

Thomas R. Pollicita Middle School: Safe Routes to School Workshop Summary

Prepared for: The Thomas R. Pollicita Middle School Community and Partners

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Walk auditors make a human curb extension (top) & develop recommendations. April 19, 2023.



Summary

Members of the Thomas R. Pollicita Middle School community and surrounding area, including school faculty and administrators, parents, advocates, area residents, Daly City staff, and representatives of the San Mateo County Office of Education have participated in a Safe Routes to School initiative. This included a walk audit and planning session in April of 2023 with the goal of developing recommendations to improve pedestrian, bicycle, and motor vehicle safety, and encourage more walking, bicycling, and transit travel to school. A list of the program, infrastructure project, and policy recommendations that have been developed conclude this memo. The key recommendations for action are briefly summarized here, and are illustrated more fully in the memo. This includes a schematic map locating some of the key recommendations.

A. Launch an educational and promotional campaign to increase safe walking and bicycling and reduce motor vehicle travel to campus. Activities can include, but are not limited to:

- Student driven promotion of the health, environmental, emotional, and other benefits of walking/bicycling.
- Launch of walking school buses and bicycle trains, groups of students walking or cycling to school.
- Create a coned-off single lane along the school sidewalk for sequential, curb-side only drop-off/pick-up.

B. Construct low-cost quick-build pedestrian safety measures at key pedestrian crossings:

- Curb extensions at E. Market Street and Hillside Blvd., to shorten very long crosswalks and provide safe waiting areas for pedestrians. Test elimination of the dedicated right turn lane on northbound Hillside.
- Curb extensions at Lisbon Street and Hillside Blvd., to shorten the extremely long crosswalk of Lisbon.
- Curb extensions at Wyandotte Ave. and E. Market St., to aid students and the crossing guard there.
- Curb extensions at Florence St. and E. Market St., to aid the many students crossing there.

C. Shift the SamTrans stop to the front of the school and add crosswalks. Relocate the eastbound SamTrans stop on E. Market St. to in front of the school; open the fence to access this area directly from the school. Place the crossing guard at a new crosswalk with curb extensions on the east leg of the Lausanne Ave. and E. Market St. intersection. If the road diet occurs (E, below) add a median island. Make the eastbound parking lane on E. Market St. west of the school a queuing lane for vehicles entering the school parking lot.

D. Engage math, science, civics, and other classes to *objectively* study the performance of demonstration projects. Before and after installations students can record and evaluate pedestrian, bicycle, and vehicle counts; vehicle speeds; pedestrian crossing locations; close calls; and other indicators of performance.

E. Pursue a lane reduction on E. Market Street and make improvements permanent. Reconfigure E. Market St. to three lanes: one traffic lane in each direction, plus a center turn lane, with bike lanes (to replace the shared use arrows now on the road). Add a center median in areas with no left turns available. During re-paving or other construction make permanent any of the demonstration curb extensions shown to be successful.

Background

In April of 2023 the San Mateo County Office of Education Safe Routes to School team facilitated a walk audit and workshop at Thomas R. Pollicita Middle School. Participants included members of the school community and surrounding area, including school faculty and administrators, parents, advocates, area residents, Daly City officials and law enforcement, and representatives of the San Mateo County Office of Education. The focus was on travel patterns and safety issues for walking, bicycling, and taking transit (together called the *active transportation* modes) to the school, and the group identified safety issues and then generated a series of recommendations to improve the safety and viability of active transportation. Particular concerns the group noted were vehicle speeds on E. Market St., making pedestrian crossings hazardous; particular safety and visibility challenges at the eastbound SamTrans bus stop and nearby crosswalk; vehicles parking too close to crosswalks (and thus impeding visibility); narrow sidewalks and long crosswalks at the Hillside Blvd. and E. Market Street intersection; a double row of vehicle traffic in the school drop-off and pick-up area, meaning students are walking through one lane of vehicles to reach the outer lane; and vehicles turning left out of the school driveway, into a long crosswalk on E. Market Street. In the picture below, the student feels compelled to run to clear four lanes of traffic, including vehicles turning left out of the school driveway. It was also

suggested that these safety concerns were likely discouraging some households from allowing students to walk or bike to school, in part because of the volume of traffic around the school at arrival and dismissal. So improving safety for walking and bicycling to school should help reduce some of that traffic, and encourage even more students to choose active travel to school.



