An Equity Profile of Las Cruces
Acknowledgments

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This profile was written by James Crowder Jr. at PolicyLink; the data, charts, and maps were prepared by Sheila Xiao, Pamela Stephens, and Justin Scoggins at PERE; and Rosamaria Carrillo of PolicyLink assisted with formatting, editing, and design.
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Equity Profiles are products of a partnership between PolicyLink and PERE, the Program for Environmental and Regional Equity at the University of Southern California.

The views expressed in this document are those of PolicyLink and PERE.
Summary

While the nation is projected to become a people-of-color majority by the year 2044, Las Cruces reached that benchmark in the 1990s. The city is already 63 percent people of color, and the White share of the population has been steadily declining since 1980. Indeed, Las Cruces has experienced dramatic demographic growth and transformation – driven mostly by an increase in the Latino population.

The city’s diversity is a major asset in the regional economy, but inequities and disparities are holding Las Cruces back. Unemployment in the city is higher than the national average. Racial wage gaps persist in the labor market. Closing racial gaps in economic opportunity and outcomes will be key to the city’s future.

Equitable growth is the path to sustained economic prosperity in Las Cruces. New Mexico’s economy could have been more than $29 billion stronger in 2014 if its racial gaps in income had been closed: a 30 percent increase. By growing good jobs, connecting younger generations with older ones, integrating immigrants into the economy, building communities of opportunity, and ensuring educational and career pathways to good jobs for all, Las Cruces can put all residents on the path toward reaching their full potential, and secure a bright future for the city and region.
Key Findings

• Las Cruces is a fast-growing city that increased its population by more than a third (35 percent) between 2000 and 2014.

• The racial/ethnic composition of the city has changed dramatically since 1980, with the share of people of color increasing from 49 to 63 percent of the population.

• More than a quarter of Native Americans are unemployed, greater than three times the rate of Whites.

• There is a looming skills and education gap for Latino and Native American residents, whose rate of bachelor’s degree attainment is lower than the share of future jobs statewide that will require that level of education.

• Las Cruces has a larger share of households that are rent burdened than the county, state of New Mexico, and nation as a whole.

Percent of youth who are people of color:
75%

Share of workers who are living below 150% of the poverty level:
29%

Potential statewide GDP gains from closing racial gaps in income:
$29 billion
Introduction
Introduction

Overview

Across the country, community organizations and residents, local governments, business leaders, funders, and policymakers are striving to put plans, policies, and programs in place that build healthier, more equitable communities and foster inclusive growth.

These efforts recognize that equity – just and fair inclusion into a society in which all can participate, prosper, and reach their full potential – is fundamental to a brighter future for their communities.

Knowing how a community stands in terms of equity is a critical first step in planning for greater equity. To assist with that process, PolicyLink and the Program for Environmental and Regional Equity (PERE) developed an equity indicators framework that communities can use to understand and track the state of equity and equitable growth locally.

This document presents an equity analysis of the City of Las Cruces. It was developed with the support of the W.K. Kellogg Foundation to support local community groups, elected officials, planners, business leaders, funders, and others working to build a stronger and more equitable city. The foundation is supporting the development of equity profiles in 10 of its priority communities across Louisiana, Michigan, Mississippi, and New Mexico.

The data in this profile are drawn from a regional equity database that includes data for the largest 100 cities and 150 regions in the United States, as well as all 50 states. This database incorporates hundreds of data points from public and private data sources including the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the Behavioral Risk Factor Surveillance System, and Woods and Poole Economics. It also includes unique data on child and family well-being from the W.K. Kellogg Foundation Priority Communities Dashboard Database, contributed by The diversitydatakids.org Project based at the Institute for Child, Youth and Family Policy at the Heller School for Social Policy and Management at Brandeis University.

See the "Data and methods" section of this profile for a detailed list of data sources.

This profile uses a range of data sources to describe the state of equity in Las Cruces as comprehensively as possible, but there are limitations. Not all data collected by public and private sources is disaggregated by race/ethnicity and other demographic characteristics. And in some cases, even when disaggregated data is available, the sample size for a given population is too small to report with confidence.

Communities facing deep challenges and barriers to inclusion may be absent from some of the analysis presented here because of small sample size. Local data sources and the lived experiences of diverse residents should supplement the data provided in this profile to more fully represent the state of equity in Las Cruces.
Introduction

Why equity matters now

The face of America is changing. Our country’s population is rapidly diversifying. Already, more than half of all babies born in the United States are people of color. By 2030, the majority of young workers will be people of color. And by 2044, the United States will be a majority people-of-color nation.

Yet racial and income inequality is high and persistent. Over the past several decades, long-standing inequities in income, wealth, health, and opportunity have reached unprecedented levels. Wages have stagnated for the majority of workers, inequality has skyrocketed, and many people of color face racial and geographic barriers to accessing economic opportunities.

Racial and economic equity is necessary for economic growth and prosperity. Equity is an economic imperative as well as a moral one. Research shows that inclusion and diversity are win-win propositions for nations, regions, communities, and firms.

For example:

- More equitable regions experience stronger, more sustained growth.¹
- Regions with less segregation (by race and income) and lower-income inequality have more upward mobility.²
- The elimination of health disparities would lead to significant economic benefits from reductions in health-care spending and increased productivity.³
- Companies with a diverse workforce achieve a better bottom line.⁴
- A diverse population more easily connects to global markets.⁵
- Greater economic equity results in better health outcomes for everyone.⁶

The way forward is with an equity-driven growth model.

To secure America’s health and prosperity, the nation must implement a new economic model based on equity, fairness, and opportunity. Leaders across all sectors must remove barriers to full participation, connect more people to opportunity, and invest in human potential.

Cities play a critical role in building this new growth model.

Local communities are where strategies are being incubated that foster equitable growth: growing good jobs and new businesses while ensuring that all – including low-income people and people of color – can fully participate as workers, consumers, entrepreneurs, innovators, and leaders.

Introduction

What is an equitable city?

Cities are equitable when all residents – regardless of their race/ethnicity, nativity, neighborhood of residence, or other characteristics – are fully able to participate in the city’s economic vitality, contribute to the city’s readiness for the future, and connect to the city’s assets and resources.

Strong, equitable cities:

- Possess economic vitality, providing high-quality jobs to their residents and producing new ideas, products, businesses, and economic activity so the city remains sustainable and competitive.

- Are ready for the future, with a skilled, ready workforce, and a healthy population.

- Are places of connection, where residents can access the essential ingredients to live healthy and productive lives in their own neighborhoods, reach opportunities located throughout the city (and beyond) via transportation or technology, participate in political processes, and interact with other diverse residents.
Introduction

Defining the geography

This profile describes demographic, economic, and health conditions in the city of Las Cruces, New Mexico, portrayed in black on the map to the right. Las Cruces is situated in the southern portion of Doña Ana County, which is coterminous with the Las Cruces, NM Metropolitan Statistical Area.

Unless otherwise noted, all data follow the city geography, which is simply referred to as “Las Cruces.” Some exceptions, due to lack of data availability, are noted beneath the relevant figures. Information on data sources and methodology can be found in the “Data and methods” section beginning on page 81.
Introduction

Equity indicators framework

The indicators in this profile are presented in four sections. The first section describes the city’s demographics. The next three sections present indicators of the city’s economic vitality, readiness, and connectedness. Below are the questions answered within each of the four sections.

Demographics:
Who lives in the city and how is this changing?
• Is the population growing?
• Which groups are driving growth?
• How diverse is the population?
• What is the age distribution of the population?

Economic vitality:
How is the city doing on measures of economic growth and well-being?
• Is the region producing good jobs?
• Can all residents access good jobs?
• Is growth widely shared?
• Do all residents have enough income to sustain their families?
• Are race/ethnicity and nativity barriers to economic success?
• What are the strongest industries and occupations?

Readiness:
How prepared are the city's residents for the 21st century economy?
• Does the workforce have the skills for the jobs of the future?
• Are all youth ready to enter the workforce?
• Are residents healthy?
• Are health disparities decreasing?
• Are racial gaps in education decreasing?

Connectedness:
Are the city's residents and neighborhoods connected to one another and to the region's assets and opportunities?
• Do residents have transportation choices?
• Can residents access jobs and opportunities located throughout the region?
• Can all residents access affordable, quality, convenient housing?
• Do neighborhoods reflect the region's diversity? Is segregation decreasing?
• Can all residents access healthy food?
Demographics
Demographics Highlights
Who lives in the city and how is it changing?

- Las Cruces is a fast-growing city that increased its population by more than a third (35 percent) between 2000 and 2014.

- This growth is driven by communities of color (47 percent increase), but the White community also experienced net population growth (12 percent increase).

- The racial/ethnic composition of the city has changed dramatically since 1980, with the share of people of color increasing from 49 to 63 percent of the population.

- Latinos represent 57 percent of all Las Cruces residents, and the vast majority were born in the U.S. (86 percent).

- The racial generation gap in Las Cruces is 37 percentage points larger than that of the nation as a whole.

Percentage of residents who are people of color:

63%

Percentage of youth who are people of color:

75%

Median age of Latino residents:

27
Demographics

Two-thirds of residents are people of color

Las Cruces is a fast-growing city. Between 1980 and 2014, the city’s population more than doubled, from 45,000 residents to more than 100,000.

While the Las Cruces White population and communities of color are both growing, the city’s communities of color are growing more rapidly. This is changing the overall racial/ethnic composition of Las Cruces. Between 1990 and 2014, communities of color grew from 50 to 63 percent of the population while the White population decreased its share from 50 to 37 percent.

Latino residents have consistently represented the majority of Las Cruces’ people of color. Since 1980 the share of residents in Las Cruces who identify as Latino has increased by 12 percentage points. Today, Latino residents represent 57 percent of the overall population.

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Source: U.S. Census Bureau.
Note: Data for 2014 represents a 2010 through 2014 average. Much of the increase in the Mixed/other population between 1990 and 2000 is due to a change in the survey question on race.
Demographics

Communities of color are driving population growth

Between 2000 and 2014, the city saw total growth of 35 percent and its communities of color grew by 47 percent. The city is growing faster than Doña Ana County, New Mexico, and the nation as a whole.

Over the 2000 to 2014 period, every major racial/ethnic group living in the city has grown, with the exception of people with mixed-race backgrounds. The city’s large Latino population grew by 48 percent. Its smaller Asian and Native American populations experienced rapid growth (98 and 91 percent, respectively).

The city’s Asian or Pacific Islander and Native American populations are small but fast-growing

Growth Rates of Major Racial/Ethnic Groups, 2000 to 2014

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>2000 to 2014 Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>13%</td>
</tr>
<tr>
<td>White</td>
<td>19%</td>
</tr>
<tr>
<td>Latino</td>
<td>48%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>98%</td>
</tr>
<tr>
<td>Native American</td>
<td>91%</td>
</tr>
<tr>
<td>Mixed/other</td>
<td>-18%</td>
</tr>
</tbody>
</table>

Las Cruces is undergoing rapid population growth

Percent Change in Population, 2000 to 2014

- United States: 35%
- New Mexico: 25%
- Doña Ana County: 27%
- Las Cruces: 47%

Source: U.S. Census Bureau.
Note: Data for 2014 represents a 2010 through 2014 average.
Demographics

The Latino population in Doña Ana County will continue to grow

Demographic change in Doña Ana County is occurring at a pace faster than that of the nation as a whole, and is projected to continue diversifying into the future. In 1980, the county was 56 percent people of color – a smaller share than the U.S. overall. The county is projected to remain majority people of color – and majority Latino – into 2050.

During that time, the majority of change will be driven by an increasing ratio between Latino and White residents in the city. By 2050, Latino residents will represent 77 percent of residents (an increase of 14 percentage points from 2000) while the percentage of residents who are White will decrease by 12 percentage points (from 32 percent in 2000).

The share of the White population will continue to decrease

Racial/Ethnic Composition, 1980 to 2050

Source: U.S. Census Bureau; Woods & Poole Economics, Inc.
Note: Data is for Doña Ana County. Much of the increase in the Mixed/other population between 1990 and 2000 is due to a change in the survey question on race.
Demographics

The majority of residents were born in the United States

The majority of Las Cruces residents – 89 percent – were born in the United States (or abroad to American parents). Among the city’s large Latino population, the vast majority (86 percent) are native-born, while 14 percent are immigrants. Conversely, the majority of Asian or Pacific Islander residents (68 percent) are immigrants.

Breaking down the city’s major racial/ethnic groups by ancestry, we see that the majority of Latino residents are of Mexican ancestry (92 percent). Among the city’s diverse Asian population, the most common ancestries are Indian, Chinese, Filipino, and Japanese.
Demographics

Las Cruces is less diverse than the state of New Mexico

With a diversity score of .94, Las Cruces is more diverse than Doña Ana County but less diverse than the state of New Mexico. The driver behind its lower diversity compared with New Mexico is its smaller Native American population (under 1 percent compared with 9 percent in the state).

The diversity score is a measure of racial/ethnic diversity in a given area. It measures the representation of the six major racial/ethnic groups (White, Black, Latino, API, Native American, and Mixed race/other) in the population. The maximum possible diversity score (1.79) would occur if each group were evenly represented in the city – that is, if each group accounted for one-sixth of the total population.

Note that the diversity score describes the city as a whole and does not measure racial segregation, or the extent to which different racial/ethnic groups live in different neighborhoods. Segregation measures can be found on pages 60 and 61.

