

BIKES TRAINS & LESS DRIVING

TRANSPORTATION TRENDS IN ARIZONA



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EXECUTIVE SUMMARY

Arizona, like the rest of America, is experiencing a shift in how people travel. The Driving Boom – a six decade-long period of steady increase in per-capita driving across the United States – is over. Driving miles per person are down especially sharply among Millennials, America’s largest generation that will increasingly dominate transportation trends. Since 2005 Arizonans have been driving fewer miles per person, and they increasingly look to public transportation to get around. As transportation dollars become scarcer, the time has come for Arizona to shift its transportation priorities away from expensive new highways and toward the maintenance and repair of our existing infrastructure and the development of new transportation choices.

Arizonans, Like Other Americans, Are Shifting Away from Driving

10.5%

The decline in
annual driving
miles per capita
in Arizona
from 2005-2012.

Between 2005-2012, Arizona saw a 10.5 percent decline in annual vehicle miles traveled per capita. Arizonans drive fewer total miles today than seven years ago, and fewer per person than we did in 1994.

Despite increasing population, fewer vehicles are on Arizona’s roads. Between 2007 and 2012, the number of registered vehicles in Arizona dropped by 4.16 percent. The percent of households with no vehicle increased 1.9 percent from 2006 to 2011 for the Phoenix urbanized area, while at the same time, the percent of households with two or more vehicles decreased 2.9 percent.

Arizonans Are Finding More Reasons to Choose Transit, Walking, and Biking Options

Some people might assume that the decrease in driving is a result of the recent economic recession and that driving will rebound once the economy improves. However, many factors show that this shift away from driving and to other modes of transportation is a trend that is likely to be long-lasting.

- The trend away from driving is led by the Millennial generation, which is already the largest generation in the United States. In 2012, 23.4 percent of Arizonans were young people aged 18-34. Young people are more likely than the rest of the population to use public transportation and walk or bike to their destination, and many young people reduce their driving in an effort to protect the environment.
- Arizona’s population skews slightly older than the national average. In 2012, 14.8 percent of Arizonans were at least 65 years old, compared to 13.7 percent nationally. Public transportation offers a good alternative for seniors who may feel that managing a car is too burdensome or for those who can no longer safely operate a vehicle.

- 11.7 percent of Arizonans have a disability that may restrict their driving abilities. In addition, most Arizona public transit systems offer paratransit service, which is specialized, door-to-door transportation service for people with disabilities or seniors who are not able to ride fixed-route public transportation.
- Fewer Arizonans are making a regular commute to and from to work. In 2012, 5.4 percent of Arizonans worked from home, compared to 4.0 percent in 2005.

16.1%
The increase in public transportation trips in the Phoenix urbanized area from 2005-2010.

Arizonans are Riding Public Transportation in Record Numbers

24.6%
The increase in public transportation trips in the Tucson urbanized area from 2005-2010.

As personal vehicle travel has decreased, the number of trips and the number of miles traveled by public transportation has increased in Arizona. Between 2005 and 2010, there was a 16.1 percent increase in public transportation trips in the Phoenix urbanized area and a 24.6 percent in the Tucson urbanized area. From 2005 to 2010, there was a 33.5 percent increase in per-person passenger miles traveled on public transportation in Phoenix, and a 31 percent increase in Tucson.

Transit agencies across the state are experiencing record ridership. In the Phoenix metro area, the light rail opened in late 2008 and is already experiencing ridership numbers that weren't projected to be reached until the year 2020. In 2013, the Valley Metro transit system experienced a record high annual ridership, and between 2007-2013, boardings on Valley Metro transit service jumped from 60 million to more than 75 million – an increase of 25 percent. The Northern Arizona Intergovernmental Public Transportation Authority recently saw its highest monthly ridership in October 2013. And in Yuma, ridership on Yuma County Area Transit has tripled since 2011.

Public transportation allows consumers to save money and use their time more effectively than while driving.



Policy Recommendations

The time has come for the State of Arizona and its municipalities to shift their transportation priorities away from investments in expensive, unnecessary new highways, and toward the maintenance and repair of our existing infrastructure and the development of new transportation choices for Arizonans. To that end, public officials should:

- > **REVISIT TRANSPORTATION PLANS.** Many existing transportation plans continue to reflect outdated assumptions that the number of miles driven will continue to rise steadily over time. Officials at all levels should revisit transportation plans to ensure that they reflect recent declines in driving and new understandings of the future demand for travel.
- > **REALLOCATE RESOURCES.** With driving stagnating and demand for transit, bicycling and pedestrian infrastructure increasing, officials should reallocate resources toward system repair and programs that expand the range of transportation options available to Arizonans.
- > **REMOVE BARRIERS TO NON-DRIVING TRANSPORTATION OPTIONS.** In many areas, planning and zoning laws and transportation funding rules limit public officials' ability to expand access to transportation choices. Officials at all levels should remove these barriers and ensure access to funding for non-driving forms of transportation.
- > **USE INNOVATIVE TRAVEL TOOLS AND SERVICES.** New technologies and techniques provide transportation officials with new tools to address transportation challenges. Transportation agencies should encourage the use of carsharing, bikesharing and ridesharing and provide real-time travel information for public transit via smartphone.
- > **GET BETTER DATA.** Transportation agencies should compile and make available to the public more comprehensive, comparable and timely data to allow for better informed analysis of the causes and magnitude of changes in driving trends. Officials at all levels should eliminate inconsistencies in the reporting of transportation data, increase the frequency of surveys that shed light on changes in transportation preferences and behaviors, and use emerging new sources of information made possible by new technologies in order to gain a better grasp of how driving trends are changing and why.

