

# US 395 Southern Sierra Corridor



## Traffic Safety Charrette US 50 to SR 88

Prepared for:



January 2006

Prepared by:

**PARSONS**  
www.parsons.com



Community Partners LLC  
www.suenewberry.com

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## 1. Overview

The Southern Sierra Corridor Study was initiated in August 2005, to determine the future transportation needs on US 395 from Clearview Drive in Carson City to the Nevada/California border. In conjunction with that effort, a traffic safety charrette was conducted between October and December, 2005. The term *charrette* is used to describe a series of events, including meetings, in which citizens and staff work together to define concerns, establish priorities, and develop solutions. The charrette was conducted to involve the public and other stakeholders in a process to identify concerns, priorities, and suggestions for the corridor that lies between U.S. 50 and SR 88.

Charrette activities included focus groups, a community workshop, a corridor field evaluation, data compilation and evaluation, analyses of input, and a community meeting at which recommendations were presented. A website established for the corridor study was used to provide information about the charrette and to invite electronic comment.

The charrette resulted in recommendations for specific projects that can be implemented within a three or four year timeline. These projects are divided into two categories. One category includes projects that qualify for the Nevada Department of Transportation's (NDOT) Safety Improvement program. This group includes projects that could be done using District II staff and funds. It also includes projects that will be done using available safety funds. The second category includes projects that must adhere to a project development process that is required by the Nevada State Legislature for transportation projects throughout the state. It will be necessary for an agency or individual to complete an application before any recommendation in this group is funded and constructed. Projects in this category compete for funding with other projects throughout the state.

The Traffic Safety Charrette addressed immediate concerns in one segment of the Southern Sierra Corridor Study area. The long-term suggestions that were offered by charrette participants will continue to be evaluated as the corridor study progresses.

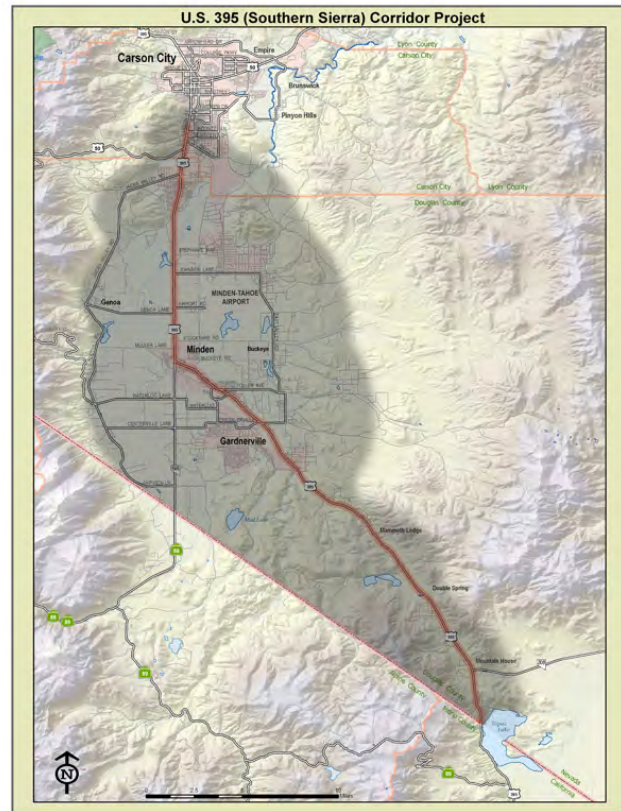


Figure 1. Southern Sierra Corridor Study area, See [www.douglascounty395.com](http://www.douglascounty395.com) for additional information.

## 2. Process

Input from stakeholders began early in the process and continued through the final meeting. Outreach included a presentation at the Good Government Committee, notices of both meetings mailed to Douglas County addresses within 1/4 miles of corridor between the Douglas County line and SR 88, and newspaper ads were placed in the Record Courier. The Saratoga Springs Homeowners Association and the Good Government Group included notices in their newsletters. The NDOT web site for Public Involvement included a posting for both meetings, and the project website, [www.douglascounty395.com](http://www.douglascounty395.com), included a notice of the final meeting.

### Focus Groups

Two group meetings focused on corridor growth and safety issues were held at NDOT headquarters on the afternoon of October 6, 2005. Each group was engaged in a facilitated discussion that invited their input on driver behavior, traffic concerns, and potential improvements in the corridor. Participants included Douglas County Sheriff and Planning Department representatives, members of various Conservation Districts, representatives from Carson City, the Town of Minden, Indian Hills General Improvement District, and the Federal Highway Administration. Detailed notes are provided in the Appendices. (Page 18)

### Community Workshop

On Saturday, October 15, 2005, approximately 34 people attended a workshop at the Carson Valley Middle School. Following introductions,

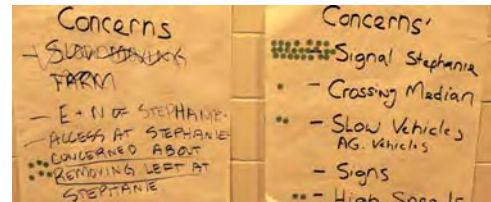
Figure 2. Community Workshop Process



After developing a list of concerns, participants viewed a series of slides.



People voted for their top seven concerns.



The audience gathered in groups to develop suggestions.



Each table presented their suggestions.

the audience viewed several background slides that explained the corridor study, the workshop agenda, and how the public input would be used. Participants then voiced their concerns about the corridor, which were listed on large pieces of paper and affixed to the wall. Additional slides featuring crash data, prior improvements, current challenges, and potential solutions were then shown. Participants then “voted” for their top seven concerns using sticky dots. A traffic signal at Stephanie was the top concern. A detailed list of concerns and the number of votes received are listed in the appendices. (Page 24)

The audience then gathered in groups to discuss possible solutions. When all groups were ready, they each presented their ideas. The Potential Solutions handout, a list of suggestions, written comments, and responses is provided in the appendices. (Page 25)

### Field Review

On November 15, 2005 a Corridor Evaluation Field Review was conducted. Participants included representatives from Parsons, NDOT, and FHWA. The group drove the corridor, stopping at selected locations to observe conditions. Objectives of the corridor evaluation were:

- Reduce the risk and severity of crashes that may be attributed to the existing road conditions by identifying potential safety improvements.
- From a road user’s viewpoint, identify confusing and/or misleading messages.
- Improve awareness of safe maintenance practices.
- Review the concerns and requests expressed at the Community Workshops held on 10/15/05

### Follow-up Meeting

A follow-up community meeting was conducted on December 14, 2005, at Minden Elementary School. A slide presentation explained how suggestions from the Community Workshop, focus groups, and the field review were analyzed and developed into recommendations. The presentation included information on how recommendations are implemented through the normal transportation planning process and through the NDOT safety improvement program.

### Website and Email

A project website for the corridor study is located at [www.douglascounty395.com](http://www.douglascounty395.com). Information regarding the traffic safety charrette meetings, input, and results were posted on the website. A weblog (blog) was used to invite public comment.. Comments received begin on page 35.



*Figure 3. Suggestions received during the Community Workshop were plotted on a corridor map for analyses and for public viewing at the follow-up meeting.*

### 3. Background, Suggestions and Recommendations

**Trends 2000 - 2004**

- Muller Ln to Plymouth Dr 65 MPH
  - # vehicles increased by 4,000 = 15%
  - # crashes decreased by 1 = -2%
- Plymouth Dr to Koontz Ln 45-55 MPH
  - # vehicles increased by 13,000 = 30%
  - # crashes increased by 46 = 45%

**Crash rate = Total crashes x 100 million divided by average vehicle miles traveled**

Figure 4

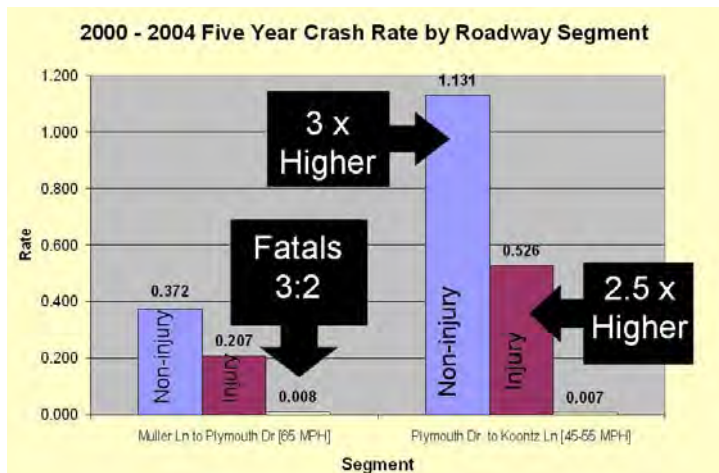


Figure 5

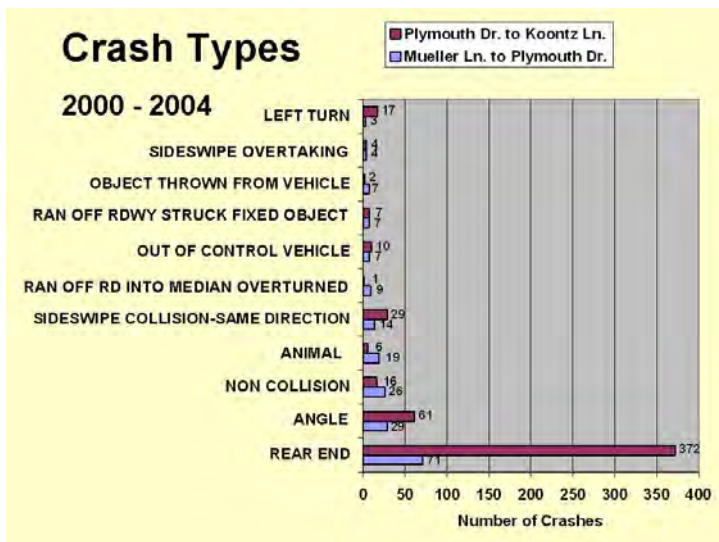


Figure 6

This section provides an overview of study area background, participant suggestions, engineering analyses of issues and input, and the resulting recommendations.

### Background

Figures 3-6 are slides that were presented during the October 15, 2005, Community Workshop to clarify the location and type of crash problem that is most prevalent in the corridor. NDOT Safety Engineering compiled and analyzed data using five years of traffic count and crash records. Their analyses divided the roadway into two segments based on operational characteristics.

As shown in Figure 4, traffic volumes increased in both roadway segments. There has been residential and commercial growth near the corridor. There are no parallel through routes, so all traffic uses US 395 for local and regional trips. Crash rates increased most in the Plymouth to Koontz segment, where there is a series of traffic signals. Figure 5 illustrates that injury and non-injury crash rates were several times greater in this segment.

