

The State of Health in Dona Ana County

“Health is more than healthcare. Until we invest in the social, economic, and environmental drivers of health, we will continue receiving poor grades on wellbeing.” Sandro Galeo

Background

Today, three babies will be born in Dona Ana County. Let’s call them Maria, John, and Ysabel.

How will their lives unfold? Will their childhoods be full of trips to the park, swimming and piano lessons, soccer practice, bedtime books, and household chores? As adults, will they be professors, lawyers, doctors, nurses, piano teachers, auto mechanics, flight attendants, poets, artists, musicians, or any of the hundreds of other possibilities that await human beings? Will they marry their high school sweethearts, have three kids, send them off to college, and celebrate their 50th wedding anniversary surrounded by children and grandchildren? Will they discover a cure for Alzheimer’s, develop a new manufacturing process, or create a famous designer fashion line?

For these three infants, the future is a blank slate of possibility. Or is it?

Maria will greet the world with a lusty cry, turning to suckle at her mother’s breast, her proud father standing by. John will be born addicted to the opioids that his mother used during pregnancy. And Ysabel will be born to a 15-year old girl.

A complex array of forces and fates will shape their futures, most of which are already in play. Maria will go home to a home full of love and support, with resources to send them to childcare and summer camps and music lessons and soccer practice; John’s equally loving parents will struggle with addiction, leaving him to fend for himself until he’s placed in the foster care system; Isabel will be cared for by a mom who is still too young to have a driver’s license.

Statistically, John and Ysabel have a one-in-three chance that they will be hampered by poor physical and mental health before they turn 17. For Maria, living in a more affluent household, that chance is only 7 out of 100.

As they grow, they will face an array of disparities. They will go to different schools, experience different parenting styles, and have different access to food, clothing, recreation, and health care. They will play in different parks, swim in different pools, and be treated differently by their teachers, doctors, and others in their communities.

Maria, John, and Ysabel will make many choices about their lives and their wellbeing as they grow into adulthood. But they will only be able to choose from the choices that are available to them. And those choices will be shaped by their families and the communities where they live.

What is health?

In the Preamble to the WHO constitution, health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” This definition has not been amended since it 1948.

In alignment with the WHO’s definition of health, this report will focus on robust *wellbeing* that affords people the chance to be the healthiest, happiest, most fulfilled people they can be. It recognizes that

achieving wellbeing requires far more than medical care. While essential to health, medical care is not enough:

“Affordable, high-quality health care is essential to our health. But where we live can have an even greater impact. Improving health and longevity in communities starts with ensuring access to healthy food, good schools, affordable housing, and jobs that provide us the resources necessary to care for ourselves and our families—in essence, the types of conditions that can help keep us from getting sick in the first place.”

