

1. Purpose and Need

1.1 Proposed Action

The proposed project involves traffic improvements to United States Highway 93 (U.S. 93) in the Boulder City, Nevada, area. The project limits are between a western boundary at the end of Interstate 515 (I-515) on U.S. 93/United States Highway 95 (U.S. 95) in Henderson (U.S. 95 Milepost [MP] 59.10), approximately 1.6 kilometers (km) (1 mile) north of the Railroad Pass Hotel and Casino, and an eastern boundary on U.S. 93, approximately 1.2 km (0.75 miles) east of the Hacienda Hotel and Casino. The eastern boundary is coincident with the planned western end of the U.S. 93 Hoover Dam Bypass project Nevada Interchange (see Section 2.1). The Boulder City/U.S. 93 Corridor Study covers a total distance of approximately 16.7 km (10.4 miles) on the present route of U.S. 93 (Figure 1-1).

U.S. 93 is the major commercial corridor for interstate and international commerce, and it is the single route through Boulder City, functioning as a principal urban arterial. It is a direct north-south link between Phoenix and Las Vegas, which are two of the fastest-growing areas in the United States (U.S.), and it carries a high volume of east-west traffic from Interstate 40 (I-40) to Las Vegas and to Interstate 15 (I-15). U.S. 93, in combination with other highways, creates a continuous Canada to Mexico (CANAMEX) corridor through the U.S. between Calgary, Alberta, and Nogales, Sonora (Figure 1-2). In Nevada, U.S. 93/95 is a four-lane divided facility from Las Vegas to just east of the U.S. 93/95 interchange in Boulder City. U.S. 93 and U.S. 95 are National Highway System (NHS) routes. In Arizona, U.S. 93 is a four-lane divided highway from Kingman to the Lake Mead National Recreation Area (LMNRA) boundary; the remaining segment of U.S. 93, totaling approximately 27 km (17 miles) from the LMNRA boundary over Hoover Dam to the eastern limit of the Boulder City Corridor Study near the Hacienda Hotel and Casino, is a two-lane undivided highway. Within the study corridor, U.S. 93 varies from a four-lane divided roadway to a two-lane roadway with numerous business driveways and cross streets.

The Federal Highway Administration (FHWA), in cooperation with the Nevada Department of Transportation (NDOT), is studying the Boulder City/U.S. 93 corridor and has prepared this Environmental Impact Statement (EIS) for a project to improve this highway corridor, located in Clark County, Nevada. The Draft EIS (DEIS) for the project, released to the public in March 2002, considered the following alternatives: (1) taking no action (Alternative A); (2) improving U.S. 93 on the existing alignment (Alternative B); (3) realignment of U.S. 93 as a new four-lane, limited-access highway parallel to existing U.S. 93 (Alternative C); and (4) realignment of U.S. 93 as a new four-lane, limited-access highway by bypassing the developed area of Boulder City to the south (Alternative D).

FHWA is the lead agency, and NDOT is serving as the sponsoring agency for the Boulder City/U.S. 93 Corridor Study. Cooperating agencies consist of the National Park Service (NPS), U.S. Bureau of Reclamation (Reclamation), Western Area Power Administration (WAPA), Bureau of Land Management (BLM), Regional Transportation Commission of Southern Nevada (RTC), Clark County, and the cities of Boulder City and

Henderson. The corridor study is a vital element in RTC's Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) and NDOT's Statewide Improvement Program (STIP).

1.2 Purpose of the Project

The purpose of the project is to provide overall transportation improvements in the corridor by reducing traffic congestion and crashes, and to improve regional mobility while maintaining or improving local circulation and access to Boulder City businesses. The proposed Boulder City/U.S. 93 transportation improvements address:

- Resolving traffic problems in the vicinity of Boulder City
- Extending freeway status to the U.S. 93/95 interchange
- Improving operations at the junction of U.S. 93/95
- Creating a safer transportation corridor
- Accommodating future transportation demand
- Improving system linkage on U.S. 93 and maintaining route continuity

