

# City of Jurupa Valley 2021 Complete Streets Safety Assessment (CSSA)

## Observations and Suggestions

**November 18, 2021**

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# About SafeTREC and the CSSA Program



- UC Berkeley SafeTREC ([safetrec.berkeley.edu](http://safetrec.berkeley.edu))
  - School of Public Health
  - Safety research, public engagement tools (StreetStory), collision GIS (TIMS), professional development classes, local technical assistance for cities & tribes (e.g. CSSA)
- Complete Streets Safety Assessment (CSSA)
  - Latest in 20+ years of local technical assistance programs
  - Free to cities and counties throughout California
  - Offered to agencies annually based on crash statistics
  - Funding provided by a grant from the California Office of Traffic Safety (OTS) through the National Highway Traffic Safety Administration (NHTSA)

# About John Ciccarelli



- SafeTREC Engineering Evaluator since 1999
- Consultant - Bicycle Solutions, San Francisco
  - Active Transportation Planning, Design, Safety Analysis
  - Workshops, classes, private coaching
  - Bicycle Parking & Storage





# CSSA Engagement



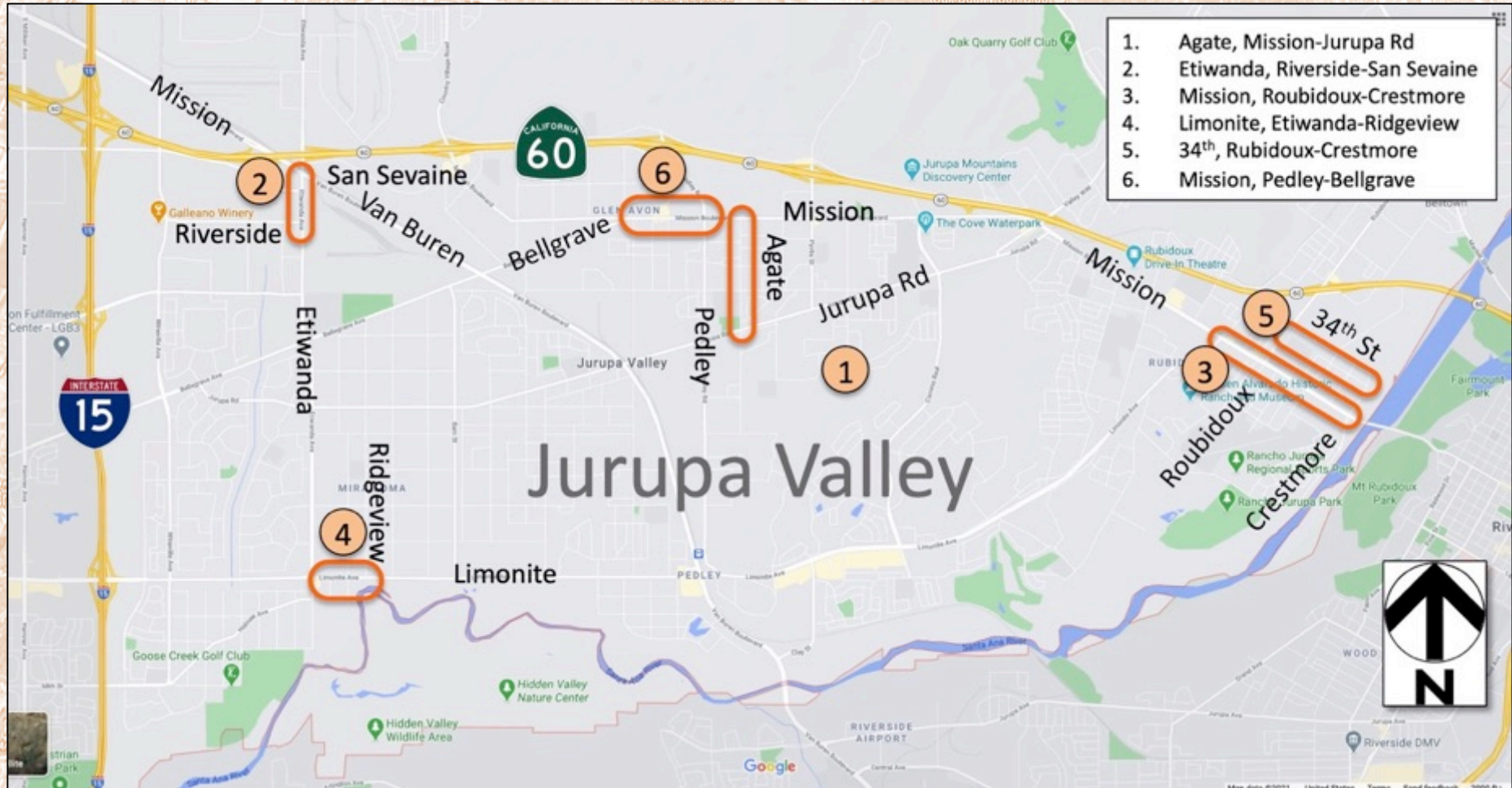
Discussion



Field  
audit

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# Focal areas



# 1. Agate Street

## Mission Blvd – Jurupa Road

### Issues and opportunities

- Sidewalk / walkway continuity
- Mission and Galena intersections
- Wide street between Galena and Jurupa Rd



