

---

## 3.5 Transportation

### **No Action Alternative**

Under the No Action Alternative, the 1999 Congressional land withdrawal of 201,933 acres from public domain (Public Law 106-65) would expire on November 5, 2021, and military training activities requiring the use of these public lands would cease. Expiration of the land withdrawal would terminate the Navy's authority to use nearly all of the Fallon Range Training Complex's (FRTC's) bombing ranges, affecting nearly 62 percent of the land area currently available for military aviation and ground training activities in the FRTC.

### **Alternative 1 – Modernization of the Fallon Range Training Complex**

Under Alternative 1, the Navy would request Congressional renewal of the 1999 Public Land Withdrawal of 202,864 acres, which is scheduled to expire in November 2021. The Navy would request that Congress withdraw and reserve for military use approximately 618,727 acres of additional Federal land and acquire approximately 65,153 acres of non-federal land. Range infrastructure would be constructed to support modernization, including new target areas, and expand and reconfigured existing Special Use Airspace (SUA) to accommodate the expanded bombing ranges. Implementation of Alternative 1 would potentially require the reroute of State Route 839 and the relocation of a portion of the Paiute Pipeline. Public access to B-16, B-17, and B-20 would be restricted for security and to safeguard against potential hazards associated with military activities. The Navy would not allow mining or geothermal development within the proposed bombing ranges or the Dixie Valley Training Area (DVTA). Under Alternative 1, the Navy would use the modernized FRTC to conduct aviation and ground training of the same general types and at the same tempos as analyzed in Alternative 2 of the *2015 Military Readiness Activities at Fallon Range Training Complex, Nevada, Final Environmental Impact Statement* (EIS). The Navy is not proposing to increase the number of training activities under this or any of the alternatives in this EIS.

### **Alternative 2 – Modernization of Fallon Range Training Complex with Managed Access**

Alternative 2 would have the same withdrawals, acquisitions, and SUA changes as proposed in Alternative 1. Alternative 2 would continue to allow certain public uses within specified areas of B-16, B-17, and B-20 (ceremonial, cultural, or academic research visits, land management activities) when the ranges are not operational and compatible with military training activities (typically weekends, holidays, and when closed for maintenance). Alternative 2 would also continue to allow grazing, hunting, off-highway vehicle (OHV) usage, camping, hiking, site and ceremonial visits, and large event off-road races at the DVTA. Additionally under Alternative 2, hunting would be conditionally allowed on designated portions of B-17, and geothermal and salable mineral exploration would be conditionally allowed on the DVTA. Large event off-road races would be allowable on all ranges subject to coordination with the Navy and compatible with military training activities.

### **Alternative 3 – Bravo-17 Shift and Managed Access (Preferred Alternative)**

Alternative 3 differs from Alternative 1 and 2 with respect to the orientation, size, and location of B-16, B-17, B-20 and the DVTA, and is similar to Alternative 2 in terms of managed access. Alternative 3 places the proposed B-17 farther to the southeast and rotates it slightly counter-clockwise. In conjunction with shifting B-17 in this manner, the expanded range would leave State Route 839 in its current configuration along the western boundary of B-17 and would expand eastward across State Route 361 potentially requiring the reroute of State Route 361. The Navy proposes designation of the area south of U.S. Route 50 as a Special Land Management Overlay rather than proposing it for withdrawal as the DVTA. This Special Land Management Overlay would define two areas, one east and one west of the existing B-17 range. These two areas, which are currently public lands under the jurisdiction of BLM, would not be withdrawn by the Navy and would not directly be used for land-based military training or managed by the Navy.

## Environmental Impact Statement

### Fallon Range Training Complex Modernization

#### TABLE OF CONTENTS

<b>3.5 TRANSPORTATION.....</b>	<b>3.5-1</b>
3.5.1 METHODOLOGY .....	3.5-1
3.5.1.1 Region of Influence .....	3.5-1
3.5.1.2 Regulatory Framework .....	3.5-1
3.5.1.3 Approach to Analysis .....	3.5-1
3.5.1.4 Public Scoping Concerns .....	3.5-4
3.5.2 AFFECTED ENVIRONMENT .....	3.5-4
3.5.2.1 Rights of Way .....	3.5-4
3.5.2.2 Road Network .....	3.5-4
3.5.2.3 Transit Network .....	3.5-5
3.5.2.4 Bravo-16.....	3.5-6
3.5.2.5 Bravo-17.....	3.5-9
3.5.2.6 Bravo-20.....	3.5-13
3.5.2.7 Dixie Valley Training Area .....	3.5-17
3.5.3 ENVIRONMENTAL CONSEQUENCES .....	3.5-21
3.5.3.1 No Action Alternative .....	3.5-21
3.5.3.2 Alternative 1: Modernization of the Fallon Range Training Complex .....	3.5-21
3.5.3.3 Alternative 2: Modernization of the Fallon Range Training Complex and Managed Access.....	3.5-30
3.5.3.4 Alternative 3: Bravo-17 Shift and Managed Access (Preferred Alternative) .....	3.5-34
3.5.3.5 Proposed Mitigation, Minimization, or Avoidance.....	3.5-40
3.5.3.6 Summary of Effects and Conclusions.....	3.5-40

#### List of Figures

FIGURE 3.5-1: B-16 AND TRANSPORTATION FACILITIES FOR ALTERNATIVES 1 AND 2.....	3.5-7
FIGURE 3.5-2: B-16 AND TRANSPORTATION FACILITIES FOR ALTERNATIVE 3 .....	3.5-8
FIGURE 3.5-3: B-17 AND TRANSPORTATION FACILITIES FOR ALTERNATIVES 1 AND 2.....	3.5-11
FIGURE 3.5-4: B-17 AND TRANSPORTATION FACILITIES FOR ALTERNATIVE 3 .....	3.5-12
FIGURE 3.5-5: B-20 AND TRANSPORTATION FACILITIES FOR ALTERNATIVES 1 AND 2.....	3.5-15
FIGURE 3.5-6: B-20 AND TRANSPORTATION FACILITIES FOR ALTERNATIVE 3 .....	3.5-16
FIGURE 3.5-7: DVTA AND TRANSPORTATION FACILITIES FOR ALTERNATIVES 1 AND 2 .....	3.5-19
FIGURE 3.5-8: DVTA AND TRANSPORTATION FACILITIES FOR ALTERNATIVE 3 .....	3.5-20

#### List of Tables

TABLE 3.5-1: TRAFFIC CONDITIONS ASSOCIATED WITH EACH LEVEL OF SERVICE RATING .....	3.5-2
TABLE 3.5-2: RIGHTS OF WAY LOCATED WITHIN THE EXISTING OR PROPOSED B-16.....	3.5-6
TABLE 3.5-3: EXISTING INTERSECTION SEGMENT LEVEL OF SERVICE NEAR B-16 .....	3.5-9
TABLE 3.5-4: RIGHTS OF WAY LOCATED WITHIN THE EXISTING OR PROPOSED B-17.....	3.5-9
TABLE 3.5-5: EXISTING INTERSECTION AND ROADWAY SEGMENT LEVEL OF SERVICE NEAR B-17 .....	3.5-13
TABLE 3.5-6: RIGHTS OF WAY LOCATED WITHIN THE EXISTING OR PROPOSED B-20.....	3.5-13
TABLE 3.5-7: EXISTING INTERSECTION AND ROADWAY SEGMENT LEVEL OF SERVICE NEAR B-20 .....	3.5-14
TABLE 3.5-8: RIGHTS OF WAY LOCATED WITHIN THE EXISTING OR PROPOSED DVTA .....	3.5-17

---

TABLE 3.5-9: EXISTING INTERSECTION AND ROADWAY SEGMENT LEVEL OF SERVICE IN THE DVTA.....	3.5-18
TABLE 3.5-10: ALTERNATIVE 1: LEVEL OF SERVICE – INTERSECTIONS NEAR B-16 .....	3.5-22
TABLE 3.5-11: SUMMARY OF EFFECTS AND CONCLUSIONS ON TRANSPORTATION .....	3.5-40



### **3.5 Transportation**

This discussion of transportation is defined as the capacity of individuals to move themselves or others, as well as to move vehicles and/or various goods, over and through relevant land areas. A transportation system can consist of any or all of the following: roadways, bus routes, railways, subways, bikeways, trails, waterways, airports, and taxis, and can be evaluated on a local or regional scale. Within the Fallon Range Training Complex (FRTC), there are roadways, railways, bikeways, trails, and airspace. Section 3.6 (Airspace) of this Environmental Impact Statement (EIS) addresses Special Use Airspace (SUA) and impacts on airports, airspace, and air transportation.

#### **3.5.1 Methodology**

This analysis focuses on the potential for significant impacts on transportation as a result of the Proposed Action discussed in this EIS.

##### **3.5.1.1 Region of Influence**

The region of influence includes roadways, railways, bikeways, and trails as transportation facilities that overlap or are adjacent to existing and proposed FRTC Bravo (B-) ranges and the Dixie Valley Training Area (DVTA). The region of influence does not contain bus routes, subways, waterways, or taxis. Section 3.12 (Recreation) addresses recreational characteristics of transportation facilities (i.e., off-highway vehicle [OHV] use).

##### **3.5.1.2 Regulatory Framework**

Agencies operating within the region of influence that manage transportation include the Nevada Department of Transportation (NDOT), Nevada Transportation Authority, the Regional Transportation Commission of Southern Nevada, the National Park Service, and the U.S. Department of the Interior, Bureau of Land Management (BLM). These agencies are responsible for highways, roadways, bikeways, and trails in and around the region of influence.

Applicable regulations are listed below:

- U.S. Department of Defense Reauthorization Act (10 United States Code [U.S.C.] section 113)
- U.S. Department of Transportation Act – Section 4(f) (23 U.S.C. section 138)
- Land and Water Conservation Fund Act of 1965 (54 U.S.C. Chapter 2003)
- Executive Order 13693, Planning for Federal Sustainability in the Next Decade
- The National Trails System Act (Public Law 90-543, as amended through Public Law 111-11, March 30, 2009)
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users – Section 6009

##### **3.5.1.3 Approach to Analysis**

The analysis of impacts to ground transportation considers the changes to existing traffic conditions and the capacity of area roadways from proposed road closures, rerouting, and restricted use roads. Average daily traffic and design capacity were used to measure traffic. These two measures are used to assign a roadway with a corresponding level of service (LOS), as shown in Table 3.5-1. The LOS designation is used to describe the operating conditions of a roadway segment or intersection. The LOS is measured on a scale of A to F that describes the range of operating conditions on a particular type of roadway facility.

LOS A reflects free-flowing conditions and LOS F represents heavily congested conditions. In general, LOS C is an acceptable performance standard in rural and undeveloped areas, while LOS D is commonly acceptable in more urbanized areas (Foltz et al., 2016; Transportation Research Board, 2000). LOS E and F represent highly congested conditions and are usually considered unacceptable.

**Table 3.5-1: Traffic Conditions Associated with Each Level of Service Rating**

LOS Rating	Description of Traffic Conditions
A	Traffic flows freely, with little or no restrictions to vehicle maneuvers within the traffic stream.
B	Reasonably free-flowing conditions, with slight restrictions to vehicle maneuvers within the traffic stream.
C	Traffic speed approaches free-flowing conditions, but freedom to maneuver within the traffic stream noticeably restricted.
D	Traffic speed begins to be reduced, and freedom to maneuver is seriously limited due to a high concentration of traffic.
E	Severe congestion occurs resulting in traffic delays and the formation of queues on critical approaches to roadway capacity.
F	Unstable traffic flow resulting in delays and the formation of queues in locations where traffic demand exceeds roadway capacity.

Note: LOS = Level of Service

NDOT uses the Present Serviceability Index (PSI) condition rating system to evaluate the condition of the pavement on state-maintained roads (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>], for more information). There are six defined pavement conditions, including very good (PSI of 4.00–5.00), good (PSI 3.50–3.99), fair (PSI 3.00–3.49), mediocre (PSI 2.50–2.99), poor (PSI 2.00–2.49), and very poor or failed (PSI < 2.00). NDOT allocates pavement maintenance expenditures based on road prioritization categories, which take into consideration the functional classification of the roadway, the existing traffic volume, and the volume and weight of heavy trucks using these roads. Road prioritization categories range from 1 to 5 (road prioritization 1 being the highest), and funds are allocated first to roadways having a higher prioritization category.

Transportation information within the region of influence was identified by reviewing available literature and working in partnership with the BLM to identify potential routes for re-alignment of roads and alternatives. The information presented in this section was gathered using the best publically available sources, including *Off Highway Vehicle Trail Survey and Mapping, Naval Air Station Fallon* (AMEC Environment & Infrastructure, 2013); the *Carson City District, Nevada Draft Resource Management Plan and Environmental Impact Statement* (Bureau of Land Management, 2014); the *Churchill County 2015 Master Plan* (Churchill County, 2015); the *Nevada State Rail Plan* (Nevada Department of Transportation, 2012); the *State Maintained Highways of Nevada: Descriptions and Maps* (Nevada Department of Transportation, 2017); and the FRTC Transportation Studies developed for this EIS (discussed below [full reports available in Supporting Study: Transportation Study {available at <http://frtcmodernization.com>}] ). NDOT’s public data page for highway traffic information was used to evaluate and verify transportation considerations (Nevada Department of Transportation, 2018). The

Navy is consulting and will continue to consult with NDOT regarding highway conditions, usage, and potential road rerouting.

The Navy conducted the following studies to support preparation of this EIS:

- *Transportation Study*: In 2017, the Navy prepared a Transportation Study that analyzed on-road vehicle use within affected areas as part of this EIS effort (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]). The Study evaluated peak hour intersection and roadway segment traffic conditions for existing, baseline, the No Action Alternative, the baseline plus State Route 839 Notional Relocation Corridor Option 1 (discussed in Section 3.5.3, Environmental Consequences), baseline plus State Route 839 Notional Relocation Corridor Option 2 (discussed in Section 3.5.3, Environmental Consequences), and baseline plus State Route 839 Notional Relocation Corridor Option 3 (discussed in Section 3.5.3, Environmental Consequences). The study sampled the LOS for intersections and roadway segments, average travel speeds, the percentage of free flow speed, and discussed differences in existing and potential travel distances. The study also conducted 24-hour segment counts at four range access gates every day over two weeks in January using geomagnetic car counting devices that determined typical traffic volumes. Naval Air Station (NAS) Fallon compiled estimates of the number and types of vehicles that typically accessed B-16, B-17, and B-20 to factor in to what is considered to be typical traffic volumes.
- The Navy is currently working on an additional Transportation Study that analyzes on-road vehicle use within the affected areas under Alternative 3. The Study will evaluate peak hour intersection and roadway segment traffic conditions for existing, baseline, the No Action Alternative, and the baseline plus State Route 361 Notional Relocation Corridor (with two potential routes, discussed in Section 3.5.3, Environmental Consequences). The study is sampling the LOS for intersections and roadway segments, average travel speeds, the percentage of free flow speed, and will discuss the differences in existing and proposed travel distances. The study is also conducting 24-hour segment counts at access gates using geomagnetic car counting devices that determine typical traffic volumes, using similar methods as the previous transportation study to determine typical traffic volumes. The Navy acknowledges that there may be impacts that have yet to be defined and will continue to develop and incorporate mitigation measures as necessary based on this Study.
- *Off-Highway Vehicle Count*: The Navy conducted OHV counts on unpaved roads and trails near ranges B-16 and B-17. The counts collected OHV traffic data in 2017 across two seasons on roads and trails that are subject to closure as a result of the Proposed Action. The results are discussed in detail in Section 3.12 (Recreation). The study can be found in Supporting Study: Transportation Study (available at <http://frtcmodernization.com>).

The analysis of impacts on ground transportation considers the possible changes to existing traffic conditions and area roadways from proposed road closures. The analysis focuses on the following elements:

- Evaluating change in LOS
- Evaluating changes in traffic circulation and movement patterns associated with permanent and temporary road closures

- Evaluating changes in pavement rating (PSI)

The Navy utilized the Transportation Study for the FRTC (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]), specifically to support the analysis of this EIS. The following factors determine whether impacts on transportation are deemed significant:

- an increase in the need for safety-related traffic signals and signs
- increased or decreased transit times for residents and emergency responders
- loss of access via customary transit routes
- the nature and magnitude of changes to the ground traffic are more than minimal (i.e., significant impacts degrade the LOS to a level of D, E or F as a result of the Proposed Action or that the PSI rating on paved roads changes from between 5 and 3 to below 3)

These factors help to determine significance but should not be viewed as thresholds for significance. For example, inconsistency with state or local plans by itself would not automatically result in a significant impact (Federal Aviation Administration, 2015).

