MAP
MAKING ACTION POSSIBLE
for Southern Arizona

ANNUAL REPORT 2020

Executive Summary

The award-winning MAP Dashboard project was created to measurably improve Southern Arizona through data driven collective civic action and education. The MAP provides users with measures on our region's progress, as well as access to the latest information and research. MAP fills a gap by providing a common collection of information upon which to evaluate our community and collaborate to address our shared issues.

The Southern Arizona community continues to embrace the MAP Dashboard. The website has nearly 115,000 unique users since launch and over 435,000 page views. In addition, over 3,600 people subscribe to the MAP monthly newsletter, 312 people follow on Twitter, and 273 people follow on Facebook.

Since its founding, the MAP Dashboard has received international, national, state, and local recognition. In 2018, the MAP received the impact award from the international Community Indicators Consortium for its demonstrated ability to drive positive community change in Southern Arizona.

The content on the MAP Dashboard is constantly expanding and changing in response to the most pressing community issues. In addition to the regular data updates In addition to the regular data updates done throughout the year, 19 feature articles and three white papers appeared on the website. These included articles on:

- Economic impacts of the COVID-19 outbreak
- Impacts of automation on the workforce
- Implications of our shifting demographics
- Analysis of Southern Arizona communities
- House price trends and affordable housing
- Costs of traffic congestion
- And many others

White papers written by University of Arizona faculty are funded by MAP white paper grants and featured on the website. White papers published on the MAP last year included research on:

- Analysis of chronic disease related visits in Arizona hospitals
- Manufactured housing gaps in Tucson
- Charting incivility from and directed at locally elected officials in Tucson
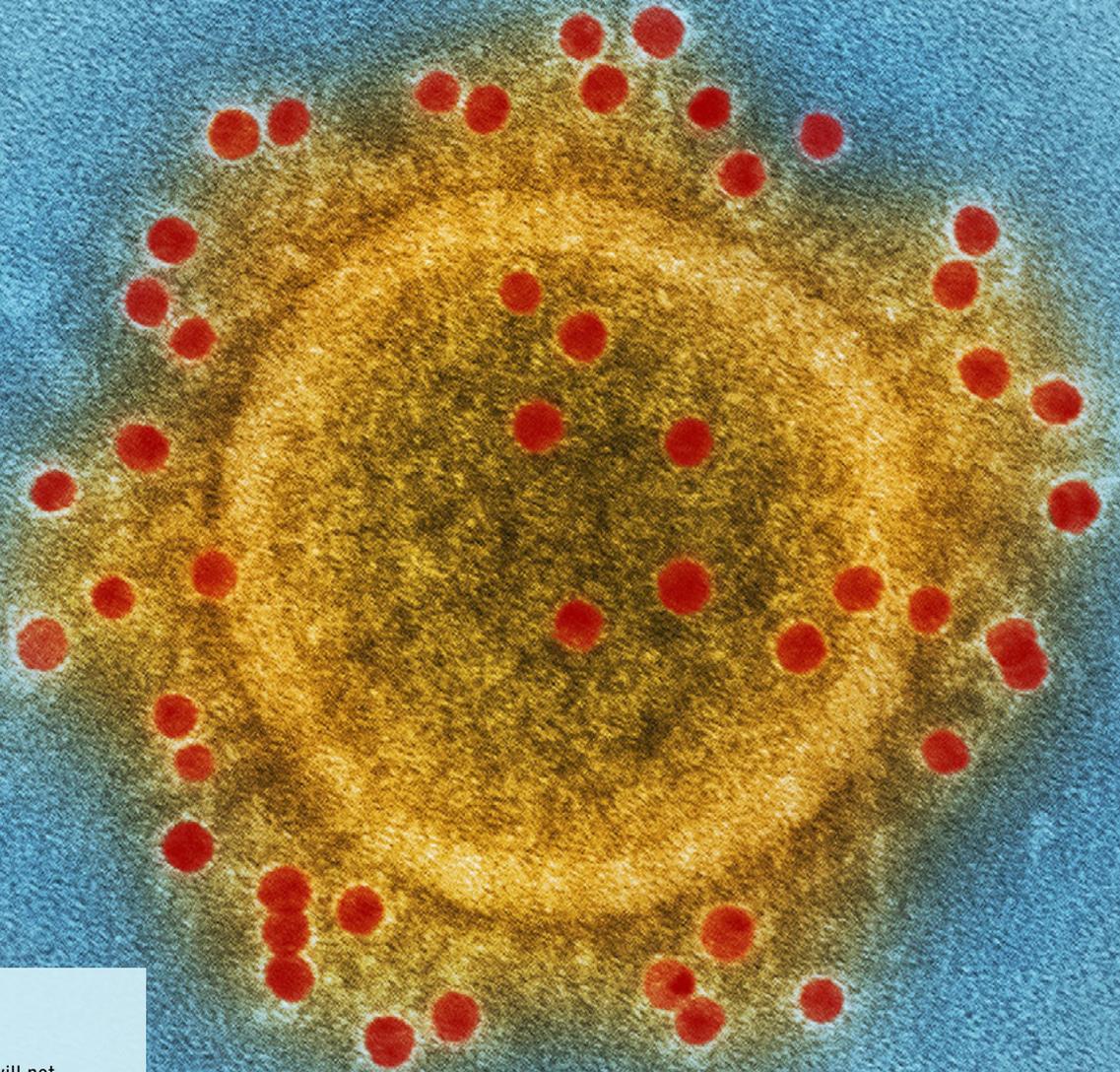
The MAP Dashboard highlights regional impact through the Community Spotlight. This Spotlight highlights how various organizations around Southern Arizona are using the MAP Dashboard. Each spotlight provides insight on how to get the most out of the MAP and inspire others on new ways to use the website. Community Spotlights last year featured the Freeport McMoRan Foundation and Tucson Values Teachers.

