### **TRIP's Top 40 Surface Transportation Projects to Support Economic Growth in Nevada**

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Founded in 1971, <u>TRIP</u> ® 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 and businesses. The state's roads, highways and public transit systems remain the backbone of Nevada's economy. The Silver State's transportation system has helped support a high quality of life and make the state a desirable place to live and visit. With America experiencing the deepest recession since the Great Depression, the quality of Nevada's transportation system will play a critical role in bolstering the state's economic recovery and supporting future economic development.

To achieve sustainable economic growth, Nevada must proceed with numerous projects to improve key roads, highways and public transit systems. This will allow Nevada to leverage several existing advantages, including its position as the nation's fastest growing state, its desirable quality of life and the fact that it is home to Las Vegas, the second-most popular tourist destination in the U.S. Enhancing critical segments of Nevada's surface 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.

In this report, TRIP examines recent transportation and economic trends in Nevada and provides information on the surface transportation projects in the state that are most needed to support economic growth. Sources of data include the Nevada Department of Transportation (NDOT), the Regional Transportation Commission of Southern Nevada, the Regional Transportation Commission of Washoe County, 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 40 surface transportation projects that are most needed to support Nevada's economic growth. These projects are located throughout the state.

- The most needed surface transportation improvements in Nevada include 31 projects to build, expand or modernize highways, five projects to improve public transit or provide intermodal facilities and four projects to improve the state's traffic management systems. These improvements would enhance economic development opportunities throughout the state by increasing mobility and freight movement, easing congestion, enhancing safety and making Nevada an attractive place to live, visit and do business.
- TRIP ranked each transportation project based on a rating system that considered 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 longterm improvement provided in regional or state economic performance and competitiveness.

- Nevada's 10 most needed surface transportation projects to support economic development in the state as determined by TRIP follow. Additional details on these and the other projects that make up the 40 most needed projects in Nevada for economic recovery and growth are included in the report's <u>Appendix</u>.
- 1. Improvements to the southern portion of I-15 in Clark County. This multi-part project will improve the southern portion of the I-15 corridor in Clark County from Sloan to Tropicana, including the widening of portions of I-15 and Las Vegas Boulevard and the construction of six new interchanges, one overpass and new collector-distributor lanes. The widening and improvement to this portion of the I-15 Corridor would provide significant congestion relief, providing improved access, reduced trip times, improved safety and reduced emissions. Improvement to this route will enhance local and regional business productivity.
- 2. Improvements to the northern portion of I-15 in Clark County. Spanning from US 95 to Apex, the first phase of this three-phase project will widen I-15 from six to ten lanes from US 95 to Lake Mead Boulevard including re-alignment of on and off ramps, widening I-15 to eight lanes from Lake Mead Boulevard to Craig Road, reconfiguring the Lake Mead Boulevard Interchange, and constructing a new connection road linking D Street and F Street between I-15 and Bonanza Road. The second phase would widen I-15 from four to six lanes from Craig Road to Speedway Boulevard. Phase three includes widening 4.6 miles of I-15 from four lanes to six lanes from Speedway Boulevard to the Apex Interchange. This project will reduce congestion and trip times, provide improve daccess, improve safety and reduce emissions. Improvements to I-15 will improve business productivity and downtown access, which will support redevelopment projects in downtown Las Vegas.
- 3. Extension of I-580 in Washoe County. This project includes 8.5 miles of new sixlane controlled access freeway, the completion of the Mt. Rose Interchange and construction of a new interchange at Bowers Mansion Road. It also includes construction of two grade separations and five bridges, Kelly Canyon Road (frontage road) and Parker Ranch Road to maintain local access at the south end of the project. Construction will result in 27 miles of uninterrupted controlled access facility that meets interstate standards and will serve as an important portion of an interstate highway link between Mexico and Canada and a major local arterial. The project will also provide the only all-weather connection between Carson City and Reno, Sparks and I 80. Completion will alleviate congestion, accommodate future travel growth and improve safety.

