live. Minority populations tend to live in substandard housing and in Pulaski that equates to 69,925 (18.39 percent) of the population.

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22. The generally accepted definition of affordability is for a household to pay no more than 30 percent of its annual income on housing. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.
**OVERALL GOAL:** All people will have access to quality education and living wage employment.

| **BOLD STEPS:** |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Increase investments in summer youth engagement and development programs which teach the importance of entrepreneurship, education, and health and wellness life skills. | Implement a robust network system that support families and assist them in navigating through the health and social services system. | There will be subsidized public transportation in order for all residents to have access to gainful employment opportunities. | There will be a significant increase in the number of high school graduates attending post-secondary and technical education. | Support educational systems across the region to provide bilingual services. |

| **INDICATORS OF SUCCESS BY 2018:** |
|-----------------|-----------------|-----------------|-----------------|
| 100 percent of all summer youth engagement and development programs will integrate principles focused on entrepreneurship, education, and health and wellness into the curriculum. | There will be measurable results from a robust network system that will support families in navigating through the health and social services system. | At least 65 percent of all residents within the region will qualify for subsidized transportation in order to have access to gainful employment opportunities. | There will be a significant increase in the number of high school graduates that will meet admission requirements for college and/or trade school. | At least 75 percent of all educational systems across the region will have bilingual services. |
FAMILY AND SOCIAL SUPPORT

Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality. Furthermore, social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to participate in healthy lifestyle choices.

Adults and children in single-parent households are both at risk for adverse health outcomes such as mental health problems (including substance abuse, depression, and suicide) and unhealthy behaviors such as smoking and excessive alcohol use.23

The costs associated with treating the elderly with chronic conditions are high and continuing to grow. These costs are borne by everyone – federal and state governments, families, as well as the elderly.

Research from the Agency for Healthcare Research and Quality shows that out-of-pocket health costs are highest for people with chronic health conditions or functional impairment. Additionally, the number of Americans who will suffer functional disability due to arthritis, stroke, diabetes, coronary artery disease, cancer, or cognitive impairment is expected to increase at least 300 percent by 2049.24

According to the 2013 Senior Hunger in Arkansas Report:25
• About one-third of all Arkansans age 60 or older are food insecure. This places Arkansas in the top tier nationally in terms of the proportion of seniors without access to adequate food supply.
• Senior food insecurity is caused primarily by financial hardship, lack of transportation, living in areas with few food stores, and mobility limitations.
• Specifically within Pulaski County, 2,989 elderly residents (4.7 percent) receive SNAP benefits.
• Food insecurity is associated with many negative health effects, including malnutrition, poor overall health, extended hospital stays, and cardiovascular disease. These health consequences have profound costs in terms of quality of life and financial impact.

According to the 2010 Feeding America report, “Child Food Insecurity: The Economic Impact on Our Nation,”26 child hunger is linked to healthcare and educational outcomes as well as a workforce:
• Children experiencing food insecurity are at even greater risk of being overweight, with this trend beginning by the preschool years (ages 3-5).
• Hungry children do worse in school and have lower academic achievement because they are not well prepared for school and cannot concentrate.
• Child hunger leads to greater absenteeism, presenteeism,27 and turnover in the work environment, all of which are costly for employers. Child sick days are also linked to parent employee absences.
• Children living in poverty are less likely to have access to nutritious food. In the state of Arkansas, 33 percent of children live in poverty with 13 to 19 percent of these children residing in Pulaski County.
**OVERALL GOAL:** To be the most inclusive community in the nation.

### BOLD STEPS:

| Implement a county-wide parenting readiness initiative to build family management skills, literacy levels, and parenting skills. | All social services will be better aligned with the needs of military families in order to support their health and well-being. | Strengthen the existing volunteer network and create a robust volunteer activation program for both youth and adults. | Implement a caregiver relief program across social service programs. | There will be robust family health promotion that helps to engage and activate families across the county in healthy living and systemic change. |

### INDICATORS OF SUCCESS BY 2018:

| There will be a county-wide parenting initiative that will build family management skills addressing literacy levels and parenting skills. | At least 70 percent of military families (and their children) will receive supportive services on health, mental health, and social support services with a special focus on addressing the needs of those who experience the impact of permanent change of station. | There will be an enhanced volunteer network available to non-profits, individuals, and communities across the region where recognition and utilization is at least 70 percent increased. | There will be an integrated care giver relief program created and implemented within the healthcare system across all social service programs. | The region will be educated about health disparities/inequities and evidence-based practices on proposed solutions to reduce disparities systemically. |

---


27. Definition: Presenteeism—the act of attending work while sick.
COMMUNITY SAFETY

According to the Racial Attitudes in Pulaski Countysurvey,28 African Americans were more likely to perceive the crime problem in their communities as “very” or “extremely serious” than were Whites. The largest categories of reported neighborhood crime were break-ins and/or theft. Violent crimes, drugs, and drug related crime were also a major concern.