Priority Recommendations

The workshop group considered three broad categories of intervention, referred to as the three Ps.

- **Programs.** Events, outreach, education, encouragement, 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 low cost, near term actions that can be pursued quickly to build momentum and begin making it safer for students immediately. The ideas developed are fully summarized in a table at the end of this memo. All of these recommendations have merit, and taken together they comprise a very comprehensive approach to making a safer setting for walking, bicycling, and transit use. It is recommended that a school and community working group be created to continue to work on implementation of these priorities, as it is not the sole responsibility of the school to carry out these goals. Following are the key recommendations broken into the five broad areas summarized at the beginning of this memo.

A. Launch an educational and promotional campaign to increase safe walking and bicycling and reduce motor vehicle travel to campus.

- Engage students in developing messaging, images, and incentives to promote safe walking and bicycling to school.** A promotional campaign should target both students and adults, but message development and “branding” should be driven by students. Specific classes in art, communications, health and physical education, math and science can take part in developing messages, images, signs, and social media. Messages can focus on the health, safety, environmental, social, and even academic benefits of walking, bicycling, and taking transit, as studies show more physically active students perform better academically and experience fewer disciplinary referrals. This promotional outreach should be distributed through all available media, such as parent/guardian and student emails and newsletters, handouts and messaging during parent-teacher meetings, family events and assemblies, and all other contact opportunities.
- Require a single lane of traffic for sequential, curb-side only pick-up and drop-off.** Currently a double line of vehicles forms in the school parking lot at dismissal (photo at right). This is dangerous, as it encourages students to walk through one lane of vehicles to access vehicles in the outer lane. Cones can be placed so that only *one lane forms* and students exit and enter vehicles only along the curb. Vehicles should move all the way through this lane in sequence, to avoid collisions that can occur when vehicles pull into and out of such a lane. Also vehicles must be required to pull all the way forward when queuing at dismissal; otherwise vehicles will actually back into the driveway at the far end, as captured in the photo sequence below.



- **Engage students as “valets” at the curbside drop-off/pick-up lane.** Many schools create a safety patrol of upper grade students to act as valets at the drop-off and pick-up line. This requires that students stay on the curb but are able to open car doors, so that drivers stay in their vehicles. (Photo at right is from JFK Elementary School, Daly City.)



This group and associated adults can remind cars to pull all the way forward. These two actions can dramatically improve the safety (most important) and efficiency (secondary importance) in the vehicle line.

- **Place a five-minute safety delay on vehicle pick-up line to allow pedestrians to clear conflict areas.** Instituting a five-minute safety delay on the vehicle pick-up line at dismissal can give pedestrians and bicyclists time to cross key intersections, including the exit of the school driveway (photos below). Only after the bulk of pedestrians have cleared the most challenging areas - certainly the pedestrian congestion directly in front of the school, but also perhaps the intersection of Hillside Blvd. and E. Market St. - allow the vehicle pick-up line to begin moving. The goal is to reduce pedestrians-vehicle conflicts, but also to create incentives that reduce traffic congestion.



- **Shift the culture to support walking and bicycling, through comprehensive and consistent promotion and education; launch walking school buses, bicycle trains, and *Walking Wednesdays*. Promote the SamTrans “Youth Unlimited” fare pass.** The first Wednesday of October is National Walk to School Day. Many schools use this week to kick-off on-going Walking Wednesday promotions, encouraging all students who are able to do so to walk or roll to school or to take transit (and if eligible to utilize a SamTrans Youth Unlimited pass). Walking school buses and bicycle trains are designated routes to school that a group, often with an adult, walks or bikes picking up students along the way. They can be formal and organized by the school, or informal gatherings of neighborhood households sharing group leader responsibilities. The school can help by mapping the location of student households and identifying natural clusters for volunteer-organized walking or bicycling groups to get together.

B. Construct low-cost quick-build pedestrian safety measures and paint high visibility crosswalks at key pedestrian crossings around the school.

A curb extension is a widening of the curb or sidewalk, typically the width of a roadway's parking lane or shoulder.

