

USCDornsife Equity Research Institute

An Equity Profile of Kalamazoo County





Summary

Mirroring national trends, Kalamazoo County is growing more diverse. In the next few decades, the majority of the county's residents will be people of color from a rich variety of racial and ethnic backgrounds. However, a long history of racial discrimination and disinvestment in communities of color has created entrenched and persistent racial inequities in employment, income, wealth, education, health, justice, housing, and transportation.

The success and prosperity of Kalamazoo County will rely on dismantling these unjust barriers and ensuring that everyone can participate in and enjoy the benefits of a thriving economy. It is estimated that without racial gaps in income, the regional economy could have been \$1 billion larger in 2019. Existing community and policy efforts are beginning to adopt an equity-focused approach, providing meaningful opportunities for residents, government, and businesses to advance long-term sustainable change to shape a more inclusive economy for all.

Indicators

DEMOGRAPHICS

Race, Ethnicity, and Nativity, 2019 Racial/Ethnic Composition, 1980 to 2050 Growth Rates of Major Groups by Race/Ethnicity and Nativity, 1990 to 2019 Black, Latinx, and Asian/Pacific Islander Populations by Ancestry, 2019 Percent People of Color by Census Tract, 2019 Percent People of Color by Age Group, 1980 to 2019 Median Age (years) by Race/Ethnicity, 2019 Percent Linguistically Isolated Households by Census Tract, 2019 English-Speaking Ability Among Immigrants by Race/Ethnicity, 1990 and 2019

ECONOMIC VITALITY

Average Annual Growth in Jobs and GDP, 1990 to 2007 and 2009 to 2019 Growth in Jobs by Industry Wage Level, 1990 to 2020 Growth in Real Earnings by Industry Wage Level, 1990 to 2020 Income Inequality, 1979 to 2019 Real Earned Income Growth for Full-Time Wage and Salary Workers Ages 25– 64, 1979 to 2019 Median Hourly Wage by Race/Ethnicity, 1979 and 2019 Households by Income Level, 1979 to 2019 Unemployment Rate by Race/Ethnicity, 2019 Unemployment Rate, Not Seasonally Adjusted, June 2022 Unemployment Rate by Census Tract, 2019 Unemployment Rate by Educational Attainment and Race/Ethnicity, 2019 Median Hourly Wage by Educational Attainment and Race/Ethnicity, 2019 Poverty Rate by Race/Ethnicity, 1990 and 2019 Working-Poor Rate by Race/Ethnicity, 1990 and 2019 Child Poverty Rate by Race/Ethnicity, 2019 Percent Population Below the Poverty Level by Census Tract, 2019 Share and Count of Working-Age Population with an Associate's Degree or Higher by Race/Ethnicity, 2019, and Projected Share of Jobs that Require an Associate's Degree or Higher, 2020

YOUTH PREPAREDNESS

Share of 16- to 24-Year-Olds Not Enrolled in School and Without a High School Diploma by Race/Ethnicity, 1990 to 2019
Share of 16- to 24-Year-Olds Not Enrolled in School and Without a High School Diploma by Race/Ethnicity and Gender, 2019
Disconnected Youth: 16- to 24-Year-Olds Not in School or Work by Race/Ethnicity, 1990 and 2019
Disconnected Youth: 16- to 24-Year-Olds Not in School or Work by Race/Ethnicity and Gender, 2019
Composite Child Opportunity Index by Census Tract

Indicators (continued)

CONNECTEDNESS

Percent Severely Rent-Burdened Households by Census Tract, 2019 Owner-Occupied Households by Race/Ethnicity, 2019 Percent of Households Without a Vehicle by Census Tract, 2019 Means of Transportation to Work by Annual Earnings, 2019 Percent Using Public Transit by Annual Earnings and Race/Ethnicity, 2019 Average Travel Time to Work in Minutes by Census Tract, 2019

ECONOMIC BENEFITS OF EQUITY

Actual GDP and Estimated GDP Without Racial Gaps in Income, 2019

Foreword

Kalamazoo County is a place of abundance, home to stunning natural landscapes, beautiful architecture, thriving industries, growing small businesses, and recently a vaccine that has had a global impact. Nationally, we're known not only for our microbreweries and universities but also for the investments we make in our young people and their education. Of course, the best thing about Kalamazoo County is the people who live here. Our community is enriched by the vibrant diversity that exists within its cities, towns, and neighborhoods, strengthened by the cultural contributions and economic innovations of the individuals who call this place home.

With all that Kalamazoo County has to offer, it is an unjust reality that not everyone who lives here can access that abundance. Even as we all do our best to provide for our families, build the lives we want, pursue our aspirations, and contribute to the community, our experiences of living here can be very different. This report asks: what are the root causes behind people in the same place living such different lives? In answer, through each page of this profile, we gain an understanding of how racial, social, and economic inequities are impacting access to resources, housing, education and power. The data in this report show a clear but challenging truth: systemic racism is harming Black, Indigenous, and People of Color (BIPOC) within our county. Disproportionate and unjust barriers woven into our community's systems, policies, and institutions make it more difficult for BIPOC families and individuals to access the things we all need to thrive. As in our state, nation, and world, racial inequity has a strong impact on both short-term outcomes and life trajectories across generations.

The good news? This report not only maps out challenges facing Kalamazoo County but also shows how to navigate our response as a community. Listening to the stories told here can act as a catalyst, bringing together philanthropic organizations, nonprofit partners, policymakers, and community members to spark strategies that advance equity and justice. Our region's talented people, abundant resources, and data-driven expertise can all be mobilized toward a more equitable and just community.

From all of the progress that has already been made, it's clear it will take effort and ingenuity to dismantle deeply embedded inequities and injustices in our systems. The commitment and support of the entire community will be vital in driving immediate action and sustaining the long-term work ahead.

Fortunately, the rewards will be shared by us all. As shown in this report, equity leads to better outcomes in a community: a stronger economy, longer and healthier lives, higher academic achievement, greater sustainability, and more resilience through change. Equity and justice have the power to unlock our community's economic and human potential. It is in the best interest of all of us to work toward a future where everyone is welcomed, valued, and prepared for the success that lies ahead.

Sandy Barry-Loken

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Acknowledgments

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In addition to the data analysis contained in the profile, the summary report draws upon insights that were shared during interviews conducted with local community leaders and residents. Their comments helped shape the policy recommendations included in the summary. We would like to give a special thanks to the following individuals and organizations who participated in interviews:

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Introduction Overview

Equity – ensuring full inclusion of all residents in the economic, social, and political life of a community regardless of their race/ethnicity, nativity, age, gender, sexual orientation, neighborhood of residence, or other characteristics – is an essential element to achieving economic inclusion.

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

This profile was developed to help Kalamazoo Community Foundation and local partners plan for equitable growth. In the course of drafting this profile, input was sought from a cross-section of Kalamazoo stakeholders who reflected on the county's challenges and opportunities for overcoming them.

Community residents, activists, advocates, elected officials, and civic leaders all shared their insights and ideas. We hope that the profile is broadly used by advocacy groups, elected officials, planners, business leaders, funders, and others working to build a stronger and more equitable county.

About the Data

This document presents an equity analysis of Kalamazoo County, Michigan. 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 US Census Bureau, the US Bureau of Labor Statistics, the Behavioral Risk Factor Surveillance System, and Woods & Poole Economics. See the "Data and methods" section of this profile for a detailed list of data sources.

This profile also uses a range of data sources to describe the state of equity in Kalamazoo County as comprehensively as possible, but it has limitations. Not all data collected by public and private sources are disaggregated by race/ethnicity and other demographic characteristics. And in some cases, even when disaggregated data are available, the sample size for a given population is too small to report with confidence. Local data sources and the lived experiences of diverse groups of residents should supplement the data provided in this profile to more fully represent the state of equity in Kalamazoo County.

We recognize that inequities exist across many characteristics in addition to race/ethnicity and nativity, including income, gender, age, ability, sexual orientation, and neighborhood. Unfortunately, because we are working with survey data and seek to provide data for the county, we are limited in the extent to which we can disaggregate the data.

Introduction What is an equitable county?

Counties are equitable when all residents – regardless of their race/ethnicity, nativity, age, gender, sexual orientation, income, neighborhood of residence, or other characteristics – are fully able to participate in the county's economic vitality, contribute to the region's readiness for the future, and connect to the region's assets and resources.

Strong, equitable counties:

- Have economic vitality that supports residents to secure high-quality jobs and to produce new ideas, products, businesses, and economic activity so the well-being of the residents is sustainable.
- 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 neighborhoods, reach opportunities located throughout the region (and beyond) via transportation and technology, participate in civic processes, and productively engage with other diverse residents.

PolicyLink and ERI

An Equity Profile of Kalamazoo County

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 2045, the United States will be a majority people-ofcolor 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. And while most have been affected by this growing inequality, communities of color have felt the greatest pains as the economy has shifted and stagnated.

Racial, gender, and economic equity is necessary for the nation's economic growth and prosperity.

Equity is an economic and health imperative as well as a moral one. Research shows that equity 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
- Health equity can lead to significant economic benefits from reductions in health-care spending and lost productivity.³
- Companies with a diverse workforce achieve a better bottom line.⁴
- A diverse population more easily connects to global markets.⁵
- Lower economic inequality results in better health outcomes for everyone.⁶

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

A new economic model based on equity, fairness, and opportunity can secure America's health and prosperity. As the county recovers from the Covid-19 pandemic, policies and investments must support equitable strategies that benefit all residents, especially those who have historically been excluded from opportunities.

Counties 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 and prosper.

