



CENTER
FOR THE FUTURE OF
ARIZONA

Infrastructure Data Profile



Geography:
All Arizona Counties

Produced By
The Center for the Future of Arizona

The Arizona We Want Progress Meters

<https://www.arizonafuture.org/>

5/1/2020

Arizona's economic vibrancy and livability rely on a robust infrastructure.

What success looks like: Arizonans enjoy access to safe and reliable energy, water, transportation, housing, and communications infrastructure built to meet future demand.



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The Arizona We Want Progress Meters

The Arizona We Want

The Arizona We Want is a shared vision of success around what matters most to Arizonans that expresses their highest aspirations and hopes for the future. It is derived from what the Center for the Future of Arizona (CFA) has learned through careful listening to what Arizonans say about what matters most to them and their highest priorities. CFA's findings and analyses can be found in the three The Arizona We Want reports which you can access here (<https://www.arizonafuture.org/reports/>).

The Arizona We Want Progress Meters

The Arizona We Want Progress Meters are an evolving, dynamic set of tools to measure the priorities that Arizonans identified of critical importance to the future of the state. The metrics were carefully considered and included with the criteria of being: easily understood; supported by publicly available, trusted, and regularly updated data; and, useful as a guidepost for assessing policy and practice. The Progress Meters may evolve over time with the input from Arizona's leaders, communities and technical experts. Learn more on our website at: <https://www.arizonafuture.org/az-progress-meters/overview/>

The Arizona We Want Progress Meters are defined by categories but in the real world none of these areas exist in isolation. Explore our data and feel free to connect with us at any time if you would like CFA to support you in identifying the best measures for advancing the priorities of your community.

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How Progress Meters were Selected

The Arizona We Want Progress Meters were developed through the following milestones:

- CFA partnered with leading education organizations, with Expect More Arizona as lead partner, to develop and launch the Education Progress Meter, which engaged over 40 partners in its launch and has now been formally adopted by 60 cities and towns.
- CFA partnered with the National Conference on Citizenship (NCoC) to use the nationally developed and recognized Civic Health Index to provide an array of metrics and data to track progress on two additional Progress Meters: Connected Communities and Civic Participation.
- CFA led an extensive process for developing metrics for the following Progress Meters: Jobs, Health & Well-being, Natural Resources, and Infrastructure. It engaged a Task Force, involved content experts, and held focus groups in using consensus-building around which metrics are most critical to track for each of the four meters. It followed this process with what has become a consistent practice in using critical readers statewide to provide feedback. Over 100 of 300+ critical readers rated metrics and provided feedback that culminated in the chosen measurements of each category.
- The Young Talent Progress Meter is still under development as it is being defined by Arizona's Young People. Learn more here! (<https://www.arizonafuture.org/az-progress-meters/young-talent/overview/>)

Throughout this process, careful consideration was given to the following criteria which must be met for metrics to be included in the Arizona We Want Progress Meters:

- They must be supported by publicly available, trusted, and regularly updated data;
- They must be understandable by most Arizonans;
- And they must be useful as a guidepost for assessing policy initiatives.

Many of our data sources do not provide data disaggregated to cities and counties, though some do. Because of this, in the event that data is not available, it will be provided at the most local level possible. Please reference the notes on each metric for details on how often data is updated, and at what geographic level the data is available.

Using this Report

This local report is intended to provide timely and trusted data that can be used by communities to better inform them on how they are doing on what matters most to them. The Arizona We Want Local Progress Meter Profiles are intended to support the following objectives:

- Allow communities to compare themselves with their peers, and the state as a whole (where data is available)
- Track progress over time by reporting the value of indicators in previous years
- Support in the identification of priorities that can be the subject of targeted actions to improve conditions
- Explore the interconnections between the categories of The Arizona We Want priorities in pursuit of holistic and well-designed solutions

The Center for the Future of Arizona is engaging with a select group of communities in Community Conversations that are intended to support in advancing the objectives above. Please connect with us if you would like us to bring this process to you!

We appreciate hearing feedback and responding to inquiries about Progress Meters data, website and/or reports. Feel free to reach out to Ian Dowdy, Director of Progress Meters at ian.dowdy@arizonafuture.org.

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Arizona-Mexico Border Wait Time

Quality of Public Transit

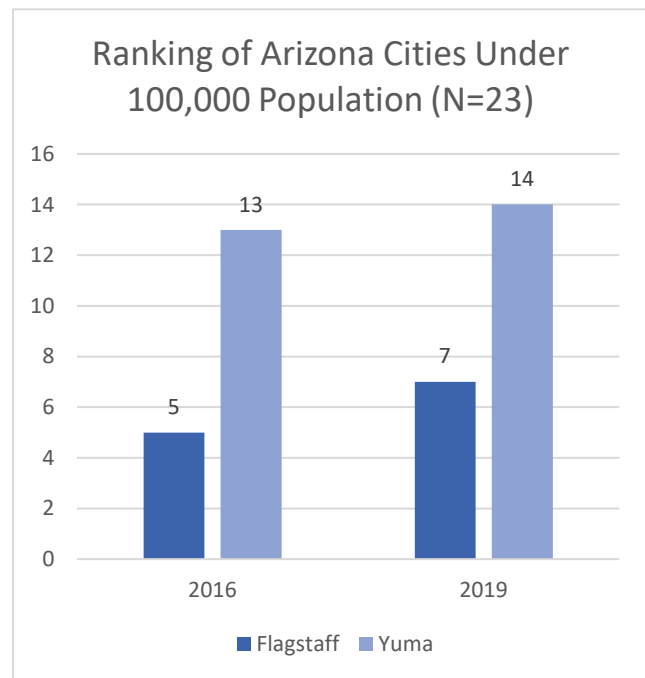
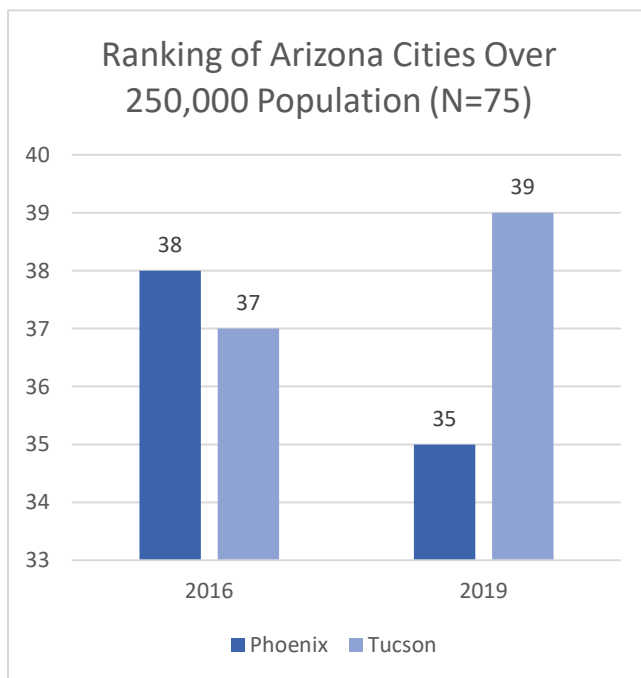
Quality of Public Transit is measured by the statewide ranking of peer communities with the AllTransit™ performance score. “The AllTransit™ Performance Score is a comprehensive score that looks at connectivity, access to land area and jobs, frequency of service, and the percent of commuters who use transit to travel to work. (<https://alltransit.cnt.org>)”

Public transportation is considered by many people as an important aspect of the quality-of-life in urban communities. It addresses the needs of working people, especially those without alternative means of transportation; high density, urban environments; and the stated preferences of many young adults. Tucson, Tempe and Phoenix have recently expanded public transportation options and have made significant investment in redevelopment in their central, urban cores.

