



School Safety Assessment Technical Memorandum

CRAGMONT ELEMENTARY SCHOOL

830 Regal Rd, Berkeley, CA 94708

Berkeley Unified School District

October 2022



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 Measure BB sales tax, and regional, state, and federal funds.

Cragmont Elementary School


A school safety assessment was conducted at Cragmont Elementary School in Berkeley during the morning arrival on October 25, 2022. The assessment was attended by representatives from the City of Berkeley, Alameda County Safe Routes to Schools staff, and Cragmont Elementary School staff and parents.

Participants included:

- Beth Thomas, Principal Planner, City of Berkeley Public Works Department
- Guillermo Jaramillo, Engineer, City of Berkeley Public Works Department
- Candyce Cannon, Principal, Cragmont Elementary School
- Ana Vasudeo, Berkeley Unified School District
- Mauricio Hernandez, Planner, Alameda County SR2S team
- George Foster, Planner, Alameda County SR2S team
- Nathan Sharafian, Engineer, Alameda County SR2S team
- Three Cragmont Elementary School parents

School Information



Location & Enrollment



	Address:	830 Regal Rd, Berkeley, CA 94708
	Morning Bell(s):	8:55 AM
	Afternoon Bell(s):	TK and Kindergarten 2:15 PM (Mo-Fr) Grades 1-5 3:10 PM (Mo, Tu, Th, Fr) 2:15 PM (We)
	Grade Levels:	TK-5
	Enrollment:	303
	School Type (neighborhood/ magnet/charter):	Neighborhood

Student Travel Data

<p>Student Travel Mode Info:</p>	<p>Recent SR2S Hand Tally Data:</p> <p>Spring 2014</p> <p>Walking: 10%</p> <p>Biking: 1%</p> <p>School bus: 24%</p> <p>Transit: 0%</p> <p>Carpool: 5%</p> <p>Family Vehicle: 60%</p> <p>Other: 0%</p>
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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>There are three U-racks outside of the main office along the southern sidewalk of Regal Rd with capacity for six bikes.</p> <p>Typically, there are only three or fewer bicycles using the rack outside the school, though several parents were observed dropping students off with their own longtail bikes.</p>
<p>How do school buses interact with the school?</p>		<p>School buses drop off and pick up students from the eastern sidewalk on Spruce St, north of the intersection with Marin Ave.</p>

Do local transit agencies serve the school? Are there stops within ¼ mile?		AC Transit Route 67, on Spruce St, has stops at the northeast and southwest corners of the intersection with Marin Ave (NE stop adjacent to school pictured).
Does the school have special pick-up/drop-off policies/procedures?		There are three school access points: Spruce St, Regal Rd, and Marin Ave. Although all are available during pick-up and drop-off, the school recommends using the Spruce St entrance for safety reasons, where a staff person waits in the morning to greet students as they arrive. This is also where school buses park.

Street Profiles

Street Name	Width	Lanes	Posted Speed Limit	Traffic Volumes	Notes
Regal Rd	24 feet	2 lanes	25 mph		
Spruce St	36 feet	2 lanes	25 mph		Sharrows
Cragmont Ave	22 feet	2 lanes	25 mph		
Marin Ave	23 feet	2 lanes	20 mph		

Pedestrian- and Bicycle-Involved Collision Summary 2017-2021

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-related travel.

Radius from School	Total Collisions	Fatal Collisions	Severe Injury Collisions	Visible Injury Collisions	Complaint of Pain Collisions	Pedestrian Collisions	Bicycle Collisions
< ¼ mi	5	0	0	2	3	1	4
¼ mi – ½ mi	11	0	2	9	0	1	10
Total	16	0	2	11	3	2	14

Source: UC Berkeley – Transportation Injury Mapping System, Safe Transportation Research and Education Center, University of California, Berkeley, 2022

Community Health and Demographics (Data from the census tract of school site)

Percent of Students Eligible for Free or Reduced Priced Meals ('20-'21 school year)	MTC Equity Priority Community Designation (2018)	Healthy Places Index Score (2021)	CalEnviroScreen 4.0 Percentile (2021)
24.6%	None	99.2	1

Sources: California Department of Education, Metropolitan Transportation Commission, Public Health Alliance of Southern California, and California Office of Environmental Health Hazard Assessment

Existing Conditions

Overview

Cragmont Elementary School is set in the Berkeley Hills, where narrow, winding roads traverse the sloping geography. The school is bounded by Spruce St, Regal Rd, Cragmont Ave, and Marin Ave. There are three access points families use to drop off and pick up students: Spruce St, Regal Rd, and Marin Ave.