#### **3.5.1.4 Public Scoping Concerns**

Public issues raised during scoping in regard to ground transportation included concerns about road closures or public use restrictions in certain areas. These areas and road closures of concern included Nevada State Route 839 closure, secondary access roads through B-20, secondary access roads through the DVTA, the U.S. Route 95/Wildes Road/Sheckler Road connection to the City of Fallon, access roads to cultural and tribal sacred sites, Nye County's Hot Springs Road, established county roads, Bombing Range Road and Wild Horse Pass, B-20 East County Road, B-16 Sand Canyon Road, Dead Camel Mountain Road, and B-17 Earthquake Fault Road. The public is also concerned with the impact of the Proposed Action to various public races such as the Vegas to Reno, the Valley Off Road Racing Association Night Vision Fallon, the High Desert Classic Endurance Ride, and other racing events; these are discussed in Section 3.12 (Recreation). Other concerns raised during scoping included public concern about the Proposed Action's effects on planned transportation improvements (including railroad/railroad spur development through B-20); and the proposed Interstate 11 corridor which is addressed further in Chapter 4 (Cumulative Impacts). For further information regarding comments received during the public scoping process, please refer to Appendix D (Public Involvement).

### **3.5.2 Affected Environment**

#### **3.5.2.1 Rights of Way**

All of the ranges and surrounding areas have existing rights of way (ROW) for access roads, including county and state roads, utilities, and land ownership. ROWs for public access roads are included under each range discussion as applicable. Section 3.2 (Land Use) discusses ROWs for utilities and land ownership.

#### **3.5.2.2 Road Network**

The road network in and around the ranges includes federal highways, state and county highways, and roads (public and private). The Navy is continuing to review potential impacted roads regarding county-designated access roads and other potential ROWs in the lands requested for withdrawal or proposed for acquisition. The Navy acknowledges that there are or may be claimed interests in these areas but

does not have sufficient data to include them fully in the analysis; therefore, they are not described further.

The following subsections describe the existing road network, major intersections, and segments. A traffic segment is any stretch of road, highway, or route between two intersections and can vary in length. The road network near the FRTC experiences a substantial amount of freight movement daily due to the crossroads of U.S. Route 50 and U.S. Route 95. U.S. Route 95 carries the majority of the truck traffic to the city of Fallon, and Interstate 80 carries the majority of truck traffic through the city of Fernley. Some of the segments carry more than 1,200 trucks daily, representing almost 27 percent of the average daily traffic on U.S. Route 95 and U.S. Route 50 to, from, and through the City of Fallon (Churchill County, 2015).

The 2017 Transportation Study (Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]) evaluated the existing traffic operating conditions for roadways and intersections within and around the FRTC. As discussed in Section 3.5.1 (Methodology), the analysis evaluated roadways and intersections in terms of LOS ratings. As discussed in Section 3.5.1 (Methodology), Table 3.5-1 summarizes general traffic conditions associated with each LOS rating, and NDOT uses the PSI condition rating system to evaluate the condition of the pavement on state-maintained roads.

### 3.5.2.3 Transit Network

BLM-managed federal land has over 200 miles of operational railroads in Churchill, Lyon, Mineral, Storey, and Washoe Counties. These railroads pass through public and non-federally owned lands. These rail lines do not intersect with any of the existing training ranges. Railroad ROWs held by Western Pacific, Central Pacific, and Southern Pacific Railroad companies in this area are now controlled by the Union Pacific Railroad Company (Bureau of Land Management, 2014). The Union Pacific Railroad Company operates the northern and southern east/west corridors. The two-route northern corridor connects to Salt Lake City and Denver in the east and to Sacramento and San Francisco in the west. This northern corridor serves the city of Reno and other northern Nevada communities. Interstate 80 parallels the rail lines in this northern corridor. The southern corridor single rail line connects to Salt Lake City in the northeast and to Los Angeles in the Southwest. The southern corridor line also serves Las Vegas. Interstate 15 parallels the southern corridor rail line (Nevada Department of Transportation, 2012).

The land area around the FRTC includes numerous formal and informal recreation and cultural destinations. Recreation and cultural destinations include the Fallon National Wildlife Refuge, the Stillwater National Wildlife Refuge, Grimes Point/Hidden Cave Archaeological Area, Sand Mountain Recreational Area, the Carson River, the proposed Sand Mountain Special Recreation Management Area, and the proposed Salt Wells Extensive Recreation Management Area (Bureau of Land Management, 2014). These destinations provide numerous trails and roads throughout the region (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]). The non-motorized transportation network includes trails for equestrian, pedestrian, and cycling activities (Bureau of Land Management, 2014). Section 3.11 (Cultural Resources) and Section 3.12 (Recreation) discuss the cultural resources and recreational activities in these areas in detail.

The *Trails Across Churchill County* plan illustrates a dedicated trail system in Churchill County (Churchill County, 2010). The *State of Nevada Bike Plan* was updated in 2015 and included additional changes and

improvements to the *Trails Across Churchill County* plan. The *2015 Churchill County Master Plan* outlines the goals and policies in place for pedestrian and bike traffic (Churchill County, 2015).

### 3.5.2.4 Bravo-16

#### 3.5.2.4.1 Rights of Way

There are four BLM recognized ROWs for roads on B-16 and the land requested for withdrawal. Two of the ROWs are held by the Navy, one is held by Churchill County, and the last is held by the Los Angeles Department of Water and Power as shown in Table 3.5-2.

**Table 3.5-2: Rights of Way Located within the Existing or Proposed B-16**

Serial Number	Facility Type	Holder	Status	Notes
N-1018	285002 - ROW-POWER TRANSMISSION LINE	Los Angeles Department of Water & Power	Authorized	Transmission line and road
N-47875	281001 - ROW-ROADS	Churchill County	Authorized	
N-6447	281008 - ROW-ROADS FEDERAL 44LD513	Navy	Authorized	
Nev 059264	281008 - ROW-ROADS FEDERAL 44LD513	Navy	Authorized	Sand Canyon Road

Notes: ROW = Rights of Way

#### 3.5.2.4.2 Road Network

Figure 3.5-1 and Figure 3.5-2 illustrate the transportation routes near B-16, which is located southwest of NAS Fallon near two major U.S. highways. U.S. Route 95 is a north/south highway that passes east of B-16 and runs approximately 262 miles through Churchill, Nye, Lyon, and Mineral Counties (Nevada Department of Transportation, 2017). U.S. Route 95 is a north/south highway that extends from Interstate 80 in northern Churchill County to the southern Churchill-Lyon County border. U.S. Route 95 passes between B-16 and B-19. Sand Canyon Road, which turns into Red Mountain Road and Hooten Well Road to the west, is an east/west unpaved road that traverses the existing B-16 and is an access road for B-16 (Figure 3.5-1 and Figure 3.5-2). This road has a LOS rating of A, indicating free-flowing traffic, with little or no restrictions to vehicle maneuvers within the traffic stream. Segments of U.S. Route 95 are classified using the PSI condition rating system as very good and good.

U.S. Route 50 is a two-lane highway that traverses Churchill County for 106 miles in an east/west direction and passes to the north of B-16. Segments of U.S. Route 50 are classified as good and fair. U.S. Route 95 south of U.S. Route 50 has a road prioritization category of 2, U.S. Route 95 north of U.S. Route 50 and U.S. Route 50 itself have a road prioritization category of 3 (see Supporting Study: Transportation Study [available at <http://frtcmmodernization.com>] for more information). Dead Camel Mountain Road and Simpson Road offer access to the Dead Camel Mountains and the Lahontan State Recreation Area from U.S. Route 95.

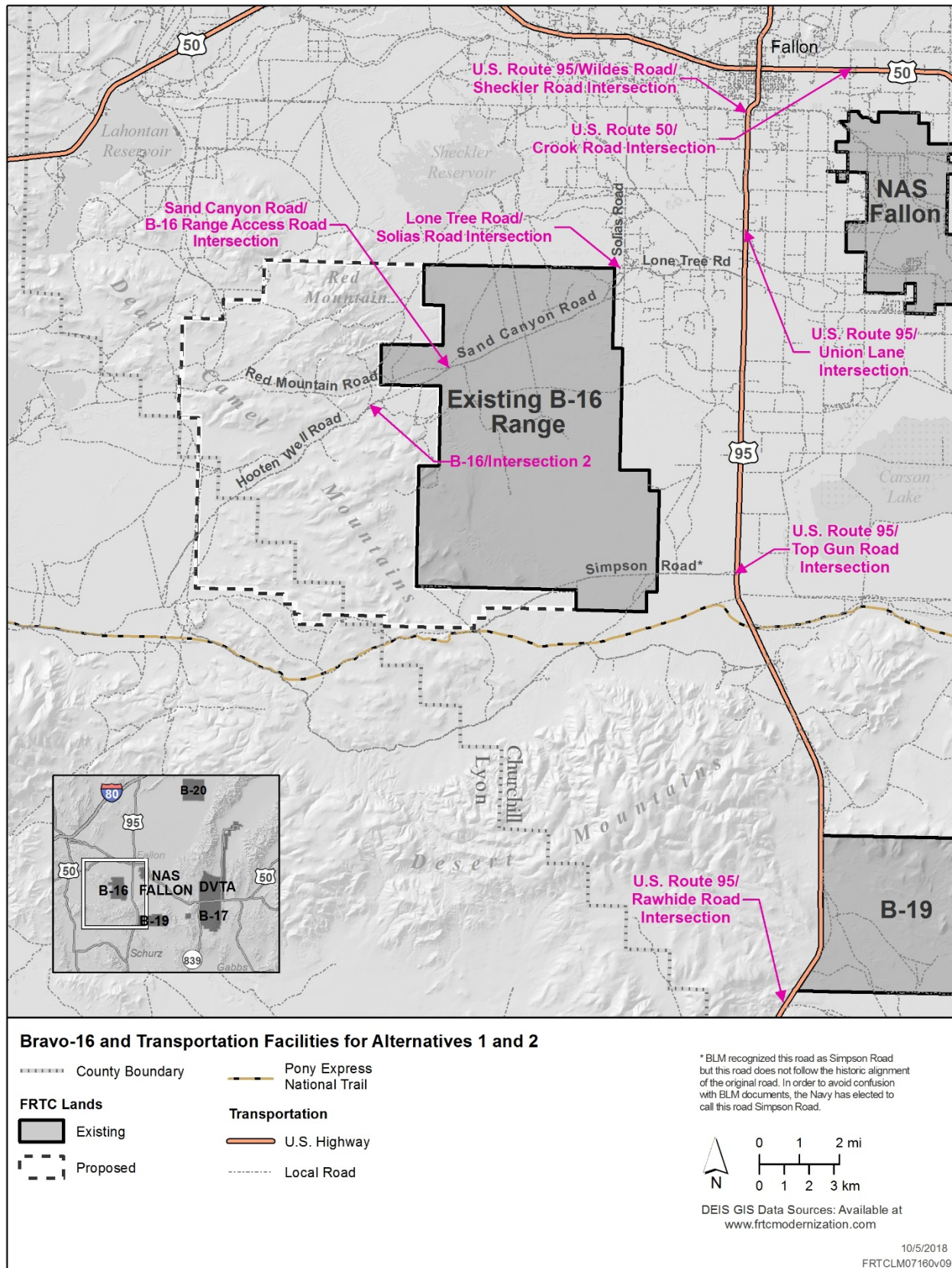


Figure 3.5-1: B-16 and Transportation Facilities for Alternatives 1 and 2



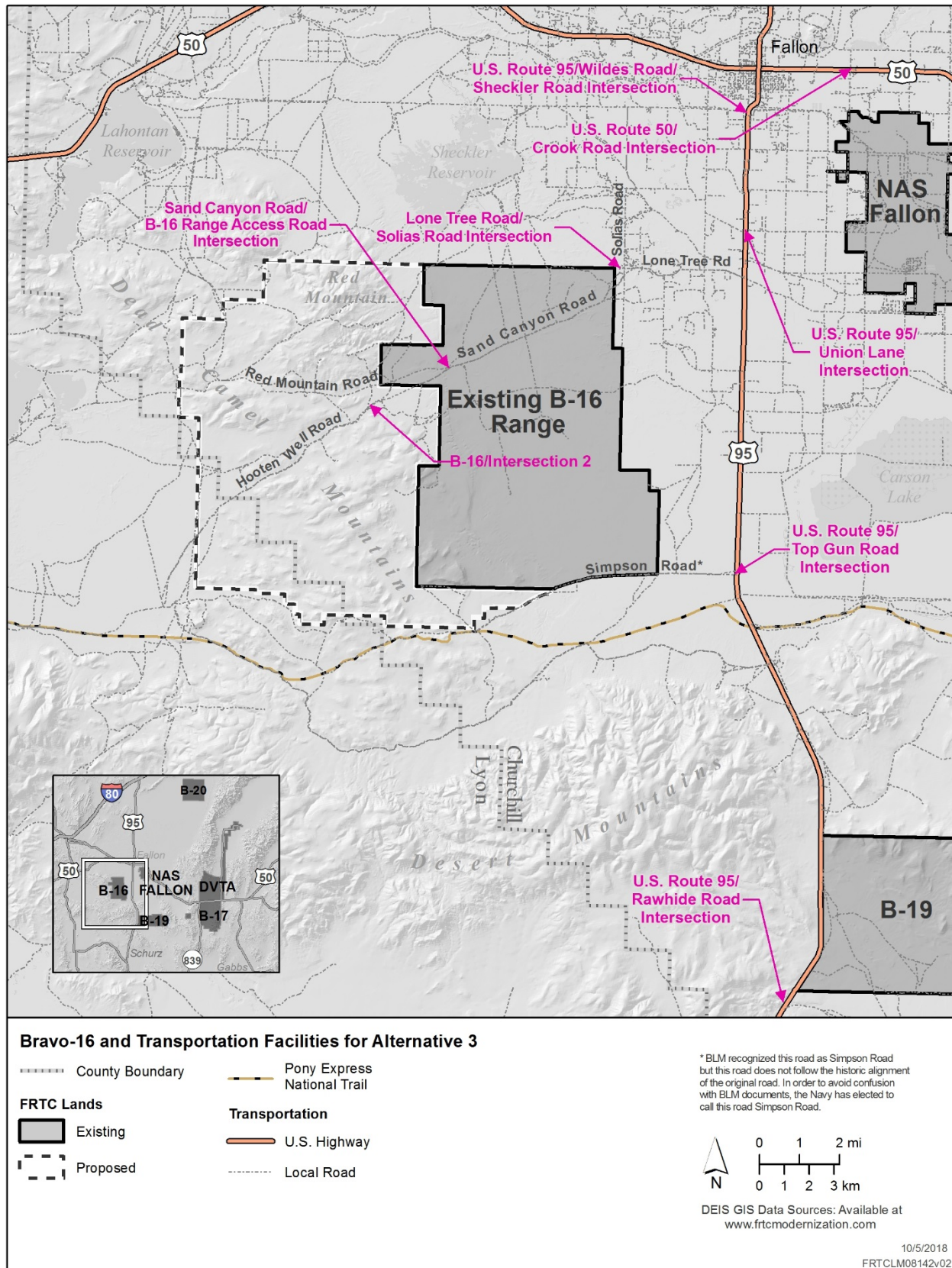


Figure 3.5-2: B-16 and Transportation Facilities for Alternative 3



Table 3.5-3 summarizes the LOS for main intersection and roadway segments near B-16. This table focuses on the existing B-16 range and vicinity roads. Additional information and detail are available in the Transportation Study in Supporting Study: Transportation Study (available at <http://frtcmodernization.com>).