Updated annually and available for the following localities:

- US cities
- Counties
- Metropolitan Planning Organizations (MPOs)
- Municipal Statistical Areas (MSAs).

Source: Center for Neighborhood Technology, AllTransit™ (<https://alltransit.cnt.org>).



Bridge and Pavement Conditions

Bridge and Pavement Conditions are measured with three separate indicators - (1) Bridge conditions: the percent of Arizona bridges in poor condition; (2) Interstate highway conditions: Percent of Arizona interstate highway miles that are in poor condition; (3) Non-Interstate highway conditions: Percent of Arizona highway miles that are in poor condition.

Over the past few years, there has been significant national discussion about the condition of America's infrastructure, including roads and bridges. This discussion was prompted in-part by the collapse of the I-35 bridge in Indianapolis Minnesota.¹ Its catastrophic failure resulted in the deaths of 13 people and 145 injuries during rush hour. Numerous independent assessments have warned that more investment is needed to prevent similar tragedies in the future.

Across Arizona, pavement condition and bridges are assessed annually. For the safety of the public, an adequate amount of investment is needed to keep transportation assets in acceptable condition.

Updated annually and available for:

- Nation
- States

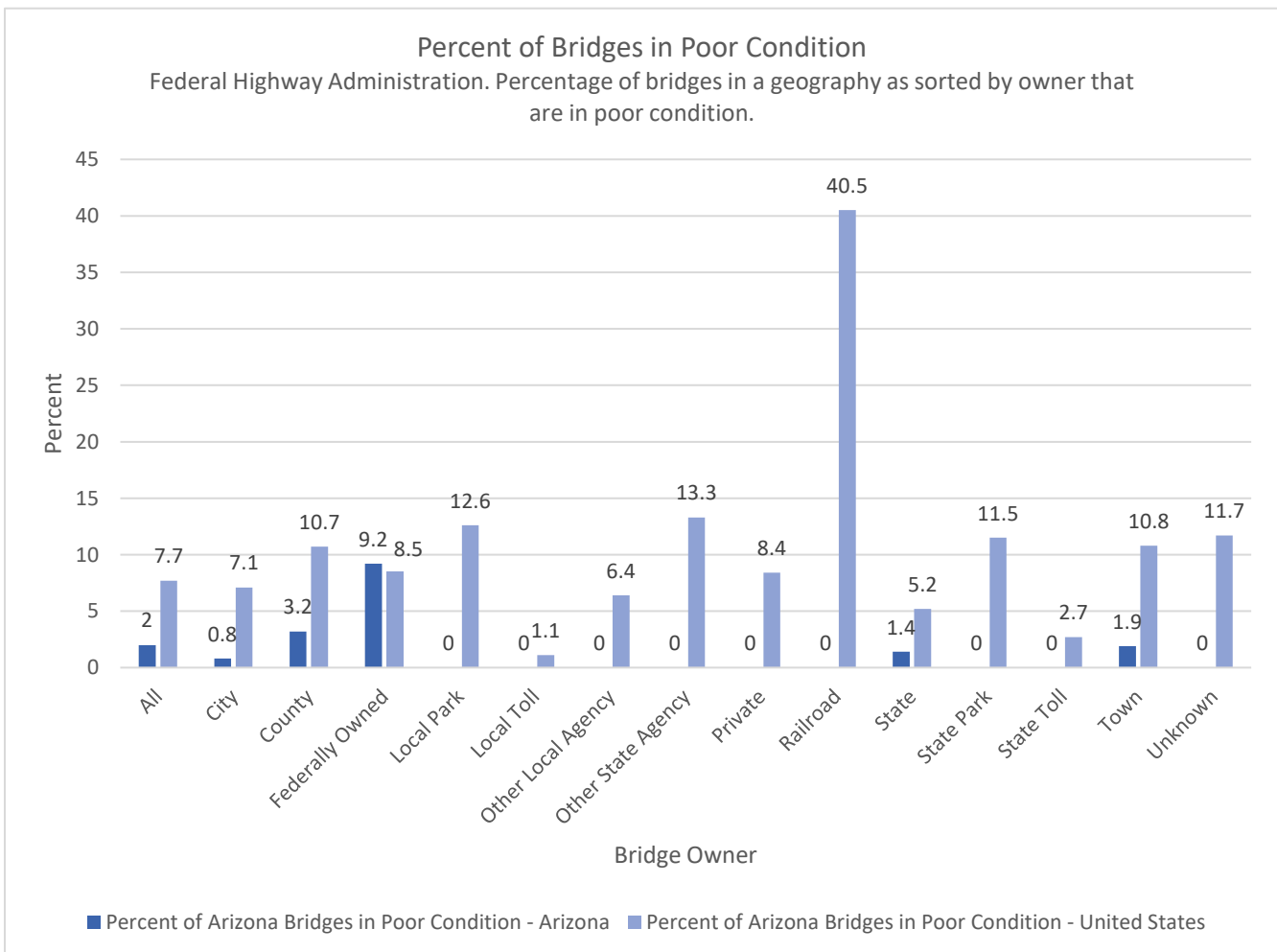
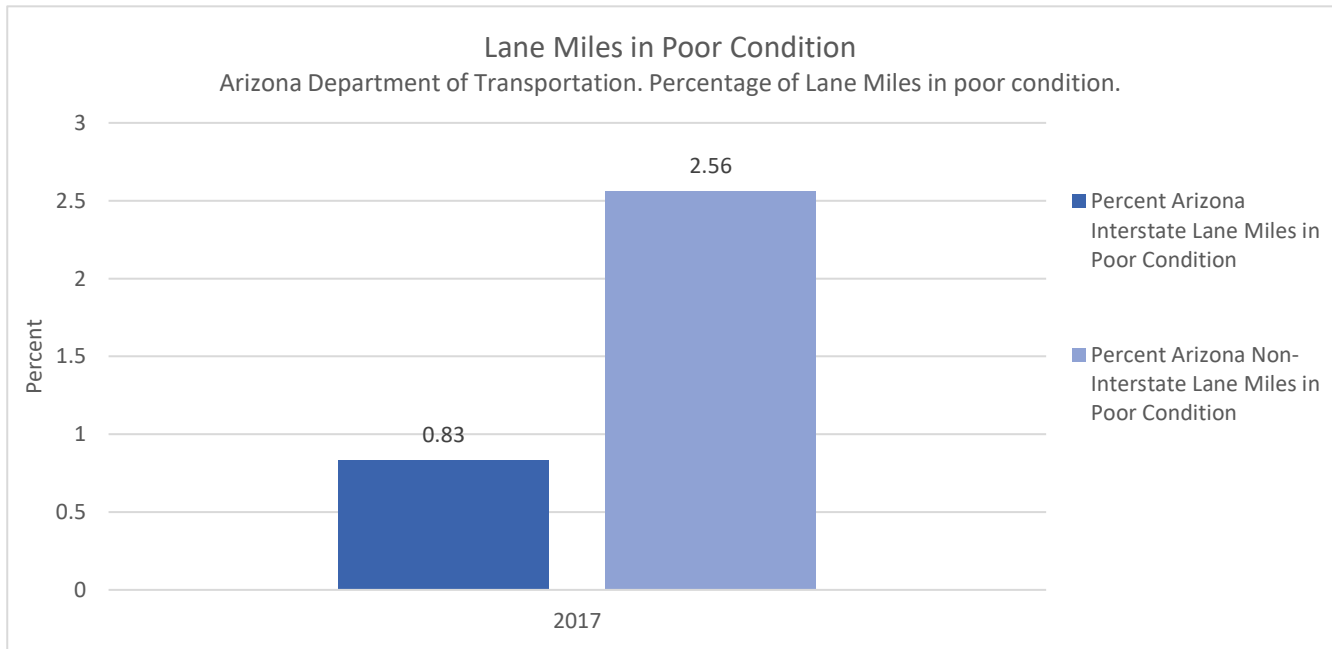
Sources:

1. Bridge Conditions: Federal Highway Administration.
2. Interstate Highway Conditions: Arizona Department of Transportation.
3. Arizona's State Highways: Arizona Department of Transportation. Updated annually.

