Rosemead High School Mobility & Active Transportation Plan

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School Mobility & Active Transportation Plan

Introduction

This School Mobility & Active Transportation Plan was developed for Rosemead High School with the goal of identifying school-related mobility needs and solutions that will encourage active transportation. The Plan is part of larger clean transportation efforts that are underway to electrify El Monte Union High School District's school bus fleet, funded by a Clean Mobility in Schools grant from the California Air Resources Board (CARB).

Project Goals

The goal of the School Mobility & Active Transportation Plan (Plan) is to identify project areas that will make it more safe, comfortable, and fun to walk, bike, or take other types of low-emission transportation to get to campus. The Plan is tailored to the specific conditions and needs of Rosemead High School and draws from industry best practices to inform future actions that can be taken in years to come. The plan is informed by an analysis of existing conditions, an inventory of existing infrastructure, circulation patterns, and a school community survey.

School Overview & Enrollment

Rosemead High School is located at 9063 East Mission Drive, Rosemead, CA 91770. The school's frontage is along Mission Drive and is generally bound by Rosemead Drive, Lower Azusa Road, and Encinita Avenue. A map of the area can be found in Figure 1 below. A brief overview of the school's enrollment data is presented in Table 1. Based on the 2019-2020 student enrollment data, enrollment numbers are lower compared to previous years, possibly due to COVID-19.



Table 1. Rosemead High School Enrollment Data

Enrollment Data Type ¹	Total
2019-2020 Cumulative Day Student Enrollment ²	1,878
2018-2019 Census Day Student Enrollment ³	1,844
2018-2019 Cumulative Student Enrollment	1,922
Free & Reduced-Price Meals	80.4%
English Learners	18.2%
Languages of English Learners	Spanish: 116 Vietnamese: 1 Cantonese: 51
2017-2018 Number of Faculty	107
2017-2018 Number of Staff	12
2017-2018 Number of Classified Staff	52

School Kick-Off Meeting

On November 12th, 2020, the project team met with Brian Bristol, Principal of Rosemead High School, to further understand existing conditions at the school and any opportunities for improvements near the school site. The purpose of the meeting was to discuss the goals and expectations for the project, review the key transportation issues at the school, and finalize data collection efforts.

Dr. Bristol shared his experience with school-related transportation issues as well as the strategies in place to help mitigate these issues. He noted that the Sheriff's Department works with the school to get motorcycle officers to regulate traffic on Mission Drive. Drop-offs occur on Mission Drive as well as in the northwest parking lot. The west lot on Mission Drive is dedicated to visitors, while the east lot is dedicated to faculty parking and electric vehicle (EV) charging. The southwest lot is used as overflow for the auditorium, crew and band but is not used during school hours. Additionally, there is a Memorandum of Understanding with the City of Rosemead to use the track when the school is not using it.

³ According to ED-Data.org, "Census Day" enrollment is measured by counting the number of students enrolled in school on the first Wednesday in October. Short term enrollments are not accounted for in this number.



¹ Source: Education Data Partnership

² According to ED-Data.org, "Cumulative" enrollment counts are collected at the end of the year and consist of the total number of unduplicated primary and short-term enrollments within the academic year.

Some key issues identified for the school are summarized below:

- Few issues occur on Lower Azusa Road; not a priority area for the school
- The intersections of Mission Drive & Valley Boulevard and Mission Drive & Encinita Avenue have heavy foot traffic after school
- Rosemead Boulevard & Mission Drive has the biggest issue related to traffic and safety
- Traffic backs up Mission Drive to Encinita Avenue in the morning, causing a conflict point with pedestrians at that intersection
- Main traffic issues on Mission Drive:
 - The school has wanted to do a traffic study on Mission Drive and the City of Rosemead is supportive but it has not happened yet
 - Collisions involving students are a regular occurrence, particularly between Rosemead Boulevard and the Starbucks
 - The school exits on Mission Drive are signed and marked as right-turn only but there are many attempted lefts, resulting in some collisions
 - The collisions frequently involve school employees
 - Mission Drive & Rosemead Boulevard get congested in mornings
 - Possible sight line issues along Mission Drive at parking lot exits

Existing Conditions

An existing conditions assessment was conducted for Rosemead High School. The project team conducted field observations, evaluated circulation patterns, analyzed historical collision data, and reviewed transit options offered by the City of El Monte, Foothill Transit and Los Angeles County Metropolitan Transportation Authority (Metro).

School Location, Circulation & Access

Rosemead High School lies northwest of El Monte and is adjacent to notable infrastructure such as Encinita Elementary, Rosemead Skatepark, and Rosemead Park. Surrounding land uses include commercial and residential areas. Rosemead High School is a large campus with frontage on Mission Drive. The map below presents the circulation of the school.





- Pedestrian Circulation
- City Boundary
- 3 Visitors
- - 4 Faculty & EV Charging 5 Maintenance & Faculty



X Key Concerns

• Attempted lefts out of the front lots along Mission Dr. • Conflicts between vehicles lining up and pedestrians walking along Mission Dr. at Encinita Ave. & Mission Dr.

Figure 1 Rosemead High School Circulation The school has five parking lots, two of which are used as drop-off zones along Mission Drive and Rosemead Boulevard. The primary pedestrian entrance is located on Mission Drive where there is heavy pedestrian traffic coming from Valley Boulevard. Few pedestrians enter the school through Lower Azusa Road, though the entrance is open during arrival and dismissal times. Crossing improvements were recently implemented along Encinita Avenue, which improves access to the Rosemead Park from the adjacent neighborhood with curb extensions, landscaping, and new crosswalks striped at all three perpendicular streets. There are no bike lanes adjacent to the school. Three Metro bus lines have bus stops along Rosemead Boulevard from Lower Azusa Road and Mission Drive.

Field Observations

On October 22nd, 2020, a site visit was conducted at Rosemead High School. During the site visit, the school was assessed for existing primary and secondary access points, usage of various modes, existing circulation patterns, and existing bicycle and pedestrian infrastructure. An audit of the entire school perimeter was conducted. Due to COVID-19 public health guidelines, school was not in session during the site visit, on-site school conditions were not observed, and walk audits did not offer an opportunity to assess drop-off and pick-up conditions or normal school traffic and circulation.

Mission Drive & Newby Avenue have a pedestrian crossing with pedestrian-actuated warning lights directly in front of the school. Newby Avenue is stop-controlled. Rosemead High School has inbound and outbound driveways on Mission Drive. Rosemead Boulevard & Mission Drive is a large intersection with 70-foot crossings for pedestrians traveling north-south and 50-foot crossings for those traveling east-west.

Rosemead Boulevard is a major arterial with a raised center median. Between Mission Drive and Lower Azusa Road on Rosemead Boulevard, there is no marked pedestrian crossing for about 1,000 feet. Lower Azusa Road & Rosemead Boulevard have a signalized pedestrian crossing that has two out of three legs with marked crosswalks. On Lower Azusa Road, 40 MPH speed signs were observed and only one school speed sign was observed in each direction. The sidewalk on Lower Azusa Road is in good condition but few marked crossings to the residential neighborhood north of Rosemead High School exist.

Encinita Elementary is located on the northeast corner of Encinita Avenue & Lower Azusa Road, adjacent to Rosemead Park and near Rosemead High School. High visibility crosswalks exist along Encinita Avenue, along with a curb extension at Encinita Avenue & Pitkin Street, providing direct access to the elementary school and Rosemead Park. The curb ramps on Encinita Avenue & Rio Dell Street direct pedestrians towards the intersection rather than into the marked crosswalks. Sidewalks on Encinita Avenue were in excellent condition and many people were observed walking to and around Rosemead Park.



