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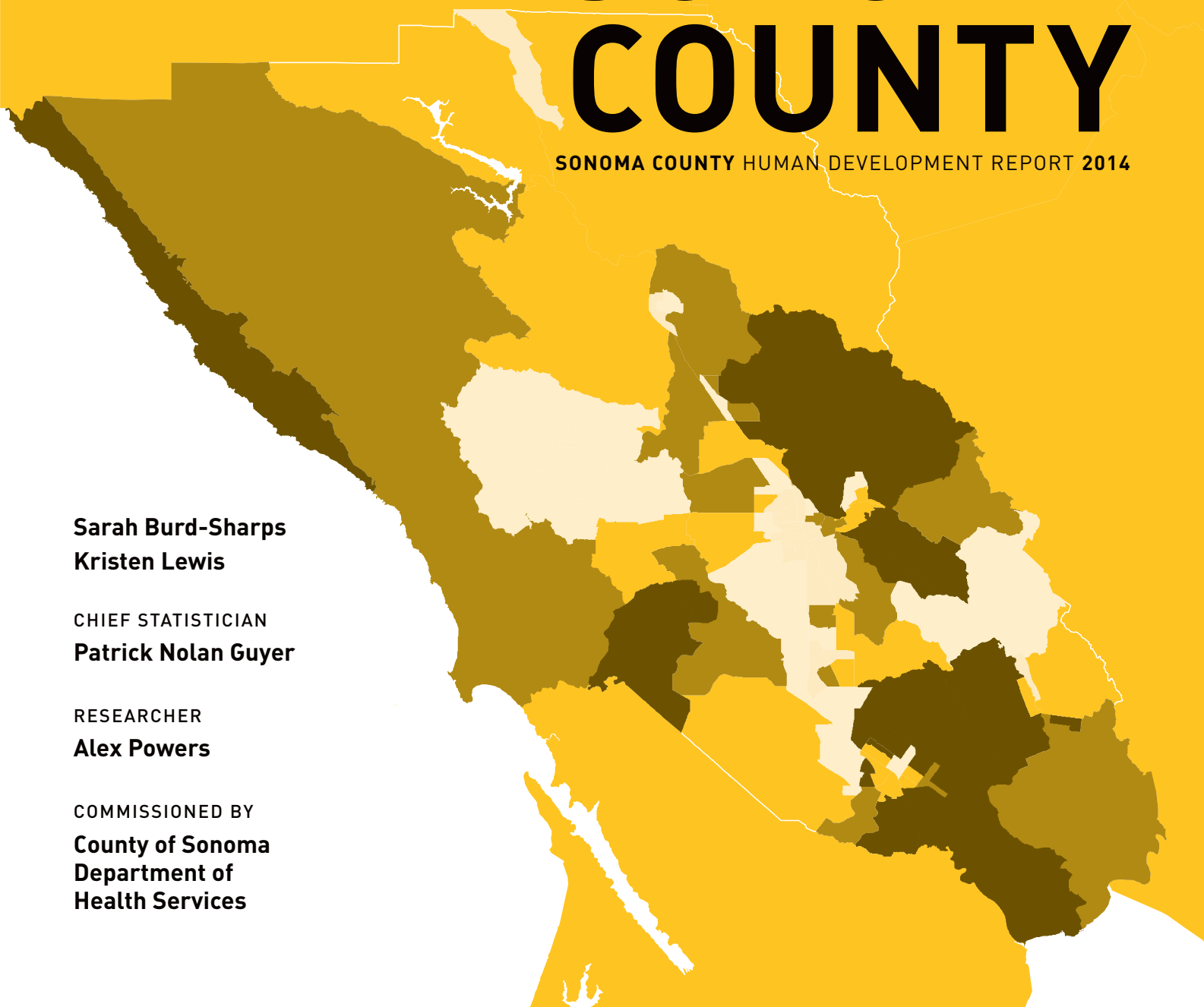
A PORTRAIT OF SONOMA COUNTY

SONOMA COUNTY HUMAN DEVELOPMENT REPORT **2014**



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Contents

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Health Action Subcommittees

Committee for Healthcare Improvement

Cradle to Career Operations Team

Health Action Chapters

Community Health Initiatives in the Petaluma Area

Healthy Healdsburg

Russian River Area Resources and Advocates

Sebastopol Area Community Alliance

Sonoma Valley Health Roundtable

Windsor Wellness Partnership

Community Groups

Community Activity and Nutrition Coalition

Community Engagement and Healing Subcommittee of the Community and Local Law Enforcement Task Force

Community Development Commission

Food System Alliance

Santa Rosa Interfaith Ministerial Association

Santa Rosa Mayor's Gang Prevention Task Force

Social Advocates for Youth

Sonoma County Superintendent Council

Sonoma County Continuum of Care

St. Joseph's Health System Neighborhood Care Team

Tomorrow's Leaders Today

United Way Community Solutions Team

Upstream Investments Policy Committee

Upstream Investments Portfolio Review Committee

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thank you!

Foreword

We live in a thriving, beautiful county with unique natural resources, rich cultural diversity, and a robust entrepreneurial community. While every city and neighborhood in Sonoma has many assets that contribute to our county, not every individual has access to the same opportunities to meet their full potential to live long and healthy lives. *A Portrait of Sonoma County* is an important step in recognizing those assets as well as raising the difficult reality of disparities.
A Portrait of Sonoma County is also a critical tool to identify avenues for addressing the underlying causes of disparities.

Our county has set its mission to invest in beautiful, thriving, sustainable communities for all, and by using *A Portrait of Sonoma County*, we will be better able to focus resources and attention to areas of need, leverage the tremendous assets of every neighborhood, and help our many community partners do the same. It is also imperative that our work not end with the publishing of the report. We plan to use the portrait to help build the resilience of our many neighborhoods and communities by enhancing existing collaborative efforts and forging new partnerships with community members, nonprofits, foundations, and public agencies. In doing this, we will support our community's shared desire for a Sonoma County that is a healthy place to live, work, and play—a place where all residents thrive and achieve their life potential.

David Rabbitt
Chair, Sonoma County Board of Supervisors

Greetings. On behalf of the Sonoma County Department of Health Services, I extend our sincere appreciation to the Measure of America team for the comprehensive analysis in this report. This report would not have happened without the Sonoma County Board of Supervisors continued commitment to the Health Action vision and significant investments in prevention-focused approaches to health and community well-being.
I would like to convey deep gratitude to the Health Action Council and our many community partners who contributed to the development of *A Portrait of Sonoma County* over the last year. This community-led report represents an opportunity for all of us to collectively address areas of unmet potential throughout our County in order to ensure a prosperous and healthy community for all.

Protecting the health and well-being of individuals, families, and the community is the primary responsibility of the Sonoma County Department of Health Services. Many factors play a role in the health of a community. The design and construction of our communities; educational attainment; affordable housing; economic stability and employment opportunities; climate change; access to healthy and preferably locally produced food - all affect our ability to live, work, learn and play in Sonoma County.

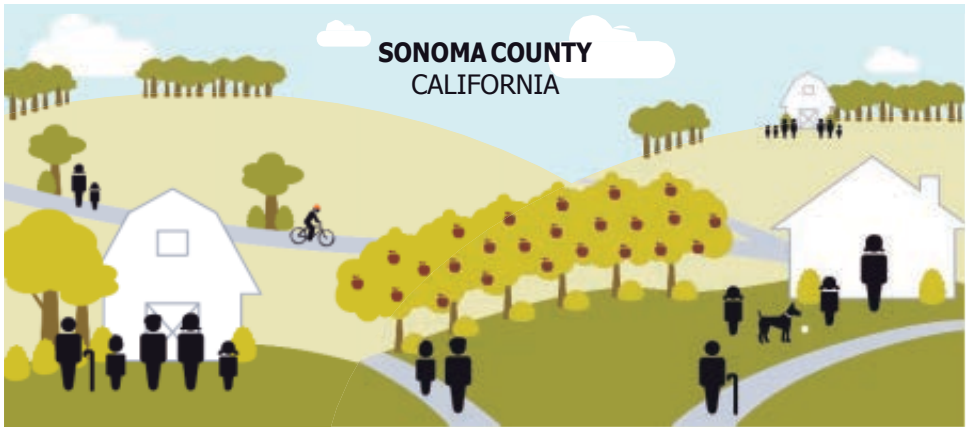
We are committed to working collaboratively with the community and our partners to make Sonoma County the healthiest county in California.

Your opinions and views on how we can improve services and the health of our community are important. We invite you to participate in community meetings or lead discussions on this report in your own communities. For more information and to learn how you can be involved, please visit the Health Action website: www.sonomahealthaction.org.

Best regards,

Rita Scardaci
Director, Sonoma County Department of Health Services

Pledge of Support



We have the vision of being the healthiest county in the state of California. We recognize that in order to achieve this goal, we must work together in strategic, thoughtful, and engaging ways. Our Collective Impact efforts to date have led to cross-sector collaborative partnerships and broad awareness of the multiple factors that influence our health, such as access to education, jobs, housing, transportation, parks, nature, and safe neighborhoods. We are committed to significantly improving the health and well-being of all residents.

However, we know that not all residents have access to the same opportunities to meet their full potential and that health, education, and income disparities exist depending on where one lives in the county. We also know that these disparities have real individual and community impacts on long-term health and prosperity.

We, below, commit to using *A Portrait of Sonoma County* to better understand these gaps in opportunities and to partnering with community to identify the strengths and assets on which to build a comprehensive and inclusive response to this report. We commit to utilizing *A Portrait of Sonoma County* in the work of our organizations and our collaborative efforts. We aim to leverage resources, empower communities, share best practices, and strategically focus our efforts in order to creatively contribute to a new and innovative discussion of health equity in our county. We recognize that only by working together as equal partners with a shared vision and common agenda can we hope to achieve our long-term goals of making Sonoma County the healthiest county in the state for all our residents to work, live, and play.

The Pledge is a living document, and additional organizations and elected officials are welcome to pledge support after the initial release. The following organizations and elected officials voice support:

4Cs (Community Child Care Council of Sonoma County)

Action Network

Ag Innovations Network

Alliance Medical Center

Bischoff Performance Improvement Consulting

Child Care Planning Council

Child Parent Institute (CPI)

Catholic Charities of Santa Rosa

Ceres Community Project

Community Action Partnership Sonoma County

Community & Family Service Agency

Community Baptist Church

Community Foundation Sonoma County

Community Health Initiatives in the Petaluma Area (CHIPA)

Council on Aging

Daily Acts

First 5 Commission

Food for Thought

Food Systems Alliance

Healdsburg District Hospital

Healthy Community Consortium

Healthy Healdsburg

John Jordan Foundation

Kaiser Permanente

KRCB North Bay Public Media

La Luz Center

La Tortilla Factory

LandPaths

Leadership Institute for Ecology and the Economy

North Bay Children's Center

North Bay Jobs with Justice

North Bay Labor Council

North Bay Leadership Council

North Bay Organizing Project

Northern California Center for Well-Being

Petaluma Coalition to Prevent Alcohol, Tobacco and Other Drug Problems

Petaluma Community Foundation

Petaluma Health Care District

Petaluma Health Center

Redwood Community Health Coalition

Regional Climate Protection Authority

Russian River Area Resources and Advocates

Santa Rosa Community Health Centers

Santa Rosa Junior College

Sebastopol Area Community Alliance

Social Advocates for Youth (SAY)

Sonoma County Agricultural Preservation and Open Space District

Sonoma County Continuum of Care

Sonoma County Commission on the Status of Women

Sonoma County Department of Health Services

Sonoma County Economic Development Board

Sonoma County Human Services Department

Sonoma County Library

Sonoma County Office of Education

Sonoma County Regional Parks

Sonoma County Transportation Authority

Sonoma Ecology Center

Sonoma State University

Sonoma Valley Health Roundtable

St. Joseph's Health – Sonoma County

Sutter Medical Center of Santa Rosa

United Way of the Wine Country

Voices

West County Health Centers

Windsor Wellness Partnership

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David Glass
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Susan Harvey
City of Cotati Councilmember

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Robert Jacob
City of Sebastopol Mayor

Steve Jorgensen
Windsor Unified School District Superintendent

Mark Landman
City of Cotati Councilmember

Keller McDonald
West Sonoma County Union High School District Superintendent

Ernesto Olivares
City of Santa Rosa Councilmember

Carol Russell
City of Cloverdale Mayor

Socorro Shiels
Santa Rosa City Schools Superintendent

Patrick Slayter
City of Sebastopol Councilmember

Key Findings

A Portrait of Sonoma County is an in-depth look at how residents of Sonoma County are faring in three fundamental areas of life: **health**, **access to knowledge**, and **living standards**. While these metrics do not measure the county's breathtaking vistas, the rich diversity of its population, or the vibrant web of community organizations engaged in making it a better place, they capture outcomes in areas essential to well-being and opportunity. This report examines disparities within the county among neighborhoods and along the lines of race, ethnicity, and gender. It makes the case that population-based approaches, the mainstay of public health, offer great promise for longer, healthier, and more rewarding lives for everyone and that place-based approaches offer a way to address the multiple and often interlocking disadvantages faced by families who are falling behind. Only by building the capabilities of all residents to seize opportunities and live to their full potential will Sonoma County thrive.

Measure of America, a project of the Social Science Research Council, provides easy-to-use yet methodologically sound tools for understanding well-being and opportunity in America and seeks to foster greater awareness of our shared challenges and more support for people-centered policies.

The Sonoma County Department of Health Services (DHS) commissioned Measure of America to prepare this report to provide a holistic framework for understanding and addressing complex issues facing its constituency. It will inform the work of the Department's Health Action initiative. Unlike many other health initiatives, Health Action aims to move beyond a narrowly defined focus on sickness and medical care to take into account a wide range of vital determinants of well-being and health, such as economic opportunities; living and working conditions in homes, schools, and workplaces; community inclusion; and levels of stigma and isolation. DHS has sought to engage a broad spectrum of stakeholders and pinpoint root causes of health disparities, all in the service of Health Action's goal: to make Sonoma the healthiest county in California.

The hallmark of this work is the American Human Development Index, a supplement to Gross Domestic Product and other money metrics that tells the story of how ordinary Americans are faring. The American Human Development Index uses official government data in health, education, and income and allows for well-being rankings of states, congressional districts, counties, census tracts, women and men, and racial and ethnic groups. The Index can empower communities with a tool to identify priorities and track progress over time.

How Does Sonoma County Fare on the American Human Development Index?

The American Human Development Index combines fundamental well-being indicators into a single score expressed as a number between 0 and 10. It is based on the Human Development Index of the United Nations, the global gold standard for measuring the well-being of large population groups. This report is Measure of America's second exploration of well-being within a single county; *A Portrait of Marin* was published in 2012. Both county reports build upon a 2011 study of the state as a whole, *A Portrait of California*.

The most extreme disparities in basic health, education, and earnings outcomes are often found within small geographical areas.

KEY FINDINGS: AMERICAN HUMAN DEVELOPMENT INDEX

- The most extreme disparities in basic health, education, and earnings outcomes are often found within small geographical areas. Of the county's ninety-nine census tracts, top-ranking East Bennett Valley, with an index value of 8.47, is only five miles away from bottom-ranking Roseland Creek, with an index value of 2.79. The former has a Human Development Index value above that of top-ranked state Connecticut, while the well-being outcomes of the latter are well below those of Mississippi, the lowest-ranked state on the American Human Development Index.
- The ranking of well-being levels by race and ethnicity in Sonoma County follows that of California, with Asian Americans at the top, followed by whites, African Americans, and Latinos. But the gap in human development between the highest- and lowest-ranked racial and ethnic groups is smaller in Sonoma County than it is in California and nationally.
- Sonoma County's females edge out males in human development. They outlive males by just over four years, adult women are slightly more likely to have completed high school and college, and girls' school enrollment is higher than boys'. Yet women's median earnings lag behind men's by $8,628 per year.

KEY FINDINGS: HEALTH

- Sonoma County residents have an average life expectancy of 81.0—two years longer than the national average of 79.0 but just under California's life expectancy of 81.2.
- An entire decade separates the life expectancies in the top and bottom census tracts.

An entire decade separates the life expectancies in the top and bottom census tracts.

- The top five tracts are Central Bennett Valley (85.7 years), Sea Ranch/Timber Cove and Jenner/Cazadero (both 84.8 years), Annadel/South Oakmont and North Oakmont/Hood Mountain (both 84.3 years), and West Sebastopol/Graton (84.1 years). The bottom five are Bicentennial Park (77.0 years), Sheppard (76.6 years), Burbank Gardens (76.0 years), Downtown Santa Rosa (75.5 years), and Kenwood/Glen Ellen (75.2 years).
- Analysis of Sonoma County's ninety-nine tracts shows a clear positive correlation between life expectancy and education: people in neighborhoods with higher educational attainment and enrollment have longer lives.
- Asian Americans in Sonoma County live the longest compared to other major racial and ethnic groups (86.2 years), followed by Latinos (85.3 years), whites (80.5 years), and African Americans (77.7 years).

KEY FINDINGS: EDUCATION

- Variation in educational outcomes by census tract in Sonoma County is significant and meaningful. The range in the percentage of adult residents with less than a high school diploma is huge, going from a low of 0.4 percent in North Oakmont/Hood Mountain to a high of 46.1 percent in Roseland Creek. The range in school enrollment is likewise vast, from 53.8 percent in Forestville to 100 percent in Central East Windsor.
- In Sonoma County, as in most metro areas and states as well as nationally, educational attainment follows a similar pattern: Asian Americans have the highest score, followed by whites, African Americans, and Latinos. The Education Index is measured by combining the highest degree attained by adults 25 and older and school enrollment of all kids and young adults ages 3 to 24.
- The Census Bureau–defined category "Asian" encompasses U.S.-born citizens who trace their heritage to a wide range of Asian countries, as well as Asian immigrants. The high level of average attainment for this broad group obscures the education struggles of some. While 59.7 percent of Asian Indians in Sonoma County have at least a bachelor's degree, only 17.5 percent of Vietnamese residents do.

KEY FINDINGS: EARNINGS

- Median earnings, the main gauge of material living standards in this report, are $30,214 annually in Sonoma County, which is roughly on par with earnings in California and the country as a whole.

Of the three indicators analyzed in this report—unemployment, child poverty, and housing burden—Sonoma falls near the middle of the pack compared to its peer counties in California.

- Significant disparities in earnings separate census tracts within Sonoma County; annual earnings range from $14,946 in Rohnert Park B/C/R Section, which is below the federal poverty line for a two-person household, to $68,967 in East Bennett Valley, more than double the county median.
- In Sonoma County, whites earn the most money, $36,647 annually, followed by Asian Americans ($32,495), African Americans ($31,213), and Latinos ($21,695). This is found in California as a whole as well, although Asian Americans are the top-earning group in the country overall.
- Men in Sonoma County earn about $8,500 more than women. This wage gap is similar to the gap between men and women at the state level, although it is around $1,000 smaller than at the national level.
- Level of education is the single biggest predictor of earnings for racial and ethnic groups and for census tracts in Sonoma County.

Conclusion—Pledge of Support

Sonoma County is rich in organizations dedicated to improving life for its residents, particularly those who face high barriers to living freely chosen lives of value and opportunity. Working together, these public and private organizations can make a real difference. Thus, this report not only ends with an Agenda for Action—a set of recommendations in health, education, and income that scholarly research and well-documented experience have shown will be essential to boosting Index scores—but also a Pledge of Support from these community actors.

Over sixty organizations and elected officials have committed thus far to using *A Portrait of Sonoma County* to better understand gaps in opportunities and to partner with community organizations and agencies to identify the strengths and assets on which to build a comprehensive and inclusive response to the report. This list will grow as the report is released, understood, and shared across the county, and communities will play a critical role in owning the data and creating solutions moving forward. Those who have signed the Pledge of Support aim to leverage resources, empower communities, share best practices, and strategically focus their efforts in order to creatively contribute to a new and innovative discussion of health equity in Sonoma County. Recognizing that only by working together as equal partners with a shared vision and common agenda, these groups and individuals hope to achieve their long-term goal of making Sonoma County the healthiest county in the state for all residents to work, live, and play.

Over sixty organizations and elected officials have committed thus far to using *A Portrait of Sonoma County* to better understand gaps in opportunities and to build a comprehensive and inclusive response to the report.

Understanding Human Development

Introduction

Sonoma County is a leading producer of wine grapes and, after suffering negative impacts from the Great Recession, is seeing renewed vigor in the tourism industry. The county now ranks as a very competitive place to do business.[1] We know this from frequently collected and closely tracked economic metrics that provide an important account of how the economy is doing in U.S. states and counties. For a more complete story of how **people** are doing, however, in Sonoma County and elsewhere, we need **human metrics**, which tend to be lower on the list of information-gathering priorities. For example, health data on something as basic as how long people are living in our states and counties, as well as by race and ethnicity within our communities, are rarely calculated. They are, however, incorporated—along with other important indicators on education and earnings—into the American Human Development Index.

For a more complete story of how people are doing, we need human metrics.

Telling a more complete story has been a goal of the Sonoma County Department of Health Services (DHS) for several years. **In 2007, DHS convened a major initiative called Health Action to improve health in Sonoma County and achieve the vision of making the county the healthiest in California.** Unlike many other health initiatives at the time, the goal was to move beyond a narrowly defined focus on sickness and medical care to take into account a wide range of vital determinants of well-being and health, such as economic opportunities; living and working conditions in homes, schools, and workplaces; community inclusion; and levels of stigma and isolation. In doing so, DHS sought to engage a broad spectrum of stakeholders and pinpoint root causes of health problems rather than focusing solely on disease and illness. BOX 1 outlines the county's vibrant response to bringing about systemic change in people's lives.

BOX 1 Sonoma County's Goal to Bring About Health Equity for All

Sonoma County aspires to be the healthiest county in California. Health Action, Sonoma County's collective impact initiative to improve the health and well-being of all residents, has established a cross-sector approach to meet this vision. Ten broad goals and target outcomes guide strategic planning to address major determinants of health, with a strong focus on eliminating health disparities in those communities that experience the most negative health outcomes as a result of poor access to opportunity and prosperity.

In order to meet the county's goals of health equity for all, the Health Action Council, a group of forty-seven leaders committed to this vision, is focusing on three broad priority areas: educational attainment, economic security, and health system improvement, in line with the 2013–2016 Action Plan approved by the Sonoma County Board of Supervisors in 2012. Subcommittees of Health Action, including Cradle to Career and the Committee for Healthcare Improvement, in collaboration with a host of other initiatives, assess local data to identify issues across a spectrum of areas that affect health. These subcommittees recommend specific actions, drawing from evidence-based and prevention-focused programs promoted by the Upstream Investments Policy. The initiatives all rely on strong partnerships with nonprofit organizations, government agencies, foundations, businesses, local community groups—including place-based Health Action Chapters—and other sectors across the county to maximize resources and impact.

Measure of America Publications

NATIONAL REPORTS
The Measure of America 2010–2011: Mapping Risks & Resilience

STATE REPORTS
A Portrait of California: California Human Development Report 2011

COUNTY REPORTS
A Portrait of Marin: Marin Human Development Report 2012

THEMATIC REPORTS
Halve The Gap: Youth Disconnection in America's Cities 2013

During the course of this work, DHS became acquainted with the human development approach, which had been applied in well-being reports on California and Marin County, and saw that it might be useful to its work on the social determinants of health. The connection led to the commissioning of this report.

Human development is formally defined as **the process of improving people's well-being and expanding their freedoms and opportunities**—in other words, it is about what people can do and be. The human development approach puts people at the center of analysis and looks at the range of interlocking factors that shape their opportunities and enable them to live lives of value and choice. People with high levels of human development can invest in themselves and their families and live to their full potential; those without find many doors shut and many choices and opportunities out of reach.

The human development concept is the brainchild of the late economist Mahbub ul Haq. In his work at the World Bank in the 1970s, and later as minister of finance in his own country of Pakistan, Dr. Haq argued that existing measures of human progress failed to account for the true purpose of development: to improve people's lives. In particular, he believed the commonly used measure of Gross Domestic Product (GDP) was an inadequate measure of well-being.

Dr. Haq often cited the example of Vietnam and Pakistan. In the late 1980s, both had the same GDP per capita—around $2,000 per year—but the Vietnamese, on average, lived a full eight years longer than Pakistanis and were twice as likely to be able to read. In other words, money alone did not tell the whole story; the same income was "buying" two dramatically different levels of well-being. Working with Harvard professor and Nobel laureate Amartya Sen and other gifted economists, Dr. Haq published the first Human Development Report in 1990 with the sponsorship of the UN Development Programme.

The Human Development Report is widely known as a useful analysis of the well-being of large populations. In addition to the global edition that comes out annually, reports have been produced in more than 160 countries in the last fifteen years, with an impressive record of spurring public debate and political engagement. **Today, the Human Development Report with its trademark Human Development Index is a global gold standard and a well-known vehicle for change.**

Measure of America (MOA), a project of the nonprofit Social Science Research Council, is built upon the UN Human Development Index. MOA keeps the same conceptual framework and areas of focus but uses data more relevant to an affluent democracy such as the United States, rather than those applicable to the full range of conditions found in the 183 United Nations member states. Since MOA introduced a modified American Human Development Index in 2008, organizations and communities across the country have used it to understand community needs and shape evidence-based policies and people-centered investments.

How Is Human Development Measured?

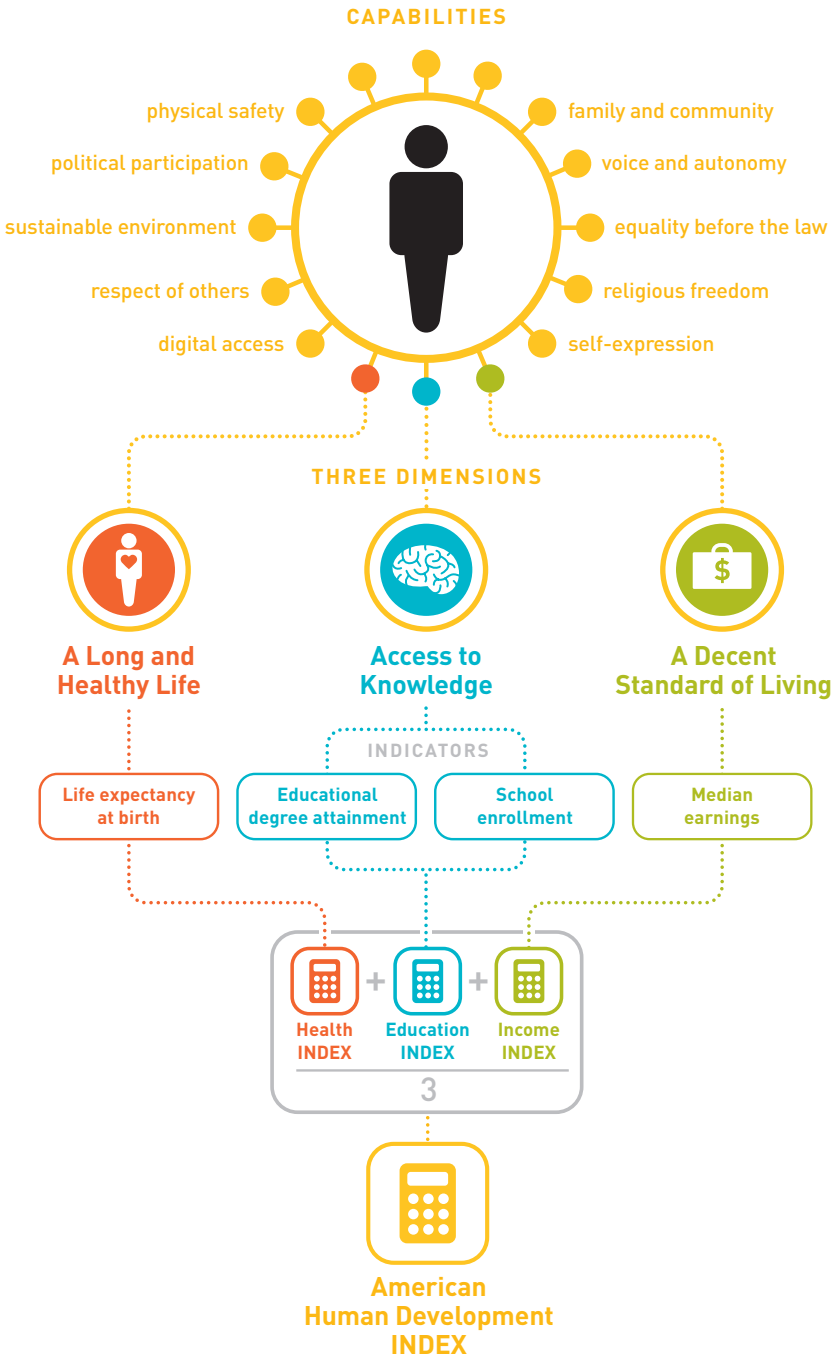
The human development concept is broad: it encompasses the economic, social, legal, psychological, cultural, environmental, and political processes that define the range of options available to people. The Human Development Index, however, measures just three fundamental human development dimensions: **a long and healthy life**, **access to knowledge**, and **a decent standard of living**. The three components are weighted equally on the premise that each is equally important for human well-being. **People around the world value these as core building blocks of a life of freedom and dignity, and good proxy indicators are available for each.** The index is the start of a conversation about well-being and access to opportunity and a useful summary measure that allows for reliable comparisons of groups and areas. Once disparities in these basic outcomes have been brought to light through the use of objective data, the next task is to examine the underlying conditions and choices that have led to them by exploring a whole host of other indicators.

The Human Development Index measures three fundamental human development dimensions: a long and healthy life, access to knowledge, and a decent standard of living.

In broad terms, the first steps for calculating the index are to compile or calculate the four indicators that comprise it: life expectancy, school enrollment, educational degree attainment, and median personal earnings. Because these indicators use different scales (years, dollars, percent), they must be put on a common scale so that they can be combined. Three sub-indexes, one for each of the three dimensions that make up the index—health, education, and earnings—are created on a scale of 0 to 10. The process requires the selection of minimum and maximum values—or "goalposts"—for each of the four indicators. These goalposts are determined based on the range of the indicator observed from the data and also taking into account possible increases and decreases in years to come. For life expectancy, for example, the goalposts are ninety years at the high end and sixty-six years at the low end. The three sub-indexes are then added together and divided by three to yield the American Human Development Index value. (See **FIGURE 1**; also, a detailed technical description of how the index is calculated is contained in the Methodological Note on page 96.)

The American Human Development Index is sensitive to changes in the indicators that constitute it and therefore responsive to changes in well-being within the populations it is used to measure. For example, if life expectancy at birth in Sonoma County were to increase by one year while all other indicators remained the same, the index value for the county would increase from 5.42 to 5.56. To achieve a similar increase in the county's index score holding health and education indicators constant, median personal earnings would need to grow by $1,900.

FIGURE 1 **Human Development: From Concept to Measurement**



A Long and Healthy Life is measured using life expectancy at birth. It is calculated using mortality data from the Death Statistical Master Files of the California Department of Public Health and population data from the U.S. Census Bureau for 2005–11.

Access to Knowledge is measured using two indicators: school enrollment for the population 3 to 24 years of age and educational degree attainment for those 25 and older. A one-third weight is applied to the enrollment indicator and a two-thirds weight to the degree attainment indicator. Both are from the U.S. Census Bureau's 2012 American Community Survey.

A Decent Standard of Living is measured using median earnings of all full- and part-time workers age 16 and older from the same 2012 American Community Survey.

Human Development: The Benefits of a New Approach

Measure of America uses official government statistics to create something new in the United States: an easy-to-understand composite of comparable indicators of health, education, and living standards. Four features make the American HD Index particularly useful for understanding and improving the human condition in the United States.

It supplements money metrics with human metrics. An overreliance on economic metrics such as GDP per capita can provide misleading information about the everyday conditions of people's lives. Connecticut and Wyoming, for instance, have nearly the same GDP per capita. Yet Connecticut residents, on average, can expect to outlive their western compatriots by two and a half years, are almost 50 percent more likely to have bachelor's degrees, and typically earn $7,000 more per year.

It connects sectors to show problems, and their solutions, from a people-centered perspective. The cross-sectoral American HD Index broadens the analysis of the interlocking factors that create opportunities and fuel both advantage and disadvantage. For example, research overwhelmingly points to the dominant role of education in increasing life span, yet this link is rarely discussed. In fact, those with an education beyond high school have an average life expectancy seven years longer than those whose education stops with high school.[2]

It focuses on outcomes. Human development and the HD Index focus on the end result of efforts to bring about change. Lots of data points help us understand specific problems related to people's lives (for example, asthma rates in one county) or quantify efforts to address the problems (for example, funding for health clinics with asthma specialists). But we often stop short of measuring the outcome of these efforts: Are investments making a difference? Are children in the community healthier? Are hospitalizations for asthma decreasing?

It counts everyone. The Human Development Index moves away from the binary us-them view of advantage and disadvantage provided by today's poverty measure to one in which everyone can see him- or herself along the same continuum.

The Human Development Index moves away from a binary us-them view of advantage and disadvantage to one in which everyone can see him- or herself along the same continuum.

Who Are We?

