

James Avenue area schools, Redwood City

Safe Routes to School Workshop Summary

Sequoia High School, McKinley Institute of Technology, Northstar Academy.

Prepared for: James Avenue area school communities and neighborhood and San Mateo County Office of Education

Prepared by: Mark Fenton, public health, planning, and transportation consultant; May 2025



Bicycles at McKinley Institute of Technology; walk auditors along El Camino Real. March 2024.

Summary

Members of the Sequoia High School, McKinley Institute of Technology, and Northstar Academy communities and surrounding area, including school faculty, administrators, and students, parents, advocates, area residents, community leaders, Redwood City Department of Engineering and public safety professionals, and representatives of the San Mateo County Office of Education participated in a Safe Routes to School walk audit and planning session March 25, 2025. The workshop resulted in the following key recommendations to improve safety and encourage more walking and bicycling to school. (See summary maps on page 15 and 17.)

1. Launch a coordinated progressive student safety education and encouragement program across all three schools. (Pg. 4) Engage the youngest students on pedestrian safety; scooter, skateboard, and bicycle safety, skills, and maintenance through middle grades; and driver safety for high school students.

2. Create an area *transportation safety committee* with established membership and duties. (Pg. 5)

Include administration, parent, student, neighborhood, public safety and infrastructure, and Safe Routes to School representatives. Require routine communication and action recommendations, through multiple channels to all school and community stakeholders. Take the lead on such initiatives as:

- A park-and-walk program at Sequoia Station, and other satellite parking locations.
- Encourage safe walking groups to neighborhoods, transit, the YMCA, and Redwood Community Center.
- Facilitate adult and student safety patrol, for example to safely open vehicle doors at the curbs.

3. Make key infrastructure improvements for pedestrian and bicycle safety. (Pg. 7)

- James Avenue. Sign, paint, and widen a shared pedestrian bicycle side path on the north sidewalk.
- Elwood Avenue. Place a “yield to pedestrian in crosswalk” sign on the centerline of the James Avenue crosswalk. Replace the east-side parking lane with a two-way cycle track; add ramps to allow bikes to mount the curb extensions at Brewster Avenue to use the rapid flashing beacons for crossing.
- Duane Street. Place a high visibility mid-block crosswalk aligned with the McKinley School entry. Convert east side diagonal to parallel parking and place a protected two-way bikeway along the curb.
- Add centerline obstructions to prevent illegal U-turns on James Avenue, Duane Street, and Harrison Avenue.
- Brewster Ave. and Broadway intersection. Clarify allowed movements for vehicles exiting the High School.
- El Camino Real. Improve intersections for pedestrian and bicycle safety and visibility; place pedestrian median islands, and/or increased curb extensions where possible and appropriate.

4. Restore SamTrans service timed to align with the school arrival/dismissal schedules. (Pg. 12)

Provide incentives as well as safe pedestrian access and sufficient waiting areas at bus stops.

5. Big idea: Reconfigure traffic pattern through James-Duane-Harrison to reduce conflicts. (Pg. 13)

Test the concept of defined west side and east side traffic loops by restricting turns on and off of Duane St.

Background

The area around Sequoia High School, McKinley Institute of Technology, Northstar Academy, and Our Lady of Mt. Carmel (collectively the James Avenue area schools) suffers from stifling traffic congestion during arrival and dismissal times. (Although Our Lady of Mt. Carmel was not included in the walk audit, its traffic contributes to the challenge in this area.) Numerous unsafe vehicle movements are routinely observed, particularly U-turns at mid-block and vehicles driving the wrong way in the opposing lane to get around vehicles queued in a pick-up line in both directions on James Avenue, and westbound on Harrison Avenue. A student crossing James Avenue at Elwood Street was struck by a vehicle this spring; and another student and adult were struck last fall.



As a part of the effort to address these issues and others, a Safe

Routes to School walk audit and planning session was held on March 25, 2025 with school faculty and administrators, parents, students, advocates, area residents, community leaders and staff, Redwood City and San Carlos public works and planning professionals, and representatives of the San Mateo County Office of Education. The workshop resulted in programmatic, infrastructure project, and policy level recommendations to improve pedestrian, bicycle, and motor vehicle safety, and encourage more walking and bicycling to school. The group recognized that one of the most formidable challenges faced by many caregivers in deciding whether to allow students to walk or bike to school is the traffic that is generated by the schools themselves at arrival and dismissal times. This can form a vicious cycle: more traffic makes it unsafe to walk or bike, therefore fewer children do so and are driven to school, thus creating even more traffic around the schools. The goal of this work is to create a virtuous cycle: encourage those students (and adults) who can walk and bike safely to school to do so, and create safer settings for walking and bicycling. This begins to ease traffic



congestion in the school area, which then makes it more inviting for even greater numbers of students to walk and bike. It was agreed that the ultimate goal of this work is *not* to speed up vehicle drop-off and pick-up traffic—which will actually heighten the risk of collisions—but to make walking, bicycling, and taking transit much safer and ultimately more appealing to more of the school community.

Priority Recommendations

The workshop group was encouraged to consider three broad categories of intervention, called the three Ps.

- **Programs.** Events, outreach, education, encouragement, data collection, and promotional activities.
- **Projects.** Physical changes to infrastructure and the built environment to support active transportation.
- **Policies.** Rules, ordinances, guidelines, practices, and procedures supporting the active travel modes.