1.3 Need for the Project

1.3.1 Roadway Capacity

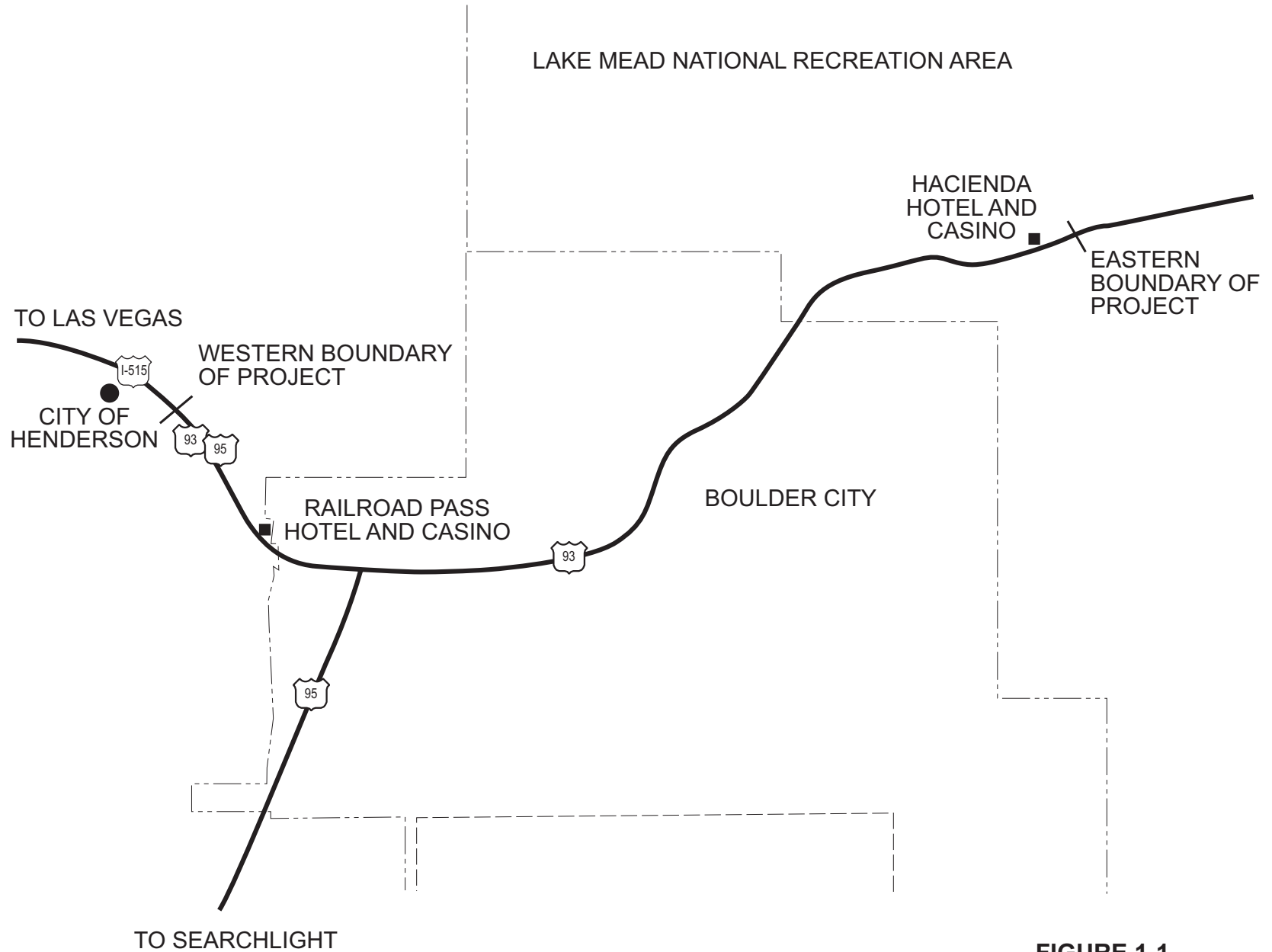
Traffic Demand and Level of Service

Traffic demand on the U.S. 93 roadway links in the project area has exceeded available capacity. One critical aspect of this demand-to-capacity problem is the high percentage of trucks, exacerbated by the relatively steep grades. Other key factors that limit capacity through this section of U.S. 93 are traffic signals and numerous access points to adjacent businesses and neighborhoods.

Traffic volumes in the Boulder City/U.S. 93 corridor will continue to increase in the future, and most segments and intersections will reach Level of Service (LOS) F in the next 10 years (Table 1-1). Table 1-2A shows current and projected average annual daily traffic (AADT) volumes and Volume/Capacity (V/C) ratios for key roadway segments; and Table 1-2B shows LOS at key intersections on U.S. 93 within the study limits (Figure 1-3). The tables also show the approximate year when LOS F is anticipated for each segment and intersection.

Traffic performance at key intersections and segments along the U.S. 93 corridor can be characterized on the basis of field observations of traffic conditions conducted in February 2000.


- Railroad Pass Intersection - LOS D currently occurs at the signalized intersection of U.S. 93/95 and the Railroad Pass Hotel and Casino. The combination of a steep grade, high truck traffic volumes, high travel speeds, minimal stopping sight distances, and sharp curves in the vicinity of this intersection increases delay and reduces safety. Based on forecast traffic volumes, this intersection will experience LOS F by 2004.



**FIGURE 1-1
PROJECT VICINITY AND
STUDY LIMITS**
BOULDER CITY/U.S. 93 CORRIDOR STUDY
ENVIRONMENTAL IMPACT STATEMENT

This page intentionally left blank.




 NOT TO SCALE


LEGEND
 U.S. 93
 INTERSTATE SYSTEM

FIGURE 1-2
U.S. 93 TRANSPORTATION CORRIDOR
 BOULDER CITY/U.S. 93 CORRIDOR STUDY
 ENVIRONMENTAL IMPACT STATEMENT

This page intentionally left blank.

