



ACTIVE

TRANSPORTATION PLAN

ActivATe the Region Now!

A SUMMARY OF ACTIVE TRANSPORTATION TRENDS AND TARGETS.

MAY 2018



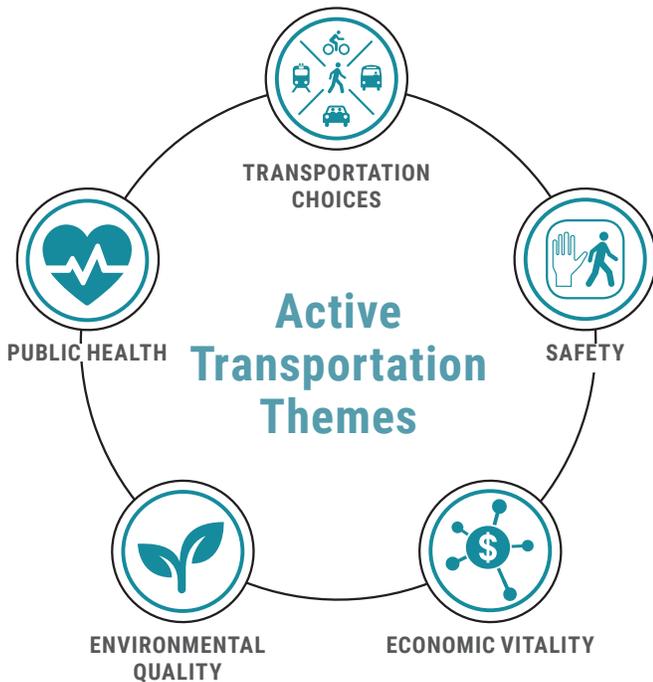


ActivATe the Region Now!

The Maricopa Association of Governments (MAG) Regional Active Transportation Plan (the Plan) will serve as a guide for improving, expanding and connecting the MAG region’s active transportation network. With a cohesive regional vision for active transportation and a context-sensitive approach to project implementation, the region has significant opportunities to improve quality of life and equity, and reap significant health, safety, economic and environmental benefits. This effort will also build upon and complement Maricopa County’s and local agency active transportation initiatives.

