4.17 Transportation and Traffic

This section of the PEA describes the transportation and traffic in the area of the IC Project Alignment, as well as an assessment of impacts that have the potential to occur during construction and operation of the IC Project and its Alternatives.

4.17.1 Environmental Setting

The environmental setting section describes the existing conditions for transportation and traffic in the area of the IC Project Alignment. The IC Project Alignment is located within unincorporated Inyo County, Kern County, and San Bernardino County, and in the City of Barstow. The predominant land use across the IC Project Alignment is open space. In Segment 1, residential and agricultural land uses are scattered and generally concentrated in developed communities. Scattered residential land uses are also found along each of the Segments. Widely-dispersed industrial uses are found in the eastern portions of Segment 4 (mining and solar electric generating facilities). Institutional uses, primarily military facilities, are located adjacent to all Segments. Figureset 4.17-1 illustrates the transportation-related infrastructure discussed in the following sections.

4.17.1.1 Highways and Roadways

Much of the IC Project Alignment is located proximate to highways and major roadways. Segment 1 of the IC Project Alignment is located in the Owens River valley, and generally parallels U.S. Route 395 (US 395). The northern and southern portions of Segment 2 also parallel US 395. Segment 3N parallels State Route 58 (SR-58) at a distance, and Segment 4 largely parallels Interstate 15 (I-15).

The regional transportation system is comprised of state highways and county and local roads. I-15, I-40, US 395, SR-31, SR-91, SR-58, SR-127, SR-136, SR-168, SR-178, and SR-190 provide regional access to the area. The IC Project Alignment crosses the following major transportation corridors:

- Segment 1
    - US 395 (four-lane) west of Tinemaha Reservoir;
    - US 395 northbound (two-lane) at two locations approximately 3 miles and 4 miles north of Lone Pine;
    - SR-136 (two-lane) at one location;
    - SR-190 (two-lane) at one location;
    - US 395 (four-lane) at one location approximately 7 miles south of Lone Pine; and
    - US 395 (two-lane) at one location approximately 1 mile north of Cartago.
- Segment 2
    - SR-178 (four-lane) at one location;
    - US 395 (two-lane) at one location; and
    - SR-58 (two-lane) at one location.
- Segment 3N
    - SR-58 (two-lane) at one location;
    - US 395 (two-lane) at one location; and
    - I-15 (four-lane) at one location.
- Segment 3S
    - US 66 (four-lane) at one location;

  - US 395 (two-lane) at one location;
  - SR-58 (four-lane) at one location;
  - I-15 (eight-lane) at one location;
  - SR-247 (two-lane) at one location; and
  - I-40 (four-lane) at one location.
- Segment 4
  - I-15 (four-lane) at four locations; and
  - SR-127 (two-lane) at one location.

The IC Project Alignment also crosses numerous other county and local roads.

4.17.1.1.1 Level of Service

Level of service (LOS) is a qualitative performance measure used to rank roadways and traffic conditions. LOS values range from A through F with "A" representing "free flow" conditions to "F" representing "stop-and-go gridlock" traffic conditions. (Kern COG 2014) Table 4.17-1 provides a description of the LOS designations and descriptions that are applied in Inyo, Kern, and San Bernardino counties.

Table 4.17-1: Level of Service Descriptions

LOS Designation	Description
Level of Service "A"	Free flow: no approach phase is fully used by traffic and no vehicle waits longer than one red indication. Insignificant delays.
Level of Service "B"	Stable operation: an occasional approach phase is fully used. Many drivers begin to feel somewhat restricted within platoons of vehicles. Minimal delays.
Level of Service "C"	Stable operation: major approach phase may become fully used and most drivers feel somewhat restricted. Acceptable delays.
Level of Service "D"	Approaching unstable: drivers may have to wait through more than one red signal cycle. Queues develop but dissipate without excessive delays.
Level of Service "E"	Unstable operation: volumes at or near capacity. Vehicles may wait through several signal cycles and long queues form upstream from intersection. Significant delays.
Level of Service "F"	Forced flow: represents jammed conditions. Intersection operates below capacity with several delays that may block upstream intersections.

Source: Inyo County 2015, Kern COG 2014, Kern County 2009, and Caltrans 2002.

Performance conditions, or LOS, on state and federal highways are set by the California Department of Transportation (Caltrans). The LOS for roadways along the IC Project Alignment is presented in Table 4.17-2. Much of the IC Project Alignment crosses rural, agricultural, and sparsely populated areas. A review of the Kern COG Regional Transportation Plan shows that roadways in the IC Project area are either unrated or operate at a Level C or better. (Kern COG 2014) The Kern County General Plan Goal is to maintain a minimum LOS Level D for all roads throughout Kern County. (Kern County 2009) The San Bernardino County Congestion Management Program shows that the county has adopted LOS standard Level E. (SANBAG 2016)

Table 4.17-2: Level of Service Descriptions

Project Segment	Route	Concept LOS	Actual LOS
1	US 395	C	C or better
1	SR-136	C	A
1	SR-190	C	A
2	US 395	D	D
2	SR-58	C	B
2	SR-178	D	C
3N	I-15	D	D
3N	US 395	D	D
3N	SR-58	C	B
3S	I-15	D	D
3S	I-40	D	B
3S	US 66	N/A	N/A
3S	US 395	D	D
3S	SR-58	C	B
3S	SR-247	D	A
4	I-15	D	D
4	SR-127	C	A

Note: US 395 in the Cartago-Olancha area operates at less than LOS C
Source: CALTRANS Transportation Concept Reports

4.17.1.1.2 Traffic Volumes

Caltrans reports average peak traffic hour and annual average daily traffic volumes along Interstate highways and State Routes. Table 4.17-3: Average Peak Daily Traffic Volumes lists the traffic volumes at major intersections that may be used by project-related construction traffic.

Table 4.17-3: Average Peak Daily Traffic Volumes

Project Segment	Highway	Intersection	Peak Hour Traffic Volume (vehicles)	Annual Average Daily Traffic (vehicle)
1	US 395	US 395 / SR-168 (Bishop)	1,600	13,500
1	US 395	US 395 / SR-168 (Big Pine)	1,050	6,200
1	US 395	US 395 / SR-136 (Lone Pine)	1,200	7,000
1	US 395	US 395 / SR-190 (Olancha)	1,250	6,800
1	US 395	US 395 / SR-14 (Inyokern)	450	2,750
1	US 395	US 395 / SR-178 (Inyokern)	410	2,950
1	SR-136	SR-136 / US 395	120	730
1	SR-190	SR-190 / US 395	50	240
2	US 395	US 395 / Randsburg Road	570	3,960
2	US 395	US 395 / SR-58	920	7,550
2	SR-58	SR-58 / US 395	1,350	12,000
2	SR-178	SR-178 / US 395	600	6,250
3N	SR-58	SR-58 / US 395	1,350	12,000
3N	US 395	US 395 / SR-58	920	7,550
3N	I-15	I-15 / Ghost Town Road	5,100	44,000
3S	US 395	US 395 / SR-58	920	7,550
3S	SR-58	SR-58 / Harper Lake Road	1,350	11,800
3S	SR-58	SR-58 / I-15	1,400	13,300
3S	I-15	I-15 / SR-58	6,300	58,000

Table 4.17-3: Average Peak Daily Traffic Volumes

Project Segment	Highway	Intersection	Peak Hour Traffic Volume (vehicles)	Annual Average Daily Traffic (vehicle)
3S	US 66	—	—	—
3S	SR-247	SR-247 / I-15	2,000	18,400
3S	I-40	I-40 / A Street	1,900	16,500
4	I-15	I-15 / SR-247	8,300	71,000
4	I-15	I-15 / I-40	7,700	66,000
4	I-15	I-15 / SR-58	5,500	47,000
4	I-15	I-15 / East Yermo Road	4,900	42,000
4	I-15	I-15 /Afton Road	4,850	41,500
4	I-15	I-15 / Zzyzx Road	4,850	41,500
4	I-15	I-15 / SR-127	4,200	36,200
4	I-15	I-15 /Halloran Springs	5,100	42,000
4	I-15	I-15 /Yates Well Road	5,200	42,600

Source: Caltrans Traffic Census Program, 2016 data

4.17.1.2 Truck Routes

According to the Kern County General Plan, at least 26 percent of all vehicle circulation in Kern County is completed by trucks. (Kern County 2009) Approximately 40 percent of the nation's containerized freight flows through the Ports of Los Angeles and Long Beach, and 80 percent of that funnels through San Bernardino County by rail or truck. (SANBAG 2014)

In the IC Project Alignment area, I-15, I-40, US 6, US 395, SR-58, SR-127, SR-136, SR-178, SR-190, and SR-247 represent the major truck network. (Caltrans 2016) The state highway system is a vital link for the region's economy due to the geographic isolation from large population centers; the region heavily depends upon goods shipped in by truck. (Caltrans 2015)

4.17.1.3 Bikeways

The IC Project Alignment is located in Caltrans District 8 and District 9. In District 8, bicyclists are permitted on certain highway routes: in the vicinity of the IC Project Alignment, bicyclists are permitted to use the shoulder along US 395, SR-18, SR-58, SR-127, and SR-247. (Caltrans 2017) On I-15 and I-40 within the vicinity of the IC Project Alignment, bicyclists are generally prohibited.

In District 9, bicyclists are allowed on all Caltrans highways in the vicinity of the IC Project Alignment with a few exceptions such as the freeway portions of SR-14 and SR-58. (Caltrans 2015, 2017) Bikes are allowed on all of US 395; for the majority of the route, there is no bikeway designation. A Class II bikeway is designated on US 395 in and around Bishop. Additional Class I, II, and III bikeways are found along portions of the following roadways in Bishop:

- Class I: Sierra Street Path; South Barlow Lane
- Class II: North Barlow Lane, Saniger Lane, SR-168
- Class III: Sunland Drive

North of the community of Wilkerson in Segment 1, the IC Project Alignment crosses a designated Class II/ III bikeway on Gerkin Road. In one location, Segment 3S crosses Main Street, a bicycle route identified by the City of Barstow and the San Bernardino County Wide Bicycle Plan. (City of Barstow 2014) The IC Project Alignment does not cross any other designated bikeways.

