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Clearlake Safe Routes to School Concept Plans

Burns Valley Elementary School & Pomo Elementary School

June 2024

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Advancing Safe Routes to School in Clearlake

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Introduction

Safe Routes to School

Safe Routes to School (SRTS) refers to a variety of programs aimed at increasing the number of students walking and bicycling to and from school. As recently as the 70's, 60% of students walked to school. Today, the national figure is down to 12%. SRTS programs typically involve partnerships between municipalities, school districts, community members, parents, volunteers, students and law enforcement agencies.

This report offers Clearlake opportunities for advancing SRTS. It highlights the observations and discussions that occurred during May 3, 2024. Installing healthy and sustainable habits in our children with well-located neighborhood schools, better street designs, and effective programs is an achievable and worthy goal.

Why is this important? Today's children may be the first generation to have a shorter life expectancy than their parents due to lifestyle choices. Active transportation is a great way of ensuring that children are getting the recommended 60 minutes of physical activity daily. Let's work together to make our streets and neighborhoods safe, comfortable, welcoming places.



Introduction

Safe Routes to School



Students walking to school gain many advantages, including exercise, social skills, quality time with a parent, sibling or friend, and improved academic performance. Clearlake must focus on improved walking environments not only at its school sites, but within a half mile radius of each school





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Burns Valley Elementary School

Safe Routes to School Concept Plan

June 2024

Transportation Safety and Active Transportation

Burns Valley Elementary School

Blue Zones Project Lake County, in collaboration with Burns Valley Elementary School and the City of Clearlake, facilitated the Burns Valley Elementary School Safe Routes to School (SRTS) audit, which analyzes existing conditions and provides practical solutions to encourage safe, comfortable active transportation travel to school and reduce negative impacts associated with drop-off and pick-up behaviors.

Burns Valley Elementary School was chosen for its unique school arrival and departure challenges. This SRTS Concept Plan includes considerations for traffic calming, traffic operations, street crossings, parking, intersection changes, and other built environment changes.

Observations and comments from the site visit, conducted during the morning drop-off period on May 3, 2024, are the basis for these recommendations and are included as an appendix.

Burns Valley Elementary School

- Student Grades and Ages: TK - 6 (~4 years to 12 years of age)
- Student Enrollment: ~550 students (~500 students/day attend school)
- ~60% Hispanic & high % of ESL students
- All students qualify for free meals

As part of this assessment, Dan Burden and Michael Williams, Blue Zones Built Environment Subject Matter Experts, received outstanding support from school leadership and City staff for transportation safety. This support is key to any safety effort. It is expected that safety and operational changes will need observation and refinement over time as responses to changes are evaluated.

Transportation Safety and Active Transportation

Burns Valley Elementary School

Image (L to R):

Dan Burden, Tammy Serpa, Adeline Leyba, Becky Salato, Michael Williams, Greg Damron (not pictured) conducted the May 3 audit at Burns Valley Elementary School



Transportation Safety and Active Transportation

Burns Valley Elementary School

Context:

The Burns Valley Elementary School campus and surrounding area. The school has no on-campus drop-off and pickup area.



Key Findings

Burns Valley Elementary School



Images L to R: Driver offloading student in front of the driveway and No Parking sign. A newly selected crossing guard aids students upon arrival. Narrow sidewalks in front of the Burns Valley Elementary school.



Key Findings

Burns Valley Elementary School



Images L to R:

Bussed students walking to school from Uhl Avenue; non-functioning RRFB at Olympic and Pine Street; school gate on Olive Street; parent with child walking to school at Pine and Austin.

Key Findings

Burns Valley Elementary School

The site visit observed the morning drop-off period on May 3, 2024:

- All students, except for the special education students, arrive at the school through one gate. This focuses all student and motor vehicle traffic into one congested conflict area.
- The use of Uhl Avenue by the school buses keeps the buses out of the congested area on Pine and supports a short 250-foot walk by students arriving at school.
- Motor vehicle speeds are uniformly low, likely due to the congestion and presence of children. Speeding did not appear to be a significant problem near the school site.
- The Rectangular Rapid Flash Beacons (RRFB) at Olympic and Pine were not functioning during the site visit.
- The sidewalk along the front of the school is 5-feet wide but is too narrow to hold the number of students that arrive and need to congregate at the front gate.
- The school has several other gates and arrival points which could serve as alternative access points.

Key Findings

Burns Valley Elementary School

- The parking lane on the west side of Pine Street is well occupied before much of the drop-off traffic occurs. These legally parked cars can hide students wanting to use the mid-block crosswalk from drivers.
- A food services truck was parked on the east side of Pine Street against a red curb and blocking the crosswalk in front of the special education building. The driver stated that they parked there “all the time”.
- The NO PARKING sandwich signs on both sides of Pine Street are routinely ignored by drivers stopping in the travel lane and letting students out.
- The northernmost intersection of Austin Road and Pine Street is congested with students and vehicles. This intersection requires a crossing guard and full attention from drivers. The crossing guard does double duty as both a traffic director and protector of students in the crosswalk. This double duty distracts the crossing guard from their primary task. By requiring drivers to watch for threats coming from multiple directions, it also raises the potential for conflict.
- Olive and Walnut Streets will be paved this coming Summer.



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Burns Valley Elementary School Recommendations

Proposed Transportation Safety Changes

Burns Valley Elementary School

The recommendations presented in this section include low-cost modifications to create fully separated and better arrival and departure conditions for all modes of travel during pickup and drop-off periods:

1. Convert Pine Street from Division Avenue to Olympic Drive to a northbound one-way street.
2. Convert Olive Street to a southbound one-way street.
3. Configure Walnut as a two-way street with no marked centerline.
4. Create additional entry and exit points to the school at available gates on Pine and Olive to move some of the student and motor vehicle traffic away from the front gate.
5. Provide painted curb extensions on Pine Street and Austin Road.
6. Provide painted curb extensions at midblock crosswalk on Pine Street.
7. Provide painted curb extensions at Pine Street and Olympic Drive.
8. Provide painted curb extensions at Austin Road and Uhl Avenue.

Proposed Transportation Safety Changes

Burns Valley Elementary School

9. Provide painted curb extensions at Uhl Avenue and Olympic Drive.
10. Move the fence at the front of the school away from the sidewalk to create more space for waiting students.
11. Create a remote pickup and drop-off area on Uhl Avenue and have volunteers serve as escorts or “drivers” of the walking school bus from Uhl Avenue to school.
12. Continue and reinforce the practice of having the large school buses park on Uhl Avenue for student drop-off and pickup.
13. Demarcate a drop-off zone to handle 8-12 cars at a time, requiring motorists to pull to the top of the queue. A volunteer “director” is needed to obtain driver compliance
14. Provide a neighborhood traffic circle or mini-roundabout at Olympic Drive and Pine Street (see example at <https://nacto.org/publication/urban-street-design-guide/intersections/minor-intersections/mini-roundabout/>).

Proposed Transportation Safety Changes

Burns Valley Elementary School

- 15. Provide training to all school crossing guards (see Florida school crossing guard training and certification videos and materials).
- 16. Consider a 5-minute early release for all students who are walking or bicycling.
- 17. Consider an early arrival supervised physical activity.
- 18. Collaborate with the city to create a “Twenty-is-Plenty” program to establish a 20 MPH speed limit for all streets within a quarter mile radius of the campus.





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Burns Valley Elementary School Street Design Concepts

Proposed Campus Configuration

Burns Valley Elementary School

Plan view of campus showing traffic flows, bus stops, and remote pickup/drop-off points. The one-way northbound flow of traffic on Pine Street is key to creating a linear near-side drop-off zone. Uhl Avenue should be an attractive alternative drop-off and pickup location.





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Pine Street

Existing Pine Street Configuration

Burns Valley Elementary School

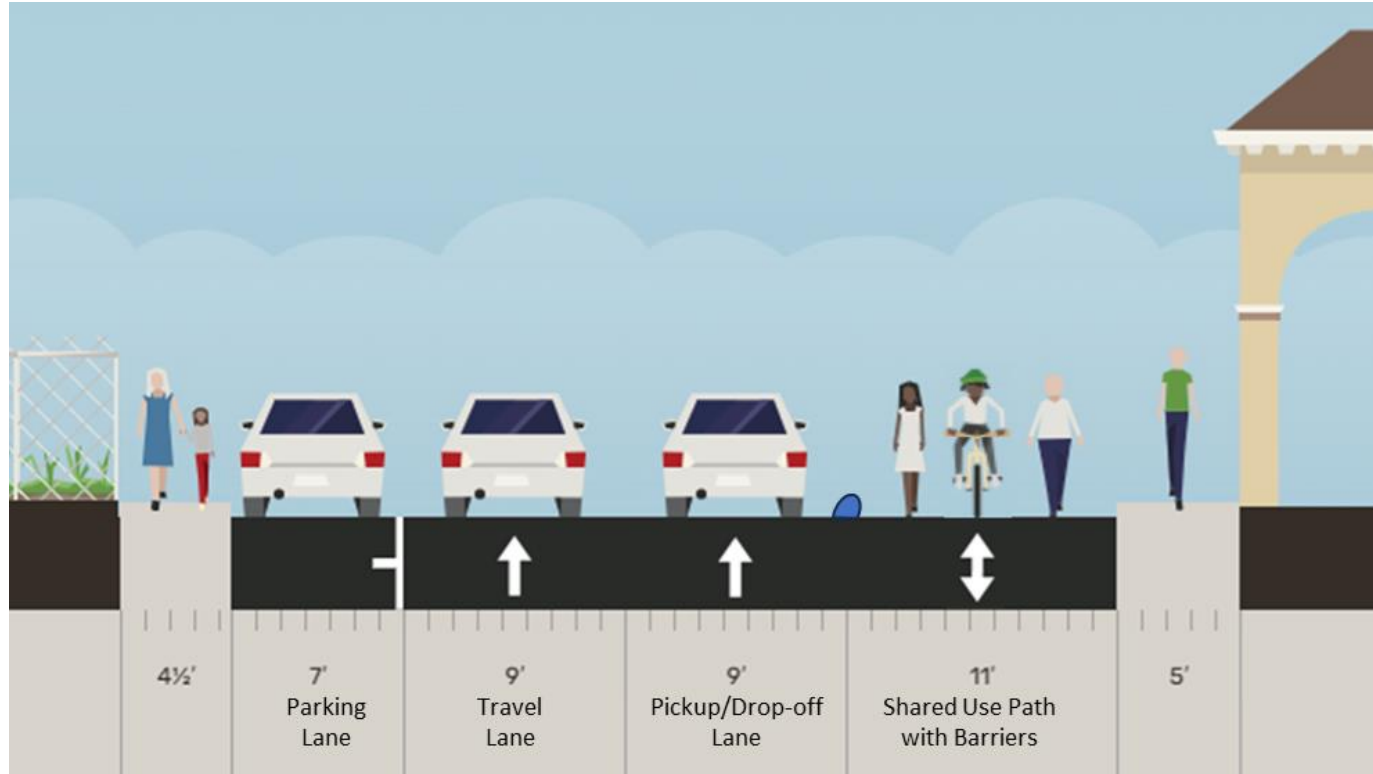


Pine Street Existing Configuration

Pine Street is 36-feet wide and is currently configured as a two-way street with curb side parking on the west side and some parking allowed on the east curb.

