Transportation Management Plan

US 395, Washoe County
Milepost 27.064 to 31.107

Construct Aux Lane Northbound and Southbound, Construct Travel Lane Southbound, Construct New Braided Ramp at Panther Valley Interchange, and Rehab Existing Pavement

January 2023

Nevada Department of Transportation
1263 S. Stewart Street
Carson City, Nevada 89712

Prepared By: Jessica Downing

Executive Summary

US 395 is the primary connector between Reno/Sparks and the Golden Valley, Lemmon Valley, Stead, and Cold Springs areas. This route also serves as the main connector to northeastern California. This project consists of adding auxiliary lanes, an additional travel lane, a new braided ramp, and roadway rehabilitation on US 395 in Washoe County. These improvements will be constructed between mileposts WA 27.064 to 31.107. The roadway is classified as a freeway. US 395 within the project limits has a posted speed limit of 65 mph. Traffic control will consist of lane, shoulder, and ramp closures, lane, shifts, and flagging operations.

This Transportation Management Plan (TMP) will describe the transportation management strategies developed throughout the course of this project. The strategies developed include the Maintenance of Traffic Plan and the Transportation Operations Plan.

TMP Roles and Responsibilities

TMP Coordinator

The Nevada Department of Transportation's (NDOT) Project Coordinator for this project is Victor Peters. Jessica Downing will serve as the Transportation Management Plan (TMP) Project Manager and is responsible for the overall development of the TMP.

Victor Peters
Office: (775) 888-7680
vpeters@dot.nv.gov

Jessica Downing
Office: (775) 888-7705
jdowning@dot.nv.gov

TMP Team

The TMP Team is comprised of the individuals who have been involved in the development and review of the TMP. The TMP team consisted of Pedro Rodriguez, Robert Vrooman (NDOT Project Management), Ruedy Edgington (HDR/Consultant Project Manager), Victor Peters, Katie Durham (NDOT Roadway Design), Mike West, Shawn Hilbert (NDOT Constructability), Bhu Sandhu, Andrew Lawrence, Joel Read (NDOT District 2 Construction), Austin Hoekstra, Jeff Bickett, Eric Harmer, Jessica Downing (Traffic Operations).

TMP Implementation Task Leaders

The following are some of the implementation responsibilities of Task Leaders as defined in this TMP:

NDOT Resident Engineer

1. Approve staging areas.
2. Coordinate with other construction activity in the general area of this project.
3. Enforce the contract limitations of operations.
4. Review the safety of in-place traffic control and contractor operations.
5. Provide construction information to District II so that they can place it on the 511 website.
6. Identify additional emergency contacts.

Contractor

1. Choose staging areas.
2. Coordinate with other construction activity in the general area of this project.
3. Design and submit traffic control plans.
4. Provide traffic control supervision and inspection.

Emergency Contacts

Bhupinder Sandhu, Asst. District II Engineer:	(775) 834-8300 Office; (775) 434-3458 Cell
Andrew Lawrence, Resident Engineer:	(775) 888-3040 Office; (775) 443-5169 Cell
Joel Read, Asst. Resident Engineer:	(775) 888-3040 Office; (775) 400-6740 Cell
Garrett Rodgers, PE Crew 905	(775) 888-3040 Office; (775) 350-0755 Cell

Additional emergency contacts will be identified at the Pre-Construction Meeting.

Project Description

The project extends from North McCarran interchange to the Golden Valley interchange on US 395. The work consists of constructing a new travel lane in the southbound direction, new auxiliary lanes in the northbound and southbound directions, and a new braided ramp at the Panther Valley interchange. Other items will include drainage improvements, new lighting, signs, striping, concrete barrier rail, sound walls, retaining walls, and rehabilitation of existing pavement.

Project Type

This capacity project is federally funded.

General Schedule and Timeline

This project is anticipated to begin construction in the spring of 2023 with four-hundred fifty (450) working days.

Need for Detours

This project utilizes lump sum traffic control, traffic control plans will be developed and supplied by the contractor and will be approved by the Resident Engineer. Any detours shall be provided in the traffic control plans. Pedestrian traffic control and detours shall be submitted together with the work zone traffic control plans. Plans for any closures and detours shall be submitted 14 days prior for approval.