While home to residents of many races and ethnicities, the city is relatively homogenous

Diversity Score, 2014

<table>
<thead>
<tr>
<th>Area</th>
<th>Diversity Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1.13</td>
</tr>
<tr>
<td>New Mexico</td>
<td>1.13</td>
</tr>
<tr>
<td>Doña Ana County</td>
<td>0.83</td>
</tr>
<tr>
<td>Las Cruces</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau.
Note: Data represent a 2010 through 2014 average.
Demographics

Demographic change varies by neighborhood

Mapping the growth in people of color by census block group illustrates variation in growth and decline in communities of color throughout the region. The map highlights how the population of color has grown in many neighborhoods throughout the city.

Areas highlighted in shades of green include neighborhoods in which the people of color population has declined or seen no growth over the last decade.

The largest increases in the people-of-color population are found in the northeast areas of the city.

Source: U.S. Census Bureau, GeoLytics, Inc.; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community.

Note: One should keep in mind when viewing this map and others that display a share or rate that while there is wide variation in the size (land area) of the census block groups in the region, each has a roughly similar number of people. Thus, care should be taken not to assign unwarranted attention to large block groups just because they are large. Data for 2014 represents a 2010 through 2014 average.
As the city’s population size and demographic make up have shifted, where residents live in relation to one another has also changed. Since 1990, the share of the population that is people of color has increased to 63 percent. This growth in the people-of-color population can be largely attributed to the growing Latino population, which has grown significantly in the city east of Route 25.
Demographics

Three quarters of youth in Las Cruces are people of color

Youth are leading the demographic shift occurring in the city. Today, 75 percent of Las Cruces’s youth (under age 18) are people of color, compared with 38 percent of the region’s seniors (over age 64). This 37 percentage point difference between the share of people of color among young and old can be measured as the racial generation gap.

The city’s growing population of people of color is also younger than its White population. The median age of Latino residents is 27, which is fifteen years younger than the median age of the White population.

The racial generation gap may negatively affect the region if policymakers do not invest in the educational systems and community infrastructure needed to support a youth population that is more racially diverse.

Source: U.S. Census Bureau.
Note: Data for 2014 represents a 2010 through 2014 average.

The city’s generation gap has grown
Percent People of Color (POC) by Age Group, 1980 to 2014

Residents of color tend to be younger than their White peers
Median Age by Race/Ethnicity, 2014

- Percent of seniors who are POC
- Percent of youth who are POC

- All
  - 31.7

- White
  - 42.2

- Black
  - 30.8

- Latino
  - 27.3

- Asian
  - 35.2

- Native American and Alaska Native
  - 28.1

Source: U.S. Census Bureau.
Note: Data represent a 2010 through 2014 average. “White” is defined as non-Hispanic White and “Latino” includes all who identify as being of Hispanic origin. “Asian” does not include those who identify as “Pacific Islander”. All other racial/ethnic groups include any Latinos who identify with that particular racial category.
Demographics

A large racial generation gap

At 35 percentage points, New Mexico has the fifth largest racial generation gap among all 50 states. Las Cruces and Doña Ana County have similarly large racial generation gaps. This may be due in part to the city becoming a growing retirement community.

Las Cruces has a relatively large racial generation gap

The Racial Generation Gap in 2014

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>26%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>35%</td>
</tr>
<tr>
<td>Doña Ana County</td>
<td>36%</td>
</tr>
<tr>
<td>Las Cruces</td>
<td>37%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau.
Note: Data represent a 2010 through 2014 average.
Economic vitality
Economic vitality

Highlights

How is the city doing on measures of economic growth and well-being?

• Both the gross regional product and cumulative job growth in Doña Ana County has consistently outpaced the nation as a whole.

• More than a quarter of Native Americans are unemployed, greater than three times the rate of Whites.

• Las Cruces has twice the working-poverty rate as the nation overall.

Share of total income held by the top 20 percent of households: 49%

Share of workers who are living below 150% of the poverty level: 29%

Share of Latino children in poverty: 36%
Economic vitality

Strong economic growth in Doña Ana County

Compared to the nation as a whole, Doña Ana County has experienced strong economic growth in jobs and economic output over the past several decades.

There has consistently been high growth in gross regional product (GRP) – the value of all goods and services produced within the region – especially after 1999. Since 1979, the county has seen its GRP grow by 163 percent, compared with the national average of 106 percent growth in gross domestic product. The recession caused GRP growth to decline but growth picked up again as of 2012.

Job growth has also been strong in Doña Ana County, with a 138 percent increase in jobs since 1979, compared with a 64 percent average increase nationwide.

Source: U.S. Bureau of Economic Analysis.
Economic vitality

Unemployment remains high post-recession

Unemployment is higher in Doña Ana County compared with the national average, consistent with the trends in the 1990s. Unemployment declined in Doña Ana County during the economic boom prior to the downturn, reaching 4 percent in 2007, but then grew to nearly 8 percent and has not changed much since then.

Unemployment has remained elevated since the recession

Unemployment Rate, 1990 to 2015

Economic vitality

Job growth per person is lower than national average

While overall job growth has been strong, the rate of job creation is slower than the rate of population growth. This means that although jobs are increasing, there are still too few jobs per worker. Thus, although cumulative job growth in the county is more than double the national average, cumulative growth in the jobs-to-population ratio is only one fourth that of the nation as a whole.
Economic vitality

Average labor force participation for communities of color but high unemployment rates

Las Cruces has similar overall labor force participation rates as the nation and the state of New Mexico. However, unemployment is slightly higher. The county's overall unemployment rate of 12 percent is slightly higher than the national average of 9 percent. Unemployment rates for Black and Native American residents in Las Cruces are significantly higher than the rates for Whites.

The overall unemployment rate for Doña Ana County presented here is higher, and less current, than that reported on page 26, and this is due to the different time period covered (there was a rapid decline in unemployment leading up to 2015), and the different data source used – the 2014 5-year American Community Survey (ACS). However, the ACS allows us to examine unemployment by race/ethnicity in the county, and the gaps we find are likely to hold even if the levels across all groups have declined in recent years.

Source: U.S. Census Bureau. Universe includes the population age 16 or older. Note: Data represent a 2010 through 2014 average. “White” is defined as non-Hispanic White and “Latino” includes all who identify as being of Hispanic origin. All other racial/ethnic groups include any Latinos who identify with that particular racial category.
Economic vitality
Communities of color have higher unemployment rates

Unemployment is geographically concentrated throughout Las Cruces. Areas in the central and northernmost parts of the city have the highest rates of unemployment. Areas populated with majority people-of-color residents tend to have higher rates of unemployment compared to parts of the city with fewer people of color.

Unemployment clustered around tracts with higher concentrations of people of color
Unemployment Rate by Census Tract and High People of Color Tracts, 2014
Less than 8%
8% to 11%
11% to 14%
14% to 18%
18% or more

77% or more people of color

Source: U.S. Census Bureau; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community. Universe includes the civilian labor force age 16 or older. Note: Data represent a 2010 through 2014 average.
Economic vitality
Average level of income inequality

Las Cruces has a similar level of income inequality as the county of Doña Ana, the state of New Mexico, and the U.S. as a whole.

Inequality here is measured by the Gini coefficient, which is the most commonly used measure of inequality. The Gini coefficient measures the extent to which the income distribution deviates from perfect equality, meaning that every household has the same income. The value of the Gini coefficient ranges from zero (perfect equality) to one (complete inequality, one household has all of the income).

### Income inequality in Las Cruces is similar to that experienced nationwide

<table>
<thead>
<tr>
<th>The Gini Coefficient, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
</tr>
<tr>
<td>New Mexico</td>
</tr>
<tr>
<td>Doña Ana County</td>
</tr>
<tr>
<td>Las Cruces</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau. Universe includes all households (no group quarters). Note: Data represents a 2010 through 2014 average.
Economic vitality
Declining incomes for lower income households

After adjusting for inflation, incomes have declined or have grown very little for all of the city's households since 1979. The real decline in income has been greatest for households on the lower end of the income distribution, with a decline of 12 percent for households at the 10th percentile.

Compared to the United States overall, household incomes have declined more on the lower end of the income distribution, and have experienced less growth at the 80th and 90th percentiles.

Source: U.S. Census Bureau. Universe includes all households (no group quarters).
Note: Data for 2014 represent a 2010 through 2014 average. Percentile values are estimated using Pareto interpolation.
Economic vitality

Income heavily concentrated amongst the top 20 percent of households

Income distribution is skewed among Las Cruces residents. The top 20 percent of city households – those earning more than $84,100 annually, take home almost half of all income earned in the city. The top five percent take home 20 percent of all income – these household incomes exceed $153,000, which triple the upper bound of household incomes for the middle 20% percent. The lowest 40 percent of households collectively earn 11 percent of the city’s total income.

One-fifth of income is held by the top five percent of households

Aggregate Household Income by Quantile, 2014

Source: U.S. Census Bureau. Universe includes all households (no group quarters).
Note: Data represent a 2010 through 2014 average. Values are in 2014 dollars.
Economic vitality
Households of color are underrepresented among high-income households

Income inequality overlaps with racial inequity in Las Cruces. Households headed by people of color in the city are highly underrepresented among the city’s highest-income households and overrepresented among its middle- and lower-income brackets.

In 2014, people of color headed 55 percent of the city’s households. However, only 28 percent of households earning above $150,000 is headed by a person of color. Meanwhile, 63 percent of households earning less than $20,000 annually are headed by a person of color.

Source: U.S. Census Bureau. Universe includes all households (no group quarters).
Note: Data represent a 2010 through 2014 average. Dollar values are in 2014 dollars.
Economic vitality
Latinas and Native American women have the lowest earnings

The city’s workers experience marked racial and gender disparities in earnings.

Across racial/ethnic and gender groups, Latinas have the lowest median annual earnings ($29,000), followed by Native American women ($30,000), and Latino men ($33,000). Asian men have the highest earnings ($54,000).

There are gender earnings gaps across all racial groups, but the size of the gaps varies widely. The median income for Asian women is 67 percent of that of Asian men, the disparity among Native American women and men is 73 percent. These gender gaps are much smaller among White (90 percent), Black (96 percent), and Latino (89 percent) workers in Las Cruces.

Source: U.S. Census Bureau. Universe includes full-time workers with earnings age 16 or older.
Note: "White" is defined as non-Hispanic White and "Latino" includes all who identify as being of Hispanic origin. "Asian" does not include Pacific Islanders. All other racial/ethnic groups include any Latinos who identify with that particular racial category. Values are in 2014 dollars. Data for some racial/ethnic groups are not available due to small sample size.
Economic vitality
Notable disparities in poverty by race

Not surprisingly, residents experience poverty very differently depending upon their race. With a poverty rate of 42 percent, Black residents are more than twice as likely to be poor than White residents (17 percent). Latino residents are also more likely to live in poverty than average, with a poverty rate of 28 percent.

This trend is consistent for child poverty in the city. Seventy-one percent of Black children and 36 percent of Latino children are poor, compared to 15 percent of White children.

Black residents are more than twice as likely as White residents to be poor

Poverty Rate by Race/Ethnicity, 2014

Seven in 10 Black children in the city live in poverty

Child Poverty Rate by Race/Ethnicity, 2014

Source: U.S. Census Bureau. Universe includes all persons not in group quarters.
Note: “White” is defined as non-Hispanic White and “Latino” includes all who identify as being of Hispanic origin. All other racial/ethnic groups include any Latinos who identify with that particular racial category. Data represent a 2010 through 2014 average.
Economic vitality
High rates of working poverty

With a working-poverty rate of 29 percent, Las Cruces residents are more than twice as likely to be among the working poor than the average American (14 percent).

Working poor is defined here as workers age 16 or older with a family income below 150 percent of the federal poverty level. For a family of four, this is roughly $36,000 a year.

The working poverty rate in Las Cruces is twice the rate nationwide.

Working-Poverty Rate, 2014

- United States: 14%
- New Mexico: 20%
- Doña Ana County: 30%
- Las Cruces: 29%

Source: U.S. Census Bureau. Universe includes workers age 16 or older not in group quarters.
Note: Data represent a 2010 through 2014 average.
Economic vitality

Major growth in middle-wage jobs

In Doña Ana County, middle-wage jobs have seen the most growth. The share of middle-wage jobs more than doubled between 1990 and 2015. Although earnings have increased for workers at all wage levels since 1990, workers in low-wage jobs have seen the most growth: 53%. Middle-wage and high-wage workers have seen earnings increases of 25 percent and 11 percent, respectively.

Note: Data is for Doña Ana County, NM. Universe includes all jobs covered by the federal Unemployment Insurance (UI) program.
Economic vitality
Varying earnings increases across wage categories

Earnings growth in Doña Ana County between 1990 and 2015 has tended to be faster among low-wage jobs. The two industries that saw the most significant growth during this time, Administrative and Support and Waste Management and Remediation Services (64 percent increase in earnings) and Mining (191 percent increase), were both within the low-wage industry category.

There were also noticeable differences in wage growth among middle-income industries. While workers in the manufacturing industry experienced an earnings increase of 55 percent, earnings growth in retail was limited to 7 percent.

There were also large differences in earnings growth among some high-wage industries. Incomes for workers in information declined by 37 percent. Conversely, workers in the utilities and wholesale trade sectors saw their earnings increase by more than 40 percent over this time period.