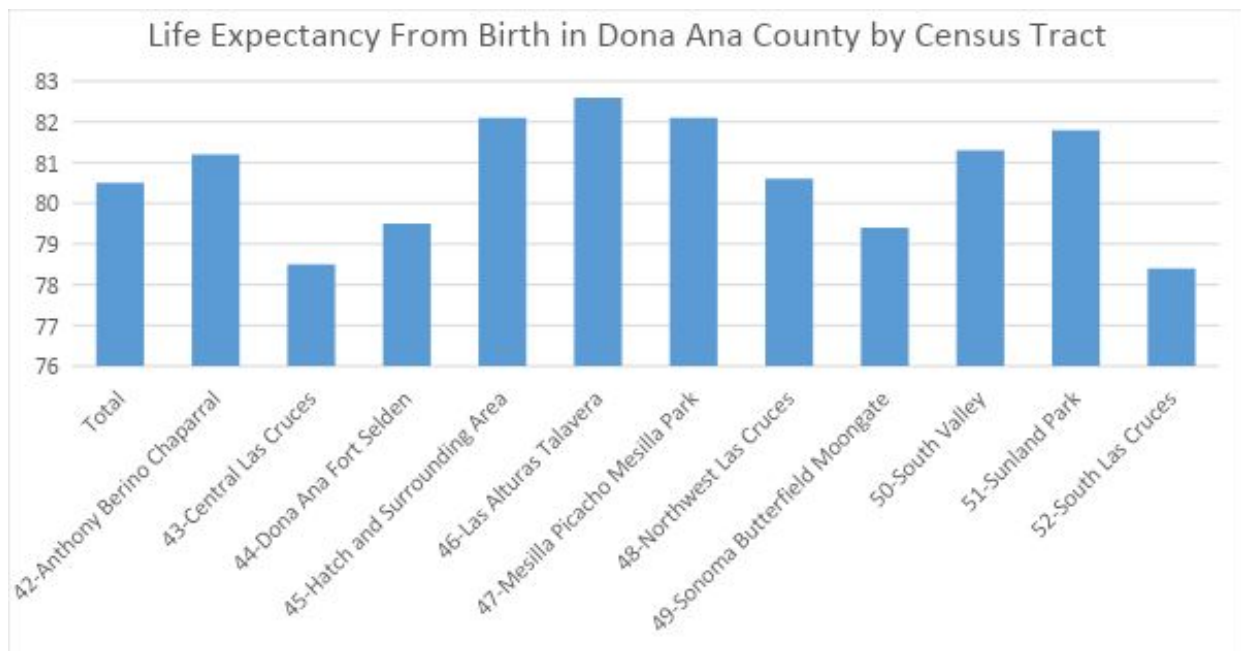
How Healthy are Dona Ana County Residents?

Public health experts use three core measures to assess a population’s health: life expectancy, years of potential life lost, and self-reported health status.

Life Expectancy

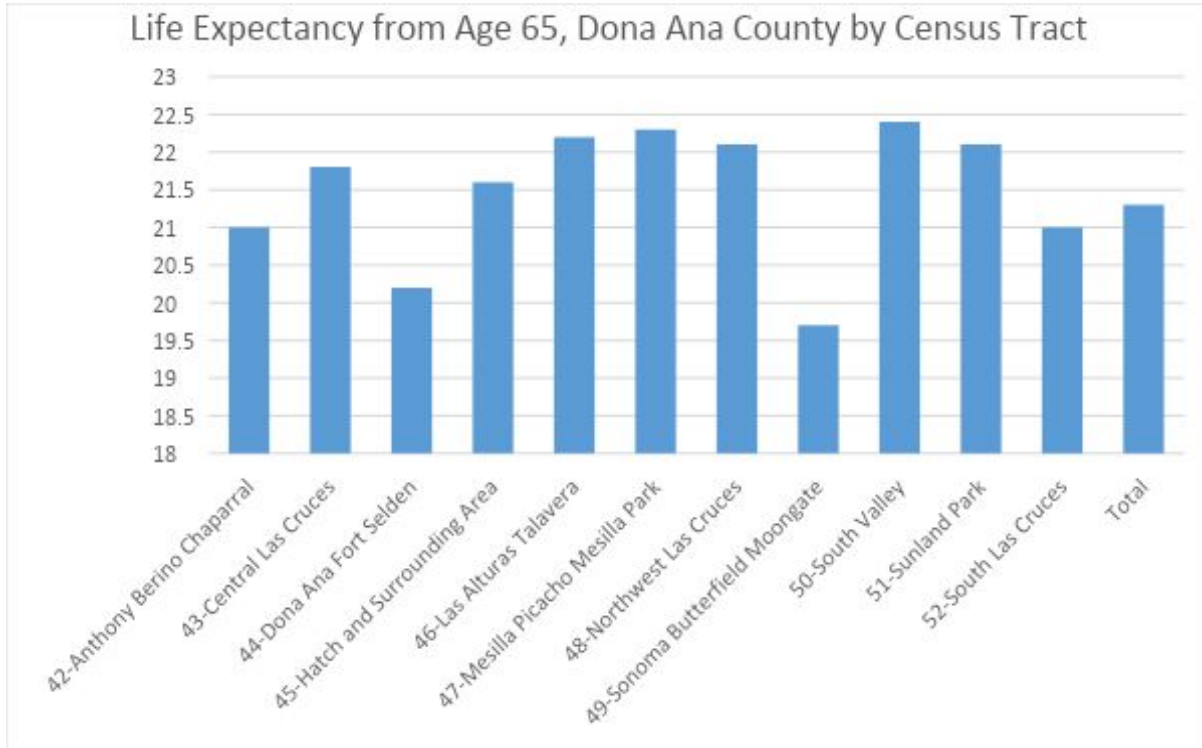
Life expectancy – i.e. how long people in a certain population live, on average – is commonly used as a measure of health. Life expectancy is a broad general measure of health that is linked to ethnicity, gender, income, education, and other factors. It is usually measured in two ways: 1) from birth, which includes childhood deaths, and 2) from age 65, which epidemiologists use as a measure of adult health.