Existing and Future Conditions

US 395 in the project area is a freeway with three 12-feet through lanes northbound from Clear Acre to Golden Valley and reduces to two lanes from Golden Valley to Lemmon Valley with an auxiliary lane between Panther Valley on-ramp and Golden Valley off-ramp. There are two lanes southbound for the entire corridor from Lemmon Valley to Clear Acre with an auxiliary lane between Golden Valley on-ramp and Panther Valley off-ramp. The posted speed limit is 65 mph. The directional traffic in the project corridor is separated by a median with a concrete barrier rail. Each directional travel way has both an inner and an outer shoulder of varying width, 8-12 feet. There are four freeway interchanges along the section. The heavy truck percentage is 6%.

Typical morning peak hour traffic volumes on US 395 are 3,347 vehicles per hour (vph) southbound and 2,179 vph northbound. The morning peak traffic periods are 5:00 AM to 12:00 PM in the southbound direction and 6:00 AM to 12:00 PM in the northbound direction. The afternoon peak hour volumes are 3,081 vph southbound and 4,611 vph northbound. The afternoon peak traffic periods are 12:00 PM to 7:00 PM in both directions.

US 395: between the McCarran Blvd I/C Exit 70 and Parr Blvd I/C Exit 71 (2019) ..... 86,500 AADT

US 395: 0.1 mile North of the Golden Valley Interchange Exit 73 (2017) ..... 74,500 AADT

US 395: 200 feet South of the Stead Interchange Exit 76 sign (2021) ..... 51,500 AADT

US 395: 0.4 miles North of the N/B on-ramp of the Parr Blvd I/C Exit 71 (2021) ..... 74,000 AADT

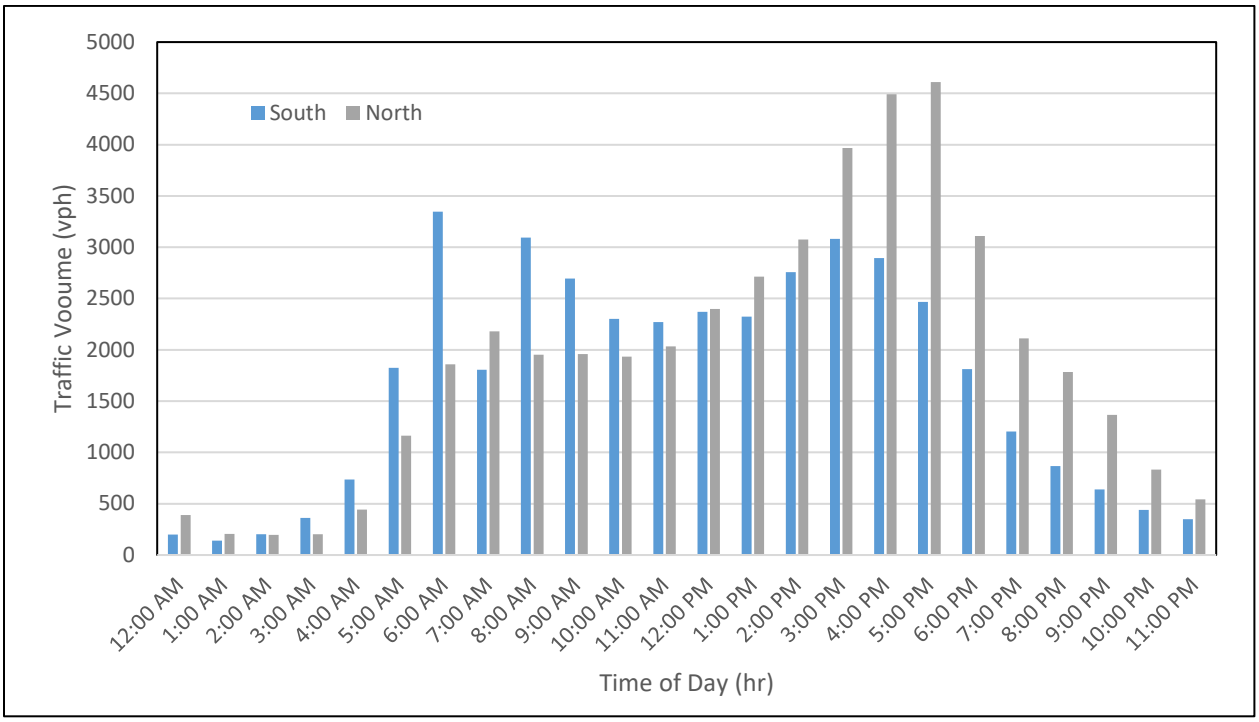

Figure 1: Typical Weekday Traffic Characteristics on US 395 (Between McCarran and Parr)

Traffic Operations Division recommends the following:

Southbound direction:

2 lanes recommended from 5:00 AM to 7:00 PM,

Northbound direction:

2 lanes recommended from 7:00 AM to 8:00 AM and 11:00 AM to 4:00 PM,

3 lanes recommended from 3:00 PM to 6:00 PM, where available.