VIOLENT CRIME RATE
High levels of violent crime compromise physical safety and psychological well-being. Crime rates can also deter residents from pursuing healthy behaviors such as exercising outside. Additionally, some evidence indicates that increased stress levels may contribute to obesity prevalence, even after controlling for diet and physical activity levels.29

MOTOR VEHICLE CRASH DEATH RATE
Motor vehicle travel is the primary means of transportation in the United States, providing an unprecedented degree of mobility. Yet for all its advantages, motor vehicle crashes are the leading cause of death for ages 4, and 11 through 27 (based on 2009 data).30 In addition to the impact on victims’ families and friends, crash deaths resulted in $41 billion annually in medical cost and a decrease in work productivity. According to the Centers for Disease Control (CDC), $618 million was spent in Arkansas with $5 million attributed to medical cost and $613 million to a decrease in productivity.

Between 2005 and 2009, Arkansas had 3,153 fatalities. Of these fatalities, 80 percent were among passenger vehicle occupants who were not wearing their seat belts. The number of fatalities for pedestrians and bicyclists had increased as well, with the number of vehicle fatalities in Pulaski County being ranked as number one in the state.31

According to the Arkansas Highway Transportation office, the most effective means of reducing fatalities and injuries attributed to motor vehicle crashes is to lower the incidence of impaired driving and significantly increase seatbelt use rate in the state.32

Additionally, a major cause of death in motor vehicles is a result of drivers being under the influence from drugs or alcohol. In 2009, the Arkansas Crime Information Center (ACIC) reported 11,786 driving while intoxicated (DWI)/driving under the influence (DUI)33 arrests. Between 2005 and 2009, there were 112 alcohol-related fatalities in Pulaski County.

The percentage of fatally injured drivers who tested positive for drugs increased over the last five years, according to data from the National Highway Traffic Safety Administration. Each year between 56 and 65 percent of drivers fatally injured in motor vehicle crashes were tested for the presence of drugs in their systems.34 In 2009, 33 percent of the 12,055 of drivers fatally injured in motor vehicle crashes tested positive for at least one drug, compared to 28 percent in 2005.

**OVERALL GOAL:** To establish and pursue shared public safety and revitalization of neighborhoods providing economic opportunities for all communities with targeted investments made in low-income and communities of color.

**BOLD STEPS:**

| There will be outreach efforts that support the mutual trust between law enforcement agencies and every community within the region. | There will be a decrease in the recidivism rates of juvenile offenders by increasing entrepreneurship and other employment opportunities. | 'There will be a decrease in violent crimes. | There will be an increase in law enforcement mentoring programs in schools and communities to reduce crimes. | There will be an increase in the number of community members reporting safe neighborhoods. |

**INDICATORS OF SUCCESS BY 2018:**

| There will be an increase in the number of outreach programs which integrate community needs and cultural competency to enhance the relationship between community and law enforcement. | The number of juvenile offenders will be decreased by 25 percent in the region. | The number of violent crimes will be decreased by 25 percent in the region. | There will be an increase in the number of mentoring and professional development programs within schools and communities to reduce crimes. | The region will have a 25 percent reduction in the number of violent crimes, drugs and drug related crimes. |
The relationship between elevated air pollution – especially fine particulate matter and ozone – and compromised health has been well documented. The negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.

The availability of recreational facilities can influence individuals’ and communities’ choices to engage in physical activity. Proximity to places with recreational opportunities is associated with higher physical activity levels, which in turn is associated with lower rates of adverse health outcomes including poor diet, lack of physical activity, and obesity.

Limited access to healthy food choices can lead to poor diets resulting in higher levels of obesity and other diet-related diseases. In addition, limited choices of affordable healthful food can lead to food insecurity, increasing the number of low- and moderate-income families without access to enough food to sustain a healthy, active life. Studies have shown an association between increased levels of obesity and diabetes prevalence levels associated with increased availability of fast food establishments in a community.  

Access to supermarkets, grocery stores, and specialty markets is important, in part, because they provide consumers with a variety of fruits and vegetables. A lack of availability of fruits and vegetables can make it more difficult for low-income residents to adhere to a nutritious diet when compared to neighborhoods where access to healthy foods is more readily available.