**Table 3.5-3: Existing Intersection Segment Level of Service near B-16**

Intersection Segment	AM Peak Hour LOS	PM Peak Hour LOS
Lone Tree Road/Solias Road	A	A
Sand Canyon Road/B-16 range access road	A	A
B-16 Intersection 2	A	A
U.S. Route 95/Union Lane	B	B
U.S. Route 95/Wildes Road/Sheckler Road	D	C
U.S. Route 50/Crook Road	B	B
U.S. Route 50/Macari Lane	A	A
U.S. Route 95/Top Gun Road	A	A

Notes: B = Bravo, LOS = Level of Service, U.S. = United States

### 3.5.2.4.3 Transit Network

The Pony Express National Trail runs south of B-16, parallel with U.S. Route 50 to the north as shown in Figure 3.5-1 and Figure 3.5-2. It is a congressionally designated national historic trail, and traverses eight states from Missouri to California. Some recreational activities exist along the approximately 1,800-mile long trail, including sightseeing, hiking, biking, and horseback riding. Section 3.12 (Recreation) discusses the recreational activities and use of these trails in further detail.

### 3.5.2.5 Bravo-17

#### 3.5.2.5.1 Rights of Way

There are sixteen ROWs for roads or highways on the existing B-17 and the land requested for withdrawal or proposed for acquisition. Six of the ROWs are held by the Navy, eight are held by NDOT, one is held by the University of Nevada, Reno, and the other is held by Ormat Nevada Inc., as shown in Table 3.5-4.

**Table 3.5-4: Rights of Way Located within the Existing or Proposed B-17**

Serial Number	Facility Type	Holder	Status	Notes
CC-021314	282105 - FEDERAL AID HIGHWAY (SEC 17)	NDOT	Authorized	Gabbs Highway
N-3438	281008 - ROW-ROADS FEDERAL 44LD513	Navy	Authorized	
N-42748	289004 - ROW-MISC & SPECIAL	Navy	Authorized	EWR Site 6, Sheelite Road
N-42752	289007 - ROW-OTHER FEDERAL FACILITIES	Navy	Authorized	EWR Site 18, Sheelite Highway

Table 3.5-4: Rights of Way Located within the Existing or Proposed B-17 (continued)

Serial Number	Facility Type	Holder	Status	Notes
N-42753	289007 - ROW-OTHER FEDERAL FACILITIES	Navy	Authorized	EWR Site 21, Gabbs Highway
N-44649	289001 - ROW-OTHER-FLPMA	University of NV Reno	Authorized	Fairview Peak seismological site and road
N-86244	281001 - ROW-ROADS	Ormat Nevada Inc.	Authorized	Geothermal pad access road
Nev 058550	282104 - MATERIAL SITES (SEC 317)	NDOT	Authorized	
Nev 058668	282104 - MATERIAL SITES (SEC 317)	NDOT	Authorized	
Nev 058670	282104 - MATERIAL SITES (SEC 317)	NDOT	Authorized	
Nev 058705	282103 - FEDERAL AID HIGHWAY (SEC 317)	NDOT	Authorized	State Route 839
Nev 061170	282104 - MATERIAL SITES (SEC 317)	NDOT	Authorized	
Nev 024607	282106 - MATERIAL SITES (SEC 17)	NDOT	Authorized	
Nev 056517	282106 - MATERIAL SITES (SEC 17)	NDOT	Authorized	
N-45141	281007 - ROW-ROADS FEDERAL FACILITIES	Navy	Authorized	

Notes: EWR = Electronic Warfare Receiver, MISC = Miscellaneous, NDOT = Nevada Department of Transportation, NV = Nevada, ROW = Rights of Way, SEC = Section

### 3.5.2.5.2 Road Network

Figure 3.5-3 and Figure 3.5-4, illustrate the transportation routes near B-17. As shown in Figure 3.5-3 and Figure 3.5-4, U.S. Route 50 is an east/west freeway that runs to the north of B-17. State Route 839 is a north/south highway located to the west of B-17. The U.S. Route 50/State Route 839 intersection is a “T” intersection consisting of west, south, and east roads. There is a stop sign for northbound traffic approaching the intersection via State Route 839, and eastbound and westbound traffic on U.S. Route 50 proceeds freely through the intersection (Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]).

The most significant use of State Route 839 is by vehicles traversing the B-17 bombing range (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]). There is a primary access point to the B-17 range approximately 2 miles to the south of U.S. Route 50 and a secondary access point about 7.5 miles south of U.S. Route 50. State Route 839 is a two-lane road approximately 18 miles long with the majority of the road in Churchill County (Nevada Department of Transportation, 2017). State Route 839 turns into Sheelite Mine Road (or Ryan Canyon Road), which accesses the Rawhide Mine, approximately 16 miles south of U.S. Route 50. The classification of portions of State Route 839 pavement segments are mediocre or poor, but it continues to be an important route for access to the Rawhide Mine.

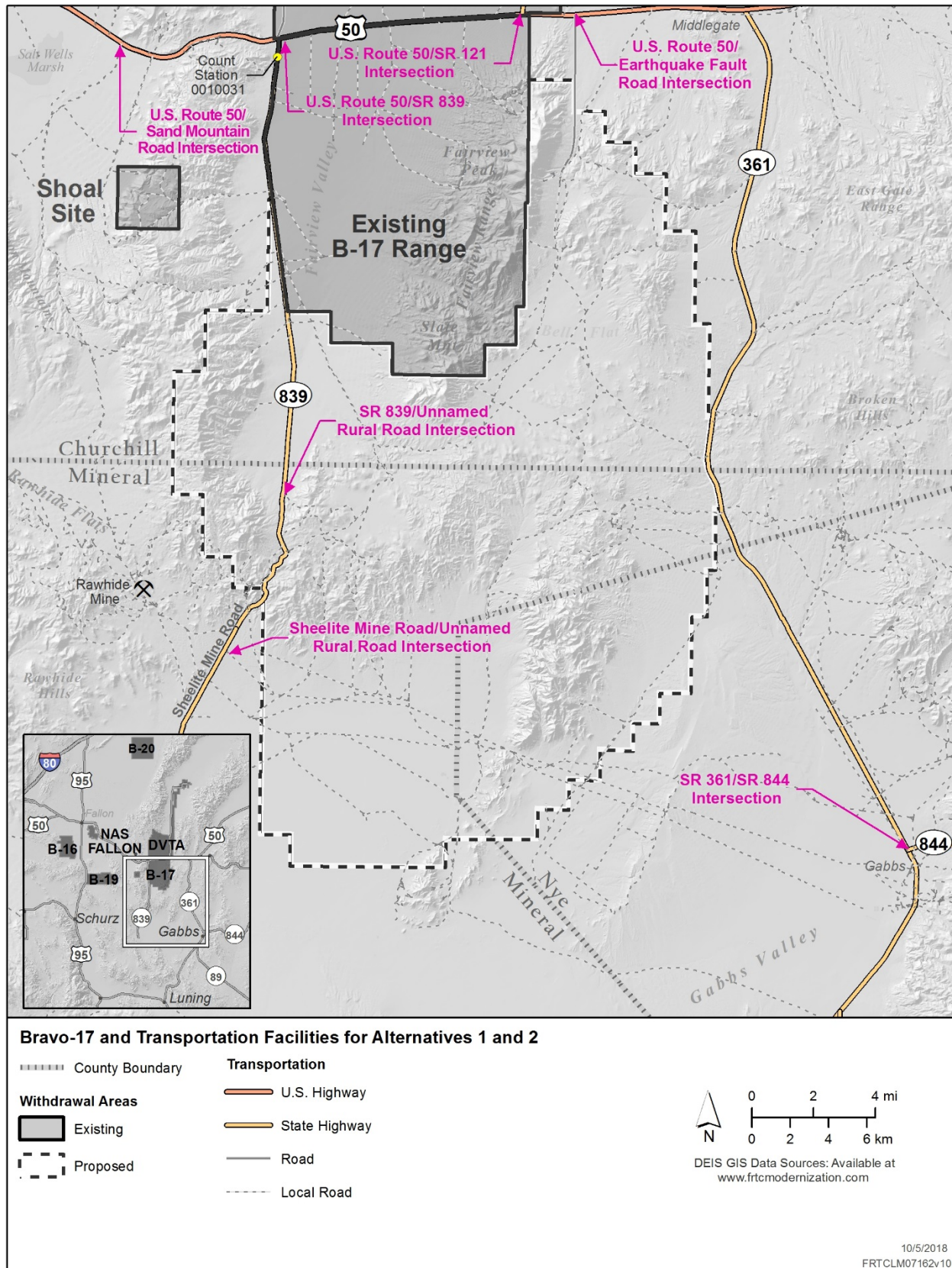


Figure 3.5-3: B-17 and Transportation Facilities for Alternatives 1 and 2



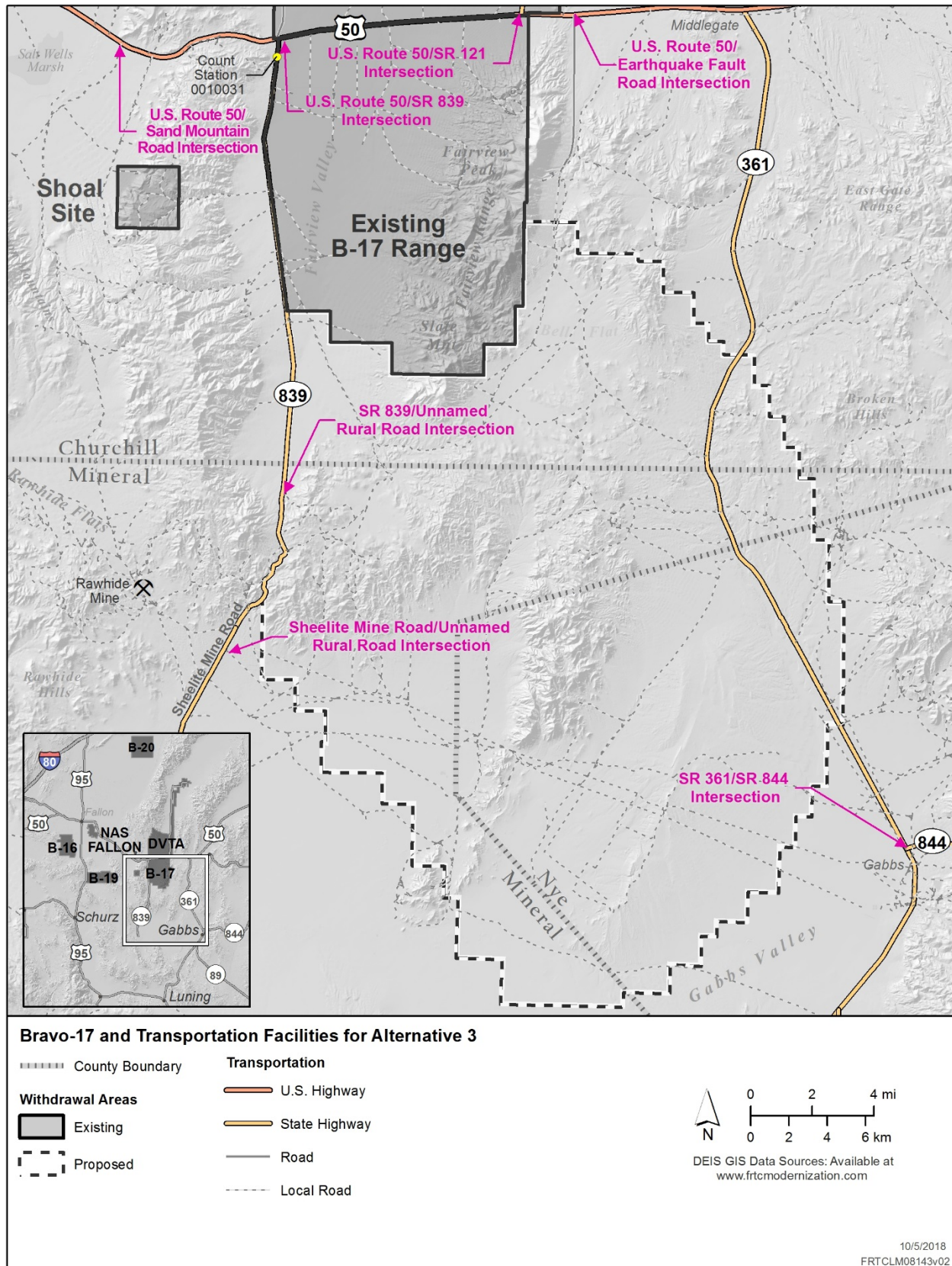


Figure 3.5-4: B-17 and Transportation Facilities for Alternative 3

State Route 361 is a north/south highway, similar in construction to State Route 839, and lies along the eastern limit of B-17 approximately 10 miles east. The U.S. Route 50/State Route 361 intersection is a “T” intersection consisting of west, south, and east roads. State Route 361 runs south from U.S. Route 50 to the community of Gabbs and intersects with State Route 844, an east/west highway. State Route 361 continues south from Gabbs and intersects with U.S. Route 95 near Luning. There are no direct paved roads connecting State Route 361 to B-17. The most significant use of State Route 361 is the connection between Luning, Gabbs, and Middlegate, via U.S. Route 50 to Fallon, as well as the access to recreational lands east of Gabbs along State Route 844. Earthquake Fault Road is a smaller less-traveled road east of B-17.

Table 3.5-5 summarizes the LOS for main intersections and roadway segments in B-17 and vicinity, including State Route 839. Additional information and detail are available in the Transportation Study in Supporting Study: Transportation Study (available at <http://frtcmodernization.com>). According to 2015 data at count station 0010031, shown on Figure 3.5-2, located on State Route 839, approximately 0.60 miles (mi.) south of U.S. Route 50, State Route 839 has an average daily traffic volume of 40 vehicles per day.

**Table 3.5-5: Existing Intersection and Roadway Segment Level of Service near B-17**

Intersection Segment	AM Peak Hour LOS	PM Peak Hour LOS
State Route 839/unnamed rural road	A	A
Sheelite Mine Road/unnamed road	A	A
Roadway Segment		
State Route 839, south of U.S. Route 50	A	A

Notes: B = Bravo, LOS = Level of Service, U.S. = United States

### 3.5.2.5.3 Transit Network

The Pony Express trail runs parallel to U.S. Route 50, south of the existing and proposed B-17. Some recreational activities exist along the approximately 1,800-mile trail, including sightseeing, hiking, biking, and horseback riding, depending on the section of trail. Section 3.12 (Recreation) discusses the recreational activities and use of the trail.

### 3.5.2.6 Bravo-20

#### 3.5.2.6.1 Rights of Way

Currently, B-20 and the lands requested for withdrawal have two Navy-held ROWs, as shown in Table 3.5-6.

**Table 3.5-6: Rights of Way Located within the Existing or Proposed B-20**

Serial Number	Facility Type	Holder	Status	Notes
N-44676	281007 - ROW-ROADS FEDERAL FAC	Navy	Authorized	
N-82709	281007 - ROW-ROADS FEDERAL FAC	Navy	Authorized	

Notes: FAC = Facilities, ROW = Rights of Way

### 3.5.2.6.2 Road Network

Interstate 80 is an east/west running highway that passes approximately 6–10 miles to the north of B-20. It extends through the northwest portion of Churchill County from Lyon County to Pershing County. In Nevada, Interstate 80 is approximately 400 miles long and traverses multiple counties. Interstate 80 intersects with U.S. Route 95 within Churchill County. Approximately 27 miles of Interstate 80 are within Churchill County (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]).

The B-20 Navy Access Road (also known locally as Pole Line Road exiting U.S. Route 95), shown in Figure 3.5-3, is an east/west unpaved road that passes approximately 1–3 miles within B-20 in the northern part of the range. The only authorized user of this road is the Navy. It is 33.3 miles in length (Nevada Department of Transportation, 2017). East County Road is a smaller and less traveled road that runs north-to-south on the east side of B-20.

Figure 3.5-5 and Figure 3.5-6 illustrate the transportation routes near B-20. Table 3.5-7 summarizes the LOS for main intersection and roadway segments near B-20. Additional information and detail are available in the Transportation Study in Supporting Study: Transportation Study (available at <http://frtcmodernization.com>).

