

A Look at the Projects, Programs and People of the Nevada Department of Transportation

THE PEOPLE OF NDOT







The dedication of NDOT maintenance professionals extends beyond transportation infrastructure. Here, an NDOT crew stands in the Washoe Valley wildlife protection area that they help maintain.

To help protect the safety of school children and motorists, NDOT maintenance professionals use reflectometers to measure the reflectivity of school zone crosswalks.



A keen eye and a dedication to the public's best interest are needed as NDOT financial management professionals dutifully oversee millions in annual tax dollar expenditures.



Working in cooperation with local governments is key to NDOT's ability to provide a top state transportation system. NDOT regularly meets with county commissioners (pictured above) and other agencies throughout the state.



In NDOT materials labs, all road materials, from above ground to below, are closely evaluated for stringent quality requirements.



NDOT maintenance professionals use a dedicated eye while operating machinery to restripe Nevada freeways for better visibility and safer travel.



MAJOR ROAD PROJECTS

Throughout Nevada, NDOT builds the road improvements that keep commerce and motorists moving. These road projects join with NDOT's road operation, maintenance and preservation activities to provide a seamless, top-notch transportation system.

These are examples of some larger current NDOT projects that, when complete, will help keep Nevada moving well into the future.

I-15 NORTH - Phase 1

I-15/U.S. 95/I-515 Interchange to Craig Road

Las Vegas

Project Description

- First phase of the I-15 north corridor improvements between U.S. 95 and Apex interchange
- Widen I-15 from six lanes to ten lanes from U.S. 95 to Lake Mead Boulevard, including realignment of U.S. 95 and Washington and D Street interchanges
- Widen I-15 to eight lanes from Lake Mead Boulevard to Craig Road
- Construct connection road linking D Street and F Street between I-15 and Bonanza Road

Project Benefits

- Increase capacity to accommodate projected local and interstate traffic to year 2030
- Decrease congestion and travel times
- Improve access to planned North Las Vegas development
- Improve freeway operations with full freeway-to-freeway connectivity
- Improve safety
- Use design-build method to complete project more quickly

I-15 EXPRESS LANE PROJECT

Las Vegas

Project Description

- Widen I-15 from four to five lanes in each direction between Russell and Sahara Avenues
- Convert two inside lanes in each direction into express, through traffic-only lanes, separated from regular travel lanes by candlestick delineators
- Project may be incorporated into proposed congestion pricing pilot project

Project Benefits

- Improve freeway operations by separating through traffic from exiting traffic
- · Reduce weaving and merging
- Decrease congestion and travel times
- Improve safety





Photo Illustration

MAJOR ROAD PROJECTS



BLUE DIAMOND ROAD (State Route 160) Widening Project-Phase 2B

Las Vegas

Project Description

- Widen State Route 160 (Blue Diamond Road) from two to eight lanes between Decatur and Rainbow Boulevards
- Construct new single-span bridge to carry vehicles over railroad tracks
- Realign Jones Boulevard and Blue Diamond Road intersection, including new traffic signal
- Improve Rainbow Boulevard traffic signal

Project Benefits

- Increase capacity to accommodate growing traffic
- Eliminate traffic stops at railroad crossing
- Improve merging from connector roads
- · Improve safety

HOOVER DAM – Nevada Approach Southern Nevada

Project Description

Federal Highway Administration project:

- Create highway bypass around Hoover Dam by realigning current winding, two-lane U.S. 93
- Construct Mike O'Callaghan-Pat Tillman Memorial bridge crossing the Colorado River immediately south of Hoover Dam
- Construct new diamond interchanges at Arizona and Nevada side of project
- Construct pedestrian plaza and parking area

NDOT project (Nevada approach highway):

• Construct 2.2 miles of four-lane road, including traffic interchange and six bridges

Project Benefits

- Improves travel, commerce and safety on designated North American Free Trade Agreement route by removing trucks and through traffic from tourist-heavy Hoover Dam
- Improves operations for trucks on U.S. 93 and tourists on Hoover Dam
- Improves Hoover Dam facility, worker and visitor operations
- Protects Colorado River waters
- Helps protect against safety threats to Hoover Dam

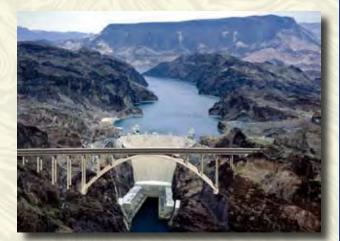


Photo Illustration

INTERSTATE 580 – South Reno to Washoe Valley

Reno

Project Description

- Construct 8.5 miles of new, six-lane controlled access freeway
- Complete interchange with Mt. Rose Highway (State Route 431)
- Construct new interchange at Bowers Mansion Road (State Route 429)
- Construct two grade separations and five bridges
- Construct Kelly Canyon Road (frontage road) and Parker Ranch Road to maintain local access



