# **KEEPING NEVADA CONNECTED:**

# Future Mobility in the Silver State

**MARCH 2014** 



Founded in 1971, TRIP (e), of Washington, DC is a nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. TRIP is sponsored by insurance companies, equipment manufacturers, distributors and suppliers; businesses involved in highway and transit engineering and construction; labor unions; and organizations concerned with efficient and safe surface transportation.

## **Executive Summary**

Nevada's transportation system has played a significant role in the state's development, providing mobility and access for residents, visitors, businesses and industry. The state's roads, highways, rails, ports and public transit systems remain the backbone of the Silver State's economy. Nevada's transportation system also provides for a high quality of life and helps make the state a desirable place to live and visit. The condition and quality of its transportation system will play a critical role in Nevada's ability to continue to capitalize on its economic advantages and meet the demands of the 21st Century.

To achieve sustainable economic growth, Nevada must proceed with numerous projects to improve key roads, bridges, highways, public transit systems and other transportation facilities. Enhancing critical segments of Nevada's transportation system will boost the state's economy in the short-term by creating jobs in construction and related fields. In the long-term these improvements will enhance economic competitiveness and improve the quality of life for the state's residents and visitors by reducing travel delays and transportation costs, improving access and mobility, improving safety, and stimulating sustained job growth.

Meeting Nevada's need to modernize and maintain its system of roads, highways and bridges will require a significant boost in local, state and federal funding.

But federal transportation funding, a key source of revenue for the state's roads, highways, bridges and public transit systems, is threatened. Signed into law in July 2012, MAP-21(Moving Ahead for Progress in the 21<sup>st</sup> Century Act), has improved several procedures that in the past had delayed projects, but MAP-21 does not address long-term funding challenges facing the federal surface transportation program.

The impact of inadequate federal surface transportation revenues could be felt as early as summer of 2014, when the balance in the <u>Highway Account of the federal Highway Trust Fund</u> is expected to drop below \$1 billion, which will trigger delays in the federal reimbursement to states for road, highway and bridge projects. States are expected to respond to this delay in federal reimbursement for road, highway and bridge repairs and improvements by delaying or postponing numerous projects.

As a further result, nationwide federal funding for highways will be cut by almost 100 percent from the current investment level for the fiscal year starting on October 1, 2014 (FY 2015) unless Congress provides additional transportation revenues. This is due to a cash shortfall in the Highway Trust Fund as projected by the <u>Congressional Budget Office</u>.

Sources of data include the Nevada Department of Transportation (NDOT), the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), the U.S. Bureau of Transportation Statistics (BTS), and the U.S. Census Bureau. All data used in the report is the latest available.

TRIP has identified and ranked the 25 transportation projects that are most needed to support quality of life and economic growth in Nevada. These projects will require significant additional funding to proceed.

- The most needed transportation improvements in Nevada include projects to build, expand or modernize roads, highways, bridges, mass transit systems and other transportation facilities. These improvements would enhance economic development opportunities throughout the state by increasing mobility and freight movement, easing congestion, and enhancing Nevada's desirability as a place to live, visit and do business.
- TRIP ranked each transportation project based on the following: short-term economic benefits, including job creation; the level of improvement in the condition of the transportation facility, including safety improvements; the degree of improvement in access and mobility; and the long-term improvement provided in regional or state economic performance and competitiveness.

Nevada's 15 most needed transportation improvements to support economic development in the state as determined by TRIP follow. A description of the 25 most needed transportation projects in Nevada to support the state's future are listed in the report.

- 1. Continued expansion and modernization of portions of I-15 in the Las Vegas area. These improvements include portions from Sahara Avenue to I-15/US 95 (Spaghetti Bowl), from Craig Road to Apex, from St. Rose Parkway to Sunset Road and from Blue Diamond to Tropicana Avenue.
- 2. Construction of new Interstate highway corridor from Phoenix to Las Vegas. The construction of I-11 from Phoenix and Las Vegas, starting with initial portions of the project from Hoover Dam Road to US 93/US 95 Interchange in Boulder City.
- **3.** Improved I-215/Airport Connector interchange in Las Vegas area. A two-mile, 1-215/Airport Connector interchange improvement is needed to ease congestion and improve regional connectivity.
- **4. Widening of portions of I-80 in Reno.** Widen portions of I-80 in the Reno, Sparks and Truckee area to between 6 to 10 lanes in different sections and also incorporating multiple traffic interchange improvements.
- **5. Redevelopment of corridor from airport to downtown in Las Vegas**. Redevelop the Maryland Parkway corridor between McCarran International Airport and downtown Las Vegas with complete street enhancements and a center-running transit system that utilizes either Bus Rapid Transit or Light Rail.
- 6. Las Vegas Valley Eastern Bypass. The construction of an Eastern Bypass from the I-15/CC-215 northern interchange to US 95 will provide a southern truck bypass route from Utah to Arizona, relieving congestion on other area highways.