¹https://en.wikipedia.org/wiki/I-35W_Mississippi_River_bridge

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Bridge and Pavement Conditions



Roadway Fatalities and Serious Injuries

Roadway fatalities and serious injuries are measured by (1) Ranking of Arizona traffic fatalities per 100 million vehicle miles travelled as compared to the 51 US states and the District of Columbia; (2) Arizona injuries per 100 million vehicle miles travelled; and (3) Raw number of fatalities and injuries for pedal cyclists, pedestrians, motorcyclists, and car crashes for local communities.

Roadways nationwide are the third-leading cause of preventable death in the United States behind intentional self-harm and non-transportation-related, accidental injuries. There are many contributors to roadway deaths including speed of traffic, interactions between different types of transportation like bicycles and motor vehicles, the design of the roadway, and vehicle safety equipment. Arizonans have seen much recent attention to pedestrian injuries. Transportation planners have been working to improve the ability of roadways to safely accommodate different modes of travel in an effort to cut down on fatalities and serious injuries.¹

Updated annually for the following localities:

- The nation
- States
- Counties
- Cities

Sources:

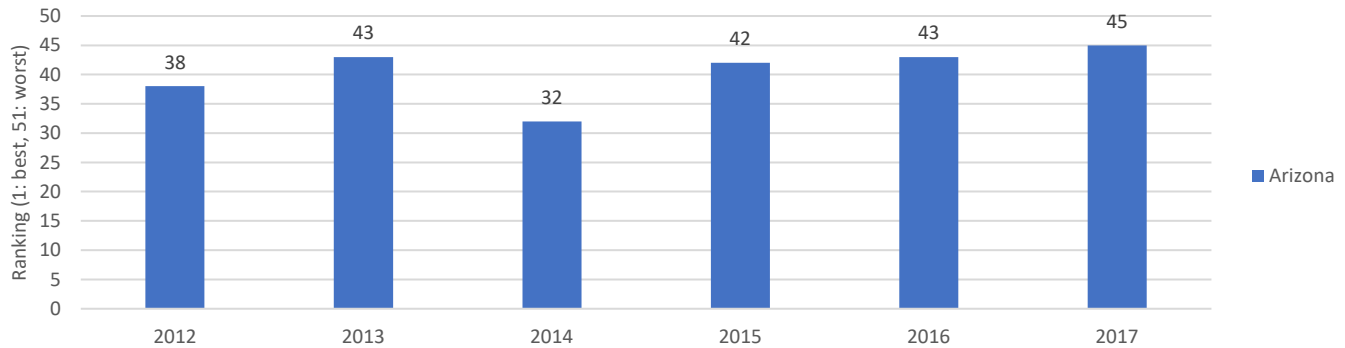
1. Traffic Fatalities Ranking: Institute for Highway Safety Highway Loss Data Institute
2. Number of fatalities and serious injuries: Arizona Department of Transportation
3. Injuries per 100 miles of travel: Arizona Department of Transportation and National Highway Traffic Safety Administration (NHTSA) Annual Report Tables

¹<https://www.advisory.com/daily-briefing/2019/01/16/deaths>

Roadway Fatalities and Serious Injuries

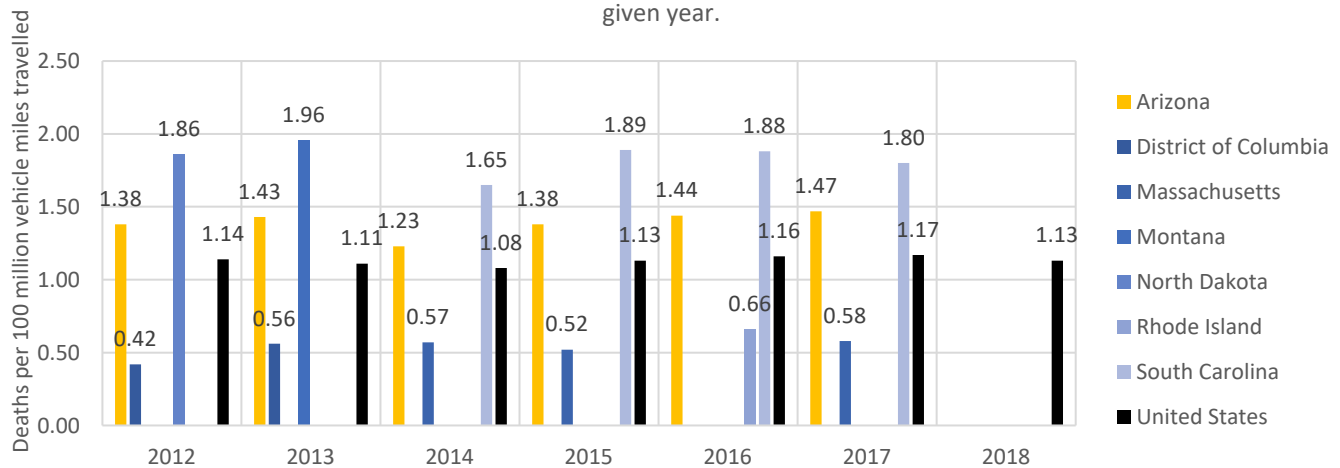
Arizona's National Ranking of Traffic Fatalities Among the Fifty States and the District of Columbia

Insurance Institute for Highway Safety Highway Loss Data Institute.



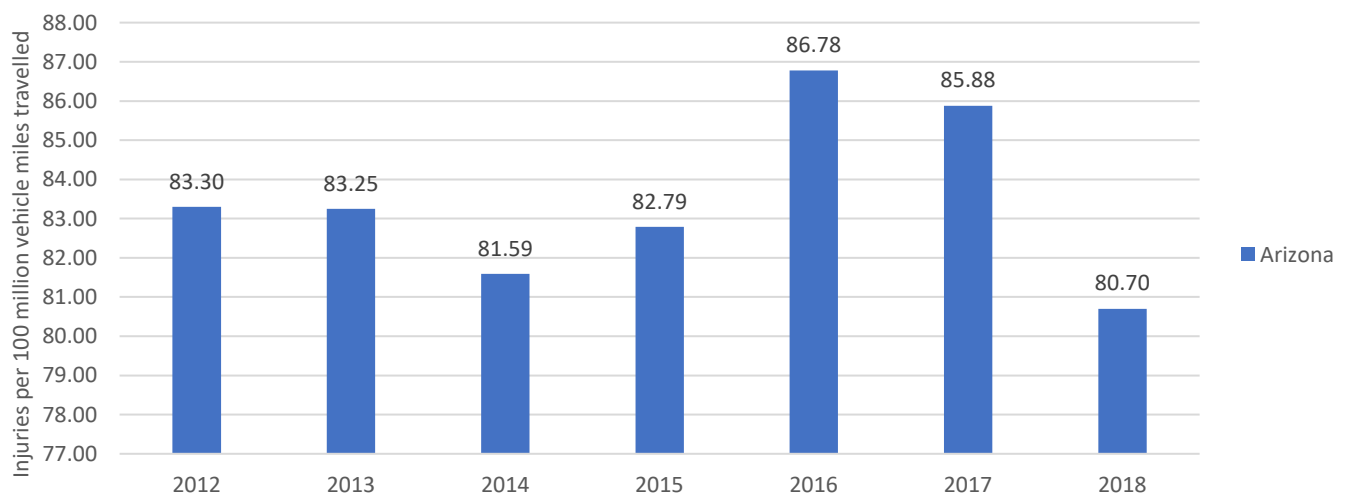
Vehicle Fatality Rate

Insurance Institute for Highway Safety Highway Loss Data Institute. Number of deaths per 100 million vehicle miles travelled. Comparison between highest and lowest comparable geography in the given year.

