

## EXECUTIVE SUMMARY



### Plan Development

Nevada’s Statewide Long-Range Transportation Plan is a policy document that is intended to provide direction and strategies for the Nevada Department of Transportation (NDOT) over the next 20-years. This Plan was prepared by NDOT with the assistance of many individuals and organizations. It is a multimodal plan that explores the issues affecting aviation, bicycles, pedestrians, transit, cars, trucks, and trains and the linkage between these modes.

This Plan was developed in accordance with the current federal transportation bill, known as the Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) provisions. The last edition of the Statewide Long-Range Transportation Plan, titled the NevPLAN, was adopted in 2002 under the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). The Plan was renamed with this edition.

There are four designated Metropolitan Planning Organizations (MPO’s) in Nevada: Clark County, Washoe County, Carson City and Lake Tahoe. These four MPO’s have the primary stewardship for transportation planning within their boundaries, including member cities and surrounding unincorporated areas. The

MPO’s facilitate the coordination of planning activities between the multiple local agencies and NDOT with their urbanized areas. NDOT coordinates with the MPO’s and represents the interests of the state.

We worked closely with all of our transportation partners, (MPO’s, local, state, federal and tribal nations) to ensure that our efforts were coordinated and consistent with theirs. This is only one planning element of many. All of these plans should provide a consistent and accurate depiction of the needs of the statewide transportation system.

During the development of this plan NDOT reached out to the citizens, communities and businesses of Nevada to find out what’s important to them and what they want our transportation system to look like in the future. We held several workshops across the state, attended community meetings, participated in corridor studies, and attended transportation fairs. We also used the comments that we received from over 500 customer opinion surveys.

***“More emphasis needs to be placed on new residents to connect the place they work with the place where they plan to live.”***

-anonymous survey comment

### Guiding Principles

Through the Mission Statement, the general direction of the organization is established. NDOT’s Mission is:

*“Providing a better transportation system for Nevada through our unified and dedicated efforts.”*

NDOT has established Goals and Core Values to help achieve our Mission (see Chapter 1 – Introduction). These Goals and Core Values were used to develop the Guiding Principles for this Plan. We also used the input that we received from our citizens. Our intent was to develop direction for this Plan that reflects the opinions of the users of our transportation system. These Guiding Principles represent the goals, core values, and standards of conduct that NDOT will use to guide the decisions we make. We have also developed strategies to help us attain our Guiding Principles, and objectives to gauge how well we are meeting our principles. These Guiding Principles are also used as the initial step in our project selection and prioritization process.

GUIDING PRINCIPLES:

- **SAFETY** – Improve safety for all modes of our transportation system.

A core priority of NDOT and all citizens in this state is transportation safety across all modes. NDOT will work to ensure that safety is considered and implemented, as appropriate, in all phases of transportation planning, design, construction, maintenance, and operations.

- **CUSTOMER SERVICE** – Improve internal and external customer service and satisfaction.

NDOT will work to improve and enhance our transportation network to have a positive impact on our residents and the traveling public. We will work to improve our relationships with the contractors and crews who build our infrastructure, local businesses and developers who need access to their facilities, the customers who need timely permits to work in our rights-of-way, and our political leaders who are trying to satisfy their constituents.

- **FISCAL RESPONSIBILITY** – Secure the highest amount of funding possible for our state and ensure that it is invested responsibly and properly.

NDOT will work to secure the highest amount of federal and state funding possible and we will use effective planning and decision making to ensure that funding goes to the state’s highest priorities. We will ensure proper use of our funds while fulfilling the state and federal requirements that go along with the benefit of receiving those funds.



- **ASSET MANAGEMENT** – Protect the public’s investment in our transportation system.

NDOT will work to balance our limited funding with the appropriate highway maintenance that will most effectively maximize the life of our system and protect our assets.

- **MOBILITY / ACCESSIBILITY** – Provide a statewide, multimodal, interconnected, efficient transportation system that enhances Nevada’s Economic Competitiveness.