Charrette participants focused primarily on the Muller Lane to Plymouth Drive segment, and in particular on Stephanie Way, site of a recent fatal crash caused by a left

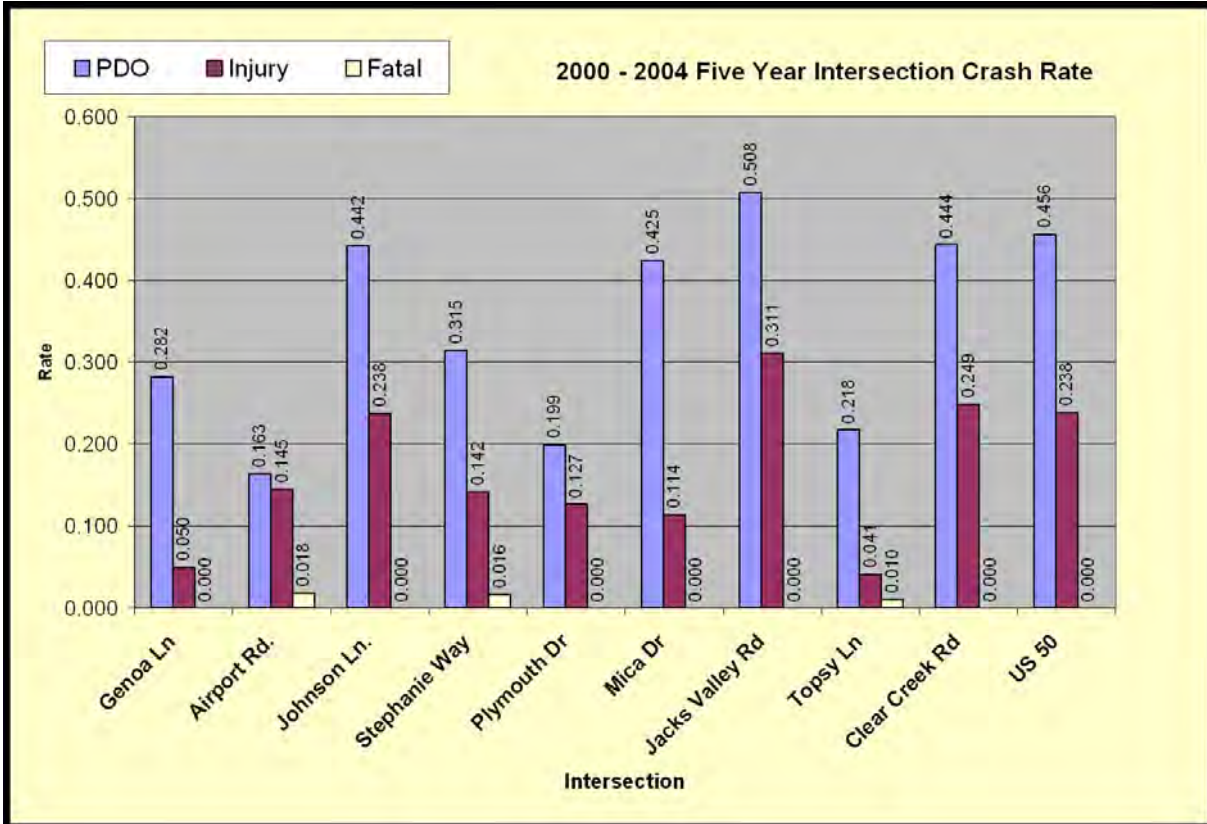


Figure 7. This slide illustrates that Johnson Lane, the only signalized intersection between Genoa Lane and Plymouth Drive, has a higher crash rate than the un-signalized intersections in that roadway segment. The intersections from Mica Drive to US 50 all are signalized.

turning vehicle. In this segment roadway departure crashes were prevalent. Some participants felt traffic signals were needed at numerous intersections in the corridor to alleviate the difficulty of entering the high-speed traffic from side streets, although some public comment received later in the process was in opposition to additional traffic signals in the corridor.

## Recommendations

Analyses of community input and technical data resulted in recommendations for specific projects within the corridor and at selected intersections. At the December 14, 2005, Community Meeting, a PowerPoint presentation was used to explain results and next steps.

### Median Barrier

Median barrier was suggested by charrette participants as a solution to crossover crashes. Cable barrier, shown in figure 8, is recommended for installation from Mica Drive to Muller Lane. Installation will require existing



Figure 8 A barrier using cables is recommended to reduce cross-over crashes.



median side slopes to be flattened and existing median openings should be reviewed for possible closure or relocation. Cost of the installation is estimated at \$1.2 million and implementation is expected to take 18 to 36 months from the time of NDOT approval and funding.

**Acceleration or Deceleration Lanes**

Charrette participants discussed the difficulty of entering and exiting the high-speed traffic. They suggested adding or extending acceleration or deceleration lanes at many of intersections and some driveways. During the field review, additional sites and lane changes were added to the list. The resulting recommendations were summarized for the Community Meeting as shown in Figure 9 and are discussed in more detail below.

Intersection	Acceleration	Deceleration
Clear Creek Rd	-	Add
Jacks Valley	Extend 3 lanes through intersection*	
Mica Drive	Add truck climbing lane to Sunridge	
S. Sunridge Dr.	Add	Add
RV Park	Add	Extend
Johnson Lane	Add	Existing
Genoa Lane	Add*	Existing
Muller Lane	No	No
Ironwood	No	No

\*Southbound; other additions are northbound

Figure 9. Summary of lane modifications recommended.

**Clear Creek Road**

A north-bound deceleration lane is recommended at Clear Creek Road to help reduce rear-end crashes occurring due to the increased delay on US 395. Cost is estimated at \$150,000. It would take 18 to 36 months to develop the project and install the lanes from the time of NDOT approval and funding.. The cost and implementation schedule would be greater if additional right-of-way is required.

**Jacks Valley Road**

Currently the right travel lane on southbound US 395 becomes a right-turn only lane at the intersection of Jacks Valley Road. The safety team recommended continuation of this lane through the intersection and ending south of the shopping center driveways. No cost was calculated for this improvement. It may be feasible to include this project when future development occurs.

**Mica Drive**

During the field review participants observed that when northbound trucks have to come to a complete stop for the signal at Mica/Sunridge Drive, their slow start-up speeds cause traffic to back up. It was recommended that Douglas County pursue a project with NDOT to construct a truck climbing lane from Mica Drive to Sunridge Drive. The lane would be designed to allow for a right-turn lane to serve the residential area access from Sunridge Drive. Cost is estimated at \$600,000 and implementation would take between 18 and 36 months from the time of NDOT approval and funding.

**South Sunridge Drive**

New home construction in this area has increased the number of vehicles turning into and out of



this street. Currently vehicles must enter the outside travel lane, posted for speeds of 55 mph, to travel northbound. Northbound traffic must reduce its speed within the northbound outside travel lane to make a right-turn onto South Sunridge Drive. It was recommended that Douglas County pursue a project with NDOT to add northbound acceleration and deceleration lanes to serve this traffic. Cost is estimated at \$400,000 and the project would take between 18 and 36 months to



*Figure 10. Modifications would better accommodate slow-moving traffic at the RV park.*

complete from the time of NDOT approval and funding.

#### RV Park

Large recreational vehicles (RVs) access a commercial site via a private driveway on US 395 near S. Sunridge. Due to the size of the vehicles, the distance needed to decelerate for the approach or accelerate into traffic,

longer long deceleration and acceleration lanes are needed. It was recommended that Douglas County pursue a project with NDOT to lengthen the deceleration lane, add an acceleration lane, and lengthen the southbound left-turn lane into the RV park. Cost is estimated at \$475,000. The project would take 18 to 36 months to complete from the time of NDOT approval and funding.

#### Johnson Lane

Charrette participants pointed out there is a need for an acceleration lane to facilitate traffic turning right from Johnson Lane onto US 395. To widen US 395 at this point, right-of-way is needed to relocate irrigation ditches and head gates. In addition, Johnson Lane should also be widened 14 feet to the north to allow for a right-turn lane. It was recommended Douglas County pursue a project with NDOT to make these changes. Cost is estimated at \$650,000. It would take an estimated 18 to 36 months to complete the project from the time of NDOT approval and funding, not including right-of-way acquisition.

#### Genoa Lane

Community Workshop participants suggested improving turning conditions at Genoa Lane. Douglas County could pursue a project with NDOT to lengthen the southbound deceleration and acceleration lane, and to lengthen the northbound left-turn lane. Cost is estimated at \$640,000 and implementation would take 18 to 36 months from the time of NDOT approval and funding.

#### Muller Lane and Ironwood

Participants also suggested lengthening and/or adding acceleration and deceleration lanes at these two intersections. However, they also suggested speeds need to be lower in this suburbanized area. Acceleration and deceleration lanes facilitate high speeds, and were therefore not recommended at these sites. Other changes to improve access and mobility may be appropriate and will be considered as the corridor study continues.

## Manage Access

Participants of the Community Workshop understood the need to manage the points where traffic enters and exits US 395. Some suggested eliminating or consolidating openings and moving traffic to grade-separated interchanges or newly constructed parallel routes. Some suggested retaining all openings. An Access Management Assessment is recommended. A detailed study would determine the number of approaches with median openings that should be combined, modified, or removed, and would allow time for staff to work with property owners to ensure their access needs are met. The could be completed by NDOT staff at a cost of about \$2,000 in 6 to 18 months from the time of NDOT approval and funding.

## Alternate Routes

Many suggestions for frontage roads and connections within existing county road systems were heard during the charrette process. Some suggested a new freeway alignment, while others envisioned new routes for local traffic that would preserve US 395 for regional traffic. The Traffic Safety Charrette resulted in recommended improvements over the next three to four years. Longer terms improvements, including the alternatives from the charrette, will continue to be considered as the corridor study progresses and additional public input is received.

## Corridor Speeds

During the workshop, many people spoke of the need for reduced speeds in the corridor. However, there are limited enforcement resources that can be dedicated to this specific corridor. An NDOT speed study conducted between Plymouth and Muller shows that 85% of vehicles are traveling at 68 mph, which is 3 mph over the 65 mph posted speed limit. Many people would prefer lower speeds, but research shows that reducing posted speed limits is not likely to change the travel speeds of many drivers unless the reduction is accompanied by heavy enforcement. A reduction in the speed limit is not recommended because it could therefore result in wider speed variance, which could increase crashes.

A speed study from Muller to SR 88 is recommended. The study would conduct an assessment of current travel speeds, access, visibility, design speed, and crashes to determine if the speed limit in this segment should be reduced. Completion of the study is expected within 6 months and will cost approximately \$1,000.

## Flashing Warning Lights

Some participants suggested warning lights at Johnson Lane should flash sooner. The timing of the lights is intended to alert the driver to the need to begin braking when the lights are



Figure 11. Flashing warning lights at Johnson Lane.

flashing. Drivers should know they do not have time to clear the intersection. No changes are recommended because a longer time could result in red-light running.

There were also suggestions for additional flashing warning lights at Stephanie Way and Johnson Lane to alert drivers to traffic merging into the left lane. The field review group observed that drivers at these locations are moving into the right lane to allow turning traffic to merge except during congested times. This indicates any reluctance to move over is not because the driver isn't aware of the condition. No change is recommended.

Some participants also suggested the use of flashing lights south of Muller Lane to alert drivers to reduced speeds. Research shows warning lights yield little change in speeds unless accompanied by ample enforcement. Other strategies to slow traffic in this area may be useful and will be considered as the corridor study progresses.