### 1. Agate St, Mission Blvd – Jurupa Rd

#### OBSERVATIONS

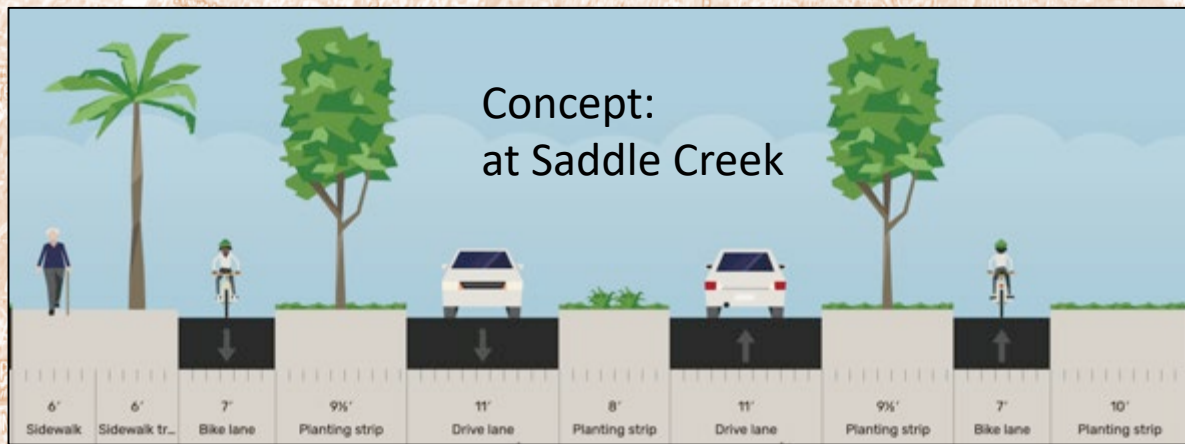
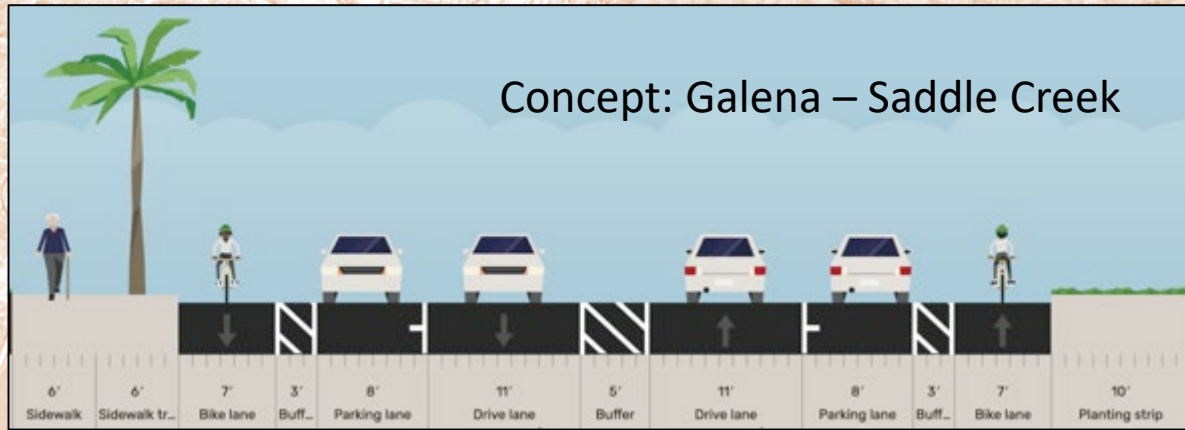
Paved width varies.  
 Much excess width.  
 Saddle Creek 240' from Jurupa Rd.  
 (Unc XW opp on S leg, to cap SB LT.  
 Could consider N leg too - desire line)