Community outreach and engagement is a key part of the MAP Dashboard. Researchers from the University of Arizona's Economic and Business Research Center frequently participate in print, radio, and television interviews. They gave 14 public presentations to local residents last year, reaching 1,600 attendees. These public presentations included events such as:

- Eller's Economic Outlook Luncheon and Breakfast with the Economists
- MAP Talk webinar series
- Community Foundation of Southern Arizona housing affordability event
- And many other public gatherings

Information from the MAP Dashboard website also reaches thousands of readers each month through a full-color feature in the Sunday Business section and Monday Health section of the *Arizona Daily Star.*

This annual report provides a snapshot of the MAP Dashboard as of spring 2020, using the most up to date annual data. Since federal agencies release this information with significant delays, the majority of the estimates are for 2018 and 2019. In some cases, in particular the health-related data, the most recent estimates available for all comparison regions are for 2017. This is due to the time required by federal agencies to acquire and report the data. This report summarizes the latest results for all indicators and highlights key changes during the past year. It also documents changes to the website during 2019, brings together website metrics, and summarizes outreach activities.

COVID-19

The month of March 2020 will not soon be forgotten by those who lived through it. The spread of the COVID-19 outbreak impacted the lives of all people worldwide. The MAP team pivoted rapidly to help the Southern Arizona community understand the economic impacts of the outbreak. The team quickly published new feature articles devoted to the industries experiencing the immediate impacts of social distancing. The MAP team will continue to be the trusted source of information that the community can rely on to understand the ongoing economic impacts of the outbreak. The MAP will also provide key metrics tracking the economic recovery when it comes.

THE FUTURE OF WORK

On January 10, 2020, the MAP partners and sponsors brought together over 500 participants from the local community for the Future of Work event. The gathering increased our understanding of the impacts of automation and artificial intelligence on the Tucson economy by convening experts from the academic, education, and business communities. A video recording is available on the MAP here: **https://mapazdashboard.arizona.edu/event/future-work**

While over 40% of Tucson jobs are expected to be impacted by automation in the next two decades, the major takeaway from the event was the fact that machines will not be taking all of our jobs. Instead, we will increasingly work with machines and artificial intelligence to accomplish business goals. That means that in-demand skills in the future will include advanced information technology and basic digital skills, entrepreneurship and leadership, and creativity and complex information processing and interpretation.

What did attendees think of the event? According to our survey results, they rated the content, sponsors, and venue very highly. They also left the event better informed about the current and projected impacts of automation on the nature of work. Nearly all respondents said that the meeting caused them to consider how automation might affect their careers and/or the prospects of their family members. They also left believing that automation will cause them to need additional training. Finally, all respondents expressed an interest in future events on this topic.

From left:
Mara Aspinall of Venture Partners, Calline Sanchez of IBM, Anthony Cook of Komatsu, Robert Brown of TuSimple and Paul Dias of Dias Management Inc./ McDonald's discuss the Automated Workplace today and in the future.

University of Arizona President Dr. Robert C. Robbins gets a special delivery from a Northern Arizona University robot.

Figure 1: **Median Home Price**   Off the Gauge: San Diego at $645,000

Tucson's Home Prices Increase but Lag Peers

Is housing still affordable in Tucson with rising prices? It depends on who you ask and what data you explore. In 2019, the median price of a single-family home in the Tucson Metropolitan Statistical Area (MSA) was at a twelve-year high and up 7.1% over last year. While prices have steadily increased since the 2008-2009 recession, Tucson continues to have one of the lowest median home prices when compared to peer western MSAs (Figure 1). However, despite steady increases, Tucson is one of only two MSAs explored on the MAP that has not regained its pre-recession home price.

