

5.0 HIGH-RISK CORRIDORS AND INTERSECTIONS (CRASH HISTORY AND ROADWAY CHARACTERISTICS)

The high-risk corridors and intersections were identified using the network screening analysis described in Section 3.2. Those locations are presented below as the priority locations for safety investments within the Tahoe Region. The pedestrian and bicycle priority locations are discussed first followed by motor vehicle priority locations. Section 6.0 presents initial countermeasures identified for these locations, and Section 7.0 presents a subset of viable project scopes that were identified from this initial set of locations.

5.1 PEDESTRIAN AND BICYCLE PRIORITY LOCATION

Many areas with higher traffic speeds and wide streets lack appropriate bicycle infrastructure. Most contain bike lanes; however, these may insufficiently address bike safety. Areas with higher speeds tend to serve a wider range of bicyclists when they have separated infrastructure and better crossing opportunities. The risk factors of speeds, traffic volumes, and pedestrian and bicycle exposure informed the priority locations shown in Exhibit 36 through Exhibit 39. In some cases, projects are underway that are improving high priority locations, such as the improvement in Kings Beach, Tahoe City, US 50 at Pioneer trail and SR 89 in Meyers, and potentially US 50 at Stateline through the US 50 Community Revitalization Project.

Table 7 summarizes the Pedestrian and Bicycle high priority locations. The identified priority locations for pedestrians and bicyclists are on state highways. State Route 28 at Kings Beach and U.S. Highway 50 through Stateline/Heavenly Village have notable overall crash rates. However, the Kings Beach location has recently had pedestrian and bicycle infrastructure improvements through the Kings Beach Commercial Core Improvement Project, which evaluation results do not reflect.

The highways circling Lake Tahoe also serve as the main streets for many community and commercial centers. The high priority locations are the commercial centers of Tahoe City, Kings Beach, Stateline/South Lake Tahoe, Meyers, and Homewood, as shown in Exhibits 36 through 40. These areas have destinations on both sides of the street. The high pedestrian crash rates in these areas are most likely attributed to people walking in places without sidewalks or crossing at uncontrolled locations; however, detailed information about pedestrian crash types was not available. All the high priority locations also are located on roadways in California, which does not mean that there are not locations in Nevada where bicycle and pedestrian safety improvements should be explored. The concentration in California may be more indicative of more people walking and biking in the community centers within California relative to those in Nevada.

Table 7: Crash Summary for High Priority Locations. Source: SWITRS, NDOT, TDG 2018

Locations	Bicycle/MV Crashes	Bicycle/No MV Crashes	Pedestrian/MV Crashes	Pedestrian/No MV Crashes	Total Ped/Bike Crashes
US 50 at Stateline/ Heavenly Village	8	0	9	1	18
SR 28/Kings Beach	6	3	2	0	11
SR 28/Tahoe City	2	2	3	0	7
US 50/South Lake Tahoe	2	0	1	1	4
US 50 @ South Lake Tahoe, South of the Y	3	0	0	0	3
SR 89/ Homewood	0	0	1	1	2
US 50/Meyers	0	0	2	0	2
SR 89/South Lake Tahoe, North of the Y	2	0	0	0	2

