



School Safety Assessment Technical Memorandum

Longfellow Middle School

Berkeley Unified School District

February 2018



The Alameda County Safe Routes to Schools Program is funded by the Alameda County Transportation Commission. Your transportation dollars at work!

LONGFELLOW MIDDLE SCHOOL

A School Safety Assessment was conducted at Longfellow Middle School in Berkeley during the morning arrival on February 28, 2018. The assessment was attended by representatives from the City of Berkeley, Alameda County Safe Routes to School staff and Longfellow Middle School staff, parents, and students.

Participants included:

- Eric Anderson, City of Berkeley Associate Transportation Planner
- Peter Chun, City of Berkeley Associate Traffic Engineer
- Josh Handel, City of Berkeley Public Works
- Rosina Keren, Longfellow Middle School staff
- Brett Hondorp, Alameda County SR2S planner
- Beth Martin, Alameda County SR2S planner
- Nick Bleich, Alameda County SR2S engineer
- Longfellow Middle School parents
- Longfellow Middle School students

School Information

Address	1500 Derby St, Berkeley, CA 94703
Morning Bell(s)	9:00 am, 8:10 am Period 0
Afternoon Bell(s)	3:05 pm, 2:00 pm on Wednesday
Grade Levels	Grades 6-8
Enrollment	514
Students' Proximity to School (Percentage of students)	School Estimate: Less than ¼ mile (5-minute walk): 20% Between ¼ and ½ mile (5-10-minute walk): 20% Between ½ and 1 mile (10 to 20-minute walk): 20% Greater than 1 mile (more than 20-minute walk): 40%
Student Travel Mode Info (Percentage of students)	School Estimate: Walking: 20% Biking: 10% School bus: 1% Transit: 20% Carpool: 9% Family Vehicle: 40% Other: 0%

Does the school have bike racks? What is the capacity? Is it secure bike parking? On a typical day, what percentage of racks are used?	Yes, multiple racks in the inner courtyard. Bike racks not secure. Around 90% full on day of assessment.
How do school and transit buses interact with the school?	Students use AC Transit to get to school
Does the school have special pick-up/drop-off policies/procedures?	No

Longfellow Middle School is bounded by Derby Street on the north, Ward Street on the south, Sacramento Street on the west and California Street on the east. Sacramento Street is a high volume major street with two lanes each direction and a raised center median. California, Derby and Ward Streets are local residential streets. California Street is a designated Bicycle Boulevard, and Derby Street is a proposed Bicycle Boulevard in the 2017 Bicycle Plan.

The main campus entry gate is on Derby Street, with a secondary gated entrance on Ward Street. The school's cafeteria is located in a separate building on the south side of Ward Street, which requires students to cross Ward Street mid-block to access during the lunch period. A marked raised crosswalk with an actuated beacon has been installed at this crossing.

Within a quarter mile of the school, there were 11 pedestrian collisions and 16 bicycle collisions between 2011 and 2016, mainly on Sacramento Street and California Street. One of the students in attendance reported being hit by a car while crossing Sacramento Street and Derby Street on foot.

Existing Conditions

Participants observed and reported the following existing conditions during the school safety assessment (SSA).

1. Sacramento Street/Ward Street

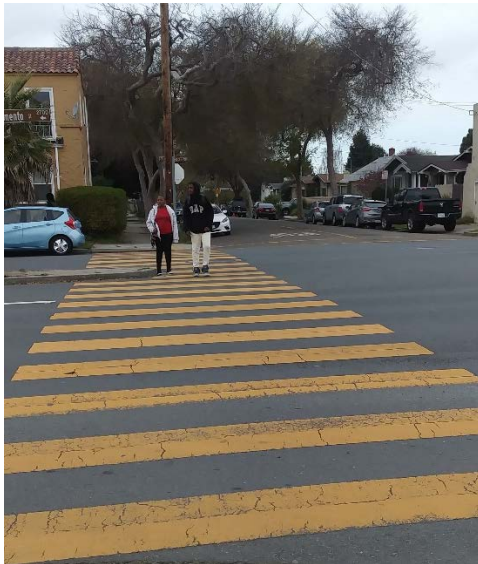
- ◆ The team observed students crossing the signalized intersection of Sacramento Street at Ward Street in the morning. The intersection has high visibility crosswalks across Sacramento Street, and transverse crosswalks across Ward Street. The crosswalks across Ward Street appeared slightly faded and worn.
- ◆ The pedestrian phase is not on recall (requires push button to activate), and SSA participants observed that when activated, the countdown is too short to provide adequate time for students crossing.
- ◆ The road width of Sacramento is around 85 feet, and the team observed that this is a very long pedestrian crossing distance. There is a small median island with a push button for students to wait if they can't finish crossing Sacramento Street. The median island does not have a pass-through area or an ADA ramp.