¹ Manuel Pastor, "Cohesion and Competitiveness: Business Leadership for Regional Growth and Social Equity," OECD Territorial Reviews, Competitive Cities in the Global Economy, Organisation for Economic Co-operation and Development (OECD), 2006; Manuel Pastor and Chris Benner, "Been Down So Long: Weak-Market Cities and Regional Equity" in *Retooling for Growth: Building a 21st Century Economy in America's Older Industrial Areas* (New York: American Assembly and Columbia University, 2008); Randall Eberts, George Erickeek, and Jack Kleinhenz, "Dashboard Indicators for the Northeast Ohio Economy: Prepared for the Fund for Our Economic Future" (Federal Reserve Bank of Cleveland: April 2006), https://www.clevelandfed.org/newsroom-and-events/publications/workingpapers/working-papers-archives/2006-working-papers/wp-0605-

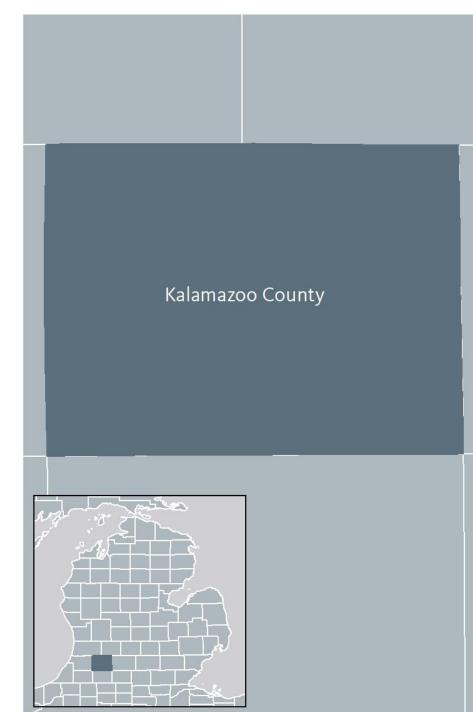
dashboard-indicators-for-the-northeast-ohio-economy.aspx.

- ² Raj Chetty, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez, "Where is the Land of Economic Opportunity? The Geography of Intergenerational Mobility in the U.S." *Quarterly Journal of Economics* 129, no. 4 (2014): 1553-1623, <u>https://scholar.harvard.edu/hendren/publications/economicimpacts-tax-expenditures-evidence-spatial-variation-across-us.</u>
- ³ Darrell Gaskin, Thomas LaVeist, and Patrick Richard, *The State of Urban Health: Eliminating Health Disparities to Save Lives and Cut Costs* (New York: National Urban League Policy Institute, 2012).
- ⁴ Cedric Herring. "Does Diversity Pay?: Race, Gender, and the Business Case for Diversity." *American Sociological Review* 74, no. 2 (2009): 208-22; Stanley F. Slater, Robert A. Weigand and Thomas J. Zwirlein. "The Business Case for Commitment to Diversity." *Business Horizons* 51 (2008): 201-209.
- ⁵ U.S. Census Bureau. "Ownership Characteristics of Classifiable U.S. Exporting Firms: 2007," Survey of Business Owners Special Report, June 2012, https://www.census.gov/library/publications/2012/econ/2007-sbo-exportreport.html.
- ⁶ Kate Pickett and Richard Wilkinson, "Income Inequality and Health: A Causal Review." Social Science & Medicine 128 (2015): 316-326.

PolicyLink and ERI

This profile describes demographic, economic, and health conditions in Kalamazoo County, Michigan, portrayed in the map to the right. Kalamazoo County is part of the Kalamazoo-Portage metropolitan statistical area, which also includes Van Buren County.

Unless otherwise noted, all data follow the Kalamazoo County geography. 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 54.









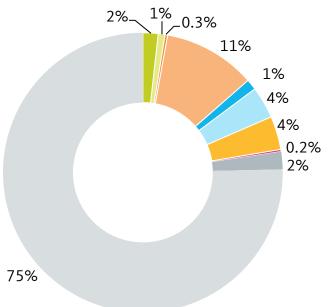
Demographics Who lives in the county?

The majority of Kalamazoo County residents are white. Approximately three-quarters of residents are white and one-quarter are people of color. The county is comparable to the population of Michigan, which is also 75 percent white and 25 percent people of color.

Among communities of color in Kalamazoo, Black residents represent the largest group (11 percent) followed by Latinx (5 percent). The majority of the white, Black, and Latinx populations in Kalamazoo were born in the US, while a larger share of the Asian or Pacific Islander population are immigrants.

Race, Ethnicity, and Nativity, 2019

Asian or Pacific Islander, Immigrant (2%)
Asian or Pacific Islander, US-born (1%)
Black, Immigrant (0.3%)
Black, US-born (11%)
Latinx, Immigrant (1%)
Latinx, US-born (4%)
Mixed/other (4%)
Native American and Alaska Native (0.2%)
White, Immigrant (2%)
White, US-born (75%)



Demographics Who lives in the county and how is this changing?

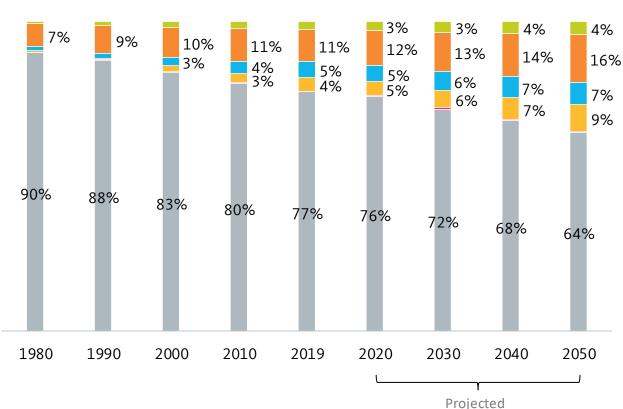
The county is experiencing a demographic

shift. Although Kalamazoo is less diverse than the nation (only around 20 percent of Kalamazoo residents identify as people of color compared to 40 percent of U.S. residents). Demographic change has occurred more quickly in Kalamazoo County in the past four decades.

The increase in the Black, multiracial and Latinx populations will continue to drive growth in the county. Between 2020 and 2050, the Black population is anticipated to increase from by around 15,000 residents or from 12 percent to 16 percent of the population. The multiracial population will grow by around 13,000 residents or from five percent to nine percent of the total population. Latinx residents will grow by around 8,000 residents or from five to seven percent of the population.

Racial/Ethnic Composition, 1980 to 2050

- Asian or Pacific Islander
- Black
- Latinx
- Mixed/other
- Native American
- White

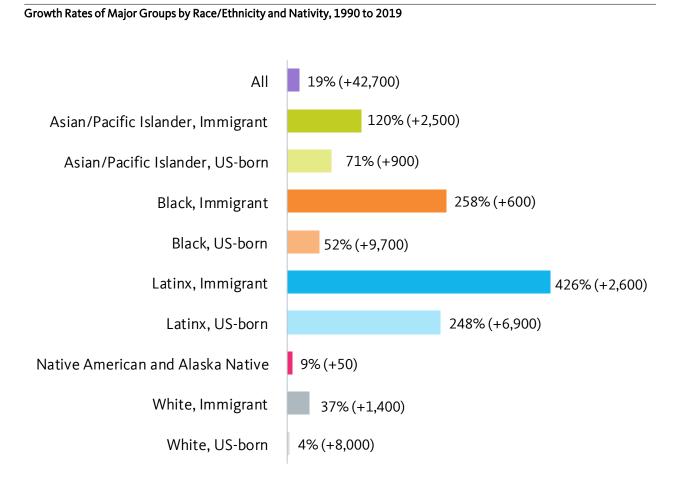


Sources: US Census Bureau and Woods & Poole Economics, Inc.

Note: 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 Who lives in the county and how is this changing?

The overall population in the county has seen an increase (19 percent) since 1990. The USborn white population has seen the least growth rate while collectively people of color have experienced the largest population growth. Latinx immigrants are the fastest growing group, growing by 426 percent and increasing by over 2,600 residents between 1990 and 2019. Black immigrants also experienced large increases more than doubling their population by adding nearly 600 residents since 2019. Asian American or Pacific Islanders immigrants have also added considerably to population growth over the past three decades increasing by around 120 percent (2,500 people) during that time period.



Demographics Who lives in the county and what is their ancestry?

The county's Black, Latinx, and Asian communities are diverse with respect to their ancestry. The Black population is predominantly African American. Within the Latinx community, the largest individual ancestry subgroup are Mexicans. Among Asian or Pacific Islanders, the largest ancestry groups are from South Asia and East Asia. Black, Latinx, and Asian/Pacific Islander Populations by Ancestry, 2019

Asian or Pacific Islander	Population
South Asian (all)	2,261
East Asian (all)	2,224
Southeast Asian (all)	581
Other Asian or Pacific Islander	1,629
Total	6,695

Black	Population
African American/Other Black	27,772
Sub-Saharan African (all)	924
Caribbean/West Indian (all)	138
All other Black	83
Total	28,917

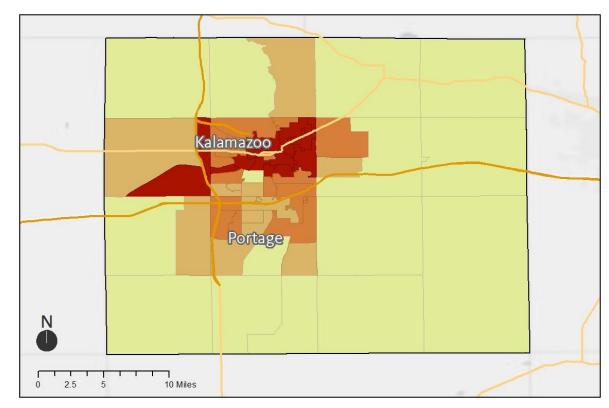
Latinx	Population
Mexican	5,089
Caribbean (all)	1,818
South American (all)	726
Central American (all)	674
Other Latinx	4,680
Total	12,987

Demographics Where do people of color live in the county?

Communities of color are primarily concentrated in the urban centers of the county. The neighborhoods with the highest concentrations of people of color are located east of the city of Kalamazoo such as in the Edison and Eastside neighborhoods, running along the 131 expressway and on either side of the M-43 highway.