- 4. Improvements to portions of I-80 from Robb Drive to Vista Boulevard in Washoe County. This project would improve operations, safety and capacity along I-80 and provide better connectivity between I-80 and I-580/US 395 to accommodate future travel growth.
- 5. Construction of a new freeway in the Pyramid Corridor in Washoe County. In order to improve connectivity and mobility, current recommendations for this project are for five miles of new freeway along an existing arterial and a new east/west connecting freeway approximately four miles in length. Without this element of the regional transportation plan, a very large portion of the region's population will not have adequate mobility.
- 6. Widening and improving I-15 from Spaghetti Bowl to South of Sahara in Clark County. This project includes construction of high occupancy vehicle lanes, modernization of the I-15/Charleston Interchange and improvements to access ramps and collector roads leading to this portion of I-15. The improvements will accommodate anticipated traffic increases on this route, reducing traffic congestion and improving downtown access, which will support redevelopment projects in downtown Las Vegas.
- 7. Widening and improving I-15 from Sloan to Stateline. This project will increase capacity by widening I-15 to eight lanes to accommodate projected local and interstate traffic. The project would widen several bridges and a grade separation at UPRR and improve on/off ramps at Primm and Sloan Interchanges. Congestion and travel times would decrease as a result.
- 8. US 93/95 expansion and improvements in Boulder/Hoover Dam area. This multi-part project includes the construction of a Boulder City Bypass on US 93/95, an extension from US 95 to tie into the Hoover Dam Bypass, and realignment of US 93 to create a highway bypass around Hoover Dam tying into existing US 93. The project will increase capacity, reduce congestion, boost safety, improve local access and provide improved access to a major tourist destination.
- **9.** US **95** extension in Clark County. This project extends from Washington Avenue to Kyle Canyon Road and includes multiple interchanges. It is needed to alleviate congestion within the corridor by increasing capacity and providing new and improved freeway connections to boost regional connectivity.
- 10. Improvements to I-515 from I-15 to Horizon Drive. This project would improve operational efficiency, capacity and safety by reconstructing the Downtown Las Vegas viaduct, constructing new interchanges at "City Parkway", Pecos Road and Sahara Avenue, constructing Bonanza Road overcrossing of Las Vegas Boulevard, realigning Stewart Avenue and Sahara Avenue, and reconstructing and expanding pedestrian and bicycle facilities. Project completion would increase traffic volumes to acceptable operating speeds, reduce traffic at congested interchanges, improve traffic operations and enhance safety.

Surface 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. Following are some of the benefits of making transportation improvements.

- 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 provide significant economic benefits by improving travel speeds, capacity, load-carrying 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.
- Site Selection magazine's 2010 survey of corporate real estate executives found that transportation infrastructure was the third most important selection factor in making site location decisions, behind only work force skills and state and local taxes.
- 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.

• 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.

# Nevada, which is heavily reliant on economic sectors that are very sensitive to national economic trends, was hard hit by the deepest recession since the Great Depression. A return to modest economic growth is forecast for Nevada in 2011.

- 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 and significantly higher that the national average of nine percent.
- Between January 2000 and February 2008, Nevada added 251,000 jobs, but has since lost 120,000 jobs.
- In 2010, Nevada experienced the largest decrease in economic activity in the U.S. with a 1.4 percent decrease in real gross state product (GSP), which is corrected for price changes. Total real GSP in the U.S. increased by 0.4 percent in 2010.
- Nevada's economy is forecast to return to positive growth in 2011, but with an expected rate of real GSP growth of 2.1 percent in 2011, Nevada has lowest rate of growth forecast in the U.S.
- Nevada is heavily reliant on tourism, gaming, entertainment, construction and real estate, economic sectors which were all impacted severely by the nation's economic downturn.
- From 1990 to 2009, Nevada's population increased by 120 percent, from approximately 1.2 million to approximately 2.6 million, the fastest rate of growth in the nation. Nevada's population is expected to increase to 4.3 million by 2030.
- From 1990 to 2009, annual vehicle-miles-of-travel (VMT) in the state doubled from approximately 10.2 billion VMT to 20.4 billion VMT. Based on travel and population trends, TRIP estimates that vehicle travel in Nevada will increase another 60 percent by 2030, reaching approximately 33 billion VMT.

## Nevada's economy is served by an extensive surface transportation system that has significant deficiencies. Roads carry the majority of freight shipped in the state.

• Nevada is served by a system of 33,907 miles of roads and 1,753 bridges, maintained by local, state and federal governments, which carry 20.4 billion vehicle miles of travel annually.