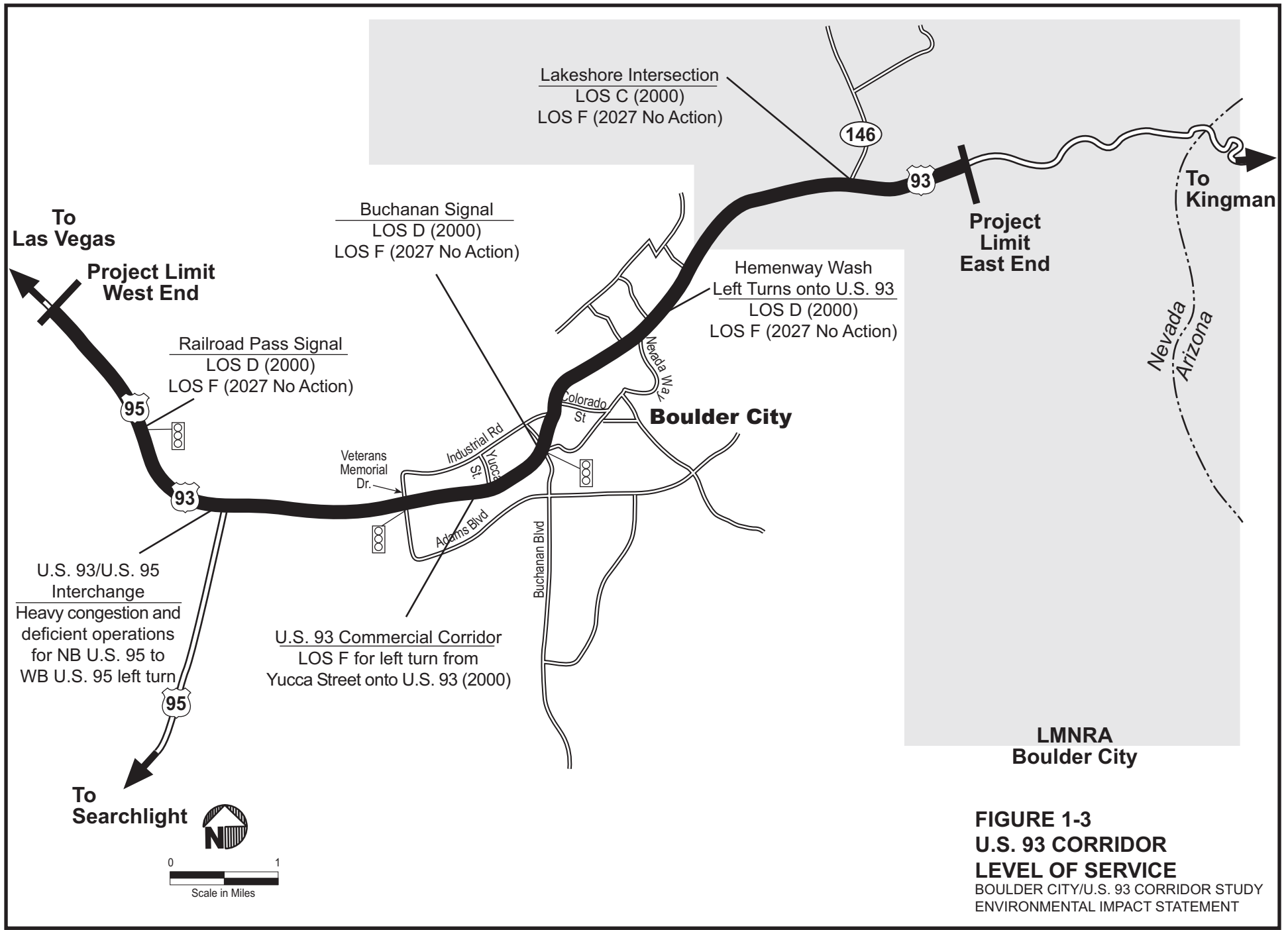


FIGURE 1-3
U.S. 93 CORRIDOR
LEVEL OF SERVICE
 BOULDER CITY/U.S. 93 CORRIDOR STUDY
 ENVIRONMENTAL IMPACT STATEMENT

This page intentionally left blank.

TABLE 1-1
Levels of Service (LOS)

Freeway LOS	Maximum Density (Passenger Cars/Mile/Lane)	Description
A	10	Free-flow operation. The ability to maneuver is almost completely unimpeded.
B	16	Reasonably free-flow operation. The ability to maneuver is only slightly restricted.
C	24	Near free-flow operation. The freedom to maneuver is noticeably restricted.
D	32	Speeds begin to decline. The freedom to maneuver is more noticeably limited.
E	39.3	Operation is at capacity. There is very limited room to maneuver.
F	–	Breakdown in vehicular flow.

TABLE 1-2A
Traffic Volumes (AADT) and Volume/Capacity Ratios (V/C) along U.S. 93

Location on U.S. 93	NDOT Counting Station	1999		2016		2027		LOS F by Year ²
		AADT ¹	V/C	AADT	V/C	AADT	V/C	
West study limit to U.S. 93/95 interchange	230	38,300	0.63	56,300	0.92	66,000	1.12	2021
U.S. 93/95 interchange to Veterans Memorial Drive	331509	32,000	0.53	47,200	0.78	55,000 ³	0.94	2033
Veterans Memorial Drive to Buchanan Boulevard	1087	31,200	0.94	35,900	1.08	42,000	1.17	2006
Buchanan Boulevard to Pacifica Way	228	16,000	0.79	31,500	1.48	37,000	1.92	2004
Pacifica Way to Lakeshore Road	225	15,000	0.91	24,800	1.49	31,000	1.87	2002
Lakeshore Road to east study limit	222	13,000	0.79	21,500	1.30	29,000	1.63	2006

¹ The average daily traffic volumes have been adjusted for seasonal changes, per NDOT factoring procedures.