NDOT will continue to work with our partners (MPO’s, local, state, federal and tribal governments), to increase the capacity of our transportation system. We will seek ways to make our existing transportation system work

better by utilizing strategies such as, Intelligent Transportation Systems, Access Management, and Travel Demand Management. We will continue to promote and support other modes of transportation that alleviate congestion, such as transit services and facilities for pedestrians and bicycles.

- **FREIGHT MOVEMENT** – Improve the safety and mobility of freight movers.

NDOT understands that a well functioning transportation system is vital to our economy and that delays cost our freight carrier industry and our economy money. We will work to make commercial carrier trips to and through our state as smooth and efficient as possible and provide them with superior intermodal connectivity when needed.

- **ENVIRONMENTAL STEWARDSHIP** – Ensure the human and natural environments are considered when developing the transportation system.

A sound transportation system must address the relationship between the movement of people and goods as well as the impact upon our environment. NDOT will work closely with our MPO’s, federal, state, regional, local and tribal governments to coordinate and preserve our environment and natural resources for our future generations.

**About Nevada**

At one time, Nevada was the nation’s most sparsely populated state, outside Alaska, when the Paiute and other Native American tribes were making a meager living from the land and animals. Our population exploded from 1950 to 2000 increasing more than 1200%. Since 1990 Nevada’s population grew by 133% with nearly 1 million new residents, the fastest

rate of growth in the nation. Las Vegas experienced the highest percentage change of any metropolitan area in the country. Today at about 2.7 million people, Nevada is increasingly home to retirees and workers in new technology industries. Nevada’s population is expected to continue to grow to 4.3 million people by 2026.

Nevada’s economy is overwhelmingly based on tourism, especially gaming, (legalized in 1931) and resort industries centered in Las Vegas and, to a lesser extent, Reno and Lake Tahoe. Nevada is the gambling capital of the US with gaming taxes accounting for 34.1% of general fund tax revenues. The service sector employs about half of Nevada’s workers. Nevada is 5<sup>th</sup> in the country for tour bus operations, and most are coming into Las Vegas.



The State of Nevada is divided into 17 individual counties that vary widely in population. The 10 largest cities in Nevada are: Las Vegas (545,147), Henderson (232,146), Reno (203,550), North Las Vegas (176,635), Sparks (82,051), Carson City (56,062), Elko (16,685), Boulder City (15,177), Mesquite (13,523), Fernley (11,342).

There are 31 Native American Reservations and Colonies in Nevada covering almost 2,000 square miles and close to 9,000 members.

Nevada is the driest state in the nation, with an average annual rainfall of only about 7 inches. Almost 80% of Nevada lands are federally owned and given over to military and related use. Nellis Air Force Base and the Nevada Test Site have been the scene of much nuclear and aircraft testing.

About 100 miles northwest of Las Vegas, Yucca Mountain has been proposed to be the primary depository for U.S. nuclear waste. If approved, rail transportation will be the mode used in Nevada and nationally, for the shipment of 70,000 metric tons of nuclear waste to Yucca Mountain. The State of Nevada has filed a suit challenging DOE’s final Yucca Mountain Environmental Impact Statement (FEIS). The State contends the DOE should have fully and adequately addressed transportation of spent nuclear fuel and high-level radio waste to Yucca Mountain in the FEIS, and that the transportation analysis contained in the FEIS is legally and substantively deficient and entirely inadequate.

With a calculated value of about \$4.9 billion in 2006, Nevada’s mineral industry is a major economic force in our state. Nevada is the nation’s leading producer of gold, barite, and lithium. Copper, diatomite, dolomite and other minerals are also extracted. Nevada is rich in geothermal resources and is second only to California in the production of geothermal power. The state’s leading agricultural industry is cattle and calves. Crops consist mainly of hay, alfalfa, seed, barley, wheat, and potatoes.

Manufacturing includes gaming machines and associated products, aerospace equipment, lawn and garden irrigation devices, and seismic monitoring equipment. Warehousing and trucking are also significant industries in Nevada.

**Transportation – Current and Future**

There are a total of 34,624 centerline miles of roads in Nevada, 29,202 miles are maintained by the local agencies and 5,422 miles are maintained by NDOT. Nevada’s interstates, urban freeways, principal arterials, and rural minor arterials were rated #1 for the smoothest roads in the Nation by the Federal Highway Administration.