When it comes to affordability, home prices only tell part of the story. The income of the local residents is equally as important. The MAP Dashboard explores two measures of affordability, one for homeowners and 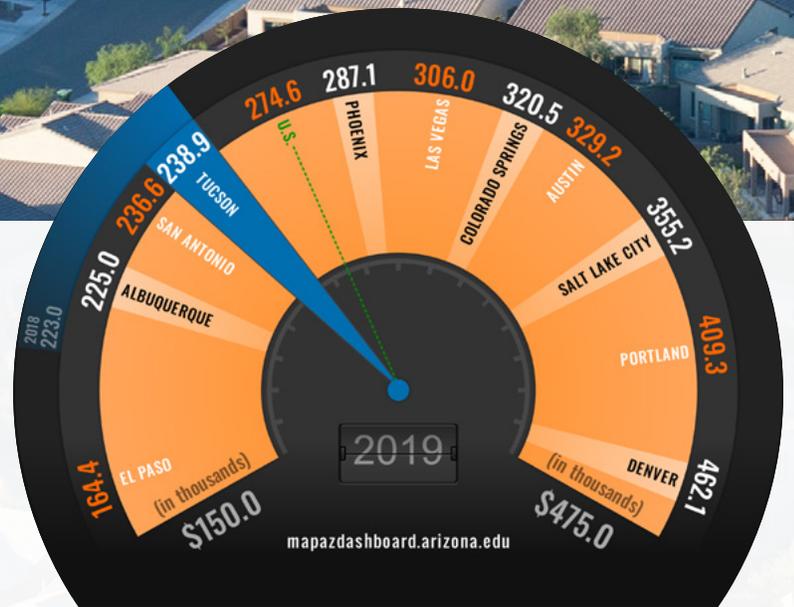one for renters. Housing affordability looks at how affordable recently sold single-family homes are to someone earning the local median family income. Tucson ranks highly in housing affordability among peer western MSAs with 66.2% of homes sold in 2018 affordable. The outlook for rental affordability isn't quite as rosy for Tucson when compared to peer MSAs. Overall, the data on the MAP suggests that while housing is affordable for those earning at least the local median family income those in the lower-income bracket struggle to find homeownership or renting affordable.

Southern Arizona Communities

The MAP Dashboard typically explores economic and socio-economic indicators for peer western MSAs and states as well as Arizona counties, but a wide variety of data is also available at the community level in the form of feature articles. These articles offer detailed information on 41 of the largest cities, towns, and census designated places (CDPs) in Southern Arizona. Three New Mexico geographies are also included (Bayard, Hurley, and Silver City) due to the importance of mining in neighboring Greenlee County. The features provide in-depth analyses on poverty, internet access, income and earnings, education, and more.

The Southern Arizona Communities Snapshot is published annually at the beginning of each year and captures key core measures such as population growth. For instance, there were 22 communities that posted population growth rates surpassing the U.S. rate of 14.7% between 2000 and 2018. The city of Maricopa posted a remarkable increase at 4,449.4%. The Corona de Tucson CDP and the city of Sahuarita also posted significant increases in populations with respective growth rates of 924.1% and 792.9%. According to the Southern Arizona Communities Education Report, educational attainment rates, or the percentage of those 25 years and older with a bachelor's degree or better, varied significantly by ethnicity across the communities in 2017. The Catalina Foothills CDP had the highest rates for both Hispanics and non-Hispanics at 49.3% and 67.2%, respectively. The average difference between the ethnicities for all Southern Arizona communities was 15.0 percentage points. The table outlines the communities with the largest gaps.

Four-Year College Attainment Rate (2017)

Geography	Hispanic	non-Hispanic
Bisbee	9.2	36.7
Catalina Foothills	49.3	67.2
Corona de Tucson	24.5	47.3
South Tucson	2.6	9.4
Tucson	12.9	36.1
Rio Rico	17.6	43.9

U.S. Census Bureau via MAP (mapazdashboard.arizona.edu)

MAP Dashboard Overview

The award-winning Making Action Possible (MAP) Dashboard was formed through a unique partnership between the University of Arizona, Community Foundation for Southern Arizona, and Southern Arizona Leadership Council to develop a project to measurably improve Southern Arizona through data-driven, collective civic action and education. Subsequently, Pima Association of Governments and Sun Corridor Inc. joined the partnership in 2016 and 2018, respectively. The partnership represents the non-profit and business communities, regional government, local economic development, and higher education. The MAP Dashboard fills a resource gap by providing a common collection of research and information upon which to evaluate and measure key socio-economic indicators in our community and collaborate to address our shared issues.

