

Community Focus Statement H: Maintain roadway infrastructure and improve traffic flow and vehicle safety within the communities.

Action Statement H.2: Identify opportunities to improve safety and maintenance of private roads.

H₂

Benchmarks: List of safety improvement locations and types and Road Districts and County Service Areas established to fund safety and maintenance efforts.

Champion: Volunteer group or person or can be identified by the community

Estimated Cost: \$50,000–\$2,000,000

Transportation safety is critical in small communities, as they often lack safety-improving infrastructure such as street lighting and sidewalks often found in other larger towns and cities. A balance between safety and amenities is important in order to maintain the local character of the area while supporting a safe and efficient roadway network.

Privately owned roadways in the Lake Arrowhead communities are typically two-lane roadways (of varying widths) with asphalt paving and minimal amenities given the rural mountain character of the area. Traffic safety analysis is often conducted using available crash data for reported crashes along area roadways. However, this information is often difficult to collect for secondary or local roadways. Understanding safety issues often involves coordination with local law enforcement officials (San Bernardino County Sheriff's Department, Twin Peaks Facility) since they may have historic crash data for local roadways, or potentially anecdotal safety information. The Sheriff's Department and local residents can collaborate to identify locations in need of safety improvements.

Safety improvements often include street lighting, traffic signs and pavement markings, sidewalks, crosswalks, and turn lanes. Safety improvements cannot be developed using a blanket approach; rather, they require analysis relative to the specific location and conditions. For example, while improved street lighting can help to improve safety, proper maintenance and upkeep of the pavement markings and signage in the area can also help to support safe operations. Replacing markings with highly reflective designs is one way to achieve improved safety without adding street lighting if light pollution is a concern.

Maintenance, including snow removal, is an important issue in the area. The San Bernardino County Public Works Department is responsible for snow removal along County-maintained roadways; however, the department is not involved in the removal of snow along privately owned roadways. The Lake Arrowhead communities are responsible for the maintenance of such facilities, along with snow removal. Local residents can consider an organized method of snow removal for privately owned roadways.

Road Districts/County Service Areas already exist in certain locations throughout the Lake Arrowhead communities (CSA 70 R-7). Additional Road Districts can be established through County Service Areas to coordinate and fund safety and maintenance efforts through tax parcel service charges.

The table summarizes the cost of potential future infrastructure that could be installed to improve safety, not including any right-of-way acquisition costs. Maintenance costs such as snow removal are specific to the number and type of locations where snow removal is conducted.

Estimated Infrastructure Costs

Type	Typical Cost
Street Signs	\$800–\$1,000 per sign
Striped Crosswalks	\$1,000–\$5,000 per crosswalk
Wired Streetlights	\$6,000–\$7,000 per light
Solar Streetlights	\$5,000–\$6,000 per light
Sidewalk	\$20 per square foot
Extend Turn Lane	\$350 per foot
Provide Turn Lane	\$400 per foot

Action	Action Leader	Timeline	Resources
1. Create a Public Safety Task Force	Champion	Month 1	San Bernardino County Public Works County Maintained Road System
2. Define the project study area including privately owned roadways and intersections, and the desired project safety goals and select a group of volunteers.	Public Safety Task Force with Lake Arrowhead County Service Area, local community leaders, Lake Arrowhead Communities Chamber of Commerce	Months 1–2	http://sbcountydpw.maps.arcgis.com
3. Coordinate with the San Bernardino County Sheriff's Department to gain an understanding of potential existing safety issues or concerns identified in the area.	Public Safety Task Force with Lake Arrowhead County Service Area, local community leaders, with support from County Sheriff's Department	Months 3–4	Federal Highway Administration Intersection Safety, a Manual for Local Rural Road Owners, FHWA http://safety.fhwa.dot.gov/local_rural/training/fhwas1108/fhwas1108.pdf
4. Develop a list of potential safety needs and improvements based on local resident experience.	Public Safety Task Force with Lake Arrowhead County Service Area, local community leaders	Months 5–6	San Bernardino County Special Districts, Road Districts http://www.specialdistricts.org/index.aspx?page=176
5. Define maintenance-related goals and impacted privately owned roadways.	Public Safety Task Force with Lake Arrowhead County Service Area, local community leaders	Months 7–8	Lake Arrowhead Community Services District http://www.lakearrowheadcsd.com/
6. Develop a list of potential maintenance improvement projects.	Public Safety Task Force with Lake Arrowhead County Service Area, local community leaders	Months 9–10	
7. Establish Road Districts and County Service Areas as a way to manage and fund projects.	Special Districts	Months 11–48	