Intersection of Sacramento Street and Ward Street.

2. Sacramento Street/Derby Street

- ◆ At the unsignalized intersection of Sacramento Street and Derby Street, the team observed vehicles making left and right turns from Sacramento Street onto Derby Street at high speeds. The median along Sacramento Street extends part way into the crosswalk, partially obstructing its width, but not providing a full refuge area. The team observed students waiting in the middle of Sacramento Street for vehicles to yield, or running across Sacramento Street to avoid fast-moving cars through that intersection.



Left: Students wait in the middle of Sacramento Street to cross.



Right: Student dashes across Sacramento Street to avoid fast-moving traffic.

- ◆ Cars had to inch forward through the Derby Street crosswalk at Sacramento Street to see oncoming traffic; students trying to cross Derby Street had to walk behind or through a set of cars.

3. Derby Street School Frontage

- ◆ Derby Street is the designated vehicular drop off area for the school. The school curb frontage is signed for active loading from 8:30 AM to 9:30 AM and from 2:00 PM to 3:30 PM.
- ◆ Due to inefficient use of the designated loading zone the team observed many cars double parking and dropping off in the travel lanes in both directions on Derby Street.
- ◆ The parents in attendance noted that there is more school-related traffic and more double parking during dropoff for period 0 (starting at 8:00 AM) and for afternoon dismissal. During those busier times, parents noted that students are often dropped off on the opposite curb and walk across the street, crossing in front of and between other unloading cars.



White minivan double parked in the travel lane opposite the school entrance on Derby Street.

4. Derby Street/California Street

- ◆ The vegetation in the traffic circle at Derby Street and California Street is tall and obstructs visibility across the intersection from all approaches. SSA participants observed that drivers had difficulty seeing students walking or biking through the intersection and would brake quickly to avoid hitting people in the intersection as they came around the circle. Most cars traveled slowly through the traffic circle, but the team observed at least two cars traveling at high speed.



The tall vegetation in the center roundabout of Derby Street and California Street impedes visibility between drivers and those walking and biking.

- ◆ Students biked south on California Street accessing the school by turning left onto Derby Street. Several students biking would bike across Derby Street in the crosswalk and ride onto the school-side sidewalk to access the main school gate.

5. Ward Street

- ◆ Longfellow students cross Ward Street during the lunch periods to reach the cafeteria located in a separate building on the south side of Ward Street. Currently there is a raised crosswalk with pedestrian activated beacons on each side of the crosswalk. The lights of one of the beacons is not working.
- ◆ SSA participants said that that even with the enhanced crossing, they observed cars failing to yield to students in the crosswalk. Teachers noted that during the two lunch periods, they had a staff assigned to monitor the crosswalk as a safety precaution.



Raised crosswalk and pedestrian activated beacons across Ward Street connects students from classrooms to cafeteria.

6. Playing Field Driveway Access

- ◆ On Derby Street, there is an unpaved driveway access across the sidewalk that provides maintenance vehicle access to the playing fields. The sidewalk is crumbling at this spot and the dirt is tracked onto the sidewalk.



Sidewalk is crumbling and has dirt tracked across its width

7. On Campus

- ◆ The school recently installed a second area for bike parking on campus. On the day of the School Safety Assessment, the two bike areas and scooter cage was nearly at capacity.



Bike and scooter parking areas in the central courtyard

Recommendations

Recommendations to improve infrastructure or operations surrounding Longfellow Middle School are shown on the conceptual improvement plan found on the following page.

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

Policy & Program Recommendations

- ◆ Distribute Recommended Walk/Bike Maps to students and their families in an effort to promote walking and biking to school on suggested routes. Safety tips are also included on these maps to promote good behavior among bicyclists, pedestrians, and drivers. SR2S resources would be very useful in creating these documents.
- ◆ Work with parents to connect them with others who live nearby to increase the number of students carpooling, which may reduce the number of vehicles coming to campus.
- ◆ Located off of the Bike Boulevard on California Street, Longfellow Middle School is a bike-friendly destination for organizing a Bike Train among students and parents.
- ◆ Participate in more SR2S events, including Drive Your Bike, Pedestrian Safety Rodeos, and the Step Up Assembly.
- ◆ Participate in SR2S evaluations each fall and spring to monitor progress on mode shift goals.

Transit Recommendations

- ◆ Longfellow Middle School is well served by AC Transit with bus stops for the 88 near Sacramento Street and Ward Street, and the 12 and 36 running on nearby Martin Luther King Jr Way and Dwight Way, respectively.