The group discussed both short-term ideas that could be executed on the order of weeks to months, and longer-term initiatives that might cost more and take months to even years. This was to assure that we identified some lower-cost near-term actions that can be pursued quickly to build momentum and begin making it safer for students immediately. All of these recommendations have merit and taken together they comprise a very comprehensive approach to making a safer setting for walking and bicycling. It is recommended that the James Avenue area schools work closely with the Redwood City Safe Routes to School coordinator, who can help facilitate ongoing efforts through existing connections with city departments such as public works and law enforcement. The following key recommendations require a collaborative approach, and the coordinator can serve as a key link between the schools and broader community partners already engaged in this work.

1. Launch a coordinated progressive student safety education and encouragement program across all three schools. (Recommended leads: Local bicycle advocacy organizations; school administration; parent-teacher organizations/interested parents.)

Engage the youngest students with pedestrian safety education. Progress to scooter and skateboard safety and skills, then to bicycle safety, skills, and maintenance through elementary and middle grades. Collaborate with the Redwood City Safe Routes to School program and the San Mateo County Office of Education Safe Routes to School team to provide bicycle instruction from instructors certified by the [League of American Bicyclists](#). Consider culminating with required driver safety for high school students, perhaps integrated into school curricula, coordinated with or by the transportation safety committee (#2).

Promote walking and bicycling to school directly to students through announcements, assemblies, classes (e.g. health, physical education, geography), and fun walk- and roll-to-school events. Target messages to parents and caregivers through newsletters, social media, parent-teacher conferences, and engage them together with children during [May Bike Month](#) and [October Walk & Roll to School Month](#) activities, such as completing walkability/bike-ability checklists assessing their routes to school.



A group crossing James Ave. at Elwood St.

Launch walking school buses and bicycle trains—groups of students walking or biking to school together with an adult along a planned route and schedule, picking up others along the way. While these can be organized informally by friends and neighbors, schools are encouraged to work with the Redwood City Safe Routes to School program and the San Mateo County Office of Education Safe Routes to School team to help plan, promote, and coordinate efforts, along with the area transportation safety committee (see #2).



Dismiss pedestrians, bicyclists, and transit riders first to minimize conflicts with vehicles. All three schools have challenges with pedestrians and bicyclists facing unsafe crossings at key intersections near the schools at dismissal because of the ‘pick-up’ traffic congestion (photo above, at James Avenue and Duane Street). One solution is to place a *safety delay* on the motor vehicle pick up right at the schools, so vehicles are not moving there while the initial release of walking and bicycling students are crossing nearby roadways. Pedestrians, bicyclists, transit riders, and those students walking to distant pick-up locations (such as Sequoia Station) should be released first so they can more safely navigate these areas. Students going to school-front vehicle pick-up lines can be released several minutes later.

2. Create an area transportation safety committee (TSC) with established initiatives and communication responsibilities. (Recommended leads: Redwood City Safe Routes to School coordinator, school administration, faculty; local advocates; interested parents/caregivers.)

A number of workshop participants identified a need for a standing working group focused on the issues of transportation safety around the schools. A significant challenge of shifting travel behavior is that many of the people driving children to the school would like *others* to walk and bike to reduce the traffic congestion at the school, but feel they themselves simply need the flexibility to drive. Therefore an essential goal of an area transportation safety committee (TSC) would be to help coordinate on-going efforts to increase safe walking and bicycling and reduce motor vehicle congestion, to assure timely and complete communication with the broader school and area community, and to help *everyone* see their role in shifting travel behavior. Membership should include administration, parent, and student representation from each school; as well as neighborhood, public safety and infrastructure, local bike advocacy, and Safe Routes to School representatives.

A priority task of the group must be routine communication with faculty, staff, community members, caregivers and students about new procedures, safety measures, and traffic patterns, initiatives or events, and to solicit input from all of these groups to inform on-going efforts. Specific initiatives that this group should help facilitate include (but are not limited to) the following:

- **Develop and encourage walking school buses and bicycle trains** (described in #1) to neighborhoods, transit stops, the YMCA, and Redwood Community Center. This can include coordinating safety training and criminal background checks if required for adult walk/bike leaders.
- **Launch a park-and-walk program at Sequoia Station and possibly other satellite locations.** For high school students who drive to school provide incentives such as low- or no-cost parking at Sequoia Station so that those vehicles remain somewhat distant from campus. Explore other similarly distant parking options.
- **Identify satellite drop-off/pick-up locations.** These are locations where adults can safely drop-off or pick-up students a short, safe walking distance from the school to avoid school-area congestion. Typical locations are church, park, transit, and mall parking areas that are not busy during school arrival and dismissal times.
- **Launch a student (and ideally adult volunteer) safety patrol at McKinley Institute of Technology and Northstar Academy.** The SMCOE Safe Routes to School team can provide training and support for both upper grade student and adult safety patrol members to assure program effectiveness and sustainability. Arrival and dismissal roles can include placing and removing cones or signs where needed (such as at driveway entrances or along curbs); opening vehicle doors at the curb for students so that drivers do not get out of their vehicles (photo at right, JFK Elementary, Daly City); and assisting the crossing guards at James Avenue and Elwood Street (photo at left),



and at Duane Street and Harrison Avenue by holding back pedestrians until signaled to cross. Adults who routinely drive students to school should be recruited for one- or two-week “volunteer” safety patrol duties to assist these students, and to help them become more aware and thoughtful drivers.