**Table 3.5-7: Existing Intersection and Roadway Segment Level of Service Near B-20**

Intersection Segment	AM Peak Hour LOS	PM Peak Hour LOS
B-20 range access road (known locally as Pole Road)	A	A
East County Road/unnamed rural road	A	A
U.S. Route 95/ Navy B-20 range access road (Pole Line Road)	A	A
East County Road/Poco Canyon Road	A	A
East County Road/Poco Canyon Road	A	A
Roadway Segment		
B-20 range access road (Navy use only)	A	A

Notes: B = Bravo, LOS = Level of Service, U.S. = United States

### 3.5.2.6.3 Transit Network

The California National Historic Trail shown on Figure 3.5-5, follows the migration of farmers, settlers, miners, and others who traveled from Missouri to California by covered wagon in the 1800s. The trail is approximately 2,000 miles long and traverses Missouri, Kansas, Nebraska, Colorado, Wyoming, Idaho, Utah, Nevada, and Oregon, to Central California. The trail traces Interstate 80 and winds south into the Ruby Mountains. In addition to formal trail systems, there are many informal trails used for OHVs near B-20. The majority of the off-highway vehicle roads and trails mapped are dirt roads between 6 and 12 feet wide. An additional substantial number of roads and trails include dirt roads greater than 12 feet wide (AMEC Environment & Infrastructure, 2013). There are no major pedestrian or bike trails located within the proposed B-20 range. Section 3.12 (Recreation) discusses the use of land near B-20 for OHVs.



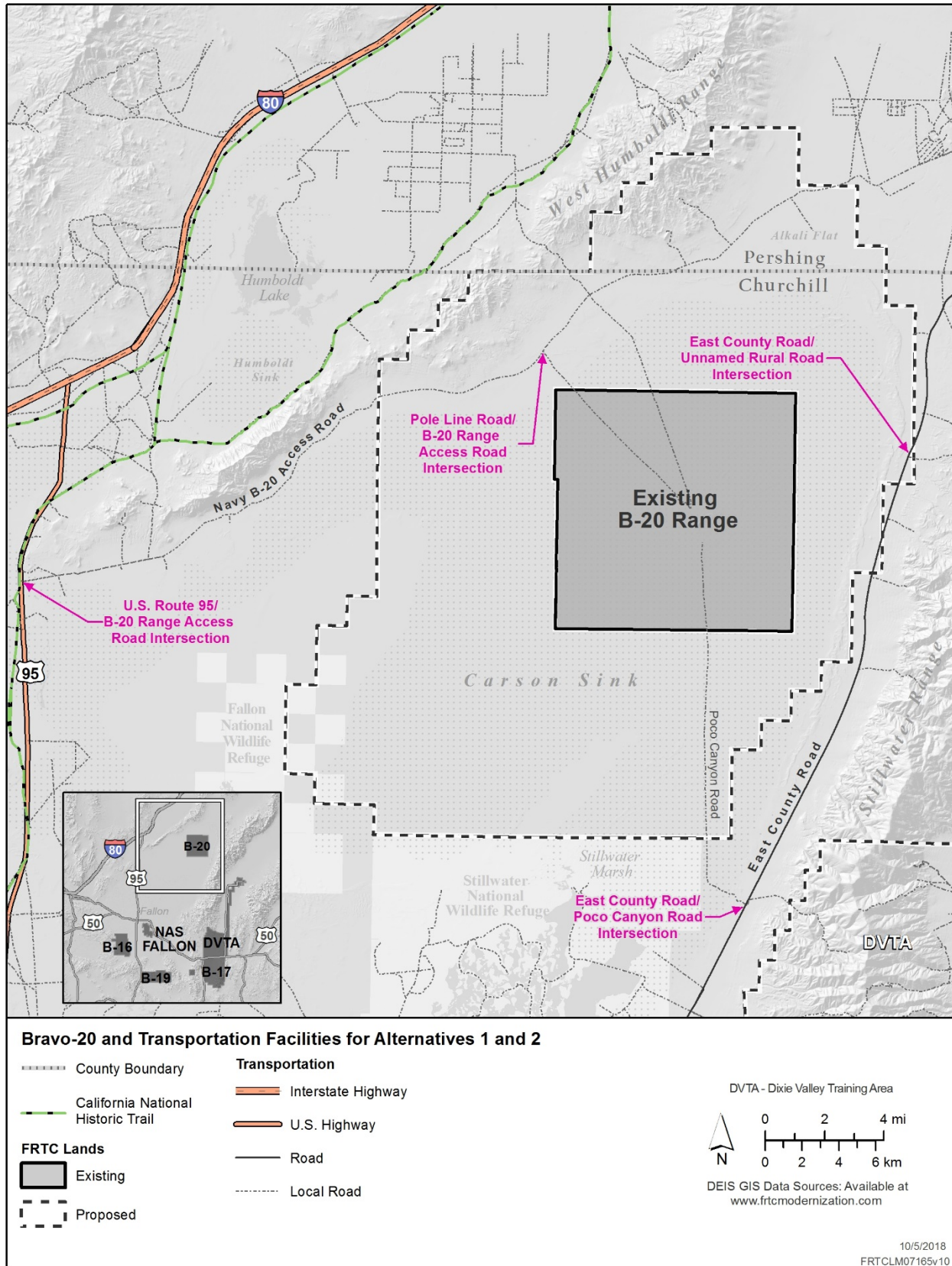


Figure 3.5-5: B-20 and Transportation Facilities for Alternatives 1 and 2

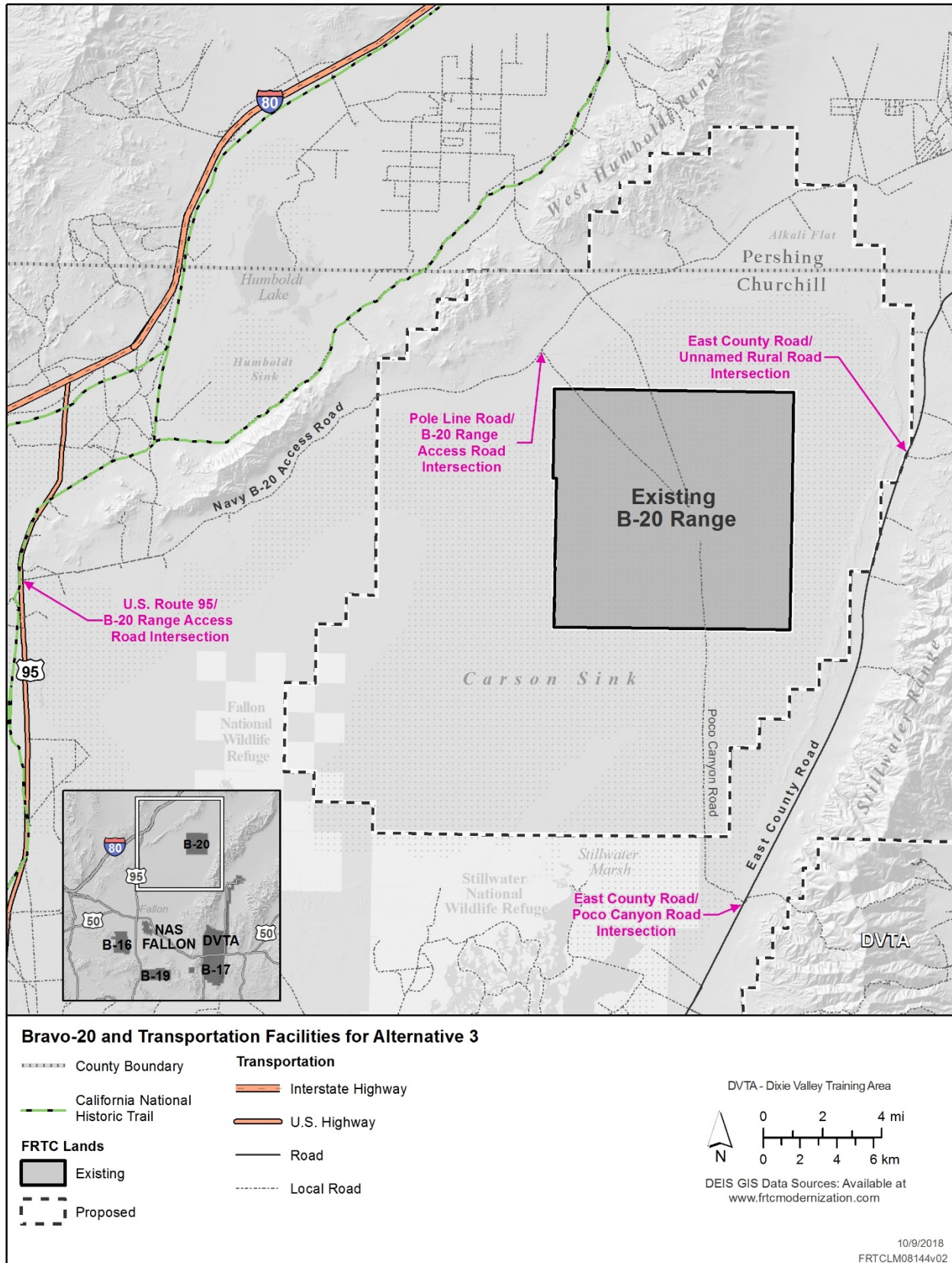


Figure 3.5-6: B-20 and Transportation Facilities for Alternative 3



### 3.5.2.7 Dixie Valley Training Area

#### 3.5.2.7.1 Rights of Way

Fourteen ROWs are located within the existing or proposed DVTA. There are eight ROWs on the DVTA that are held by NDOT for federal aid highways and other uses, five are held by the Navy, and one is held by Churchill County as shown in Table 3.5-8.

**Table 3.5-8: Rights of Way Located within the Existing or Proposed DVTA**

Serial Number	Facility Type	Holder	Status	Notes
CC 023694	282105 - FEDERAL AID HIGHWAY (SEC 17)	NDOT	Authorized	U.S. Route 50
N-11870	282103 - FEDERAL AID HIGHWAY (SEC 317)	NDOT	Authorized	Dixie Valley Highway
N-12143	282104 - MATERIAL SITES (SEC 317)	NDOT	Authorized	
N-12144	282104 - MATERIAL SITES (SEC 317)	NDOT	Authorized	Material site and access road
N-37238	289001 - ROW-OTHER-FLPMA	Navy	Authorized	Radar system site, road, and distribution line.
N-42567	289007 - ROW-OTHER FEDERAL FAC	Navy	Authorized	EWR site #13, Old Dixie Road
N-42568	289007 - ROW-OTHER FEDERAL FAC	Navy	Authorized	EWR site #26, Old Dixie Road
N-42569	289007 - ROW-OTHER FEDERAL FAC	Navy	Authorized	EWR site #27, Old Dixie Road
N-42570	289007 - ROW-OTHER FEDERAL FAC	Navy	Authorized	EWR site #31, Eleven Mile Canyon Road
N-49742	281001 - ROW-ROADS	Churchill County	Authorized	Dixie Valley Road
Nev 042775	282105 - FEDERAL AID HIGHWAY (SEC 17)	NDOT	Authorized	U.S. Route 50
Nev 045631	282105 - FEDERAL AID HIGHWAY (SEC 17)	NDOT	Authorized	U.S. Route 50
Nev 054862	282105 - FEDERAL AID HIGHWAY (SEC 17)	NDOT	Authorized	U.S. Route 50
Nev 056515	282106 - MATERIAL SITES (SEC 17)	NDOT	Authorized	U.S. Route 50/Westgate

Notes: EWR = Electronic Warfare Receiver, FLPMA = Federal Land Policy and Management Act, NDOT = Nevada Department of Transportation, ROW = Rights of Way, SEC = Section, U.S. = United States

### 3.5.2.7.2 Road Network

State Route 121 passes through the DVTA. Referred to as Dixie Valley Road, State Route 121 is an important road for accessing the Dixie Meadows Geothermal site. State Route 121 is approximately 27 miles in length, runs through Churchill County, and spans from U.S. Route 50 to 0.1 mile north of Settlement Road as depicted in Figure 3.5-7 and Figure 3.5-8 (Nevada Department of Transportation, 2017).

Table 3.5-9 summarizes the LOS for main intersections and roadway segments in the DVTA. Additional information and detail is available in the Supporting Study: Transportation Study (available at <http://frtcmodernization.com>). Figure 3.5-7 and Figure 3.5-8 illustrate the transportation facilities in the DVTA.

**Table 3.5-9: Existing Intersection and Roadway Segment Level of Service in the DVTA**

Intersection Segment	AM Peak Hour LOS	PM Peak Hour LOS
U.S. Route 95/Sand Mountain Road	A	A
U.S. Route 50/State Route 839	A	A
U.S. Route 50/State Route 121	A	A
U.S. Route 50/Earthquake Fault Road	A	A
Roadway Segment		
U.S. Route 50, west of Macari Lane	A	A
U.S. Route 50, west of Sand Mountain Road	A	A
U.S. Route 50, west of State Route 839	A	A
U.S. Route 50, west of State Route 121	A	A

Notes: LOS = Level of Service, U.S. = United States

### 3.5.2.7.3 Transit Network

The DVTA contains a great number of informal trails used for OHVs. The majority of the roads and trails mapped are dirt roads between 6 and 12 feet wide. An additional substantial number of roads and trails include dirt roads greater than 12 feet wide (AMEC Environment & Infrastructure, 2013). Section 3.12 (Recreation) discusses the use of the DVTA for OHVs in detail.