<table>
<thead>
<tr>
<th>Wage Category</th>
<th>Industry</th>
<th>Average Annual Earnings 1990</th>
<th>Average Annual Earnings 2015</th>
<th>Percent Change in Earnings 1990-2015</th>
<th>Share of Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Management of Companies and Enterprises</td>
<td>$56,521</td>
<td>$74,014</td>
<td>31%</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>$52,087</td>
<td>$33,006</td>
<td>-37%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional, Scientific, and Technical Services</td>
<td>$48,138</td>
<td>$51,825</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Utilities</td>
<td>$46,165</td>
<td>$67,342</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finance and Insurance</td>
<td>$33,859</td>
<td>$43,865</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wholesale Trade</td>
<td>$31,834</td>
<td>$45,133</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>Health Care and Social Assistance</td>
<td>$30,806</td>
<td>$34,744</td>
<td>13%</td>
<td>56%</td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
<td>$30,753</td>
<td>$47,522</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation and Warehousing</td>
<td>$27,346</td>
<td>$35,316</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>$25,736</td>
<td>$34,535</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education Services</td>
<td>$22,508</td>
<td>$30,442</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retail Trade</td>
<td>$22,064</td>
<td>$23,718</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Real Estate and Rental and Leasing</td>
<td>$21,609</td>
<td>$29,283</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Administrative and Support and Waste</td>
<td>$20,745</td>
<td>$34,091</td>
<td>64%</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>Management and Remediation Services</td>
<td>$18,520</td>
<td>$24,588</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Services (except Public Administration)</td>
<td>$16,007</td>
<td>$20,093</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arts, Entertainment, and Recreation</td>
<td>$14,855</td>
<td>$43,162</td>
<td>191%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mining</td>
<td>$13,074</td>
<td>$21,689</td>
<td>66%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>$11,994</td>
<td>$14,587</td>
<td>22%</td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics; Woods & Poole Economics, Inc. Universe includes all private sector jobs covered by the federal Unemployment Insurance (UI) program. Note: Data is for Doña Ana County, NM. Dollar values are in 2015 dollars.
Economic vitality

Health care and social assistance industries projected to add the most jobs

Doña Ana County is projected to add 7,300 jobs between 2014 and 2024. About 3,400 will be in health care and social assistance industries. Accommodation and food service industries will add another 840 jobs, and 690 jobs will be added through educational services.

Projected average annual job growth of almost three percent in the health care and social assistance industry

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>12,694</td>
<td>16,088</td>
<td>3,394</td>
<td>2.7%</td>
<td>27%</td>
</tr>
<tr>
<td>Professional, Scientific &amp; Technical Services</td>
<td>3,741</td>
<td>4,210</td>
<td>469</td>
<td>1.3%</td>
<td>13%</td>
</tr>
<tr>
<td>Accommodation &amp; Food Services</td>
<td>6,772</td>
<td>7,607</td>
<td>835</td>
<td>1.2%</td>
<td>12%</td>
</tr>
<tr>
<td>Construction</td>
<td>3,449</td>
<td>3,817</td>
<td>368</td>
<td>1.1%</td>
<td>11%</td>
</tr>
<tr>
<td>Self-Employment &amp; Unpaid Family Workers</td>
<td>5,303</td>
<td>5,769</td>
<td>466</td>
<td>0.0%</td>
<td>9%</td>
</tr>
<tr>
<td>Administrative &amp; Support &amp; Waste Management &amp; Remediation Services</td>
<td>3,439</td>
<td>3,741</td>
<td>302</td>
<td>0.9%</td>
<td>9%</td>
</tr>
<tr>
<td>Arts, Entertainment &amp; Recreation</td>
<td>885</td>
<td>952</td>
<td>67</td>
<td>0.8%</td>
<td>8%</td>
</tr>
<tr>
<td>Educational Services</td>
<td>10,862</td>
<td>11,556</td>
<td>694</td>
<td>0.6%</td>
<td>6%</td>
</tr>
<tr>
<td>Other Services (Ex. Public Administration)</td>
<td>1,317</td>
<td>1,394</td>
<td>77</td>
<td>0.6%</td>
<td>6%</td>
</tr>
<tr>
<td>Management of Companies &amp; Enterprises</td>
<td>39</td>
<td>41</td>
<td>2</td>
<td>0.5%</td>
<td>5%</td>
</tr>
<tr>
<td>Real Estate &amp; Rental &amp; Leasing</td>
<td>761</td>
<td>800</td>
<td>39</td>
<td>0.5%</td>
<td>5%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>7,659</td>
<td>8,030</td>
<td>371</td>
<td>0.5%</td>
<td>5%</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>1,764</td>
<td>1,837</td>
<td>73</td>
<td>0.4%</td>
<td>4%</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>1,322</td>
<td>1,362</td>
<td>40</td>
<td>0.3%</td>
<td>3%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>1,171</td>
<td>1,204</td>
<td>33</td>
<td>0.3%</td>
<td>3%</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing &amp; Hunting</td>
<td>3,517</td>
<td>3,589</td>
<td>72</td>
<td>0.2%</td>
<td>2%</td>
</tr>
<tr>
<td>Government</td>
<td>7,548</td>
<td>7,681</td>
<td>133</td>
<td>0.2%</td>
<td>2%</td>
</tr>
<tr>
<td>Information</td>
<td>887</td>
<td>870</td>
<td>-17</td>
<td>-0.2%</td>
<td>-2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2,491</td>
<td>2,390</td>
<td>-101</td>
<td>-0.4%</td>
<td>-4%</td>
</tr>
<tr>
<td>Utilities</td>
<td>400</td>
<td>347</td>
<td>-53</td>
<td>-1.3%</td>
<td>-13%</td>
</tr>
<tr>
<td><strong>Total, All Industries</strong></td>
<td><strong>76,037</strong></td>
<td><strong>83,301</strong></td>
<td><strong>7,264</strong></td>
<td><strong>1.0%</strong></td>
<td><strong>10%</strong></td>
</tr>
</tbody>
</table>

Source: New Mexico Department of Workforce Solutions.
Note: Data is for Doña Ana County, NM. Figures may not sum to total because data for the mining and extraction industry is suppressed.
Economic vitality
Most jobs projected to be added to personal care and food preparation and serving related occupations

Of the 7,200 jobs to be added to the county by 2024, personal care and service occupations, food preparation and serving-related occupations, and health-care practitioners and technical occupations will contribute the most, adding over 3,100 jobs. Personal care and service occupations will also see the fastest growth rate, rising by 33 percent.

Personal care, food preparation, and health-care practitioners projected to add most jobs

<table>
<thead>
<tr>
<th>Occupational Employment Projections, 2014 to 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupation</strong></td>
</tr>
<tr>
<td>Personal Care &amp; Service Occupations</td>
</tr>
<tr>
<td>Healthcare Support Occupations</td>
</tr>
<tr>
<td>Healthcare Practitioners &amp; Technical Occupations</td>
</tr>
<tr>
<td>Community &amp; Social Service Occupations</td>
</tr>
<tr>
<td>Computer &amp; Mathematical Occupations</td>
</tr>
<tr>
<td>Food Preparation &amp; Serving Related Occupations</td>
</tr>
<tr>
<td>Life, Physical &amp; Social Science Occupations</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports &amp; Media Occupations</td>
</tr>
<tr>
<td>Construction &amp; Extraction Occupinations</td>
</tr>
<tr>
<td>Building &amp; Grounds Cleaning &amp; Maintenance Occupations</td>
</tr>
<tr>
<td>Education, Training &amp; Library Occupations</td>
</tr>
<tr>
<td>Business &amp; Financial Operations Occupations</td>
</tr>
<tr>
<td>Management Occupations</td>
</tr>
<tr>
<td>Legal Occupations</td>
</tr>
<tr>
<td>Installation, Maintenance &amp; Repair Occupations</td>
</tr>
<tr>
<td>Office &amp; Administrative Support Occupations</td>
</tr>
<tr>
<td>Sales &amp; Related Occupations</td>
</tr>
<tr>
<td>Transportation &amp; Material Moving Occupations</td>
</tr>
<tr>
<td>Protective Service Occupations</td>
</tr>
<tr>
<td>Architecture &amp; Engineering Occupinations</td>
</tr>
<tr>
<td>Production Occupations</td>
</tr>
<tr>
<td>Farming, Fishing &amp; Forestry Occupinations</td>
</tr>
<tr>
<td><strong>Total, All Occupations</strong></td>
</tr>
</tbody>
</table>

Source: New Mexico Department of Workforce Solutions.
Note: Data is for Doña Ana County, NM.
Economic vitality
Identifying the region’s strong industries

Understanding which industries are strong and competitive in the region is critical for developing effective strategies to attract and grow businesses. To identify strong industries in the region, 19 industry sectors were categorized according to an “industry strength index” that measures four characteristics: size, concentration, job quality, and growth. Each characteristic was given an equal weight (25 percent each) in determining the index value. “Growth” was an average of three indicators of growth (change in the number of jobs, percent change in the number of jobs, and wage growth). These characteristics were examined over the last decade to provide a current picture of how the region’s economy is changing.

Industry strength index =

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Employment</strong>&lt;br&gt;The total number of jobs in a particular industry.</td>
<td><strong>Location Quotient</strong>&lt;br&gt;A measure of employment concentration calculated by dividing the share of employment for a particular industry in the region by its share nationwide. A score &gt;1 indicates higher-than-average concentration.</td>
<td><strong>Average Annual Wage</strong>&lt;br&gt;The estimated total annual wages of an industry divided by its estimated total employment</td>
<td><strong>Change in the number of jobs</strong>&lt;br&gt;Percent change in the number of jobs</td>
</tr>
</tbody>
</table>

Real wage growth

Note: This industry strength index is only meant to provide general guidance on the strength of various industries in the region, and its interpretation should be informed by an examination of individual metrics used in its calculation, which are presented in the table on the next page. Each indicator was normalized as a cross-industry z-score before taking a weighted average to derive the index.
Economic vitality
Health care and agriculture jobs dominate

According to the industry strength index, the Las Cruces region’s strongest industries are health care and social assistance, and agriculture, forestry, fishing, and hunting with a strong concentration of jobs in the region and a high rate of growth. Utilities is the third strongest industry in the region, although these occupations are an example of high-wage jobs that have skewed incomes in the city. Although this is a high-paying job, it is relatively inaccessible – only 150 new positions were added to this industry in 10 years.

Transportation and warehousing are strong and expanding in the region

Industry Strength Index

<table>
<thead>
<tr>
<th>Industry</th>
<th>Size</th>
<th>Concentration</th>
<th>Job Quality</th>
<th>Growth</th>
<th>Industry Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total employment</td>
<td>Location Quotient</td>
<td>Average annual wage</td>
<td>Change in employment</td>
<td>% Change in employment</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>13,348</td>
<td>1.4</td>
<td>$34,744</td>
<td>4,541</td>
<td>52%</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>3,389</td>
<td>5.3</td>
<td>$21,689</td>
<td>-351</td>
<td>-9%</td>
</tr>
<tr>
<td>Utilities</td>
<td>420</td>
<td>1.5</td>
<td>$67,342</td>
<td>150</td>
<td>56%</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>3,820</td>
<td>0.9</td>
<td>$51,825</td>
<td>1,378</td>
<td>56%</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>41</td>
<td>0.0</td>
<td>$74,014</td>
<td>-88</td>
<td>-68%</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>6,903</td>
<td>1.1</td>
<td>$14,587</td>
<td>1,444</td>
<td>26%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>7,578</td>
<td>1.0</td>
<td>$23,718</td>
<td>563</td>
<td>8%</td>
</tr>
<tr>
<td>Administrative and Support and Waste Management and Remediation Services</td>
<td>3,017</td>
<td>0.7</td>
<td>$34,991</td>
<td>64</td>
<td>2%</td>
</tr>
<tr>
<td>Construction</td>
<td>3,521</td>
<td>1.1</td>
<td>$34,535</td>
<td>-782</td>
<td>-18%</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>1,768</td>
<td>0.6</td>
<td>$43,865</td>
<td>303</td>
<td>21%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>1,219</td>
<td>0.4</td>
<td>$45,133</td>
<td>-7</td>
<td>-1%</td>
</tr>
<tr>
<td>Education Services</td>
<td>564</td>
<td>0.4</td>
<td>$30,442</td>
<td>241</td>
<td>75%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2,264</td>
<td>0.4</td>
<td>$47,522</td>
<td>-1,112</td>
<td>-33%</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>1,423</td>
<td>0.6</td>
<td>$35,316</td>
<td>110</td>
<td>8%</td>
</tr>
<tr>
<td>Mining</td>
<td>17</td>
<td>0.0</td>
<td>$43,162</td>
<td>-23</td>
<td>-58%</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>788</td>
<td>0.7</td>
<td>$29,283</td>
<td>-47</td>
<td>-6%</td>
</tr>
<tr>
<td>Other Services (except Public Administration)</td>
<td>1,201</td>
<td>0.5</td>
<td>$24,588</td>
<td>-83</td>
<td>-6%</td>
</tr>
<tr>
<td>Information</td>
<td>840</td>
<td>0.6</td>
<td>$33,006</td>
<td>-308</td>
<td>-27%</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>921</td>
<td>0.8</td>
<td>$20,093</td>
<td>-142</td>
<td>-13%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics; Woods & Poole Economics, Inc. Universe includes all jobs covered by the federal Unemployment Insurance (UI) program.
Economic vitality

Identifying high-opportunity occupations

Understanding which occupations are strong and competitive in the region can help leaders develop strategies to connect and prepare workers for good jobs. To identify “high-opportunity” occupations in the region, we developed an “occupation opportunity index” based on measures of job quality and growth, including median annual wage, real wage growth, job growth (in number and share), and median age of workers. A high median age of workers indicates that there will be replacement job openings as older workers retire.