Proposed Pine Street Configuration

Burns Valley Elementary School



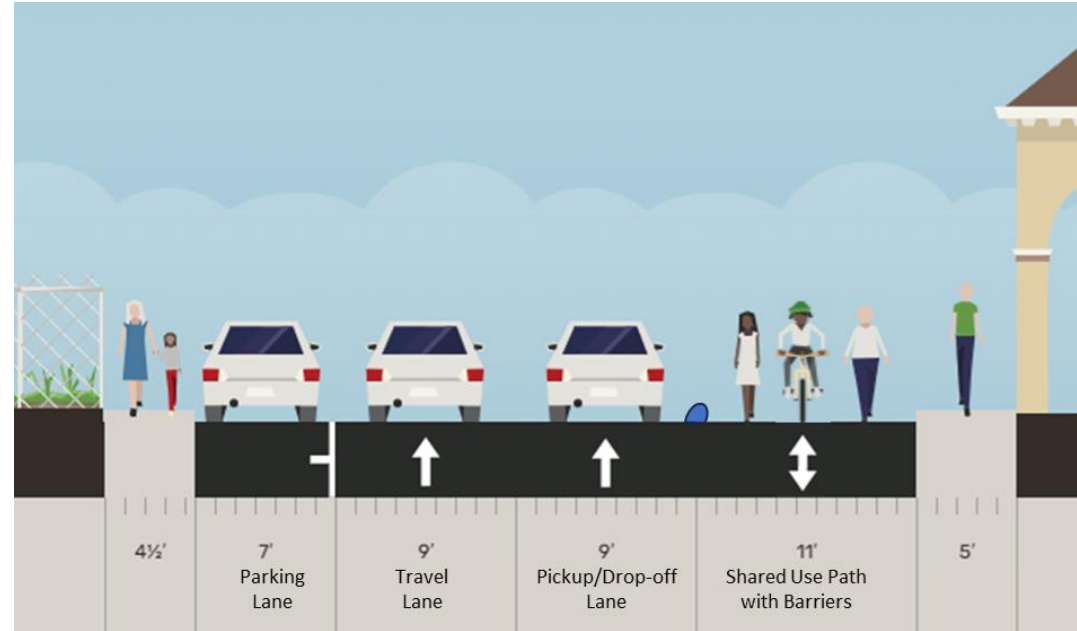
Pine Street Proposed Configuration

The proposed configuration for Pine Street consists of, from west to east, a parking lane, a northbound travel lane, a pickup/drop-off lane, and a separated, on-street shared use path.

Proposed Pine Street Configuration

Burns Valley Elementary School

- Configure Pine Street with a 11-foot wide painted, separated, on-street walking and bicycling path on the east side of Pine Street.
- Include a one-foot buffer populated with barriers (see example images).
- Provide a 9-foot pickup/drop-off lane next to the shared-use path, then a 9-foot travel lane, with a 7-foot parking lane against the western curb (see cross sections).
- This puts the front passenger door toward the school. The western parking lane should be marked as not for student pickup/drop-off.



Proposed Pine Street Configuration

Burns Valley Elementary School



Image: Plan view of Pine Street showing conceptual layout of lanes, curb extensions, and pavement markings.



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Olive Street

Existing Olive Street Configuration

Burns Valley Elementary School

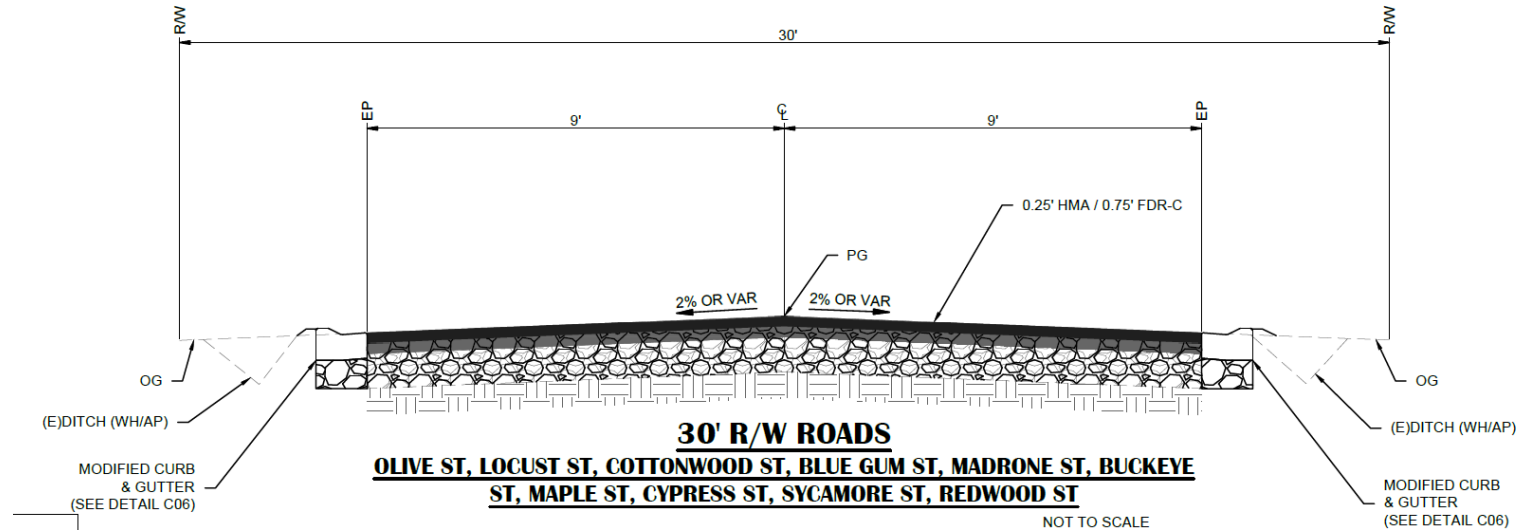


Olive Street Configuration

Olive Street is approximately 30-feet wide and is currently configured as a two-way street with deteriorated pavement and gravel or native earth shoulders.

Proposed Olive Street Configuration

Burns Valley Elementary School



Olive Street Proposed Configuration: The plan for the reconstructed Olive Street shows asphalt with a rolled curb and gutter measuring 20-foot wide with gravel shoulders. If only light use of Olive Street occurs, the street can remain unmarked. If use is heavy or northbound drivers are stopping in the travel lane for pickup/drop-off, the proposal is to mark Olive with a 10-foot wide southbound, one-way travel lane and a 10-foot wide pickup/drop-off lane next to the school. The shoulder is not an ADA-accessible path of travel.



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Pomo Elementary School

Safe Routes to School Concept Plan
June 2024

Transportation Safety and Active Transportation

Pomo Elementary School

Blue Zones Project Lake County, in collaboration with Pomo Elementary School and the City of Clearlake, facilitated the Pomo Elementary School Safe Routes to School (SRTS) audit, which analyzes existing conditions and provides practical solutions to encourage safe, comfortable active transportation travel to school and reduce negative impacts associated with drop-off and pick-up behaviors.

Pomo Elementary School was chosen for its unique school arrival and departure challenges. This SRTS Concept Plan includes considerations for traffic calming, traffic operations, street crossings, parking, intersection changes, and other built environment changes.

Observations and comments from the site visit, conducted during the afternoon drop-off period on May 3, 2024, are the basis for these recommendations and are included as an appendix.

Pomo Elementary School

- Student Grades and Ages: TK - 6
 - ~4 years to 12 years of age
- Student Enrollment:
 - ~725 students
 - ~200 bussed
 - ~40 walk
 - ~485 driven
- ~80 teachers and staff working at the school

As part of this assessment, Dan Burden and Michael Williams, Blue Zones Built Environment Subject Matter Experts, received outstanding support from school leadership and City staff for transportation safety. This support is key to any safety effort. It is expected that safety changes will need observation and refinement over time as responses to changes are evaluated.

Transportation Safety and Active Transportation

Pomo Elementary School

Image (L to R):

Dan Burden, Michael Williams, Jamey Gill, Becky Salato, Principal April Ellis, Greg Damron (not pictured) conducted the May 3 audit at Pomo Elementary School



Transportation Safety and Active Transportation

Pomo Elementary School

Context:

The Pomo Elementary School campus and surrounding area.

The campus sees limited school-side pickup activity, with many parents using the far side lots for drop-offs and pick-up, creating a safety challenge. The skewed intersection at Arrowhead Road, Acacia Street, Pomo Road and Huntington Avenue poses an additional risk.



