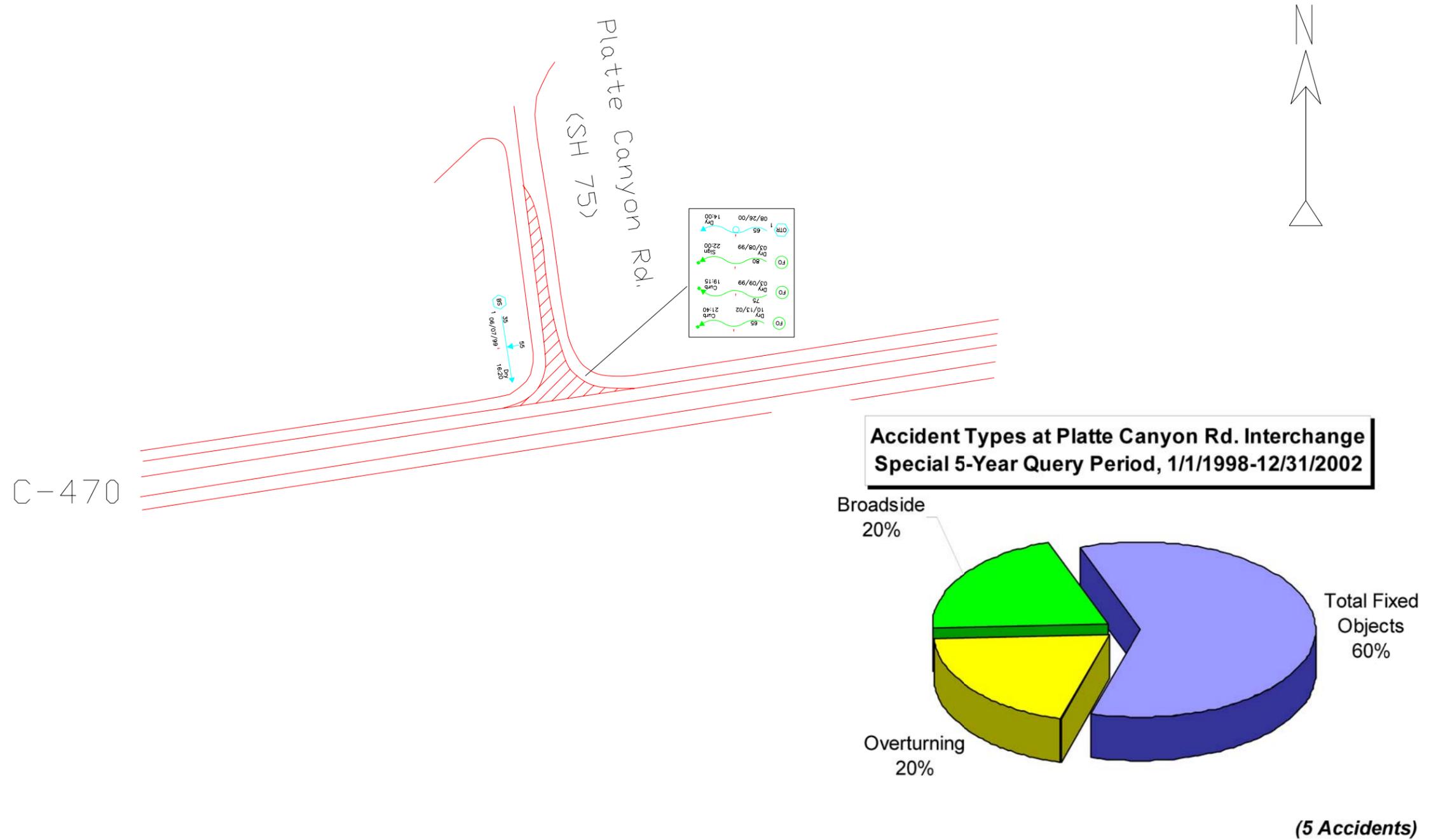


# C-470 & Platte Canyon Rd. Interchange



### *C-470 and Santa Fe Drive Interchange*

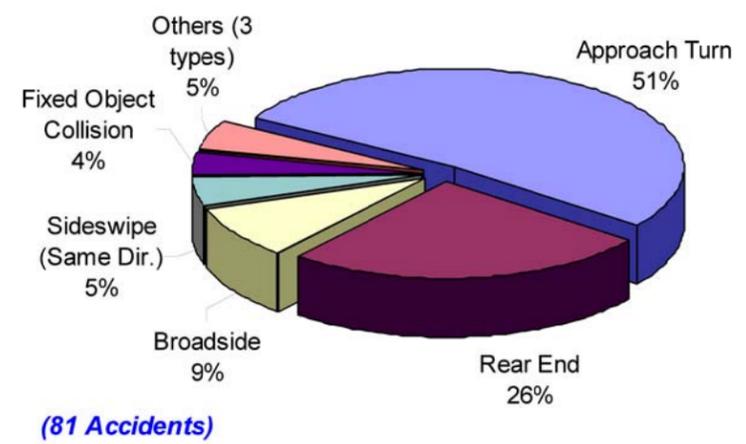
An accident diagram as well as charts showing the accident type distribution profile for the interchange intersections as well as the ramps and cross road is shown on the following page.