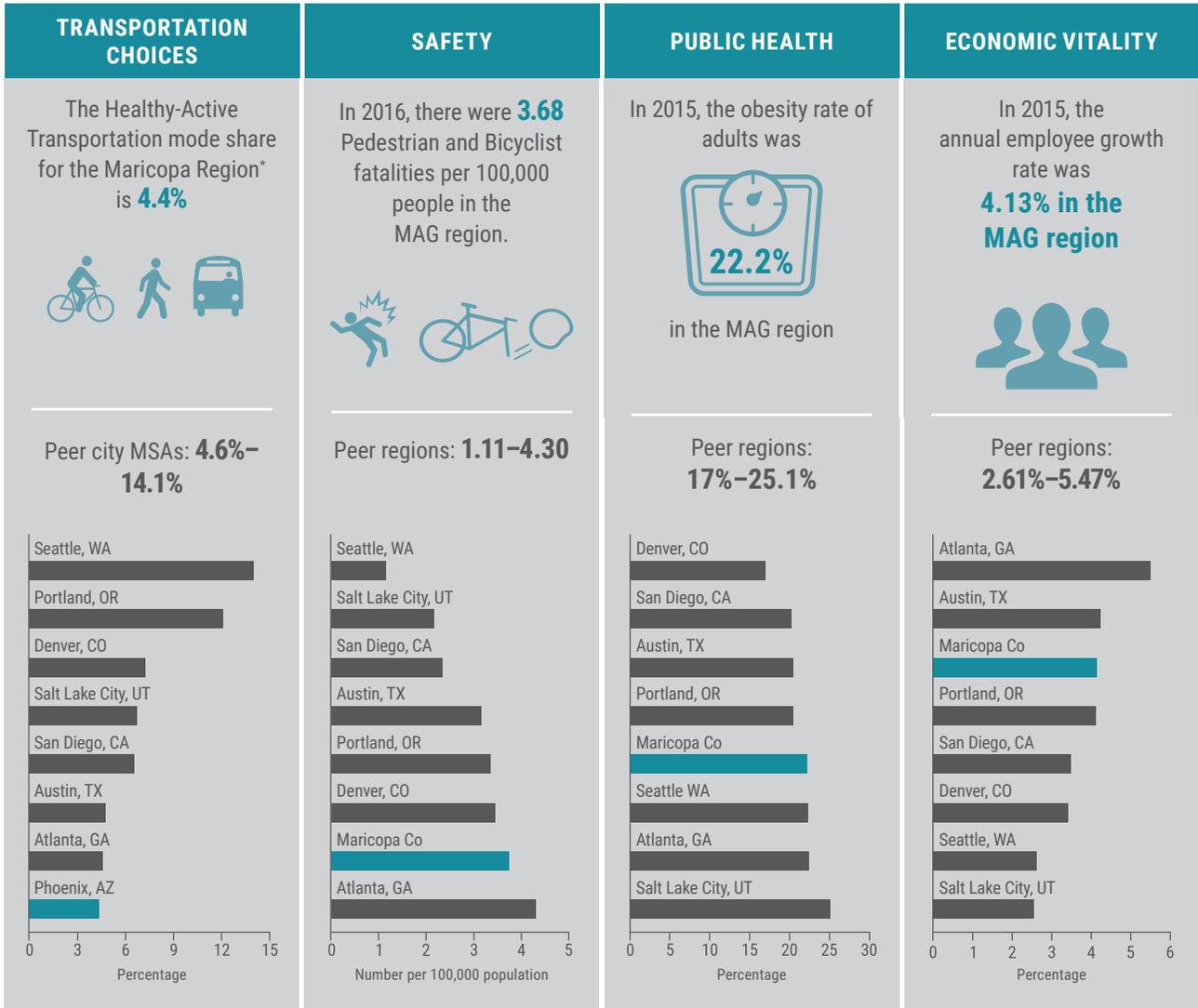
A November 2017 visioning workshop with a diverse group of stakeholders launched the Maricopa Association of Government’s (MAG) Regional Active Transportation Plan by identifying key active transportation themes and establishing a series of measurable and actionable targets (see page 5). These will guide decisions around transportation planning, design, investment and operations that are essential to realize a vision for a happier, healthier and more economically vibrant region through active transportation.¹

For each active transportation theme current conditions, potential benefits and targets are documented for the MAG region and peer regions. Peer regions include Atlanta, Austin, Denver, Portland, Salt Lake City, San Diego and Seattle. These are regions that MAG often looks to for comparison given their geographies, populations and planning practices.



¹ For more information on who attended the workshop and outcomes go to: www.azmag.gov/action

HOW ARE WE DOING?



* Phoenix-Mesa-Scottsdale MSA

Nationally more than **\$190 billion** is spent on annual health care costs for obesity-related illnesses²

In 2016 there were **3.14 pedestrian fatalities per 100,000** people in Maricopa County compared to 1.84 pedestrian fatalities per 100,000 people nationally.

² National League of Cities. "Economic Costs of Obesity." www.healthycommunitieshealthyfuture.org/learn-the-facts/economic-costs-of-obesity/

Current Conditions

Regional and local efforts to improve, expand and connect active transportation networks will have positive impacts on the region's quality of life, as it relates to safety, public health, economic vitality, environmental quality and providing people with transportation choices.

A comparison of data representing each of these active transportation themes provides a quick snap shot on how the MAG region measures up to its peer regions.³ Some data are available at the county level while other data are available at the Metropolitan Statistical Area (MSA) level. A complete list of the peer regions' data is provided in the Appendix section.

50% of all trips in metropolitan areas are 3 miles or less and 28% are 1 mile or less, distances easily made by foot or bicycle.

