



Future of Transportation

In March 2015 the U.S. Department of Transportation released “Beyond Traffic: Trends and Choices 2045,” an in-depth study of the nation’s transportation network and how it might look in 30 years based on current trends. The report highlighted many concerns facing Americans and the roads, airways and railroads we use to move people and goods. Aging infrastructure, fast-growing communities, congested roads and dwindling transportation funding will all play integral roles in shaping the transportation network of America, and, to varying degrees, southern Nevada.

- ❖ America will add 70 million people by 2045, with the greatest increases in the South and West. Although population growth in Nevada slowed during the Great Recession and its aftermath, the economic recovery has once again moved it near the top of state population growth rankings. The Urban Institute projects that population within the southern Nevada-northwest Arizona commuter zone will grow to 3.3 million by 2030, an increase of more than 1 million people.
- ❖ Because of growing congestion, American commuters spend an average of 40 hours a year stuck in traffic. The annual cost of congestion is \$121 billion. Increasing population will bring growing transportation demands, however, some trends could help slow the growth of congestion in the coming decades, including millennials’ preference for public transit, more people telecommuting, and a falling share of workers among the aging population. Yet the U.S. Department of Transportation predicts that by 2040, 30,000 miles of America’s busiest highways will be clogged on a daily basis.
- ❖ New technologies, such as autonomous vehicles and ride-sharing services, have the potential to dramatically change transportation supply and demand. Autonomous vehicles could greatly reduce congestion through technology that prevents crashes as well as enhancing capacity on existing infrastructure by synchronizing traffic flows. Ride-sharing services, such as Uber and Lyft, can supplement other urban transit services by providing flexible and efficient on-demand transportation.
- ❖ Growing demand for transporting goods across the country will also tax current infrastructure as U.S. freight volume is expected to grow by 45 percent by 2040. Shipping by air will expand by 250 percent, shipping by truck will rise by 43 percent, and shipping by rail will increase by 37 percent.
- ❖ Buses, light rail and other public transit systems have seen a resurgence, with ridership reaching its highest level in 50 years by growing 25 percent in the past two decades. Growing populations in metropolitan areas and changing attitudes will likely increase demand for public transit in coming decades.
- ❖ Paying for future transportation improvements and maintenance will be a challenge across America. The federal gas tax has remained unchanged since 1993, and inflation combined with less travel and greater fuel efficiency cut gas tax revenue by \$15 billion (31 percent) from 2002 to 2012. State gas tax revenue fell by \$10 billion (19 percent) during the same period. Alternative revenue sources, such as tolls, vehicle registration fees and taxes on vehicle miles traveled, will make up a larger share of transportation financing as fuel tax revenue declines.



Future of Transportation Background Resources

Beyond Traffic: Trends and Choices 2045

U.S. Department of Transportation

http://www.transportation.gov/sites/dot.gov/files/docs/Draft_Beyond_Traffic_Framework.pdf

This wide-ranging report from the U.S. Department of Transportation examines current trends in transportation and predicts what the nation's transit network might look like in 30 years. The report, which covers the movement of people and goods in all transit modes, identifies many areas of concern that could negatively affect the future of travel in America, such as aging infrastructure, growing congestion and decreasing transportation funding.

Connecting and Transforming the Future of Transportation

Sustainable Mobility and Accessibility Research and Transformation (SMART) at University of Michigan

<http://deepblue.lib.umich.edu/bitstream/handle/2027.42/85216/102756.pdf>

A primer by the SMART project under the University of Michigan Transportation Research Institute that addresses livability, sustainability and economic vitality in communities and city regions of the world through systems-based transportation. It is meant to serve businesses, community leaders, transportation practitioners and policymakers who are interested in improving and transforming their transportation systems and related economies as whole systems

Foresight: Informing Transportation's Future

Transportation Research Board of the National Academies

http://www.trb.org/Resource.ashx?sn=n20-83B_IntroductiontotheReportsWEB2

A report by the National Academies that summarizes a series of reports on critical issues facing the future of transportation. The series examines population growth, alternative fuels, technology, climate and other issues that will shape travel decades from now.

The Future of Transportation

CityLab

<http://www.citylab.com/special-report/future-of-transportation/>

A collection of articles by *The Atlantic's CityLab* on a variety of transportation topics and issues facing American cities now and in the future.

Transportation in Transition

U.S. Public Interest Research Group

http://uspirg.org/sites/pirg/files/reports/US_Transp_trans_scrn.pdf

A report that details recent trends in travel in America's biggest cities. Specifically, it analyzes available data to show how Americans are driving less in metro areas while turning more to public transit and other non-driving alternatives.

Mapping America's Future

Urban Institute

<http://datatools.urban.org/features/mapping-americas-futures/>

An interactive web application by the Urban Institute that displays projected population growth across the United States commuting zones in 2030.