KEY FACTS ABOUT THE POPULATION OF SONOMA COUNTY

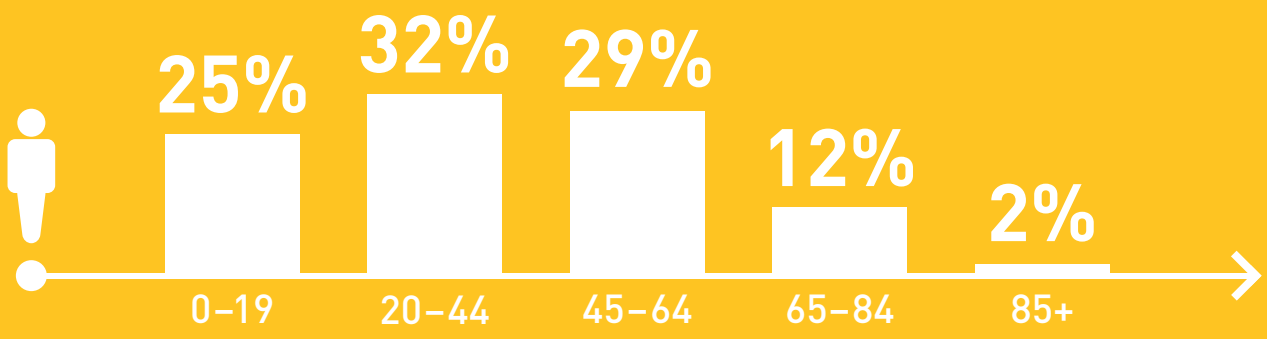
Four hundred eighty-three thousand, eight hundred seventy-eight **people**

307 people PER SQUARE MILE

GENDER

URBAN | RURAL

AGE



RACE & ETHNICITY

66.1%
White

24.9%
Latino

3.9%
Some other race/races

3.7%
Asian American

1.4%
African American

HOME OWNERSHIP

60%
Own

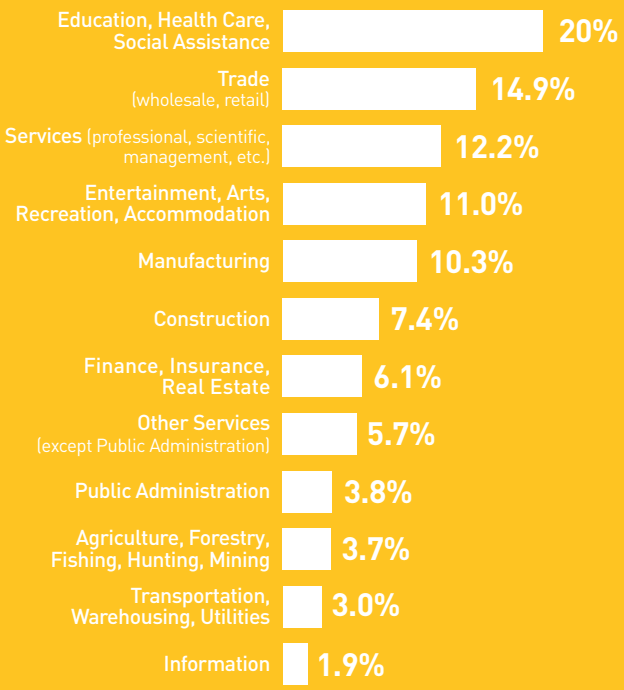
40%
Rent

BIRTHPLACE

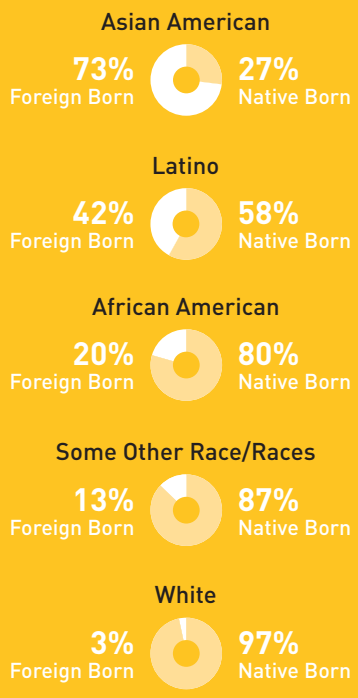
17%
Foreign Born

83%
Native Born

EMPLOYMENT



NATIVITY BY RACE



Note: Population data by gender, urban/rural, and age are from 2010; all other data are from 2012. Totals may not equal 100 due to rounding.
Sources: U.S. Census Bureau, Census 2010 and American Community Survey 2012.

Sonoma County: What the Human Development Index Reveals

IN THIS SECTION

Sonoma County in Context

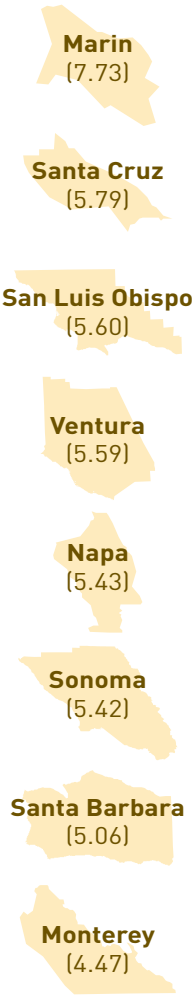
While the American Human Development Index does not measure Sonoma County's breathtaking vistas, the rich diversity of its population, or the vibrant web of community organizations engaged in making it a better place, it captures outcomes in three areas essential to well-being and access to opportunity. Encapsulated within these three broad areas are many others: for example, life expectancy is affected by the quality of the air we breathe, the amount of stress in our daily lives, the presence or absence of occupational hazards, and many other factors.

Sonoma County's Human Development Index value is 5.42 out of a possible total of 10. This score is well above the U.S. index value of 5.07 and slightly above California's value of 5.39. Relative to seven other California counties that share some important socioeconomic characteristics with it, Sonoma County ranks sixth on the index, below Marin, Santa Cruz, San Luis Obispo, Ventura, and Napa Counties, but above both Santa Barbara and Monterey Counties (see SIDEBAR). These counties were selected for this analysis because the Sonoma County Economic Development Board uses them as a benchmark against which to assess the county in the areas of business and jobs. As discussed below, Sonoma County falls toward the middle of this group on education and earnings but is at the bottom in terms of life expectancy.[3]

Sonoma County is made up of ninety-nine inhabited areas (or neighborhoods) designated by the U.S. Census Bureau as census tracts. Each contains an average of 5,000 inhabitants, enabling comparisons of neighborhoods with roughly the same population size. Together they encompass all the land within the county boundaries, including tribal lands. In sixty-nine tracts, or two-thirds of the county's census-defined neighborhoods, well-being and access to opportunity fall above the U.S. average of 5.07.

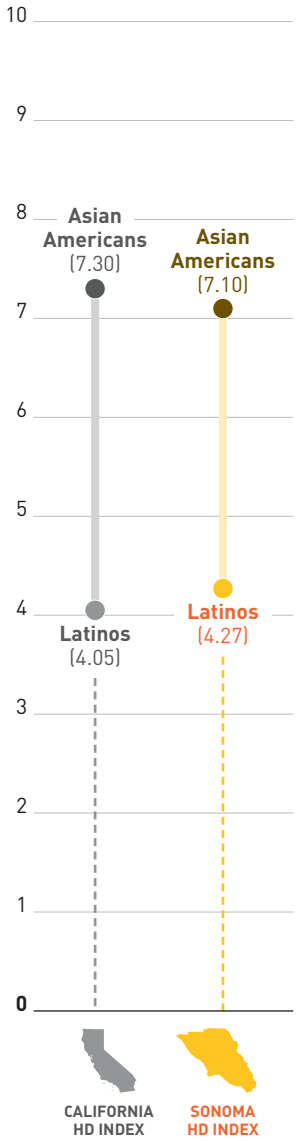
The following is an exploration of the state of well-being within Sonoma County. It presents and analyzes index scores based on a number of indicators for the major racial and ethnic groups, for women and men, and for the county's census tracts, which contain the smallest place-based population groups for which reliable, comparable data on these indicators are available from the U.S. Census Bureau.

Sonoma and Comparable Counties on the HD Index



Sources: Measure of America analysis of data from the California Department of Public Health 2005–2012, and U.S. Census Bureau, American Community Survey, 2012.

Sonoma County's racial and ethnic well-being gap is smaller than that of California.



Source: Race and ethnic group estimates for California are from Lewis and Burd-Sharps (2013). Remainder are from Measure of America analysis of data from the California Department of Public Health 2005–2011, and U.S. Census Bureau, American Community Survey, 2012.

VARIATION BY RACE AND ETHNICITY

The American Human Development Index scores of Sonoma County's major racial and ethnic groups vary significantly. The groups we examine are defined by the White House Office of Management and Budget, although we cannot include Native Americans in the index, as they make up less than 1 percent of Sonoma County's population. The report does discuss issues concerning Native American well-being, however.

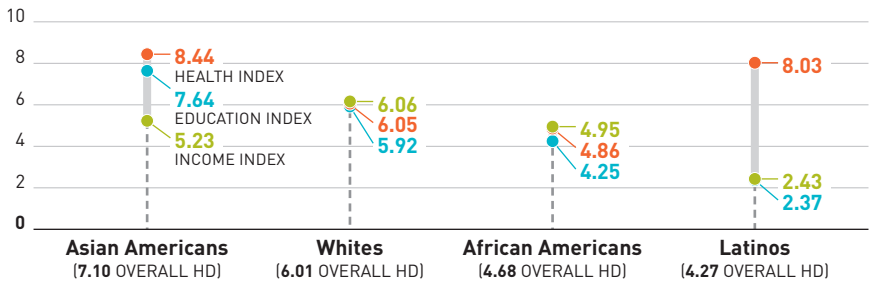
The ranking of well-being levels by race and ethnicity in Sonoma County follows that of California, with Asian Americans at the top, followed by whites, African Americans, and Latinos. A similar pattern holds nationwide, although Latinos fare better than African Americans at the national level, and Native Americans have the lowest score.[4] Even so, Sonoma County differs from the state and nation in some surprising ways.

One considerable difference is the gap in human development between the highest- and lowest-ranked racial and ethnic groups, which is smaller in Sonoma County (2.83) than in California (3.25). Given the increasing evidence that extreme racial disparities in terms of income and other factors can be detrimental to many aspects of well-being, this is indeed very good news for Sonoma.[5]

A second difference concerns the well-being of Asian Americans, who are the only major racial or ethnic group with an HD Index value lower in Sonoma County than in the United States, even though they are ranked first overall in Sonoma. This lower Asian American value is in marked contrast to that of African Americans, with an index value in Sonoma a surprising 23 percent higher than for African Americans nationally; likewise, the index value is 5 percent greater for Sonoma's Latinos than the national Latino average and 11 percent greater for whites.

The following are some notable strengths of and challenges for each of these groups in Sonoma County:

FIGURE 2 Human Development Outcomes among Sonoma County's Major Racial and Ethnic Groups Vary Significantly



Source: Measure of America analysis of California Department of Public Health, Death Statistical Master File, 2005–2011, and U.S. Census Bureau, American Community Survey, 2012.

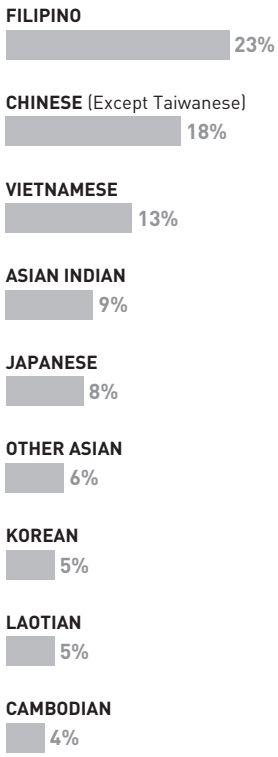
Asian Americans, who make up 3.7 percent of Sonoma County's population, have the highest well-being score in Sonoma, at 7.10. Their strongest dimension is health: Asian Americans live longer than members of any other racial and ethnic group, 86.2 years. The high educational attainment of Sonoma County's Asian American adults is also impressive; 44.4 percent have at least a bachelor's degree, as compared to whites at 38 percent. One area in which the group lags, though, is high school completion; nearly 13 percent of Sonoma's Asian American adults age 25 and older did not complete high school or an equivalency diploma. One factor to consider when looking at these data is that the Census Bureau–defined category "Asian" is extremely broad. It encompasses U.S.-born citizens who trace their heritage to a wide range of Asian countries as well as Asian immigrants who arrive in the United States from extraordinarily diverse circumstances (see SIDEBAR). This split record on educational attainment can be traced to the differing educational opportunities of immigrants and their children. But like immigrant groups before them, the second generation tends to have far higher levels of educational attainment than their parents. While overall educational outcomes of Asian Americans are higher than those of whites, median personal earnings, or the wages and salaries of the typical worker in Sonoma County, are considerably lower, with a gap of over $4,000 ($32,495 for Asian Americans, as compared to $36,647 for whites). Earnings are explored in greater depth in the chapter on Standard of Living.

Whites, who make up 66.1 percent of Sonoma County's population, have an index score of 6.01, the second-highest among the racial and ethnic groups. Whites can expect to live 80.5 years, which is on par with the California and Sonoma life expectancies; over 95 percent of adults have completed high school; and earnings are $36,647, well above California's median of $30,500, but considerably lower than other nearby counties. Whites in Santa Cruz, Ventura, and Napa Counties, for example, earn roughly $40,000, $42,000, and $39,500, respectively.

African Americans, who make up 1.4 percent of Sonoma County's population, rank third with an index score of 4.68. African Americans fare better in Sonoma County than in California as a whole, and while they are below Latinos in the national HD Index ranking, their score in the county is higher than Latinos'. African Americans also have rates of college attainment and median personal earnings at or above Sonoma County's average. Yet, as in the nation and in California, they have the shortest life expectancy at birth. An African American baby born today in Sonoma County can expect to live eight and a half years less than an Asian American baby and seven and a half years less than a Latino baby.

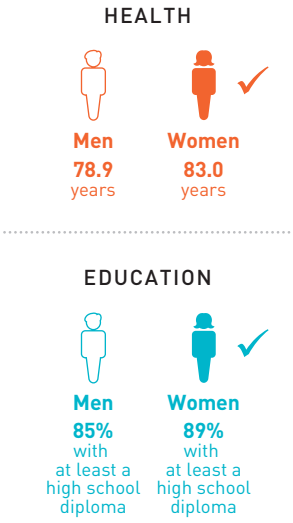
Latinos, who make up 24.9 percent of Sonoma County's population, have the lowest score on the index, 4.27. Yet Latinos in Sonoma County do better in terms of human well-being than they do in the state as a whole (the Latino statewide score is 4.05). As discussed below, Latino life expectancy in Sonoma County is very high; Latinos outlive whites, on average, by nearly half a decade.

Major Asian Subgroups in Sonoma County



Source: U.S. Census Bureau. American Community Survey, 2012, 5-year estimates.

In Sonoma, women live longer and have more education, but men earn more.



Source: Measure of America analysis of data from the California Department of Public Health 2005-2011, and U.S. Census Bureau, American Community Survey, 2012, 1-year estimates.

Education and income indicators are far behind, however. Nearly 44 percent of Latino adults did not complete high school, and their median earnings are only about $21,500, which is below the poverty line for a family of four.

In the chapters that follow, the distribution of well-being by race and ethnicity in health, education, and earnings are explored further.

VARIATION BY GENDER

Sonoma County's females edge out males in human development by a small margin; their score is 5.41, as compared with 5.30. Females outlive males by just over four years, women are slightly more likely to have completed high school and college than men, and girls' school enrollment is higher than boys'.[6] Females age 16 years and older in the workforce, however, lag behind males in earnings by an annual amount of $8,628 (see SIDEBAR).

The difference in life expectancy between men and women can largely be attributed to biological genetic factors—the world over, females have an average four- to five-year advantage in life span over males, though differing patterns of health and risk behaviors play a role as well.

In the United States, women have taken to heart the notions that education is an assured route to expanding options beyond traditional low-paying "female" occupations and that competing in today's globalized knowledge economy requires higher education; girls and young women today are graduating high school and college at higher rates than men across the nation. Yet, as the numbers show, higher educational achievement has not automatically translated into higher earnings.

The earnings gap between men and women remains stubbornly persistent.[7] Median personal earnings include both full- and part-time workers, so part of the difference is a higher proportion of Sonoma County's women than men working part time.[8] These gaps are also explained in part by the wage "penalty" women pay if they leave the workforce to raise children; in part by women's predominance in such low-wage occupations as child-care providers and home health aides; and in part by the persistence of wage discrimination—even in a female-dominated field like education, where two in three workers are women, men earn $17,000 more per year.[9]

VARIATION BY GEOGRAPHY: CENSUS TRACTS

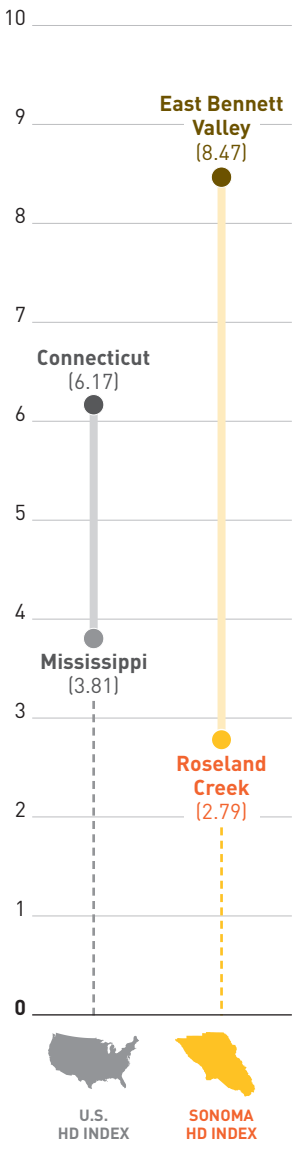
A look at the Sonoma County human development map does not reveal any particular geographical pattern to well-being outcomes (see MAP 1). High human development areas are found in the north as well as the south and in cities as well as rural areas. What is clear, however, as is true across America, is that the most extreme disparities in basic social and economic outcomes are often found within small geographical areas.

At the top of the Sonoma County well-being scale are three census tracts in and around the city of Santa Rosa: East Bennett Valley, Fountain Grove, and Skyhawk. Three Santa Rosa neighborhoods are also at the bottom: Sheppard, Roseland, and Roseland Creek (see SIDEBAR). Top-ranking East Bennett Valley, with an index value of 8.47, is five miles east of bottom-ranking Roseland Creek, with an index value of 2.79. The former has a Human Development Index value above that of top-ranked-state Connecticut, while the well-being outcomes of the latter are well below those of Mississippi, the lowest-ranked state on the American HD Index.

In **East Bennett Valley**, a baby born today can expect to live 82 years. Virtually every adult living in this tract has completed high school, and nearly three in five have at least a bachelor's degree. Median personal earnings ($68,967) are more than double those of the typical Sonoma County worker. East Bennett Valley is 90 percent white, 5 percent Latino, 3 percent Asian, and less than 1 percent African American.

In contrast, life expectancy at birth in **Roseland Creek** is only 77.1 years, and educational outcomes are alarmingly low, with nearly half (46 percent) of adults today lacking the barebones minimum of a high school diploma. The typical worker in Roseland Creek earns $21,699, about the same as the earnings of an American worker in the late 1960s (in inflation-adjusted dollars). Roseland Creek is 60 percent Latino, 30 percent white, 5 percent Asian American, and 2 percent African American.

Sonoma County vs. United States



Sources: Lewis and Burd-Sharps (2013) and Measure of America analysis of data from the California Department of Public Health 2005–2011, and US Census Bureau, American Community Survey, 2012, 5-year estimates.

MAP 1 **Human Development in Sonoma County by Census Tract**

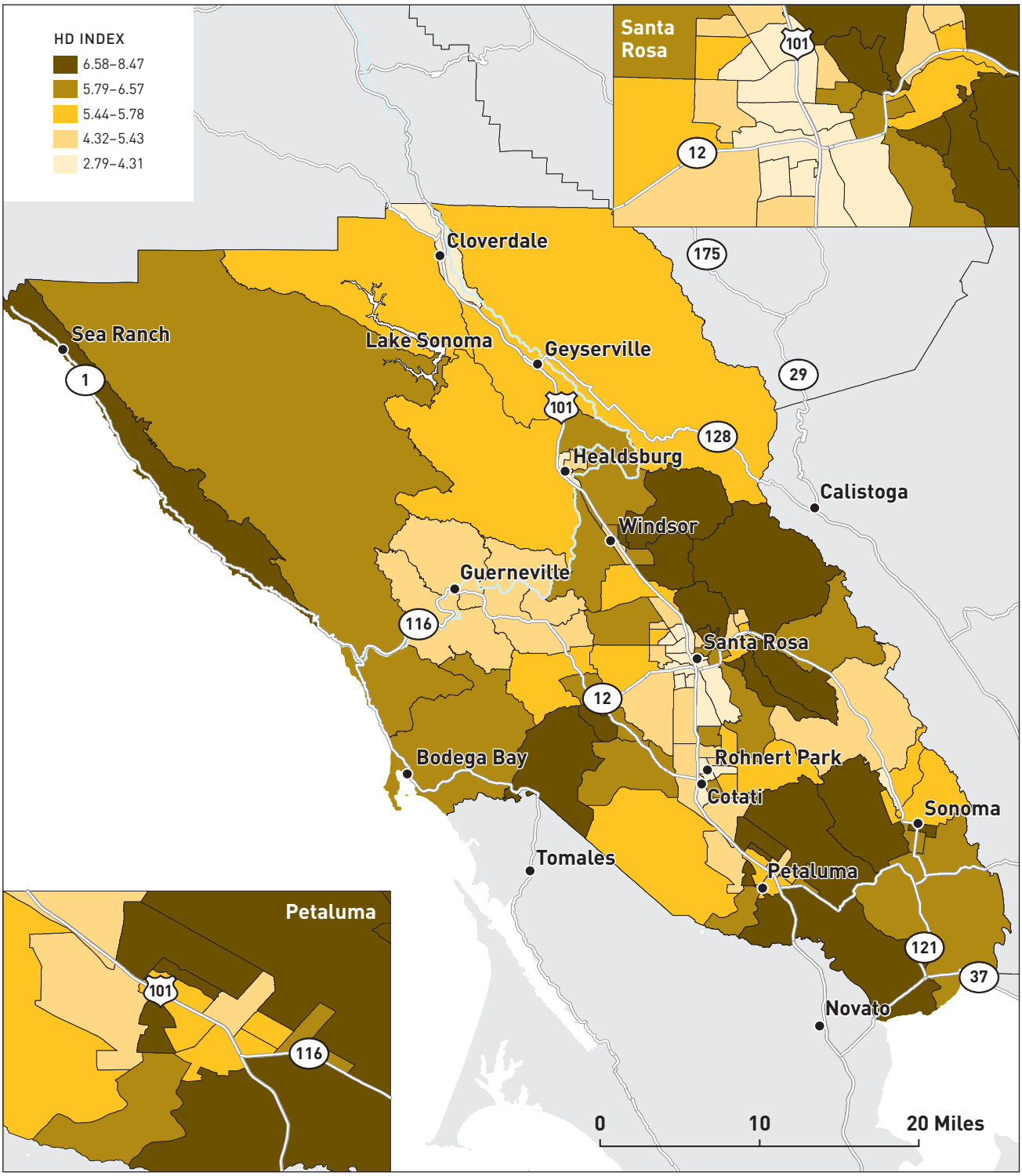


TABLE 1 Human Development in Sonoma County by Census Tract

		HD INDEX	LIFE EXPECTANCY AT BIRTH (years)	LESS THAN HIGH SCHOOL (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)	MEDIAN EARNINGS (2012 dollars)
	California	**5.39**	81.2	18.5	30.9	11.3	78.5	30,502
	Sonoma County	**5.42**	81.0	13.1	31.8	11.7	77.9	30,214
1	East Bennett Valley	**8.47**	82.0	0.5	58.6	24.0	90.2	68,967
2	Fountain Grove	**8.35**	82.0	4.2	56.6	24.6	88.7	67,357
3	Skyhawk	**7.78**	83.1	3.6	57.8	22.5	84.1	50,633
4	Annadel/South Oakmont	**7.71**	84.3	3.1	54.3	21.2	86.5	45,441
5	Old Quarry	**7.71**	82.5	3.7	57.5	26.5	93.1	43,919
6	Rural Cemetery	**7.67**	83.6	3.4	48.0	25.7	92.5	43,240
7	Central Bennett Valley	**7.63**	85.7	6.3	40.8	15.8	89.4	44,564
8	Sea Ranch/Timber Cove	**7.35**	84.8	1.1	65.4	40.8	86.7	31,552
9	Cherry Valley	**7.18**	81.1	5.6	40.1	15.7	90.6	47,536
10	Sonoma Mountain	**7.16**	81.2	4.3	39.8	7.7	87.3	51,590
11	Windsor East	**7.06**	83.3	7.2	40.5	13.7	81.9	45,526
12	Meadow	**7.00**	81.2	4.5	39.1	15.1	85.5	47,368
13	Petaluma Airport/Arroyo Park	**6.98**	82.4	5.0	36.9	8.4	88.3	44,504
14	Downtown Sonoma	**6.95**	80.4	4.3	52.3	19.7	86.1	42,835
15	Southwest Sebastopol	**6.94**	81.5	6.5	41.9	15.6	85.5	44,669
16	Gold Ridge	**6.94**	83.4	5.4	51.4	21.5	77.5	40,151
17	Arnold Drive/East Sonoma Mountain	**6.77**	82.6	5.1	50.9	13.8	78.7	40,369
18	Central East Windsor	**6.71**	83.3	9.5	21.2	8.4	100.0	38,783
19	Larkfield-Wikiup	**6.62**	81.2	6.4	36.2	9.9	81.9	44,643
20	Sonoma City South/Vineburg	**6.57**	80.4	5.4	32.0	13.3	90.1	41,168
21	Southern Junior College Neighborhood	**6.56**	81.9	4.0	49.5	18.1	79.7	37,055
22	Jenner/Cazadero	**6.55**	84.8	4.7	35.9	12.1	80.2	35,000
23	Occidental/Bodega	**6.47**	81.7	5.0	51.5	25.5	83.4	32,468
24	Fulton	**6.46**	81.2	12.2	30.2	7.1	89.2	41,465
25	Spring Hill	**6.45**	77.1	8.2	45.7	15.3	86.4	46,214
26	Casa Grande	**6.42**	82.4	7.6	38.4	12.6	84.7	35,987
27	Montgomery Village	**6.38**	82.0	3.8	32.7	10.8	86.4	36,101
28	Hessel Community	**6.37**	81.3	7.7	34.0	12.1	83.1	39,743
29	Rohnert Park F/H Section	**6.22**	81.6	6.3	31.1	8.8	87.0	35,610
30	West Bennett Valley	**6.17**	81.6	6.6	47.5	18.8	72.4	36,145
31	Carneros Sonoma Area	**6.15**	81.7	8.3	39.6	12.1	92.3	30,052
32	Northeast Windsor	**6.15**	83.3	12.2	23.2	5.7	81.9	37,289
33	North Healdsburg	**6.11**	81.7	12.0	41.9	18.4	81.8	32,928
34	Windsor Southeast	**6.11**	79.6	11.1	16.6	5.6	94.2	40,145
35	Southeast Sebastopol	**6.10**	79.2	7.3	36.0	15.0	78.9	41,014
36	West Windsor	**6.07**	82.0	15.0	32.0	8.2	80.6	37,695
37	North Oakmont/Hood Mountain	**5.98**	84.3	0.4	44.2	18.9	95.0	20,406
38	North Sebastopol	**5.84**	82.1	8.0	39.5	16.4	75.1	31,627
39	East Cotati/Rohnert Park L Section	**5.79**	80.6	11.2	24.7	7.0	83.6	35,880
40	Sonoma City North/West Mayacamas Mountain	**5.78**	81.8	7.3	43.1	15.3	73.0	31,649
41	Grant	**5.77**	80.5	6.6	44.1	15.6	65.3	37,279
42	West Cloverdale	**5.76**	80.1	13.2	25.9	9.1	79.4	38,292
43	Rohnert Park M Section	**5.75**	81.9	5.9	28.3	7.0	85.0	30,179
44	Alexander Valley	**5.73**	82.1	17.8	32.1	13.2	79.2	32,303
45	Sunrise/Bond Parks	**5.72**	81.2	12.9	29.8	10.4	78.4	34,621
46	Piner	**5.71**	82.7	11.2	19.0	3.9	74.0	36,774
47	Laguna de Santa Rosa/Hall Road	**5.69**	82.0	18.4	30.6	9.3	81.5	32,231
48	Boyes Hot Springs West/El Verano	**5.68**	83.0	26.0	29.8	11.5	85.3	29,824
49	McKinley	**5.66**	80.6	17.3	30.6	8.9	78.1	36,114
50	Shiloh South	**5.62**	81.9	11.8	34.4	13.3	74.0	31,909

TABLE 1 Human Development in Sonoma County by Census Tract

		HD INDEX	LIFE EXPECTANCY AT BIRTH (years)	LESS THAN HIGH SCHOOL (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)	MEDIAN EARNINGS (2012 dollars)
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	Sonoma County	**5.42**	81.0	13.1	31.8	11.7	77.9	30,214
51	Middle Rincon South	**5.61**	80.3	7.3	28.7	10.3	85.4	30,568
52	Miwok	**5.59**	80.9	16.7	26.2	5.1	82.1	34,119
53	Spring Lake	**5.59**	81.4	11.6	33.3	14.1	75.5	31,683
54	La Tercera	**5.58**	78.8	16.4	25.9	4.7	86.9	36,216
55	West Sebastopol/Graton	**5.58**	84.1	14.4	45.1	16.1	61.2	30,518
56	Two Rock	**5.55**	82.4	9.6	32.3	12.0	72.2	30,949
57	Boyes Hot Springs/Fetters Springs/Agua Caliente East	**5.55**	81.8	14.2	40.4	17.3	72.6	30,164
58	Dry Creek	**5.55**	81.9	11.5	45.0	20.5	67.0	30,375
59	Rohnert Park SSU/J Section	**5.50**	80.4	13.5	33.2	9.6	80.5	31,638
60	Old Healdsburg	**5.43**	82.4	8.3	37.0	15.6	66.2	29,912
61	Schaefer	**5.39**	78.2	13.3	22.8	5.8	75.1	40,322
62	Guerneville/Rio Nido	**5.29**	80.1	11.1	32.4	15.6	65.1	34,547
63	West Cotati/Penngrove	**5.25**	80.6	16.3	26.1	7.6	77.3	31,499
64	Northern Junior College Neighborhood	**5.25**	80.0	5.3	33.0	9.2	70.3	31,860
65	Rohnert Park D/E/S Section	**5.21**	81.4	12.6	21.2	7.9	83.4	27,294
66	Pioneer Park	**5.20**	81.2	15.0	19.1	5.4	71.1	34,083
67	Russian River Valley	**5.19**	79.9	8.2	37.1	16.5	68.1	30,431
68	Brush Creek	**5.15**	79.5	15.1	32.2	10.8	74.7	31,334
69	Cinnabar/West Rural Petaluma	**5.10**	78.9	9.5	32.3	9.8	67.5	34,010
70	Central Rohnert Park	**4.96**	78.0	10.8	28.4	7.0	71.8	33,509
71	Kenwood/Glen Ellen	**4.95**	75.2	11.9	36.8	12.8	62.5	41,137
72	Wright	**4.91**	79.4	21.5	20.8	6.4	76.1	32,046
73	Central Windsor	**4.84**	79.6	17.2	22.4	8.5	73.2	30,436
74	Middle Rincon North	**4.83**	77.1	8.1	28.0	9.7	72.7	31,947
75	Olivet Road	**4.82**	80.5	12.3	22.0	7.4	78.2	26,118
76	Bellevue	**4.66**	81.0	25.4	13.0	4.6	78.5	27,511
77	Monte Rio	**4.64**	79.9	5.8	28.0	14.0	67.9	25,553
78	Lucchesi/McDowell	**4.60**	78.5	17.7	24.2	7.9	79.8	26,597
79	Forestville	**4.57**	79.7	7.2	35.0	15.6	53.8	26,561
80	Downtown Cotati	**4.31**	77.8	14.3	24.7	9.2	70.1	27,108
81	Kawana Springs	**4.20**	80.9	26.8	22.1	5.4	78.6	21,510
82	Central Healdsburg	**4.14**	79.3	22.7	23.0	9.3	67.1	25,463
83	Railroad Square	**4.12**	79.7	21.7	14.0	5.9	78.0	22,908
84	Downtown Rohnert Park	**4.09**	79.5	10.0	18.6	3.9	60.1	26,630
85	Coddingtown	**4.08**	78.9	21.4	16.5	4.7	75.6	24,114
86	Burbank Gardens	**4.03**	76.0	16.1	29.8	14.8	79.0	22,421
87	Rohnert Park B/C/R Section	**3.97**	80.4	10.0	28.7	8.3	85.9	14,946
88	Comstock	**3.90**	78.0	33.0	8.4	3.2	81.2	25,000
89	Taylor Mountain	**3.90**	77.1	23.2	13.1	2.9	71.3	27,688
90	Downtown Santa Rosa	**3.89**	75.5	8.4	30.1	7.4	75.2	22,628
91	East Cloverdale	**3.79**	80.1	30.3	12.4	2.9	63.5	25,721
92	Rohnert Park A Section	**3.75**	77.9	22.0	14.2	3.7	76.4	22,522
93	Bicentennial Park	**3.73**	77.0	26.6	21.5	5.0	71.2	24,760
94	West End	**3.51**	78.7	35.7	12.9	3.6	73.2	22,294
95	West Junior College	**3.44**	79.3	17.1	22.7	7.0	65.3	18,919
96	Fetters Springs/Agua Caliente West	**3.41**	81.8	45.4	17.1	5.8	67.8	19,444
97	Sheppard	**2.98**	76.6	41.8	8.2	3.6	71.7	22,068
98	Roseland	**2.95**	77.1	40.8	14.4	4.1	65.4	21,883
99	Roseland Creek	**2.79**	77.1	46.1	8.6	4.3	66.2	21,699

Sources: Measure of America analysis of data from the California Department of Public Health, Death Statistical Master File, 2005–2011, and U.S. Census Bureau, American Community Survey, 2012 and 2008–2012.

The three chapters that follow examine gaps in Sonoma County in three basic areas vital to well-being and access to opportunity—**health**, **education**, and **earnings**.

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They explore the distribution of well-being through several lenses, including **geography**, focusing primarily on census tracts, and **demography**, focusing primarily on race and ethnicity, and gender. Both geography and demography affect human development outcomes, and the ways in which they interact also influence the range of people's choices and opportunities.

A Long and Healthy Life

IN THIS SECTION

Introduction

The topic of health has been high on the national agenda in recent years as a result of the passage of the Patient Protection and Affordable Care Act. At the local level, attention has begun to shift to an aspect of health that lies beyond the singular focus on doctors and medicine that has characterized much of the debate: the conditions in our communities—whether we have access to healthy food, clean air, safe places to play and get exercise, secure jobs that reduce the chronic stress of economic uncertainty, good schools, and other important advantages. The impacts on our health of the conditions in which we grow up, work, and grow old are largely underappreciated by the general public. Yet a look at today's leading causes of death, in Sonoma County as in the nation, shows that many of the chronic diseases that cause premature death come from factors that are often preventable through changes in social and environmental conditions. These so-called social determinants of health (see **SIDEBAR**) are the main drivers of disparities within our communities. Sonoma County has dedicated itself to addressing social determinants of health and has set a bold goal: to be the healthiest county in the state by 2020.

Why does life expectancy at birth figure as one-third of the American Human Development Index? It is because advancing human development requires, first and foremost, expanding people's real opportunities to live long and healthy lives. The index uses the indicator of life expectancy at birth as a proxy measure for its health dimension. Defined as the number of years that a baby born today can expect to live if current patterns of mortality continue throughout that baby's life, it is calculated using mortality data from the California Department of Public Health and population data from the U.S. Census Bureau for 2005–2011.

Life expectancy does not, of course, tell the full story of our health. Some people go about their lives with ruddy good health, few restrictions on their physical activity, and little protracted pain. Others struggle with chronic pain or disease, disability, or even lack of dental care—often overlooked as a health issue—all of which undeniably affect daily quality of life. **Life expectancy is, nonetheless, an important gauge for indicating which groups are living long lives and which are experiencing conditions that cause premature death, and it helps to focus investigations on a whole range of other information necessary for understanding why.** This chapter examines the disparities that exist in this summary measure in Sonoma County and uses additional data to explore some important issues further.

Social Determinants of Health

These are defined as the circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.