- Approximately one in seven of Nevada's major roads are deficient, with five percent rated in poor condition in 2008. An additional nine percent of the state's major roads were rated in mediocre condition in 2008.
- Two percent of Nevada's bridges were rated structurally deficient in 2010. A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. Structurally deficient bridges are often posted for lower weight or closed to traffic, restricting or redirecting large vehicles, including commercial trucks, school buses and emergency services vehicles.
- In 2010 10 percent of Nevada's bridges were rated as functionally obsolete. Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances or poor alignment.
- Every year, \$53 billion in goods are shipped annually from sites in Nevada and another \$77 billion in goods are shipped annually to sites in Nevada, mostly by truck.
- Seventy-eight percent of the goods shipped annually from sites in Nevada are carried by trucks and another 18 percent are carried by parcel, U.S. Postal Service or courier services, which use trucks for part of the deliveries.

Sources of data include the Nevada Department of Transportation (NDOT), the Regional Transportation Commission of Southern Nevada, the Regional Transportation Commission of Washoe County, 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.

### Introduction

Nevada's transportation system serves as the backbone of the Silver State's economy, providing mobility to the state's residents, visitors and businesses. Nevada's surface transportation system has allowed the state's residents to travel to work and school and to access recreation, healthcare, social and commercial activities. The system also has allowed the state's businesses to access customers, suppliers and employees.

But Nevada's surface transportation system has significant deficiencies that could prevent the state from reaching its full economic potential. In order to insure that the state's economy recovers from the recession and returns to significant and sustained growth, Nevada must improve and expand key highways and transit routes, which will ease congestion, improve traffic safety and enhance access throughout the state.

From 2000 to 2008 Nevada experienced significant economic growth, benefiting from a high quality of life and an economic base that benefited from a booming U.S. economy. But since the nation entered an economic downturn in 2008, Nevada has actually fared worse than most states because its key economic sectors are very sensitive to national economic trends.

As Nevada begins to dig out of a deep statewide recession, it must make surface transportation infrastructure investments that will stimulate job growth and support the state's long-term economic goals by improving access for the state's diversified economy. The completion of needed transportation improvements is a key component of any region's ability to support sustainable economic growth.

Because it impacts the time it takes to transport people and goods, as well as the cost of travel, the reliability and physical condition of a region's surface transportation system plays a significant role economic growth, productivity and competitiveness. Numerous studies have concluded that investment in expanding the capacity or improving the condition of existing transportation facilities is critical to a region's ability to stimulate short-term and long-term economic growth.

In this report, TRIP identifies and ranks the 40 surface transportation projects in Nevada that are most needed to spur economic growth in the state and assist in Nevada's economic growth. Information on these projects, such as location, the estimated cost of the project and an explanation of the importance of the project and how it would improve Nevada's economy can be found in the report with additional details available in the <u>Appendix</u>.

### **Transportation Projects Impact the Economy**

When a state or region's surface transportation system lacks adequate capacity, is deteriorated or lacks some desirable safety features, it impedes economic performance by slowing commerce and commuting, increasing transport costs and burdening an economy with future transportation investment needs.

Local, regional and state economic performance is improved when a region's surface transportation system is expanded or repaired. This improvement comes as a result of the initial job creation and increased employment created over the long-term because of improved access, reduced transport costs and improved safety. Site Selection

magazine's 2010 survey of corporate real estate executives found that transportation infrastructure was the third most important selection factor in making site location decisions, behind only work force skills and state and local taxes.<sup>1</sup>

To prepare this report, TRIP analyzed data provided by the Nevada Department of Transportation (NDOT), the Regional Transportation Commission of Southern Nevada, and the Regional Transportation Commission of Washoe County on the surface transportation projects in the state most needed to support economic growth. The projects include the reconstruction, expansion, provision or improvement of existing transportation facilities or services as well as the construction of new transportation facilities. These agencies provided information on projects including route, location, current level of use, the type of improvement needed, the estimated cost of the improvement, a description of the importance of the facility to regional mobility and an explanation of the economic benefits provided by the project.

### The 40 Surface Transportation Projects Most Needed to Support Nevada's Economy

TRIP has identified and ranked the 40 surface transportation projects that are most needed to support Nevada's economic recovery and growth. The most needed surface transportation improvements in Nevada include 31 projects to build, expand or modernize highways, five projects to improve public transit or provide an intermodal facility and four projects to improve the state's traffic management systems. TRIP ranked the projects by assigning each transportation segment or facility an overall score, based on a scale that provided points for the following categories.

