HWY 17 ACCESS MANAGEMENT PLAN

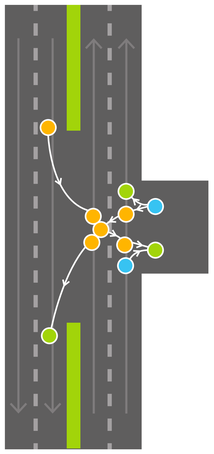
ACCESS MANAGEMENT + CONFLICT POINTS

ACCESS MANAGEMENT

ACCESS MANAGEMENT REDUCES CONFLICT POINTS

Access management is a term used by transportation professionals for the management of locations where vehicles enter and exit the roadway. Conflict points are areas where two vehicles' paths can either cross, merge, or diverge. Each conflict point represents a location where a collision may occur. Access management techniques help to reduce conflict points, preserve mobility, and maintain safety by controlling the location, spacing, design, and operation of driveways, median openings and street connections. **The diagrams show an example of how the installation of a physical barrier reduces conflict points.**

BEFORE
ACCESS MANAGEMENT TECHNIQUES



AFTER
ACCESS MANAGEMENT TECHNIQUES

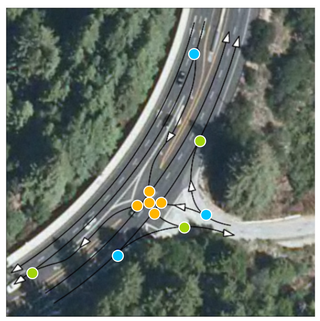
TYPES OF CONFLICT POINTS

- CROSSING
- MERGING
- DIVERGING

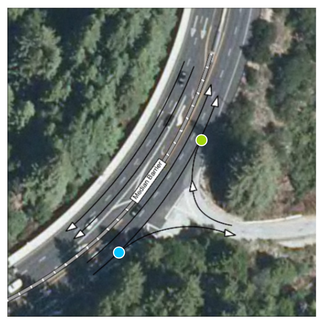
ACCESS MANAGEMENT CASE STUDY: LAUREL ROAD

The intersection at Laurel Road is an example of access management within the study area. The closure of the median removed nine conflict points at the Laurel Road intersection, including five crossing conflict points. In June of 2012, CHP statistics showed a **72% decrease in collisions since the installation of the barrier.** Since this technique reduced direct access to the Laurel Road community, proper planning is required to develop solutions that help achieve an appropriate balance of mobility and accessibility.

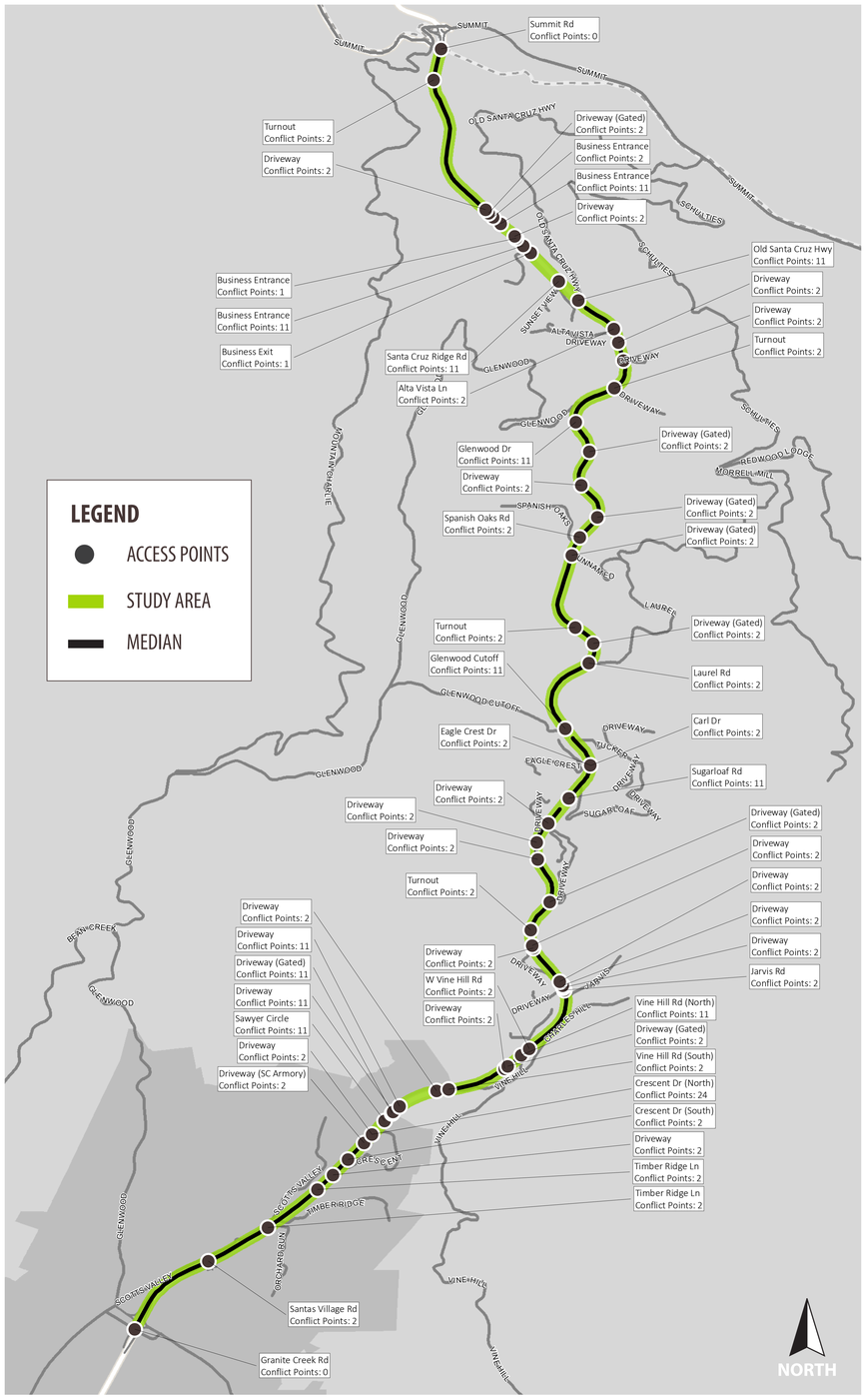
BEFORE
MEDIAN CLOSURE (03/20/12)