Observations made for each corridor and intersection surrounding the school are summarized below:

> Mission Drive

- o School campus has main frontage on Mission Drive
- Mission Drive is signed as a Truck Route
- Pedestrian-activated warning lights at Mission Drive & Newby Avenue with one leg striped on the east side of the intersection
- No striped crossing at Lorna Avenue
- Parking restrictions obscured by overgrown landscaping
- Left turns out of the school exits are not permitted; in-road raised pavement markers near Mission Drive & Rosemead Boulevard provide additional infrastructure to prevent this movement

Encinita Avenue

- Signalized crossing at Encinita Avenue & Mission Drive
- Recent crossing improvements along Encinita Avenue provide access to Rosemead Park from the adjacent neighborhood with curb extensions, landscaping, new crosswalks striped at all three perpendicular streets
- Encinita Elementary is located on the northeast corner of block; Rosemead Park is located on the southeast corner of the block
- o Ramps on Pitkin Street & Encinita Avenue does not align with crosswalks

Lower Azusa Road

- No striped crosswalks at any perpendicular residential streets
- Signed 40 MPH with one school speed sign present in each direction
- Lower Azusa Road & Rosemead Boulevard has only two of three legs with striped crosswalk and is immediately adjacent to a driveway that functions as a fourth leg of the intersection

Rosemead Boulevard

- o Rosemead Boulevard & Mission Drive is main intersection of interest
- Destinations on the southeast corner include In & Out, Jack in the Box
- Rosemead Boulevard has raised median with pedestrian push-button but lacks pedestrian ramps; could be upgraded to provide better pedestrian refuge space
 - No pedestrian crossing on Darlow Avenue & Lower Azusa Road
 - No crossing on the southern leg connected to school Rosemead Boulevard & Lower Azusa Road
 - 40 MPH on Lower Azusa Road
 - Possible school drop-off and pick-up queue in front of school on Rosemead Boulevard
 - No crossing from Rosemead Boulevard to Encinita Avenue
 - Add high visibility crosswalk on eastern and western legs
 - Encinita Avenue has speed balls
 - Bulb-out in front of Rosemead Boulevard on Encinita Avenue



Figure 2. Raised Pavement Markers to Prevent Left Turns near Mission Drive & Rosemead Boulevard



Figure 3. Pedestrian-Actuated Warning Lights at Mission Drive & Newby Avenue

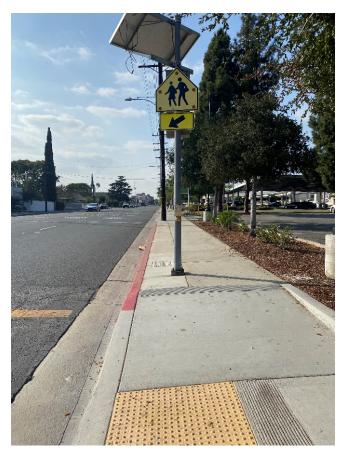




Figure 4. Raised Median with Pedestrian Push Button on Rosemead Boulevard



Collision History

Collision data from 2015 through 2019 was analyzed to assess roadway safety conditions near Rosemead High School. Collision data from the UC Berkeley Transportation Injury Mapping System (TIMS) database was used to conduct the collision analysis. The purpose of the collision analysis was to determine the roadway safety conditions, and identify locations where vehicle-vehicle, pedestrian-vehicle, and bicycle-vehicle collisions are concentrated near the school. Collision data was analyzed by mode, year, collision severity, and school age (14-19) within one mile of Rosemead High School. Highway collisions were excluded from the analysis.

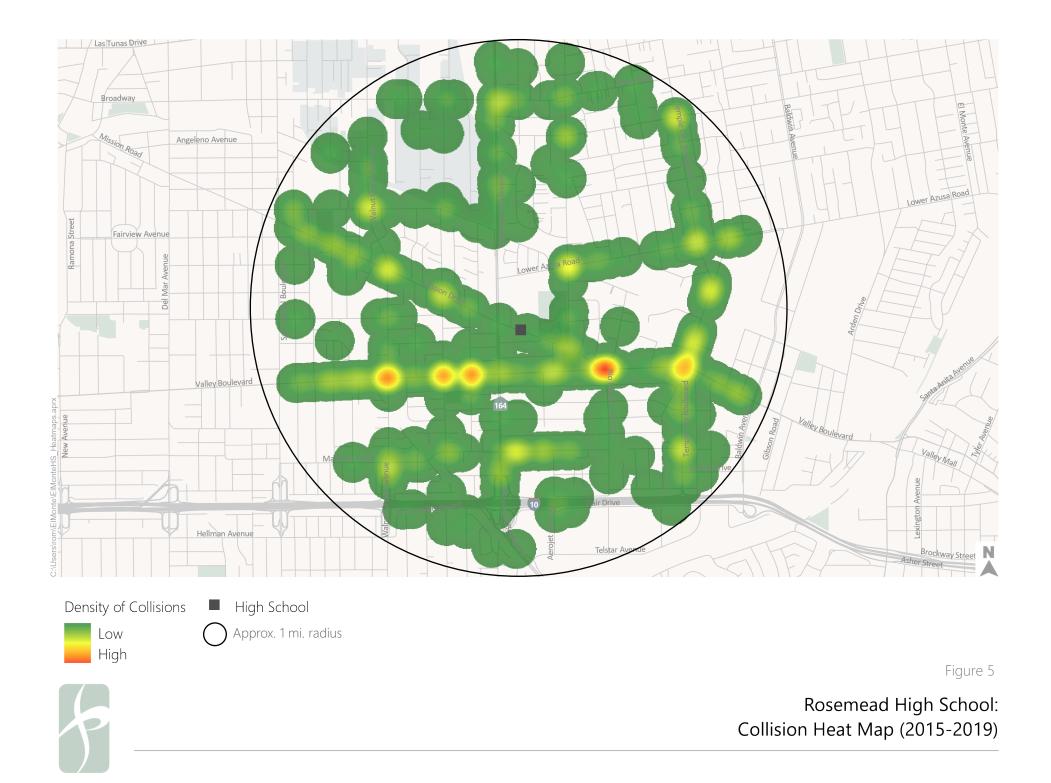
Figure 5 below visualizes the collision patterns as a heat map over the five-year period. The hotspots represent vehicle-vehicle, pedestrian-vehicle, and bicycle-vehicle collision densities. During the five-year period, collisions occurred primarily along arterials such as Valley Boulevard and Mission Road. Intersections of notable collision hotspots shown in Figure 5 are summarized in Table 2 below.



Table 2. Collision Hotspot Characteristics

Local Intersections of Major Collision Hotspots	Adjacent Built Environment Characteristics	Signalized/Unsignalized
Valley Blvd. & Walnut Grove Ave.	Commercial	Signalized
Valley Blvd. & Muscatel Ave.	Commercial	Signalized
Valley Blvd. & Ivar Ave.	Commercial	Signalized
Valley Blvd. & Rio Hondo Ave.	Commercial	Signalized
Valley Blvd. & Temple City Blvd.	Commercial	Signalized





Collisions by Mode

In addition to the summary hotspot map, understanding the location patterns of collisions involving bicyclists and pedestrians can help inform where improvements to bicycle and pedestrian infrastructure are needed. Figure 6 presents the reported bicycle and pedestrian collisions from 2015 to 2019 within one mile of Rosemead High School.