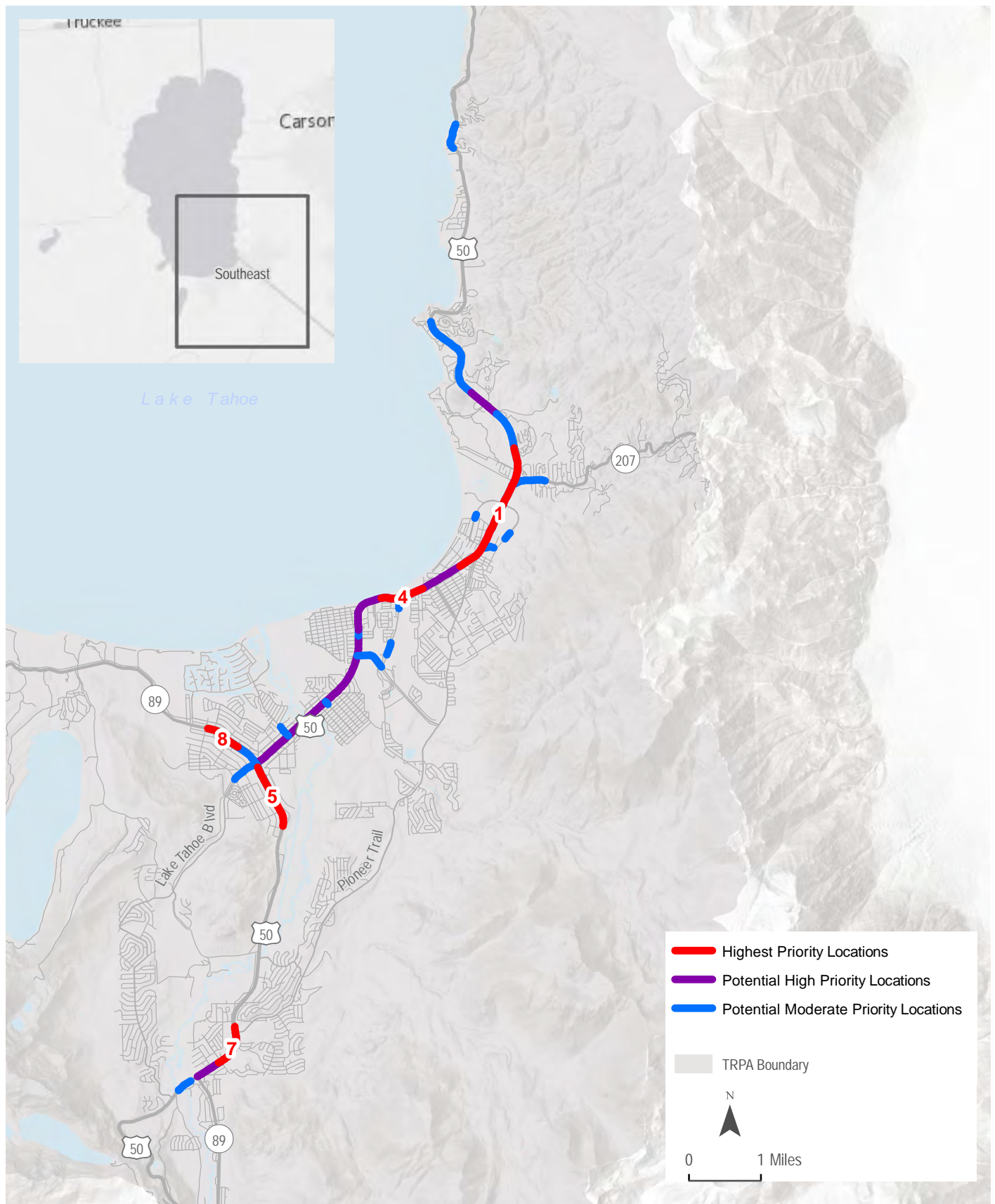


Exhibit 36

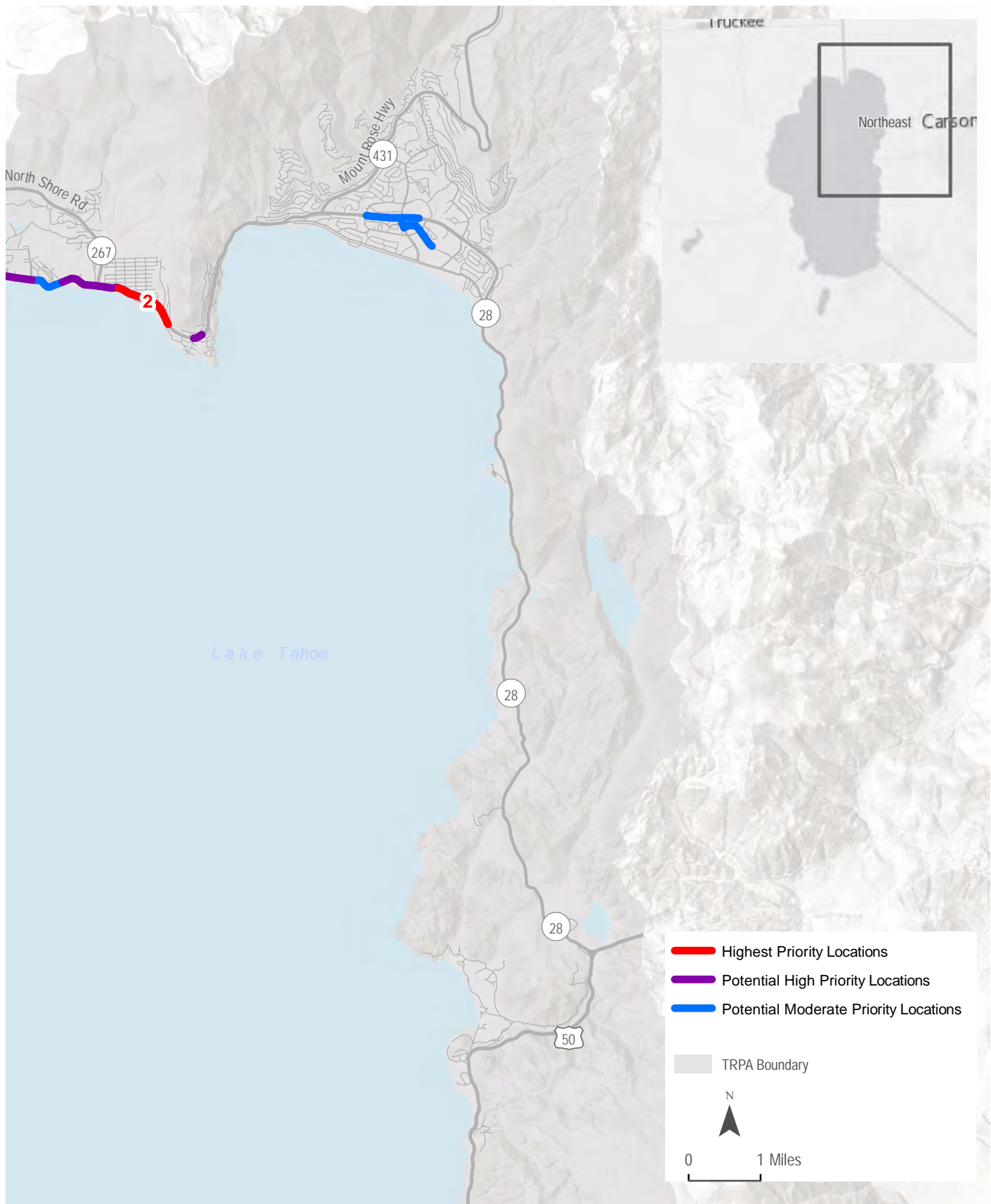


Exhibit 37