The socio-economic indicators are grouped into six categories: 1) Economy, 2) Education, 3) Health and Social Well-Being, 4) Infrastructure, 5) Quality of Place, and 6) Workforce and Demographics. For each indicator, users can learn how Southern Arizona is doing, how it compares, and what the latest trends tell us about our progress. Users can compare Southern Arizona to the United States, states in the West, and select Metropolitan Statistical Areas (MSAs). With this information, Southern Arizonans can decide priorities, shape and pursue effective policies, and seek external funding opportunities. They can also use the data to drive business and organizational decisions, as well as build collaborative and cross-sector partnerships capable of taking action throughout our region.

While the MAP Dashboard focuses on state, county, and metropolitan area data, it also includes a wealth of information for cities and towns located in the Southern Arizona region. The Southern Arizona region commonly includes the following counties: Cochise, Graham, Greenlee, Pima, Pinal, Santa Cruz, and Yuma. The MAP Dashboard also includes data for all 15 Arizona counties.

In the five years since its launch, the MAP Dashboard has received international, national, state, and local recognition. It was awarded the 2016 Award for Website Excellence by the Association for University Business and Economic Research and the 2016 DataViz Award from the Association for Public Data Users. The MAP Dashboard was one of three finalists for the Arizona Governors Award for Innovation in Academia and received the 2016 Common Ground Award from the Metropolitan Pima Alliance. Additionally, in 2018, the MAP received the impact award from the international Community Indicators Consortium for its demonstrated ability to drive positive community change in Southern Arizona.

Local community support makes the MAP Dashboard possible. Funding partners include the Community Foundation for Southern Arizona, Pima Association of Governments, the Southern Arizona Leadership Council, Sun Corridor Inc., and the University of Arizona. The UA's Economic and Business Research Center maintains, updates, and administers the MAP Dashboard website.

Financial support is also provided by community sponsors. Sustaining sponsors include the Thomas R. Brown Foundation, Tucson Electric Power, and Freeport McMoRan. Wells Fargo is a supporting sponsor, while Sundt Construction and Visit Tucson are contributing sponsors. Media sponsors include the Arizona Daily Star and Arizona Public Media.

Economy

Education

Health & Social Well-Being

Infrastructure

Quality of Place

Workforce & Demographics

Economy Overview

An economy is defined by the production, distribution, and consumption of goods and services. The decisions of individuals and firms interacting in this process determine how economic resources are allocated. The quality of a region's economy reflects the opportunities available to individuals and businesses. Strong economies typically result in a high standard of living, higher wages, and consistent job growth. The economic indicators included in this section help identify where Southern Arizona stands in comparison to other economies in the Western United States.

Tucson MSA Economy Scorecard

INDICATOR	HOW ARE WE DOING?		HOW DO WE COMPARE?	RECENT CHANGE
BUSINESS GROWTH	**0.0%**	FROM 2017 TO 2018	⛈	▼
EMPLOYMENT GROWTH	**1.9%**	FROM 2018 TO 2019	⛅	▲
HOUSING AFFORDABILITY	**66.2%**		☀	▼
MEDIAN HOUSEHOLD INCOME	**$51,037**		☁	▲
PATENTS	**17.4**	PER 10,000 WORKERS	☀	▼
REAL GDP	**3.6%**		⛅	▼

☀ Ranked in Top 1/3 ⛅ Ranked in Middle 1/3 ☁ Ranked in Bottom 1/3 ⛈ Ranked Last

MAP Scorecard "How Do We Compare?" Rankings Are Relative To The Following Peer Metropolitan Areas:
Albuquerque, Austin, Colorado Springs, Denver, El Paso, Las Vegas, Phoenix, Portland, Salt Lake City, San Antonio, and San Diego

mapazdashboard.arizona.edu

NOTABLE ANNUAL CHANGES

- Total nonfarm employment in the Tucson MSA increased to 1.9 percent in 2019, which was the fastest growth posted since the 2008-2009 recession.

- The Tucson MSA generated no growth in the number of establishments employing workers in 2018.

NOTE: Data refer to the Tucson Metropolitan Statistical Area (MSA), unless otherwise noted. Information published in this report use the most up-to-date data available.

- The growth rate of business establishments was flat in 2018, meaning there was no growth in the number of establishments employing workers. This ranked the Tucson MSA last among peer Western MSAs and was a decline from the previous year.

- The Tucson MSA's job growth rate accelerated to 1.9 percent in 2019. That put local growth above the national average of 1.4 percent and ranked the Tucson MSA as the seventh fastest among peer metropolitan areas.

- Housing affordability declined slightly between 2017 and 2018 in the Tucson MSA, falling by 4.9

percentage points to 66.2 percent. However, Tucson remained one of the most affordable metros for those earning the local median family income when compared to Western peers.

- The Tucson MSA's median household income rose to $51,037 in 2018 but remained near the bottom of peer Western metros.