Transportation Safety and Active Transportation

Pomo Elementary School



Students walking to
Pomo Elementary
School.

Key Findings

Pomo Elementary School



Acacia Street

Afternoon pickup in the right lane. Motorists parking in the bike lane (left side) create unsafe sight lines.

Key Findings

Pomo Elementary School



Sonoma Avenue at Acacia Street

Access gate and student waiting area. Note the lack of a crosswalk, ramps and high visibility clothing for the crossing guard. Also, there is no sheltered area.

Existing Sonoma Avenue Configuration

Pomo Elementary School



Sonoma Avenue

Sonoma Avenue is currently configured as a two-way street with deteriorated pavement, uneven terrain, and gravel or native earth shoulders.

Key Findings

Pomo Elementary School

The site visit observed the afternoon pickup period on May 3, 2024:

- All students departed from two gates, with most students leaving from the northern gate at the intersection of Acacia Street and Sonoma Avenue.
- The majority of drivers arrive at the school by traveling along Acacia Street.
- Many drivers leave via Acacia Street, but a steady stream of drivers was also observed leaving via Sonoma Avenue and Boxwood Street.
- The on-campus U-shaped drive is used as a student staging area for the school buses. This does an excellent job of separating those students from private vehicle traffic.
- The campus has other gates which could serve as alternate access points, supervised by volunteers, as needed.
- The gate near the intersection of Sonoma Avenue and Acacia Street, from which most children leave the campus, has a field nearby which functions as a good staging area for students.

Key Findings

Pomo Elementary School

- The bicycle lane on the west side of Acacia Street was unused by bicyclists during our observations. It was well-used by pedestrians as a sidewalk and by motorists as a parking lane.
- Sonoma Avenue will be paved in Summer 2024. This will likely make Sonoma more attractive to drivers as a way to leave the school area.
- There is little traffic on Acacia north of the school. Only two homes and a collection of buildings, which appeared to be part of the school campus, exist on that portion of Acacia, supporting the use of Acacia as a one-way street.
- Burns Valley Road north and west of Acacia Street will be paved in Summer 2024. This may make Burns Valley Road and Acacia Street a more attractive route for nearby residents wanting to drop-off or pickup students.



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Pomo Elementary School Recommendations

Proposed Transportation Safety Changes

Pomo Elementary School

The recommended changes include low-cost modifications to create fully separated and better arrival and departure conditions for all modes of travel during pickup and drop-off periods. These recommendations are:

1. Continue the practice of having the school buses using the on-campus, U-shaped driveway for pickup and drop-off. This eliminates conflicts between school bus pickup/drop-off and private vehicles.
2. Boxwood Street should be paved during the construction work this Summer to create a loop that is attractive to all drivers and to reduce drivers' desire to leave by traveling south on Acacia Street.
3. Close Huntington Avenue at the Arrowhead/Acacia/Pomo intersection to create a standard four-way intersection and a calmed Huntington Avenue. Mark crosswalks on all legs of the intersection. Inform nearby residents of recent California law, AB413, that prohibits parking near intersections and enforce if necessary.
4. Re-locate the entry/exit driveways to the parking lot on the west side of Acacia Street to the east side of Boxwood Street and close those permitting access to Acacia Street. This moves vehicle turning activity away from the student-dominated area and provides more flexible access via the two-way Boxwood Street.
5. Install crosswalk markings at the Sonoma Avenue / Acacia Street intersection, and use raised crosswalks.

Proposed Transportation Safety Changes

Pomo Elementary School

6. Allow pickup and drop-off to occur for the length of the proposed street treatment on Acacia Street.
7. Configure both crosswalks near the school on Acacia Street as 12-foot-wide raised crosswalks. These raised crosswalks will help keep vehicle speeds low in the area where the greatest pedestrian and student traffic exists.
8. Provide curb extensions on Acacia Street at Sonoma Avenue. This will help slow turning vehicle speeds and any new traffic resulting from the paving of Burns Valley Road.
9. Demarcate a drop-off zone on Acacia Street to handle 8-12 cars at a time, requiring motorists to pull to the top of the queue. A volunteer “director” is needed to obtain driver compliance.
10. Install raised, marked crosswalks on Arrowhead Road connecting the existing sidewalk on the north side to Mountain View and Halika Streets. These raised crosswalks will provide a safe crossing for students walking to/from the neighborhoods south and east of the school. They will also lower motor vehicle speeds on Arrowhead Road which will make the possibility of safe drop-off and pickup activity there feasible.
11. Apply traffic calming to Arrowhead Road and allow pickup/drop-off activity on that side of campus after conditions are safe enough to support that activity.

Proposed Transportation Safety Changes

Pomo Elementary School

12. Consider establishing physical activities for students that arrive early.
13. Move the fence at the front of the school 2 feet back from the sidewalk to create more space for students.
14. Conduct a parking utilization study by school administrators which quantifies current supply and demand for staff parking and future projections is needed to address the concerns around staff and guest parking. A possible first step is for staff to conduct a study to decide what further work is needed.
15. Collaborate with the city to introduce a 20-mph is plenty program for all streets within a quarter mile radius of a school campus.
16. Provide training to all school crossing guards (see Florida school crossing guard training and certification videos and materials).
17. Consider a 5 -minute early release for all walking and bicycling students.



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Pomo Elementary School Street Design Concepts

Proposed Circulation

Pomo Elementary School

- Future traffic will move on Acacia Street in a northerly one-way flow.
- Significant drop-off traffic will access remote field parking areas through Boxwood Street, thus reducing conflicts on Acacia Street.
- Acacia pickup/drop-off traffic will generally exit to Arrowhead Road using Boxwood Street.
- Additional drop-offs will take place in approved areas on Arrowhead at the school.



Proposed Campus Road Configuration

Pomo Elementary School

- Proposed changes for the campus circulation plan eliminate the Acacia Street driveways to the parking lot (now placed on Boxwood Street) thus significantly reducing crossing conflicts on Acacia Street.
- Many parents will drop off students directly in front of the school, with the option of continuing to use field parking areas.
- Acacia Street will operate as a one-way street, thus freeing up space for a drop-off lane and an active transportation lane next to the sidewalk.
- Crossings will be narrower, speeds will be better controlled





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Acacia Street

Existing Acacia Street Configuration

Pomo Elementary School

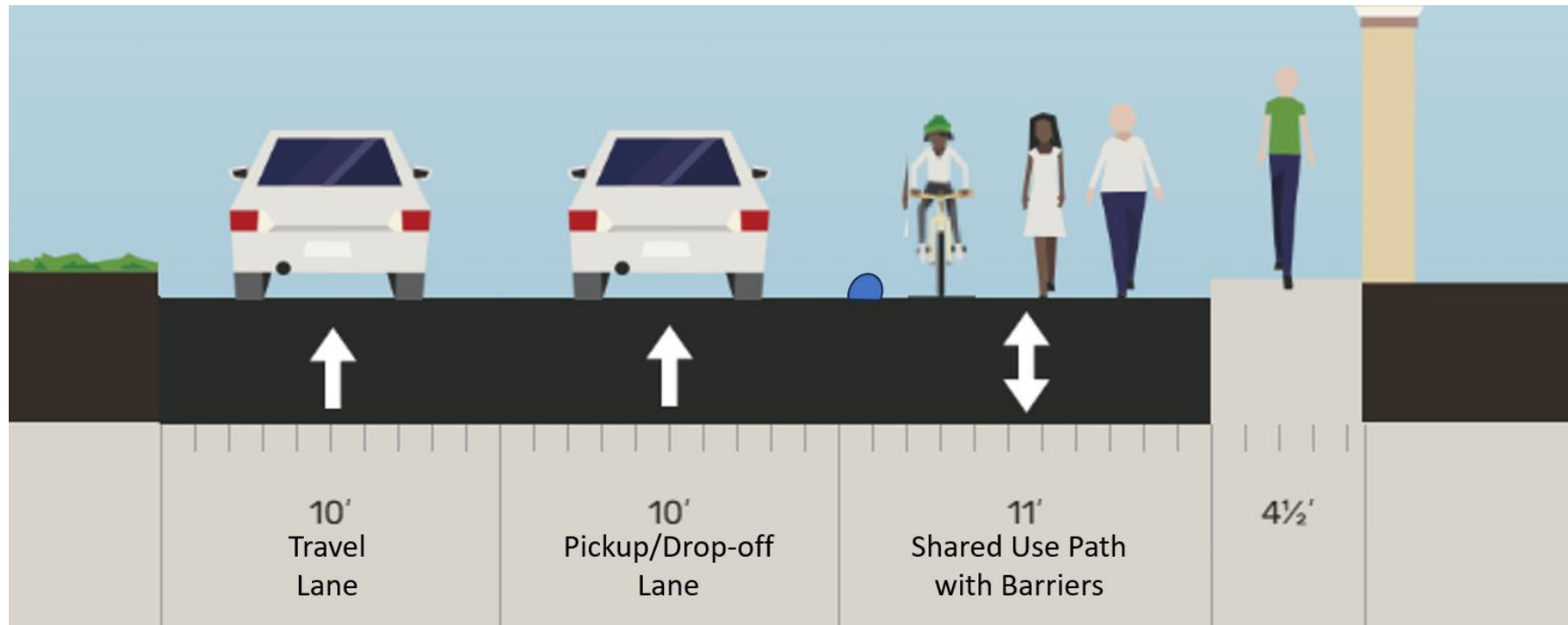


Acacia Street

Acacia Street is ~31-feet wide and is configured as a two-way street with a bicycle lane on the west side and various levels of vehicle parking allowed on the east curb. No sidewalk exists on the west side and a 4½-foot wide sidewalk exists on the east side. Two entry/exit driveways on the west side are located across from the school's main entry drives. This creates an unsafe mix of cars and people on foot.