² Assumes straight-line growth.

³ Assumes 22,000 ADT is diverted to the local network.

TABLE 1-2B
Projected LOS and First Year of LOS F at U.S. 93 Intersections

Location	1999 LOS	2016 LOS	2027 LOS	LOS F by Year ²
U.S. 95 at Railroad Pass Hotel and Casino	D	F	F	2004
U.S. 93 at Buchanan Boulevard	D	E	F	2018
U.S. 93 at Lakeshore Road ¹	C	F	F	2006

¹ Assumes the intersection will not be signalized

² Assumes straight-line growth

- U.S. 93/95 Interchange – Failing operations were observed at this interchange for the northbound-to-westbound turning movement. The combination of truck traffic, steep grade, and the 90-degree turn at the intersection results in a peak-period queue of approximately 0.4 km (0.25 mile). Without improvements to this interchange, it is expected that this type of congestion will occur during more hours of the day and cause queuing to extend over a greater distance.
- U.S. 93 Strip Commercial Segment west of Buchanan Boulevard – LOS F currently occurs for drivers entering U.S. 93 at unsignalized intersections, public streets, and private driveways. Traffic making a left turn from the intersecting streets or driveways is forced to wait for a gap in traffic along U.S. 93 before making the turn. The high volume of cross traffic along U.S. 93 increases delay and reduces safety for vehicles making these movements.
- U.S. 93 through Hemenway Wash – LOS D is currently occurring for vehicles turning left onto U.S. 93. Using forecast traffic volumes for 2016 and 2027, LOS F will occur at these intersections in future years.

Traffic Diversion

Increasingly, Boulder City local traffic is diverting onto Veterans Memorial Drive. During the March 2000 Origin and Destination (O&D) survey, approximately 300 left turns were observed being made onto westbound U.S. 93 during the morning survey period. This would equate to an AADT of approximately 5,000 to 7,000 vehicles per day.

Travel Time

Time trials conducted in August 1999 determined that the average running speed for the 11.2-km (7-mile) Boulder City segment of U.S. 93 was 71 kilometers per hour (km/h) (44 miles per hour [mph]). For comparison, the average running speed for the 87-km (54-mile) segment of U.S. 95 from the U.S. 93/95 interchange to State Route (SR) 163 was 101 km/h (63 mph). Furthermore, out of the 288-km (179-mile) “loop” consisting of U.S. 93 between Henderson and Kingman, SR 68, SR 163, and U.S. 95, only the 9.6-km (6-mile) Hoover Dam crossing segment of these two Kingman-to-Henderson corridors operates at a lower average running speed than the Boulder City segment (24 km/h [15 mph] versus 71 km/h [44 mph]).

1.3.2 Roadway Deficiencies

U.S. 93 varies from a full-freeway section with a 110-km/h (70-mph) design standard at the western terminus of the study (near the Foothills Road grade separation) to a two-lane section at the project’s eastern terminus (near the Hacienda Hotel and Casino). Within these study limits, the U.S. 93 roadway contains numerous deficiencies, including a broad range of design speeds, roadway sections, and geometry. Uncontrolled access conditions at various points and an at-grade railroad crossing add to the deficiencies. Figure 1-4 depicts the locations of roadway deficiencies along the U.S. 93 corridor within the study limits.

