



School Safety Assessment Technical Memorandum

Washington Manor Middle School

1170 Fargo Avenue, San Leandro, CA 94579

San Lorenzo Unified School District

November 2019



The Alameda County Safe Routes to Schools Program is a program of the Alameda County Transportation Commission (alamedactc.org) and is funded with Alameda County's local sales tax Measure B, regional, state and federal funds.

Washington Manor Middle School


A school safety assessment was conducted at Washington Manor Middle School (WMM) in San Leandro during the afternoon dismissal on Tuesday, November 19, 2019. Attendees included representatives from the City of San Leandro, Alameda County Safe Routes to Schools staff, and Washington Manor Middle School staff.

Participants included:

- Michael Stella, Principal Engineer, San Leandro Engineering and Transportation
- Dean Hsiao, Traffic Operations Engineer, San Leandro Engineering and Transportation
- Theresa Armada, Principal, Washington Manor Middle School
- Glenna Wurm-Hayerg, Teacher, Washington Manor Middle School
- Diane Erwin, Counselor, Washington Manor Middle School
- Elida Mojica, Counselor, Washington Manor Middle School
- Kenny Jeong, Engineer, Alameda County SR2S team
- Ben Frazier, Planner, Alameda County SR2S team

School Information


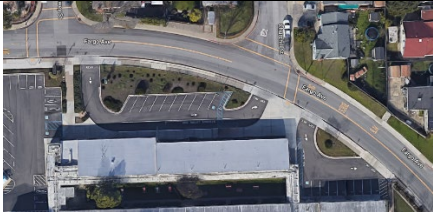
Location & Enrollment

	Address:	1170 Fargo Avenue San Leandro, CA 94579
	Morning Bell(s):	8:05 AM
	Afternoon Bell(s):	Regular Dismissal: 3:00 PM Minimum Days: 12:15 PM
	Grade Levels:	Grades 6-8
	Enrollment:	760
	School Type (neighborhood/ magnet/charter):	Neighborhood

Student Travel Data

Student Travel Mode Info:	School Estimate:
	<p>Walking: 28%</p> <p>Biking: 5%</p> <p>School bus: 0%</p> <p>Transit: 0%</p> <p>Carpool: 7%</p> <p>Family Vehicle: 60%</p> <p>Other: 0%</p>

Bikes, Buses, and Drop-off/Pick-up

<p>Does the school have bike racks? What is the capacity? Is it secure bike parking?</p> <p>On a typical day, what percentage of racks are used?</p>		<p>Washington Manor Middle has two “schoolyard” style bike racks for a capacity of about 40 bicycles. The racks are secured on campus.</p> <p>The school estimates that about 30 students bike to school on a typical day.</p>
<p>Does the school have special pick-up/drop-off policies/procedures?</p>		<p>Washington Manor Middle has a large drop-off loop that is used by private vehicles and a smaller loop for vehicles with special needs students.</p>

Note: Washington Manor Middle School is not served by school buses nor directly served by AC Transit.

Street Profiles

Street Name	Width	Lanes	Posted Speed Limit	Traffic Volumes	Notes
Fargo Avenue (nearby segment)	32 feet	2 lanes	25 mph	8,529 ADT 2/2018	Rolled curbs
Trojan Avenue	32 feet	2 lanes	25 mph	Not available	Rolled curbs
Edgemoor Street	32 feet	2 lanes	25 mph	Not available	Rolled curbs
Beatty Street	32 feet	2 lanes	25 mph	170 ADT 4/2014	Rolled curbs

Pedestrian- and Bicycle-Involved Collision Summary 2014-2018

The collision summary table shows all bicycle- and pedestrian-involved collisions within one-half mile of the school. These collisions may or may not be school-travel related.