Approximately 158 accidents were detected in the immediate interchange vicinity on Santa Fe Dr. and on the entrance/exit ramps to C-470. Rear-end and approach turn collisions together made up nearly 75% of these crashes. At the signalized ramp intersection on the north side of the bridge structure, over half of the accidents were approach turns. These crashes involved northbound vehicles on Santa Fe turning left onto the westbound C-470 entrance ramp colliding with southbound Santa Fe traffic. The frequency of these accidents is increased by periodic volume congestion and the limited storage capacity of the current northbound to westbound left turn lane configuration. The Region has recently changed from protected-permitted signal phasing to protected-only phasing. This improvement is expected to reduce the incidence of approach-turn crashes significantly, accompanied by a delay and capacity cost however.

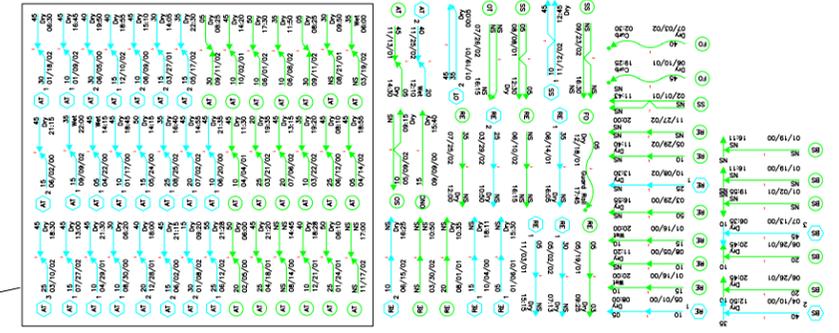
The south ramp intersection includes a double left turn lane for vehicles making the southbound to eastbound turn movement. This movement requires drivers to execute a turn through more than 90 degrees due to interchange skew. Approximately eleven same direction sideswipe accidents are noted in these lanes. Ensuring that durable pavement markings are used and maintained for the turn lane stripe extensions into the intersection can help mitigate this type of accident.

# C-470 & Santa Fe Interchange

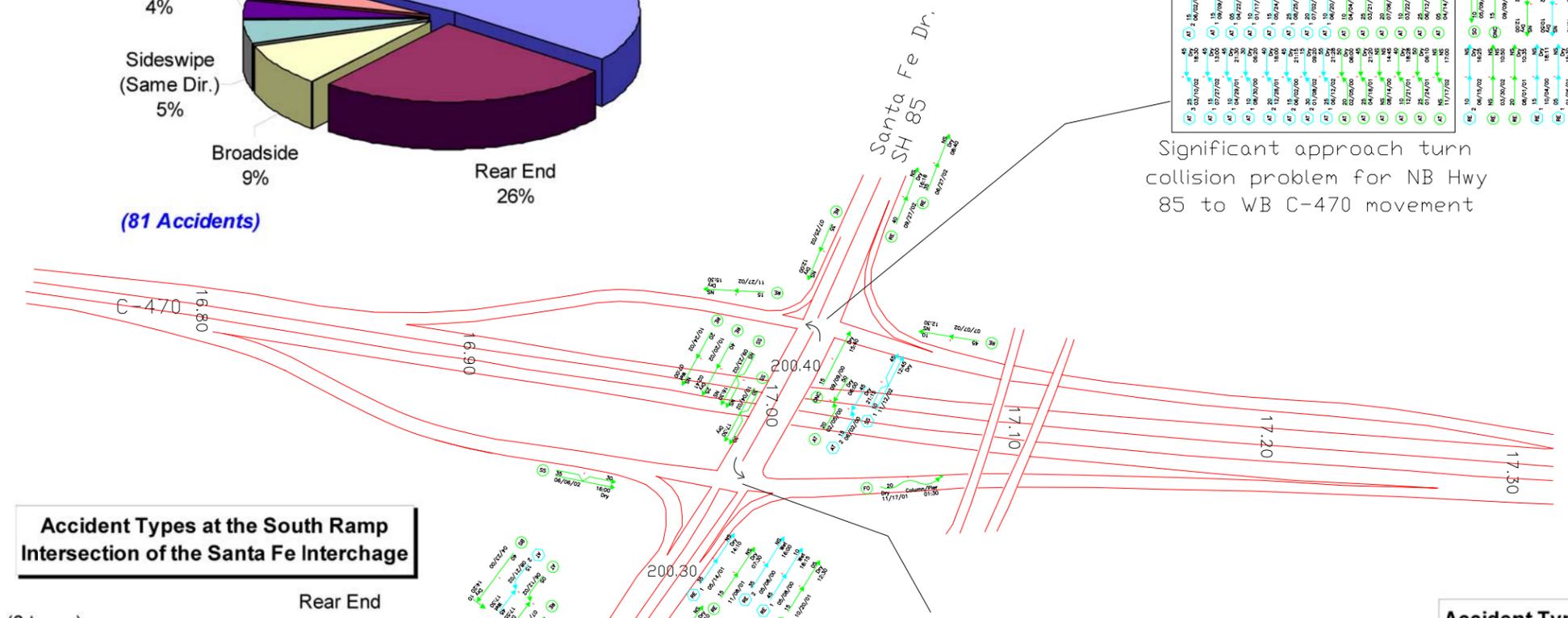
**Accident Types at the North Ramp Intersection of the Santa Fe Interchange**