The picture at right illustrates the many benefits of curb extensions: they can keep cars from parking illegally too close to a crosswalk; they make pedestrians more visible, and more able to see oncoming traffic; they shorten the in-road crossing distance and time for pedestrians; and they tend to slow traffic by *visually* narrowing the roadway (even if travel lanes are not actually narrowed).



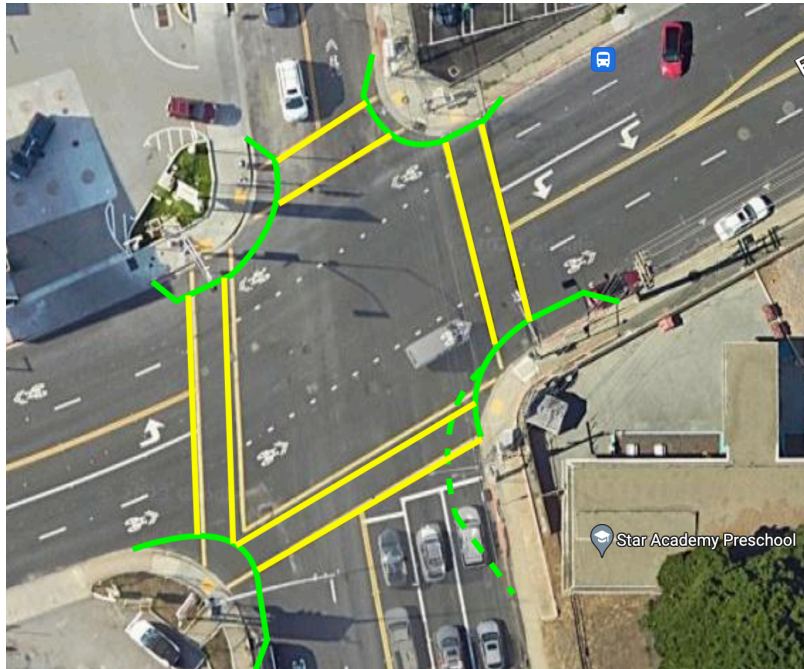
Although constructing concrete curb extensions can be quite expensive, there are less expensive ways to create curb extensions. Paint, planters, and vertical delineators (flexible reflective posts) can be used to create a curb extension at moderate cost. The pictures below show an intersection near Sunset Ridge Elementary School in Pacifica, identified during a 2022 walk audit as having very long pedestrian crossings and sweeping turns, with cars often parking too close to the crosswalks (below left). The 2023 photo at right shows how the city has created curb extensions with paint and installation of flexible delineators; these also help to slow traffic.



A number of intersections were identified which would benefit from the installation of at least low cost (sometimes called “quick build”) curb extensions as pictured above. These can first be tested with washable paint and removable planters and delineator devices; such temporary treatments are often called pop-up demonstrations. Then quick build structures (permanent paint, flexible delineators) can be put in place at low cost, but to provide more protection. The picture at right shows county staff, students, and families painting curb extensions in Maui, HI.



- **Hillside Blvd. and E. Market Street.** The green lines on the diagram below roughly illustrate how curb extensions could be added at the intersection of Hillside Blvd. and E.