For safety reasons, the school recommends that students be dropped off at the bottom of the stairs on Spruce St, where a staff person waits in the morning to greet students as they arrive. Buses park at the base of the steps and cars are not allowed to park in the designated bus parking. Limited curb space is available on Regal Rd for drivers to drop off/pick up students curbside. There is no parking on Marin Ave. The school entrance can be accessed via the playground by parking elsewhere and walking, using the crosswalk at Cragmont Ave and Marin Ave, where a crossing guard is available to assist. The intersection of Marin and Spruce also has a crossing guard to facilitate crossing at that crosswalk.

[Berkeley's Vision Zero Action Plan](#) identifies Spruce St, Euclid Ave, and Marin Ave as High-Injury Streets for people walking and riding bikes, where the majority of the City's severe and fatal collisions occur. These three corridors are also included in the [Pedestrian and Bicycle High-Injury Network](#) identified in the 2019 Countywide Active Transportation Plan for both the countywide network and the local network .

Observations

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

1. Regal Rd and Spruce St (*Corresponds to #1 on improvement map*)

- ◆ The T-intersection of Regal Rd at Spruce St is stop-controlled on the Regal Rd approach and has marked crosswalks on the southern and eastern legs.
- ◆ At the intersection, Spruce St curves away from Regal Rd on an incline, going downhill as one travels southbound.
- ◆ Bicycles were observed traveling in both directions.
- ◆ Southbound drivers on Spruce St have a blind, downhill turn as they approach the crosswalk at Regal Rd.
 - Participants observed drivers crossing the double yellow centerline to pass stopped garbage and delivery trucks around this blind turn, with limited sightlines to the crosswalk across Spruce St.
 - The crosswalk across Spruce St ends in a driveway on the western side of the street.
- ◆ The large curb radii and width of the Regal Rd approach allow for faster vehicle turns and make it easier to block crosswalks at the corners.



Left: Crosswalk across Spruce Street at Regal Rd looking uphill (north) at the blind turn.

Right: Crosswalk across Regal Rd at Spruce St is extremely long (65 feet) and without protection for pedestrians.

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- *Study options across Spruce St for crosswalk relocation. Consider sightlines, elevation, and driveway access to determine what is the safest, but also more accessible location. Crosswalk relocation may include the construction of curb ramps, red curb, signage, pavement markings, and street lighting for the new crosswalk. Multiple components of potential crosswalk relocation are subject to traffic engineer review and residential outreach.*
- *Short term, consider constructing a paint and post curb extension on Regal Rd on the northeast corner of the intersection with Spruce St. Long term, consider upgrading paint and post to concrete curb extension, with attention to concerns about existing stormwater drainage infrastructure, adjacent driveways, and potential crosswalk relocation in the design. Outreach to residents will be necessary due to the potential impacts on residential parking.*
- *Consider conducting a warrant study for all-way stop control.*

2. Regal Rd and Cragmont Ave (Corresponds to #2 on improvement map)

- ◆ Regal Rd at Cragmont Ave is stop-controlled on all four approaches, and has marked crosswalks on the northern, western, and southern legs. Both roads have one travel lane in each direction with on-street parking.
 - This is an offset, angled intersection with wide approaches at non-right angles.
 - The southern curb of the western leg of Regal Rd is red curb.
- ◆ Drivers traveling east on Regal Rd were seen entering the intersection without stopping at the stop sign.
- ◆ Drivers parked along red curb zone or double parked on Regal Rd to drop off their students.
- ◆ A walking school bus crossed at this intersection.



Left: Wide intersection geometry looking west toward Regal Rd. Some drivers failed to comply with stop sign on the left.

Right: Aerial map of the intersection geometry of Cragmont Ave and Regal Rd.

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- *Consider squaring the offset intersection by constructing curb extensions on the southwestern corner where the southern leg of Cragmont Ave intersects with Regal Rd, and on the northeastern side of Regal Rd where it intersects with the northern leg of Cragmont Ave. Further engineering design and residential outreach will be necessary prior to implementation.*
- *Restripe existing high-visibility crosswalks (northern, western, and southern legs) as triple-fours, and stop bars at all legs (requires verification of sight lines by the city traffic engineer).*
- *Extend red curb 35 ft on the south side of Regal Rd, from Cragmont Ave to the crosswalk west of Cragmont Ave (requires sight line verifications from the city traffic engineer). Residential outreach will also be necessary prior to implementation.*

3. Marin Ave and Cragmont Ave *(Corresponds to #3 on improvement map)*

- ◆ Marin Ave at Cragmont Ave is stop-controlled on the Cragmont Ave approaches and has marked crosswalks on the northern and southern legs.
 - This offset intersection also has a third crosswalk, running perpendicular across Marin Ave from the northwestern and southeastern corners of the intersection.
 - Both roads have one travel lane in each direction. Signage on Cragmont Ave is unclear about on-street parking, though most of the eastern curb of the southern leg of Cragmont Ave is red curb.
 - Speed feedback signs on Marin Ave have since been installed by the City of Berkeley.
- ◆ Drivers parked vehicles partially on the sidewalk blocking pedestrian access.
 - While parking in such a manner did provide enough width for through traffic on the road, conversely it blocked sidewalks for children and anyone walking to access the sidewalk, forcing them into the street to travel.
- ◆ Most pedestrians walking through the intersection were not dropped off at the intersection.
 - Some parents use Cragmont Ave as a park-and-walk location and walk through this intersection to reach campus.
 - Some students walked alone, while most students observed were with their caregivers.