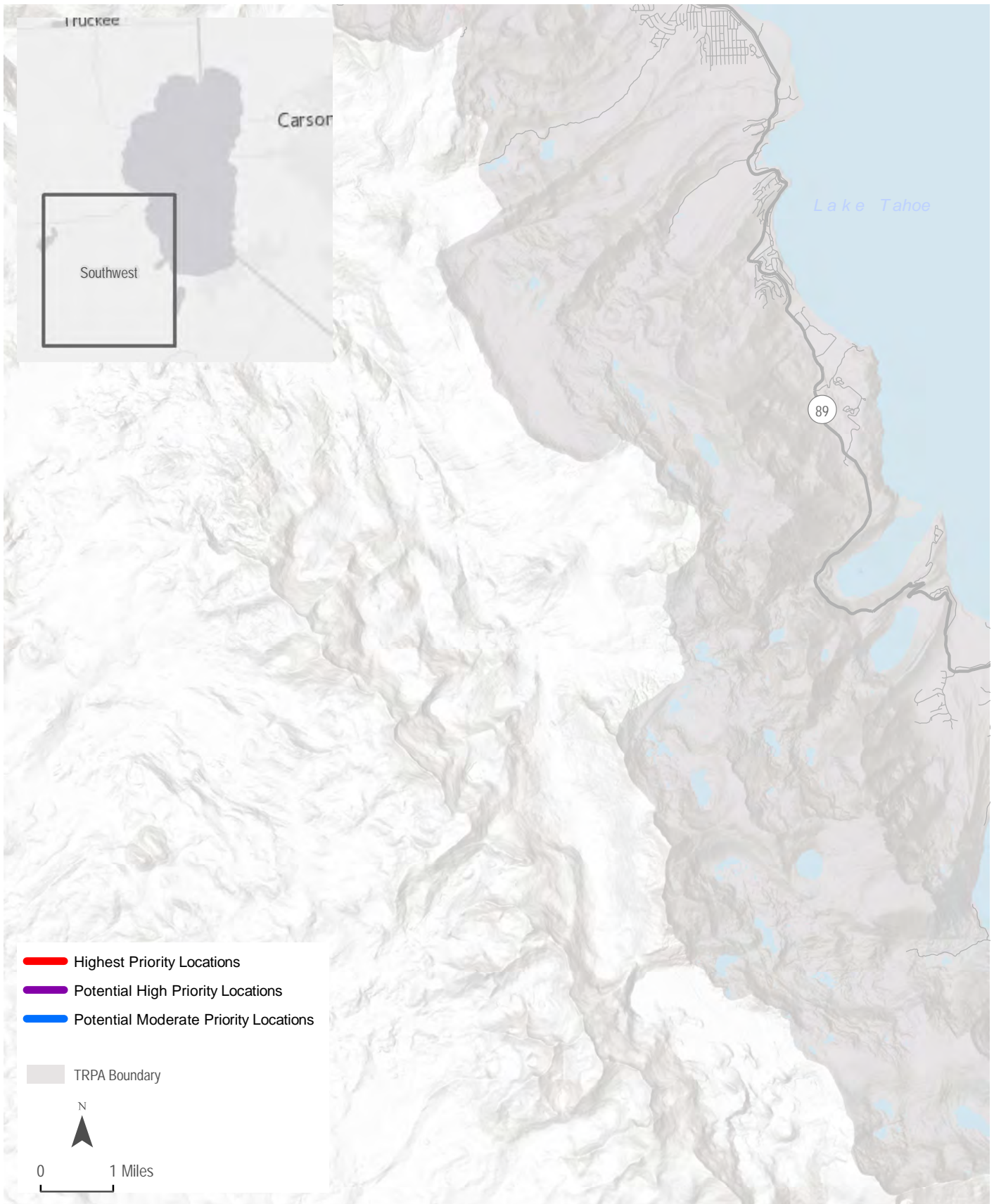


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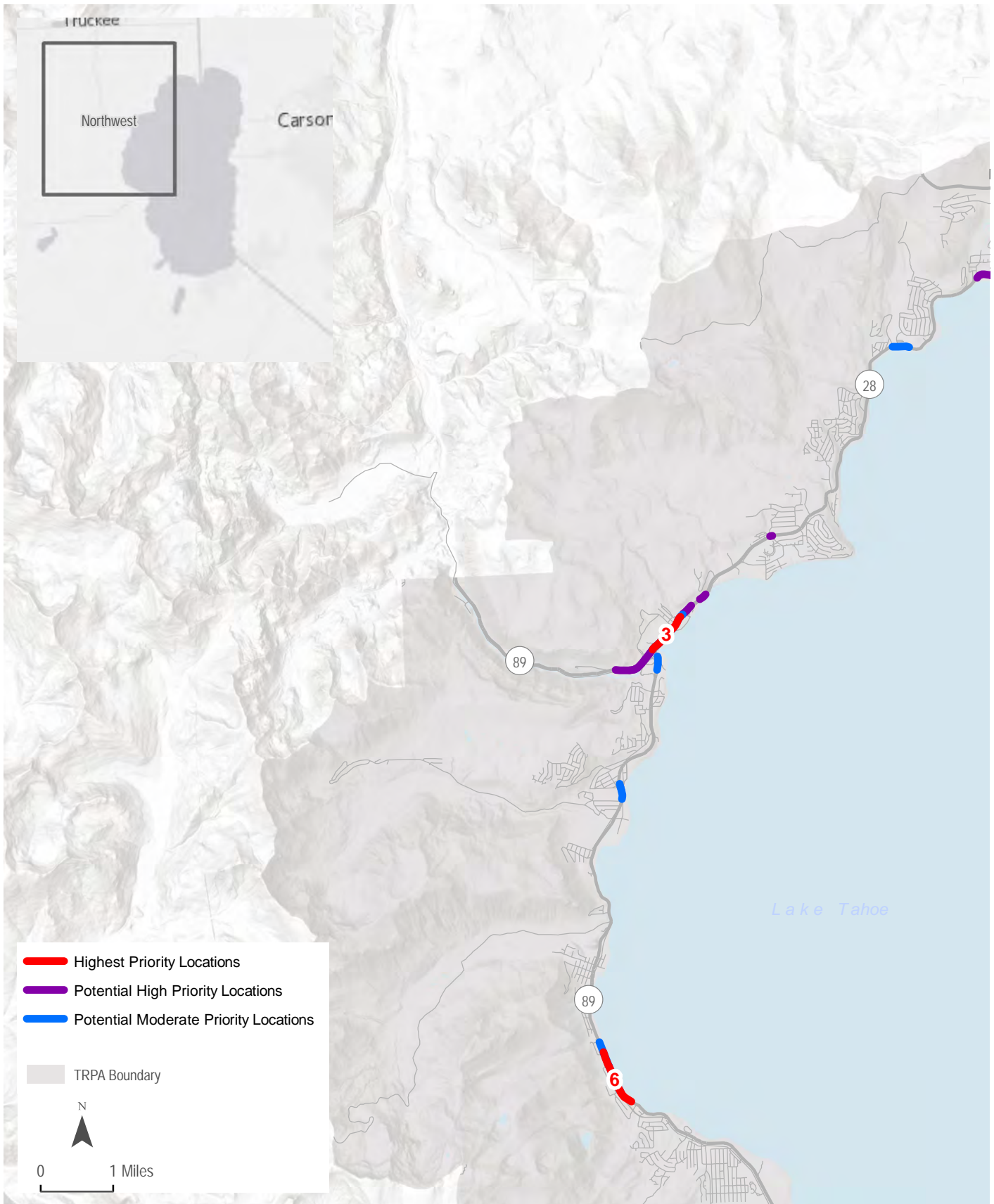