#### IDEAS

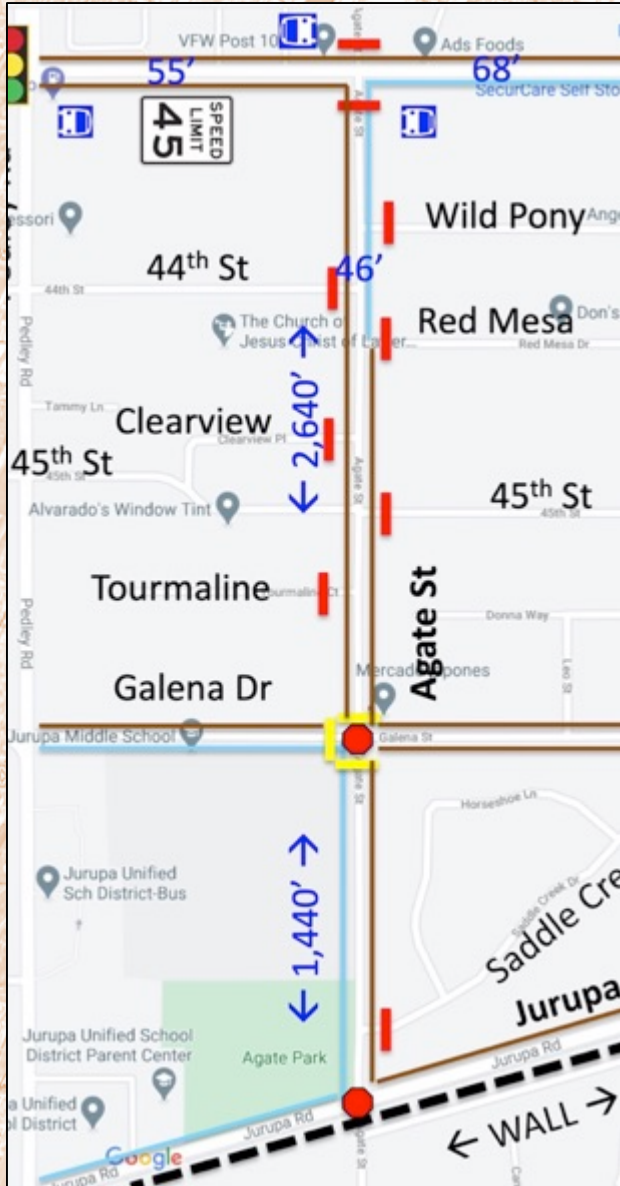
- Side street gateways  
 Soak up excess width to support walking (primary), biking (secondary).  
 Wide segments:
- \* Bike lanes (buffered),
  - Narrow painted median
  - XW opps (refuges!)
  - Between 44<sup>th</sup> & Red Mesa
  - At 45<sup>th</sup>
  - At Saddle Creek



# Agate Street - Suggestions



# Agate Street



#	Location	Item	Suggestion
1	Mission Boulevard	Facilitating pedestrian crossings	<p>a) With current uncontrolled approaches, consider 11' traffic lanes, 10' left turn lane, and 7' bike lanes away from the intersection. At intersection, transition to 5' bike lanes to fit 4' stinger islands along turn lanes, providing some protection for pedestrians halfway across.</p> <p>b) Ultimately, signalize the intersection</p>
2	Between Mission and Galena	Short term: walkway continuity along unpaved frontage	<p>a) Develop "spot" solutions where the unpaved frontage is not wide enough for a walkway along parallel parking.</p> <p>b) At all locations, prohibit perpendicular parking with regulatory signs ("Park Parallel"), with outreach explaining benefits of a continuous walking area for families.</p> <p>c) Consider speed feedback signs and speed limit markings.</p>
3		Medium term: install sidewalks	Initially, consider extending the east sidewalk to Galena. Ultimately, provide sidewalks on both sides.
4	Between 44th Street and Red Mesa Drive	Traffic calming and safer, more convenient pedestrian crossings	<p>Add physical deflection such as mini-roundabouts and/or speed humps, spaced closely enough to be effective — at least at the "1/3 points" where there are through routes between Pedley and Vernon:</p> <p>a) Between 44th Street and Red Mesa Drive</p> <p>b) At 45th Street</p>
5			Alley on east side south of Red Mesa Drive
6	Galena Street intersection	Traffic control, pedestrian safety	Consider installing a single-lane roundabout. See discussion above, in the "Galena Street intersection" section.
7	Between Galena and Jurupa Road	Bicycle accommodation	Consider parking-separated bike lanes (see Figure 4-11).
8	Saddle Creek Drive intersection	Enhanced crosswalk	Mark and sign a high-visibility crosswalk on the north leg, with islands "capping" the floating parking lanes to the north, and a wide median island to protect persons walking bicycles. Use double-sided signs to maximize motorist awareness.
9	Jurupa Road intersection	Crosswalks	Install advance limit (stop) lines 4' before the marked crosswalks on the southbound and eastbound approaches.



# 2. Etiwanda Avenue

## Riverside Drive – San Sevaine Way

- Issues and opportunities
- Sidewalk continuity & conflicts
- Mission / Van Buren intersection
- Pedestrian crossings at Riverside



# Etiwanda (Riverside – San Sevaine)



#	Location	Item	Suggestion
1	Mission / Van Buren intersection	Southeast corner	Support staff's concept of adding a large-radius right turn (slip) lane incorporating a marked crosswalk.  Incorporate state-of-the-practice slip lane design, including FHWA Safer Journey countermeasure #15, to improve pedestrian safety at the slip lane crosswalk and also the safety of the merge onto Van Buren for eastbound motorists and bicyclists.
2		Northwest corner	Similar to what is envisioned for the southeast corner, consider installing a right turn channelization ("pork chop") island to enable pedestrians to resolve the right turn conflicts independently of the mainline crossings, and to reduce the length of the north and west crosswalks.
3	Riverside Drive intersection	North crosswalk	Consider adding Leading Pedestrian Interval (LPI) phasing, given the high demand for crossing to and from the east-side destinations.  Given the high conflict levels due to spillback of the northbound left turn queue approaching Mission, consider also installing high-visibility markings even though this is a controlled crosswalk.
4	Both signals	All approaches	(Citywide suggestion for controlled crosswalk approaches)  Install advance limit (stop) lanes four feet upstream of controlled crosswalks, to deter vehicle encroachment and thus reduce the chance that a pedestrian — especially a short or wheelchair-using person — will be hidden from the view of a motorist preparing to turn right on red by a tall vehicle in the adjacent lane.