- ✓ 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.

Following are Nevada's 25 most needed surface transportation projects for economic recovery. A listing of all 40 most needed surface transportation projects to support economic growth, including additional details, such as the status of each project, is included in the report's <u>Appendix</u>.

- Improvements to the southern portion of I-15 in Clark County. This multi-part project will improve the southern portion of the I-15 corridor in Clark County from Sloan to Tropicana, including the widening of portions of I-15 and Las Vegas Boulevard and the construction of six new interchanges, one overpass and new collector-distributor lanes. The widening and improvement to this portion of I-15 Corridor would provide significant congestion relief, providing improved access, reduced trip times, improved safety and reduced emissions. Improvement to this route will enhance local and regional business productivity.
- 2. Improvements to the northern portion of I-15 in Clark County. Spanning from US 95 to Apex, the first phase of this three-phase project will widen I-15 from six

to ten lanes from US 95 to Lake Mead Boulevard including re-alignment of on and off ramps, widening I-15 to eight lanes from Lake Mead Boulevard to Craig Road, reconfiguring the Lake Mead Boulevard Interchange, and constructing a new connection road linking D Street and F Street between I-15 and Bonanza Road. The second phase would widen I-15 from four to six lanes from Craig Road to Speedway Boulevard. Phase three includes widening 4.6 miles of I-15 from four lanes to six lanes from Speedway Boulevard to the Apex Interchange. This project will reduce congestion and trip times, provide improved access, improve safety and reduce emissions. Improvements to I-15 will improve business productivity and downtown access, which will support redevelopment projects in downtown Las Vegas. The project also provides improved access to areas planned for development in North Las Vegas.

3. Extension of I-580 in Washoe County. This project includes 8.5 miles of new six-lane controlled access freeway, the completion of the Mt. Rose Interchange and construction of a new interchange at Bowers Mansion Road. It also includes construction of two grade separations and five bridges, Kelly Canyon Road (frontage road) and Parker Ranch Road to maintain local access at the south end of the project. Construction will result in 27 miles of uninterrupted controlled access facility that meets interstate standards and will serve as the primary interstate highway linking Mexico with Canada and a major local arterial. The project will also provide the only all-weather connection between Carson City and Reno,

Sparks and I 80. Completion will alleviate congestion, accommodate future travel growth and improve safety.

- 4. Improvements to portions of I-80 from Robb Drive to Vista Boulevard in Washoe County. This project would improve operations, safety and capacity along I-80 and provide better connectivity between I-80 and I-580/US 395 to accommodate future travel growth.
- 5. Construction of a new freeway in the Pyramid Corridor in Washoe County. In order to improve connectivity and mobility, current recommendations for this project are for five miles of new freeway along an existing arterial and a new east/west connecting freeway approximately four miles in length. Without this element of the regional transportation plan, a very large portion of the region's population will not have adequate mobility.
- 6. Widening and improving I-15 from Spaghetti Bowl to South of Sahara in Clark County. This project includes construction of high occupancy vehicle lanes, modernization of the I-15/Charleston Interchange and improvements to access ramps and collector roads leading to this portion of I-15. The improvements will accommodate anticipated traffic increases on this route, reducing traffic congestion and improving downtown access, which will support redevelopment projects in downtown Las Vegas.

- 7. Widening and improving I-15 from Sloan to Stateline. This project will increase capacity by widening I-15 to eight lanes to accommodate projected local and interstate traffic. The project would widen several bridges and a grade separation at UPRR and improve on/off ramps at Primm and Sloan Interchanges. Congestion and travel times would decrease as a result.
- 8. US 93/95 expansion and improvements in Boulder/Hoover Dam area. This multi-part project includes the construction of a Boulder City Bypass on US 93/95, an extension from US 95 to tie into the Hoover Dam Bypass, and realignment of US 93 to create a highway bypass around Hoover Dam tying into existing US 93. The project will increase capacity, reduce congestion, boost safety, improve local access and provide improved access to a major tourist destination.
- 9. **US 95 extension in Clark County.** This project extends from Washington Avenue to Kyle Canyon Road and includes multiple interchanges. It is needed to alleviate congestion within the corridor by increasing capacity and providing new and improved freeway connections to boost regional connectivity.
- 10. Improvements to I-515 from I-15 to Horizon Drive. This project would improve operational efficiency, capacity and safety by reconstructing the Downtown Las Vegas viaduct, constructing new interchanges at "City Parkway", Pecos Road and Sahara Avenue, constructing Bonanza Road overcrossing of Las Vegas Boulevard, realigning Stewart Avenue and Sahara Avenue, and reconstructing and expanding