4.17.1.4 Bus Routes

4.17.1.4.1 Segment 1

The area along Segment 1 is served by the Eastern Sierra Transit Authority (ESTA) in Inyo County. There are three ESTA bus routes that operate in the vicinity of the IC Project Alignment that include the Lancaster Route, Reno – Lone Pine Route, and the Lone Pine Express.

Kern Regional Transit is the main transit operator for Kern County, providing connections for outlying regions. Bus routes 230 (Mojave-Ridgecrest) and 227 (Lake Isabella-Ridgecrest) run three days a week in the vicinity of the IC Project Alignment in Segment 1. (Kern Regional Transit 2017)

4.17.1.4.2 Segments, 2, 3, 4, and 5

Kern Regional Transit is the main transit operator for Kern County, providing connections for outlying regions. In the vicinity of Segment 2, routes 230 (Mojave-Ridgecrest) and 227 (Lake Isabella-Ridgecrest) run three days a week. (Kern Regional Transit 2017)

There are seven public transit agencies that operate within San Bernardino County. These provide approximately 17.5 million passengers per year with access to a vast majority of the Valley and Mountain Regions of San Bernardino County and to the more developed areas of the Desert Region. Of the seven transit operators described above, six are located almost entirely within the County and are provided funds and received oversight from SANBAG, the County's transportation planning agency. (San Bernardino County 2014)

The Victor Valley Transit Authority (VVTA) operates three bus routes in the vicinity of the IC Project Alignment: route 15 (San Bernardino-Barstow), route 200 (Needles-Barstow-Victorville), and the Fort Irwin National Training Center (NTC) five-day work week commuter bus which serves the High Desert cities of Hesperia, Victorville, Helendale, Barstow, and Fort Irwin. (VVTA 2017)

4.17.1.5 Railroads

There are no active rail lines in the vicinity of Segment 1. Burlington Northern and Santa Fe Railway (BNSF) and Union Pacific Railroad (UPRR) operate lines in the vicinity of Segments 2, 3N, 3S, and 4.

4.17.1.6 Airports

There are 16 public airports, 21 private airports, and 8 private heliports within Kern County. (Kern County 2012) There are seven publicly-operated airports in Inyo County and six private airstrips and one private heliport. (Inyo County 2015) There are 44 public and private airports operating throughout San Bernardino County. San Bernardino County manages, operates, and maintains six of these facilities. San Bernardino County also has a total of 25 heliports; 4 are publicly-operated, 11 are for private medical use, and 10 are for private general use. (San Bernardino County 2014)

4.17.1.6.1 Segment 1

Two airports anchor Segment 1: The Eastern Sierra Regional Airport is located in Bishop at the northern end of the Segment, and the Inyokern Airport is west of Inyokern Substation at the southern end of the Segment. The nearest public airports to the IC Project Alignment in Segment 1 are Inyokern Airport (approximately 1.2 miles west of the alignment), Independence Airport (approximately 2.6 miles west), and the Eastern Sierra Regional Airport (approximately 4.4 miles east). The Inyo County Sheriff Search and Rescue Heliport is co-located with the Eastern Sierra Regional Airport.

4.17.1.6.2 Segments 2, 3N, 3S, and 4

The nearest public airports to Segments 2, 3N, 3S, and 4 are Inyokern Airport (approximately 1.2 miles from the northern terminus of Segment 2), Baker Airport (approximately 0.4 miles from the IC Project Alignment in Segment 4), and the Barstow-Daggett Airport (approximately 3 miles from the confluence of Segments 3N, 3S, and 4).

The nearest private airports to the IC Project Alignment are Boron Airstrip Airport (3.4 miles east of Segment 2); Depue Airport (approximately 2.5 miles from Segment 3S); and Harvard Airport (approximately 1.9 miles from Segment 4).

4.17.1.6.3 Military Installations

Two military aviation installations—the China Lake Naval Air Weapons Station (CLNAWS) and Edwards Air Force Base—are located adjacent to Segments 1 and 2, respectively. Each installation has unique flying operations, and their primary missions are to test military aircraft and weapon systems. (Kern County 2012)

Due to the required flying mission at these military bases, aircraft fly beyond the boundaries of the installations at supersonic speeds and sometimes as low as 200 feet above the ground. In order to minimize flight hazards to non-military aircraft, the military aircraft from these installations fly within restricted airspace known as the Joint Service Restricted R-2508 Complex. This complex is considered an extension of the airspace for these military aviation installations and their flying mission. For the IC Project, China Lake Naval Air Weapons Station and Edwards Air Force Base both shall be notified of development that falls within any of the following categories:

- Any structure within 75 miles of the installations that is greater than 50 feet tall;
- Any environmental document of discretionary project with 25 miles of the military installation boundaries;
- Any project that would create environmental impacts (e.g. visibility, elevated obstructions) within 25 miles of the complex;
- Any project within 25 miles of the centerline of any route/corridor; and
- Any project with the potential to impact the utilities of the military installation (water, gas, electricity, phone, roads, railway, etc.) required for normal bases operations.

4.17.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the IC Project.

4.17.2.1 Federal

Code of Federal Regulations (CFR) Title 49, Subtitle B includes procedures and regulations pertaining to interstate and intrastate transport (including hazardous materials program procedures), and provides safety measure for motor carriers and motor vehicles that operate on public highways.

All airports and navigable airspace not administered by the Department of Defense are under the jurisdiction of the Federal Aviation Administration (FAA). CFR Title 14, Section 77 establishes the standards and required notification for objects affecting navigable airspace. In general, construction projects exceeding 200 feet in height above ground or extending at a ratio greater than 50 to 1 (horizontal to vertical) from a public or military airport runway less than 3,200 feet long out to a horizontal distance of 20,000 feet are considered potential obstructions, and require notification to the FAA. For helicopters,

1 vertical foot for every 25 horizontal feet for a horizontal distance of 5,000 feet. In addition, the FAA requires a Helicopter Lift Plan for operating a helicopter within 1,500 feet of residences.

4.17.2.2 State

4.17.2.2.1 California Department of Transportation

The California Department of Transportation (Caltrans) manages state highways in California. The use of California state highways for reasons other than normal transportation purposes may require written authorization or an encroachment permit from Caltrans. Caltrans has jurisdiction over the state's highway system and is responsible for protecting the public and infrastructure. Caltrans reviews all requests from utility companies that plan to conduct activities within its rights-of-way. Encroachment permits may include conditions or restrictions that limit when construction activities can occur within or above roadways under the jurisdiction of Caltrans.

Caltrans prepared a document, *Guide for the Preparation of Traffic Studies* (2002) that describes when a traffic impact study is needed. The intent of this guide is to provide a starting point and a consistent basis which Caltrans evaluates traffic impacts to state highway facilities. The applicability of the guide for local streets and roads (non-state highways) is at the discretion of the effected jurisdiction.

The IC Project Alignment falls entirely within Caltrans Districts 8 and 9.

4.17.2.2.2 California Transportation Commission

The California Transportation Commission (CTC) was established in 1978 out of a growing concern for a single, unified California transportation policy. The CTC is responsible for the programming and allocating of funds for the construction of highway, passenger rail, active transportation, aeronautics, and transit improvements throughout California. The CTC also advises and assists the Secretary of the California State Transportation Agency (CalSTA) and the Legislature in formulating and evaluating state policies and plans for California's transportation programs. The CTC is also an active participant in the initiation and development of state and federal legislation that seeks to secure financial stability for the state's transportation needs.

4.17.2.2.3 California Streets and Highway Code

The State of California Streets and Highway Code (Code) requires the IC Project proponent to obtain permits from Caltrans for any roadway encroachment during truck transportation and delivery. The Code includes regulations for the care and protection of highways (both state and county) and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

Sections 700 through 711 provide provisions that are specific to utility providers. The Code also outlines directions for cooperation with local agencies, guidelines for permits, as well as general provisions relating to state highways and Caltrans' jurisdiction. (State of California 2017)

4.17.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the IC Project. Pursuant to CPUC General Order 131-D (GO 131-D), Section XIV.B, "Local jurisdictions acting pursuant to local authority is preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties' and cities' regulations are not applicable as

the counties and cities do not have jurisdiction over the IC Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only.

4.17.2.3.1 Inyo County General Plan, Circulation Element

Policy RH-1.4, Level of Service, in the Circulation Element of the Inyo County General Plan, states:

> "Maintain a minimum level of service (LOS) "C" on all roadways in the County. For highways within the County, LOS "C" should be maintained except where roadways expansions or reconfigurations will adversely impact the small community character and economic viability of designated Central Business Districts."

4.17.2.3.2 Inyo County Regional Transportation Plan

The Inyo County 2015 Regional Transportation Plan (RTP) provides a coordinated, 20-year vision of the regionally significant transportation improvements and policies needed to efficiently move goods and people in the region. As the Regional Transportation Planning Agency (RTPA), the Inyo County Transportation Commission (ICLTC) is required by California law to adopt and submit an approved RTP to the California Transportation Commission (CTC) every five years. Caltrans assists with plan preparation and reviews draft documents for compliance and consistency. The RTP must be consistent with other planning guidance in the region such as adopted general plans, airport plans, bicycle plans, and public transit plans. (Inyo County 2015)

4.17.2.3.3 Kern Council of Governments Regional Transportation Plan

The Kern Council of Governments (COG) is an association of city and county governments created to address regional transportation issues. Its member agencies include the County of Kern and 11 incorporated cities within Kern County. The Kern COG is responsible for developing and updating a variety of transportation plans, determining priority projects, allocating the federal and state funds to implement the plans, and assuring money accepted for improving plans are properly utilized.