- Arizona patents per 10,000 workers declined in 2018 to 8.6 falling below the national average of 9.9. Tucson MSA patent activity, at 17.4 patents per 10,000 workers, was well above the state and the nation in 2015, according to the latest available data.

- Inflation-adjusted Gross Domestic Product in the Tucson MSA increased by 3.6 percent in 2018, which was slightly slower than the growth of 4.0 percent posted in 2017. Tucson's growth was above the national average of 2.9 percent and ranked eighth among peer metropolitan areas.

Education Overview

Education is one key driver of economic success, both for individuals and for regions. Individuals benefit from education in a variety of ways, including higher productivity, higher wages, better health outcomes, and less need for publicly funded economic assistance. In addition, research has shown that the benefits of education spill over to the region as a whole. Local areas with high concentrations of highly educated residents tend to have better aggregate socioeconomic outcomes, such as higher per capita income, lower crime, and faster job and population growth. Thus, less educated residents also benefit by locating in regions with high educational attainment rates.

Tucson MSA Education Scorecard

INDICATOR	HOW ARE WE DOING?	HOW DO WE COMPARE?	RECENT CHANGE
COLLEGE MAJOR	47.1% SCIENCE, ENG., OR RELATED	Top 1/3	►
EDUCATIONAL ATTAINMENT	31.9% BA OR BETTER	Middle 1/3	▲
GRADUATION RATES	78.0% FOR ARIZONA	Bottom 1/3	▼
PRE K-12 ENROLLMENT	40.9% IN EARLY EDUCATION	Bottom 1/3	▲
STUDENT ACHIEVEMENT	279.9 AVERAGE MATH SCORE IN AZ	Middle 1/3	▼
TEACHER WAGES	$40,870	Last	▲

☀ Ranked in Top 1/3 ⛅ Ranked in Middle 1/3 ☁ Ranked in Bottom 1/3 ⛈ Ranked Last

MAP Scorecard "How Do We Compare?" Rankings Are Relative To The Following Peer Metropolitan Areas:
Albuquerque, Austin, Colorado Springs, Denver, El Paso, Las Vegas, Phoenix, Portland, Salt Lake City, San Antonio, and San Diego

mapazdashboard.arizona.edu

NOTABLE ANNUAL CHANGES

- High school teacher wages in the Tucson MSA increased in 2019 but continued to be less than peer MSAs.

- The percent of three-to-four-year-olds enrolled in an early education program increased in the Tucson MSA to 40.9 percent in 2018 but remains low compared to some peer MSAs.

NOTE: Data refer to the Tucson Metropolitan Statistical Area (MSA), unless otherwise noted. Information published in this report use the most up-to-date data available.

- In 2018, the Tucson MSA fell to fourth in the share of college graduates with majors in science and engineering or related fields, at 47.1 percent. However, that remained well above the national average of 44.4 percent.

- The college attainment rate for those aged 25 years and older in the Tucson MSA increased to 31.9 percent in 2018. Tucson remained slightly above the U.S. rate, but long-term trends suggest the nation is increasing at a much faster rate.

- In Arizona, the share of public high school students graduating in four years varied widely by race & ethnicity. In 2017, 89.0 percent of Asian/Pacific Islanders graduated with their peers while only 66.8 percent of Native Americans graduated on time.

- The Tucson MSA ranked ninth among peer MSAs in the percent of three-to-four-year olds that were enrolled in an early education program in 2018.

- The percentage of 8th-grade students in Pima County who scored proficient or higher on the

AzMERIT 8th Grade Math Test ranked eighth among Arizona counties in 2019 with 26 percent passing.

- In the Tucson MSA, the median annual wage for secondary school teachers increased in 2019 to $40,870. Wages remained far below the national average for teachers and Tucson ranked last among peer metropolitan areas.

Health & Social Well-Being Overview

Indicators in this section identify critical trends in the health and social well-being of Southern Arizona residents. Measures of physical and behavioral well-being provide information about the health of local residents, which plays an important role in determining the overall quality of life. Households that are housing cost burdened or whose income is at or near the poverty level are more likely to endure adverse social, economic, and health conditions. Likewise, those who lack health insurance coverage are at a greater risk for bankruptcy and illness. The data provide residents and policymakers with performance measures crucial to gauging the overall well-being of a region.