Percent People of Color by Census Tract, 2019

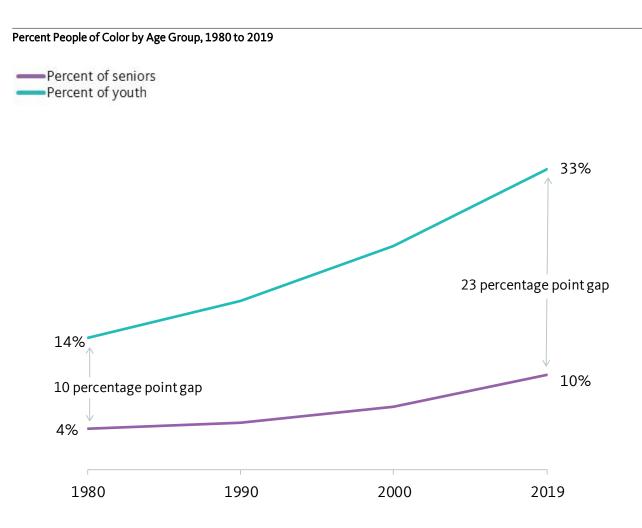
- 2% to 12%
- 12% to 20%
- 20% to 30%
- 30% to 97%



Demographics How do the county's residents differ by age?

Young people are leading the demographic shift in the county. Currently, about 33 percent of the youth (younger than 18 years) in Kalamazoo County are people of color, compared with 10 percent of the county's seniors (ages 65 years and older) who are people of color. This 23-percentage point difference between the share of people of color among young and old can be measured as the racial generation gap. Since 1980, the racial generation gap has grown by 13 percentage points.

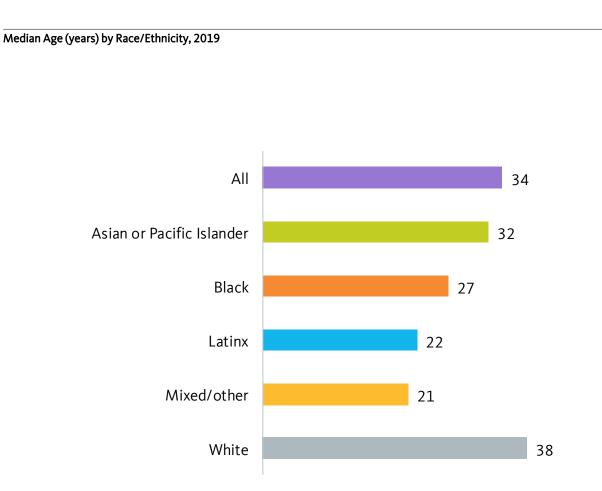
This <u>trend</u> mirrors that of the nation. The predominantly white older generation needs to invest in infrastructure and opportunities for a more racially diverse young population to secure the development of the next generation and the county's economic future.



Demographics Who will be driving growth in the future?

The county is relatively younger compared to Michigan and to the nation. The median age of residents of Kalamazoo County is 34 years old, compared to the statewide median of 40 years and the nationwide median of 38 years. This may be due to the large student population attending local higher education institutions such as Western Michigan University and Kalamazoo College.

The county's communities of color are more youthful than its white population. Latinx and multiracial people, for example, have the lowest median age at 22 and 21 years respectively, followed by the Black population at 27 years. The median age of white people is the highest at 38 years.



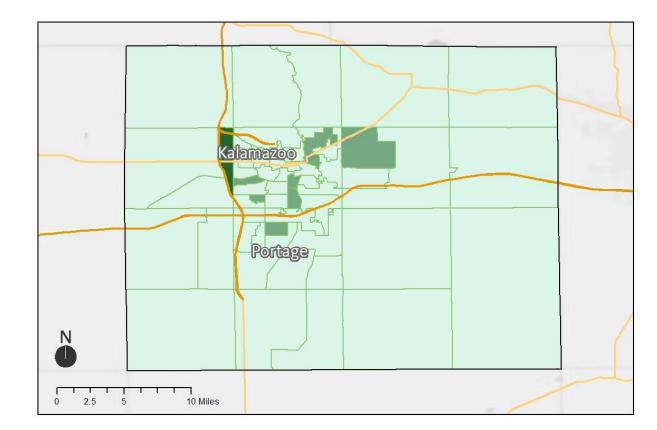
Demographics Where are the linguistically isolated households?

The city of Kalamazoo has pockets of

linguistic isolation. Linguistic isolation refers to households in which no member age 14 or older speaks "only English" or speaks English at least "very well." For context, 6 percent of the county's population are immigrants, similar to the 7 percent for the state. Both the county and Michigan has a lower share of population that are immigrant compared to the nation at 14 percent.

Relative to the state and the country, residents in Kalamazoo County have high English proficiency with only 2 percent of people age five or older reporting speaking English less than "very well"; in Michigan and the nation, it is 3 percent and 8 percent, respectively. The pockets with higher rates of linguistic isolation include neighborhoods west of the City of Kalamazoo running along the 131 expressway. Percent Linguistically Isolated Households by Census Tract, 2019

- 0% to 2%
- 2% to 4%
- 4% to 6%



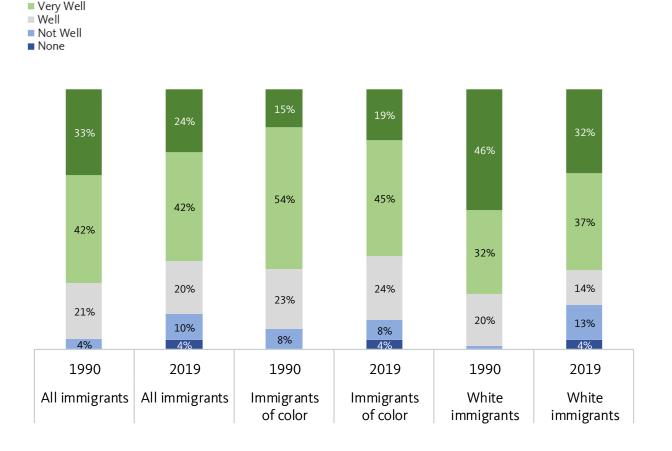
Demographics What is the English proficiency among immigrants?

Percent speaking English...

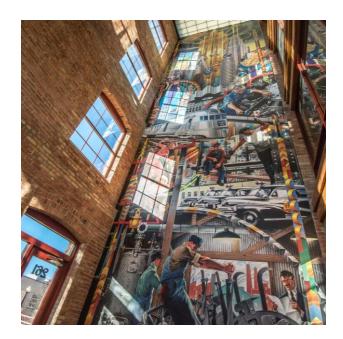
Only

About one-third of all immigrants in Kalamazoo County have limited English proficiency (LEP), defined as speaking English less than "very well." The LEP share of the immigrant population has increased since 1990 for both white immigrants and immigrants of color. Immigrants of color have the lowest levels of English-speaking ability. On the other hand, white immigrants have the highest levels of English-speaking ability with 31 percent having LEP.

English-Speaking Ability Among Immigrants by Race/Ethnicity, 1990 and 2019



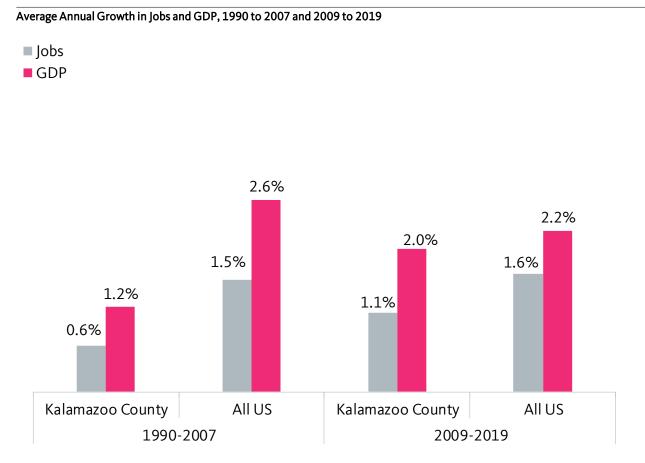
Economic vitality





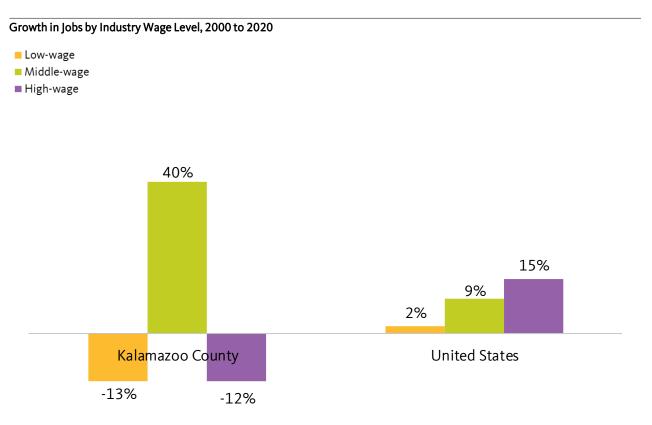
Economic vitality How is the economy doing after the Great Recession?

The county has seen higher job and gross domestic product (GDP) growth in the decade following the Great Recession compared to before. Before the Great Recession that lasted from late 2007 to mid 2009, the county's economy performed behind the nation in job growth and GDP growth. Since 2009 up until the Covid-19 pandemic, Kalamazoo County has higher job and GDP growth compared to pre-recession level. While the job and GDP growth rates in Kalamazoo are now closer to national growth, the county is still slightly behind.



Economic vitality Is the county growing good jobs for everyone?

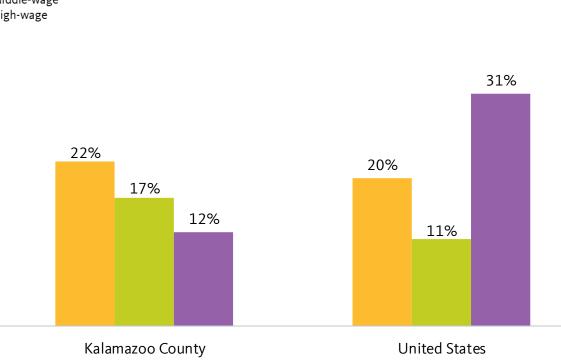
While the country has seen growth across industries, this trend is not true in Kalamazoo County. Jobs in middle-wage industries have grown, but jobs in low- and high-wage industries have declined. High-wage industries include sectors such as finance and insurance, information, and professional services; middle-wage industries include sectors such as mining, health care and social assistance, and transportation and warehousing; low-wage industries include sectors such as retail trade and accommodation and food services.



Sources: US Bureau of Labor Statistics and Woods & Poole Economics, Inc. Universe includes all jobs covered by the federal Unemployment Insurance (UI) program. Note: Wage levels for industries are classified based on the industry's average annual wage in 2000. The wage level classification for each industry remains the same across all years in order to track the trajectory of jobs and wages of low-, middle-, and high-wage industries.