Job quality, measured by the median annual wage, accounted for two-thirds of the occupation opportunity index, and growth accounted for the other one third. Within the growth category, half was determined by wage growth and the other half was divided equally between the change in number of jobs, percent change in jobs, and median age of workers.

| Occupation opportunity index = |
| Job quality | Growth |
| Median annual wage | Real wage growth |
| Change in the number of jobs | Percent change in the number of jobs |
| Median age of workers |

Note: Each indicator was normalized as a cross-occupation z-score before taking a weighted average to derive the index.
Economic vitality
Identifying high-opportunity occupations

Once the occupation opportunity index score was calculated for each occupation, occupations were sorted into three categories (high-, middle-, and low-opportunity). The average index score is zero, so an occupation with a positive value has an above average score while a negative value represents a below average score.

Because education level plays such a large role in determining access to jobs, we present the occupational analysis for each of three educational attainment levels: workers with a high school degree or less, workers with more than a high-school diploma but less than a bachelor's degree, and workers with a bachelor's degree or higher.

Given that the regional economy has experienced widespread employment decline across many occupation groups, it is important to note that this index is only meant to provide general guidance on the strength of various occupations. Its interpretation should be informed by examining all metrics of job quality and growth.

All jobs
(2011)

High-opportunity
(26 occupations)

Middle-opportunity
(18 occupations)

Low-opportunity
(21 occupations)

Note: The occupation opportunity index and the three broad categories drawn from it are only meant to provide general guidance on the level of opportunity associated with various occupations in the region, and its interpretation should be informed by an examination of individual metrics used in its calculation, which are presented in the tables on the following pages.
### Economic vitality
#### High-opportunity occupations for workers with a high school diploma or less

Supervisors of construction, extraction, transportation, material moving, and production workers are high-opportunity jobs for workers without postsecondary education. The Occupation Opportunity Index is calculated based on the median annual wage, real wage growth, change in employment, and percentage change in employment for these occupations. The index reflects the relative economic vitality of these occupations, with a higher index indicating a stronger opportunity for workers in that field.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment (2011)</th>
<th>Job Quality</th>
<th>Growth</th>
<th>Occupation Opportunity Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Opportunity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors of Construction and Extraction Workers</td>
<td>310</td>
<td>$39,570</td>
<td>0.7%</td>
<td>-10</td>
</tr>
<tr>
<td>Supervisors of Transportation and Material Moving Workers</td>
<td>110</td>
<td>$39,142</td>
<td>3.4%</td>
<td>20</td>
</tr>
<tr>
<td>Supervisors of Production Workers</td>
<td>150</td>
<td>$38,310</td>
<td>1.9%</td>
<td>-80</td>
</tr>
<tr>
<td>Food Processing Workers</td>
<td>360</td>
<td>$19,469</td>
<td>23.7%</td>
<td>320</td>
</tr>
<tr>
<td>Other Protective Service Workers</td>
<td>770</td>
<td>$30,670</td>
<td>15.3%</td>
<td>320</td>
</tr>
<tr>
<td>Other Installation, Maintenance, and Repair Occupations</td>
<td>870</td>
<td>$30,318</td>
<td>13.8%</td>
<td>-280</td>
</tr>
<tr>
<td>Construction Trades Workers</td>
<td>2,200</td>
<td>$31,082</td>
<td>8.6%</td>
<td>-260</td>
</tr>
<tr>
<td>Other Personal Care and Service Workers</td>
<td>2,440</td>
<td>$18,910</td>
<td>16.7%</td>
<td>960</td>
</tr>
<tr>
<td>Other Production Occupations</td>
<td>180</td>
<td>$27,404</td>
<td>25.6%</td>
<td>-210</td>
</tr>
<tr>
<td>Supervisors of Building and Grounds Cleaning and Maintenance Workers</td>
<td>120</td>
<td>$27,570</td>
<td>6.4%</td>
<td>10</td>
</tr>
<tr>
<td>Vehicle and Mobile Equipment Mechanics, Installers, and Repairers</td>
<td>500</td>
<td>$29,063</td>
<td>-15.4%</td>
<td>-30</td>
</tr>
<tr>
<td>Middle-Opportunity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material Recording, Scheduling, Dispatching, and Distributing Workers</td>
<td>1,340</td>
<td>$26,395</td>
<td>2.4%</td>
<td>-140</td>
</tr>
<tr>
<td>Motor Vehicle Operators</td>
<td>760</td>
<td>$25,128</td>
<td>6.9%</td>
<td>0</td>
</tr>
<tr>
<td>Nursing, Psychiatric, and Home Health Aides</td>
<td>1,000</td>
<td>$20,545</td>
<td>-2.4%</td>
<td>420</td>
</tr>
<tr>
<td>Animal Care and Service Workers</td>
<td>170</td>
<td>$20,690</td>
<td>7.6%</td>
<td>90</td>
</tr>
<tr>
<td>Supervisors of Food Preparation and Serving Workers</td>
<td>560</td>
<td>$22,960</td>
<td>-7.0%</td>
<td>160</td>
</tr>
<tr>
<td>Metal Workers and Plastic Workers</td>
<td>150</td>
<td>$27,877</td>
<td>-17.7%</td>
<td>20</td>
</tr>
<tr>
<td>Building Cleaning and Pest Control Workers</td>
<td>1,540</td>
<td>$18,942</td>
<td>7.4%</td>
<td>-60</td>
</tr>
<tr>
<td>Cooks and Food Preparation Workers</td>
<td>1,490</td>
<td>$19,631</td>
<td>19.0%</td>
<td>50</td>
</tr>
<tr>
<td>Material Moving Workers</td>
<td>970</td>
<td>$18,867</td>
<td>5.5%</td>
<td>40</td>
</tr>
<tr>
<td>Grounds Maintenance Workers</td>
<td>520</td>
<td>$19,120</td>
<td>3.0%</td>
<td>60</td>
</tr>
<tr>
<td>Low-Opportunity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food and Beverage Serving Workers</td>
<td>3,060</td>
<td>$18,308</td>
<td>23.2%</td>
<td>180</td>
</tr>
<tr>
<td>Personal Appearance Workers</td>
<td>100</td>
<td>$19,870</td>
<td>-9.0%</td>
<td>-30</td>
</tr>
<tr>
<td>Assemblers and Fabricators</td>
<td>340</td>
<td>$18,797</td>
<td>-13.5%</td>
<td>70</td>
</tr>
<tr>
<td>Retail Sales Workers</td>
<td>3,920</td>
<td>$19,432</td>
<td>9.7%</td>
<td>-60</td>
</tr>
<tr>
<td>Textile, Apparel, and Furnishings Workers</td>
<td>130</td>
<td>$18,440</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Agricultural Workers</td>
<td>840</td>
<td>$17,920</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Other Food Preparation and Serving Related Workers</td>
<td>470</td>
<td>$17,787</td>
<td>19.0%</td>
<td>-200</td>
</tr>
<tr>
<td>Other Transportation Workers</td>
<td>100</td>
<td>$19,850</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Helpers, Construction Trades</td>
<td>250</td>
<td>$18,816</td>
<td>-15.6%</td>
<td>-210</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics; Integrated Public Use Microdata Series. Universe includes all nonfarm wage and salary jobs for which the typical worker is estimated to have a high school degree or less. Note: Analysis reflects the Las Cruces, NM Metropolitan Statistical Area as defined by the U.S. Office of Management and Budget. Dollar values are in 2011 dollars. “NA” indicates that no data are available.
### Economic vitality

### High-opportunity occupations for workers with more than a high school diploma but less than a bachelor’s degree

Supervisors protective service workers, drafters, engineering technicians, and mapping technicians are high-opportunity jobs for workers with more than a high school diploma but less than a bachelor’s degree

#### Occupation Opportunity Index: Occupations by Opportunity Level for Workers with More Than a High School Diploma but Less Than a Bachelor’s Degree

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment (2011)</th>
<th>Job Quality</th>
<th>Growth</th>
<th>% Change in Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Median Annual Wage</td>
<td>Real Wage Growth</td>
<td>Change in Employment</td>
</tr>
<tr>
<td>Supervisors of Protective Service Workers</td>
<td>120</td>
<td>$61,610</td>
<td>-9.5%</td>
<td>10</td>
</tr>
<tr>
<td>Drafters, Engineering Technicians, and Mapping Technicians</td>
<td>450</td>
<td>$56,412</td>
<td>7.4%</td>
<td>90</td>
</tr>
<tr>
<td>Supervisors of Installation, Maintenance, and Repair Workers</td>
<td>150</td>
<td>$48,380</td>
<td>10.1%</td>
<td>-50</td>
</tr>
<tr>
<td>Other Education, Training, and Library Occupations</td>
<td>1,180</td>
<td>$27,465</td>
<td>85.4%</td>
<td>140</td>
</tr>
<tr>
<td>Legal Support Workers</td>
<td>200</td>
<td>$33,593</td>
<td>2.1%</td>
<td>140</td>
</tr>
<tr>
<td>Supervisors of Office and Administrative Support Workers</td>
<td>830</td>
<td>$35,310</td>
<td>-7.8%</td>
<td>350</td>
</tr>
<tr>
<td>Law Enforcement Workers</td>
<td>1,380</td>
<td>$37,192</td>
<td>-16.9%</td>
<td>660</td>
</tr>
<tr>
<td>Electrical and Electronic Equipment Mechanics, Installers, and Repairers</td>
<td>100</td>
<td>$39,906</td>
<td>-16.7%</td>
<td>-10</td>
</tr>
<tr>
<td>Supervisors of Sales Workers</td>
<td>740</td>
<td>$32,470</td>
<td>9.1%</td>
<td>90</td>
</tr>
<tr>
<td>Health Technologists and Technicians</td>
<td>670</td>
<td>$37,398</td>
<td>-15.9%</td>
<td>110</td>
</tr>
<tr>
<td>Secretaries and Administrative Assistants</td>
<td>2,160</td>
<td>$27,617</td>
<td>-3.3%</td>
<td>390</td>
</tr>
<tr>
<td>Other Healthcare Support Occupations</td>
<td>860</td>
<td>$26,267</td>
<td>3.5%</td>
<td>340</td>
</tr>
<tr>
<td>Supervisors of Personal Care and Service Workers</td>
<td>70</td>
<td>$26,420</td>
<td>5.7%</td>
<td>10</td>
</tr>
<tr>
<td>Financial Clerks</td>
<td>1,800</td>
<td>$26,370</td>
<td>3.5%</td>
<td>350</td>
</tr>
<tr>
<td>Information and Record Clerks</td>
<td>2,950</td>
<td>$23,667</td>
<td>1.4%</td>
<td>990</td>
</tr>
<tr>
<td>Other Office and Administrative Support Workers</td>
<td>1,270</td>
<td>$22,322</td>
<td>13.1%</td>
<td>-210</td>
</tr>
<tr>
<td>Communications Equipment Operators</td>
<td>110</td>
<td>$19,200</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics; Integrated Public Use Microdata Series. Universe includes all nonfarm wage and salary jobs for which the typical worker is estimated to have more than a high school diploma but less than a bachelor's degree.

Note: Analysis reflects the Las Cruces, NM Metropolitan Statistical Area as defined by the U.S. Office of Management and Budget. Dollar values are in 2011 dollars. "NA" indicates that no data are available.
Economic vitality

High-opportunity occupations for workers with a bachelor’s degree or higher

Engineers, and lawyers, judges and related workers are high-opportunity occupations for workers with a bachelor’s degree or higher

Occupation Opportunity Index: All Levels of Opportunity for Workers with a Bachelor’s Degree or Higher

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineers</td>
<td>1,150</td>
<td>$84,852</td>
<td>-1.8%</td>
<td>480</td>
<td>71.6%</td>
<td>1.66</td>
</tr>
<tr>
<td>Lawyers, Judges, and Related Workers</td>
<td>190</td>
<td>$82,000</td>
<td>12.2%</td>
<td>50</td>
<td>35.7%</td>
<td>1.60</td>
</tr>
<tr>
<td>Other Management Occupations</td>
<td>1,090</td>
<td>$74,740</td>
<td>12.5%</td>
<td>440</td>
<td>67.7%</td>
<td>1.45</td>
</tr>
<tr>
<td>Health Diagnosing and Treating Practitioners</td>
<td>2,520</td>
<td>$72,737</td>
<td>5.6%</td>
<td>970</td>
<td>62.6%</td>
<td>1.40</td>
</tr>
<tr>
<td>Preschool, Primary, Secondary, and Special Education School Teachers</td>
<td>3,220</td>
<td>$61,853</td>
<td>61.9%</td>
<td>890</td>
<td>38.2%</td>
<td>1.35</td>
</tr>
<tr>
<td>Operations Specialties Managers</td>
<td>290</td>
<td>$74,072</td>
<td>22.1%</td>
<td>-270</td>
<td>-48.2%</td>
<td>1.25</td>
</tr>
<tr>
<td>Computer Occupations</td>
<td>990</td>
<td>$64,788</td>
<td>9.9%</td>
<td>490</td>
<td>98.0%</td>
<td>1.09</td>
</tr>
<tr>
<td>Top Executives</td>
<td>1,060</td>
<td>$65,840</td>
<td>-2.2%</td>
<td>180</td>
<td>20.5%</td>
<td>1.02</td>
</tr>
<tr>
<td>Media and Communication Workers</td>
<td>110</td>
<td>$39,525</td>
<td>104.6%</td>
<td>70</td>
<td>175.0%</td>
<td>0.76</td>
</tr>
<tr>
<td>Other Sales and Related Workers</td>
<td>100</td>
<td>$38,550</td>
<td>90.2%</td>
<td>60</td>
<td>150.0%</td>
<td>0.69</td>
</tr>
<tr>
<td>Business Operations Specialists</td>
<td>1,480</td>
<td>$51,195</td>
<td>-7.9%</td>
<td>840</td>
<td>131.3%</td>
<td>0.56</td>
</tr>
<tr>
<td>Other Teachers and Instructors</td>
<td>70</td>
<td>$45,693</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.41</td>
</tr>
<tr>
<td>Financial Specialists</td>
<td>580</td>
<td>$46,638</td>
<td>-5.3%</td>
<td>50</td>
<td>9.4%</td>
<td>0.24</td>
</tr>
<tr>
<td>Librarians, Curators, and Archivists</td>
<td>130</td>
<td>$41,618</td>
<td>-10.8%</td>
<td>100</td>
<td>333.3%</td>
<td>0.24</td>
</tr>
<tr>
<td>Media and Communication Equipment Workers</td>
<td>90</td>
<td>$41,047</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.17</td>
</tr>
<tr>
<td>Sales Representatives, Wholesale and Manufacturing</td>
<td>300</td>
<td>$39,080</td>
<td>24.3%</td>
<td>-100</td>
<td>-25.0%</td>
<td>0.13</td>
</tr>
<tr>
<td>Counselors, Social Workers, and Other Community and Social Service Specialists</td>
<td>1,140</td>
<td>$38,349</td>
<td>1.9%</td>
<td>610</td>
<td>115.1%</td>
<td>0.12</td>
</tr>
<tr>
<td>Sales Representatives, Services</td>
<td>330</td>
<td>$33,929</td>
<td>-9.1%</td>
<td>110</td>
<td>50.0%</td>
<td>-0.21</td>
</tr>
</tbody>
</table>