The general distribution of collisions is concentrated south of the school, and involved more bicyclists than pedestrians. Valley Boulevard has the greatest number of collisions.



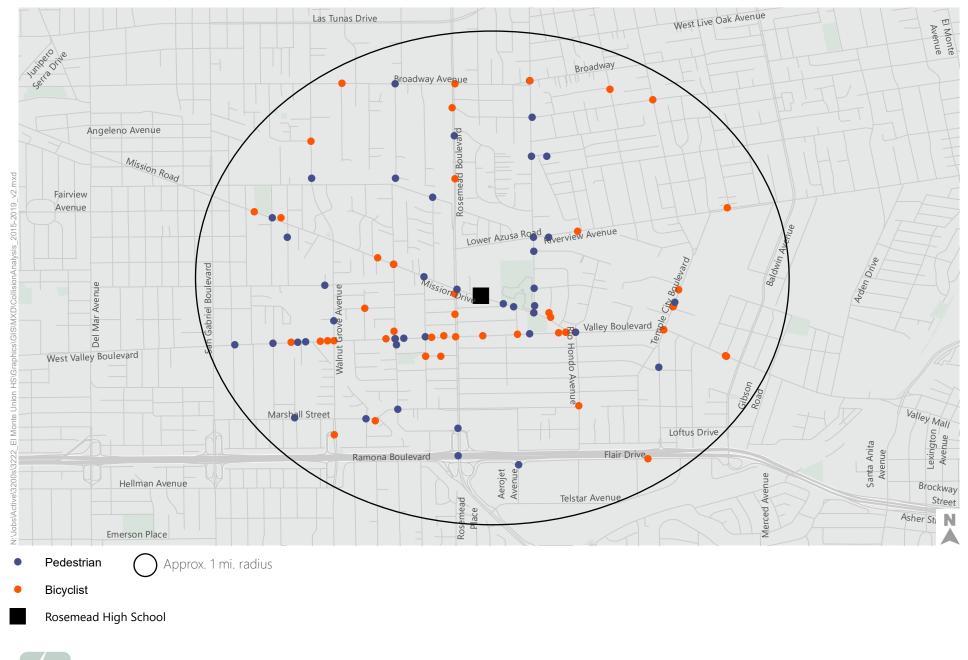
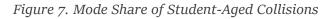


Figure 6

Bicycle and Pedestrian Collisions Within One Mile of Rosemead High School (2015-2019)

Figure 7 and Figure 8 below display the total collisions near Rosemead High School. Between 2015-2019, there were 741 collisions within one mile of the school. Most of the collisions were vehicle collisions, followed by bicycle and pedestrian collisions, respectively. There were 104 people between the ages of 14 through 19 involved in the collisions in the area, with 60 reporting injuries. Of the students involved in collisions, 81 were drivers, seven were pedestrians, and 16 were bicyclists.



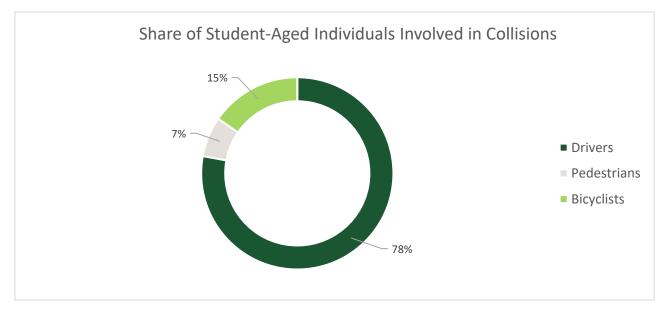
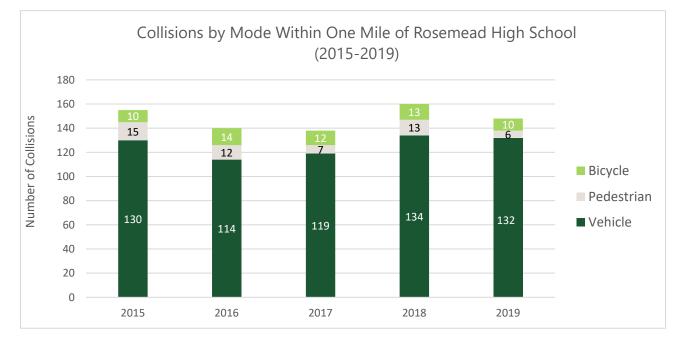


Figure 8. Collisions by Mode Within One Mile of Rosemead High School



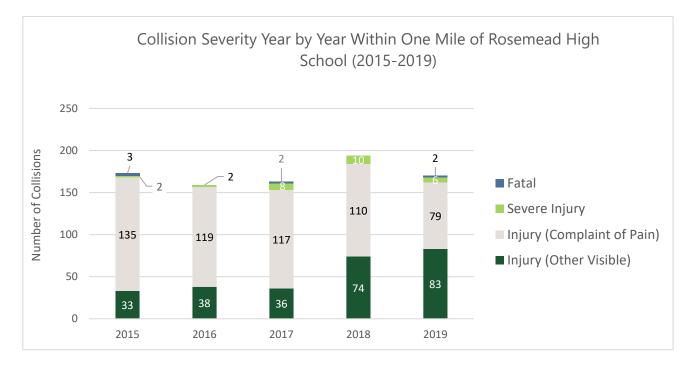


Collision Severity

Throughout the five-year period, there were seven fatalities, 28 reports of serious injuries, 264 reports of visible injuries, and 560 complaints of pain. No fatalities involved people between the ages of 14 and 19. The chart below depicts the levels of severity for all collisions within one mile of Rosemead High School.

Of the 741 collisions in this area over the five-year period, there were seven fatalities, 28 reports of serious injuries, 264 reports of visible injuries, and 560 complaints of pain. No fatalities involved people between the ages of 14 and 19. Reports of other visible injuries have been generally increasing since 2015. The chart below depicts the levels of severity for all collisions within one mile of Rosemead High School.

Figure 9. Collision Severity Year by Year Within One Mile of Rosemead High School





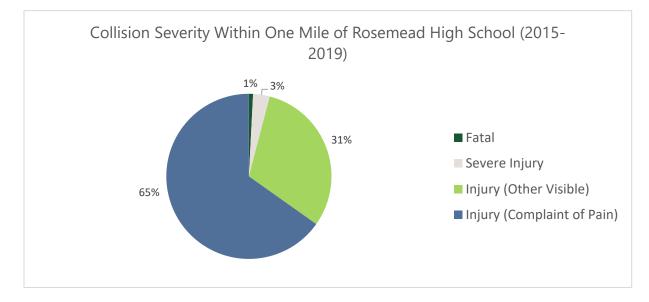
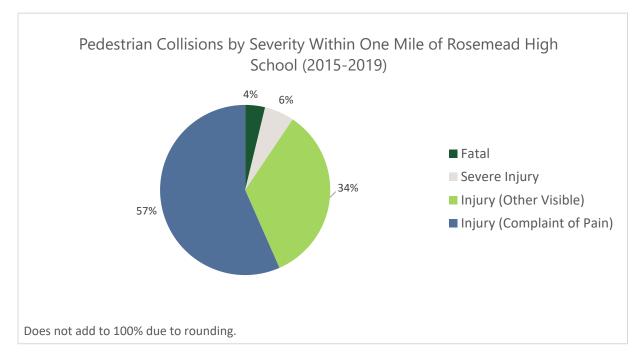


Figure 10. Collision Severity Within One Mile of Rosemead High School

Pedestrian Collision Severity

Figure 11 below depicts the proportion of levels of severity across pedestrian collisions. There were two pedestrian fatalities, however none were people between the ages of 14 and 19. Seven of the pedestrians that reported injuries were determined to be people between the ages of 14 and 19.