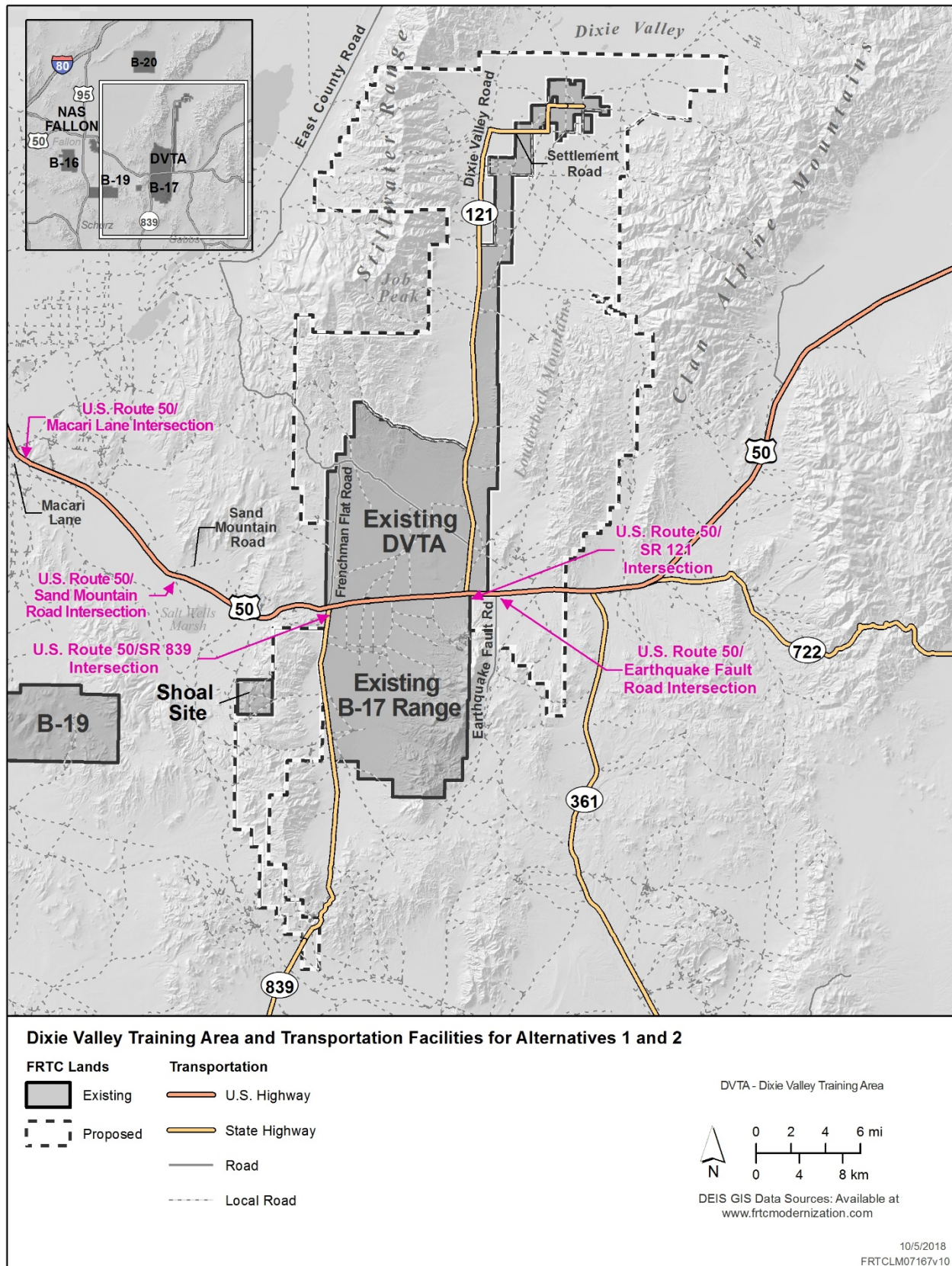


Figure 3.5-7: DVTA and Transportation Facilities for Alternatives 1 and 2



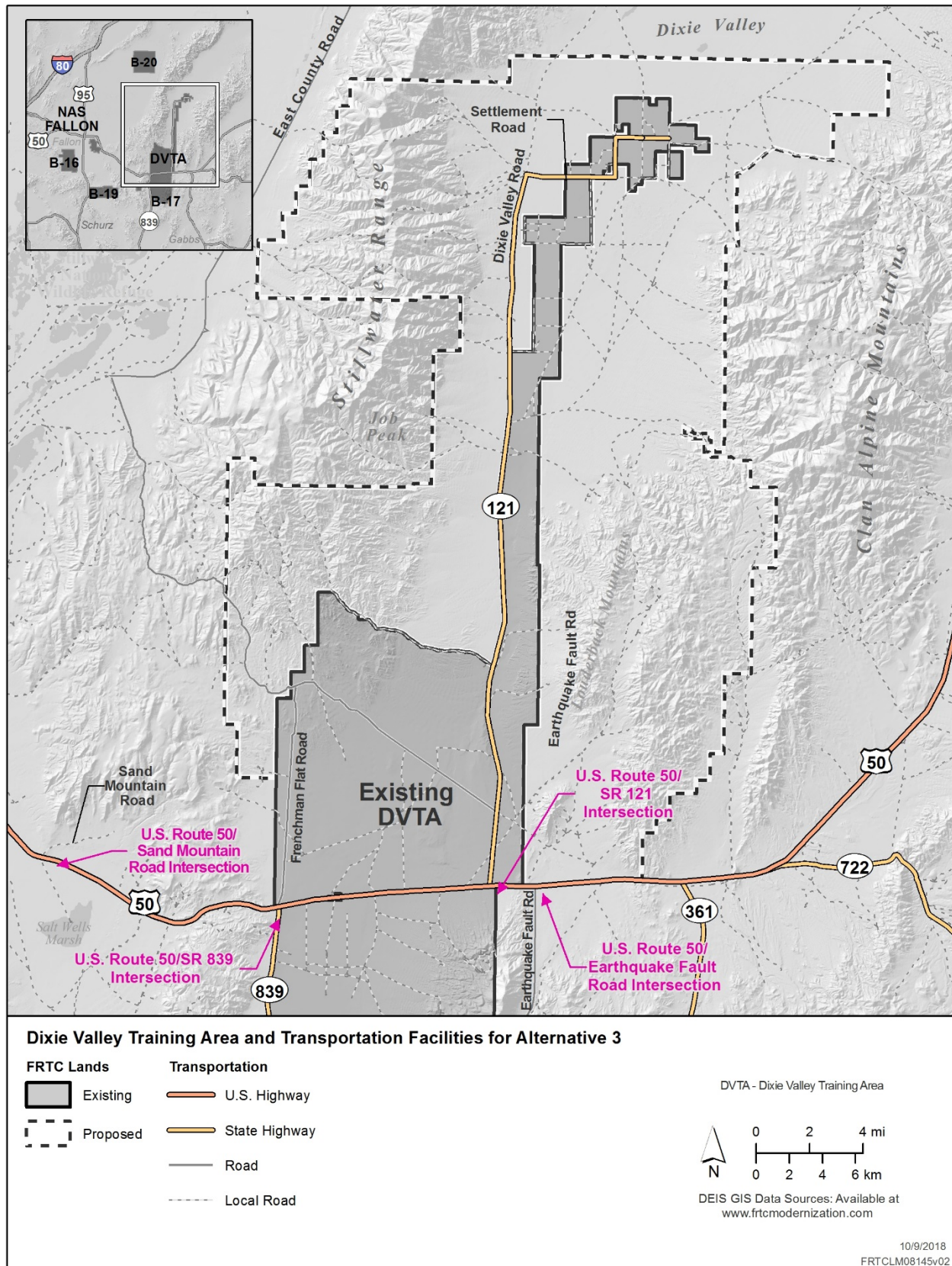


Figure 3.5-8: DVTA and Transportation Facilities for Alternative 3

### **3.5.3 Environmental Consequences**

The following provides an analysis of environmental effects of the No Action Alternative and Alternatives 1 through 3 against the environmental baseline as described in Section 2.4 (Environmental Baseline). A Summary of the potential impacts with implementation of the No Action Alternative or any of the three action alternatives (Alternatives 1, 2, and 3) is provided at the end of this section (see Section 3.5.3.6, Summary of Effects and Conclusions).

#### **3.5.3.1 No Action Alternative**

The No Action Alternative is not the environmental baseline to which Alternative 1, 2, or 3 are compared in this analysis. See Section 2.4 (Environmental Baseline) of this EIS for a detailed description of the baseline. Under the No Action Alternative, the Proposed Action would not occur, and there would be no renewal of the existing land withdrawals at the FRTC. Consequently, the Transportation study conducted for this EIS found that under the No Action Alternative, existing training activities at NAS Fallon would be reduced, resulting in military personnel relocation and subsequently the downsizing of some business and reduction of annual growth rate. That relocation and downsizing could lead to reduced traffic volumes at NAS Fallon and to some degree throughout the FRTC (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]). There would be no changes to existing transportation routes but there would be a potential reduction in traffic volumes under the No Action Alternative. The potential reduction of training activities would be expected to reduce the number of military personnel, federal workers, and civilian contractors temporarily working, residing, and utilizing transportation facilities in the FRTC region of influence. Therefore, implementation of the No Action Alternative would not result in changes to transportation routes or travel patterns and would have no significant impact on transportation.

#### **3.5.3.2 Alternative 1: Modernization of the Fallon Range Training Complex**

Under Alternative 1, the most notable roadway closures would include: the unpaved Sand Canyon Road that traverses B-16; portions of the unpaved B-20 Access Road (open for Navy use only) that pass to the north of B-20; and potentially, State Route 839 west of B-17. These roads and LOS are shown in Table 3.5-10 and in the 2017 Transportation study conducted for this EIS (Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]).

Implementation of Alternative 1 would not result in any incremental increase in existing traffic generation. Instead, traffic impacts would arise from the redistribution of traffic from their current routes to other roadways due to the closure of existing public roads resulting from training range expansion and the potential closure and rerouting of State Route 839 (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]). Site-specific National Environmental Policy Act (NEPA) analysis would need to occur for the re-alignment of State Route 839 and for the potential Paiute Pipeline relocation after the implementation of Alternative 1. Options for rerouting State Route 839 for Alternative 1 are discussed in Section 3.5.3.2.2 (Bravo-17). OHV use would not be permitted in the expanded Bravo ranges. Closure of OHV use areas as a result of implementing Alternative 1 is discussed in Section 3.12 (Recreation). Access impacts on cultural and sacred sites are discussed in Section 3.11 (Cultural Resources).

Table 3.5-10: Alternative 1: Level of Service – Intersections near B-16

Intersection Segment	Existing Baseline AM Peak Hour LOS	Existing Baseline PM Peak Hour LOS	Alternative 1 AM Peak Hour LOS	Alternative 1 PM Peak Hour LOS
Lone Tree Road/Solias Road	A	A	A	A
Sand Canyon Road/B-16 range access road	A	A	A	A
B-16 Intersection 2	A	A	A	A
U.S. Route 95/Union Lane	B	B	B	B
U.S. Route 95/Wildes Road/Sheckler Road	D	C	D	Option* 1 = D Options* 2 and 3 = C
U.S. Route 50/Crook Road	B	B	B	B
U.S. Route 50/Macari Lane	A	A	A	A
U.S. Route 95/Top Gun Road	A	A	A	A

\* “Options” refer to the section titled *Road and Infrastructure Improvements to Support Alternative 1, State Route 839 Notional Relocation Corridor Options* discussed under Section 3.5.3.2.2 (Bravo-17).

Notes: LOS = Level of Service, U.S. = United States

### 3.5.3.2.1 Bravo-16

#### *Land Withdrawal and Acquisition*

Under Alternative 1, the B-16 range would expand to the west by virtue of the Navy withdrawing approximately 32,201 acres of federal BLM land (see Table 2-1), increasing the range’s total area to approximately 59,560 acres. These new lands would be fenced in accordance with all applicable regulations and would not impact established ground transportation routes in B-16. Although Alternative 1 would result in closure of the Sand Canyon Road, it would not result in a significant impact to transportation, because the road is used primarily for access to B-16 and closure of it would not impact LOS on surrounding roads or intersections. Therefore, there would be no significant impact on transportation as a result of the withdrawal and acquisition under Alternative 1.

#### *Training Activities*

Training activities at B-16 would not change from Baseline Conditions see Section 2.4 (Environmental Baseline) under Alternative 1, and therefore would have no significant impact on transportation.

#### *Public Accessibility*

Public access changes under Alternative 1 would result in a significant impact on transportation routes near B-16. Under Alternative 1, Sand Canyon Road would be closed to the public, preventing public travel on this road and causing a loss of access via customary/familiar transit routes. Access to the planned Special Recreation Management Areas, discussed in detail in Section 3.12 (Recreation) and shown in Figure 3.12-4, in the withdrawal area would be closed to OHV use and alternate routes would be utilized.

Rights of Way: Implementation of Alternative 1 would close access to one ROW held by Churchill County, and one held by the Los Angeles Department of Water and Power in B-16. The two ROWs held by the Navy would remain under Navy control. The ROWs held by Churchill County (road), and the Los

Angeles Department of Water and Power (transmission line and road), would be purchased as real property. This purchase would result in a loss of access to the roads formerly held by Churchill County and the Los Angeles Department of Water and Power.

**Road Network:** Table 3.5-10 summarizes the projected LOS changes to intersections in the B-16 range. Implementation of Alternative 1 and closure of Sand Canyon Road would not result in a significant impact to transportation, because the road is used primarily for access to B-16 and closure of it would not impact LOS on surrounding roads or intersections, as shown in Figure 3.5-1. Users of land that is currently open for recreational OHV use would be impacted by the closure of Sand Canyon Road if it were the route used to access these areas (e.g., Dead Camel Mountains). There are other routes available off-road that can be used to access these areas (e.g., Dead Camel Mountains). These impacts are discussed further in Section 3.12 (Recreation).

**Transit Network:** Implementation of Alternative 1 would not result in any impact on rail corridors on B-16 because no rail corridors are located within the B-16 range. Implementation of Alternative 1 would not result in any significant impact to pedestrian and bike network trails near the B-16 range because there are no official pedestrian or bike network trails near B-16. The Pony Express National Historic trail is located just to the south of the B-16 proposed land withdrawals; therefore, there would be no impact on the trail or its use.

### ***Construction***

Construction on the B-16 range of fencing and administrative buildings may temporarily increase traffic on existing roads due to equipment, laborers, and material movement onto and away from construction sites. However, these impacts would not result in significant changes to transit times for residents or emergency responders as they would be intermittent and temporary. Therefore, there would be no significant impact to transportation as a result of construction on B-16 under Alternative 1.

#### **3.5.3.2.2 Bravo-17**

### ***Land Withdrawal and Acquisition***

Under Alternative 1, approximately 178,013 acres (176,977 acres of BLM lands and 1,036 acres of non-federally owned lands) would be withdrawn or acquired to expand the B-17 range to the south (see Table 2-1), increasing its total area to approximately 232,799 acres. These new lands would be fenced in accordance with all applicable regulations, but would impact established ground transportation routes in the B-17 withdrawal lands by necessitating the potential re-routing of State Route 839 and changing associated travel distances and times for users of this route. Based on the changes in travel distance described below under each notional relocation corridor for the potential State Route 839 relocation, there would be a significant impact on transportation as a result of the withdrawal and acquisition of B-17 under Alternative 1.

### ***Training Activities***

Training activities at B-17 would not change from Baseline Conditions (see Section 2.4, Environmental Baseline) under Alternative 1 and therefore would have no significant impact on transportation.

### ***Public Accessibility***

Public access changes under Alternative 1 would result in a significant impact on transportation routes near B-17 with the potential re-routing of State Route 839 causing changes to time and distance, as well as a loss of access via customary/familiar transit routes. Under Alternative 1, several state and local

roads within the B-17 range would be closed to the public, restricting public access. However, LOS at intersection segments in the B-17 range such as State Route 839/unnamed rural road, Sheelite Mine Road/unnamed road, and State Route 839 south of U.S. Route 50 would not change from their existing baseline AM Peak Hour LOS of A.

Under Alternative 1 the potential closure and rerouting of State Route 839 associated with the expansion of B-17 would prevent access to public lands and impact traffic patterns. This state route is currently important to county residents and visitors, and a major reroute would have a direct impact on access to Rawhide Mine and cultural/recreation sites south of the B-17 range. This EIS assumes that the existing State Route 839 route would remain open until the new route is completely constructed (see “Road and Infrastructure Improvements to Support Alternative 1,” for further details). The potential rerouting of State Route 839 and construction of the new State Route 839 could have an impact on traffic flow on U.S. Route 50 and on the freight transit that occurs over U.S. Route 50 and U.S. Route 95 as discussed further under “Road and Infrastructure Improvements to Support Alternative 1.”

Rights of Way: Implementation of Alternative 1 would close access to eight NDOT held ROWs (including Gabbs Highway and potentially State Route 839), one University of Nevada, Reno ROW (Fairview Peak seismological site and road), and one ROW held by Ormat Nevada Inc. (Geothermal pad access road) on B-17. The six ROWs held by the Navy would remain under Navy control. The ROWs held by Ormat Nevada Inc., NDOT, and the University of Nevada, Reno would be purchased as real property.

Road Network: Implementation of Alternative 1 and expansion of the B-17 range would change the nature and magnitude of ground traffic. Travel distances would likely be affected; the travel distances may be unfavorable or beneficial depending on the specific route traveled and which potential re-route option is chosen. Changes in travel distance are detailed further in the potential relocation options of State Route 839 below. Depending on which option is chosen, the changes would be more than minimal, meaning that the LOS degrades to a level of D, E, or F (see Table 3.5-10) as a result of Alternative 1. The projected future traffic volumes shown and analyzed assume that redistributing traffic from State Route 839 to the new route would not warrant the insertion of traffic signal control. However, this potential reroute would cause a decrease in the LOS rating of the U.S. Route 95/Wildes Road/Sheckler Road intersection from a LOS C rating to a LOS D rating in the afternoon under peak hour conditions under Option 1 for relocation (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]). None of the options for re-route would change the average speed on the road segments by more than 1 mile per hour according to the 2017 Transportation Study. The PSI rating would improve on the relocated portion of State Route 839 but would not be expected to change in other areas. Additional information and detail is available in the Supporting Study: Transportation Study (available at <http://frtcmodernization.com>). U.S. Route 95 is a busy road, and Sheckler Road is an uncontrolled 4-way stop. An increase in traffic on the U.S. Route 95 would decrease the LOS on the two perpendicular roads as well. This change would result in a significant impact on transportation near the B-17 range.

Transit Network: Implementation of Alternative 1 would not result in a significant impact on rail corridors since no rail corridors are located within the B-17 range. The expansion of B-17 under Alternative 1 would potentially impact the Salt Wells Extensive Recreational Management Area, proposed by the BLM under Alternative E of the *Carson City District Draft Range Management Plan* (2014). Closure of the public land under Alternative 1 would restrict the use of the extensive BLM planned trail network in the Salt Wells Extensive Recreational Management Area. The Recreation section of this EIS (Section 3.12) discusses impacts on hiking and recreation on trails under Alternative 1.