A car moves into the opposing lane through the crosswalk to pass queued traffic.

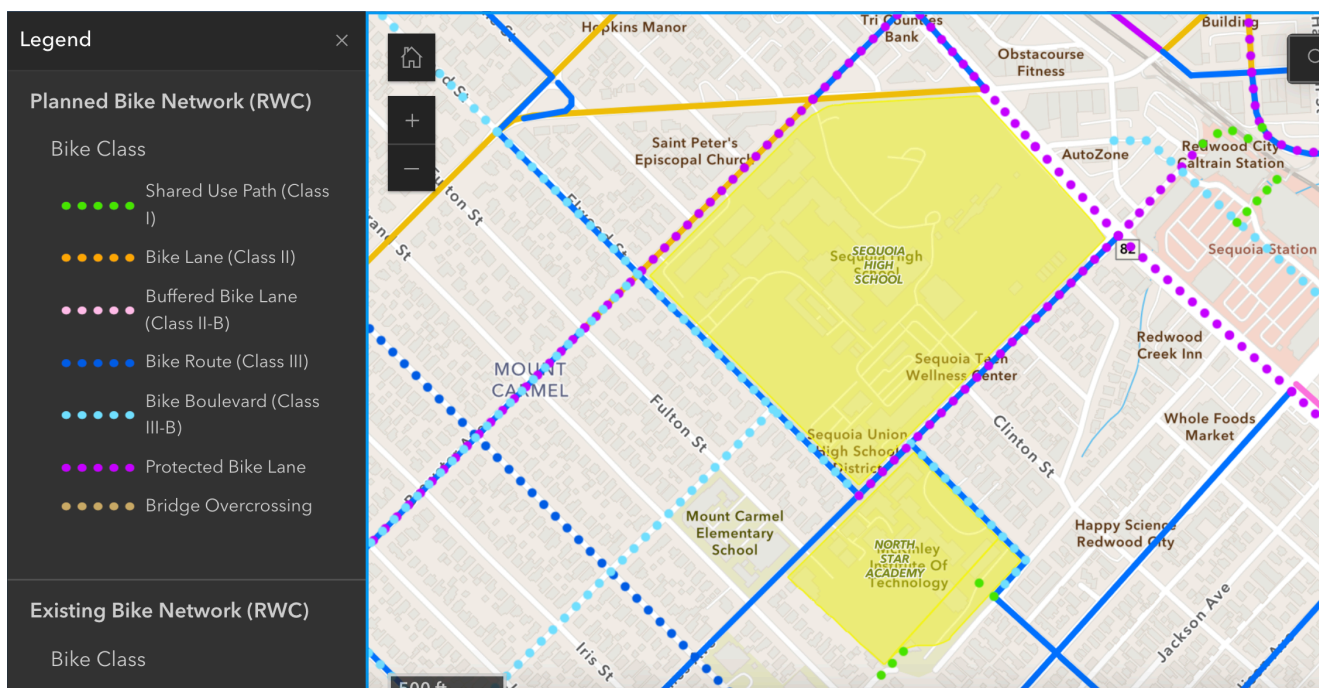
- **Staggered dismissal by grade(s).** To ease congestion the work group suggested as well as releasing pedestrians and bicyclists first from any school, further staggering the dismissals by school (separating McKinley and Northstar arrival and dismissal times) and possibly even grade level (e.g. K-3 at one time; 4-8 slightly later). If the schools are separated by enough time, this could ease the traffic congestion at dismissal.



3. Make key infrastructure improvements for pedestrian and bicycle safety and access.

(Recommended lead: Redwood City Engineering, Redwood City law enforcement.)

RWCWalkBikeThrive is a Redwood City active transportation plan adopted in June 2022. It provides comprehensive recommendations for pedestrian and bicycle infrastructure and safety improvements throughout Redwood City. These include detailed recommendations to improve safety along El Camino Real, and improve safe bicycling around the James Avenue school area. Specific recommendations include protected bicycle facilities on James Avenue and Brewster Avenue, and Bicycle Boulevards on Elwood Street and Duane Street. (See map below from [*RWCWalkBikeThrive*](#).) Note that the Peninsula Bikeway, a planned bike route linking a number of cities of the peninsula, passes through this area. It travels on Elwood Street from Hopkins Avenue south to James Avenue, is briefly on James Avenue, continues south on Duane Street, then jogs west on Harrison Avenue to Cleveland Street. **The recommendations below support the Peninsula Bikeway and align with other recommendations of *RWCWalkBikeThrive*.**





James Avenue. Sign, paint, and widen a shared pedestrian bicycle side path on the north side of James Avenue, at least from El Camino Real to Grand Street. Workshop participants suggested a design similar to the shared side path on Middlefield Road in Redwood City (pictured at left; note the signage).

