

Comparison of Roundabout Alternatives for the Lance Gulch Road/State Route 299 Intersection in Trinity County

		Traffic Signal	Roundabout - Alternative 1-Option 1	Roundabout - Alternative 1-Option 2	Roundabout - Alternative 2
Design Vehicle		Lance Gulch Road & SR 299 = STAA Truck			
		Glen Road = CA Legal 50'			
		Nugget Lane = School Bus/Delivery Truck			
Utility Impacts	No utility relocations.	Verizon facilities will require relocation if the design results in the manhole located in the traveled way.			
Parking Impacts	No impact to parking.	Significant parking impacts along the front of the Stoddard building (Nail Salon) and Nugget Lane.			
			CHP/DMV parking will be impacted.		
Right-of-Way Acquisition (1)	No additional right-of-way acquisition. Future traffic conditions may result in limiting left turns in and out of the CHP/DMV	Limits access (left turns) to/from CHP/DMV parcel. A crossover easement may be considered to improve access.			
		Nail Salon building is retained, but parcel is impacted.		Requires a full acquisition of the Nail Salon.	
			Requires partial acquisition of the CHP/DMV parcel.		
Pros	Lower capital cost.	Reduced on-going maintenance compared to Traffic Signal.			
	No utility and parking impacts.	Enhanced pedestrian crossings on all approaches.			
	Lower overall right-of-way impacts.	Limited to no right-of-way impact to CHP/DMV compared to Alternative 1, Option 2.	Lower impact to Nail Salon parcel, compared to Alternative 1, Option 1.	Most ideal roundabout geometry compared to other alternatives.	
				Improves alignment of the approach at Glen Road.	
Cons	Greater vehicle delay compared to roundabout alternatives.	Requires reconfiguring access to CHP/DMV parcel with a potential crossover easement.			
	Signal has potential for higher frequency and severity of accidents.	Requires some utility relocation.			
	Does not provide the same opportunity for landscape and gateway features as roundabout.	Significant parking impacts to the Nail Salon may require redevelopment of parcel.		Requires full acquisition of Nail Salon.	
	Pedestrian crossings at 3 legs only. More exposure to traffic	Less desirable roundabout approach geometry at the Glen Road approach compared to Alternative 2.	Additional right-of-way impacts to CHP/DMV parcel compared to Alternative 1, Option 1.		
			Compared to other alternatives, requires more reconstruction to SR 299.		
		Less desirable roundabout geometry compared to other alternatives.			
Preliminary Range of Costs	Right of Way (1)	\$0	\$456,000	\$569,000	\$591,000
	Utility Relocation	\$0	\$400,000	\$515,000	\$515,000
	Construction (2)	\$ 0.25 M to \$ 0.35 M	\$ 1.5 M to \$ 1.8 M	\$ 1.7 M to \$ 2.0M	\$ 1.8 M to \$2.1 M
	PE (Engineering/ Environmental/ Permitting/Construction Management)	\$250,000 (3)	\$800,000	\$800,000	\$800,000
	Total Range of Costs	\$ 0.5 M to \$ 0.6 M	\$ 3.2 M to \$ 3.5 M	\$ 3.6 M to \$ 3.9 M	\$ 3.7 M to \$ 4.0 M

(1) It is not the County's intention to initiate eminent domain, but rather to evaluate different alternative options for the intersection.

(2) Preliminary Construction Costs based on square footage unit costs with footprint of improvements. Developed to provide ranges and relative cost difference between alternatives.

(3) Signal engineering costs include \$150,000 for the environmental and engineering analysis required to evaluate the signal vs. roundabout