Above: Parked cars blocking sidewalks on Cragmont Ave north of the intersection.

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- *Conduct residential outreach to remind residents to not park on the sidewalk. Long term, if efforts to stop sidewalk parking are not successful, study options for balancing residential parking and sidewalk accessibility on Cragmont Ave between Marin Ave and Regal Rd. Options may include time-limited parking restrictions during school arrival and dismissal times.*
- *Upgrade existing transverse crosswalk across the northern approach to a triple-four crosswalk.*
- *Consider installing RRFBs for Marin Ave crossing.*
- *Extend red curb 90 ft on the east side of the southern leg of Cragmont Ave to the intersection approach with Marin Ave (project in-progress by the City of Berkeley).*

4. Marin Ave and Spruce St (Corresponds to #4 on improvement map)

- ◆ **Marin Ave at Spruce St is stop-controlled on all four approaches and has marked, high-visibility crosswalks on all four legs. Both roads have one travel lane in each direction, and Spruce St is a designated Bicycle Route with sharrows.**
 - **Crosswalks have since been restriped as triple-four crosswalks by the City of Berkeley on all four legs. Stop bars have been restriped as well.**

- ◆ There is a lot of perceived speeding near this intersection on both Spruce St and Marin Ave for all four legs.
- ◆ It is difficult for drivers to see pedestrians entering the intersection from the western approach on Marin Ave due to the existing slope of Marin Ave.
- ◆ Drivers stopped in the western crosswalk across Marin Ave as they drove east on Marin Ave.
 - The stop sign at the western leg of Marin Ave was not placed in a California Manual on Uniform Traffic Control Devices (CA MUTCD) compliant position.
- ◆ Sidewalks on northwest and southwest corners are in poor condition and missing segments (discontinuous). The southwest corner is missing a curb ramp.

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- *Construct curb ramp to make southwest corner ADA accessible (will require field verification from city traffic engineer prior to implementation).*
- *Long term: Construct 4 ft of sidewalk to fill missing gap at the southwest corner.*

5. Regal Rd *(Corresponds to #5 on improvement map)*

- ◆ Regal Rd, between Spruce St and Cragmont Ave, is a serpentine, local road with one travel lane in each direction and on-street parking on the northern curb. It fronts the school's main office entrance, though the school discourages pick up and drop off of students on this road.
 - Regal Rd is stop-controlled on its approaches to Spruce St and Cragmont Ave, and has no marked crosswalks mid-block.
 - The entire southern curb is red curb along this section.
- ◆ Most observed vehicle traffic was traveling eastbound, uphill.
- ◆ There was perceived driver speeding in both directions.
- ◆ During the observation, participants observed double parking, parking along red curbs, and parked cars blocking driveways.
- ◆ Students were observed crossing Regal Rd mid-block, sometimes from between parked cars where they were difficult to see.
- ◆ Regal Rd has vertical and lateral curves immediately in front of the school entrance. Participants noted that pedestrian and vehicular visibility is difficult when driving through that roadway segment.
- ◆ Sections of sidewalk along Regal Rd on the western sidewalk near the intersection with Spruce St are uneven due to tree roots.

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- *Restripe red curb paint on southern curb of Regal Rd between Cragmont Ave and Spruce St.*
- *Conduct a circulation traffic engineering study for Regal Rd between Spruce St and Cragmont Ave in consideration for eastbound one-way traffic flow with access from Spruce St. If the recommendation does not proceed, consider adding “No Stopping” signs along the southern curb.*

Participant Comments

Generally, attendees commented on issues with roadway geometry. Streets are steep, winding, and narrow. While appropriate for the topography and density, it does create some issues during congested periods, especially for more vulnerable roadway users, like children. Perceived speeding, blind turns, and blocked lanes are paramount concerns for Cragmont Elementary School families.

Recommendations

Engineering Recommendations

Recommendations to improve infrastructure or operations surrounding Cragmont Elementary 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 Cragmont Elementary School.

The School Site Coordinator for Cragmont Elementary School is Sheila Islam. 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:

Sheila Islam, sislam@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 Cragmont Elementary School to increase safety and active commutes to school.