The Kern COG prepared the Regional Transportation Plan, a long-term general plan for the region's transportation network, and encompasses projects for all types of travel, including aviation and freight movement. (Kern COG 2014) The plan assesses environmental impacts of proposed projects, and establishes air quality conformity as required by federal regulations.

The Kern COG is required to periodically update the Regional Transportation Plan to ensure that the transportation system addresses the transportation and traffic plans for Kern County in a manner that is consistent with the applicable federal and state requirements.

4.17.2.3.4 Kern County General Plan and Circulation Element

The Kern County General Plan's Circulation Element includes the following goal:

> "Maintain a minimum Level Of Service (LOS) D for all roads throughout the County unless the roads are part of an adopted Community Plan or Specific Plan which utilizes Smart Growth policies that encourage efficient multi-modal movements."

4.17.2.3.5 San Bernardino County General Plan, Circulation and Infrastructure Element

Policy D/CI 1.1 of the County of the San Bernardino County General Plan Circulation and Infrastructure Element states:

> "The County shall ensure that all new development proposals do not degrade Levels of Service (LOS) on Major Arterials below LOS C in the Desert Region."

4.17.2.3.6 Southern California Association of Governments

The Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range Plan for the six-county region that includes Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. The RTP/SCS is a visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, County Transportation Commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the region. Ultimately, the vision of the RTP/SCS is to improve the quality of life for the region's residents by making the best transportation and land use choices for the future and supporting those choices with wise investments. Among the goals of the Plan are to reduce greenhouse gas emissions 8 percent per capita by 2020, with an 18 percent reduction by 2035 and a 21 percent reduction by 2040. The Plan also aims to reduce daily Vehicle Miles Traveled (VMT) per capita in San Bernardino County by nearly 10 percent (to 19.7 miles from 21.8 miles) and Vehicle Hours Traveled (VHT) per capita by 18 percent (for automobiles and light/medium duty trucks).

4.17.3 Significance Criteria

The significance criteria for assessing the impacts to transportation and traffic are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project causes a potentially significant impact if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit
- Conflict with an applicable congestion management program, including Level of Service (LOS) standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

4.17.4 Impact Analysis

4.17.4.1 Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

4.17.4.1.1 Construction

Less than Significant Impact with Mitigation. Construction activities would include the movement of medium and heavy-duty vehicles (including oversize vehicles such as cranes) along Interstates, US Routes, State Routes, and county and city-maintained roads. Construction activities would require the temporary closure of traffic lanes or roads during installation or removal of structures located adjacent to roadways, and temporary and short-term road closures would also be required during the removal and installation of overhead wire (see Figureset 4.17-2).

IC Project-related vehicles and equipment would generally travel from material yards or contractor yards to work sites in the morning, returning to their points of departure in the evening. The typical crew size needed to accomplish each of the construction activities, and the equipment typically used to accomplish each of the construction activities, is provided in Table 3.7-8: Construction Equipment and Workforce. SCE anticipates that up to 200 workers could be working on the IC Project on any given day. It is estimated that work described in *Chapter 3—Project Description* would generate approximately 300 daily vehicle trips across the breadth of the IC Project. The 300 daily vehicle trips is inclusive of each worker making two daily personal vehicle trips (one trip in the morning from home to a material yard, and one trip in the reverse in the evening, for a total of 200 roundtrips per day); due to the working hours of utility and construction crews, the majority of these personal vehicle trips would occur outside the morning and evening peak hours. Further, vehicle movements would be geographically- and temporally-dispersed across the IC Project. Note also that due to the remoteness of much of the area in which the IC Project would be constructed, construction equipment would likely be parked along the alignment at the end of each construction day rather than it being transported to a material yard.

A temporary increase in vehicle movements during IC Project construction activities would occur at a number of the intersections identified in Table 4.17-3. Given that construction activities will be physically dispersed; that construction activities would be temporally dispersed across this area over the construction period; that a small number of IC Project-related vehicle movements would likely occur at any given intersection on any given day; and that those movements generally would occur outside of morning and evening peak times, construction of the IC Project would not result in the lowering of the existing LOS along a roadway or intersection given the low volume of non-project traffic across much of the area in which the IC Project would be constructed and the presence of high-capacity roadways where traffic volumes are greater. The IC Project-related vehicle movements would account for a minimal increase over peak hour and average daily volumes along roadways and intersections.

IC Project construction activities would require temporary lane or road closures that could impact the performance of the circulation system in populated areas, including but not limited to intersections, streets, highways, and public transit. In these areas, SCE would obtain encroachment permits from the local jurisdictions and Caltrans, as appropriate, for lane or roadway closures. In addition, SCE would

implement APM TRA-1 to ensure the safe and efficient transit of vehicles, trains, bicyclists, and pedestrians.

Based on the number of daily vehicle trips generated during construction, and the implementation of APM TRA-1, the IC Project would not create any inconsistency or conflict with an applicable plan, ordinance or policy that establishes measures of effectiveness, and impacts would be less than significant with mitigation.

4.17.4.1.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconductored under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.17.4.2 Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

On September 27, 2013, Senate Bill 743 was signed into law, starting a process that is changing transportation impact analysis as part of CEQA compliance. These changes include elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California, and establishment of metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.

Upon completion of the "rulemaking" process in 2018, SB 743 went into effect, although agencies will have an opt-in period until January 1, 2020.

4.17.4.2.1 Construction

No Impact. The Southern California Association of Governments 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) has established a goal to reduce daily Vehicle Miles Traveled (VMT) per capita in San Bernardino County by nearly 10 percent (to 19.7 miles from 21.8 miles) and Vehicle Hours Traveled (VHT) per capita by 18 percent (for automobiles and light/medium duty trucks).The Kern Council of Governments' 2018 Regional Transportation Improvement Program establishes a goal to reduce VMT per capita from 27.21 in 2020 to 26.45 in 2040. The Inyo County Regional Transportation Plan 2015 does not establish any VMT or VHT goals.

As presented in *Chapter 3 – Project Description*, up to 200 workers could be working on the IC Project on any given day. SCE anticipates that its own crews or specialty electrical contractors would be used for this work. The short duration of the construction period would not trigger the creation of any new employment positions—SCE crews and contractor crews are currently employed and utilized on projects across the broader region. Because of this, no population growth would be induced by the construction of the IC Project, and therefore the IC Project would not result in a per capita increase in VMT or VHT. Because construction of the IC Project would not result in an increase in a per capita increase in VMT or VHT, no impact would occur under this criterion.

4.17.4.2.2 Operations

No Impact. As presented in Section 4.14, the IC Project would not provide new or upgraded electrical service. In addition, the IC Project does not include any new infrastructure such as publicly accessible roads that could induce population growth during operations.

As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconductored under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project.

Because the operation of the IC Project infrastructure would not induce any population growth, and because no material changes in O&M activities would occur, no increase in VMT, VHT, or automobile trips would result, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.17.4.3 Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

4.17.4.3.1 Construction

Less than Significant Impact. The nearest public airports to the IC Project are the Eastern Sierra Regional Airport (approximately 4 miles east of Segment 1), Independence Airport (approximately 2.6 miles west of Segment 1), Inyokern Airport (approximately 1.2 miles distant from Segments 1 and 2), Baker Airport (approximately 0.4 miles distant from Segment 4), and the Barstow-Daggett Airport (approximately 3 miles distant from the confluence of Segments 3N, 3S, and 4). The nearest private airstrips are the Inyo County Sheriff Search Rescue Heliport (approximately 4.3 miles from Segment 1), Depue airstrip (approximately 2.5 miles distant from Segment 3S) and the Harvard airstrip (approximately 1.75 miles distant from Segment 4).

The IC Project includes the reconstruction of subtransmission lines in and immediately proximate to existing subtransmission line alignments, and therefore there would be no substantial change in location of the subtransmission lines that could impact air traffic patterns.

The IC Project would not result in a population increase, and therefore would not trigger a population-induced increase in air traffic at local airports.

Helicopters would be used to install new subtransmission structures and conductor, and to remove existing structures or conductor. Therefore, construction activities would result in a short-term increase in air traffic levels. This work would not result in a change in established air traffic patterns, but would result in an increase in aircraft traffic in the area during construction of the IC Project. SCE would implement APM TRA-2, and through coordination with the FAA impacts to air traffic patterns would be less than significant. The IC Project falls within the R-2508 Complex which would require notifications to the China Lake Naval Air Weapons Station and Edwards Air Force Base. With notification and coordination with federal authorities, and compliance with applicable regulations, less than significant impacts would occur under this criterion as a result of IC Project activities.

4.17.4.3.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconductored

under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.17.4.4 Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

4.17.4.4.1 Construction

No Impact. No incompatible uses or construction or alteration of any public roads are proposed. Therefore, no impacts would occur under this criterion as a result of the IC Project.

4.17.4.4.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconductored under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.17.4.5 Would the project result in inadequate emergency access?

4.17.4.5.1 Construction

Less than Significant Impact with Mitigation. Construction activities would not result in inadequate emergency access. All construction at substations would be conducted within, or immediately proximate to, the fencelines of the facilities; activities and construction vehicles would not reduce the dimensions of access roads or driveways, or block roads or driveways, and thus would not impair emergency access to substations.

Subtransmission-related construction activities may require temporary closure of travel lanes on public roadways, private roads, and driveways, and would involve the movement of oversize vehicles that could affect emergency vehicle access to and through IC Project construction areas. To ensure that construction related activities result in less than significant impacts to emergency access, SCE would implement APM TRA-1. Implementation of this APM would provide for efficient and safe transit of emergency vehicles through construction areas. SCE would also obtain the appropriate permits from the local jurisdictions, UPRR, BNSF, and Caltrans, as applicable, for construction activities that would encroach upon any public ROW or easement.