### **Rumble Strips / Wider Markings**

In addition to suggestions offered by the public, NDOT will initiate a project to install rumble strips on the inside and outside of shoulders from Topsy Lane south to Plymouth Drive. Rumble strips help avert roadway departure crashes and are already in place in the remainder of the charrette study area (US 50 to SR 88). The project is expected to be complete with six months at a cost of about \$25,000. In addition, NDOT will replace faded markings with 8" lines to improve visibility. Estimated cost is \$3,000 and the project should be complete within six months from the time of NDOT approval and funding.

## **Additional Recommendations at Intersections**

### **US 50 High "T"**

Members of the Field Review group suggested investigating the potential for converting the full signal at US 50 to a "high-T." There is potential for this treatment to improve traffic flow and reduce crashes. Detailed evaluation of the feasibility of this treatment is recommended. Estimated cost is \$30,000 and it would take six to eighteen months from the time of NDOT approval and funding.

### **Stephanie Way**

Stephanie Way is currently an un-signalized high "T" intersection. Participant suggestions for this location included a full-signal, a half-signal (High T), leaving it un-signalized, installing a dual lane roundabout, restricting movements, and providing grade-separated access. A signal received the most votes during the Community Workshop.



*Figure 12. Stephanie Way*

NDOT analyzed all of the alternatives and provided the technical data to the Douglas County Commissioners. Analyses indicated that although the intersection did not meet normal minimum



traffic count requirements, or warrants, it did meet a warrant for left-turn movements. Because a fatality involving a left-turn occurred at the intersection, this warrant was used to qualify the intersection for a half signal. Analyses showed that a full signal would increase crashes. A dual-lane roundabout may be feasible, but would have required a much longer time period for evaluation, design, and implementation. The Douglas County Commission supported provision of a half-signal at Stephanie Way. A project for installation of the signal has been initiated by NDOT, with Douglas County as a partner participating in the funding.

Grade-separated treatments such as overpasses or interchanges are long-term solutions that will continue to be evaluated as the corridor study explores how transportation need for the next 25 years can be met.

### **Johnson Lane**

Johnson Lane is a high “T” intersection with a half signal. Community Workshop participants suggested a full signal, extending the existing raised median, or providing a grade separated interchange.

A full signal would increase crashes and was not recommended. Engineers could not identify any benefits to extending the median, so this change was not recommended. Grade-separated treatments such as overpasses or interchanges are long-term solutions that will continue to be evaluated as the corridor study explores how transportation need for the next 25 years can be met.

### **Genoa Lane**

One suggestion at this location was to realign it with Airport Road and add a traffic signal. Others suggested a grade-separated overpass. These two long-term suggestions will continue to be considered as the corridor study progresses. The suggestion for lengthening the northbound left turn lane was included in recommendations and costs under Acceleration/Deceleration lanes.

### **Muller Lane**

The characteristics of the US 395 corridor become more suburban south of Muller Lane. Participants spoke of the need for a gateway, or entrance, into the Minden area that would alert motorists to the need to slow down. Their suggestions included using signs to slow drivers, or providing a traffic signal. The Consultant team suggested consideration of a roundabout at this site.

Figure 13 to 16 on the following page are slides that were used to explain some of the characteristics and benefits of roundabouts to the audience at the Community Meeting. Roundabouts are circular intersections with channelized approaches. They differ in many ways from the large traffic circles some people may have driven on the east coast. In Figure 13, a green circle in the center shows where a roundabout is being built to replace a traffic circle.



Figure 13

In a roundabout, entering traffic yields to circulating traffic. Speeds are controlled by the design, and generally range from 15 to 27 mph. Roundabouts can be single or multiple lane.

The primary benefit of roundabouts is improved safety. Single and multiple lane roundabouts have fewer crashes than signalized intersections. Overall severity of injury is less at roundabouts. The capacity of a roundabout is greater than that of a signalized intersection. Roundabouts can be aesthetically pleasing and are sometimes used to create a gateway, or entrance, to communities.

Roundabouts and other possibilities for Muller Lane will continue to be analyzed as long-term transportation needs in the entire corridor are analyzed.



Figure 14 The roundabout in Fig. 15 is replaced the above intersection.



Figure 15



Figure 16



### **Ironwood Drive**

Participants perceived Ironwood Drive as another site for reduced speeds and a possible gateway. Long-term suggestions will be considered as the project progresses.

A suggestion to eliminate the left turn from the Ironwood Center onto US 395 was made during the Field Review and is recommended for implementation. This change would reduce conflicts. NDOT will partner with Douglas County to work with affected parties to ensure access needs are met.

### **SR88**

A project has been developed to modify the free-flow right turn lane at this junction. The new design will force drivers to enter SR88 at reduced speeds. Long-term alternatives to enhance traffic flow and maximize capacity at this intersection will be considered as the corridor study progresses. Alternatives could include a roundabout.

### **Lucerne Street**

Although this street is outside the study area for the Traffic Safety Charrette, some participants suggested a traffic signal at this location. This suggestion will be considered during the development of long-term alternatives in the entire corridor.

## 4. Implementation

The Traffic Safety Charrette resulted in numerous recommendations to improve safety on US 395 between US50 and SR88 over the next three to four years. Strategies for implementation are dependent upon the type of process and available funding applicable to each recommendation.

Some recommended improvements qualify for the NDOT Safety Improvement program or as District II maintenance projects. These include:

- Median Barrier, Mica Drive to Muller Lane
- Rumble Strips, Topsy Lane to Plymouth Drive
- Restripe shoulders & lanes with 8” wide markings
- Access Management Assessment
- US 50 High T Feasibility Evaluation
- Speed Limit Evaluation: Muller to SR88
- Eliminate left turn lane at Ironwood
- Slower right turn lane, SR88

This group of projects will be prioritized and implemented by NDOT as funds are available. Project steps include securing funding, working with Douglas County and property owners, and scheduling the work.

Other projects, listed on the following page, must go through a Project Development Process as required by the Nevada Legislature. The flow chart below was used to summarize this process for the audience at the Community Meeting.

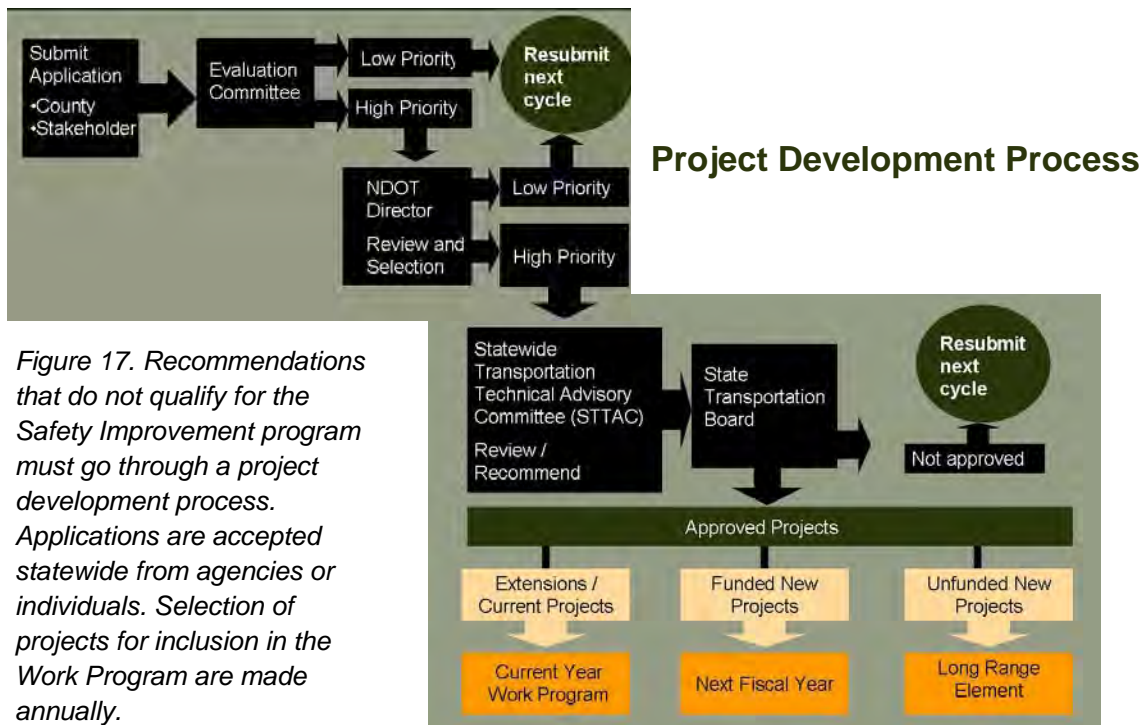


Figure 17. Recommendations that do not qualify for the Safety Improvement program must go through a project development process. Applications are accepted statewide from agencies or individuals. Selection of projects for inclusion in the Work Program are made annually.



Projects that must go through the project development process include:

- Acceleration / deceleration lanes
- Truck climbing lane Mica Drive to Sunridge
- Extend third lane past Jacks Valley Road
- Install half signal at Stephanie Way
- Lengthen right turn pocket on Johnson Lane
- Lengthen left turn pocket at Genoa Lane

A project application for the half signal at Stephanie Lane has been completed. Local funding participation assures this project is a high priority. The other projects will require Douglas County and/or individuals to submit an application for a transportation system project. Information and applications are available from the Program Development Office, 775-888-7122.

## Summary

The Traffic Safety Charrette focused on one segment of a corridor that extends from the California border to the southern end of Carson City. It resulted in a list of projects that will be pursued by NDOT, and a list of projects that will require further action by a local agency or individual to be considered for programming and funding. It also resulted in some suggestions for long-term improvements in the corridor. These suggestions will receive additional consideration as work on the Southern Sierra Corridor Study continues.





# Appendices



**US 395 Southern Sierra Corridor  
Focus Group Meetings  
October 6, 2005  
Notes**

Two group meetings were held at NDOT headquarters on the afternoon of October 6, 2005. P.D. Kiser gave a brief overview of the corridor study at the beginning of each meeting. Coy Peacock explained his role and NDOT goals to participants. Sue Newberry facilitated both meetings by asking open-ended questions and inviting each participant to respond. Questions and comments from P.D., Sue, and Coy are italicized. Responses are summarized anonymously.

**GROUP 1**

Attendees:

Jeff Fultz and Mimi Moss, Douglas County Planning  
Steven Orr, Douglas County Sheriff  
Phone comment by Jerry Seevers, Nevada Highway Patrol

*What do you know about this corridor? What is most noticeable?*

- The major increase in usage has been most noticed. 65% increase in a bedroom community. The corridor is packed at 10:30 at night. Increased use and less respect for law enforcement and speed limits. Average speed is, in my opinion, 80-85 mph on the open highway. Drivers show lack of concern or responsibility for others or consequences. Citations don't change behavior.
- 395 is NHP jurisdiction, so they investigate. Sheriff supports, backs up NHP. Non-injury accidents are handled cooperatively. Not the Sheriff's primary patrol area. Enforcement on 395 means officers are not patrolling neighborhoods.
- I live in Carson and drive the corridor twice a day. Most notable is the increase in traffic volumes. When they changed to four lanes, I didn't think they were necessary. The capacity is being eaten up. We need an overpass at Johnson Lane, to keep capacity. A signal is frightening because of high speeds on the approach.
- The median doesn't stop traffic from crossing over. An office colleague was hit by a wheel coming across the median. But drainage is a problem.