Transportation Choices

Pedestrians, bicyclists and transit riders represent only 4.4% of commuters in the MAG region.⁴ Nationally, 8.5% of commuters walk, bike, or take public transit. The Phoenix region has the lowest walk-bike-transit mode share among all its peer regions, and many people currently walking, biking and taking transit do so out of necessity rather than choice. Millennials, who are now the largest percentage of the workforce, want communities offering all transportation options. One third of the population is either too old or too young to drive and 44% of MAG households have one or zero cars. If the MAG region is to remain economically competitive and become more equitable it must deliver competitive transportation choices for all.

52% of all people and 63% of millennials would like to live in a place where they do not need to use a car very often.

THEMES AT THE LOCAL, STATE AND NATIONAL LEVEL



TRANSPORTATION CHOICES	TRAFFIC SAFETY	PUBLIC HEALTH	ECONOMIC VITALITY
<p>MESA, AZ: Increase bicycle mode share for all trips to work and school in Mesa to 5% (from 0.7%) within the life of the Plan. (2012)</p>	<p>ADOT: Reduce the frequency of all pedestrian-involved crashes (including fatal, injury, and non-injury) on the State Highway System by 25% by the year 2025.</p>	<p>US DEPARTMENT OF HEALTH AND HUMAN SERVICES: Reduce the national rate of adult obesity from 33.9% to 30.5% by 2020 (2010)</p>	<p>ADOT: To develop projects that put people to work and deliver goods and services that spur economic development and attract jobs to the state, creating a cycle of economic benefits</p>

³ Data comes from the Census Bureau, the National Highway Traffic Safety Administration, the Center for Disease Control and the Bureau of Labor Statistics.

⁴ This metric was measured at the MSA level.



Walkability Matters

A **5%** increase in walkability⁵ is associated with a change of:

+32% in walking, biking and transit use

-0.23 body mass index (BMI)

-6.5% vehicle miles traveled

-5.6% grams of oxides of nitrogen (NO_x) omitted

-5.5% grams of volatile organic compounds (VOC) omitted⁶



Safety

On average, close to 400 people, including 120 pedestrians and bicyclists, are killed in the Maricopa region every year and another 3,000 are seriously injured on roadways. The economic cost of these tragedies is more than \$650 million per year. No loss of life on the region's roads is acceptable. A safer active transportation network would not only result in huge cost savings, but it would also contribute to a more livable and equitable region.

Public Health

In 2012, 22.2% of adults in the MAG region self-reported as obese. While this is below the 36.5% of adults self-reporting as obese at the national-level, it is significantly higher than the Denver region where 17% of adults are obese. Active transportation reduces chronic diseases that are in part due to physical inactivity and obesity such as diabetes, heart disease and certain cancers. And just 30 minutes of steady cycling has been shown to improve memory and provide emotional and mental health benefits.

The environmental quality benefits of active transportation also contribute to positive public health outcomes, including decreasing respiratory diseases such as asthma.

5 Walkability relates to a neighborhood's land use mix, street connectivity, net residential density and retail floor area ratios.

6 Frank, L. D., Sallis, J.F., Conway, J. E., Chapman, J. E., Salenes, B. E. and Bachman, W. 2007. Many Pathways from Land Use to Health. Journal of the American Planning Association. 72(1): 75-87.



Biking More Matters

The bicycle-industry generates **\$17.7 billion** in annual federal, state and local taxes⁷

The value of nearly 1,800 parcels within 500 feet of the Cultural Trail in Indianapolis increased by more than **\$1.01 billion** over a 6-year period.⁸

After the installation of a protected bike lane in New York City, injuries to all street users decreased by **58%** and retail sales increased by as much as **49%** (compared to a 3% increase in sales citywide).⁹



Driving Less Matters

People in the Portland OR region save **\$1.2 billion annually** in costs associated with purchasing, operating and maintaining motor vehicles due to the region's prevalence of walking, biking and transit¹⁰



Economic Vitality

Streets that encourage walking and biking with high quality infrastructure can have a huge economic impact. One study showed 80% of “complete street” projects resulted in increased property values.¹¹ At the national level a 3% increase in active transportation mode share is estimated to result in savings of \$10 billion annually from avoiding car usage, CO2 emissions and increased physical activity.⁹ Employers are increasingly looking for locations that offer their employees walkable and bikeable communities in which to live, work and play. The environmental quality benefits of active transportation also positively contribute to regional livability and decisions of employers and employees to locate in the MAG region. All this translates into real economic value by investing in active transportation infrastructure.