### ***Construction***

Construction on the B-17 range of fencing and administrative buildings may temporarily increase traffic on existing roads due to equipment, laborers, and material movement onto and away from construction sites. However, these impacts would not result in significant changes to transit times for residents or emergency responders as they would be intermittent and temporary.

### ***Road and Infrastructure Improvements to Support Alternative 1***

Alternative 1 includes the potential relocation of State Route 839 and re-routing a portion of the Paiute Pipeline. State Route 839 has an average count of 40 vehicles per day as of 2015. The Navy, which uses State Route 839 to access B-17, is the primary user of this road (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]). In addition to providing access to the Rawhide-Denton Mine, State Route 839 also provides access to the eastern slope of the Sand Springs Range. The Navy is working with the NDOT, the BLM, Churchill County, and other stakeholders to identify a suitable location for relocating State Route 839 and the Paiute Pipeline outside of B-17's Weapon Danger Zone (WDZ). The Navy and stakeholders are exploring three notional options at this time for State Route 839, as shown in Chapter 4, Cumulative Impacts (see Figure 4-3: Cumulative Impact Sites in and near the Lands Requested for Withdrawal or Proposed for Acquisition). All three options include closing up to 24 miles of the existing State Route 839 to public travel and improving existing dirt roads/trails to paved roads.

The BLM or other land manager would conduct follow-on, site-specific NEPA analysis of any potential routes for such ROW (for the Paiute Pipeline or State Route 839), prior to making any decision with respect to any final route. NDOT would ensure that construction of any new route is complete before closing any portion of the existing State Route 839, and the Navy would not utilize any portion of the expanded B-17 range (if implemented) that would overlap the existing State Route 839 unless and until any such new route had been completed and made available to the public. The Navy has responsibility for planning, designing, permitting, funding and constructing any realignment of highways. The Navy would coordinate with NDOT during each of these phases. The Navy has submitted a request to utilize the Defense Access Roads program. If approved, the Navy would coordinate construction execution through the Federal Highway Administration.

### ***State Route 839 Notional Relocation Corridor Option 1***

Under Option 1 for the relocation of State Route 839 (as shown in Figure 4-3), the existing State Route 839 would be closed at the U.S. Route 50 intersection and State Route 839 would be re-routed to connect to U.S. Route 95, south of the City of Fallon. This corridor would traverse BLM-managed land as well as the Walker River Paiute Indian Reservation. Under Option 1, the redistribution of existing and projected future traffic from State Route 839 would result in a drop from LOS C to LOS D during the afternoon peak hour at the U.S. Route 95/Wildes Road/Sheckler Road intersection. Diverted traffic travelling between the Option 1 intersection with U.S. Route 95 and Fallon would pass through this intersection, incrementally increasing the delay for motorists approaching the intersection via Wildes Road and Sheckler Road by approximately 2.6 seconds per vehicle. Installation of a traffic signal at this intersection would result in LOS C or better conditions during both peak hours. The road would follow pre-existing dirt roads or trails and would be developed into a paved two-lane highway (to the same levels as the road it is replacing, following the minimum design criteria listed in NDOT's design manual). Shoulders would serve as temporary staging areas for construction of the road. Construction activities would temporarily increase noise and fugitive dust. Because the corridor goes through Walker River

Paiute Indian land, construction could occur on the Tribal Reservation. Proposed roadwork would be anticipated to take one to two years and would be phased to minimize impacts on the public. The phasing would occur such that the original State Route 839 would be kept open until the new road construction was complete and the road open for use.

Impacts on travel distance would occur with rerouting State Route 839. If notional relocation corridor Option 1 were chosen, traffic approaching the existing U.S. Route 50/State Route 839 intersection from the east and destined for Sheelite Mine Road would be forced to continue west towards Fallon. Traffic would then proceed southward on U.S. Route 95 to Rawhide Road, before backtracking eastward on the State Route 839 replacement corridor, causing substantial out-of-direction travel. The travel distance would increase from approximately 20 miles to approximately 84 miles. The affected traffic volume is comparatively low (i.e., 13 vehicles in the morning peak hour and 2 vehicles in the afternoon peak hour).

Eastbound motorists originating in Fallon would need to divert from U.S. Route 50 eastbound to U.S. Route 95 southbound and then drive on the State Route 839 replacement route. The travel distance for this movement would increase from approximately 53 miles to approximately 55 miles. The affected traffic volume is also comparatively low (i.e., 13 vehicles in the morning peak hour and 2 vehicles in the afternoon peak hour). For motorists approaching from the south via Sheelite Mine Road and originating in the vicinity of Schurz, the State Route 839 replacement route would substantially reduce travel distance, since vehicles would not be required to travel southbound and eastbound on U.S. Route 95 through Babbitt (where U.S. Route 95 and Sheelite Mine Road intersect south of the B-17 range) before connecting to Sheelite Mine Road northbound. As a result, the travel distance for this movement would decrease from approximately 71 miles to approximately 44 miles. Option 1 would therefore reduce travel distance for traffic originating in the Schurz area (see Supporting Study: Transportation Study [available at <http://frtcmmodernization.com>]).

### **State Route 839 Notional Relocation Corridor Option 2**

Under Option 2 for the relocation of State Route 839 (as shown in Figure 4-3), the existing State Route 839 would be closed at the U.S. Route 50 intersection, and existing roads west of the Sand Springs Range would be improved. Option 2 would not change LOS at the U.S. Route 95/Wildes Road/Sheckler Road intersection. As with State Route 839 Notional Relocation Corridor Option 1, the road would follow pre-existing dirt roads or trails and would be developed into a paved two-lane highway (to the same levels as the road it is replacing, following the minimum design criteria as listed in NDOT's design manual). Construction activities would temporarily increase noise and fugitive dust. Construction under Option 2 would not occur on the Walker River Paiute Indian reservation. Proposed roadwork would be anticipated to take one to two years and would be phased to minimize impacts on the public. The phasing would occur such that the original State Route 839 would be kept open until the new road construction was complete and the road open for use.

If notional relocation corridor Option 2 were chosen, travel distance impacts would occur with rerouting State Route 839. Traffic approaching the existing U.S. Route 50/State Route 839 intersection from the east, and destined for Sheelite Mine Road, would be forced to continue west towards Fallon, but at a lesser distance than under Option 1. Motorists would only need to travel approximately 5 miles east to the new intersection of State Route 839 and U.S. Route 50 going westbound. Eastbound motorists originating in Fallon would travel approximately 5 miles less on U.S. Route 50 eastbound to the intersection with State Route 839 replacement route. For motorists approaching from the south via Sheelite Mine Road and originating near Schurz, the State Route 839 replacement route would not

substantially reduce travel distance. Vehicles would still be required to travel southbound and eastbound on U.S. Route 95 through Babbitt (where U.S. Route 95 and Sheelite Mine Road intersect south of the B-17 range) before connecting to Sheelite Mine Road northbound. Option 2 would reduce travel distance for trips originated on U.S. Route 50 to the east of State Route 839 (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]).

### **State Route 839 Notional Relocation Corridor Option 3**

Under Option 3 for the relocation of State Route 839 (as shown in Figure 4-3), the existing State Route 839 would be closed at the U.S. Route 50 intersection and existing roads along the existing Paiute Pipeline route would be improved. The corridor would traverse an existing bombing range and would be fenced on either side where necessary. Option 3 would not change the LOS at the U.S. Route 95/Wildes Road/Sheckler Road intersection. As with State Route 839 Options 1 and 2, the road would follow pre-existing dirt roads or trails and would be developed into a paved two-lane highway (to the same levels as the road it is replacing, following the minimum design criteria as listed in NDOT's design manual). Construction activities would temporarily increase noise and fugitive dust. Construction under Option 3 would not occur on the Walker River Paiute Indian reservation. Proposed roadwork would be anticipated to take up to two years and would be phased to minimize impacts on the public. The phasing would occur such that the original State Route 839 would be kept open until the new road construction was complete and the road open for use.

If notional relocation corridor Option 3 were chosen, travel distance impacts would occur with rerouting State Route 839. Traffic approaching the existing U.S. Route 50/State Route 839 intersection from the east, and destined for Sheelite Mine Road/unnamed road, would be forced to continue west towards Fallon, at a distance of approximately 12 miles east to the new intersection of State Route 839 and U.S. Route 50. Eastbound motorists originating in Fallon would travel approximately 12 miles less on U.S. Route 50 eastbound to the intersection with Option 3 State Route 839 replacement route. The State Route 839 replacement route is approximately 10 miles longer than the current State Route 839 from the intersections of State Route 839/U.S. Route 50 and State Route 839 and Sheelite Mine Road. For motorists approaching from the south via Sheelite Mine Road and originating in the vicinity of Schurz, the State Route 839 replacement route would not substantially reduce travel distance, since vehicles would still be required to travel southbound and eastbound on U.S. Route 95 through Babbitt (where U.S. Route 95 and Sheelite Mine Road intersect south of the B-17 range) before connecting to Sheelite Mine Road northbound. Option 3 would reduce the travel distance for motorists originating in the Fallon area (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]).

### **Paiute Pipeline**

Alternative 1 includes the potential relocation of a segment of the Paiute Pipeline outside the B-17 WDZ. The Navy is working with the operator of the pipeline, the BLM, Mineral and Nye Counties, and other stakeholders to identify a suitable location for relocating the pipeline. The Navy and stakeholders are exploring one notional option at this time. Construction activities would increase noise and fugitive dust near the selected route, which could temporarily disturb recreationists and wildlife in the vicinity of these activities for as long as construction occurs. A follow-on, site-specific NEPA document would be required to analyze the impacts of any feasible relocation of the pipeline, which would include analyzing potential impacts on transportation. The proposed expansion areas around B-17 would not be utilized in advance of completion of such site-specific NEPA analysis and ultimate construction of any such alternate pipeline route.

### 3.5.3.2.3 Bravo-20

#### ***Land Withdrawal and Acquisition***

B-20 would expand in all directions, growing by approximately 180,329 acres (see Table 2-1) and increasing in total size to approximately 221,334 acres. This expansion includes approximately 3,200 acres of land currently withdrawn by the U.S. Fish and Wildlife Service (USFWS) as a portion of the Fallon National Wildlife Refuge. The Navy is not proposing to develop targets in the refuge. Due to the safety concerns of being within a WDW, the Navy and the USFWS would close the refuge lands to the public. The USFWS would continue to manage the land under a Memorandum of Understanding with the Navy and BLM. Under Alternative 1, expanding B-20 would allow for an additional 1,450 acres (in addition to the existing B-20 training areas) for target areas for Naval Aviation Advanced Strike Warfare and Large Force Exercise training (see Figure 2-5).

These new lands would be fenced in accordance with all applicable regulations and would not impact established ground transportation routes in the B-20 withdrawal lands. Therefore, there would be no significant impact on transportation as a result of the withdrawal and acquisition under Alternative 1.

#### ***Training Activities***

Training activities at B-20 would not change from Baseline Conditions see Section 2.4 (Environmental Baseline) under Alternative 1 and therefore would have no significant impact on transportation.

#### ***Public Accessibility***

Public access changes under Alternative 1 would not result in a significant impact on transportation routes near B-20. Except for a small portion of East County Road (which would remain open), the majority of B-20 would be closed and alternate routes would need to be utilized. The range would be restricted from public use except for Navy-authorized activities academic research or ceremonial or cultural site visits.

**Rights of Way:** Implementation of Alternative 1 would not close access to any ROWs on B-20. The two ROWs held by the Navy would remain under Navy control.

**Road Network:** Implementation of Alternative 1 would not result in significant impacts on transportation, travel distance, or traffic patterns along the small portion of the unpaved East County Road that overlaps with the withdrawal area. This road would remain open for public transit. No change to the LOS near B-20 would occur under Alternative 1. Intersection segments would remain at LOS A near the B-20 range area.

Implementation of Alternative 1 would close the unpaved B-20 Access Road; however, the B-20 Access Road is currently only open for authorized use by the Navy, and there are other publically accessible routes to the large expanses of public and federal lands north of the B-20 range including the East County Road. Impacts to trips on the B-20 Access Road would be minimal because the Navy is currently the only currently authorized user of the road, and because no trips were counted during data collection for the Transportation Study (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]).

**Transit Network:** Implementation of Alternative 1 would not result in an impact on rail corridors on B-20 since there are no rail corridors located within the existing and proposed B-20 range. Implementation of Alternative 1 would not result in an impact on pedestrian or bike networks since no major pedestrian or

bike trails are located within the B-20 range. Impacts on OHV operators and use are discussed in Section 3.12 (Recreation).

### ***Construction***

No new public roads would be constructed under Alternative 1 in or around the B-20 range. The Navy would construct access roads on the range in accordance with range procedures. Therefore, there would be no significant impacts on transportation as a result of construction under Alternative 1.

#### **3.5.3.2.4 Dixie Valley Training Area**

### ***Land Withdrawal and Acquisition***

Under Alternative 1, the DVTA would expand in all directions by approximately 302,065 acres (see Table 2-1), increasing its total size to approximately 370,903 acres. The proposed expansion overlaps portions of the Clan Alpine Mountain Wilderness Study Area (WSA), the Job Peak WSA, the Stillwater Range WSA, and the BLM-proposed Fox Peak ACEC (proposed under Alternative E of the Carson City District Draft Range Management Plan). Under Alternative 1, Congressional withdrawal legislation would remove the WSA designation from those portions of the Clan Alpine WSA, Job Peak WSA, and Stillwater WSA within the DVTA. Alternative 1 would also remove the ACEC designation of the Fox Peak ACEC within the DVTA. The BLM would change the boundaries of the Fox Peak ACEC to remove those areas within the DVTA. The BLM would continue managing the remaining WSA portions of Clan Alpine WSA, Job Peak WSA, and Stillwater Range WSAs as WSAs. These new lands would not impact established ground transportation routes in the DVTA withdrawal lands. Therefore, there would be no significant impact on transportation as a result of the withdrawal and acquisition under Alternative 1.

### ***Training Activities***

Training activities at the DVTA would not change from Baseline Conditions see Section 2.4 (Environmental Baseline) under Alternative 1 and therefore would have no significant impact on transportation.

### ***Public Accessibility***

Public access changes under Alternative 1 would not change and therefore would have no significant impact on transportation.

Rights of Way: Implementation of Alternative 1 would not close any of the ROWs on the DVTA held by NDOT, the Navy, or Churchill County.

Road Network: Implementation of Alternative 1 would not result in a significant impact on transportation or travel distance in the DVTA. State Route 121 provides access to lands with recreational assets and a vast expanse of public and conservation lands. Implementation of Alternative 1 would not restrict access to these lands. There are no proposed changes to access or usability of State Route 121, which would remain open to the public. Therefore, the LOS and PSI ratings of this road would not change.

Transit Network: Implementation of Alternative 1 would not result in an impact on rail corridors since no rail corridors are located within the DVTA. Implementation of Alternative 1 would not change the existing access to pedestrian trails, including the Pony Express National Historic trail and other associated trails, and bike facilities or access to them within the DVTA. Impacts on OHV operators and use are discussed in Section 3.12 (Recreation).

### ***Construction***

No road construction is planned in the DVTA under Alternative 1. Therefore, construction activities would have no significant impact on transportation near the DVTA. Under Alternative 1, the Navy would develop three Electronic Warfare sites with perimeter fencing surrounding each Electronic Warfare site. Existing trails and roads would be used to transport construction materials to the new Electronic Warfare sites, as well as provide access for servicing. No public roads would be altered or constructed as a result of Alternative 1 in the DVTA. This construction on the DVTA may temporarily increase traffic on existing roads due to equipment, laborers, and material movement onto and away from construction sites, but these impacts would not result in significant changes to transit times for residents or emergency responders.

#### **3.5.3.2.5 Summary of Effects and Conclusions**

Implementation of Alternative 1 would result in significant impacts to transportation in the areas surrounding B-17 due to the potential closure and rerouting of State Route 839. It would also result in significant impacts on transportation access (via state/county ROWs/roads) in the areas closed to the public within the expanded FRTC ranges. Site-specific NEPA analysis would need to occur at a later date for the potential relocations of portions of State Route 839 and the Paiute Pipeline as additional infrastructure improvements after the implementation of Alternative 1. The roads near B-16 would experience a small impact to traffic patterns due to the closure of Sand Canyon Road. Alternative 1 would have no transportation or access impacts on the DVTA. B-20 would experience minor impacts due to the closure of the B-20 Access Road (which is currently only authorized for Navy use). Implementation of Alternative 1 would also impact access to recreational areas that provide pedestrian hiking and biking trails in all ranges except the DVTA as discussed in Section 3.12 (Recreation). Therefore, implementation of Alternative 1 would result in significant impacts on transportation.