Proposed Acacia Street Configuration

Pomo Elementary School

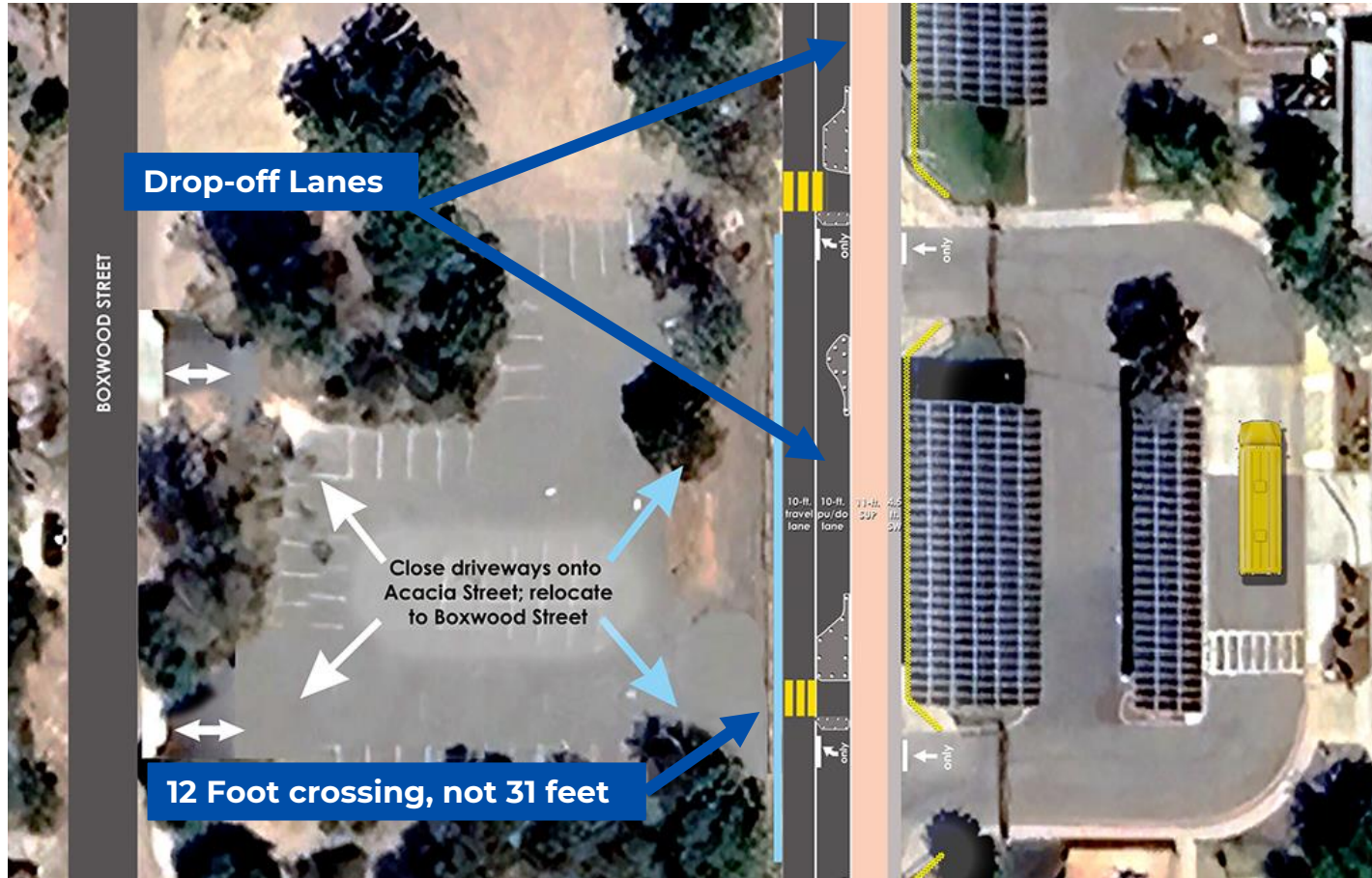


Acacia Street

The proposed configuration for Acacia Street consists of (from west to east), a northbound motor vehicle travel lane, a pickup/drop-off lane, and a separated, on-street shared use path.

School Pickup and Dropoff

Pomo Elementary School



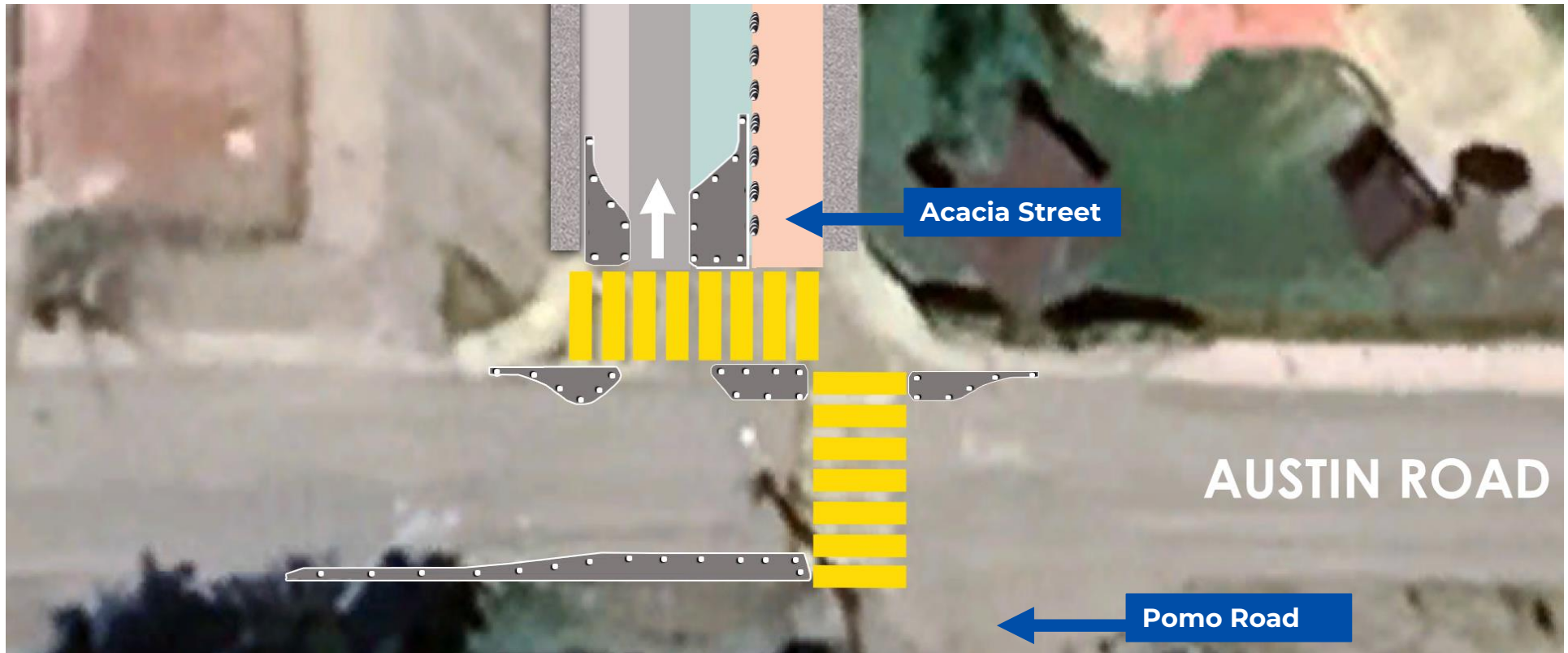
Acacia Street

Acacia Street should be a low speed (5 mph) location for near-side student drop-off and pickup. Motorists should queue along this street in an orderly fashion. Other parents can park and escort their children to designated crossing areas, which will become 12-foot-wide crossings. Driveways from the far-side lots will be closed on Acacia Street, with new entries on Boxwood Street. Crossings will be raised.

Acacia Street and Austin Road Intersection

Pomo Elementary School

- Crossing exposure will be reduced to 12-feet
- Field drop-off and pickup will be accessed through Boxwood Street.





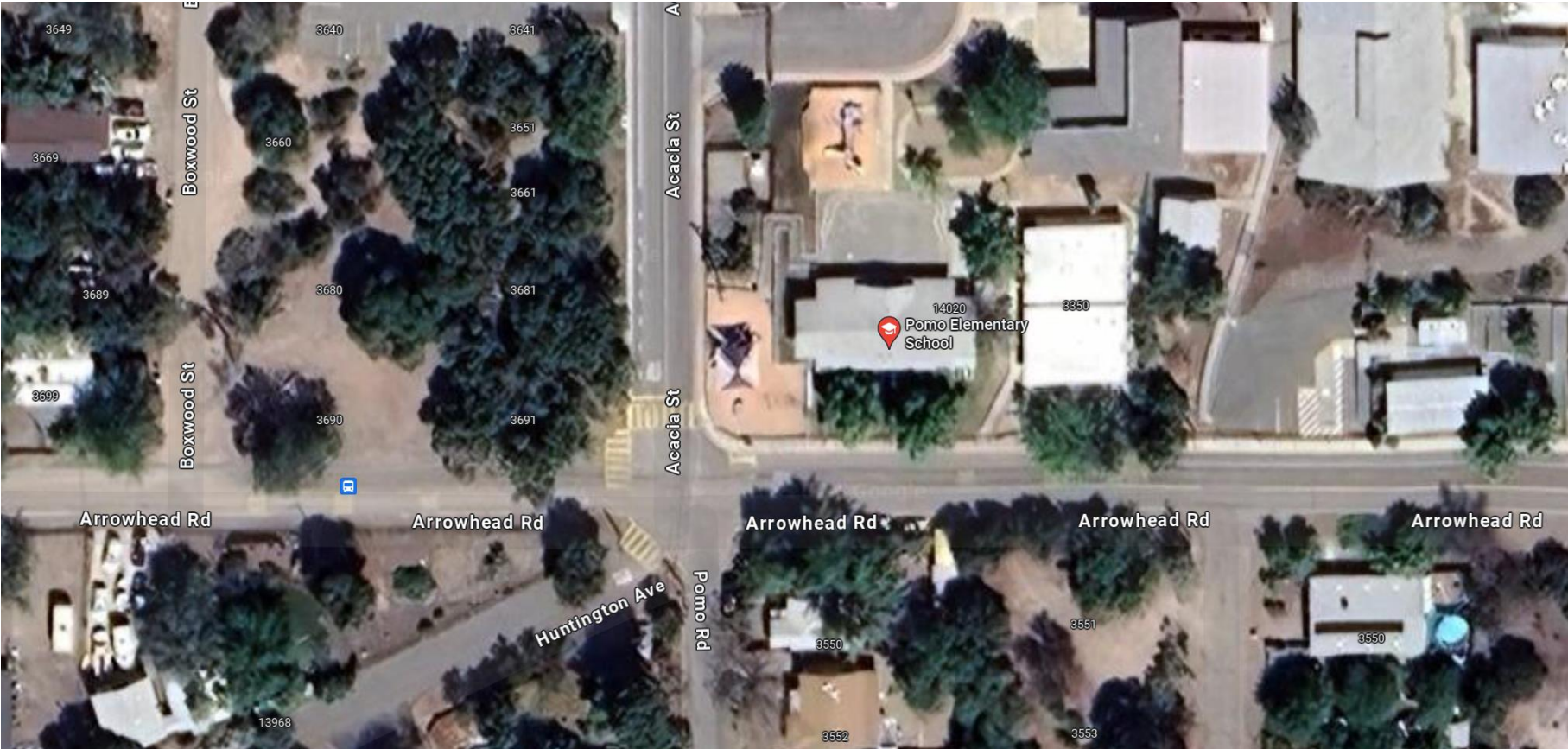
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Arrowhead Road