At 80.5 years, life expectancy in Dona Ana County is slightly higher than the rest of the state and nation. But those averages belie large differences in life expectancy between neighborhoods. When life expectancy is broken down by census tract in Dona Ana County, stark differences emerge between regions of the county. As shown in Figure X, the life expectancy of people living in Las Alturas/Talavera is 4.2 years greater than for people living in south Las Cruces.



Because life expectancy from birth is very sensitive to infant and child mortality, epidemiologists estimate life expectancy from age 65 to get a better picture of adult health. The differences between

regions of the county are striking. For instance, the average adult living in the Sonoma/Butterfield/Moongate area will live an additional 19.7 years after their 65th birthday; in comparison, for those living in the Mesilla/Picacho Park area, life expectancy past 65 is 22.3 years. In comparison, the U.S. average is 19.4 years.



Self-Rated Health

People’s own assessment of their health, called “self-rated health” (SRH), is another widely used measure of health. SRH has been shown to be an accurate way to capture disease and poor functional status, as well as predict mortality (death).

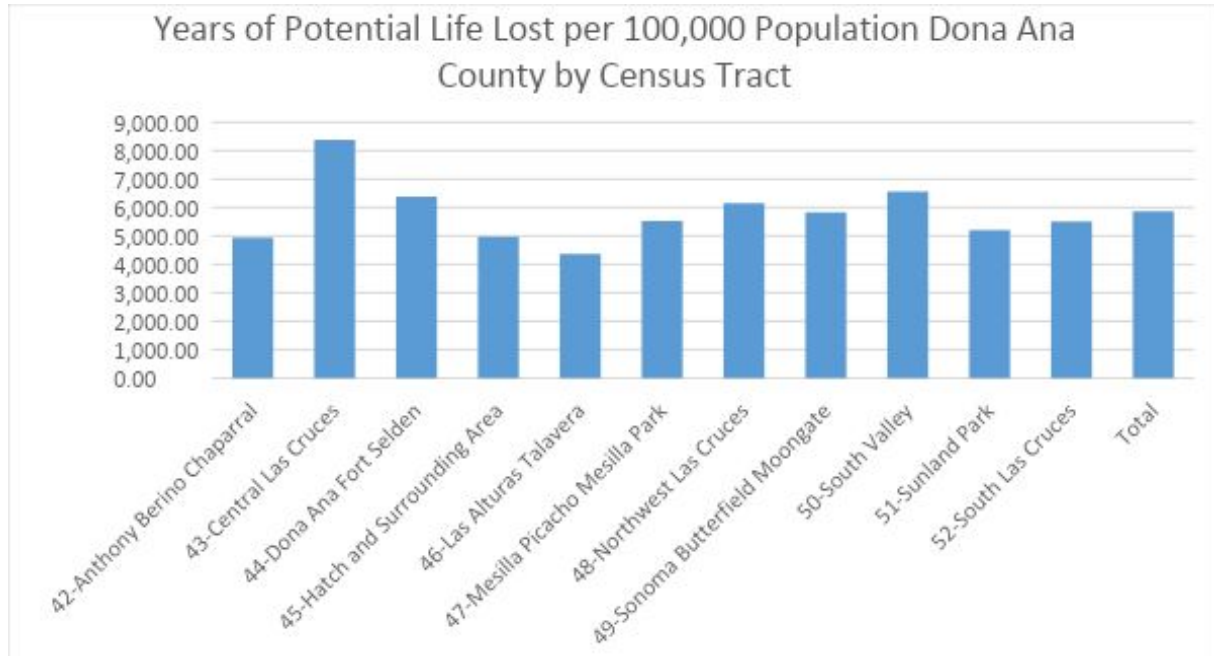
To assess self-rated health, researchers ask people one simple question: “Please rate your health as ‘excellent,’ ‘very good,’ ‘good,’ ‘fair,’ or ‘poor.’”