Exhibit 39

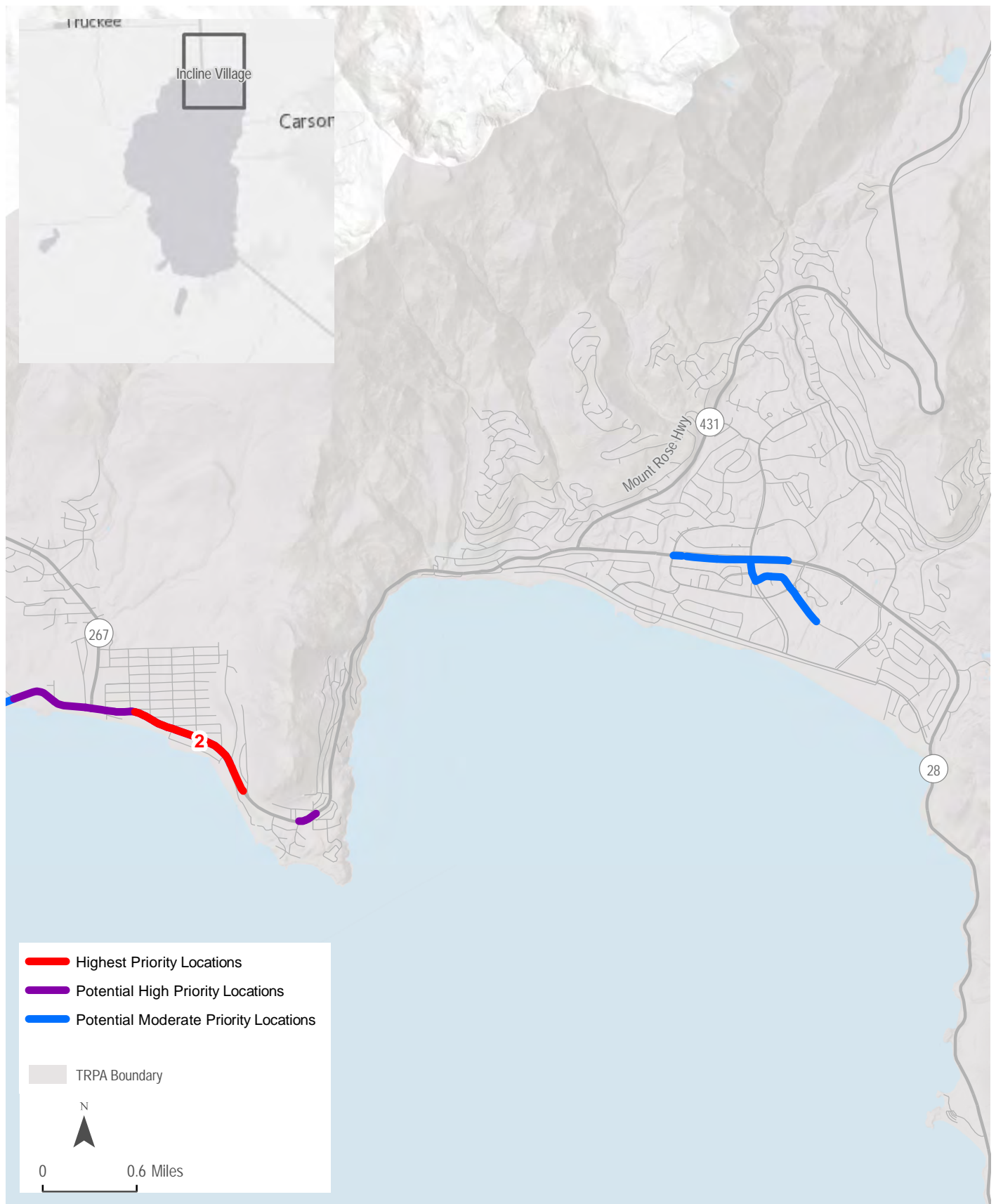


Exhibit 40

Exhibit 41 depicts the pedestrian and bicyclist crash severity frequencies by mode within each of the identified priority locations. Crashes with a severity of “K” (fatal) and “A” (incapacitating or severe injury) are given the most attention and are associated with a higher benefit valuation in the allocation of HSIP grant funds. Crash severity of “B” indicates Moderate Injury, a severity of “C” indicates Complaint of Pain or Minor/Possible Injury, and a severity of “O” indicates PDO (i.e., no injuries because of the crash).



Accordingly, locations with high crash rates at these severity levels have been prioritized. Given this criterion, State Route 28 through Tahoe City, U.S. Highway 50 through Stateline/Heavenly Village, and State Route 89 through Meyers are the top priorities for the Region in terms of pedestrian and bicycle safety. As noted above, there are several on-going projects and/or planning studies working to address transportation related issues in these areas.

Exhibit 41: Collision Severity by Priority Location. Source: SWITRS, NDOT, TDG 2018

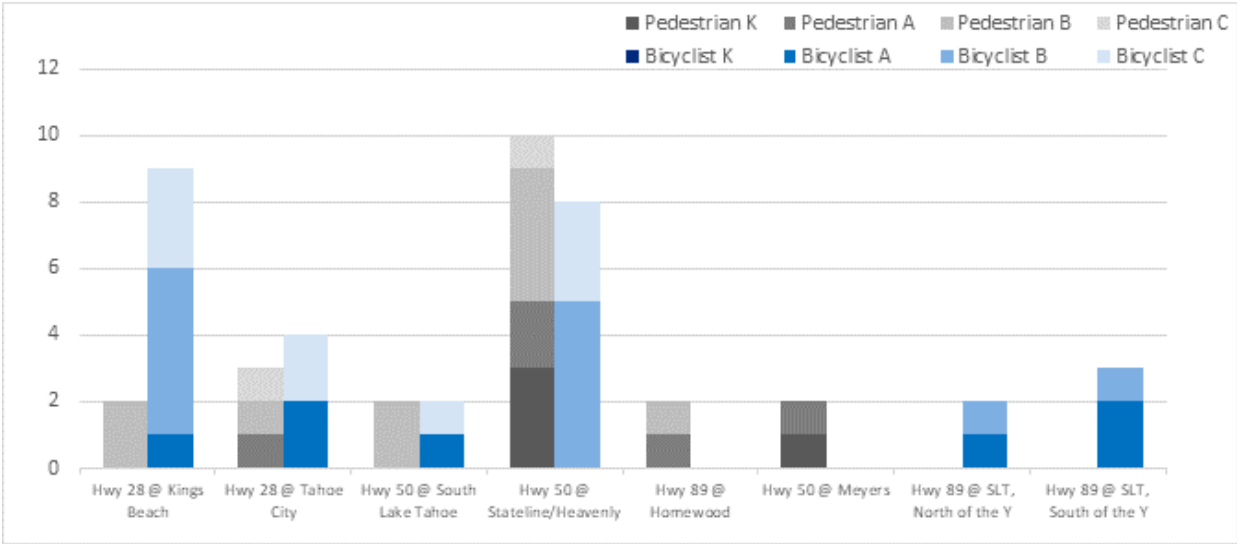
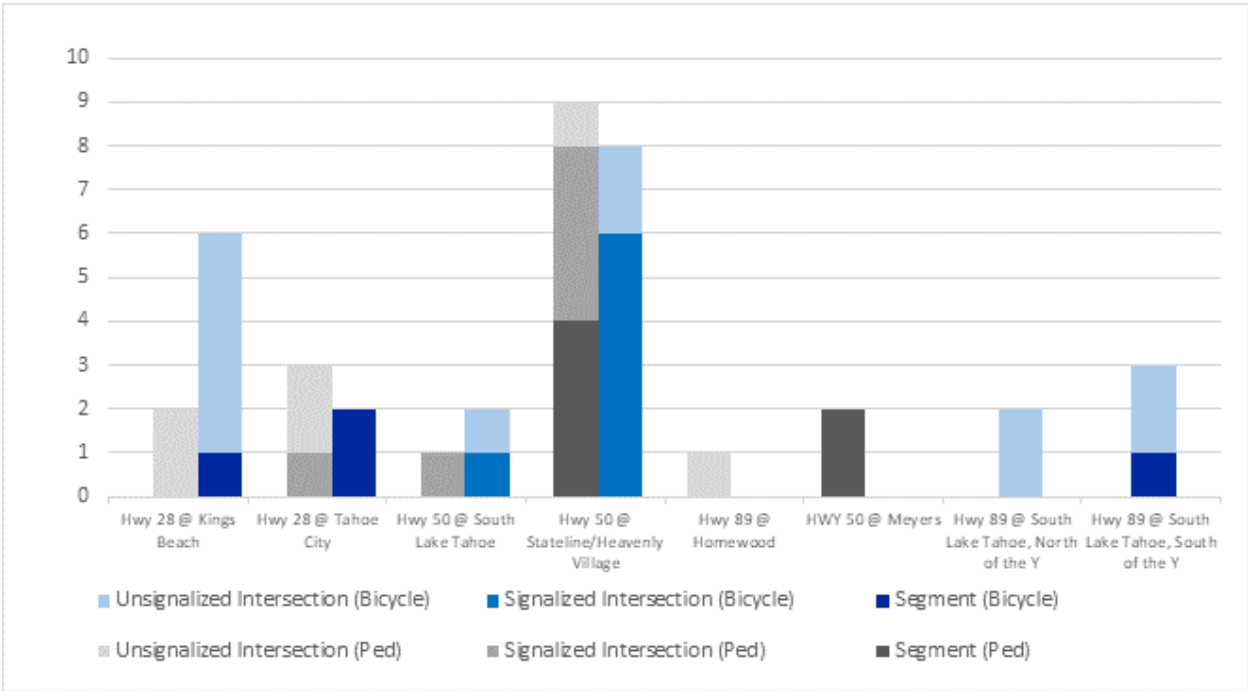