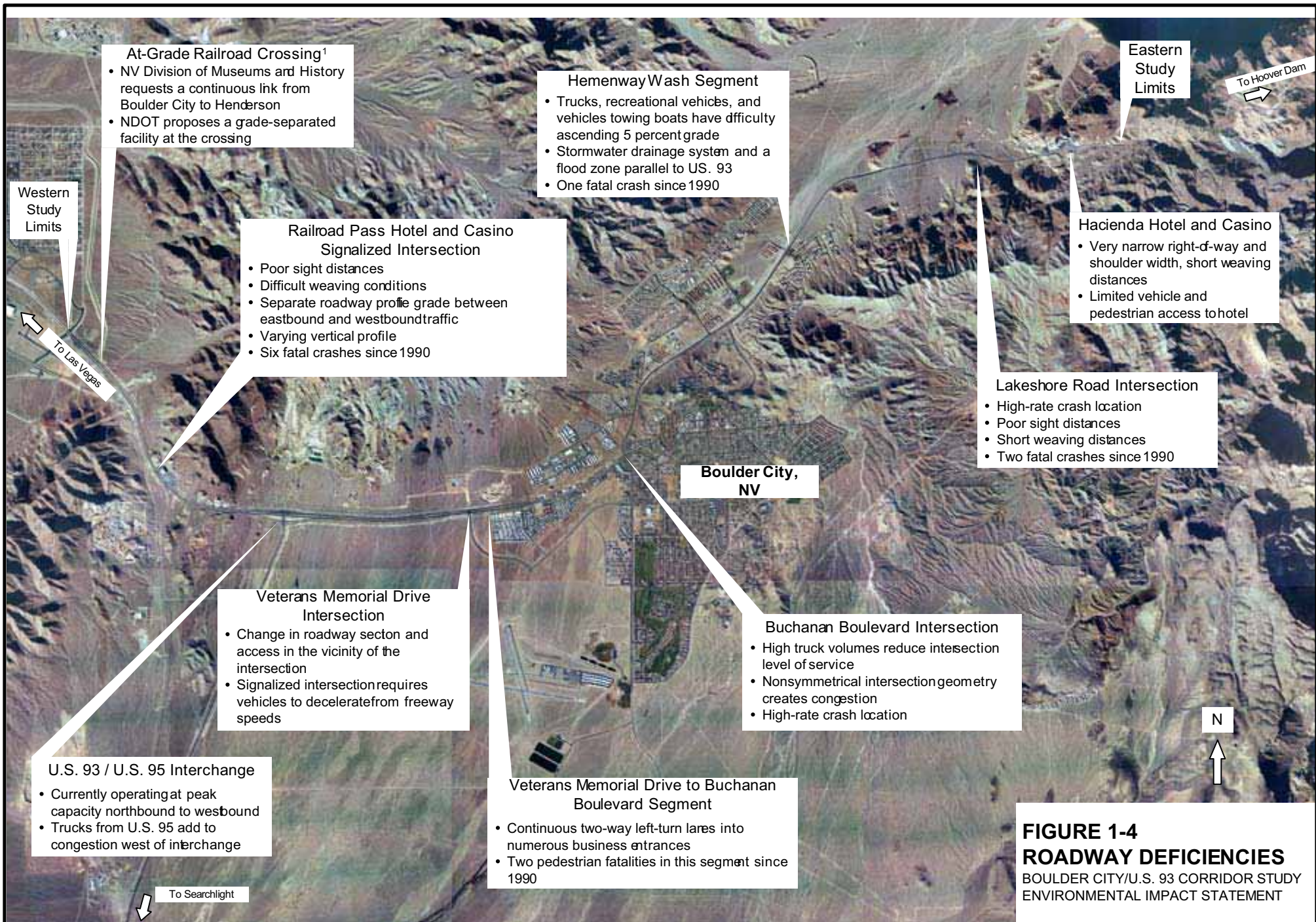


FIGURE 1-4
ROADWAY DEFICIENCIES
 BOULDER CITY/U.S. 93 CORRIDOR STUDY
 ENVIRONMENTAL IMPACT STATEMENT

¹Closed by NDOT in 1993 for traffic safety.

This page intentionally left blank.

1.3.3 Safety

Crash Rates along the Existing U.S. 93 Corridor

Traffic on U.S. 93 in Boulder City from Railroad Pass to Buchanan Boulevard has almost doubled over the last 15 years, from 17,200 AADT in 1985 to 32,000 AADT (between U.S. 93/95 to Veterans Memorial Drive) in January 2000. This equates to approximately 5.7 percent annual traffic growth along the U.S. 93 corridor through Boulder City. As shown in Table 1-2A, present traffic volumes are highest, approximately 38,000 AADT, between the west study limit and the U.S. 93/95 interchange. In response to increasing volumes in this area, NDOT closed the at-grade railroad crossing west of Railroad Pass in 1993 for traffic safety. It is anticipated that the number of crashes will grow commensurate with a continued increase in volumes. Two purposes of the project are resolving traffic problems in the vicinity of Boulder City and creating a safer transportation corridor. This will be accomplished partly by identifying corrective measures to reduce the number of crashes at the intersections of U.S. 93/95 and Railroad Pass Hotel and Casino, Buchanan Boulevard, and Lakeshore Road.

U.S. 93 Corridor Crash History

A total of 805 crashes were recorded in the period from January 1, 1994, to December 31, 1999, on the 18.2-km (11.3-mile) section of U.S. 93 passing through Boulder City between Milepost (MP) 13.81 (Foothills Road) and MP 2.5 (Hacienda Hotel). Of the 805 crashes, 715 involved passenger cars, while the others (11 percent) involved buses or large trucks. Table 1-3 categorizes the crashes occurring in this timeframe, dividing the 18.2-km (11.3-mile) length of U.S. 93 into four segments (note that the Buchanan Boulevard intersection is in Segment 3).

According to NDOT statistics, in almost every crash the cause was partially attributable to existing highway conditions such as sharp curves, uncontrolled access, poor sight distances, inadequate weaving distances, and vehicles accelerating into the traffic flow on a high-speed facility.

These data are converted to crash rates per million vehicle miles (MVM) in Table 1-4. Crash rates are determined by using the AADT values for the type of vehicle and the segment of the corridor, according to the following equation:

$$\text{crashes/MVM} = (\# \text{ crashes}) (10^6) / [(\text{length of roadway}) (\text{AADT}) (\# \text{ days in study period})]$$

Within the U.S. 93 corridor defined by this project, NDOT has determined the following three intersections to be "high-crash intersections":

- U.S. 93/95 at Railroad Pass Hotel and Casino: U.S. 93/95 MP 56.23 (within Segment 1)
- U.S. 93 at Buchanan Boulevard: U.S. 93 MP 8.08 (within Segment 3)
- U.S. 93 at Lakeshore Road: U.S. 93 MP 4.02 (within Segment 4)

TABLE 1-3

Number of Crashes in the U.S. 93 Study Corridor
January 1, 1994, to December 31, 1999