Dona Ana County residents do not fare well on this measure. One out of four (25%) Dona Ana County residents reports fair or poor health, compared to one out of five people (20%) in New Mexico and one out of six (16.9%) people nationally. This self-rating of health as poor suggests that poor health has a negative impact on quality of life for a significant proportion of the county’s population.

Years of Potential Life Lost (YPLL)

Another way to measure health in a population is a measure called “years of potential life lost,” abbreviated “YPLL.” YPLL is a way to measure how many people die prematurely (defined as before they reach 75). For instance, a child who dies at age 5 would represent 70 YPLL; a 30 year-old who dies would represent 45 YPLL.

YPLL is a way to measure deaths that could have been prevented. YPLL emphasizes deaths of younger persons, in contrast to overall mortality statistics, which mostly reflect deaths of the elderly. As shown in Figure X, the YPLL rate in Central Las Cruces is 8,378 YPLL/100,000 people, almost twice the rate in Las Alturas/Talavera (4370 YPLL/100,000 people). While the average rate in the county is X across New Mexico, the discrepancies across the county are notable.



Leading Causes of Death, Disease, and Disability

Dona Ana County mirrors New Mexico and the nation in that heart disease, cancers, and diabetes are the three leading causes of death. Heart disease deaths affect mostly those X and older, but a significant proportion of heart disease deaths are among people 45-65.

Rates of diabetes in the county are higher than . Type 2 diabetes is linked to obesity and poor diet, which are notably more prevalent in Dona Ana County than in other parts of the state. More than 30% of Dona Ana County residents have a BMI that fall into the category of “obese.” This puts them at greater risk of diabetes, injuries from falls, orthopedic problems, heart disease, depression, amputation, and other complications of diabetes.

Dona Ana County ranks at or above the state average for deaths in seniors due to unintentional falls, sexually transmitted diseases, teen pregnancies, and mental distress in both youth and adults. Sexually transmitted diseases are on the rise, and rates of chlamydia are 12% higher than the state average and nearly 20% above the national rate. Other key health issues in the county include:

Arthritis: One out of four people in Dona Ana County is living with arthritis. Affects quality of life, ability to work, and functionality. Chronic pain can lead to depression and other behavioral health issues, reduce the ability to exercise and perform physical work, and .

Asthma:

Injury: Injury remains a significant cause of hospitalization and mortality, leading to 745.5 hospitalizations per 10,000 people annually.

Unintentional injuries such as motor vehicle collisions, falls, and accidental poisonings (which include overdoses) takes an inordinate toll on Dona Ana County residents. In terms of YPLL, unintentional injuries account for 1,362 YPLL per 100,000 residents of Central Las Cruces, compared to a rate of 674 YPLL in Sunland Park.