Existing Arrowhead Road Configuration

Pomo Elementary School



Proposed Arrowhead Road Configuration

Pomo Elementary School





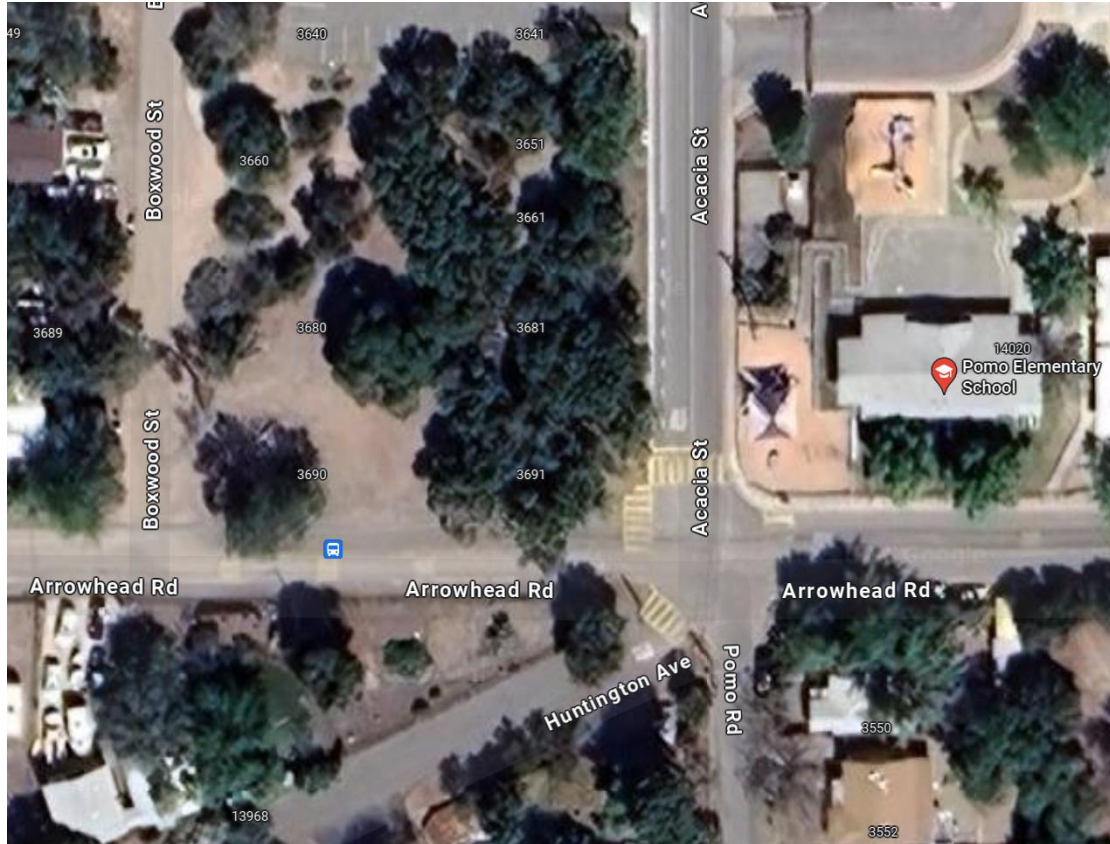
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Huntington Avenue

Existing Huntington Avenue Configuration

Pomo Elementary School



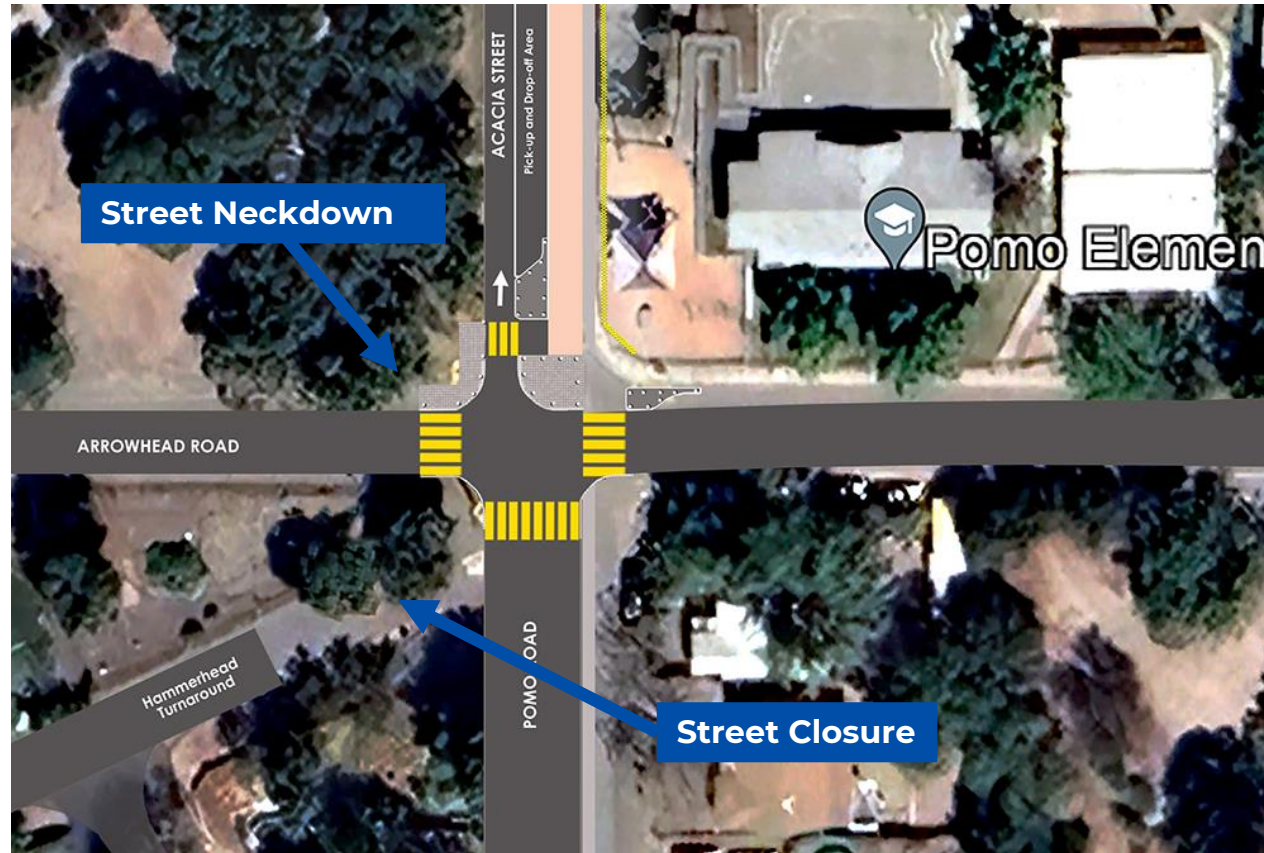
Huntington Avenue Existing Configuration

Huntington Avenue complicates traffic movement and safety at this tiny intersection.

Consider closing off this entry to help reduce conflict points. Huntington will become a quieter, safer street for residential access.

Proposed Huntington Avenue Configuration

Pomo Elementary School



Huntington Avenue Proposed Configuration

Huntington Avenue complicates traffic movement and safety at this tiny intersection.

Consider closing off this entry to help reduce conflict points. Huntington will become a quieter, safer street for residential access.