Economic vitality Are earnings growing for all workers?

Workers across all industries have seen growth in earnings since 2000. While lowwage industries in Kalamazoo saw declines in jobs, real (inflation-adjusted) earnings growth was highest in these industries, growing by 22 percent. Average earnings increased by 17 percent for workers in middle-wage industries, which saw the highest growth in jobs. This differs from national trends which show a much higher growth in earnings for workers in high-wage industries.



Growth in Real Earnings by Industry Wage Level, 2000 to 2020

High-wage

PolicyLink and ERI

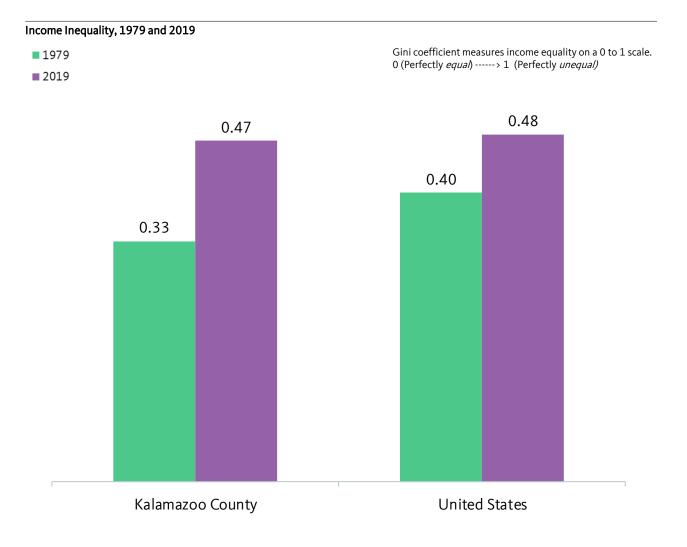
Sources: US Bureau of Labor Statistics and Woods & Poole Economics, Inc. Universe includes all jobs covered by the federal Unemployment Insurance (UI) program. Note: Earnings growth rates are adjusted for inflation. Wage levels for industries are classified based on the industry's average annual wage in 2000. The wage level classification for each industry remains the same across all years in order to track the trajectory of jobs and wages of low-, middle-, and high-wage industries.

Low-wage

Middle-wage

Economic vitality Is inequality low and decreasing?

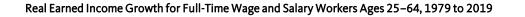
Income inequality in Kalamazoo County has been increasing over the last few decades in and is now commensurate to that of the nation. Inequality here is measured by the Gini coefficient, which is the most commonly used measure of inequality. The Gini coefficient measures the extent to which the income distribution does not show perfect equality, when every household has the same income. The value of the Gini coefficient ranges from zero (perfect equality) to one (complete inequality where one household has all of the income).



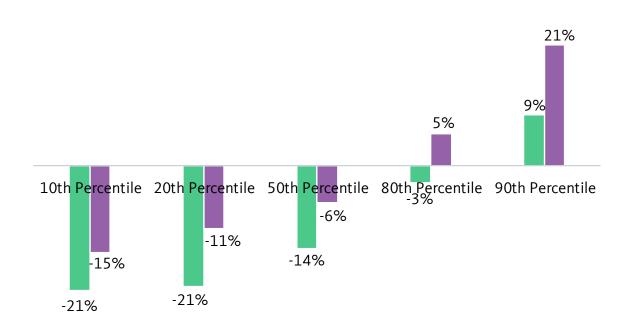
Economic vitality Are incomes increasing for all workers?

Declining wages play an important role in the county's increasing inequality. One way to examine wage growth is to measure how real earned income has grown at certain portions of the income distribution. In this chart workers at the 20th percentile, for example, earn more than the bottom 19 percent of all workers and less than the top 80 percent of all workers.

After adjusting for inflation, wages have declined the steepest for the bottom half of the county's workers. Since 1979, wages fell by 21 percent for workers at the 10th and 20th percentiles. Only workers at the very top experienced wage growth, with wages increasing by 9 percent for workers at the 90th percentile.



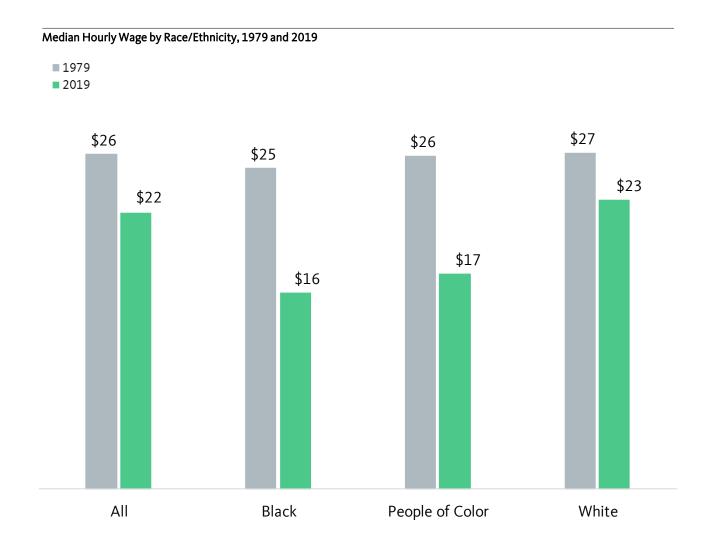
- Kalamazoo County
- United States



Source: Integrated Public Use Microdata Series. Universe includes civilian non-institutional full-time wage and salary workers ages 25 through 64 years. Note: Data for 2019 represent a 2015 through 2019 average. Growth rates are adjusted for inflation.

Economic vitality Is the median hourly wage increasing for all workers?

Since 1979, the median hourly wage has declined for all workers. The median hourly wage for Black workers decreased by nearly ten dollars, the largest decrease of all racial and ethnic groups. Wages were highest in 2019 for white workers (around \$23), well above the \$17 per hour observed for all workers of color combined.

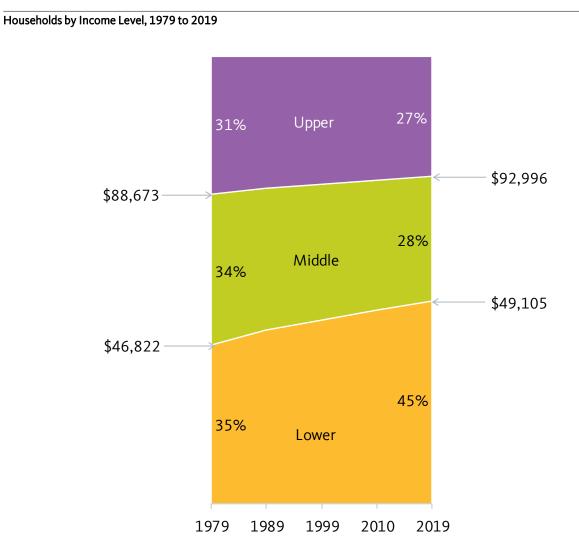


Source: Integrated Public Use Microdata Series. Universe includes civilian non-institutional full-time wage and salary workers ages 25 through 64 years. Note: Data for 2019 represent a 2015 through 2019 average. Note: Values are in 2019 dollars.

Economic vitality Is the middle class expanding?

The proportion of households with middleand upper-level incomes are on the decline while the proportion of low-income households is on the rise. Since 1979, the share of households with middle incomes decreased from 34 to 28 percent while the share of households with lower incomes increased from 35 to 45 percent. The share of upper-income households also decreased, but less so compared to middle-income households.

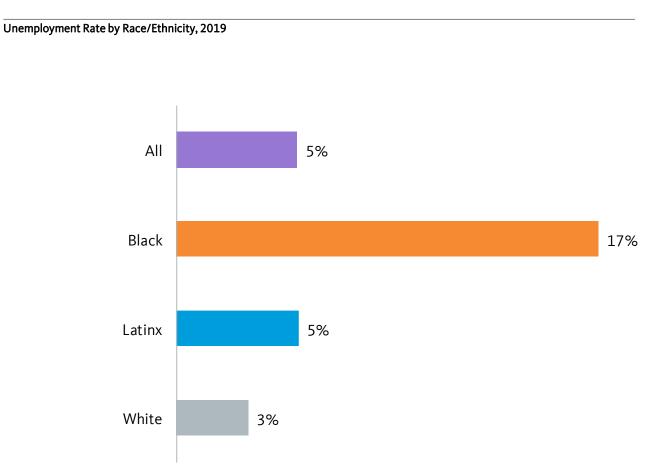
In this analysis, households with middle income are defined as having incomes in the middle 34 percent of household income distribution in 1979. In 1979, those household incomes ranged from \$46,822 to \$88,673 (in 2019 dollars).



Source: Integrated Public Use Microdata Series. Universe includes all households (no group quarters). Note: Data for 2010 represent a 2006 through 2010 average and data for 2019 represent a 2015 through 2019 average. Dollar values are in 2019 dollars.

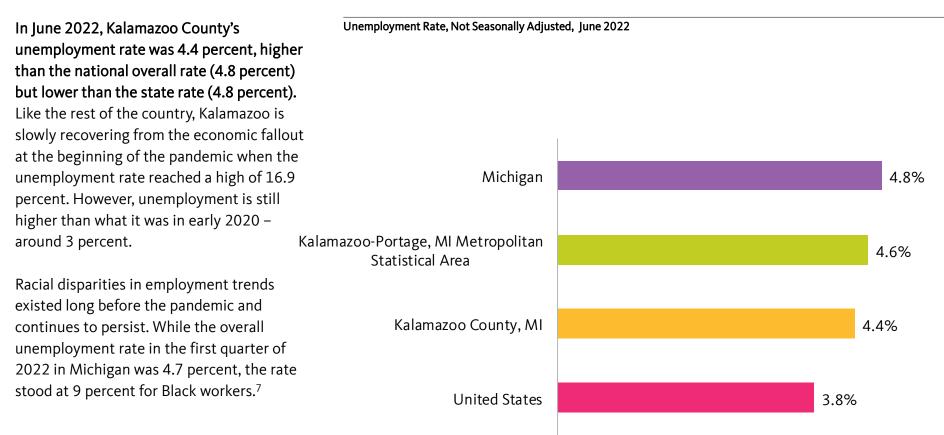
Economic vitality Can all residents reach employment?