# 3. Mission Boulevard

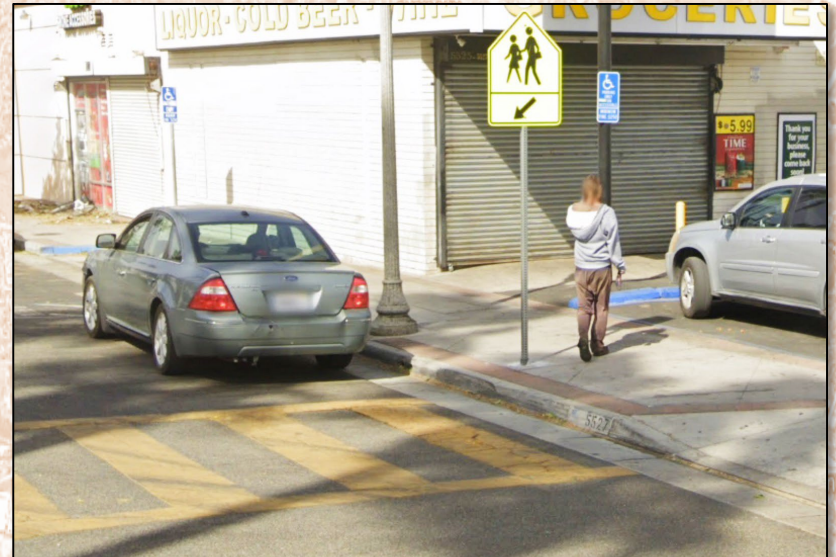
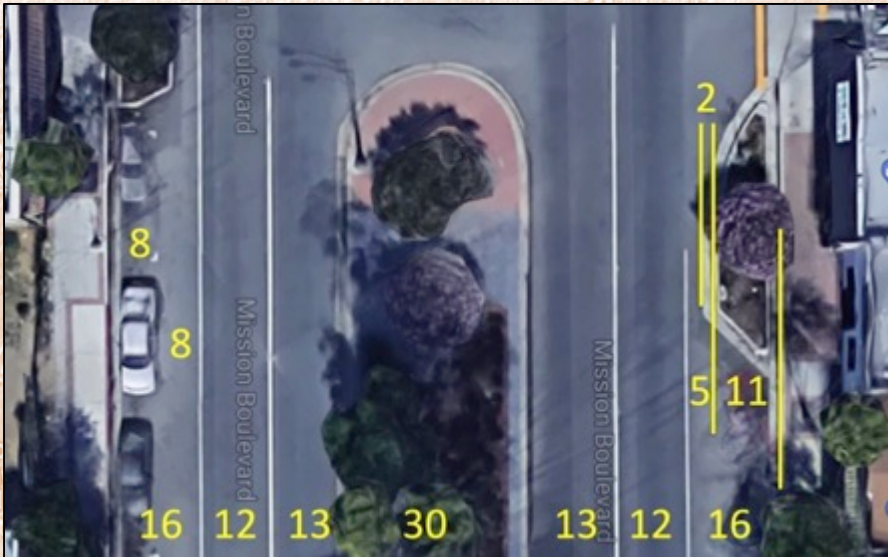
## Roubidoux – Crestmore