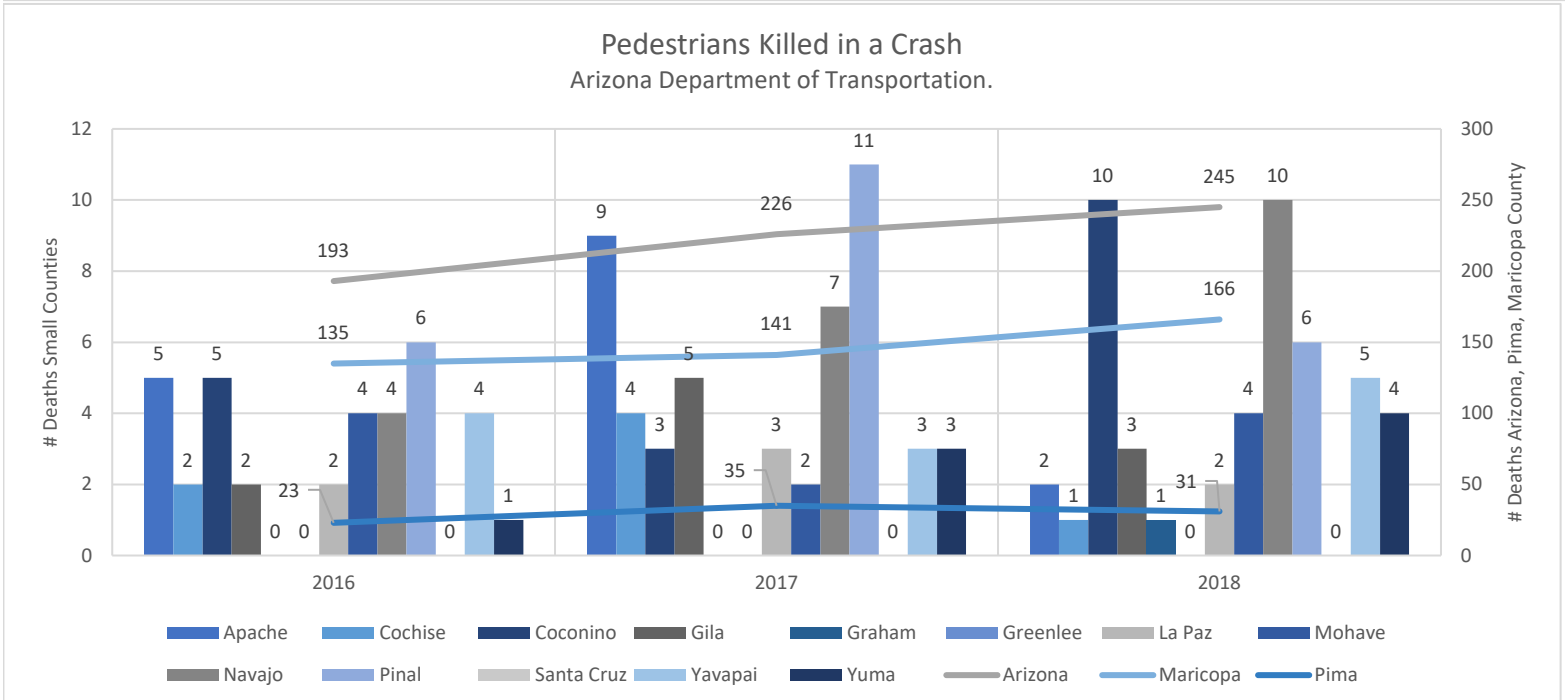
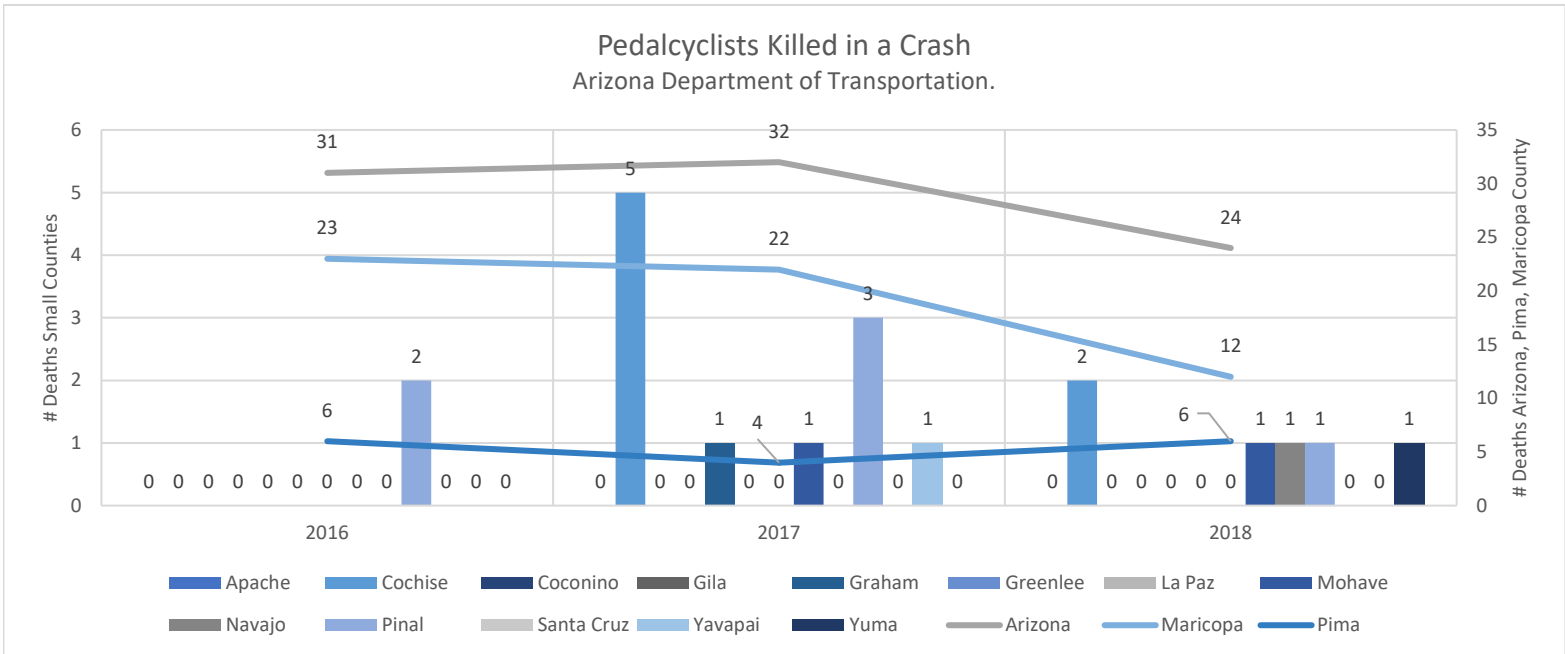
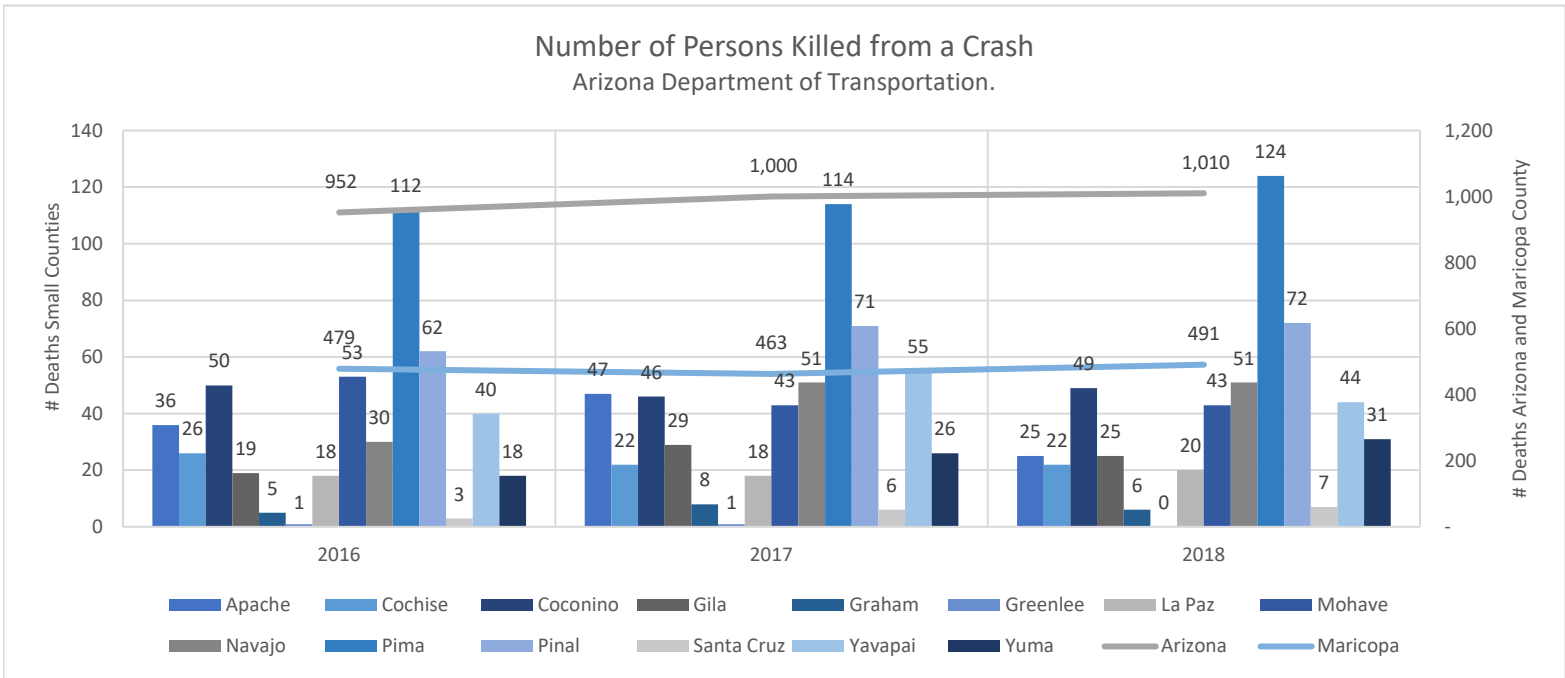


