Mountain View High School Mobility & Active Transportation Plan

Prepared for:

Mountain View High School

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School Mobility & Active Transportation Plan

Introduction

This School Mobility & Active Transportation Plan was developed for Mountain View 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 ideas 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 Mountain View 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

Mountain View High School is located at 2900 Parkway Drive, El Monte, CA 91732. The school's frontage is along Parkway Drive, and is generally bound by Parkway Drive, Valley Boulevard, the San Gabriel River Trail and Magnolia Street. The school lies west of the I-605 San Bernardino Freeway and south of the I-10 San Bernardino Freeway. 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. Mountain View High School Enrollment Data

Enrollment Data Type ¹	Total
2019-2020 Cumulative Day Student Enrollment ²	1,418
2018-2019 Census Day Student Enrollment ³	1,347
2018-2019 Cumulative Student Enrollment	1,456
Free & Reduced-Price Meals	93.2%
English Learners	29.6%
Languages of English Learners	Spanish: 369 Vietnamese: 15 Cantonese: 5
2017-2018 Number of Faculty	88
2017-2018 Number of Staff	12
2017-2018 Number of Classified Staff	52

School Kick-Off Meeting

On November 5th, 2020, the project team met with Jose Marquez, Principal of Mountain View High School, to further understand existing conditions at the school and any opportunities for improvement near the

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.

school. 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.

Principal Marquez noted that Mountain View High School currently has a school modernization project underway that aims to upgrade landscaping and reconfigure fencing. The project also intends to heighten the campus' sense of pride through opportunities for signage, art, and personalization. Some improvements from this project relate to the transportation environment, including:

- Creating dedicated parent drop-off and bus drop-off areas
- Reviewing options to create a public parking lot for visitors with ADA (Americans with Disabilities
 Act) accessible parking spots which are accessible throughout the day without site supervision of
 gates
- Simplify fencing by considering a gate with the ability to be electronically opened and have a microphone for screening
- Upgrades for ADA throughout campus

At the time this Plan was published, the aforementioned projects had not been finalized and are therefore not included in this study.

Drop-off and pick-up currently occur on Parkway Drive. Students riding bikes dismount on Parkway Drive. Bike racks are located directly within the school entrance on Parkway Drive. Some students take the bus to campus. The main concern that school administration shared surrounding active transportation relates to safety. Administrators shared that students do not feel safe walking or biking to school due to the lack of bike and pedestrian friendly facilities. School staff also mentioned that the community would like to reopen the San Gabriel River Bike Path to access campus but are concerned about personal safety. Theft that has occurred on campus in the past as a result of having an open access point to the Bike Path.

Existing Conditions

An existing conditions assessment was conducted for Mountain View 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

Mountain View High School is located in the southeast portion of the City of El Monte, encompassed by mostly residential areas. The San Gabriel River and I-605 San Gabriel River Freeway lies 0.36 miles to the east of the school. Figure 1 provides a diagram of school circulation.





Mountain View High School Vehicular, Pedestrian and Bicycle Circulation
City Boundary
Secondary point of entry



Key ConcernsSingle point of entry for pedestrians and bikes



- 1 Staff parking, visitor parking2 Staff parking
- 3 Campus maintenance, school bus parking, EV charging4 Event parking



Mountain View High School Circulation



Access to the school occurs along Parkway Drive, though there is no crosswalk directly in front of the school on Parkway Drive & Dahlia Avenue. The approach on Dahlia Avenue – but not Parkway Drive – is stop-controlled. In addition, there is a standard crosswalk across Dahlia Avenue and across one leg of Parkway, but the crosswalk does not lead directly to the school entrance. Parkway Drive has several speed bumps that were installed after a street racing incident resulted in a fatal collision. The school parking lot is located on Parkway Drive and vehicles enter near Dahlia Avenue. The gated driveway northwest of the school buildings provides access to parking lots and the football field.

Additionally, while the San Gabriel River Bike Path runs behind Mountain View High School, there is no direct connection to it. Magnolia Street is a cul-de-sac that provides access to a school parking lot. There are no existing bicycle facilities immediately surrounding the school. There are bike sharrows (pavement markings indicating a bike route) west of Parkway Drive on Magnolia Street that facilitate bicycle access near the school. The intersection of Magnolia Street & Parkway Drive has high-visibility crosswalks on all four legs that provides pedestrian access to the school.

Field Observations

On October 29th, 2020, a site visit was conducted at Mountain View 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.