Open a west entry to the McKinley/Northstar campus from the west portion of Harrison Avenue. Note on the map from *RWCWalkBikeThrive* (previous page) the green dots at the lower left corner of the McKinley/Northstar campus. This is a recommended pedestrian-bicycle path from where the west portion of Harrison Avenue dead ends into the southwest corner of the campus (photo at right). It appears that it may be possible to place a gate in the fence at the sidewalk dead end in this photo; this would only be unlocked at arrival and dismissal time, as is the gate at the pedestrian bridge to Harrison Avenue. This can provide access to a path along the edge of the ballfields and almost directly to the bicycle parking area between the schools. This would allow students walking and cycling from the south and west to approach campus without ever having to deal with the traffic on Duane Street and Harrison and James Avenues. No doubt some drivers might discover this entry and try to drop-off and pick-up students at the Harrison dead end, so preemptive “Residents and Guests Only” and “No School Traffic” signs at the intersection may be appropriate.



Elwood Avenue. This is a key link in the Peninsula bikeway, and carries a great deal of school-related pedestrian and bicycle as well as vehicle traffic.

- **Place a “Yield to Pedestrian in Crosswalk” blade sign in the James Avenue crosswalk.** This is the intersection at which young student was struck by a vehicle earlier this year, and many pedestrians and bicyclists cross here at both arrival and dismissal. (Photos pages 4, 6, 7.) A sign of the type pictured at left should be placed on the centerline of the street at the crosswalk, to increase driver awareness.

- **Speed table.** There is currently a crossing guard assigned to the James Avenue crosswalk at Elwood Street. If it is determined further safety measures are needed, creating a speed table or raised crosswalk would be appropriate for this location as well. See an example in the photo at right with raised crossing and the recommended centerline pedestrian sign.

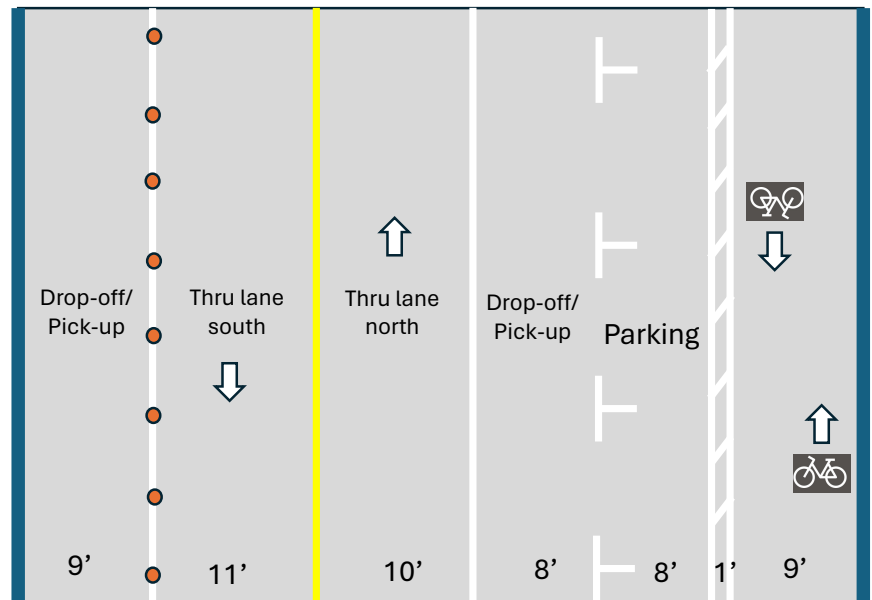


- **Replace the east-side parking lane on Elwood Street with a two-way cycle track.** Workshop participants felt a significant number of high school students park in the resident-only parking lane on the east side of Elwood Avenue, along the high school property. The group recommended a more efficient use of that space is to convert that to a protected two-way bicycle lane. This completes a link in the Peninsula Bikeway and precludes the illegal parking occurring there. It also increases the utility of bicycling in this area while reducing the convenience of driving. If eliminating the parking is an issue, consider a narrower northbound cycle track protected by a parking lane (which would complement the southbound cycle track planned for El Camino Real.) Place ramps to allow bikes to mount the curb extensions and use the rectangular rapid flashing beacons (RRFB) on the east side of the Elwood Street and Brewster Avenue intersection.
- **Duane Street.** The bulk of drop-off and pick-up activity for McKinley and Northstar schools occurs on this street (picture below), and it is also a link in the Peninsula Bikeway, currently marked with shared-use arrows (sharrows). It is recommended to be a bicycle boulevard in the *RWCWalkBikeThrive* plan. Duane is 56 feet wide, with the current allocation of space from west to east as follows: a curbside drop-off/pick-up lane marked with delineators, two very wide travel lanes, and a mix of parallel and diagonal parking along the eastern curb. *Substantial* northbound double parking along this curbside parking is common at dismissal.



- **Reallocate space to include a protected cycle track and room for northbound drop-off/pick-up.** The following is a conceptual lane alignment for consideration, from west to east across Duane Street (left to right on the schematic here):

- 9-foot southbound curbside drop-off/pick-up lane, with sections for both McKinley and Northstar defined with delineators.
- 11-foot southbound travel lane.
- 10-foot northbound travel lane.
- Extra wide 16-foot northbound parallel parking lane, with parking spaces for *resident permit parking* marked with painted Ts. The extra-wide lane effectively provides a queueing area for vehicles during drop-off/pick-up next to the parking lane (as this is occurring already and unlikely to be eliminated).
- 9-foot two-way bicycle-pedestrian lane, which is a portion of the peninsula bikeway. At arrival/dismissal students exiting northbound vehicles would be required exit to the right and to walk in this lane to a new mid-block crosswalk (next recommendation) before crossing Duane Street.