Vehicle movements along, and use of, access roads would be communicated to and coordinated with the appropriate agencies as necessary. At construction work areas, equipment would be situated or attended to facilitate adequate emergency vehicle access. Therefore, less than significant impacts would occur under this criterion.

4.17.4.5.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconductored under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.17.4.6 Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

4.17.4.6.1 Construction

Less than Significant Impact with Mitigation. IC Project construction activities would not conflict with adopted policies, plans, or programs regarding railroad, public transit, bicycle, or pedestrian facilities. Construction activities in any given location would occur over a short time period, and would largely be conducted in rural areas with no public transit service, bicycle or pedestrian facilities. Construction activities conducted in populated areas with public transit service, rail service or bicycle or pedestrian facilities are generally confined to subtransmission line reconstruction work in and in the vicinity of the City of Barstow. Work in this area would be conducted within existing public utility easements, or in a public ROW. SCE would obtain encroachment permits from the local jurisdictions, UPRR, BNSF, and Caltrans, as appropriate, for future construction activities that would encroach upon any public ROW or easement. In cases where future construction work may require temporary closure of travel lanes or oversize vehicle trips that could disrupt public transit, rail service, bicycle, or pedestrian traffic, SCE would implement APM TRA-1 to ensure the safety of pedestrians and bicyclists and reduce any performance impacts to less than significant levels.

4.17.4.6.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconductored under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.17.5 Applicant Proposed Measures

SCE has designed and incorporated APMs TRA-1 and TRA-2 into the IC Project to avoid or minimize potential impacts to transportation and traffic. The full text of these APMs is presented in Section 5.1.

4.17.6 Alternatives

Alternatives to the IC Project are addressed in Section 5.2, Description of Project Alternatives and Impact Analysis.

4.17.7 References

California Department of Transportation (Caltrans). 2017. Bicycling in Caltrans District 9. Webpage. Available at http://www.dot.ca.gov/d9/bicycle/d9_bike_brochure.pdf

Caltrans. 2017. District System Management Plan – District 8. Prepared by Caltrans District 8 Branch of System Planning and Traffic Forecasting. Available at http://www.dot.ca.gov/hq/tpp/corridor-mobility/D8_docs/DSMP2017Approved.pdf

Caltrans. 2017. Traffic Census Program. Data accessed at http://www.dot.ca.gov/trafficops/census/volumes2016/

Caltrans. 2016. Truck Networks on California State Highways. Available at http://www.dot.ca.gov/trafficops/trucks/docs/truckmap-d08.pdf and http://www.dot.ca.gov/trafficops/trucks/docs/truckmap-d09.pdf

Caltrans. 2015. District System Management Plan – District 9. Prepared by Caltrans District 9 Office of System Planning. Available at http://www.dot.ca.gov/d9/planning/docs/D9FinalMar2015DSMP.pdf

Caltrans. 2002. Guide for the Preparation of Traffic Impact Studies. December 2002. 19 pages.

California Inter-Utility Coordinating Committee. 2016. California Temporary Traffic Control Handbook. Available at https://www.sce.com/nrc/aboutsce/regulatory/distributionmanuals/tcm.pdf

City of Barstow. 2014. Traffic Study for Barstow 2014 General Plan Amendment. Available at http://www.barstowca.org/home/showdocument?id=2932

Eastern Sierra Transit Authority (ESTA). 2017. About Eastern Sierra Transit Authority – History Webpage. Available at https://www.estransit.com/administration/about/

Inyo County. 2015. Inyo County Regional Transportation Plan 2015. Available at http://www.inyoltc.org/pdfs/rtp/frtpwhole.pdf

Kern County. 2009. Kern County General Plan. Available at http://www.co.kern.ca.us/planning/pdfs/kcgp/KCGP.pdf

Kern County Council of Governments (KERN COG). 2014. 2014 Regional Transportation Plan/Sustainable Communities Strategy. Available at https://www.arb.ca.gov/cc/sb375/kerncog_2014_rtp.pdf

Kern COG. 2012. Kern County Bicycle Master Plan and Complete Streets Recommendations. Volume 1: Bicycle Master Plan. Available at http://www.ca-ilg.org/sites/main/files/file-attachments/2012_bicyclemasterplan_i.pdf

Kern Regional Transit. 2017. Routes and Schedules Webpage. Available at http://kerntransit.org/routes-and-schedules/

Kern County. 2012. Airport Land Use Compatibility Plan. Available at https://psbweb.co.kern.ca.us/planning/pdfs/ALUCP2012.pdf

Kern County. 2009. Kern County General Plan. Available at http://www.co.kern.ca.us/planning/pdfs/kcgp/KCGP.pdf

San Bernardino Associated Governments (SANBAG). 2016. San Bernardino County Congestion Management Program. 2016 Update. Available at http://www.gosbcta.com/plans-projects/CMP/CMP16-Complete-061416.pdf

SANBAG. 2015. San Bernardino Non-Motorized Transportation Plan. Available at http://www.gosbcta.com/plans-projects/plans/NMTP-RevisedMay2015.pdf

SANBAG. 2014. Freight Strategy Working Paper. Available at http://www.gosbcta.com/plans-projects/goods-movement/FreightStrategy.pdf

San Bernardino County. 2014. County of San Bernardino 2007 General Plan. Available at http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf

Southern California Association of Governments. 2016. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available at http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx

State of California. 2017. California Legislative Information; Streets and Highways Code. Available at https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=SHC&division

Legend

- Substation
- Airport
- IC Project Alignment
- County
- Truck Route Network
- Railroads

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Miles

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IVANPAH-CONTROL PROJECT

TRUCK ROUTES, PUBLIC USE AIRPORTS, AND RAILROADS

ARCADIS

SOUTHERN CALIFORNIA EDISON

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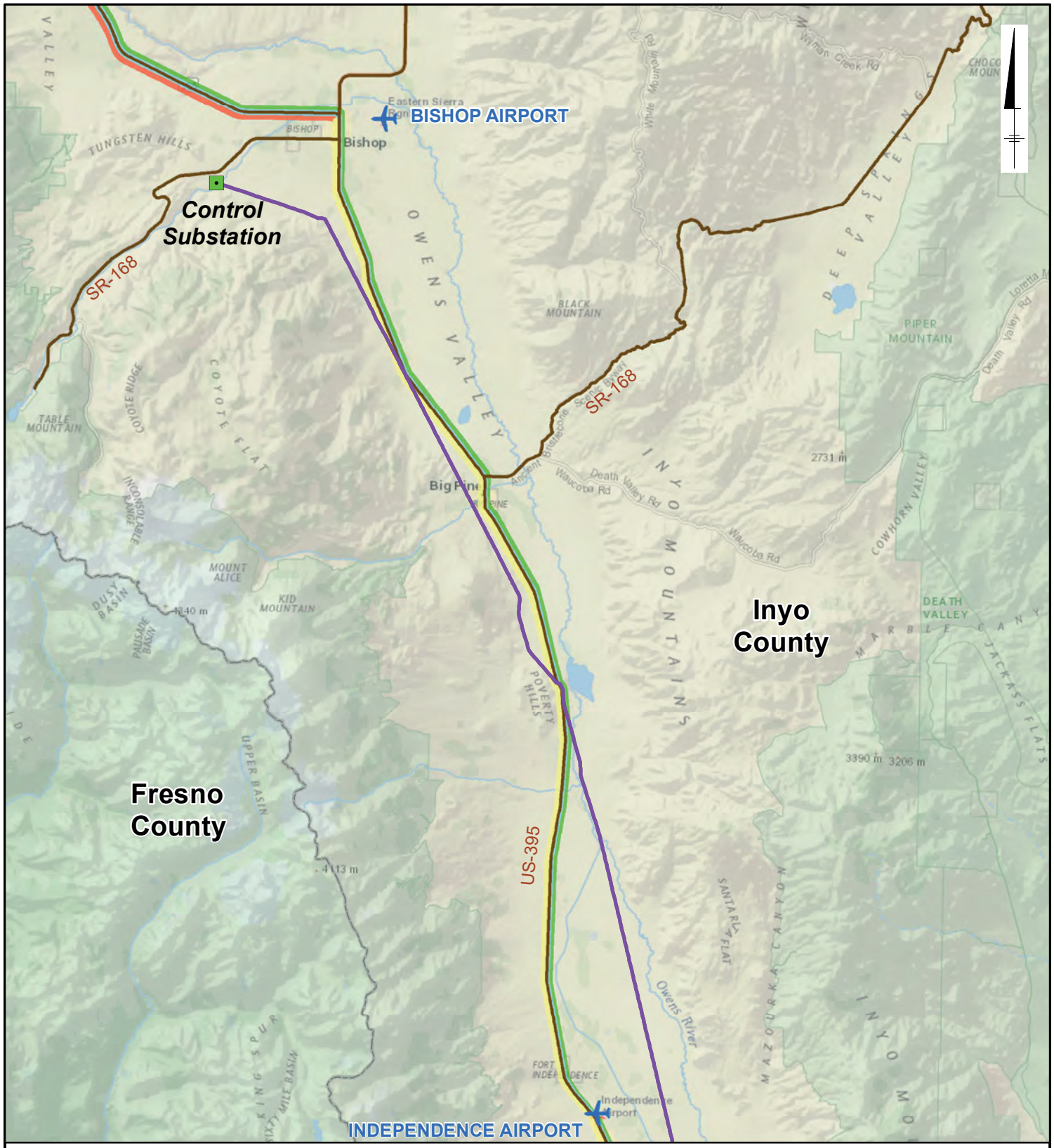

