

Hacienda Road Traffic Study

Study	Date	Subject	Suggested Improvements	Improvements Implemented	Advantages	Disadvantages
Hacienda Road Traffic Evaluation	4/12/2007	Guard Rails	Install MBGR along shoulder from Avacodo Crest to front of property	Installed MBGR along shoulder from 100' to front of property	1. Reduce Traffic Speeds 2. Improve Traffic Safety	1. High Cost 2. High Maintenance 3. Potential Head on Collisions
		Speed Tables	Install two Speed tables at Bottom and top of curves	None	1. Reduce Traffic Speeds 2. Improve Traffic Safety	1. Increase Noise 2. Effects Emergency Response Times 3. Additional Signage
		Centerline Delineators	Install Delineators throughtout entire Curvature	None	1. Guide Traffic 2. High Visibility 3. Low Cost	1. Restrict Turn by Large Vehicles 2. Not Visually Attractive
		Roadside Visibility Enhancement	Tree Trim on East Side of Roadway	Trees Removed on ROW	1. Provide Visibility	1. Consistent Maintenance 2. Small Magnitude
		Rumble Strips	1. Across Path of Travel Rumble Stirps 2. Shoulder Rumble Strips 3. Centerline Rumble Strips	None	1. Centerline Rumble Strips proven to be effective 2. Low Maintenance 3. Low Cost	1. 24- Hour Noise 2. Potential may occur w/o rumble strips down the road way
		Traffic Signal	1. Install Traffic Signal at Intersection 2. Stop Signs	None	1. Reduce Traffic Speeds 2. Improve Traffic Safety 3. Facilate Turns to/from Avocado Crest Rd	1. Installation Cost is High 2. Potential to Increase traffic Along Hacienda Road
		Curb	1. Install Curb 2. Install Curb w/ Guard Rail	None	1. Protection for Property	1. Guard Rail more effective 2. Aesthetics (inconsistent w/ Rural)
Right Turn Lane on Avocado Crest Rd & Hacienda Road	1/12/2006	Right Turn Pocket Lane	Restripe Avocado Crest Road to allow right turn without a separate lane	Created	1. Allow vehicles to look for gaps w/o blocking 2. Least Expensive Alt.	1. Drivers still need to safely manuever
		Paint Red Curb	Paint red Curb to allow no parking	1. Painted Curb on Hydrant 2. Curb Lost paint due to weathering	1. Enforce No parking 2. No Impactet on Street parking	1. Minor effectiveness to the bigger issue
		"Do Not Block Instersection"	"Do not block Intersection" & " Keep Clear"	"Keep Clear" painted	1. Effective During Peak Hours	1. Only Effective During heavy Traffic
		Increase Red Phase	Increase Red phase at traffic signal	Increased on E/W Rd	1. Longer gaps can be created southbound 2. Allow vehicles to turn on Avocado Crest Rd	1. Increase wait time for vehicles 2. Civilian Complaints 3. Potential to backup traffic along Stretch
		Roadside Visibility Enhancement	Tree Trim on East Side of Roadway	Trimmed	1. Provide Visibility	1. Consistent Maintenance 2. Minor Effectiveness to the bigger issue
		Increase Red Phase on Whitter Blvd.	Increase Red phase at traffic signal	None	1. Longer gaps can be created for Avocado	1. Controlled by City of La Habra 2. Traffic Signal not capable of creating Longer red zones during Peak Hours 3. Requires Upgrade
		Street Widening	1. Widen north side of Avocado by 10' 2. Create Left & Right Turn Lanes 3. Relocate Storm Drain Inlet	Widenend & Lanes Created	1. Designated Lanes able to make turns as soon as a gap is available	1. Most vehicles turn right which will still cause a long queue during peak hours
		Traffic Signal	Install Traffic Signal At intersection	None	1. Improve Traffic Safety 2. Provide Efficient Movement	1. Delay Hacienda Road during Peak Hours