High-Oppportunity

Middle-Oppportunity

Source: U.S. Bureau of Labor Statistics; Integrated Public Use Microdata Series. Universe includes all nonfarm wage and salary jobs for which the typical worker is estimated to have a bachelor's degree or higher. Note: Analysis reflects the Las Cruces, NM Metropolitan Statistical Area as defined by the U.S. Office of Management and Budget. Dollar values are in 2011 dollars. "NA" indicates that no data are available.
Readiness
Readiness Highlights

How prepared are the region’s residents for the 21st century economy?

• There is a looming skills and education gap for Latino and Native American residents, whose rate of bachelor’s degree attainment is lower than the share of future jobs statewide that will require that level of education.

• The percentage of three- and four-year-olds in Las Cruces enrolled in school is significantly lower than both the state and the nation as a whole.

• Latinos are more likely than any other racial/ethnic group to lack health insurance.

Percent of adults with at least a bachelor’s degree: 34%

Percent of Latino residents without health insurance: 29%

Percent of Latino adults without a high school diploma: 24%
Readiness

Lower education attainment among Latino and Native American adults

Noticeable gaps exist in educational attainment among racial/ethnic groups in the city. Nearly a quarter of Latino and Native American adults do not have a high school diploma, as compared with only 5 percent of White adults and 2 percent of Black adults.

Examining which groups have college degrees, the city’s Asian population is highly educated – 65 percent of adults have a college degree. The city’s Black and White adults also have high levels of educational attainment – 46 and 47 percent, respectively, have at least a bachelor’s degree. Only 20 percent of Latino adults and 27 percent of Native American adults have a college degree in Las Cruces.

Source: U.S. Census Bureau. Universe includes all persons age 25 or older.
Note: Data represent a 2010 through 2014 average. “White” is defined as non-Hispanic White and “Latino” includes all who identify as being of Hispanic origin. All other racial/ethnic groups include any Latinos who identify with that particular racial category.
Las Cruces adults are more likely to hold a bachelor's degree or higher than other New Mexicans and the nation as a whole. While 29 percent of all Americans and 26 percent of all New Mexico residents have earned at least a bachelor's degree, 34 percent of Las Cruces residents have at least a bachelor's degree.

**Educational attainment in the city is higher than the state and the nation**

**Percent of the Population with a Bachelor's Degree or Higher, 2014**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>29%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>26%</td>
</tr>
<tr>
<td>Doña Ana County</td>
<td>27%</td>
</tr>
<tr>
<td>Las Cruces</td>
<td>34%</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau. Universe includes all persons age 25 or older. Note: Data represent a 2010 through 2014 average.*
Readiness

A potential education and skills gap for Latino and Native American males

By 2020, 27 percent of jobs in New Mexico will require a bachelor’s degree or higher, yet not all Las Cruces residents are prepared to enter those jobs.

While over 74 percent of Asian men, 65 percent of Black women, and 57 percent of Asian women have obtained a bachelor’s degree, attainment is notably lower for Latinos and Native Americans. Only 18 percent of Latino men, 23 percent of Latina women, and 24 percent of Native American women have a bachelor’s degree.

Source: Georgetown Center for Education and the Workforce; U.S. Census Bureau. Universe for education levels of workers includes all persons age 25 or older. Note: “White” is defined as non-Hispanic white and “Latino” includes all who identify as being of Hispanic origin. All other racial/ethnic groups include any Latinos who identify with that particular racial category. Data on education levels by race/ethnicity represents a 2010 through 2014 average for Las Cruces while data on educational requirements for jobs in 2020 are based on statewide projections for New Mexico.
Readiness

Eight percent of youth are disconnected from work or school

The share of Las Cruces youth who are “disconnected youth” – young people ages 16- to 19-years-old not in work or school – is similar to the national rate as well as that of the county and state. In Las Cruces, and nationally, 8 percent of youth are disconnected from school or employment.

Rate of youth disconnectedness is similar to the national average
Percent of 16- to 19-Year-Olds Not in Work or School, 2014

- United States: 8%
- New Mexico: 10%
- Doña Ana County: 9%
- Las Cruces: 8%

Source: U.S. Census Bureau.
Note: Data represent a 2010 through 2014 average.
Readiness
Relatively low pre-school enrollment

Three- and four- year-olds in Las Cruces are much less likely to be enrolled in pre-school than children their age across the state of New Mexico. While 47 percent of all American three- and four-year-olds and 40 percent of three- and four-year-olds in the state are enrolled in school, only 31 percent of Las Cruces children in this age range are enrolled in pre-school.

Below average pre-school enrollment
Percent of three-to-four-Year-Olds Enrolled in School, 2014

<table>
<thead>
<tr>
<th>Location</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>47%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>40%</td>
</tr>
<tr>
<td>Doña Ana County</td>
<td>29%</td>
</tr>
<tr>
<td>Las Cruces</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau. Universe includes all persons ages 3 and 4.
Note: Data represent a 2010 through 2014 average.
Readiness

Fairly uneven educational outcomes across racial groups

Research by Robert Balfanz of Johns Hopkins University stresses the importance of key transitions and academic behaviors that predict whether or not students will be academically successful and graduating from high school on time. Among them are reading proficiency and attendance. Third grade reading proficiency levels are low for Black and Native American students in Las Cruces: only 21 percent of Black and Native American students, and 26 percent of Latino students read with sufficient proficiency at the end of third grade.

Latino children living in the city attend pre-kindergarten or kindergarten at lower levels than other students. Only 42 percent of Latino children access the critical formal early learning foundation provided by pre-kindergarten and kindergarten.

There are racial disparities across indicators of early childhood learning
Share Achieving Third Grade Reading Proficiency, 2015

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>27%</td>
</tr>
<tr>
<td>White</td>
<td>37%</td>
</tr>
<tr>
<td>Black</td>
<td>21%</td>
</tr>
<tr>
<td>Latino</td>
<td>26%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>50%</td>
</tr>
<tr>
<td>Native American</td>
<td>21%</td>
</tr>
</tbody>
</table>

Share of three- to five-year-olds who are Enrolled in Nursery School, Preschool or Kindergarten, 2010-2014

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>43%</td>
</tr>
<tr>
<td>White</td>
<td>51%</td>
</tr>
<tr>
<td>Latino</td>
<td>42%</td>
</tr>
</tbody>
</table>

Source: diversitydatakids.org calculations of data from the American Community Survey, 2010-2014 and the New Mexico Public Education Department.
Note: Data for some racial/ethnic groups are excluded due to data availability. Estimates for school enrollment for 3- to 5-year-olds are derived from survey data and subject to sampling variability; please interpret accordingly. Estimates based on survey data are not reported if the margin of error at the 95 percent confidence interval is one-third of the estimate value or more.
A significant number of Las Cruces residents lack health insurance coverage, but this figure varies across racial/ethnic groups. While 14 percent of White adults lack health insurance, 29 percent of Latino adults, 25 percent of Native American adults, and 20 percent of Black adults lack coverage.

Source: U.S. Census Bureau. Universe includes the civilian noninstitutionalized population ages of 18 through 64.
Note: Data represent a 2010 through 2014 average. “White” is defined as non-Hispanic white and “Latino” includes all who identify as being of Hispanic origin. All other racial/ethnic groups include any Latinos who identify with that particular racial category.
Readiness

More elderly residents live alone in the city compared to the county

Roughly the same share of Las Cruces residents ages 65 or older live alone compared to the rest of the state and the nation as a whole. Twenty-nine percent of residents ages 65 or older in Las Cruces live alone, and 27 percent of residents in this age group in New Mexico and the nation as a whole live alone.

Source: U.S. Census Bureau. Universe includes all persons ages 65 or older.
Note: Data represent a 2010 through 2014 average.
Connectedness
Connectedness Highlights
Are the region's residents and neighborhoods connected to one another and to the city's assets and opportunities?

- Although segregation has declined slightly over time, Black-White and White-Latino segregation persists.
- Native Americans are the most likely to live in limited supermarket access areas.
- Las Cruces has a larger share of households that are rent burdened than the county, state of New Mexico, and nation as a whole.

Share of Whites who would need to move to achieve integration with Native Americans: 50%
Percent of Native Americans with limited supermarket access: 28%
Percent of renters who pay too much for housing: 58%
connectedness

Residential segregation is relatively low in Las Cruces

Las Cruces is less segregated by race/ethnicity than New Mexico and the nation as a whole, and segregation has declined over time as the city has become more diverse.

Segregation is measured by the entropy index, which ranges from a value of 0, meaning that all census tracts have the same racial/ethnic composition as the entire metropolitan area (maximum integration), to a high of 1, if all census tracts contained one group only (maximum segregation).

Residential segregation in Las Cruces is lower than the national average

Residential Segregation, 1980 to 2014

Source: U.S. Census Bureau; Geolytics.
Note: Data for 2014 represents a 2010 through 2014 average.
Connectededness

Segregation is high and increasing between Native Americans and other groups

While racial segregation overall has been on the decline in Las Cruces, it remains high between some population groups, and is increasing for others.

The dissimilarity index estimates the share of a given racial/ethnic group who would need to move to a new neighborhood to achieve complete integration with the other group.

This index shows that Native American segregation remains high with every racial/ethnic group. At least 50 percent of Native American residents in Las Cruces would need to move to achieve integration with Blacks, Asian or Pacific Islanders, or Whites.

Source: U.S. Census Bureau; Geolytics, Inc.
Note: Data for 2014 represents a 2010 through 2014 average.
Connectedness

Concentrated poverty a challenge for communities of color

The percent of the population in Las Cruces that lives below the poverty level is 24 percent, but poverty varies by neighborhood. As the maps shows, the areas with the highest poverty are located in the central, southwestern, and northernmost parts of the city – particularly in tracts with high concentrations of people of color.

Areas of high poverty (40 percent or more) are found primarily in the southwestern part of the city.

Source: U.S. Census Bureau; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community.

Note: Universe includes all persons not in group quarters. Data represent a 2010 through 2014 average.
Connectedness

Low-income workers are more likely to rely on the city’s transit system to get to work

Income plays a role in determining who uses the city’s public transit system to get to work. Low-income households are more likely to be dependent on public transit than higher-income workers in Las Cruces. Use of public transportation declines as earnings increase. However, overall public transit use in Las Cruces is very low.

Households in Las Cruces are as likely to own a vehicle as households elsewhere in the state, and slightly more likely than in the nation as a whole.

Source: U.S. Census Bureau. Universe includes all households (no group quarters). Note: Data represent a 2010 through 2014 average.
Connectedness

Challenges to car access in central and western areas of the city

In a city where people rely heavily on driving, the vast majority of households (94 percent) have access to at least one vehicle. But access to a vehicle remains a challenge for households in many areas of Las Cruces, with a particular concentration of carless households around Fairacres and Mesilia Park.

Source: U.S. Census Bureau; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community.

Note: Universe includes all households (no group quarters). Data represent a 2010 through 2014 average.
Connectedness

Longer commute times for residents outside of the city center

Workers with the longest commute times tend to live in the northeast part of the city. Conversely, workers in University Park tend to have the shortest commute times.

Source: U.S. Census Bureau; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community. Universe includes all persons ages 16 or older who work outside of home. Note: Data represent a 2010 through 2014 average.
Renters in Las Cruces are more likely to be burdened than renters elsewhere in New Mexico, or the nation overall. Las Cruces has a higher share of households that are rent burdened (58 percent) and severely rent burdened (31 percent) than New Mexico and the nation as a whole.

Rent burdened is defined as spending more than 30 percent of household income on housing costs while severely rent burdened means spending more than half of income on housing costs.