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TRUCK ROUTES, PUBLIC USE AIRPORTS, AND RAILROADS

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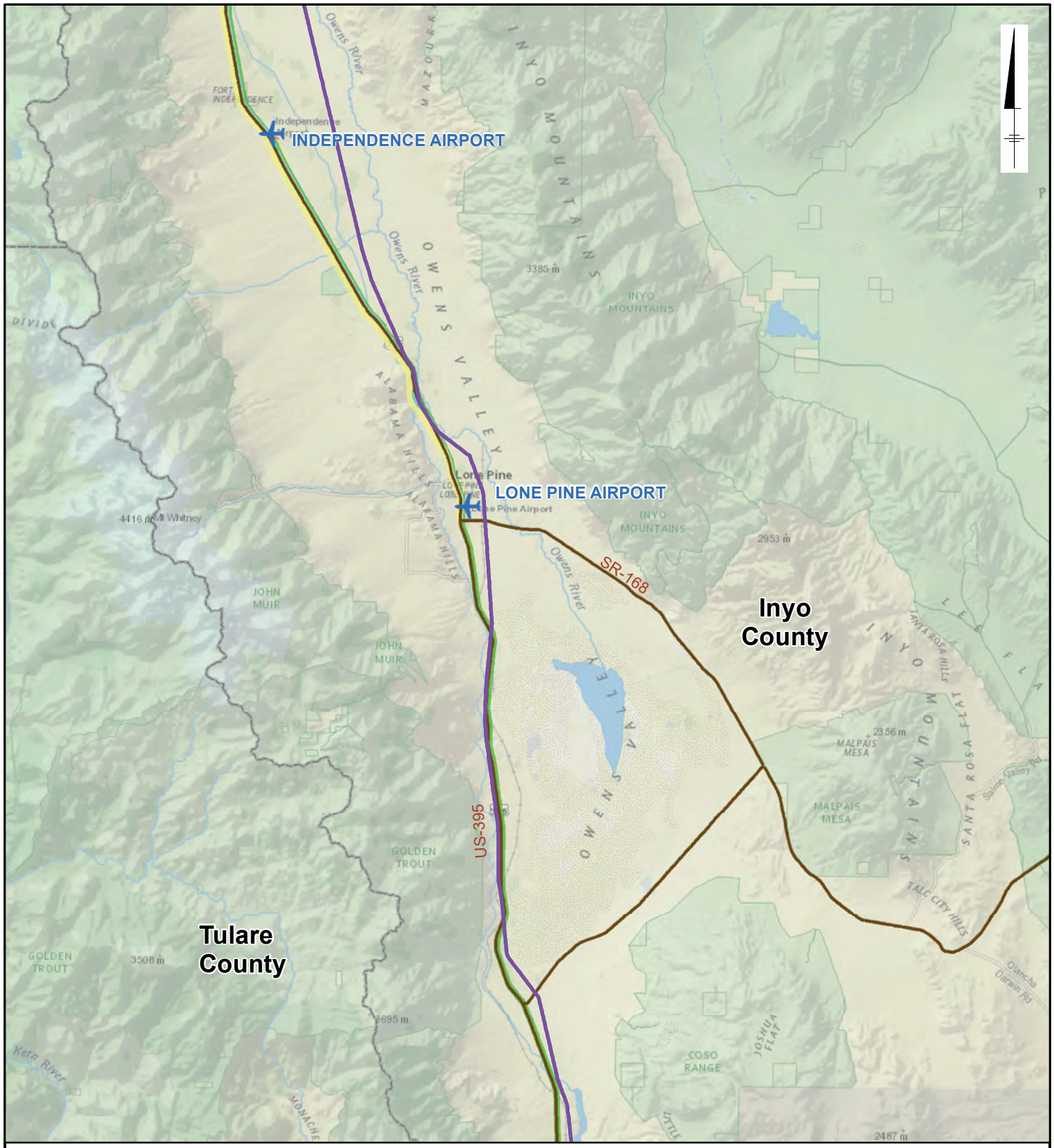

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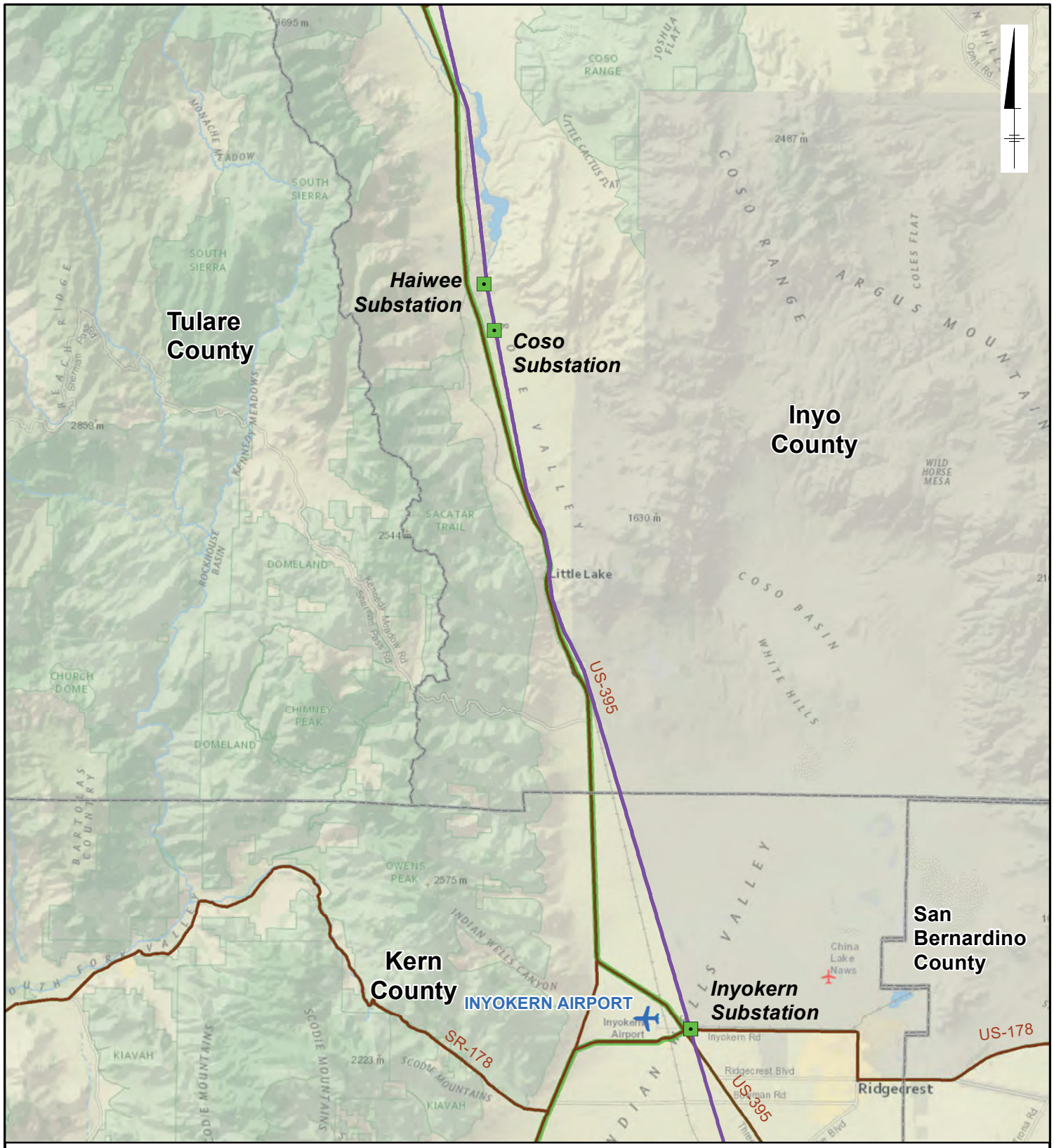

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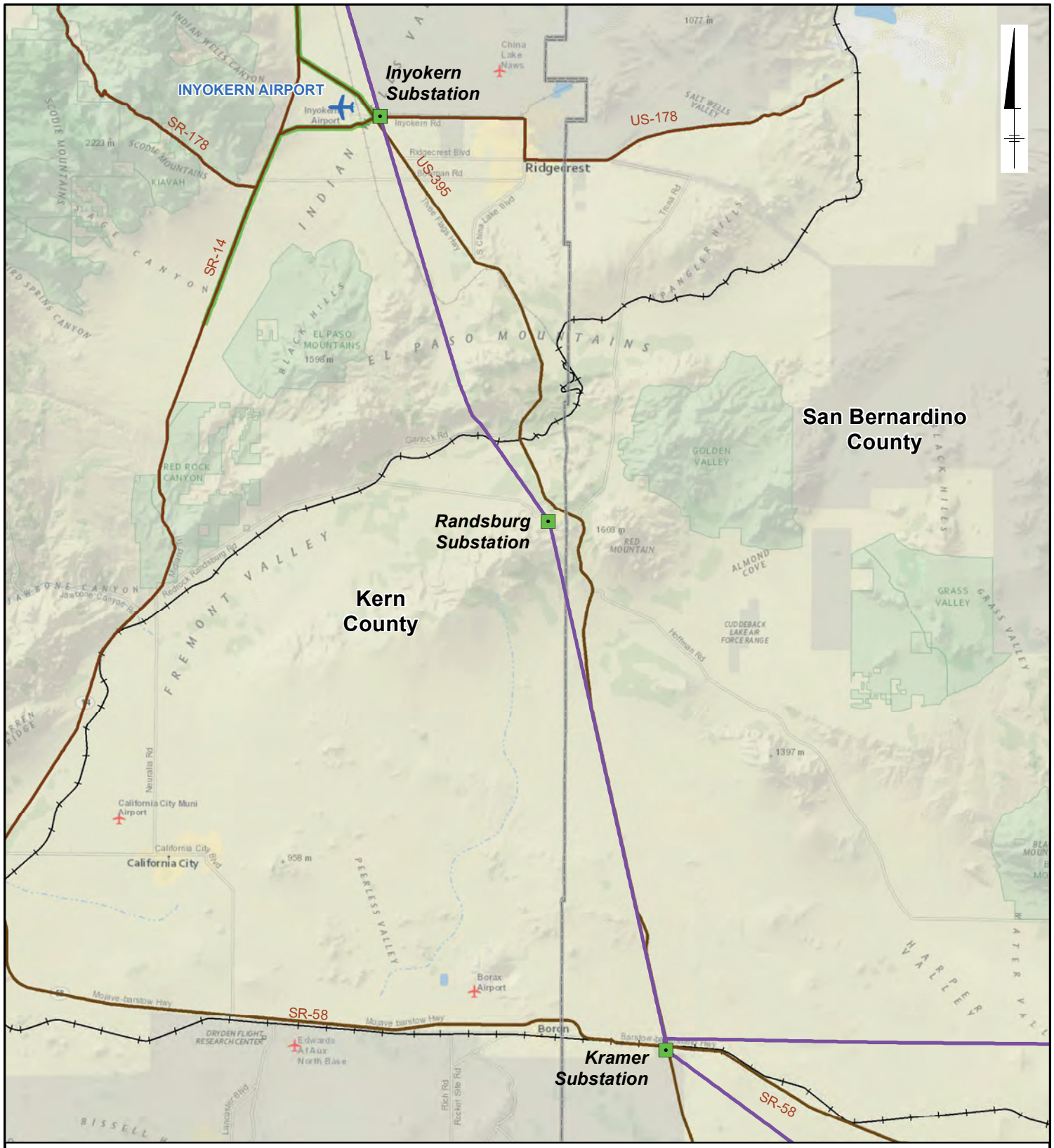