World Health Organization

Healthy Communities Have:

- Parks
- Sidewalks and bike paths
- Affordable housing

- Fresh produce stores
- High-quality schools
- Affordable health care
- Accessible public transportation

- Jobs with decent wages
- Work/life balance
- A diverse economy

- Equality under the law
- Accountable government
- Affordable, safe childcare
- Safety and security

Analysis by Geography and Race and Ethnicity

VARIATION BY GEOGRAPHY: SONOMA COUNTY IN CONTEXT

Sonoma County in Context

LIFE EXPECTANCY IN YEARS

U.S.	California	Sonoma
79.0 years	81.2 years	81.0 years

Source: Measure of America analysis of data from the California Department of Public Health 2005–2012, Centers for Disease Control and Prevention WONDER 2010, and U.S. Census Bureau.

Sonoma County's residents can expect to live to an average age of 81 years—two years longer than the national average of 79 but just slightly shorter than California's life expectancy of 81.2. If we judge only by how long people are living, seven of the eight peer counties have very similar mortality outcomes. Marin stands apart with a life expectancy of 84.2 years, with the rest grouped in a narrow range from Monterey, at 82.4 years, to Sonoma, at 81 (see SIDEBAR).[10] A look at a set of interrelated factors that contribute to long lives, or conversely, to premature deaths, yields some interesting observations about Sonoma County in comparison to this set of seven counties. They are as follows:

Absence of health risk behaviors. Most premature death today stems from preventable health risks, chiefly smoking, poor diet, physical inactivity, and excessive alcohol use. As TABLE 2 illustrates, Sonoma County is on the higher side in each of these areas among the eight counties. It has the highest rate of smoking among adults, 14.3 percent. In contrast, Napa County's much lower smoking rate is 8.7 percent of adults.[11] Reducing exposure to these "fatal four" health risks through policy actions can go a long way toward improving the average life span in Sonoma County.

Access to health care. Sonoma County falls in the middle of the eight-county pack in terms of both access to doctors and health insurance (although 15 percent lacking insurance is clearly suboptimal). In terms of disease screenings, Sonoma is faltering. Screenings for diabetes or cancer and other forms of preventive care have an important impact on lowering premature death rates and are far less costly than dealing with full-blown disease at a later stage.

Economic security. Low income and the chronic stress of economic insecurity make people more susceptible to health risks such as poor diet and smoking and take a toll on the cardiovascular system.[12] Sonoma County's unemployment rate is relatively low, at 6 percent (as compared with around 9 percent in Santa Cruz and Monterey), and the proportion of people living in poverty in the county is 12.1 percent, which is far better than the high of over 18 percent in Monterey but much higher than the 8–9 percent range in Marin and Napa Counties.

Safe neighborhoods. The damaging effects of high rates of crime and violence on health include causing chronic stress, discouraging outdoor exercise, and, at worst, resulting in injury or death. Sonoma County's rate of 412 violent crimes per 100,000 residents is roughly double Marin's rate and far higher than those of Ventura and San Luis Obispo Counties, but it is below the rates in Napa and Monterey, which have nearly 500 violent crimes per 100,000 residents.

Education. As discussed below, people across the United States who have more education live longer than those who have less.[13] Sonoma County's educational outcomes fall well below those of Marin County, but they compare favorably to both Monterey and Napa.

TABLE 2 Health-Related Indicators in Sonoma and Seven Peer Counties

Health risk behaviors

COUNTIES	OBESITY (% of adults with Body Mass Index 30 or above)	SMOKING (% of adults)	PHYSICAL INACTIVITY (% 20 and older with no activity)	EXCESSIVE DRINKING (%)
Marin	15.3	9.6	12.6	24.6
Monterey	22.4	13.1	15.9	15.0
Napa	22.2	8.7	15.5	22.9
San Luis Obispo	21.7	10.3	14.6	19.5
Santa Barbara	19.9	11.1	16.0	18.4
Santa Cruz	19.8	9.6	12.4	17.6
Sonoma	**22.9**	**14.3**	**14.5**	**21.5**
Ventura	23.3	12.3	17.0	17.5

Access to health care

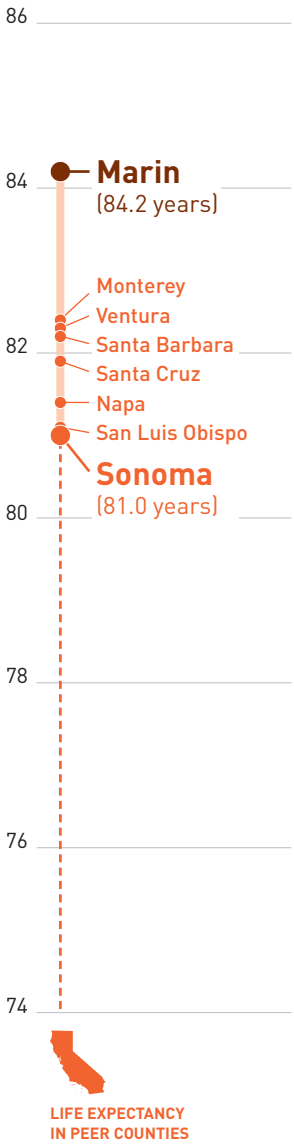
COUNTIES	PRIMARY CARE PHYSICIANS (ratio to population)	DIABETIC MONITORING (% of Medicare diabetics receiving annual screening)	MAMMOGRAPHY SCREENINGS (% of female Medicare patients screened in past 2 years)	NO HEALTH INSURANCE (% of population)
Marin	1:712	80.1	69.5	8.9
Monterey	1:1,595	82.2	66.9	21.0
Napa	1:1,189	81.7	66.5	14.8
San Luis Obispo	1:1,280	85.7	70.8	13.1
Santa Barbara	1:1,252	86.6	69.0	18.6
Santa Cruz	1:1,047	83.2	69.4	14.4
Sonoma	**1:1,070**	**79.8**	**66.3**	**15.0**
Ventura	1:1,458	82.4	65.6	16.0

Economic security & safe neighborhoods

COUNTIES	UNEMPLOYMENT RATE (%)	BELOW POVERTY LEVEL (%)	SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (% of households receiving benefits)	VIOLENT CRIME (per 100,000 population)
Marin	4.6	7.9	3.9	212.9
Monterey	9.1	18.4	8.8	498.8
Napa	6.0	8.9	5.9	511.4
San Luis Obispo	6.1	13.7	5.5	274.2
Santa Barbara	6.4	16.3	6.8	437.8
Santa Cruz	8.7	13.4	7.9	493.9
Sonoma	**6.0**	**12.1**	**7.5**	**412.4**
Ventura	7.3	11.5	7.5	243.8

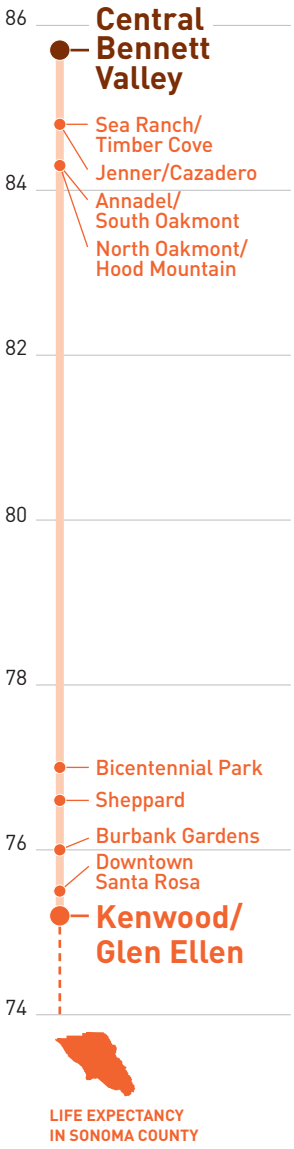
Sources: Measure of America (life expectancy); Bureau of Labor Statistics, Local Area Unemployment Statistics, November 2013 (unemployment); Measure of America analysis of U.S. Census Bureau, American Community Survey 2012 (insurance, poverty level, SNAP); County Health Rankings 2013 (remaining indicators).

Life Expectancy at Birth in Sonoma (years)



Source: Measure of America analysis of data from California Department of Public Health 2005–2012, and U.S. Census Bureau.

Top and Bottom Five Census Tracts for Life Expectancy in Sonoma County



Source: Measure of America analysis of data from the California Department of Public Health, 2005–2011, and population data from the U.S. Census Bureau.

VARIATION BY GEOGRAPHY: CENSUS TRACTS

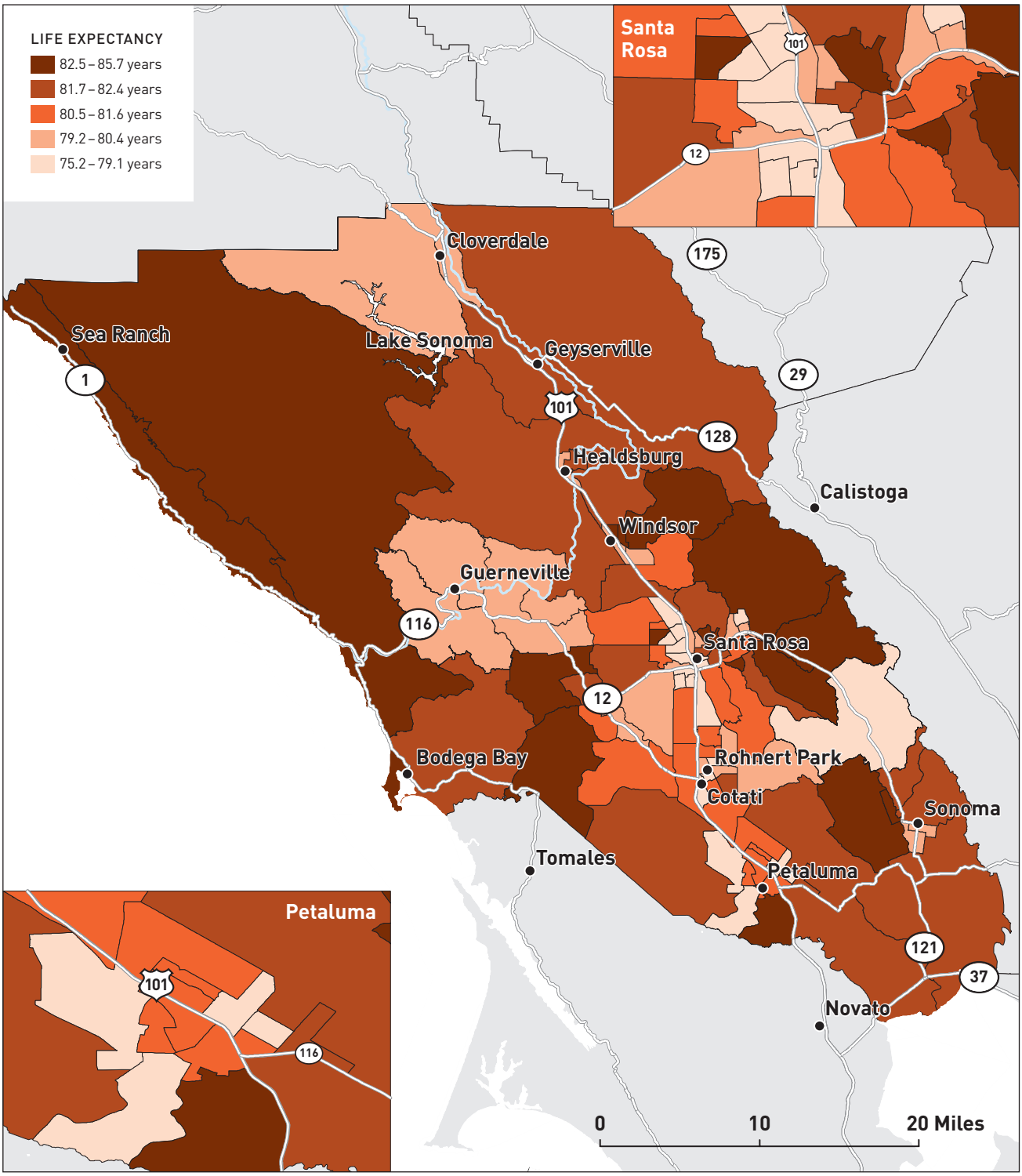
These main drivers of longevity in Sonoma County make it one of a set of very healthy counties in a state with very good health outcomes; California has the third-highest life expectancy in the continental United States. Nonetheless, work remains to be done (see MAP 2). **An entire decade separates the life expectancies of the top and bottom census tracts among the ninety-nine that make up the county.** The top five tracts are Central Bennett Valley (85.7 years), Sea Ranch/ Timber Cove and Jenner/Cazadero (both 84.8 years), Annadel/South Oakmont and North Oakmont/Hood Mountain (both 84.3 years), and West Sebastopol/Graton (84.1 years). The bottom five are Bicentennial Park (77.0 years), Sheppard (76.6 years), Burbank Gardens (76.0 years), Downtown Santa Rosa (75.5 years), and Kenwood/Glen Ellen (75.2 years). See SIDEBAR.

What characteristics do the census tracts with higher life expectancies have in common? While many Americans believe income and health rise and fall in tandem, the situations in these neighborhoods challenge that assumption. The typical currently employed worker in Central Bennett Valley and Annadel/South Oakmont earns in the range of $45,000, while his or her counterparts in Sea Ranch/Timber Cove and Jenner/Cazadero have median earnings of $31,500 and $35,000, respectively; all are among the top five census tracts for life expectancy. In marked contrast, the tracts with the highest earnings, Fountain Grove and East Bennett Valley, rank twenty-fourth and twenty-fifth in terms of life expectancy. In fact, studying the relationship between earnings and health across all ninety-nine of Sonoma County's census tracts shows only a weak positive correlation. In other words, knowing about the wages and salaries in Sonoma's neighborhoods gives you little of the information necessary to predict life span.

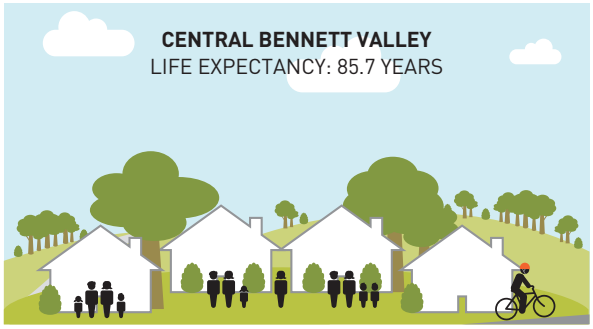
What, then, does matter for health outcomes?

One very important, and undervalued, factor in a long and healthy life is education. Analysis of Sonoma County's ninety-nine tracts shows a clear positive correlation between life expectancy and education: people in neighborhoods with higher educational attainment and enrollment have longer lives. This is in part because better-educated people have more access to health care and are more likely to comply with treatment regimens, use safety devices such as seat belts and smoke detectors, and embrace new laws and technologies.[14] But low educational attainment also chips away at life expectancy in ways less obviously linked with health. It both causes and is caused by low socioeconomic status, circumscribes career options, results in low-wage jobs and limited benefits, and often results in families living in neighborhoods with poorer schools and higher crime, all of which contribute to chronic stress that damages the heart and blood vessels.

MAP 2 **Life Expectancy in Sonoma County by Census Tract**



BOX 2 A Tale of Two Neighborhoods



Residents of Central Bennett Valley in eastern Santa Rosa have an average life expectancy of 85.7 years, at the top of Sonoma County's longevity scale. Toward the bottom of this scale is Sheppard, a neighborhood within the same city and only about two miles away. Here, the average resident has a life expectancy at birth of 76.6 years. **What are some of the factors that may be contributing to this life expectancy gap of over nine years**?

Central Bennett Valley, a top-ten tract in terms of overall human development, is a small neighborhood of 0.6 square miles,[15] located in eastern Santa Rosa in a verdant area that is close by hundreds of acres of state parkland. The neighborhood's ethnic makeup is about four-fifths white, with a small (10.8 percent) Latino population. Four in ten adults here have at least a bachelor's degree. The tract is home to Strawberry Park, with nearly six acres of open space and sports facilities, and the smaller Matanzas Park.[16] The poverty rate is low (6.6 percent), and only 8.6 percent of residents lack health insurance. Of the major occupational categories (defined by the U.S. Bureau of Labor Statistics), Central Bennett Valley has a very high proportion of workers in management-type work (60 percent). It has few service jobs (11 percent) and even fewer jobs in agriculture, construction, manufacturing, and other manual labor–based trades.

Sheppard ranks ninety-seventh of the county's ninety-nine tracts in human development. It is roughly the same size as Central Bennett Valley[17] but flanked by two highways. Sheppard's population is two-thirds Latino—over six times the Latino population share of Central Bennett Valley—and one-third white. Fewer than one in twelve adults has a bachelor's degree or higher. One six-acre park lies within the tract boundaries, but only one acre is developed, and the park has walking areas but no recreational facilities.[18] Sheppard's poverty rate is nearly three times that of Central Bennett Valley, and triple the proportion of residents lack health insurance.

Sheppard has fewer than a third of the proportion of workers of Central Bennett Valley in relatively higher-paying management and related occupations (16.9 percent) and over triple the proportion (19.2 percent) doing work that revolves largely around manual labor: agriculture, construction, maintenance, or repair. Finally, while in most Sonoma County census tracts, including Central Bennett Valley, women outnumber men in the population, largely due to their longer life expectancy, the reverse is true in Sheppard. Although data on the undocumented are hard to obtain, a recent study by the Public Policy Institute of California found that in the zip code that encompasses Sheppard and the other Southwest Santa Rosa neighborhoods, more than one in four residents is an undocumented immigrant.[19] Health outcomes in this neighborhood are very low, all the more worrisome because, as discussed below, Latinos in Sonoma County outlive whites, on average, by just under half a decade.

The portraits of these two small neighborhoods are not exhaustive—in part because health risk behaviors data are lacking for very small populations. But they cover some important social, economic, demographic, and environmental health determinants. **The daily conditions for healthful behaviors in these two neighborhoods are worlds apart, as are the educational backgrounds, jobs, and access to services of their residents. And the outcomes speak for themselves.** In the neighborhood with ample parks and clean air, where the majority of adults have relatively high levels of education and work in management jobs with minimal exposure to hazards, and where poverty rates are low, the life expectancy of a baby born there today is longer than that of a baby born in any other Sonoma County tract on the same day. In the neighborhood where the risk of work-related injury and the stress of economic insecurity that is so damaging to health are far higher, and where access to health insurance and opportunities for recreation and exercise are more limited, life expectancy is about the same as it was in the United States in the mid-1990s, nearly two decades ago.[20]

BOX 2 CONTINUED A Tale of Two Neighborhoods

CENTRAL BENNETT VALLEY

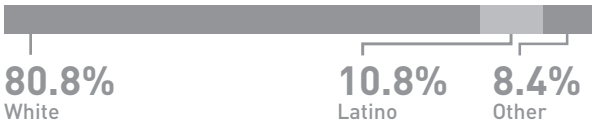
Total Population

3,563

Ratio of Men to Women

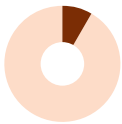
.93 Man : 1 Woman

Race/Ethnicity



HEALTH

85.7 years life expectancy



8.6% without health insurance

EDUCATION

89.4% school enrollment

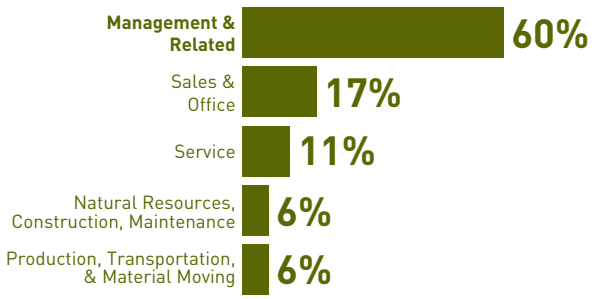
40.8% have at least a bachelor's degree

STANDARD OF LIVING

$44,564 median earnings

6.6% living in poverty

OCCUPATIONAL BREAKDOWN



SHEPPARD

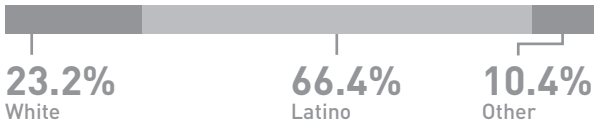
Total Population

5,742

Ratio of Men to Women

1.11 Men : 1 Woman

Race/Ethnicity



HEALTH

76.6 years life expectancy

25.9% without health insurance

EDUCATION

71.7% school enrollment

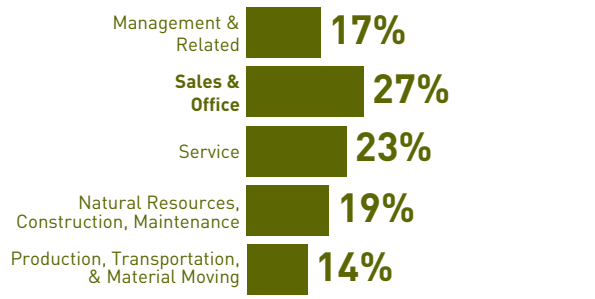
8.2% have at least a bachelor's degree

STANDARD OF LIVING

$22,068 median earnings

18.7% living in poverty

OCCUPATIONAL BREAKDOWN



Sources: U.S. Census Bureau, Census 2010, and American Community Survey 2008–2012.

BOX 3 Dating and Domestic Violence: Public Health Challenges in Sonoma County

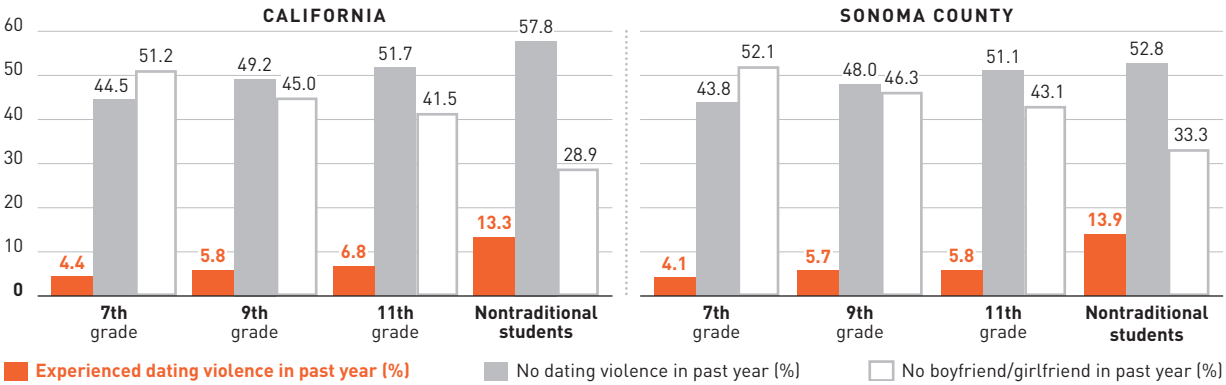
According to the California Department of Justice, 147 homicides from domestic violence were committed in 2011—nearly 12 percent of the state's homicides. While gang- and robber-related homicides were on the decline, domestic violence killings in California went up by 30 percent from 2008 to 2011.[21] The tragedy of death resulting from domestic violence is only part of the destruction it wreaks. Domestic violence has devastating psychological, physical, and economic consequences on those who experience it—and on the children who are exposed to it. In the health realm, beyond the immediate injuries, victims often suffer from a host of longer-term physical health problems, including sleep and eating disorders, and frequently experience devastating psychological distress, such as depression, anxiety, and sometimes suicide. Young people who are victims of teen dating violence can also experience these health symptoms; are more likely to engage in health risk behaviors such as smoking, excessive drinking, and drug use; and are at a higher risk of being victims of intimate partner violence in adulthood. Domestic violence also exacts a high cost to society at large—medical costs, justice system costs, reduced workforce productivity, and reduced capabilities of future generations.

Dating and domestic violence are pervasive public health issues that continue to impact communities nationwide, including Sonoma County. In 2012, the rate of domestic violence–related calls to law enforcement in Sonoma County was 4.7 per one thousand residents ages 18 to 64, lower than the state rate of 6.6 per one thousand. Yet some areas in the county are seeing higher rates, ranging from fewer than four calls to law enforcement per 1,000 residents in some cities and towns to nearly twenty calls in others.[22] However, care must be taken in comparing and interpreting these data due to possible differences in how local law enforcement agencies define, collect, and record domestic violence–related calls. Standardization of definitions and data collection practices are essential to understanding the relative magnitude of the problem.

A look at teens who have experienced dating violence in the county shows that the rate is slightly below the California average for all but nontraditional students, but is nonetheless a problem that affects hundreds of Sonoma's young people (see below). The percentage of students who have been intentionally physically hurt by a boyfriend or girlfriend in the past year in Sonoma County public schools ranges from 4.1 percent among seventh graders to 5.7 percent in ninth grade, and climbs to 5.8 percent by eleventh grade. Both dating and domestic violence are typically underreported, especially among certain populations, such as people who are undocumented. These data, therefore, may be an underestimation of the extent of dating and domestic violence in Sonoma County.

The Sonoma County Department of Health Services is developing a Violence Profile, due out in 2014, as part of an effort to move away from a focus on individual causes to one that frames violence as a public health issue. The next step will be the development of a full-scale initiative with targeted efforts to better understand and address the community, environmental, and social factors that contribute to violence in Sonoma County.

Dating Violence among Youth in California and Sonoma County, 2008–2010 School Years



Source: California Department of Education, California Healthy Kids Survey (WestEd) http://www.kidsdata.org/. Notes: Nontraditional students are students enrolled in community day schools or continuing education. They make up about 7 percent of the sampled student body on this survey question. Values may not sum to 100 due to rounding.

VARIATION BY RACE AND ETHNICITY

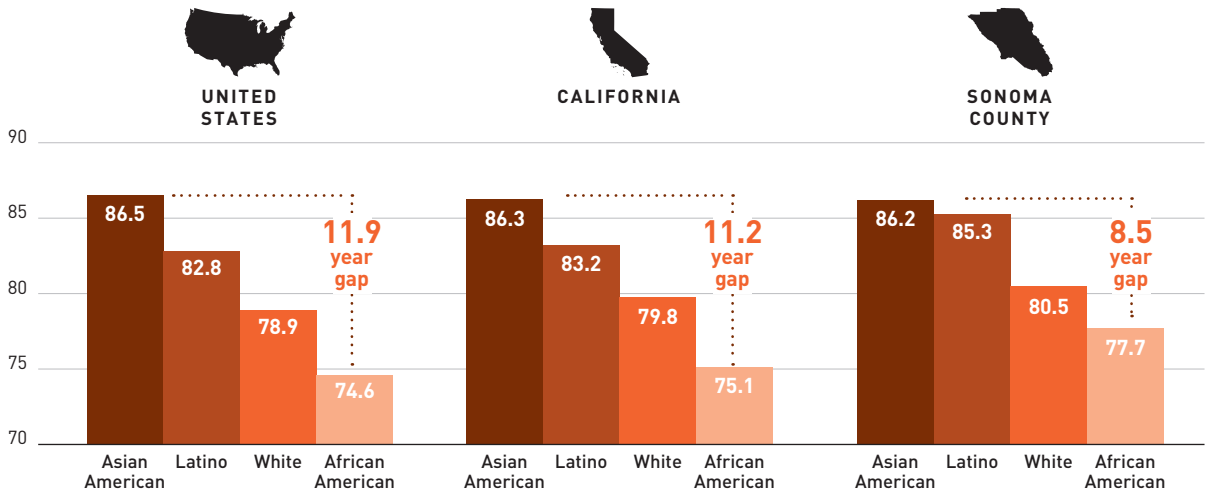
The life expectancy of Sonoma County's population varies considerably by race and ethnicity, reflecting that of the state and nation as a whole, but with a smaller gap between the longest- and shortest-lived groups (see FIGURE 3).

Asian Americans in Sonoma County live longest, with an average life expectancy of 86.2 years. This is very close to the state and national average for this group. As discussed above, education is an important determinant of health, and in Sonoma County, Asian American educational outcomes are indeed impressive. Nearly three-fourths of Sonoma County Asians were born overseas,[23] and one way in which they differ from Asian Americans statewide is that they include a larger proportion of immigrants from Cambodia and Thailand.[24] Many Cambodian immigrants in California are refugees from years of civil war, whose psychologically traumatic experiences and physical deprivations, including periods of starvation, have led to exceedingly poor health compared to other Asian immigrants.[25] More research is needed on the health of this population to better meet their needs. Yet despite the particular challenges of refugee populations in Sonoma County, health outcomes for Asian Americans overall top the chart.

Latinos have the second-highest life expectancy in Sonoma County, 85.3 years—only about one year less than Asian Americans. Sonoma County's Latinos outlive whites, on average, by nearly half a decade.

The life expectancy of Sonoma County's population varies considerably by race and ethnicity.

FIGURE 3 The Gap between the Longest- and Shortest-Lived Groups in Sonoma County Is Smaller Than the U.S. or California Gap.



Sources: Measure of America analysis of data from the California Department of Public Health, Death Statistical Master File and U.S. Census Bureau, 2005–2011. U.S. and California estimates are from Lewis and Burd-Sharps (2013).

Three factors appear to contribute to Latino longevity:

Latinos smoke cigarettes at **lower rates** than whites.

Latinos drink to excess at **lower rates** than whites.

Strong social support and **family cohesion** seem to bolster health outcomes, particularly for Latino mothers and infants.

The phenomenon of Latinos living longer than whites despite having lower educational levels and incomes and far lower rates of insurance coverage (29.4 percent of Latinos in Sonoma lack health insurance, as compared to 9.4 percent of whites)[26] is referred to as the Latino Health Paradox and is evident at the state and national levels as well.

Although Latinos in Sonoma County are generally a very young population, that does not affect life expectancy at birth, as the calculation is sensitive to the age structure of the local population. For example, the presence of a large assisted-living facility for seniors that encompasses much of one census tract does not distort the calculation of life expectancy. While further research on the longevity of Latinos and on the Latino Health Paradox is needed, several factors seem to contribute. Latinos binge drink less than non-Hispanic whites and have far lower smoking rates,[27] which is important because both smoking and excessive drinking can contribute to premature death from heart disease, stroke, and cancer. In addition, some research shows that aspects of Latino culture, such as strong social support and family cohesion, help bolster health outcomes, particularly for mothers and infants.[28]

One particularly interesting aspect of the Latino Health Paradox is that this protective health benefit seems to wear off the longer Latinos are in the United States. Researchers seeking to understand this trend have found that splitting Latinos into two groups, U.S.-born and foreign-born, reveals markedly different characteristics. Foreign-born Latinos tend to have better health outcomes than those who were either born in the United States or have spent a significant amount of time in this country. These findings have led researchers to believe that immigrants adopt the preferences of the people among whom they live over time, a process of acculturation that has significant adverse impacts on health (with some beneficial impacts as well).[29] More research is needed, however, to understand the various factors contributing to these outcomes. Gaining such knowledge could help lengthen life spans for everyone, as well as contribute to our understanding of acculturation's negative health impacts on immigrant groups, so that the second generation can remain as healthy as their parents.

Whites in Sonoma County have a life expectancy of 80.5 years, better than whites nationwide and in California but well below that of Asian Americans and Latinos. In fact, the longevity gap between Latinos and whites (4.8 years) is much larger in Sonoma County than it is in either California (with a gap of 3.4 years) or the United States (3.9 years). Given the relatively high income and educational levels of the county as well as other environmental and social characteristics of Sonoma that support good health, it is surprising that whites live significantly shorter lives than Latinos and Asian Americans, despite their higher earnings and other socioeconomic advantages. One concern in Sonoma is cancer.

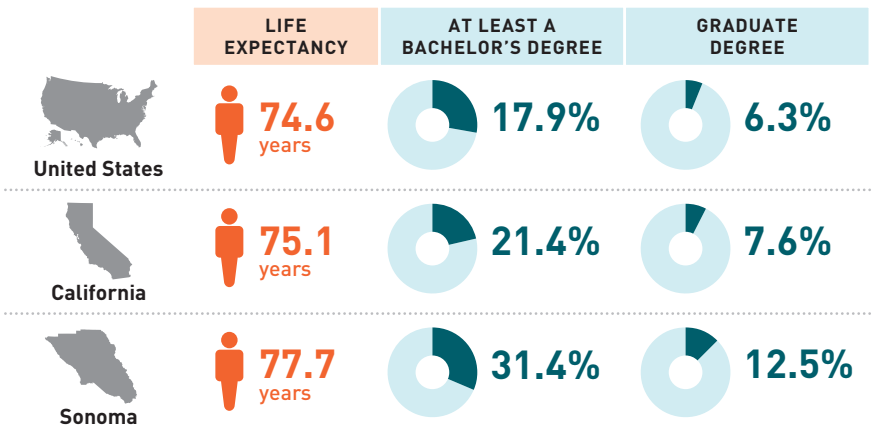
Sonoma County has higher incidence and death rates from cancer than the state averages,[30] but the death rate is significantly higher still for white residents than for other racial and ethnic groups. Whereas the Latino and Asian American cancer rates are in the range of 100 to 110 deaths per 100,000 population, for whites, the death rate is nearly 177 per 100,000. (Cancer death rates for African Americans in Sonoma County cannot be estimated due to the small size of this population).[31] A focus on reducing Sonoma's relatively high smoking rates would be one important effort for reducing cancer in the county.

African Americans have a life expectancy of 77.7 years, the shortest life span of the four major racial and ethnic groups in Sonoma County. The concerning life expectancy gap of 8.5 years between this shortest- and the longest-lived racial or ethnic group in Sonoma County is nevertheless smaller than that observed in either the United States (12 years) or California (11 years). While the African American population in Sonoma is quite small (around 7,000), one in five is foreign born,[32] which represents a far higher proportion of immigrants than the national average among African Americans.[33] In California, foreign-born African Americans have a slight life expectancy edge over U.S.-born African Americans.[34]

A comparison between the education levels of African Americans in Sonoma County and those nationally reveals important health-giving advantages in the county. Sonoma's African Americans are far more likely to have bachelor's degrees (31.4 percent versus 17.9 percent) and twice as likely to have graduate or professional degrees. In addition, this population is more integrated across Sonoma census tracts than in many other cities and counties across America.

African Americans have a life expectancy of **77.7 years**, the shortest life span of the four major racial and ethnic groups in Sonoma County.

FIGURE 4 African Americans in Sonoma County



Source: Lewis and Burd-Sharps (2013), Measure of America analysis of the California Department of Public Health, Death Statistical Master File, 2005–2011, and U.S. Census Bureau, American Community Survey, 2012.

Native Americans face a very high rate of unintentional injuries related to poisoning, firearms, falls, motor vehicle accidents, fires, drowning, and work.

Our research has shown that residential segregation by race often leads to concentrations of poverty and disconnection as well as islands of affluence, which affects local revenue streams and in turn has an impact on public services, including school funding and quality, and public transportation options.[35]

Also very important is segregation's effects on access to the strong social networks and connections so vital to job and mentorship opportunities and for neighborhood safety and trust.[36] Each of these sets of community conditions, in turn, affect health.