- **Place a high visibility mid-block crosswalk on Duane Street aligned with the McKinley School entry.** Vehicles are often observed dropping off and picking up students on the east side of Duane Street, and students routinely cross Duane *not* at the designated crosswalks at the end of the block. A high visibility crosswalk aligned with the McKinley school entrance gate should encourage students to cross there, in a spot where drivers can be taught to expect pedestrians. This could eventually become a raised crosswalk (or speed table, pictured on the previous page) which slows traffic and further improves pedestrian visibility.

Preclude illegal U-turns and center-line crossing on James Avenue, Duane Street, and Harrison Avenue.

Particularly dangerous movements observed during peak traffic were vehicles on James Avenue attempting to pass cars queuing to turn left or right onto Duane Street by simply crossing the centerline and driving on the wrong side of the road until they had passed the queue. This is apparently not uncommon, and is exceptionally dangerous not just for vehicles but also creates a “multiple threat” for



Vehicle passing queued traffic on James Avenue.

crossing pedestrians. This is when a first car yields but a vehicle in a second lane doesn't see the pedestrian. Adding simple centerline obstructions can help prevent illegal U-turns and keep vehicles from moving into the opposing lane. These can include flexible vertical delineators (pictured at right), raised curbing material, and accompanying additional signage. Note that emergency vehicles can pass over or through such delineators if needed.



Brewster Avenue and Elwood Street. Workshop participants felt traffic was often much too fast along Brewster Avenue, and still frequently did not yield for crossing pedestrians despite the activation of rectangular rapid flashing beacons (RRFB) at the crosswalk. They also identified brush obscuring visibility on the southwest corner of the intersection. Although a four-way stop was suggested by some participants, that can be quite inefficient at off-peak hours, forcing vehicles to stop, idle, and re-accelerate even when there is no cross traffic. Even worse, if it is common to have to stop on Brewster with no cross traffic (because of lower traffic volumes on Elwood Street) then drivers on Brewster can get in the habit of rolling through the stop sign. In such a case, a mini-circle (small neighborhood roundabout) can actually be a better solution. It reduces idling and emissions in the neighborhood yet effectively slows traffic to speeds that make pedestrian and bicycle crossings (as Elwood is part of Peninsula Bikeway) safer. Two specific recommendations for this intersection:



- **Cut back brush on the southwest corner** of the intersection to improve visibility.
- **Install a quick build mini-circle** to test its effectiveness at slowing traffic on Brewster and improving yielding for crossing pedestrians and bicyclists. (An example of a low cost demonstration circle is shown in the photo at left, Redwood City.)

Brewster Avenue and Broadway intersection. Vehicles exiting the High School driveway at this large, offset intersection do not have clear instruction as to when they are allowed to exit and where they can turn. The strongest recommendation of the group was to clarify what is allowed and when, through addition of a sign and perhaps signals for vehicles exiting the High School driveway. It is worth noting that this intersection is very large, Broadway has bicycle lanes and Brewster is recommended in *RWCWalkBikeThrive* for a protected bike facility. This suggests that this intersection might be a candidate for a modern single lane roundabout, at which the High School driveway could be a fifth “leg,” depending of course on a more detailed analysis.

El Camino Real. This is a priority corridor for pedestrian and bicycle safety improvements in the *RWCWalkBikeThrive* plan. The workshop identified the intersections at Broadway (pictured at right) and James Avenue as areas of particular concern because of the very large numbers of pedestrians (and significant numbers of cyclists) observed crossing at these intersections. Three specific suggestions:



- **Continue the use of leading pedestrian interval (LPI).** These give pedestrians a walk signal several seconds before the concurrent traffic is given a green light, allowing pedestrians to step off the curb and be more visible before vehicles start moving. They are in place and should be continued after reconstruction.



- **Increase the safe curb areas for pedestrians at the El Camino and James Avenue intersection,** especially on the north and west corners where large numbers of students were seen waiting in the morning and afternoon peak travel times.
- **Place median islands** (with pedestrian signal actuators if needed) during reconstruction of El Camino Real to provide a mid-crossing refuge for slower pedestrians or those at the back of a large group. The photo at left is of an excellent median island on Brewster Avenue.

4. Restore SamTrans service in the area that is aligned to the school arrival/dismissal schedules.

(Recommended leads: SamTrans, Redwood City, school administration.)

In some locations SamTrans provides bus service that is aligned with school arrival and dismissal schedules with reduced student fares, a strong incentive for older students to ride the bus. The picture at right is such a scheduled bus stop near Woodside High School. It is equally important that safe pedestrian access and a sufficient waiting area be provided at bus stops (a notable shortcoming in the photo, near Woodside High School).



School-schedule service is strongly recommended for the schools in this area. In addition, schools should actively promote the [SamTrans Youth Unlimited Program](#) as part of a comprehensive encouragement campaign to re-introduce students to the benefits of taking the bus such as promotion and incentives at school, initially free or very-reduced fares, and other encouragement to shift more eligible students and faculty to transit use and reduce private vehicles on and near campus.

5. Reconfigure traffic pattern through James-Duane-Harrison to move vehicles more safely.

(Recommended leads: Redwood City Engineering & law enforcement; Northstar & McKinley schools.)