pedestrian and bicycle facilities. Project completion would increase traffic volumes to acceptable operating speeds, reduce traffic at congested interchanges, improve traffic operations and enhance safety.

- 11. Improving US 395 from Moana Lane to I-80 in Washoe County. This project would widen northbound US 395 to improve traffic operations from the Moana Lane Interchange to the I-80 Interchange. It would also widen northbound bridges at Vassar, Mill, Glendale, Truckee River, Kietzke, UPRR and Fourth Street. The project would also include replacement of overhead sign structures, drainage features and the reconstruction of northbound ramps at Mill, Glendale, Villanova and I-80. Completion of the project will relieve heavy northbound peak hour congestion, reduce crashes, improves northbound traffic operations and increases safety.
- 12. Completing the CC-215 Beltway to freeway standards in Clark County. This project is broken into two sections. Section one will complete the Beltway as a four-lane, access controlled freeway from Craig Road to Hualapai Way. It includes interchanges at Lone Mountain Road and Ann Road, as well as grade separations at Washburn Avenue and Centennial Parkway. Section two spans from North Fifth Street to Range Road and completes the Beltway to a six-lane, access controlled freeway, including completing the interchanges at Losee Road, Pecos Road and Lamb Boulevard. Completion of the Beltway in this area to a full freeway standard will enhance safety and mobility, and provide for future growth. Completion of

interchanges and grade separations will enhance safety and fill in gaps in the arterial network, increasing system and neighborhood connectivity.

- 13. Construction of a new Southeast Connector from Greg Street in Sparks to South Meadows in Reno. This new route will help relieve congestion on I-580 and McCarran Boulevard, which are not adequate to support the current travel demand. This project is needed to support mobility, reduce congestion and increase economic development within the area.
- 14. Improvements to the Urban Resort Corridor in Clark County. Stretching from the Bruce Woodbury Beltway (I-215) to the Spaghetti Bowl (US 95), this project would enhance access and mobility within the resort corridor and develop a phased implementation strategy for future improvements to the corridor in addition to currently planned improvements. This project would improve capacity, operations, safety, access and mobility while improving quality of life and supporting economic development.

#### 15. Improvements to the Intersection of Pyramid Highway and McCarran

**Boulevard.** Specific improvements will be determined by an ongoing review process. The intersection currently far exceeds delay standards and will worsen with future growth if not improved. Improvements to this intersection will provide congestion relief and improve economic development opportunities in the Spanish Springs area, just north of downtown Sparks.

- 16. I-215 widening and improvements in Clark County. This project includes I-215 median widening, construction of the Easterly segment of I-215, the work includes widening five bridges and adding one lane in each direction as well as an auxiliary eastbound lane between Warm Springs and Windmill Lane, and a one-Inch Rubberized Asphalt Overlay. Completion will provide additional capacity, reduce congestion and travel time, improve freeway operations and improve safety.
- 17. Creation of a regional traffic operations system in Washoe County. This project will initiate a Northern Nevada Traffic Management and Operations system. This would be a collaboration of all local agencies, including highway patrol, City of Reno, City of Sparks, Washoe county public works, fire departments, EMT, NDOT, RTC and incident management. The system would reduce incident response times on the highways, thereby reducing residual incidents and crashes. It would improve the capacity and efficiency of the roadway network and assist in better coordination of emergency response elements.
- 18. Upgrading a portion of North Fifth Street and constructing a bridge over Losee Road in Clark County. This project includes the construction of a bridge over Losee Road and improvements to the roadway, curb, sidewalks, street lights, bike lanes and bus transit lanes to link major employment centers on the north and south sides of I-15 with multimodal forms of transportation. Completion of this

corridor will promote additional economic development along the route and provide a much needed multimodal corridor for access to the region's major employment centers.