*In Utah, they used a cable barrier and had a fair amount of success in redirecting crashes and to absorb force of impact. Cable barriers are less costly and accommodate drainage.*

- Another thought about capturing vehicles is what they use for runaway truck ramps.
- I use 88 more than 395, but you don't have many breaks in traffic; it is a constant flow. People are impatient on the crossroads; they figure people will slow down for them. They miscalculate speeds. Overpasses would really help. We only have a few roads that get you to 395. People don't want to wait. Drivers are impatient. My husband was hit.
- People are upset with you if you drive the speed limit.
- Drivers feel entitled to high speeds.
- The road looks and feels like a freeway and people get a sense of security. Yet we have at-grade intersections. There's a conflict about what the road wants to be. At 50-60,000 vehicles per day, there will be



problems.

*Should speeds be higher or lower for the roadway today?*

- The road is continuing to evolve. Unless there's a stop light at every intersection, there should be a free-way.
- I think the sign is posted appropriately. People drive 70-75.
- Upgrade 395 to a controlled-access 6-lane freeway (3 in each direction, no at grade intersections).

*What should be the priority?*

- Overpasses at Johnson and Stephanie. NDOT Crisis Mitigation Team has been meeting for four years, but has resulted only in a light at Mott. Almost a complete waste of time. Action is most important.
- Land is getting more expensive by the minute. We should acquire land for overpasses right now. Then we should add a lane and build overpasses. It would be much cheaper than a completely new route.
- Median openings are not a problem.
- Improving this corridor will be much better than building a new one.
- Maybe you could connect Topsy and Plymouth Drive. Everyone uses it now, including commercial uses. An alternate route would accommodate Sunridge people.
- The new Muller extension will help traffic in town.
- Residents don't like truck traffic through town.

*There has been not much increase in traffic crossing the state line either on 88 or 395. Traffic increases are toward the north.*

- Traffic is internal to the valley, because there are no alternate routes. My concern is also the industrial users on Johnson or Airport.
- There is so much pressure along the corridor to develop, we should acquire right-of-way for frontage road now.
- We're looking to be built out in 15 years.

*Are there any changes being considered for the Master Plan?*

- No changes are being considered, even though we get a lot of pressure from outside developers. Indian and BIA developments can continue cause growth in the southern part of the corridor. The current master plan allows 3-4,000 new units at 395 and 208.
- There has been some discussion about several hundred acres on Johnson Lane.
- Our transportation plan only considers collector and higher level streets. It does not plan for local roads and connections.
-



- One of the other things, Ironwood was always supposed to have a traffic signal.

*Based on data, Ironwood needs a signal more than Stephanie.*

- In crash mitigation meetings, we suggested access management at Ironwood. With the new section, control makes even more sense.

*What about other sections of 395?*

- You'll hear from residents that they want to slow traffic through town. Limit access with a center median. They support slower speeds so people can find business and turn into parking areas.
- Posted speed is 25, most people go 35-45. Lots of rear-enders. People leaving businesses can't find a gap. Speeding, reckless driving are the biggest complaint. Biggest complaint on the whole corridor is speeding. Reckless driving and crossing center line are next biggest complaints.
- Towns want to have landscaped medians to slow traffic. But where is the truck traffic going to go?
- Businesses want to create an environment where people will want to shop, but through drivers want an express route. Muller Blvd. is not going to be a truck route.

*Do you think people will be surprised that there is no plan for 395?*

- I don't know.

*What shouldn't we forget to look at?*

- Overpasses.
- 395 has a paved shoulder we use as a bike lane. We have a tandem bike but don't like to ride on 395.
- There was supposed to be a separated bike trail, but it was removed from the state plan.
- Cycling in Minden and Gardnerville is unsafe. You will probably hear from local bicycle and pedestrian people.
- The ladder bars installed through town are really great for pedestrians.
- Things have changed a lot.
- Even in Carson City you are forced to slow down. It does slow people down.

**GROUP 2**

Attendees

Mike Sarman, Carson Valley Conservation District

Paul Williams, Indian Hills General Improvement District

Arnold Settlemeyer, Landowner

James Settlemeyer, Carson Valley Conservation District

Greg Hill, Town of Minden

Andrew Soderburg, Federal Highway Administration (FHWA)

Andy Burnham, Carson City Community Development



Michael Dulude, Carson City/CAMPO Regional Transportation  
Tim Seward, General Counsel, Washoe Tribe

*Our target year is 2030. What are the biggest concerns right now?*

- Future growth will mostly be an issue, especially commercial growth. We'll need more roads.
- We used to drive cattle down this road from one to the other. Worked on a couple of Master Plans. East valley bypass or 5000' bypass. Safety and growth and ever increasing traffic. Agricultural owners are worried because we're the cheapest land in the valley, so that's where you build the roads. In 1986 we lost 60 acres. We need to do some serious planning because we can't even imagine the growth. Even Smith Valley and Little Walker are growing rapidly.
- I've heard a lot of ideas over the years, where there's smoke there might be fire. I'm concern about how increasing traffic impacts agricultural interests. NDOT should contact landowners about projects, to contact them specifically about construction projects that will affect local agriculture. Like pedestrians, we want as much width beside the road as possible, to drive equipment that only goes 13-15 miles per hour.
- If you divide a road, you own the fence and a lot of other problems.
- In the Town of Minden, our main concerns are speed and safety. We're right where speeds go from 65 to 35. Our population will probably double in two years. We need a signal at Ironwood because of high speeds. County Road is another concern because of the swim center and high school. The town board is not really sold on a roundabout. Highway 88 is getting busier, so how is a roundabout going to work?
- A lot of people will cut through subdivisions to avoid congestion, putting pressure on subdivisions. A lot of people will avoid Ironwood to come out on County Road. Rush hour is the biggest problem.
- Minden has about 3000 residents, about 1100 homes, and 800 approved for construction. A little commercial growth along 395. We're not incorporated so we rely on the County for planning.
- I've only been here since January, but I have talked to some trucking agencies. They have real concerns about the merging affects on the grade from Hwy 50 up to Topsy Lane, because of the trap lanes. In 20 years, I'd like to see a good range of alternate transportation, such as public transit.
- One of the big concerns we have is safety. As part of the National Highway System (NHS), 395 has higher priority for funding. We are concerned about regional traffic as well as local. Local crashes need examination. We're concerned about the interface between Carson and Douglas County. How can we circulate the traffic in the commercial areas (Topsy Lane)? We have some concerns with the tribe south of Gardnerville. We deal with the tribe as a separate nation. Having a say in what happens means that the public decides what's best. People should have a voice in what's happening. It might mean making some concessions. I want to make sure that these are the philosophies.
- Indian Hills thinks timing on the Mica signal sucks. Foothill acts as an alternate route when 395 is closed, but can't handle the traffic. You're making the same mistake everyone does: using the federal highway for local traffic.
- I drive from Minden every day. Our future model says Indian Hills fails unless we do something about it. Maybe the solution is to have alternate routes. BLM sales are causing significant commercial growth. New subdivisions also cause growth. Alternate transportation systems are really needed. How are you



going to move all the traffic? We also need to address the accidents. We have a significant problem. Additional alternate routes make sense. We want to make sure our community has a voice, through public workshops and meetings.

- The (Washoe) Tribe is concerned about how their property would be affected by the highway. The tribe is troubled about the alignment of the southern portion of the bypass, right along the property line. We are concerned about alternate alignments and how they will affect us. Access and traffic safety are also concerns. We want to make sure that the solutions will not lay the burden on the tribal lands. We have lands on both ends of the corridor along the highway. High speeds are a problem, creating safety problems. The southern part of the corridor can be dangerous, people are afraid.

*Will lands continue to be agricultural?*

- Look at south Reno. Economic reality: land values and liability. Laws force premature development due to estate taxes. There are a couple of local land conservancies. The valuation method is not close enough to make it attractive. Decisions about right of way really impact land owners. We want a highway, but not in our back yard. We have A-19 zoning, but people are working the system to get smaller and smaller parcels. If “No Growth” gets passed, we’ve got 65,000 acres of private Indian allotments that local planners have no control over. The tribe has its own master plan.
- If we don’t build in the valley floor, there’s a lot of private land in the Pine Nuts. The growth will occur and it will impact the county. Tax by the IRS is on highest and best use, not by current zoning restriction or use.
- I’m worried about the bottleneck at the south end of the corridor. People don’t want to go to shops in Gardnerville because access is almost impossible. Everyone is agreeing, there’s just no way it can go on the east side, it has to go down the west side, affecting owners and the tribe.
- Greatest potential growth is in the south corridor and some in Indian Hills. Dropping the mid-valley arterial was a mistake. The Hayborn alignment looks pretty good. It could take a lot of traffic off 395, even if two lanes.
- I don’t want condemnation. In California, it’s much more land-owner friendly.
- At one time, Douglas and Carson discussed an alternate corridor alignment behind Prison Hill. It was a good idea.
- I would put a two lane road on the east side using the old McCarran bridge. There are some 300’ rights-of-way. Ties into Vickie.
- South of Gardnerville, cross valley circulation sucks. You can drive East Valley from Stephanie to Buckeye.
- We need to consider access management. Many times you can improve roadways by managing access better. You can improve safety. I’m really glad to hear how discussions are going. We talked a little about federal and public land. When you’re going through the process of locating a roadway, parkland has a different status than private land. If you have a road, you generally avoid parkland at all costs. Conservation easements sound like an attractive tool.
- The tribe looked very hard at turn pockets for access. The cost was several hundred thousand dollars. We heard that ten people have to die before turn lanes are added. People don’t like that.



# US 395 Southern Sierra Corridor Study

## October 15, 2005 Traffic Safety Workshop

### Public Process Report

This workshop is the first in a series of public involvement events that will be conducted during the Corridor Study. The first two events focus on traffic safety concerns on US 395 from US50 to SR88. The workshop was hosted by NDOT at the Carson Valley Middle School in the multi-purpose room. NDOT staff and the Parsons Consultant team were present. Thirty-four citizens participated.

The meeting was opened by Coy Peacock, the Project Manager for the Corridor Study. He introduced Susan Martinovich, Deputy Director of NDOT, who welcomed attendees. Ms. Martinovich explained that NDOT was interested in understanding what is important to the community and in the community understanding NDOT's constraints and requirements. She turned the meeting over to the Parsons' facilitator, Sue Newberry.

### Workshop Activities

Ms. Newberry began by showing several background slides that explained the corridor study, the agenda for the workshop, and how the public input will be used. She then asked participants to share their concerns about the corridor with the group. Concerns were recorded as bullet points on flip charts, then posted on the wall.

After all concerns cited by the audience were listed, Ms. Newberry presented a series of slides that included crash data, prior improvements, current challenges, and potential solutions. Following the presentation, participants were invited to "vote" for their top seven concerns using sticky dots. See Table 1 on the following page for results.