Unemployment rates were by far the highest for Black workers and lowest for white workers in the county. Among Black adults ages 25 to 64 years, 17 percent were unemployed, three times higher than the county's overall rate. Among white workers, 3 percent were unemployed, which is below the county and state averages of 5 percent.



29

Economic vitality How likely are residents to be unemployed compared to the region?



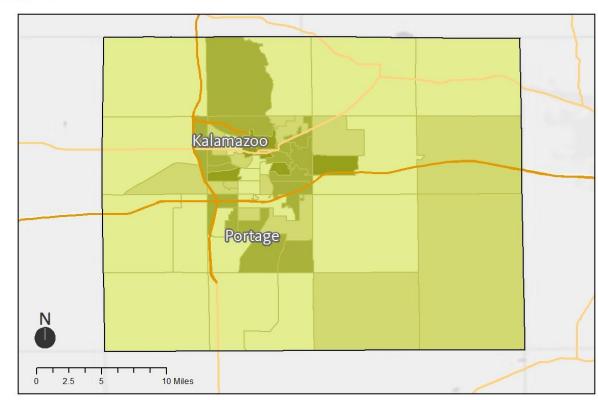
Source: US Bureau of Labor Statistics. Universe includes the civilian noninstitutionalized labor force ages 16 years and older. Note: US Bureau of Labor Statistics does not have monthly unemployment data broken down by race and ethnicity, but provides the most recent data. Data for Michigan, Kalamazoo-Portage metro area, and Kalamazoo County are preliminary.

Economic vitality Where is unemployment most prevalent?

Neighborhoods with high unemployment rates are present across the entire county but especially so in and around the City of Kalamazoo. While unemployment tends to be more concentrated around the cities, suburban areas are not immune to economic recession. Many neighborhoods with high unemployment are located around Edison, Eastside, Southside, and in the areas around the 131 expressway.

Unemployment Rate by Census Tract, 2019

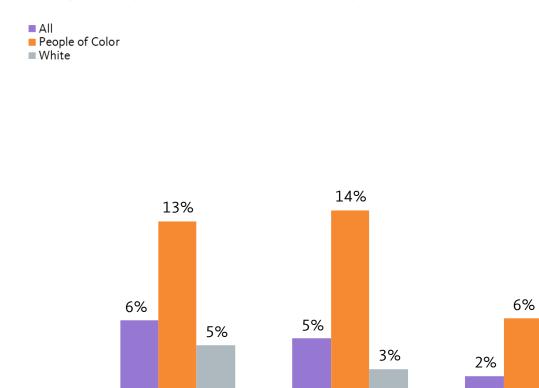
- 1% to 3%
- 3% to 6%
- 6% to 10%
- 10% to 25%



Source: US Census Bureau. Universe includes the civilian noninstitutionalized labor force ages 16 years and older. Note: Data represent a 2015 through 2019 average.

Economic vitality Does education lead to employment for everyone?

In general, unemployment decreases as educational attainment increases. Workers of color face higher levels of unemployment than white workers at every level of education. Among college graduates, 6 percent of workers of color are unemployed compared with 2 percent of white workers. Even with a high school diploma, workers of color experience much higher rates of unemployment than their white counterparts.



Unemployment Rate by Educational Attainment and Race/Ethnicity, 2019

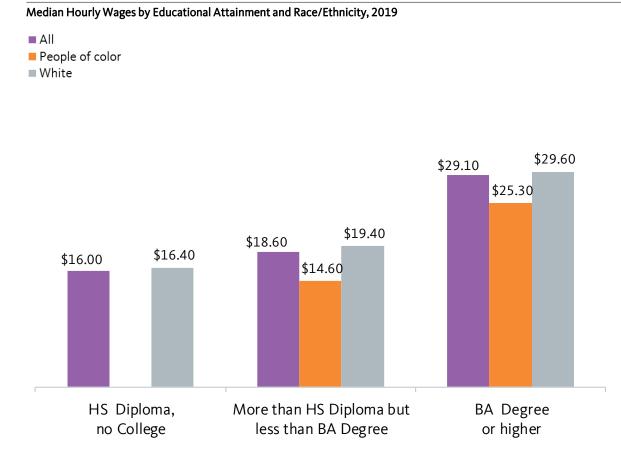
HS Diploma, More than HS Diploma BA Degree no College but less than BA Degree or higher

Source: Integrated Public Use Microdata Series. Universe includes the civilian non-institutional labor force ages 25 through 64 years. Note: Data represent a 2015 through 2019 average. Data for some racial/ethnic groups are excluded due to small sample size.

2%

Economic vitality Does higher education lead to better wages for everyone?

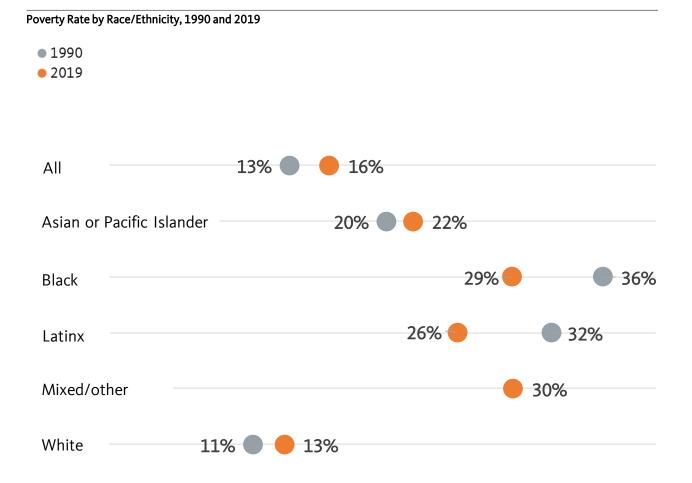
Wages also tend to increase with higher educational attainment, but people of color with more than a high school diploma or with a bachelor's degree or higher have lower median hourly wages compared with their white counterparts. White workers out-earn workers of color with more than a high school diploma or with a bachelors degree or higher, earning \$4 to \$5 more per hour on average.



Source: Integrated Public Use Microdata Series. Universe includes civilian noninstitutional full-time wage and salary workers ages 25 through 64 years. Note: Data represent a 2015 through 2019 average. Values are in 2019 dollars. Data for some racial/ethnic groups are excluded due to small sample size.

Economic vitality Is poverty low and decreasing?

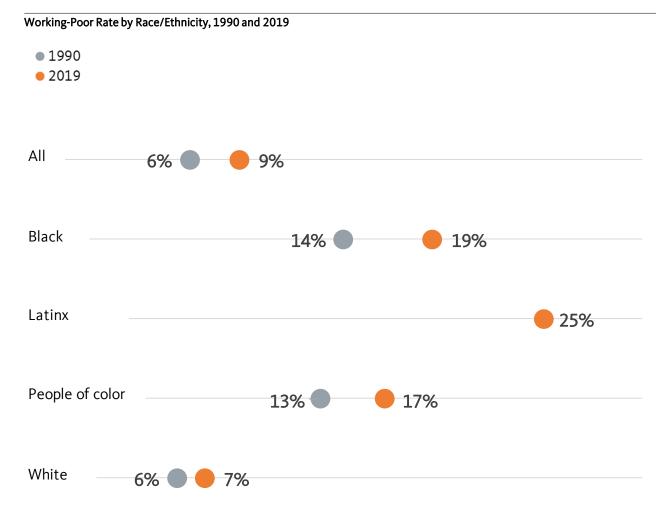
For Black and Latinx residents, the poverty rate decreased between 1990 and 2019, but people of color continue to be most impacted by economic insecurity. Black and multiracial residents have the highest poverty rate at 29 and 30 percent, respectively. About one in four Latinx people and over one in five Asian or Pacific Islander people live below the federal poverty level compared with about one in eight whites.



Source: Integrated Public Use Microdata Series. Universe includes all persons not in group quarters. Note: Data for 2019 represent a 2015 through 2019 average.

Economic vitality Is the share of workers who work full time and have income below the federal poverty level low and decreasing?

The proportion of workers of color who work full time and have income leaving them in poverty has increased for all groups since 1990, especially workers of color. The working-poor rate – defined as those working full time with family income at or below 200 percent of poverty – is highest among Latinx and Black workers at 25 percent and 19 percent, respectively.

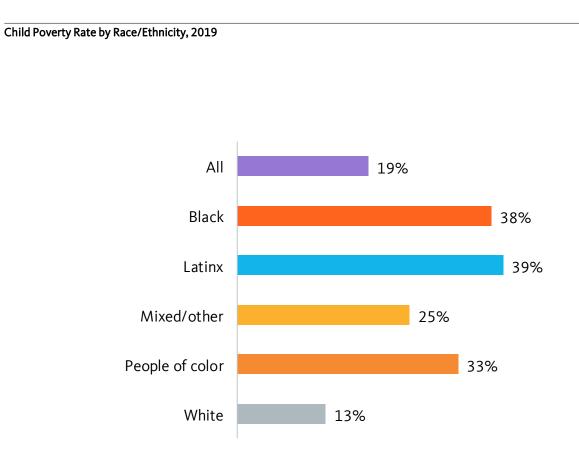


Source: Integrated Public Use Microdata Series. Universe includes the civilian noninstitutional population ages 25 through 64 not living in group quarters who worked at all during the year prior to the survey. Note: Data for 2019 represent a 2015 through 2019 average.

Economic vitality Is child poverty low?

Black and Latinx children have the highest

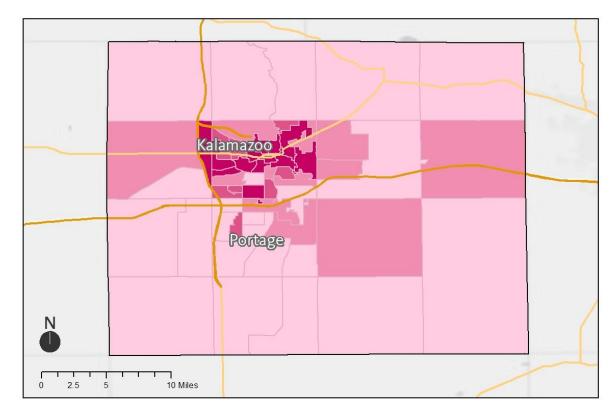
poverty rates. In 2019, the child poverty rates for Latinx and Black children were 39 percent and 38 percent, respectively, which was more than double the county average and three times the rate for white children. By way of comparison, only about 13 percent of white children lived in poverty. The rate for all children of color combined was 33 percent.