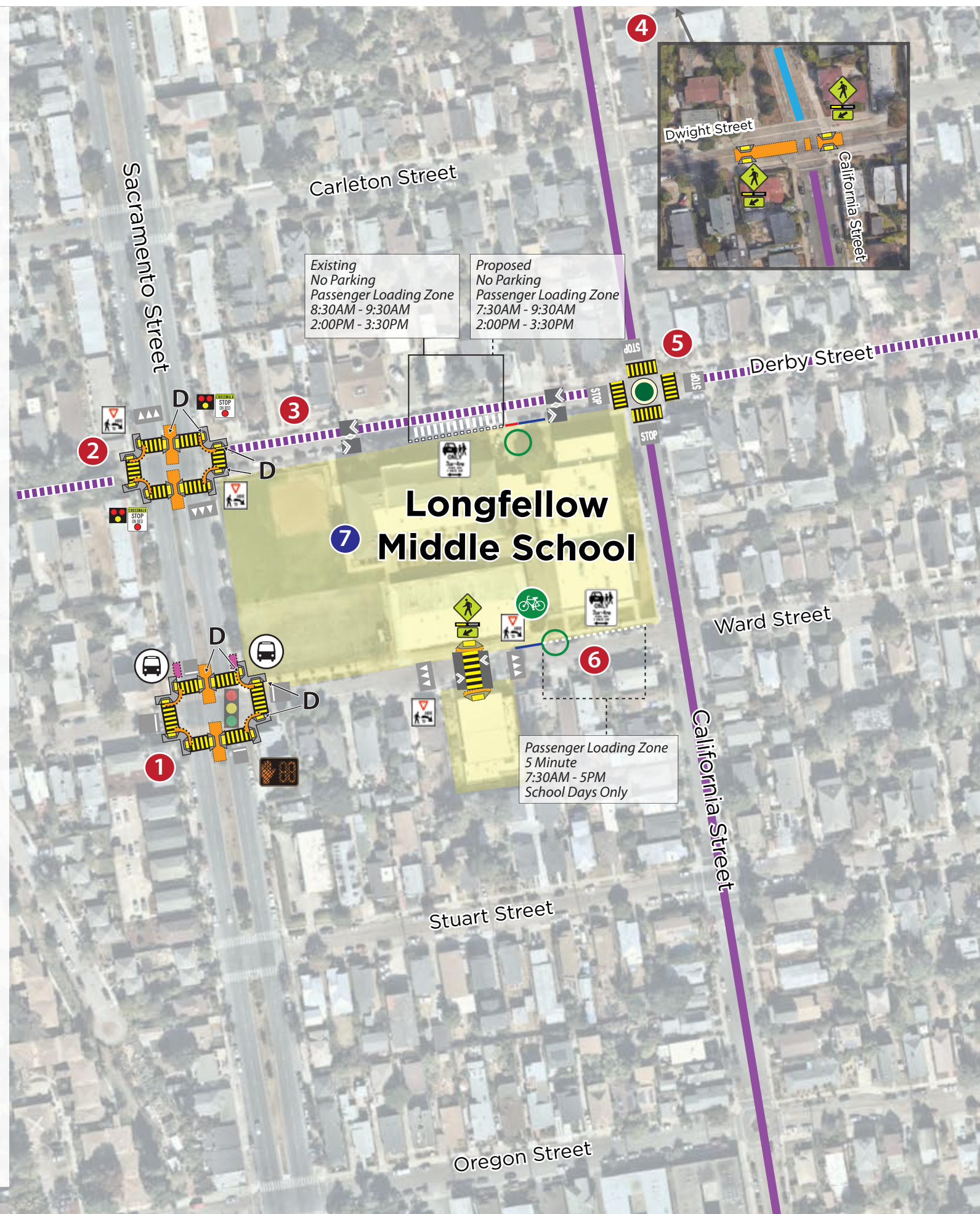
- ◆ Install landing pads for bus stops on Sacramento Street by Ward Street to improve accessibility.
- ◆ The most recent school estimate indicated that 20% of students use transit to get to/from school.
- ◆ Use the Transit Training Program to teach/refresh students on the basics of transit riding.