### A large share of Las Cruces renters are housing burdened

**Share of Households that Are Rent Burdened, 2014**

<table>
<thead>
<tr>
<th>Region</th>
<th>Rent Burdened</th>
<th>Severely Rent Burdened</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>52%</td>
<td>27%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>51%</td>
<td>26%</td>
</tr>
<tr>
<td>Doña Ana County</td>
<td>57%</td>
<td>30%</td>
</tr>
<tr>
<td>Las Cruces</td>
<td>58%</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau. Universe includes renter-occupied households with cash rent (no group quarters).
Note: Data represent a 2010 through 2014 average.
Connectedness
Access to healthy food varies by income

Limited Supermarket Access areas (LSAs) are defined as areas where residents must travel significantly farther to reach a supermarket than the “comparatively acceptable” distance traveled by residents in well-served areas with similar population densities and car ownership rates.

In Las Cruces, those living above 200 percent of poverty are more likely to live in limited food access areas than those at or above that poverty threshold.

A disproportionate share of residents living above 200% of poverty are in limited supermarket areas

Source: The Reinvestment Fund, 2014 LSA analysis; U.S. Census Bureau. Universe includes all persons not in group quarters.

Note: Data on population by poverty status reflects a 2010 through 2014 average.
Native American residents have an above-average likelihood of living in an area with limited supermarket access. In fact, Native American residents in Las Cruces are more than two and a half times as likely as White residents to live in a limited supermarket access area.

Source: The Reinvestment Fund, 2014 LSA analysis; U.S. Census Bureau.
Note: Data on population by race/ethnicity reflects a 2010 through 2014 average.
Connect edness
Healthy food access varies by neighborhood

For the most part, Limited Supermarket Access areas (LSAs) in Las Cruces are found in the northeastern and southern portions of the city.

The LSA census tract in the southeastern part of the city is sparsely populated with a relatively large share of residents who are White. The LSA tracts in the northeastern part of the city are far more populated, with one tract having a larger White share of the population and the others having a population that is mostly Latino along with a substantial portion of the city’s Native American population.

Respects living in the northeastern and southwestern portions of the city have less access to healthy food
Percent People of Color by Census Block Group and Limited Supermarket Access, 2014

- Less than 54%
- 54% to 61%
- 61% to 70%
- 70% to 80%
- 80% or more

Source: The Reinvestment Fund, 2014 LSA analysis; U.S. Census Bureau; TomTom, ESRI, HERE, Delorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community.
Note: Data on population by race/ethnicity reflects a 2010 through 2014 average.
Economic benefits
Economic benefits

Highlights

What are the benefits of racial economic inclusion to the broader economy?

• New Mexico’s economy could have been $29 billion stronger in 2014 – a 30 percent increase – if its racial gaps in income had been closed.

• In New Mexico, two-thirds of the racial income gap between Latinos and Whites is due to differences in wages, while one-third is due to differences in employment.

• With racial equity in income in Las Cruces, Native Americans would see their average annual income grow by $19,800 while Latinos would see an average increase of $14,800.

Equity dividend for New Mexico:

$29 billion

Average annual income gain with racial equity for people of color in Las Cruces:

$14k
Economic benefits of inclusion

A potential $29 billion per year GDP boost from racial equity

New Mexico stands to gain a great deal from addressing racial inequities. The state’s economy could have been $29 billion stronger in 2014 if its racial gaps in income had been closed: a 30 percent increase.

Using data on income by race, we calculated how much higher total economic output would have been in 2014 if all racial groups who currently earn less than Whites had earned similar average incomes as their White counterparts, controlling for age.

We also examined how much of the state’s racial income gap between people of color and Whites was due to differences in wages and how much was due to differences in employment (measured by hours worked). Nationally, 64 percent of the racial income gap between all people of color and Whites is due to wage differences. In New Mexico, the share of the gap attributable to wages is very similar (63 percent).

Source: Integrated Public Use Microdata Series; Bureau of Economic Analysis.
Note: Data reflect the state of New Mexico and represent a 2010 through 2014 average. Values are in 2014 dollars.
Economic benefits of inclusion

Average income for people of color would increase by about 70 percent with racial equity

People of color in New Mexico as a whole would see their incomes grow by 70 percent with racial equity compared with 54 percent nationwide.

Native Americans would see the largest gain in average annual income at 119 percent, while Asians or Pacific Islanders would see only a 20 percent gain.

Income gains were estimated by calculating the percentage increase in income for each racial/ethnic group if they had the same average annual income (and income distribution) and hours of work as non-Hispanic Whites, controlling for age.

Native Americans in New Mexico would experience the largest income increases with racial equity.

Statewide Percentage Gain in Income with Racial Equity by Race/Ethnicity, 2014

Source: Integrated Public Use Microdata Series. Universe includes all persons ages 16 and older.
Note: Data reflect the state of New Mexico and represent a 2010 through 2014 average.
Economic benefits of inclusion

Average income for Native Americans would increase by over $21,000 per year

On average, people of color in New Mexico would see their incomes grow by $16,200 with racial equity. Native American average incomes would rise the most, by about $21,200, while average incomes for Latinos would rise by about $16,000. African Americans, Asian or Pacific Islanders, and those of mixed or other races would see smaller, but still substantial increases.
Economic benefits of inclusion

Most of the potential income gains would come from closing the racial wage gap, but employment differences matter too

We also examined how much of the state’s racial income gap was due to differences in wages and how much was due to differences in employment (measured by hours worked). In New Mexico, 63 percent of the racial income gap is due to differences in wages, while 37 percent is due to differences in employment.

The share of the racial income gap attributable to wages is largest for Latinos, followed by Asian or Pacific Islanders. For Native Americans, the racial income gap is equally driven by differences in wages and employment. African Americans are the only group for which over half of the gap is attributable to differences in employment.

Source: Integrated Public Use Microdata Series. Universe includes all persons ages 16 and older.
Note: Data reflect the state of New Mexico and represent a 2010 through 2014 average.
Economic benefits of inclusion

Income gains with racial equity are likely to be smaller in Las Cruces than for the state overall – but still substantial.

Although there is insufficient data to conduct a full analysis of gains in income and GDP with racial equity in Las Cruces, a comparison of average annual income by race/ethnicity for the population 16 and older suggests that gains in the city would likely be smaller than for the state overall – but still substantial.

If average annual income for groups of color rose to the levels we observe for non-Hispanic Whites, we would anticipate that average annual income for all people of color combined would rise by about $14,000, from about $22,100 to $36,100.

Native Americans would see the largest gain of about $19,800, followed by Latinos at $14,800, and then Asian or Pacific Islanders at $5,600. The incomes of African Americans would not be expected to rise as their average levels are already similar to the White population.

Source: U.S. Census Bureau. Universe includes all persons ages 16 and older.

Note: Data represent a 2010 through 2014 average. “White” is defined as non-Hispanic White and “Latino” includes all who identify as being of Hispanic origin. All other racial/ethnic groups include any Latinos who identify with that particular racial category. Values are in 2014 dollars.
Implications
Implications
Advancing racial equity and inclusive growth

The diverse population of Las Cruces is a major economic asset that can help the city compete in the global economy, if the city’s leaders invest in ensuring all of its residents can contribute their talent and creativity to building a strong next economy.

Business, community, and political leaders must work together to connect communities of color to jobs, business opportunities, quality education and career training, and healthy homes and neighborhoods. Tremendous work is already underway, which can be strengthened and built upon. PolicyLink and PERE suggest the following areas of focus to ensure all residents – particularly low-income residents and communities of color – contribute to and benefit from the city’s vibrant, equitable economic future.

Grow good jobs
Job growth in the region has consistently been higher than both the state and nation since 1979. However, unemployment – particularly in communities of color – is still above the national average. Las Cruces needs to create a significant number of new, well-paying jobs – and ensure that the city’s growing labor force (majority youth of color) are connected to those jobs. This entails a two-pronged approach. First, economic and workforce development efforts should focus on entrepreneurship and business development in industries that are growing and tend to pay good wages.

Second, the jobs that are being created need to be good jobs. Currently, almost half of the household income in the city is earned by the top 20 percent of residents. Good jobs that are accessible to workers of color and other marginalized workers who are likely to live in poor, isolated neighborhoods form the bedrock of equitable cities. A job that pays enough to support one’s family and put some away for the future, provides health care, other benefits such as employer-sponsored retirement programs, and safe, dignified, family-friendly working conditions is a universal foundation for well-being and prosperity. Las Cruces should target its economic development efforts to grow high-road, inclusive businesses in high-opportunity sectors; leverage public investments to help entrepreneurs of color and triple-bottom-line businesses grow more good jobs; and set high standards for wages and benefits for all workers.

Increase the economic security and mobility of vulnerable families and workers
Economic security – having enough money to cover basic needs and enough savings to weather setbacks and invest for the future – is critical to the health and well-being of families, neighborhoods, and local economies. In Las Cruces, 29 percent of workers are still earning less than 150 percent of the federal poverty level. The city can make strides to reduce this insecurity and strengthen its economy by connecting vulnerable residents with jobs and opportunities to save and build assets, removing discriminatory barriers to employment, and protecting families from predatory financial practices.

Approaches to addressing predatory lending
Implications

Advancing racial equity and inclusive growth

practices aim to monitor and protect consumers from high-cost lenders by capping interest rates on payday loans, auto-title loans, and short-term installment loans. The Federal Consumer Financial Protection Bureau (CFPB) and states are currently designing mechanisms that curb predatory lending. Local governments are also acting to limit the proliferation of payday lenders and check-cashers by exercising their licensing and zoning authority. San Francisco, for example, enacted permanent zoning restrictions to create a restricted-use district; high-cost lenders are prohibited from operating in designated neighborhoods that already have a high concentration of payday lenders or check-cashers.

Social loan programs are an innovative approach to expanding safe and affordable access to credit. For example, the Mission Asset Fund (MAF), based in San Francisco, has created a zero-interest, zero-fee social loan program called Lending Circles. The Lending Circles model is based on informal peer-to-peer lending practices that are common throughout the world, where friends and families come together to borrow and lend each other money as a community.

Cultivate homegrown talent through a strong cradle-to-career pipeline

A skilled workforce is the key to city success in the global economy, so Las Cruces and other cities must prioritize equipping youth of color with the skills to excel in the 21st century workforce. By 2020, 27 percent of jobs in the state of New Mexico will require at least an bachelor’s degree, but only 20 percent of Latino residents are currently prepared for these jobs. Las Cruces can nurture homegrown talent by taking a cradle-to-career approach that includes a strong workforce system to connect adult workers – including those facing barriers to employment – with employment opportunities.

Although the scale of the solutions required to address concentrated unemployment will vary, in regions where both racial and spatial inequality in employment are high, workforce development and job access strategies that target a certain number of high-unemployment neighborhoods could be an effective way to maximize limited resources and achieve greater scale. In recent years, New Orleans, Louisiana, and North Minneapolis, Minnesota, have launched geographically targeted jobs strategies to address high joblessness in their communities of color.

Policymakers and advocates may also want to explore implementing sectoral workforce strategies that connect workers with low-education levels to high-quality training programs that lead to gainful employment in growing sectors of the economy. Such approaches are a win-win for employers who need access to skilled workers as well as workers seeking employment. Ensure public investments in roads, transit, sewers, and other community infrastructure are made in ways that create job opportunities for the underemployed and unemployed. This can be done by targeting investments in neighborhoods where unemployment and poverty are high and by implementing local and targeted hiring and training strategies.

Remove barriers and implement strategies to help minority-owned businesses expand. This
Implications

Advancing racial equity and inclusive growth

can create employment pathways for people who are jobless because these firms tend to hire more employees of color and people living in the community.

Ensure meaningful community participation, voice, and leadership
Underlying each of the issues confronting Las Cruces – those cited here as well as others – is the most vital component in advancing racial equity: the leadership and engagement of community members. If policy strategies are to be effective, they must be grounded in the wisdom and experiences of people of color and immigrants who have lived through the circumstances that must be changed. Intentional strategies are needed to build authentic avenues for increased participation in all aspects of the political process – from the basic act of voting to serving on boards and commissions to being elected as political leaders. Without their involvement and leadership, meaningful progress will be difficult to achieve.
Data and methods

Data source summary and regional geography

Selected terms and general notes
- Broad racial/ethnic origin
- Nativity
- Detailed racial/ethnic ancestry
- Other selected terms
- General notes on analyses

Adjustments made to census summary data on race/ethnicity by age

Adjustments made to demographic projections
- National projections
- County and regional projections

Estimates and adjustments made to BEA data on GDP
- Adjustments at the state and national levels
- County and metropolitan area estimates

Assembling a complete dataset on employment and wages by industry

Growth in jobs and earnings by industry wage level, 1990 to 2015

Analysis of occupations by opportunity level

Analysis of access to healthy food

Measures of diversity and segregation

Estimates of GDP without racial gaps in income
Data and methods

Data source summary and regional geography

Unless otherwise noted, all of the data and analyses presented in this profile are the product of PolicyLink and the USC Program for Environmental and Regional Equity (PERE), and reflect the Las Cruces, New Mexico. The specific data sources are listed in the table shown here.

While much of the data and analysis presented in this profile are fairly intuitive, in the following pages we describe some of the estimation techniques and adjustments made in creating the underlying database, and provide more detail on terms and methodology used. Finally, the reader should bear in mind that while only a single city is profiled here, many of the analytical choices in generating the underlying data and analyses were made with an eye toward replicating the analyses in other cities and regions and the ability to update them over time. Thus, while more regionally specific data may be available for some indicators, the data in this profile are drawn from our regional equity indicators database that provides data that are comparable and replicable over time.