Radius from School	Total Collisions	Fatal Collisions	Severe Injury Collisions	Visible Injury Collisions	Complaint of Pain Collisions	Pedestrian Collisions	Bicycle Collisions
< ¼ mi	6	0	0	1	5	4	6
¼ mi – ½ mi	11	1	3	2	5	7	11
Total	17	1	3	3	10	11	17

Source: UC Berkeley – Transportation Injury Mapping System, Safe Transportation Research and Education Center, University of California, Berkeley, 2019

Existing Conditions

Overview

Washington Manor Middle School is located in San Leandro's Manor neighborhood along Fargo Avenue between Edgemoor Street and Beatty Street. The campus has direct frontage along Fargo Avenue and Trojan Avenue; the campus is surrounded by houses on that front on Edgemoor Street and Beatty Street. WMM's primary frontage is along Fargo Avenue with secondary access and egress along Trojan Avenue. The majority of WMM students get to school via private vehicle. Walking is the second most popular mode of choice, with about a quarter of students walking to/from school. WMM has two crossing guards that help students cross two intersections along Fargo Avenue at Dewey Street and Churchill Street.

There are two primary points of access for WMM students and families: Fargo Avenue and Trojan Avenue. Fargo Avenue provides vehicular access to the drop-off loop, as well as pedestrian and bicycle access. Trojan Avenue provides additional curbside drop-off and pick-up as well as pedestrian and bicycle activity. Students access Trojan Avenue via the paths on either side of the playing fields. On the north side of campus, students were observed walking both directions on Fargo Avenue. Vehicle pick-up and drop-off also occurred on the north side of Fargo Avenue, across from the school. On the south side of campus, students were observed walking both directions on Trojan Avenue and walking south down Dewey Street.

Around campus, multiple street segments are part of the Countywide High Injury Network. Fargo Avenue, east of Dewey Street, is part of the Countywide Bicycle High Injury Network; this is the only direct frontage along the High Injury Network. Nearby segments of Farnsworth Street and Manor Boulevard are part of the Countywide Pedestrian High Injury Network.

Observations

The following existing conditions were observed or reported by participants during the school safety assessment (SSA).

1. Fargo Avenue and School Driveways

- ◆ Fargo Avenue is a narrow 32-foot wide roadway with one travel lane in each direction delineated with a dashed yellow centerline.
 - In front of the WMM campus, parking is permitted only on the north side of the street. Stopping is prohibited on the south side of the street, in front of the campus.
 - Away from the school, parking is allowed on both sides of the street.
- ◆ Fargo Avenue has rolled curbs on both sides of the street. Given the narrowness of the street and current lane striping configuration with a centerline, some parking encroachment into the sidewalk occurs as vehicle owners attempt to minimize obstructing the travel lanes.

- The amount of sidewalk encroachment did vary, but every parked vehicle either partially encroached on the sidewalk or completely blocked access to the sidewalk, forcing pedestrians to walk on the street.
- ◆ In addition to parked vehicles, drivers also rolled on the curb/sidewalk and stopped to wait for their student(s). This behavior produced similar outcomes and drivers who had parked and left their vehicles unattended.
- ◆ The school has several active driveways along the Fargo Avenue frontage, including (from west to east): The staff parking lot, drop-off loop/visitor parking entry driveway, drop-off loop exit driveway, and the staff parking/special education driveways.
 - Staff lot driveway: School staff reported that drivers sometimes enter the staff-only area to pick-up or drop-off students.
 - There are pavement markings on the driveway that state: “Staff Only” in addition to a “Staff Only” sign to the right of the driveway.
 - Drop-off loop entry driveway: This driveway is slightly offset to the east of the Fargo Avenue/Dewey Street intersection. The driveway (and drop-off loop) is wide enough to accommodate two vehicles side-by-side. Visitor parking is also accessed from this driveway.
 - Left turns from westbound Fargo Avenue are prohibited between 7:30AM and 3:30PM on weekdays. There is a posted sign that prohibits this movement.
 - Despite this prohibition, drivers consistently made this turning movement during the observation period.
 - Once the drop-off loop filled up, vehicle congestion was observed in both directions on Fargo Avenue from cars waiting to turn into the loop.
 - Drop-off loop exit driveway: This driveway is aligned with the Fargo Avenue/Churchill Street intersection.
 - Signs currently prohibit drivers from making left turns from this driveway. The only permitted movements are straight and right turns.
 - The current pavement markings, however, only indicate that right turns are permissible.
 - Staff lot/Special education loop: This area has a smaller drop-off loop that vehicles dropping off and picking up special education students use in addition to staff parking.
 - There are signs and pavement markings indicating the intended use of this area. The school also puts out an A-frame sign, further emphasizing the message.
- ◆ Between the drop-off loop exit driveway and the small staff lot/special education loop entry driveway, there is a large plaza area where students congregate after dismissal.