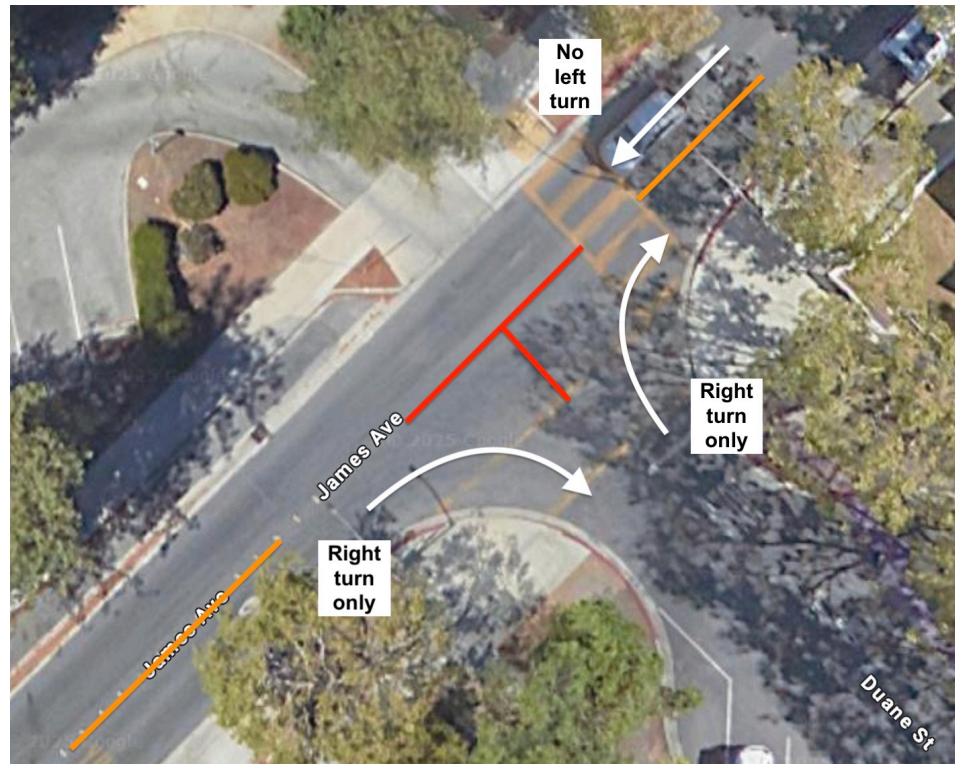
A number of proposals were offered to improve traffic safety and vehicle flow particularly at the intersections of Duane Street with James Avenue and Harrison Avenue bottleneck during McKinley and Northstar arrival and dismissal. First, it is critically important to realize that *the only real solution to this congestion is to actually reduce the total number of vehicles converging on this area at the same time*. All of the other recommendations in this memo are focused on shifting travel modes - getting more students (and faculty and staff) to safely walk, bike, and take transit to the schools. Simply reconfiguring traffic patterns will absolutely not solve this problem. Furthermore, it is important to recognize that during peak arrival and dismissal traffic the intersections of Duane Street with both James (below left) and Harrison (below right) Avenues are currently “failing,” often with many vehicles queuing to turn onto Duane Street, and following vehicles intending to go straight actually moving into the opposing lane for as much as 100 feet or more to pass this queue. This is both illegal and exceptionally dangerous, creating a particular hazard for crossing pedestrians.



Slowing vehicles and reducing dangerous and conflicting movements in this area can do two things: reduce the likelihood of collisions, and actually create a disincentive to driving to the school. If the traffic is safe and slow enough, it is hoped caregivers will recognize the benefit of walking, cycling, or taking transit to school, or at least parking at a distance (e.g. at Sequoia Station) and walking to avoid driving in the school area. Here are two approaches that would ease some of the vehicle conflicts, without actually increasing vehicle speeds (which is anathema to safety) if put in place for the arrival and dismissal hour each morning and afternoon.

This will dramatically limit turning movements during the peak school traffic, but keep in mind that drivers are already experiencing significant restrictions on their ability to move through this area to a large degree due to the stalled queues on James and Harrison Avenues every day.

On the schematic the red lines indicate temporary structures (e.g. saw horses, parade barriers) placed for arrival and dismissal; the orange lines indicate permanent centerline barriers (e.g. flex posts); and the text is for signs mounted on the temporary barriers. The white arrows are not painted; they simply illustrate the temporarily constrained vehicle movements.