Native Americans make up less than 1 percent of the Sonoma County population, with a total of about 3,500 residents whose full heritage is Native American, plus 9,800 others who make some claim to Native American identity. Unlike in many other American communities, Native Americans live in almost every Sonoma city and town. No Sonoma County neighborhood is more than 3.8 percent Native American, however, and only three neighborhoods (Sheppard, Wright, and West Windsor) have over 100 people who identify as Native American.[37]

Health care for this population is provided by a variety of services, including the federally funded Sonoma County Indian Health Project, plus local clinics and providers. The result is that nearly three in four Native American adults (73.5 percent) and nearly all children (99.1 percent) have health insurance. This compares favorably to 88.3 percent of Latino children and 95.1 percent of white children.[38] Another respect in which Sonoma's Native American population is faring comparatively well is in terms of the prevalence of cancer. Coupled with Alaska Natives, the Native American population has the lowest cancer rates of the county's five major racial and ethnic groups, almost half that of whites (250 as compared to 482 cases per 100,000).[39]

Native Americans face other health challenges, however, one of which is the very high rate of unintentional injuries related to poisoning, firearms, falls, motor vehicle accidents, fires, drowning, and work. In 2009, they had a startling rate of 2,158 unintentional injuries per 100,000 population, more than double the African American rate and nearly triple that of whites. Latinos also have a relatively high rate of unintentional injury, but it is still considerably lower, at 1,374 per 100,000.[40]

Two other areas of concern regard children. A lower proportion of Native American mothers receives early prenatal care (71 percent) than mothers in any other racial or ethnic group, and the rate of child abuse is 20.6 cases per 1,000 children, as compared to 3.9 per 1,000 for Asian Americans, 4.9 per 1,000 for Latinos, 5.3 per 1,000 for whites, and 15 per 1,000 children for African Americans.[41]

What Fuels the Gaps in Health?

Action to address the following three priority areas is key to boosting index scores for all residents of Sonoma County and to narrowing the gaps in health outcomes between groups and neighborhoods. In each case, they emphasize a focus on creating the conditions for preventing problems before they start, which is in almost every instance less expensive and more effective than delaying action until a crisis is full-blown.

UNEVEN NEIGHBORHOOD CONDITIONS

The life expectancy gaps that separate groups in Sonoma County—over a decade by neighborhood, eight and a half years by race and ethnicity—are not predestined, nor are they rooted only in genetic makeup. They are largely avoidable. But reducing these gaps requires distributing health resources far more evenly than they are distributed today.

The life expectancy gaps that separate groups in Sonoma County are largely preventable.

Doctors, treatments, and medicines are essential, especially when a person is already sick. But progress in health at the population level can only be made by going beyond the systems put in place to deal with illness to address the wide set of economic, social, and political forces shaping the conditions in which people are born and grow up.

What are the resources for health in Sonoma County? They are safe and affordable opportunities for recreation and fitness, places to get nutritious food, reliable transportation systems, high-quality schools, safe neighborhoods, jobs that offer dignity and economic security, decent housing, and a voice in decisions that affect people's lives. And they are an absence of such health risks as exposure to toxic substances, policing policies that target specific groups, zoning and private-sector lending and credit practices that segregate neighborhoods, aggressive marketing of cigarettes and alcohol in low-income neighborhoods, and many others.

In some Sonoma County neighborhoods and among some groups, resources for health are plentiful, and their value is clearly evident in the people's health outcomes. For others, the social determinants of health that shape daily routines result in shorter, less healthy lives. **The good news, however, is where we started: extreme health disparities are largely preventable.** Collaborative efforts by government, businesses, nonprofit organizations, and individuals themselves aimed at prevention offer a path to healthier, longer lives and fewer public health-care dollars spent on treating preventable illness.

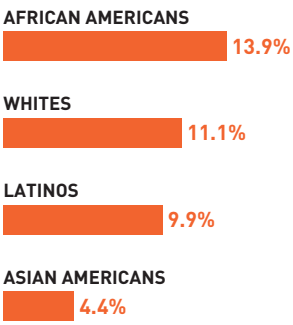
Adolescent Smoking Rates by Gender in Sonoma

Smoked a Cigarette during Past 30 Days (% of 7th, 9th, 11th graders)

Source: Measure of America calculations from California Department of Education, California Healthy Kids Survey (WestEd), 2008–10.

Adolescent Smoking Rates by Race and Ethnicity in Sonoma

Smoked a Cigarette during Past 30 Days (% of 7th, 9th, 11th graders)



Source: Measure of America calculations from California Department of Education, California Healthy Kids Survey (WestEd), 2008–10. Data for 7th, 9th, and 11th graders are combined to provide more reliable estimates.

SMOKING—A MAJOR HEALTH RISK BEHAVIOR

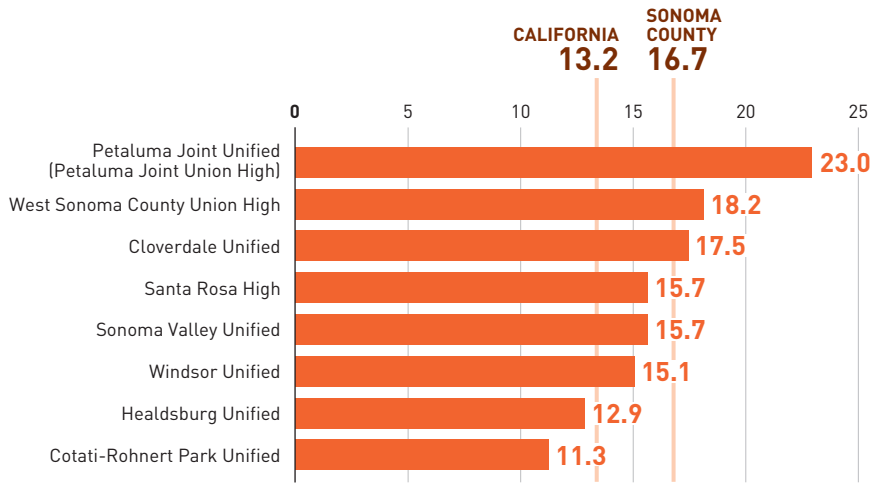
The tremendous reduction in smoking rates between 1965, when 42 percent of American adults smoked, to 2000, when 23 percent did, ranks among the greatest U.S. public health victories of the twentieth century.[42] Smoking declined because people's desire to quit was supported by a whole range of actions that made smoking difficult (such as indoor and outdoor antismoking policies and ordinances), expensive (such as cigarette taxes and fees), and less socially acceptable (through social marketing and health promotion campaigns). A wide range of proven tools is available to reduce death and disease from tobacco use and exposure to secondhand smoke. Sonoma County has been active in using many of them, including an ordinance passed in 2011 pertaining to secondhand smoke and smoking in certain public places. But the battle against smoking is not yet won. Over 14 percent of county residents smoke, a higher percentage than residents of any of the other seven counties in this analysis, though differences are not all statistically significant.

Where will antismoking efforts bring the greatest benefits? Local data on smoking rates are particularly important for tailoring them. According to calculations from the California Healthy Kids Survey for 2008–10, a higher percentage of eleventh-grade boys smoked at least once during the thirty days before the survey than girls (19.0 percent compared with 14.7 percent), and African American youth were the most likely among racial and ethnic groups to have smoked in the past thirty days (see **SIDEBAR**). **Among the nine school districts surveyed, smoking rates ranged from 11.3 percent of eleventh graders in Cotati-Rohnert Park Unified School District to more than double that (23.0 percent) in Petaluma Joint Unified School District** (see **FIGURE 5**).

The 2014 report card of the American Lung Association in California shows much room for improvement in many parts of Sonoma County with respect to smoke-free housing and restricting outdoor smoking and gives the county low marks for restricting tobacco sales at pharmacies and within a certain distance of parks and schools as well as for curtailing sampling of tobacco products.[43]

Finally, despite the strong deterrence value of cost to smoking, especially among teenagers, California has one of the lowest cigarette tax rates per pack in the nation—87 cents—as compared with $4.35 in New York State, $3.51 in Massachusetts, and $3.03 in Washington State.[44] Although state law prohibits municipalities from levying their own cigarette taxes, one local mechanism Sonoma County could investigate, though it does require a community vote, is imposing an additional regulatory fee per pack for cigarette litter cleanup, as San Francisco has done.[45] Redoubling all these efforts would help chip away at the annual county toll from cancer, which amounted to 933 deaths in 2012 alone.[46]

FIGURE 5 **Teenage Smoking Rates Vary Widely by School District**



Source: Measure of America calculations from California Department of Education, California Healthy Kids Survey (WestEd), 2008–10. Data for Geyserville Unified not available.

LATINO HEALTH ADVANTAGES

Common wisdom holds that higher incomes can buy better health, and, certainly, groups with higher education levels tend to be healthier and to live longer the world over. Yet Latinos in Sonoma County, many of whom face disproportionate economic and social challenges, outlive Sonoma County whites by half a decade. As discussed in subsequent chapters, the typical Latino worker earns only $21,695 a year, compared to $36,647 for the typical white worker. And less than 5 percent of white adults have never completed high school, compared to 44 percent of Latino adults.[47] What factors might explain this conundrum?

We have some indications about what Latinos are doing right: they engage in fewer health risks like smoking and drinking, and their communities and families are more supportive of healthy behaviors. In addition, some researchers have conjectured that the Latino immigrant population is a statistically biased sample because only relatively healthy individuals are willing to undergo the risks and uncertainties of emigration (the "healthy migrant" hypothesis), or that Latino immigrants disproportionately return home when they are ill to die in their countries of origin and are thus not counted in U.S. mortality statistics (the "salmon bias" hypothesis). But tests of these hypotheses have been inconclusive or contradictory.[48] Much more investigation is needed to learn from Latinos how we might lengthen life spans for everyone and help second-generation Latinos avoid the negative health impacts of acculturation.

Latinos in Sonoma County, many of whom face disproportionate economic and social challenges, outlive Sonoma County whites by half a decade.

Access to Knowledge

IN THIS SECTION

Introduction

For individuals, access to knowledge is a critical determinant of long-term well-being and is essential to self-determination, self-sufficiency, and the real freedom a person has to decide what to do and who to be. More than just allowing for the acquisition of skills and credentials, education builds confidence, confers status and dignity, and broadens the horizons of the possible. More education is associated with better physical and mental health and a longer life, greater marital stability and ability to adjust to change, better job prospects, and higher income. **For society as a whole, a more educated population correlates to less crime, greater tolerance, public savings on remedial education and the criminal justice system, and increased voting rates and civic participation.** There's no human development "silver bullet," but education comes the closest.

There's no human development "silver bullet," but education comes the closest.

Education is not only key to human development more broadly; it is also, as has been shown, a **fundamental social determinant of health**. For adults ages 35 and up, every additional year of education is associated with 1.7 additional years of life expectancy.[49] Why? Because well-educated people have greater access to and understanding of health-related information. They tend to practice fewer health risk behaviors like smoking and are more likely to exercise regularly and eat a healthy diet. They are better able to understand and comply with medical instructions and make well-informed decisions about their health. In addition, educated people tend to have more stable interpersonal relationships and a greater range of healthy coping behaviors, both of which mitigate health-eroding chronic stress. And because more education typically leads to better jobs and higher wages, better-educated people are more likely to have health insurance and more money and time to take care of themselves and less likely to live in stress-inducing neighborhoods—specifically, concentrated-poverty areas with high crime rates and comparatively few opportunities for physical activity.

Education is also the surest route to economic competitiveness, for people and places alike. Globalization and technological change have made it extraordinarily difficult for poorly educated Americans to achieve the economic self-sufficiency, peace of mind, and self-respect enabled by a secure livelihood. The diverging fortunes of well- and poorly-educated workers in the Great Recession illustrates the economic benefits of education, especially in a tight labor market. In 2010, California's unemployment rate approached 13 percent—but the rate for the state's college graduates (6.7 percent) was less than half that for Californians who never completed high school (16.1 percent).[50] Economic competitiveness is at risk when the workforce lacks the technical skills and credentials a knowledge-based economy requires. Sonoma County has made concerted efforts to diversify its economy, targeting in particular knowledge-based sectors, in part by luring tech companies north through promotion of its numerous lifestyle amenities.

Access to knowledge is measured using two indicators: school enrollment and educational degree attainment.

Continuing to attract such businesses and ensuring that the residents of Sonoma County can compete for the higher-wage jobs they bring requires real investment on the part of the county, schools, and young people themselves in developing higher-order skills.

Access to knowledge in the American Human Development Index is measured using two indicators that are combined into an Education Index. The first is **school enrollment** for the population between the ages of 3 and 24 years; this indicator captures everyone who is currently in school, from preschool-age toddlers to 24-year-olds in college or graduate school. The second indicator is **educational degree attainment** for the population age 25 and older. This indicator presents a snapshot of education in a place or among a group at one point in time. (Keep in mind that the share of the population with high school degrees refers only to adults over 25; it is not a measure of the current high school graduation rate. The graduation rate of today's high schoolers is an important indicator discussed in this chapter, but it is not part of the index.)

The school enrollment indicator counts for one-third the weight of the education dimension of the Human Development Index, and the degree attainment indicator counts for the remaining two-thirds; these relative proportions reflect the difficulty of, as well as the payoff for, completing an education as compared to simply enrolling in school. Data for both indicators come from the annual American Community Survey of the U.S. Census Bureau.

Finally, while access to education is critical, so is the quality of that education. Unfortunately, no comparable, reliable indicators of quality are available across the country, so none are included in the American Human Development Index. Such measures are incorporated into the analysis when they exist.

FIGURE 6 **The Benefits of Education Go Well beyond Better Jobs and Bigger Paychecks.**

If we were to wave a magic wand and **every Sonoma County adult without a high school diploma suddenly had one,** trends suggest the following would happen:

Life expectancy would increase by **4 months**

352 fewer people would be unemployed

4,426 fewer people would live in poverty

10,359 more residents would vote

Source: Measure of America, Common Good Forecaster. measureofamerica.org/forecaster.

Analysis by Geography and Race and Ethnicity

VARIATION BY GEOGRAPHY: SONOMA COUNTY IN CONTEXT

Sonoma County outpaces the rest of California in terms of the share of adults who have at least a high school diploma. In Sonoma County, nearly 87 percent of adults over age 25 have high school diplomas, compared to just under 82 percent in California as a whole. When it comes to today's young people, the county is on par with the state. In Sonoma County, 79.3 percent of those in the graduating class of 2011–2012 finished on time or within four years, compared to 78.9 percent statewide. Sonoma County's 2011–2012 on-time graduation rate was up appreciably from the county's rate in 2009–2010, which was 75 percent.[51]

Sonoma County is similar to the rest of the state on other education indicators. The percentage of adults with college and graduate or professional degrees is roughly the same as it is in the rest of California (see TABLE 3). Likewise, Sonoma school enrollment is on par with that of California as a whole, at 77.9 percent versus 78.5 percent, respectively. But both of these figures top the U.S. average of 77.5 percent. In fact, Sonoma County is equal to or modestly better than the nation on all education indicators covered in this report.[52]

Sonoma County compares favorably on education with the seven peer counties identified by its Economic Development Board. Its share of adults without high school diplomas, 13.1 percent, is smaller than those of all its peers except San Louis Obispo and Marin. On the other indicators, Sonoma County tends to be in the middle of the pack. Neighboring Marin County, with the best educational score among these California counties, throws the curve for the whole state, registering much higher rates of educational attainment and enrollment than the others in this group, including Sonoma County.

ADULTS WHO COMPLETED HIGH SCHOOL

U.S.	California	Sonoma
86%	82%	87%

Source: U.S. Census Bureau, American Community Survey, 2012.

TABLE 3 Education in Sonoma County and Seven Peer Counties

RANK	COUNTY	EDUCATION INDEX	LESS THAN HIGH SCHOOL (%)	AT LEAST HIGH SCHOOL DIPLOMA (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)
	California	**5.04**	**18.5**	**81.5**	**30.9**	**11.3**	**78.5**
1	**Marin**	8.09	6.8	93.2	55.8	24.5	87.3
2	**Santa Cruz**	5.94	14.0	86.0	38.3	15.2	80.6
3	**San Luis Obispo**	5.91	8.7	91.3	33.5	11.8	81.6
4	**Sonoma**	**5.28**	**13.1**	**86.9**	**31.8**	**11.7**	**77.9**
5	**Ventura**	5.15	17.3	82.7	31.6	11.1	78.8
6	**Santa Barbara**	5.12	20.8	79.2	30.2	12.5	80.2
7	**Napa**	4.93	18.3	81.7	30.3	9.2	78.5
8	**Monterey**	3.92	30.1	69.9	24.0	8.7	76.6

Source: Measure of America analysis of data from the U.S. Census Bureau, American Community Survey, 2012.

For instance, nearly twice the percentage of Marin's adults over 25 have graduate or professional degrees, and the share of adults with at least a bachelor's degree is nearly 25 percentage points higher than in California (see **TABLE 3**).

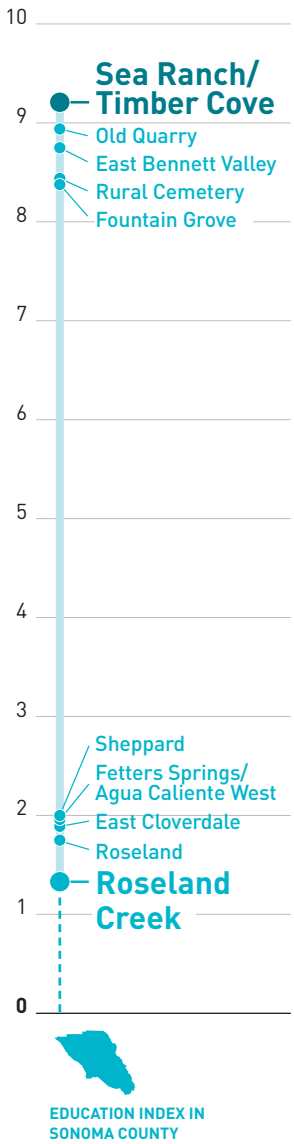
VARIATION BY GEOGRAPHY: CENSUS TRACTS

Despite Sonoma County's above-average educational statistics at the county level, variation is significant and meaningful among its census tracts. The range in the percentage of residents with less than a high school diploma is huge, going from a low of 0.4 percent to a high of 46.1 percent. The share of the adult population with graduate degrees goes from 2.9 percent to 40.8 percent, and the range in school enrollment is tremendous, from 53.8 percent in Forestville to 100 percent in Central East Windsor.

The top five geographical areas on the Education Index are Sea Ranch/ Timber Cove, Old Quarry, East Bennett Valley, Rural Cemetery, and Fountain Grove. (See **MAP 3** for Education in Sonoma County and **TABLE 4** for Top Tracts for Education.) In all five neighborhoods, less than 5 percent of adults lack high school diplomas, and between 48 percent and 65 percent have bachelor's degrees; enrollment rates top 85 percent. In Sea Cove/Timber Ranch, nearly all adults completed high school, and two in three have at least a bachelor's degree. In Old Quarry, East Bennett Valley, and Fountain Grove, nearly six in ten have bachelor's degrees, and about one in four has a graduate degree. To put this high level of educational achievement in perspective, no U.S. state or metro area comes close to the Education Index scores of these five neighborhoods; their scores, which range from 8.38 to 9.21, are near the top of the education scale, higher even than Marin County overall.

Of the bottom five neighborhoods on the Education Index, Roseland Creek has the lowest score, followed by Roseland, East Cloverdale, Fetters Springs/ Agua Caliente West, and Sheppard. The values for all five tracts are comparable to those found in areas that register some of the country's lowest human development levels—California neighborhoods in the Fresno area and South Los Angeles and counties in the Mississippi Delta and Appalachia. In Sheppard, Roseland Creek, Roseland, and Fetters Springs/Agua Caliente West, four in ten adults lack high school diplomas. The school enrollment rates in East Cloverdale (63.5 percent), Roseland (65.4 percent), Roseland Creek (66.2 percent), and Fetters Springs/Agua Caliente West (67.8 percent) bode poorly for the future; they are between 10 and 14 percentage points below the rate for Sonoma County overall. This is particularly concerning because Roseland, Roseland Creek, and Fetters Springs/Agua Caliente West are three of the top four census tracts in terms of share of the population under age 18; in these neighborhoods, more than three in every ten people are children.

Education Index Stack-Up



Source: Measure of America analysis of data from the U.S. Census Bureau, American Community Survey, 2008–2012.

MAP 3 **Education in Sonoma County by Census Tract**

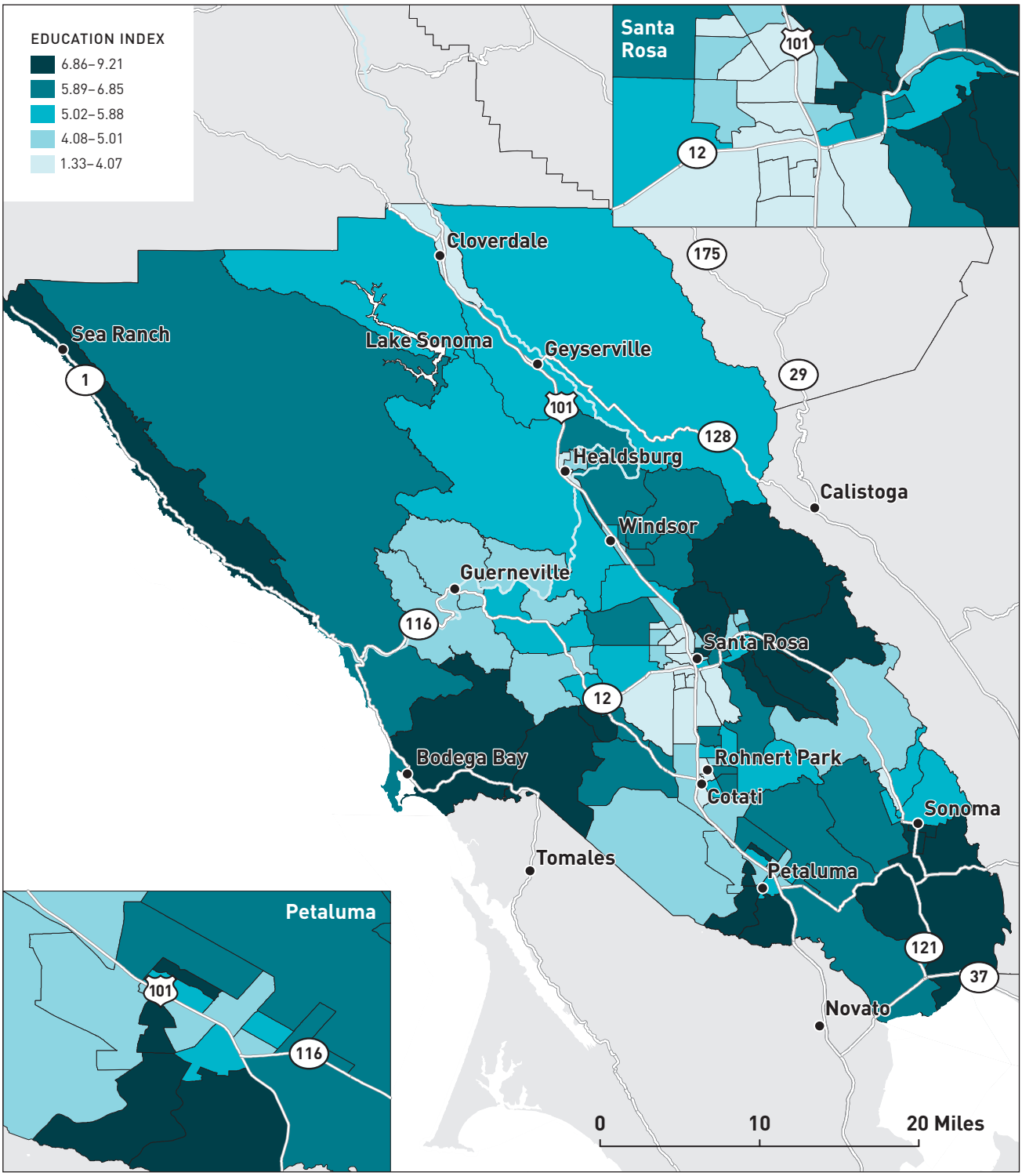


TABLE 4 **Top- and Bottom-Five Census Tracts for Education in Sonoma County**

RANK	TRACT NAME	EDUCATION INDEX	LESS THAN HIGH SCHOOL (%)	AT LEAST HIGH SCHOOL DIPLOMA (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)	HD INDEX
	California	5.04	18.5	81.5	30.9	11.3	78.5	5.39
	Sonoma County	5.28	13.1	86.9	31.8	11.7	77.9	5.42
Top Five Census Tracts for Education								
1	**Sea Ranch/Timber Cove**	9.21	1.1	98.9	65.4	40.8	86.7	7.35
2	**Old Quarry**	8.94	3.7	96.3	57.5	26.5	93.1	7.71
3	**East Bennett Valley**	8.75	0.5	99.5	58.6	24.0	90.2	8.47
4	**Rural Cemetery**	8.44	3.4	96.6	48.0	25.7	92.5	7.67
5	**Fountain Grove**	8.38	4.2	95.8	56.6	24.6	88.7	8.35
Bottom Five Census Tracts for Education								
95	**Sheppard**	2.00	41.8	58.2	8.2	3.6	71.7	2.98
96	**Fetters Springs/Agua Caliente West**	1.96	45.4	54.6	17.1	5.8	67.8	3.41
97	**East Cloverdale**	1.89	30.3	69.7	12.4	2.9	63.5	3.79
98	**Roseland**	1.75	40.8	59.2	14.4	4.1	65.4	2.95
99	**Roseland Creek**	1.33	46.1	53.9	8.6	4.3	66.2	2.79

Source: Measure of America analysis of data from the California Department of Public Health, Death Statistical Master File, 2005–2011, and U.S. Census Bureau, American Community Survey, 2012 and 2008–2012.

VARIATION BY RACE AND ETHNICITY AND GENDER

Asian Americans have the highest score, followed by whites, African Americans, and Latinos.

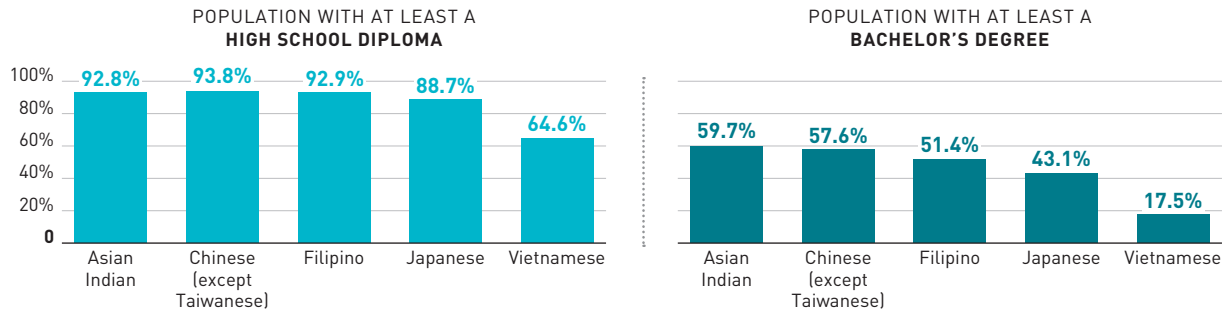
In most states, educational attainment follows a similar pattern: Asian Americans have the highest score, followed by whites, African Americans, and Latinos (see **TABLE 5**). This is also the ranked order at the national level, as well as in most metro areas.[53] Sonoma County follows this pattern.

Asian Americans have an Education Index score of 7.64, by far the highest of any of the major racial and ethnic groups in this analysis. As explained earlier in the health section, the Census Bureau–defined category "Asian" encompasses U.S.-born citizens who trace their heritage to a wide range of Asian countries, as well as Asian immigrants.

The high level of average attainment for this broad group obscures the educational struggles of some. Although 44.4 percent of Asian American adults in Sonoma County hold bachelor's degrees or more—nearly 40 percent higher than the county average—almost 13 percent lack the bare-bones minimum of a high school diploma (see **FIGURE 7**). A look at the educational attainment of the five largest Asian subgroups sheds light on this dichotomy: while six in ten Sonoma residents of Asian Indian descent and nearly as many of Chinese descent have bachelor's degrees, only about one in six of Vietnamese heritage do.

The astonishingly high enrollment rate of Asian Americans ages 3 to 24 in Sonoma County, 95.5 percent, demonstrates that the county's young people of Asian descent stay in high school through graduation and continue their educations

FIGURE 7 Asian American Educational Attainment Varies Widely by Subgroup



Source: U.S. Census Bureau, American Community Survey, 2006–2010 (Table DP02).

beyond high school at much higher rates, regardless of their parents' academic credentials, than do white, Latino, or African American young people in Sonoma County. Asian Americans in Sonoma not only do better on this indicator than young people of other racial and ethnic groups in the county, they also surpass Asian Americans in the rest of the state. The enrollment rate for Asian Americans in California as a whole (already better than that of all other ethnic groups) is nearly 10 percentage points less, 86 percent.

Whites have the second highest Education Index score in Sonoma County, 5.92. Only 4.7 percent lack high school diplomas, giving this group the highest score in high school completion. More than one in three have bachelor's degrees, and about one in seven has a graduate degree. The white educational enrollment rate, however, is essentially on par with the overall county rate.

African Americans score 4.25 on the Education Index. The share of adults with bachelor's and graduate degrees is roughly the same as in the county as a whole. Pulling down this group's score is the high proportion of adults who lack high school degrees, just about one in four. This rate is 10 percentage points higher than the Sonoma County rate and twice the rate for African Americans in California. African Americans' school enrollment also lags the Sonoma County average by 6 percentage points.

Latino educational attainment in Sonoma County, as in the state and country, lags that of other groups significantly. Four in ten Latino adults did not complete high school, and less than one in ten completed a bachelor's degree. Part of the explanation is the difference in educational attainment between native-born and foreign-born residents. Overall, U.S.-born residents have higher educational attainment levels than foreign-born residents, who are seven and a half times as likely to lack high school degrees. Eighty-eight percent of Latino immigrants to Sonoma County hail from Mexico, and many arrive with limited education; 42 percent of Sonoma's Latino population today is foreign born.[54]

Women outpace men in educational attainment and enrollment.

Interestingly, while more than half of foreign-born Latino adults in California today did not complete high school, the percentage of native-born Latino adults who hold high school diplomas is virtually the same as the rate for all Californians, about 80 percent.[55] This generational change, which has U.S.-born children ending up with higher levels of educational attainment than their immigrant parents, is certainly not unique to Mexican Americans but rather reflects the typical experience of most waves of immigrants to the United States.

Finally, in the United States as a whole, women outpace men in educational attainment and enrollment, and this pattern holds in Sonoma County, where they are more likely to have completed high school. As discussed in great detail below, the gender gap in high school completion among today's young people is actually larger than the gap among adults over age 25.

TABLE 5 Educational Attainment by Gender and Race and Ethnicity

POPULATION GROUP	EDUCATION INDEX	LESS THAN HIGH SCHOOL (%)	AT LEAST HIGH SCHOOL DIPLOMA (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)
California	5.04	18.5	81.5	30.9	11.3	78.5
Sonoma County	5.28	13.1	86.9	31.8	11.7	77.9
Gender						
Women	5.59	11.2	88.8	33.0	11.8	79.7
Men	4.96	15.2	84.8	30.6	11.7	76.1
Race/Ethnicity						
Asian Americans	7.64	12.9	87.1	44.4	15.4	95.5
Whites	5.92	4.7	95.3	38.0	14.0	76.7
African Americans	4.25	23.8	76.2	31.4	12.5	71.8
Latinos	2.37	43.6	56.4	7.7	1.9	77.4

Source: Measure of America analysis of data from the U.S. Census Bureau, American Community Survey, 2012.

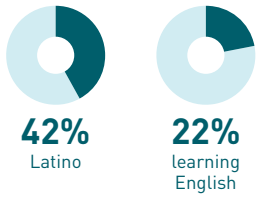
What Fuels the Gaps in Access to Knowledge?

Society often seems to expect schools to solve all its problems. To be sure, throughout American history, schools have been instrumental in creating a productive and cohesive society, helping to assimilate waves of young immigrants and the children of immigrants, fostering a collective identity as Americans, developing shared norms around citizenship, and providing a ladder out of poverty for academically able young people. Yet in the past, there was not the same expectation that schools would be able to create equality of outcomes; even equality of opportunity in schools wasn't on the table a generation ago. Girls were shut out of athletics and certain types of coursework, and African Americans faced legal segregation, the most blatant example of educational inequity in our country's history. In 1970, only 52 percent of American adults had even completed high school, and just 11 percent had bachelor's degrees.[56] The difference between then and now was that equal opportunity for everyone, women and people of color included, was not yet a salient concept in American society. In addition, unionized jobs in manufacturing and the trades paid middle-class wages to people, mostly men, with limited academic skills; educational credentials weren't a requirement for a family's basic economic security.

In today's globalized, knowledge-based economy, such jobs are few and far between. In addition, society has rightly rejected the idea that school success is for the few. Schools are expected to graduate "college- and career-ready" young people, and to be able to do so for all students—including children whose young, single parents did not graduate high school and struggle to make ends meet as well as those whose affluent, college-educated parents read to them every night; neglected children from chaotic, abusive homes as well as cherished children from stable, loving ones; and everyone in between. This is a worthy aim, but to believe just saying it is so will make it so is magical thinking. In reality, educating children from disadvantaged backgrounds requires greater resources, human and financial, than educating more privileged ones. Making the required investments in disadvantaged children is imperative, not only for reasons of basic fairness and social justice, but also to ensure America's continued competitiveness in the global economy.

Sonoma County Public Schools

70,600 students



42% Latino

22% learning English

48% economically disadvantaged

12% receiving special education services

40 school districts (K–12)

182 public schools

107 Elementary

25 Alternative

24 Middle/Junior High

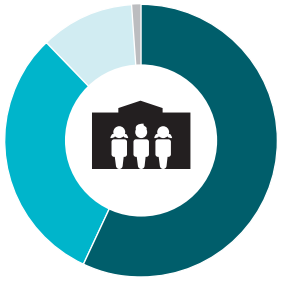
19 High

7 Independent Study

Source: Sonoma County Office of Education, About Sonoma County Schools, 2014.

UNEQUAL RESOURCES FOR EDUCATION

Where do California school resources come from?



57% State of California

31% Local Property Taxes

11% Federal Government

1% Lottery

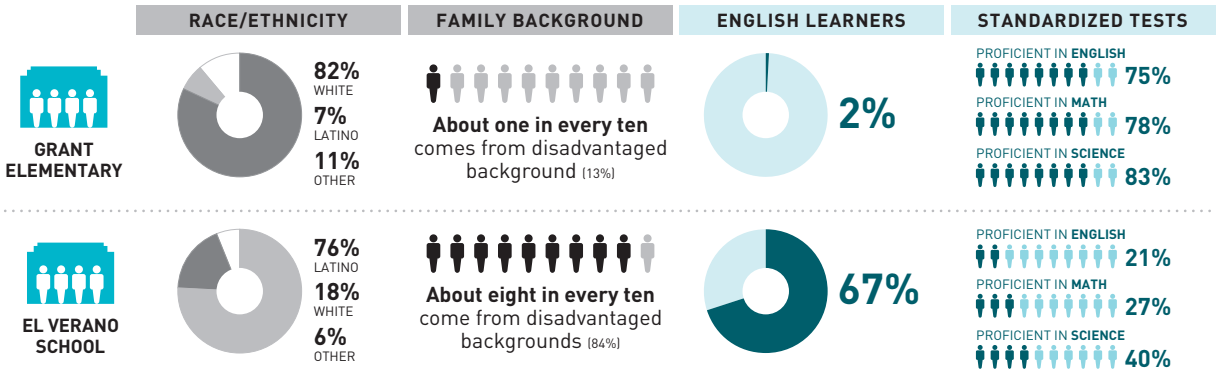
Source: "Education Budget—CalEdFacts."