- Students were very active in this area, running around the plaza and along the sidewalk continuing east. Students were also observed milling around within the staff lot/special education loop area.
 - There was minimal vehicle traffic through this area, resulting in minimal pedestrian-vehicle conflicts.
- The plaza also serves as the staging area for the Fargo Avenue crossing at Churchill Street.
- ◆ There are two existing speed feedback signs on Fargo Ave, one is located near Edgemoor Street and the other is located between Beatty Street and Andover Street.
- ◆ School staff reported drivers on Fargo Avenue can be blinded by the sun, reducing their visibility of the surrounding environment.
- ◆ One driver (non-school related) turned very quickly from a side street, crossing into the opposing travel lane of Fargo Avenue and speeding around the queue of cars waiting to access the school.



Above: A row of vehicles stopped on the sidewalk/rolled curb along the northern side of Fargo Avenue across from the school. A van traveling westbound crossing over the double yellow to continue travel.



Left: The pavement markings at the main staff parking lot driveway.

Right: Looking west at the queue of cars waiting to turn into the drop-off loop from Fargo Avenue.

2. Fargo Avenue / Dewey Street

- ◆ Fargo Avenue/Dewey Street is a T-intersection. The Dewey Street approach is stop-controlled.
- ◆ There are two yellow transverse crosswalks across the northern and western approaches.
 - There is a yield paddle sign located in the roadway at the western crosswalk.
- ◆ A crossing guard currently serves this intersection during both the morning and afternoon peak periods.
- ◆ Because this intersection is very close to the primary drop-off loop entry driveway, during the observation period the intersection was sometimes blocked by queuing cars waiting to enter the loop.
- ◆ This intersection was a common crossing location for students whose parents were waiting across the street on Fargo Avenue or on Dewey Street.



Above: The Fargo Avenue crossing at Dewey Street. The crossing guard is preparing for her shift.

3. Fargo Avenue / Churchill Street

- ◆ Fargo Avenue/Churchill Street is a T-intersection. The Churchill Street approach is stop-controlled. Fargo Avenue is curved in this section, which can reduce advanced visibility of the crossing for approaching drivers; especially if cars are lined up on the north side of Fargo Avenue.
- ◆ There are two yellow transverse crosswalks across the northern and eastern approaches.
 - There is a yield paddle sign located in the roadway at the eastern crosswalk.
- ◆ A crossing guard currently serves this intersection during both the morning and afternoon peak periods.
- ◆ The southeast corner connects to the plaza area where students were observed congregating after school, generating a high volume of Fargo Avenue crossings at this location.
 - This plaza is located between the two drop-off loops.



Above: Students crossing Fargo Avenue at Churchill Street while others wait at the plaza in front of the school.

4. Fargo Avenue / Beatty Street

- ◆ Fargo Avenue/Beatty Street is a four-way asymmetrical intersection. Both Beatty Street approaches are stop-controlled.
 - Beatty Street intersects Fargo Avenue as the street curves, creating wide Beatty Street approaches; the southern approach is about 90 feet wide and the northern approach is about 100 feet wide. In addition to long crossing distances for pedestrians, the intersections have very wide corner radii; these angles allow drivers to make turns at higher speeds.
 - Beatty Street is normally 30 feet wide.
 - The northern approach has two painted buffer areas channelizing the travel lanes and the southern approach has one. Both approaches have double yellow centerline markings.
- ◆ Vehicles traveling southbound on Beatty Street are supposed to continue across Fargo Avenue by completing a two-stage movement (turn onto Fargo and then turn onto Beatty).
 - Most drivers observed during the school safety assessment attempted to cross this intersection in one movement. Participants noted that some drivers cross over the double yellow buffer area to make crossing with one movement easier.
 - The combination of the asymmetrical intersection and curve on Fargo Avenue limits visibility of drivers, especially from the Beatty Street approaches, traveling through this intersection.