According to the Arkansas Department of Environmental Quality, those most at risk to ozone exposure include children, the elderly, and persons with breathing problems. High ozone concentrations may reduce visibility, aggravate pre-existing respiratory illness (e.g., asthma, bronchitis, common colds, emphysema, influenza, and pneumonia), and even cause symptoms in normally healthy persons who engage in strenuous physical activity outdoors (e.g., athletes, construction workers, farmers, and joggers).

Symptoms of ozone exposure may include shortness of breath, coughing, wheezing, headaches, nausea, and eye and throat irritation. According to the American Lung Association report, “State of Air 2013,” there are 7,912 Arkansas children at risk of pediatric asthma and 28,141 adults are at risk of asthma.

**OVERALL GOAL:** To be the healthiest, sustainable, and most well-connected community in order to access the resources needed to live a well-balanced and healthy lifestyle.

<table>
<thead>
<tr>
<th>BOLD STEPS:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>There will be an increase in the number of public and private partnership agreements that encourage the development of transportation and housing improvements.</td>
<td>There will be an increase in the safeguard and enhancement of natural resources and the environment that encourages efficient energy use.</td>
<td>Implement a complete street policy, including all modes of transportation (i.e. transit, freight, automobile, bicycle, and pedestrian) that allows for seamless transportation for all residents regardless of ages and abilities.</td>
<td>Create model neighborhood parks where families and communities have access to open, safe, and enjoyable spaces.</td>
</tr>
<tr>
<td>There will be an increase in the number of public and private partnership agreements that align transportation and housing improvements with better health and wellness outcomes within the region.</td>
<td>There will be a 70 percent decrease in the carbon emissions and reduced energy cost.</td>
<td>Each city in the region will have created and implemented a complete streets policy inclusive of all modes of transportation (i.e. transit, freight, automobile, bicycle, and pedestrian).</td>
<td>There will be an expansion in mixed-use/mixed-income transit-oriented development that will connect communities to opportunities both in their own neighborhoods and in the region.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDICATORS OF SUCCESS BY 2018:</th>
</tr>
</thead>
<tbody>
<tr>
<td>There will be an increase in the number of public and private partnership agreements that align transportation and housing improvements with better health and wellness outcomes within the region.</td>
</tr>
<tr>
<td>There will be an increase in the number of mixed-use/mixed-income agreements which connect families to transit, employment, and equitable housing opportunities.</td>
</tr>
</tbody>
</table>
### DEMOGRAPHIC COUNTY HEALTH RANKINGS

<table>
<thead>
<tr>
<th>DEMOGRAPHICS</th>
<th>Pulaski County</th>
<th>Arkansas</th>
<th>National Benchmark*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>386,299</td>
<td>2,937,979</td>
<td></td>
</tr>
<tr>
<td>% below 18 years of age</td>
<td>24.00%</td>
<td>24.00%</td>
<td></td>
</tr>
<tr>
<td>% 65 and older</td>
<td>12.00%</td>
<td>15.00%</td>
<td></td>
</tr>
<tr>
<td>% Non-Hispanic Caucasians</td>
<td>55.00%</td>
<td>74.00%</td>
<td></td>
</tr>
<tr>
<td>% African American</td>
<td>35.10%</td>
<td>15.00%</td>
<td></td>
</tr>
<tr>
<td>% American Indian and Alaskan Native</td>
<td>1.00%</td>
<td>1.00%</td>
<td></td>
</tr>
<tr>
<td>% Asian</td>
<td>2.00%</td>
<td>1.00%</td>
<td></td>
</tr>
<tr>
<td>% Native Hawaiian/Other Pacific Islander</td>
<td>0.00%</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>% Hispanic</td>
<td>6.00%</td>
<td>7.00%</td>
<td></td>
</tr>
<tr>
<td>% not proficient in English</td>
<td>2.00%</td>
<td>2.00%</td>
<td></td>
</tr>
<tr>
<td>% Females</td>
<td>52.00%</td>
<td>51.00%</td>
<td></td>
</tr>
</tbody>
</table>

### HEALTH OUTCOMES

#### MORTALITY

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Pulaski County</th>
<th>Arkansas</th>
<th>National Benchmark*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premature death</td>
<td>9,374</td>
<td>9,290</td>
<td>5,317</td>
</tr>
<tr>
<td>Premature age-adjusted mortality</td>
<td>435</td>
<td>449</td>
<td></td>
</tr>
<tr>
<td>Infant mortality</td>
<td>973</td>
<td>785</td>
<td></td>
</tr>
<tr>
<td>Child mortality</td>
<td>89</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>HIV prevalence rate</td>
<td>472</td>
<td>190</td>
<td></td>
</tr>
<tr>
<td>Chlamydia***</td>
<td>3,062</td>
<td>16,054</td>
<td></td>
</tr>
<tr>
<td>Gonorrhea***</td>
<td>1,257</td>
<td>4,691</td>
<td></td>
</tr>
</tbody>
</table>