Type of Vehicle	Segment 1: U.S. 93/95 MP 13.81 (Foothills) to MP 11.36 (U.S. 93/95)	Segment 2: U.S. 93 MP 11.36 (U.S. 93/95) to MP 8.08 (just west of Buchanan)	Segment 3: U.S. 93 MP 8.08 (just west of Buchanan) to MP 6.65 (Nevada Way)	Segment 4: U.S. 93 MP 6.65 (Nevada Way) to MP 2.5 (Hacienda Hotel)	Total
Passenger cars	259	229	128	99	715
Buses	1	1	0	0	2
Light trucks	13	7	10	6	36
Heavy trucks	8	8	16	20	52
Total	281	245	154	125	805

Source: NDOT Traffic Safety Division (May 26, 2000, memorandum)

TABLE 1-4

Crash Rates (per MVM) in the U.S. 93 Study Corridor^{1,2}
January 1, 1994, to December 31, 1999

Type of Vehicle	Segment 1: U.S. 93/95 MP 13.81 (Foothills) to MP 11.36 (U.S. 93/95)	Segment 2: U.S. 93 MP 11.36 (U.S. 93/95) to MP 8.08 (just west of Buchanan)	Segment 3: U.S. 93 MP 8.08 (just west of Buchanan) to MP 6.65 (Nevada Way)	Segment 4: U.S. 93 MP 6.65 (Nevada Way) to MP 2.5 (Hacienda Hotel)	Average Through U.S. 93 Corridor
Passenger cars	4.01	1.15	3.65	0.87	1.57
Buses	2.44	0.79	0.00	0.00	0.69
Light trucks	10.46	1.83	5.22	2.93	3.33
Heavy trucks	2.55	0.83	1.68	1.96	1.36
Overall segment crash rate	4.04	1.14	3.29	0.99	1.58

¹Crash Rate = 259 crashes x 10⁶ / [0.86 miles x 34,330 AADT x 2,191 days]

²Statewide Principal Arterial Urban Crash Rate during this time period: 5.07 crashes/MVM

Source: NDOT Traffic Safety Division (May 26, 2000, memorandum)

Railroad Pass Crash History

Of the three high-crash intersections, the Railroad Pass Hotel and Casino intersection has the most crashes, the highest crash rates, and the greatest percentage of crashes involving commercial vehicles (light and heavy trucks and buses). In 1993, after a history of crashes and fatalities at the Railroad Pass intersection, NDOT installed a traffic signal at the intersection, stopping westbound traffic periodically and permitting continuous eastbound traffic.

Warning signals in both directions of travel prior to the intersection were planned to accompany the traffic signal, but they were not installed with the new signal. Then, after a series of crashes occurred at the intersection immediately following installation of the signal, NDOT put up temporary message boards containing a warning message in advance of the intersection. These boards remained in place until 1994, which is when the permanent warning signals were installed.

Safety was improved at the Railroad Pass intersection as a result of the installation of the traffic and warning signals. The beneficial effect of this safety improvement is seen in crash data collected by NDOT at this intersection, summarized in Table 1-5, as the number of crashes decreased between the 3 years before and after the signals were in place. However, while the number of crashes and crashes causing injury or death decreased, the number of rear-end collisions greatly increased. This is an indication that the Railroad Pass at-grade intersection requires further improvement.

TABLE 1-5

Comparison of Crash Statistics at U.S. 95/Railroad Pass Intersection (U.S. 95 MP 55.81 to MP 56.80) Before and After Installation of Traffic and Warning Signals

NDOT Crash Statistic	Study Period		
	1/1/90 to 12/31/92	1/1/93 to 12/31/93	1/1/94 to 12/31/96
Intersection signal status	No signal	Traffic signal at intersection; no warning signal	Traffic signal at intersection; warning signals
Total number of crashes	50	22	41
Overall crash rate (number per MVM)	1.68	1.86	1.00
Fatal crashes	3	0	0
Injury crashes	23	10	14
Rear-end crashes	6	3	22

Source: NDOT Traffic Safety Division (May 26, 2000)

Fatal Crash History along the U.S. 93 Corridor

In the study period from January 1, 1990, to December 31, 1999, historical data indicates 16 fatal crashes occurred along the U.S. 93 corridor. Table 1-6 breaks down these fatal crashes into type of vehicle involved and roadway segment, and indicates the high-crash intersection within the segment that contributed to the majority of the fatal crashes, as well as the number of fatalities. The segment with the most fatal crashes during this period is

Segment 1, which contains the Railroad Pass intersection. Since 1990, six of the seven fatal crashes in this segment occurred at the Railroad Pass intersection (the other occurred just west of the U.S. 93/95 interchange). Note that by comparing Table 1-5 with Table 1-6, it can be seen that an additional three fatal crashes occurred from 1997 through 1999.