Standard crosswalks are located on the western and southern legs of Dahlia Avenue & Parkway Drive, providing indirect access to the school. Speed bumps are located about every 100 feet on Parkway Drive for the entirety of the corridor. There is a driveway just south of Denholm Avenue along Parkway Drive that provides access to the school and school parking lot. This intersection also has a pedestrian crossing on the northern leg of Parkway Drive. A school parking lot located on Parkway Drive has an inbound driveway just north of Dahlia Avenue and an outbound driveway south of Denholm Drive. Durfee Avenue, which runs north-south just west of Mountain View High School, has a bike lane in both directions which can provide student bicyclists access to the school.

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

> Parkway Drive

- o Speed humps all along Parkway Drive
- Intersections and Parkway Drive right-of-way are relatively wide for two lanes and parking; excess right of way exists along Parkway
- Sidewalks are narrow on both sides

> Parkway Drive & Dahlia Avenue

- Marked crosswalk along Parkway Drive that gives students access to the front of the school; stop-controlled on Dahlia Avenue but not on Parkway Drive
- Crosswalk is not high-visibility and in faded condition



- Crosswalks only across two of three legs—not stop-controlled but nearby speed humps exist along Parkway Drive
- Student entrance just north of Dahlia Avenue

> Parkway Drive & Magnolia Street

- High visibility crosswalk at Magnolia Street across all legs; stop controlled
- No markings across driveway out of the parking area
- o There is a sign that says "Student Entrance"
- o Cul-de-sac on eastern leg
- o Magnolia Street dead-ends in a fenced access point; sign says "student drop-off"
- o Magnolia Street north of Parkway Drive has new sharrows

Parkway Drive & Denholm Drive

- o Speed bumps all along both Parkway Drive & Denholm Drive
- o There are bike sharrows on western leg
- o Denholm Drive has crosswalk on northern leg

Valley Boulevard

o Vehicle access point on Valley Boulevard at the far end of the sports fields

Figure 2. Speed humps on Parkway Drive





Figure 3. Existing Sidewalk on Parkway Drive



Figure 4. Existing Conditions on Magnolia Street





Collision History

Collision data from 2015 through 2019 was analyzed to assess roadway safety conditions near Mountain View 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 understand 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 Mountain View 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 Durfee Avenue. 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. & Mountain View Rd.	Commercial	Signalized
Valley Blvd. & Durfee Ave.	Commercial & Industrial	Signalized
Valley Blvd. & South San Angelo Ave.	Commercial	Signalized
Valley Blvd. & Basetdale Ave.	Commercial & Residential	Unsignalized
Magnolia St. & Durfee Ave.	Commercial & Residential	Signalized
Elliot Ave. & Durfee Ave.	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 below presents the reported bicycle and pedestrian collisions from 2015 to 2019 within one mile of Mountain View High School.

The general distribution of collisions shows that most have occurred west and northwest of the school, and involved more bicyclists than pedestrians. Concentrations of collisions also occurred along Durfee Avenue, Mountain View Road, and Valley Boulevard, which are closer to the school.









Figure 5

Mountain View High School: Collision Heat Map (2015-2019)





Figure 7 and Figure 8 below display the total collisions near Mountain View High School. Between 2015-2019, there were 1,028 collisions within one mile of the school. Most of the collisions were vehicle collisions, followed by collisions involving bicyclists and pedestrians, respectively. The number of vehicle collisions has been trending upward since 2015, with a slight decrease in 2017 compared to 2016. There were 116 students between the ages of 14 through 19 involved in the collisions in the area, with 80 people reporting injuries. Of the students injured, 55 were drivers, six were pedestrians, and 11 were bicyclists.



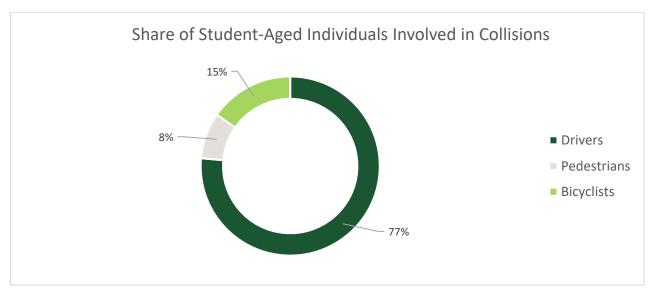
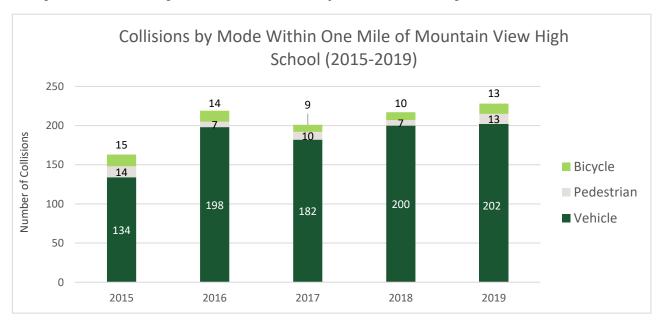


Figure 8. Collisions by Mode Within One Mile of Mountain View High School





Collision Severity

Throughout the five-year period, there were ten fatalities, 72 reports of serious injuries, 378 reports of visible injuries, and 797 complaints of pain. No fatalities involved people between the ages of 14 and 19. Reports of serious injuries and other visible injuries have been generally increasing since 2015. The charts below depict the levels of severity for all collisions within one mile of Mountain View High School.