MAJOR ROAD PROJECTS

Project Benefits

- Will provide only all-weather route between Carson City and Reno, Sparks and Interstate 80
- Alleviate congestion due to predicted growth of vehicles traveling in area
- Projected to reduce the over 2,570 accidents and 16 fatalities that occurred in a 10-year span on existing road near project area
- Construction will result in 27 miles of uninterrupted controlled-access road meeting interstate standards



Photo Illustration

CARSON FREEWAY – Phase 2A

U.S. 50 East to Fairview Drive

Carson City

Project Description

- Construct two miles of four-lane freeway
- Complete interchange at U.S. 50 East and build partial interchange at Fairview Drive
- Construct Fifth Street overpass
- Construct flood control facilities and realign bicycle/pedestrian path

Project Benefits

- Second phase of multi-phase project to relieve traffic congestion through Carson City on Carson Street and local streets
- Reduce travel times through region
- Provide flood control protection
- Improve opportunities for economic development along the corridor and downtown



I-15 North – Phase 1, Groundbreaking

PLANNING FOR THE FUTURE

Proposed Projects



In conjunction with our local government and community partners, NDOT carefully plans the transportation systems and improvements of the future. It is this look to the future that gives us the opportunity to collaboratively plan the most effective, socially-responsible road network for future years and generations.

In the Las Vegas area alone, a recent nation-wide urban mobility report states that traffic congestion creates 29 million wasted hours and 20 million gallons of wasted fuel every year. These are examples of some larger NDOT projects that are planned to be built, funding dependent, to provide for the mobility needs and commerce of the state's ever-growing population.

PIONEER PROGRAM DEMONSTRATION PROJECT

I-15/U.S. 95 Las Vegas Corridor

Las Vegas

The I-15/U.S. 95 Demonstration Project is a proposed project to examine the effectiveness, value and functionality of express lanes and the suitability of public-private partnerships to provide much-needed Nevada highways in the face of funding deficits.

Project Description

- Convert high-occupancy vehicle (carpool)/express lanes to congestion-priced express lanes in the Las Vegas I-15/U.S. 95 corridor
- Congestion pricing for vehicles with less than three occupants (video-enforced)
- Free use for public transit, emergency vehicles, and pre-registered vehicles with more than three occupants
- Improved access and interchanges

Project Benefits

- Increase capacity and access
- · Improved safety and reliable travel
- Reduce idling/vehicle emissions
- New funding source to add needed Las Vegas freeway capacity amid funding deficits
- Provides for a new high speed transit option for commuters

Schedule: TBD

PROJECT NEON

Las Vegas

Project Description

 Construct high-occupancy vehicle (carpool lane) direct connection from U.S. 95 to I-15 and improve I-15 high-occupancy vehicle lanes, including collector/distributor roads

Project Benefits

- Extend high-occupancy vehicle (carpool lane) system to reduce congestion
- Accommodate anticipated traffic increases
- Provide new access to downtown redevelopment

Schedule: Planning/Environmental Clearance: 2003-2009 Final Design/Construction: TBD



Photo Illustration



PLANNING FOR THE FUTURE **Proposed Projects**

BOULDER CITY BYPASS - PHASE 1

I-515 / U.S. 93 / U.S. 95 - Foothill Drive to U.S. 95

Southern Nevada

Project Description

• Realignment of I-515 / U.S. 93 / U.S. 95 to create an access-controlled facility from Foothill Drive to U.S. 95 **Project Benefits**

- Improves safety by eliminating signal at U.S. 93 and Railroad Pass Casino
- Improves local traffic circulation and peak-hour trips between Boulder City and Las Vegas
- Completes initial bypass phase

Schedule: Final Design: 2008 – 2010 **Construction:** Anticipated Start: 2010-2013

U.S. 395 (I-580) NORTHBOUND

Moana Lane to I-80

Reno

Project Description (Split Gore Alternative)

• Widen U.S. 395 (northbound only) from Moana Lane to I-80 interchange

Project Benefits

- Relieves heavy northbound peak-hour congestion
- Reduces crashes associated with congestion/ reduces northbound travel time

Schedule: Environmental Clearance: 2009 Final Design: 2008-2010

Construction: Anticipated Start: 2010 – 2012

PYRAMID HIGHWAY IMPROVEMENTS

Reno

Project Description

- Widen Pyramid Highway (State Route 445) between Nugget Avenue and Calle De La Plata Drive
- Improve Pyramid Way/McCarran Boulevard intersection
- Develop Pyramid Highway and U.S. 395 / I-80 interchange connection