States and communities tend to invest less in educating low-income students than in educating middle-class and affluent ones. Education budgets in California, as across the United States, are derived from a hyper-complex set of formulas; in California, funding comes from the federal government (about 11 percent of a school's budget), the state (about 57 percent), local property taxes (about 31 percent), and the lottery (about 1 percent),[57] supplemented by volunteer hours and contributions from parents and the private sector. Differences in property values, which underpin local educational budgets, have a big impact on the funds available to different school districts. Widening the gap are parental efforts. Because families in affluent communities have more disposable income and extensive parental social networks that include the business community, PTA fundraising efforts there can yield tens of thousands of dollars, resources sufficient to hire an art or music teacher, or funding for a year's worth of culturally enriching field trips—thus expanding opportunities for students whose families may already pay for private music lessons or belong to local museums.

Because incomes of Latinos in the state are disproportionately low, this group is often on the losing end of the funding equation. In California, the proportion of low-income Latino students attending overcrowded schools is twice that of white students. Latino high school students are four times as likely as white high schoolers to attend schools designated "low performing," and over twice as likely as white or Asian students to attend schools with severe shortages of qualified teachers.[58] Previous Measure of America research in Los Angeles County and Marin County has found strong evidence that schools with predominantly Latino or African American students from low-income families have fewer resources at their disposal than those whose mostly white students come from more privileged circumstances. Research also shows that educational funding alone is not enough to overcome the out-of-school challenges and barriers low-income children face.[59]

How is Sonoma County doing on this score? One way to judge is to look at two specific schools with similarly sized but socioeconomically distinct populations. **BOX 4** takes a closer look at two elementary schools.

BOX 4 A Tale of Two Schools



A dismaying pattern has emerged in other Measure of America studies: schools that serve the most disadvantaged students tend to have the fewest resources, and schools that serve the most advantaged students tend to have the most resources. Two Sonoma County schools buck this counterproductive trend.

Grant Elementary in Petaluma enrolls 402 children. The average parental educational attainment is college graduate, and most families live in single-family homes they own. Most students enter Grant in kindergarten or first grade after one or two years of preschool and remain through sixth grade. Eighty-two percent are white, and 7 percent are Latino. Thirteen percent come from disadvantaged backgrounds, but less than 2 percent are English-language learners. On the 2012–2013 California Standardized Tests, Grant students performed very well.[60]

El Verano School in Sonoma Valley Unified district enrolls 437 children in kindergarten through fifth grade. Students are drawn chiefly from an area with low index scores and a poverty rate double the county average. Over eight in every ten children come from disadvantaged backgrounds, and nearly seven in ten are English-language learners. On the 2012–2013 state tests, only 21 percent of the children scored at least "proficient" in English language arts (not unexpectedly, given the large number of English-language learners).[61]

Grant and El Verano spend approximately the same per pupil, teacher pay and qualifications are on par, and average class size is comparable. Both schools have beautiful student murals, thriving outdoor garden plots, space for outdoor play, and warm, vibrant environments for learning. Both are also sparing in their use of suspension and expulsion, with almost no cases over the last three reporting cycles.

Both schools also offer a rich array of afterschool activities, though they differ in their focus, funding, and operation. At Grant, for instance, the PTA chair manages a host of enrichment programs, which vary by semester and are paid for by individual parents. Options for fall 2013 included chess, Spanish, art, jewelry making, and a music troupe.

El Verano also offers afterschool classes like ballet, art, and yoga. In addition, the school offers a range of programs, all free of charge, that directly address out-of-school barriers to school success. A program run by the Boys & Girls Clubs of Sonoma Valley every school day from dismissal until 6:00 p.m. offers healthy snacks, homework assistance, and enrichment activities. An innovative partnership with a science museum in San Francisco combines science and English-language instruction. El Verano runs a preschool program funded by the California Department of Education and local foundations;[62] a high-quality preschool is particularly vital for English-language learners, who are not only adjusting to school but also learning a new language. The school's Universidad de Padres provides parents with a forum to talk about their needs, concerns, and hopes. A recent activity was a trip for nineteen parents to the University of California/Davis. None had attended college, and the excursion allowed them to tour the campus and learn about requirements for admission, financial aid, and college life.

Although El Verano students don't perform as well as Grant students on the state tests, the future looks bright for them. El Verano is taking steps that decades of research have shown help to close the achievement gaps opened by socioeconomic inequality. But leveling the playing field is not something that schools can do on their own; true equal opportunity requires greater investment in young children and their parents from all parts of society.

Sources: School Accountability Report Card: Grant Elementary 2012-2013 and School Accountability Report Card: El Verano Elementary School 2012-2013.

POVERTY AND EDUCATIONAL ATTAINMENT OF PARENTS

Gaps in educational achievement in Sonoma County stem largely from poverty and parental education levels. These interacting challenges, coupled with language barriers and issues related to immigration status, particularly affect Latino families and children.

Low levels of educational attainment among parents are associated with less verbally rich environments for very young children, which has serious consequences for school readiness and success. A famous study by Betty Hart and Todd R. Risley of the University of Kansas found that poor children were exposed to about 600 spoken words per hour, while working-class children heard 1,200 words per hour and children from professional families 2,100 words per hour. By age three, a poor child had heard 30 million fewer words than one from a professional family—a huge gap separating poor children from their peers before they even entered school. The researchers found correlations between the number of words and both IQ and eventual school performance.[63] In other words, children in poverty start school behind and too often do not catch up. The good news is that high-quality, center-based preschools can address this problem as well as allow children to build the noncognitive skills they will need to succeed in school (like persistence and impulse control). Unfortunately, in California, the children who would benefit most—low-income children and those at highest risk of school failure—are least likely to attend preschool.[64] In Sonoma County, only 39 percent of Latino 3- and 4-year-olds attend preschool, compared to 65 percent of white 3- and 4-year-olds.[65] Research by, among others, University of Chicago economist and Nobel Laureate James Heckman shows that a quality preschool experience has a higher return than any other educational investment. The cost of preschool is a barrier for low-income families, as is a lack of programs that meet the needs of the youngest English-language learners and their parents.

In Sonoma County, only 39 percent of Latino 3- and 4-year-olds attend preschool, compared to 65 percent of white 3- and 4-year-olds.

Once in school, children living in poverty face many barriers to academic success. Some were mentioned above in the section on unequal school resources. A frequently overlooked issue is the frequency of moves. Research shows that children who change schools typically suffer "psychologically, socially, and academically from mobility," and that "students who changed high schools even once were less than half as likely as stable students to graduate from high school, even controlling for other factors that influence high school completion."[66] While three-quarters of California students make unscheduled school changes between first grade and the senior year of high school, national patterns reveal that low-income students make more moves, especially in high school,[67] than high-income students, and high-minority schools tend to have high mobility rates.[68]

More obviously, low levels of parental education make it more difficult for parents to help their children with homework and may make them feel intimidated when dealing with schools and teachers. Language barriers, work hours, and concerns about immigration status may make even meeting with teachers difficult.

DIFFERENCES IN HIGH SCHOOL COMPLETION BY GENDER AND ETHNICITY

Completing high school is the bare-bones minimum educational credential in today's global economy. **Yet in Sonoma County, as in the nation as a whole, only four in every five high school students graduate in four years.** Failing to complete high school is associated with a variety of poor outcomes, the most obvious being economic. High school dropouts face far higher unemployment rates than better-educated adults—the rate for adults 25 and older without high school diplomas in 2013 was 11 percent, compared to 5 percent for people with associate degrees and 4 percent for those with bachelor's degrees. Even when they are working, poorly educated Americans in our increasingly knowledge-based economy are unlikely ever to earn more than poverty wages. Average weekly earnings for full-time workers over 25 without high school diplomas are just $472—compared to $827 for all full-time workers.[69]

Yet the impacts of lacking a high school diploma go well beyond the pocketbook effects. The life expectancy gap between high school dropouts and high school graduates has been increasing over the past generation; today the former live seven years fewer than the latter.[70] One in eleven male high school dropouts between the ages of 16 and 24 is behind bars—a figure that jumps to nearly one in four for young African American men who dropped out. People without high school diplomas are less likely to marry and more likely to have children as teenagers.[71] Students who live in poverty, have recently immigrated to the United States, struggle with English, are parents, or have disabilities are all more likely to drop out of school than students without these challenges.[72]

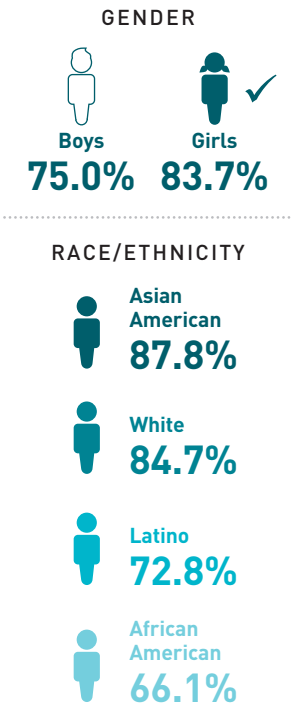
Keeping young people in school is easier than luring them back. The early warning signs of dropping out of high school appear well before ninth grade and are well known. Students who fail core courses in English or math, achieve low grades, score poorly on assessments, exhibit attendance or discipline problems, or are held back are more likely to drop out. By identifying and engaging with students who exhibit a critical mass of dropout factors, stakeholders can intervene while the students are still likely to benefit from it. For early warning systems to be effective, student monitoring must begin early, as must intensive services to help at-risk children overcome the obstacles they face, from learning differences to health problems to difficult family situations. In addition, schools need to be aware of the economic situations different families are facing; young people who see their families struggling economically may feel compelled to leave school and enter the labor market, a short-term stopgap that exposes them to lifelong economic insecurity.[73] Helping young people to balance their responsibilities to their families with their schoolwork and to see staying in school as a long-term investment that will pay off for everyone in the long term is vital.

U.S. weekly earnings for full-time workers over 25

Source: U.S. Bureau of Labor Statistics, Earnings and Unemployment Rates by Educational Attainment, 2013.

Sonoma County On-Time High School Graduation

(percent of ninth graders who graduate from high school four years later)



Source: Measure of America analysis of California Department of Education, DataQuest, 2011–2012 school year.

Sonoma County high schools do as well as those in the state overall in graduating students in four years, with one exception—at Cloverdale Unified, 71 percent of students graduate on time, less than the state and county averages, which straddle 79 percent. Yet a great deal of variation lies below the averages. In looking at the numbers, it is important to keep in mind the main message of this chapter: school performance is conditioned by the challenges children face outside the classroom, not just by what happens inside.[74] The following are some of the key differences we found among students in Sonoma County:

- Girls in Sonoma County are considerably more likely than boys to graduate high school in four years—83.7 percent as compared to 75.0 percent. The gender gap in Cloverdale Unified is even larger, nearly 20 percentage points. In no Sonoma County district do boys "outgraduate" girls.
- At the county level, Asian American students are the most likely to graduate on time (87.8 percent do), followed by whites (84.7 percent), Latinos (72.8 percent), and African Americans (66.1 percent).
- In Cotati–Rohnert Park Unified, only 54.6 percent of African American students graduate high school on time, the lowest rate for any racial or ethnic group in any of the Sonoma County high schools.
- In West Sonoma County Union High, 79 percent of Asian American students graduate on time—about 9 percentage points lower than the rate for Asian Americans in the county as a whole.
- Healdsburg Unified, Sonoma Valley Unified, and West Sonoma County Union High have the highest rates of on-time graduation for Latino young people, between 87.3 percent and 89.7 percent. The lowest rate for Latinos among the school districts is in Santa Rosa High, where only 72.3 percent graduate in four years.
- The white rate of on-time graduation (69.8 percent) is below the Latino rate (74.1 percent) in only one district, Cloverdale.[75]

TABLE 6 **Percentage of Ninth Graders Who Graduate from High School Four Years Later, by Sonoma County School District, Gender, and Race and Ethnicity**

RANK	SCHOOL DISTRICT	OVERALL	MALE	FEMALE	ASIAN AMERICAN	WHITE	LATINO	AFRICAN AMERICAN
	California	78.9	74.9	83.0	91.1	86.6	73.7	66.0
	Sonoma County	79.3	75.0	83.7	87.8	84.7	72.8	66.1
1	Petaluma Joint Unified (Petaluma Joint Union High)	91.0	88.4	93.4	96.4	94.3	84.6	—
2	West Sonoma County Union High	90.8	89.8	91.8	78.6	92.3	87.3	—
3	Healdsburg Unified	90.4	87.5	93.8	—	93.1	87.3	—
4	Sonoma Valley Unified	90.3	87.7	92.9	—	90.7	89.7	—
5	Windsor Unified	88.7	87.4	90.2	—	93.0	81.4	84.6
6	Santa Rosa High	80.6	77.6	83.5	90.6	87.5	72.3	77.1
7	Cotati-Rohnert Park Unified	79.2	74.3	84.2	95.5	82.5	74.4	54.6
8	Cloverdale Unified	71.2	63.1	82.6	—	69.8	74.1	—

Source: Measure of America analysis of California Department of Education, DataQuest. Data for Geyserville are not available.
Note: Where data are missing, there are too few students for reliable analysis.

A Decent Standard of Living

IN THIS SECTION

Introduction

Income is essential to meeting basic needs like food, shelter, health care, and education—and to moving beyond these necessities to a life of genuine choice and freedom. Income provides valuable options and alternatives, and its absence can limit life chances, restrict access to many opportunities, lead to untenable tradeoffs among necessities, and cause tremendous stress. Income is an important means to a host of vital ends, including good health, a decent education, a safe living environment, security in illness and old age, social inclusion, and a say in the decisions that affect one's life. Money isn't everything, but it's something quite important.

As the many organizations in Sonoma County that are concerned with people's health and well-being know, material resources are an important social determinant of health. Adequate earnings allow people to afford to live in safe neighborhoods with places to exercise and generally enable access to healthy foods, clean air, and high-quality medical care. They allow families to avoid many of the situations that cause stress, such as living in overcrowded apartments or dangerous neighborhoods or having to work two jobs. Sufficient earnings free people from the chronic anxiety of not being able to make ends meet, thus protecting their health from toxic stress and stress-induced health-risk behaviors. And aside from monetary compensation, jobs themselves can (if they're good) provide meaning, emotional support, and social capital, which boost mental health and protect physical health.

The continuation of Sonoma County's recovery from the Great Recession, with sharp improvements in recent years across a range of economic indicators, is thus good news for human well-being. The most recent monthly unemployment figure available for the county (November 2013) was 6 percent, better than the national average and down significantly from the November 2010 rate of 10.3 percent.[76] According to the Sonoma County Economic Development Board, employment grew three times faster in Sonoma, than in the nation as a whole in 2012, the county enjoys a high growth rate in business establishment, and tourism is surpassing its prerecession level.[77] A recent report by the National Association of Counties reports that Sonoma County's 2013 GDP (the total value of all goods and services produced) was $23.7 billion, and its 2012–2013 economic growth rate was 2.9 percent, close to what it had been before the 2007 crash.[78]

More worrisome economic trends in Sonoma County relate to persistent poverty, still-high housing costs, and stagnation—even backsliding—in the economic fortunes of middle- and low-wage workers. About one in eight people (12 percent) in the county live below the poverty line. Nearly half of all households (46 percent) spend more than 30 percent of their income on housing. Although the recession-sparked decline in median housing prices has made homeownership more affordable to new buyers than it was during the real estate bubble, that is

An overview of Sonoma County's economic improvements and challenges

of little comfort to those homeowners who saw the value of their largest asset plummet over the course of 2008. Median household income declined $2,500 between 2009 and 2011.[79] Also concerning are the economic prospects of a large group of young people; the rate of youth disconnection (that is, the proportion of people ages 16 to 24 who are neither working nor in school) in Sonoma County increased from 10.4 percent in 2009 to 11.8 percent in 2011.[80]

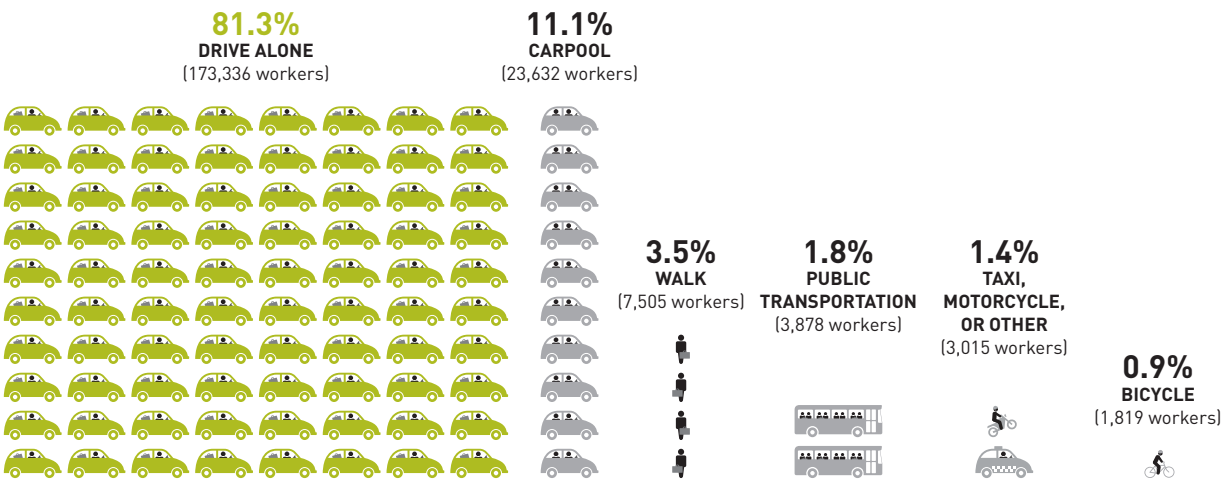
These larger trends provide the backdrop for considerable variation by neighborhood, race, ethnicity, and gender. Some groups within Sonoma County have high living standards, while others struggle with low-wage, insecure jobs, overcrowded or unaffordable housing, and inadequate transportation (see **BOX 5**).

BOX 5 Commuting: Most Sonoma County Commuters Go It Alone

An overwhelming majority of Sonoma County residents, over 81 percent, drive to and from work alone; 11 percent carpool; 3.5 percent walk; and about 4 percent either use public transit or another form of transportation (see figure below).

American workers over age 16 spend, on average, 25.4 minutes commuting each way; the mean commute time for Sonoma County workers is identical. This is lower than the California average of 27.1 minutes, but the average commute time for those in Sonoma using public transportation (55.3 minutes) is significantly longer than the national and California averages (47.9 and 47.3 minutes, respectively).[81]

Some 10 percent of Sonoma County workers commute more than an hour each way.[82] Lengthy commutes have serious downsides. Long drives fuel climate change, for one. Both health and happiness suffer as the result of less sleep, decreased family time, stress over commuting standbys like timeliness, traffic congestion, and other drivers, and environmental stressors, such as noise, crowds, and pollution. The resulting ill effects may include less exercise, higher levels of stress, increased blood pressure, worse cardiorespiratory fitness, risk of neck pain, higher Body Mass Index, musculoskeletal disorders, diminished cognitive performance, and increased chances of divorce.[83]



Source: U.S. Census Bureau, American Community Survey, 2012.

Agriculture is a cornerstone of the Sonoma County economy and was the source of over 10 percent of county earnings in 2008.[84] Sonoma County agriculture enjoyed a banner year in 2012: agricultural products like crops, livestock, vineyards, and nurseries yielded over $820 million, an increase of about 41 percent from 2011. Wine grapes alone contributed 71 percent of the total 2012 value.[85] With some 450 vineyards in Sonoma County, this bounty has been and remains a magnet for tourists, who spent $1.5 billion within the county in 2011.[86] Residents also benefit from the availability of many different locally grown foods.

Agriculture is a cornerstone of the Sonoma County economy and was the source of over 10 percent of county earnings in 2008.

Although data about the agricultural workforce in Sonoma County specifically are limited, nearly all (96 percent) of California's farmworkers are from Mexico.[87] (A study of Sonoma County agricultural workers currently under way will provide much needed information on this group.) Working conditions can be difficult. **The most recent Department of Labor agricultural survey found that the typical Californian farmworker puts in forty-five hours a week and earns between $12,500 and $15,000 per year, which leaves the families of one in every four farmworkers in poverty.** Over half of California farmworkers are under 35 years of age and, despite their youth, face serious barriers to working their way up either in or out of the industry. More than 62 percent cannot speak English at all, and fewer than one in ten speak it "somewhat" or "well." In addition, most (seven in ten) are not citizens and are not authorized to work in the United States.[88]

Vineyard workers are more highly skilled than other agricultural workers because producing grapes for premium wines involves a series of specialized tasks (pruning, suckering, leaf removal, shoot positioning, and harvesting), many of which must be done by hand and require expertise and experience. Thus, vineyard workers in Sonoma County and neighboring Napa County tend to earn more than farmworkers elsewhere in the state, though their wages are still on the low end of the wage distribution.[89] In addition, unlike farms growing crops that require tending by many workers at harvest time and almost none the rest of the year, vineyards have work to be done nine or ten months a year. Thus, some vineyard workers have as many challenges in common with low-wage workers in the service sector (low pay, the need to find long-term affordable housing and transport, no set work schedule) as they do with traditional migrant workers (the need for temporary housing, problems arising from undocumented status, physically arduous labor, exposure to pesticides and other workplace risks, and so forth).[90]

The wages and working conditions of farmworkers have long been an area of concern in California. Though earnings and conditions have improved, most farmworkers—the people on whom key parts of Sonoma County's economy, particularly wine and tourism, depend—still earn too little for a life of dignity, security, and self-determination.

What About Wealth?

Neither earnings nor income include wealth. Wealth (or net worth) is the value of everything a person owns—a house or other real estate, savings, investments, businesses, cars, and more—minus any liabilities or debts, such as unpaid mortgage principal. **Wealth has a major impact on current well-being and future opportunities, and wealth disparities eclipse income or earnings disparities.**

Unfortunately, wealth is extremely hard to measure, in part because the value of assets like stocks and real estate are constantly in flux, and also because the very wealthiest are likely to be missed in random sampling or decline to participate in surveys. The Federal Reserve Board produces reliable wealth data on the United States as a whole every three years through the Survey of Consumer Finances. The data are not available for states, counties, or congressional districts, however, much less census tracts, and thus cannot be incorporated into the American Human Development Index.

BOX 6 Measuring Living Standards in the Human Development Index

Many different measures can be used to gauge people's material standard of living. The American Human Development Index uses the median personal earnings of all full- and part-time workers 16 years of age and older; the data come from the U.S. Census Bureau's American Community Survey.

The median earnings figures in this report may strike some as unexpectedly low. News outlets and others talking about economic issues often refer to the average (or mean) incomes of households rather than the median earnings of individuals, and median household incomes in Sonoma County, which top $60,000, are about double the county's median personal earnings. Average household incomes are higher still. What accounts for the large differences among apparently similar measures?

Earnings versus income. Earnings are the wages or salaries people earn from their paid jobs. Income is a broader category; it includes earnings, which make up the largest share of **income** for most Americans, and it also includes pensions and Social Security benefits, child support payments, public assistance, annuities, stock dividends, funds generated from rental properties, and interest. Earnings figures thus are lower than income figures in most cases.

Personal earnings versus household earnings. Actual and potential earnings have a significant impact on the range of options a person has and the decisions he or she makes about family and work life. Referring to personal earnings—rather than household earnings—allows us to compare the relative command women and men have over economic resources. While many households are headed jointly by married couples, who typically share their incomes, more than half are not. The share of married-couple households has been falling since the 1970s; it passed the halfway mark in 2011 and is continuing a downward trend. In addition, not all married couples stay that way, and cohabitating couples who share resources also often part company.

Median versus average. The median gives a better indication than the average does of how the ordinary worker is faring. The median earnings figure is the midpoint of the earnings distribution—that is, half the population is earning more than that amount and half is earning less. In contrast, averages can be misleading in situations of high inequality; the presence of a few people taking home whopping sums will pull the average far above what the vast majority are actually earning. For example, in Sonoma County, the mean household income is nearly $84,000—almost $20,000 above the median.[91]

Part-time workers. The earnings of part-time workers are included in median personal earnings. While some workers prefer not to or don't need to work full-time, others work part-time because they cannot find full-time jobs or affordable child care, or they have responsibilities, such as elder care, that make full-time work impossible. Thus, **all workers** are included in the median personal earnings indicators, whereas other indicators may only include full-time workers.

Analysis by Geography, Gender, and Race and Ethnicity

VARIATION BY GEOGRAPHY: SONOMA COUNTY IN CONTEXT

Median earnings, the main gauge of material living standards in this report, are $30,214 in Sonoma County, which is roughly on par with those of California and the country as a whole.

Sonoma County's economic conditions look slightly less rosy, though, when compared with Marin County, whose residents earn more than those of any other California county to which Sonoma often compares itself. In Marin, median earnings are $45,052, nearly $15,000 more than in Sonoma County. Sonoma County earnings are quite similar, however, to those in neighboring Napa County as well as in Ventura, Santa Cruz, and San Luis Obispo Counties, and significantly higher than in Santa Barbara County ($24,561) and Monterey County ($22,433).

The three indicators below—unemployment, child poverty, and rent burden—track some very important risk factors that can pose direct threats to people's capability to enjoy a decent standard of living. **Sonoma County has an unemployment rate lower than both the nation and the state and lower than most of its peer counties.** On child poverty, Sonoma falls in the middle of the group, though this still represents about 15,400 of the county's children under 18 who are living in households with incomes below the poverty line. Finally, all of the counties in this group have housing cost burdens above the U.S. average. Nearly 46 percent of Sonoma's households pay 30 percent or more of their monthly income on housing.

TABLE 7 Economic Challenges in Sonoma and Seven Peer Counties

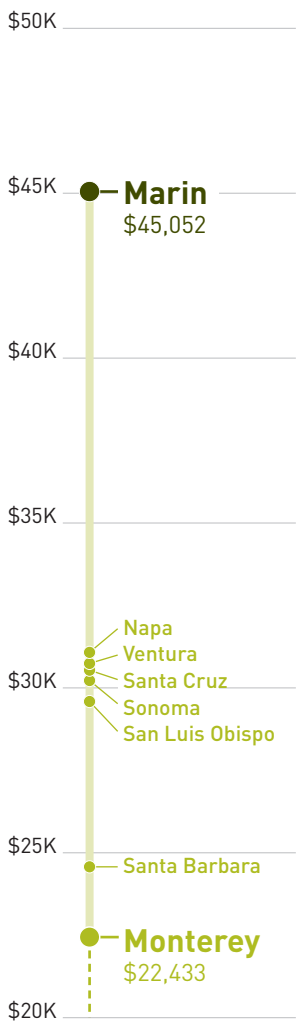
TRACT NAME	UNEMPLOYED (% age 16 and older)	CHILD POVERTY (% under 18)	SPEND 30% OR MORE OF INCOME ON HOUSING (%)
United States	7.0	22.6	35.9
California	8.4	23.8	46.8
Marin	4.6	9.1	41.7
Monterey	9.1	28.2	47.4
Napa	6.0	10.9	41.2
San Luis Obispo	6.1	15.1	44.2
Santa Barbara	6.4	20.5	46.5
Santa Cruz	8.7	14.0	45.1
Sonoma	**6.0**	**14.9**	**45.7**
Ventura	7.3	17.7	46.4

Source: Bureau of Labor Statistics, Current Population Survey and Local Area Unemployment Statistics, non–seasonally adjusted county figures and seasonally adjusted state and national figures for November 2013 (unemployment); U.S. Census Bureau, American Community Survey, 2012 tables S1701 (child poverty) and DP04 (rent).

MEDIAN EARNINGS (2012 DOLLARS)

U.S.	California	Sonoma
$30,155	**$30,502**	**$30,214**

Earnings in Sonoma and Seven Peer Counties



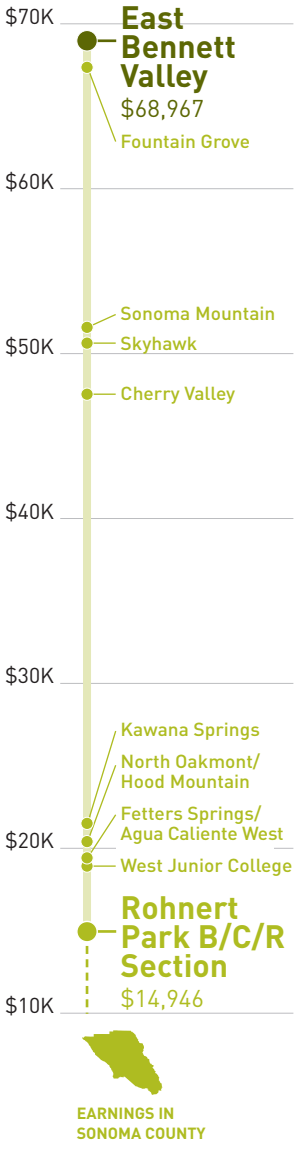
Source: U.S. Census Bureau, American Community Survey, 2012.

VARIATION BY GEOGRAPHY: CENSUS TRACTS

Significant disparities in median earnings separate census tracts within Sonoma County; earnings range from $14,946, which is below the federal poverty line for a two-person household, to $68,967, more than double the county median (see MAP 4).

The five top-earning tracts are East Bennett Valley, Fountain Grove, Sonoma Mountain, Skyhawk, and Cherry Valley (see TABLE 8). Earnings in all these neighborhoods surpass those in top-ranked Marin County and are, at least in two, more than twice as high as the California median. In top-earning East Bennett Valley, nearly nine in ten residents are white, and over six in ten work in the occupational category "management, business, science, and arts occupations," which includes executives and managers in business and other fields, as well as professionals in computer and life sciences, law, medicine, and architecture. The poverty rate is 1 percent, and 92 percent of housing units are owner-occupied rather than rented. Nearly all adults have at least a high school diploma, six out of every ten have bachelor's degrees, and school enrollment is very high.

Median Earnings: Top and Bottom Five Tracts



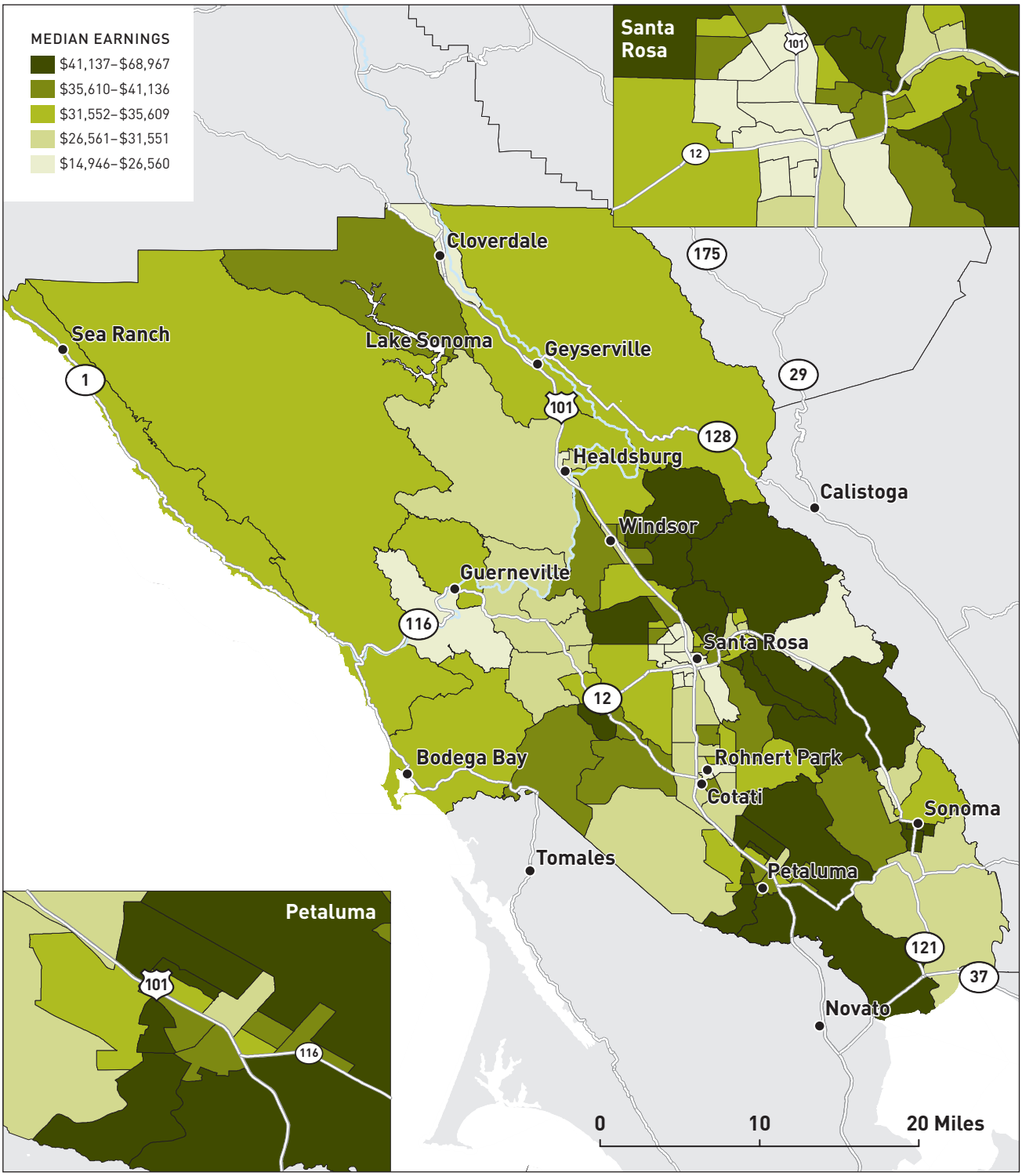
Source: U.S. Census Bureau, American Community Survey, 2008–2012.

TABLE 8 Top- and Bottom-Five Tracts for Earnings in Sonoma County

RANK	TRACT NAME	MEDIAN EARNINGS (2012 dollars)	HD INDEX
	California	$30,502	5.39
	Sonoma County	$30,214	5.42
	Top-Five Census Tracts for Earnings		
1	**East Bennett Valley**	$68,967	8.47
2	**Fountain Grove**	$67,357	8.35
3	**Sonoma Mountain**	$51,590	7.16
4	**Skyhawk**	$50,633	7.78
5	**Cherry Valley**	$47,536	7.18
	Bottom-Five Census Tracts for Earnings		
95	**Kawana Springs**	$21,510	4.20
96	**North Oakmont/Hood Mountain**	$20,406	5.98
97	**Fetters Springs/Agua Caliente West**	$19,444	3.41
98	**West Junior College**	$18,919	3.44
99	**Rohnert Park B/C/R Section**	$14,946	3.97

Source: Measure of America analysis of data from the California Department of Public Health, Death Statistical Master File, 2005–2011, and U.S. Census Bureau, American Community Survey, 2012 and 2008–2012.

