

Green Valley Road Corridor Safety and Operations Analysis



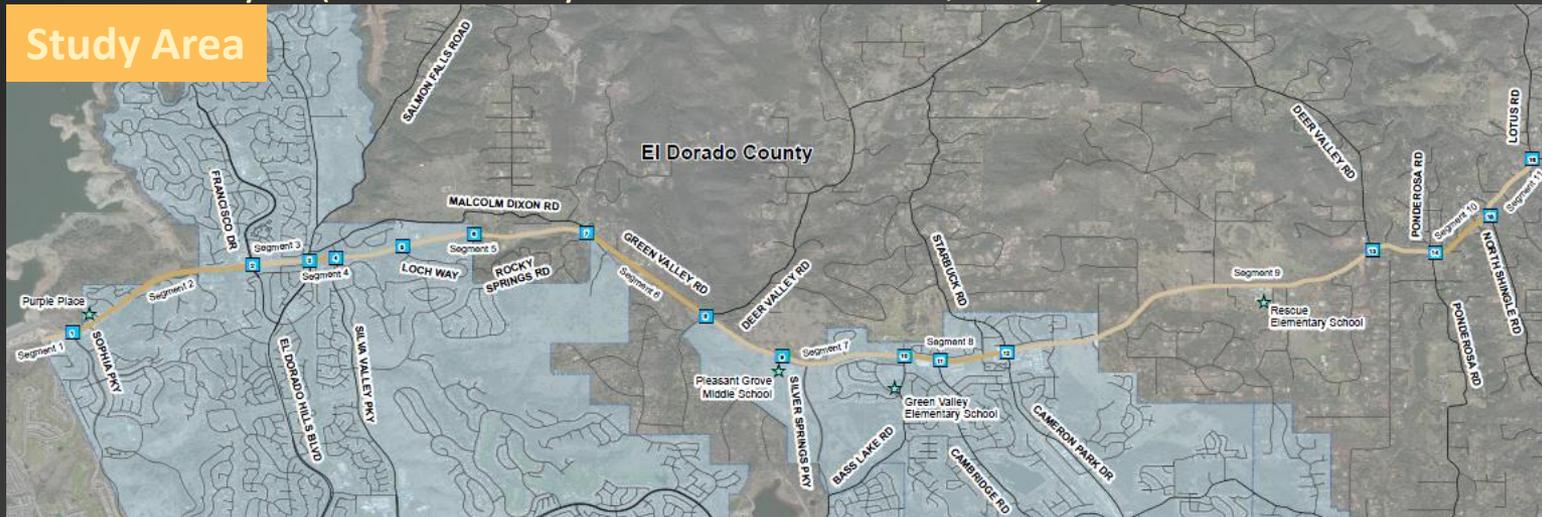
El Dorado County

Background

- Conditions on Green Valley Road had been a recurring Board of Supervisors discussion item
- The Board of Supervisors authorized a study of Green Valley Road in July 2013.
- Public workshop held in October 2013.
 - Breadth of analysis was the direct result of public input.
- The study began in March 2014.
- Purpose:
 - Identify baseline safety and traffic operational issues
 - Recommend potential improvements and/or considerations.

Study Scope

- Data collection included traffic counts, speed surveys, a detailed inventory of the corridor, and crash history.
- Multimodal operational and safety assessment of Green Valley Road.
- Additional analyses included:
 - Analysis of Pleasant Grove Middle School accesses and internal circulation
 - Evaluation of Allegheny Road and Salmon Falls Road cut-through traffic
 - Assessment of private driveways between Loch Way and Bass Lake Road
 - Assessment of Purple Place Retail Center driveways
 - Noise analysis (conducted by Rincon Consultants, Inc.)



Traffic Operations

- Findings:
 - Two intersections do not meet the County's level of service (LOS) standards
 - El Dorado Hills Boulevard/Salmon Falls Road (School peak hour)
 - Pleasant Grove Middle School's Signalized Access (AM peak hour)
 - Extensive vehicular queues were observed between Francisco Drive and Silva Valley Parkway/Allegheny Road
 - Estimated left-turn queues at some intersections exceed existing storage capacity
- Potential Improvements:
 - Coordinate signals between Francisco Drive and Silva Valley Parkway (CIP project)
 - Extend left-turn lane storage to accommodate queues



Bicycle Facilities

- Findings:
 - Bicycle lanes are not continuous between El Dorado Hills and Cameron Park
 - Bicycle lane pavement markings are infrequent and are not marked at the far side of all study intersections along the corridor
 - Signs to mark the beginning and end of bicycle lanes are inconsistent
- Potential Improvements
 - Provide bicycle lanes between Francisco Drive and Loch Way
 - Install signage and pavement markings to increase motorists' awareness
 - Install rumble strips on high-speed rural segments



Speed Survey

- Findings:
 - Observed speeds exceed the posted speed limits by more than 5 mph between:
 - Sophia Parkway and Francisco Drive
 - Silva Valley Parkway and Malcolm Dixon Road
 - Deer Valley Road (West) and Bass Lake Road
- Potential Improvements:
 - Speed transition zones could increase motorists' awareness of impending speed reductions/changes in roadway context
 - Treatment applications include: Automated speed feedback signs or trailers, rumble strips, gateway features
 - Lane narrowing concepts with rumble strips and markings



Pennsylvania – FHWA-HRT-08-063, Figure 9



Pleasant Grove School Access

- Findings:
 - The eastern drop-off is underutilized
 - Queues form on Green Valley Road for the westbound left-turn
- Potential Improvements:
 - Appointing traffic monitors to help regulate traffic flow
 - Modifying the western driveway to increase utilization of the eastern drop-off location
 - Managing peak demand



Safety and Physical Features (2)

- A few improvement considerations along the corridor include:
 - Providing 8-foot shoulders along the roadway or bike lane
 - Installing advance intersection warning signs
 - Installing raised delineation to define pavement edge/intersection
 - Filling sidewalk gaps
 - Adding left-turn pockets
 - Improving lighting



Community Outreach

- Community meeting held September 17th, 2014 at Pleasant Grove Middle School
- Presented and discussed draft study findings
- Attendees were encouraged to fill out comment cards and express concerns via a brief survey
- Key results include from the public input include:
 - Most use occurs during peak hours and is for commute or shopping trips
 - The segments with the higher level of concern were Francisco Drive to Silva Valley Parkway, Cameron Park Drive to Ponderosa Road, and Ponderosa Road to North Shingle Road
 - The top three concern areas were motorist safety, traffic congestion and speeds
 - Most respondents were satisfied with the study

Next Steps

- Study findings as well as public comments and survey responses will be folded into the upcoming major update to the Traffic Impact Mitigation Fee Program and West Slope Capital Improvement Program.
- The study will also be used to support future engineering assessments and grant applications by County staff.