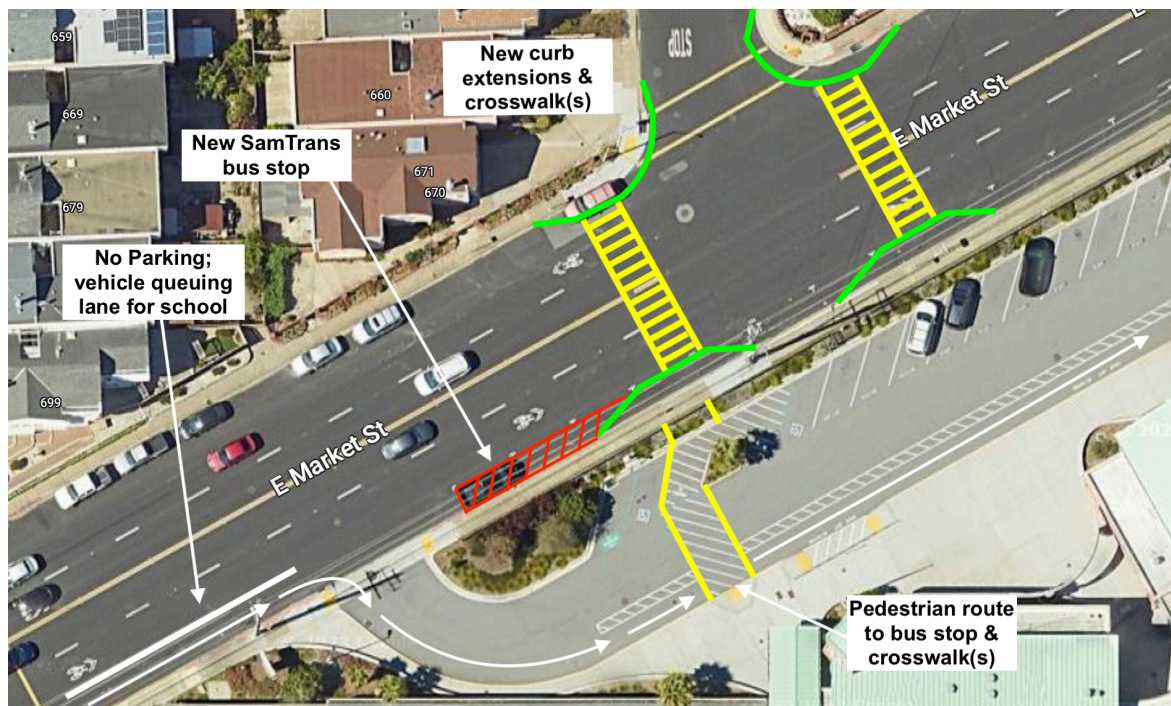


Market Street. Essentially, the approach is to extend the sidewalk roughly the width of the parking lane, where one exists. There is no parking lane on the east side of Hillside Blvd. approaching the intersection from the south, because there is a right turn lane there. However the dashed green line on the southeast corner illustrates how the curb could be extended if the right turn lane could be eliminated. In any case, many students arrive on this southeast corner at dismissal so there is a need for a curb extension to provide significant waiting space for pedestrians.

- **Lisbon Street and Hillside Boulevard.** The crosswalk on Lisbon St. is very long, because Lisbon enters Hillside at an angle, creating a wide sweeping turn on the northeast corner. Curb extensions at these corners will make the entry from Lisbon onto Hillside more perpendicular, which improves vehicle driver visibility, and it will dramatically shorten the pedestrian crossing distance.
- **Wyandotte Avenue and E. Market Street.** The crossing guard at this crosswalk indicated that it is very challenging to get vehicles in all four lanes on E. Market Street to stop for crossing pedestrians. It is especially difficult when an eastbound SamTrans bus pulls up to the bus stop immediately adjacent to the crosswalk (photo, page 11). Curb extensions at this crosswalk will significantly shorten the crossing distance, and make the crossing guard and pedestrians more visible when preparing to cross. Combined with a high visibility paint pattern (ladder style) this should improve vehicle yielding for pedestrians.
- **Florence Street and E. Market Street.** At dismissal many students walk along the sidewalk in front of the school to the east end of the school parking lot, then cross the school driveway to use the E. Market Street crosswalk at Florence Street (see photos, page 5). Like the crosswalk at Wyandotte Avenue, this should be repainted in the high visibility ladder style, and curb extensions should be added so that pedestrians preparing to cross are visible and can be seen beyond the cars parked on the south side of E. Market Street. It will also preclude cars from parking too closely to the crosswalk.

C. Shift the SamTrans stop to the front of the school and add crosswalks.

Given the proposal to allow only a single, curb-side drop-off and pick-up lane through the school driveway, it is likely that at afternoon dismissal the vehicle queue will extend onto E. Market Street, possibly a significant distance west of the school. Also, crossing for students at the Wyandotte Avenue crosswalk, with the SamTrans bus stop immediately adjacent to the crosswalk, is very challenging (see photo, page 11). The planning group offered the following recommendation to alleviate these problems, and to significantly improve safety for pedestrians, bus riders, and drivers. This reconfiguration is illustrated on the schematic at below.