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Study	Date	Subject	Suggested Improvements	Improvements Implemented	Advantages	Disadvantages
Hacienda Rd Traffic Calming Report	7/26/2002	Roadway Striping	<ol style="list-style-type: none"> 1. Revise Striping According To Traffic Manual 2. Pavement Markings on Double Centerline stripes 3. Diagonal yellow stripes within painted median on both sides of Canada Sombre Rd. 4. Transverse grooves in median to provide warning 5. 4" Pavement Shoulder Markings 6. Reflectors & Paddle Markers on guard rails 7. Remove Rumble Strip near City Hall 8. Revise Pavement markings on Janine Dr. 	<ol style="list-style-type: none"> 1. Striping Revised 2. Pavement Markings installed 3. Diagonal stripings painted 4. Unknown 5. Painted 6. Installed but weathered 7. Rumble strip deteriorating 8. Pavement revised 	<ol style="list-style-type: none"> 1. Improve Traffic Safety 2. Maximize Sight Distance 3. Provide Warning for those attempting to illegally pass other vehicls 	None
		LED Enhanced Pavement Markers	Install LED Enhanced Pavement Markers w/ roadway striping	None	<ol style="list-style-type: none"> 1. Visible during daylight, night, stormy weather, fog 2. 10x greater than reflective pavement markers 	
		Traffic Signal Operation	<ol style="list-style-type: none"> 1. "Rest in Red" at Skyline Dr. & Flashing Yellow Traffic Beacon 2. "Fixed Time" on East & West 	Fixed Time on E/W Rd Traffic Beacon Installed	<ol style="list-style-type: none"> 1. Constant Cycle of side streets & to left turn arrows 2. Traffic speed limit maintained 3. Advance Warning 	1. Received Several Complaints in regards to wait time on E/W Rd with no vehicles on Hacienda
		Raised Median Installation	Install Raised Median with Federally funded Grant	None		None
		Roadside Visibility Enhancement	Tree Trim up to 300' of clearance	Trimmed	<ol style="list-style-type: none"> 1. Provide Visibility 	<ol style="list-style-type: none"> 1. Consistent Maintenance 2. Small Magnitude
		Traffic Signing Improvements	<ol style="list-style-type: none"> 1. Replace Existing Signs with Curve Signs 2. Improve Guide Signs 3. Truck route/weight limit signs restriction on Whittier 	Done	<ol style="list-style-type: none"> 1. Accordance with accepted standards & Practices 	None
		Traffic Signal	Install Traffic Signal @ Reposado Dr & Avocado Crest Rd	None (Recommended to Study platoons on fixed time traffic signal Operations for E/W rd to satisfy guidelines)	<ol style="list-style-type: none"> 1. Allow Progression plan with E/W Road Traffic Signals using a 60 sec. Cycle 	<ol style="list-style-type: none"> 1. Reposado Dr. would not fit with the progression plan & Difficulty maintaining Platoons 2. High Installation Cost 3. Annual Maintenance & Energy Cost
		Speed Striping	Install Optical Speed Bars	None	<ol style="list-style-type: none"> 1. Speed Reduction 2. Provides pecerptual & warning effect 	1. Small magnitude
		Speed Humps	Install Speed Humps	None	<ol style="list-style-type: none"> 1. Maintain Speed 	1. Design Features not Traffic Control Devices
		Speed Tables	Install Speed Tables	None (Requires equal traffic volume)	<ol style="list-style-type: none"> 1. Enhance Ped Crossing opportunities 	N/A Due to Hight Traffic Volume
		Roundabouts	Install Roundabouts	None	<ol style="list-style-type: none"> 1. Eliminate Traffic Signals 	1. Require significant ROW
		Chicanes/Neck Downs /Chokers	Install extension of outside roadway curbs	None	N/A	1. Requires Special Design for drainage purposes
		Rumble Strips	Install Rumble Strips	None	<ol style="list-style-type: none"> 1. Motorist's to maintain effective traffic measures 	1. Increases Noise
Traffic Signals to 4-way stops	Change traffic signals to 4-way stops	None	N/A due to imbalance traffic	1. Traffic Volumes are unequal		