Deaths of despair:

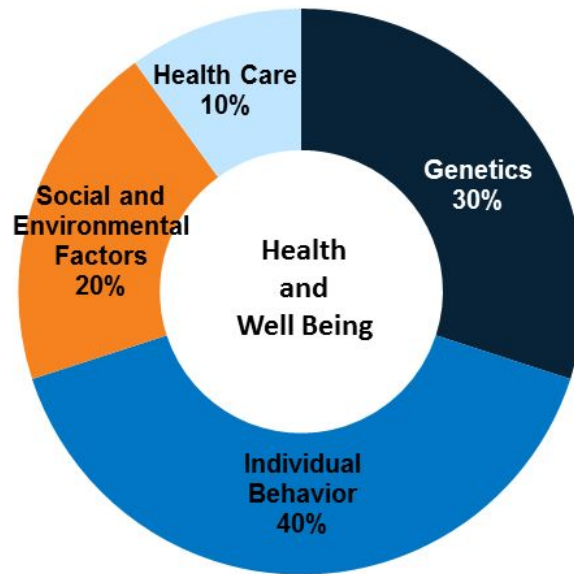
How Social, Economic, and Environmental Factors Shape Health

Discussions of community health often focus on medical care. Do people have health insurance coverage? Do they see their doctor regularly? Are there enough doctors, nurses, dentists, and other health-care workers to meet the population's needs?

Yet a focus on medical care is only one small part – about 10% -- of wellbeing. Medical care *is* necessary. Yet its influence on health is surprisingly weak. Health-related behaviors, in contrast, account for about 40% of premature deaths. Figure X shows the relative impact of different influences on premature death.

Figure 2

Impact of Different Factors on Risk of Premature Death



SOURCE: Schroeder, SA. (2007). We Can Do Better — Improving the Health of the American People. *NEJM*. 357:1221-8.



In recognition of the impact of behaviors on health, people are regularly admonished to eat well, exercise, don't smoke or use tobacco products, drink alcohol only in moderation, and practice other healthy behaviors. Only recently, however, have researchers begun to tease out the ways in which people's *ability to engage in healthy behaviors* is shaped by social and economic factors – which, in turn, are shaped by factors including policies, social milieu, and normalization of behaviors. For example, adults who have not completed high school are more likely to work in low-wage jobs, rent substandard housing, and encounter regular financial and other stressors. Children born to these parents often grow up in neighborhoods that lack safety, sidewalks, parks and other recreational facilities, and well-funded school systems. Grocery stores may be far away, making it difficult for these families to procure fresh produce and other items necessary for a healthful diet.

As Maria, John, and Ysabel grow, will they develop asthma, living in housing affected by mold and other contaminants including lead paint, in a home where adults smoke cigarettes? Will they witness or experience violence in their home or their community, leaving a long-lasting impact on their own mental health? Will they struggle in school, cycle in and out of detention centers, and never reach their potential? Will their lives be cut short by diseases that could have been prevented, injuries that shouldn't have happened, or violence?