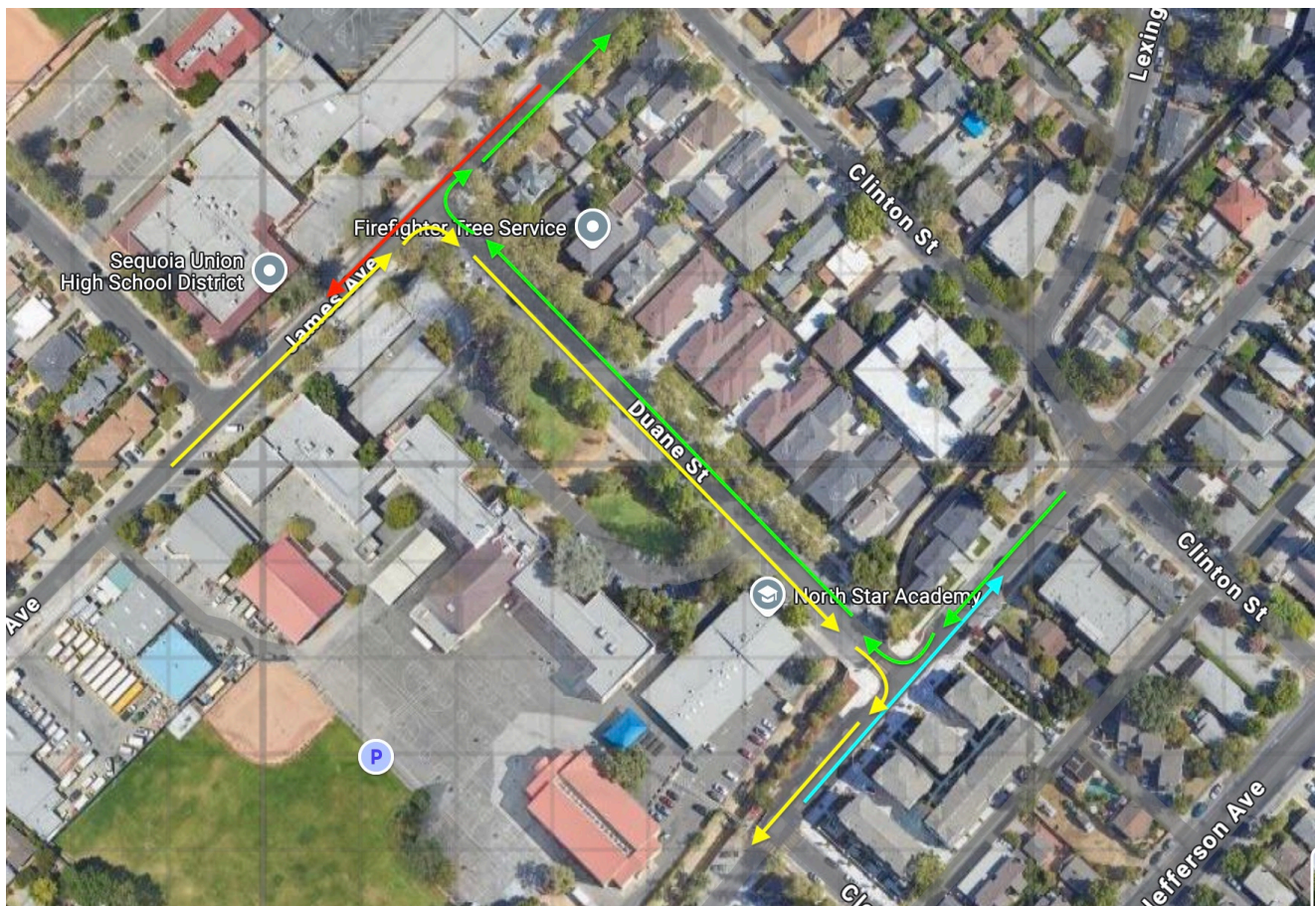
Part 1: James Avenue and Duane Street. Currently no left turns are allowed from Duane Street onto James Avenue during dismissal hours, although numerous vehicles were observed making this turn. Barriers with signs can be placed to physically preclude illegal turns and make this intersection dramatically safer for pedestrians. A set of barriers places as a “T” on the centerlines of the intersection could enforce the following:

- **No left turn from northbound Duane Street onto James Avenue.** This would be for both afternoon and morning traffic patterns.
- **No left turn from westbound James Avenue onto Duane Street.** A number of vehicles were seen making the exceptionally dangerous maneuver of going into the opposing lane to go around vehicles waiting to turn left onto southbound Duane Street. Simply preclude this maneuver with the same barriers placed to force right turns from Duane Street onto James Avenue.
- **Right turn only from eastbound James Avenue onto Duane Street.** This forces vehicles coming east to turn south onto Duane St. to either enter the curbside drop-off/pick-up lane, or pass down Duane to Harrison Avenue. The addition of centerline flex posts (delineators) will also preclude eastbound vehicles on James Avenue from trying to go around the queuing traffic to continue east on James Avenue (photo, page 10).

Part 2: Harrison Avenue and Duane Street intersection. Similar restrictions as at the north end of Duane St.

- **Right turn only from westbound Harrison Avenue onto Duane Street.** This assures no vehicles can go straight to cross Duane Street.
- **Right turn only from southbound Duane Street onto westbound Harrison.** The combination of these two restrictions assures that there is no back up on south bound Duane Street as vehicles can only exit the area by turning right onto Harrison.
- **No left turn from eastbound Harrison Avenue onto northbound Duane Street.** This combined approach could be enhanced by Northstar Academy recommending that younger students be dropped off in the spots directly in front of the school, with vehicles carrying the older two or three grades being encouraged to continue south on Duane and drop off in the spots just around the corner on Harrison Avenue.

This will effectively create two restricted but entirely predictable flows for the traffic in front of McKinley and Northstar (schematic below). Vehicles can enter the area on westbound Harrison Avenue, go up Duane Street to drop-off/pick-up, and then turn east on James Avenue to exit. Or they can come eastbound on James Avenue, go south on Duane to drop-off/pick-up, and then to west on Harrison and exit the area via Cleveland Street. It is possible that this could be effective if just put in place for the 60 to 90 minutes bracketing arrival or dismissal.