- Safety assessment participants noted that the sun can cause visibility issues as drivers check for other approaching vehicles and pedestrians.
- ♦ Assessment participants also stated that Beatty Street is a common alternative pick-up and drop-off location. Drivers will use available curb space and wait for their students.
- ♦ The existing curbs on both sides of the northern approach and the southwest corner are not aligned with the existing crosswalk markings.



Top: An aerial view of the Fargo Avenue/Beatty Street intersection (Google Maps).

Left: The northern Beatty Street approach, from the southwest corner.

Right: The southern crossing of Beatty Street from the southwest corner.

5. Trojan Avenue

- ◆ Trojan Avenue is the secondary access point for Washington Manor Middle. There are two access points to the campus and fields from Trojan Avenue, one at the eastern side and one at the western side.
 - Drivers will idle on both sides of the street in the afternoon waiting for their students to walk out to them.
 - On the day of the assessment, the street was lined with cars on both sides in front of the school's rear frontage.
 - Trojan Avenue is also a relatively narrow street (30 feet) with rolled curbs. Similar to Fargo Avenue, idle and parked cars can obscure the sidewalk, hindering pedestrian access and mobility.
 - Waiting drivers sometimes block driveways of houses along Trojan Avenue.
- ◆ Students who walked home were observed walking in both directions on Trojan Avenue; there was not one dominant direction of travel. Students were also observed crossing Trojan Avenue at Dewey Street and walking south on Dewey Street.
- ◆ Assessment participants stated that traffic along Trojan Avenue is typically calmer than traffic on Fargo Avenue.
- ◆ When Washington Manor Middle has field trips, the buses load and alight students from Trojan Avenue.



Above: Parents queued-up on the sidewalk waiting for the dismissal bell.



Left: Parents waiting for their students on/along the curb and charter buses dropping off students returning from a field trip.

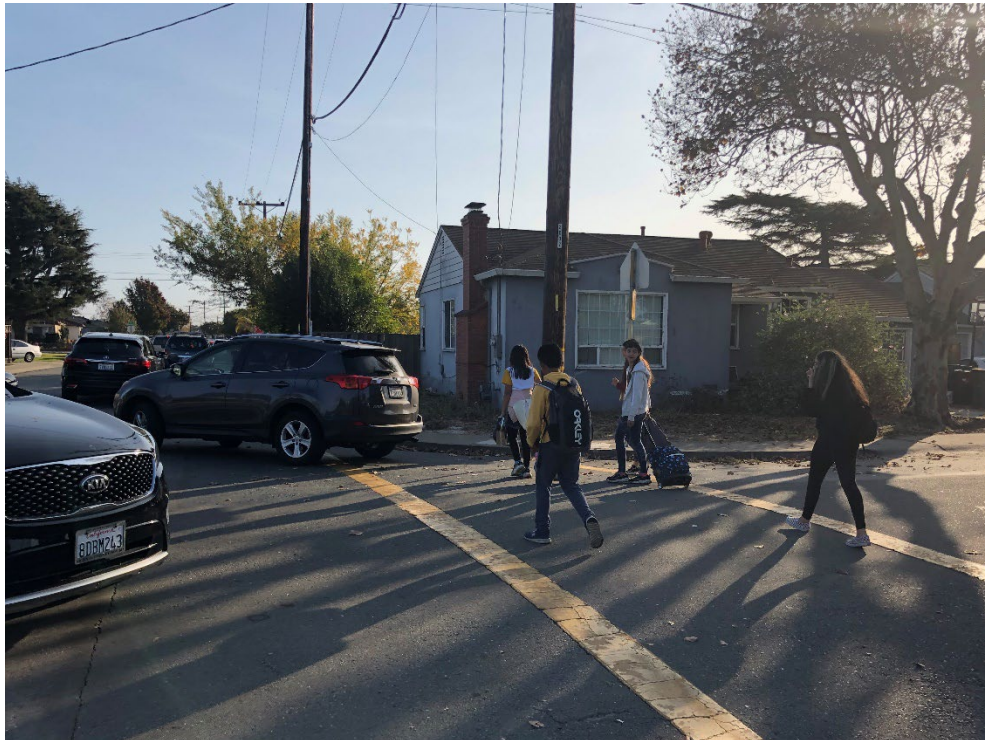
Right: Trojan Avenue.