Exhibit 42 presents the type of location where the crashes occurred. “Intersection” crashes here are defined as those within 250 feet of an intersection. The U.S. Highway 50/Stateline area has a notable proportion of crashes occurring at signalized intersections.

Exhibit 42: Pedestrian and Bicycle Collisions by Location Type



Source: SWITRS, NDOT, TDG 2018

5.2 MOTOR VEHICLE PRIORITY LOCATION AND ASSOCIATED TRENDS

Table 8 and Table 9 as well as Exhibit 43 through Exhibit 47 present the segment and intersection priority locations for motor vehicles. They are listed from highest severity score to lowest based on the number and severity of crashes at the location.



Table 8: Priority Roadway Segments

Segment Number	Street Name	Location/Extents	Length (miles)	Annualized Severity Score	State Highway
1	SR-267/North Shore Boulevard	South of Brockway Summit	0.375	74.8	Yes
2	US-50	Old Meyers Grade Road to Echo Summit Road	0.875	74.4	Yes
3	US-50	West of North Upper Truckee Road	0.25	74.4	Yes
4	SR-89	East of Cascade Lake/Cascade Lake Road	0.5	71.8	Yes
5	SR-89	Near D.L. Bliss State Park/Lester Beach Road	0.375	71.8	Yes
6	SR-89/West Lake Boulevard	Btw. Sequoia Avenue Intersections	0.375	71.8	Yes
7	SR-89/West River Road	West of Twin Crags	0.625	71.8	Yes
8	SR-207/Kingsbury Grade	Btw. Palisades Drive and Summer Place	0.375	71.8	Yes
9	SR-207/Kingsbury Grade	Btw. Logging Road Lane and Buchanan Road	0.375	71.8	Yes
10	US-50	Southbound tunnel	0.160	40.8	No
11	SR-28	North of Spooner Lake	0.375	39.3	Yes
12	SR-28	South of Sand Harbor Beach	0.375	39.3	Yes
13	SR-28	Sand Harbor Beach	0.25	39.3	Yes
14	SR-28	South of Carnelian Bay	0.375	39.3	Yes
15	SR-28/North Lake Boulevard	Btw. Beach Street and Secline Street	0.375	39.3	Yes
16	SR-28/Lakeshore Boulevard	West of Lakeshore Terrace	0.25	39.3	Yes
17	US-50	South of the Tunnel	0.25	39.0	No
18	US-50	South of Logan Shoals	0.376	39.0	No
19	US-50	Logan Shoals	0.375	39.0	No
20	US-50	Segment approaching SR-28	0.875	39.0	No
21	SR-89	Lake Tahoe Boulevard to B Street	0.25	38.0	Yes

Table 9: Priority Intersections

Intersection Number	Intersection	North-South Street	East-West Street	Annualized Severity Score	State Highway
1	SR 28/US Hwy 50	US Hwy 50	SR 28	60.4	Yes
2	US Hwy 50/Martin Drive	US Hwy 50	Martin Drive	47.9	No
3	US Hwy 50/Lakeview Drive	Lakeview Drive/Lake Shore Blvd	US Hwy 50	46.2	No
4	US Hwy 50/Warrior Way	US Hwy 50	Warrior Way	45.6	No
5	US Hwy 50/Cedarbrook	US Hwy 50	Cedarbrook	44.5	No
6	US Hwy 50/Hidden Woods Drive	US Hwy 50	Hidden Woods Drive	43.6	No
7	SR 28/Secline Street	Secline Street	SR 28	42.8	Yes
8	SR 207/S Benjamin Drive	S Benjamin Drive	SR 207	42.6	Yes
9	US Hwy 50/Modesto Avenue	US Hwy 50	Modesto Avenue	42.5	Yes
10	SR 431/Marlette Way	SR 431	Marlette Way	42.4	Yes
11	SR 28/Amagosa Road and Gonawabie Road	SR 28	Amagosa Road/Gonawabie Road	41.8	Yes
12	US Hwy 50/Kelly Circle	US Hwy 50	Kelly Circle	41.8	No
13	SR 28/Park Lane	SR 28	Park Ln	41.6	Yes
14	SR 28/Robert Avenue	SR 28	Robert Avenue	41.4	Yes
15	Lake Tahoe Boulevard/Boulder Mountain Court	Boulder Mountain Court	Lake Tahoe Boulevard	41.4	No
16	US Hwy 50/Lodi Avenue	Lodi Avenue	US Hwy 50	41.2	Yes
17	Friedhoff Road/Pittman Terrace	Friedhoff Road	Pittman Terrace	41.2	No
18	SR 28/Beaver Street	SR 28	Beaver Street	40.6	Yes
19	US Hwy 50/Bigler Avenue	US Hwy 50	Bigler Avenue	40.4	Yes
20	US Hwy 50/Zephyr Point Entrance	US Hwy 50	Zephyr Point Entrance	40.4	No
21	SR 431/2nd Creek Drive	2nd Creek Drive	SR 431	40.2	Yes
22	SR 207/Ansaldo Acres Road	Ansaldo Acres Road	SR 207	40.2	Yes
23	N Upper Truckee Road/E San Bernardino Avenue	E San Bernardino Avenue	N Upper Truckee Road	40.2	No
24	SR 267/Commonwealth Drive and Kingswood Drive	SR 267	Commonwealth Drive/Kingswood Drive	40.2	Yes
25	SR 28/Laurel Drive	Laurel Drive	SR 28	40.0	Yes
26	SR 89/Mountain Drive	SR 89	Mountain Drive	40.0	Yes
27	Pioneer Trail/Edna Street	Pioneer Trail	Edna Street	40.0	No

Intersection Number	Intersection	North-South Street	East-West Street	Annualized Severity Score	State Highway
28	SR 89/5th Street	SR 89	5th Street	40.0	Yes
29	US Hwy 50/Jewell Road North	US Hwy 50	Jewell Road	40.0	Yes
30	Pioneer Trail/Glen Eagles Road	Pioneer Trail	Glen Eagles Road	40.0	No

Source: Kittelson 2018

Exhibit 43 through Exhibit 47 on the following pages are maps of the priority locations listed in Tables 8 and 9 above.