Project Benefits

- Address congestion and safety on Pyramid Highway, including enhanced Pyramid Way/McCarran Boulevard intersection
- Provide alternate access to freeway system
- Improve safety

Schedule: Planning: Complete Environmental Clearance/Design/Construction: TBD

LAMOILLE HIGHWAY ROUNDABOUT

Elko/Spring Creek

Project Description

- Install one-lane roundabout on State Route 227 at intersection of Licht Parkway and Spring Creek Parkway **Project Benefits**
- Provide a traffic control device in an area that does not meet federal guidelines for traffic light
- Reduce traffic speed, congestion and severity of collisions
- Improve safety

A SAMPLE OF OTHER PLANNED PROJECTS

- U.S. 95 northwest widening (multi-phase)- Washington Avenue to Kyle Canyon Road, Las Vegas
- I-15 North improvements (multi-phase)- Craig Road to Interstate 15/215 northern Las Vegas
- Pyramid Way (State Route 445) improvements *Reno*

ROAD MAINTENANCE



Nevada roads are one of the state's largest public infrastructure investments. They are also the lifeline for Nevada commutes, travel and commerce. From repaving and repainting to snow removal and accident traffic control, NDOT maintenance forces perform nearly 100 different tasks.

Through each of these tasks, these maintenance professionals protect and upkeep state roads with expertise, dedication and a recognition of the invaluable public investment of each roadway. Here is a sample of their vital work.





2000	
SAMPLE MA	INTENANCE TASKS

MAN HOURS

Snow and ice removal	95,000
Debris removal	91,000
Road slope repair/enhancements	46,000
Pothole/crack filling and patching	37,000
Road brooming/sweeping	33,000
Road striping	22,000
Emergency response	14,000

2008 TOTAL NDOT MAINTENANCE MAN HOURS: 821,000 (INCLUDING ABOVE SAMPLE TASKS AND ALL OTHERS)





PUBLIC SERVICES

NDOT is dedicated to the mobility and safety of Nevada residents and visitors. Our dedication to the traveling public extends beyond the roads, rails and skies. It also extends to these vital public services.

511 NEVADA TRAVEL INFO

NDOT's 511 Nevada Travel Info system posts current Nevada road, construction, weather and accident reports to an easy-to-remember 511 phone number and www.nevadadot.com Web site.

Motorists simply dial 511 toll-free, 24-hours-a-day from within the state. Designated by major section of state road, callers then select their state route number for automated road conditions, weather forecasts, scheduled event road closures and construction updates. Hands-free, interactive voice recognition allows voice commands without the hazard of pushing number selections while driving. Out-of-state callers can dial 1-877-NV-ROADS to receive the same information. Over 1 million calls for road information have already been placed to the 511 service.



FREEWAY SERVICE PATROL

A traveler service contracted through NDOT, Freeway Service Patrol vans assist drivers on Las Vegas and Reno freeways. Freeway Service Patrol vans travel a continuous fixed route, stopping to



provide free motorist assistance, from emergency medical service and vehicle repair to removal of roadway debris, accident scenes, vehicle fires, animals on the roadway and more.

While assisting individual motorists, the service also keeps freeway capacity at a maximum by helping to move stalled vehicles and keep traffic flowing.

PUBLIC SERVICES





LITTER REMOVAL

NDOT's sponsor-a-highway and adopt-a-highway programs allow non-political groups and individuals to remove trash from certain state roadways, providing cleaner roadways at no additional cost to taxpayers.

While the program's environmental, civic and economic/tourism impact is more than can be expressed in monetary terms, it has enabled NDOT to avoid \$1.8 million in annual litter removal costs over recent years; money that can be utilized for other vital maintenance and safety activities. Meanwhile, the program provides cleaner, safer roads for Nevada motorists.

LANDSCAPE/AESTHETICS

Landscape and aesthetics are vital roadway components that can not only enhance and define corridors, cities, and tourism, but can also improve air quality and provide dust control.

NDOT's Landscape and Aesthetics Master Plan was adopted in 2002 to incorporate landscape and aesthetics as important components of state highways; reflecting scenic, historic, aesthetic and environmental elements of the area.

Today, NDOT dedicates up to three percent of the cost of new construction and widening projects to landscaping



and aesthetics, such as the award-winning Henderson spaghetti bowl interchange that uses murals, drought-tolerant plants and rock designs to establish a community gateway. It's all to enhance economic development, connect communities with their roadways and provide socially-responsible enhancements to our freeways.