Bottom: A driver parked their car halfway on the sidewalk, leaving minimal space for pedestrians.

6. Trojan Avenue / Dewey Street

- ◆ Trojan Avenue/Dewey Street is a T-intersection. The Dewey Street approach is stop-controlled.
 - There is a yellow transverse crosswalk across the Dewey Street approach.
 - There are no curb ramps on either side of this crosswalk.

- ◆ The existing School Assembly B signs (school crossing) have not been updated to the current standard.
- ◆ Drivers were observed parking very close to the crosswalk, limiting visibility of the staging area and pedestrians when present.
 - There is no red curb around the crosswalk.



Left: Students and families crossing between two idling school field trip buses.

Right: A student bicyclist turning left onto Dewey Street.

Bottom: Students crossing southbound on Dewey Street with a driver idling at the opposite corner and another stopping too close to the crosswalk.

Participant Comments

School staff who attended the assessment were primarily concerned with the traffic and crossing conditions along Fargo Avenue. They stated the narrowness of the road, the curve in the road, and driver visibility being affected by the sun were all factors that they believed contributed to some of the behavior they observe on a regular basis. Other comments included:

- ◆ Having two crossing guards on Fargo Avenue works really well.
- ◆ Congestion in and on the approach of the drop-off loop can be a problem and parents routinely violated the no left turn rule.
- ◆ Concerns about impatient non-school related drivers who cross the double yellow to go around queuing or parked cars.

Recommendations

Engineering Recommendations

Recommendations to improve infrastructure or operations surrounding Washington Manor Middle School can be seen on the conceptual improvement plan found following this memo.

Policy & Program Recommendations

In addition to engineering improvements, the Alameda County Safe Routes to Schools Program has many encouragement and educational activities that can benefit students and the campus community at Washington Manor Middle School.

The School Site Coordinator for Washington Manor Middle is Stephanie Jim. The Site Coordinator can help schedule, organize, and promote many of the program offerings of Alameda County SR2S. The contact information for the Site Coordinator is below:

Stephanie Jim, sjim@alamedacountysr2s.org

Please do not hesitate to reach out to the Site Coordinator if you have any questions or concerns, or if you wish to move forward with additional programming activities.

Programs

The following improvements are recommendations for policy and program implementation at Washington Manor Middle School to increase safety and active commutes to school.

- ◆ Encourage and Help Facilitate Carpooling
 - The SR2S Program can assist schools in working with parents to connect them with other families who live nearby to increase the number of students carpooling. This can reduce congestion by reducing the number of vehicles coming to campus.