The time has come for Arizona to shift transportation priorities toward the development of new transportation options.

INTRODUCTION

The number of miles driven annually on our roads steadily increased from World War II until just a few years ago. Now, Arizona is the nation's 15th most populous state, and the state's dramatic population growth is expected to continue. In the Phoenix-to-Tucson "Sun Corridor," population growth between 2010 and 2050 is projected to be 117.9 percent.¹ While much of the state remains vast open space and rural desert landscapes, three out of four Arizonans live in an urban area.²

75%
The number of
Arizona residents
that live in an
urban area.

As a relatively young state, Arizona has had less time to develop infrastructure than other states and municipalities that have had years, even centuries, longer to develop their transportation systems. Arizona's booming population and burgeoning economy, have placed strains on the state's existing infrastructure, and the lack of alternatives to driving has become more pronounced. New highway construction tends to generate new traffic and create new bottlenecks. Drivers must deal with the daily headaches of accidents, construction, and stifling traffic jams. Coupled with the effects of air pollution and the rising cost of getting around via automobile, these traffic problems are eroding Arizonans' quality of life. While the state and local governments in Arizona were making massive investments in new highways and roads, they neglected investing in public transit, pedestrian, and bicycling infrastructure for many years. Sunday bus service in Phoenix was not widely available until 2000, and the metro area's light rail opened only in late 2008.

In contrast to the past decades of growth in the numbers of miles Arizonans drove, Arizonans recently have been reducing the number of vehicle miles traveled. While the economic downturn certainly played a role in these trends, the unique combination of conditions that fueled the Driving Boom – from cheap gas prices to the rapid expansion of the workforce during the Baby Boom generation – no longer exists. Meanwhile, the Millennial generation is demanding more transportation choices.



At the same time Arizonans are decreasing the number of miles they drive each year, they are increasing their use of public transportation. Several Arizona transit agencies – including those in Phoenix, Flagstaff, and Yuma – have broken transit ridership records in the past year. However, declines in revenues intended for transit during the recession and a removal of state funding earmarked for local transit service delayed plans in many areas of the state to expand transit services.

Per person driving has been decreasing and transit ridership has been increasing, and study after study shows that people want alternatives to driving.

To address these trends, logical next steps for Arizona would include the expansion of transit service, increased investment in pedestrian and bicycling infrastructure, and the addition of new transportation options such as passenger rail connecting Phoenix and Tucson and commuter rail in the Phoenix metro area.

Providing transportation options also helps the state's economy by increasing Arizona's ability to attract and retain talented young professionals – and the businesses that want to hire them. Developing alternatives to driving will establish valuable regional connections and boost economic development because Millennials are seeking places where they have a variety of transportation options and companies are seeking to locate in places that are magnets to young talent.

There are societal benefits to our changing relationship with driving. Reduced numbers of cars on the road will greatly reduce air pollution in the state, improving Arizona's air quality. Expanding non-driving transportation options also would allow increased mobility for those who can't afford or are unable to drive a car. Increased transportation choices could save Arizonans millions of hours of valuable time that won't be spent behind the wheel of a car.

WHAT DO YOU MEAN BY “PUBLIC TRANSPORTATION”?

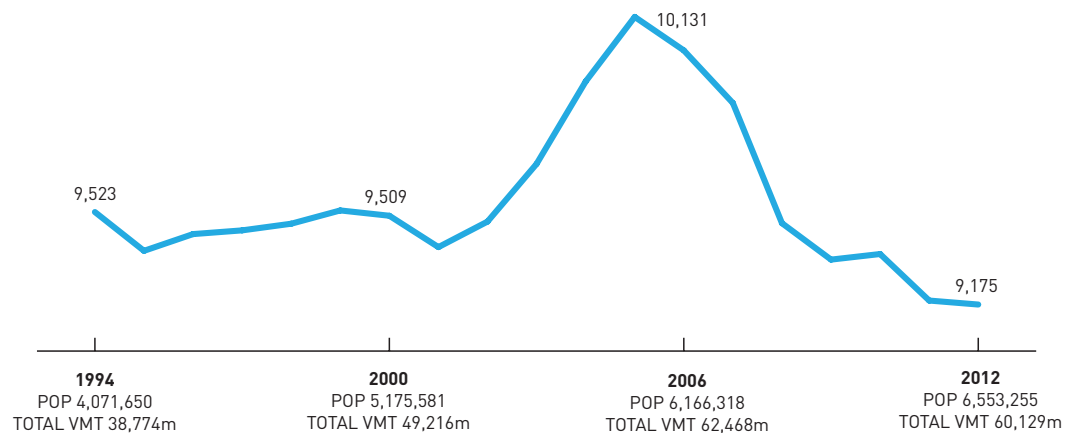
Many of Arizona's urban areas offer public transit systems to the public, which allow residents the ability to travel without driving and parking a car. These transit services include fixed-route bus service, light rail, vanpooling, and paratransit. Reasonably priced passes can either be purchased online or at the station itself. These systems also offer websites, apps, or texting services that allow passengers to obtain real-time information about their next ride. Many also maintain robust Facebook and Twitter accounts that quickly and easily link passengers with important information, such as delays in service or route changes. The social media accounts also allow riders to ask questions and report problems.