<table>
<thead>
<tr>
<th>Source</th>
<th>Dataset</th>
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</thead>
<tbody>
<tr>
<td>Integrated Public Use Microdata Series (IPUMS)</td>
<td>2010 American Community Survey, 5-year microdata sample 2010 American Community Survey, 1-year microdata sample</td>
</tr>
<tr>
<td>Woods &amp; Poole Economics, Inc.</td>
<td>2016 Complete Economic and Demographic Data Source</td>
</tr>
<tr>
<td>U.S. Bureau of Economic Analysis</td>
<td>Gross Domestic Product by State Gross Domestic Product by Metropolitan Area Local Area Personal Income Accounts, CA30: Regional Economic Profile</td>
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<tr>
<td>Reinvestment Fund</td>
<td>2014 Analysis of Limited Supermarket Access (LSA)</td>
</tr>
<tr>
<td>The diversitydatakids.org Project</td>
<td>W.K. Kellogg Foundation Priority Communities Dashboard Database</td>
</tr>
<tr>
<td>New Mexico Department of Workforce Solutions</td>
<td>Industry Employment Projections Occupation Employment Projections</td>
</tr>
<tr>
<td>Georgetown University Center on Education and the Workforce</td>
<td>Updated projections of education requirements of jobs in 2020, originally appearing in: Recovery: Job Growth And Education Requirements Through 2020; State Report</td>
</tr>
</tbody>
</table>
Data and methods

Selected terms and general notes

Broad racial/ethnic origin
Unless otherwise noted, the categorization of people by race/ethnicity is based on their response to two separate questions on race and Hispanic origin, and people are placed in six mutually exclusive categories as follows:

• “White” and “non-Hispanic White” are used to refer to all people who identify as White alone and do not identify as being of Hispanic origin.
• “Black” and “African American” are used to refer to all people who identify as Black or African American alone and do not identify as being of Hispanic origin.
• “Latino” refers to all people who identify as being of Hispanic origin, regardless of racial identification.
• “Asian American and Pacific Islander,” “Asian or Pacific Islander,” “Asian,” and “API” are used to refer to all people who identify as Asian American or Pacific Islander alone and do not identify as being of Hispanic origin.
• “Native American” and “Native American and Alaska Native” are used to refer to all people who identify as Native American or Alaskan Native alone and do not identify as being of Hispanic origin.

However, much of the analysis by race/ethnicity presented in this profiles relies upon the 2014 5-year American Community Survey (ACS) summary file. In most of the ACS tables that provide socioeconomic data disaggregated by race/ethnicity, those who identify Hispanic or Latino can only be excluded from the White population. As indicated in the note beneath the relevant figures, this means that the data presented for the Black, Asian or Pacific Islander, Native American, and Mixed/other populations may include some number of people from the Latino category. The Mixed/other category is likely to have the largest share of Latinos included in the socioeconomic data reported for them, but this really depends on the geography being examined. To provide some context when reviewing data in this profile that is not presented by the six mutually exclusive racial/ethnic categories, it may be useful to know that in the city of Las Cruces, Latinos account for 7 percent of the Black population, 4 percent of the Asian or Pacific Islander population, 30 percent of the Native American population, and 80 percent of the Mixed/other population.

Nativity
The term “U.S.-born” refers to all people who identify as being born in the United States (including U.S. territories and outlying areas), or born abroad to American parents. The term “immigrant” refers to all people who identify as being born abroad, outside of the United States, to non-American parents.

Detailed racial/ethnic ancestry
Given the diversity of ethnic origin and large presence of immigrants among the Latino and Asian populations, we present tables that
Data and methods

Selected terms and general notes

(continued)

provide detailed racial/ethnic categories within these groups. The categories, referred to as “ancestry,” are based on tables in the ACS summary file that break down the Latino, Native American, and Asian or Pacific Islander populations by more detailed racial/ethnic or tribal categories. Such detailed tables are not available for the White, Black, and Mixed/other populations.

Other selected terms

Below we provide some definitions and clarification around some of the terms used in the profile:

• The term “region” may refer to a city but typically refers to metropolitan areas or other large urban areas (e.g. large cities and counties). The terms “metropolitan area,” “metro area,” and “metro” are used interchangeably to refer to the geographic areas defined as Metropolitan Statistical Areas under the December 2003 definitions of the Office of Management and Budget (OMB).

• The term “neighborhood” is used at various points throughout the profile. While in the introductory portion of the profile this term is meant to be interpreted in the colloquial sense, in relation to any data analysis it refers to census tracts.

• The term “communities of color” generally refers to distinct groups defined by race/ethnicity among people of color.

• The term “high school diploma” refers to both an actual high school diploma as well as high school equivalency or a General Educational Development (GED) certificate.

• The term “full-time” refers to all persons who reported working at least 50 weeks and usually worked at least 35 hours per week during the 12 months prior to the survey.

General notes on analyses

Below, we provide some general notes about the analysis conducted:

• In regard to monetary measures (income, earnings, wages, etc.) the term “real” indicates the data has been adjusted for inflation. All inflation adjustments are based on the Consumer Price Index for all Urban Consumers (CPI-U) from the U.S. Bureau of Labor Statistics.
Data and methods

Adjustments made to census summary data on race/ethnicity by age

For the racial generation gap indicator, we used the U.S. Census Bureau files to generate consistent estimates of populations by race/ethnicity and age group (under 18, 18-64, and over 64 years of age) for the years 1980, 1990, 2000, and 2014 (which reflects a 2010-2014 average), at the city and county levels, which were then aggregated to the regional level and higher. The racial/ethnic groups include non-Hispanic White, non-Hispanic Black, Hispanic/Latino, non-Hispanic Asian or Pacific Islander, non-Hispanic Native American/Alaskan Native, and non-Hispanic Other (including other single race alone and those identifying as multiracial, with the latter group only appearing in 2000 and later due to a change in the survey question). While for 2000 and later years, this information is readily available in the SF1 dataset and in the ACS, for 1980 and 1990, estimates had to be made to ensure consistency over time, drawing on two different summary files for each year.

For 1980, while information on total population by race/ethnicity for all ages combined was available at the city and county levels for all the requisite groups in the STF2 dataset, for race/ethnicity by age group we had to look to the STF1 dataset, where it was only available for non-Hispanic White, non-Hispanic Black, Hispanic, and the remainder of the population. To estimate the number of non-Hispanic Asians and Pacific Islanders, non-Hispanic Native Americans, and non-Hispanic Others among the remainder for each age group, we applied the distribution of these three groups from the overall city and county populations (across all ages) to that remainder.

For 1990, the level of detail available in the underlying data differed at the city and county levels, calling for different estimation strategies. At the county level, data by race/ethnicity was taken from the STF2A dataset, while data by race/ethnicity and age was taken from the 1990 MARS file—a special tabulation of people by age, race, sex, and Hispanic origin. However, to be consistent with the way race is categorized by the OMB’s Directive 15, the MARS file allocates all persons identifying as “other race alone” or multiracial to a specific race. After confirming that population totals by county (across all ages) were consistent between the MARS file and the STF2A dataset, we calculated the number of “other race alone” or multiracial people who had been added to each racial/ethnic group in each county by subtracting the number who were reported in the STF2A dataset for the corresponding group. We then derived the share of each racial/ethnic group in the MARS file (across all ages) that was made up of “other race alone” or multiracial people and applied it to estimate the number of people by race/ethnicity and age group exclusive of “other race alone” or multiracial people and the total number of “other race alone” or multiracial people in each age group.

For the 1990 city-level estimates, all data were from the STF1 dataset, which provided counts of the total population for the six broad racial/ethnic groups required but not counts by age. Rather, age counts were only available for people by single race alone.
Data and methods

Adjustments made to census summary data on race/ethnicity by age

(including those of Hispanic origin) as well as for all people of Hispanic origin combined. To estimate the number of people by race/ethnicity and age for the six broad racial/ethnic groups that are detailed in the profile, we first calculated the share of each single-race alone group that was Hispanic based on the overall population (across all ages). We then applied it to the population counts by age and race alone to generate an initial estimate of the number of Hispanic and non-Hispanic people in each age/race alone category. This initial estimate was multiplied by an adjustment factor (specific to each age group) to ensure that the sum of the estimated number of Hispanic people across the race alone categories within each age group equated to the “actual” number of Hispanic origin by age as reported in the STF1 dataset. Finally, an Iterative Proportional Fitting (IPF) procedure was applied to ensure that our final estimate of the number of people by race/ethnicity and age was consistent with the total population by race/ethnicity (across all ages) and total population by age group (across all racial/ethnic categories) as reported in the STF1 dataset.
**Data and methods**

**Adjustments made to demographic projections**

**National projections**

National projections of the non-Hispanic White share of the population are based on the U.S. Census Bureau's 2014 National Population Projections. However, because these projections follow the OMB 1997 guidelines on racial classification and essentially distribute the other single-race alone group across the other defined racial/ethnic categories, adjustments were made to be consistent with the six broad racial/ethnic groups used in our analysis.

Specifically, we compared the percentage of the total population composed of each racial/ethnic group from the Census Bureau's Population Estimates program for 2015 (which follows the OMB 1997 guidelines) to the percentage reported in the 2015 ACS 1-year Summary File (which follows the 2000 Census classification). We subtracted the percentage derived using the 2015 Population Estimates program from the percentage derived using the 2015 ACS to obtain an adjustment factor for each group (all of which were negative, except that for the Mixed/other group) and carried this adjustment factor forward by adding it to the projected percentage for each group in each projection year. Finally, we applied the resulting adjusted projected population distribution by race/ethnicity to the total projected population from the 2014 National Population Projections to get the projected number of people by race/ethnicity in each projection year.

**County and regional projections**

Similar adjustments were made in generating county and regional projections of the population by race/ethnicity. Initial county-level projections were taken from Woods & Poole Economics, Inc. Like the 1990 MARS file described above, the Woods & Poole projections follow the OMB Directive 15-race categorization, assigning all persons identifying as other or multiracial to one of five mutually exclusive race categories: White, Black, Latino, Asian/Pacific Islander, or Native American. Thus, we first generated an adjusted version of the county-level Woods & Poole projections that removed the other or multiracial group from each of these five categories. This was done by comparing the Woods & Poole projections for 2010 to the actual results from SF1 of the 2010 Census, figuring out the share of each racial/ethnic group in the Woods & Poole data that was composed of other or mixed-race persons in 2010, and applying it forward to later projection years. From these projections, we calculated the county-level distribution by race/ethnicity in each projection year for five groups (White, Black, Latino, Asian/Pacific Islander, and Native American), exclusive of other and mixed-race people.

To estimate the county-level share of population for those classified as other or Mixed race in each projection year, we then generated a simple straight-line projection of this share using information from SF1 of the 2000 and 2010 Census. Keeping the projected other or mixed race share fixed, we allocated the remaining population share to each of the other five racial/ethnic groups by applying the racial/ethnic distribution implied...
Data and methods

*Adjustments made to demographic projections (continued)*

by our adjusted Woods & Poole projections for each county and projection year. The result was a set of adjusted projections at the county level for the six broad racial/ethnic groups included in the profile, which were then applied to projections of the total population by county from the Woods & Poole data to get projections of the number of people for each of the six racial/ethnic groups.

Finally, an Iterative Proportional Fitting (IPF) procedure was applied to bring the county-level results into alignment with our adjusted national projections by race/ethnicity described above. The final adjusted county results were then aggregated to produce a final set of projections at the regional, metro area, and state levels.
The data on national gross domestic product (GDP) and its analogous regional measure, gross regional product (GRP) – both referred to as GDP in the text – are based on data from the U.S. Bureau of Economic Analysis (BEA). However, due to changes in the estimation procedure used for the national (and state-level) data in 1997, and a lack of metropolitan area estimates prior to 2001, a variety of adjustments and estimates were made to produce a consistent series at the national, state, metropolitan-area, and county levels from 1969 to 2014.

Adjustments at the state and national levels
While data on gross state product (GSP) are not reported directly in the profile, they were used in making estimates of gross product at the county level for all years and at the regional level prior to 2001, so we applied the same adjustments to the data that were applied to the national GDP data. Given a change in BEA’s estimation of gross product at the state and national levels from a standard industrial classification (SIC) basis to a North American Industry Classification System (NAICS) basis in 1997, data prior to 1997 were adjusted to prevent any erratic shifts in gross product in that year. While the change to a NAICS basis occurred in 1997, BEA also provides estimates under an SIC basis in that year. Our adjustment involved figuring the 1997 ratio of NAICS-based gross product to SIC-based gross product for each state and the nation, and multiplying it by the SIC-based gross product in all years prior to 1997 to get our final estimate of gross product at the state and national levels.

County and metropolitan area estimates
To generate county-level estimates for all years, and metropolitan-area estimates prior to 2001, a more complicated estimation procedure was followed. First, an initial set of county estimates for each year was generated by taking our final state-level estimates and allocating gross product to the counties in each state in proportion to total earnings of employees working in each county – a BEA variable that is available for all counties and years. Next, the initial county estimates were aggregated to metropolitan-area level, and were compared with BEA’s official metropolitan-area estimates for 2001 and later. They were found to be very close, with a correlation coefficient very close to one (0.9997). Despite the near-perfect correlation, we still used the official BEA estimates in our final data series for 2001 and later. However, to avoid any erratic shifts in gross product during the years until 2001, we made the same sort of adjustment to our estimates of gross product at the metropolitan-area level that was made to the state and national data – we figured the 2001 ratio of the official BEA estimate to our initial estimate, and multiplied it by our initial estimates for 2000 and earlier to get our final estimate of gross product at the metropolitan-area level.