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Sonoma Avenue

Existing Sonoma Avenue and Acacia Street Configuration

Pomo Elementary School

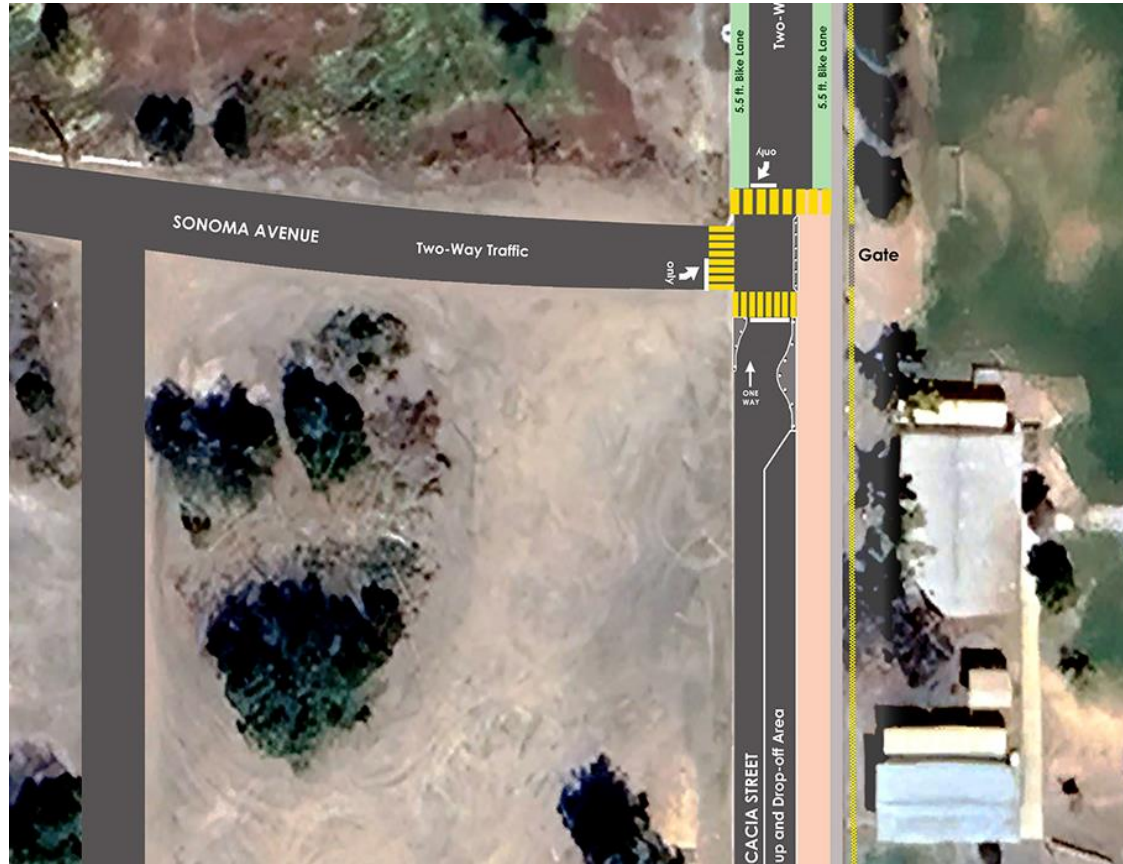


Sonoma Avenue at Acacia Street

Motorists both enter and exit in the crossing area, creating the potential for a crash.

Proposed Sonoma Avenue and Acacia Street Configuration

Pomo Elementary School



Sonoma Avenue Drop-off and Pickup

- Crossing exposure will be reduced to 12-feet.
- Field drop-off and pickup will be accessed through Boxwood Street, thus reducing conflicts on Acacia Street.



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SRTS Principles & Example Treatments

KEY DESIGN PRINCIPLES FOR A SCHOOL CAMPUS

IMAGE SOURCE: TODD CLEMENTS, DAN BURDEN AND SARAH BOWMAN, WALC INSTITUTE



School Area Operations/Principles: Maintain low (15-20 mph speeds 24-7), separate all modes (bus, parents, staff, walking/bike), receive students at earliest campus entry, provide many "eyes" on the street using campus and housing design, provide 8-foot wide sidewalks with setbacks on all approaches to school, keep all intersections compact and low speed, provide adequate lighting, especially at crossings, design school(s) as community centers, maximize on-street parking, green the streets for added cooling and speed reductions.

General Principles

Encouraging SRTS



This section establishes basic principles to maximize SRTS safety programs:

- Allow a 5-minute early release for those walking and bicycling.
- Provide volunteer greeters to open doors and allow queues of 5-8 cars to pull in and out at one time.
- Separate bus arrivals from parent drop-off/pickups.
- Encourage parents to park in other locations near the school, and then walk their children to school.
- Work with the Clearlake Police Department to warn, then ticket, parents who make an illegal or unsafe drop-off, such as on the far side of the street, or those double parking. This can be a concerted effort during the first week of school.
- With adult volunteer supervision, require parents to pull to the top of the queue for dropping off their child.
- Separate pick-up and drop-off by grade level.
- For students in the second grade or younger, parents should find a legal parking space and walk their child into the school.
- For students in the third grade and higher, parents can use the drop/pick-up zone system identified.



Upper and Lower Images: Northfield School, Los Angeles, California

Proposed Treatments

Advancing SRTS



Example of an 11' shared use path with vertical barriers



Example of a curb extension with vertical elements

Proposed Treatments

Advancing SRTS



Example of a neckdown crossing. Many crossing, especially Acacia Street, could be much shorter.



Example of a pedestrian / bicycling path. Newly dedicated paths can be colorful and advance school identity.

Proposed Treatments

Advancing SRTS



Example raised crossing on a one-way street (Seattle, WA)



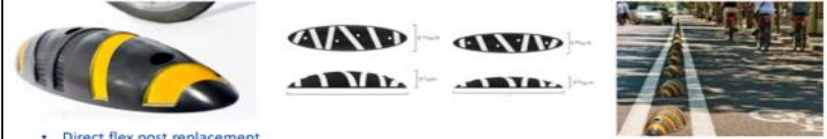
Raised crossing for a bike facility (Victoria, B.C.)

Proposed Treatments

Advancing SRTS



The Armadillo by Cyclehoop / Zebra by Zicla



- Direct flex post replacement
- Extensive international use, but with US availability
- 8 or 14 lbs, no lift required
- 6 1/2 or 8 1/4 wide, 3 1/2" or 5 1/2" tall
- Shorter than flex posts, usually countered with more frequent spacing
- Built-in retroreflectivity



Parking Curb: Rubber, 6 ft Lg, 6 in Wd, 4 in Ht, Blue/White

Raised delineators (Victoria, B. C.). The use of various delineators will be made with the next level of design development. Both mountable and more fixed tools should be considered.

Proposed Treatments

Advancing SRTS

Not only are neighborhood mini-circles low cost and effective, but they are also attractive.

Seattle, Washington has been installing Neighborhood Mini-Circles for 35 years, from their oldest to their newest communities. Nearly 2,500 are on the ground, and the result: Seattle has reduced neighborhood crashes by 93%.

The cost of Neighborhood Mini-Circles is highly affordable, around \$25,000.

Image: Port Townsend, WA



Proposed Treatments

Advancing SRTS



Intersections were often built to maximize efficiency and speed. This before and after proposal shows what is possible to slow vehicles and maximize safety and courtesies. As a general recommendation, all intersections within 1,000 feet of a school should be 15-20 mph.

Image: Photo simulation, Manhattan Beach, CA



Proposed Treatments

Advancing SRTS



Example of neighborhood traffic circle

Opportunity: Educate Parents

Encouraging SRTS

- Pedestrian and bicyclist safety guidelines need to reinforce safe practices.
- Value and offer techniques for walking and bicycling with children for school trips.
- Require safe and courteous driving near schools.
- Establish school pick-up and drop-off procedures.
- Consider remote drop-off and pick up locations to reduce chaos and danger of unsafe practices at school.



Opportunity: Build on Successes

Encouraging SRTS

The more children who walk and ride bikes to school, the sooner motorists change their behavior, not just around schools, but in many neighborhoods. This adds to the safety and respect needed for children and for all people who walk and bike.

Experience has proven that the more times and places motorists see people walking and riding bikes, the more likely the driver forms a mental “signature” on what is traffic, which broadens their respect and understanding to share the road.





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Appendices



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Burns Valley Elementary School Observation Notes

Observation Notes

Burns Valley Elementary School

This report documents existing infrastructure and behavior patterns at Burns Valley Elementary School observed on the morning of May 3, 2024.

Attendees: Becky Salato (superintendent), Tammy Serpa (principal), Adeline Leyba (city public works director), Greg Damron (Blue Zones), Dan Burden (Blue Zones), Michael Williams (Blue Zones).

- Timeline: school bell rings at 8:15.
- The two Rectangular Rapid Flash Beacons (RRFB) signs at Olympic Drive and Pine Street we're not functioning during our walk around.
- 7:40 am students have started to arrive. Approximately 10 are waiting but gate to campus is closed. Students remain on the sidewalk while waiting, crowding the narrow (5 foot) sidewalk. At this time, the new school crossing guard was on duty, wearing a fluorescent vest.
- The parking lane on the west side of pine street is almost full by 7:45 a.m.
- 7:45 a.m. School gates open. Approximately 20 to 30 kids enter the campus. The new line of drop-offs on west side of Pine requires kids to cross without a crosswalk.
- 7:50 a.m. The parking lane on the west side of pine is full.
- Sight lines at the Pine Street midblock crossing are blocked by parked cars
- The large school buses, two of them, drop off students on Uhl. This is the standard practice. However, during our observation period, at least 2 more large school busses dropped of students in front of the school. The smaller buses for the special education students drop students off on the east side of Pine at the gate next to the special education building entry door.
- School normally lets out at 2:24 p.m. Early release days have students getting out at 12:42 p.m.
- Southbound drivers were observed parking on the east side of Pine to drop their children off because the curb was clear. These drivers are facing in the opposite direction of travel and parking at a red-colored curb.
- Several motorists pulled into the red zone to drop their child(ren), blocking the sight lines to the Austin and Pine crossing.