Arizona Injuries Per 100 Million Vehicle Miles Travelled

Arizona Department of Transportation.

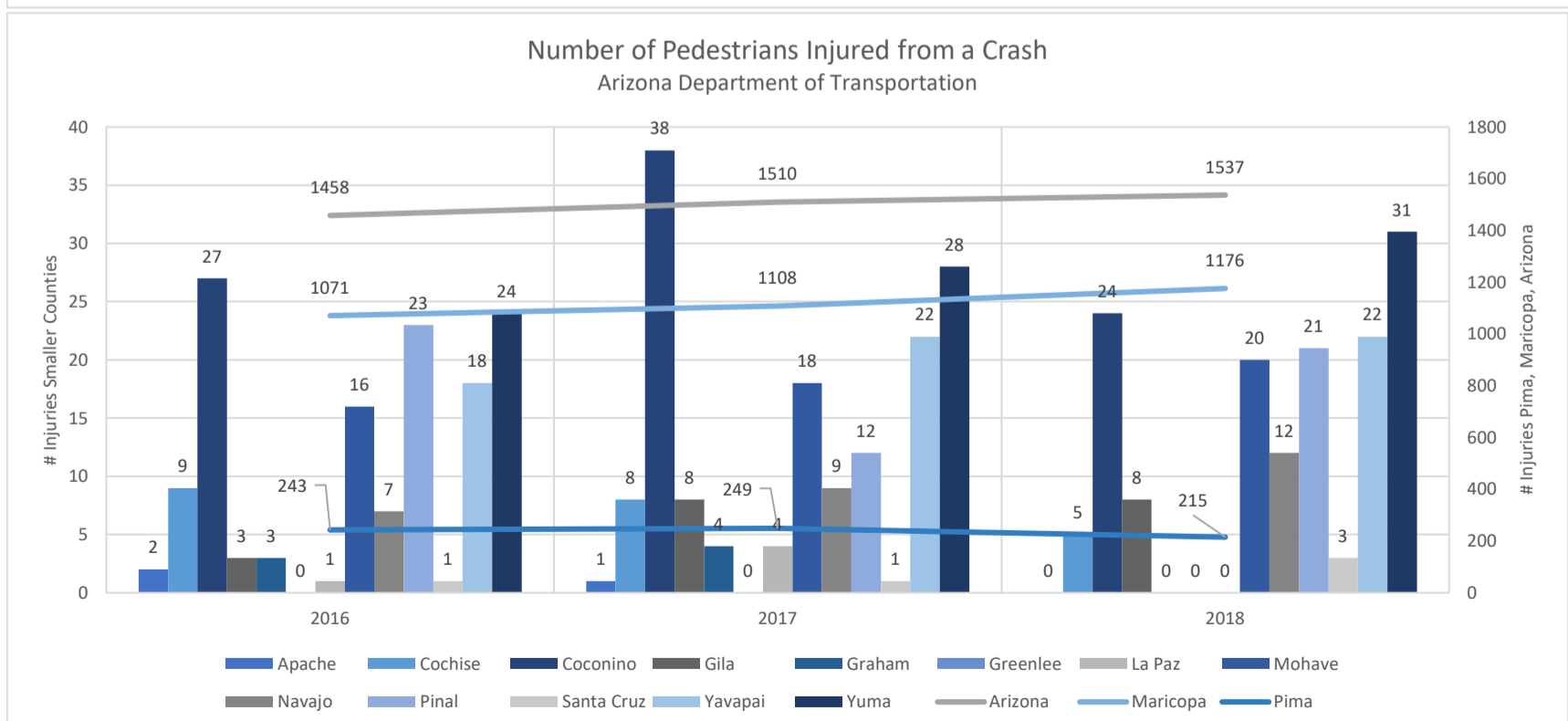
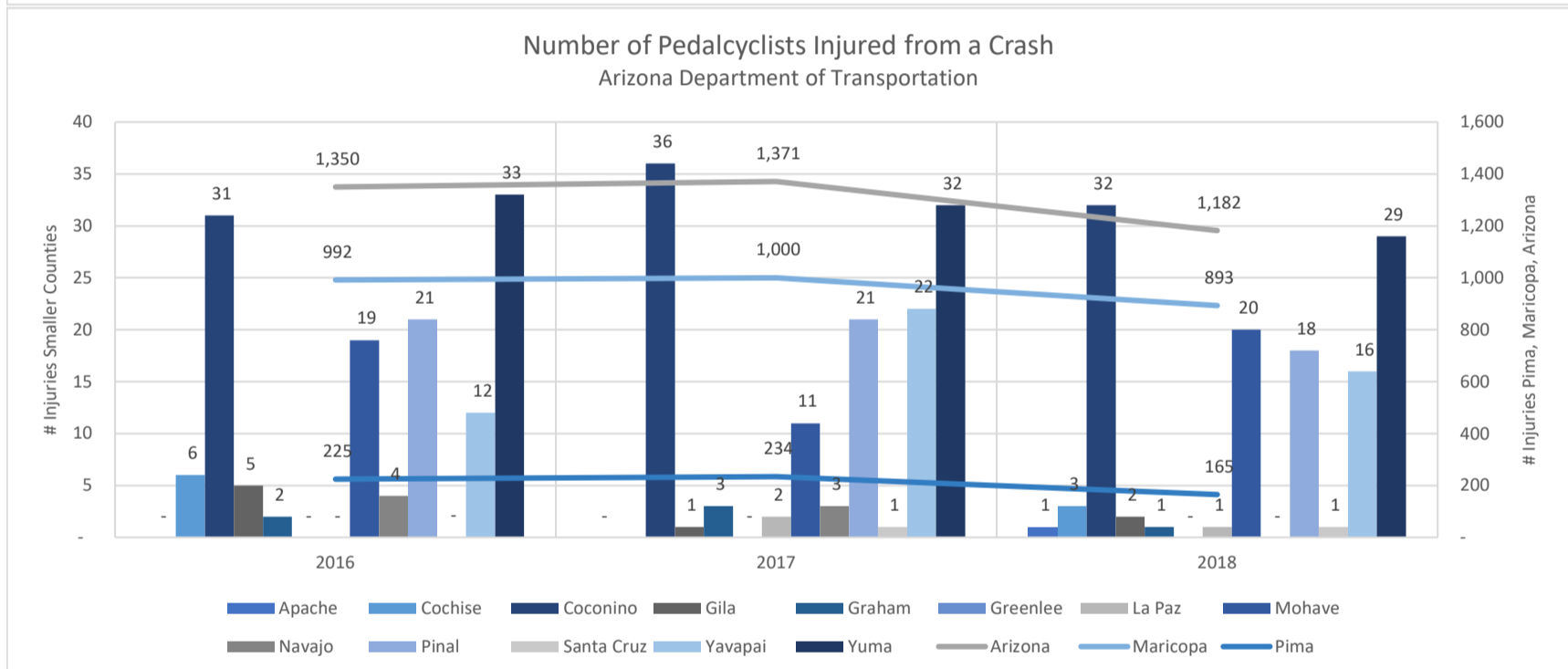
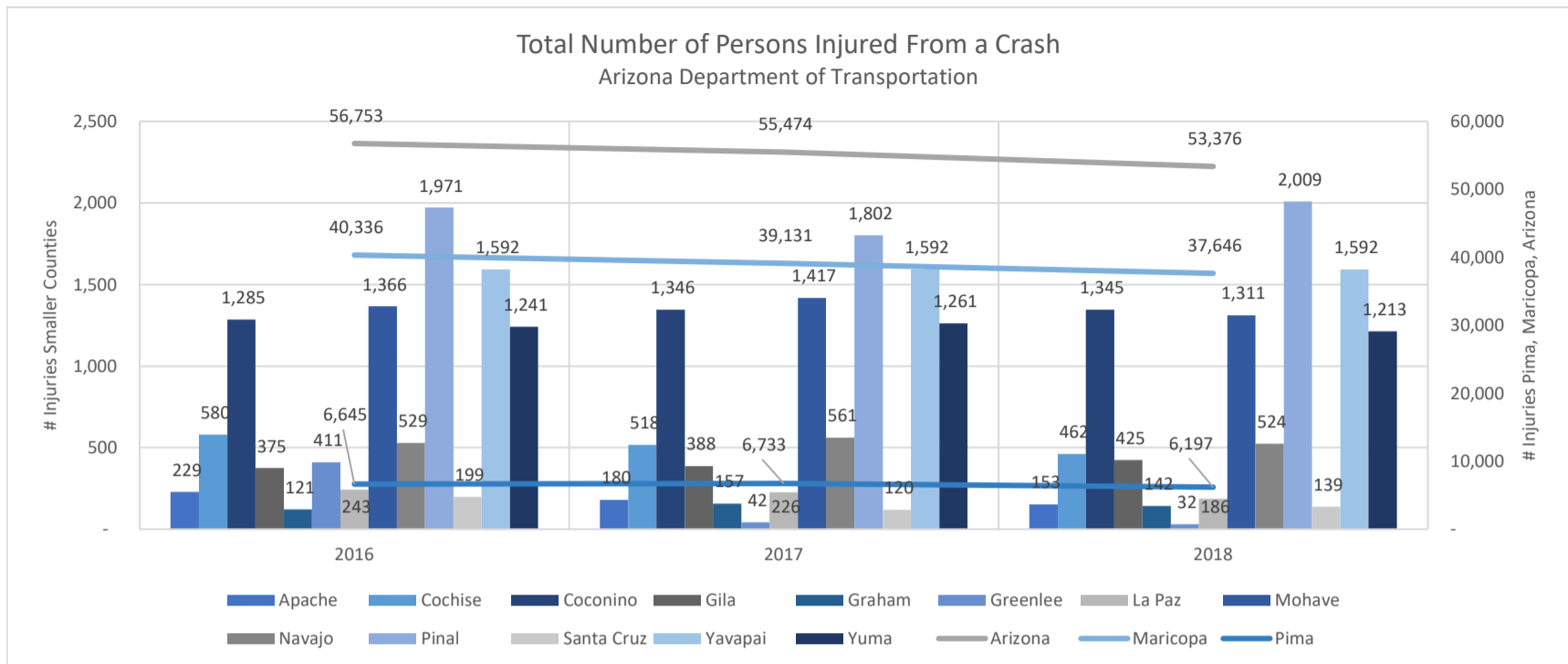


Roadway Fatalities and Serious Injuries



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Roadway Fatalities and Serious Injuries



Commute Time Length

Commute time length is measured by the Arizonan's average commute time to work as reported by the US Census Bureau.

Commute Time Length is amount of time it takes for a commuter to get to work. Commute time can be managed through numerous approaches including diversifying where employers are located and expanding and improving the transportation system.