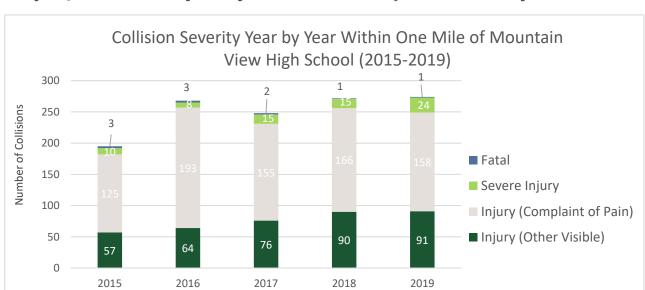
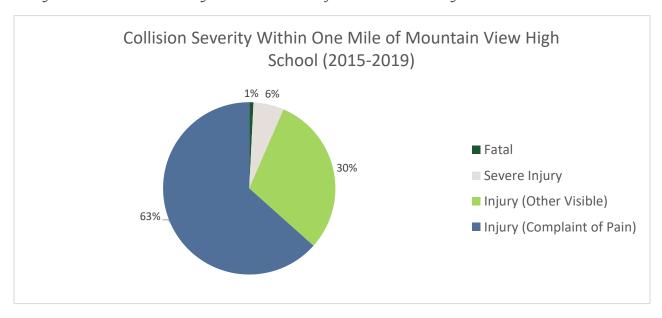


Figure 9. Collision Severity Year by Year Within One Mile of Mountain View High School

Figure 10. Collision Severity Within One Mile of Mountain View High School





Pedestrian Collision Severity

Figure 11 below depicts the levels of severity across pedestrian collisions near Mountain View High School. There were four pedestrian fatalities, however the fatality was not a school aged person. Six of the pedestrians that reported injuries were determined to be of school age.

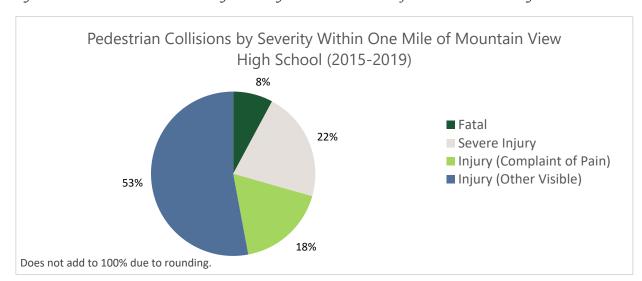


Figure 11. Pedestrian Collisions by Severity Within One Mile of Mountain View High School

Bicycle Collision Severity

The chart below depicts levels of severity across bicycle collisions near Mountain View High School. Of the 61 bicyclists who reported injuries, 11 were identified to be people between the ages of 14 and 19. No fatalities involving bicyclists were reported, though eight reported severe injuries.