- **7.** Addition of High Occupancy Vehicle (HOV) lanes on portion of I-215 in Las Vegas area. Addition of one HOV lane in each direction on portion of I-215 from I-515 to Summerlin Parkway.
- 8. Widening McCarran Boulevard in the Reno area. Widen the entire stretch of McCarran Boulevard in the Reno Area from four to six lanes to relieve congestion.
- **9.** Widening of the southern segment of I-15. Widen I -15 from the California state line to the Southern Beltway from four to six lanes.
- **10. Widening of I-80 from Reno to Winnemucca.** Widen I-80 from Reno to Winnemucca by adding an additional lane in each direction.
- **11. Widening of portion of SR 225 in Northern Nevada.** Widen SR 225 by adding one lane in each direction from I-80 to Idaho state line to improve safety and enhance economic development opportunities in this corridor.
- **12. Improve portions of SR 445 Pyramid Highway in Reno area.** Needed improvements include converting the existing arterial road from Calle De La Plata to Disc Drive to a 6-lane freeway, building a new 6-lane freeway from the Disc area west to US 395 and extending Disc Drive east from Pyramid to Vista as a 6-lane arterial road.
- **13. East Truckee Canyon/Spanish Springs new route in Reno area.** A six-lane freeway connecting the east end of Sparks with east I-80 at about the Patrick Interchange.
- **14. Provide inland port facilities in Northern and Southern Nevada.** Providing intermodal rail and highway inland port facilities will enhance economic development opportunities in Nevada by increasing the efficiency of goods movement and increasing the attractiveness of the region for distribution facilities and manufacturing.
- **15. Provide rail passenger service between Los Angeles and Las Vegas.** Provide passenger rail passenger service between Los Angeles and Las Vegas to relieve congestion on this heavily traveled corridor.

Nevada's businesses are dependent on an efficient, safe, modern transportation system. A key component in business efficiency and success is the level and ease of access to customers, markets, materials and workers.

- Trucks are the primary transportation mode for commodities moving to, from, and within Nevada.
- The <u>2010 Federal Highway Administration Freight Analysis Framework</u> (FAF) data show that 87 percent of commodities to, from and within Nevada move by truck (2010). Another four percent are carried by other modes, which include truck-rail and mail modes.
- Highway accessibility was ranked the number one site selection factor in a 2011 survey of corporate executives by <u>Area Development Magazine</u>.

Transportation projects that improve the efficiency, condition or safety of a highway or transit route provide significant economic benefits by reducing transportation delays and costs associated with a deficient transportation system. Some benefits of transportation improvements include the following.

- Improved business competitiveness due to reduced production and distribution costs as a result of increased travel speeds and fewer mobility barriers.
- Improvements in household welfare resulting from better access to higher-paying jobs, a wider selection of competitively priced consumer goods, additional housing and healthcare options, and improved mobility for residents without access to private vehicles.
- Gains in local, regional and state economies due to improved regional economic competitiveness, which stimulates population and job growth.
- Increased leisure/tourism and business travel resulting from the enhanced condition and reliability of a region's transportation system.
- A reduction in economic losses from vehicle crashes, traffic congestion and vehicle maintenance costs associated with driving on deficient roads.
- The creation of both short-term and long-term jobs.
- Transportation projects that expand roadway or transit capacity produce significant economic benefits by reducing congestion and improving access, thus speeding the flow of people and goods while reducing fuel consumption.
- Transportation projects that maintain and preserve existing transportation infrastructure also provide significant economic benefits by improving travel speeds, capacity, load-carry abilities and safety, and reducing operating costs for people and businesses. Such projects also extend the service life of a road, bridge or transit vehicle or facility, which saves money by either postponing or eliminating the need for more expensive future repairs.

The fastest growing state in the U.S., Nevada was hard hit by the recent recession, but has begun to rebound. A return to strong economic growth in Nevada will require a reliable, safe and well-maintained transportation system that is able to accommodate the anticipated high rate of growth in Nevada.

- Nevada had the largest increase in population in the nation between 1990 and 2012. Nevada's population reached 2.7 million in 2012, a 130 percent increase since 1990, when the state's population was approximately 1.2 million.
- Nevada's population is expected to increase to approximately 3.6 million people by 2030, a 33 percent increase from 2012.