Economic vitality What neighborhoods have the highest poverty rates?

Poverty rates are highest around the city centers of the county. Neighborhoods with high levels of poverty are seen in Eastside, Edison, downtown, and many other parts of city of Kalamazoo. Percent Population Below the Poverty Level by Census Tract, 2019

- 2% to 10%
- 10% to 15%
- 15% to 20%
- 20% to 59%



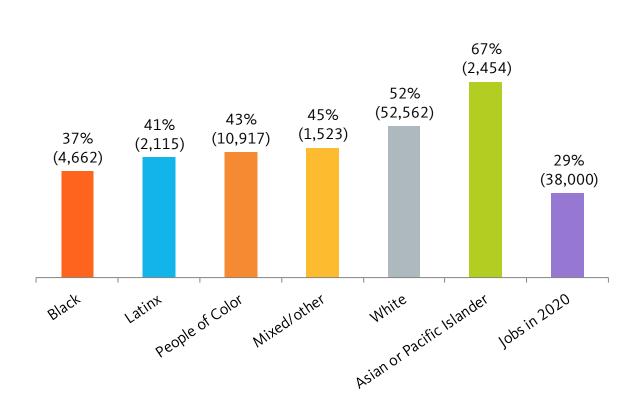
Sources: US Census Bureau; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community. Universe includes all persons not in group quarters.

Note: Data represent a 2015 through 2019 average.

An Equity Profile of Kalamazoo County

Economic vitality Do workers have the education and skills needed for the jobs of the future?

According to the Georgetown Center on Education and the Workforce, in 2020, 29 percent of jobs in Michigan were expected to require an associate's degree or higher.⁸ While on average the region's workers currently have that level of education, there are large racial gaps in educational attainment. Less than half of Black, Latinx, and multiracial residents have an associate's degree or higher compared to the majority of white and Asian or Pacific Islander residents. While obtaining postsecondary training or credentials is often critical to accessing quality jobs, data are not available to track this at the county level. Share and Count of Working-Age Population with an Associate's Degree or Higher by Race/Ethnicity, 2019, and Projected Share of Jobs that Require an Associate's Degree or Higher, 2020



⁸ Anthony P. Carnevale, Nicole Smith, and Jeff Strohl. *Recovery Job Growth and Education Requirements through 2020: State Report* (Washington, DC: Georgetown University. 2013), <u>https://lgyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/2014/11/Recovery2020.FR_.Web_.pdf</u>.

Sources: Georgetown Center on Education and the Workforce and Integrated Public Use Microdata Series. Universe for education levels of workers includes all persons ages 25 through 64 years.

Note: Data for 2019 by race/ethnicity represent a 2015 through 2019 average for Kalamazoo County; data on jobs in 2020 represent a state-level projection for Michigan.

An Equity Profile of Kalamazoo County

Youth preparedness



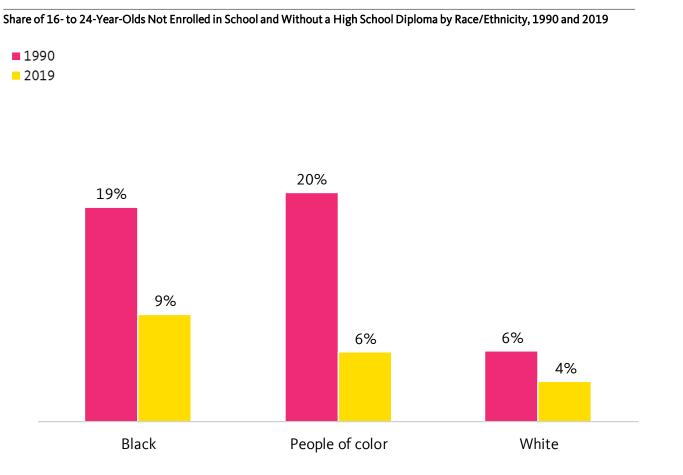


Youth preparedness Do all youth have a high school degree or are they pursuing one?

The share of youth who do not have a high school education and are not pursuing one has declined since 1990 for all racial/ethnic groups.

Across the nation, youth of color become disconnected — neither working nor in school — at higher rates than White youth <u>due to</u> <u>disparities in school and neighborhood</u> <u>poverty rates</u>, which are the primary contributors to disconnection.⁹

Despite the progress, Black youth and youth of color in Kalamazoo are still less likely to finish high school than white youth; 9 percent of Black youth lack a high school education and are not pursuing one whereas the rate for white youth is only 4 percent.

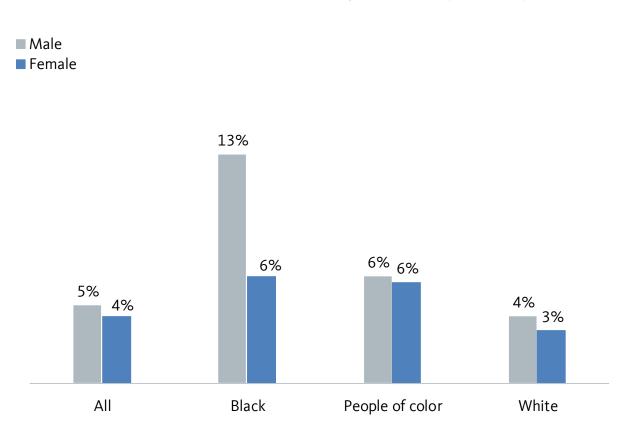


⁹ Martha Ross and Nicole Prchal Svajlenka. *Employment and disconnection among teens and young adults: The role of place, race, and education* (Brookings Institute. May 24, 2016),

https://www.brookings.edu/research/employment-and-disconnectionamong-teens-and-young-adults-the-role-of-place-race-and-education. Source: Integrated Public Use Microdata Series. Universe includes 16- through 24-year-olds. Note: Data for 2019 represent a 2015 through 2019 average.

Youth preparedness Are all youth able to complete a high school degree?

Overall the share of youth who do not have a high school degree and are not pursuing one is about the same for female and male youth, but this does not hold across racial/ethnic groups. Black young men are most likely to be lacking a high school diploma and not in pursuit of one, far surpassing the rate for other racial/ethnic and gender groups.



Share of 16- to 24-Year-Olds Not Enrolled in School and Without a High School Diploma by Race/Ethnicity and Gender, 2019

Youth preparedness Who are the youth not working or in school?

The number of "disconnected youth" who are neither in school nor working remains high. While the raw number of disconnected youth has decreased slightly for Black and white youth, the number for youth of color has increased.

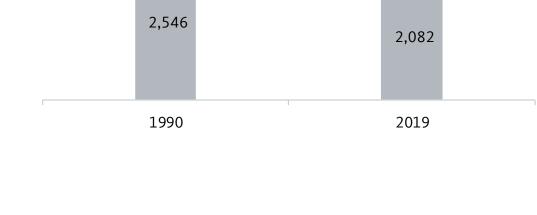
In 1990, 266 youth who were Latinx, Asian or Pacific Islander, Native American, or multiracial were disconnected from school and jobs. By 2019, that number has increased to 433.

Investments in education, career pathways, and youth empowerment can support increased connection in school and work for Kalamazoo's youth. Disconnected Youth: 16- to 24-Year-Olds Not in School or Work by Race/Ethnicity, 1990 and 2019

978

266

- Black
- Latinx, API, Native American, or Mixed/other
- White



Source: Integrated Public Use Microdata Series. Universe includes total population ages 16 to 24 years (including group quarters). Note: Data for some racial/ethnic groups are excluded due to small sample size. Data for 2019 represent a 2015 through 2019 average.

649

433

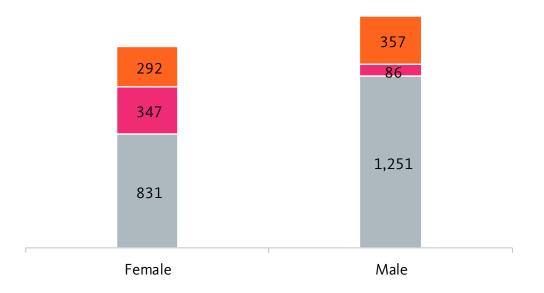
Youth preparedness Have young people been prepared to enter the workforce?

The number of disconnected male youth is higher than their female counterparts. In 2019, 1,694 young men were disconnected compared to 1,470 young women. For both genders, white youth are more likely to be disconnected than youth of color. However, young women of color are more likely to be disconnected compared to their share of the overall population.



Black

- Latinx, API, Native American, or Mixed/other
- White

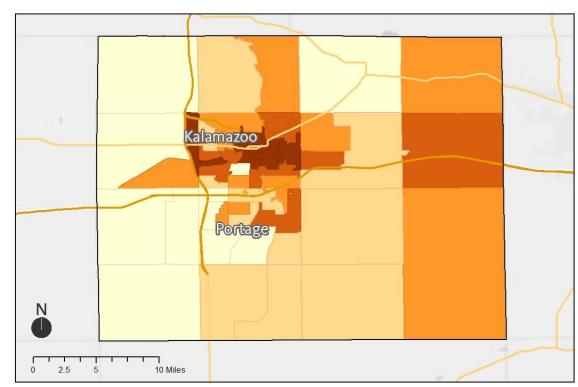


Youth preparedness Do all children have equitable access to opportunity-rich neighborhoods?

Child opportunity is highest in the rural parts of the county compared to the city core. In areas that score low on the Child Opportunity Index, such as Edison, Southside, and Eastside, children tend to have less access to educational, health, and social opportunities that are crucial for their well-being and success. These are the same parts of the county with a greater concentration of Black and Latinx households.