ARIZONANS ARE DRIVING LESS

After World War II, the number of vehicle miles traveled by Arizonans increased steadily virtually each year. Cars became a huge part of American culture and were central to popular movies like *Grease* and songs such as the Beach Boys' "Little Deuce Coupe." Car collecting and attending car shows became popular hobbies, and obtaining a driver's license and buying a first car was a milestone in a young adult's life.

But in a short time, things have changed. Even though cars are still a part of most people's lives, driving them is becoming less popular. Arizonans drive no more miles in total today than in 2006 and fewer miles per person than twenty years ago in 1994.³ Between 2005 to 2012, Arizona saw a 10.5 percent decline in annual vehicle miles traveled per capita.⁴ This mirrors the national trends away from driving where Americans drive fewer total miles today than eight years ago, and fewer per person than we did in 1996.⁵

Arizona Per-Capita Vehicle Miles Traveled (VMT) from 1994-2012 Includes Total Population of State and Total Annual VMT (in millions)



VMT Source: Federal Highway Administration, *Highway Statistics* reports, VM-2 table.

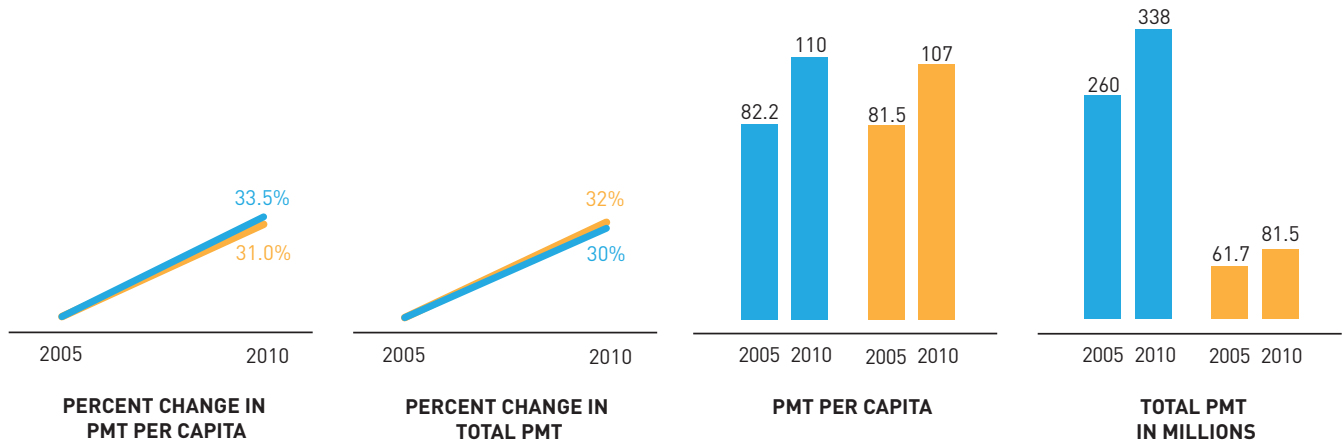
Population Source: U.S. Census Bureau, yearly American Community Survey, 1-Year Estimates.

In addition to the decline in vehicle travel, the number of cars on the road is decreasing. Between 2007 and 2012, the number of personal registered vehicles in Arizona decreased 4.16 percent, dropping from 4,357,430 to 4,333,480.⁶ The share of households reporting that they do not have a vehicle increased in the Phoenix urbanized area.⁷ The percent of households with no vehicle similarly increased 1.9 percent from 2006 to 2011 for the Phoenix urbanized area, while at the same time, the percent of households with two or more vehicles decreased 2.9 percent.⁸ It is unknown whether this increase in carless households is the result of changing preferences or economic hardship, but it does represent a dramatic reversal of the national trend toward increased vehicle ownership since at least the 1960s.

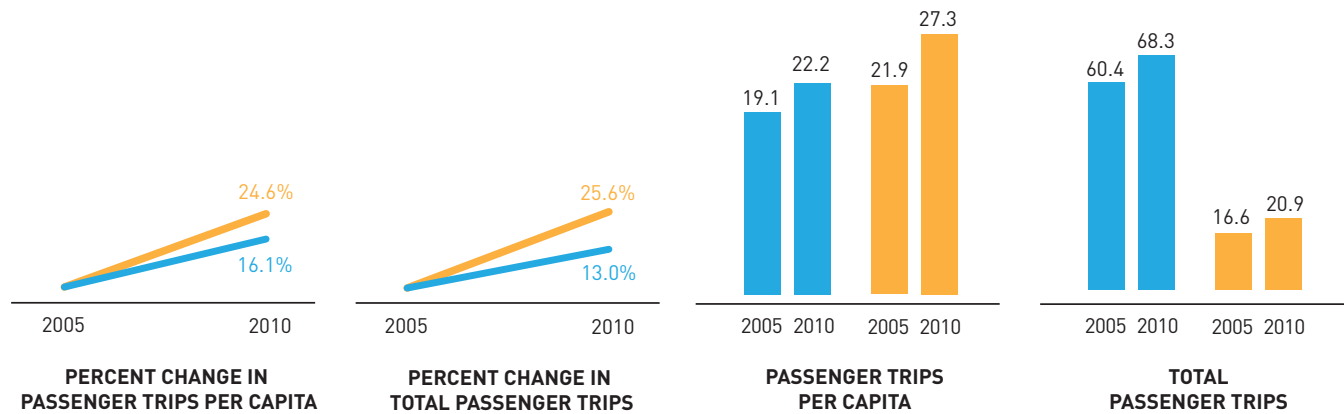
Increases in Phoenix and Tucson Public Transportation Ridership from 2005-2010