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TRUCK ROUTES, PUBLIC USE AIRPORTS, AND RAILROADS

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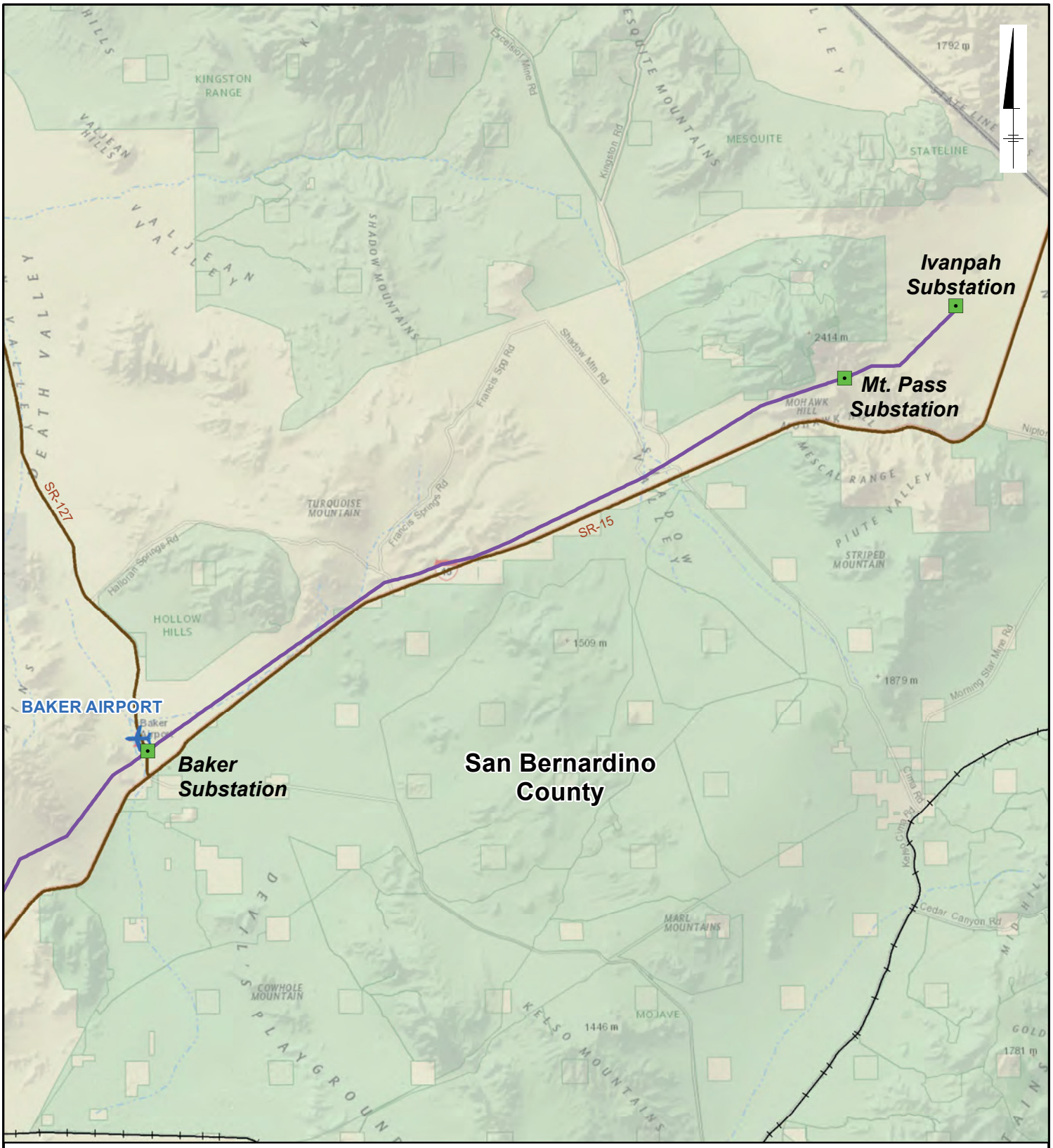

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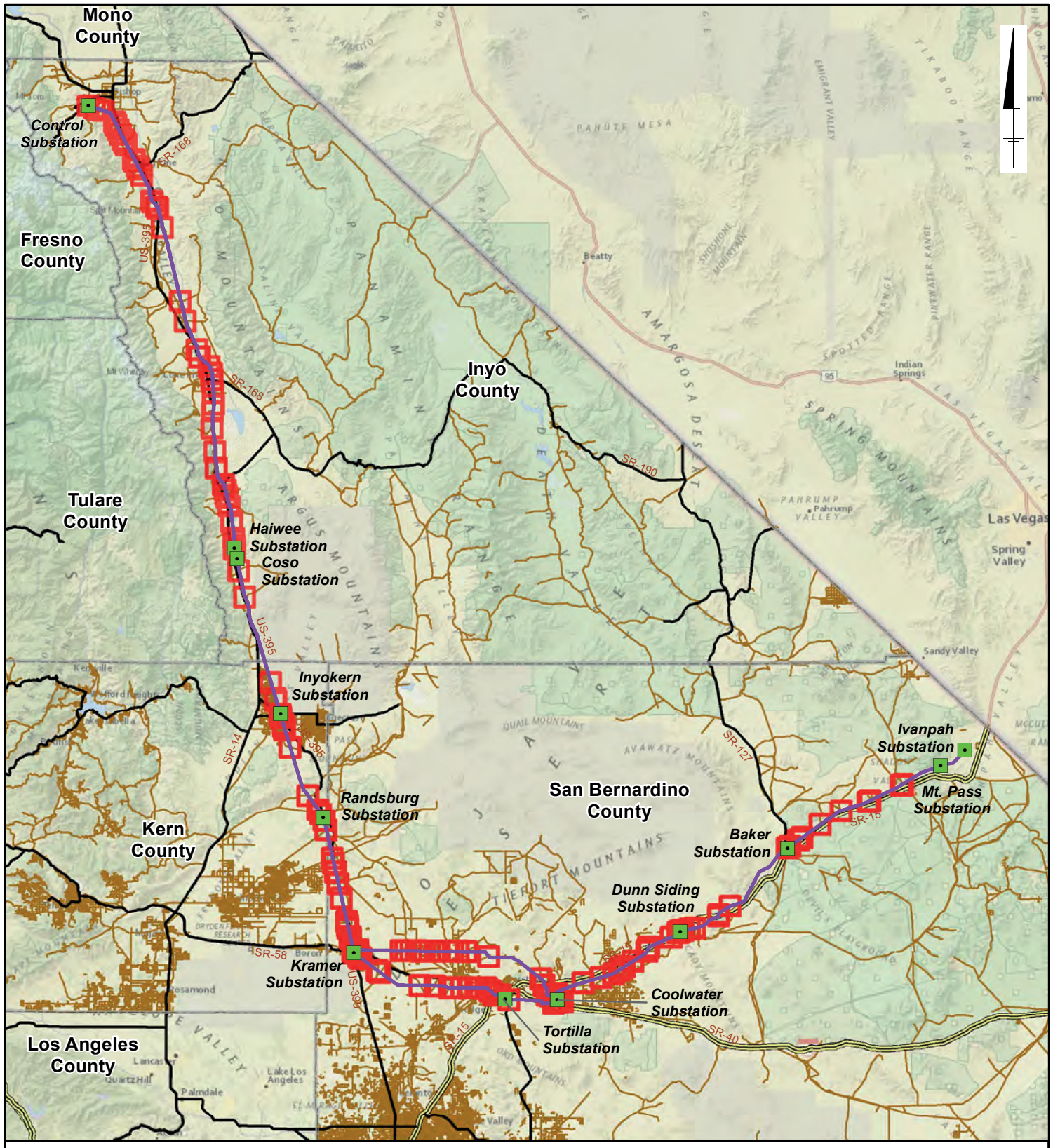

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- Substation
- Road Crossings and Potential Lane Closures
- IC Project Alignment
- County
- Interstate Highway
- US/State Highway
- Road

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Miles

NOTES:
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(2) Potential lane closures determined by areas where IC alignment runs parallel to and within 20 ft of public road.