Composite Child Opportunity Index by Census Tract

- Very high
- High
- Moderate
- Low
- Very low



Sources: The diversitydatakids.org Project and the Kirwan Institute for the Study of Race and Ethnicity; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community. Note: The Child Opportunity Index is a composite of indicators across three domains: educational opportunity, health and environmental opportunity, and social and economic opportunity. The index is a relative measure of opportunity within the Kalamazoo-Portage metropolitan area. The vintage of the underlying indicator data varies, ranging from years 2007 through 2013. The map was created by ranking the census tract level Overall Child Opportunity Index Score into quintiles for Kalamazoo County.







Connectedness Are residents paying too much for housing?

High rent burden is a county-wide issue.

Several communities, such as in the Edison and Eastside neighborhoods and in the outer portions of the county, experience high rent burden. These renter households spend more than 30 percent of their income on rent, leaving less money to pay for other expenses such as childcare, health care, and wealthbuilding. Affordable housing will continue to be a barrier to equitable growth for all Kalamazoo residents.

Percent Severely Rent-Burdened Households by Census Tract, 2019

- 0% to 15%
- 15% to 20%
- 20% to 25%
- 25% to 30%
- 30% to 49%

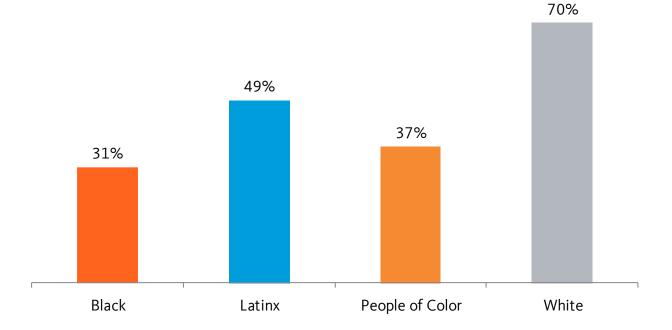


Sources: US Census Bureau; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community. Universe includes all renter-occupied households with cash rent. Note: Data represent a 2015 through 2019 average.

Connectedness Are residents able to own their homes?

Owner-Occupied Households by Race/Ethnicity, 2019

In Kalamazoo County, the majority of white households own their homes (70 percent). Homeownership rates for Black households (31 percent) and Latinx households (49 percent) are well below the county average (61 percent).



Source: Integrated Public Use Microdata Series. Universe includes all households (excludes group quarters). Note: Data represent a 2015 through 2019 average.

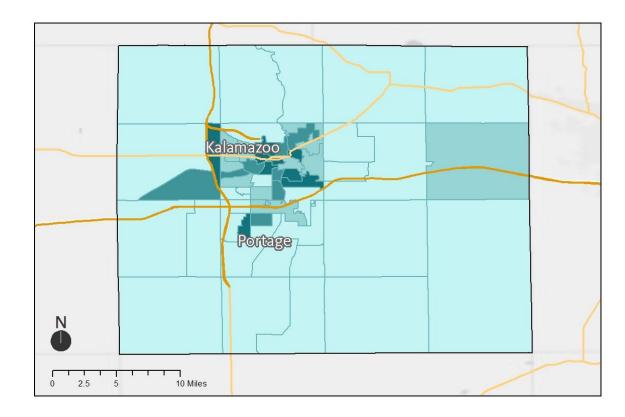
An Equity Profile of Kalamazoo County

Connectedness Do all residents have access to a vehicle?

In a county where access to jobs and opportunities rely heavily on driving, most households (92 percent) have at least one vehicle. But access to a vehicle remains a challenge for households across the entire county, especially around Edison, Southside, and parts of Milwood in the City of Kalamazoo. Compared with 6 percent of white households, 22 percent of Black households in the county do not own a vehicle.

Percent of Households Without a Vehicle by Census Tract, 2019

- 0% to 5%
- 5% to 10%
- 10% to 15%
- 15% to 35%



Sources: U.S. Census Bureau; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community. Note: Universe includes all households (excludes group quarters). Note: Data represent a 2015 through 2019 average.

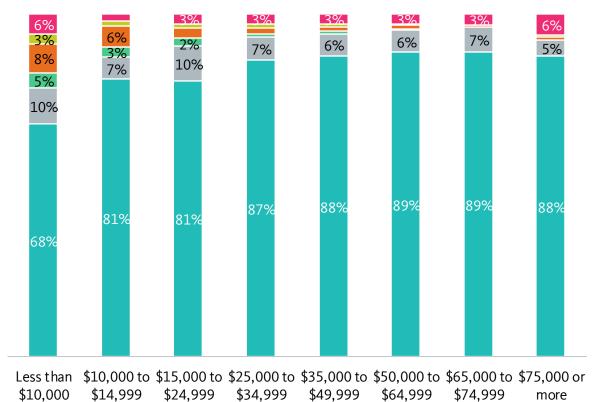
Connectedness How do residents get to work?

The vast majority of residents in Kalamazoo County drive alone to work. Single-driver commuting, however, fluctuates with income. Just under 70 percent of very low-income workers (earning under \$10,000 per year) drive alone to work, compared to 88 percent of workers who make \$75,000 or more a year.

For households living in neighborhoods without robust transit systems, access to a car is critical, but people with lower incomes and people of color are more likely to be carless.

Means of Transportation to Work by Annual Earnings, 2019

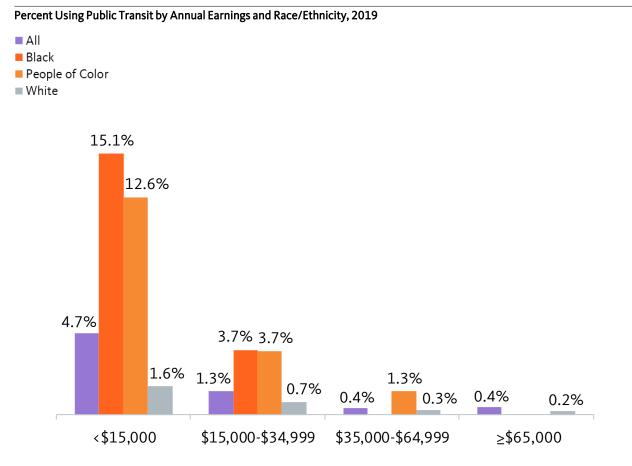
- Worked at home
- Other
- Walked
- Public transportation
- Auto-carpool
- Auto-alone



Source: Integrated Public Use Microdata Series. Universe includes workers ages 16 years and older with earnings. Note: Data represent a 2015 through 2019 average. Dollar values are in 2019 dollars.

Connectedness Who relies on public transit to get to work?

Income and race both play a role in determining who uses the county's public transit system to get to work. Households of color are the most likely to be dependent on public transit. Among very-low-income Black workers, 15 percent get to work using public transit, while only 2 percent do among white workers making the same income.



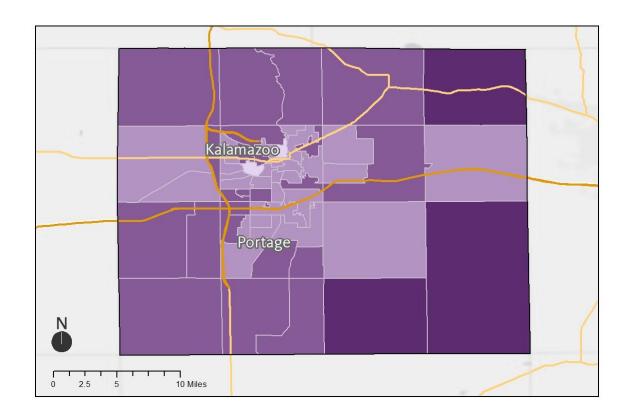
Source: Integrated Public Use Microdata Series. Universe includes workers ages 16 and older with earnings. Note: Data represent a 2015 through 2019 average.

Connectedness How long do residents travel to get to work?

Workers who live close to city centers have shorter commute times than those living in the rural parts of the county. Many living further away from the city centers travel to the cities for job opportunities. Even within the city of Kalamazoo, those who live further away from downtown, such as in Edison, Eastside, Southside, and Stuart, have longer commute times than those closest to downtown.

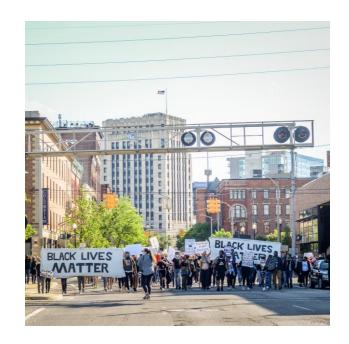
Average Travel Time to Work in Minutes by Census Tract, 2019

- 13 to 15 minutes
- 15 to 20 minutes
- 20 to 25 minutes
- 25 to 28 minutes



Sources: US Census Bureau; TomTom, ESRI, HERE, DeLorme, MaymyIndia, © OpenStreetMap contributors, and the GIS user community. Note: Universe includes all persons ages 16 years or older who work outside of the home. Data represent a 2015 through 2019 average.

Economic benefits of equity





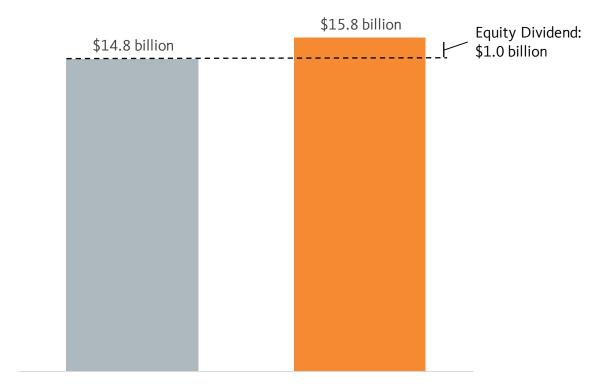
Economic benefits of equity How much higher would GDP be without racial economic inequities?

Kalamazoo County stands to gain a great deal from addressing racial inequities. The county's economy could have been \$1 billion stronger in 2019 if its racial gaps in income had been closed: a 7 percent increase.

Using data on income by race, we calculated how much higher total economic output would have been in 2019 if all racial groups who currently earn less than whites had earned average incomes similar to their white counterparts, controlling for age.



- GDP in 2019
- GDP if racial gaps in income were eliminated



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PolicyLink and ERI

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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 Equity Research Institute (ERI), and reflect Kalamazoo County, Michigan. 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 the terms and methodology used. Finally, the reader should bear in mind that while only a single county 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 counties 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.