Longfellow Middle, BERKELEY

Safe Routes to Schools Improvement Plan

Site Assessment held FEBRUARY 2018

- 1 Sacramento Street/ Ward Street**
 - 1a. Consider signal modification to reduce pedestrian-vehicle conflicts. Improvements are subject to traffic operations analysis.
 - 1b. Install directional curb ramps and bulb-outs at all corners*
 - 1c. Install high visibility crosswalks on all approaches
 - 1d. Extend median past crosswalk to provide ADA compliant pedestrian refuge space on Sacramento crossings
 - 1e. In partnership with AC Transit, install bus pads for bus stops to improve accessibility
 - 1f. Add stop bars on all four approaches
- 2 Sacramento Street/ Derby Street**
 - 2a. Install directional curb ramps and bulb-outs at all corners*
 - 2b. Install high visibility crosswalks on all approaches.
 - 2c. Install advanced yield markings and R1-5 "Yield Here to Pedestrians" Signage in front of Sacramento Street crosswalks
 - 2d. Implement recommendations of City of Berkeley Bicycle Plan to install a Bike Boulevard along Derby Street, including additional traffic calming and vehicle access restrictions at major crossings
 - 2e. Extend median past crosswalk to provide pedestrian refuge area on Sacramento crossings
 - 2f. Install Pedestrian Hybrid Beacon as recommended by the Bicycle Plan. Pedestrian Hybrid Beacon should be bike accessible with push-buttons facing Derby Street
 - 2g. Study the removal of left turn pockets on Sacramento Street to provide additional median space
- 3 Derby Street School Frontage**
 - 3a. Extend loading zone timing before 8:00am to accommodate Period 0 dropoffs; update R-25D signs to reflect earlier passenger loading zone timing
 - 3b. Encourage parents to drop off students along the school-side curb and explore implementing a rolling drop off
 - 3c. Explore installing speed humps on Derby Street
 - 3d. Implement recommendations of City of Berkeley Bicycle Plan to install a Bike Boulevard along Derby Street, including additional traffic calming and vehicle access restrictions at major crossings
 - 3e. Reconstruct sidewalk and pave driveway access with a hard surface to prevent dirt from being tracked onto sidewalk. Coordination is required between the City of Berkeley and Longfellow Middle School
- 4 Dwight Street / California Street**
 - 4a. Install Rectangular Rapid Flashing Beacon as recommended by the City of Berkeley Bicycle Plan
 - 4b. Install a median island that runs continuously through the intersection, preventing north & south vehicle travel, but allow bicycle movement



LEGEND

Existing Conditions

- Stop Sign
- Bus Stop
- Traffic Signal
- Bike Parking
- Traffic Circle
- Red Curb
- Blue Curb
- Standard Bike Lane
- Bicycle Boulevard
- Drain Inlets
- School Access Point

2017 Berkeley Bike Plan Recommendations

- Bicycle Boulevard
- Pedestrian Hawk Beacon (PHB/HAWK)

Recommendations

- Signal Modification*
- High Visibility Crosswalk
- Advanced Yield Markings
- Pedestrian Refuge
- Rolling Drop Off
- R-25D School Passenger Loading signage
- Rectangular Rapid Flashing Beacon
- Bus Pad
- White Curb / Passenger Loading Zone
- R1-5 "Yield Here to Pedestrians" Signage
- Speed Humps
- Advanced Stop Bar
- Bulb-out or Curb Extension**
- Raised Crosswalk
- City of Berkeley Recommendation
- Berkeley Unified School District Recommendation

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.

*Subject to turn movement conflict analysis

** Subject to turn movement and radius analysis

0 200 ft

Improvements not to scale



Longfellow Middle, BERKELEY

Safe Routes to Schools Improvement Plan

Site Assessment held FEBRUARY 2018

- 5 Derby Street / California Street**
 - 5a. Trim vegetation in the traffic circle to increase visibility
 - 5b. Install high visibility crosswalks on all approaches
 - 5c. Encourage ice cream trucks to park further away from intersection during afternoon dismissal
- 6 Ward Street**
 - 6a. Replace light in pedestrian activated beacon that is no longer working
 - 6b. Create additional curbside passenger loading zone area on Ward Street
 - 6c. Install curb extension on both side of the raised crosswalk to prevent vehicular through traffic
- 7 On Campus**
 - 7a. Install more secure bike and scooter parking options



LEGEND

Existing Conditions

- Stop Sign
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- Traffic Signal
- Bike Parking
- Traffic Circle
- Red Curb
- Blue Curb
- Standard Bike Lane
- Bicycle Boulevard
- Drain Inlets
- School Access Point

2017 Berkeley Bike Plan Recommendations

- Bicycle Boulevard
- Pedestrian Hawk Beacon (PHB/HAWK)

Recommendations

- Signal Modification*
- High Visibility Crosswalk
- Advanced Yield Markings
- Pedestrian Refuge
- Rolling Drop Off
- R-25D School Passenger Loading signage
- Rectangular Rapid Flashing Beacon
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- R1-5 "Yield Here to Pedestrians" Signage
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- Raised Crosswalk
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0 200 ft

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