Tucson MSA Health & Social Well-Being Scorecard

INDICATOR	HOW ARE WE DOING?		HOW DO WE COMPARE?	RECENT CHANGE
BEHAVIORAL HEALTH	4.0	POOR MENTAL HEALTH DAYS	☁	▲
HEALTH INSURANCE COVERAGE	90.1%		⛅	▶
HOUSING COST BURDEN	33.0%	OF HOUSEHOLDS	⛅	▼
PHYSICAL WELL-BEING	82.8%	GOOD OR EXCELLENT HEALTH	⛅	▼
POVERTY RATE	17.8%		☁	▲
TEEN BIRTH RATE	24.5	PER 1,000 FEMALES	⛅	▼

☀ Ranked in Top 1/3   ⛅ Ranked in Middle 1/3   ☁ Ranked in Bottom 1/3   🌧 Ranked Last

MAP Scorecard "How Do We Compare?" Rankings Are Relative To The Following Peer Metropolitan Areas:
Albuquerque, Austin, Colorado Springs, Denver, El Paso, Las Vegas, Phoenix, Portland, Salt Lake City, San Antonio, and San Diego

mapazdashboard.arizona.edu

NOTABLE ANNUAL CHANGES

- The percentage of housing cost burdened households in Tucson declined to 33.0 percent in 2018.

- Tucson's teen birth rate has declined by 54.6 percent since 2006

NOTE: Data refer to the Tucson Metropolitan Statistical Area (MSA), unless otherwise noted. Information published in this report use the most up-to-date data available.

- The Tucson MSA had the fifth-lowest percentage of the population that drank excessively in 2017 when compared to peer metropolitan areas. Tucson's percent of 17.0 was better than the national rate of 19.0.

- In 2018, health insurance coverage rates for residents of the Tucson MSA was 90.1 percent. Rates varied by age group, but those between 19-64 years old posted the lowest rates.

- In 2018, 73.7% of the households that were housing cost burdened earned less than $35,000.

- The percent of those who reported good or excellent health in Tucson during 2017 was 82.8%, slightly lower than the previous year.

- Poverty rates varied widely by race & ethnicity in Tucson ranging from 10.9 percent for Native Hawaiian and Other Pacific Islanders to 38.5 percent for American Indian and Alaska Natives.

- The teen birth rate in Tucson declined to 24.5 births per 1,000 females age 15-19, ranking it squarely in the middle of peer Western metros. This can be attributed to teens engaging in less sex, use of more effective contraception, and pregnancy prevention programs.

Infrastructure Overview

A region's overall prosperity is related to the quality of its infrastructure. People rely on transportation and communication networks for access to employment, goods, and services. Businesses also rely on infrastructure to provide access to trade, raw materials, labor, and other inputs to production. The responsible use of natural resources by residents is also important, as energy and water use can affect long-term regional sustainability. Responsive and well-planned infrastructure results from a collaborative process between residents and policymakers, improving current levels of service and meeting future demand. Data presented in this category identify key trends in infrastructure performance and provide a valuable basis to inform future decisions related to its development.

Tucson MSA Infrastructure Scorecard

INDICATOR	HOW ARE WE DOING?		HOW DO WE COMPARE?	RECENT CHANGE
AIR TRAVEL	4.0	ANNUAL SEATS PER CAPITA	☁ Ranked in Bottom 1/3	▼
BICYCLING CAPACITY	7.9	BIKE MILES PER 10,000 RESIDENTS	☀ Ranked in Top 1/3	▶
ENERGY USE	12.8	CENTS PER KWH FOR AZ	☁ Ranked in Bottom 1/3	▲
INTERNET ACCESS	86.9%	HOUSEHOLDS W/ BROADBAND	⛅ Ranked in Middle 1/3	▶
RESIDENTIAL WATER USE	146	GAL. DAILY PER CAPITA IN AZ	☁ Ranked in Bottom 1/3	▼
TRANSPORTATION TO WORK	76.9%	PEOPLE DROVE ALONE	⛅ Ranked in Middle 1/3	▲

☀ Ranked in Top 1/3   ⛅ Ranked in Middle 1/3   ☁ Ranked in Bottom 1/3   ☁ Ranked Last

MAP Scorecard "How Do We Compare?" Rankings Are Relative To The Following Peer Metropolitan Areas:
Albuquerque, Austin, Colorado Springs, Denver, El Paso, Las Vegas, Phoenix, Portland, Salt Lake City, San Antonio, and San Diego

mapazdashboard.arizona.edu

NOTABLE ANNUAL CHANGES

- The percentage of people living in a household with broadband internet access in the Tucson MSA exceeded the national rate in 2018.

- The share of those bicycling to work in the Tucson MSA during 2018 outpaced the nation and almost all peer MSAs.

NOTE: Data refer to the Tucson Metropolitan Statistical Area (MSA), unless otherwise noted. Information published in this report use the most up-to-date data available.

- Tucson International Airport ranked fifth out of seven comparable airports in departures per day in 2017 at 53, which was down from 78 in 2007.

- In 2016, the city of Tucson ranked third out of peer western cities with 7.9 miles of bicycle infrastructure, such as bicycle only lanes and multi-use paths, per 10,000 residents.