- Nevada had 1,728,060 licensed drivers in 2012.
- Vehicle miles traveled (VMT) in Nevada increased by 136 percent from 1990 to 2012, the largest increase in the nation during that time. Vehicle travel in Nevada jumped from 10.2 billion VMT in 1990 to 24.2 billion VMT in 2012.
- By 2030, vehicle travel in Nevada is projected to increase by another 50 percent.
- From 1990 to 2012, Nevada's Gross Domestic Product, a measure of the state's economic output, increased by 139 percent, when adjusted for inflation, the largest increase in the nation.
- In January 2008, Nevada's unemployment rate was five percent. By January 2011, Nevada's unemployment had nearly tripled to 14.2 percent, the highest rate in the nation. Currently, Nevada's unemployment rate is 8.8 percent.

Employment in Nevada is expected to increase from approximately 1.1 million jobs in 2010 to approximately 1.55 million jobs in 2030, a 40 percent increase.

# Significant levels of traffic congestion cause significant delays in Nevada, particularly in its larger urban areas, choking commuting and commerce.

- According to the Texas Transportation Institute (TTI), the average driver in the Las Vegas urban area loses \$906 each year in the cost of lost time and wasted fuel as a result of traffic congestion. The average commuter in the Las Vegas urban area loses 44 hours each year stuck in congestion.
- TTI calculates that the average driver in the Reno-Carson City urban area loses \$590 each year in the cost of lost time and wasted fuel as a result of traffic congestion. The average commuter in the Reno-Carson City urban area loses 27 hours each year stuck in congestion.
- Throughout the state, lost time and wasted fuel due to congestion cost Nevada's drivers a total of \$1.1 billion each year.

# Federal funding is a critical source of transportation funding in Nevada. The following ten surface transportation projects of regional or statewide significance to Nevada were completed since 2005 and included significant federal funding.

- 1. Six lane freeway with 11 bridges on I-580 in Washoe County. This 8.5 mile, \$393 million project on I-580 from Winters Ranch to Mt. Rose Highway reduced congestion and improved regional mobility.
- 2. I-15 capacity improvements in Clark County. This six mile, \$277 million project on I-15 from Silverado Ranch Road to Tropicana Avenue reduced congestion and improved mobility.

- **3. I-15 roadway widening to 10 lanes in Clark County.** This 5.5 mile, \$240 million project from US 95/I-15 Interchange to Craig Road reduced congestion and improved mobility.
- 4. Hoover Dam Bypass/new bridge on US 93 in Clark County. This 0.3 mile, \$230 million project from the Nevada side to the Arizona side of the Colorado River reduced congestion and improved mobility.
- 5. I-215 Southern Beltway Interchange upgrade in Clark County. This \$160.5 million Airport Connector interchange upgrade project reduced congestion and improved connectivity.
- 6. US 95 lane widening with auxiliary lanes in Clark County. This 6.4 mile, \$145 million project widening six lanes to eight with auxiliary lanes from Washington Avenue to Ann Road reduced congestion and improved mobility.
- **7. I-80 improvements on six lanes, including ITS in Washoe County.** This 16.2 mile, \$85 million improvement project including pavement, auxiliary lanes, ramps and ITS from Robb Drive to Vista Boulevard reduced congestion and improved operations and safety.
- **8. I-580 auxiliary lanes and operational improvements in Washoe County.** This 4.7 mile, \$66 million project involving auxiliary lanes and operational improvements from Moana Lane to I-80 reduced congestion and improved mobility.
- **9.** Construction of a six lane freeway on US 395 Carson City Freeway. This 1.8 mile, \$64.7 million project to construct a six lane freeway from Fairview Drive to East William improved mobility and connectivity.
- **10.** Construction of a six lane roadway with interchange on I-15 Cactus Interchange. This I-15/Cactus Interchange \$65 million six lane roadway with interchange reduced congestion and improved mobility.

The federal government remains a critical source of funding for Nevada's roads, highways, bridges and transit systems and provides a significant return to Nevada in road and bridge funding based on the revenue generated in the state by the federal motor fuel tax.

- MAP-21, approved by Congress in July 2012, greatly increased funding flexibility for states and streamlined project approval processes to improve the efficiency of state and local transportation agencies in providing needed transportation improvements in the state.
- MAP-21 does not provide sufficient long-term revenues to support the current level of federal surface transportation investment.
- The impact of inadequate federal surface transportation revenues could be felt as early as summer of 2014, when federal funding for road, highway and bridge projects is likely to be delayed because the balance in the <u>Highway Account of the federal Highway Trust</u>

<u>Fund</u> is expected to drop below \$1 billion. This delay and uncertainty in funding will likely result in the postponement of numerous projects.

- Nationwide federal funding for highways is expected to be cut by almost 100 percent from the current investment level for the fiscal year starting October 1, 2014 (FY 2015) unless Congress provides additional transportation revenues. This is due to a cash shortfall in the Highway Trust Fund as projected by the <u>Congressional Budget Office</u>.
- If the funding shortfalls into the federal Highway Trust Fund are addressed solely by cutting spending it is estimated that federal funding for highway and transit improvements in Nevada will be cut by \$384 million for the federal fiscal year 2015, starting October 1, 2014, unless Congress provides additional transportation revenues.