We then generated a second iteration of county-level estimates – just for counties included in metropolitan areas – by taking the final metropolitan-area-level estimates and allocating gross product to the counties in each metropolitan area in proportion to total earnings of employees working in each
Data and methods

Estimates and adjustments made to BEA data on GDP

(continued)

county. Next, we calculated the difference between our final estimate of gross product for each state and the sum of our second-iteration county-level gross product estimates for metropolitan counties contained in the state (that is, counties contained in metropolitan areas). This difference, total non-metropolitan gross product by state, was then allocated to the non-metropolitan counties in each state, once again using total earnings of employees working in each county as the basis for allocation. Finally, one last set of adjustments was made to the county-level estimates to ensure that the sum of gross product across the counties contained in each metropolitan area agreed with our final estimate of gross product by metropolitan area, and that the sum of gross product across the counties contained in each state agreed with our final estimate of gross product by state. This was done using a simple IPF procedure. The resulting county-level estimates were then aggregated to the regional and metro area levels.

We should note that BEA does not provide data for all counties in the United States, but rather groups some counties that have had boundary changes since 1969 into county groups to maintain consistency with historical data. Any such county groups were treated the same as other counties in the estimate techniques described above.
Data and methods

Assembling a complete dataset on employment and wages by industry

Analysis of jobs and wages by industry, reported on pages 37-38, and 41-42, is based on an industry-level dataset constructed using two-digit NAICS industries from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW). Due to some missing (or nondisclosed) data at the county and regional levels, we supplemented our dataset using information from Woods & Poole Economics, Inc., which contains complete jobs and wages data for broad, two-digit NAICS industries at multiple geographic levels. (Proprietary issues barred us from using Woods & Poole data directly, so we instead used it to complete the QCEW dataset.)

Given differences in the methodology underlying the two data sources (in addition to the proprietary issue), it would not be appropriate to simply “plug in” corresponding Woods & Poole data directly to fill in the QCEW data for nondisclosed industries. Therefore, our approach was to first calculate the number of jobs and total wages from nondisclosed industries in each county, and then distribute those amounts across the nondisclosed industries in proportion to their reported numbers in the Woods & Poole data.

To make for a more accurate application of the Woods & Poole data, we made some adjustments to it to better align it with the QCEW. One of the challenges of using Woods & Poole data as a “filler dataset” is that it includes all workers, while QCEW includes only wage and salary workers. To normalize the Woods & Poole data universe, we applied both a national and regional wage and salary adjustment factor; given the strong regional variation in the share of workers who are wage and salary, both adjustments were necessary. Another adjustment made was to aggregate data for some Woods & Poole industry codes to match the NAICS codes used in the QCEW.

It is important to note that not all counties and regions were missing data at the two-digit NAICS level in the QCEW, and the majority of larger counties and regions with missing data were only missing data for a small number of industries and only in certain years. Moreover, when data are missing it is often for smaller industries. Thus, the estimation procedure described is not likely to greatly affect our analysis of industries, particularly for larger counties and regions.

The same above procedure was applied at the county and state levels. To assemble data at for regions and metro areas, we aggregated the county-level results.
Data and methods

Growth in jobs and earnings by industry wage level, 1990 to 2015

The analysis on pages 37-38 uses our filled-in QCEW dataset (see the previous page) and seeks to track shifts in regional job composition and wage growth by industry wage level.

Using 1990 as the base year, we classified all broad private sector industries (at the two-digit NAICS level) into three wage categories: low-, middle-, and high-wage. An industry’s wage category was based on its average annual wage, and each of the three categories contained approximately one-third of all private industries in the region.

We applied the 1990 industry wage category classification across all the years in the dataset, so that the industries within each category remained the same over time. This way, we could track the broad trajectory of jobs and wages in low-, middle-, and high-wage industries.


While we initially sought to conduct the analysis at a more detailed NAICS level, the large amount of missing data at the three- to six-digit NAICS levels (which could not be resolved with the method that was applied to generate our filled-in two-digit QCEW dataset) prevented us from doing so.
Data and methods

Analysis of occupations by opportunity level

The analysis of occupations on pages 43-47 seeks to classify occupations in the region by opportunity level. To identify “high-opportunity” occupations, we developed an “occupation opportunity index” based on measures of job quality and growth, including median annual wage, wage growth, job growth (in number and share), and median age of workers (which represents potential job openings due to retirements). Once the “occupation opportunity index” score was calculated for each occupation, occupations were sorted into three categories (high-, middle-, and low-opportunity). Occupations were evenly distributed into the categories based on employment.

There are some aspects of this analysis that warrant further clarification. First, the “occupation opportunity index” that is constructed is based on a measure of job quality and set of growth measures, with the job-quality measure weighted twice as much as all of the growth measures combined. This weighting scheme was applied both because we believe pay is a more direct measure of “opportunity” than the other available measures, and because it is more stable than most of the other growth measures, which are calculated over a relatively short period (2005-2011). For example, an increase from $6 per hour to $12 per hour is fantastic wage growth (100 percent), but most would not consider a $12-per-hour job as a “high-opportunity” occupation.

Second, all measures used to calculate the “occupation opportunity index” are based on data for metropolitan statistical areas from the Occupational Employment Statistics (OES) program of the U.S. Bureau of Labor Statistics (BLS), with one exception: median age by occupation. This measure, included among the growth metrics because it indicates the potential for job openings due to replacements as older workers retire, is estimated for each occupation from the 2010 five-year IPUMS ACS microdata file (for the employed civilian non-institutional population ages 16 and older). It is calculated at the metropolitan statistical area level (to be consistent with the geography of the OES data), except in cases for which there were fewer than 30 individual survey respondents in an occupation; in these cases, the median age estimate is based on national data.

Third, while most of the data used in the analysis are regionally specific, information on the education level of “typical workers” in each occupation, which is used to divide occupations in the region into the three groups by education level (as presented on pages 45-47), was estimated using national 2010 IPUMS ACS microdata (for the employed civilian non-institutional population ages 16 and older). Although regionally specific data would seem to be the better choice, given the level of occupational detail at which the analysis is conducted, the sample sizes for many occupations would be too small for statistical reliability. And, while using pooled 2006-2010 data would increase the sample size, it would still not be sufficient for many regions, so national 2010 data were chosen given the balance of currency and sample size for each occupation. The implicit assumption in using national data is that the
Data and methods

Analysis of occupations by opportunity level

(continued)

occupations examined are of sufficient detail that there is not great variation in the typical educational level of workers in any given occupation from region to region. While this may not hold true in reality, it is not a terrible assumption, and a similar approach was used in a Brookings Institution report by Jonathan Rothwell and Alan Berube, *Education, Demand, and Unemployment in Metropolitan America* (Washington D.C.: Brookings Institution, September 2011).

We should also note that the BLS does publish national information on typical education needed for entry by occupation. However, in comparing these data with the typical education levels of actual workers by occupation that were estimated using ACS data, there were important differences, with the BLS levels notably lower (as expected). The levels estimated from the ACS were determined to be the appropriate choice for our analysis as they provide a more realistic measure of the level of educational attainment necessary to be a viable job candidate – even if the typical requirement for entry is lower.

Finally, the level of occupational detail at which the analysis was conducted, and at which the lists of occupations are reported, is the three-digit standard occupational classification (SOC) level. While considerably more detailed data is available in the OES, it was necessary to aggregate to the three-digit SOC level in order to align closely with the occupation codes reported for workers in the ACS microdata so that it could be used to estimate typical education levels of workers by occupation.
Analysis of access to healthy food is based on the 2014 Analysis of Limited Supermarket Access (LSA) from the Reinvestment Fund. LSA areas are defined as one or more contiguous census block groups (with a collective population of at least 5,000) where residents must travel significantly farther to reach a supermarket than the “comparatively acceptable” distance traveled by residents in well-served areas with similar population densities and car ownership rates.

The methodology’s key assumption is that block groups with a median household income greater than 120 percent of their respective metropolitan area’s median (or nonmetro state median for nonmetropolitan areas) are adequately served by supermarkets and thus travel an appropriate distance to access food. Thus, higher-income block groups establish the benchmark to which all block groups are compared, controlling for population density and car ownership rates.

An LSA score is calculated as the percentage by which the distance to the nearest supermarket would have to be reduced to make a block group’s access equal to the access observed for adequately served areas. Block groups with an LSA score greater than 45 were subjected to a spatial connectivity analysis, with 45 chosen as the minimum threshold because it was roughly equal to the average LSA score for all LSA block groups in the 2011 Reinvestment Fund analysis.

Block groups with contiguous spatial connectivity of high LSA scores are referred to as LSA areas. They represent areas with the strongest need for increased access to supermarkets. Our analysis of the percent of people living in LSA areas by race/ethnicity and poverty level was done by merging data from the 2014 5-year ACS summary file with LSA areas at the block group level and aggregating up to the city, county, and higher levels of geography.

Data and methods

Measures of diversity and segregation

In the profile, we refer to measures of residential segregation by race/ethnicity (the “diversity score” on page 18, the “multi-group entropy index” on page 60 and the “dissimilarity index” on page 61). While the common interpretation of these measures is included in the text of the profile, the data used to calculate them, and the sources of the specific formulas that were applied, are described below.

All measures are based on census-tract-level data for 1980, 1990, and 2000 from Geolytics, and for 2014 (which reflects a 2010-2014 average) from the 2014 5-year ACS. While the data for 1980, 1990, and 2000 originate from the decennial censuses of each year, an advantage of the Geolytics data we use is that it has been “re-shaped” to be expressed in 2010 census tract boundaries, and so the underlying geography for our calculations is consistent over time; the census tract boundaries of the original decennial census data change with each release, which could potentially cause a change in the value of residential segregation indices even if no actual change in residential segregation occurred. In addition, while most of the racial/ethnic categories for which indices are calculated are consistent with all other analyses presented in this profile, there is one exception. Given limitations of the tract-level data released in the 1980 Census, Native Americans are combined with Asians and Pacific Islanders in that year. For this reason, we set 1990 as the base year (rather than 1980) in the chart on page 61, but keep the 1980 data in the chart on page 60 as this minor inconsistency in the data is not likely to affect the analysis.

The formula for the multi-group entropy index was drawn from a 2004 report by John Iceland of the University of Maryland, *The Multigroup Entropy Index* (Also known as Theil’s H or the Information Theory Index) available at https://www.census.gov/topics/housing/housing-patterns/about/multi-group-entropy-index.html. In that report, the formula used to calculate the multi-group entropy index (referred to as the “entropy index” in the report) appears on page 8.

The formula for the dissimilarity index is well established, and is made available by the U.S. Census Bureau at https://www.census.gov/library/publications/2002/dec/censr-3.html.
Data and methods

Estimates of GDP without racial gaps in income

Estimates of the gains in average annual income and GDP under a hypothetical scenario in which there is no income inequality by race/ethnicity are based on the 2014 5-Year IPUMS ACS microdata. We applied a methodology similar to that used by Robert Lynch and Patrick Oakford in chapter two of *All-In Nation: An America that Works for All*, with some modification to include income gains from increased employment (rather than only those from increased wages). As in the Lynch and Oakford analysis, once the percentage increase in overall average annual income was estimated, 2014 GDP was assumed to rise by the same percentage.

We first organized individuals aged 16 or older in the IPUMS ACS into six mutually exclusive racial/ethnic groups: White, Black, Latino, Asian or Pacific Islander, Native American, and Mixed/other (with all defined non-Hispanic except for Latinos, of course). Following the approach of Lynch and Oakford in *All-In Nation*, we excluded from the non-Hispanic Asian/Pacific Islander category subgroups whose average incomes were higher than the average for non-Hispanic Whites. Also, to avoid excluding subgroups based on unreliable average income estimates due to small sample sizes, we added the restriction that a subgroup had to have at least 100 individual survey respondents in order to be included.

We then assumed that all racial/ethnic groups had the same average annual income and hours of work, by income percentile and age group, as non-Hispanic Whites, and took those values as the new “projected” income and hours of work for each individual. For example, a 54-year-old non-Hispanic Black person falling between the 85th and 86th percentiles of the non-Hispanic Black income distribution was assigned the average annual income and hours of work values found for non-Hispanic White persons in the corresponding age bracket (51 to 55 years old) and “slice” of the non-Hispanic White income distribution (between the 85th and 86th percentiles), regardless of whether that individual was working or not. The projected individual annual incomes and work hours were then averaged for each racial/ethnic group (other than non-Hispanic Whites) to get projected average incomes and work hours for each group as a whole, and for all groups combined.

One difference between our approach and that of Lynch and Oakford is that we include all individuals ages 16 years and older, rather than just those with positive income. Those with income values of zero are largely non-working, and were included so that income gains attributable to increased hours of work would reflect both more hours for the those currently working and an increased share of workers – an important factor to consider given differences in employment rates by race/ethnicity. One result of this choice is that the average annual income values we estimate are analogous to measures of per capita income for the age 16- and-older population and are thus notably lower than those reported in Lynch and Oakford. Another is that our estimated income gains are relatively larger as they presume increased employment rates.
Data and methods

Estimates of GDP without racial gaps in income

(continued)

Note that because no GDP data is available at the city level (partly because economies tend to operate at well beyond city boundaries), our estimates of gains in GDP with racial equity are only reported at the regional level. Estimates of income gains and the source of gains by race/ethnicity, however, are reported for the profiled geography.
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