MAP 4 **Median Earnings in Sonoma County by Census Tract**



Communities at the bottom of the earnings table have low concentrations of workers in management and related professions.

The five lowest-earning census tracts in Sonoma County are Rohnert Park B/C/R Section, followed by West Junior College, Fetters Springs/Agua Caliente West, North Oakmont/Hood Mountain, and Kawana Springs. The low earnings in two of these, however, are most likely due less to financial struggles than to stage-of-life realities:

- The **Rohnert Park**–area tract is home to Sonoma State University and its student housing. Wages there are pulled down because a large share of the population are students, and students who are working are disproportionately likely to be in part-time and lower-paying jobs.
- **North Oakmont/Hood Mountain** is home to the 4,200-person planned retirement community of Oakmont, developed in 1963 for adults 55 years old and up.[92] Nearly two-thirds of the residents of this tract are 65 or older, and many are no longer working. Furthermore, the relatively few Oakmont residents still in the job market may be working only part-time, relying in part on savings, pensions, and Social Security, none of which would show up as earnings. That Oakmont is a retirement community explains why 23.8 percent of residents—nearly one in four—have some form of disability and also clears up some contradictory findings, such as the coexistence of low earnings with a high share of bachelor's and graduate degree holders.

The other three Sonoma County communities at the bottom of the earnings table, two of which are in Santa Rosa, have low concentrations of workers in management and related professions. Between four and five out of every ten residents are renters, and approximately one in four lives in poverty.

In Fetter Springs/Agua Caliente, 26.9 percent of residents lack health insurance, which, coupled with such low earnings, leaves families in this area particularly vulnerable to economic shocks like unexpected illness or injury. Rental housing in Fetter Springs/Agua Caliente is crowded; it ties Sheppard as the census tract with the largest household size among those who are renting their homes—4.5 people—compared to 2.6 people Sonoma County–wide. And 45 percent of adults here did not graduate high school. Both Fetter Springs/Agua Caliente and Kawana Springs are predominately Latino, 60 percent and 51 percent, respectively.

VARIATION BY RACE AND ETHNICITY AND GENDER

In Sonoma County, whites earn the most money, $36,647, followed by Asian Americans ($32,495), African Americans ($31,213), and Latinos ($21,695). This earnings ranking is found in California as a whole as well, although Asian Americans are the top-earning group in the country overall. The following are more particulars about earnings by race and ethnicity in Sonoma County:

- **Asian Americans** in Sonoma County earn about $3,500 less than Asian Americans at the national level, whereas whites in Sonoma earn about $3,500 more than whites in the country as a whole.[93]
- Median personal earnings for **African Americans** in Sonoma County are on par with earnings for all African Americans in the state ($32,837) and higher than the national median for African Americans ($26,299).[94]
- The overall earnings gap in Sonoma County between **whites** and **Latinos** is about $15,000. This is about $3,500 smaller than the gap at the state level.

Men in Sonoma County earn about $8,500 more than women. This wage gap is similar to the gap between men and women at the state level, although it is around $1,000 smaller than at the national level.

The gender gap in earnings is the result of several factors, but lack of education is not one of them. As discussed above, women in Sonoma outperform their male counterparts at every educational level; they are more likely than men to hold high school, college, and graduate degrees and to be enrolled in school.

Men in Sonoma County earn about $8,500 more per year than women.

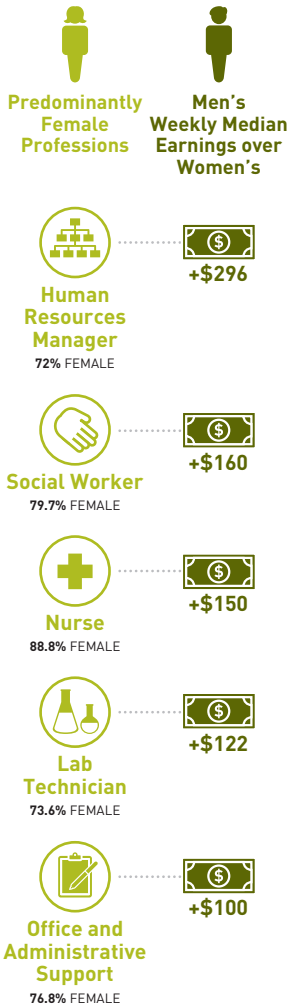
Source: U.S. Census Bureau, American Community Survey, 2012.

TABLE 9 Earnings by Race and Ethnicity

POPULATION GROUP	MEDIAN EARNINGS (2012 dollars)	HD INDEX
California	$30,502	5.39
Sonoma County	$30,214	5.42
Whites	$36,647	6.01
Asian Americans	$32,495	7.10
African Americans	$31,213	4.68
Latinos	$21,695	4.27

Source: Measure of America analysis of data from the California Department of Public Health, Death Statistical Master File, 2005–2011, and U.S. Census Bureau, American Community Survey, 2012.

Even in professions where women predominate, men earn more.



Source: Measure of America analysis of data from the Bureau of Labor Statistics, Current Population Survey, 2013.

Several other factors are behind the gap:

- **Part-time work.** Among women in Sonoma County, 42.4 percent work part time, a larger percentage than men.[95] This contributes to lower median earnings.
- **Responsibilities for caretaking labor.** Social norms around work in and outside the home have changed significantly over the past generation, but the change has been dramatic in one direction and lackluster, at best, in the other. Women have joined men in the paid workforce in droves, but men have been slower to take over an equal share of caretaking responsibilities. As a result, women still shoulder the majority of the child and elder care, domestic work, and emotional labor required by family life. Depending upon life stage and family circumstances, handling the bulk of these tasks alongside a demanding, high-paying job is extremely difficult.
- **Motherhood penalty.** Women pay a wage penalty for leaving the marketplace to care for children, and evidence indicates employers discriminate more against mothers than women in general in hiring and promotion decisions.[96] This is in part because the United States has not adopted family-friendly policies similar to those of all other affluent democracies, ranging from mandatory paid maternity and paternity leave, sick leave, and annual leave to care for children or elderly relatives to universal, affordable child care. The smaller wage gap in California and Sonoma County relative to the country as a whole may have something to do with the paid maternity leave mandate in the state.
- **Wage discrimination.** Evidence shows women across the United States are hired less frequently than men in high-wage firms and receive less training and fewer promotions. Even when working in the same occupational category, and even in female-dominated occupations like nursing, men tend to earn more than women.[97]
- **Women work different jobs.** Women are concentrated in lower-paying occupations and industries, in part because of their choices of fields of study. Fewer women major in science and engineering, for example, than in education or social work, fields with lower economic payoffs.
- **Low-skills jobs pay men more.** The low-wage jobs where women predominate, such as child care provider and home health aide, virtually always pay less than occupations dominated by men with similarly low educational attainment levels, such as security guard or parking attendant.[98]

What Fuels the Gaps in Living Standards?

Gaps in living standards among different groups in Sonoma County stem from a variety of factors:

EDUCATION LEVELS

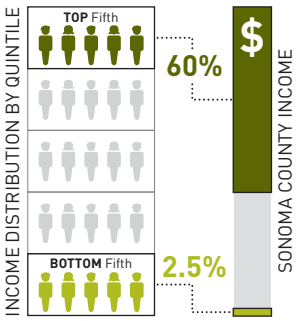
Level of education is the single biggest predictor of earnings for racial and ethnic groups and for census tracts in Sonoma County. The county's Latino residents earn the least by a huge margin—about $9,500 less than African Americans, $11,000 less than Asian Americans, and $15,000 less than whites.[99] They are also the furthest behind in terms of educational attainment, with four in ten adults lacking high school diplomas. Educational attainment rates for Latinos in California are pulled down by the lower attainment of new immigrants; in the state as a whole, U.S.-born Latino adults are as likely as other Californians to have completed high school. Enrollment rates for Sonoma County Latinos are on par with those of the county as a whole, which bodes well for improved earnings in the next generation. **In terms of neighborhoods, educational attainment and enrollment strongly and positively correlate with earnings; in other words, as a census tract's average education levels rise, so, too, do median earnings.**

Level of education is the single biggest predictor of earnings for racial and ethnic groups and for census tracts in Sonoma County.

Unlike the national story, the fact that Asian American residents have the highest education score doesn't translate into their having the highest earnings. One likely contributing factor is that although 44 percent of Sonoma County Asian Americans have bachelor's degrees, nearly 13 percent of the overall group lack high school diplomas (compared to only 4.7 percent of whites). This is discussed further below.

IMMIGRATION PATTERNS

Immigration patterns influence earnings largely because of the education levels of new arrivals. The vast majority of Latino migrants come from Mexico and arrive with low levels of education, giving them few options outside low-wage jobs in the service, construction, and agricultural sectors. Although immigrants from Asia tend to arrive with higher levels of education, generalizations about this large and extremely diverse population can obscure important subgroup distinctions. For instance, the county's Laotian Lua population struggles with low English proficiency, low levels of educational attainment, high unemployment, and many health problems that stem from their often traumatic experiences as refugees fleeing war and reprisals.[100]



The **top fifth** of Sonoma County taxpayers take home **60%** of Sonoma's total income. The **bottom fifth** take home **2.5%.**

Source: Measure of America analysis of Sonoma County income tax statistics from California Franchise Tax Board 2011 Annual Report.

HOLLOWED-OUT MIDDLE

The decline in manufacturing has made middle-class jobs less available, not just in Sonoma County, but in the state and country as well. People at the bottom of the wage ladder can't climb it as easily as in the past because there are fewer middle rungs on the ladder. Projected job growth is primarily at the top and bottom of the income scale (see **BOX 7**). This bifurcated job market leads to sharp divides in living standards; the bottom fifth of Sonoma taxpayers take home only 2.5 percent of the county's total income, while the share of the top fifth is twenty-four times higher, at 60 percent.[101] **The wages earned by 6 percent of all working residents of Sonoma—about 14,000 workers—are insufficient to lift them above poverty.**[102] The split is starkly evident in earnings at the top and bottom of the Sonoma County census tract scale. In Fountain Grove, for instance, 56 percent of workers have jobs in management-type occupations and 11 percent work in the service sector; median earnings here are over $67,000. In Fetters Springs/Agua Caliente West, only 16 percent of workers have management jobs, whereas 38 percent are in the service sector; in The Springs, median earnings are about $19,500. In Sonoma County as in the rest of the state, the boundaries of these distinct worlds of work fall along ethnic lines.

WEALTH DISPARITIES

Although wealth is not part of the American Human Development Index, it is too consequential to ignore. Wealth matters because financial assets allow families to invest in futures—to buy homes in safe neighborhoods with good schools, to invest in businesses, to pay for college, to help grown children with mortgages, and to leave behind inheritances that can translate into higher living standards for children and grandchildren. Wealth also matters because it is closely linked to the distribution of power; affluent people are more likely to be elected to public office and to influence the political process through access to social and professional networks than are the poor and middle class, and elected officials are more responsive to the preferences of the rich.[103] In emergencies, assets can enable people to cushion the effects of job loss, death or divorce, or natural disasters. Because, unlike most jobs, wealth can be transferred from one generation to the next, the wealth divide is more dramatic than the earnings divide. **The stark wealth differences that drive the disparities in living standards today lay the foundation for still more disparities tomorrow.**

BOX 7 The Earnings Hourglass

The decline in middle-wage jobs like construction, coupled with the growth in jobs at the top and bottom of the earnings scale, creates an hourglass-shaped labor market in Sonoma County that mirrors broader national trends.

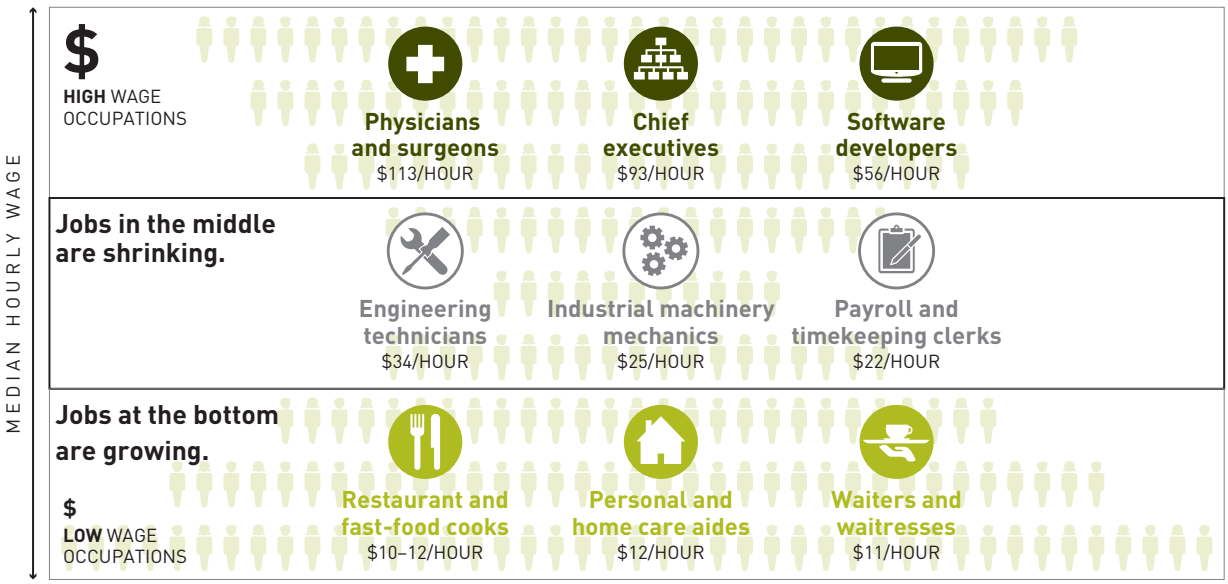
Sonoma County has a workforce of 250,000, employed across a wide range of sectors.[104] About two-thirds are employed by private companies; 13 percent work for local, state, or federal government entities; and much smaller percentages work for nonprofit organizations or are self-employed.[105] One in five working county residents has a job in education or health care, with almost 29,000 employed in health care and social assistance alone.

The next largest industry is the retail sector; one in eight employed county residents works in retail, one of the lowest-paying job categories. The typical retail worker earns only $21,500 per year, a sum that falls short of the Sonoma County self-sufficiency standard of $26,065 for just one person—and is just a fraction of the more than $53,700 a worker with two school-age children needs to make ends meet in Sonoma. The self-sufficiency standard, developed by Diana Pierce in the mid-1990s, "defines the amount of income necessary to meet basic needs (including taxes) without public subsidies (e.g., public housing, food stamps, Medicaid or child care) and without private/informal assistance (e.g., free babysitting by a relative or friend, food provided by churches or local food banks, or shared housing)."[106]

Sonoma County has seen major shifts in its employment picture in recent years. From 2000 to 2011, employment declined in sectors like manufacturing and construction, where in the past middle-wage jobs were plentiful. Job growth has been strong at the top in the well-paying professional sectors, including business services, education, and health.[107] Among the highest earning are business executives and medical specialists, such as psychiatrists, internists, physicians, and surgeons, all of whom earn upwards of $90 per hour, on average.[108]

At the opposite end of the earnings distribution are workers in a range of service and agricultural occupations—among them farm workers, graders and sorters of agricultural products, waiters and waitresses, dishwashers, and fast-food cooks—who typically earn between $9 and $12 per hour.[109] Job growth has been strong in the lower-wage leisure and hospitality sectors, fueled to some degree by burgeoning interest in the farm-to-table movement and "agri-tourism," as well as large increases in the incomes of "the top 1 percent" from the larger Bay Area and beyond, who have plenty of resources for travel.

Large and fast-growing job categories are clustered at the bottom of the earnings scale.



Source: Mean hourly wage from California Employment Development Department, High Wage Occupations in Santa Rosa-Petaluma Metro Statistical Area, first quarter 2013.

Agenda for Action

What concrete actions can the Sonoma County Department of Health Services and its allies across a wide range of sectors take to shore up the foundations of well-being for all the county's people and build the capabilities of those groups that lag behind?

Population-Based Interventions

- Make Universal Preschool a Reality
- Redouble Antismoking Efforts

Place-Based Interventions

- Improve Neighborhood Conditions to Facilitate Healthy Behaviors
- Mend the Holes in the Safety Net for Undocumented Immigrants
- Address Inequality at Education's Starting Gate
- Prioritize On-Time High School Graduation
- Reduce Youth Disconnection
- Take a Two-Pronged Approach to Raising Earnings: Boost Education and Improve Pay

Sonoma County is home to some communities in which most residents have the tools they need to live healthy, productive, freely chosen lives; neighborhoods in Bennett Valley, the Sonoma Mountain and Arroyo Park area, and Southwest Sebastopol are good examples. The rich and diverse sets of capabilities and conditions people in these and similar Sonoma County communities tend to have—from educational credentials, well-paying jobs, and strong social networks to safe neighborhoods, secure housing, and a voice in the decisions that affect their lives—are reflected in their communities' high scores on the American Human Development Index. This is not to say people living in neighborhoods that score on the high end of the index scale (from roughly 6.50 upward) are on easy street; they work hard and are certainly not immune to the reversals and sorrows that are part and parcel of the human condition. Nonetheless, the foundational building blocks they require to realize their potential and invest in their families' futures are firmly in place.

Sonoma County is home to some communities in which most residents have the tools they need to live healthy, productive, freely chosen lives and others in which people face many obstacles to discovering, developing, and deploying their unique gifts and talents.

Sonoma County is also home to neighborhoods in which people face many obstacles to discovering, developing, and deploying their unique gifts and talents, and where necessity too often demands that human flourishing take a backseat to human survival. In the lowest-scoring tracts—those that fall in the high 2.00 to low 4.00 range—fewer capabilities translates into fewer choices and opportunities, as well as greater economic insecurity. In Southwest Santa Rosa, East Cloverdale, and other low-scoring Sonoma County communities, adults must direct the lion's share of their time and energy to securing the basics—essentials like nutritious food, medical care, and a place to live. The struggle to stretch low wages far enough to make ends meet and to navigate the daily challenges of life in high-poverty neighborhoods exacts a high cost: the chronic stress of insecurity causes excessive wear and tear on the heart and blood vessels, weakens immunity, frays relationships, and erodes psychological health. And the effects of prolonged poverty, particularly in the early years, on children's well-being are grave and long-lasting.

Between these high- and low-scoring neighborhoods are ones that score in the high-4.00 to mid-6.00 range. **The people living in these communities experience a mixture of security and insecurity.** Their health, levels of education, and earnings range from near the national average to well above it. But, like many in California's statistical middle, they lack the security Americans have long associated with middle-class status. Too frequently they face high housing costs, have limited assets, have too little saved for higher education and retirement costs, and are particularly affected by the erosion of middle-class jobs and benefits. Many have yet to recover fully from the effects of the Great Recession.

As this report reaches its conclusion, the question we need to ask is this: What concrete actions can the Sonoma County Department of Health Services and its allies across a wide range of sectors take to shore up the foundations of well-being for all the county's people and build the capabilities of those groups that lag behind?

Two sets of actions offer promise. The first comprises population-based interventions targeted at Sonoma County as a whole; they are aimed at promoting the overall well-being of the county and will benefit communities all along the human development spectrum. The second includes place-based interventions that target specific neighborhoods.

Population-Based Interventions

Make Universal Preschool a Reality

A mountain of evidence shows that disadvantaged children who benefit from a high-quality preschool experience are less likely to repeat grades and more likely to graduate from high school and college, marry, earn more, and be healthier as adults than those who do not. They are also less likely to have children when they are teenagers, receive public assistance, and spend time behind bars.[110] National research has consistently shown that quality matters—poor-quality programs don't help disadvantaged children and may harm them—and that the most disadvantaged children attend the lowest-quality preschools.[111]

Today, only about half of Sonoma County's 3- and 4-year-olds are enrolled in preschool and, among Latinos, the rate falls to 39 percent.

Today, only about half of Sonoma County's 3- and 4-year-olds are enrolled in preschool and, among Latinos, the rate falls to 39 percent. In 2012, the average annual full-time cost in licensed child care/preschool centers was $9,500[131] for preschool-age children – equivalent to about one-third of the median annual personal earnings for the county. This high price puts preschool out of reach not just for low-income families but for many middle-income families as well. Fewer than 3,200[131] spots in licensed centers were available for 3- and 4-year-olds in 2012. Even if all spots went to subsidy-eligible children, we would still have a shortage of almost 2,000[132] spots for subsidy-eligible children, not to mention the remaining 6,000 of 3-4 year olds in the county.[112] A commitment among municipalities, the county, the business community, the school system, and the philanthropic community to meet the need for subsidized preschool would help secure a life of choice and value for today's Sonoma County children. As quality is fundamental to the benefit of preschooling, raising the wages of preschool personnel to attract teachers with early childhood expertise is important. The California Employment Development Department estimates Sonoma County has about 1,800 child care workers, and, in the Santa Rosa–Petaluma Metro Area, their median hourly wages are just $11.52.[113] Attaching a preschool to an existing elementary school, as El Verano School has done, is an excellent approach to build strong bonds between families and the school from the start.

Redouble Antismoking Efforts

Most premature death today stems from preventable health risks, chief among which is smoking. Among its peer counties, Sonoma County has the highest rate of adults who smoke, 14.3 percent. The county also has higher incidence and death rates from cancer than are average for California, particularly among whites.[114]

Given that tobacco is highly addictive and most people who smoke began in their teens,[115] **the best way to lower smoking rates is to prevent teenagers from picking up the habit in the first place.** Since most smokers want to quit, helping them do so is also vital; quitting by age thirty-five reduces most of the risk of premature death, and quitting by forty returns an astonishing nine years of life expectancy to a former smoker.[116] Sonoma County has a range of approaches in place to address both adults and teens, including an ordinance prohibiting smoking in certain public places, active public health campaigns, and free and low-cost smoking cessation programs. Yet adult and teen smoking rates in Sonoma remain stubbornly high.[117] California's cigarette tax, at 87 cents per pack, is among the lowest in the country.[118] Raising cigarette prices could have an immediate impact on young smokers in particular, who respond quickly to price increases.[119] Another important strategy would be enforcing ID laws and restricting sales in pharmacies, particularly near parks and schools, to limit teens' access to cigarettes. Building upon the ample evidence about what works to lower smoking rates can make a real difference to longevity in Sonoma County.

Most premature death today stems from preventable health risks, chief among which is smoking.

Place-Based Interventions

Place matters to psychological and physical health and is a fulcrum of educational and economic opportunity.

Place matters to psychological and physical health and is a fulcrum of educational and economic opportunity. Our well-being and life paths are profoundly shaped by the characteristics of the places where we are born, spend our earliest years, attend school, make friends, fall in love, make the transition from adolescence to adulthood, work, start families, and age. **Neighborhoods can be bridges, or barriers, to lives of freedom and opportunity.**

The American Human Development Index allows us to identify areas whose populations face interlocking health, education, and income impediments to human flourishing. In Sonoma County, the census tracts with the lowest scores should be the focus of a place-based approach to improving people's well-being. The challenges these communities face are well beyond what any single institution—whether a school, a health clinic, or a municipal or county agency—can meaningfully address on its own. A place-based approach views a neighborhood, its people, and their assets and challenges as a holistic system and brings to bear on their needs the concerted, coordinated efforts of a wide variety of actors from the business community, local government, schools, hospitals, community-based organizations, faith communities, and the philanthropic sector. Place-based approaches, which also fall within the rubric of "collective impact," ideally ensure that a set of actions becomes more than the sum of its parts and does so in a way that empowers communities to identify their own priorities and solutions.

Index results suggest that the areas discussed in BOX 8, many of which comprise contiguous census tracts, would benefit from a place-based approach.

In some low-scoring Sonoma County census tracts, the data show clearly the basic areas where the lag is most significant and where concerted effort could make a real difference to overall human development levels. East Cloverdale, for instance, has fallen behind in terms of education, not just of adults over age 25, but in terms of today's young people as well; education would, therefore, appear to be a good place to start. The Springs lags in education and income, but already has put in place education policies and approaches that are helping to close the gap between Latino and white students, as evidenced by the near parity between these two groups in rates of on-time graduation from Sonoma Valley High School; the improvement already in progress has set in place a strong foundation for further place-based initiatives.

But in areas like Southwest Santa Rosa, all major indicators badly trail the county average. From health and housing to health insurance and income, people in these neighborhoods face major constraints from all quarters in terms of their ability to live freely chosen lives of value. **To impose a hierarchy of needs or list of priorities for action from outside would only serve to disempower these communities further.**

Bolstering the ability of existing organizations to take a lead role in the development of priorities for place-based initiatives, or supporting the creation of new mechanisms, is a critical first step.

Although each community will identify a set of issues that call for intervention based on people's most pressing concerns, the analysis done for this report suggests that making real progress toward higher levels of well-being and expanded opportunity requires taking the actions outlined below. This list can serve as a launching point for community-led identification of priorities.

BOX 8 Sonoma County Priority Places

Southwest and Southeast Santa Rosa

Three census tracts in Southwest Santa Rosa, adjacent to one another in the area bounded by Highway 12 and Route 101, have the county's lowest human development levels. Index scores in Roseland Creek, Roseland, and Sheppard, which range from 2.79 to 2.98, are similar to those that prevailed in the country as a whole in the late 1970s. The struggles here are many: life expectancies are among the county's lowest (around 77 years); four in ten adults lack high school diplomas; school enrollment rates are well below the county average; and earnings are roughly $22,000 per year—the median wage that prevailed in the United States in the late 1960s. Six in ten housing units are rented, and the average size of households living in rental housing is among the county's highest, suggesting overcrowded living conditions. Just across Route 101 lie two Southeast Santa Rosa tracts, Kawana Springs and Taylor Mountain, which rank eighty-first and eighty-ninth, respectively, on the index among the ninety-nine Sonoma County census tracts. Their low scores place Southeast Santa Rosa at high priority for intervention.

Northwest Santa Rosa

The scores of the eight tracts to the north of Highway 12 that straddle Route 101 in Santa Rosa range from 3.50 to a bit over 4.00, which are typical of the country in the early 1990s. The neighborhoods of West End, Bicentennial Park, Downtown Santa Rosa, Comstock, Burbank Gardens, West Junior College, Coddingtown, and Railroad Square, all of which are among the twenty lowest-scoring tracts, together represent a large area of concentrated disadvantage.

The Springs

The Springs in Sonoma Valley (Fetters Springs/Agua Caliente West) has the lowest score outside Southwest Santa Rosa. This comparatively compact area lies amid census tracts with much higher scores. Although life expectancy in this community is higher than the county average, 45 percent of its adults lack high school diplomas and its median personal earnings are third from last among Sonoma's ninety-nine tracts. The relatively small population (just over 5,000); the fact that this community is not adjacent to other high-poverty, low-human-development areas; and the strong positive community role played by the area's schools (see **BOX 4**) give a place-based approach to the area a high likelihood of success.

East Cloverdale

East Cloverdale ranks ninety-first among the ninety-nine Sonoma County census tracts. This north Sonoma tract struggles in particular with education. Three in ten adults lack high school diplomas, and just 12 percent hold bachelor's degrees (compared to 31.8 percent for Sonoma County as a whole). School enrollment, at 63.5 percent, is in the bottom five for the county, and the rate for on-time graduation from high school in the Cloverdale Unified school district is fewer than three in four students (71.2 percent)—the lowest in the county. The situation with boys is particularly worrisome; less than two-thirds (63.1 percent) graduate high school in four years.

Improve Neighborhood Conditions to Facilitate Healthy Behaviors

Better health and longevity are largely the result of the conditions of our daily lives, the levels of stress we habitually experience, the scores of small decisions we make about what to put in our bodies, and how well we are able to avoid the "fatal four" risk factors for premature death: smoking, drinking to excess, poor diet, and physical inactivity. Efforts to improve neighborhood conditions should focus on creating a safe environment with more sidewalks, more streetlights, more parks, convenient, full-service grocery stores, accessible physical and mental health care, and other amenities conducive to healthy behaviors. They should also focus on eliminating risk factors, such as easily available tobacco, pervasive alcohol advertising, or concentrations of fast-food outlets.

Mend the Holes in the Safety Net for Undocumented Immigrants

Longevity is largely the result of the conditions of our daily lives.

Recent estimates show Sonoma County has roughly 41,000 undocumented immigrants, constituting 8.8 percent of the population—the tenth-highest rate among California's counties.[120] Undocumented immigrants and their children, including children who are U.S. citizens, face significant challenges in getting access to vital services and are often unaware of what services actually exist. Despite Sonoma County efforts and policies to improve the well-being of this population, including the Sanctuary County designation for driving and the promotion of the health insurance program Healthy Kids, the undocumented and their families face numerous and varied barriers to living productive, fulfilling lives of value and dignity.

Address Inequality at Education's Starting Gate

Universal preschool in Sonoma County would benefit all families, and particularly low-income families. But those with the greatest challenges, such as deep poverty, domestic instability, and low levels of parental education, also need intervention at an earlier stage. The first three years are critical to the emotional, social, cognitive, and linguistic development of young children, and responsive, warm, and appropriately stimulating interactions with consistent caregivers provide the primary pathway for this development. Well-tested and proven programs, such as the Nurse-Family Partnership, that target infants and young children in the 0–3 age range and their parents are associated with greatly improved child health outcomes and school performance and more effective parenting strategies.[121]

Prioritize On-Time High School Graduation

A high school diploma is the barebones minimum educational credential in today's increasingly knowledge-based economy; the costs of dropping out of high school are extremely high in terms of health, relationships, employment, and wages. On-time graduation rates vary widely by school district in Sonoma County, from over 90 percent of ninth graders finishing high school on time in Petaluma Joint Unified, West Sonoma County, Healdsburg Unified, and Sonoma Valley Unified, to fewer than three in four in Cloverdale Unified.[122] The early-warning signs that typically precede a child's dropping out of high school are now well established, allowing for the development of systems to identify, monitor, and engage at-risk youth. Vigorous efforts to support students at risk of dropping out can pay dividends not only to the students and their schools but to all county residents, as high school dropouts are four times as likely as high school graduates to be unemployed[123] and eight times as likely to be incarcerated.[124]

The costs of dropping out of high school are extremely high in terms of health, relationships, employment, and wages.

Reduce Youth Disconnection

The years between ages 16 and 24 are extremely important for a person's life trajectory—a time for gaining educational credentials, work experience, and the social and emotional skills required for a productive, rewarding adulthood. Yet in Sonoma County, 11.8 percent of people in this age group, comprising nearly 7,000 teens and young adults, were "disconnected" in 2011—that is, neither working nor in school—up from 10.4 percent in 2009.[125] Young people of color are disproportionately likely to be disconnected.[126] Periods of disconnection as a young person reverberate in adulthood in the form of lower wages, lower marriage rates, and higher unemployment rates. Offering narrow interventions late in the game, such as an unpaid high school summer internship, cannot turn around a situation years in the making. The large majority of disconnected young people come from communities with entrenched poverty, where the adults in their lives also tend to be disconnected from mainstream institutions as they struggle with limited education, frequent periods of unemployment, and limited social networks.[127] Preventing youth disconnection thus requires improving the conditions and opportunities in today's high-disconnection communities. It also requires the creation of meaningful pathways—such as career and technical education programs in high school linked to postsecondary certificate programs and work experience—that connect school and work for students whose interests and aspirations are not best served by traditional bachelor's degree programs. Another important priority is helping low-income young people with the financial costs of attending college and certificate programs.[128]

Take a Two-Pronged Approach to Raising Earnings: Boost Education and Improve Pay

When families earn too little to make ends meet, a host of well-being outcomes suffer.

When families earn too little to make ends meet, a host of well-being outcomes suffer. The impact on children is particularly pronounced: research shows that deep poverty in early childhood has immediate and lifelong adverse effects, including worse health, lower levels of educational attainment, and a greater chance of living in poverty in adulthood.[129] Two pathways are open to higher earnings, and ideally Sonoma County will pursue both:

- **Help more people bypass or exit low-paying sectors by getting more education.** Sonoma County should focus on boosting educational outcomes, starting with providing universal preschool and raising rates of high school completion, to make livelihoods more secure and improve health.

- **Ensure that all jobs, including those that do not require a college degree, pay wages that afford workers the dignity of self-sufficiency and the peace of mind of economic security.** Not everyone has an interest in higher education or the opportunity, preparation, or aptitude for it, and not everyone has the wherewithal to enter higher-paying fields. As discussed earlier, fewer mid-level jobs are available today than in the past, and the low-wage service sector is the country's fastest-growing job category. While a job as a farmworker, a cleaner in a hotel or inn, or a laborer on a construction site may be a stepping-stone for some, for many, jobs like these are long-term careers. Improving the pay and quality of such jobs, which employ many working adults in Sonoma County's poorest tracts, is central to improving well-being in those communities.

California's minimum wage will rise to $9 per hour in July 2014, and to $10 in January 2016. In addition, several municipalities in Sonoma County have introduced ordinances that raise the wage floor further. These important steps should be built upon. In addition, the onus should not rest solely on the government but also on employers to make all jobs "good jobs."

Also central to well-being is improving the quality of these jobs, not just by providing benefits like sick leave, but by reducing the variability of work schedules. Many low-wage workers not only work too few hours at one job to make ends meet; they also have work schedules that change weekly. Some are even subject to "on-call" schedules, where they call in to see if they should come to work each day. This variability makes it impossible to take second jobs or make financial plans, wreaks havoc on child care scheduling needs, and feels disrespectful and disempowering—all factors that contribute to health-eroding chronic stress.

Conclusion

Sonoma County is rich in organizations dedicated to improving life for its residents, particularly those who face high barriers to living freely chosen lives of value and opportunity. Working together, these public and private organizations can make a real difference. **Population-based approaches**, the mainstay of public health, offer great promise for longer, healthier, and more rewarding lives for everyone. Making universal preschool a reality and redoubling antismoking efforts are high-impact priorities that enjoy widespread popular support; setting concrete, realistic-but-ambitious targets could galvanize collective action. **Place-based approaches** offer a way to address the multiple and often interlocking disadvantages faced by families living in low-scoring communities. Having as a starting point a process in which residents themselves identify their top priorities and organizations and then join together to help address them is an empowering approach that makes meaningful, lasting results more likely.

References

IN THIS SECTION

Sonoma County Human Development Indicators

The following indicator tables were prepared using the latest available data on Sonoma County. All data are standardized to ensure comparability. To create customized maps and interactive data charts for these indicators, go to: www.measureofamerica.org/maps.