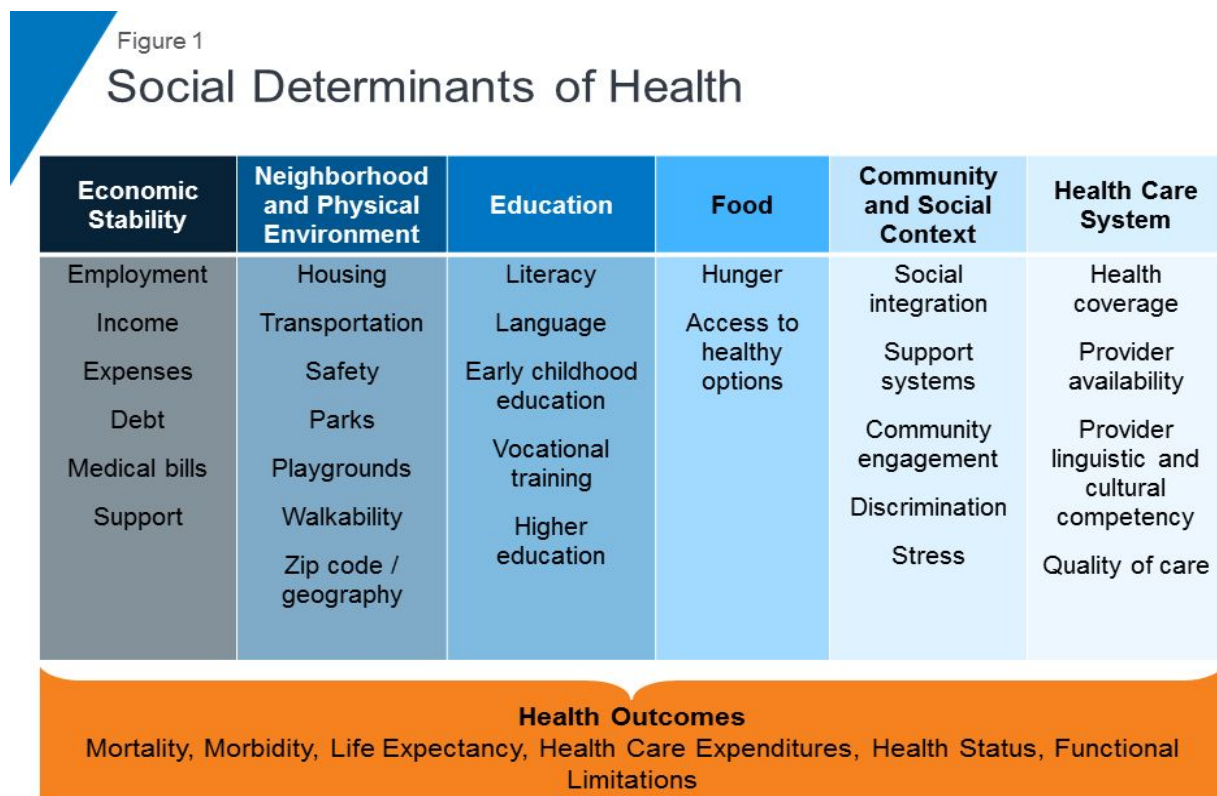
These social, economic, and environmental factors that influence health are referred to as **social determinants of health**. While medical care is essential when one is sick, it is the social determinants of health that determine whether one gets sick in the first place.

Social determinants of health are the result of social and economic disadvantages that lead to disparities in health. They do not exist in isolation, but in the context of policies and practices across sectors. For instance, the availability and acceptability of public transportation may affect a person’s ability to get to work, a grocery store, or a clinic. Likewise, the availability of early childhood education and parenting skills training for low-income families can start to address achievement gaps.

The World Health Organization (WHO) emphasizes the contextual nature of SDH in its current definition: “The social determinants of health (SDH) are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems.” (World Health Organization, https://www.who.int/social_determinants/en/ emphasis added).

In other words, individuals make choices about health-related behaviors. But those choices have to be available and acceptable to them.

Social determinants of health are an intricate network of factors, each affecting the other. For purposes of this report, however, they are categorized into specific actionable areas, as depicted in Figure X.



<https://www.kff.org/wp-content/uploads/2018/05/8802-02-figure-1.png>

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health-Care System
Employment Income Expenses Medical bills Support	Housing Transportation Safety Parks Playgrounds Walkability Zip code/geography	Literacy Language Early childhood education Vocational training Higher education	Hunger Access to healthful options Food literacy	Social integration Support systems Community engagement Discrimination Stress	Access to care (affordability, accessibility, availability, acceptability, accommodation) Quality of care

Health outcomes: Death, Disease and Disability, Life Expectancy, Health-Care Spending, Health Status, Functional Limitations

Economic Stability

How it affects health and wellbeing

Economic stability is critical to wellbeing, allowing individuals and families to meet basic needs such as housing, food, clothing, transportation, and utilities. Key components of economic stability are employment, income, expenses, debt, medical bills, and support.