Sixteen percent of all Nevada’s roads are on the state maintained system, however, that 16% carries 58% of the total vehicle miles of travel. Thirty-nine million people visited Las Vegas in 2005 and 53% percent of them arrived by automobile or bus. The state maintained system also carries 83% of all truck traffic and 87% of the heavy truck traffic. Annual vehicle miles of travel on all Nevada roads exploded from 10 billion in 1990 to 22 billion in 2006. That number is expected to increase to 35 billion vehicle miles by 2010. Almost every major road leading into and out of the Las Vegas Valley and the Reno area needs to increase capacity in order to keep up with growth.

The fatality rates in Nevada are similar to the national experience, with significant decreases during the 80’s and early 90’s followed by a noticeable flattening over the past decade. However, Nevada’s fatality rate has

consistently been 20% to 40% above the national average. While Nevada continues to rank high nationally in the statewide rate of traffic fatalities on the state’s highway system, improvement has been made through concentrated and coordinated efforts. A core priority of NDOT and all citizens in this state is transportation safety across all modes.

There are 1898 public bridges in Nevada; 1084 are owned by NDOT, 776 are owned by federal, county, city or other governmental agencies, and 38 are privately owned. Currently, only 5% of Nevada’s bridges are rated as deficient, compared to the national average of 25% placing us #1 in the Nation. But by 2020, we are projecting a \$24 million deficit in our bridge preservation funding program.

In Nevada, truckers are the third largest motorists group using our highways, after commuters and tourists. Interstate 15 and Interstate 80 are among the busiest truck-freight corridors in the nation and that traffic is expected to increase significantly in the future. After the tragic events of September 11, 2001, the US 93 Hoover Dam crossing of the Colorado River was closed to freight traffic increasing congestion and wear and tear on alternate routes. It is also costing the trucking industry million of dollars in delays and fuel. New bridges planned downstream of Hoover Dam and near the existing Laughlin Bridge will reduce congestion on these facilities.

September 11, 2001, also cause safety for the freight carrier industry to take on a new dimension. It forced freight carriers to increase their efforts to ensure the safe, secure and efficient movement of goods into and across the US.

Our transportation system is a vital link for mobilizing our armed forces and for

supporting civilian emergency response. Per Nevada Revised Statutes, (NRS 414) NDOT is the primary agency responsible for keeping state highways and roads repaired and open during a disaster and assisting with traffic control on our routes. NDOT has evaluated our existing security threat and the countermeasures that we have in place and as a result, we have documented our security system and provided guidelines to ensure that we have secured our nations highways and bridges for all motorists.

There is one major railroad operating in Nevada, Union Pacific with 1,091 miles of track. There are various other small lines operating in Nevada completing the total track miles of 1,449 in the state. Our railroads are key players in moving freight, and to some extent passengers. The coordination among these modes is critical for the movement of goods and services in and through our state and to our economy.

Amtrak operates the only intercity rail passenger service across Nevada via the California Zepher. This train operates daily between Oakland, California and Chicago, Illinois with Nevada stops in Reno, Sparks, Winnemucca and Elko. Annually, about 70,000 passengers use Amtrak for Nevada origins or destinations.



Nevada recently received \$45 million through the SAFETEA-LU Technical Corrections Bill to continue environmental work

on the proposed 300-mph magnetically levitated train from Anaheim, California to Las Vegas, Nevada. In addition, environmental work for a high-speed diesel-electric passenger train between Las Vegas and Victorville, CA is being done by a private company.

The US Congress has identified 43 “High Priority Corridors” nationally. Those of particular note for Nevada are:

- Economic Lifeline Corridor, running through California, Arizona, and Nevada.
- US 395 Corridor, running through Washington, Oregon, Nevada, and California.
- The CANAMEX Corridor, running north-south through Montana, Idaho, Utah, Nevada, and Arizona.

Two of these corridors are truly multimodal, having both interstate highways and transcontinental rail routes. One is the Economic Lifeline Corridor, which branches in Southern California. One branch includes Interstate-15 and the Union Pacific Railroad (UP) main line through Las Vegas to a junction with the CANada – MEXico Corridor (CANAMEX).