#### MORBIDITY

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Pulaski County</th>
<th>Arkansas</th>
<th>National Benchmark*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor or fair health</td>
<td>15.00%</td>
<td>19.00%</td>
<td>10.00%</td>
</tr>
<tr>
<td>Poor physical health days</td>
<td>3.20%</td>
<td>4.10%</td>
<td>2.60%</td>
</tr>
<tr>
<td>Poor mental health days</td>
<td>3.40%</td>
<td>3.90%</td>
<td>2.30%</td>
</tr>
<tr>
<td>Low Birthweight (LBW)</td>
<td>10.50%</td>
<td>9.10%</td>
<td>6.00%</td>
</tr>
</tbody>
</table>

### HEALTH FACTORS

#### HEALTH BEHAVIORS

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Pulaski County</th>
<th>Arkansas</th>
<th>National Benchmark*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Smoking</td>
<td>20%</td>
<td>23%</td>
<td>13%</td>
</tr>
<tr>
<td>Adolescent Smoking****</td>
<td>6%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Adolescent Drinking****</td>
<td>12%</td>
<td>14%</td>
<td></td>
</tr>
</tbody>
</table>
### HEALTH BEHAVIORS (continued)

<table>
<thead>
<tr>
<th></th>
<th>Pulaski County</th>
<th>Arkansas</th>
<th>National Benchmark*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Perscription Drug Abuse****</td>
<td>8%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Adult Obesity</td>
<td>32%</td>
<td>32%</td>
<td>25%</td>
</tr>
<tr>
<td>Physical Inactivity</td>
<td>29%</td>
<td>31%</td>
<td>21%</td>
</tr>
<tr>
<td>Excessive Drinking</td>
<td>16%</td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td>Motor Vehicle Crash Death Rate</td>
<td>18</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>791</td>
<td>529</td>
<td>92</td>
</tr>
<tr>
<td>Teen Birth Rate</td>
<td>60</td>
<td>59</td>
<td>21</td>
</tr>
</tbody>
</table>

### CLINICAL CARE

<table>
<thead>
<tr>
<th></th>
<th>Pulaski County</th>
<th>Arkansas</th>
<th>National Benchmark*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninsured</td>
<td>18%</td>
<td>21%</td>
<td>11%</td>
</tr>
<tr>
<td>Uninsured Adults</td>
<td>23%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Uninsured Children</td>
<td>7%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Primary Care Physicians**</td>
<td>979 to 1</td>
<td>1,613 to 1</td>
<td>1,067 to 1</td>
</tr>
<tr>
<td>Dentists**</td>
<td>1,572 to 1</td>
<td>2,571 to 1</td>
<td>1,516 to 1</td>
</tr>
<tr>
<td>Mental health providers</td>
<td>1,309 to 1</td>
<td>4,601 to 1</td>
<td></td>
</tr>
<tr>
<td>Health care cost</td>
<td>$9,302</td>
<td>$9,378</td>
<td></td>
</tr>
<tr>
<td>Could not see doctor due to cost</td>
<td>12%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Preventable Hospital Stays</td>
<td>64</td>
<td>79</td>
<td>47</td>
</tr>
<tr>
<td>Diabetes</td>
<td>11%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Diabetic Screening</td>
<td>81%</td>
<td>82%</td>
<td>90%</td>
</tr>
<tr>
<td>Mammography Screening</td>
<td>66%</td>
<td>61%</td>
<td>73%</td>
</tr>
</tbody>
</table>

### SOCIAL & ECONOMIC FACTORS

<table>
<thead>
<tr>
<th></th>
<th>Pulaski County</th>
<th>Arkansas</th>
<th>National Benchmark*</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Graduation**</td>
<td>68%</td>
<td>81%</td>
<td></td>
</tr>
<tr>
<td>Some College</td>
<td>65%</td>
<td>53%</td>
<td>70%</td>
</tr>
<tr>
<td>Median household income</td>
<td>$43,898</td>
<td>$38,889</td>
<td></td>
</tr>
<tr>
<td>High housing cost</td>
<td>32%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Unemployment</td>
<td>7.02%</td>
<td>8.00%</td>
<td>5.00%</td>
</tr>
<tr>
<td>Children in Poverty</td>
<td>23%</td>
<td>28%</td>
<td>14%</td>
</tr>
<tr>
<td>Children Eligible for Free Lunch</td>
<td>55%</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>Inadequate Social Support</td>
<td>19%</td>
<td>21%</td>
<td>14%</td>
</tr>
<tr>
<td>Children in Single-parent households</td>
<td>44%</td>
<td>36%</td>
<td>20%</td>
</tr>
<tr>
<td>Violent Crime Rate</td>
<td>1,104</td>
<td>508</td>
<td>66</td>
</tr>
<tr>
<td>Homicide Rate</td>
<td>16</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>
## Physical Environment