North of Golden Valley Interchange

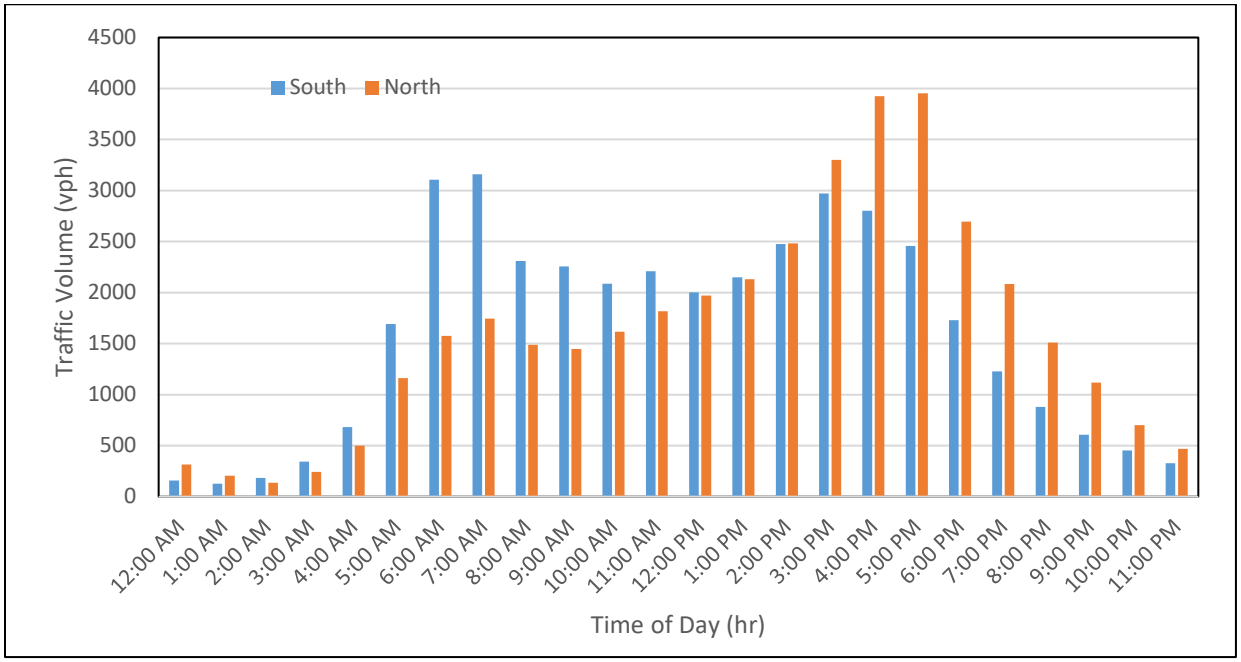

Figure 2: Typical Weekday Traffic Characteristics on US 395 (Between Golden Valley and Lemmon Valley)

One lane per direction should always be opened to traffic. Additionally,

Southbound direction:

2 lanes recommended from 6:00 AM to 7:00 PM.

Northbound direction:

2 lanes recommended from 7:00 AM to 8:00 AM and 10:00 AM to 8:00 PM.

Weekend Traffic Information (2017)