Votes	Item
24	Signal at Stephanie
21	Install full signal instead of half signal
15	Safe solution for Stephanie
14	Traffic plan needs to be twenty years in the future
14	Enforcement
13	Median barrier
11	Uniform treatment of 395 intersections
9	Growth slowed or stopped until problems solved
8	Acceleration lanes should be uniform
7	Frontage roads
7	Lower speed limit
6	Increase resources for additional sheriff enforcement
6	Limited access freeway
6	Don't remove left turns at Stephanie
5	Acceleration lane length
4	Public education on High-T use
4	Preserve Ag qualities
4	Long term solutions
3	Overpass
3	Mobility
3	Have new development pay for these traffic improvements
3	Build freeway on East Valley Road
3	Alternate routes
3	Add Douglas County gas tax to help pay for improvements
2	Slow Ag vehicles
2	Sight distance in commercial areas
2	Short term solutions
2	Senior drivers
2	People not courteous
2	Inattention by drivers
2	High speeds
4	Fly-over
2	Better signs such as slow traffic keep right
2	Automated enforcement
1	Speed limits close to town
1	HOV lane
1	Crossing median
0	Add lanes
0	Signs
0	Red light running
0	No stop signs and lights on 395
0	Don't increase speed limit in business areas

TABLE 1





## Group Table Discussions

Participants then gathered at tables where handouts summarizing potential solutions, maps of the corridor, and crash data were available. NDOT Safety Engineering provided crash data tables for the intersections between SR50 and Muller Lane. The maps were aerial images by roadway segment::

- Koontz Lane to South of Mica Drive
- South of Mica Drive to Stephanie
- South of Stephanie to Airport Rd
- South of Airport Rd to Buckeye Rd.

Groups worked together to determine their priorities and suggestions. After working in groups for about 45 minutes, each table presented its findings. Subsequent groups did not repeat previously presented findings. The summarized list illustrates that not all groups agreed on the treatments suggested. For example, some preferred a half-signal to a full signal at Stephanie Lane. The list of suggestions compiled by location is followed by the detailed input provided by the groups and information shown on their maps.

## Suggestions by Location

### Overall Corridor

Short - Mid Term:

- Install barrier medians (cable rail suggested) throughout corridor
- Redesign ditch
- Reduce posted speed limit
- 45 mph north of Muller
- Improve flashing/merging signs for southbound traffic
- Make acceleration and deceleration lanes uniform at all intersections
- Increase enforcement efforts
- Implement education campaign

Long Term:

- Frontage roads: US 395 becomes freeway
- Several access roads could share one or more overpasses
- Connection road to Minden other than US 395
- Relocate US 395 to facilitate through travel
- Make US 395 into a six-lane freeway with overpasses

### Mica Drive

- Add northbound and southbound acceleration lanes

### Plymouth/S. Sunridge to Stephanie

- Create left turn acceleration lane out of RV park
- Lengthen southbound left turn pocket into RV park
- Provide acceleration lane northbound from RV park
- Provide deceleration lane for S. Sunridge
- Close all median openings between these two streets
- Provide northbound acceleration lane from Sunridge
- Extend northbound deceleration lane into Sunridge
- Provide full signal at Sunridge



- Close RV park access to US 395 and provide alternative access to S. Sunridge
- Provide frontage road west of US 395 that ties into future interchange at Stephanie

#### **Stephanie Lane**

- Full traffic signal
- Coordinate timing with Johnson Lane
- Signalized High “T”
- Half traffic signal
- Extend northbound and southbound acceleration lanes
- Extend deceleration lane to RV park
- Add flashing / merge signs
- Multi-lane roundabout
- Interchange / flyover / overpass

#### **Johnson Lane**

- Adjust advance warning lights to come on sooner
- Turn half signal into full signal
- Extend acceleration lane
- Extend raised median
- Add northbound acceleration lane
- Impose a gas tax to pay for an overpass

#### **Airport Road**

- Extend deceleration lane
- Improve northbound acceleration lane
- Make this a right-in / right-out only (no left turns allowed)
- Provide frontage road to Johnson Lane on east side of US 395 using ranch access road
- Preserve ranch access
- Provide parallel north/south route on ranch access north of Airport Rd with Gersh Lane south of Airport Road.
- Connect Heybourne Road segments
- Provide ranch overpass

#### **Genoa Lane**

- Extend deceleration lane
- Provide northbound and southbound acceleration lanes
- Lengthen northbound left turn lane
- Add flashing warning lights
- Realign with Airport Road and provide traffic signal
- Connect to flyover/overpass
- Provide overpass

#### **Stockyard Road**

- Reduce posted speed to 55 mph ½ mile north of this intersection

#### **Muller Lane**



- Reduce posted speed to 35 mph (both directions)
- Reduce posted speed to 45 mph (both directions)
- Provide flashing warning lights for reduced speeds
- Provide acceleration and deceleration lanes
- Traffic calming sign directed to southbound traffic before intersection
- Traffic calming treatments from Muller to bridge on SR 88
- Welcome and speed limit signal from bridge at river to SR 88
- Install traffic signal; coordinate with SR88
- Provide connection from Ironwood subdivision to Muller Lane

#### **Ironwood Drive**

- Add northbound acceleration lane
- Add “welcome” and reduced speed limit signs
- Prune vegetation to improve line of sight

#### **SR88**

No suggestions

#### **Lucerne Street**

- Install traffic signal

## **Group Presentations**

### **Group 1**

Short-term solutions:

- Increase the length of time that amber lights at Johnson come on before light changes
- Install signal at Stephanie in 2005: Half a signal light would be good compromise
- Step up enforcement efforts: Ticket high-risk activities with high-cost tickets. Target and publicize high-risk activities
- Step up education efforts, add signage: Differentiate between locals and visitors for education. Signage for merging traffic is important because locals don’t understand the high-T. Bridge to Muller Lane should promote “town driving habits” using traffic calming.
- Left turn control: Do we want this treatment at other intersections? County employees are not allowed to make left Airport Road, required to drive around.
- From Muller Lane south to bridge should be a “downtown driving area”, needs traffic calming method
- There should be a big “welcome” sign with a prominently posted speed limit sign. That would help problems around Ironwood

Long-term solutions:

- Alternate route: Current location of 395 is not optimal; we need to relocate the route for through traffic
- Two access roads, such as Johnson and Stephanie, or Airport and Genoa, could share one overpass, using frontage roads to connect
- Make 395 a six-lane freeway

### **Group 2**

Short-term goals:



- Install a half-signal at Stephanie.
- More enforcement. Cut down on speeding
- A slower speed limit
- Southbound amber warning lights at Johnson need to come on earlier
- Stephanie warning lights are on all the time so people ignore them

Long-term:

- Develop alternate route for 395
- Overpasses with 6-lane freeway

### Group 3

- Install acceleration/deceleration at Silver City
- Lower speed limits
- A half-light at Stephanie
- Merge signs
- Extend acceleration/deceleration lanes
- At Johnson Lane, extend median barriers and acceleration lanes
- Airport Road, better acceleration lane north bound, or flyovers
- Flashing lights for merging traffic
- Slow down traffic sooner southbound into town: 35 mph past Muller Lane
- Coordinate lights at 88 and Muller Lane

### Group 4

- Full traffic light at Stephanie to create gaps in traffic to ease access at points south and eliminate merging hazard
- Coordinate light with adjacent signal
- Johnson Lane should be a full signal
- Median barrier along full length of corridor.
- Currently road slopes toward median because drainage engineered that way (and vehicles can) become airborne
- Considered lowering speed to 55, but there needs to be additional enforcement
- County commissioners increased officers by 50% (but only 6 total officers)
- NHP has only 13 officers in Northern Nevada, they are short-handed
- We have sign ordinances in Douglas County so we cannot use signs like in Pleasant Valley.

Long Term:

- Frontage Road with freeway
- Multiple-lane roundabout alternative
- Realign Genoa Lane and Airport: join by a frontage road, like Riverview and Pine Nut, so one signal could cover both.

### Group 5

- Concerned about access from Airport Road, since more businesses are going in there
- Median barriers should be cable because it's more cost effective
- Lower the speed limit
- Add/lengthen acceleration/deceleration lanes



- Signals as mentioned by other groups

**Group 6**

- Everything north of Muller should be 45
- Reduce access points by adding frontage roads
- Signal at Stephanie could be half or full signal
- Gas tax could pay for overpass at Johnson Lane
- Frontage roads could handle local traffic

**Information noted on maps:**

Map #1 – Aerial coverage – South of Mica Drive to Stephanie

Map #2 – Aerial coverage – South of Stephanie to Airport Rd

Map #3 – Aerial coverage – South of Airport Rd to Buckeye Rd

North End Map – Aerial coverage - Koontz to South of Mica Drive

**RED GROUP**

**#1 South of Mica Drive to Stephanie**

- Full traffic light at Stephanie (no merging hazard)
- Coordinate light with adjacent signal
- Creates break in traffic. Clearance interval.

Long Term

- Frontage road with freeway
- Multiple-lane roundabout alternative

**#2 South of Stephanie to Airport Rd**

- Full light at Johnson Lane
- Throughout the 395 Corridor – median barrier

Long Term

- Realign Genoa with Airport
- Add a signal at Airport.

**GREEN GROUP**

**#1 South of Mica Drive to Stephanie**

- Extend accel lane from Stephanie.
- Signalized high T

**#2 South of Stephanie to Airport Rd**

- Connection road to Minden other than Hwy 395.

**#3 South of Airport Rd to Buckeye Rd**

- Install cable median barrier – lessen ditch

**GROUP #3**

**#1 South of Mica Drive to Stephanie**

- Extend accel lane out of Stephanie N & S.
- Stephanie: Short Term

½ light

Extend all accel/decel lanes



New flashing/merge signs

Long Term

Interchange –flyover

- Lengthen existing decel lane to RV park
- Create left turn accel lane out of RV park
- Lengthen turning lane into RV southbound
- Accel lane for RV park
- Decel lane for Sunridge
- Change speed limits if no improvements are made

**#2 South of Stephanie to Airport Rd**

- Extend decel coming into Airport Road
- Better accel lane going N. from Airport Road
- Improve flashing/merging signage southbound on 395.

Long Term

- Fly-over – overpass – connecting to Genoa Lane
- Extend accel lane out of Johnson Lane
- Extend raised median by Johnson Lane
- New accel lane going N. from Johnson Lane

**#3 South of Airport Rd to Buckeye Rd**

- Future light at Lucerne
- Reduce speed limit to 35 mph from SR88 to Muller (both directions)
- Future light at Muller Lane
- ½ mile N. of Stockyard Road – lower speed limit to 55 mph
- Muller to Stockyard, reduce speed limit (both directions) to 45 mph w/ flashing warning lights
- New accel/decel lanes at Muller
- Eastbound to northbound accel lane (on US 395) out of Ironwood

Short Term at Genoa Lane

- Extend decel and a new accel lane northbound and southbound
- Flashing lights
- Lengthen left turn lane northbound

**YELLOW GROUP**

**#1 South of Mica Drive to Stephanie**

- Overpass at Stephanie
- Frontage road along 395 from Stephanie to Sunridge – close all median openings between these two streets
- Look at cable barriers – some sight breaks
- Cable barrier or R in R out
- Full signal at Sunridge
- Accel lane northbound out of Sunridge
- Decel lane southbound into Sunridge (longer left turn lane)
- Close RV park access to US 395 and provide alternative access to Sunridge
- Close all property access to US 395 between Sunridge/Plymouth and Stephanie and provide a



frontage road west of US 395 in this section that ties into a future interchange at Stephanie.