The Interstate-15 corridor through southern Nevada has qualified for the prestigious Corridors of the Future Program (CFP). As one of six multi-state transportation corridors selected, I-15 will be eligible for the accelerated designation of federal funds and project development. The CFP corridor selection was based on congestion reduction, mobility improvements, supporting economic growth, and innovations in project delivery and finance. Nevada took the lead on the multi-state application working together with partners in California, Utah, and Arizona to create a regional project of national significance.

As a major trade route, I-15 connects to four transcontinental highways – I-10, I-40, I-80

and I-90. The I-15 corridor is a critical commerce corridor which plays a significant role in the movement of goods in the United State, commuters within or close to urban core areas, and recreational and seasonal travelers. NDOT has selected this corridor for a demonstration project to examine the effectiveness, value and functionality of managed lanes and confirm the suitability of public-private partnerships for Nevada. Interstate 15 also runs directly through the heart of PROJECT NEON, which is a comprehensive strategy to address the short and long-term transportation needs along the I-15 corridor.

Although Interstate 15 and Interstate 80 are national freight and rail corridors for the Ports of Oakland and Long Beach California, Nevada does not have any major waterways or ports that would fall under the jurisdiction of the United State Department of Transportation.

Nevada is ranked the seventh largest state in the nation, in terms of square miles, and as a result our population centers are spread across many miles. Because of our geography, aviation plays a critical role in bridging the vast distances between our communities. Nevada’s public-use airports include two international, three commercial-service, and 47 general-aviation facilities. McCarran International Airport in Las Vegas is the 5<sup>th</sup> busiest airport, by traffic movement, in the world and it is currently at capacity. A new commercial airport 30 miles southwest of Las Vegas (Ivanpah Valley) is currently being planned. Ivanpah Valley Airport is expected to be open in 2017 and will serve the projected 55 million passengers annually with 14-gate terminals and two parallel runways for concurrent takeoff and landings.

Public transportation in Nevada is a critical element used to move our tourists and workforce particularly in the urban areas of our

state. But it is also becoming an essential mode of transportation in rural Nevada. From 1999 to 2008, our rural transit program grew from \$1M in annual federal funding to over \$10M, and we are on track to become a \$20M program in the next few years. Since 1975, over 400 vehicles have been acquired that operate in 45 areas throughout our state. Busses in rural Nevada travel over 5,000,000 miles per year and there has been no severe crashes and no fatalities in over 25 years.

***“I think NDOT must recognize that a transportation system consists of more than automobiles, and should work to provide a transportation system for Nevada that balances the modes.”***

-anonymous survey comment

Many of our elderly, disabled, tribal reservation members, and the general public in rural areas depend on our transit services. Each year over one million rides are given on vehicles provided through NDOT with Federal Transit Administration funding. These rides contribute to the quality of life and independence for many of our rural residents by providing access to employment, medical, shopping, and government services.

Through our surveys and public outreach we consistently find there is a demand for a continuous, high quality bike/pedestrian system that links our communities and the cities together. NDOT recognizes that bicycling and walking are important components of our transportation system and we make every effort to integrate these modes into as many transportation projects as feasible. Our State Bicycle Plan supports measures to encourage bicycling in Nevada and has two primary goals: to increase levels of bicycling throughout

Nevada and reduce crashes between bicycles and motorists. Our Pedestrian Plan provides a cohesive and uniform approach to pedestrian safety, mobility, security and comfort. The Plan stresses the need for system continuity across all components of a given pedestrian system.

NDOT, the MPO’s, and various municipalities have been increasing their efforts to acquire funds to provide bicycle and pedestrian facilities in their areas. In fact public agencies in Las Vegas have plans to add over 1800 miles of bicycle lanes, routes and shared use paths in the next 12 years, at a cost of \$50 million.

Most transit systems across Nevada have now equipped their buses with equipment to accommodate bikes. The Citizens Area Transit system in Las Vegas carries over 54,000 bike trips every month, which may be the greatest number of any transit system in the United States.