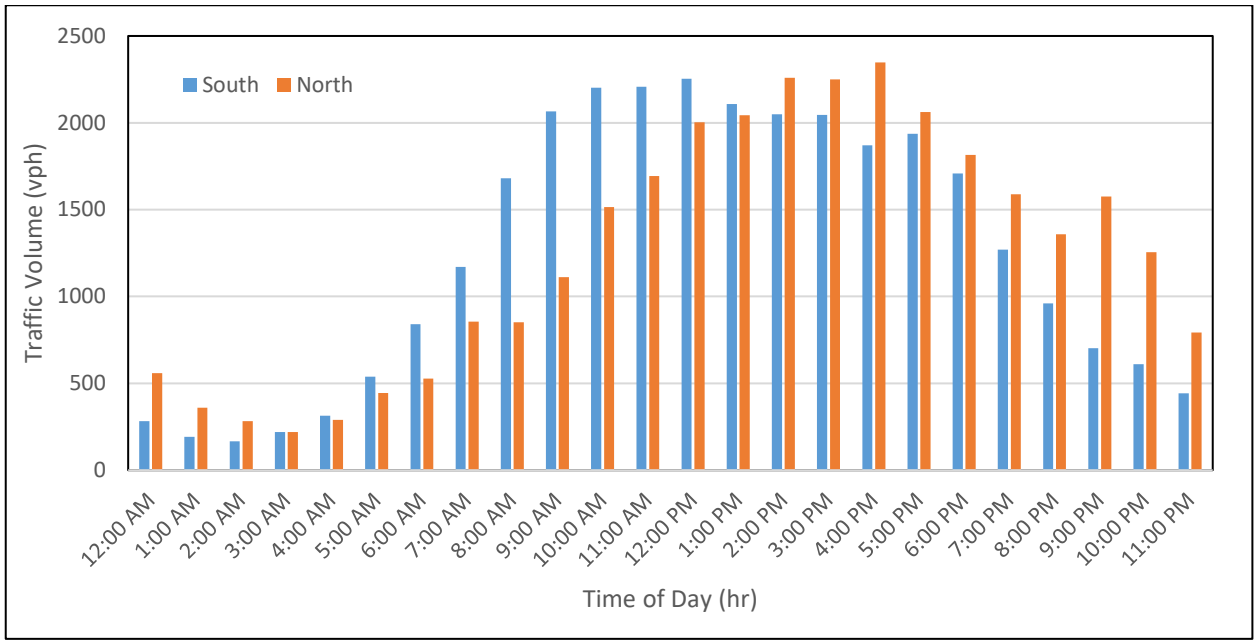

Figure 3: Typical Weekend Traffic Characteristics on US 395 (Between McCarran and Parr)

Southbound direction:

2 lanes recommended from 7:00 AM to 6:00 PM

Northbound direction:

2 lanes recommended from 10:00 AM to 6:00 PM

Stakeholder Concerns/Issues

Project stakeholders and organizations potentially affected by the project include:

- Nevada Department of Transportation
- Federal Highway Administration (FHWA)
- Union Pacific Railroad (UPRR)
- Nevada State Police: Division of Highway Patrol
- Washoe County
- Washoe County School District
- City of Reno
- Regional Transportation Commission Washoe (RTC Washoe)
- Desert Research Institute
- Truckee Meadows Community College (TMCC)
- Truckee Meadows Fire Protection District
- SPCA of Northern Nevada Shelter
- Local utility companies
- Emergency medical services
- Local law enforcement agencies
- Adjacent local and commercial businesses
- Adjacent residents

Stakeholder traffic concerns and issues, including those by the community and business representatives, known are:

- Delays to traffic
- Roadway and ramp closures and detours
- Construction noise impacts on residents adjacent to the roadway
- Inconvenience to access local businesses and residences

Work Zone Impacts Assessment Report

Qualitative Summary of Anticipated Work Zone Impacts

This work will have impacts on mobility. The construction is expected to use lane closures, shoulder closures, ramp closures, and flagging operations. There will be prolonged lane closures during roadway widening, bridge work, and retaining wall work. Directional mainline closures will only be performed during nighttime and off-peak traffic hours.

It is anticipated that the traveling public will experience longer commute times during construction even with the public outreach efforts implemented. Significant congestion may occur in locations adjacent to the project work area, especially during any daytime operations. Backups should be planned for by utilizing advanced signing, warnings on changeable message signs, and public notifications advising motorists to utilize alternate routes whenever possible.

Although the traffic volumes are expected to cause congestion and delays through the work zone, the work zone will operate safely and efficiently with implementation of advanced warning signs, DMS controlled by Reno Road Operations Center (ROC), CMS and notices to residents and businesses.

Project areas with a posted speed limit of 65 mph may reduce to 55 mph during construction, as directed. Speed reductions to include advanced warning signs and additional mitigation strategies to assist with compliance and promote safety and awareness.

A work zone impact assessment will be developed throughout construction. This ongoing assessment will include daily field surveys that monitor traffic mobility, evaluation of work safety records, and daily evaluation of stakeholder and public complaints. Upon review of the assessments, NDOT and the contractor may choose to modify the traffic control to improve deficiencies as appropriate.

Construction Approach/Phasing/Staging Strategies

This project will be completed using lump sum traffic control, submitted by the contractor and approved by the Resident Engineer.

A minimum of eighteen (18) changeable message signs shall be deployed to assist the traveling public during construction. Changeable message signs may be used for smart travel time system as directed.

Structures G-1748 N & S and G-1092 N & S are over railroad tracks. Coordination with UPRR is required as specified in section 107.08 of the special provisions.