- ◆ Schedule Drive Your Bike
 - This interactive workshop is a great educational opportunity to teach and refresh safe walking and bicycling behavior. These workshops cover a wide range of relevant topics from understanding traffic signals and signs, to bicycle hand signals, to how to safely cross the street. The Drive Your Bike workshop has both a middle school and high school version.
- ◆ Participate in International Walk and Roll to School Day (IRW2SD), the Golden Sneaker Contest (GSC), and Bike to School Day (B2SD)
 - These are the three main countywide encouragement events that occur throughout the academic year. All schools can participate in International Walk and Roll to School Day, held in October every year. The Golden Sneaker Contest, held in spring, is for elementary and middle schools and is a two-week contest both within schools and across the county challenging classrooms to travel to/from school using active and shared modes. All schools can also participate in Bike to School Day, held in tandem with Bike to Work Day, which encourages schools to sponsor Energizer Stations and students and families to bike to school.
- ◆ Start regular (reoccurring) walk and roll to school days. These events can be weekly or monthly and can be coordinated with Walking School Buses and Bike Trains. Safe Routes to Schools staff and resources can be made available to help coordinate and organize walk and roll days. Consider using other SR2S programming, like Drive Your Bike or International Walk and Roll to School Day, as a launching pad to build momentum and enthusiasm for walking and biking to school.

Safe Routes to Schools Improvement Plan
Washington Manor Middle
San Leandro

School Safety Assessment held November 2019

- 1**Fargo Avenue**

1a. Realign and restripe Detail 22 yellow centerline stripe; providing additional width for westbound vehicles and parking (two 12-foot travel lanes and an 8-foot parking/loading lane on the north side). Remark pavement text as necessary

1b. Install “KEEP CLEAR” pavement markings in front of the drop-off loop entry driveway

1c. Install R25D “School Loading” signs on the north side of Fargo Avenue between Dewey Street and Beatty Street

1d. Install a Detail 27B parking edge line stripe for the parking lane along the north side of Fargo Avenue

1e. On the south side of Fargo Avenue, between Churchill Street and Beatty Street, install R26S “No Stopping” signs

1f. On the south side of Fargo Avenue, in front of the drop-off loop, remove passenger loading signs and install R26S “No Stopping” signs

1g. Remove all “Traffic Fines Doubled” subplates from signs

1h. Upgrade all crosswalks at Fargo Avenue/Farnsworth Street to high-visibility crosswalks with advance stop pavement markings
- 2**Fargo Avenue/Dewey Street**

2a. Upgrade the two existing transverse crosswalks to high-visibility crosswalks. Install advance yield and stop markings (not symbolized)

2b. Install paint-and-post curb extensions at the two northern corners
- 3**Fargo Avenue/Churchill Street**

3a. Install 48 linear feet of Detail 22 yellow centerline stripe at the northern approach of Churchill Street

3b. Upgrade the two existing transverse crosswalks to high-visibility crosswalks. Install advance yield and stop markings (not symbolized)

3c. Install a R10-15 “Turning Vehicles Yield to Pedestrians” sign

3d. Install paint-and-post curb extensions at the two northern corners
- 4**Fargo Avenue/Beatty Street**

4a. At the northern approach of Beatty Street, install “Dura-curb” delineators on top of existing double yellow lane markings

4b. Consider placing additional “Dura-curb” delineators in the middle of the intersection to further guide drivers how to navigate the intersection

4c. Install 35 feet of red curb on the south side of Fargo Avenue between the curb ramp and residential driveway. Install additional red curb at all corners - at least 20 feet on approach legs

4d. Upgrade the two existing crosswalks across Beatty Street to high-visibility crosswalks

4e. Install paint-and-post curb extensions at all four corners

4f. **Long Term:** Relocate the northeastern and southwestern curb ramps to align with the crosswalks