- **Add curb extensions and one (or two) high visibility crosswalk(s) on E. Market Street at Lausanne Avenue.** This requires creating an opening and pathways through the fence in front of the school, and emphasizing the crosswalk through the parking lot so that pedestrians can walk directly to this area to access these crosswalks. Note that instituting the recommended 5-minute safety delay on moving the vehicle pick-up line at dismissal makes it easier for pedestrians to walk across the parking lot to this area.
- **Move the SamTrans bus stop to a position in front of the school.** The area shown in red on the schematic could be the new bus stop, with students able to access it directly from the front of the school. Note that the curb extension shown in green may be important as a waiting area for bus riders.
- **Create a queueing lane along E. Market Street's south curb, west of the school driveway entrance.** White arrows on the schematic show how vehicles could queue in the area that is currently a parking lane and the SamTrans bus stop. By moving the bus stop and painting this curb white and adding signage, this could be reserved as a queueing lane during school arrival and dismissal hours.

D. Engage math, science, civics, and other classes to *objectively* study the performance of pop-up and quick build demonstration projects.

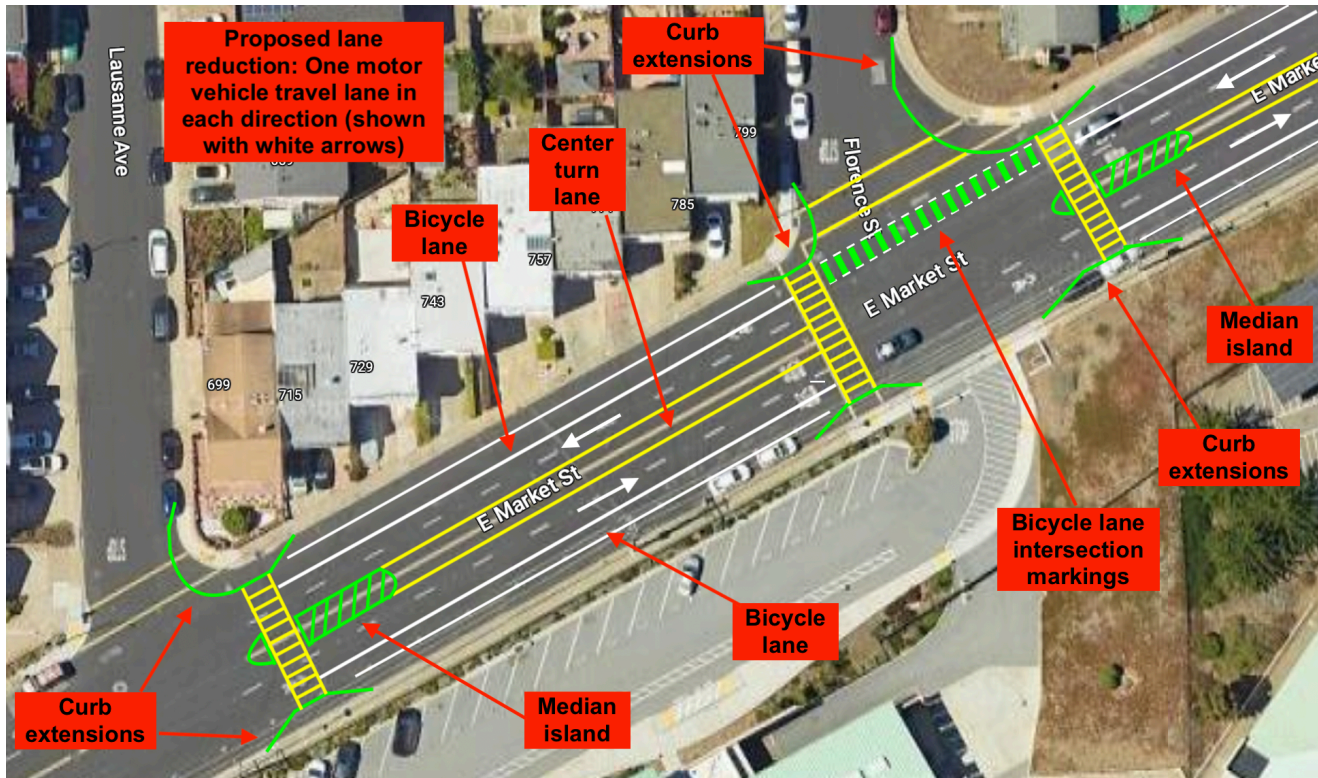
The work group strongly suggests that objective data be collected on the performance of the demonstration projects and drop-off/pick-up procedures that have been recommended, to assure they are actually improving safety. In many schools math, science, civics, and other classes have carried out this type of evaluation. Student scientists can determine the appropriate data to collect before and then during the demonstration improvements, to see if they are having any impact. Possible measures include but are not limited to the following:

- **The numbers of pedestrians, bicyclists, transit riders, and car riders arriving at school.** How many cars are dropping off at the school, compared to students coming by the “active” modes (walk, bike, transit)?
- **The number of pedestrians crossing streets at key intersections.**
- **The locations of pedestrian crossings** (e.g. when crosswalks have been painted, how many are using the crosswalk versus crossing elsewhere?)
- **The speed of vehicles** passing through areas that are receiving curb extensions and high visibility crosswalks (as these are expected to slow vehicle speeds somewhat).
- **Yielding behavior of vehicles** when pedestrians are crossing. Specifically, when a pedestrian is standing at the roadway edge preparing to cross, if vehicles are present how many vehicles pass before one yields to let the pedestrian cross? It may be worth noting not only if there is a difference before versus after the pop-up crosswalk is installed, but also after installation comparing yielding for pedestrians in the crosswalk versus those not at the crosswalk.
- **Collisions and close calls between vehicles, and with pedestrians and bicyclists.**

E. Pursue a lane reduction on E. Market Street and make demonstration improvements permanent.

During a walk audit and workshop at JFK Elementary School in 2022 the idea of a reducing Guadalupe Canyon Parkway from four lanes to three (one lane in each direction plus a center turning lane) was discussed by San Mateo County transportation staff as a possibility to improve safety and slow traffic on this roadway. This is the extension of E. Market Street, and begs the question of whether this lane reduction (sometimes called a “road diet”) could be carried out on the section of E. Market Street from Guadalupe Canyon Parkway to Hillside Boulevard, which could immensely improve the pedestrian environment near the school. (It would also improve motor vehicle safety at the intersection with Price Street, at the JFK Elementary.) A very simple schematic on the next page illustrates some of the possible elements of a lane reduction through the area by the Pollicita School. The key elements are as follows:

- **Create one motor vehicle lane in each direction, keep the parking lanes, and add painted bicycle lanes.**
The two through travel lanes are illustrated with white arrows in the schematic. By eliminating the equivalent of one entire travel lane, there is enough width to provide a six-foot wide bicycle lane on each side of the road. Given the speed and volume of traffic on this road, this is a far more desirable and appropriate bicycle facility than the shared use arrows currently painted on E. Market Street. To be clear, only the most experienced cyclist would be comfortable riding here without a bike lane.



- **Create a center turn lane.** The center turn lane is lined in yellow on the schematic; it allows vehicles turning left to pull into the center lane, leaving the through travel lanes unobstructed.
- **Place median islands in locations where no left turn are possible.** Note on the schematic that curb extensions the width of the parking lane are outlined in green, high visibility crosswalks are yellow, and proposed median islands are shown as hashed green areas. These median islands are recommended on the high visibility pedestrian crosswalks on the east side of the Florence Street and Lausanne Avenue. At both of these locations there is no left turn available to west bound traffic, so the island provides a refuge for a student crossing, as they can focus on traffic coming first from one direction, then stand in the island while waiting for a break in traffic from the other direction. This is a dramatically easier and safer crossing than hoping for a break in traffic on four lanes at once, which is currently required.
- **Use “best practice” bicycle lane markings.** Recommended best practices in marking bicycle lanes can be found in resources such as the National Association of City Transportation Officials *Urban Bikeway Design Guide* (NACTO; see references and resources). These include painting a buffering strip rather than just a single six-inch stripe between a bike lane and travel lane, and creating high visibility markings where bicycle lanes pass through intersections. A simplistic rendering of one approach is shown where the bike lane crosses Florence Street in the schematic.