Figure 11. Pedestrian Collisions by Severity Within One Mile of Rosemead High School





Bicycle Collision Severity

Figure 12 below depicts collisions by levels of severity near Rosemead High School. Of the 59 bicyclists who reported injuries, 16 were between the ages of 14 and 19. One fatality was reported, though not involving a student.

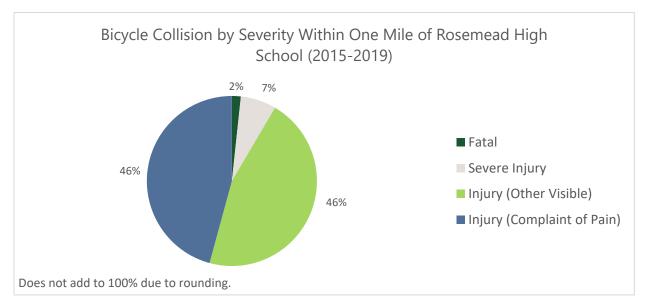
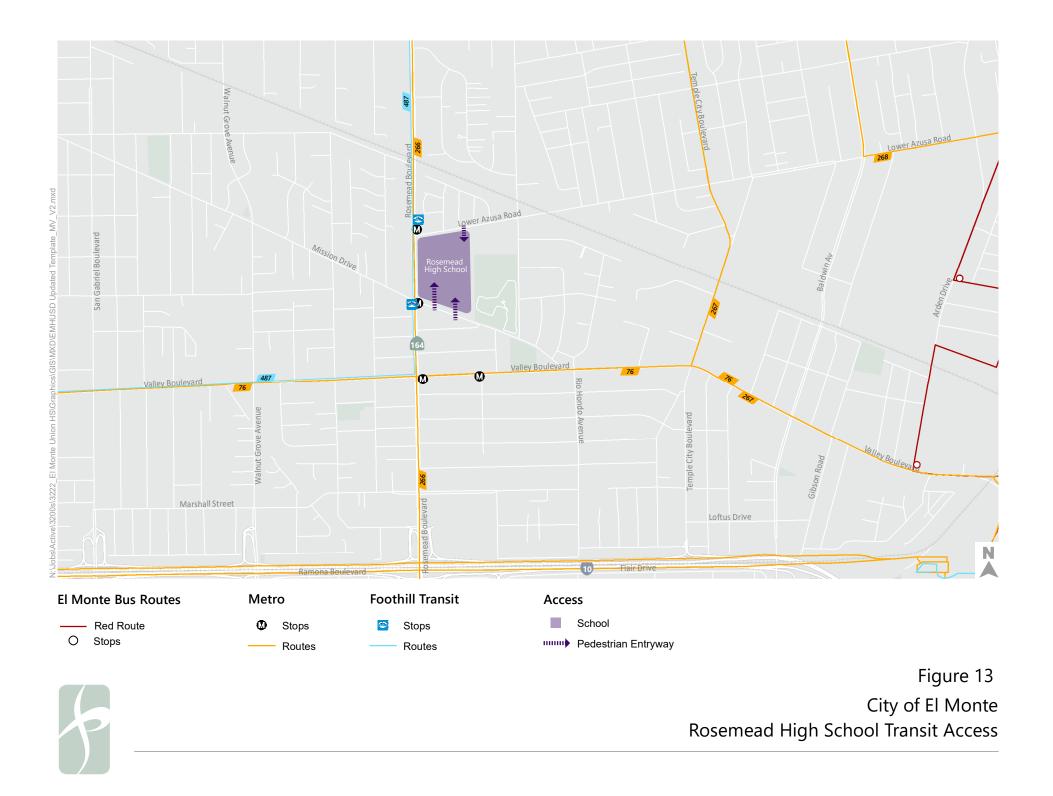


Figure 12. Bicycle Collisions by Severity Within One Mile of Rosemead High School

Community Transit Systems

Metro and Foothill Transit provide bus service along Rosemead Boulevard & Valley Boulevard. Two bus stops are directly along Rosemead High School's west frontage on Rosemead Boulevard. Metro Local Route 266 provides service every 20 minutes, and Foothill Transit Route 487 has daytime service every 40 minutes. South of Rosemead High School, Metro Local Route 76 provides service every 20 minutes. Figure 13 shows the transit services near Rosemead High School.





Community Input

In addition to the review of existing conditions, the project team conducted a survey inviting students, parents, and staff to describe their school travel experiences and offer input to the process of developing project ideas. The survey was made available for four weeks during Spring 2021, in English, Spanish, Mandarin, and Vietnamese. The surveys were created using the Survey Monkey platform and were distributed as links at various after-school meetings. In addition, the link was circulated through social media and other communications channels by another project partner, VMA Communications, Inc. Table 3 below shows the survey response total for Rosemead High School.

Groups	Total Number of Respondents
Students	99
Parents	117
Staff ⁴	1

Table 3. Rosemead High School Survey Response Totals

Mode Share

Mode share refers to the percentage of travelers who use a particular type of transportation including walking, biking, driving, transit, or other options. Mode shift represents a change in travel patterns based on previous mode share. The survey asked respondents about their current mode share (how they get to school on most days, assuming in-person instruction during non-COVID conditions), as well as the potential for mode shift (how they would prefer to get to school in an ideal world). Results are shown in Figure 14 and Figure 15 for students, and students' behavior reported by parents, respectively.

⁴ Includes faculty, staff, and classified staff



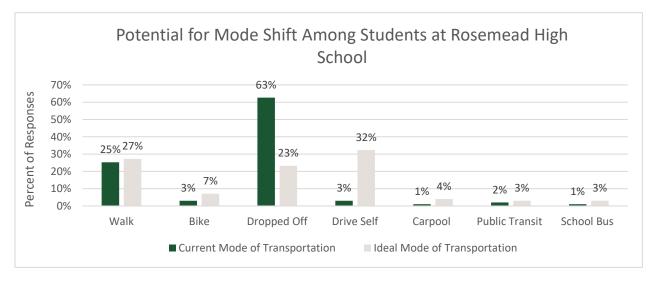


Figure 14. Potential for Student Mode Shift

Current mode share among student showed that the majority of students are currently dropped off, and one quarter of students currently walk. Many students indicated they would prefer to drive themselves, with some indicating a preference for walking, biking, carpooling, or taking transit instead of getting dropped off. This demonstrates potential to increase active transportation mode share for Rosemead High School. In addition, the desire to drive oneself to school may indicate a latent demand for independent travel, which could be met by active modes if more supportive infrastructure was available.