NUMBER OF PASSENGER MILES TRAVELED (PMT) ON PUBLIC TRANSPORTATION

■ PHOENIX ■ TUCSON



NUMBER OF TRIPS TAKEN ON PUBLIC TRANSPORTATION



Source: U.S. Department of Transportation's Federal Transit Administration's National Transit Database.

As personal vehicle travel has decreased, the number of trips and the number of miles traveled by public transportation has increased in Arizona.



ARIZONANS ARE FINDING REASONS TO CHOOSE OTHER TRANSPORTATION OPTIONS

Some people might assume that the decrease in driving is a result of the recent economic recession and that driving will rebound once the economy improves. However, many factors show that this shift away from driving and to other modes of transportation is a trend that is likely to be long-lasting.

Long-term Trends Run Their Course

66%
of Millennials say
access to high-quality
transportation
is one of the top
three criteria
when deciding
where to live.

Many of the trends that long encouraged Americans to drive more have recently reached their natural limits or have reversed directions. In addition to the rising use of other transportation modes, there are a number of other changes to some of these long-term trends:

We're saturated with driving. In the decades after World War II, rising incomes, the development of new low-density suburbs, increased participation of women in the workforce, and improvements in vehicles and new highways put millions of new commuters on the roads. By the turn of the 21st century, however, these trends had largely played themselves out, and some had shown signs of beginning to reverse:

- **Vehicle Ownership:** After decades of increase, the number of vehicles per licensed driver has declined by 4 percent since 2006, suggesting that Americans may have reached a limit on the number of vehicles they can beneficially use.⁹
- **Driver's Licensing:** After peaking in 1992, the percent of driving-age (16 and older) Americans holding licenses has stagnated and then declined. By 2011, 86 percent of driving age Americans held licenses, the lowest percentage in 30 years.¹⁰
- **Time Spent in Travel:** Americans may be hitting the limit on the amount of time they are willing to spend in their cars each day, and unless travel speeds increase – which haven't since the 1990s – they may be hitting the limit of the number of miles they are willing to drive each day.¹¹
- **Labor Force Participation:** Workers tend to drive more miles than non-workers, and after decades of increase, the share of Americans in the labor force has dropped from its 2000 peak of 67.3 percent to 63.2 percent – the lowest level since 1978.¹²

4%
The national
decline in vehicle
ownership per
person since 2006.

The Baby Boomers are entering retirement. With people in their prime earning and child-rearing years tending to drive the most, and the baby boomers retiring, a greater share of Americans are entering age groups that have historically driven fewer miles.¹³

The cost of gasoline has gone up. For decades, relatively cheap gas helped fuel the Driving Boom, but from 2002 to 2012, the average inflation-adjusted price of a gallon of gasoline doubled and put car ownership out of reach for many families.¹⁴ Prices vary up and down with various gluts and shortages, but are not expected to fall significantly over the long-term. Three-dollars for a gallon of gas used to be a temporary price spike, but the average price per-gallon now hasn't fallen below that threshold since the end of 2010. With increased driving in places like China, India and Brazil, prices at the pump could instead rise further over time.

New technology has made it easier to choose other modes of transportation. The recent advent of new technologies – from carsharing to real-time transit information – has accelerated the trend toward reduced driving.¹⁵ People may also choose not to drive so they can stay safely connected on social media or because they can shop easily online.

Fewer people are commuting to work. One reason for the decline in traveling by private car to work is that more and more people are working from home, thanks to the increasing use of telecommuting. In 2012, 5.4 percent of Arizonans worked from home, compared to 4.0 percent in 2005.¹⁶

5.4%
The number of
Arizonans who
worked from home
in 2012.

Different Generational Preferences

54%
The number of
Millennials who
would consider
moving to another
city if it had better
transportation
options.