None of the schematics in this report are intended to provide engineering guidance; they are simply images intended to help members of the school community and Daly City partners visualize the challenges raised by workshop participants, and the approaches being recommended to make it safer and more inviting to walk, bicycle, and take transit to T.R. Pollicita Middle School. Though none of the highlighted measures alone will dramatically



solve safety issues or the traffic congestion at the school, taken together with the full list of recommendations that follow they offer a fairly comprehensive approach to improving safety and promoting the more active travel modes to school. Therefore it is important to consider and pursue the full list of programmatic, infrastructure project, and policy recommendations listed below, not just those highlighted in the memo.

Full List of Program, Project, & Policy Recommendations

Near-Term Programs; education, encouragement, promotion, events, etc.

- Launch student led safety patrol, to act as valet for pick-up and drop. Or parent volunteers. Provide incentives for students to participate, such as earned community service hours.
 - Have adults at pick-up/drop-off area to make cars pull all the way forward
 - Have students available to open doors at drop-off/pick-up lane.
- Recruit and train parent volunteers to fill in as crossing guards
- Pursue travel fellowship with SMCOE.
- Launch a parent driver education (PDE) program.
- Pop-up demonstration of curb extension and/or median island on east leg of E. Market & Florence intersection.
- Launch walk/bike to school day; Walking Wednesdays
 - Create simple events and promotions for walking & bicycling to school.
 - Map student locations to find natural clusters who can walk or bike together.
 - Bring together parents for walking school buses.

Longer-Term Programs; education, encouragement, promotion, events, etc.

- More traffic enforcement (speed, illegal left turns out of the parking lot) if available.
- More crossing guards – E. Market & Hillside intersection (multiple crossings).
 - Could these be well-trained students, with long-handled stop signs?
- Safety delay on release for those students going to vehicle queue; hold vehicle line for 5-minutes to allow pedestrians to clear nearby conflict areas, such as the school driveway.
- Consider alternative satellite drop-off/pick-up areas (e.g. church or retail parking, park).

Near-Term Projects: Physical changes to infrastructure to support active transportation.

- School exit – right turn only; enhanced do not enter treatment.
 - Add right turn only cones at school exit to physically preclude left turns.
- Enhance no turn on red on Northbound Hillside at E. Market; add signage, pavement markings; consider eliminating right turn lane to allow for needed curb extension.
- Add Leading Pedestrian Interval at Hillside and E. Market Street.
- Curb extensions on all four corners of Hillside and E. Market Street.
- Quick build curb extension and/or median island on east leg of E. Market & Florence intersection.
- Move bus stop on E. Market to get it away from the crosswalk at Wyandotte. Two options considered:
 - Move bus stop back toward Hillside Blvd intersection.
 - Move bus stop forward and place it in front of the school.
- Paint high visibility ladder style striping at all of the existing school crosswalks.

Longer-term Projects: Physical changes to infrastructure to support active transportation.

- Lane reduction (or “road diet”) on E Market Street. Reduce four lanes to three – one through lane in each direction, plus a center turn lane.
 - Add bicycle lanes on E. Market Street (to replace shared-use arrows).
 - Place median island in any locations that don’t require center turn lane, to help calm traffic and provide for safe mid-block pedestrian crossings.
- Rectangular Rapid Flashing Beacons for the crosswalk at Florence Street, which is an uncontrolled intersection.
- Repair sidewalk in the Hillside – E. Market area
- Install at least demonstration curb extensions at:
 - SE corner of E. Market & Hillside – no room for students to queue waiting for the light.
 - At each crosswalk on E. Market in front of school.
 - At Lisbon & Hillside (very long pedestrian crossing).

Near-Term Policy: Rules, ordinances, practices, and procedures supporting active travel.

- Limiting speed to 15 mph in school zone.
- Assure that substitute crossing guards are called in promptly when guard will be absent.
- Concept to try: Require students on foot to exit out rear of the school – completely remove the pedestrian & motor vehicle conflict.
- Establish a safety delay on the motor vehicle line at school dismissal.
 - First release pedestrians & bicyclists, transit riders.
 - Hold the car line for 5-minutes, to get all pedestrians clear of the school driveway entrances.

Long-term Policy: Rules, ordinances, practices, and procedures supporting active travel.

- Designated pick-up times for motor vehicles, separate by grade level, to ease congestion.

References and Resources

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.ruraldesignguide.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