- 19. Improved bus service along Flamingo Road in Clark County. This bus rapid transit project includes dedicated curbside transit lanes, improved passenger stations, transit signal priority, ticket vending machines and other corridor enhancements such as landscaping and wider sidewalks. Improved transit operations will reduce travel and dwell times on one of the Valley's busiest transit routes.
- 20. Widening portions of US 395 from McCarran Boulevard to Stead Boulevard in Washoe County. This project would widen US 395 to increase capacity and improve traffic operations. It would include the modification of interchange ramps and cross streets, new drainage features and new signs. Bridge structures at Stead, Lemmon Drive, Golden Valley, UPRR, Virginia Street, Panther Valley, Parr Boulevard and Clear Acre Lane would be widened. Completion of this project will bring congestion relief, safety improvements and improved overall traffic operations.
- 21. Expansion of US 395 from South Carson Street to Fairview Drive in Carson City. This phase of the project will construct three miles of four-lane access controlled freeway, completing the nine mile system around the State Capital. The

interchange at Fairview Drive will be completed, as well as the Snyder Avenue grade separation, the South Carson Street Interchange, and over four miles of sound walls to mitigate traffic noise. The project will include flood control facilities including detention basins, channels, box culverts, and the freeway drainage system. Completion of the project will relieve traffic congestion on Carson Street through Carson City and local streets along the freeway corridor, reduce travel times and improve economic development opportunities along the corridor.

- 22. Construction of a new interchange at US 95 and Clark County 215. This project will improve access and provide significant traffic congestion relief in this region. The new interchange will support economic development opportunities in the area and improve traffic safety.
- 23. **Bus Rapid Transit Service along Virginia Street Corridor in Washoe County.** Extending from the Fourth Street Station to Meadowood, this project would accommodate needs on one of the state's busiest transit routes. Completion of the project would improve mobility and connectivity.
- 24. Construction of interchange with North 5th Street Bridge over Cheyenne Avenue in Clark County. Completion of this urban interchange will eliminate congestion, promote additional economic development along North 5th Street and

accommodate the anticipated traffic increases once the connection over I-15 and Losee Road are made.

25. Improved bus service along Maryland Parkway in Clark County. This project will include Bus Rapid Transit with transit signal priority, improved passenger stations, ticket vending machines and other corridor enhancements such as landscaping and wider sidewalks where right of way is available. It is needed to improve transit operations by reducing travel and dwell times while also improving the customer experience on the valley's second busiest transit route outside the resort corridor.

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

While the entire United States entered a significant economic downturn in 2008, including a large increase in unemployment, 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, which was the same as the national unemployment rate.<sup>2</sup> But by January 2011, Nevada's unemployment rate had nearly tripled to 14.2 percent, significantly higher than the

national average of 9.0.<sup>3</sup> Between January 2000 and February 2008, Nevada added 251,000 jobs, but has since lost 120,000 jobs.<sup>4</sup>

In 2010, Nevada experienced the largest decrease in economic activity in the U.S. with a 1.4 percent decrease in real gross state product (GSP), which is corrected for inflation. Total real GSP in the U.S. increased by 0.4 percent in 2010. <sup>5</sup> In 2011, Nevada's economy is forecast to return to positive growth in 2011, but with an expected rate of real GSP growth of 2.1 percent in 2011, Nevada has lowest rate of forecast economic growth in the U.S.<sup>6</sup>

From 1990 to 2009, Nevada's population increased by 120 percent, from approximately 1.2 million to approximately 2.6 million.<sup>7</sup> Nevada's population is expected to increase to approximately 4.3 million by 2030. <sup>8</sup>

The continued increase in population has resulted in significant increases in vehicle travel in Nevada. From 1990 to 2009, annual vehicle-miles-of-travel (VMT) in the state doubled, from approximately 10.2 billion VMT to 20.4 billion VMT.<sup>9</sup> Based on travel and population trends, TRIP estimates that vehicle travel in Nevada will increase another 60 percent by 2030, reaching approximately 33 billion VMT.