It will require a great deal of outreach and education before implementation, and extremely clear signage when first put in place. It is also apparent based on current driver behavior that this will only be effective if directive barriers are put in place to enforce these movements. Clear signs indicating the times of restricted turns must be permanently placed at key intersections such as James Avenue at El Camino Real and Grand Street, and Harrison Avenue at El Camino Real, so that entering drivers are forewarned. No doubt many people will complain that this restricts their ability to move through this area and eliminates their choices and flexibility as drivers. But it is crystal clear that *the congestion that occurs daily here is already creating those restrictions!* And it is creating exceptionally dangerous situations as drivers try to maneuver around the existing congestion. This “double loop” will eliminate those dangerous maneuvers, and need only be in place for each arrival and dismissal cycle. Perhaps most importantly, it can be tried without making any costly or irreversible infrastructure changes; temporary structures placed daily at the two key intersections will allow for a very informative test. However, it must be in place for several months to give drivers time to learn the pattern.



Conclusion

It is imperative that a collaborative working group be established to advance these recommendations, which are summarized on a simple schematic map on the next page. Officials from all three of the schools must maintain close contact with parents, community leaders, and the team from the Redwood City Departments of Planning, Engineering, and Public Works, and Redwood City Safe Routes to School. The combination of three schools' advocacy, city involvement, and the existence of the city's *RWCWalkBikeThrive* (pedestrian and bicycle) plan identifying some of these recommendations should help move this work along, particularly the lower cost and easier near term ideas. The schools will benefit from joining forces in keeping the existing city plan and these important recommendations in front of city officials, as they will benefit not just the schools but the residents of the surrounding neighborhoods and all users of these roadways.

Schematic map of locations of significant infrastructure recommendations.

The simple schematic below outlines the locations of the significant infrastructure and safety improvements resulting from the Safe Routes to School workshop in the area of three schools straddling James Avenue in Redwood City. These recommendations are built on input from a diverse group of stakeholders after direct observation of the extremely challenging traffic congestion that occurs especially on James Avenue, Duane Street, and Harrison Avenue during arrival and dismissal times at the McKinley Institute of Technology and Northstar Academy. This congestion not only significantly impedes any free movement of vehicles traveling through this area at these times, but also encourages exceptionally dangerous behaviors by drivers. This is illustrated by the collision of a vehicle with a student and adult in August 2024, and student being hit by a vehicle at the intersection of Elwood Street and James Avenue in spring of the 2025. Some of these recommended measures may on first glance seem quite restrictive, such as constraining movements at the Duane Street intersections with James and Harrison Avenues during arrival and dismissal times. However, given the severity of the congestion, these restrictions are no worse than the current existing conditions and indeed will likely maintain better traffic movement than what is happening currently. And these recommendations can be put in place for very low cost, allowing the results to be objectively observed before any major infrastructure investments are made.



References and Resources

RWCWalkBikeThrive; 2022. An outstanding plan with detailed recommendations, including safety improvements on El Camino Real and specific bicycle infrastructure recommendations in the area of the James Avenue schools.

The National Center for Safe Routes to School; extensive practical traffic safety and programmatic information downloadable resources: www.saferoutesinfo.org

The Safe Routes to School National Partnership; coalition of organizations and experts providing great implementation support to schools & communities: www.saferoutespartnership.org

Complete Streets: National coalition working for streets that work for pedestrians, bicyclists, transits riders, and drivers of all ages, incomes, and abilities: <http://www.completestreets.org>

Quick Build Guide: How to Build Safer Streets Quickly and Affordably. Practical guide to low-cost ‘quick-build’ techniques to increase pedestrian and bicycle safety and accommodation. Alta Planning and the California Bike Coalition; 2020.
<https://altago.com/wp-content/uploads/Quick-Build-Guide-White-Paper-2020-1.pdf>

The Pop-Up Placemaking Tool Kit, an exceptionally practical how-to guide for low-cost traffic calming, safety, and place-making demonstrations from the AARP. <https://www.aarp.org/livable-communities/tool-kits-resources/info-2019/pop-up-tool-kit.html>

Slow Your Street: A How-to Guide for Pop-Up Traffic Calming. Trailnet’s excellent practical guide with design, implementation, promotion, and evaluation tips on demonstration projects. <https://trailnet.org/tag/plan4health/>

The Tactical Urbanist’s Guide to Materials & Design, by the Streets Plan Collaborative. Downloadable for free. <http://tacticalurbanismguide.com>

Small Town and Rural Multi-Modal Networks. Outstanding resource for low cost neighborhood-scale traffic calming and safety measures, with lots of relevant images and information. (Federal Highway Administration 2017.) Downloadable for free. <https://www.ruralsdesignguide.com>

Urban Street Design Guide and the *Urban Bikeway Design Guide* of the National Association of City Transportation Officials (NACTO; ~\$50 each). <https://nacto.org/publication/urban-street-design-guide/>

Guidebook for Developing Bicycle and Pedestrian Performance Measures (Federal Highway Administration 2017). Downloadable for free. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/performance_measures_guidebook/pm_guidebook.pdf