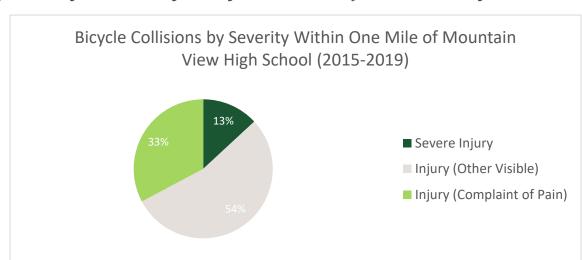


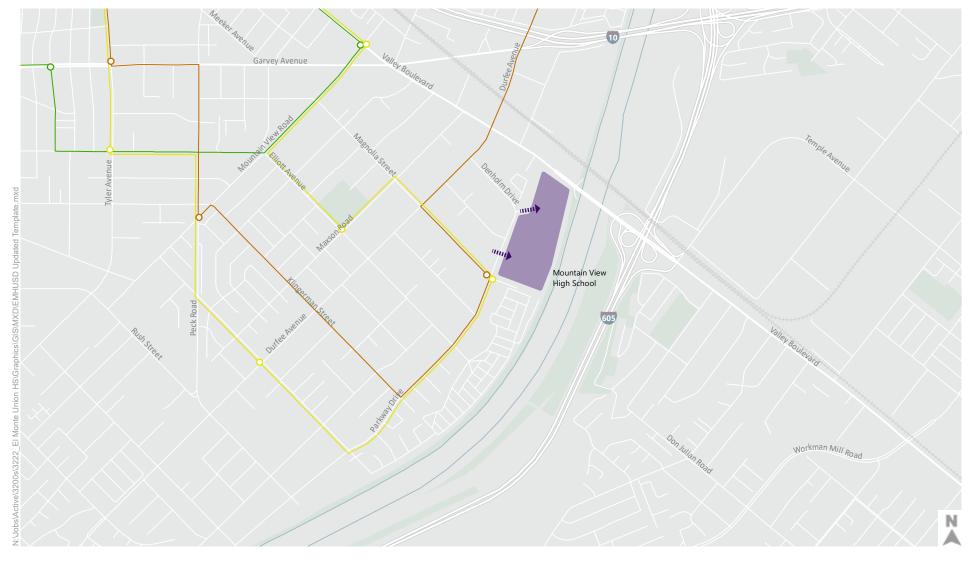
Figure 12. Bicycle Collisions by Severity Within One Mile of Mountain View High School



Community Transit Systems

The City of El Monte operates its own municipal transit system and two of its lines serve Mountain View High School: the Yellow Route and the Orange Route, with a stop at the intersection of Magnolia Street & Parkway Drive. Both routes provide service weekdays every 50 minutes beginning at 6:00 AM. Foothill Transit provides service along Valley Boulevard with routes 194 and 282; the closest stop to Mountain View High School is less than a half-mile north of the school. Figure 13 shows the locations of the routes and stops relative to Mountain View High School.





El Monte Bus Routes

Yellow Route O Stops

Green Route

Orange Route

Access

School

Pedestrian Entryway



Figure 13

City of El Monte Transit Access

Community Input

In addition to the review of the 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 to students, parents, and staff. 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 shows the total number of survey responses for Mountain View High School.

Table 3. Mountain View High School Survey Response Totals

Groups	Total Number of Respondents
Students	45
Parents	66
Staff ⁴	1

Mode Share

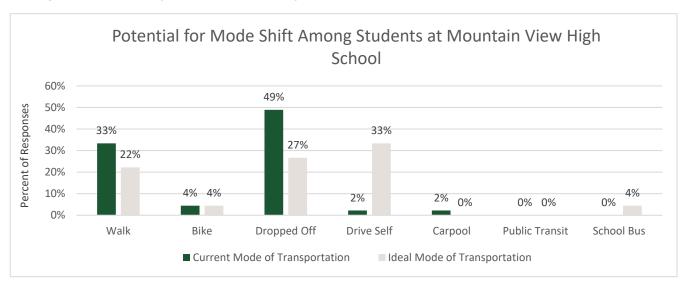
Mode share refers to the percentage of travelers who use a particular type of transportation including walking, biking, driving, transit, or other options. Mode shift represents a change in travel patterns based on previous mode share. The survey asked respondents about their current mode share (how 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



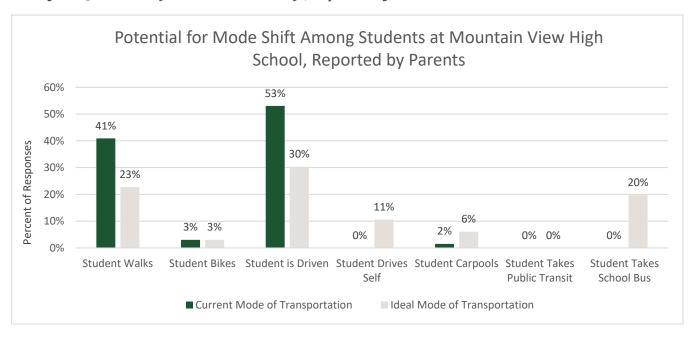
16

Figure 14. Potential for Student Mode Shift



Students getting dropped off and walking to school together comprise over 80% of current mode share. A small percentage of students drive themselves, bike, or carpool to school. Driving oneself saw the largest potential mode shift among students, representing 2% of the current mode share and 33% of student's ideal mode of transportation, shifting from getting dropped off and from walking. The desire to drive oneself signals a latent demand for independent travel, which could be met (in part) by non-auto options if improvements to walking and bicycling infrastructure were made.

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





Mode share results among parents aligned with the student responses that showed driving students to school and students walking as the predominant modes of transportation, with a small percentage biking and carpooling to school. In terms of mode shift, although "Student is Driven" and "Student Walks" represented a smaller share of ideal modes compared to current mode share, they remained the top preferred modes among parents. "Student Drives Self" grew from 0% of current mode share to 11% of ideal mode. The share of "Student Carpools" and "Student Takes School Bus" grew compared to the current mode share, with demand for school bus transportation growing by 20%. These trends present opportunities for improved access and availability of non-auto modes.

