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

Action Statement H.3: Investigate traffic safety at major intersections and turnouts/cutoffs.

H3

Benchmarks: A safety plan is prepared that includes a set of recommended safety improvements for the study area identified funding, design, and construction for a set of improvements.
Champion: Volunteer group or person or can be identified by the community
Estimated Cost: $75,000–$5,000,000

Installation of signage in advance of and at unsignalized intersections would provide approaching motorists with additional information at these locations. Drivers would be more aware that the intersection is coming up, and therefore make safer decisions. Photo source: FHWA

Safety is the top priority for those responsible for constructing, operating, and maintaining the transportation infrastructure network. Transportation projects are often implemented with the goal of reducing the number and severity of crashes along a particular corridor or crossroads. In fact, Vision Zero is a national road safety project with the belief that traffic crashes are preventable and thus none are acceptable. Intersections and driveways are often the focus of safety improvement efforts given the potential for multiple conflicts at such locations. These safety projects consider the impacts on all potential users (motor vehicles, large trucks, bicyclists, pedestrians, and equestrians).

Detailed safety analysis is conducted by first obtaining and reviewing historic reported crash data to determine any potential safety issues. Crash data can be obtained from the Statewide Integrated Traffic Records System (SWITRS), which is managed by the California Highway Patrol, or through the local police department (the San Bernardino County Sheriff's Department). Observations include the identification of the type of crash, specific location, current roadway and traffic conditions, and potential contributing factors. Once the data is analyzed and observations are made, a set of countermeasures can be developed with the goal of improving the safety of the study location.

Improvements that can be implemented at intersections and/or turnouts/cutoffs in order to improve safety include street lighting; enhanced/highly visible signage and delineation; supplemental signage; crosswalks; operational improvements such as turn lanes, traffic signals, and roundabouts; medians and/or islands; and improved sight lines. The type of improvement is specific to any safety issues identified and the context of the area. Table 1 shows the estimated costs of some of the potential intersection safety improvements.

Once countermeasures are selected and installed, implementation of improvements is often followed up with post-construction monitoring.

Minor projects may be funded through SBCTA grants, while larger projects will likely require a Community Services District. A Community Services District (CSD) is a permanent form of governance that can provide certain public facilities and services in unincorporated areas. CSDs are often established to lead project implementation, including the direction of taxpayer assessments.

Intersection Safety Improvement Costs

Potential Improvement	Cost (typical per item)
Safety Study	$75,000–$100,000
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
Traffic Signals	$250,000–$300,000 per signal
Provide Turn Lanes	$400 per foot
Median/Island	$400 per foot

Action	Action Leader	Timeline	Resources
1. Create a Public Safety Task Force	Champion	Month 1	San Bernardino County Special Districts Department http://specialdistricts.org/index.aspx?page=176 Local Roadway Safety, A Manual for California's Local Road Owners http://www.dot.ca.gov/hq/LocalPrograms/HSIP/Documents/hsip/CA_SM4LROv11.pdf Federal Highway Administration Innovative Intersection Safety Improvement Strategies and Management Practices http://safety.fhwa.dot.gov/intersection/other_topics/fhwasa06016/ Federal Highway Administration Intersection Safety, A Manual for Local Rural Road Owners, FHWA http://safety.fhwa.dot.gov/local_rural/training/fhwasa1108/fhwasa1108.pdf
2. Define project study intersections and desired project safety goals.	Public Safety Task Force with Lake Arrowhead County Service Area, Lake Arrowhead Communities Chamber of Commerce, local community leaders	Months 1–2	
3. Coordinate with County Department of Public Works and Caltrans, if needed.	Public Safety Task Force	Month 3	
4. Develop a safety plan with a set of recommended improvements for each study intersection.	Public Safety Task Force	Months 4–16	
5. Coordinate with the County Special Districts Department to establish a Community Services District for safety improvements in the Lake Arrowhead communities.	Public Safety Task Force	Years 1 - 6	
6. Obtain community and stakeholder input on proposed improvements.	Public Safety Task Force with Community Services District	Year 7	
7. Determine and secure funding for proposed improvements	Public Safety Task Force with Lake Arrowhead County Service Area		
8. Procure final design plans for proposed improvements.	Lake Arrowhead County Service Area, County Public Works Department, Caltrans	Year 8	
9. Construct/implement corridor improvements.	County Public Works Department, Caltrans	Months Years 9 - 10	