#### Introduction

Quality of life, economic competitiveness and future mobility in Nevada all rely on a sound, efficient and safe surface transportation system. From its rich mineral deposits, agricultural bounty and manufacturing specialties, to its sports and recreational attractions, and the entertainment and gaming industry, Nevada attracts businesses and visitors from around the globe.

To ensure future mobility and economic competitiveness, Nevada must maintain and modernize its roads, highways, bridges, rail, inland port and transit systems by improving the physical condition of its transportation network and enhancing the system's ability to provide efficient and reliable mobility. Making needed improvements to Nevada's roads, highways and bridges could also provide a boost to the state's economy by creating jobs in the short-term and stimulating long-term economic growth as a result of enhanced mobility and access.

The federal government plays a critical role in funding for Nevada's, and all states' roads, highways and bridges and provides a significant return to Nevada in road and bridge funding based on the revenue generated in the state by the federal motor fuel tax. Since 2005, Nevada has completed many critical projects that included significant federal funding, but meeting Nevada's need to modernize and maintain its system of roads, highways and bridges moving forward will require a significant boost in local, state and federal funding.

The current federal surface transportation legislation, Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21), was signed into law in July 2012 and expires this year on September 30. MAP-21improved several procedures that in the past had delayed projects, but does not address long-term funding challenges facing the federal surface transportation program.

The level of funding and the provisions of the federal surface transportation program have a significant impact on highway and bridge conditions, roadway safety, transit service, quality of life and economic development opportunities in Nevada and the state's ability to move forward with numerous projects needed to support quality of life and economic growth in the state.

#### **Population, Travel and Economic Trends in Nevada**

Nevada residents and businesses require a high level of personal and commercial mobility. While still recovering from the recession, population and economic growth over the past two decades have resulted in increased demands on Nevada's major roads and highways, leading to increased wear and tear on the transportation system.

To foster a high quality of life and spur economic growth in Nevada, it will be critical that the state provide a safe and modern transportation system that can accommodate future growth in population, tourism, recreation and vehicle travel.

Nevada's population grew to 2.7 million residents in 2012, a 130 percent increase since 1990, when the state's population was approximately 1.2 million.<sup>1</sup> This was the largest population increase in the nation between 1990 and 2012. <u>Nevada's population</u> is anticipated to increase to approximately 3.6 million by 2030, a 33 percent increase from 2012.<sup>2</sup> Nevada has 1,728,060 licensed drivers.<sup>3</sup> From 1990 to 2012, Nevada's gross domestic product (GDP), a measure of the state's economic output, increased by 139 percent, when adjusted for inflation.<sup>4</sup>

Population increases and economic growth in the state have resulted in an increase in the demand for mobility as well as an increase in vehicle miles of travel (VMT). From 1990 to 2012, annual VMT in Nevada increased by 136 percent, the largest increase in the nation during that time. VMT in Nevada increased from 10.2 billion miles traveled annually in 1990 to 24.2 billion miles traveled annually in 2012.<sup>5</sup> Based on population and other lifestyle trends, TRIP estimates that travel on Nevada's roads and highways will increase by another 50 percent by 2030.<sup>6</sup> While the entire country suffered from the recession, Nevada has fared worse than most states, experiencing a decrease in economic activity and a significant increase in unemployment. Nevada is particularly dependent on economic sectors that are highly sensitive to national economic trends, including tourism, entertainment, gaming, construction and real estate.

In January 2008, Nevada's unemployment rate was five percent. By January 2011, Nevada's unemployment had nearly tripled to 14.2 percent, the highest rate in the nation. Currently, Nevada's unemployment rate is 8.8 percent. Employment in Nevada is projected to increase from <u>approximately 1.1 million jobs in 2010 to approximately 1.55 million jobs</u> in 2030, a 40 percent increase.<sup>7</sup>

#### **Transportation and Economic Growth**

In order to compete economically, a region needs well-maintained and efficient roads, highways and bridges. As a result of improvements in technology and communications, over the past several decades businesses have transitioned from a from a push-style distribution system, which relies on large-scale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. Today, mobile inventories are the norm, resulting in increased truck traffic as goods are moved throughout North America and to port, rail and air transports. Consequently, the quality of a region's transportation system has become a key component in a business's ability to compete locally, nationally and internationally. Increasingly, companies are looking at the quality of a region's transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system. Highway accessibility was ranked the number one site selection factor in a 2011 survey of corporate executives by <u>Area Development Magazine</u>.<sup>8</sup>