Only one staff member 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. Due to the low response rate among staff across all schools, a graph of the district-wide staff responses is shown below.

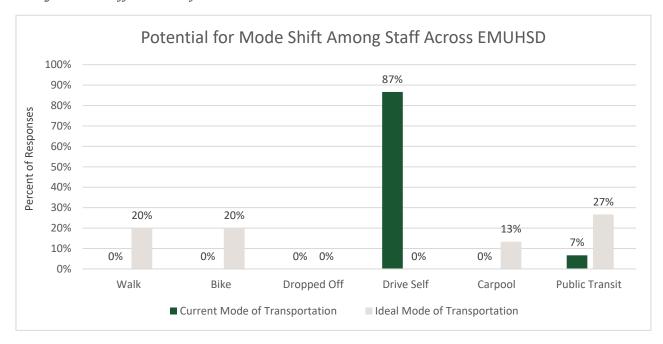


Figure 16. Staff Mode Shift Across the District

Reported Safety Concerns

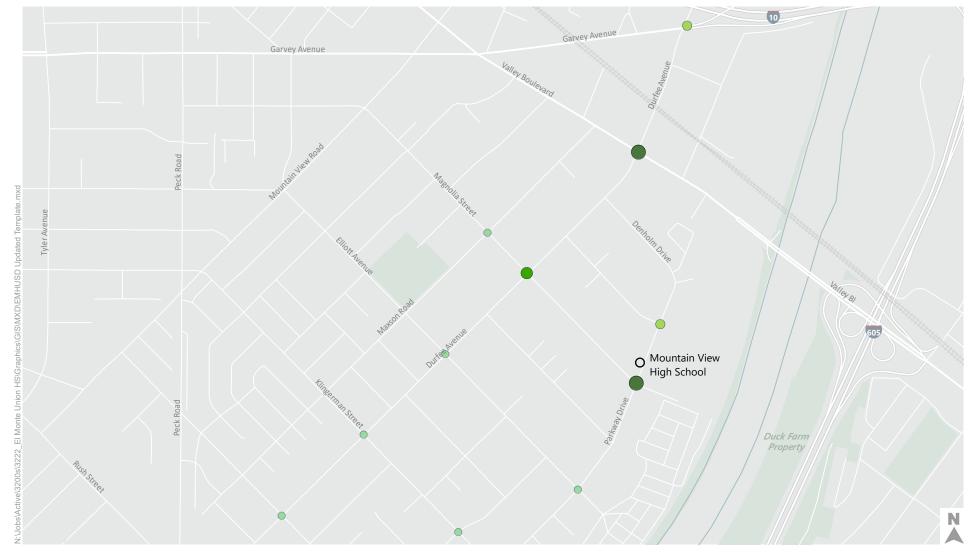
Survey respondents identified locations where they experienced near-misses with vehicles and streets with safety concerns. Survey mentions were aggregated and mapped, resulting in the identification of key locations. This information helps to inform the locations of project ideas that prioritize safety-related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

Figure 17 shows key intersections along Parkway Drive, Durfee Avenue, and Magnolia Street. The most frequently cited intersections are Parkway Drive & Magnolia Street directly adjacent to the high school, Valley Boulevard & Durfee Avenue, and Magnolia Street & Durfee Avenue. Some intersections further away from Mountain View High School were also mentioned.



Figure 18 shows key corridors where students, parents, and staff feel unsafe. For Mountain View High School respondents, Durfee Avenue, Valley Boulevard, Parkway Drive and Magnolia Street represent the top corridors where respondents feel unsafe connecting to school. However, Durfee Avenue is mentioned far more frequently, likely due to it being the arterial roadway closest to Mountain View High School.





Survey Mentions



3 - 4

5 - 13



Survey Results Mountain View High School-Key Intersections





Survey Mentions

3 - 12 _____ 13 - 21 _____ 22 - 30 _____ 31 - 39

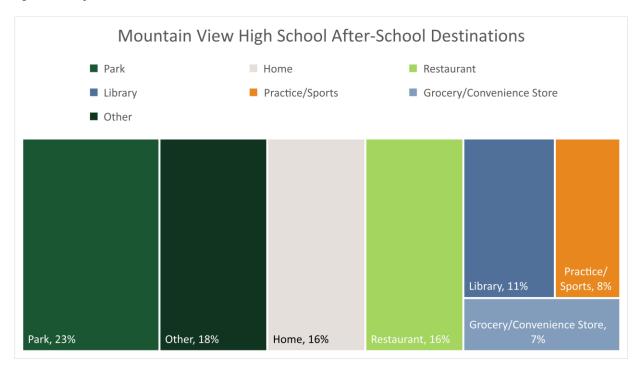


Figure 18

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. Figure 19 presents the after-school destinations. The most popular destination was the park.