The trend away from driving is led by the Millennial generation, which is the largest generation in the United States. The Millennials (people born between 1983 and 2000) have different mindsets toward driving than Baby Boomers and older generations. Millennials are more likely to want to live in urban and walkable neighborhoods and are more open to non-driving forms of transportation than previous generations. A recent survey of Millennials found that 54 percent said they would consider moving to another city if it had more and better options for getting around, and 66 percent said that access to high quality transportation is one of the top three criteria they would weigh when deciding where to live.¹⁷

Many young people reduce their driving because of their desire to help the environment. When a sample group of Millennials was asked if they agree with the statement “I want to protect the environment, so I drive less,” 39 percent of them agreed.¹⁸

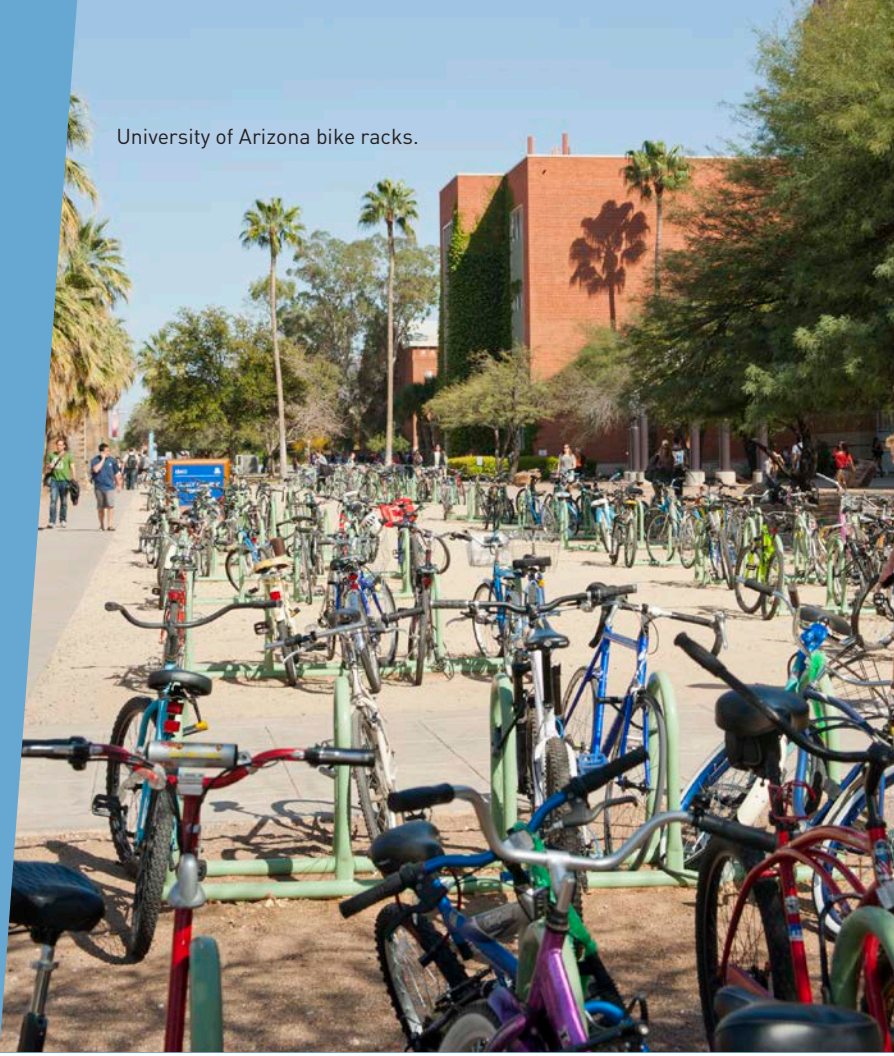
Fewer young Arizonans are getting driver's licenses. Between 2008 and 2012, the number of teenagers increased 3 percent, but the number of teens with licenses actually fell by the same amount.¹⁹ In the process of obtaining both a license and a car, young adults have to consider the cost of owning and operating a car, which the AAA Auto Club estimates to be \$9,122 per year. Almost two-thirds of Millennials (64 percent) say that the expense of owning a car is a major reason they want be less reliant on one, including 77 percent of

\$9,122
The estimated
yearly cost of
owning and
operating a car.

University of Arizona bike racks.

The trend away from driving is led by the Millennial generation – born between 1983 and 2000 – which is the largest generation in the United States.

39% The number of Millennials who say they drive less to protect the environment.



Millennials who earn less than \$30,000 a year.²⁰ Certainly, this effect is compounded by the economic slowdown but, especially with the enormous overhang of student debt weighing down recent college graduates, it is hard to see this effect as “temporary.”

Young people also are the biggest users of new technology that shapes travel decisions in ways that previous generations did not experience. Millennials are accustomed to using smartphones and laptops in everyday life, so young adults may look for transportation options that allow them to continue use of these technologies while traveling. Young adults may also use these technologies as a substitute for traveling altogether. When asked if they sometimes choose to spend time with friends online – for example, text messaging, using social media outlets like Facebook or Twitter, or online gaming – instead of driving to see them, four in ten people aged 18-34 agreed.²¹

While all of these trends in youth are national in scope, they are especially important to Arizona, where between 2000 and 2010, the state added 76,546 additional people between the ages of 25 and 29, the second largest net addition of any demographic group, trailing only 60 to 64 year olds.²² As Millennials continue to be a more dominant portion of Arizona’s driving-age public, their more adverse attitudes toward driving make it less likely that the volume of driving will steadily increase as it did during its driving boom era levels.

ARIZONANS ARE USING TRANSIT AT MUCH HIGHER RATES

So how are Arizonans finding ways to travel without using a car? They are increasingly looking to public transportation to take them where they need to go. As personal vehicle travel decreased, the number of trips traveled by public transportation increased across Arizona:

Phoenix: Between 2005 and 2010, there was a 16.1 percent increase in public transportation trips and a 33.5 percent increase in per-person passenger miles traveled on public transportation in the Phoenix urbanized area.²³ Between 2007 and 2013, boardings on Valley Metro transit service jumped from 60 million to more than 75 million – an increase of 25 percent in just seven years.²⁴ In 2013, Valley Metro experienced a record high in its annual ridership.²⁵ The Phoenix metro light rail began service in late 2008 and is already experiencing ridership numbers that weren't projected to be reached until the year 2020.