Employment is a fundamental element of wellbeing: “A secure livelihood, whether through employment or other means, is a fundamental human need and one of the strongest and most consistent predictors of health and disease in public health research” (WHO). Employment in a satisfying job offers not only income, but a sense of purpose. People who feel a sense of purpose are more likely to engage in positive health behaviors (Skecher). Key elements of supportive employment are a living wage, proximity, and a safe and supportive work environment.

The effects of poverty on children – and on society at large – cannot be understated. According to the American Academy of Pediatrics, “Child poverty is associated with lifelong hardship. Poor developmental and psychosocial outcomes are accompanied by a significant financial burden, not just for the children and families who experience them but also for the rest of society” (AAP, 2016. p. 2). The estimated cost of poverty in children and youth in lost productivity and increased crime and health care needs, is more than \$500 billion annually.

The impact of poverty does not occur only at the “magic” number of the federal poverty line (a measure that, many have argued, is sorely in need of revision to reflect the realities of today’s housing and food markets). Instead, it occurs on a gradient – with the wealthiest having the most advantage. Indeed, relative poverty -- that is, how “poor” someone is in comparison to others in their community -- may have more influence on health status than income level alone (Wilkinson & Pickett).

How is Dona Ana County doing?

In March 2019, unemployment in Dona Ana County was 5.7%, the lowest rate since 1994 (<https://fred.stlouisfed.org/series/NMDONA5URN>). Of the population 16 years and older, 59% was in the civilian labor force.

Income: Median household income in Dona Ana County is \$39,114, approximately \$10,000 less than the national median. More than one out of four (26.3%) people in the county live on incomes below the federal poverty line, slightly better than the state average of 27.8% but far higher than the national average of 19.5%. However, that average masks significant variations between communities. In five out of twelve SAIPes, more than half of children 5 years and younger live in households below the federal poverty line. In Anthony/ Berino/ Chapparral, 60.6% of children 5 years and younger live in poverty.

Among children younger than 17 years, more than one out of three (36%) live in households with incomes below the poverty threshold, an average that covers deep disparities between communities. For instance, 6 out of ten children (60.6%) in the Anthony/Berino/Chapparral area live in poverty, compared to 2.5 out of 10 (24.4%) in the most affluent area of the county, Las Alturas/Talavera.

Expenses/Cost of living: The cost of living in most parts of Dona Ana County is below the U.S. average. In March 2016, the cost of living index for Dona Ana County was 85.7 (the U.S. average is 100).

Debt: Average household debt?

Income inequity: The Gini coefficient -- a measure of the difference in income between the wealthiest and poorest people in a population -- in Dona Ana County increased from 13.7 in 2011 to 17.8 in 2017, and it continues to climb. Discrepancies in income tend to cluster within neighborhoods, with ramifications for the health and wellbeing of residents.

Medical bills: Nearly one out of four (24.4%) of Dona Ana County residents do not have health insurance, a notably higher rate than the state (20.7%) and national (15.3%) rates. Nearly half (48%) of county residents are enrolled in Medicaid. The county's medically indigent program provides emergency coverage for some people in need, but eligibility is restricted to those who are working services are limited. For those on Medicare or with private insurance, out-of-pocket expenses may be prohibitive.

Neighborhood and Physical Environment

The built environment, defined as "all the human-made physical spaces where we live, recreate and work"

(<https://www.healthandenvironment.org/environmental-health/environmental-risks/built-environment> has a tremendous effect on health. Four key elements of the built environment are discussed here. For a more complete discussion of the impact of the built environment on health, please see www.healthandenvironment.org

Housing: Housing impacts health in four general ways: 1) Having a stable home reduces stress and allows people to pursue other activities that foster health; 2) Conditions inside the home can either support health or expose people to dangers such as radon, asbestos, and mold; 3) The costs of housing can create financial stress on a family, reducing their capacity to purchase other things that support healthy behaviors, such as healthful foods, shoes, clothing, and equipment for a preferred sport, membership in a gym, exercise classes, etc.; and 4) the neighborhoods where people live can either

foster or create obstacles to healthful behaviors because of both environmental and social characteristics (<https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/>) .