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 suggestions from Mountain View High School parents and students were the need for a greater security presence around the school in the mornings, followed by more school bus and public transportation options. Numerous entries describe the need for better traffic enforcement around the school during travel times; one parent suggests "having police officers at all times everywhere when students are walking and crossing," underscoring the need for a safe environment directly outside the school during commute times. Numerous responses also complain of dangerous drivers around the school, including the need for "more diligence of catching people who speed or run red lights."



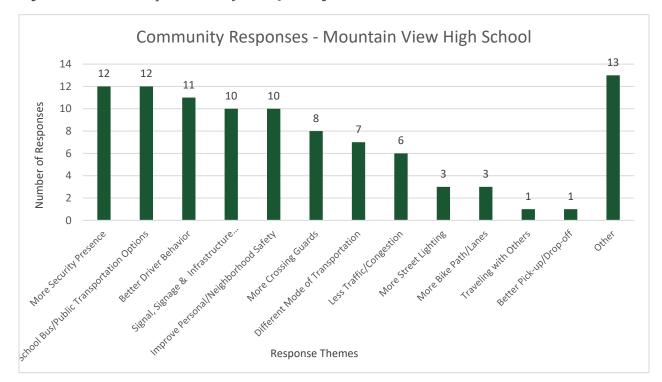


Figure 20. Desired Improvements for the Journey to Mountain View School

Project Ideas

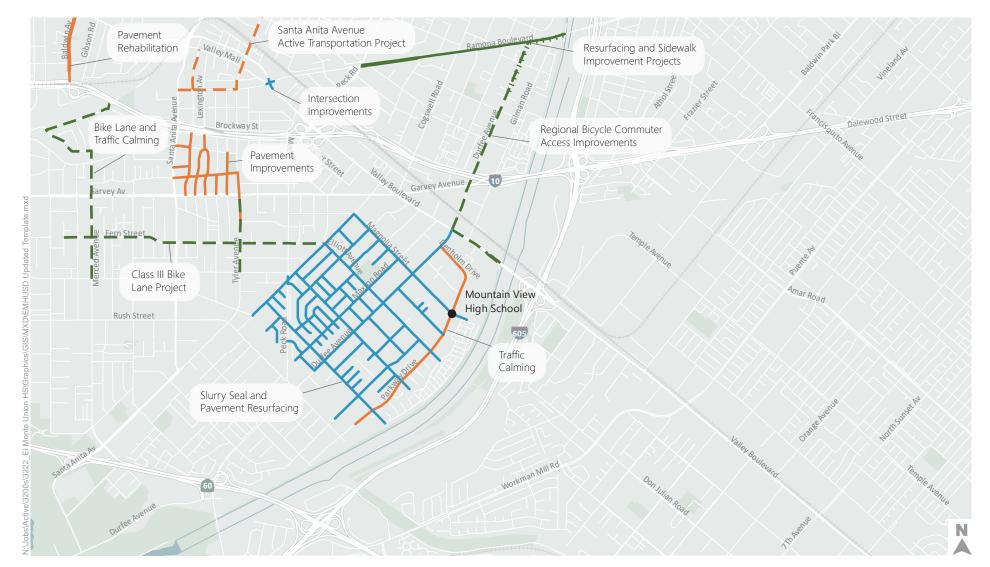
Based on the review of existing conditions and the input offered from the survey, the project team developed a set of targeted recommendations, including infrastructure improvements and programs, to improve active transportation and mobility options around Mountain View High School.

El Monte Union High School District has control over the campus conditions but not the public right of way within adjacent cities. Therefore, the project team engaged City of El Monte traffic engineering and transportation staff to understand what project improvements may already be underway and where there is opportunity for further improvement.⁵ Figure 21 and Figure 22 show the City of El Monte's Capital Improvement Plan for the next three years and safety related projects that have been identified in the City of El Monte's Systemic Safety Analysis Report (SSAR).

The City of El Monte's Street Improvement Projects near Mountain View High School include traffic calming and a Class IV bikeway along Parkway Drive & Denholm Drive from Durfee Drive to the southern City limit, a Class III bike route project on Elliot Avenue and Fern Street, and a pavement resurfacing project. The City's SSAR identified various locations that would benefit from safety improvements. These include improving signal timing, installing curb ramps, adding intersection lighting and signage, and enhancing crosswalks.

⁵ The project team connected with City of El Monte staff and received follow-up information about City efforts.