Tucson: Between 2005 and 2010, there was a 24.6 percent increase in public transportation trips and a 31 percent increase in per-person passenger miles traveled on public transportation in the Tucson urbanized area.²⁶

Flagstaff: The Northern Arizona Intergovernmental Public Transportation Authority's (NAIPTA) ridership has increased from fewer than 200,000 trips in 2001 to nearly 1.75 million trips in 2012.²⁷ In October 2013, NAIPTA broke its monthly ridership record.²⁸

Yuma: Ridership on Yuma County Area Transit (YCAT) buses has tripled since 2011.²⁹

Some Arizonans rely on public transportation because they cannot drive. In 2012, 14.8 percent of Arizona's citizens were 65 years or older, compared to the national average of 13.7 percent.³⁰ Public transportation offers a good alternative for seniors who may feel that managing a car is too burdensome or that they can no longer safely operate a vehicle. And 11.7 percent of Arizona's citizens have a disability that may restrict their driving abilities.³¹ Most Arizona public transit systems offer paratransit service, which is specialized, door-to-door transportation service for people with disabilities or seniors who are not able to ride fixed-route public transportation.

While many transit agencies across the state are experiencing record ridership and many Arizonans depend on public transportation, many agencies had to cut back service or delay planned expansions in recent years because of declines in revenues intended for transit during the recession and a removal of state funding earmarked for local transit service.

TRANSIT AGENCIES IN ARIZONA

Phoenix Metro Area: In the Phoenix metro area, the Valley Metro regional public transportation authority services include buses, light rail, paratransit services, and vanpooling. Their bus services include more than 50 fixed local bus routes, 15 express routes, a RAPID commuter bus service, LINK service to connect to light rail, and links to rural bus routes.³² A 20-mile light rail line currently connects Phoenix, Tempe, and Mesa. Two expansions of the line are currently under construction and expected to be operational in the next two years, which would extend the line six additional miles.³³ Neighborhood circulators, which are smaller buses with set routes in a smaller area, offer localized service in Phoenix, Tempe, Mesa, Glendale, Avondale, and Scottsdale.³⁴ Valley Metro also offers a Dial-a-Ride paratransit service, which provides transportation to local residents who are unable to use the bus service due to a disability.

20
Miles of light rail
currently connecting
Phoenix, Tempe
and Mesa.

Valley Metro Trip Planner

Trip Planner Google Transit NextRide

Transit Trip Planner

From (do not use city, state, zip)

To (do not use city, state, zip)

Departing After Arriving By

Time: 11 ▾ 31 ▾ p.m. ▾

Date: 01/05/2014 **plan it!**

[go to full trip planner >](#)

Valley Metro also offers several technology-enabled tools to help riders plan their trips. A service called “NextRide” give riders real-time information about their upcoming bus rides through a phone call or by text messaging. Valley Metro’s website also offers a trip planner that helps travelers to easily schedule a trip and have confidence that they know where they are going.

Tucson: Tucson features the Sun Tran bus service, which includes paratransit service, express services, and neighborhood transit services in surrounding areas.³⁵ Riders can use a SunGO smart card, a reloadable fare payment card that can store cash value or passes for passenger convenience and boarding ease.³⁶

There is also a Sun Link streetcar service planned to open in the summer of 2014.³⁷ This system will be linked to the already existing Sun Tran bus service, and it will include a card-swipe fare system. Plans for the streetcar also include the expansion of bike lines and sidewalks.

Flagstaff: The Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA) in the Flagstaff region offers seven local bus routes on Mountain Line bus service, including Mountain Link, which is a high-frequency bus service linking downtown Flagstaff, Northern Arizona University and residential and commercial areas.³⁸

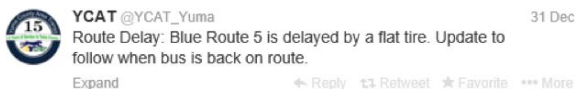


Flagstaff's Mountain Line bus service.

NAIPTA's website offers real time arrival information, making it easy for riders to plan their travel around Flagstaff.³⁹ Smartphone users can download the free TransLoc app and obtain real time information after supplying their bus stop number.⁴⁰ NAIPTA also maintains informative Twitter⁴¹ and Facebook⁴² accounts for its Mountain Line that report schedule conflicts due to weather or accidents and allow riders to ask questions or report problems.

Yuma: Yuma County Area Transit (YCAT) offers ten local bus routes.⁴³ YCAT has a special fare option called the YCAT Pass, which is a reloadable electronic transit card to make paying fares and boarding buses easier.

A Helpful Tweet Posted to Twitter by the YCAT System



The website for YCAT features the catTRAX system, which allows riders to track real time arrival information by both Google map and the NEXTbus service.⁴⁴ By calling or texting NEXTbus and supplying their stop number, YCAT patrons can find out exactly when their next bus will arrive.