TABLE 1-6
Fatal Crashes in the U.S. 93 Study Corridor
January 1, 1990, to December 31, 1999

NDOT Crash Parameter	Segment 1: U.S. 93/95 MP 13.81 (Foothills) to MP 11.36 (U.S. 93/95)	Segment 2: U.S. 93 MP 11.36 (U.S. 93/95) to MP 8.08 (just west of Buchanan)	Segment 3: U.S. 93 MP 8.08 (just west of Buchanan) to MP 6.65 (Nevada Way)	Segment 4: U.S. 93 MP 6.65 (Nevada Way) to MP 2.5 (Hacienda Hotel)
"High-crash" U.S. 93/95 intersection	Railroad Pass Hotel and Casino	None	Buchanan Boulevard	Lakeshore Road
Passenger cars fatal crashes	6	4	0	4
Light trucks fatal crashes	1	0	0	0
Heavy trucks fatal crashes	0	0	0	1
Total fatal crashes	7 ²	4	0	5
Number of fatal crashes/MVM ¹	0.10	0.02	0	0.04

Source: NDOT Traffic Safety Division (July 25, 2000)

¹Statewide Principal Arterial Urban Fatal Crash Rate during this time period: 0.02 crashes/MVM

²Six of the seven crashes occurred at the Railroad Pass Hotel and Casino intersection

Fatal crash rates for each segment can be directly compared to the corresponding statewide principal arterial crash rate. According to current NDOT classifications, the entire reach of U.S. 93 considered in this study is classified as "urban;" therefore, it is comparable to the statewide principal arterial urban crash rate. The statewide fatal crash rate for the time period considered in Table 1-6 is 0.02 crashes per MVM.

Table 1-6 shows that three of the four segments of U.S. 93 through Boulder City have experienced a fatal crash rate per MVM that is equal to or greater than the Statewide Urban Principal Arterial Fatal Crash Rate of 0.02 for this time period. Segment 1 exceeded the statewide rate by the greatest amount, with a fatal crash rate of approximately five times the state average, while Segment 4 (which contains the Lakeshore Road intersection) contained a rate twice the state average. This fatal crash history indicates a safety problem within the U.S. 93 corridor through Boulder City.

Hazardous Materials Spill History at Railroad Pass

Hazardous materials incidents in the Railroad Pass vicinity along U.S. 93 have become a safety issue. These incidents include crashes that have been broken down into those involving hazardous materials spills and those where hazardous materials were being

hauled but were not spilled. Table 1-7 displays the history of these incidents at Railroad Pass.

TABLE 1-7
Summary of Hazardous Materials Incidents at U.S. 95/Railroad Pass Intersection
Before and After Installation of Traffic and Warning Signals

	Study Period		
	1/1/90 to 12/31/92	1/1/93 to 12/31/93	1/1/94 to 12/31/99
Intersection signal status	No signal	Traffic signal at intersection; no warning signal	Traffic signal at intersection; warning signals
Hazardous materials incidents	3	3	2
Crashes involving hazardous materials spills	3	3	0
Total hazardous materials incidents in Nevada	51	25	180
Hazardous materials incident rate at the Railroad Pass intersection (number/MVM) ¹	0.101	0.254	0.024
Total hazardous materials incident rate for Nevada (number/MVM)	0.003	0.004	0.005

Source: City of Henderson Fire Department (November 20, 2000)

¹Incidents per MVM calculated similar to crashes/MVM calculation

Table 1-7 indicates that the number of these incidents and the severity of the incidents (whether a hazardous material was released) have decreased in recent years. In the 1990 to 1992 time period, when there was no signal at Railroad Pass, three spills were recorded. In 1993 alone, when there was a traffic signal but no warning signals at the intersection, there were an additional three spills of hazardous materials. In the 6 years since the warning signals were installed on the approach to the intersection, there have been two incidents but no spills. This indicates an increase in safety at the intersection, but the need for improvement to minimize the chance of crashes involving hazardous materials remains.

The need for improvement is reflected in a comparison of hazardous materials incident rates at Railroad Pass versus the statewide average rates for the years considered (in incidents per MVM). Although improvement is shown, the two incidents at Railroad Pass between 1994 and 1999 are nearly five times as high as the average for the entire state of Nevada. Three incidents in the shorter 1990-to-1992 and 1993 study periods reflect a very large exceedance of the statewide average hazardous materials incident rate.

1.3.4 System Linkage and Route Continuity

U.S. 93 is a vital system link in the CANAMEX Corridor. Currently the Nogales, Mexico, border crossing handles more than 250,000 truck crossings annually and is the primary point of entry for produce shipped by truck into the U.S. from Mexico (FHWA, 1998). Truck demands are expected to increase as the North American Free Trade Agreement (NAFTA) effects continue to be realized.

The facility type approaching Boulder City from both directions is now, or is currently planned to be, a four-lane divided, high-speed limited-access highway. The urban arterial nature of U.S. 93 through Boulder City is inconsistent with the rest of the U.S. 93 corridor and acts as a bottleneck to regional and interstate commerce.

1.3.5 City Initiative

In June 1999 in response to perceived traffic problems, Boulder City voters passed an initiative by a vote of 61.3 percent. That initiative states the following:

Shall the People of the City of Boulder City enact the following new Chapter to Title 9 of the Boulder City Municipal Code:

“CONSENT FOR DIVERSION OR CHANGE OF ROUTE OF HIGHWAY

Whenever it is determined by the governmental entities concerned that a new bridge will be constructed over the Colorado River near Hoover Dam, and the State of Nevada, after the required studies and investigations, concludes that a new highway connecting the existing freeway that terminates near Railroad Pass Hotel and Casino to the new bridge approach is desirable, and if the preferred routing of this new highway, as determined by the required studies, meets the following criteria:

- A. It is south of the Boulder City Airport;*
- B. It is at least three-fourths (3/4) of 1 mile from any existing residence in Boulder City; and*
- C. At least two (2) interchanges will be provided to serve Boulder City, one just east and one just west of Boulder City and configured to permit all traffic the option to use the existing highway through Boulder City (heavy trucks may be prohibited) or the new highway around Boulder City;*

then the Boulder City Council shall give its consent to the State of Nevada for this preferred routing in accordance with the provisions of Chapter 408.397 of the Nevada Revised Statutes”

1.3.6 County/City Consent

NRS 408.397 Procedure for Diversion or Change of Route of Highway.

