

Route 1/Calera Parkway Project - Preliminary Concepts Matrix (May 2010)

Concept		Description	Feasibility / Effectiveness	Further Study
A	Widen 4-lane to 6-lane - 0.8 miles <i>(from 1999 PSR)</i>	Widen 4 lanes to 6 lanes from 460 ft south of Fassler Ave to 660 ft north of Reina Del Mar Ave. <i>(Exhibit A)</i>	Impacts wetlands and special status species habitat; only evaluated traffic growth out to Year 2010 but now must evaluate to Year 2035 (Caltrans requires 20 year benefit from estimated construction year); does not provide traffic benefit to Year 2035 because third lane does not extend far enough south of Fassler Ave intersection or far enough north of Reina Del Mar intersection.	No
B	Widen 4-lane to 6-lane - 1.0 miles <i>(from preliminary studies)</i>	Variations on the 1999 PSR version were explored in mid 2000s. Widen 4 lanes to 6 lanes from 500 ft south of Fassler Ave to 1,700 ft north of Reina Del Mar Ave. <i>(Exhibit B1)</i> - A variation of this idea includes splitting NB and SB directions of roadway through Quarry Site to go around existing wetlands. <i>(Exhibit B2)</i>	Impacts wetlands and special status species habitat; evaluated traffic growth out to Year 2030; does not provide traffic benefit to Year 2035 because third lane does not extend far enough south of Fassler Ave intersection or far enough north of Reina Del Mar intersection. Determined during Coastal Commission consultations that impacting wetlands is not allowed.	No
C	Widen 4-lane to 6-lane - 1.3 miles <i>(from current studies)</i>	Widen 4 lanes to 6 lanes from 1,500 ft south of Fassler Ave to 2,300 ft north of Reina Del Mar Ave. Shifted alignment east to eliminate wetland impacts. Explored idea of restoring Calera Creek crossing. <i>(Exhibit C1)</i> - A second variation of this idea included a pedestrian overcrossing at Reina Del Mar Avenue. <i>(Exhibit C2)</i> - A third variation of this idea drops the 3rd southbound lane at Fassler Avenue and only two lanes continue south of Fassler. Calera Creek restoration idea is dropped. <i>(Exhibit C3)</i> - A fourth variation, similar to C3, includes a landscaped median between San Marlo Way and Reina Del Mar Avenue. <i>(Exhibit C4)</i>	Provides improvement in traffic operations over existing conditions out to Year 2035. Does not impact wetlands like Concepts A and B. Pedestrian overcrossing at Reina Del Mar does not appreciably enhance traffic operations and creates pedestrian safety problem since some people will still try to cross at grade but without a crosswalk and signal delay to protect them. Landscaped median variation (C4) would have more impacts and cost than narrow median (C3) but same traffic operations.	C1 - No C2 - No C3 - Yes C4 - Yes
D	Partial Widening at Reina Del Mar Avenue <i>(from 2004 Scoping Mtg)</i>	Five-lane or six-lane widening for short segment north and south of Reina Del Mar intersection with 4-lane segment between the two intersections. <i>(Exhibit D)</i> Variations of this idea analyzed widening for different length segments: - 4 to 5 lanes for 800 ft (NB right-turn lane in/out of Reina Del Mar Avenue) - 4 to 6 lanes for 1,100 ft - 4 to 6 lanes for 1,700 ft - 4 to 6 lanes for 2,300 ft	Would improve capacity at Reina Del Mar, but would shift the bottleneck to the south between Fassler and Reina Del Mar.	No
E	Grade Separation at Reina Del Mar Avenue <i>(from current studies)</i>	Shift Route 1 alignment on top of embankments at Reina Del Mar Avenue to separate highway from Reina Del Mar and use retaining walls to minimize impacts. Included creek crossing restoration idea. Several variations on this theme were evaluated including: - Tight diamond interchange with east side business driveways accessing directly to/from on and off ramps. <i>(Exhibit E1)</i> - Tight diamond with one-way frontage road on the east side extending north from Harvey Way. <i>(Exhibit E2)</i> - Southbound tight diamond with northbound hook ramps and two-way frontage road south of Reina Del Mar on east side. <i>(Exhibit E3)</i>	A grade separation would provide the most significant traffic operations benefit but would require on & off ramps with controlled access so driveways could not access directly to/from ramps. First variation with simple tight diamond would not be feasible due to controlled access of ramps. Other two variations would have much higher cost due to additional frontage road requirements. City not supportive of additional NB "out of direction" travel to access businesses on east side at Reina Del Mar Avenue with NB hook ramps option. Raised highway would create additional visual and noise impacts. Potential for additional cultural resource impacts.	No
F	Roundabout (Traffic Circle) <i>(from 2004 Scoping Mtg)</i>	Install roundabout in place of signal at either one or both intersections. <i>(Exhibit F)</i>	Significant business and R/W impacts at intersections with roundabout/widening large enough to meet traffic demand. Additional right-turn slip ramps needed. Full six-lane widening still needed on Route 1 between Fassler and Reina Del Mar to make either or both roundabouts work. The multi-lane roundabouts required to meet traffic demand are unsafe for pedestrian crossing and bike traffic due to the large number of uncontrolled traffic lanes a pedestrian or bicyclist must cross.	No
G	Frontage Road on West Side <i>(from 2004 Scoping Mtg)</i>	Construct a 2-way frontage road through the Quarry site from Dondee Way to Reina Del Mar Avenue. <i>(Exhibit G)</i>	Very high right of way cost. Minimal traffic benefit for highway thru traffic.	No
H	Signal Interconnect & Signal Timing Improvements <i>(from current studies)</i>	Install signal interconnect cable between the two signals to coordinate timing of green phases. <i>(no exhibit)</i> - A variation of this idea includes widening to add a 3rd lane in northbound direction only. <i>(no exhibit) (from 2004 Scoping Mtg)</i>	Signal interconnect does not provide an appreciable benefit due to the distance between the two signals. Traffic signal retiming would improve congestion initially based on existing traffic volumes but then benefit dissipates by about Year 2015 and offers little benefit as traffic demand increases in the future.	No
I	Increased or Modified Transit Service <i>(from current studies)</i>	Provide increased transit service to areas and points both north and south via additional bus routes, increased bus headways (more busses), additional park-n-ride lots, additional feeder shuttles, etc. <i>(no exhibit)</i>	High operating cost over time; high initial cost for some options; does not provide significant improvement in congestion relief.	No
J	School Bus Service to Elementary School at Vallemar <i>(from current studies)</i>	Provide increased school bus service to the elementary school on Reina Del Mar Avenue. <i>(no exhibit)</i>	Could provide small benefit for portion of AM peak commute congestion (NB) but not enough to reduce backups significantly. Would not provide benefit for any of the PM commute congestion (SB).	No
K	Moveable Cones or Barrier <i>(from 2010 Scoping Mtg)</i>	Install moveable concrete barrier to provide 3 lanes in peak direction and 1 lane in off-peak direction. <i>(no exhibit)</i> - Another variation of this idea uses moveable cones instead of barrier. - Another variation would include widening to 5 lanes w/ movable cones/barrier (3/2 split).	Very difficult to implement with signalized intersections; movable barrier is in conflict with left-hand turns at intersections; high ongoing operations cost; traffic impact in off-peak direction if 5th lane not added. Movable cones create safety hazard since no fixed barrier between opposing traffic. The 5-lane widening would have both initial widening construction cost & ongoing operations cost.	No