#### **3.5.3.3 Alternative 2: Modernization of the Fallon Range Training Complex and Managed Access**

The primary difference between Alternatives 1 and 2 is that under Alternative 2 the public would have access to specific parts of B-16, B-17, and B-20 for some or all categories of activities such as bighorn sheep hunting, site visits (ceremonial, cultural, or research), management access, and events (races), when the ranges are not operational (i.e., typically weekends, holidays, and when closed for scheduled maintenance) (see Table 2-5, Alternative 2 Allowable Activities within Range Boundaries). This section evaluates the impacts on transportation from implementation of Alternative 2 by range. OHV use would not be permitted in the expansion areas. Changes to OHV use areas as a result of implementing Alternative 2 is discussed in Section 3.12 (Recreation). Impacts from Alternative 2 on access to cultural and sacred sites are discussed in Section 3.11 (Cultural Resources).

##### **3.5.3.3.1 Bravo-16**

#### ***Land Withdrawal and Acquisition***

Alternative 2 would have the same withdrawals and acquisitions as proposed in Alternative 1. Therefore, there would be no significant impact on transportation as a result of the withdrawal or acquisition under Alternative 2.

### ***Training Activities***

Training activities at B-16 would be the same under Alternative 2 as described under Alternative 1. Therefore, as discussed under Alternative 1, training activities would have no significant impact on transportation under Alternative 2.

### ***Public Accessibility***

Public access on B-16 under Alternative 2 would be the same as described under Alternative 1 with one exception. Under Alternative 2, Simpson Road and the lands south of it would be withdrawn but remain open for public use. Therefore, public access changes would not result in a significant impact on transportation routes near B-16.

Rights of Way: Implementation of Alternative 2 would close access to ROWs as described under Alternative 1. The Navy proposes to purchase the ROWs as applicable as real property.

Road Network: Under Alternative 2, Sand Canyon Road would be closed from public access, as discussed under Alternative 1. Closure of unpaved Sand Canyon Road would not result in a significant impact to transportation, because the road is used primarily for access to B-16 and closure of it would not impact LOS on surrounding roads or intersections, as shown in Figure 3.5-1 and Table 3.5-10. Users of land that is currently open for recreational OHV use would be impacted by the closure of Sand Canyon Road if it were the route they normally used to access these areas (e.g., Dead Camel Mountains). These impacts are discussed further in Section 3.12 (Recreation).

Transit Network: Under Alternative 2, the B-16 range would be open to limited access for academic research, ceremonial or cultural site visits, and events such as races. The Navy and BLM would coordinate the permitting and scheduling of these events. Targets are not generally near race routes; however, the Navy would clear race routes of unexploded ordnance and other potential safety hazards prior to these events. This limited access would allow vehicles to travel in these areas when open to the public. Public access changes under Alternative 2 would not result in a significant impact on transportation.

### ***Construction***

No road construction is planned in B-16 under Alternative 2. Therefore, as discussed under Alternative 1, construction activities would have no significant impact on transportation near B-16 under Alternative 2.

#### **3.5.3.3.2 Bravo-17**

### ***Land Withdrawal and Acquisition***

Alternative 2 would have the same withdrawals and acquisitions as proposed in Alternative 1, including the potential relocation of State Route 839 and portions of the Paiute Pipeline. Therefore, as discussed under Alternative 1, there would be a significant impact on transportation as a result of the withdrawal and acquisition under Alternative 2.

### ***Training Activities***

Training activities at B-17 under Alternative 2 would be the same as described under Alternative 1. Therefore, as discussed under Alternative 1, there would be no significant impact on transportation under Alternative 2.

### ***Public Accessibility***

Public access changes under Alternative 2 would result in the same impacts as described under Alternative 1. Therefore, as discussed under Alternative 1, public access changes under Alternative 2 would have a significant impact on transportation routes near B-17.

Rights of Way: Implementation of Alternative 2 would close access to ROWs as described under Alternative 1. The Navy is proposes to purchase the ROWs as applicable as real property.

Road Network: Implementation of Alternative 2 and expansion of the B-17 range would have a direct impact on transportation near the B-17 range. Several state and local roads within the B-17 range would be closed to the public, and public access would be restricted, as described under Alternative 1.

Transit Network: Implementation of Alternative 2 would have similar impacts as Alternative 1, and would not result in any significant impacts on rail corridors or transit networks within B-17. Access for the bighorn sheep hunting program, as described in Section 3.12 (Recreation), would occur within B-17 in accordance with Nevada Department of Wildlife rules and regulations. The Navy would limit hunter access to certain areas of the range for safety reasons. Certain areas would also be open for academic research, ceremonial or cultural site visits, events (races), and land management pending Navy approval in advance of these visits. Fairview Peak would not be accessible by the public for any activities other than hunting. Although the Navy would prohibit general OHV use, races would continue to be allowed, including the Vegas to Reno Race, which would occur in the southern portion of the range. The Navy and BLM would coordinate the permitting and scheduling of these events. The Navy would clear race routes of unexploded ordnance and other potential safety hazards prior to these events. The Recreation section of this EIS (Section 3.12) discusses impacts on hiking and recreation on trails in the ranges.

### ***Construction***

Construction activities under Alternative 2 would be the same as described under Alternative 1. No road construction is planned in B-17 under Alternative 2. Therefore, as discussed under Alternative 1, construction activities would have no significant impact on transportation near B-17.

### ***Road and Infrastructure Improvements to Support Alternative 2***

State Route 839 Notional Relocation Corridor Options 1, 2, and 3 (see Figure 4-3) and the potential relocation of the Paiute Pipeline would be the same under Alternative 2 as described under Alternative 1. As discussed under Alternative 1, site-specific NEPA analysis would need to occur at a later date for State Route 839 Notional Relocation Corridor Options 1, 2, or 3 and for the Paiute Pipeline relocation after the implementation of Alternative 2. State Route 839 would remain open and the expanded B-17 area would not be used until after construction of the relocated road was complete. Ultimately, the Navy has responsibility for planning, designing, permitting, funding and constructing any realignment of highways. The Navy would coordinate with NDOT during each of these phases. The Navy has submitted a request to utilize the Defense Access Roads program. If approved, the Navy would coordinate construction execution through the Federal Highway Administration.



### **3.5.3.3.3 Bravo-20**

#### ***Land Withdrawal and Acquisition***

Alternative 2 would have the same withdrawals and acquisitions as proposed in Alternative 1. Therefore, as discussed under Alternative 1, there would be no significant impact on transportation as a result of the withdrawal and acquisition under Alternative 2.

#### ***Training Activities***

Training activities at B-20 would be the same as described under Alternative 1 and would therefore have no significant impact on transportation under Alternative 2.

#### ***Public Accessibility***

Public access changes under Alternative 2 would not result in a significant impact on transportation routes near B-20. The primary difference is that under Alternative 2, the public would have limited access for academic research, ceremonial or cultural site visits, and events such as races in areas that are clear of unexploded ordnance and other hazards.

Rights of Way: Implementation of Alternative 2 would not close access to any ROWs on B-20. The two ROWs held by the Navy would remain under Navy control.

Road Network: Implementation of Alternative 2 would not result in significant impacts on transportation or traffic patterns near B-20, as discussed under Alternative 1.

Transit Network: Implementation of Alternative 2 would not result in any impact on rail corridors or trails on B-20 since there are no rail corridors located within B-20 as discussed under Alternative 1.

#### ***Construction***

No new public roads would be constructed under Alternative 2 in or around the B-20 range. Therefore there would be no significant impacts on transportation as a result of construction under Alternative 2.

### **3.5.3.3.4 Dixie Valley Training Area**

#### ***Land Withdrawal and Acquisition***

Alternative 2 would have the same withdrawals and acquisitions as proposed in Alternative 1. Therefore, as discussed under Alternative 1, there would be no significant impact on transportation as a result of the withdrawal and acquisition under Alternative 2.

#### ***Training Activities***

Training activities in the DVTA would be the same as described under Alternative 1 and would therefore have no significant impact on transportation under Alternative 2.

#### ***Public Accessibility***

Public access changes under Alternative 2 would not result in a significant impact on transportation routes near the DVTA. Under Alternative 2, the DVTA range would be open for grazing, hunting, camping, hiking, OHVs, ceremonial and cultural site visits, and events such as races; and would allow leasable (geothermal) and salable mining, utilities, and ROWs access for utilities. Geothermal development west of State Route 121 would be authorized in the DVTA, with Navy-proposed design features, and managed under the Geothermal Steam Act of 1970 by the BLM where compatible. Alternative 2 would have most of the same impacts as Alternative 1 for the DVTA range. Along with the

limited geothermal development, limited salable mining activities would be permitted through the BLM, and would not impact transportation in the DVTA.

Rights of Way: Implementation of Alternative 2 would not close any of the ROWs on the DVTA held by NDOT.

Road Network: Implementation of Alternative 2 would not result in significant impacts on transportation or traffic patterns near the DVTA as discussed under Alternative 1.

Transit Network: Implementation of Alternative 2 would not result in any impact on the transit network on the DVTA since there are no changes to the network proposed within the DVTA, as discussed under Alternative 1.

### **Construction**

As described under Alternative 1, no road construction is planned in the DVTA under Alternative 2. Existing trails and roads would be used to transport construction materials to the new Electronic Warfare sites, as well as provide access for servicing. Therefore, construction activities would have no significant impact on transportation near or within the DVTA.

#### **3.5.3.3.5 Summary of Effects and Conclusions**

As with Alternative 1, implementation of Alternative 2 would result in significant impacts on transportation due to the potential closure and rerouting of State Route 839 and loss of access via customary/familiar transit routes. The roads near B-16 would experience an impact on traffic patterns due to the closure of Sand Canyon Road. Alternative 2 would have minimal transportation and access impacts on B-20 due to closure of the B-20 range access road (known locally as Pole Line Road - which is only authorized for Navy use). Implementation of Alternative 2 would have similar impacts on transportation and traffic compared to Alternative 1. However, Alternative 2 would allow for hunting on B-17 for bighorn sheep, allowing some routes to remain open for parts of the year, and would allow for salable mining, and geothermal development west of State Route 121 in the DVTA, with Navy-proposed design features, and managed under the Geothermal Steam Act of 1970 where compatible. Other restrictions to access and road closures would be the same under Alternative 2 as described under Alternative 1. Therefore, implementation of Alternative 2 would result in significant impacts on transportation.

#### **3.5.3.4 Alternative 3: Bravo-17 Shift and Managed Access (Preferred Alternative)**

Alternative 3 is similar to Alternative 1 in regard to land withdrawal and acquisition, with the exception of shifting B-17, and changing the withdrawal area of B-16, B-20, and the DVTA. Alternative 3 is the same as Alternative 2 in regards to managed access. Changes to OHV use areas as a result of implementing Alternative 3 is discussed in Section 3.12 (Recreation). Access impacts on cultural and sacred sites are discussed in Section 3.11 (Cultural Resources). Unlike Alternative 1, the Navy would not withdraw land south of U.S. Route 50 as DVTA. Rather, the Navy proposes that Congress categorizes this area as a Special Land Management Overlay (details on this area can be found in Section 2.3.4.4 [Dixie Valley Training Area]). This Special Land Management Overlay will define two areas (one east and one west of the B-17 range) as Military Electromagnetic Spectrum Special Use Zones. These two areas, which are public lands under the jurisdiction of BLM, will not be withdrawn by the Navy and would not directly be used for land-based military training or managed by the Navy. This analysis will estimate LOS after the completion of the 2018 Transportation Study for the implementation of Alternative 3 and potential relocation of State Route 361. The Navy acknowledges that there may be impacts that have yet to be

defined and will continue to develop and incorporate mitigation measures as necessary based on the results of the 2018 Transportation Study.

#### **3.5.3.4.1 Bravo-16**

##### ***Land Withdrawal and Acquisition***

Under Alternative 3, the B-16 range would expand to the west by approximately 31,836 acres (see Figure 2-13), increasing the total area to approximately 59,195 acres. Unlike Alternatives 1 and 2, the lands south of Simpson Road would not be withdrawn, and since they are currently withdrawn lands, they would be relinquished by the Navy back to the BLM. Although these lands south of Simpson Road represent lands that are being relinquished by the Navy to the BLM for public use, they are already open to the public, and therefore would not represent a significant change from current conditions. Therefore, as discussed under Alternatives 1 and 2, there would be no significant impact on transportation as a result of the withdrawal and acquisition under Alternative 3.

##### ***Training Activities***

Training activities at B-16 would be the same under Alternative 3 as described under Alternatives 1 and 2. Therefore, as discussed under Alternatives 1 and 2, training activities would have no significant impact on transportation under Alternative 3.

##### ***Public Accessibility***

Public access changes under Alternative 3 would be the same as described under Alternative 2. Therefore, as discussed under Alternative 2, public access changes would not result in a significant impact on transportation routes near B-16.

Rights of Way: Implementation of Alternative 3 would close access to ROWs as described under Alternative 1. The Navy proposes to purchase the ROWs as applicable as real property.

Road Network: Alternative 3 would have the same impacts as Alternative 2 in the B-16 range. Under this alternative, Sand Canyon Road would be closed from public access to the Dead Camel Mountains. Closure of unpaved Sand Canyon Road would not result in a significant impact to transportation, because the road is used primarily for access to B-16 and closure of it would not impact LOS on surrounding roads or intersections as shown in Figure 3.5-2 and Table 3.5-10. Users of land that is currently open for recreational OHV use would be impacted by the closure of Sand Canyon Road if it were the route used to access these areas (e.g., Dead Camel Mountains). These impacts are discussed further in Section 3.12 (Recreation). The public would not be allowed to operate OHVs within B-16 when the range is operational during training activities.

Transit Network: Alternative 3 would have similar impacts as Alternatives 1 and 2. Under Alternative 3, the public would have limited access to the B-16 range for hunting, academic research, ceremonial or cultural site visits, and events such as races. The Navy and BLM would coordinate the permitting and scheduling of these events. The Navy would clear race routes of unexploded ordnance and other potential safety hazards prior to these events. Public access changes under Alternative 3 would not result in a significant impact on transportation routes near B-16. Therefore, they would not have significant impacts on transportation.

### ***Construction***

As described under Alternatives 1 and 2, no road construction is planned in B-16 under Alternative 3. Therefore, as discussed under Alternatives 1 and 2, construction activities would have no significant impact on transportation near B-16 under Alternative 3.

#### **3.5.3.4.2 Bravo-17**

### ***Land Withdrawal and Acquisition***

Under Alternative 3, B-17 would expand to a total of approximately 267,448 acres and be “tilted” (see Table 2-6, Alternative 3 Proposed Withdrawal and Acquisition by Range). This tilt of the requested withdrawal would eliminate the WDW overlapping State Route 839 (under Alternatives 1 and 2). Approximately 4,000 acres would support convoy routes, military vehicle training routes, or ground target areas (see Table 2-6). Under Alternative 3, in addition to new targets and target areas, the Navy would continue to use existing targets and target areas. These new lands would be fenced in accordance with all applicable regulations, but would impact established ground transportation routes in the B-17 withdrawal lands. Therefore, there would be a significant impact on transportation as a result of the withdrawal and acquisition under Alternative 3.

### ***Training Activities***

Training activities at B-17 under Alternative 3 would be the same as described under Alternative 1. Therefore, as discussed under Alternative 1, there would be no significant impacts on transportation under Alternative 3.

### ***Public Accessibility***

Public access changes under Alternative 3 would result in the same impacts as described under Alternative 2. Therefore, as discussed under Alternative 2, public access changes under Alternative 3 would have a significant impact on transportation routes near B-17.

Rights of Way: Implementation of Alternative 3 would close access to ROWs in a similar way as described under Alternative 1. The Navy proposes to purchase the ROWs as applicable as real property.