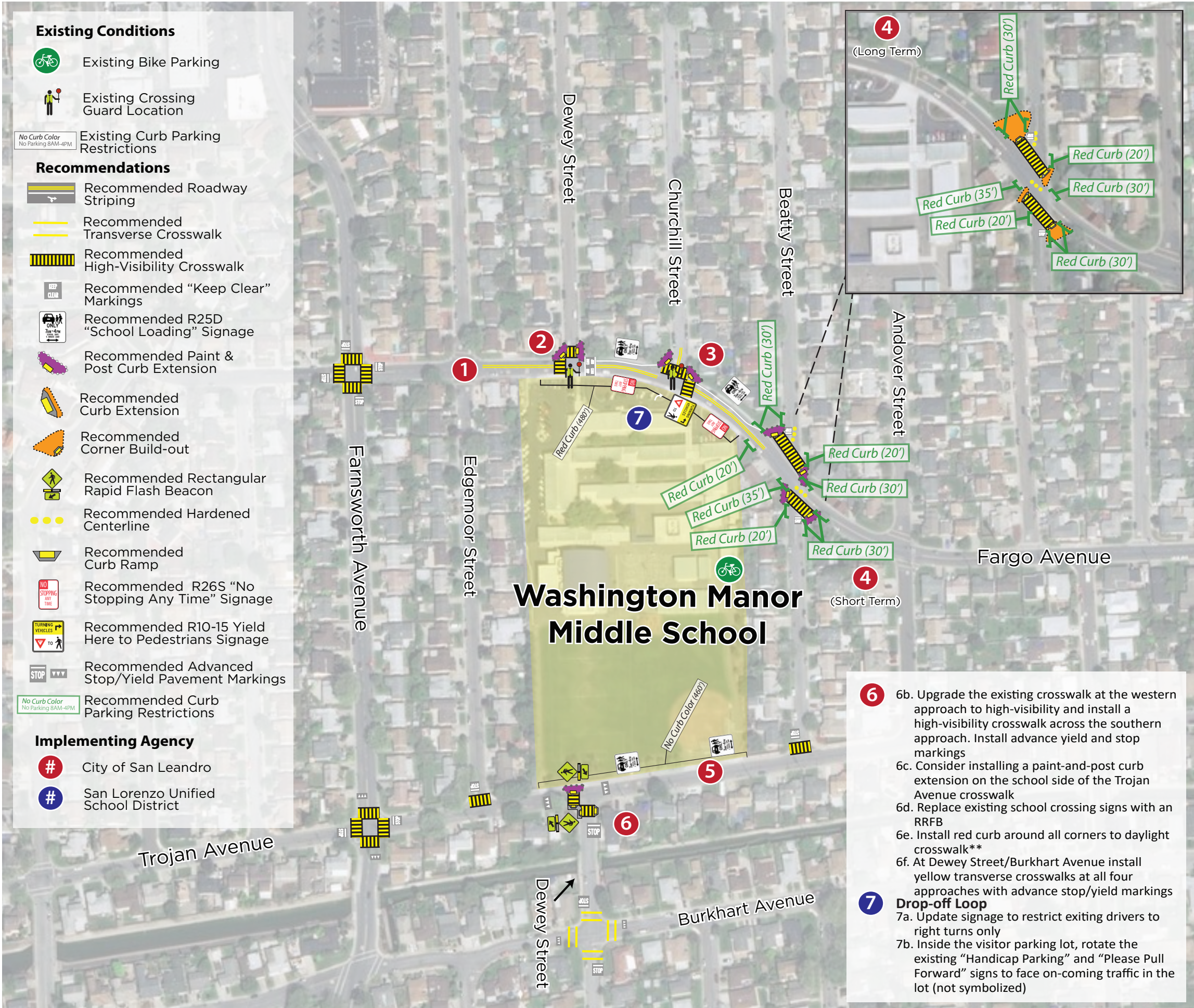
4g. **Long Term:** Install curb extensions at the southwest and northeast corners and build out the southeast and northwest corners of the intersection to square it up
- 5**Trojan Avenue**

5a. Replace “School Bus Only” signs with R25D “Passenger Loading” signs. Restrict to existing white curb area

5b. At Trojan/Farnsworth, Trojan/Edgemoor, and Trojan/Beatty upgrade all existing crosswalks to high-visibility crosswalks with advance stop/yield pavement markings

5c. Install paint-and-post curb extensions at the northern corners at Trojan/Beatty
- 6**Trojan Avenue/Dewey Street**

6a. Install curb ramps on both sides of the existing crosswalk at the western approach and at the southeast corner



*The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.
**Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards. Red curb not symbolized on map.