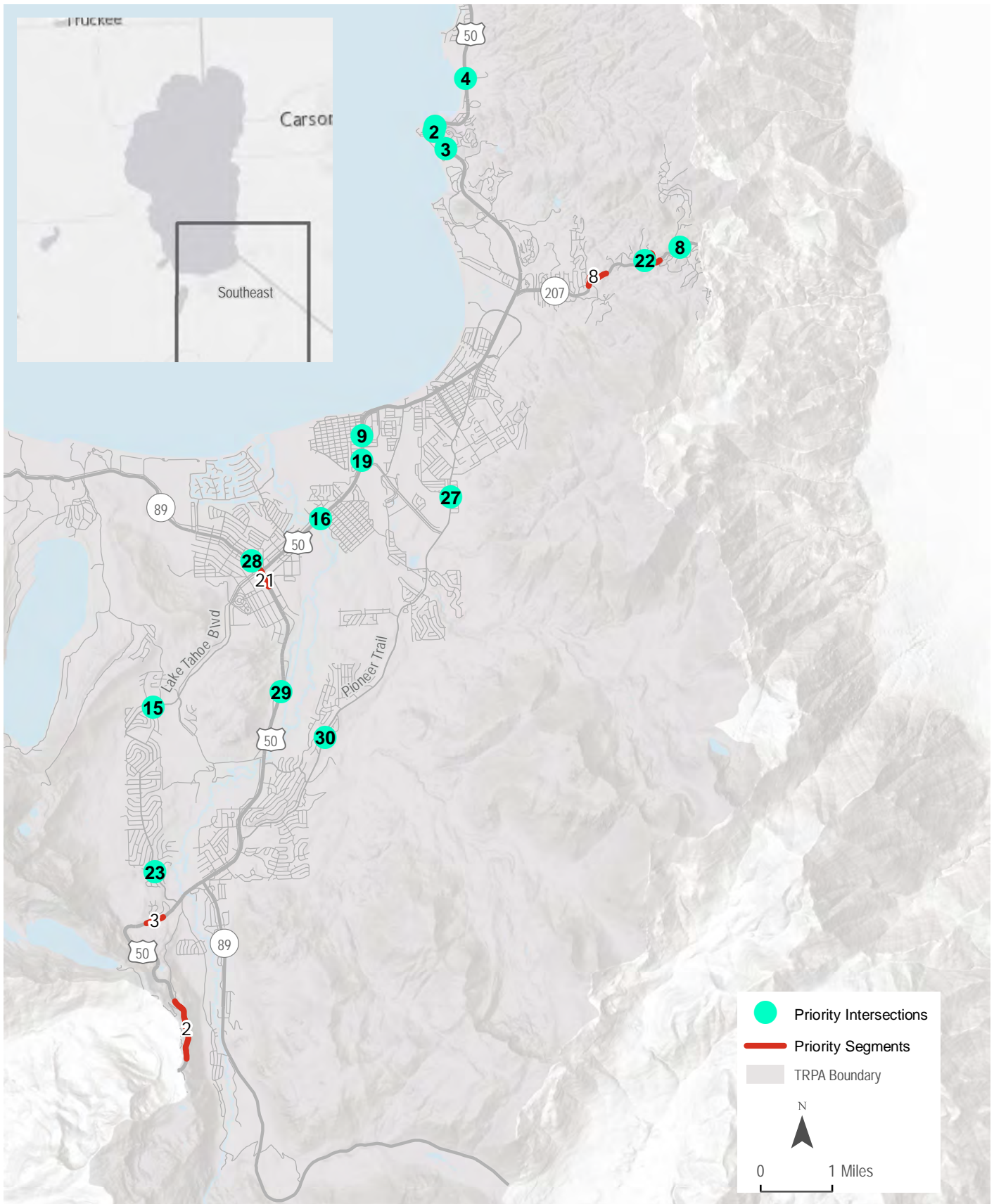


Exhibit 43

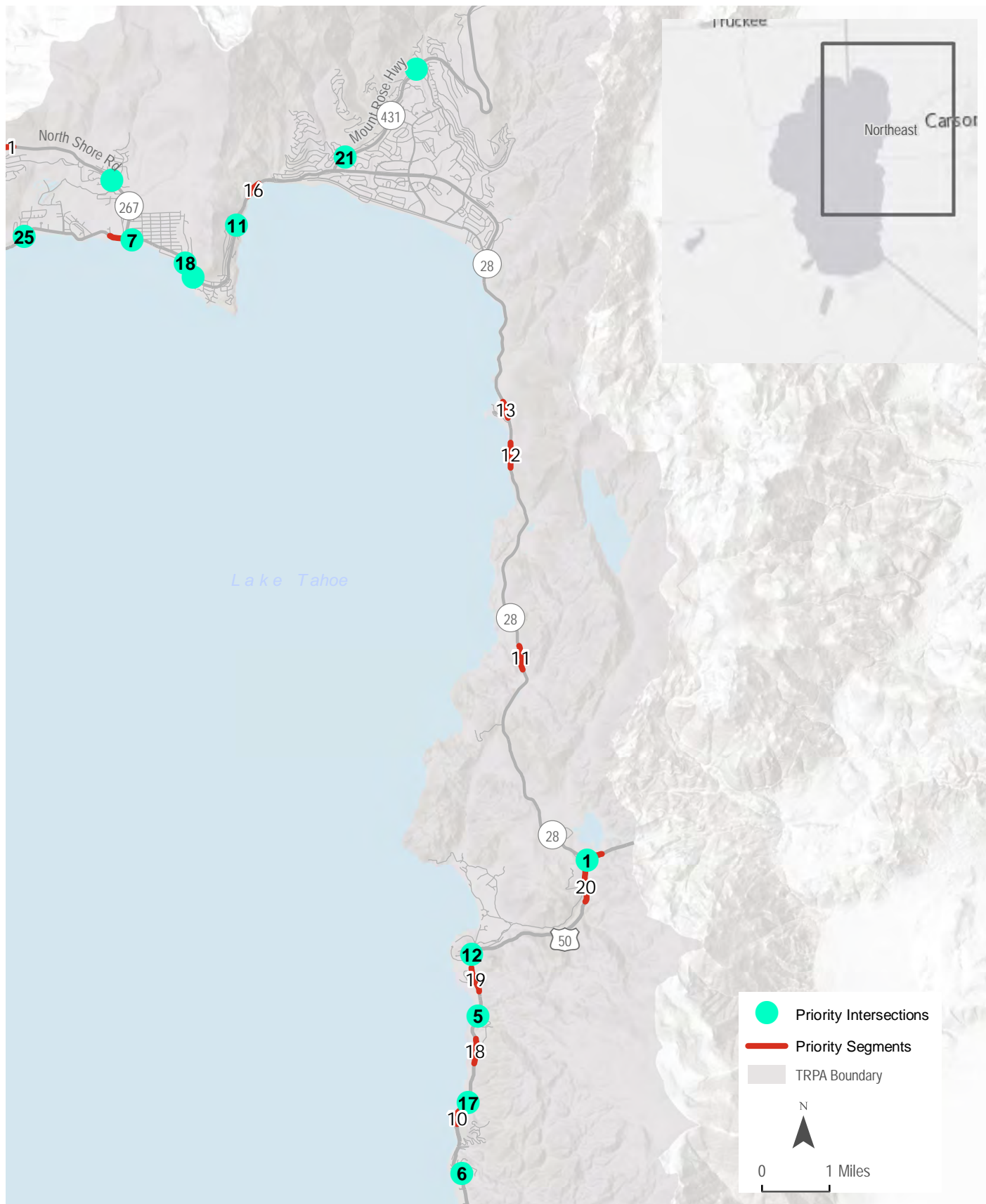