Light rail expansion to Downtown Mesa has spurred over \$350 million in investment (both public and private) and the city of Mesa saw a 12% increase in sales tax collected from businesses in the corridor in the first year of operation compared to the year before.

Retail sales for businesses adjacent to a protected bike lane in Salt Lake City increased 8.8% compared to a 7% increase citywide.¹²

7 Flusche, Darren, League of American Bicyclists, Advocacy Advance. “Bicycling Means Business: The Economic Benefits of Bicycle Infrastructure.” July, 2012. bikeleague.org/sites/

5. Ibid.

6. Ibid.

8 Active Transportation and Real Estate: The Next Frontier, Urban Land Institute, 2015.

9 *Measuring the Street: New Metrics for 21st Century Streets*, 2012.

10 Smart Growth America.

11 Gotschi and Mills, 2008

12 Active Transportation and Real Estate: The Next Frontier, Urban Land Institute, 2015.

Targets

While the region does face challenges related to current levels of active transportation use and serious or fatal collisions involving people walking and biking, MAG's Active Transportation Plan will identify planning and design strategies to address these challenges and support a desirable, safe and economically competitive region. Progress towards addressing these challenges will be tracked through the establishment of regional targets.

In November 2017, a visioning workshop with representatives from around the region gathered to discuss and identify Plan targets related to active transportation mode share, safety and public health.

MAG's active transportation targets will be supported by the efforts of local cities and Maricopa County, most of which have adopted plans and policies focused on expanding the active transportation network. Additionally, this work is supported by the Arizona Department of Transportation's Statewide Bicycle and Pedestrian Plan and Safety Action Plans.

The following targets were established by workshop attendees after taking into account current conditions and the substantial benefits active transportation could bestow on the region. While these targets are ambitious, they are reasonable if the region is serious about making a change from business as usual and commits the necessary resources.

- **Mode Share:**

Increase the active transportation mode share from 4.4% to 30% by 2040

- **Safety:**

Achieve zero pedestrian and bicyclist traffic fatalities by 2030

- **Public health:**

Increase the percentage of people getting enough physical activity from 37% to 64% and decrease the percentage of people who are considered obese or overweight from 64% to 37% by 2040

Additional information on the Plan is available online at azmag.gov/action.



Compelling Cases for Investing in Active Transportation

New York City

2007 plan NYC established the target of promoting cycling use by completing the city's 1,800 mile bike master plan by 2030, with the first phase of 200 miles completed by 2009.

2007-2010, New York installed +250 miles of bike routes and saw a +87% increase in the amount of commuter bicycling.

Seattle

When the city of Seattle removed car lanes and added bike lanes to its Stone Way North street, the volume of cyclists increased 25%, motor traffic on adjacent streets declined 12-34%, speeding decreased 80% and collisions dropped 14%.

Lodi, CA

Streetscape improvements and economic incentives led to 60 new store openings, a 12% drop in commercial vacancies and a 30% increase in sales tax revenue.¹³

¹³ Business Performance in Walkable Shopping Areas, Active Living Research, Robert Wood Johnson Foundation, November 2013.

Calgary, Alberta

Installed a 4 mile protected bike lane network in downtown and saw a 95% increase in weekday bicycle ridership and a 22% increase in the number of women riding.

Seville, Spain

Starting in 2007, the city installed 86 miles of protected bike lanes over 7 years. In the first year alone, the City installed 40 miles.