A new traffic signal project at the Parr Blvd / Dandini Blvd interchange will be complete prior to construction of this project. Contact District II permit office at 775-834-8330 for any questions.

The use of traffic drums on US 395 are mandatory for tapers or shifts.

Flaggers are required for all truck ingress and egress locations, for cross street intersections, and when deemed necessary and directed for safety.

To enhance safety and conspicuity a minimum of six (6) trailer-mounted speed feedback signs and yellow flashing beacons placed on the W3-5A signs shall be used during approved speed reductions.

The temporary regulatory speed limit should not be left in effect beyond the daily hours of operations unless the conditions for which the speed reduction was implemented continues to exist, or channeling devices are required to route traffic through the work zone area.

The original regulatory speed limit shall be resumed by posting new signs at the end of the work zone for each direction of traffic.

Traffic control operations that take place at night, the use of portable overhead trailer mounted balloon lighting is mandatory as determined and specified in 625 of the Special Provisions.

Work Zone Impacts Management Strategies

A variety of management strategies may be deployed to minimize disruption to traffic and maintain a safe working environment. Suggested strategies to minimize impacts are documented in Table 1 (temporary traffic control), Table 2 (traffic operations control), and Table 3 (public information) as shown below:

Table 1- Temporary Traffic Control (TTC) Strategies

A. Control Strategies	B. Traffic Control Devices	C. Project Coordination, Contracting, and Innovative Construction Strategies
Construction phasing/staging Lane shifts or closures: ▪ Lane closures to provide worker safety ▪ Shoulder closures to provide worker safety ▪ Lane shift to shoulder/median to maintain number of lanes Ramp closures/relocation Night work Weekend work Work hour restrictions for peak travel Off-site detours/alternate routes	Temporary signs • Warning • Regulatory Changeable message signs Arrow panels Channelizing devices Flaggers and uniformed traffic control officers Lighting devices Balloon lighting	Project Coordination • Coordination with other projects • Utilities coordination • Right-of-Way coordination • Coordination with other transportation infrastructure

Table 2- Transportation Operations (TO)

A. Demand Management Strategies	B. Corridor/Network Management Strategies	C. Work Zone Safety Management Strategies	D. Traffic/Incident Management and Enforcement Strategies

	Emergency turnouts	Construction safety supervisors/inspectors TMP monitor/inspection team Team meetings Speed limit reduction Warning lights	Incident/emergency management coordinator Incident/emergency response plan Dedicated (paid) police presence Increased penalties for work zone violations

Table 3- Public Information (PI)

Press releases/media alerts (performed by Headquarters) as appropriate Coordination with media, schools, businesses, and/or emergency services as appropriate	Changeable Message Signs (CMS) Highway information network (web-based) 511 traveler information systems (wireless, handhelds) Social Media (Facebook, Twitter) Dynamic Speed Message Signs

Selected Alternative

The selected alternative for work will be completed using lump sum traffic control submitted by the contractor and approved by the Resident Engineer. Traffic control plans submitted by the contractor will be subject to the construction restrictions and limitations as written in the Special Provisions.

TMP Monitoring

Monitoring Requirements

The Resident Engineer will monitor the effectiveness of the TMP through general inspection and traffic control supervision. The NDOT Resident Engineer will document unforeseen events relevant to the TMP as well as lessons learned. If any relevant information is documented, it should be distributed to the TMP Project Manager.

Public Information and Outreach Plan

As appropriate, portable CMSs will be used to inform road users of traffic information, such as to alert drivers of possible delays, dates construction will occur, incidents, or alternate routes. The current plan is to deploy eighteen (18) CMS ten (10) days prior to construction activities.

NDOT also maintains work zone information for motorists on the 511 Traveler Information Line as well as on their website (http://www.nvroads.com). This project will be posted on the Traveler Information System.

Incident Management Plan

Incident management is the standardized procedure in place for the safe, efficient, and quick management of an incident zone from the time of incident to roadway clearance. Incident management will be handled by the 1st responder community. At each incident a 1st responder, known as the Incident Commander, will take authority over the management of incident zone. It is the responsibility of NDOT, the contractor, all subcontractors, and any consultants to defer to the Incident Commander until the incident area is clear. Guidelines for incident management are developed and adopted by local agencies as part of the local Traffic Incident Management (TIM) Coalition. For questions during an incident see the Incident Commander, for all other times contact TIM representatives Captain John Dondero at 775-687-9628 or at Jdondero@dps.state.nv.us. For NDOT maintenance participation contact Assistant District Engineer John Angel at 775-834-8300 or at jangel@dot.nv.gov.