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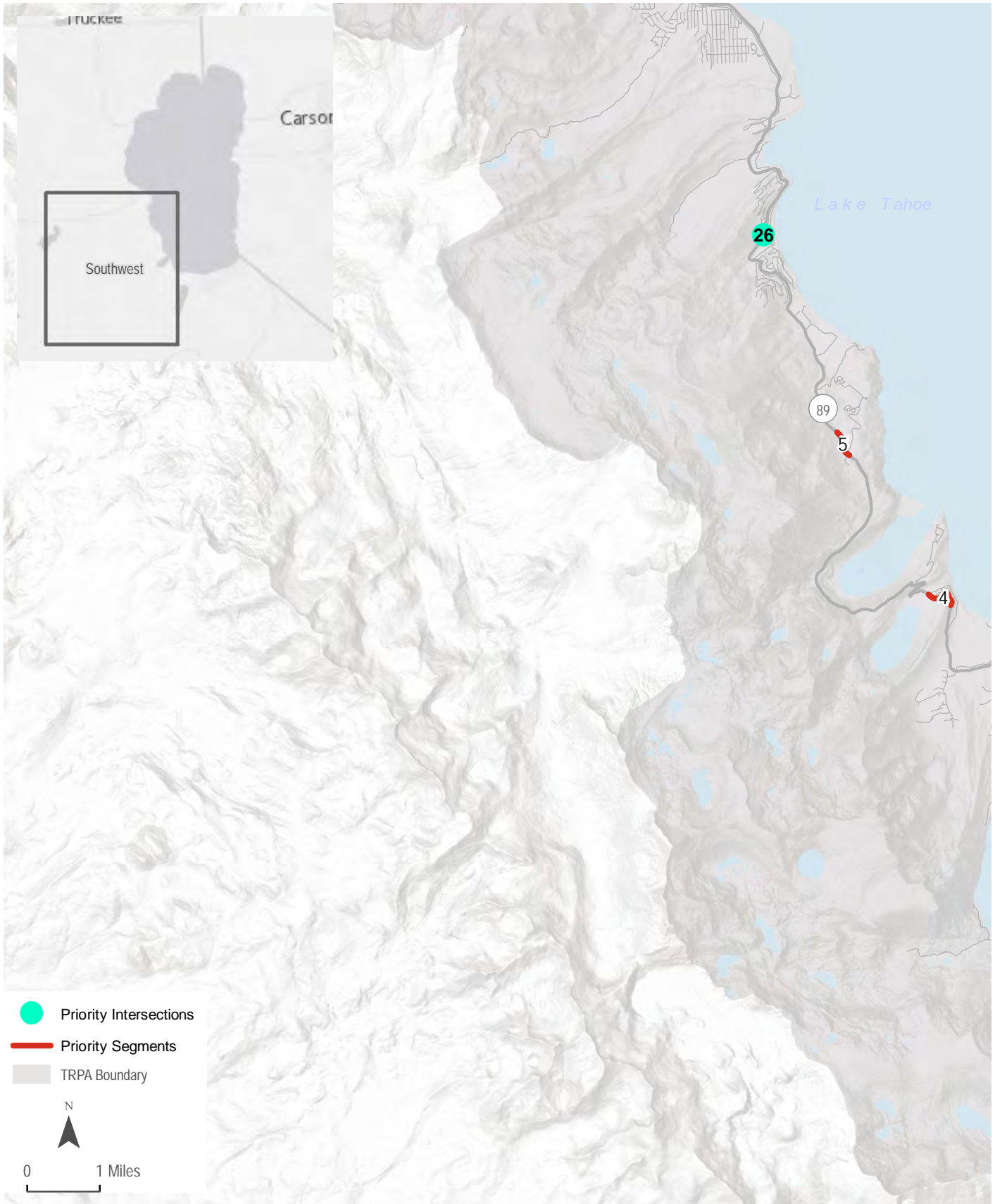