The Federal Highway Administration Freight Analysis Framework (FAF) Version 3 commodity flow database estimates existing commodity flows to, from, within, and through Nevada. The 2010 FAF data show trucks are the primary transportation mode for commodities moving to, from, and within Nevada, with 87 percent of the internal and internal-external, external-internal commodity flows by volume moving by truck.<sup>9</sup>



Figure 1. Nevada Freight Mode by Tonnage

# Source: NDOT <u>Connecting Nevada</u> ("Other" modes include combination truck-rail and mail modes.)

According to NDOT's 2008 Long Range Transportation Plan (LRTP), I-15 and I-80 are among the busiest truck-freight corridors in the nation<sup>10</sup>. With a market area of 51 million people within one day's drive, businesses can take advantage of Nevada's low taxation and operation costs and still easily ship to a multitude of states.<sup>11</sup> Highways are vitally important to economic development in Nevada. As the economy strengthens, creating more jobs and increasing consumer confidence, the demand for consumer and business products grows. In turn, manufacturers ship greater quantities of goods to market to meet this demand, a process that adds to truck traffic on the state's highways and major arterial roads.





#### Source: NDOT Connecting Nevada

The cost of road and bridge improvements are more than offset by the reduction of user costs associated with driving on rough roads, the improvement in business productivity, the reduction in delays and the improvement in traffic safety. The <u>Federal Highway Administration</u> <u>estimates</u> that each dollar spent on road, highway and bridge improvements results in an average benefit of \$5.20 in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel

consumption, improved safety, reduced road and bridge maintenance costs and reduced emissions as a result of improved traffic flow.<sup>12</sup>

Increasing investment in Nevada's roads, highways and bridges will also boost the state's economy by creating jobs. A <u>2007 analysis by the Federal Highway Administration</u> found that every \$1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction sector, and approximately 14,000 other jobs induced in non-construction related sectors of the economy.<sup>13</sup>

Because it impacts the time it takes to transport people and goods, as well as the cost of travel, the level of mobility provided by a transportation system and its physical condition play a significant role in determining a region's economic effectiveness.

The economic benefits of a well-maintained, efficient and safe transportation system can be divided into several categories, including the following.

**Improved competitiveness of industry.** An improved transportation system reduces production and distribution costs by lowering barriers to mobility and increasing travel speeds. Improved mobility provides the manufacturing, retail and service sectors improved and more reliable access to increased and often lower-cost sources of labor, inventory, materials and customers.<sup>14</sup> An increase in travel speeds of 10 percent has been found to increase labor markets by 15 to 18 percent. A 10 percent increase in the size of labor markets has been found to increase productivity by an average of 2.9 percent.<sup>15</sup>

**Improved household welfare.** An improved transportation system gives households better access to higher-paying jobs, a wider selection of competitively priced consumer goods, and additional housing and healthcare options. A good regional transportation system can also

provide mobility for people without access to private vehicles, including the elderly, disabled and people with lower incomes.<sup>16</sup>

**Improved local, regional and state economies.** By boosting regional economic competitiveness, which stimulates population and job growth, and by lowering transport costs for businesses and individuals, transportation improvements can bolster local, regional and state economies. Improved transportation also stimulates urban and regional redevelopment and reduces the isolation of rural areas.<sup>17</sup>

**Increased leisure/tourism and business travel.** The condition and reliability of a region's transportation system impacts the accessibility of activities and destinations such as conferences, trade shows, sporting and entertainment events, parks, resort areas, social events and everyday business meetings. An improved transportation system increases the accessibility of leisure/tourism and business travel destinations, which stimulates economic activity.<sup>18</sup>

Reduced economic losses associated with vehicle crashes, traffic congestion and driving on deficient roads. When a region's transportation system lacks some desirable safety features, is congested or is deteriorated, it increases costs to the public and businesses in the form of traffic delays, increased costs associated with traffic crashes, increased fuel consumption and increased vehicle operating costs. Transportation investments that improve roadway safety, reduce congestion and improve roadway conditions benefit businesses and households by saving time, lives and money.

Transportation investment creates and supports both short-term and long-term jobs. A 2007 analysis by the Federal Highway Administration found that every \$1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction

sector, and approximately 14,000 other jobs induced in non-construction related sectors of the economy.<sup>19</sup>

Needed transportation projects that expand capacity and preserve the existing transportation system generate significant economic benefits. Transportation projects that provide additional roadway lanes, expand the efficiency of a current roadway (through improved signalization, driver information or other Intelligent Transportation Systems), or provide additional transit capacity, produce significant economic benefits by reducing congestion and improving access, thus speeding the flow of people and goods.<sup>20</sup>

Similarly, transportation projects that maintain and preserve existing transportation infrastructure also provide significant economic benefits. The preservation of transportation facilities improves travel speed, capacity, load-carry abilities and safety, while reducing operating costs for people and businesses.<sup>21</sup> Projects that preserve existing transportation infrastructure also extend the service life of a road, bridge or transit vehicle and save money by postponing or eliminating the need for more expensive future repairs.<sup>22</sup>