Finally, NDOT recognizes that we cannot continue to build our way out of congestion, we need to find ways to make our existing transportation system work better. NDOT is committed to continue to focus on strategies such as Intelligent Transportation Systems, Access Management, and Travel Demand Management. A Traffic Incident Management Coalition, consisting of local and state public safety individuals, emergency responders and NDOT, has also been formed to

focus on incident management. Collectively, these efforts are designed to reduce congestion by reducing the total number of vehicles on the roadway, reducing traffic on congested areas, improving the efficiency of the roadways and rerouting traffic away from congested situations such as accidents.

NDOT, the RTC of Southern Nevada, the Nevada Highway Patrol and local public agencies have formed a cooperative venture called Freeway Arterial Systems of Transportation (FAST) System in the Las Vegas Valley. FAST is one of the first truly integrated Intelligent System organization in the country. It provides opportunities to reduce congestion, improve incident response time and management, reduce the number of crashes, and efficiently use agency resources to manage traffic. The traffic control aspect of the FAST system is achieved through traffic signals, ramp meters, dynamic message signs and lane-use control signals.

NDOT was also responsible for pushing forward on the construction of our first High Occupancy Vehicle (HOV) lanes in Nevada, along the US 95 corridor in Las Vegas. Right now this HOV lane is restricted to motorcycles and cars with three or more passengers. Our objective is encouraging drivers to share rides.

**Funding our Transportation System**

NDOT is facing a severe funding shortfall crisis. Our state highway system needs are expected to be \$11 billion by 2015. We are currently facing a \$3.8 billion shortfall (in 2006 dollars), for the 10 largest projects planned for completion in 2015. This figure does not include the costs of many of our smaller projects, nor does it account for the maintenance and operation of our infrastructure.

We have more fuel efficient vehicles consuming less fuel and fewer revenues are being generated from gas taxes. Nevada’s gas tax is 18.4¢. State highway taxes and fees have not been raised since 1991. Compounding all of this, highway construction costs rose 99.7 percent nationally and highway construction inflation has risen nearly 44 percent in the past few years, exceeding general inflation.

Recognizing our impending funding shortfall, Nevada’s Governor went before the 2007 Legislature with Assembly Bill 595. This bill was passed and could provide up to \$1 billion dollars in bonding capacity for Super/Mega (Major) projects identified by NDOT as priority projects for our State. By providing funds to start vital road projects now, versus a pay-as-you-go strategy, we will save the taxpayers an estimated \$600 million in construction inflation costs. For more information on our Performance Measures see the “Annual Report for Assembly Bill 595.”

*“I would like to see Nevada improve in transportation innovations. We have a golden opportunity to learn from other metropolitan areas and develop better traffic flow, reduce congestion and add mass transit ahead of the real need.”*

-anonymous survey comment

NDOT initiated the Pioneer Program as another tool to address our anticipated funding shortfalls. This new program will help develop innovative road funding and construction partnerships. We hope to provide faster project delivery and relieve congestion, while securing more funding amid a statewide transportation funding deficit. This is a solution-oriented transportation program that explores innovative ways to deliver the roads that Nevada needs.

As part of the Pioneer Program, Governor Gibbons named a 12-member Public-Private Partnership Advisory Panel to explore the use of public-private partnerships. This is when a contractual agreement between a public agency, such as NDOT, and a private company is used to fund transportation improvements.

Whether through taxes, tolls or other fees, NDOT will continue to look to this new program to help provide quality transportation for Nevada. We are looking for programs and opportunities that work specifically for Nevada, while building upon lessons learned from other states. The Pioneer Program will join other NDOT initiatives to deliver quality transportation projects for the citizens and visitors of Nevada.

The future of our transportation infrastructure and our future land use are directly and inseparably related. The issues of population growth and transportation needs must be addressed cooperatively. The state, cities, counties, Native American tribes, trucking industry and all transportation agencies operating in Nevada, must coordinate and work as partners to innovatively and strategically invest in improvements that will make our system more efficient and effective. Our goal is to improve our transportation system for the economic vitality of our state while preserving our quality of life.