Since the protected bike lanes' installation:

- The bicycle mode share has increased to 7% (from >1%),
- +1,000% increase in the average number of daily cyclists (6,000 to 70,000) and
- 2,600 bike, 260 station bike share system launched.

Atlanta

Homes selling in walkable neighborhoods fetch a 20% premium compared to similar homes with larger lots in less walkable areas.



Next Steps

MAG will be working with cities, Maricopa County, ADOT and other stakeholders to develop an active transportation framework that builds on investments made to date and identifies complete corridors and connections that will boost active transportation throughout the region. This framework will focus on infrastructure planning and design, policy and investment strategies informed by best practices at the local, regional and national level, including those

developed by MAG's peer regions. MAG is also engaging the public to better understand their preferences for how streets should look and function and where there are specific issues that need to be addressed to improve safety, comfort and connectivity for walking and biking.

The safety, economic, environmental, and health benefits of a high quality active transportation system are too great to pass up. We must Activate the Region Now!

Appendix

The peer regions considered for this working paper include Atlanta, Austin, Denver, Portland OR, Salt Lake City, San Diego and Seattle regions. The reporting areas used for these metrics include either the most populous county in these regions or the Metropolitan Statistical Area (MSA) level depending on data availability.¹⁴

Transportation Choices

- 4.6% of commuters in the greater Atlanta MSA,
- 4.8% of commuters in the greater Austin MSA,
- 6.6% of commuters in the greater San Diego MSA,
- 6.8% of commuters in the greater Salt Lake City MSA,
- 7.3% of commuters in the greater Denver MSA,
- 12.2% of commuters in the greater Portland MSA and
- 14.1% of commuters in the greater Seattle MSA take healthy, active modes of transportation to work.¹⁵

Safety

- 1.07 pedestrian fatalities and 0.05 bicycle fatalities per 100,000 population in King County, WA,
- 1.96 pedestrian fatalities and 0.18 bicycle fatalities per 100,000 population in Salt Lake County, UT,
- 2.23 pedestrian fatalities and 0.12 bicycle fatalities per 100,000 population in San Diego County, CA,
- 2.99 pedestrian fatalities and 0.17 bicycle fatalities per 100,000 population in Travis County, TX,
- 2.62 pedestrian fatalities and 0.75 bicycle fatalities per 100,000 population in Multnomah County, OR,
- 2.88 pedestrian fatalities and 0.58 bicycle fatalities per 100,000 population in Denver County, CO and
- 4.20 pedestrian fatalities and 0.10 bicycle fatalities per 100,000 population in Fulton County, GA.¹⁶

Public Health

- 17.0% of adults in Denver County, CO,
- 20.2% of adults in San Diego County, CA,
- 20.4% of adults in Travis County, TX,
- 20.5% of adults in Multnomah County, OR,
- 22.3% of adults in King County, WA,
- 22.4% of adults in Fulton County, GA and
- 25.1% of adults in Salt Lake County, UT self-reported as obese.¹⁷

Economic Vitality

- 2.54% growth rate in Salt Lake County, UT,
- 2.61% growth rate in King County, WA,
- 3.39% growth rate in Denver County, CO,
- 3.46% growth rate in San Diego County, CA,
- 4.10% growth rate in Multnomah County, OR,
- 4.23% growth rate in Travis County, TX and
- 5.47% growth rate in Fulton County, GA.¹⁸

14 The most populous counties in each of the peer regions are Travis Co., Austin region; Fulton Co., Atlanta region; Denver Co., Denver region; Multnomah Co., Portland, OR region; Salt Lake Co., Salt Lake City region; San Diego Co., San Diego region; and King Co., Seattle region.

15 American Community Survey, 2012-2016, 5-Year Estimates.

16 Fatality Analysis Reporting System, 2015. American Community Survey, 2012-2016, 5-Year Estimates.

17 Centers for Disease Control and Prevention, 2012 County Data Atlas.

18 American Community Survey, 2015 1-Year Estimate.