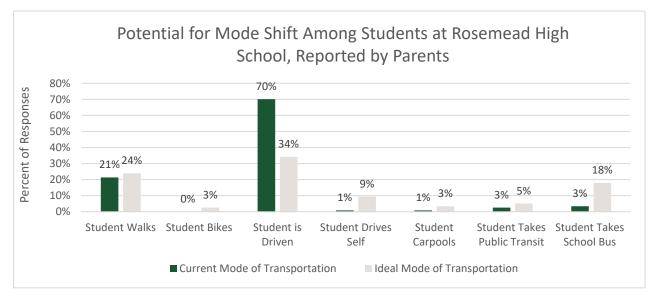


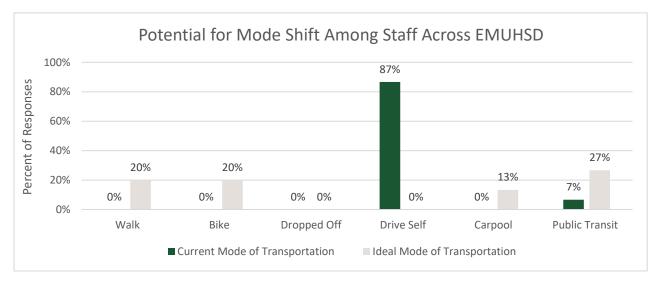
Figure 15. Potential for Student Mode Shift, Reported by Parents

Mode share results among parents for the most part aligned with the student responses that showed driving students to school and students walking as the predominant modes of transportation. Parents also shared that a small percentage of students drive themselves, take public transit, carpool, and take the school bus.



In terms of mode shift, though "Student is Driven" represented a smaller share of ideal mode compared to current mode share, it remained the top mode among parents. "Student Walks" grew slightly from 21% to 24% and remained the second most popular mode among parents. Other options also grew by small percentage points, with "Student Takes School Bus" growing the most compared to the current mode share. These trends present opportunities for improved access and availability of non-auto modes.

Only one staff member from Rosemead High School responded to the survey and though the datapoint provides insight into potential mode shift preferences for staff, it is not representative of staff trends for the school or the district. Due to the low response rate among staff across all schools, a graph of the staff responses across all surveyed high schools is shown below, representing fifteen total staff responses.





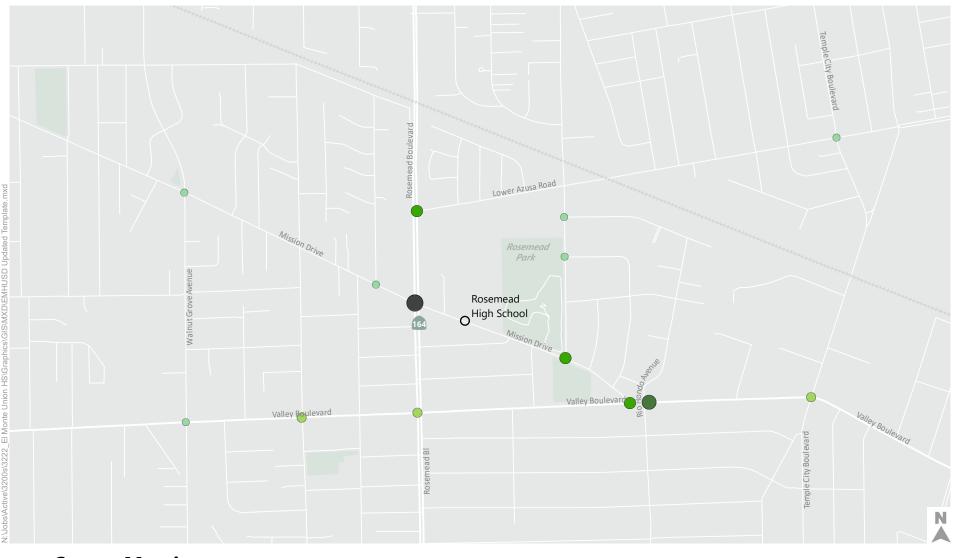
Reported Safety Concerns

Survey respondents identified locations where they experienced near-misses with vehicles or streets with safety concerns. Survey mentions were aggregated and mapped, resulting in the identification of key locations. This information helps to inform the locations of project ideas that prioritize safety-related active transportation improvements.

Figure 17 shows key intersections along Mission Drive, Rosemead Boulevard, and Valley Boulevard. The most frequently cited locations were Lower Azusa Road & Rosemead Boulevard, Mission Drive & Rosemead Boulevard, and Valley Boulevard & Rio Hondo Avenue. The intersection of Mission Drive & Rosemead Boulevard represents the greatest concern. This information is important in developing active transportation and traffic countermeasures with enhanced safety as the priority.

Figure 18 shows key corridors where students, parents, and staff reported feeling unsafe. For Rosemead High School, Mission Drive and Rosemead Boulevard represent the greatest share of responses, with Valley Boulevard to the south also being cited as a concern.





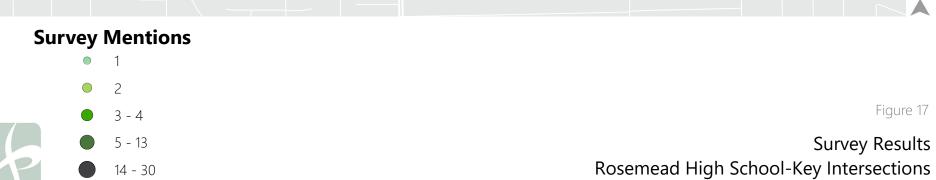






Figure 18

Survey Results Rosemead High School-Key Corridors

Short-Answer Survey Questions

The survey also asked respondents open-ended questions related to travel after-school and desired transportation improvements. Students and parents were asked where they often go after school to get a better idea of students' travel patterns. This information helps guide the project development process, informing improvement locations and potential programmatic approaches to encouraging more walking and biking. Figure 19 presents the after-school destinations. Local restaurants were the top after-school destination, followed by the park.

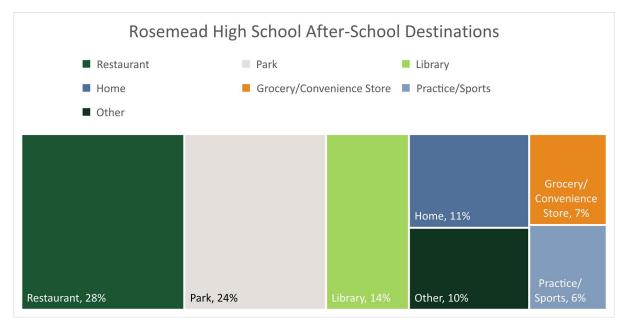


Figure 19. After-School Destinations

In response to, the question, "If there were one thing you could change that would make your trip to school easier, safer, more comfortable, or more pleasant, what would it be?" students and parents shared insights on the concerns they have commuting to and from school. The most frequent concern in responses from Rosemead High School parents and students was the amount of traffic congestion during commute times in the area, followed by the lack of supportive signals, signage and infrastructure necessary for dropping off students. One person suggests improving circulation around the school with "the use of several gates to be open and different drop off locations, so there are less people in the same place at the same time." Others suggest having a greater law enforcement and crossing guard presence at the school to reduce dangerous driving conditions.

Improving roadway conditions around the school were also mentioned as a necessary change, with numerous firsthand accounts of pedestrian being involved in near-miss collisions. One student wrote, "on the streets that do not have street signs, I've crossed the street and suddenly a car quickly turns and almost crashed into me."



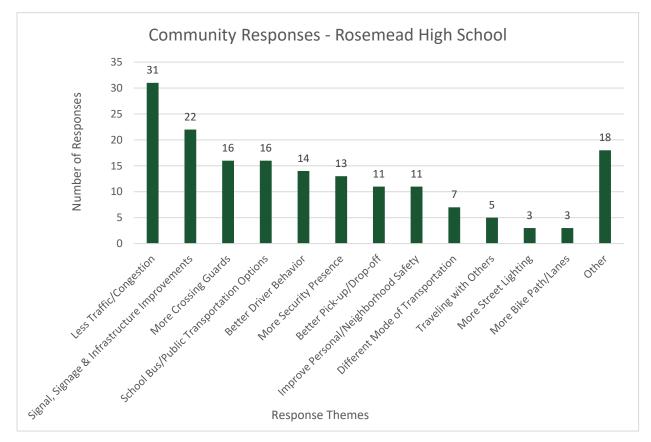


Figure 20. Desired Improvements for the Journey to Rosemead High School

The community responses shown in Figure 20 above reflects concerns around congestion, signals, signage, and other infrastructure improvements. Respondents to the survey indicate they would prefer less congestion and traffic, yet the leading current and ideal mode for both students and parents was driving to school or dropping-off students. This disconnect highlights the opportunity to offer other options that make walking and biking more desirable in order to reduce traffic, and also the fact that tradeoffs may be necessary to meet the stated goals and preferences of the school community.