### #2 South of Stephanie to Airport Rd

- Airport Road – R in / R out only
- Frontage to Johnson Lane (east of US 395) using ranch access road
- Ranch access to Johnson – leave some R-in/R-out with accel/decal close through movements
- Line up ranch access (runs N/S behind Don Bently’s home) north of Airport Road with Gersh Lane (south of Airport Road) to provide a N/S parallel route to US 395

### #3 South of Airport Rd to Buckeye Rd

- Muller – full signal – town entrance
- At airport – ranch over pass
- Genoa Lane – overpass
- Ironwood subdivision connection to Muller – one-way out
- Full signal at Lucerne
- Ranch access parallel 395
- Heybourne connection to Airport

## **BLUE GROUP**

### #1 South of Mica Drive to Stephanie

- ½ light at Stephanie Way like Johnson Lane

### #3 South of Airport Rd to Buckeye Rd

- Just before Muller Lane – want a traffic “calming” sign
- Town driving habits
- Welcome sign and speed limit signs all the way to bridge at the river on SR88

### Northend Map

- Mica - Accel lanes N & S bound
- Plymouth & Sunridge - Accel lanes N & S bound
- Accel lanes to all be longer and uniform in each intersection.
- Accel lane out of R.V. park

## **Written Questions and Comments from Participants**

- Is it effective to put slower speeds before traffic signals?
- How do statistics for Johnson Lane compare with the SR 88 intersection?
- I understand one of the options is to eliminate left turns at the Stephanie/395 intersection. This should not be an option because
- This would put excessive pressure on the Johnson Lane intersection
- This would create huge traffic problems on the whole Johnson Lane corridor
- Add additional travel time to those living on Stephanie as well as those north and south of Stephanie.
- Short term we either need a stoplight or build an overpass between Stephanie & Johnson so that traffic is not slowed on 395. It seems one overpass such as the one in Washoe Valley would solve all concerned. This overpass set between Johnson Land and Stephanie would efficiently move traffic the whole area.
- Median barrier throughout the 395 corridor between Minden and Plymouth



- This would create huge traffic problems on the whole Johnson Lane corridor
- Add additional travel time to those living on Stephanie as well as those north and south of Stephanie.
- Short term we either need a stoplight or build an overpass between Stephanie & Johnson so that traffic is not slowed on 395. It seems one overpass such as the one in Washoe Valley would solve all concerned. This overpass set between Johnson Land and Stephanie would efficiently move traffic the whole area.
- Median barrier throughout the 395 corridor between Minden and Plymouth
- NDOT needs to have approximate costs of proposed projects, including traffic signals, cable barriers, overpasses, etc.
- NDOT needs to advise amount budgeted annually and for what.
- Have respect for the need for business productivity. 32,000 vehicles a day move between Carson and Minden. Productivity is a government economic concern. Medium- to long-term solution must consider maximum-speed freeway with limited access, and the best way to achieve that in the corridor is a frontage road (two-way) for access to all neighborhoods and industry areas.
- Too few people (at the workshop) to make such important decisions. Evening sessions draw better. (Douglas County Master Plan meetings attracted hundreds in aggregate.)
- Too little interest in multiple-lane roundabouts as a short-term solution. They work in Europe on high-speed highways, why not here? NDOT is erroneously focused on single-lane roundabouts. The above-stated solution requires driver education by DMV on how to drive a roundabout.
- (The workshop was) well coordinated, chance for all to express opinions.
- Short-term: half-signal or full signal with platooning; speeds 55 vs. 65?
- Frontage roads to reduce the number of access points
- East side: access to Heybourne
- West side: focus on ranch access frontage
- Plymouth North: 45 mph collector
- Muller South: "in town"
- 5 years: one overpass shared by Stephanie and Johnson
- 10-15 years: one overpass for Airport and Genoa
- Bond 5 cent gas tax 10-15 years





## Responses to Written Comments, October 14, 2005 Workshop

----- Original Message -----

**From:** [SUE Newberry](#)

**To:** [jvandien@charter.net](mailto:jvandien@charter.net)

**Cc:** 'Kiser, Paul D'

**Sent:** Friday, September 16, 2005 2:11 PM

**Subject:** US 395 Project Questions

Dear Jack:

Thank you for participating in the meeting Wednesday, Sept. 14, to discuss the upcoming traffic safety workshop. Your efforts in preparing the thoughtful questions are appreciated. There was not adequate time to respond to your questions at that time, but your input is valued and will be considered as the process progresses.

Regarding question 1, the Mica Drive and Jack's Valley intersections will be included in the study. The others present at the meeting initially expressed doubts about including this area in the October 15 traffic safety workshop. At the end of the meeting we agreed that the traffic safety workshop would include the area from US 50 south to Muller. The October 15 workshop will have a workshop environment in which people can choose to work on specific sites rather than the entire corridor.

Question 2 is a concern that we expect to hear more about during the workshops. The first two workshops will focus on the area north of Muller. We may also hear about Minden and Gardnerville concerns, but we will move these issues to the Jan/Feb planning workshop. At that time many people are likely to offer concerns about difficult left turns and related issues. The use of center turn lanes for left turning vehicles can be discussed during these workshops and evaluated along with other suggestions that are contributed.

Number 3 makes good suggestions about signage that we will record. It would also be helpful if you bring these signage issues up during the planning workshops so that others can contribute their thoughts as well. In number 4 you pose several good questions. The possibility of a bypass will be studied, but it is too early to know what may result. The issue of SR88 and the roundabout versus a traffic signal as it relates to the traffic safety workshop will be discussed at a meeting with NDOT next week. Everyone at the meeting seemed to agree this issue should be separated from traffic safety on US395. Mr. Chambers indicated he would like to have the roundabout design and analysis reviewed by someone other than the designer who normally work on local project. We are pursuing that possibility.

Regarding traffic circles, the US Department of Transportation clarifies the distinction between traffic circle and roundabouts in their publication, Roundabouts: An Informational Guide, publication no. FHWA-RD-00-067, available on the web at <http://www.tfhr.gov/safety/00068.htm>. The differences are dramatic, in size, operational characteristics, and safety records. There are many websites that discuss the pros and cons of roundabouts, show pictures, and even provide film clips of various trucks, fire engines, and other vehicles moving through them. I selected a few websites that you may find informative: <http://www.alaskaroundabouts.com/akRound.html>  
<http://www.dot.state.ny.us/roundabouts/round.html>  
<http://www.ci.olympia.wa.us/publicworks/transportation/roundabouts.asp>

Thank you for bringing these issues to our attention now. It will help us be prepared to address them in the workshops.

Sue Newberry  
Community Partners, LLC



**From:** SUE Newberry [suenewb@nvbell.net]  
**Sent:** Thursday, October 20, 2005 11:04 AM  
**To:** 'rchambers@heritagebanknevada.com'  
**Cc:** 'Peacock, Coy J.'  
**Subject:** US 395 Traffic Safety Workshop Question Response  
Mr. Chambers:

Thank you for the following comments submitted during the October 15 workshop:

- I understand one of the options is to eliminate lefthand turns at the Stephanie/395 intersection. This should not be an option because
  - This would put excessive pressure on the Johnson Lane intersection
  - This would create huge traffic problems on the whole Johnson Laen corridor
  - Add additional travel time to those living on Stephanie as well as those north and south of Stephanie.
  - Short term we either need a stoplight or build an overpass between Stephanie & Johnson so that traffic is not slowed on 395. It seems one overpass such as the one in Washoe Valley would solve all concerned. This overpass set between Johnson Land and Stephanie would efficiently move traffic the whole area.”

**Response: Eliminating left turns at Stephanie and US 395 is one of the options that will be considered, however the traffic impact at Johnson Lane will have to be analyzed to determine if it is feasible. The results of the analysis will be discussed during the next meeting. We will notify you via email when the data and location of the meeting is confirmed.**

**Constructing an interchange somewhere along US 395 in the valley does have merit. It is a long term solution that needs further analysis and will be considered in the US 395 Corridor Study that is now underway.**

**Thank you for your input**

Sue Newberry  
Community Partners

**From:** SUE Newberry [suenewb@nvbell.net]  
**Sent:** Thursday, October 20, 2005 11:15 AM  
**To:** 'safedrivingpac@yahoo.com'  
**Cc:** 'Peacock, Coy J.'; 'Kiser, Paul D'  
**Subject:** Traffic Safety Workshop Comments  
Dear Mr. Watson:

Thank you for the comments and carefully prepared drawings you provided during the workshop Saturday. The safety team will look at the sites and suggestions illustrated in your drawings during their field visit. After all suggestions have been analyzed, a follow-up meeting will be held. At that time we will address the pros and cons of all suggestions, including those in your drawings. We will email you the data and location for that meeting, which is expected to be in late November or early December.

In response to your question about the effectiveness of lowering speed limits in advance of traffic signals, research has shown that lowering speed limits below what the general driving population feels is reasonable and prudent (85<sup>th</sup> percentile level) has little or no effect on vehicle speeds. NDOT has successfully used the advanced warning signs with flashing beacons (Prepare To Stop When Flashing) that warn approaching drivers when the traffic signal is about to change from green to yellow.

We do not have the crash rate at the SR 88 and US 395 intersection so we cannot do a direct comparison to Johnson Lane at this time. We hope to have that information at a later date. Comparing total crashes without regard to the traffic volume levels would not be a fair comparison for these two intersections.

Thank you for your participation.

Sue Newberry  
Community Partners



administration

Comments posted on Weblog.

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Blog Administration

Date: 11/21/2005 6:13:06 PM

Title: Invitation to Comment

Post: Traffic is increasing at intersections in the US395 corridor. Traffic signals are one method of assigning vehicle right-of-way at intersections. Roundabouts are another, but less familiar, method. Roundabouts differ from the large traffic circles used in some areas. The design of the road on the approach to the roundabout requires drivers to slow down and yield to circulating traffic. Roundabouts vary in size and the number of approach lanes. Safety at roundabouts is better than at signalized intersections. Click on the links page to access more information about roundabouts. NDOT is assessing the merits of using roundabouts in the US 395 corridor and would like to know if people are interested in knowing more about how roundabouts can improve safety and access to US 395.

Date: 11/18/2005 7:07:10 PM

Title: Community Suggestion

Post: After attending the first traffic workshop that NDOT held on October 15, 2005 and seeing a few maps that groups worked on, I think that we have another consideration to address. If there were other routes for residents of the Johnson Lane/Stephanie Way to take to go to Minden/Gardnerville, that might ease up some of the problems on 395. If East Valley Road and Heybourne Road were paved all the way into town, it would give us alternative routes to take. I know of several people who would prefer taking a two lane road with a lower speed limit.

Date: 10/20/2005 4:18:33 PM

Title: Median Barriers

Post: NDOT is considering the merits of installing median barriers in this segment of US 395. Median barriers prevent errant vehicles from crossing over the median into oncoming traffic. Crashes of this type have caused deaths in the corridor. Limiting the number of openings in the median barrier improves effectiveness. NDOT must balance the need for access to side streets and driveways with the need to improve safety.



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Blog Administration

Date: 10/20/2005 5:22:08 PM

Title: Traffic Signals at Stephanie Way

NDOT is considering the merits of installing a traffic signal at Stephanie Way. Traffic signals may reduce some types of crashes, but may increase other types. In 1997, a driver entering US 395 from Mica Drive was killed when a large truck went through a red light. Crash rates for US 395 between US 50 and Muller Lane are higher at most signalized intersections than at unsignalized intersections.