Project Year Project Type

2019-2020 — Automobile

2020-2021 -- Bicycle

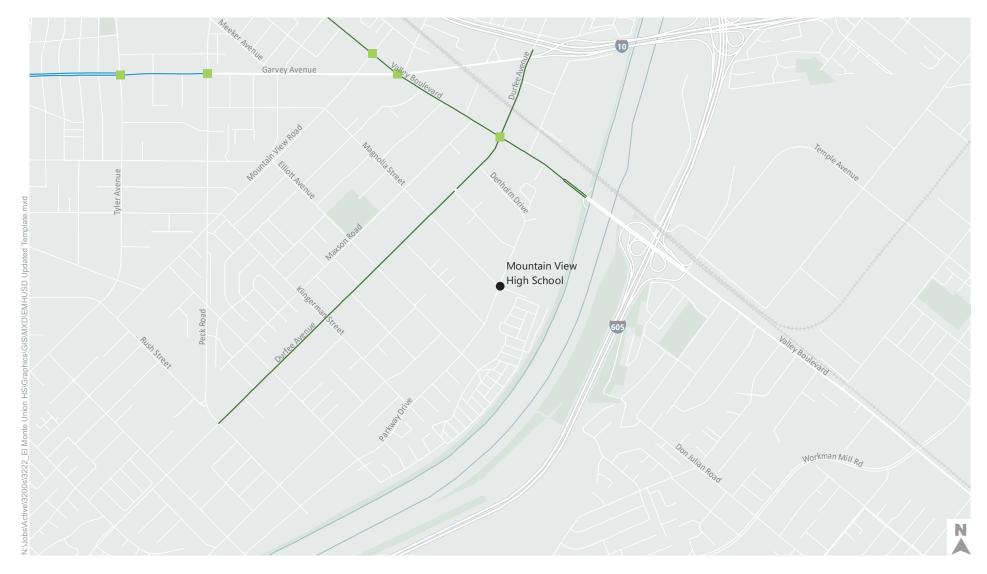
2021-2022 ||| Pedestrian



Figure 21

City of El Monte

Capital Improvement Projects



Proposed Safety Projects

— Pedestrian

Intersection





Figure 22

City of El Monte Systemic Safety Analysis Report

Location-specific Recommendations

The project team developed the following project development targeted recommendations shown in Figure 23 located within a one-mile walkshed of the school. Recommendations were prioritized for intersections and corridors that were bicycle and pedestrian collision hotspots, and/or where survey participants noted they felt unsafe. Table 4 details the intersections and corridors of interest, along with their recommended improvements.

Table 4. Mountain View High School Project Development Recommendation List

Location	Location Type	Recommended Improvements
Garvey Ave. & Valley Blvd.	Intersection	 Realign crosswalks for shorter walking distances between curbs Potential for scramble crosswalk if pedestrian counts show need Extend median into crosswalk for all four legs to create pedestrian refuge islands and slow traffic Update curb ramps to be in compliance with the ADA standards
Durfee Ave. & Garvey Ave.	Intersection	 Update curb ramps for northeast, northwest, and southwest corners in compliance with ADA standards Convert crosswalks on the south and west legs to high-visibility continental crosswalks Extend median and add pedestrian refuge island for west leg of Garvey Ave. Review signal timing and consider including a leading pedestrian interval (LPI) in all directions
Valley Blvd. & Durfee Ave.	Intersection	 Add curb ramps in compliance with ADA standards at all four corners Convert crosswalks to high-visibility continental crosswalks Extend median and add pedestrian refuge island on the north leg of Durfee Ave. Realign crosswalk on west leg of Valley Blvd. for a shorter crossing distance between curbs
Durfee Ave. & Denholm Dr.	Intersection	Add new high-visibility continental crosswalk with rectangular rapid flashing beacon (RRFB) and overhead signage



Location	Location Type	Recommended Improvements
Parkway Dr. & Dahlia Ave.	Intersection	 Add all-way stop control Consider adding a raised speed table with curb extensions Convert crosswalks to high-visibility continental crosswalk on all legs, including adding a new crosswalk on the north leg on Parkway Dr. Add ADA-compliant curb ramp to north leg of Parkway Dr. to connect to crosswalk
Durfee Ave. & Magnolia St.	Intersection	 Convert crosswalk to high-visibility continental crosswalk Update curb ramps for all four corners in compliance with ADA standards Review signal timing for LPIs on the north and south crosswalk legs
Parkway Dr. & Magnolia St.	Intersection	 Add stop bar and convert crosswalk to high-visibility continental crosswalk Add curb extensions to the intersection where feasible Update curb ramps for northwest, northeast, and southwest corners in compliance with ADA standards
Durfee Ave. & Elliott Ave.	Intersection	 Review signal timing for intersection and evaluate LPIs for the east and west crosswalk legs Convert all crosswalks to high-visibility continental crosswalks Update curb ramps for all four corners in compliance with ADA standards
Durfee Ave. & Klingerman St.	Intersection	 Review signal timing and evaluate potential for LPIs on the north and south crosswalk legs Convert crosswalk to high-visibility continental crosswalk Update curb ramps for all four corners in compliance with ADA standards