Community Meetings

On February 10th, 2021, the project team attended Rosemead High School's Parent, Teacher, Staff Association (PTSA) meeting. Participants confirmed that the collision hotspots identified in Figure 5 and Figure 6 have high traffic volumes and are active pedestrian areas. There were several suggestions for crossing guards and more traffic enforcement.

The project team also had the opportunity to give an overview of the project at Rosemead High School's English Learner Advisor Committee (ELAC) meeting on February 10th, 2021. Parents and staff were present and shared that traffic and speeding are issues that have resulted in near-miss experiences or collisions. Parents suggested that there be more stop signs and streetlights, and more driver and pedestrian education to ensure everyone knows and follows the rules of the road.



Project Ideas

Based on the review of existing conditions and the input offered from the survey and community meetings, the project team developed a set of targeted recommendations, including infrastructure improvements and programs, to improve active transportation and mobility options around Rosemead High School.

The District has control over the campus conditions but not the public right of way within adjacent cities. The project team made multiple efforts to engage with the City of Rosemead traffic engineering staff, but did not receive any response or information from the City. The projects developed in this section were therefore not discussed with or informed by City activities.

Location-specific Recommendations

The project team developed the following targeted recommendations shown in Figure 21, located within a one-mile walkshed (or reasonable walking distance) of the school. Recommendations were prioritized for intersections and corridors that were bicycle and pedestrian collision hotspots, and where survey participants noted they felt unsafe. Table 4 details the intersections and corridors of interest, along with their recommended improvements.

Location	Location Type	Recommended Improvements
Lower Azusa Rd. & Rosemead Blvd.	Intersection	 Add school zone signage Add high-visibility continental crosswalks on all legs Extend median to create pedestrian refuge islands compliant with the Americans with Disabilities Act (ADA) on north and south legs of Rosemead Blvd.
Lower Azusa Rd. & Encinita Ave.	Intersection	 Convert crosswalks to high-visibility continental crosswalks Add protected left turn phase on Encinita Ave. Add school zone signage Improve visibility of railroad crossing stop bar on Lower Azusa Rd.
Mission Dr. & Rosemead Blvd.	Intersection	 Add school zone signage Add high-visibility continental crosswalks on all legs Extend median to create pedestrian refuge islands compliant with the Americans with Disabilities Act (ADA) on north and south legs of Rosemead Blvd.

Table 4. Rosemead High School Project Development Recommendation List

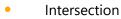


Location	Location Type	Recommended Improvements
Mission Dr. & Newby Ave.	Intersection	 Add high-visibility continental crosswalk on south leg across Newby Ave. Add overhead signage to existing signalized pedestrian crossing Add curb extension to shorten crossing distance
Mission Dr. & Encinita Ave.	Intersection	 Refresh faded crosswalks with new high visibility school-zone paint
Valley Blvd. & Temple City Blvd.	Intersection	 Convert crosswalks to high-visibility continental crosswalk Reconstruct curb ramp to comply with ADA
Valley Blvd. & Rio Hondo Ave.	Intersection	 Add high-visibility continental crosswalks to all legs Add protected left turn phase on Valley Blvd. Adjust alignment of crosswalk on west leg Add school zone signage at Valley Blvd. & Mission Dr.
Valley Blvd. & Ivar Ave.	Intersection	• Add protected left turn phase on Valley Blvd.
Valley Blvd. & Muscatel Ave.	Intersection	Add protected left turn phase on Valley Blvd.Add protected left turn phase on Muscatel Ave.
Valley Blvd. & Walnut Grove Ave.	Intersection	 Convert crosswalks to high-visibility continental crosswalks Consider reducing speed limit on Walnut Grove Ave.
Mission Dr.	Corridor	 Study and mitigate possible sight line issues at parking lot on Mission Dr. and Muscatel Ave. Consider reducing speed limit
Valley Blvd.	Corridor	 Consider narrowing lanes Extend medians to create pedestrian refuge islands at crosswalks Convert crosswalks to high-visibility continental crosswalks Reconstruct curb ramps to be ADA-compliant Consider installing bike lane in both directions Consider reducing speed limit
Rosemead Blvd.	Corridor	 Add high-visibility continental crosswalks where missing Consider reducing existing 40 MPH speed limit





Project Development Sites



1 Mile Walkshed

Corridor

) Improvement/Recommendation Type

Figure 21

Project Development Recommendations Rosemead High School Figure 22 below provides a closer look at what these recommendations could look like on the ground for the intersection of Mission Drive & Newby Avenue. As the intersection closest to the primary parking lot and pedestrian entrance of Rosemead High School, this location demonstrates a need for active transportation improvements, particularly for students on foot arriving from the neighborhood to the south. Recommended improvements include adding high-visibility continental crosswalks across Mission Drive & Newby Avenue, installing overhead Rectangular Rapid Flashing Beacons (RRFBs) across Mission Drive to enhance pedestrian safety, and adding curb extensions with ADA compliant ramps to reduce the speed of turning vehicles and shorten crossing distances for people on foot.



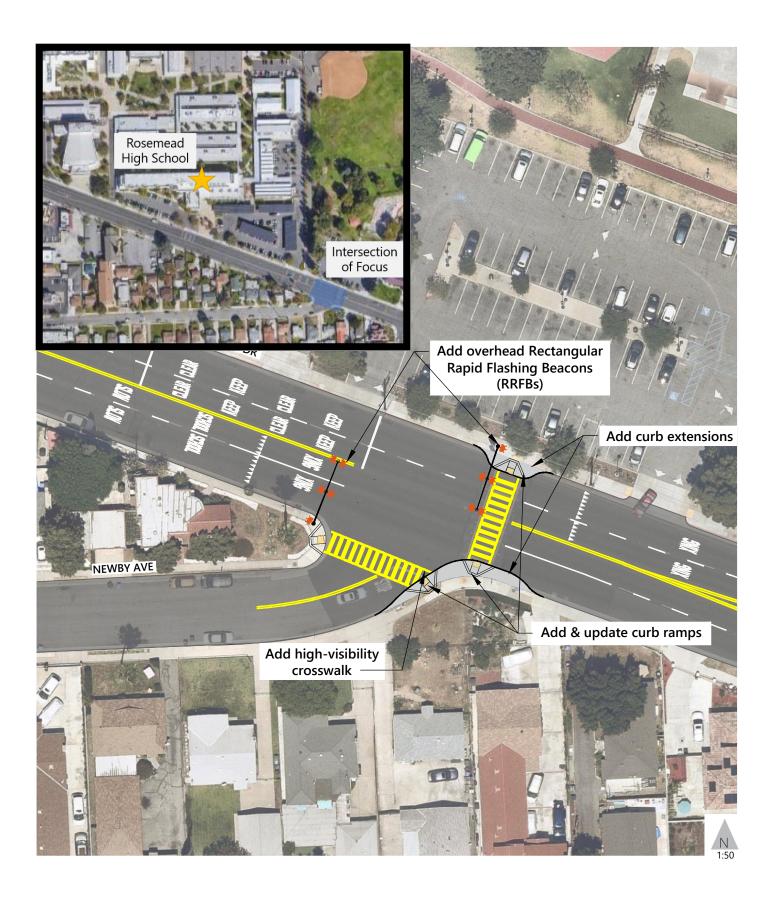


Figure 22



Conceptual Improvements Intersection of Mission Dr & Newby Ave Rosemead High School