HD Index by Race/Ethnicity and Gender

	HD INDEX	LIFE EXPECTANCY AT BIRTH (years)	LESS THAN HIGH SCHOOL (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)	MEDIAN EARNINGS (2012 dollars)	HEALTH INDEX	EDUCATION INDEX	INCOME INDEX
California	**5.39**	81.2	18.5	30.9	11.3	78.5	30,502	6.35	5.04	4.79
Sonoma County	**5.42**	81.0	13.1	31.8	11.7	77.9	30,214	6.26	5.28	4.72
GENDER										
1 Women	**5.41**	83.0	11.2	33.0	11.8	79.7	25,591	7.08	5.59	3.57
2 Men	**5.30**	78.9	15.2	30.6	11.7	76.1	34,219	5.36	4.96	5.59
RACE/ETHNICITY										
1 Asian Americans	**7.10**	86.2	12.9	44.4	15.4	95.5	32,495	8.44	7.64	5.23
2 Whites	**6.01**	80.5	4.7	38.0	14.0	76.7	36,647	6.05	5.92	6.06
3 African Americans	**4.68**	77.7	23.8	31.4	12.5	71.8	31,213	4.86	4.25	4.95
4 Latinos	**4.27**	85.3	43.6	7.7	1.9	77.4	21,695	8.03	2.37	2.43

HD Index for Peer Counties

	HD INDEX	LIFE EXPECTANCY AT BIRTH (years)	LESS THAN HIGH SCHOOL (%)	AT LEAST HIGH SCHOOL DIPLOMA (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)	MEDIAN EARNINGS (2012 dollars)	HEALTH INDEX	EDUCATION INDEX	INCOME INDEX
United States	**5.07**	79.0	13.6	86.4	29.1	10.9	77.5	30,155	5.43	5.06	4.71
California	**5.39**	81.2	18.5	81.5	30.9	11.3	78.5	30,502	6.35	5.04	4.79
RANK											
1 Marin County	**7.73**	84.2	6.8	93.2	55.8	24.5	87.3	45,052	7.60	8.09	7.49
2 Santa Cruz County	**5.79**	81.9	14.0	86.0	38.3	15.2	80.6	30,525	6.63	5.94	4.79
3 San Luis Obispo County	**5.60**	81.1	8.7	91.3	33.5	11.8	81.6	29,582	6.30	5.91	4.58
4 Ventura County	**5.59**	82.3	17.3	82.7	31.6	11.1	78.8	30,738	6.79	5.15	4.84
5 Napa County	**5.43**	81.4	18.3	81.7	30.3	9.2	78.5	31,074	6.43	4.93	4.92
6 Sonoma County	**5.42**	81.0	13.1	86.9	31.8	11.7	77.9	30,214	6.26	5.28	4.72
7 Santa Barbara County	**5.06**	82.2	20.8	79.2	30.2	12.5	80.2	24,561	6.77	5.12	3.29
8 Monterey County	**4.47**	82.4	30.1	69.9	24.0	8.7	76.6	22,433	6.84	3.92	2.66

Sources: HD Index: Measure of America analysis of California Department of Public Health, Death Statistical Master File, 2005–2011, and U.S. Census Bureau, American Community Survey, 2012. Demographic Indicators by Census Tract: U.S. Census Bureau, Census 2010. Tract all or partially within City: Missouri Census Data Center, MABLE/Geocorr12: Geographic Correspondence Engine. All other indicators: U.S. Census Bureau, American Community Survey, 2012 and 2008–2012.

Note: The "Tract all or partially within City" column on pages 92-93 identifies which incorporated city the tract is all or partially within the boundaries of, if any. Tracts straddling one or more cities were grouped with the city in which the largest share of their population lives. A blank cell indicates that the tract is in an unincorporated part of the county or is part of a town.

HD Index by Census Tract

		HD INDEX	LIFE EXPECTANCY AT BIRTH (years)	LESS THAN HIGH SCHOOL (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)	MEDIAN EARNINGS (2012 dollars)	HEALTH INDEX	EDUCATION INDEX	INCOME INDEX
	California	**5.39**	81.2	18.5	30.9	11.3	78.5	30,502	6.35	5.04	4.79
	Sonoma County	**5.42**	81.0	13.1	31.8	11.7	77.9	30,214	6.26	5.28	4.72
1	East Bennett Valley	**8.47**	82.0	0.5	58.6	24.0	90.2	68,967	6.67	8.75	10.00
2	Fountain Grove	**8.35**	82.0	4.2	56.6	24.6	88.7	67,357	6.68	8.38	10.00
3	Skyhawk	**7.78**	83.1	3.6	57.8	22.5	84.1	50,633	7.12	7.93	8.30
4	Annadel/South Oakmont	**7.71**	84.3	3.1	54.3	21.2	86.5	45,441	7.61	7.96	7.55
5	Old Quarry	**7.71**	82.5	3.7	57.5	26.5	93.1	43,919	6.86	8.94	7.32
6	Rural Cemetery	**7.67**	83.6	3.4	48.0	25.7	92.5	43,240	7.35	8.44	7.21
7	Central Bennett Valley	**7.63**	85.7	6.3	40.8	15.8	89.4	44,564	8.21	7.26	7.42
8	Sea Ranch/Timber Cove	**7.35**	84.8	1.1	65.4	40.8	86.7	31,552	7.83	9.21	5.02
9	Cherry Valley	**7.18**	81.1	5.6	40.1	15.7	90.6	47,536	6.31	7.37	7.86
10	Sonoma Mountain	**7.16**	81.2	4.3	39.8	7.7	87.3	51,590	6.32	6.74	8.43
11	Windsor East	**7.06**	83.3	7.2	40.5	13.7	81.9	45,526	7.22	6.40	7.56
12	Meadow	**7.00**	81.2	4.5	39.1	15.1	85.5	47,368	6.32	6.86	7.84
13	Petaluma Airport/Arroyo Park	**6.98**	82.4	5.0	36.9	8.4	88.3	44,504	6.82	6.71	7.41
14	Downtown Sonoma	**6.95**	80.4	4.3	52.3	19.7	86.1	42,835	5.99	7.71	7.14
15	Southwest Sebastopol	**6.94**	81.5	6.5	41.9	15.6	85.5	44,669	6.47	6.92	7.43
16	Gold Ridge	**6.94**	83.4	5.4	51.4	21.5	77.5	40,151	7.23	6.89	6.69
17	Arnold Drive/East Sonoma Mountain	**6.77**	82.6	5.1	50.9	13.8	78.7	40,369	6.94	6.66	6.73
18	Central East Windsor	**6.71**	83.3	9.5	21.2	8.4	100.0	38,783	7.22	6.45	6.45
19	Larkfield-Wikiup	**6.62**	81.2	6.4	36.2	9.9	81.9	44,643	6.35	6.07	7.43
20	Sonoma City South/Vineburg	**6.57**	80.4	5.4	32.0	13.3	90.1	41,168	5.99	6.86	6.87
21	Southern Junior College Neighborhood	**6.56**	81.9	4.0	49.5	18.1	79.7	37,055	6.60	6.93	6.14
22	Jenner/Cazadero	**6.55**	84.8	4.7	35.9	12.1	80.2	35,000	7.83	6.07	5.74
23	Occidental/Bodega	**6.47**	81.7	5.0	51.5	25.5	83.4	32,468	6.54	7.65	5.22
24	Fulton	**6.46**	81.2	12.2	30.2	7.1	89.2	41,465	6.34	6.12	6.92
25	Spring Hill	**6.45**	77.1	8.2	45.7	15.3	86.4	46,214	4.62	7.08	7.67
26	Casa Grande	**6.42**	82.4	7.6	38.4	12.6	84.7	35,987	6.82	6.50	5.93
27	Montgomery Village	**6.38**	82.0	3.8	32.7	10.8	86.4	36,101	6.68	6.50	5.96
28	Hessel Community	**6.37**	81.3	7.7	34.0	12.1	83.1	39,743	6.37	6.13	6.62
29	Rohnert Park F/H Section	**6.22**	81.6	6.3	31.1	8.8	87.0	35,610	6.50	6.28	5.86
30	West Bennett Valley	**6.17**	81.6	6.6	47.5	18.8	72.4	36,145	6.50	6.06	5.96
31	Carneros Sonoma Area	**6.15**	81.7	8.3	39.6	12.1	92.3	30,052	6.55	7.22	4.68
32	Northeast Windsor	**6.15**	83.3	12.2	23.2	5.7	81.9	37,289	7.22	5.04	6.18
33	North Healdsburg	**6.11**	81.7	12.0	41.9	18.4	81.8	32,928	6.56	6.44	5.32
34	Windsor Southeast	**6.11**	79.6	11.1	16.6	5.6	94.2	40,145	5.66	5.97	6.69
35	Southeast Sebastopol	**6.10**	79.2	7.3	36.0	15.0	78.9	41,014	5.50	5.97	6.84
36	West Windsor	**6.07**	82.0	15.0	32.0	8.2	80.6	37,695	6.65	5.31	6.26
37	North Oakmont/Hood Mountain	**5.98**	84.3	0.4	44.2	18.9	95.0	20,406	7.61	8.34	2.00
38	North Sebastopol	**5.84**	82.1	8.0	39.5	16.4	75.1	31,627	6.69	5.79	5.04
39	East Cotati/Rohnert Park L Section	**5.79**	80.6	11.2	24.7	7.0	83.6	35,880	6.06	5.38	5.91
40	Sonoma City North/West Mayacamas Mountain	**5.78**	81.8	7.3	43.1	15.3	73.0	31,649	6.58	5.73	5.04
41	Grant	**5.77**	80.5	6.6	44.1	15.6	65.3	37,279	6.05	5.08	6.18
42	West Cloverdale	**5.76**	80.1	13.2	25.9	9.1	79.4	38,292	5.86	5.04	6.36
43	Rohnert Park M Section	**5.75**	81.9	5.9	28.3	7.0	85.0	30,179	6.61	5.91	4.71
44	Alexander Valley	**5.73**	82.1	17.8	32.1	13.2	79.2	32,303	6.72	5.27	5.19
45	Sunrise/Bond Parks	**5.72**	81.2	12.9	29.8	10.4	78.4	34,621	6.32	5.19	5.67
46	Piner	**5.71**	82.7	11.2	19.0	3.9	74.0	36,774	6.97	4.08	6.08
47	Laguna de Santa Rosa/Hall Road	**5.69**	82.0	18.4	30.6	9.3	81.5	32,231	6.66	5.23	5.17
48	Boyes Hot Springs West/El Verano	**5.68**	83.0	26.0	29.8	11.5	85.3	29,824	7.10	5.31	4.63
49	McKinley	**5.66**	80.6	17.3	30.6	8.9	78.1	36,114	6.08	4.93	5.96
50	Shiloh South	**5.62**	81.9	11.8	34.4	13.3	74.0	31,909	6.62	5.15	5.10

		TOTAL POPULATION	MALE POPULATION	FEMALE POPULATION	POPULATION UNDER 18 (%)	POPULATION 65 AND OLDER (%)	AFRICAN AMERICAN POPULATION (%)	ASIAN AMERICAN POPULATION (%)	LATINO POPULATION (%)	TWO OR MORE RACES OR SOME OTHER RACE (%)	WHITE POPULATION (%)
	California	37,253,956	18,517,830	18,736,126	25.0	11.4	5.8	12.8	37.6	3.6	40.1
	Sonoma County	483,878	237,902	245,976	22.0	13.9	1.4	3.7	24.9	3.9	66.1
1	East Bennett Valley	3,572	1,757	1,815	18.1	20.5	0.3	2.9	4.9	2.4	89.5
2	Fountain Grove	10,001	4,829	5,172	19.1	22.9	0.8	7.1	6.7	3.2	82.3
3	Skyhawk	8,365	4,156	4,209	22.6	17.2	0.6	4.9	7.2	3.1	84.2
4	Annadel/South Oakmont	3,324	1,451	1,873	6.0	60.3	0.2	1.8	3.1	1.4	93.6
5	Old Quarry	4,552	2,251	2,301	22.2	15.4	0.6	2.7	7.5	3.2	86.0
6	Rural Cemetery	4,329	1,928	2,401	17.5	26.2	0.5	2.1	6.3	3.3	87.8
7	Central Bennett Valley	3,563	1,721	1,842	20.3	19.3	1.8	2.3	10.8	4.3	80.8
8	Sea Ranch/Timber Cove	1,720	848	872	9.2	39.5	0.9	1.0	9.2	2.3	86.5
9	Cherry Valley	3,350	1,634	1,716	19.4	13.9	0.5	1.5	9.9	4.3	83.9
10	Sonoma Mountain	5,369	2,656	2,713	29.3	8.6	1.2	9.4	14.1	3.7	71.6
11	Windsor East	3,861	1,899	1,962	27.2	12.1	0.4	2.6	16.0	3.7	77.3
12	Meadow	4,004	1,963	2,041	27.7	8.1	1.9	5.6	17.2	3.5	71.8
13	Petaluma Airport/Arroyo Park	4,325	2,137	2,188	23.8	10.5	0.6	4.9	15.4	4.0	75.1
14	Downtown Sonoma	3,678	1,659	2,019	17.9	23.6	0.3	2.8	14.4	2.1	80.4
15	Southwest Sebastopol	4,011	1,875	2,136	19.5	17.7	0.8	1.7	9.5	3.5	84.5
16	Gold Ridge	3,684	1,847	1,837	16.6	17.4	0.7	1.6	10.3	2.9	84.6
17	Arnold Drive/East Sonoma Mountain	4,170	1,907	2,263	10.8	40.4	0.2	2.0	9.3	2.2	86.3
18	Central East Windsor	3,288	1,545	1,743	24.8	15.5	1.0	2.9	26.8	3.8	65.6
19	Larkfield-Wikiup	5,271	2,619	2,652	21.9	16.5	0.6	2.7	20.5	4.3	72.0
20	Sonoma City South/Vineburg	4,505	2,040	2,465	18.1	29.6	0.6	2.7	13.9	2.1	80.8
21	Southern Junior College Neighborhood	3,527	1,596	1,931	14.8	17.0	1.8	1.9	11.8	4.2	80.3
22	Jenner/Cazadero	2,400	1,249	1,151	14.3	18.8	0.3	1.5	12.3	6.6	79.4
23	Occidental/Bodega	3,747	1,909	1,838	14.1	18.8	0.4	2.2	8.3	3.7	85.4
24	Fulton	5,234	2,569	2,665	23.8	10.4	2.5	6.0	19.5	4.1	67.8
25	Spring Hill	4,994	2,398	2,596	20.8	15.8	0.6	2.5	14.8	2.8	79.3
26	Casa Grande	4,067	2,031	2,036	26.3	9.0	1.8	6.7	31.3	4.2	56.0
27	Montgomery Village	5,219	2,427	2,792	19.5	14.4	1.2	2.6	12.0	5.0	79.2
28	Hessel Community	4,319	2,142	2,177	16.5	17.8	0.8	1.7	10.9	3.3	83.3
29	Rohnert Park F/H Section	5,174	2,579	2,595	22.7	9.9	1.3	5.9	15.3	4.6	72.9
30	West Bennett Valley	6,591	3,026	3,565	19.7	16.9	1.4	3.3	13.2	4.4	77.6
31	Carneros Sonoma Area	2,322	1,165	1,157	17.9	19.9	0.1	1.9	16.6	2.7	78.7
32	Northeast Windsor	3,239	1,610	1,629	26.8	11.8	0.7	3.1	26.9	3.4	65.8
33	North Healdsburg	5,421	2,649	2,772	22.7	17.1	0.8	2.1	25.8	2.9	68.4
34	Windsor Southeast	4,336	2,106	2,230	26.4	13.7	0.7	2.8	28.8	4.6	63.1
35	Southeast Sebastopol	3,840	1,806	2,034	17.2	18.0	0.7	1.7	8.9	3.6	85.1
36	West Windsor	9,648	4,862	4,786	30.2	7.2	0.7	3.3	35.9	4.2	55.9
37	North Oakmont/Hood Mountain	2,901	1,217	1,684	7.1	64.5	0.6	1.4	5.8	1.5	90.7
38	North Sebastopol	6,131	2,854	3,277	21.6	14.3	1.0	1.3	12.4	2.9	82.4
39	East Cotati/Rohnert Park L Section	5,130	2,508	2,622	22.2	8.1	1.3	3.3	18.5	4.4	72.5
40	Sonoma City North/West Mayacamas Mountain	5,103	2,413	2,690	17.1	22.7	0.5	2.3	17.3	2.6	77.2
41	Grant	4,609	2,352	2,257	19.0	11.3	1.1	3.0	20.1	4.1	71.7
42	West Cloverdale	5,994	2,963	3,031	22.4	18.9	0.2	1.4	23.7	3.2	71.5
43	Rohnert Park M Section	6,382	3,122	3,260	22.2	4.2	1.6	7.5	16.4	4.6	70.1
44	Alexander Valley	3,729	2,003	1,726	18.3	16.0	0.3	0.6	29.6	2.2	67.3
45	Sunrise/Bond Parks	4,465	2,032	2,433	21.7	21.0	1.0	5.8	24.4	3.1	65.7
46	Piner	5,095	2,536	2,559	24.1	9.8	1.9	5.3	24.2	4.4	64.2
47	Laguna de Santa Rosa/Hall Road	6,669	3,273	3,396	22.8	14.1	1.3	5.1	24.5	4.2	64.9
48	Boyes Hot Springs West/El Verano	6,158	3,061	3,097	26.2	10.6	0.2	1.6	40.1	2.8	55.2
49	McKinley	4,904	2,416	2,488	23.2	9.6	1.5	1.9	31.0	3.6	62.1
50	Shiloh South	5,242	2,643	2,599	24.7	11.1	1.5	3.6	23.5	4.6	66.7

HD Index by Census Tract (continued)

		HD INDEX	LIFE EXPECTANCY AT BIRTH (years)	LESS THAN HIGH SCHOOL (%)	AT LEAST BACHELOR'S DEGREE (%)	GRADUATE OR PROFESSIONAL DEGREE (%)	SCHOOL ENROLLMENT (%)	MEDIAN EARNINGS (2012 dollars)	HEALTH INDEX	EDUCATION INDEX	INCOME INDEX
	California	**5.39**	81.2	18.5	30.9	11.3	78.5	30,502	6.35	5.04	4.79
	Sonoma County	**5.42**	81.0	13.1	31.8	11.7	77.9	30,214	6.26	5.28	4.72
51	Middle Rincon South	**5.61**	80.3	7.3	28.7	10.3	85.4	30,568	5.97	6.05	4.80
52	Miwok	**5.59**	80.9	16.7	26.2	5.1	82.1	34,119	6.22	4.97	5.56
53	Spring Lake	**5.59**	81.4	11.6	33.3	14.1	75.5	31,683	6.41	5.29	5.05
54	La Tercera	**5.58**	78.8	16.4	25.9	4.7	86.9	36,216	5.35	5.42	5.98
55	West Sebastopol/Graton	**5.58**	84.1	14.4	45.1	16.1	61.2	30,518	7.54	4.41	4.79
56	Two Rock	**5.55**	82.4	9.6	32.3	12.0	72.2	30,949	6.85	4.93	4.89
57	Boyes Hot Springs/Fetters Springs/Agua Caliente East	**5.55**	81.8	14.2	40.4	17.3	72.6	30,164	6.59	5.35	4.71
58	Dry Creek	**5.55**	81.9	11.5	45.0	20.5	67.0	30,375	6.61	5.29	4.76
59	Rohnert Park SSU/J Section	**5.50**	80.4	13.5	33.2	9.6	80.5	31,638	5.99	5.48	5.04
60	Old Healdsburg	**5.43**	82.4	8.3	37.0	15.6	66.2	29,912	6.85	4.78	4.65
61	Schaefer	**5.39**	78.2	13.3	22.8	5.8	75.1	40,322	5.10	4.34	6.72
62	Guerneville/Rio Nido	**5.29**	80.1	11.1	32.4	15.6	65.1	34,547	5.86	4.35	5.65
63	West Cotati/Penngrove	**5.25**	80.6	16.3	26.1	7.6	77.3	31,499	6.10	4.65	5.01
64	Northern Junior College Neighborhood	**5.25**	80.0	5.3	33.0	9.2	70.3	31,860	5.82	4.84	5.09
65	Rohnert Park D/E/S Section	**5.21**	81.4	12.6	21.2	7.9	83.4	27,294	6.42	5.18	4.02
66	Pioneer Park	**5.20**	81.2	15.0	19.1	5.4	71.1	34,083	6.34	3.70	5.56
67	Russian River Valley	**5.19**	79.9	8.2	37.1	16.5	68.1	30,431	5.77	5.02	4.77
68	Brush Creek	**5.15**	79.5	15.1	32.2	10.8	74.7	31,334	5.63	4.86	4.97
69	Cinnabar/West Rural Petaluma	**5.10**	78.9	9.5	32.3	9.8	67.5	34,010	5.36	4.39	5.54
70	Central Rohnert Park	**4.96**	78.0	10.8	28.4	7.0	71.8	33,509	4.99	4.44	5.44
71	Kenwood/Glen Ellen	**4.95**	75.2	11.9	36.8	12.8	62.5	41,137	3.85	4.14	6.86
72	Wright	**4.91**	79.4	21.5	20.8	6.4	76.1	32,046	5.59	4.01	5.13
73	Central Windsor	**4.84**	79.6	17.2	22.4	8.5	73.2	30,436	5.66	4.09	4.77
74	Middle Rincon North	**4.83**	77.1	8.1	28.0	9.7	72.7	31,947	4.63	4.75	5.11
75	Olivet Road	**4.82**	80.5	12.3	22.0	7.4	78.2	26,118	6.03	4.71	3.71
76	Bellevue	**4.66**	81.0	25.4	13.0	4.6	78.5	27,511	6.27	3.64	4.07
77	Monte Rio	**4.64**	79.9	5.8	28.0	14.0	67.9	25,553	5.77	4.58	3.56
78	Lucchesi/McDowell	**4.60**	78.5	17.7	24.2	7.9	79.8	26,597	5.20	4.75	3.84
79	Forestville	**4.57**	79.7	7.2	35.0	15.6	53.8	26,561	5.72	4.15	3.83
80	Downtown Cotati	**4.31**	77.8	14.3	24.7	9.2	70.1	27,108	4.91	4.05	3.97
81	Kawana Springs	**4.20**	80.9	26.8	22.1	5.4	78.6	21,510	6.21	4.03	2.37
82	Central Healdsburg	**4.14**	79.3	22.7	23.0	9.3	67.1	25,463	5.56	3.32	3.54
83	Railroad Square	**4.12**	79.7	21.7	14.0	5.9	78.0	22,908	5.71	3.86	2.80
84	Downtown Rohnert Park	**4.09**	79.5	10.0	18.6	3.9	60.1	26,630	5.63	2.79	3.85
85	Coddingtown	**4.08**	78.9	21.4	16.5	4.7	75.6	24,114	5.38	3.69	3.16
86	Burbank Gardens	**4.03**	76.0	16.1	29.8	14.8	79.0	22,421	4.15	5.30	2.65
87	Rohnert Park B/C/R Section	**3.97**	80.4	10.0	28.7	8.3	85.9	14,946	6.01	5.89	0.00
88	Comstock	**3.90**	78.0	33.0	8.4	3.2	81.2	25,000	5.02	3.29	3.41
89	Taylor Mountain	**3.90**	77.1	23.2	13.1	2.9	71.3	27,688	4.62	2.97	4.12
90	Downtown Santa Rosa	**3.89**	75.5	8.4	30.1	7.4	75.2	22,628	3.98	4.97	2.72
91	East Cloverdale	**3.79**	80.1	30.3	12.4	2.9	63.5	25,721	5.86	1.89	3.61
92	Rohnert Park A Section	**3.75**	77.9	22.0	14.2	3.7	76.4	22,522	4.97	3.59	2.69
93	Bicentennial Park	**3.73**	77.0	26.6	21.5	5.0	71.2	24,760	4.58	3.28	3.34
94	West End	**3.51**	78.7	35.7	12.9	3.6	73.2	22,294	5.30	2.63	2.61
95	West Junior College	**3.44**	79.3	17.1	22.7	7.0	65.3	18,919	5.55	3.29	1.48
96	Fetters Springs/Agua Caliente West	**3.41**	81.8	45.4	17.1	5.8	67.8	19,444	6.59	1.96	1.67
97	Sheppard	**2.98**	76.6	41.8	8.2	3.6	71.7	22,068	4.41	2.00	2.54
98	Roseland	**2.95**	77.1	40.8	14.4	4.1	65.4	21,883	4.61	1.75	2.49
99	Roseland Creek	**2.79**	77.1	46.1	8.6	4.3	66.2	21,699	4.61	1.33	2.43

	TOTAL POPULATION	MALE POPULATION	FEMALE POPULATION	POPULATION UNDER 18 (%)	POPULATION 65 AND OLDER (%)	AFRICAN AMERICAN POPULATION (%)	ASIAN AMERICAN POPULATION (%)	LATINO POPULATION (%)	TWO OR MORE RACES OR SOME OTHER RACE (%)	WHITE POPULATION (%)
California	37,253,956	18,517,830	18,736,126	25.0	11.4	5.8	12.8	37.6	3.6	40.1
Sonoma County	483,878	237,902	245,976	22.0	13.9	1.4	3.7	24.9	3.9	66.1
51 Middle Rincon South	4,178	1,994	2,184	24.1	9.4	1.8	4.4	16.8	4.9	72.1
52 Miwok	4,089	2,101	1,988	25.9	11.2	2.3	4.9	32.9	2.7	57.2
53 Spring Lake	6,978	3,218	3,760	20.4	19.2	1.8	3.4	18.0	5.3	71.5
54 La Tercera	4,307	2,143	2,164	21.1	14.6	1.5	3.8	19.6	3.0	72.1
55 West Sebastopol/Graton	5,327	2,647	2,680	17.6	16.8	0.4	1.5	14.2	2.9	81.0
56 Two Rock	5,151	2,674	2,477	21.9	12.1	1.2	1.2	14.5	3.2	79.8
57 Boyes Hot Springs/Fetters Springs/Agua Caliente East	4,107	2,019	2,088	22.6	10.4	0.3	1.7	36.4	2.2	59.4
58 Dry Creek	2,597	1,367	1,230	16.2	21.1	0.4	1.0	18.1	2.2	78.3
59 Rohnert Park SSU/J Section	4,865	2,395	2,470	19.8	10.5	1.1	4.3	15.1	4.4	75.1
60 Old Healdsburg	3,760	1,819	1,941	19.5	16.4	0.5	0.7	19.5	1.9	77.4
61 Schaefer	5,547	2,797	2,750	22.9	7.8	1.6	5.3	21.0	5.8	66.3
62 Guerneville/Rio Nido	3,728	2,022	1,706	14.7	13.7	0.8	1.0	12.8	5.2	80.3
63 West Cotati/Penngrove	6,855	3,351	3,504	19.1	12.1	1.2	2.7	19.6	4.6	71.9
64 Northern Junior College Neighborhood	3,846	1,844	2,002	18.0	7.3	3.1	3.3	18.3	5.2	70.1
65 Rohnert Park D/E/S Section	4,796	2,221	2,575	16.3	19.3	1.5	5.0	14.5	4.2	74.8
66 Pioneer Park	4,037	1,926	2,111	23.7	11.5	3.0	5.9	27.0	4.3	59.7
67 Russian River Valley	4,092	2,015	2,077	15.9	16.5	0.7	1.1	10.9	3.5	83.8
68 Brush Creek	6,763	3,188	3,575	22.6	18.6	2.1	4.1	17.9	5.8	70.1
69 Cinnabar/West Rural Petaluma	3,483	1,731	1,752	19.4	16.1	0.3	1.9	14.8	3.5	79.5
70 Central Rohnert Park	3,636	1,749	1,887	19.0	12.8	2.1	4.2	19.3	5.3	69.1
71 Kenwood/Glen Ellen	5,283	2,692	2,591	13.6	17.2	1.1	2.5	11.7	2.8	81.9
72 Wright	11,010	5,638	5,372	26.5	6.4	3.6	8.2	37.9	4.9	45.3
73 Central Windsor	4,251	2,098	2,153	25.8	13.3	0.8	1.3	43.4	2.9	51.7
74 Middle Rincon North	3,603	1,753	1,850	22.0	18.0	1.8	3.4	15.7	5.0	74.2
75 Olivet Road	7,286	3,461	3,825	22.8	14.4	1.6	4.6	29.0	4.1	60.7
76 Bellevue	7,522	3,800	3,722	29.8	5.6	2.8	8.6	49.2	4.4	35.0
77 Monte Rio	3,490	1,867	1,623	11.4	15.6	0.4	1.3	7.7	4.8	85.8
78 Lucchesi/McDowell	7,249	3,542	3,707	21.1	17.5	1.2	3.3	32.9	3.0	59.6
79 Forestville	3,536	1,800	1,736	16.7	14.1	0.8	1.5	11.3	3.6	82.8
80 Downtown Cotati	3,413	1,641	1,772	20.4	10.1	1.6	4.0	18.6	5.1	70.8
81 Kawana Springs	7,306	3,690	3,616	29.8	4.9	2.8	6.6	51.0	4.2	35.4
82 Central Healdsburg	4,147	2,128	2,019	24.9	11.1	0.3	0.7	49.8	2.3	46.9
83 Railroad Square	5,502	2,729	2,773	26.0	7.7	2.3	3.8	42.1	4.2	47.5
84 Downtown Rohnert Park	5,405	2,607	2,798	22.3	10.0	2.2	3.7	36.0	4.7	53.4
85 Coddingtown	6,594	3,226	3,368	26.5	8.6	2.7	4.9	42.7	5.7	43.9
86 Burbank Gardens	3,158	1,503	1,655	17.1	16.3	2.5	2.1	25.0	5.1	65.4
87 Rohnert Park B/C/R Section	6,143	2,670	3,473	13.2	4.2	2.1	6.4	16.6	5.5	69.4
88 Comstock	5,114	2,574	2,540	30.2	7.2	4.2	7.6	52.7	4.2	31.2
89 Taylor Mountain	9,177	4,543	4,634	28.0	7.9	2.5	4.7	49.4	4.4	38.9
90 Downtown Santa Rosa	2,079	1,114	965	18.3	4.9	2.5	3.3	26.0	6.3	62.0
91 East Cloverdale	3,925	2,017	1,908	23.8	12.1	0.7	0.7	43.4	3.3	52.0
92 Rohnert Park A Section	4,587	2,310	2,277	22.6	6.9	2.6	3.2	32.0	4.5	57.7
93 Bicentennial Park	6,807	3,372	3,435	24.6	9.9	3.5	5.0	43.3	5.9	42.4
94 West End	6,827	3,550	3,277	26.8	7.4	2.1	2.4	53.2	3.7	38.6
95 West Junior College	3,004	1,765	1,239	13.6	10.8	3.5	4.7	22.7	5.3	63.8
96 Fetters Springs/Agua Caliente West	5,282	2,727	2,555	30.4	6.9	0.4	1.0	60.3	2.0	36.3
97 Sheppard	5,742	3,019	2,723	30.5	6.5	1.8	4.5	66.4	4.1	23.2
98 Roseland	4,046	2,192	1,854	31.4	4.9	1.3	2.8	65.2	3.2	27.5
99 Roseland Creek	4,716	2,414	2,302	30.8	5.6	1.9	4.9	59.2	4.2	29.9

Occupations by Census Tract

		HD INDEX	TRACT ALL OR PARTIALLY WITHIN CITY	MANAGEMENT AND RELATED OCCUPATIONS (%)	SERVICE OCCUPATIONS (%)	SALES AND OFFICE OCCUPATIONS (%)	NATURAL RESOURCES, CONSTRUCTION, AND MAINTENANCE OCCUPATIONS (%)	PRODUCTION, TRANSPORTATION, AND MATERIAL MOVING OCCUPATIONS (%)
	California	5.39		36.8	19.0	24.1	9.1	11.1
	Sonoma County	5.42		33.4	21.3	25.4	10.1	9.8
1	East Bennett Valley	8.47	Santa Rosa	61.1	7.0	25.6	4.8	1.5
2	Fountain Grove	8.35	Santa Rosa	56.3	11.4	22.5	3.0	6.8
3	Skyhawk	7.78	Santa Rosa	57.7	9.7	21.5	2.3	8.9
4	Annadel/South Oakmont	7.71	Santa Rosa	50.3	14.4	23.3	4.7	7.3
5	Old Quarry	7.71	Petaluma	56.4	13.0	20.9	3.2	6.6
6	Rural Cemetery	7.67	Santa Rosa	51.6	11.5	24.5	5.7	6.7
7	Central Bennett Valley	7.63	Santa Rosa	59.6	10.7	17.5	6.0	6.1
8	Sea Ranch/Timber Cove	7.35		58.2	20.5	16.1	4.2	1.1
9	Cherry Valley	7.18	Petaluma	52.3	8.0	26.0	8.9	4.8
10	Sonoma Mountain	7.16	Petaluma	42.3	16.6	25.4	8.0	7.7
11	Windsor East	7.06		34.3	22.3	21.0	13.2	9.2
12	Meadow	7.00	Petaluma	37.8	22.7	24.3	4.3	11.0
13	Petaluma Airport/Arroyo Park	6.98	Petaluma	40.9	12.6	29.6	10.8	6.1
14	Downtown Sonoma	6.95	Sonoma	52.5	16.1	23.0	4.6	3.8
15	Southwest Sebastopol	6.94	Sebastopol	52.3	11.5	19.7	9.2	7.2
16	Gold Ridge	6.94		54.6	7.8	25.2	8.4	4.0
17	Arnold Drive/East Sonoma Mountain	6.77		40.9	13.0	38.7	3.9	3.5
18	Central East Windsor	6.71		40.0	21.8	24.3	8.9	4.9
19	Larkfield-Wikiup	6.62		40.3	13.4	33.0	5.8	7.5
20	Sonoma City South/Vineburg	6.57	Sonoma	39.0	15.0	32.7	10.9	2.4
21	Southern Junior College Neighborhood	6.56	Santa Rosa	54.5	6.4	32.6	4.7	1.8
22	Jenner/Cazadero	6.55		40.3	12.2	23.6	16.0	7.9
23	Occidental/Bodega	6.47		50.1	20.2	16.2	7.4	6.1
24	Fulton	6.46	Santa Rosa	36.4	9.8	29.7	8.4	15.7
25	Spring Hill	6.45	Petaluma	46.3	10.4	27.0	12.1	4.2
26	Casa Grande	6.42	Petaluma	27.4	20.9	33.5	9.8	8.4
27	Montgomery Village	6.38	Santa Rosa	38.8	12.2	35.7	6.1	7.2
28	Hessel Community	6.37		41.5	18.4	19.6	12.0	8.4
29	Rohnert Park F/H Section	6.22	Rohnert Park	30.8	20.4	30.9	7.2	10.6
30	West Bennett Valley	6.17	Santa Rosa	43.4	21.1	26.8	5.2	3.6
31	Carneros Sonoma Area	6.15		46.8	13.5	27.6	6.9	5.1
32	Northeast Windsor	6.15		27.1	24.9	29.6	11.6	6.7
33	North Healdsburg	6.11	Healdsburg	46.4	17.9	18.2	14.1	3.4
34	Windsor Southeast	6.11		30.8	17.7	26.1	15.1	10.4
35	Southeast Sebastopol	6.10	Sebastopol	41.4	18.4	22.4	11.4	6.4
36	West Windsor	6.07		39.8	15.1	24.9	9.5	10.7
37	North Oakmont/Hood Mountain	5.98	Santa Rosa	38.4	24.3	33.4	0.2	3.7
38	North Sebastopol	5.84	Sebastopol	43.3	18.5	23.4	6.0	8.8
39	East Cotati/Rohnert Park L Section	5.79	Cotati	37.5	15.4	29.7	10.0	7.4
40	Sonoma City North/West Mayacamas Mountain	5.78	Sonoma	35.9	27.9	24.8	6.4	5.0
41	Grant	5.77	Petaluma	40.8	17.4	27.8	8.1	6.0
42	West Cloverdale	5.76	Cloverdale	33.5	19.0	20.6	16.0	11.0
43	Rohnert Park M Section	5.75	Rohnert Park	34.7	21.4	27.8	5.6	10.3
44	Alexander Valley	5.73		33.5	14.6	21.0	21.7	9.3
45	Sunrise/Bond Parks	5.72	Petaluma	33.1	21.6	30.4	9.3	5.6
46	Piner	5.71	Santa Rosa	32.2	19.1	27.5	10.9	10.4
47	Laguna de Santa Rosa/Hall Road	5.69	Santa Rosa	31.4	23.5	28.8	8.0	8.2
48	Boyes Hot Springs West/El Verano	5.68		31.5	35.1	16.7	8.4	8.3
49	McKinley	5.66	Petaluma	31.2	23.9	22.3	15.4	7.2
50	Shiloh South	5.62		43.3	18.5	21.2	9.9	7.1