The Federal Highway Administration estimates that each dollar spent on road, highway and bridge improvements results in an average benefit of \$5.20 in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel consumption, improved safety, reduced road and bridge maintenance costs and reduced emissions as a result of improved traffic flow.<sup>23</sup>

## **Traffic Congestion in Nevada**

Commuting and commerce in Nevada are constrained by growing traffic congestion, which will increase in the future unless additional highway and transit capacity is provided. Vehicle travel in Nevada has increased dramatically in recent years, without a corresponding increase in roadway lane miles. As a result, the state's roads have become increasingly congested, choking commuting and commerce.

According to the Texas Transportation Institute (TTI), the average driver in the Las Vegas urban area loses \$906 each year in the cost of lost time and wasted fuel as a result of traffic congestion. The average commuter in the Las Vegas urban area loses 44 hours each year stuck in congestion. Based on TTI methodology, TRIP calculates that the average driver in the Reno-Carson City urban area loses \$590 each year in the cost of lost time and wasted fuel as a result of traffic congestion. The average commuter in the Reno-Carson City urban area loses 27 hours each year stuck in congestion.

The total cost of traffic congestion annually in Nevada is \$1.1 billion in lost time and wasted fuel.

#### **The 25 Transportation Projects**

#### Most Needed to Support Nevada's Economy

TRIP has ranked the 25 transportation projects that are most needed to support quality of life in Nevada's and support the state's economic growth. TRIP ranked the projects by evaluating the projects on the following:

- ✓ Short-term economic benefits, including job creation.
- ✓ Improvement in the condition of transportation facility, including safety improvements.
- ✓ Improved access and mobility.
- ✓ Long-term improvement in regional or state economic performance and competitiveness.

Nevada's 25 most needed transportation projects as determined by TRIP follow.

- 1. Continued expansion and modernization of portions of I-15 in the Las Vegas area. These improvements include portions from Sahara Avenue to I-15/US 95 (Spaghetti Bowl), from Craig Road to Apex, from St. Rose Parkway to Sunset Road and from Blue Diamond to Tropicana Avenue.
- **2.** Construction of new Interstate highway corridor from Phoenix to Las Vegas. The construction of I-11 from Phoenix and Las Vegas, starting with initial portions of the project from Hoover Dam Road to US 93/US 95 Interchange in Boulder City.
- **3.** Improved I-215/Airport Connector interchange in Las Vegas area. A two-mile, I-215/Airport Connector interchange improvement is needed to ease congestion and improve regional connectivity.
- **4. Widening of portions of I-80 in Reno.** Widen portions of I-80 in the Reno, Sparks and Truckee area to between 6 to 10 lanes in different sections and also incorporating multiple traffic interchange improvements.
- **5. Redevelopment of corridor from airport to downtown in Las Vegas**. Redevelop the Maryland Parkway corridor between McCarran International Airport and downtown Las Vegas with complete street enhancements and a center-running transit system that utilizes either Bus Rapid Transit or Light Rail.
- 6. Las Vegas Valley Eastern Bypass. The construction of an Eastern Bypass from the I-15/CC-215 northern interchange to US 95 will provide a southern truck bypass route from Utah to Arizona, relieving congestion on other area highways.
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- **11. Widening of portion of SR 225 in Northern Nevada.** Widen SR 225 by adding one lane in each direction from I-80 to Idaho state line to improve safety and enhance economic development opportunities in this corridor.
- **12. Improve portions of SR 445 Pyramid Highway in Reno area.** Needed improvements include converting the existing arterial road from Calle De La Plata to Disc Drive to a 6-lane freeway, building a new 6-lane freeway from the Disc area west to US 395 and extending Disc Drive east from Pyramid to Vista as a 6-lane arterial road.
- **13. East Truckee Canyon/Spanish Springs new route in Reno area.** A six-lane freeway connecting the east end of Sparks with east I-80 at about the Patrick Interchange.
- **14. Provide inland port facilities in Northern and Southern Nevada.** Providing intermodal rail and highway inland port facilities will enhance economic development opportunities in Nevada by increasing the efficiency of goods movement and increasing the attractiveness of the region for distribution facilities and manufacturing.
- **15.** Provide rail passenger service between Los Angeles and Las Vegas. Provide passenger rail passenger service between Los Angeles and Las Vegas to relieve congestion on this heavily traveled corridor.
- **16. Improve portion of 5th Street in the Las Vegas area.** The construction of an expanded 5th Street, including a new transit link, from Cheyenne Avenue to CC-215 will provide access to the growing northern employment center and will provide an alternative to I-15.
- **17. Widening of a portion of I-580 in Carson City area.** The widening of a 4.5 mile section of I-580 from S. Carson Street to Fairview is needed to improve access and safety.
- **18.** Construction of a Carson Valley east-side bypass. A 20-mile, four-lane loop road running south from Pinehurst Road to the Carson City freeway connecting Jack Valley Road.
- **19. Provide rail freight service from Los Angeles to Reno.** The provision of freight rail service between Los Angeles and Reno would improve economic development opportunities in Northern Nevada.
- **20. Statewide rail-highway at grade crossing improvements.** A statewide program to improve the safety of rail-highway crossings in Nevada will provide significant safety benefits.
- **21.** Improvements to portions of I-515 in Las Vegas area. Provide improvements to I-515 from I-15 to Horizon Drive to relieve congestion and improve safety. The needed improvements include new interchanges and a realignment of the Bonanza Road overcrossing of Las Vegas Boulevard.
- **22. New Route from Winnemucca to California border.** This new two-lane route would provide a new east-west route for commercial and personal travel.
- **23. Improved Elko to Las Vegas connectivity.** The widening of portions of US 93, SR 318 and US 6 by adding an additional lane in each direction to increase access along this corridor.