- Average residential electricity prices increased in 2018 for Arizona, ranking the state second, tied with New Mexico, among 10 Western states.

- The Tucson MSA ranked seventh in 2018 among peer MSAs in the share of residents living in a household with broadband access. Tucson's rate of 86.9 percent was higher than the national rate.

- The city of Tucson reduced residential water use by 32.2 percent between 1996 and 2017.

- In 2018, the Tucson MSA had the seventh lowest rate of those driving alone as their primary means of transportation to work at 76.9 percent.

Quality of Place Overview

Indicators in this category capture a wide range of influences on quality of life. Individuals who feel safe in their homes and surrounding areas are more likely to be involved in their community, increase civic participation, and even overall outdoor activity. Likewise, good air quality may increase residents' ability to participate in outdoor activities. Another aspect of quality of place is access to cultural amenities, such as the arts, entertainment, and other creative activities. How an individual values the quality of a region may differ depending on a multitude of factors, such as race and ethnicity, age, socioeconomic status, gender, and personal preference. However, the indicators included in this category reflect a broad range of factors affecting the quality of life in a region.

Tucson MSA Quality of Place Scorecard

INDICATOR	HOW ARE WE DOING?		HOW DO WE COMPARE?	RECENT CHANGE
AIR QUALITY	53.7%	GOOD DAYS	⛅	▲
COST OF LIVING	4.9%	LESS THAN THE U.S.	☀	▼
CREATIVE OCCUPATIONS	114.5	JOBS PER 1,000 RESIDENTS	☁	▲
OUTDOOR RECREATION	5.4%	RISE IN NATIONAL PARK VISITS	⛅	▲
PUBLIC SAFETY	457.4	VIOLENT CRIMES PER 100,000	☁	▼
VOTER TURN OUT	43.7%	IN ARIZONA	⛅	▼

☀ Ranked in Top 1/3   ⛅ Ranked in Middle 1/3   ☁ Ranked in Bottom 1/3   🌧 Ranked Last

MAP Scorecard "How Do We Compare?" Rankings Are Relative To The Following Peer Metropolitan Areas:
Albuquerque, Austin, Colorado Springs, Denver, El Paso, Las Vegas, Phoenix, Portland, Salt Lake City, San Antonio, and San Diego

mapazdashboard.arizona.edu

NOTABLE ANNUAL CHANGES

- The percentage of "good" air quality days in Tucson increased to 53.7 percent in 2018 from an 18 year low of 39.7 percent in 2017.

- The cost of living in Tucson was 4.9 percent below the nation in 2017, while rents were 13.4 percent lower.

NOTE: Data refer to the Tucson Metropolitan Statistical Area (MSA), unless otherwise noted. Information published in this report use the most up-to-date data available.

- In 2018, the percent of air quality days that were considered unhealthy in Tucson was three percent, one of the lowest among peer metropolitan areas.

- The cost of living in the Tucson MSA was 4.9 percent below the nation in 2017. That ranked Tucson the third lowest among peer metropolitan areas.

- Creative occupations accounted for 114.5 jobs per 1,000 residents in the Tucson MSA in 2019. This was below the national average and ranked poorly among peer MSAs.

- National park visits in the Tucson MSA were up by 5.4 percent in 2019.

- The Tucson MSA violent crime rate per 100,000 residents declined in 2018 to 457.4.

- Arizona's voter turnout rate during the mid-term election in 2018 was 43.7 percent, just slightly behind the nation.

Workforce & Demographics Overview

The indicators included in this section help identify the demographic mix and workforce characteristics of Southern Arizona compared to other regions in the Western United States. The data can provide government officials, policymakers, and planners with the information necessary to gauge demand for future resources. The type of resources a region may need in the future are highly dependent on the demographic mix and could range from educational needs to infrastructure to services, such as health care. Population growth is a measure of how well a community attracts and retains residents, which reflects economic opportunities. The workforce is a subset of the population and refers to those individuals who participate in the labor market. A highly educated and skilled workforce tends to generate greater economic opportunities for a region's residents.

Tucson MSA Workforce & Demographics Scorecard

INDICATOR	HOW ARE WE DOING?		HOW DO WE COMPARE?	RECENT CHANGE
EMPLOYMENT SHARE	1.27%	JOB MIX DIF. VS. U.S.	☀	▼
LABOR FORCE PARTICIPATION RATE	80.3%	AGED 25 TO 54	☁	▲
OCCUPATIONAL WAGES	$36,900	MEDIAN WAGE	⛅	▲
POPULATION	1.0%	2018-2019 GROWTH	⛅	▲
WAGE DISTRIBUTION	3.8 =	HIGH WAGE ÷ LOW WAGE	☀	▼
WORKING AGE OF COLLEGE GRADUATES	30.7%	AGED 25 TO 64	☁	▲

☀ Ranked in Top 1/3   ⛅ Ranked in Middle 1/3   ☁ Ranked in Bottom 1/3   🌧 Ranked Last

MAP Scorecard "How Do We Compare?" Rankings Are Relative To The Following Peer Metropolitan Areas:
Albuquerque, Austin, Colorado Springs, Denver, El Paso, Las Vegas, Phoenix, Portland, Salt Lake City, San Antonio, and San Diego

mapazdashboard.arizona.edu

NOTABLE ANNUAL CHANGES

- The Tucson MSA's population increased by 1.0 percent in 2019, the fastest growth during the past five years.