YCAT also operates a vanpool system, another alternative to commuting by car. A group of 7-15 travelers may gather to lease a YCAT van and use it to get to work.

PROFILES OF ARIZONANS SHIFTING THEIR TRANSPORTATION USE



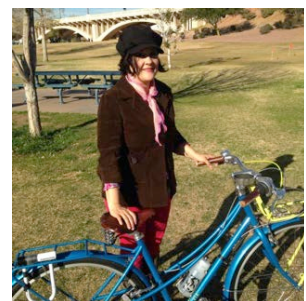
Joe O'Connell is the Senior Coordinator of New Student Orientation at Arizona State University. He likes to choose alternatives to driving whenever he can. Because there is no bus stop or light rail station near his house, he chooses to bike or walk to most local destinations. **"The biking and walking definitely started off as a financial saver," he says, "but they also are a great source of exercise."** Joe says that he favors biking and walking over driving because he doesn't like to waste gas. To save energy, he frequently chooses to eat meals at his home instead of going out, and he also tries to plan his schedule ahead so he can make fewer trips. Joe says he would be able to save even more energy if Arizona expanded community based transportation—for example, he might be able to trade in his personal truck for a smaller vehicle if there was a ride-sharing option available near him.

Adam Mann, a graphic designer based in Phoenix, uses his bike and transit to get around. His own experience using light rail led him to develop a Smartphone app to help riders cut the amount of time they spend waiting for the train. **His "Find My Train" app allows riders to see when their next Valley Metro light rail train is scheduled to arrive with one click.** "Instantly knowing when I can catch the train makes it much more convenient to take transit," he said. Since he works for himself, Adam often chooses to work from home or a coffee shop within biking distance. If he has to drive to meetings, he tries to stack his schedule to reduce driving – he's even turned down job inquiries because they would require him to drive more than he'd like.



Julian Wagner, an undergraduate biology major from Arizona State University, frequently chooses his bike as his main mode of transportation. He normally walks or bikes to his destinations if they are a short distance away, but if he needs to make a longer trip (to the airport, for example) he takes the light rail, a service that Julian would find even more useful if it were expanded further into Phoenix. For Julian, choosing biking and walking over driving is not just about saving money or energy. He says: **"They eliminate the stress of dealing with traffic and car accidents, gas prices, and insurance rates.** They give a person the chance to momentarily escape from our technology-centered lives and instead enjoy the simple activity of moving."

Lisa Parks is passionate about traveling by bicycle. She is very excited for the debut of bike-share in Phoenix because it means she can travel to and from the light rail without having to bring her own bike. Lisa bought her first bike 2 1/2 years ago and has never looked back. She says, "Now I'm car-light and drive as little as possible. Last September, I started working for bike-share, and now I commute four miles each way by bike. I love it!" Lisa enjoys traveling by bike for many reasons, including the exercise, benefit to the environment, and savings of about \$8000 per year. She encourages everyone to consider a car-light or car-free lifestyle and believes that **Arizona could help more people find alternatives by introducing high speed passenger rail and improving car sharing programs.**





Bryan Bazely is a young professional who has embraced a car-light lifestyle after learning the value of choosing driving alternatives while living in New York City for a year. He consciously made the decision to center his life around downtown Phoenix, and he enjoys spending the time he saves from his short 2 mile commute by getting involved in the community or being with family and friends. Brian believes that public transit not only helps individuals but the community as a whole. He says, "Choosing non-auto means of transportation means that the distance you travel from home decreases, but strengthens the businesses in your surrounding area which can lead to other businesses opening in the area, thus bringing investment and increasing property values." **Brian believes that commerce could be even further increased by introducing passenger rail to places like Tucson and Los Angeles.**

Libby Coyner is a self-proclaimed "bike evangelist." When she first moved to the Valley, she was afraid to travel by bike because of high automobile speeds and lack of bike lanes, but eventually her love for biking allowed her to conquer her fear. However, she wishes that Arizona would fix these problems to encourage even more people to travel by bike because it is such an efficient and environment-friendly mode of transportation. **She says that "People are tired of being slaves to their cars, spending vast amounts of time in traffic, and even more time working to support that lifestyle."** Libby believes that bicycling reduces the intense wear and tear that cars produce on our streets, and because cities like Seattle have already implemented bike-friendly streets with great success, Arizona cities should strive to be more like them.



Paul Loomans has been living car-free for the past 2 1/2 years. He substitutes driving with biking 10 to 12 miles per day and regular use of the light rail and bus system. He was attracted to this lifestyle by a passion for sustainability and simplicity, but he also discovered the extra benefits of exercise and feeling more closely connected to his community. Paul has a few ideas in mind for improving Arizona transportation including extended bike lanes, 24-hour transportation options, and frequent, affordable service between Phoenix and Tucson. He also believes that Arizona is an especially great place to live less dependent on cars. **He says, "I have found that Arizona weather is great for biking year round. It's easier to park, and I don't have to get into a hot car in the summer!"**

Karen Voyer-Caravona is a graduate student who chose to live in Central Phoenix because of its easy access to transportation and proximity to desired destinations. She usually bikes to places within 2-5 miles and takes the light rail or bus for longer trips. Karen became serious about commuting by bike when she moved to Flagstaff and the economic recession hit. By downsizing to one car in her household, she reduced gas, insurance, maintenance, and parking costs and also received physical and mental health benefits. **Karen says, "One of my favorite new things to do while on my bike is to take a closer look at new murals I find popping up in central Phoenix, something I never would have taken the effort to do had I been in my car."** Karen feels that Arizona could benefit from improved bike and bus facilities as well as commuter rail between Phoenix and Tucson and between Phoenix and Flagstaff because "either route is miserable by car."