- Issues and opportunities**
- Crosswalks
  - Improving bicycling comfort



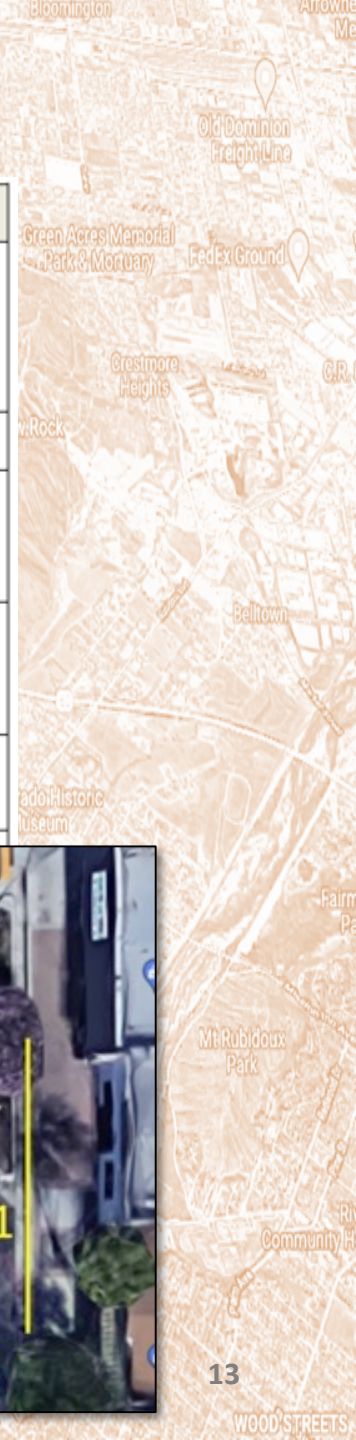


MIRA LOMA



# Mission (Roubidoux – Crestmore)

#	Location	Item	Suggestion
1	Twining intersection, south leg crosswalk	Pavement markings, signage and curbside configuration	See detailed list above under topic "School crosswalk at Twining Street".
2	Wallace Street	East-leg crosswalk	Mark with 2-line white.
3	Additional intersections	Marking and signing crosswalks	Consider installing, prioritizing based on pedestrian attractors across the street. See topic "Crosswalks at other intersecting streets".
4	Entire focal area	Travel lane widths	Consider narrowing the travel lanes to free up at least 2' for a traffic-side buffer (buffered bicycle lane). See topic "Improving bicycling conditions".
5	Entire focal area	Health and viability of in-street trees	Explore sub-surface soils-engineering options. See topic "Improving viability of in-street trees".
6	Entire corridor	Legacy "Business Route 60" signs	Identify and remove



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WOODSTREETS

# 4. Limonite Avenue

## Etiwanda – Ridgeview

### Issues and opportunities

- Etiwanda intersection
- Sidewalk continuity
- Pedestrian crossing at Ridgeview



# Limonite / Etiwanda intersection

Existing



Suggested

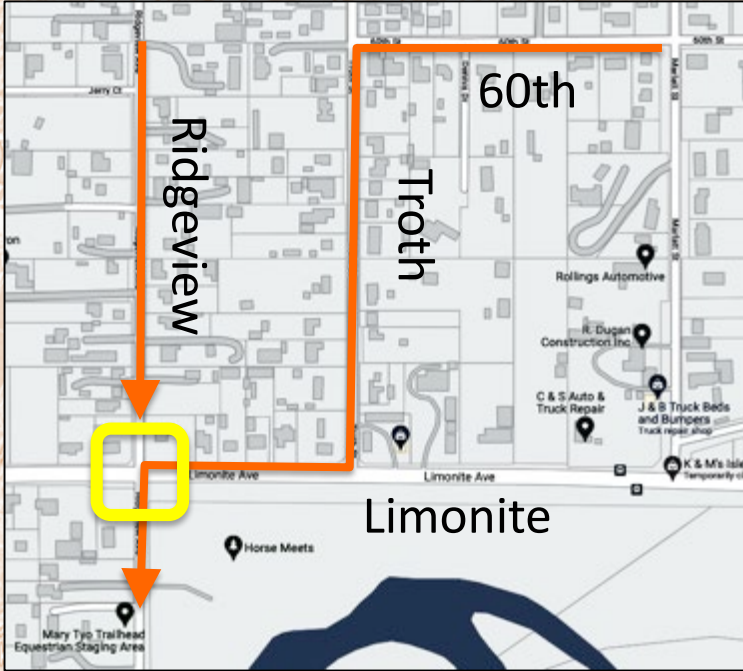


# El Torito driveways – accessible route behind aprons





# Limonite / Ridgeview Crosswalk opportunity



Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	>40 mph	≤30 mph	35 mph	>40 mph	≤30 mph	35 mph	>40 mph
2 lanes (1 lane in each direction)	1 2 4 5 6	1 5 6 7 9	1 7 9	1 4 5 6 7 9	1 5 6 7 9	1 7 9	1 4 5 6 7 9	1 5 6 7 9	1 7 9
3 lanes with raised median (1 lane in each direction)	1 2 3 4 5	1 5 7 9	1 7 9	1 3 4 5	1 5 7 9	1 7 9	1 3 4 5	1 5 7 9	1 7 9
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)	1 2 3 4 5 6	1 5 6 7 9	1 7 9	1 3 4 5 6	1 5 6 7 9	1 7 9	1 3 4 5 6	1 5 6 7 9	1 7 9
4+ lanes with raised median (2 or more lanes in each direction)	1 3 5 7 8 9	1 5 7 8 9	1 7 8 9	1 3 5 7 8 9	1 5 7 8 9	1 7 8 9	1 3 5 7 8 9	1 5 7 8 9	1 7 8 9
4+ lanes w/o raised median (2 or more lanes in each direction)	1 3 5 6 7 8 9	1 5 6 7 8 9	1 7 8 9	1 3 5 6 7 8 9	1 5 6 7 8 9	1 7 8 9	1 3 5 6 7 8 9	1 5 6 7 8 9	1 7 8 9

Given the set of conditions in a cell,  
 # Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.  
 ● Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.  
 ○ Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.\*  
 The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

- 1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
- 2 Raised crosswalk
- 3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
- 4 In-Street Pedestrian Crossing sign
- 5 Curb extension
- 6 Pedestrian refuge island
- 7 Rectangular Rapid-Flashing Beacon (RRFB)\*\*
- 8 Road Diet
- 9 Pedestrian Hybrid Beacon (PHB)\*\*