Whenever in the construction, reconstruction, maintenance, or repair of any highway it appears to the director that any portion of the highway is dangerous or inconvenient to the traveling public in its existing location by reason of grades, dangerous turns, or other local conditions, or that the expense in the constructing, building, rebuilding, maintaining, or repairing of the highway would be unreasonably great and could be materially reduced or lessened by change of route, the director may divert or change the route, but:

- 1. The highway must not be changed or diverted to exclude any city or town unless the consent of the governing body of that city or town has been obtained; and*
- 2. The director shall submit a plan of the proposed change to the board, which must be approved by the board before action is taken to effect the change.*

(Added to the Nevada Revised Statute [NRS] by 1957, 688; A 1977, 225; 1979, 1776; 1987, 1808; 1989, 1305)

NRS 408.403 Freeways.

1. *Upon a resolution of the board, the department under the provisions of this chapter may lay out, establish, acquire, open, construct, reconstruct, improve, maintain, repair, regulate, vacate, or abandon freeways, with the approval of the board of county commissioners of the county in which the freeways are proposed and with the approval of the city council of any incorporated city directly affected thereby.*
2. *The department has all such additional and necessary authority relative to freeways as it possesses relative to other highways, including the authority to acquire by gift, purchase, condemnation, or otherwise any real property or interests therein, including abutter's rights or access right required for a freeway.*
3. *Where an existing highway, in whole or in part, has been designated as, or included within, a freeway, existing abutter's rights of light, view, and air, and easements of access to and from abutting land may be extinguished by gift, purchase, condemnation, or otherwise.*
4. *As a necessary adjunct of any freeway, the department may lay out, establish, acquire, open, construct, reconstruct, improve, maintain, repair, vacate, or abandon frontage roads to provide service and access from areas adjacent to such freeway.*

(Added to NRS by 1957, 688; A 1987, 1808, 1989, 1305)

1.4 Previous Studies Conducted

There are two previous studies related to the Boulder City/U.S. 93 Corridor (U.S. 93 Buchanan Boulevard to Pacifica Way Environmental Assessment [EA] and U.S. 93 Colorado River Crossing Corridor Study), and there is one recently completed environmental study east of this project (Hoover Dam Bypass), as well as an ongoing multistate transportation study (CANAMEX), that are worth noting.

In 1982, NDOT conducted an EA for widening U.S. 93 from Buchanan Boulevard to Pacifica Way. This EA was performed as part of an ongoing sufficiency rating process of Nevada roads conducted by NDOT. The study analyzed two alternatives plus a no-build alternative for the reconstruction of the intersections of U.S. 93 with Buchanan Boulevard and Nevada Way.

A previous study in the project area addressed the feasibility of U.S. 93 alternative bypass corridors south of Boulder City. In 1994, NDOT completed the *U.S. 93 Colorado River Crossing Corridor Study* (NDOT, 1994). The study analyzed the feasibility and order of magnitude costs of two separate alignments south of Boulder City, called the Willow Beach and the Boulder City Southern Bypass Corridors. Also in 1994, NDOT developed a TRANPLAN (traffic circulation) model for Boulder City. This model is being updated as

part of the current study to identify and plan for future traffic growth demands on the existing network system.

The Hoover Dam Bypass EIS began in the early 1970s when Reclamation began studies to address increased traffic on the U.S. 93 crossing over Hoover Dam. As a result of the traffic problems and to address the safety concerns at Hoover Dam, Reclamation began environmental studies in the late 1980s. Reclamation completed the studies to approximately the 75 percent level in the early 1990s, but they did not release the DEIS for public comment. Then, in 1997, NDOT, the Arizona Department of Transportation (ADOT), and FHWA, Central Federal Lands Division, initiated the EIS for the Hoover Dam Bypass. FHWA filed a Notice of Intent (NOI) to complete the EIS in September 1997. FHWA subsequently released the DEIS in September 1998 and the Final EIS (FEIS) in February 2001. The Record of Decision (ROD) was signed in March 2001. The Hoover Dam Bypass project is now under construction, and construction completion is anticipated in 2008.

An ongoing study related to this project is the CANAMEX Corridor Plan. The CANAMEX Corridor Plan is a joint infrastructure study performed with the states of Arizona, Nevada, Idaho, Utah, and Montana. The primary objective of the project is to develop a corridor plan to stimulate investment and economic growth. CANAMEX includes transportation, tourism, trade, and communications components in the designation of a continuous multi-lane roadway from Nogales, Mexico, to the Canadian border. The project passes through Boulder City along U.S. 93 en route to I-15. Additional information about the CANAMEX Corridor can be found at the following website address www.canamex.org.