	HD INDEX	TRACT ALL OR PARTIALLY WITHIN CITY	MANAGEMENT AND RELATED OCCUPATIONS (%)	SERVICE OCCUPATIONS (%)	SALES AND OFFICE OCCUPATIONS (%)	NATURAL RESOURCES, CONSTRUCTION, AND MAINTENANCE OCCUPATIONS (%)	PRODUCTION, TRANSPORTATION, AND MATERIAL MOVING OCCUPATIONS (%)
California	5.39		36.8	19.0	24.1	9.1	11.1
Sonoma County	5.42		33.4	21.3	25.4	10.1	9.8
51 Middle Rincon South	5.61	Santa Rosa	34.1	10.7	32.6	8.3	14.3
52 Miwok	5.59	Petaluma	27.2	23.7	28.3	10.9	9.8
53 Spring Lake	5.59	Santa Rosa	31.7	20.3	24.7	5.8	17.5
54 La Tercera	5.58	Petaluma	30.7	22.4	22.5	17.8	6.7
55 West Sebastopol/Graton	5.58		40.2	11.8	25.2	9.8	12.9
56 Two Rock	5.55		36.8	15.2	25.5	16.0	6.6
57 Boyes Hot Springs/Fetters Springs/Agua Caliente East	5.55		35.9	22.3	21.2	14.7	5.9
58 Dry Creek	5.55	Healdsburg	45.7	12.3	15.5	15.7	10.9
59 Rohnert Park SSU/J Section	5.50	Rohnert Park	32.9	16.6	29.8	14.8	6.0
60 Old Healdsburg	5.43	Healdsburg	36.8	23.1	23.9	11.0	5.2
61 Schaefer	5.39	Santa Rosa	30.3	20.0	25.6	8.8	15.3
62 Guerneville/Rio Nido	5.29		39.5	19.9	22.4	11.8	6.4
63 West Cotati/Penngrove	5.25	Rohnert Park	37.3	17.3	25.3	11.8	8.3
64 Northern Junior College Neighborhood	5.25	Santa Rosa	29.3	27.5	23.6	9.4	10.2
65 Rohnert Park D/E/S Section	5.21	Rohnert Park	30.4	25.2	24.6	12.6	7.1
66 Pioneer Park	5.20	Santa Rosa	32.6	12.1	30.5	12.7	12.0
67 Russian River Valley	5.19		37.3	16.9	28.1	11.2	6.5
68 Brush Creek	5.15	Santa Rosa	33.9	18.1	29.2	5.8	13.0
69 Cinnabar/West Rural Petaluma	5.10	Petaluma	40.4	14.6	23.2	11.7	10.0
70 Central Rohnert Park	4.96	Rohnert Park	27.9	27.8	32.1	5.7	6.5
71 Kenwood/Glen Ellen	4.95		38.8	15.0	24.1	13.2	9.0
72 Wright	4.91	Santa Rosa	29.1	17.1	26.0	14.3	13.4
73 Central Windsor	4.84		34.4	23.1	27.1	8.7	6.6
74 Middle Rincon North	4.83	Santa Rosa	30.5	26.3	26.8	6.5	10.0
75 Olivet Road	4.82	Santa Rosa	35.0	16.8	27.6	7.7	12.9
76 Bellevue	4.66	Santa Rosa	20.0	23.5	26.2	17.3	13.0
77 Monte Rio	4.64		41.2	20.3	17.6	12.7	8.2
78 Lucchesi/McDowell	4.60	Petaluma	26.2	26.3	24.0	10.6	12.8
79 Forestville	4.57		33.8	24.3	25.4	6.1	10.3
80 Downtown Cotati	4.31	Cotati	35.1	15.6	23.8	14.6	10.8
81 Kawana Springs	4.20	Santa Rosa	22.7	32.7	23.4	5.5	15.7
82 Central Healdsburg	4.14	Healdsburg	21.7	21.7	23.3	14.7	18.7
83 Railroad Square	4.12	Santa Rosa	19.4	31.5	21.1	16.1	11.9
84 Downtown Rohnert Park	4.09	Rohnert Park	24.5	28.6	28.4	14.8	3.8
85 Coddingtown	4.08	Santa Rosa	19.5	29.2	26.8	14.8	9.8
86 Burbank Gardens	4.03	Santa Rosa	40.2	19.9	20.3	12.3	7.3
87 Rohnert Park B/C/R Section	3.97	Rohnert Park	33.2	22.4	26.8	9.2	8.4
88 Comstock	3.90	Santa Rosa	15.0	30.1	26.6	13.6	14.7
89 Taylor Mountain	3.90	Santa Rosa	21.2	23.0	26.2	20.4	9.4
90 Downtown Santa Rosa	3.89	Santa Rosa	21.3	28.6	26.8	12.6	10.7
91 East Cloverdale	3.79	Cloverdale	19.8	33.4	15.1	15.8	15.9
92 Rohnert Park A Section	3.75	Rohnert Park	23.4	28.9	27.9	6.2	13.6
93 Bicentennial Park	3.73	Santa Rosa	23.4	36.0	14.2	10.6	15.9
94 West End	3.51	Santa Rosa	18.5	22.4	28.7	12.4	18.0
95 West Junior College	3.44	Santa Rosa	29.8	22.4	22.3	9.2	16.3
96 Fetters Springs/Agua Caliente West	3.41		15.8	37.8	21.6	10.0	14.9
97 Sheppard	2.98	Santa Rosa	16.9	23.3	26.9	19.2	13.7
98 Roseland	2.95	Santa Rosa	17.2	13.5	26.2	27.6	15.6
99 Roseland Creek	2.79	Santa Rosa	11.3	24.2	26.0	14.3	24.2

Housing and Transportation by Census Tract

		HOUSING UNITS OCCUPIED BY OWNER (%)	HOUSING UNITS OCCUPIED BY RENTERS (%)	AVERAGE HOUSEHOLD SIZE (Renter-Occupied Housing)	AVERAGE HOUSEHOLD SIZE (Owner-Occupied Housing)	COMMUTE 60 MINUTES OR MORE (% of workers 16 and older)
	California	54.0	46.0	3.0	2.9	10.5
	Sonoma County	59.9	40.1	2.6	2.7	11.2
1	East Bennett Valley	92.0	8.0	2.0	2.5	9.4
2	Fountain Grove	76.9	23.1	1.9	2.5	7.0
3	Skyhawk	81.8	18.2	2.4	2.5	10.3
4	Annadel/South Oakmont	85.1	14.9	1.9	1.8	12.2
5	Old Quarry	75.9	24.1	2.8	2.7	17.1
6	Rural Cemetery	71.1	28.9	2.0	2.3	4.0
7	Central Bennett Valley	80.8	19.2	2.9	2.2	8.8
8	Sea Ranch/Timber Cove	78.7	21.3	1.7	1.9	9.4
9	Cherry Valley	72.8	27.2	2.1	2.3	10.7
10	Sonoma Mountain	78.3	21.7	2.7	3.1	21.3
11	Windsor East	84.2	15.8	2.8	3.0	6.3
12	Meadow	80.0	20.0	3.6	2.7	8.7
13	Petaluma Airport/Arroyo Park	68.9	31.1	2.5	2.8	8.5
14	Downtown Sonoma	56.5	43.5	2.1	2.4	14.7
15	Southwest Sebastopol	67.5	32.5	2.0	2.6	5.0
16	Gold Ridge	71.0	29.0	1.9	2.6	8.1
17	Arnold Drive/East Sonoma Mountain	85.9	14.1	2.0	1.8	8.0
18	Central East Windsor	62.5	37.5	1.9	2.7	7.7
19	Larkfield-Wikiup	78.1	21.9	2.6	2.3	6.7
20	Sonoma City South/Vineburg	52.5	47.5	1.8	2.3	14.6
21	Southern Junior College Neighborhood	39.7	60.3	1.9	2.3	6.9
22	Jenner/Cazadero	72.1	27.9	2.0	2.1	14.7
23	Occidental/Bodega	78.7	21.3	2.2	2.0	13.2
24	Fulton	69.7	30.3	2.6	2.5	9.8
25	Spring Hill	57.0	43.0	2.2	2.4	15.8
26	Casa Grande	66.8	33.2	2.7	2.8	19.8
27	Montgomery Village	64.4	35.6	2.3	2.6	11.0
28	Hessel Community	80.4	19.6	2.4	2.3	12.4
29	Rohnert Park F/H Section	76.8	23.2	2.9	2.8	12.0
30	West Bennett Valley	58.1	41.9	2.3	2.3	10.3
31	Carneros Sonoma Area	67.8	32.2	2.8	2.5	7.7
32	Northeast Windsor	86.4	13.6	2.9	3.1	12.0
33	North Healdsburg	68.9	31.1	2.3	2.5	6.1
34	Windsor Southeast	77.7	22.3	3.6	2.5	2.6
35	Southeast Sebastopol	64.9	35.1	2.0	2.6	10.3
36	West Windsor	75.2	24.8	3.4	3.2	6.7
37	North Oakmont/Hood Mountain	70.5	29.5	1.4	1.6	5.3
38	North Sebastopol	50.7	49.3	2.1	2.3	8.0
39	East Cotati/Rohnert Park L Section	56.5	43.5	2.5	2.4	9.5
40	Sonoma City North/West Mayacamas Mountain	64.7	35.3	1.9	2.3	13.8
41	Grant	38.1	61.9	2.0	2.4	9.6
42	West Cloverdale	77.3	22.7	2.6	2.6	7.2
43	Rohnert Park M Section	60.2	39.8	2.7	2.9	12.1
44	Alexander Valley	73.2	26.8	2.8	2.5	8.1
45	Sunrise/Bond Parks	76.2	23.8	3.0	2.2	22.8
46	Piner	55.1	44.9	3.2	2.7	8.5
47	Laguna de Santa Rosa/Hall Road	83.1	16.9	4.3	2.6	5.4
48	Boyes Hot Springs West/El Verano	48.5	51.5	3.0	2.6	6.8
49	McKinley	48.2	51.8	2.6	2.7	11.6
50	Shiloh South	56.8	43.2	2.6	2.6	7.1

	HOUSING UNITS OCCUPIED BY OWNER (%)	HOUSING UNITS OCCUPIED BY RENTERS (%)	AVERAGE HOUSEHOLD SIZE (Renter-Occupied Housing)	AVERAGE HOUSEHOLD SIZE (Owner-Occupied Housing)	COMMUTE 60 MINUTES OR MORE (% of workers 16 and older)
California	54.0	46.0	3.0	2.9	10.5
Sonoma County	59.9	40.1	2.6	2.7	11.2
51 Middle Rincon South	46.7	53.3	2.5	2.6	2.8
52 Miwok	72.6	27.4	3.6	2.6	10.9
53 Spring Lake	43.2	56.8	2.4	2.3	4.4
54 La Tercera	88.7	11.3	3.9	2.8	21.6
55 West Sebastopol/Graton	74.2	25.8	2.4	2.3	15.9
56 Two Rock	59.0	41.0	2.6	2.6	10.2
57 Boyes Hot Springs/Fetters Springs/Agua Caliente East	69.8	30.2	2.8	2.3	12.6
58 Dry Creek	71.0	29.0	2.9	2.2	9.1
59 Rohnert Park SSU/J Section	73.3	26.7	2.0	3.0	11.3
60 Old Healdsburg	61.5	38.5	2.9	2.3	5.5
61 Schaefer	70.3	29.7	3.1	2.7	7.8
62 Guerneville/Rio Nido	52.3	47.7	2.3	1.9	8.5
63 West Cotati/Penngrove	59.6	40.4	2.0	2.8	14.5
64 Northern Junior College Neighborhood	28.8	71.2	2.5	2.4	18.0
65 Rohnert Park D/E/S Section	53.2	46.8	2.4	2.6	16.7
66 Pioneer Park	58.6	41.4	2.0	2.5	3.0
67 Russian River Valley	79.7	20.3	2.2	2.2	6.3
68 Brush Creek	45.7	54.3	2.6	2.2	9.3
69 Cinnabar/West Rural Petaluma	60.4	39.6	2.5	2.6	17.8
70 Central Rohnert Park	59.9	40.1	2.7	2.1	17.2
71 Kenwood/Glen Ellen	66.5	33.5	1.9	2.1	16.1
72 Wright	58.0	42.0	3.1	3.1	10.6
73 Central Windsor	68.6	31.4	2.8	2.3	5.7
74 Middle Rincon North	72.5	27.5	2.8	2.3	8.6
75 Olivet Road	70.7	29.3	2.5	2.4	14.5
76 Bellevue	52.9	47.1	4.1	3.2	13.5
77 Monte Rio	52.5	47.5	1.9	2.1	16.3
78 Lucchesi/McDowell	60.2	39.8	2.4	2.9	14.8
79 Forestville	64.6	35.4	2.1	2.2	12.6
80 Downtown Cotati	56.4	43.6	2.3	2.4	11.2
81 Kawana Springs	47.4	52.6	3.4	3.5	7.1
82 Central Healdsburg	41.5	58.5	2.8	2.4	5.9
83 Railroad Square	48.3	51.7	3.2	2.5	14.5
84 Downtown Rohnert Park	29.2	70.8	2.2	2.5	5.7
85 Coddingtown	30.1	69.9	2.7	2.7	5.8
86 Burbank Gardens	39.3	60.7	2.4	2.3	4.7
87 Rohnert Park B/C/R Section	51.1	48.9	2.6	2.7	8.2
88 Comstock	43.5	56.5	4.1	3.0	11.0
89 Taylor Mountain	46.2	53.8	2.7	2.8	13.3
90 Downtown Santa Rosa	11.2	88.8	1.7	2.9	3.6
91 East Cloverdale	48.2	51.8	2.3	3.2	8.9
92 Rohnert Park A Section	44.4	55.6	2.6	3.5	11.6
93 Bicentennial Park	20.8	79.2	2.6	2.5	16.5
94 West End	55.2	44.8	3.2	2.8	6.9
95 West Junior College	59.6	40.4	2.8	2.0	12.6
96 Fetters Springs/Agua Caliente West	45.2	54.8	4.5	2.7	7.4
97 Sheppard	38.8	61.2	4.5	3.2	11.3
98 Roseland	40.7	59.3	4.0	3.0	3.5
99 Roseland Creek	42.1	57.9	3.7	3.8	6.2

Methodological Notes

Human Development

Human development is about what people can do and be. It is formally defined as the process of improving people's well-being and expanding their freedoms and opportunities. The human development approach emphasizes the everyday experiences of ordinary people, encompassing the range of factors that shape their opportunities and enable them to live lives of value and choice. People with high levels of human development can invest in themselves and their families and live to their full potential; those without find many doors shut and many choices and opportunities out of reach.

The human development concept was developed by the late economist Mahbub ul Haq. In his work at the World Bank in the 1970s, and later as minister of finance in his own country of Pakistan, Dr. Haq argued that existing measures of human progress failed to account for the true purpose of development—to improve people's lives. In particular, he believed that the commonly used measure of Gross Domestic Product failed to adequately measure well-being. Working with Nobel laureate Amartya Sen and other gifted economists Dr. Haq published the first *Human Development Report*, commissioned by the United Nations Development Programme, in 1990.

The American Human Development Index

The human development approach is extremely broad, encompassing the wide range of economic, social, political, psychological, environmental, and cultural factors that expand or restrict people's opportunities and freedoms. But the American Human Development (HD) Index is comparatively narrow, a composite measure that combines a limited number of indicators into a single number. The HD Index is an easily understood numerical measure that reflects what most people believe are the very basic ingredients of human well-being: health, education, and income. The value of the HD Index varies between 0 and 10, with a score close to zero indicating a greater distance from the maximum possible that can be achieved on the aggregate factors that make up the index.

Data Sources

The American Human Development Index for Sonoma County was calculated using two main datasets, mortality data from the California Department of Public Health and education, earnings, and population data from the U.S. Census Bureau. The American Community Survey (ACS), a product of the U.S. Census Bureau, is an ongoing survey that samples a representative percentage of the population every year using standard sampling methods.

Between 2008 and 2012, the time period of data used in this report, a sample of 33,718 people participated in the ACS from Sonoma County, about 7 percent of all residents. The Census Bureau does not publish response rates to the ACS for individual counties but in California overall response rates were at least 97.5 percent for the population in housing units and at or above 93.8 percent for the group quarters population each year of the survey.

For larger geographies, such as states and counties, the Census Bureau publishes one-year population estimates; hence any data on Sonoma County and California contained in this report are calculated using the most recent available data, 2012. However, for smaller geographies, such as census tracts, one-year estimates are not available due to small population sizes. In this report, all data for census tracts from the American Community Survey are from 2008–2012.

As with any data drawn from surveys, there is some degree of sampling and nonsampling error inherent in data from the ACS. Thus, not all differences between estimates for two places or groups may reflect a true difference between those places or groups. Comparisons between similar values on any indicator should be made with caution since these differences may not be statistically significant. Direct comparisons between estimates that are not statistically significant at a 90 percent confidence level have been noted in the text.

Health

A long and healthy life is measured using life expectancy at birth. Life expectancy at birth was calculated by Measure of America using data from the California Department of Public Health, Death Statistical Master File from 2005 to 2011 and population data from the U.S. Census Bureau. Life expectancy is calculated by Measure of America using abridged life tables based on the Chiang methodology.[130]

Education

Access to education is measured using two indicators: net school enrollment for the population ages 3 to 24 and degree attainment for the population 25 years and older (based on the proportion of the adult population that has earned a high school diploma, a bachelor's degree, and a graduate or professional degree). All educational attainment and enrollment figures come from Measure of America analysis of the U.S. Census Bureau, American Community Survey. Five-year estimates spanning 2008–2012 were used for census tracts, and single-year 2012 estimates were used for county and state estimates.

Income

A decent standard of living is measured using the median personal earnings of all workers with earnings ages 16 and older. Median personal earnings come from the U.S. Census Bureau, American Community Survey. Five-year estimates spanning 2008–2012 were used for census tracts, and single-year 2012 estimates were used for county and state estimates.

Calculating the American Human Development Index

Before the composite HD Index itself is created, an index is created for each of the three dimensions. This is done in order to transform indicators on different scales—dollars, years, etc.—into a common scale from 0 to 10. In order to calculate these indices—the health, education, and income indices—minimum and maximum values (goalposts) must be chosen for each underlying indicator. Performance in each dimension is expressed as a value between 0 and 10 by applying the following general formula:

$$\text{Dimension Index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}} \times 10$$

Since all three components range from 0 to 10, the HD Index, in which all three indices are weighted equally, also varies from 0 to 10, with 10 representing the highest level of human development.

The goalposts were determined based on the range of the indicator observed on all possible groupings in the United States, taking into account possible increases and decreases for years to come. The goalposts for the four principal indicators that make up the American Human Development Index are shown in the table below. In order to make the HD Index comparable across place, the same goalposts are used in every application of the index. To ensure that the HD Index is comparable over time, the health and education indicator goalposts do not change from year to year while the income goalposts are only adjusted for inflation. Because earnings data and the earnings goalposts are presented in dollars of the same year, these goalposts reflect a constant amount of purchasing power regardless of the year, making income index results comparable over time.

	MAXIMUM VALUE	MINIMUM VALUE
Life expectancy at birth (years)	90 years	66 years
Educational attainment score	2.0	0.5
Combined net enrollment ratio (%)	95	60
Median personal earnings (2012 dollars)*	$64,687.83	$15,289.85

* Earnings goalposts were originally set at $55,000 and $13,000 in 2005 dollars.

Geographic and Population Groups Used in This Report

Census Tracts in Sonoma County: The ninety-nine census tracts used in this report were defined by the U.S. Census Bureau for the 2010 Census. Each contains an average of 5,000 inhabitants, enabling comparisons of neighborhoods that contain populations of roughly the same size. These tracts encompass all land within the county boundaries, including tribal lands. One additional census tract, numbered 9901, covers Sonoma County's coastal areas and has no inhabitants. In this report, these census-drawn tracts are discussed in the context of Sonoma County's neighborhoods.

Racial and ethnic groups in this report are based on definitions established by the White House Office of Management and Budget (OMB) and used by the Census Bureau and other government entities. Since 1997 the OMB has recognized five racial groups and two ethnic categories. The racial groups include Native Americans, Asian Americans, African Americans, Native Hawaiians and Other Pacific Islanders, and whites. The ethnic categories are Latino and not Latino. People of Latino ethnicity may be of any race. In this report, these racial groups include only non-Latino members of these groups who self-identify with that race group alone and no other.

Accounting for Cost-of-Living Differences

The cost of essential goods and services varies across the nation and within distinct regions. However, these costs are often higher in areas with more community assets and amenities that are conducive to higher levels of well-being and expanding human development. For example, neighborhoods with higher housing costs—the major portion of cost of living—are often places with higher-quality public services, such as schools, recreation facilities, and transport systems, and safer and cleaner neighborhoods. Thus, to adjust for cost of living would be to explain away some of the factors that the HD Index is measuring. There is also currently no nationwide measure, official or not, of the cost of living that could be used as a basis for adjusting for difference. The Consumer Price Index (CPI), calculated by the U.S. Bureau of Labor Statistics (BLS), helps in understanding changes in the purchasing power of the dollar over time. The CPI is sometimes mistaken for a cost-of-living index, but in fact it is best used as a measure of the change in the cost of a set of goods and services over time in a given place. Measuring differences across region and place is far more complicated. For example, the percentage of a budget spent on particular items can vary significantly (e.g., air-conditioning in Texas versus Alaska). Collecting timely data on the prices of a wide variety of goods and services in many different localities is also very costly and time consuming. Finally, cost-of-living variations within compact regions, such as states or cities or between neighborhoods in the same urban area, are often more pronounced than variations between states and regions.

Unofficial measures such as the American Chamber of Commerce Research Association (ACCRA) Cost of Living Index are regularly updated and widely cited. However, this index suffers from several serious problems, chiefly that it only takes into consideration the living costs incurred by urban households in the wealthiest fifth of the income distribution. The ACCRA index thus leaves out the middle class, the poor, and residents of rural areas. Correcting these omissions would be a costly and time-consuming exercise that has not, to date, been done.

Notes

[1] *Sonoma County Indicators 2013 Abridged Edition*.

[2] Meara, Richards, and Cutler, "The Gap Gets Bigger."

[3] Measure of America calculations of life expectancy at birth for Sonoma County and tracts within it use data for 2005–2011; calculations for other California counties use data for 2010–2012.

[4] Lewis and Burd-Sharps, *The Measure of America 2013–2014*.

[5] Pickett and Wilkinson, *The Spirit Level*.

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2	Fountain Grove	**8.35**
3	Skyhawk	**7.78**
4	Annadel/South Oakmont	**7.71**
5	Old Quarry	**7.71**
6	Rural Cemetery	**7.67**
7	Central Bennett Valley	**7.63**
8	Sea Ranch/Timber Cove	**7.35**
9	Cherry Valley	**7.18**
10	Sonoma Mountain	**7.16**
11	Windsor East	**7.06**
12	Meadow	**7.00**
13	Petaluma Airport/Arroyo Park	**6.98**
14	Downtown Sonoma	**6.95**
15	Southwest Sebastopol	**6.94**
16	Gold Ridge	**6.94**
17	Arnold Drive/East Sonoma Mountain	**6.77**
18	Central East Windsor	**6.71**
19	Larkfield-Wikiup	**6.62**
20	Sonoma City South/Vineburg	**6.57**
21	Southern Junior College Neighborhood	**6.56**
22	Jenner/Cazadero	**6.55**
23	Occidental/Bodega	**6.47**
24	Fulton	**6.46**
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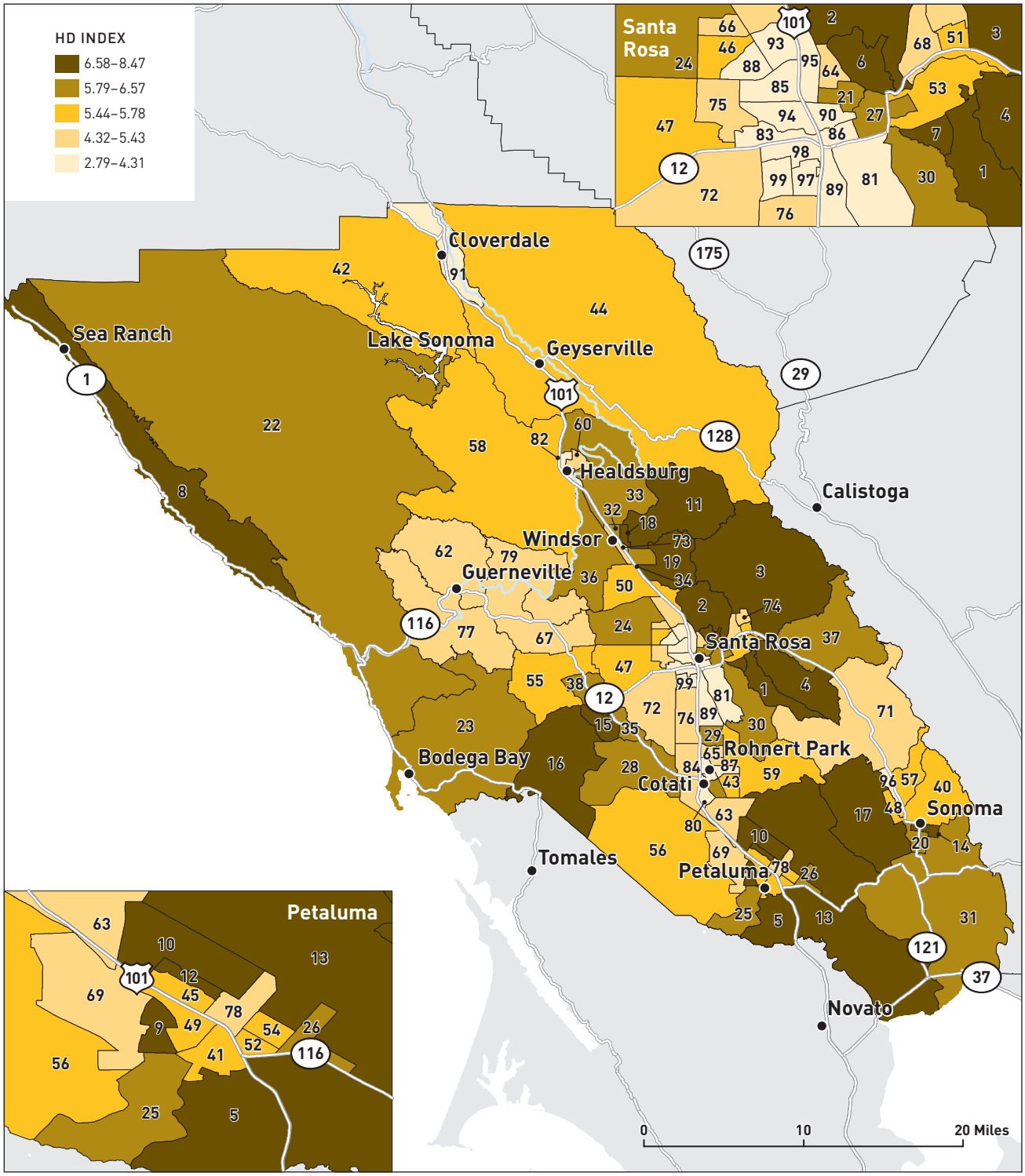
28	Hessel Community	**6.37**
29	Rohnert Park F/H Section	**6.22**
30	West Bennett Valley	**6.17**
31	Carneros Sonoma Area	**6.15**
32	Northeast Windsor	**6.15**
33	North Healdsburg	**6.11**
34	Windsor Southeast	**6.11**
35	Southeast Sebastopol	**6.10**
36	West Windsor	**6.07**
37	North Oakmont/Hood Mountain	**5.98**
38	North Sebastopol	**5.84**
39	East Cotati/Rohnert Park L Section	**5.79**
40	Sonoma City North/West Mayacamas Mountain	**5.78**
41	Grant	**5.77**
42	West Cloverdale	**5.76**
43	Rohnert Park M Section	**5.75**
44	Alexander Valley	**5.73**
45	Sunrise/Bond Parks	**5.72**
46	Piner	**5.71**
47	Laguna de Santa Rosa/Hall Road	**5.69**
48	Boyes Hot Springs West/El Verano	**5.68**
49	McKinley	**5.66**
50	Shiloh South	**5.62**

		HD INDEX
51	Middle Rincon South	**5.61**
52	Miwok	**5.59**
53	Spring Lake	**5.59**
54	La Tercera	**5.58**
55	West Sebastopol/Graton	**5.58**
56	Two Rock	**5.55**
57	Boyes Hot Springs/Fetters Springs/Agua Caliente East	**5.55**
58	Dry Creek	**5.55**
59	Rohnert Park SSU/J Section	**5.50**
60	Old Healdsburg	**5.43**
61	Schaefer	**5.39**
62	Guerneville/Rio Nido	**5.29**
63	West Cotati/Penngrove	**5.25**
64	Northern Junior College Neighborhood	**5.25**
65	Rohnert Park D/E/S Section	**5.21**
66	Pioneer Park	**5.20**
67	Russian River Valley	**5.19**
68	Brush Creek	**5.15**
69	Cinnabar/West Rural Petaluma	**5.10**
70	Central Rohnert Park	**4.96**
71	Kenwood/Glen Ellen	**4.95**
72	Wright	**4.91**
73	Central Windsor	**4.84**
74	Middle Rincon North	**4.83**
75	Olivet Road	**4.82**
76	Bellevue	**4.66**
77	Monte Rio	**4.64**
78	Lucchesi/McDowell	**4.60**
79	Forestville	**4.57**
80	Downtown Cotati	**4.31**
81	Kawana Springs	**4.20**
82	Central Healdsburg	**4.14**
83	Railroad Square	**4.12**
84	Downtown Rohnert Park	**4.09**
85	Coddingtown	**4.08**
86	Burbank Gardens	**4.03**
87	Rohnert Park B/C/R Section	**3.97**
88	Comstock	**3.90**
89	Taylor Mountain	**3.90**
90	Downtown Santa Rosa	**3.89**
91	East Cloverdale	**3.79**
92	Rohnert Park A Section	**3.75**
93	Bicentennial Park	**3.73**
94	West End	**3.51**
95	West Junior College	**3.44**
96	Fetters Springs/Agua Caliente West	**3.41**
97	Sheppard	**2.98**
98	Roseland	**2.95**
99	Roseland Creek	**2.79**

Sonoma County Census Tract Reference Map

Label numbers indicate rank on the American Human Development Index

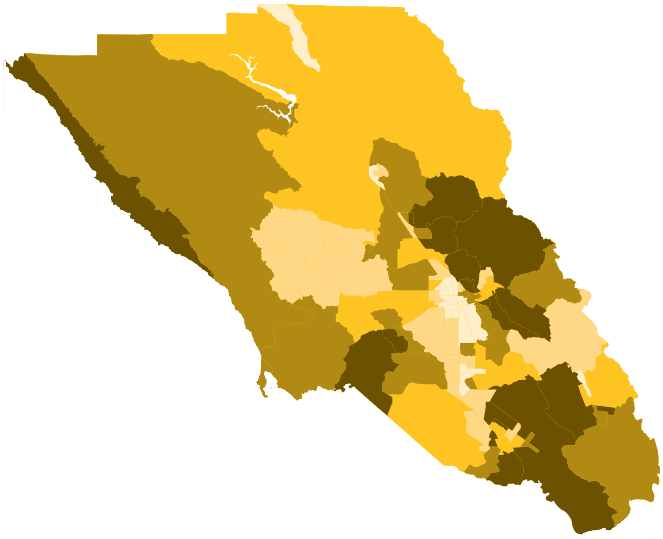


THE **MEASURE OF AMERICA** SERIES:

A PORTRAIT OF **SONOMA COUNTY**

While many measures tell us how the **county's economy** is doing, ***A Portrait of Sonoma County*** tells us how the **county's people** are doing.

East Bennett Valley has the highest well-being levels, and nearby **Roseland Creek** has the lowest.



A full decade separates the life expectancies of the top and bottom census tracts.

In Forestville, the school enrollment rate is **54 percent**, compared to **100 percent** in Central East Windsor.

Latino residents earn about **$11,000** less than Asian Americans and **$15,000** less than whites.

Map over 30 indicators for Sonoma County at **www.measureofamerica.org/maps**

ABOUT THE REPORT

A Portrait of Sonoma County is an in-depth look at how residents of Sonoma County are faring in three fundamental areas of life: health, access to knowledge, and living standards. It examines disparities within the county among neighborhoods and along the lines of race, ethnicity, and gender. In partnership with over sixty organizations and elected officials, the Sonoma County Department of Health Services initiated this report to provide a holistic framework for understanding and addressing complex issues facing its constituency. For more information about the report and findings, please contact **info@sonomahealthaction.org**.

ABOUT THE DESIGN

Humantific is an internationally recognized SenseMaking for ChangeMaking firm located in New York and Madrid.

ABOUT THE AUTHORS

Sarah Burd-Sharps and **Kristen Lewis** are co-directors of Measure of America and co-authors of *The Measure of America* series of national, state, and county reports. They both previously worked on human development issues in countries around the world.

ABOUT THE PROJECT

Measure of America of the Social Science Research Council provides easy-to-use yet methodologically sound tools for understanding the distribution of well-being and opportunity in America and seeks to foster greater awareness of our shared challenges and more support for people-centered policies.

SSRC **www.measureofamerica.org**