# Limonite (Etiwanda – Ridgeview)



#	Location	Item	Suggestion
1		South curb line east of Etiwanda	Extend north edge to match the curb line to the east (Mariscos Uruapan frontage), extending the corner parcel's north driveway accordingly.
2	Etiwanda intersection	Southwest corner	a) Install a (possibly segmented) right turn channelization island, shortening the west and south crosswalks accordingly. b) Install a diagonal crosswalk between the island and the outer curb, with high-visibility markings and possibly a raised crossing surface.
3		Eastbound bus routing	Have eastbound buses approach in the #2 through lane instead of the right turn only lane
4		Northbound approach	Extend the two through lanes to the realigned south crosswalk.
5		All approaches	Install advance limit (stop) lines four feet upstream of the crosswalks.
6	North side east of Etiwanda	Sidewalk	Install continuous sidewalk between Etiwanda and Troth Street (which is reachable from the east via 60th Street).
7	Ridgeview Avenue	Uncontrolled crossing	a) Install a Pedestrian Hybrid Beacon on the east leg, with dual sets of pedestrian call buttons — one at normal height and higher ones usable by equestrians. (The east leg is preferred because of the Santa Ana River open space including the equestrian staging area.) b) Consider also installing a raised median refuge on the east leg, with additional pedestrian call buttons, to further improve crossing safety for slow pedestrians.

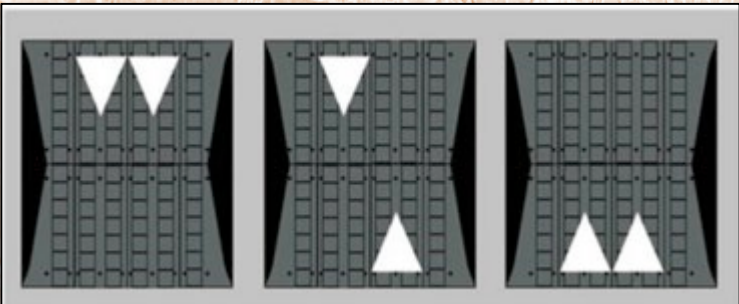
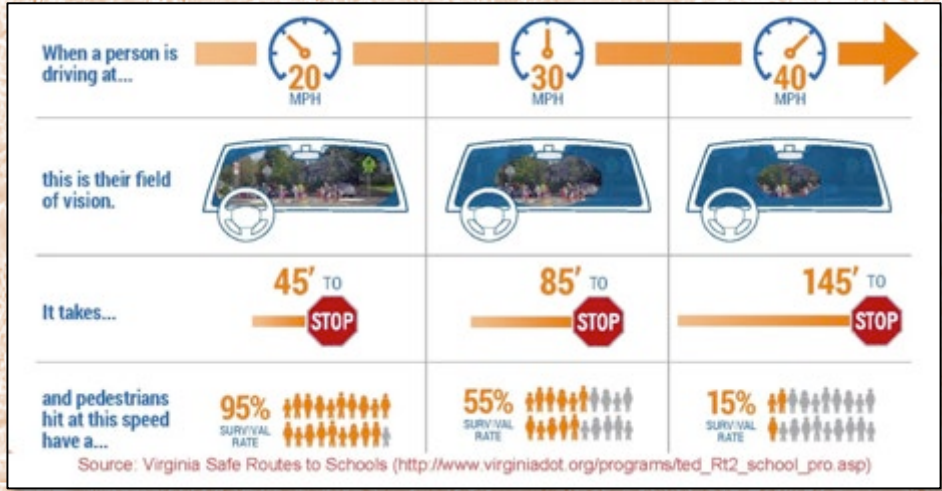
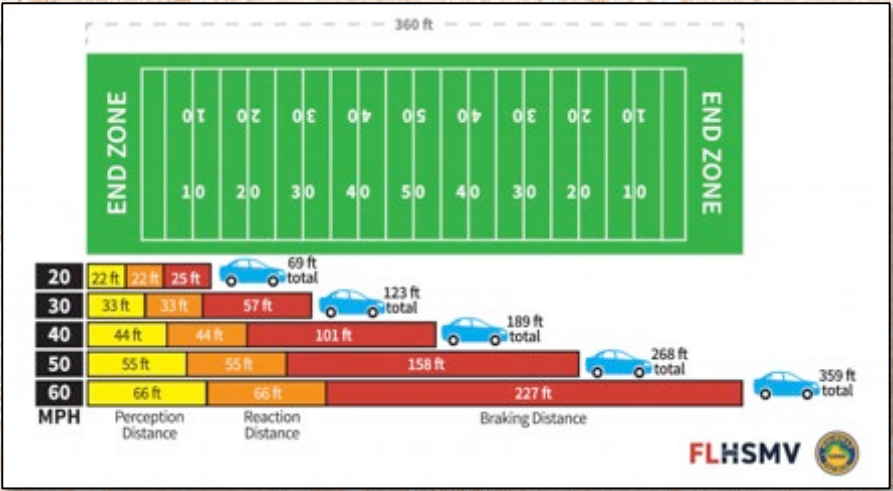
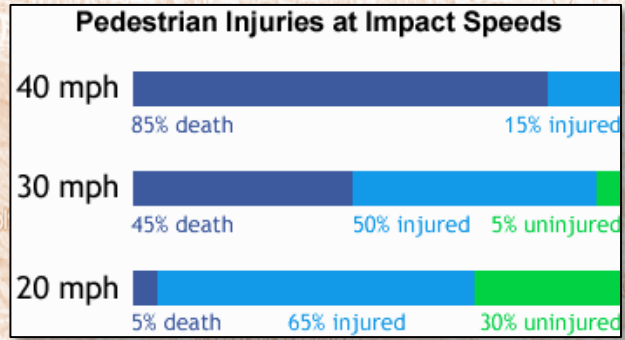
# 5. 34<sup>th</sup> Street