Observation Notes

Burns Valley Elementary School

- During our observation, one southbound driver released a student while stopped in the travel lane and instructed them to cross the street to the school. The student started crossing in front of their car on their way through to the opposite travel lane only to be stopped by the principal and the district superintendent. They instructed the student to use the crosswalk.
- One of the two daily buses, regular sized, the overflow bus was supposed to drop students off on Uhl, just as the first bus did, but decided to drop them off on Pine instead.
- Several parents pull into the staff parking area to drop off their children, and many parents the walk their children to school.
- Several other parents drive to the park area on Austin, then walk their children to school.
- 8:00 am. Photos were taken - approximately 15 cars were parked on the west side of Pine and there were approximately 20 spaces free in the parking lot to the west of the main entrance of the school. This lot is known as staff parking.
- 8:07 a.m. A food services truck, coming to supply the cafeteria, parks on the east side of Pine against a clearly red colored curb and blocks the crosswalk serving the special education building. When approached, the driver stated that he parked there “all the time”.
- 8:15 a.m. School starts
- Olive, the road running just to the east of the school, is a potential additional pickup/drop-off point. According to Adeline, the city public works director, this street and a few others nearby will be paved this coming summer.
- The NO PARKING sandwich signs in the gutter on the east side of Pine are routinely ignored by drivers stopping in the travel lane and letting students out.
- The intersection of Austin and Pine is problematic. There is significant vehicular congestion, many students crossing at the crosswalks and the crossing guard supervising the students and directing traffic at the same time.
- No parking is allowed on the east side of Pine.

Observation Notes

Burns Valley Elementary School

- All grades are released at the same time and most parents arrive at the same time making the pickup. Afternoon pickup is more problematic than morning drop off.
- Adeline says she has seen some drivers parking on Uhl during pickup time
- Access for drivers wanting to get on to Lakeshore from Olympic is difficult.
- There have been complaints from the owner of the storage unit complex on Austin about drivers stopping in front of the driveway to the storage units and blocking access.
- There was talk of Pine and Uhl functioning as a one-way couplet.
- The intersection of Austin and Pine, near the school entry gate, is quite congested and requires a lot of care from drivers. It also requires the presence of a crossing guard who does double duty as traffic director and protector of students in the crosswalk. This approach splits the crossing guard's attention and could distract them from their primary task. By requiring drivers to watch for threats coming from multiple directions, it also raises the potential for conflict.

Resources (Strengths and Opportunities):

Notes on root causes (Weaknesses):

- Except for the small number of special education students, all students are entering the campus at one entry point. This creates a high demand for limited space by all students and vehicles, no matter how they choose to travel to school.
- Providing more entry points would spread the demand out and mitigate some of the conflicts.
- One reason for requiring students to come in through the single-entry point is that some of them need to be guided to the breakfast being provided.
- There are several gates in the fence surrounding the campus that could be used as alternate entry points to better disperse student arrivals and departures. Gates were seen on Walnut, on Olive, on Austin, and on Pine Street. No discussion was had as to the viability of their use.
- Olive Street will be paved this summer. The cross section in the Tree Streets Construction plan set shows Olive being paved with asphalt 18 feet wide with concrete curb and gutter on both sides. Olive is a low-volume street. It has only the school on the west side and single-family homes on the east side. Olive could function as an additional street across which to spread the pickup and drop off activity. There appear to be multiple gates facing Olive Street.

Observation Notes

Burns Valley Elementary School

- Converting Pine Street to a one-way street was well supported as one action to simplify pick up and drop off activity.
- Use of Uhl, and potentially Olive, seem to be well supported by staff as streets that could be used for alternate pickup and drop off sites.
- The site appears to have a number of possibilities for loops that would allow cars to move near the campus to pick up students, e.g. Uhl to Austin to Pine and out to Olympic.
- The bike lane on Olympic/Old Highway 53 around Safeway is grown over, narrowed, and there are blind corners on that road that make bicycling dangerous.
- The newly reconstructed park is much more welcoming but still feels unsafe at times. The story was told about teenagers vaping and or smoking pot there that made the park feel unwelcome.
- More walking appears to be happening around the park.
- Parking is much easier around the new park.

Items discussed after observing drop-off

- The Olympic and Lakeshore intersection is difficult to transit with a motor vehicle. It is hard for drivers on Olympic to get onto Lakeshore.
- Sidewalks are needed in many areas. The built environment is not welcoming.
- Streetlights are needed.
- Pedestrians have to be patient when crossing Lakeshore.
- There is a blind corner at the car wash near Mullen and Lakeshore that is threatening.
- Tammy expressed interested in a heat map of student home locations, possibly for the entire district as they are re-evaluating the borders of school-sheds within the district.
- There appears to be more trash on the ground on trash pickup day and there's the possibility that all the trash isn't getting picked up somehow.
- There needs to be more beautification of Lakeshore so that people can have pride in their community.
- They want what Lakeport has. As an example, they cite the flowers in hanging baskets on main street. It is welcoming, it is beautiful, and it shows pride of place.
- Greg asked how to address low-income needs
- Most houses appeared to be rentals, and it's hard to get landlords to keep their places up.
- Tobacco and vaping problems were discussed. Most notably was the vaping occurring in young children (as early as Grade 1).



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Pomo Elementary School Observation Notes

Observation Notes

Pomo Elementary School

This report documents existing infrastructure and behavior patterns at Pomo Elementary School observed on the afternoon of May 3, 2024.

Attendees: Becky Salato (Superintendent), April Ellis (Principal), Greg Damron (Blue Zones), Jamey Gill (Blue Zones), Dan Burden (Blue Zones), Michael Williams (Blue Zones).

- Two problems are cited at Pomo. The first is the chaotic drop-off and pickup activity. The second is lack of adequate parking for school staff.
- No quantitative assessment of parking demand and supply was available, e.g. how many cars used by school staff park at the school, number of existing spaces, how many new spaces are needed, etc.
- Pomo has approximately 80 staff and about 725 students. The school has TK-6 grades.
- Approximately 200 students are bussed daily. During our observations, approximately 30-40 students walked.
- Observations show that the remainder are transported by personal vehicle.
- An apparent memorial for a crash fatality was observed on Arrowhead east of the school. Principal Ellis related a recent account of a drunk driver crashing into a front yard and breaking both legs of a 6-year-old student who is still in the hospital. Her characterization of the neighborhood was that crashes happened frequently. These accounts imply an unsafe road network exists in the area.
- There are two well-used crosswalks on Acacia near the school. The first is at the front of the school at the northern exit of the driveway loop servicing the campus and features a painted crosswalk. The second is further north, at the intersection of Sonoma and Acacia; it is unmarked but does feature an in-street sign positioned on the centerline.
- The crossing at Sonoma emphasizes the younger students and sees lots of children. There were crossing guards at both crossings.
- Some drivers who had parked in the dirt field just south of Sonoma were observed driving over the curb, onto Acacia, and heading southbound after picking up children.
- There is little development on Acacia north of the school. There are only a couple of homes north of the school and the pavement ends where a couple of dirt roads lead off to low density or single homes on large lots.
- Drivers were seen parking in the bike lane on the west side of Acacia.
- The Sonoma exit has good staging for children. There is a large field just east of Acacia and north of the school with a gate through the campus fence.
- There was a steady stream of slow-moving cars seen headed southbound on Boxwood Street. These cars had come from Acacia through Sonoma after picking up children.
- Students were observed leaving school and walking down both Huntington and Pomo.

Observation Notes

Pomo Elementary School

- Principal Ellis says that there are students (and others?) that ride motorcycles and quads in the streets and fields around the school after school hours.
 - Sonoma is a dirt road that extends west from Acacia. Some drivers use Sonoma as an exit route either continuing on Sonoma or turning left onto Boxwood Street and then to Arrowhead.
 - What appears to be a bike lane on the west side of Acacia is used as a sidewalk and sometimes as a parking lane. To the north of the school cars and one camper-trailer are parked in this bike lane (the trailer is seen on Google Streetview in the same location in 2022).
 - There is a crosswalk guard posted at Sonoma where no crosswalk exists. This is the site of a lot of activity with children crossing the street and cars turning from Acacia onto Sonoma or sometimes performing a U-turn to head south on Acacia. This crosswalk guard performs a lot of traffic control in addition to protecting the children. This area sees heavy use.
- near the intersection which restricts visibility. This is the intersection through which most of the traffic travels.
- Acacia is fully paved. Sonoma is a gravel road and its condition results in slow vehicle speeds. This likely reduces some drivers' desire to use Sonoma or Boxwood Street as an alternative to returning south on Acacia after picking up.
 - Acacia is the only Street to provide direct access to the school's main gate. Arrowhead, the only other street to run alongside the campus, sees high speeds and dangerous behaviors and is not considered suitable for a pickup or drop off location though there appear to be available access points along Arrowhead.
 - The west side of Acacia hosts a paved parking lot which primarily supports staff members. The west side of Acacia also has large undeveloped fields where many people park to wait for their children. These fields are not structured with identified parking spaces or access Lanes making for a chaotic traffic pattern within the fields.

Notes on Root Causes (Weaknesses):

- Approximately 400 to 500 students are leaving the campus via two points. This creates a high demand for limited space by all students, no matter how they choose to travel to school. Providing more locations would spread the demand out and reduce potential conflicts.
- The 5-way intersection at Acacia/Pomo/Arrowhead/Huntington is narrow, lacks sidewalks on most of its legs, and has vehicles parked

Resources (Strengths and Opportunities):

- Support for turning Acacia into a one-way street temporarily or permanently between Arrowhead and Sonoma.
- The northern school field east of Acacia at Sonoma is a great staging area for children and the single gate keeps pedestrian volumes low.
- The sidewalk on the east side of Acacia between Sonoma and the main entry of the school is lightly used.