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Recommended Policies & Programs

In addition to infrastructure recommendations, the following policies and programs provide for broader systemwide improvements to help support and enhance active transportation at the school and local level. Policies and program recommendations include:

- Station additional crossing guards near large intersections during arrival and dismissal times
- Develop off-site pick-up and drop-off locations with chaperoned routes that pass intersections supported by crossing guards
- Standardize pick-up/drop-off circulation approach, communicating patterns and expectations to parents at multiple times throughout the school year
- Reconfigure Mission Drive parking lot exits to prevent left turns onto Mission Drive
- Build transit confidence and bicycling confidence among students through dissemination of information, creation of a bike club, and in-class curriculum/programming
- Partner with transit agencies to offer reduced transit fare to students or advocate for fare-free transit with local transit agencies
- Continue to advocate for city policies to improve near-school intersections with infrastructure that includes more frequent pedestrian crossings, ADA-compliant curb ramps, and signal timing that provides enough crossing time across major arterials
- Designate a District staff person to work with school site administration and actively engage City of Rosemead staff around these ideas, emphasizing the importance of standardizing the approach to providing pedestrian and bicycle infrastructure near schools
- Partner with popular student destinations (nearby restaurants, City of Rosemead Parks & Recreation Department) to offer incentives and discounts for students who walk or bike

Example Costs for Recommended Improvements

Table 5 provides an overview of example costs⁵ associated with typical projects by type, to provide additional information that can support the District in prioritizing project ideas, coordinating with City engineering staff, pursuing grant funding or identifying other funding opportunities.

Table 5. Example Co	osts for Recommended	Improvements
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Recommended Improvements	Project Type	Cost Estimate
Sidewalk Enhancements	Sidewalks (per mile, one side)	\$1,800,000
Pedestrian Crossing	High-visibility crosswalk	\$5,000
Enhancements	Painted curb extensions (varying extents)	\$15,000-\$40,000

⁵ Costs are based on Fehr & Peers cost estimates of transportation and infrastructure projects from the California market.



Recommended Improvements	Project Type	Cost Estimate
	Concrete curb extensions (varying extents)	\$100,000-\$125,000
	Rapid rectangular flashing beacon	\$45,000
	Pedestrian hybrid beacon	\$170,000
	Pedestrian signs (per sign)	\$3,000
	Existing signal timing adjustments	\$5,000-\$10,000
	New or upgraded signal	\$400,000-\$500,000
	Reconstruct corners to reduce curb radius and close slip lanes	\$200,000-\$450,000
Speed Management	Re-stripe with narrowed or reconfigured lanes (per mile)	\$300,000
	Roadway lighting (per mile)	\$750,000
Lighting	Pedestrian-scale lighting (per mile)	\$2,000,000
	Intersection lighting	\$40,000
	Class I bicycle path (per mile)	\$1,847,000
	Class II bicycle lane (per mile)	\$245,000
Bicycle Enhancements	Class III bicycle route (per mile)	\$358,000
	Class IV bicycle lane (per mile)	\$2,634,000

Conclusion

Overall, the Rosemead High School analysis highlights some key themes and recommendations for the District to consider:

- Some latent demand for walking and bicycling to school has been identified, offering an opportunity to provide more support for students who currently or would consider arriving to school using active modes
- Safety concerns are a key issue for students, parents, and staff, regardless of mode
- Opportunities exist to partner with local restaurants and Rosemead Park key after-school destinations to encourage walking and bicycling, to install bicycle parking, and to improve the pedestrian environment
- Key intersections of focus include Lower Azusa Road & Rosemead Boulevard, Mission Drive & Rosemead Boulevard, and Valley Boulevard & Rio Hondo Avenue
- Key corridors of focus include Mission Drive, Rosemead Boulevard, and Valley Boulevard



- On-campus improvements could focus on information dissemination around drop-off and pickup as well as promotion of options for traveling to school using modes other than a personal car
- Non-infrastructure improvements off-campus could include additional staff/crossing guards, especially located at major intersections around the school
- Concerted outreach to and coordination with the City of Rosemead will be necessary to advance off-campus infrastructure improvements to the roadway, sidewalks, and intersections

The Rosemead High School Mobility & Active Transportation Plan provides a foundation and roadmap to address school-related mobility needs and provides solutions that will encourage active transportation for both the school and local community. The School District and the City of Rosemead should work together to prioritize both infrastructure and policy solutions that will encourage safer, more active, and sustainable transportation options for students and families.



Appendix A: Glossary of Active Transportation Terms

Term	Description
Class III Bike Route	Class III bike routes provide for shared use with motor vehicle traffic either to: (1) provide continuity to other bicycle facilities (typically Class II); or (2) designate preferred routes through high demand corridors. Established with bike route signs and shared roadway markings along the route. <i>Caltrans, 2020</i>
Class IV Bikeway	Class IV bikeways provide space on the roadway set aside for the exclusive use of bicycles, physically separated from vehicle traffic. Types of separation include, but are not limited to, grade separation, flexible posts, physical barriers, or on-street parking. <i>Fehr & Peers, 2021</i>
Closed Slip Lane	Modifies the corner of an intersection to remove the sweeping right turn lane for vehicles. Results in shorter crossings for pedestrians, reduced speed for turning vehicles, better sight lines, and space for landscaping and other amenities. <i>Fehr & Peers, 2021</i>
Curb Extensions	Widens the sidewalk at intersections or midblock crossings to shorten the pedestrian crossing distance, to make pedestrians more visible to vehicles, and to reduce the speed of turning vehicles at intersections. <i>Fehr & Peers, 2021</i>



Term	Description
High-Visibility Crosswalk	A crosswalk that is designed to be more visible to approaching drivers. Crosswalks should be designed with continental markings and use high-visibility material, such as inlay tape or thermoplastic tape instead of paint. <i>Fehr & Peers, 2021</i>
In-Roadway Warning Lights (IRWL)	In-Roadway Lights are special types of highway traffic signals installed in the roadway surface to warn road users that they are approaching a condition on or adjacent to the roadway that might not be readily apparent and might require the road users to slow down and/or come to a stop. <i>MUTCD, 2003</i>
Lane Narrowing	A reduction in lane width produces a traffic calming effect by encouraging motorists to travel at slower speeds, lowering the risk of collision with bicyclists, pedestrians, and other motorists. <i>Fehr & Peers, 2021</i>
Leading Pedestrian Interval (LPI)	Gives people walking a head start, making them more visible to drivers turning right or left. "WALK" signal comes on a few seconds before drivers get a green light. May be used in combination with No Right Turn on Red restrictions. <i>Fehr & Peers, 2021</i>
Pedestrian Refuge Island	Pedestrian refuge islands provide a protected area for pedestrians at the center of the roadway within a marked crosswalk. They reduce the exposure time for pedestrians crossing the road. They simplify crossings by allowing pedestrians to focus on one direction of traffic at a time. <i>Fehr & Peers, 2021</i>