IVANPAH-CONTROL PROJECT

POTENTIAL LANE CLOSURES AND ROAD CROSSINGS

ARCADIS

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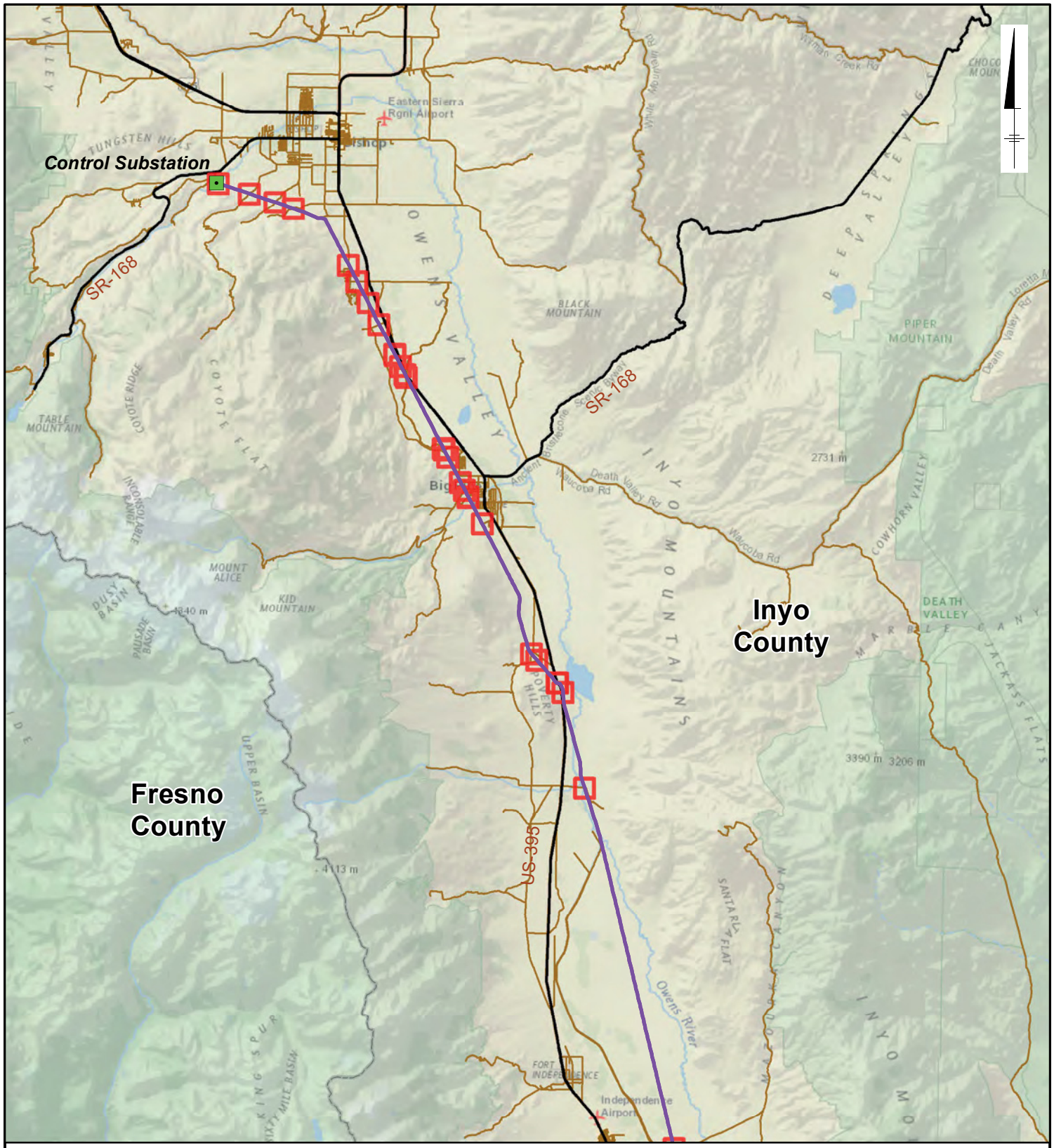

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Miles

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IVANPAH-CONTROL PROJECT

POTENTIAL LANE CLOSURES AND ROAD CROSSINGS

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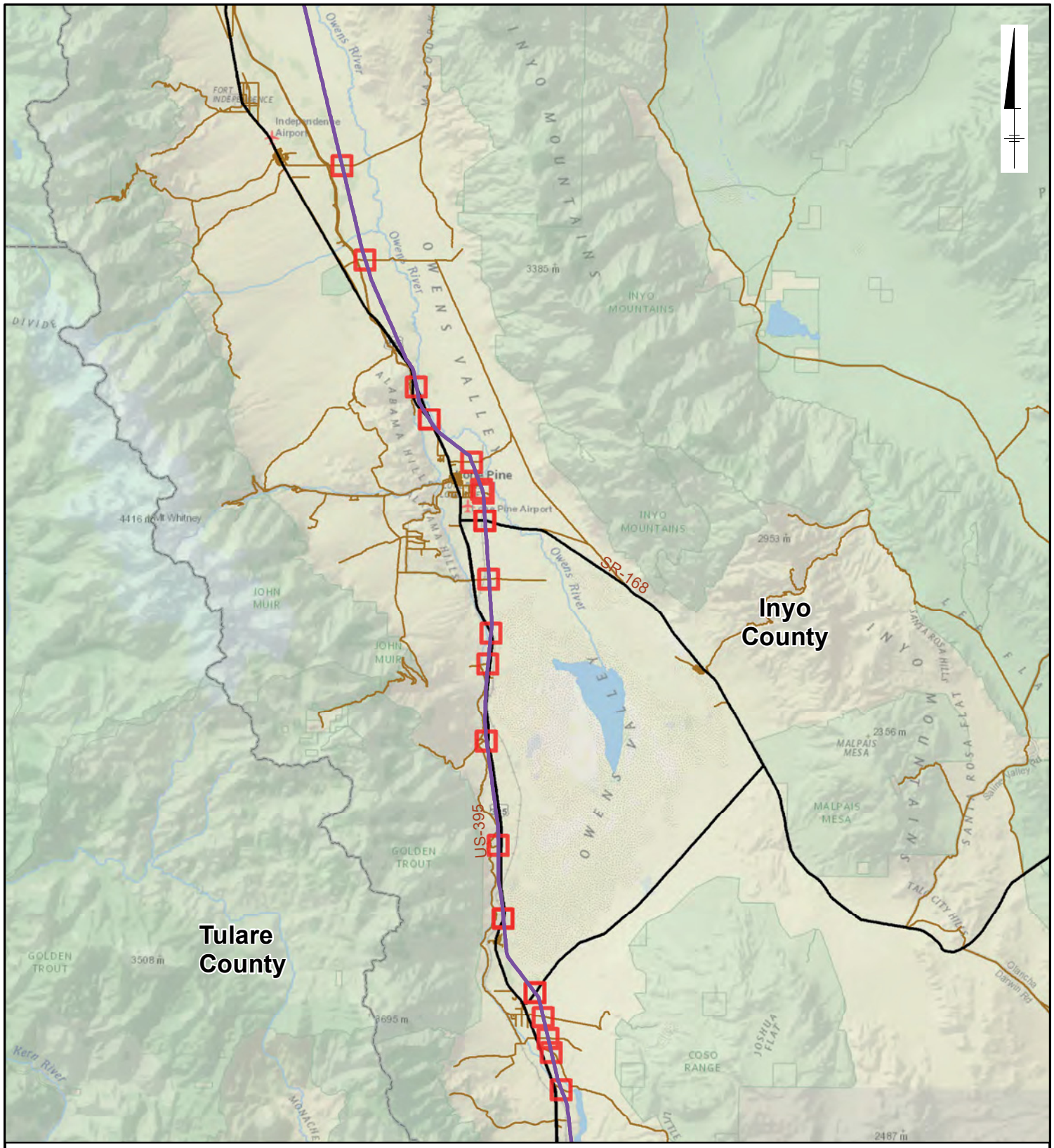

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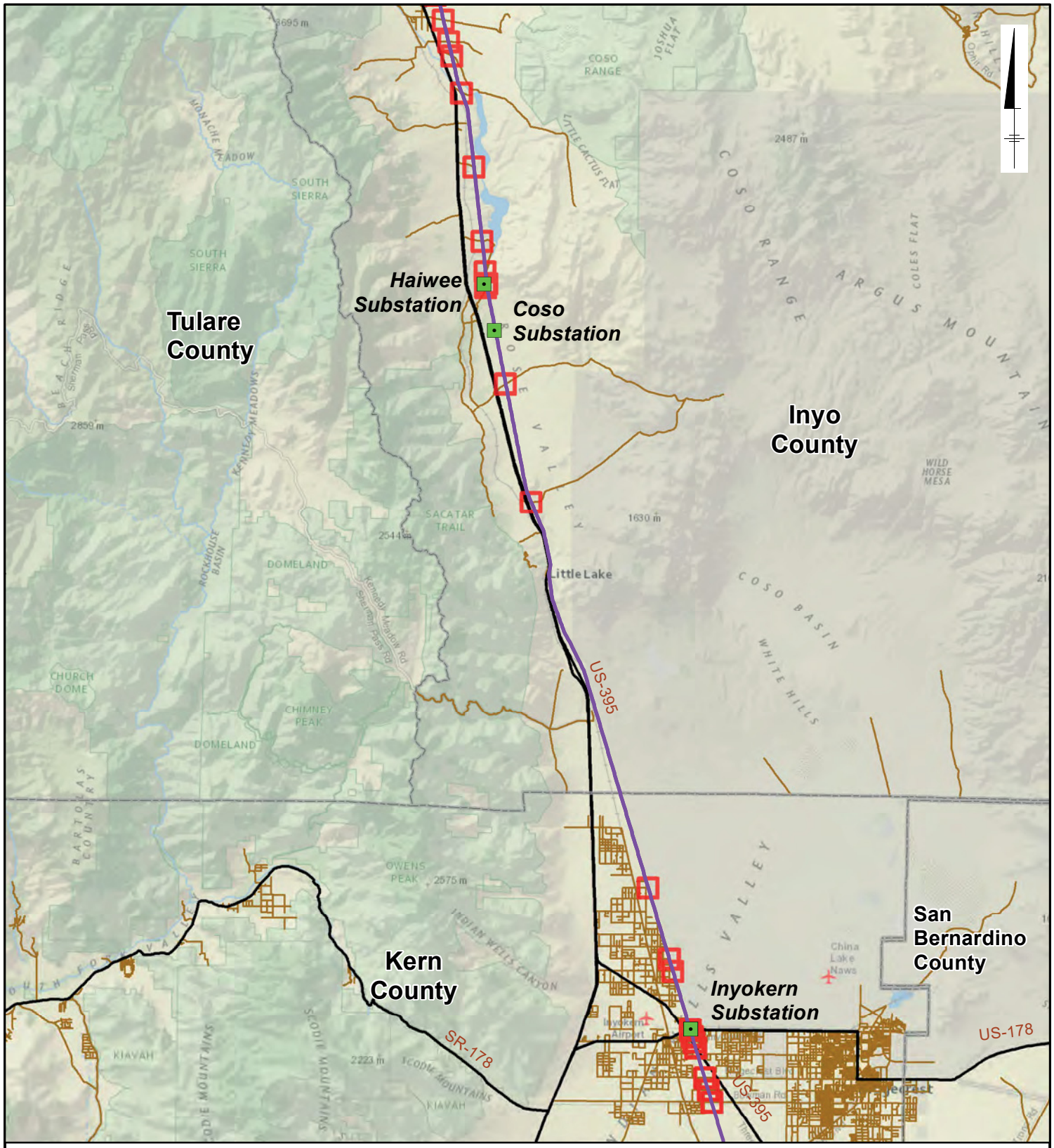