VEVADADOT

PUBLIC SERVICES

BICYCLE/PEDESTRIAN

NDOT's bicycle, pedestrian and Safe Routes to School programs promote safe and healthy bicycling and walking across the state. The bicycle and pedestrian program encourages the development of bicycle and pedestrian networks in our communities, as well as inspects existing bicycle and pedestrian facilities and reviews design and construction of proposed facilities.

Overseen by NDOT, the Safe Routes to School program is a federal funding program encouraging more elementary and middle school children to walk and bicycle to school. In its first full year, the program awarded \$1.6 million in reimbursement for 11 different local programs across the state, from infrastructure improvements such as improved walking/bicycling paths to other measures such as enhancing secure bicycle parking and organizing crossing-guard programs.





TRANSIT

Without personal transportation, how would you get to work, the doctor or even the grocery store? Nevada's many public transit programs provide transportation that connects many rural residents with the services they need.

NDOT's transit program supports these local transit providers by administering federal grants. From 1999 to 2008, NDOT's rural transit program grew from \$1 million

in annual federal funding to over \$8 million, and is on track to become a \$20 million annual program in the next years. This grant funding has helped purchase 400 transit vehicles and helped provide nearly 1 million rides each year to the elderly and disabled, rural residents and those looking for job access.

PUBLIC SERVICES 🕢



RAIL

Railroads are an essential component of our interstate and intrastate transportation system. As the nation looks to alternative transportation and goods movement, NDOT's rail and freight program undertakes statewide goods movement studies to determine the most advantageous ways to administer and oversee federal funding for the railways that transport Nevada goods and visitors.



AVIATION

In the sky, NDOT's aviation section plans for the air transportation needs of the future by indentifying funding to improve regional air service. Through annual safety inspections, airport pavement analysis and other improvement and



education programs, NDOT's aviation team plays an important role in assisting the Nevada airports that support medical emergency flights, cargo operations, fire suppression and economic vitality.

WEVADA DRIVING SAFETY

With nearly one life lost on Nevada roads each day, transportation safety is a foremost NDOT priority. Each and every day, the men and women of NDOT work to help ensure the safety of our roads. These are some examples of the Department's dedication to safety.

STRATEGIC HIGHWAY SAFETY PLAN

Alongside our transportation and safety partners, NDOT has developed Nevada's Strategic Highway Safety Plan.

The plan will guide Nevada traffic and safety professionals as they implement safety measures to reduce traffic fatalities through engineering, education, enforcement and emergency service enhancements.

Targeted driving safety measures already implemented include installation of centerline rumble strips on certain rural state roads.



RUMBLE STRIPS

In Nevada, over 40 percent of all traffic fatalities are caused by run-off-the-road and head-on crashes. For many years, NDOT has utilized rumble strips on the roadway shoulder to reduce these crashes.

Consisting of grooves cut into a roadway, rumble strips generate sound and vibration when drivers veer out of their lane. By alerting and allowing motorists to correct their vehicles, head-on and sideswipe crashes can be reduced.

NDOT's installation of edgeline

rumble strips along the side of roadways has thus far helped reduce interstate run-off-the-road crashes by 42 percent. The Department is also placing centerline rumble strips in the center median of many rural state roadways.

As a relatively quick-to-install and cost-effective safety measure, rumble strips are saving lives and further increasing the safety of Nevada's transportation system.

ITRP/TRAFFIC INCIDENT MANAGEMENT

Across the nation, congestion is estimated to cost \$78 billion per year. NDOT's Integrated Transportation Reliability Program (ITRP) aims to implement new and innovative programs to prevent congestion and keep Nevada moving. Bringing together stakeholders statewide, NDOT's ITRP program will develop strategies to improve travel time reliability in Nevada, one of the nation's fastest-growing states.

The program's first success is Las Vegas' Traffic Incident Management Coalition. Under NDOT, the coalition has brought southern Nevada emergency response and transportation agencies together to enhance emergency response to the over 15,000 traffic crashes that occur each year in the Las Vegas valley. The group has put very aggressive accident clearance time goals in place to restore the road for safer, easier travel following traffic crashes.

SPECIAL PUBLICATION • FEBRUARY 2009



Chairman Jim Gibbons Governor

Brian Krolicki *Lieutenant Governor* **Catherine Cortez Masto** *Attorney General* **Kim Wallin** *Controller*

Frank Martin District 1
Paul Morabito District 2
Tom Fransway District 3

Susan Martinovich, P.E.

www.nevadadot.com

Jim Gibbons

Director



NEVADA DEPARTMENT OF TRANSPORTATION

Public Information Office 1263 South Stewart Street Carson City, Nevada 89712 Phone: (775) 888-7000