<table>
<thead>
<tr>
<th></th>
<th>2011 Level</th>
<th>2012 Level</th>
<th>2013 Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily fine particulate matter</td>
<td>11.90%</td>
<td>11.80%</td>
<td>8.80%</td>
</tr>
<tr>
<td>Commuting Alone</td>
<td>83%</td>
<td>81%</td>
<td>n/a</td>
</tr>
<tr>
<td>Access to parks</td>
<td>30%</td>
<td>16%</td>
<td>n/a</td>
</tr>
<tr>
<td>Daily fine particulate matter</td>
<td>11</td>
<td>11.8</td>
<td>8.8</td>
</tr>
<tr>
<td>Drinking water safety</td>
<td>9%</td>
<td>9%</td>
<td>0</td>
</tr>
<tr>
<td>Access to Recreational Facilities</td>
<td>11</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Limited Access to Healthy Foods</td>
<td>10%</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>Fast Food Restaurants</td>
<td>51%</td>
<td>50%</td>
<td>27%</td>
</tr>
</tbody>
</table>

**Data should not be compared with prior years due to changes in definition.**

***Number of new cases diagnosed within Pulaski County from 01/01/2011 to 12/31/2011


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Treg Long
American Cancer Society

Captain Robert Lynch
Pulaski County Sheriff’s Office

Nichetra MacGee
Arkansas Children’s Hospital

Priscilla McChristian
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Hugh McDonald
Entergy Arkansas

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Sherwood Police Department

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Metroplan

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Mayor of Wrightsville, AR
Montine McNulty
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Jason Miller
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Sadie Mitchell, Ph.D
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Noble Strategies

Martie North
Bank of the Ozarks

Shanta Nunn-Buro
Argenta Community Development Corporation

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## 2013 Measures, Data Sources, and Years of Data

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<th>Measure</th>
<th>Data Source</th>
<th>Years of Data</th>
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<td><strong>Mortality</strong></td>
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<tr>
<td>Premature death</td>
<td>National Center for Health Statistics</td>
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<tr>
<td><strong>Morbidity</strong></td>
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<tr>
<td>Poor or fair health</td>
<td>Behavioral Risk Factor Surveillance System</td>
<td>2005-2011</td>
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<tr>
<td>Poor physical health days</td>
<td>Behavioral Risk Factor Surveillance System</td>
<td>2005-2011</td>
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<tr>
<td>Poor mental health days</td>
<td>Behavioral Risk Factor Surveillance System</td>
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<td>Low birthweight</td>
<td>National Center for Health Statistics</td>
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<tr>
<td><strong>Health Factors</strong></td>
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<td><strong>Health Behaviors</strong></td>
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<td>Tobacco Use</td>
<td>Adult smoking</td>
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<tr>
<td>Diet and Exercise</td>
<td>Adult obesity</td>
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<td></td>
<td>Physical inactivity</td>
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<td>Excessive drinking</td>
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<td>Motor vehicle crash death rate</td>
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<td>Sexually transmitted infections</td>
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<td>Teen birth rate</td>
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<td>Primary care physicians</td>
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<td>Dentists</td>
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<td>Quality of Care</td>
<td>Preventable hospital stays</td>
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<td>Diabetic screening</td>
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<td>Mammography screening</td>
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<td><strong>Social and Economic Factors</strong></td>
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<td>Education</td>
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<td>Some college</td>
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<td>Employment</td>
<td>Unemployment</td>
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<td>Income</td>
<td>Children in poverty</td>
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<td>Family and Social Support</td>
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<td>Children in single-parent households</td>
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<td>Community Safety</td>
<td>Violent crime rate</td>
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<td><strong>Physical Environment</strong></td>
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<td>Environmental Quality</td>
<td>Daily particulate matter days&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>Drinking water safety</td>
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<td>Built Environment</td>
<td>Access to recreational facilities</td>
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<td>Limited access to healthy foods</td>
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<td>Fast food restaurants</td>
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<sup>1</sup> Not available for AK and HI.