- **24. Improve portions of US 395 in Douglas County.** Build a four-lane freeway from Muller Lane to Plymouth Drive, a six-lane arterial from Woodwards Road to Muller lane and add truck climbing lanes from Mica drive to N. Sunridge Drive, along with the addition of frontage roads, interchanges, bike lanes and sidewalks.
- **25.** Complete final portion of four-lane highway in Northern Nevada from Comstock Valley to Ramsey Valley. Construct the final seven-mile portion of the USA Parkway from I-80 to US 50.

### **Transportation Funding**

Investment in Nevada's roads, highways and bridges is funded by local, state and federal governments. The federal government provides funding for the state's transportation system largely as part MAP-21(Moving Ahead for Progress in the 21st Century Act), the current two-year federal surface transportation program, which expires on September 30, 2014.

The MAP-21 program, approved by Congress in July 2012, greatly increased funding flexibility for states and streamlined project approval processes to improve the efficiency of state and local transportation agencies in providing needed transportation improvements in the state. But the MAP-21 program did not provide sufficient long-term revenues in place to support the current level of federal surface transportation investment.

The impact of inadequate federal surface transportation revenues could be felt as early as summer of 2014, when the balance in the <u>Highway Account of the federal Highway Trust Fund</u> is expected to drop below \$1 billion, which will trigger delays in the federal reimbursement to states for road, highway and bridge projects. States are expected to respond to this delay in federal reimbursement for road, highway and bridge repairs and improvements by delaying or postponing numerous projects.<sup>24</sup>

Nationwide, federal funding for highways is expected to be cut by almost 100 percent from the current investment level for the fiscal year starting October 1, 2014 (FY 2015) unless Congress provides additional transportation revenues. This is due to a cash shortfall in the Highway Trust Fund as projected by the <u>Congressional Budget Office</u>.

If the funding shortfalls into the federal Highway Trust Fund are addressed solely by cutting spending it is estimated that federal funding for highway and transit improvements in Nevada will be cut by <u>\$384 million</u> for the federal fiscal year starting October 1, 2014, unless Congress provides additional transportation revenues.<sup>25</sup>

The federal government plays a critical role in funding for Nevada's, and all states' roads, highways and bridges and provides a significant return to Nevada in road and bridge funding based on the revenue generated in the state by the federal motor fuel tax. From 2008 to 2012, the federal government provided \$1.49 for road improvements in Nevada for every dollar the state paid in federal motor fuel fees.<sup>26</sup>

The federal government is a critical source of funding for Nevada transportation improvements. Numerous transportation improvements completed in Nevada over the last decade received significant federal financing. The following chart lists some of the key transportation projects completed since 2005 in Nevada, which relied on significant federal funding.

# The following ten surface transportation projects of regional or statewide significance to Nevada were completed since 2005 and included significant federal funding.

- 1. Six lane freeway with 11 bridges on I-580 in Washoe County This 8.5 mile, \$393 million project on I-580 from Winters Ranch to Mt. Rose Highway reduced congestion and improved regional mobility.
- 2. I-15 capacity improvements in Clark County This six mile, \$277 million project on I-15 from Silverado Ranch Road to Tropicana Avenue reduced congestion and improved mobility.
- **3.** I-15 roadway widening to 10 lanes in Clark County This 5.5 mile, \$240 million project from US 95/I-15 Interchange to Craig Road reduced congestion and improved mobility.