## Roubidoux – Crestmore

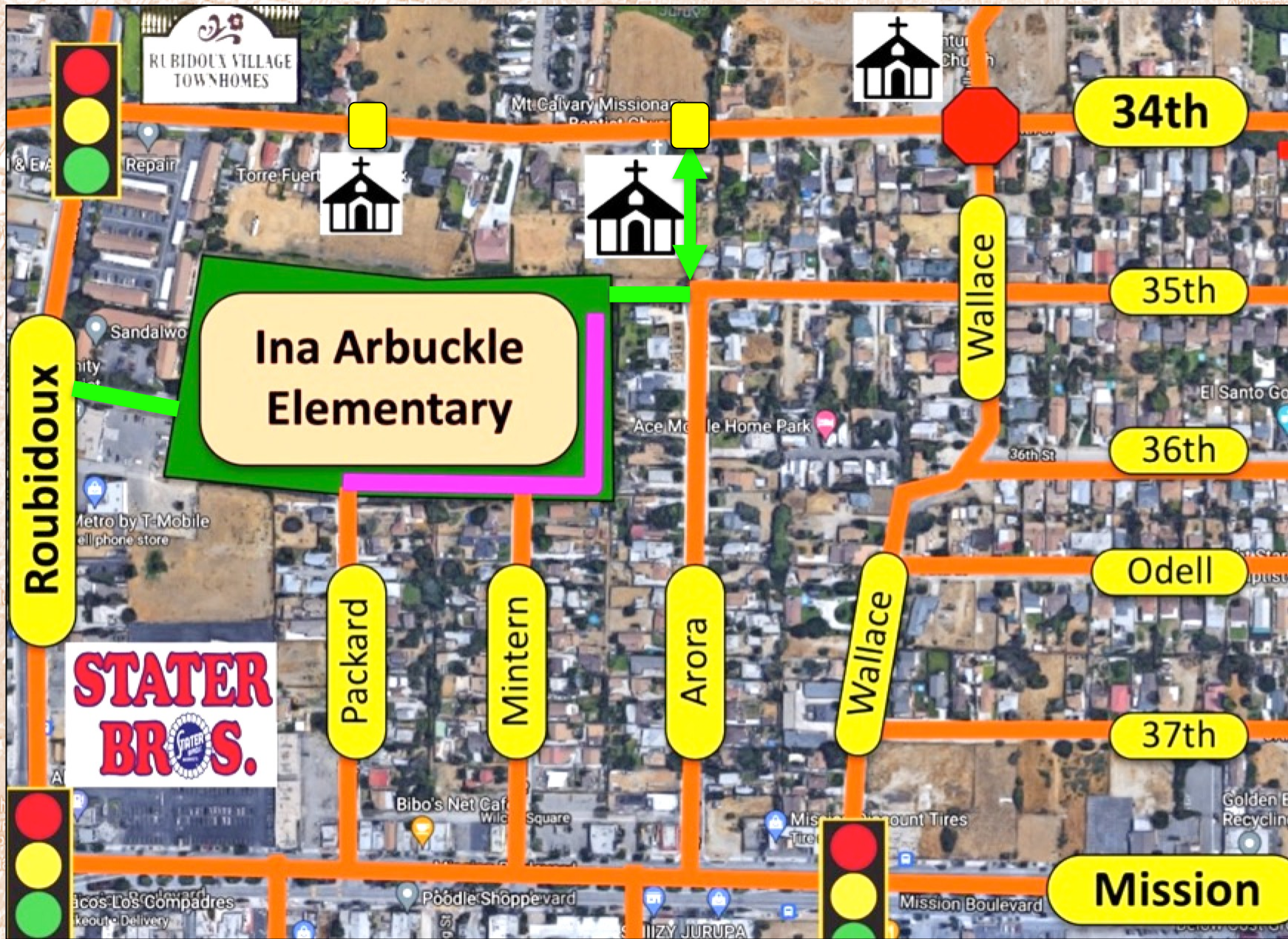
### Issues and opportunities

- 34<sup>th</sup>: Safe walking and crossing
- 34<sup>th</sup>: Eliminate speeding
- Pedestrian shortcuts (34<sup>th</sup> – 35<sup>th</sup>, school)