Transportation: Transportation makes it possible for people to access health care, jobs, grocery stores, pharmacies, and other necessities. Increasingly, cities and towns are working to build communities where walking, bicycling, and other non-motorized means of movement are central. “Active transportation” sees transportation is not only a way to access goods, services, and employment, but a health-generating activity.

Parks, Playgrounds, and Recreational Facilities. Central markers of social connection, offering opportunities for people to engage in physical activity, especially children.

Air Quality. [Particulate matter, asthma, excess deaths]

How is Dona Ana County Doing?

Housing: The Mesilla Valley Public Housing Authority offers several affordable housing programs, including administering the federal Section 8 Housing Choice Voucher program. However, the need for housing assistance is greater than the availability, and the typical waiting period is two to six years.

In terms of homelessness, DAC ranks second, after ABQ, in the state.

In addition, safe, affordable, and accessible housing for elders is becoming more critical as the population ages. Dona Ana County attracts a large retirement population, many of whom enter the county in good health but need assistance as they age in place. Little has been done to address the needs of this population.

Transportation. The Mesilla Valley Metropolitan Planning Organization is the lead transportation planning organization in the county. The current transportation plan addresses active transportation and recreational use of walkways, as well as addressing pedestrian safety, bicycle pathways, and multiple intersections both in the City of Las Cruces and on I-10 and I-25, which cross near the heart of Las Cruces.

City priorities include a trail system that will first be a central loop system and then an extended loop and spoke system. These loop systems connect important destinations and neighborhoods to provide a complete network around the City of Las Cruces and into Doña Ana County and Mesilla. A trail connection may include a roadway or multi-use path.

More than X percent of Dona Ana County residents spend more than X percent of their income on housing and transportation, reducing their ability to spend on healthful food, basic needs such as clothing and sundries, and to invest in their health.

Parks, Playgrounds, and Recreational Facilities: Dona Ana County boasts a wide array of parks, including 20 community parks in the unincorporated areas of the county. In addition, Leasburg Dam and Fort Selden State Parks lie within county boundaries, and the Chihuahuan Desert Nature Park provides educational opportunities. Camping and picnicking options are available in the Dripping Springs area, and the Organ Mountains offer ample hiking and horseback riding opportunities. The City of Las Cruces manages three large parks, as well as numerous smaller open-space areas. Three pools are located in the City of Las Cruces and open to the public: two seasonal outdoor pools and one year-round indoor facility. The indoor facility is a full-service gym for adults, although children are welcome in the pool.

Air Quality. [Dona Ana County doesn't do well on this]

Education

Literacy (numeracy, health literacy), language, early childhood education,

Food

Hunger; access to healthful foods

Community and Social Context

Arts and Culture: Arts are essential to public health.

Creative placemaking.

How is Dona Ana County Doing?

Anthony: Women's Intercultural Center in Anthony – People from the area come to share art and stories and culture. Physical building in Anthony; weaving group started.

Health-Care System

- Arts and Culture:
 - Centers
 - Events
 - Las Cruces vs Rural
- Access to information:
 - Broadband
 - Libraries. Only five libraries serve the entire county. Libraries are quickly emerging as key partners in health information – helping people to access and understand information, assistance with eligibility screenings and enrollment in services, and skill-building for employment and other .
 - Branigan
 - Munson Center
 - Sage Café
 - Hatch
 - Sunland Park
 - Anthony
- Connectivity
 - Limited broadband
- Multigenerational models

It asks: What would it take for every person in Dona Ana County to be able to live in a state of productivity and purpose, creativity and contentment?

Three babies will be born today in Dona Ana County. What will their futures be?

You decide.