- **4.** Hoover Dam Bypass/new bridge on US 93 in Clark County This 0.3 mile, \$230 million project from the Nevada side to the Arizona side of the Colorado River reduced congestion and improved mobility.
- **5. I-215 Southern Beltway Interchange upgrade in Clark County** This \$160.5 million Airport Connector interchange upgrade project reduced congestion and improved connectivity.
- 6. US 95 lane widening with auxiliary lanes in Clark County This 6.4 mile, \$145 million project widening six lanes to eight with auxiliary lanes from Washington Avenue to Ann Road reduced congestion and improved mobility.
- **7. I-80 improvements on six lanes, including ITS in Washoe County** This 16.2 mile, \$85 million improvement project including pavement, auxiliary lanes, ramps and ITS from Robb Drive to Vista Boulevard reduced congestion and improved operations and safety.
- **8. I-580 auxiliary lanes and operational improvements in Washoe County** This 4.7 mile, \$66 million project involving auxiliary lanes and operational improvements from Moana Lane to I-80 reduced congestion and improved mobility.
- **9.** Construction of a six lane freeway on US 395 Carson City Freeway This 1.8 mile, \$64.7 million project to construct a six lane freeway from Fairview Drive to East William improved mobility and connectivity.
- **10.** Construction of a six lane roadway with interchange on I-15 Cactus Interchange This I-15/Cactus Interchange \$65 million six lane roadway with interchange reduced congestion and improved mobility.

## Conclusion

Nevada's transportation system continues to play a critical role as the backbone of the state's economy by providing mobility to residents, visitors and businesses. As Nevada looks to further its recovery from the recent economic downturn, the improvement of its system of highways, rail and public transit will allow the state to support further economic growth. Needed transportation improvements will provide Nevada's residents with a high quality of life and afford its businesses and industries a high level of economic competitiveness. In order to realize Nevada's potential for economic growth, the state will need to expand and modernize its system of roads, highways, rails and public transit.

Making needed improvements to Nevada's transportation system will support future economic growth and competitiveness and help ensure that Nevada remain an attractive place to live, visit, work and do business.

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## Endnotes

<sup>10</sup> Ibid, p 77

<sup>12</sup> FHWA estimate based on its analysis of 2006 data. For more information on FHWA's cost-benefit analysis of highway investment, see the 2008 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance.

<sup>13</sup> Federal Highway Administration, 2008. Employment Impacts of Highway Infrastructure Investment.

<sup>15</sup> The Transportation Challenge: Moving the U.S. Economy (2008). National Chamber Foundation. p. 10.

<sup>16</sup> Ibid.

<sup>17</sup> <u>Ibid</u>.

<sup>18</sup> Ibid.

<sup>19</sup> Federal Highway Administration, 2008. Employment Impacts of Highway Infrastructure Investment.

<sup>20</sup>The Transportation Challenge: Moving the U.S. Economy (2008). National Chamber Foundation. p. 5.

<sup>21</sup> <u>Ibid</u>.

 $^{22}$  Ibid.

<sup>23</sup> FHWA estimate based on its analysis of 2006 data. For more information on FHWA's cost-benefit analysis of highway investment, see the 2008 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance.

<sup>24</sup> Testimony of Michael Hancock, president of the American Association of State Highway and Transportation Officials, to the Senate Committee on Environment and Public Works. (Fe. 12, 2014).

<sup>25</sup> U.S. Senate Committee on Environment and Public Works (2013).

http://www.epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\_id=cf1dfe4e-8e60-4506-a9e0-205fe809f314

<sup>26</sup> TRIP analysis of Federal Highway Administration data. 2008 to 2012 Highway Statistics sf-1.

<sup>&</sup>lt;sup>1</sup> U.S. Census Bureau (2012).

<sup>&</sup>lt;sup>2</sup> Connecting Nevada, p. 76 <u>http://www.nevadadot.com/connectingnevada/</u>

<sup>&</sup>lt;sup>3</sup> Highway Statistics (2012). Federal Highway Administration. DL-1C

<sup>&</sup>lt;sup>4</sup> TRIP analysis of Bureau of Economic Analysis data.

<sup>&</sup>lt;sup>5</sup> U.S. Department of Transportation - Federal Highway Administration: Highway Statistics 1990 and 2012.

<sup>&</sup>lt;sup>6</sup> TRIP calculation based on U.S. Census and Federal Highway Administration data.

<sup>&</sup>lt;sup>7</sup> Connecting Nevada, p. 76 <u>http://www.nevadadot.com/connectingnevada/</u>

<sup>&</sup>lt;sup>8</sup> Area Development Magazine (Winter, 2012). 26<sup>th</sup> Annual Survey of Corporate Executive Results.

<sup>&</sup>lt;sup>9</sup> Connecting Nevada, p. 43 <u>http://www.nevadadot.com/connectingnevada/</u>

<sup>&</sup>lt;sup>11</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>14</sup> National Cooperative Highway Research Program. Economic Benefits of Transportation Investment (2002). p. 4.