Post:

Blog Administration

Date: 10/21/2005 4:40:40 PM

Title: Future Needs

One challenge of the study is to predict how well the current US 395 corridor can accommodate future traffic. This segment of the roadway includes the future junction of US 50 with the I-580 freeway. NDOT expects to complete the I-580 freeway through Carson City in 2009. Travelers on the freeway can continue to Lake Tahoe or exit the freeway to access US 395.

Post:

Blog Administration

Date: 10/20/2005 7:55:19 PM

Title: Bike Lanes

There are no designated bike lanes on US 395 in the corridor study area.



administration

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Blog Administration

Date: 10/21/2005 4:55:38 PM

Title: Business District Needs

There are many businesses, side streets, and driveways in this portion of US 395. One challenge of the study will be to identify alternatives to balance this high demand for access to local commerce and neighborhoods with the need for through traffic to flow smoothly and efficiently.

Blog Administration

Date: 10/21/2005 5:03:24 PM

Title: Future Needs

Thousands of new homes are expected to be built in this segment of US 395 in the near future. One challenge of the study will be to determine how well the existing roadway will serve future needs.

Blog Administration

Date: 11/8/2005 6:21:48 PM

Title: Planning for the Future

The purpose of this study is to determine what, if any, changes are needed for the US 395 corridor to adequately serve traffic in the future.



- NDOT needs to have approximate costs of proposed projects, including traffic signals, cable barriers, overpasses, etc.

### Other Public Comments / Responses

Phone 9/28/05 Dr. Ralph Holstein 267-4611

Does not think light would be any safer. Feels the current push for a signal is a form of hysteria. US 395 is not a neighborhood street. Plans to attend workshop.

Email from Coy Peacock 11/2/05

I also received a call from Deputy Craig Shields a Douglas County deputy sheriff. He wanted to express his concerns about a full traffic signal at Stephanie. He feels in light of the safety issues at Stephanie and Johnson that it warrants full signals at both locations and a reduction of the speed limit to 55mph. He feels that safety is more of a concern than how fast you can get from A to B.

**From:** Dave Fournier [mailto:harleydocdave@earthlink.net]

**Sent:** Tuesday, October 25, 2005 5:36 PM

**To:** Information DL

**Subject:** Please forward to Scott McGruder on 395

**Importance:** High

Hello Scott

HERE IS THE OTHER SIDE OF THE STORY

We usually don't get involved in this stuff but one of us saw in the NV Appeal you were entertaining comments on 395 and Stephanie signal and have been told it was a done deal. On ramps like those at Stephanie are used in Highways i.e. 'high speed'. All on ramps should be standard and allow AMPLE time to merge with traffic.

The problem was not the road, not a cell phone it was the old guy.

We are very sorry for the loss of the young girl at Stephanie. It was established at the meeting in Douglas at the Middle School that out of the 25 people in attendance 23 wanted a signal. WE do NOT.

We are amazed that a few people could even be considered for such a MAJOR undertaking. We feel you need to do some **MORE research** with the folks who can't make these meetings due to work or schedules. Maybe mail outs or phone surveys would provide you the REAL picture.

Even your NDOT people said a light won't fix it and will create more of a problem and we find it unconscionable that 23 people are effecting thousands of drivers.

With that said.

We would like MORE Signage !

Slower traffic keep right. Trucks, Trailers, RV's and slower traffic use the right lane.

The foolishness of trucks using the left lane creates problems in Douglas County and in the North end of Town. It is grossly OUTDATED.

We do not understand your *objection to Signage*? It is made right here in the prisons?

25 miles an hour in town is slow enough to see pedestrians downtown. That trucks using left lanes is OLD thinking.

NDOT does not make our highways safer, or more user friendly which is what a DOT is *supposed to do*.

Transportation is supposed to *move*. Not stand still and continually stop.

Signage and longer merge ramps can be an immediate solution to the problem. As Mr. Settlemeyer said surface streets can be built in the interim.

**Please consider the silent majority who don't make your meetings.**

Just cause we don't go to the meetings should not mean the majority doesn't count.

David Fournier  
Jack and Drew Bernard  
Dianne Humble



Tom Fraley  
Jackie Fraley  
Rene Haskell  
Kirk Gaudreau  
Dan Norman  
Mike and Jodi Schlarmann  
Jim and Suzanne Powell  
Mr. & Mrs P. Warren  
Mr. & Mrs. Hekimain  
Mr. & Mrs. L. Rogers  
Andy Wiecheic  
Mr. & Mrs. T. Terry  
Mr. & Mrs. M. Mullens

**From:** Peacock, Coy J. [cpeacock@dot.state.nv.us]  
**Sent:** Thursday, October 27, 2005 1:11 PM  
**To:** harleydocdave@earthlink.net  
**Cc:** Sue Newberry; Martinovich, Susan G.  
**Subject:** In response to your concerns about US 395 and Stephanie  
Mr. Fournier,

I would like to take this opportunity to introduce myself. My name is Coy Peacock and I am the Project Manager for the US 395 Corridor Study. I want to thank you for expressing your concerns about the intersection of US 395 and Stephanie. Only a few people have voiced opposition to the signal. I believe that it is very important that others in the community hear from them. Could we have contact information for those who's name were listed on your email so they can be invited to attend future meetings? To place a light at US 395 and Stephanie or not is a very difficult decision. The decision about whether or not to install a signal is an engineering decision guided by national standards and safety considerations.

The US 395 Corridor Study is currently targeting early action items to resolve current issues, but will also be taking a longer look into the future and NDOT needs to hear from everyone in order to reach amiable outcome. I do appreciate your concerns and I hope that you and your neighbors will be able to attend future meetings. I would also like to invite you to visit our website at DouglasCounty395.com. There is a Blog available which gives you the opportunity to discuss your concerns with everyone who visits.

Thank you

**From:** GreaseMonkey177@aol.com [mailto:GreaseMonkey177@aol.com]  
**Sent:** Tuesday, November 29, 2005 2:17 PM  
**To:** Peacock, Coy J.  
**Cc:** editor@recordcourier.com  
**Subject:** A Light for Bridget  
Dear C. Peacock,

How unfortunate is it that a needed traffic control signal has to be named for a young woman, yet to know the joys of life, named on her behalf. I have been a life long citizen of Lake Tahoe and the Carson Valley, and abhor the politics in this tragedy for all.

Nevada is known for their well maintained highways and byways, and now it comes to this...an argument of necessity for this duly needed traffic signal.

Just put the light in and let us know that what is right has been done. Please, don't let us wait until another life is lost to get the needed action going on this matter. How about you Ms. or Mr. Pea-



cock? What if one of your family or friends became a victim to this white knuckle syndrome intersection? Without a doubt, the need for these endless delays and meetings that are dragging through the winter, would come to a halt and it would be named a "Light for the Peacock Family". Money should never become a replacement for the value of a human life. Please, wake up and get this signal in place!!! Phone calls are welcome 775-747-0326.

In All Sincerity,  
Nancy Bryan Schemersey

**From:** Peacock, Coy J.  
**Sent:** Tuesday, November 29, 2005 2:37 PM  
**To:** 'GreaseMonkey177@aol.com'  
**Subject:** RE: A Light for Bridget  
Ms. Schemersey.

I would like to take this opportunity to introduce myself. My name is Coy Peacock and I am the Project Manager for the US 395 Corridor Study. I want to thank you for expressing your concerns about the intersection of US 395 and Stephanie. There have been numerous people express concern for installing a light at this location. I believe that it is very important that others in the community hear from them. To place a light at US 395 and Stephanie or not is a very difficult decision. The decision about whether or not to install a signal is an engineering decision guided by national standards and safety considerations. This will be discussed at the Thursday, December 1, 2005, Douglas County Commission meeting in Minden. This would be a great place for you to express your concerns.

The US 395 Corridor Study is currently targeting early action items to resolve current issues, but will also be taking a longer look into the future and NDOT needs to hear from everyone in order to reach amiable outcome. I do appreciate your concerns and I hope that you will be able to attend future meetings. I would also like to invite you to visit our website at [DouglasCounty395.com](http://DouglasCounty395.com). There is a Blog available which gives you the opportunity to discuss your concerns with everyone who visits.

Thank you,

**From:** GreaseMonkey177@aol.com [mailto:GreaseMonkey177@aol.com]  
**Sent:** Tuesday, November 29, 2005 5:54 PM  
**To:** Peacock, Coy J.  
**Cc:** editor@recordcourier.com  
**Subject:** Re: A Light for Bridget  
Dear Ms.Peacock,

I thank you for your quick and polite response to my email. It would be wonderful if the quick replies could be put toward the installation of the Traffic Signal on 395 and Stephanie.

The meetings are pointless...they only allow NDOT to buy more time and drag this out until it is no longer a burning flame, but simply a flameless smolder. I don't care what you have to say, nothing will be done before more souls lose their mortality on 395.

There should not have to be meetings and discussions, it should simply be done. 775-747-0362





-----Original Message-----

From: Nevada [<mailto:Nevada>]  
Sent: Wednesday, November 30, 2005 9:30 AM  
To: Peacock, Coy J.  
Subject: [ Nevada Department of Transportation: Request Information ]

Signup for Utopia Club

-----  
First Name: Christine  
Last Name: Buch  
Email: ceb80706@yahoo.com  
Address: 984 Desert Dr.  
City: Carson City  
State: NV  
Zip: 89705  
Phone: 267-6660

Comments: Thankfully you have approved a 1/2 signal at Stephanie Way. The other suggestion I would like to make is that you reduce the speed to 55 m.p.h. Speed reduction has helped in Washoe valley, and would like to see it help the residents of Carson Valley as well.

-----Original Message-----

From: Peacock, Coy J.  
Sent: Wednesday, November 30, 2005 12:53 PM  
To: 'ceb80706@yahoo.com'  
Subject: RE: In response to you comments

Kristine,

I would like to take this opportunity to introduce myself. My name is Coy Peacock and I am the Project Manager for the US 395 Corridor Study. I want to thank you for expressing your concerns about the intersection of US 395 and Stephanie. There has been a number of people concerned about the signal. I believe that it is very important that others in the community hear from them. To place a light at US 395 and Stephanie or not is a very difficult decision. The decision about whether or not to install a signal is an engineering decision guided by national standards and safety considerations. According to several safety studies, signals are not always the safest option. This decision has not yet been made and will be discussed at the Thursday, December 1, 2005, Douglas County Commission meeting in Minden. The meeting will start at 1:00pm in the Minden Court House. This would be a great place for you to express your concerns. If NDOT receives support of the County Commission then most likely the signal will be put in.

The US 395 Corridor Study is currently targeting early action items to resolve current issues, but will also be taking a longer look into the future and NDOT needs to hear from everyone in order to reach amiable outcome. I do appreciate your concerns and I hope that you will be able to attend future meetings. I would also like to invite you to visit our website at [DouglasCounty395.com](http://DouglasCounty395.com). There is a Blog available which gives you the opportunity to discuss your concerns with everyone who visits.