POLICY RECOMMENDATIONS

For decades, the federal, state, and local governments have made massive investments in new road and highway capacity on the assumption that driving will continue to increase at a rapid and steady pace. The recent decline in driving and increase in non-driving transportation in Arizona's urbanized areas show that those assumptions are no longer necessarily correct.

Arizona's elected officials need to revisit their current transportation plans and transportation investment priorities in light of the recent changes in driving patterns. By doing so, decision-makers will be able to save money that might otherwise be wasted on unnecessary highway projects and instead invest in other important priorities such as repairing our existing roads and bridges and expanding access to the broader range of transportation options – including public transit, bicycling and walking – that Arizonans increasingly seek. Specifically, public officials should:

> REVISIT TRANSPORTATION PLANS

Many metropolitan areas and states continue to set their transportation investment priorities based on Driving Boom-era assumptions about future trends in vehicle travel. The 2013 Arizona PIRG Education Fund/Frontier Group report, *A New Direction*, argues that recent federal forecasts are likely to dramatically overstate future vehicle travel, leading to inaccurate judgments about the need for investment in highways. Similarly overly aggressive projections of future driving continue to shape public policy at the metropolitan and state level. With Arizonans driving fewer miles, the time has come to take a fresh look at transportation plans that have roots in Driving Boom-era assumptions. Local, metropolitan, and state transportation agencies should re-examine transportation plans based on new assumptions that reflect the recent decline in driving and new information about how changes in technology, the economy and consumer preferences are likely to affect the demand for driving in the future.

> REALLOCATE RESOURCES

A rethinking of transportation plans using the best, most current information is likely to reveal that many projects no longer make sense, as well as new priorities that demand increased investment. Short-term and long-term transportation plans are filled with highway projects that were planned under very different expectations of future travel growth. Transportation agencies should reevaluate the need for new or expanded highways, cancelling those projects that are no longer justifiable given new trends in driving. The state should refocus its transportation investments in projects that have been neglected, such as connecting Phoenix and Tucson with passenger rail and investing in transit systems for Arizona's urban areas. Municipalities should reallocate resources to projects that serve the growing demand for public transit, bicycling and walking infrastructure, as well as to the repair of existing roads and bridges.

> REMOVE BARRIERS TO EXPANDED TRANSPORTATION OPTIONS

Public policy infrastructure often gives cars top priority in addressing transportation problems. Local planning and zoning rules often prevent compact, mixed-use development and require developers to provide copious amounts of parking (passing the costs along to customers and workers) without providing similar access to transit riders, bicyclists and pedestrians. Arizona's Constitution prohibits the use of gasoline tax revenue for public transit or other, non-driving forms of transportation – even in cases where those investments would reduce congestion for drivers. In addition, the emergence of a variety of new technology-enabled transportation options – such as bikesharing, carsharing and ride-sharing – has run into roadblocks in some places where local regulations have not yet caught up to the pace of new innovations. Local, state and federal officials should identify policies that stack the deck in favor of auto-oriented development or stand in the way of non-driving modes of transportation and work to remove those barriers. In many places in Arizona, the biggest barrier to non-driving transportation options is a lack of funding. Local and state officials should identify stable, long-term funding sources for transit that can withstand economic downturns and enable transit agencies to take advantage of the increased demand for non-driving modes of travel.

> USE INNOVATIVE TRAVEL TOOLS AND SERVICES

New technologies – such as real-time travel information – and new approaches have the potential to address congestion more quickly and often less expensively than highway expansion. Local, state and federal governments should investigate the potential for new technologies to address urban transportation challenges and lower barriers to the use of non-driving modes of transportation. In addition to employing new technologies, transportation officials should take innovative approaches to transportation problems that prioritize multimodal connections and break down modal “silos” in transportation funding and administration.

> GET BETTER DATA

Tracking changes in vehicle travel patterns is extremely difficult. Inconsistent transportation data, infrequent travel surveys and other data problems make it hard for local, regional, state and national decision-makers to understand how driving trends are changing and the factors that may be causing those changes. Officials at all levels should invest in developing better data to address transportation challenges – eliminating inconsistencies in data reporting among various states, conducting national travel surveys on a more frequent or continuous basis, and taking advantage of new information sources, including voluntarily provided real-time information from vehicle GPS systems and “crowdsourced” data from transportation system users.

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Yuma's YCAT bus service.



About the Arizona PIRG Education Fund

With public debate around important issues often dominated by special interests pursuing their own narrow agendas, the Arizona PIRG Education Fund offers an independent voice that works on behalf of the public interest. The Arizona PIRG Education Fund, a 501(c)(3) organization, works to protect consumers and promote good government. We investigate problems, craft solutions, educate the public, and offer meaningful opportunities for civic participation. For more information about the Arizona PIRG Education Fund, please visit our website at www.ArizonaPIRGEdFund.org.



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