Location	Location Type	Recommended Improvements
Valley Blvd.	Corridor	 Install crosswalk enhancements including high visibility signage and striping at all intersections along corridor Consider potential for a Class IV bike lane Add street trees or shade amenities Consider reducing speed limit Add lighting to freeway underpass Evaluate potential for driveway closures to reduce conflict points with pedestrians on the sidewalk
Durfee Ave.	Corridor	 Consider updating current Class II bike lanes to Class IV Install crosswalk enhancements including high visibility signage and striping at all intersections along corridor Extend red curb where needed to improve visibility for vehicles turning onto Durfee Ave. from perpendicular streets *Corridor Identified as part of the City's Capital Improvement and SSAR Projects
Parkway Dr.	Corridor	 Upgrade all curbs along corridor to be compliant with ADA standards *The school is currently working on improvements to circulation, pick-up and drop-off, and parking. *This corridor is identified as part of the City's Capital Improvement and SSAR Projects and currently has a Class IV bikeway in design for the corridor.
Maxson Rd.	Corridor	 Install new signage and striping to improve pedestrian safety and visibility Install crosswalk enhancements including high visibility signage and striping at all intersections along corridor





Corridor Improvement/Recommendation Type



Project Development Recommendations Mountain View High School Figure 24 below provides a closer look at what these recommendations could look like on the ground for the intersection of Durfee Avenue & Magnolia Street. As the largest intersection close to the school, this intersection would benefit from active transportation improvements, particularly for students on foot. Recommended improvements include updating the curb ramps for all four corners of the intersection and adding a leading pedestrian interval to the north and south crosswalk legs to enhance pedestrian safety across Durfee Avenue.







Figure 24

Conceptual Improvements Intersection of Durfee Ave & Magnolia St Mountain View High School

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 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
- 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
- Advocate for city policies to improve near-school intersections with infrastructure that includes more frequent pedestrian crossings, curb ramps, and signal timing review to add leading pedestrian intervals (LPIs) and extended crossing time
- Designate a District staff person to actively engage city staff around these ideas, emphasizing the importance of standardizing the approach to providing pedestrian and bicycle infrastructure near schools
- Partner with popular student destinations (parks, nearby restaurants, library) to offer incentives and discounts for students who walk or bike
- Build transit/biking confidence among students by disseminating information to students through education programs

Example Costs for Recommended Improvements

Table 5 provides an overview of example costs⁶ 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 Costs for Recommended Improvements Table 5

Recommended Improvements	Project Type	Cost Estimate
Sidewalk Enhancements	Sidewalks (per mile, one side)	\$1,800,000
De de atrica Cue acia a	High-visibility crosswalk	\$5,000
Pedestrian Crossing Enhancements	Painted curb extensions (varying extents)	\$15,000-\$40,000

⁶ 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
Bicycle Enhancements	Class II bicycle lane (per mile)	\$245,000
	Class III bicycle route (per mile)	\$358,000
	Class IV bicycle lane (per mile)	\$2,634,000

Conclusion

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

- A high proportion of students already walk to school, underscoring the need for pedestrian safety improvements
- Safety concerns are a key issue for students, parents, and staff, regardless of mode
- Opportunities exist to partner with local parks and restaurants key after-school destinations to
 encourage walking and bicycling, to install bicycle parking, and to improve the pedestrian
 environment
- Key intersections of focus include Parkway Drive & Magnolia Street, Valley Boulevard & Durfee Avenue, and Magnolia Street & Durfee Avenue
- Key corridors of focus include Durfee Avenue, Valley Boulevard, Parkway Drive and Magnolia Street



- On-campus improvements could focus on information dissemination around drop-off and pickup expectations and 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
- Coordination with the City of El Monte will be necessary to advance off-campus infrastructure improvements to the roadway, sidewalks, intersections, and connection to regional facilities like the San Gabriel River Bicycle Path

The Mountain View High School Mobility & Active Transportation Plan provides a foundation and a 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 El Monte 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. Caltrans, 2020
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. Fehr & Peers, 2021
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. Fehr & Peers, 2021
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. Fehr & Peers, 2021



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. Fehr & Peers, 2021
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. MUTCD, 2003
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. Fehr & Peers, 2021
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. Fehr & Peers, 2021
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. Fehr & Peers, 2021



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. Fehr & Peers, 2021
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. ITE, 2015
	11E, 2015
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 $\frac{1}{4}$ or $\frac{1}{2}$ mile, depending on the destination.





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

Student Survey

- 1. What school do you 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 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]
- 7. 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



- 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?