Road Network: Under Alternative 3, State Route 839 would not be potentially closed and rerouted. Instead, the Navy would potentially relocate a 12 mile segment of State Route 361. The potential closing and re-routing of a portion of State Route 361 and closing access to the withdrawal lands for the expanded B-17 range would have an impact on transportation. Several state and local roads within the B-17 range would be closed to the public. The notional relocation corridor (and one of two potential road relocation options within that notional relocation corridor) for replacing State Route 361 may be implemented after Alternative 3. The PSI rating would be expected to improve on the new segment of State Route 361 that is relocated but would not be expected to change in other areas. Additional NEPA analysis would be necessary before closing and re-routing part of State Route 361.

Transit Network: Alternative 3 would have similar impacts as Alternative 2 and would not result in any significant impacts on rail corridors or transit networks within B-17. Under Alternative 3, public access to the Sand Hills Range would not be restricted compared to Alternatives 1 and 2 due to the shift of B-17. The Recreation section of the EIS (Section 3.12) discusses impacts on hiking and recreation on trails in the ranges.

### ***Construction***

Construction activities under Alternative 3 would be similar to that described under Alternatives 1 and 2. Site-specific NEPA analysis would need to occur at a later date for the potential relocation of part of State Route 361 and part of the Paiute Pipeline as an additional infrastructure improvement after the implementation of Alternative 3.

### ***Road and Infrastructure Improvements to Support Alternative 3***

Alternative 3 includes the potential relocation of part of State Route 361 and the re-routing of part of the Paiute Pipeline. The Navy is working with the Nevada Department of Transportation, the BLM, Churchill County, and other stakeholders to identify a suitable location for relocating State Route 361 and the Paiute Pipeline outside of B-17's WDZ. The Navy and stakeholders are exploring options at this time, as shown in Chapter 4, Cumulative Impacts (see Figure 4-3). The BLM or other land manager would conduct follow-on, site-specific NEPA analysis of any proposed routes for such ROW, prior to making any decision with respect to any final route. The Nevada Department of Transportation would ensure that construction of any new route is complete before closing any portion of the existing State Route 361, and the Navy would not utilize any portion of the expanded B-17 range (if implemented) that would overlap the existing State Route 361 unless and until any such new route had been completed and made available to the public. The State Route 361 Notional Relocation Corridor would potentially re-route approximately 12 miles of the existing State Route 361 to skirt the eastern boundary of B-17 (see Figure 4-3). Ultimately, the Navy has responsibility for planning, designing, permitting, funding and constructing any realignment of highways. The Navy would coordinate with NDOT during each of these phases. The Navy has submitted a request to utilize the Defense Access Roads program. If approved, the Navy would coordinate construction execution through the Federal Highway Administration.

### ***State Route 361 Notional Relocation Corridor***

The LOS on all applicable roads and at intersections would not be expected to change because of the potential re-routing under State Route 361 Notional Relocation Corridor (one of two potential options) because the corridor only would shift a 12 mile segment of the State Route 361 and the road would start and end in the same location it currently does, however estimations of LOS changes will be available after the completion of the traffic study in winter of 2018. The Navy acknowledges that there may be impacts that have yet to be defined and would continue to develop and incorporate mitigation measures as necessary. Transit times from all directions and travel distances would not be expected to appreciably change under this option. Construction activities would temporarily increase noise and fugitive dust and would cause delays in traffic during construction periods. This construction may temporarily increase traffic on existing roads due to equipment, laborers, and material movement onto and away from construction sites; however, these impacts would not result in significant changes to transit times for residents or emergency responders. Potential roadwork, which would be anticipated to take one to two years, would be phased to minimize impacts on the public, and the original State Route 361 would stay open until the replacement segment is completed.

### ***Paiute Pipeline***

The Navy would potentially re-route approximately 18 miles of the existing Paiute Pipeline south of the proposed B-17 range. The Navy is working with the operator of the pipeline, the BLM, Mineral and Nye Counties, and other stakeholders to identify a suitable location for relocating the pipeline. The Navy and stakeholders are exploring one notional option at this time. Construction activities would increase noise and fugitive dust near the selected route, which could temporarily disturb recreationists and wildlife in

the vicinity of these activities for as long as construction occurs. A follow-on, site-specific NEPA document would be required to analyze the impacts of any feasible relocation of the pipeline, which would include analyzing potential impacts on transportation. The proposed expansion areas around B-17 would not be utilized in advance of completion of such site-specific NEPA analysis and ultimate construction of any such alternate pipeline route.

#### **3.5.3.4.3 Bravo-20**

##### ***Land Withdrawal and Acquisition***

Alternative 3 would have the same withdrawals and acquisitions as proposed in Alternatives 1 and 2 with the exception of the lands east of East County Road and the road itself. The Navy would leave the areas east of East County Road and the Road itself open under Alternatives 1 and 2; therefore, the impacts to transportation under Alternative 3 are the same as discussed under Alternatives 1 and 2. Therefore, there would be no significant impact on transportation as a result of the withdrawal and acquisition under Alternative 3.

##### ***Training Activities***

Training activities at B-20 would be the same as described under Alternatives 1 and 2, and would therefore have no significant impact on transportation under Alternative 3.

##### ***Public Accessibility***

Alternative 3 would have the same impacts as Alternative 2 to transportation near B-20. Public access changes under Alternative 3 would be the same as described under Alternative 2. Therefore, public access would not result in a significant impact on transportation routes near B-20. The withdrawal land to the east of unpaved East County Road would remain open for public transit. There would be no change to the LOS in or near B-20. The closure of the B-20 Access Road, combined with the expansion of the B-20 range, would result in minimal impacts to transportation because the Navy is the only currently authorized user of the road, and because no trips were counted during data collection for the Transportation Study (see Supporting Study: Transportation Study [available at <http://frtcmodernization.com>]).

Rights of Way: Implementation of Alternative 3 would not close access to any ROWs on B-20. The two ROWs held by the Navy would remain under Navy control.

Road Network: Implementation of Alternative 3 would not result in significant impacts on transportation or traffic patterns near B-20 as discussed under Alternatives 1 and 2.

Transit Network: Implementation of Alternative 3 would not result in any impact on rail corridors on B-20 since there are no rail corridors located within B-20 as discussed under Alternatives 1 and 2.

##### ***Construction***

No new public roads would be constructed under Alternative 3 in or around the B-20 range. Therefore, there would be no significant impacts on transportation as a result of construction under Alternative 3.

#### **3.5.3.4.4 Dixie Valley Training Area**

##### ***Land Withdrawal and Acquisition***

Under Alternative 3, the land requested for withdrawal would decrease by 79,467 acres compared to Alternatives 1 and 2, with the creation of the Special Land Management Overlay. With the shift of B-17,

the BLM would create a Special Land Management Overlay along the western side of State Route 839 south of Highway 50 and around Earthquake Fault Road to the east of B-17. The requested withdrawal and proposed acquisition would total approximately 256,440 acres (see Table 2-6) and would increase the total size of the DVTA to 325,277 acres. The BLM would continue managing the remaining WSA portions of Clan Alpine WSA, Job Peak WSA, and Stillwater Range WSAs as WSAs. These new lands would not impact established ground transportation routes in the DVTA withdrawal lands. Therefore, there would be no significant impact on transportation as a result of the withdrawal and acquisition under Alternative 3.

### ***Training Activities***

Training activities in the DVTA would be the same as described under Alternatives 1 and 2, and would therefore have no significant impact on transportation under Alternative 3.

### ***Public Accessibility***

The BLM Special Land Management Overlay would be open to the public and allow for public uses through the BLM. The Special Land Management Overlay would be created via the withdrawal legislation and would require that BLM obtain approval from the Navy for installation of any fixed or mobile equipment used for transmitting and receiving radio signals, and consult with the Navy for any uses in this area requiring a permit from BLM.

Rights of Way: Implementation of Alternative 3 would not close any of the ROWs on the DVTA held by NDOT.

Road Network: Alternative 3 would have similar impacts as Alternatives 1 and 2 to transportation near the DVTA. The primary difference would be that the area west of State Route 839 would be available for public access. Since State Route 121 would remain open to the public the LOS rating of this road would not change.

Transit Network: Implementation of Alternative 3 would not result in any impact on rail corridors on the DVTA since there are no rail corridors located within the DVTA as discussed under Alternatives 1 and 2.

### ***Construction***

As described under Alternatives 1 and 2, no road construction is planned in the DVTA under Alternative 3. The Navy would develop three Electronic Warfare sites under Alternative 3: North Job Peak, 11-Mile Canyon, and Fairview Low as described in Alternatives 1 and 2. Existing trails and roads would transport construction materials to the new Electronic Warfare sites, as well as provide access for servicing. Therefore, construction activities would have no significant impact on transportation near the DVTA.

#### **3.5.3.4.5 Summary of Effects and Conclusions**

Implementation of Alternative 3 would result in significant impacts to transportation. The potential changes in LOS and time in transit due to the potential closing and relocation of part of State Route 361 under Alternative 3 are not expected to be appreciable. The B-16 range would experience an impact on traffic patterns due to the closure of Sand Canyon Road, and B-20 would experience loss of access via customary/familiar transit routes impacts due to the closure of the B-20 access road to the public. Alternative 3 would have no transportation and access impacts on the DVTA. Alternative 3 would impact transportation and traffic through restricted access to range areas, road and OHV area closures, re-routing of State Route 361, and loss of access via customary/familiar transit routes. Therefore, implementation of Alternative 3 would result in significant impacts to transportation.



### 3.5.3.5 Proposed Mitigation, Minimization, or Avoidance

#### 3.5.3.5.1 Proposed Management Practices

Ultimately, the Navy has responsibility for planning, designing, permitting, funding and constructing any realignment of highways. The Navy would coordinate with NDOT during each of these phases. The Navy has submitted a request to utilize the Defense Access Roads program. If approved, the Navy would coordinate construction execution through the Federal Highway Administration.

#### 3.5.3.5.2 Proposed Monitoring

Monitoring measures are warranted for transportation based on the analysis presented in Section 3.5.3 (Environmental Consequences). The Navy proposes to continue to work with ROW users to review potential impacted roads regarding county-designated access roads and other potential ROWs in the lands requested for withdrawal or proposed for acquisition and to look for appropriate replacement routes if appropriate and applicable.

#### 3.5.3.5.3 Proposed Mitigation

No mitigation measures are warranted for transportation based on the analysis presented in Section 3.5.3 (Environmental Consequences).

### 3.5.3.6 Summary of Effects and Conclusions

Table 3.5-11 summarizes the effects of the alternatives on transportation.

**Table 3.5-11: Summary of Effects and Conclusions on Transportation**

Summary of Effects and National Environmental Policy Act Determinations	
No Action Alternative	
Summary	<ul style="list-style-type: none"><li>• No changes to existing transportation routes would occur under the No Action Alternative.</li><li>• The reduced level of training likely under the No Action Alternative would reduce the number of permanent residents, transient students, requirements for goods and service in the local area, and the overall traffic count.</li><li>• Primarily the No Action Alternative would drastically curtail the Navy's ability to fulfill its Congressionally mandated duties to prepare Naval aviators and Special Warfare personnel for deployment in support of National Security objectives.</li><li>• Implementation of the No Action Alternative would not result in changes to transportation routes or travel patterns, but may result in reduced traffic volumes.</li></ul>
Impact Conclusion	The No Action Alternative would have no significant impact on transportation.

**Table 3.5-11: Summary of Effects and Conclusions on Transportation (continued)**

<b>Summary of Effects and National Environmental Policy Act Determinations</b>	
<b>Alternative 1</b>	
<b>Summary</b>	<ul style="list-style-type: none"> <li>• Implementation of Alternative 1 would result in significant impacts to transportation in the areas surrounding B-17 due to the potential closure and rerouting of State Route 839. Travel distance and travel time would both increase by varying degrees depending on which route is traversed.</li> <li>• Alternative 1 would also result in significant impacts on transportation access (via state/county ROWs/roads) in the areas closed to the public within the expanded FRTC. Site-specific NEPA analysis would need to occur at a later date for the potential relocations of State Route 839 and the Paiute Pipeline as additional infrastructure improvements after the implementation of Alternative 1.</li> <li>• The roads near B-16 would experience a small impact to traffic patterns due to the closure of Sand Canyon Road.</li> <li>• Alternative 1 would have no transportation or access impacts on the DVTA.</li> <li>• B-20 would experience minor impacts due to the closure of the B-20 Access Road (which is currently only authorized for Navy use).</li> <li>• Implementation of Alternative 1 would also impact access to recreational areas that provide pedestrian hiking and biking trails in all ranges except the DVTA as discussed in Section 3.12 (Recreation).</li> </ul>
<b>Impact Conclusion</b>	Alternative 1 would result in a significant impact on transportation.
<b>Alternative 2</b>	
<b>Summary</b>	<ul style="list-style-type: none"> <li>• Implementation of Alternative 2 would result in significant impacts on transportation due to the potential closure and rerouting of State Route 839 and loss of access via customary/familiar transit routes. Travel distance and travel time would both increase by varying degrees depending on which route is traversed.</li> <li>• The roads near B-16 would experience an impact on traffic patterns due to the closure of Sand Canyon Road.</li> <li>• Alternative 2 would have minimal transportation and access impacts on B-20 due to closure of B-20 access road (known locally as Pole Line Road -which is only authorized for Navy use). Implementation of Alternative 2 would have similar impacts on transportation and traffic compared to Alternative 1.</li> <li>• However, Alternative 2 would allow for hunting on B-17 for bighorn sheep, allowing some routes to remain open for parts of the year, and would allow for geothermal mining and salable mining on the DVTA.</li> </ul>
<b>Impact Conclusion</b>	Alternative 2 would result in a significant impact on transportation.

Table 3.5-11: Summary of Effects and Conclusions on Transportation (continued)

Summary of Effects and National Environmental Policy Act Determinations	
<b>Alternative 3</b>	
<b>Summary</b>	<ul style="list-style-type: none"><li>• Implementation of Alternative 3 would result in changes in LOS and time in transit due to the potential closing and relocation of part of State Route 361. These changes are not expected to be appreciable.</li><li>• The B-16 range would experience an impact on traffic patterns due to the closure of Sand Canyon Road, and B-17 and B-20 would experience loss of access via customary/familiar transit routes impacts due to the closure of Pole Line Road.</li><li>• Alternative 3 would have no transportation or access impacts on the DVTA.</li><li>• Alternative 3 would impact transportation and traffic through restricted access to range areas, road and OHV area closures, and potential re-routing of State Route 361.</li></ul>
<b>Impact Conclusion</b>	Alternative 3 would result in significant impacts on transportation.

## **REFERENCES**

- AMEC Environment & Infrastructure, Inc. (2013). *Off Highway Vehicle Trail Survey and Mapping, Naval Air Station Fallon Final*. San Diego, CA: Naval Facilities Engineering Command.
- Bureau of Land Management. (2014). *Carson City District, Nevada Draft Resource Management Plan and Environmental Impact Statement*. Carson City, NV: U.S. Department of the Interior.
- Churchill County. (2010). *Churchill County 2010 Master Plan*. Churchill County, NV: Churchill County Commissioners. Retrieved from <http://www.churchillcounty.org/documentcenter/view/1577>.
- Churchill County. (2015). *Churchill County 2015 Master Plan*. Churchill County, NV: Churchill County Commissioners. Retrieved from <http://www.churchillcounty.org/DocumentCenter/Home/View/8884>.
- Federal Aviation Administration. (2015). *1050.1F Desk Reference*. Washington, DC: U.S. Department of Transportation.
- Foltz, J., S. Thyagaraj, B. Scales, S. Domingue, and W. Allen. (2016). *Douglas County Master Plan: 2016 Douglas County Transportation Plan*. Pasadena, CA: Parsons.
- Nevada Department of Transportation. (2012). *Nevada State Rail Plan*. Carson City, NV: U.S. Department of Transportation and the Federal Railroad Administration.
- Nevada Department of Transportation. (2017). *State Maintained Highways of Nevada: Descriptions and Maps*. Carson City, NV: Planning Division, Roadway Systems Section.
- Nevada Department of Transportation. (2018). *Traffic Information*. Retrieved from <https://www.nevadadot.com/doing-business/about-ndot/ndot-divisions/planning/traffic-information/-folder-347>.
- Transportation Research Board. (2000). *Highway Capacity Manual*. Washington, DC: National Academy of Sciences.

This page intentionally left blank.