Term	Description
Pedestrian Scramble	A form of pedestrian "WALK" phase at a signalized intersection in which all vehicular traffic is required to stop, allowing pedestrians to safely cross through the intersection in any direction, including diagonally.
	Fehr & Peers, 2021
Rectangular Rapid-Flashing Beacon (RRFB)	A Rectangular Rapid Flashing Beacon (RRFB) is a pedestrian- actuated conspicuity enhancement used in combination with a pedestrian, school, or trail crossing warning sign to improve safety at uncontrolled, marked crosswalks. The device includes two rectangular shaped yellow indications, each with an LED-array- based light source, that flash with high frequency when activated.
	FHWA, 2018
Lane Reconfiguration (Road Diet)	Depending on the street, a lane reconfiguration, sometimes called a road diet, may change the number of lanes, turn lanes, center turn lanes, bike lanes, parking lanes, and/or sidewalks. Lane reconfigurations optimize street space to benefit all users by reallocating excess travel lanes, improving the safety and comfort of pedestrians and bicyclists, and reducing vehicle speeds and the potential for rear end collisions. <i>Fehr & Peers, 2021</i>
Stop Bar	A stop bar is a solid white line extending across approach lanes to indicate the point at which the stop is intended or required to be made. A stop bar should be placed to allow sufficient sight distance to all other approaches to an intersection.
	MUTCD, 2003



Term	Description
Tactile Warning Pad	Tactile warning pads (sometimes called "truncated domes" or "warning domes") are applied to provide pedestrians physical notice that they are about to enter the roadway environment; these applications need to be detectable underfoot or by a long cane. The tactile warning should be complimented with a visual warning, as the use of a contrasting color will increase its conspicuity to pedestrians whose sight is limited but who are not completely blind. <i>ITE, 2015</i>
Walkshed	A walkshed is the area around a school – or any central destination—that is reachable on foot for the average person, typically up to ¼ or ½ mile, depending on the destination. <i>MWCOG, 2019</i>



Fehr / Peers

Appendix B: El Monte Union High Schools Transportation Survey

The California Air Resources Board (CARB) awarded \$9.8 million dollars to implement the Clean Mobility in Schools Pilot Project in disadvantaged neighborhoods throughout El Monte Union High School District. The Clean Mobility in Schools Pilot Project will provide all electric school buses, school bus charging infrastructure, and other clean mobility options throughout the District. The Clean Mobility in Schools Pilot Project is part of California Climate Investments, a statewide program that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment — particularly in disadvantaged communities.

We want to make our schools safer and easier to get to. Help us make the best plan to get you or your student to school by taking this survey. The survey should take about 5 minutes. To thank you, we have a raffle for a \$25 Gift Card from a local store in the El Monte Union High School District community. A winner will be selected from each of the student, parent, and staff/teacher groups.

Answer the survey questions as if we are holding in-person classes (pre-COVID).

- 1. Survey Language Preference/Preferencia de idioma de la encuesta
 - a. English (Inglés)
 - b. Spanish (Español)
 - c. Chinese
 - d. Vietnamese

If select D will be redirected to this survey.

- 2. Choose the option that best describes you:
 - a. I'm a student
 - b. I'm a parent or guardian with a student at this school
 - c. I'm a teacher
 - d. I'm a school employee

<u>Student Survey</u>

- 1. What school do you attend?
 - a. El Monte High School

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- b. Ledesma High School
- c. South El Monte High School
- d. Rosemead High School
- e. Arroyo High School
- f. Mountain View High School
- g. Granada Transition Center
- 2. How do you get to school most days?
 - a. Walking
 - b. Biking
 - c. I get dropped off
 - d. I drive myself
 - e. I carpool with another driver
 - f. Public transit
 - g. School bus
- 3. In an ideal world, how would you prefer to get to school?
 - a. Walking
 - b. Biking
 - c. Getting dropped off
 - d. Driving myself
 - e. Carpooling with another driver
 - f. Public transit
 - g. School bus
 - h. Other
- 4. Are there streets that feel unsafe when traveling to school? If so, please list the street in the box below along with why/how it feels unsafe. For example, cars speed on the street or there isn't enough time for you to cross the street.
 - a. [comment box here]
- 5. What places do you go after school? This can be a restaurant, library, park, or other places.
 - a. [comment box here]
- 6. Are there locations where you have experienced close calls with getting hit by a car on your way to or from school? If so, please list them below.
 - a. [comment box here]
- 7. What are some of the streets you use on your way to school?



- a. [comment box here]
- 8. If there were one thing you could change that would make your trip to school easier, safer, more comfortable, or more pleasant, what would it be?
- 9. Thank you for taking the survey! Don't forget to provide your email to be entered into the raffle! (optional)
 - a. [enter email]

Parent Survey

- 1. What school does your student attend?
 - a. El Monte High School
 - b. Ledesma High School
 - c. South El Monte High School
 - d. Rosemead High School
 - e. Arroyo High School
 - f. Mountain View High School
 - g. Granada Transition Center
- 2. How does your student get to school?
 - a. Walking
 - b. Biking
 - c. I or another family member drop them off
 - d. They drive themselves
 - e. They carpool with another driver
 - f. Public transit
 - g. School bus
- 3. In an ideal world, how would you prefer your student get to school?
 - a. Walking
 - b. Biking
 - c. Getting dropped off
 - d. Driving themself
 - e. Carpooling with another driver
 - f. Public transit
 - g. School bus
 - h. Other



- 4. Are there streets that seem unsafe when traveling to your student's school? If so, please list the street in the box below along with why/how it feels unsafe. For example, cars speed on the street or there isn't enough time for you to cross the street.
 - a. [comment box here]
- 5. What places does your student go after school? This can be a restaurant, library, park, or other places.
 - a. [comment box here]
- 6. Are there locations where you have experienced close calls with getting hit by a car on your way to or from your student's school? If so, please list them below.
 - a. [comment box here]
- What are some of the streets you use on your way to school?
 b. [comment box here]
- 8. If there were one thing you could change that would make your trip to your student's school easier, safer, more comfortable, or more pleasant, what would it be?
- 9. Thank you for taking the survey! Don't forget to provide your email to be entered into the raffle! (optional)
 - a. [enter email]

School Employee and Teacher Survey

- 1. What school do you work at?
 - a. El Monte High School
 - b. Ledesma High School
 - c. South El Monte High School
 - d. Rosemead High School
 - e. Arroyo High School
 - f. Mountain View High School
 - g. Granada Transition Center
- 2. How do you get to school?
 - a. Walking
 - b. Biking
 - c. I drive myself
 - d. I carpool with another driver

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- e. I get dropped off
- f. Public transit
- 3. In an ideal world, how would you prefer to get to school?
 - a. Walking
 - b. Biking
 - c. Driving myself
 - d. Carpooling with another driver
 - e. Public transit
 - f. School bus
- 4. Are there streets that seem unsafe when traveling to campus? If so, please list the street in the box below along with why/how it feels unsafe. For example, cars speed on the street or there isn't enough time for you to cross the street.
 - a. [comment box here]
- 5. What places do you go after work near the school? This can be a restaurant, library, park, or other places.
 - a. [comment box here]
- 6. Are there locations where you have experienced close calls with getting hit by a car on your way to or from school? If so, please list them below.
 - a. [comment box here]
- 7. What are some of the streets you use on your way to school?
 - a. [comment box here]
- 8. If there were one thing you could change that would make your trip to school easier, safer, more comfortable, or more pleasant, what would it be?