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SRTS Concept Illustrations

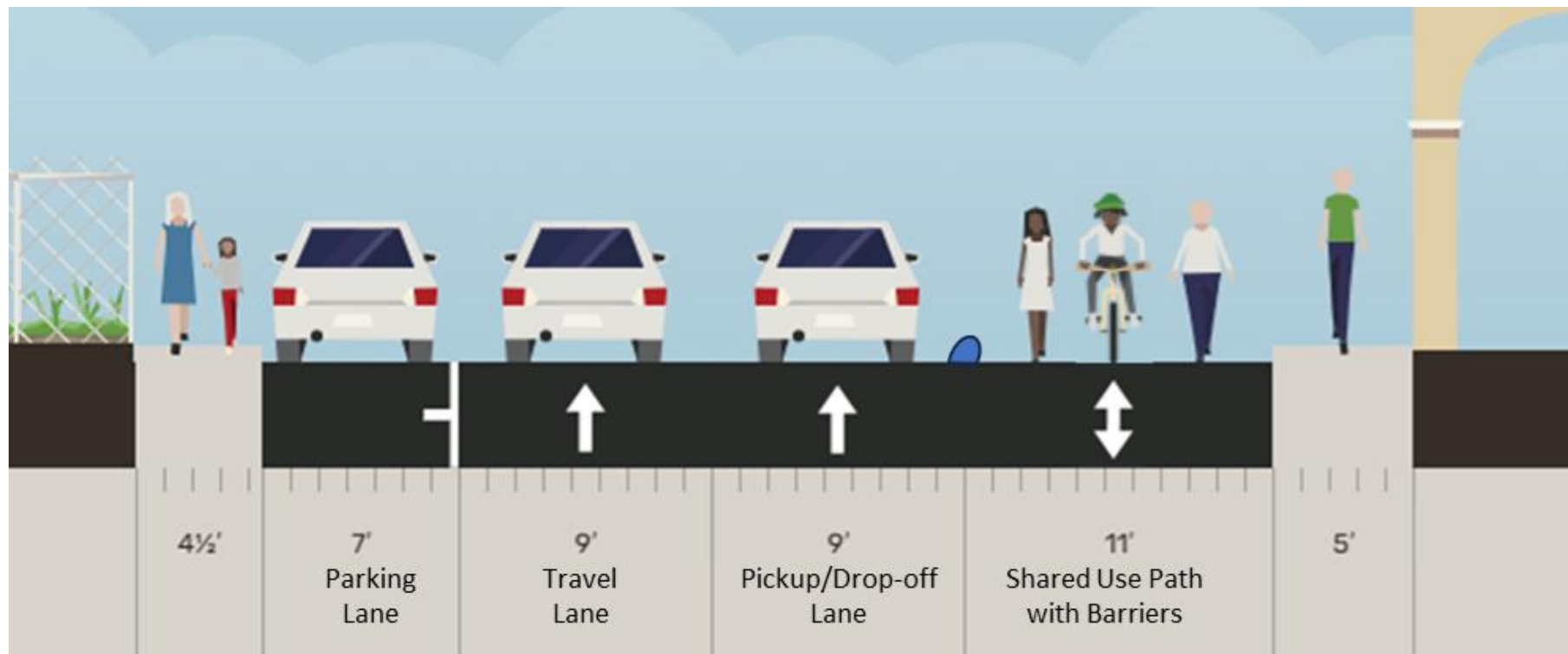


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Burns Valley Elementary School Concept Illustrations

Concept Illustrations



Concept Illustrations



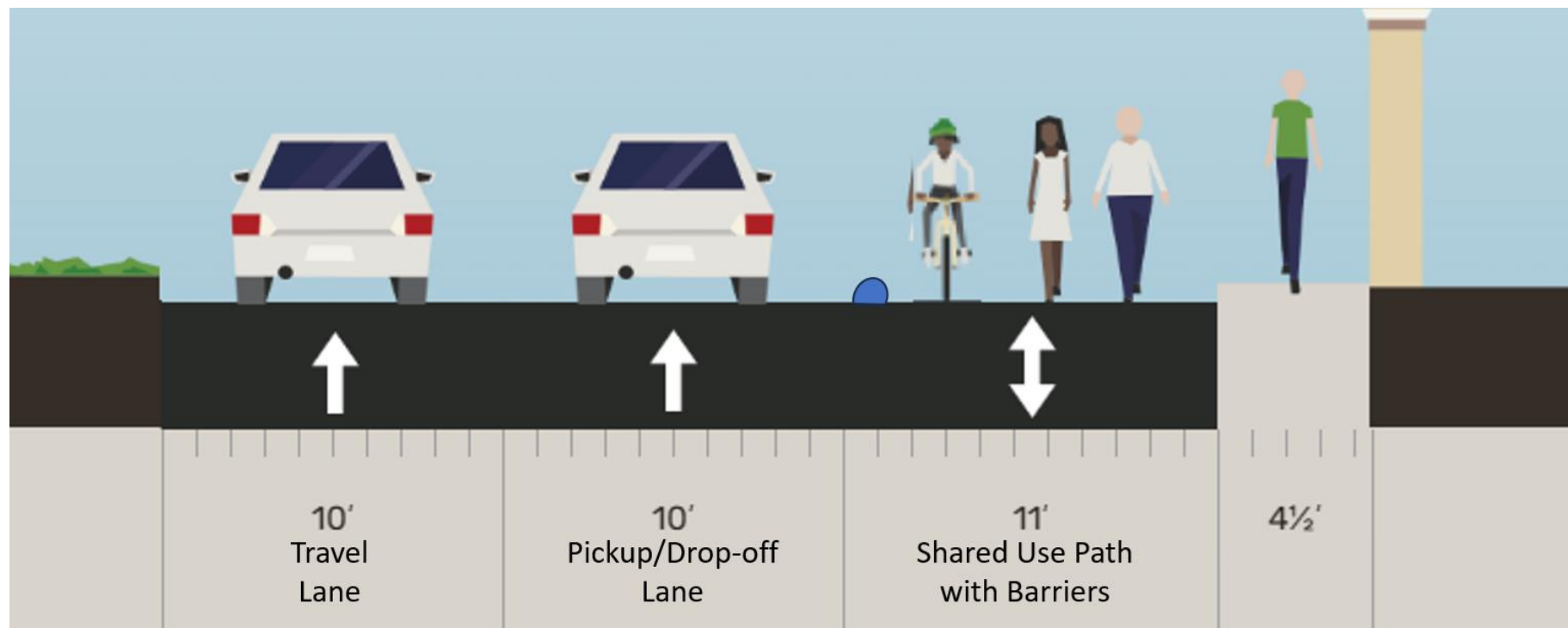


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Pomo Elementary School Concept Illustrations

Concept Illustrations







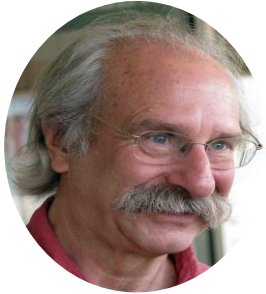
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Subject Matter Experts

Blue Zones Subject Matter Experts

Safe Routes to School



DAN BURDEN: Dan Burden, with over 40 years of experience in community and transportation planning, urban design, and active transportation studies, is a renowned expert in creating livable and walkable communities. He specializes in a wide range of areas, including trails design, Safe Routes To School, traffic calming, and complete streets. Dan is known for his ability to facilitate workshops, walking audits, and charrettes, bringing together diverse stakeholders to create holistic and prosperous communities. Dan worked on a team that developed the the nation's first grade school traffic education program (Montana), then in Florida, and Hawaii. He also pioneered the nation's first school crossing guard training and certification program (Florida). He is celebrated as a visionary urbanist, recognized by Time magazine, in 2001, as one of the six most important civic innovators globally. Dan's influence has been recognized through prestigious honors, including being named its Distinguished Lecturer by the Transportation Research Board, in 2001, and receiving the Champion of Change in Transportation recognition from the White House in 2014. He is consistently acknowledged as one of the "100 Most Influential Urbanists" by Planetizen. Dan's expertise is in inspiring and guiding communities to prioritize people and place in design.

Blue Zones Subject Matter Experts

Safe Routes to School



MICHAEL WILLIAMS: Michael is a transportation consultant specializing in active transportation and public works construction management. With more than ten years of experience as a licensed general contractor on public works projects from roads and bridges to schools allows him to see the entire picture – from planning to construction. His experience in the active transportation field has taught him how to work with the public and government agencies to reach consensus, obtain grants and bring projects to fruition. Edge Lane Roads have been a special interest of his for years. It was during a visit to the Netherlands that Michael was drawn to the potential of the treatment, especially for the millions of road-miles in the rural US that are unlikely to receive bicycle or pedestrian facilities.

Blue Zones Subject Matter Experts

Safe Routes to School



BETTY DRAKE: Betty is an accomplished urban planner with a robust portfolio of projects across the United States. She has contributed extensively to walking, bicycling, and trail planning, with master plans and risk management assessments implemented in over 50 U.S. cities. Her work includes the historic Tempe Bikeway Plan, the Thunderbird Graduate School pedestrian and traffic calming projects, and the Grand Canyon Greenway Collaborative. She has delivered training courses on pedestrian and bicyclist safety, contributing to the Federal Highway Administration (FHWA) and National Highway Traffic Safety Administration (NHTSA) programs in 40 cities. In the realm of land development planning, Betty has developed Master Development Plans and submittal documents for over 100 projects, including development in environmentally sensitive, topographically challenging, and historic areas. She is a former planner for local government with over 40 years of experience and she has achieved recognition for work in land development planning, code refinement, and place-specific urban design. Betty has a productive approach to design, planning, entitlement work and strategy development based on real-world experience, respect for all parties involved and an ability to work through to consensus in complex and politically challenging situations. A recognized artist as well, her work has a strong focus on authenticity, liveability and thoughtful response to the unique character and complexities of place and populace.

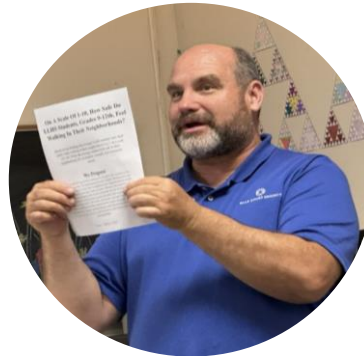
Local Experts

Safe Routes to School

Special thanks to our insightful and enthusiastic Clearlake team. Your knowledge and commitment to making Burns Valley and Pomo Elementary schools safer were essential to preparing this study.



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