### Nevada's Surface Transportation System

Nevada is served by a system of 33,907 miles of roads and 1,753 bridges. This system is maintained by local, state and federal governments and carries 20.4 billion vehicle miles of travel each year.<sup>10</sup>

Nevada's roads, highways and bridges have some deficiencies. Approximately one in seven of the state's major roads are deficient, with five percent rated in poor condition in 2008 and another nine percent rated in mediocre condition.<sup>11</sup>

In 2010, two percent of Nevada's bridges were rated structurally deficient because they are in need of repair or replacement, and another ten percent of the state's bridges were rated as functionally obsolete because they do not meet modern design standards.<sup>12</sup>

### The Importance of Transportation to Nevada's Economy

Supporting Nevada's economic recovery will require that the state build and maintain a transportation system that provides reliable and safe mobility to enhance business competitiveness and to provide convenient access for tourists and visitors.

Highways and public transit are vitally important to fostering economic development in Nevada. As the economy expands, 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.

Every year, \$53 billion in goods are shipped from sites in Nevada and another \$77 billion in goods are shipped to sites in Nevada, mostly by trucks.<sup>13</sup> Seventy-eight percent of the goods shipped annually from sites in Nevada are carried by trucks and another 18 percent are carried by parcel, U.S. Postal Service or courier services, which use trucks for part of the deliveries.<sup>14</sup>

#### How Transportation Improvements Support Economic Growth

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.

Nevada's businesses are dependent on an efficient, safe, and modern transportation system. Today's business culture demands that an area have a wellmaintained and efficient system of roads, highways, bridges and public transportation if it is to be economically competitive. Modern national and global communications and the impact of free trade in North America and elsewhere have resulted in a significant increase in freight movement. 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.

Businesses have responded to improved communications and the need to cut costs with a variety of innovations including just-in-time delivery, increased small package delivery, demand-side inventory management and by accepting customer orders through the Internet. The result of these changes has been a significant improvement in logistics efficiency as firms move from a push-style distribution system, which relies on largescale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. These improvements have made mobile inventories the norm, resulting in the nation's trucks literally becoming rolling warehouses.

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>15</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>16</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>17</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>18</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>19</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 longterm 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>20</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>21</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>22</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>23</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>24</sup>

### Conclusion

Nevada's surface 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 rebound from the recession, the improvement of its surface transportation system will play a vital role in allowing the state to support future economic growth. Needed surface 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 improve the condition and increase the capacity of its roadways and public transit systems. Making needed improvements to Nevada's surface 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

 $4 \overline{\underline{\text{Ibid}}}$ .

<sup>6</sup> USGovernmentSpending.com. Comparison of State and Local Government Spending and Debt in the United States. Fiscal Year 2011.

<sup>7</sup> TRIP analysis based on U.S. Census Bureau, Population Division, Interim State Population Projections, 2005 to 2030.

<sup>8</sup> Ibid.

<sup>9</sup> Federal Highway Administration (2010). Highway Statistics 2009.

<sup>10</sup> Ibid.

<sup>11</sup> TRIP analysis of Federal Highway Administration data (2008). Highway Statistics 2008, HM-63, HM-64.

<sup>12</sup> National Bridge Inventory (2010), Federal Highway Administration.

<sup>13</sup> Bureau of Transportation Statistics (2010), U.S. Department of Transportation. 2007 Commodity Flow Survey, State Summaries. <u>http://www.bts.gov/publications/commodity\_flow\_survey/2007/states/</u>

 $\frac{14}{15}$  <u>Ibid</u>.

<sup>15</sup> National Cooperative Highway Research Program. Economic Benefits of Transportation Investment (2002). p. 4.

<sup>16</sup> The Transportation Challenge: Moving the U.S. Economy (2008). National Chamber Foundation. p. 10. <sup>17</sup> <u>Ibid.</u>

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>20</sup> Federal Highway Administration, 2008. Employment Impacts of Highway Infrastructure Investment.

<sup>21</sup>The Transportation Challenge: Moving the U.S. Economy (2008). National Chamber Foundation. p. 5.

<sup>22</sup> <u>Ibid</u>.

 $^{23}$  <u>Ibid</u>.

<sup>24</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>&</sup>lt;sup>1</sup> One Piece at a Time (November 2010). Site Selection magazine.

<sup>&</sup>lt;sup>2</sup> Bureau of Labor Statistics, United States Department of Labor (2011). Local Area Unemployment Statistics.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> USGovernmentSpending.com. Comparison of State and Local Government Spending and Debt in the United States. Fiscal Year 2010.