- ◆ Develop Walk and Bicycle Route Maps
 - The SR2S Program can create recommended Walk and Bicycle Route Maps. These maps illustrate preferred routes to school for walking and biking and provide safety tips to encourage better travel behavior.
 - These maps can also be used as a part of Walking School Buses (WSBs), Bicycle Trains (BTs), or other Walk and Roll to School activities. Park and Walk, WSB, and BT meeting locations are also shown on these maps where appropriate.
- ◆ 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.
- ◆ Facilitate Walking School Buses and Bicycle Trains
 - Walking School Buses (WSBs) and Bicycle Trains (BTs) are groups of students, led by parent/adult chaperone(s), that meet at designated locations and times to gather and walk and/or bike to school together. WSBs and BTs can be regular events, occurring daily, weekly, monthly, or in coordination with other events like International Walk and Roll to School Day or the Golden Sneaker Contest. SR2S staff can assist schools with the planning, coordination, and execution of the WSBs and BTs. Walking and biking in groups with parental supervision can increase the visibility of these road users and reduce barriers to walking or biking for some families while making it fun and exciting for the students.
- ◆ Schedule Pedestrian Rodeos and Bicycle Rodeos
 - These interactive rodeos are great educational opportunities to teach and refresh safe walking and bicycling behavior. These workshops cover many relevant topics, from understanding traffic signals and signs to bicycle hand signals to how to safely cross the street. Pedestrian Safety Rodeos and Bicycle Safety Rodeos are geared towards elementary school students.
- ◆ 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.

Transit Recommendations

- ◆ Cragmont Elementary School is served by transit with AC Transit Route 67 bus stops near the campus.

Safe Routes to Schools Improvement Plan
Cragmont Elementary
Berkeley

School Safety Assessment held October, 2022

Improvement Detail

- 1a Study options across Spruce St for crosswalk relocation. Consider sightlines, elevation, and driveway access to determine what is the safest, but also more accessible location. Crosswalk relocation may include the construction of curb ramps, red curb, signage, pavement markings, and street lighting for the new crosswalk. Multiple components of potential crosswalk relocation are subject to traffic engineer review and residential outreach.
- 1b Short term, consider constructing a paint and post curb extension on Regal Rd on the northeast corner of the intersection with Spruce St. Long term, consider upgrading paint and post to concrete curb extension, with attention to concerns about existing stormwater drainage infrastructure, adjacent driveways, and potential crosswalk relocation in the design. Outreach to residents will be necessary due to the potential impacts on residential parking.
- 1c Consider conducting a warrant study for all-way stop control.
- 2a Consider squaring the offset intersection by constructing curb extensions on the southwestern corner where the southern leg of Cragmont Ave intersects with Regal Rd, and on the northeastern side of Regal Rd where it intersects with the northern leg of Cragmont Ave. Further engineering design and residential outreach will be necessary prior to implementation.
- 2b Restripe existing high-visibility crosswalks (northern, western, and southern legs) as triple-fours, and add stop bars at all legs (requires verification of sight lines by the city traffic engineer).
- 2c Extend red curb 35 ft on the south side of Regal Rd, from Cragmont Ave to the crosswalk west of Cragmont Ave (requires sight line verifications from the city traffic engineer). Residential outreach will also be necessary prior to implementation.
- 3a Conduct residential outreach to remind residents to not park on the sidewalk. Long term, if efforts to stop sidewalk parking are not successful, study options for balancing residential parking and sidewalk accessibility on Cragmont Ave between Marin Ave and Regal Rd. Options may include time-limited parking restrictions during school arrival and dismissal times.
- 3b Upgrade existing transverse crosswalk across the northern approach to a triple-four crosswalk.
- 3c Consider installing RRFBs for Marin Ave crossing.
- 3d Extend red curb 90 ft on the east side of the southern leg of Cragmont Ave to the intersection approach with Marin Ave (project in-progress by the City of Berkeley).
- 4a Construct curb ramp to make southwest corner ADA accessible (will require field verification from city traffic engineer prior to implementation).
- 4b Long term: Construct 4 ft of sidewalk to fill missing gap at the southwest corner.
- 5a Restripe red curb paint on southern curb of Regal Rd between Cragmont Ave and Spruce St.
- 5b Conduct a circulation traffic engineering study for Regal Rd between Spruce St and Cragmont Ave in consideration for eastbound one-way traffic flow with access from Spruce St. If the recommendation does not proceed, consider adding "No Stopping" signs along the southern curb.



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.
This figure is intended only for reference, conceptual planning, and informational purposes. This figure should not be used to establish boundaries, property lines, location of objects, or to provide any other information typically needed for final design, construction or any other purpose when engineered plans are required.