Source	Dataset
Integrated Public Use Microdata Series (IPUMS)	1980 5% State Sample
	1990 5% Sample
	2000 5% Sample
	2019 American Community Survey, 5-year microdata sample
U.S. Census Bureau	1980 Summary Tape File 1 (STF1)
	1980 Summary Tape File 2 (STF2)
	1980 Summary Tape File 3 (STF3)
	1990 Summary Tape File 2A (STF2A)
	1990 Modified Age/Race, Sex and Hispanic Origin File (MARS)
	1990 Summary Tape File 4 (STF4)
	2000 Summary File 1 (SF1)
	2010 Summary File 1 (SF1)
	2019 American Community Survey 5-year Summary File
	2010 TIGER/Line Shapefiles, 2010 Census Tracts
	2010 TIGER/Line Shapefiles, 2010 Counties
Woods & Poole Economics, Inc.	2017 Complete Economic and Demographic Data Source
U.S. Bureau of Economic Analysis	Gross Domestic Product by State
	Gross Domestic Product by Metropolitan Area
	Local Area Personal Income Accounts, CA30: Regional Economic Profile
U.S. Bureau of Labor Statistics	Quarterly Census of Employment and Wages
	Local Area Unemployment Statistics
	Current Population Survey (for national unemployment data)
Georgetown University Center on Education and	Updated projections of education requirements of jobs in 2020,
the Workforce	originally appearing in: Recovery: Job Growth And Education
	Requirements Through 2020; State Report

Data and methods Selected terms and general notes

Broad racial/ethnic origin

In all of the analyses presented, all categorization of people by race/ethnicity and nativity is based on individual responses to various census surveys. All people included in our analysis were first assigned to one of six mutually exclusive racial/ethnic categories, depending on their response to two separate questions on race and Hispanic origin 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.
- "Latinx" 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.
- "Mixed/other" and "Other or mixed race" are used to refer to all people who identify with a single racial category not included above, or identify with multiple racial categories, and do not identify as being of Hispanic origin.
- "People of color" or "POC" is used to refer to all people who do not identify as non-Hispanic white.

Nativity

The term "US born" refers to all people who identify as being born in the United States (including US 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 Latinx and Asian populations, we sometimes present data for more detailed racial/ethnic categories within these groups. In order to maintain consistency with the broad racial/ethnic categories, and to enable the examination of second-and-higher generation immigrants, these more detailed categories (referred to as "ancestry") are drawn from the first response to the census question on ancestry, recorded in the Integrated Public Use Microdata Series (IPUMS) variable "ANCESTR1." For example, while country-oforigin information could have been used to identify Filipinos among the Asian population or Salvadorans among the Latinx population, it could do so only for immigrants, leaving only the broad "Asian" and "Latinx" racial/ethnic categories for the US-born population. While this methodological choice makes little difference in the numbers of immigrants by origin we report – i.e., the vast majority of immigrants from El Salvador mark "Salvadoran" for their ancestry - it is an important point of clarification.

PolicyLink and ERI

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Data and methods Selected terms and general notes

(continued)

Other selected terms

Below we provide definitions and clarification for some of the terms used in the profile.

- The term "region" may refer to a city or county (e.g., Kalamazoo County) 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 US 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 a high school equivalency or a general educational development (GED) certificate.
- The term "full-time" workers refers to all persons in the IPUMS microdata who reported working at least 45 or 50 weeks (depending on the year of the data) and who usually worked at least 35 hours per week during the year prior to the survey. A change in the "weeks worked" question in the 2008 American Community Survey (ACS), as compared with prior years of the ACS and the long form of the decennial census, caused a dramatic rise in the share of respondents indicating that they worked at least 50 weeks during the year prior to the survey. To make our data on full-time workers more comparable over time, we applied a slightly different definition in 2008 and later than in earlier years: in 2008 and later, the "weeks worked" cutoff is at least 50 weeks while in 2007 and earlier it is 45 weeks. The 45-week cutoff was found to produce a national trend in the incidence of full-time work over the 2005-2010 period that was most consistent with that found using data from the March Supplement of the Current Population Survey, which did not experience a change

to the relevant survey questions. For more information, see: <u>https://www.census.gov/content/dam/Cens</u> <u>us/library/working-</u> <u>papers/2012/demo/Gottschalck 2012FCS</u> <u>M VII-B.pdf</u>.

General notes on analyses

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

• With 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 US Bureau of Labor Statistics.

Data and methods Summary measures from IPUMS microdata

Although a variety of data sources were used, much of our analysis is based on a unique dataset created using microdata samples (i.e., "individual-level" data) from the IPUMS, for four points in time: 1980, 1990, 2000, and 2015–2019 pooled together. While the 1980 through 2000 files are based on the decennial census and each cover about 5 percent of the US population, the 2015–2019 files are from the ACS, and each covers only about 1 percent of the US population. The five-year pooled ACS file was used to improve the statistical reliability and to achieve a sample size that is comparable to that available in previous years.

Compared with the more commonly used census "summary files," which include a limited set of summary tabulations of population and housing characteristics, use of the microdata samples allows for the flexibility to create more illuminating metrics of equity and inclusion, and provides a more nuanced view of groups defined by age, race/ethnicity, and nativity for various geographies in the United States. The IPUMS microdata allows for the tabulation of detailed population characteristics, but because such tabulations are based on samples, they are subject to a margin of error and should be regarded as estimates – particularly in smaller regions and for smaller demographic subgroups. In an effort to avoid reporting highly unreliable estimates, we do not report any estimates that are based on a universe of fewer than 100 individual survey respondents.

A key limitation of the IPUMS microdata is geographic detail. Each year of the data has a particular lowest level of geography associated with the individuals included, known as the Public Use Microdata Area (PUMA) for years 1990 and later, or the County Group in 1980. PUMAs are generally drawn to contain a population of about 100,000, and vary greatly in geographic size from being fairly small in densely populated urban areas, to very large in rural areas, often with one or more counties contained in a single PUMA. While the geography of the IPUMS microdata generally poses a challenge for the creation of regional summary measures, this was not the case for Kalamazoo County, as the geography of the county could be assembled perfectly by combining entire 1980 County Groups and 1990, 2000, and 2010 PUMAs.

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An Equity Profile of Kalamazoo County

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

For the racial generation gap indicator, we generated 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 2019 (which reflects a 2015-2019 average), at the county level, which were then aggregated to the regional level and higher. The racial/ethnic groups include non-Hispanic white, non-Hispanic Black, Hispanic/Latinx, non-Hispanic Asian and Pacific Islander, non-Hispanic Native American/Alaska 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 SF1 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 county levels for all the requisite groups in STF2, for race/ethnicity by age group, we had to look to STF1, 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 Asian or 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 county populations (across all ages) to that remainder.

For 1990, the level of detail available in the underlying data differed at the county level, calling for different estimation strategies. At the county level, data by race/ethnicity was taken from STF2A, 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 how 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 STF2A, 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 STF2A 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 STF1, 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 (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

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

(continued)

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 STF1. 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 STF1.

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 US 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 2016 (which follows the OMB 1997 guidelines) to the percentage reported in the 2016 ACS 1year Summary File (which follows the 2000 Census classification). We subtracted the percentage derived using the 2016 Population Estimates program from the percentage derived using the 2016 ACS to obtain an adjustment factor for each group (all of which were negative, except 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 population projections 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, Latinx, Asian or 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, Latinx, Asian or Pacific Islander, and Native American), exclusive of Other and Mixed-race people.

To estimate the county-level population share 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 by our adjusted Woods & Poole projections for each county and projection year. The result was a set of adjusted projections at the county level

Data and methods Adjustments made to demographic projections

(continued)

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 countylevel 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.

Data and methods Estimates and adjustments made to BEA data on GDP

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 US Bureau of Economic Analysis (BEA). However, due to changes in the estimation procedure used for the national (and statelevel) 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 2019.

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 SICbased 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

county. Next, we calculated the difference between our final estimate of gross product for each state and the sum of our seconditeration county-level gross product estimates for metropolitan counties contained in the state (that is, counties contained in metropolitan areas). This difference, total nonmetropolitan gross product by state, was then allocated to the nonmetropolitan 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 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. An Equity Profile of Kalamazoo County

Data and methods Middle-class analysis

To analyze middle-class decline over the past four decades, we began with the regional household income distribution in 1979 – the year for which income is reported in the 1980 Census (and the 1980 IPUMS microdata). The middle 40 percent of households were defined as "middle class," and the upper and lower bounds in terms of household income (adjusted for inflation to be in 2019 dollars) that contained the middle 40 percent of households were identified. We then adjusted these bounds over time to increase (or decrease) at the same rate as real average household income growth, identifying the share of households falling above, below, and within the adjusted bounds as the upper, lower, and middle class, respectively, for each year shown. Thus, the analysis of the size of the middle class examined the share of households enjoying the same relative standard of living in each year as the middle 40 percent of households did in 1979.

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Data and methods Assembling a complete dataset on employment and wages by industry

Analysis of jobs and wages by industry, reported on pages 23-24 is based on an industry-level dataset constructed using twodigit NAICS industries from the US Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW). Because of 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, twodigit 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 twodigit 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-described procedure was applied at the county and state levels. To assemble data for regions and metro areas, we aggregated the county-level results.

Data and methods Growth in jobs and earnings by industry wage level, 2000 to 2020

The analysis on pages 23–24 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 2000 as the base year, we classified all broad private sector industries (at the twodigit 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 2000 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 highwage industries. This approach was adapted from a method used in a Brookings Institution report by Jennifer S. Vey, *Building From Strength: Creating Opportunity in Greater Baltimore's Next Economy* (Washington, DC: Brookings Institution, 2012).

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 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 2019 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 modifications 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, 2019 GDP was assumed to rise by the same percentage.

We first organized individuals ages 16 or older in the IPUMS ACS into six mutually exclusive racial/ethnic groups: white, Black, Latinx, Asian or Pacific Islander, Native American, and Mixed/other (with all defined as non-Hispanic except for Latinx, 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 nonworking, and were included so that income gains attributable to increased hours of work would reflect both more hours for 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 population ages 16 and older 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.





PolicyLink is a national research and action institute advancing racial and economic equity by Lifting Up What Works®.

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