# Traffic calming and pedestrian shortcuts



# 34<sup>th</sup> Street (Roubidoux - Crestmore)

#	Location	Item	Suggestion
1	34th Street roadway	Reducing speed to 25 mph range	<p>a) Consider installing traffic calming devices at the one-third points between Roubidoux and Wallace:</p> <ul style="list-style-type: none"> <li>* East side of Mt. Calvary church (~600' from Wallace)</li> <li>* Near Torre Fuerte Roubidoux (~600 from Roubidoux)</li> </ul> <p>Devices could potentially be speed humps, "speed cushions" (slotted speed humps), or one-way slow points.</p> <p>b) Consider installing a traffic calming device within or adjacent the Daly Avenue intersection (~700' from both Wallace and Crestmore), such as a speed hump on the east or west leg, or a neighborhood traffic circle — possibly with small deflection islands to prevent "bypassing".</p>
2	34th Street – walkway	Need for assured width given parking along shoulders	Require that all on-street parking use the north shoulder. On the south side between the pavement edge and front yard fence lines, install a standard sidewalk or a walkway protected from traffic with a raised feature such as an intermittent asphalt dike.
3	School pedestrian access from Arora / 35th	Need for all-weather walkway	Add a minimum 8' paved walkway between Arora Street's school crosswalk at 35th Street, and the school's northeast pedestrian gate approximately 160' west.
4	Walkway between 34th and 35th along east edge of Mt. Calvary church yard	Need to preserve access in perpetuity	<p>a) Obtain an access easement, or</p> <p>b) Purchase a strip of land along the fence</p>
5	34th Street and other low-volume rural roadways	Alternative cross section	Look into Edge Lane Roads for potential applicability in Jurupa Valley.

# 6. Mission Boulevard Bellegrave Avenue – Pedley Road

- ### Issues and opportunities
- Sidewalk / walkway continuity
  - Crossing between Glen and Pedley
  - Subdivision walk/bike links



# Mission (Bellegrave - Pedley)

Galleano Winery  
Costco Wholesale  
Big League Dreams Sports Parks



11/18/2021

RiverSide (D&H)  
AMAZON STATION

Jurupa Ave

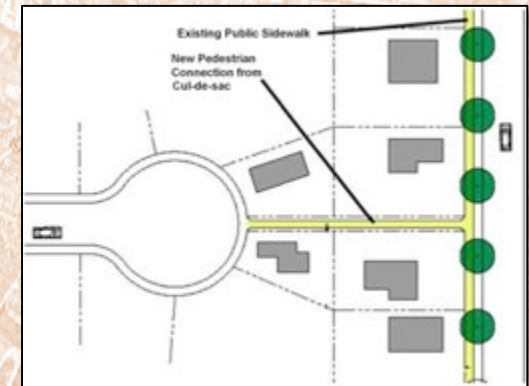
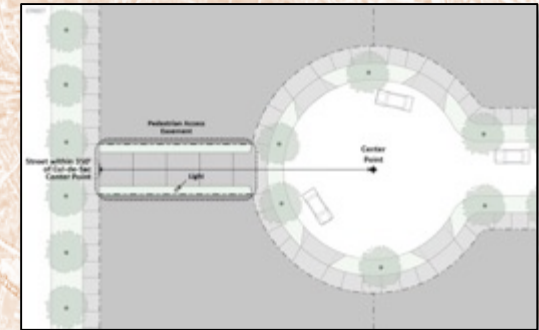
McLean Plaza  
Narrows Park

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WOODSTREETS



# Mission (Bellegrave - Pedley)



# Mission (Bellegrave - Pedley)

#	Location	Item	Suggestion
1	Entire focal area	Sidewalk connectivity	<p>Create a segmented sidewalk improvement plan — see Table 4-12. Prioritize and phase implementation.</p> <p>Along each segment, ensure that the walking route has gently sloped bypasses at each driveway apron, minimize or eliminate perpendicular parking, and ensure that the walking route is protected from vehicle circulation and parking movements, and buffered from the door-opening area beside parked vehicles.</p>
2	Crossing at Amarillo	Need for active device	Consider installing an enhanced crosswalk with pedestrian-activated active features — either Rectangular Rapid Flashing Beacons (RRFBs) or a Pedestrian Hybrid Beacon (PHB).
3	Back-side pedestrian access to Rio Ranch Market shopping plaza, on Bellegrave	Vegetation blocks sightlines	Remove or replace tall bushes
4		Adjacent sidewalk	Extend to the pedestrian access point
5	New developments including residential subdivisions	Pedestrian shortcuts and related connectivity	In the City's Municipal Codes, subdivision design guide, and planning review, require developments to provide fine-grained pedestrian / bicycle connectivity including shortcuts at culs-de-sac and periodically along long blocks, and connections to collector and arterial streets and nearby trails. See <b>Figure 4-37</b> and associated discussion.

# Questions?



Safe Transportation  
Research & Education Center  
**SafeTREC**