AFTER
MEDIAN CLOSURE (03/20/12)



HWY 17 STUDY AREA: EXISTING CONFLICT POINTS



The Highway 17 Study Area is from Granite Creek Road, in Scotts Valley, to Summit Road in Santa Cruz County. This section has been prioritized as having the most need because it has **no control of access**, meaning traffic flow may be interrupted by intersections and driveways. The lack of access control results in a high number of conflict points, laid out below.

STUDY AREA OVERVIEW	
Length (miles)	7.10
Volume of vehicles per day	54,000
Volume of trucks per day	1,600

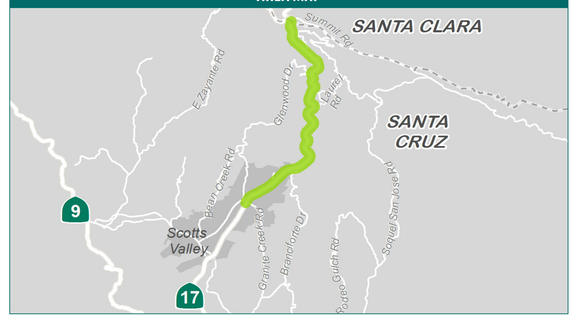
ACCESS CHARACTERISTICS		
Alignment	Northbound	Southbound
Addresses Served[1]	1,700	1,300
Approximate Trips Per Day[2]	14,000	13,000

ACCESS POINTS		
Alignment	Northbound	Southbound
Total Access Points[3]	30	29
Access Points Per Mile	4.2	4.1
Access Point Cluster Density (miles)	0.3	0.4

CONFLICT POINTS		
Alignment	Northbound	Southbound
Conflict Points - Crossings	32	40
Conflict Points - Merging	42	43
Conflict Points - Diverging With Turn	9	11
Conflict Points - Divergins Without Turn	33	32
Conflict Points - Total	116	126
Conflict Points Per Mile	16.3	17.7

MEDIAN CHARACTERISTICS	
Median Barrier Length (miles)	5.9
Median Barrier Percentage	83.3%
Median Openings	9

NOTES:

1. **Addresses Served:** An estimate of neighboring addresses within a 3 mile buffer of the study area. *(Source: CT analysis; Santa Cruz County GIS data)*
2. **Approximate Trips Per Day**: An estimate of the total daily trips of neighboring households and businesses. Trips may not necessarily use Highway 17. *(Source: CT analysis: Santa Cruz County GIS data; Institute of Transportation Engineers Trip Generation Manual 8th Edition)*
3. **Access Point**: An entrance to the highway.

AREA MAP