Thank you

Name: Nick Christensen  
1770 N Green valley Pkwy #2821  
Henderson, NV 89074  
702-274-9873  
Email: MojaveNC@cox.net

On a recent trip to Northern Nevada, I was amazed at how quickly the area has grown. But I was also concerned with the future state of US 395 as the area burgeons.

If the Carson Valley's population were to surge to 100,000, or even 200,000, would US 395, as an at-grade arterial, be able to accomodate the traffic of people commuting through the area and also up to Carson City and Reno? And would a signalized junction with I-580 be sufficient for all that commuter traffic? We've seen that type of growth in this state before. It's not outside the realm of possibility. In Nevada, nothing is.

The most prudent plan for safety improvements to US 395 would be for NDOT to plan an extension of I-580 at minimum to SR 88, and more prudently beyond that to US 395 south of Gardnerville. As volume increases, so does the danger to motorists trying to cross US 395 at at-grade crossings. At minimum, NDOT should begin the accumulation of right of way for such a facility.

Across this state, much-needed road projects are decades from completion because of a historical lack of foresight and an unwillingness to dedicate resources to projects like this. Don't let US 395 claim lives for years to come because a disbelief in what could happen in the future.

**From:** Nancy Zimmerman [mailto:do17z@charter.net]

**Sent:** Monday, November 28, 2005 7:00 AM

**To:** Peacock, Coy J.

**Subject:** STOP LIGHT AT 395 & STEPHANIE

We certainly do not need another stop light and especially at Stephanie. Why should ew have to fund a project due to an error on of a 79 year old man? While we feel deeply the pain and loss of the family of the 17 year old girl and hope our prayers give them some comfort, a stop light is not the answer. Maybe we should be looking into why this man was allowed to drive to begin with. Could that possibly be the reason for the accident? Not the fact that he was turning left. It was a judgement in error, and most possibly not one that would have been avoided by a light.

While we realize that studies have been conducted and statistics compiled, does not mean that a light at that intersection would prevent future accidents?

Please put more time and thought into this action. We have a light at Johnson Lane and we DO NOT need another just a few feet up the road.

If we cannot get the NDOT to stop the installation of a half signal at this location, then the funds should come from the man who was the cause of the accident and not local, county, state or federal funds. It was his mistake and he should pay for it. Has legal action been taken against him? Probably not because he is old but maybe it should. Maybe NDOT should be looking into the DMV practice of issuance of licenses and not try to put a band-aid on the problem but to do a complete study of drivers in Douglas County who seem to not be as able of a driver as they should due to their age. We have quite a few elderly drivers in the 395 corridor who should just not be out there driving. Why are they being given a



new drivers license? They become a problem and some cause accidents.

Thank you.

L & N Zimmerman

**From:** Montclareptg@aol.com [mailto:Montclareptg@aol.com]

**Sent:** Tuesday, October 25, 2005 2:58 PM

**To:** suenewb@nvgbell.net

**Cc:** paulcc@nvgbell.net

**Subject:** Re: US 395 website Adobe file

Dear Ms. Newberry:

Either you or Paul Carignan resent the e-mail. Thank you; it worked fine today, except I was not able to add a response to the blog. It said, "this page cannot be displayed." I'll try again another time. Basically, I wanted to thank you for considering a median barrier. My husband and I strongly feel it's needed, especially where the median is narrower and deeper. Our daughter didn't have a chance. The cable barrier seems to be the most effective, both cost-wise and safety-wise. Please keep us updated on any progress.

Thank you,  
Patti Snyder



# Flyers / Handouts

## US 395 Douglas County Traffic Safety Workshop

The Nevada Department of Transportation (NDOT) invites you to participate in a workshop to improve traffic safety on US 395 between the junction of US 50 and the junction of SR 88. At the workshop you can share concerns, discuss possible solutions, and provide community input regarding priorities to NDOT. A field inspection and engineering analyses of suggestions will follow this workshop. A follow-up meeting will be held to share results and gain additional input.



Contact Information:  
Coy Peacock  
Project Manager  
775-888-7124  
cpeacock@dot.state.nv.us

### Workshop Process



These photos of a workshop in Pleasant Valley illustrate the workshop process. Above, participants are welcomed.



Participants create a list of concerns and use colored dots to show their top priorities.



Following a slide presentation, participants work in groups to develop suggestions to address concerns.



Groups present results to the audience.

**When: Saturday, October 15, 9 am to noon**  
**Where: Carson Valley Middle School**  
**1477 Highway 395 North, Gardnerville**  
**Multi-purpose Room**

**Safety and Transportation Improvements**

www.douglascounty395.com (effective 10/22/05)

**INSTRUCTIONS****Reach group consensus:***Which potential solutions do you prefer?**Where should they be located?***Be prepared to present your suggestions to the audience:***Mark on maps, make lists, agree on who will present***SUMMARY OF POTENTIAL SOLUTIONS****Traffic Signals***Advantages*

- Reduces some types of crashes
- Assigns vehicle right-of-way
- Interrupts heavy traffic flow to permit side street entry
- Creates gaps downstream

*Disadvantages*

- May not reduce number of crashes
- Increase congestion and delay
- May require right of way acquisition
- Contribute to air pollution

**Signalized High "T" vs. Full Signal***Advantages*

- Less delay than full signal
- One direction of traffic flows continuously, which reduces stop-related crashes
- Interrupts heavy traffic flow to permit side street traffic entry
- Creates gaps downstream

*Disadvantages*

- Same as full signalized intersection, but for one travel direction only
- Some drivers don't use acceleration lane properly





## Safety and Transportation Improvements

[www.douglasecounty395.com](http://www.douglasecounty395.com) (effective 10/22/05)

### Unsignalized High "T" vs "T" Intersection

#### Advantages

- Acceleration lanes and deceleration lanes
- Raised median islands define vehicle travel route
- Drivers cross 1/2 of the roadway at a time, which reduces the gap in the traffic the driver is crossing
- Creates a turn pocket for waiting drivers

#### Disadvantages

- Does not eliminate difficulty of assessing oncoming vehicle speed and gap
- Visibility could be limited by other vehicles
- Some drivers don't use acceleration lane properly



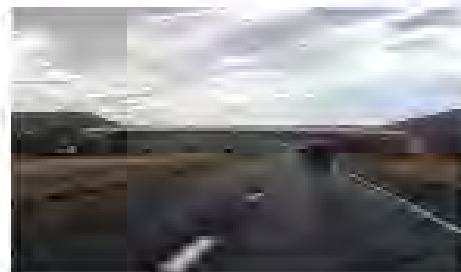
### Interchange

#### Advantages

- Eliminates left turn conflict
- Uses ramp for on/off movements
- Maintains smooth traffic flow
- Minimizes delay

#### Disadvantages

- Costly
- Requires a large amount of right-of-way
- Takes three to five years to construct, and longer if an environmental study is required or right-of-way must be acquired.



### Median Barriers

#### Advantages

- Reduces cross-over crashes
- Limits access
- Separates traffic
- Reduces severity of injury when crashes do occur

#### Disadvantages

- May restrict emergency response
- Limits access
- May increase speeds
- Could trap wrong-way motorist
- Some types of barriers could create drainage issues
- End treatments are potential conflict points





## Safety and Transportation Improvements

[www.douglascounty395.com](http://www.douglascounty395.com) (effective 10/22/05)

### Limiting Access Points

#### (Left and/or Right Turns)

##### Advantages

- Reduces the number of conflict points, which is any point where the paths of two through or turning vehicles diverge, merge, or cross
- Improves capacity, or the number of vehicles that can travel on the roadway without delay
- Helps balance mobility (traffic flow) with the desire for access to side streets or driveway

##### Disadvantages

- Often opposed by those who currently have access
- Inconveniences some drivers, since they may have to travel farther to access their destination

### Acceleration / Deceleration Lanes

##### Advantages

- Reduces rear-end and/or sideswipe crashes
- Reduces speed differential (wide variance in speeds)

##### Disadvantages

- Often requires additional right-of-way



*Acceleration and deceleration lanes allow drivers to slow down to enter a side street or speed up before entering moving traffic.*

### Reduce Posted Speed Limits

##### Advantages

- Low Cost
- Quick implementation

##### Disadvantages

- Little affect on speed
- Enforcement may not have adequate resources to cite violators
- Increases speed differential





## Safety and Transportation Improvements

[www.douglascounty395.com](http://www.douglascounty395.com) (effective 10/22/05)

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### **Enforcement**

#### *Advantages*

- Effective while present (if they aren't already writing a citation)
- Can target specific sites or driver behaviors (such as red light running)
- Can watch, warn, or ticket
- Secondary seatbelt enforcement improves safety

#### *Disadvantages*

- Cannot ticket everyone
- There are many corridors where drivers speed and a limited number of officers
- Even highly-saturated enforcement efforts produce short-lived results

### **Automated Enforcement (Cameras)**

- Can be used to enforce speeds and/or compliance with red lights
- Not legal in Nevada

### **Education Campaigns**

*Goal:* Provide information, raise awareness, and change behavior

### **Targeted Enforcement combined with Education Campaign**

#### *Advantages*

- Increases effectiveness of enforcement and of education
- Citizen groups can play an important role in educating the public. Examples include Mothers Against Drunk Driving and child passenger safety

#### *Disadvantages*

- There may be limited enforcement resources and limited funding for advertising
- It is difficult to sustain the effort over a long period of time



### Recommended Projects

- 1. Median Barrier, Mica Drive to Muller Lane
- 2. Rumble Strips, Topsy Lane to Plymouth Drive
- 3. Restripe shoulders & lanes with 8" wide markings
- 4. Access Management Assessment
- 5. US 50 High T Feasibility Evaluation
- 6. Speed Limit Evaluation: Muller to SR88
- 7. Eliminate left turn lane at Ironwood
- 8. Slower right turn lane, SR88

- 1. Add northbound acceleration lane at S. Sunridge, RV Park, Johnson Lane; add southbound at Genoa
- 2. Add northbound deceleration lane at Clear Creek Rd, S. Sunridge, and RV Park
- 3. Add northbound truck climbing lane, Mica to Sunridge
- 4. Extend 3 lanes through intersection, Jacks Valley
- 5. Add half signal at Stephanie Way
- 6. Lengthen right turn pocket on Johnson Lane
- 7. Lengthen left turn pocket at Genoa Lane

### Next Steps

This group of safety-related projects will be prioritized and, with available funding, implemented by the Nevada Department of Transportation (NDOT). Project steps may include securing funding, working with Douglas County and property owners, and scheduling the work. Time required to complete each project varies from six months to thirty-six months.

The projects in this group must go through a Project Development Process as required by the Nevada Legislature. NDOT will complete an application for the Stephanie Way signal and work with Douglas County to complete applications for the remaining projects. High-priority projects are included on the statewide Annual Work Program. New projects with funding identified are scheduled for construction during the next fiscal year. Unfunded projects are placed on a waiting list.

### Continue Evaluation

- 1. Alternate Routes
- 2. Interchanges, flyovers, overpasses
- 3. Dual-lane roundabouts

Addressing current traffic safety issues on US 395 between US50 and SR88 is a small part of the overall corridor study that is underway. These suggestions and others regarding the entire corridor will be considered during development of long-term transportation solutions. Please attend future meetings!



Community Meeting

December 14, 2005