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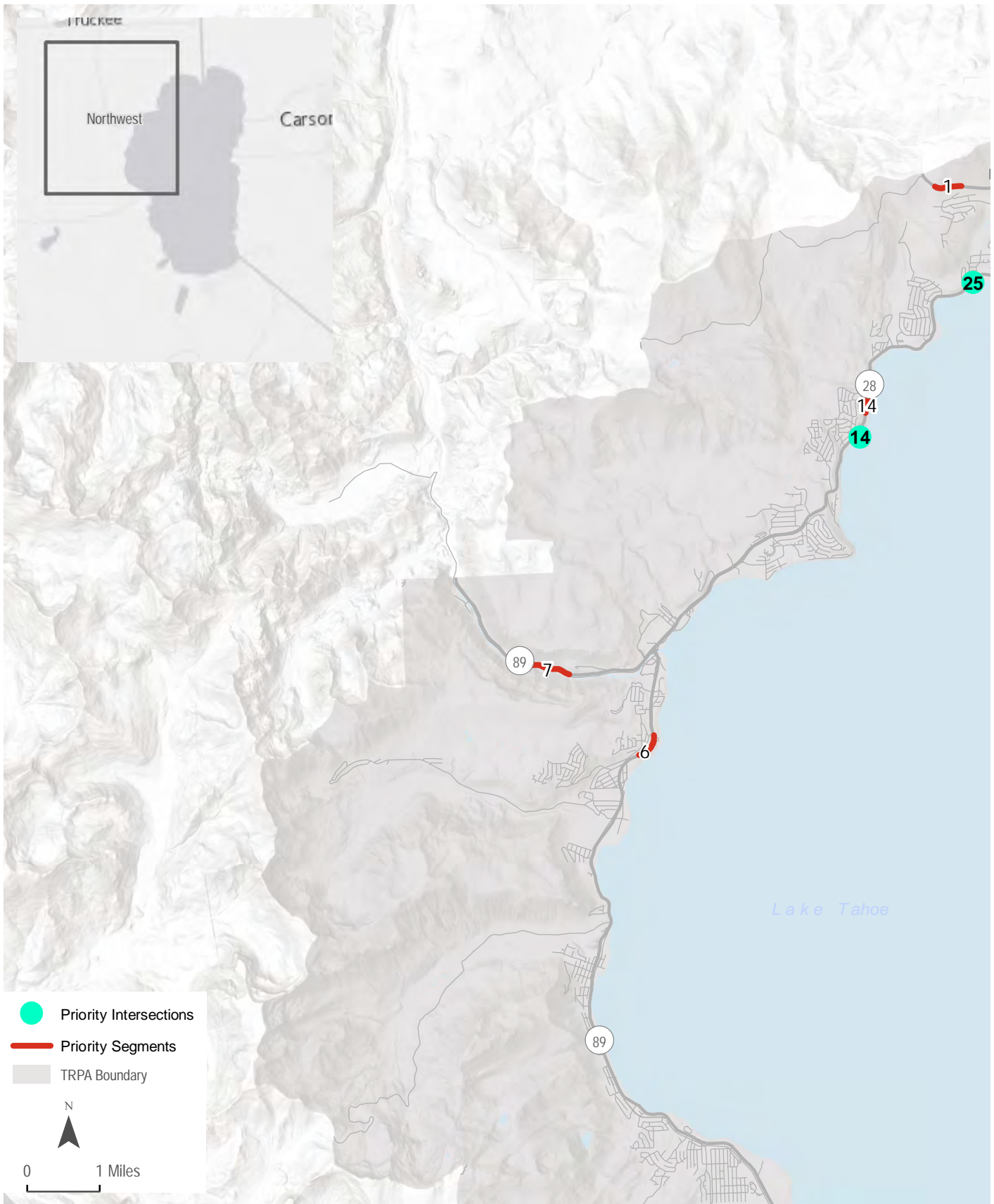


Exhibit 46

Motor Vehicle Priority Locations Tahoe
Regional Planning Agency
Lake Tahoe Region Safety **Strategy**

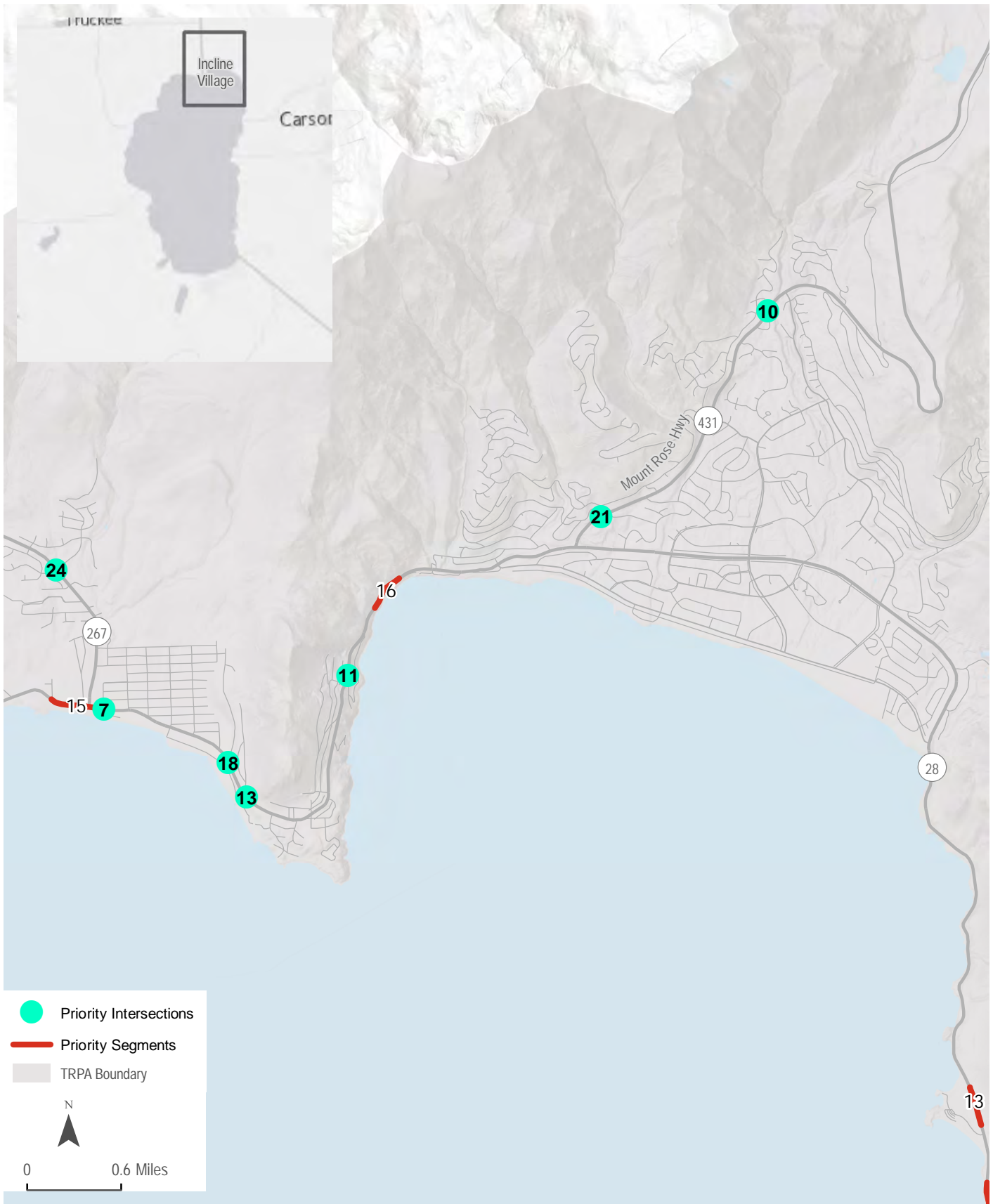


Exhibit 47