Updated annually and available for the following localities:

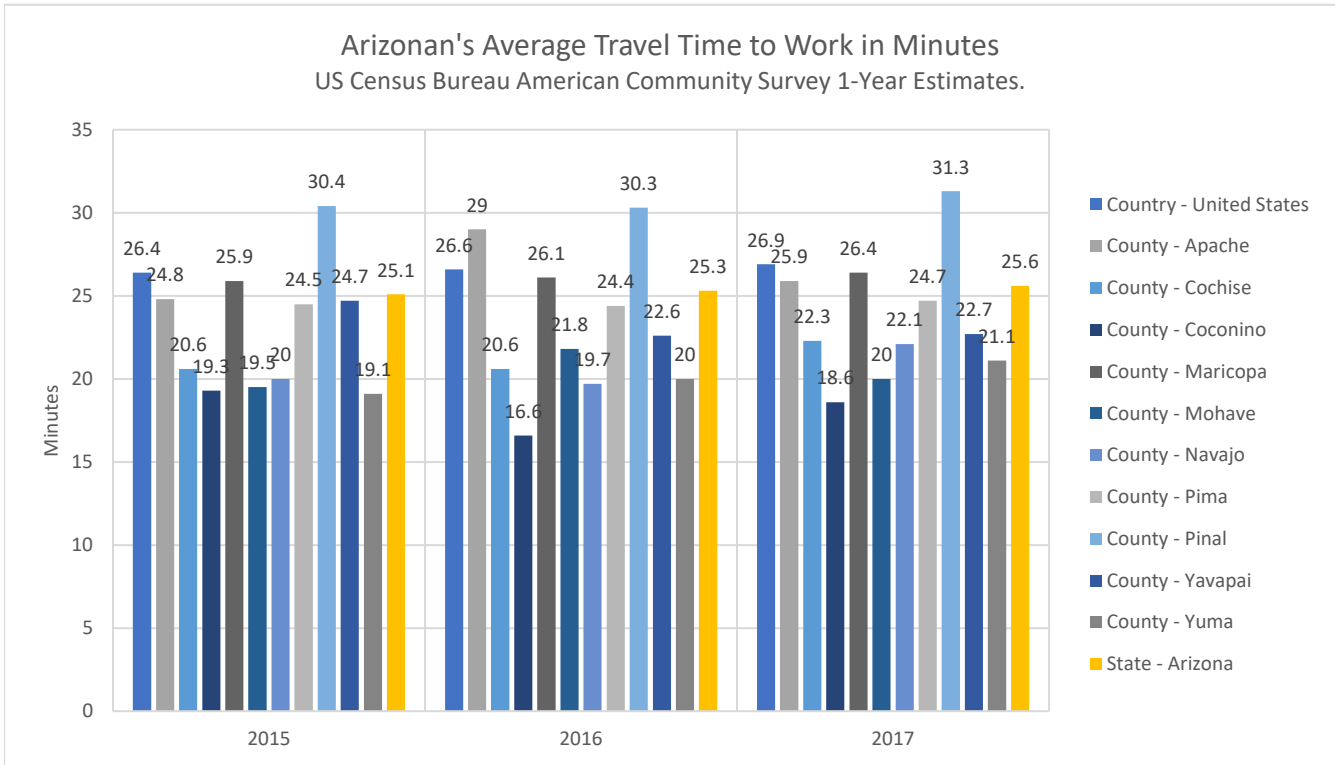
- Nation
- States
- Counties
- Some MSAs

Source: US Census Bureau 1-year Estimates, Current Population Survey.

<https://www.census.gov/topics/employment/commuting.html>

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Commute Time Length



Metropolitan Roadway Travel Time Reliability

Metropolitan roadway travel time reliability is measured by the Travel Time Index, which is a national measure of the ratio of travel time in the peak period as compared to the travel time at free-flow conditions.

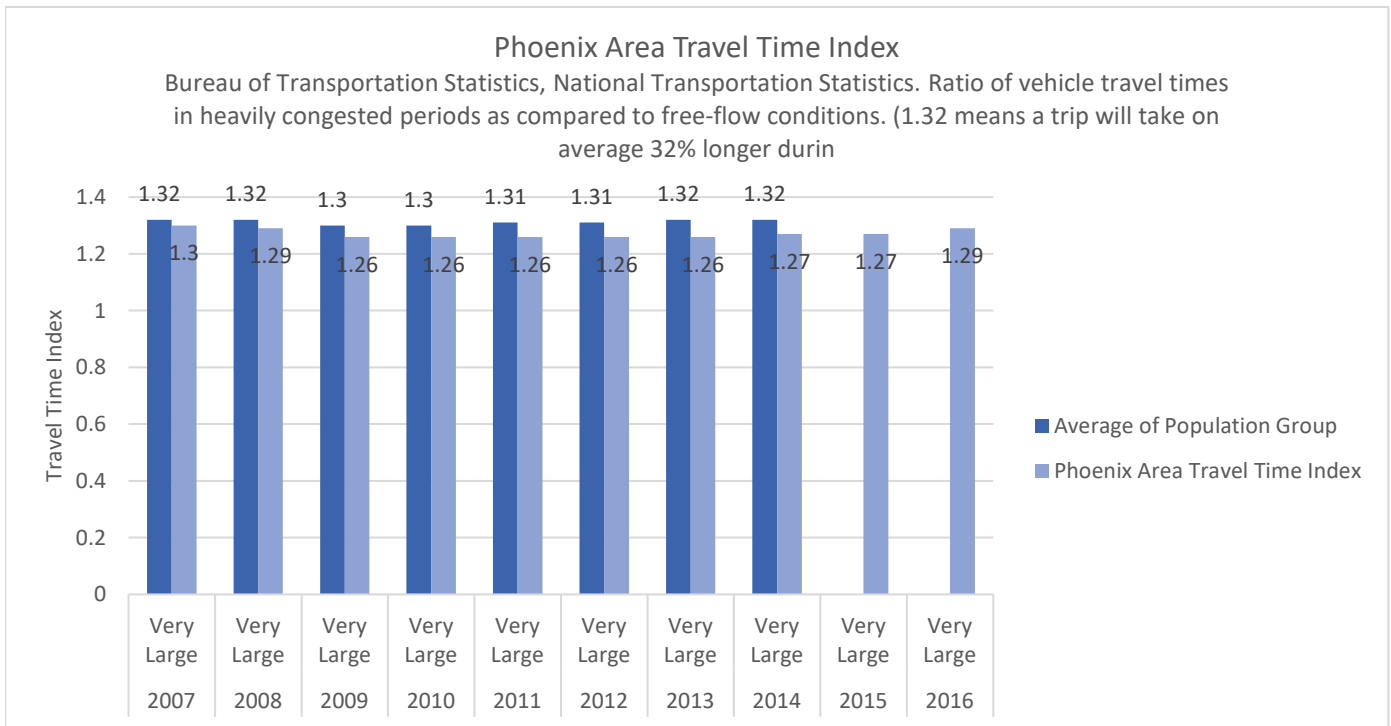
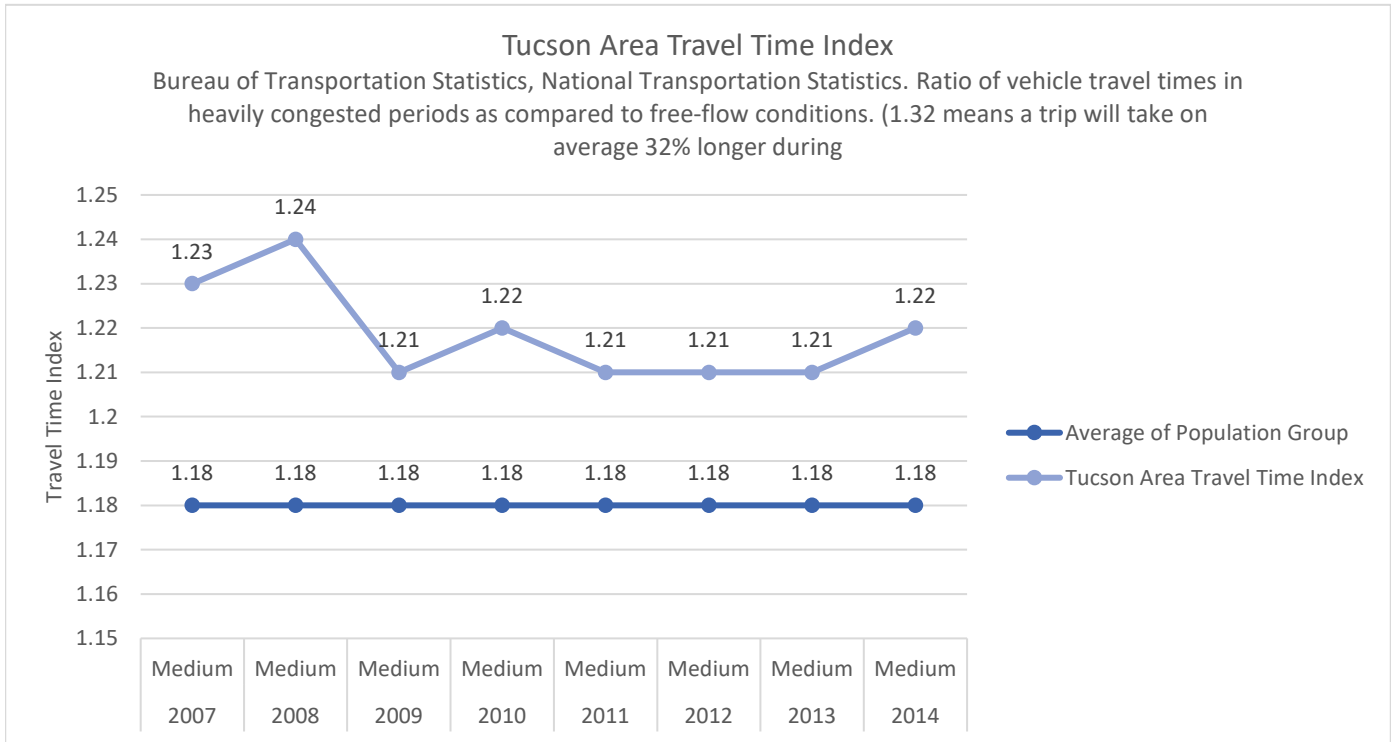
Reliable travel time can be more important than length of commute itself to many people. Unpredictable commute times raise stress and impact work productivity, and they are a special challenge in urban areas.