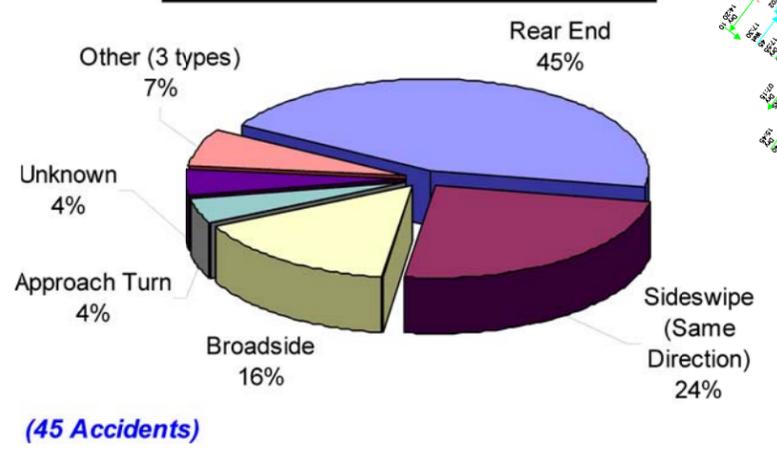
Collisions occurring at north ramp intersection



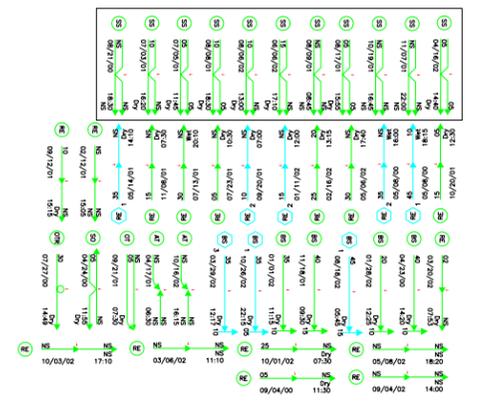
Significant approach turn collision problem for NB Hwy 85 to WB C-470 movement



**Accident Types at the South Ramp Intersection of the Santa Fe Interchange**

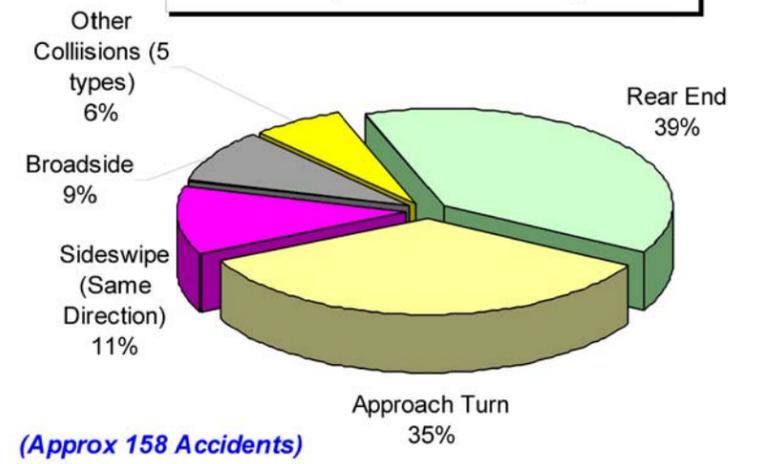


Collisions occurring at the south ramp intersection



Moderate frequency same direction sideswipe accidents in double left turn lanes, SB Santa Fe Drive to EB C-470

**Accident Types at the Santa Fe Interchange Ramps & Crossroad Only**



### *C-470 and Lucent Blvd. Interchange*

An accident diagram as well as charts showing the accident type distribution profile for the interchange intersections as well as the ramps and cross road is shown on the following page.

During the 3-year study period 47 crashes were detected on Lucent Blvd. and the ramps at this interchange. An elevated frequency of approach turn collisions was noted at the north ramp intersection. These accidents involve southbound through vehicles on Lucent colliding with vehicles turning left from northbound Lucent to westbound C-470. Consideration may be given to implementing a protected only left turn signal interval for the double left turn onto the westbound C-470 on-ramp if not already installed.