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IVANPAH-CONTROL PROJECT

POTENTIAL LANE CLOSURES AND ROAD CROSSINGS

ARCADIS

SOUTHERN CALIFORNIA EDISON

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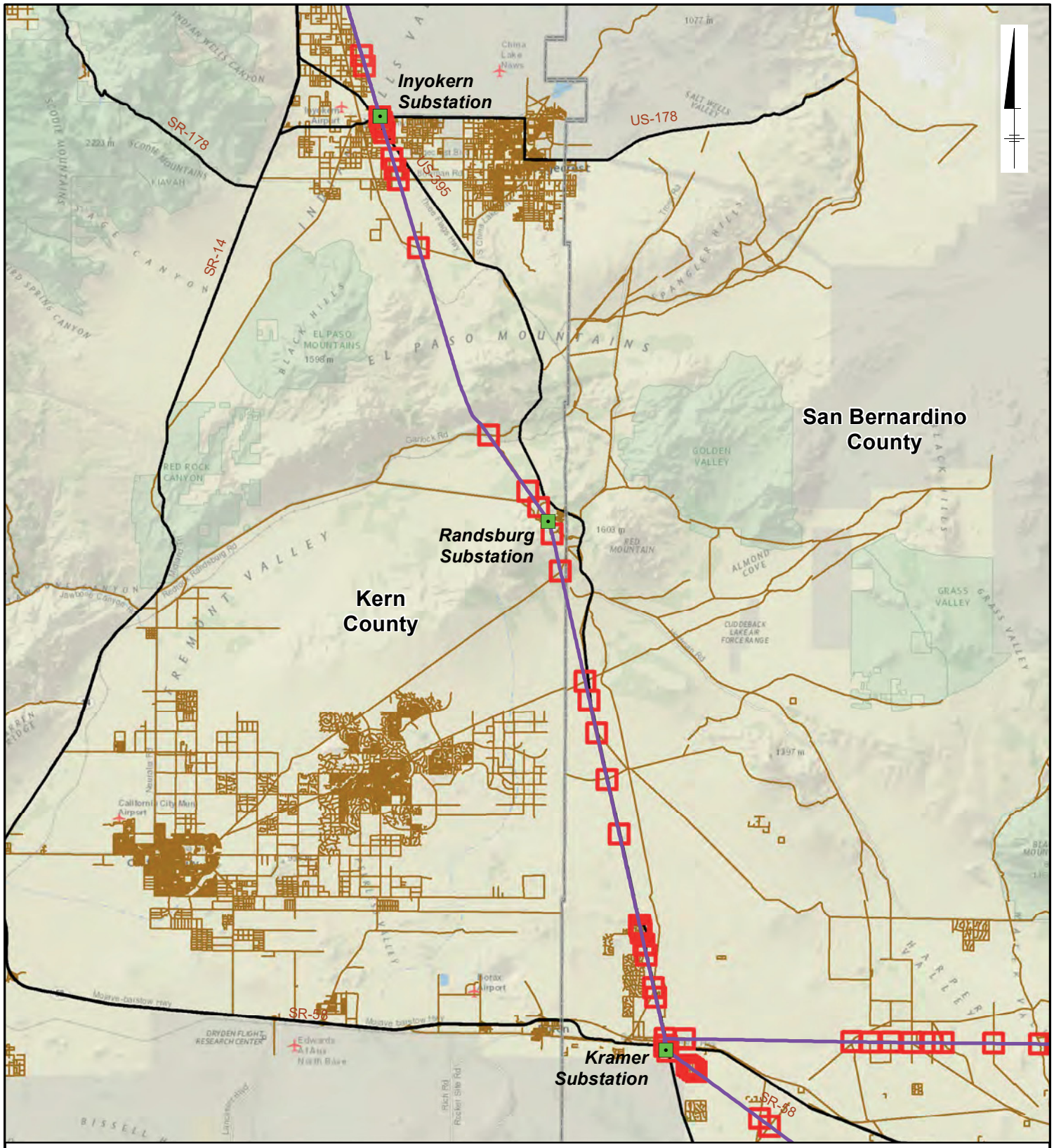

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Miles

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IVANPAH-CONTROL PROJECT

POTENTIAL LANE CLOSURES AND ROAD CROSSINGS

ARCADIS

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

FIGURESET: 4.17-2

Legend

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IVANPAH-CONTROL PROJECT

POTENTIAL LANE CLOSURES AND ROAD CROSSINGS

ARCADIS

SOUTHERN CALIFORNIA EDISON
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IVANPAH-CONTROL PROJECT

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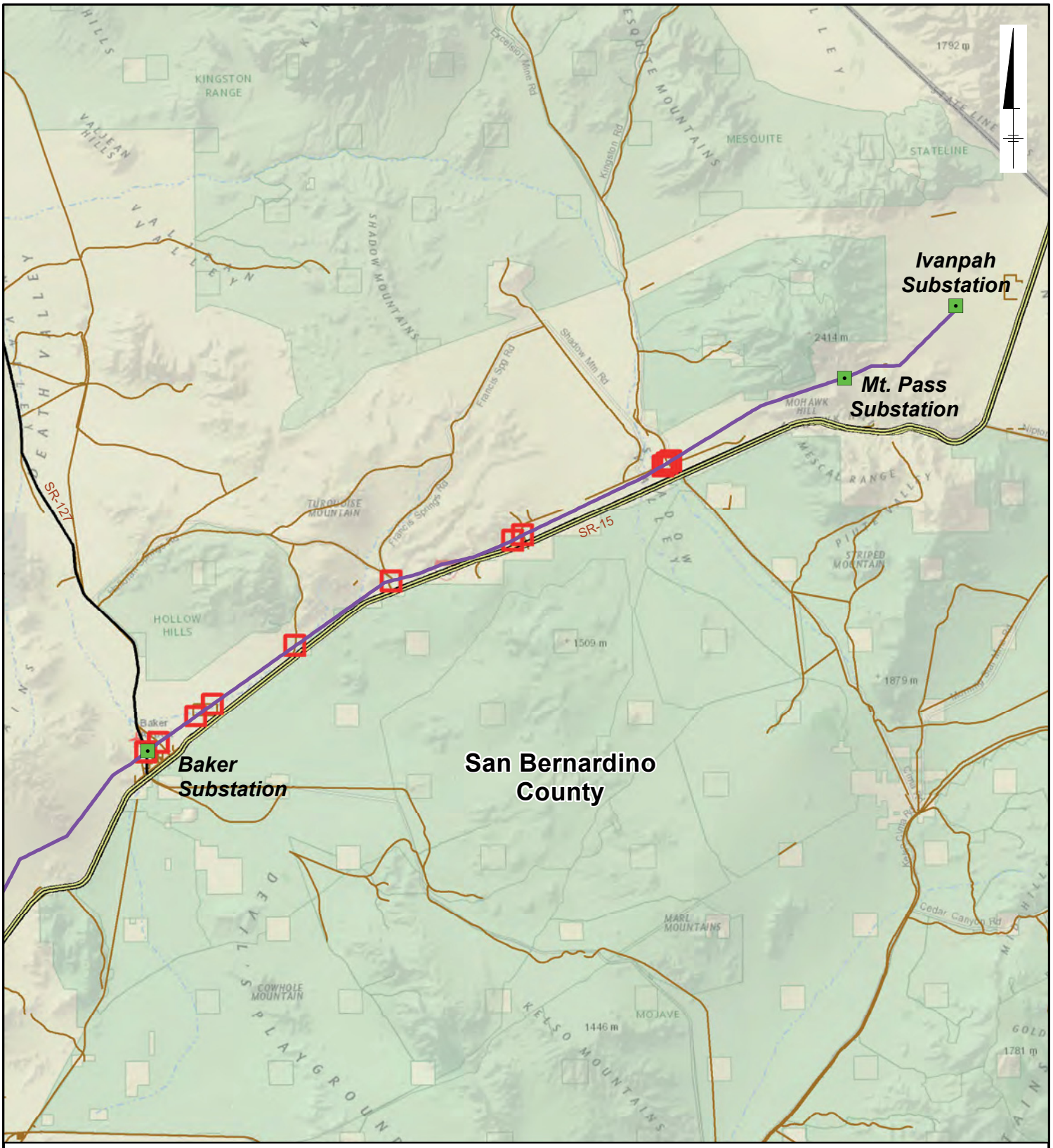

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IVANPAH-CONTROL PROJECT

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