Updated annually and available for select metropolitan areas nationally.

Source: Bureau of Transportation Statistics, National Transportation Statistics

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Metropolitan Roadway Travel Time Reliability



Broadband Access

Broadband Access is measured by the percentage of Arizonans who do not have access to broadband which is defined as terrestrial (ground-based) internet, providing speeds of at least 25 Megabits (Mb) per second download and 3 Mb per second upload.

While many urban residents may take for granted the availability of broadband access, rural communities across the nation have limited access to broadband. Even in some urban areas, the number of providers is limited. With implications for education, jobs, and connectivity with families and friends, internet access is an important factor in modern quality-of-life.

Updated annually and available for:

- Nation
- States
- Counties

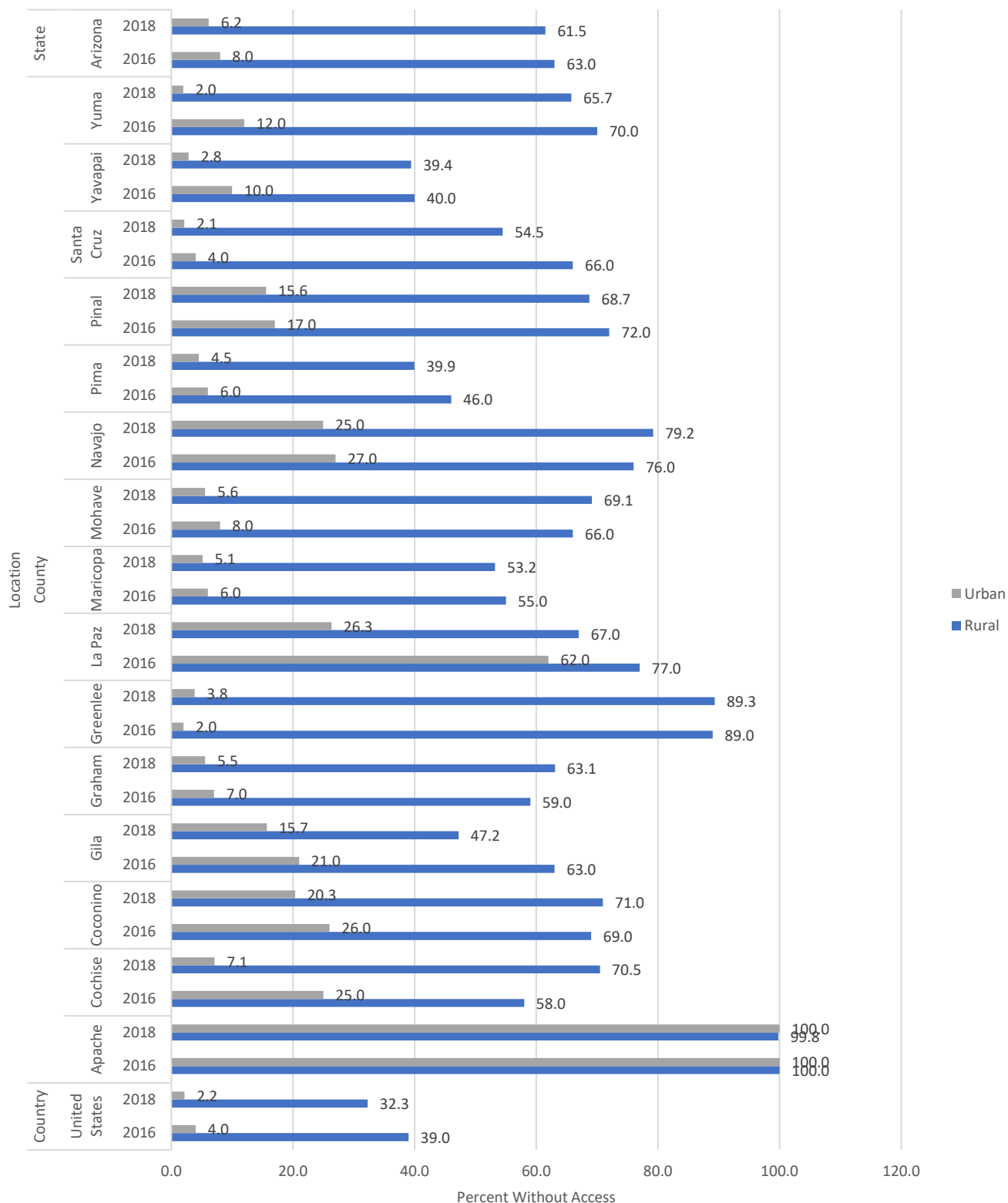
Source: Federal Communications Commission.

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Broadband Access

Percent Arizonans Who Do Not Have Access to Broadband

Federal Communications Commission. Percentage of population without access to ground-based broadband with speeds of at least 25Mbps upload and 3Mbps download.



Alternative Fuel Vehicles

Alternative Fuel Vehicles are measured by the number of hydrogen, electric, natural gas, and propane vehicles registered in Arizona annually.

Modern technology allows the adoption of alternative-fuel vehicles. Consumers likely choose alternative fuel vehicles in order to lower costs, to improve air quality, reduce dependence on foreign oil, and to access to car pool lanes. Vehicles that use alternative fuels are a growing component of Arizona's transportation system.

Updated annually and available for:

- Arizona

Source: Arizona Department of Motor Vehicles

Alternative Fuel Vehicles