- The percent of the working-age population in the Tucson MSA with a four-year college degree increased to 30.7 percent in 2018.

NOTE: Data refer to the Tucson Metropolitan Statistical Area (MSA), unless otherwise noted. Information published in this report use the most up-to-date data available.

- On average, the Tucson MSA employment mix is similar to the nation. However, government jobs accounted for nearly 20.0 percent of total employment locally in 2019, compared to 14.8 percent for the nation.

- The labor force participation rate in the Tucson MSA was 80.3 percent among prime working age adults in 2018. When exploring the labor force participation rate by gender, nearly 10 percent more males aged 25-54 are in the labor force than females.

- Median wages in the Tucson MSA hit $36,900 in 2019, increasing by more than 4 percent from 2018.

- The Tucson MSA's population increased by 1.0 percent in 2019, ranking it eighth among peer metropolitan areas in population growth.

- In 2019, the wage distribution in the Tucson MSA was 3.8, meaning that high-wage earners (those in the 90th percentile) made 3.8 times more than low-wage earners (those in the 10th percentile). Tucson has the lowest wage distribution ratio among peer MSAs, which reflects less wage inequality.

- The college attainment rate for working-age residents in the Tucson MSA increased to 30.7 percent in 2018. This was below the national rate of 32.9 percent and ranked ninth among peer metropolitan areas.

Acknowledgements

The MAP Dashboard is made possible through the support of its partners and sponsors.

PARTNERS

SUSTAINING SPONSORS

SUPPORTING SPONSORS:

CONTRIBUTING SPONSORS:

The MAP Dashboard would like to thank our media partners for their contributions in promoting the content on the MAP and supporting MAP related events

The MAP Dashboard is a product of the Economic and Business Research Center in the Eller College of Management at the University of Arizona.

Jennifer Pullen *MAP Dashboard Coordinator and Senior Research Economist*

Katelyn Chamarro *Research Economist*

Valorie Rice *Business Information Specialist*

Laurie Sheldon *Graduate Research Assistant*

Maile Nadelhoffer *Webmaster and Research Economist*

George Hammond *Director and Research Professor*

The MAP Dashboard is guided by an Advisory Board, consisting of representatives from Partner organizations

Jamie Brown *Strategic Planning and Public Affairs Administrator, Pima Association of Governments (co-alternate member)*

Allison Duffy *President, Silverado Technologies*

Celestino Fernandez *Professor, University of Arizona*

Paulo Goes *Dean, Eller College of Management, University of Arizona*

Jan Lesher, *Chief Deputy County Administrator, Pima County, past member*

Steve Lynn *Chief Strategy Officer, NüPoint Marketing, past member*

Clint Mabie *President and CEO, Community Foundation for Southern Arizona, past Chair*

Farhad Moghimi *Executive Director, Pima Association of Governments*

Paki Rico *Community Affairs Administrator, Pima Association of Governments (co-alternate member)*

Laura Shaw *Senior Vice President, Sun Corridor Inc.*

Ron Shoopman *Director of Innovation and Special Projects, Southern Arizona Leadership Council, Chair*

Joe Snell *President, Sun Corridor Inc.*

The MAP Dashboard would like to thank NüPoint Marketing for their efforts in promoting the project.

Mary Rowley *Founder and CEO, NüPoint Marketing*

Jan Howard *Vice President, NüPoint Marketing*

Steve Lynn *Chief Strategy Officer, NüPoint Marketing*

National, State and Local Recognition

1947 AUBER

2016 Award for Website Excellence

2016 AWARD WINNING DATA VIZ

APDU Winner

GOVERNOR'S CELEBRATION OF INNOVATION

(MPA) Metropolitan Pima Alliance

2016 Common Ground Award

cic

MAP Dashboard Update: Web Analytics

3,696

SUBSCRIBERS
TO THE NEWSLETTER

114,735

USERS

312

TWITTER FOLLOWERS

273

LIKES ON FACEBOOK

ANNUAL REPORT 2020

MAP MAKING ACTION POSSIBLE
for Southern Arizona

mapazdashboard.arizona.edu