

students off at the front of the school along Linden Ave. Approximately 13% of the school's students reported taking the school bus.

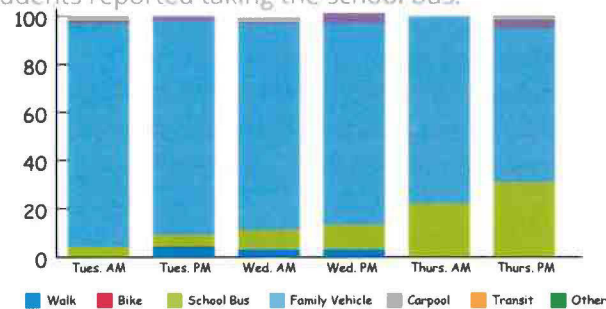


Figure 4.1.4 Walter Zimmerman Elementary School Student Arrival and Departure Tallies

Mobility Assessment

A walk audit and on-site meeting for Walter Zimmerman Elementary School in unincorporated San Bernardino County was conducted on January 28, 2025. The purpose of the event was to identify any issues related to student drop-off and pick-up that may make it unsafe or uncomfortable for students to walk, bike, and roll to and from school. Included in this assessment are discussions of observed insufficiencies, such as substandard sidewalks, missing curb ramps and crosswalks, inadequate bicycle infrastructure, and high traffic volumes and speeds around the school.

Those who attended the mobility assessment included Walter Zimmerman Elementary School Principal and staff, San Bernardino County staff, and Michael Baker International staff, including five student caregivers.

An online survey was administered to Walter Zimmerman Elementary School parents/caregivers via SurveyMonkey during the week of January 28th, 2025. Of the 21 recorded responses, 10 parents noted that their children live a quarter mile or less from school. As shown in Figure 4.1.5 and 4.1.6, vehicles are the most common mode of transportation used for arrival and departure from school.

Figure 4.1.5 Walter Zimmerman Elementary School Parent Survey Question (arrive to school)

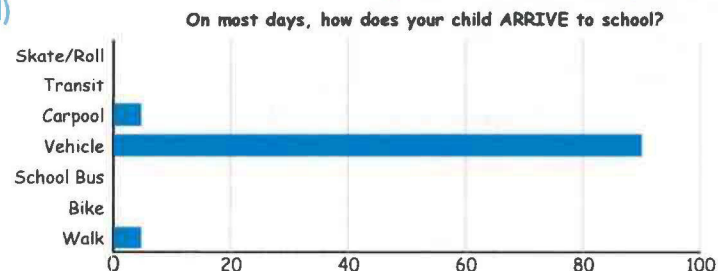
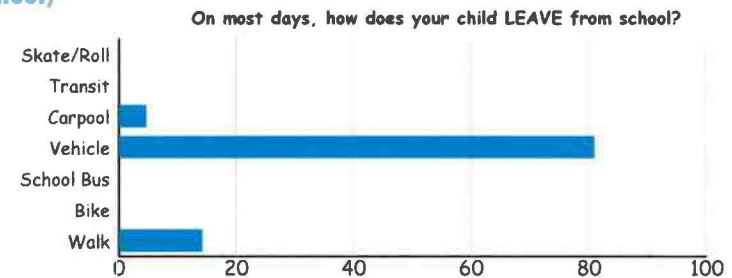


Figure 4.1.6 Walter Zimmerman Elementary School Parent Survey Question (leave from school)



CalEnviroScreen 4.0

CalEnviroScreen (CES) is a tool developed by the California Office of Environmental Health Hazard Assessment (OEHHA) that identifies communities that are disproportionately burdened by pollutants. The indicators used to identify a community's pollutant burden include exposures (i.e., traffic, pesticides, and drinking water), environmental effects (i.e., clean-up sites, solid waste), sensitive populations (i.e., Asthma, low birth weight), and socioeconomic factors (education, poverty, unemployment). Scores range from 0-100 with a higher score, indicating a higher effect of pollutants for the area. Figure 4.1.7 illustrates the CES scores for the census tract where Walter Zimmerman Elementary School is located, scoring in the 90th to 100th percentile range which indicates the area is disproportionately burdened by pollutants. For this region, the highest exposures to pollutants are Ozone, Drinking Water, and Particulate Matter 2.5, in that order.

Healthy Place Index

The California Healthy Places Index (HPI), developed by the Public Health Alliance of Southern California, is a tool used to explore the community conditions that impact life expectancy. The HPI tool helps prioritize public and private investments, resources, and programs in neighborhoods where they are needed the most. The HPI tool combines 23 community characteristics such as access to healthcare, housing, education, and more. The tool produces a score ranging from 0-100 with a higher score representing a healthier community. The tool's indicators reflect widely recognized thematic areas of the social determinants of health and are consistent with those described by the Centers for Disease Control (CDC). Figure 4.1.8 illustrates the HPI scores for the census tract Walter Zimmerman Elementary School is located within. The HPI score of 14.6 indicates less healthy conditions surrounding the school. These less healthy conditions are most critical in the categories of clean environment, neighborhood amenities access, and education level.

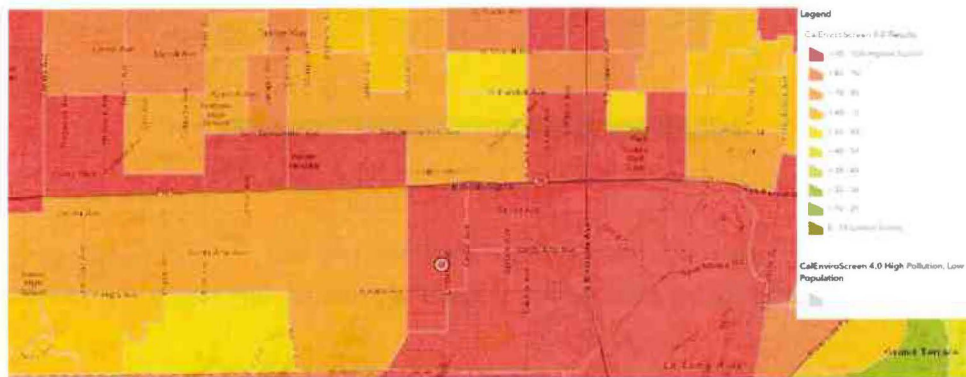


Figure 4.1.7 CalEnviroScreen 4.0 Score - Walter Zimmerman Elementary School



Figure 4.1.8 Healthy Place Index Score - Walter Zimmerman Elementary School

Walking

Figure 4.1.9 provides an overview of the existing pedestrian network and challenges observed during the mobility assessment site visit. The sidewalk network surrounding Walter Zimmerman Elementary School is incomplete. During site visits, it was observed that there were no sidewalks on the east side of Linden Avenue and an incomplete or broken sidewalk on the west side of Linden Avenue. With new commercial buildings proposed to be developed just south of the elementary school, new sidewalks will be constructed.

Challenges to walking were evaluated using the Pedestrian Evaluation Score (PES) developed by CR Associates. Based on the physical environment, surrounding land uses, and the street environment, a PES score was developed for nearby roadways. Figure 4.1.10 shows the results of the PES scoring. A sidewalk network with medium and high PES scores indicates low stress for walking, whereas low or very low PES scores can be considered a stressful walking environment. The roadways near Walter Zimmerman Elementary School show primarily low PES

scores, with a low score on Linden Avenue and very low scores on Santa Ana Avenue and Jurupa Avenue. This indicates a stressful walking environment near the school along these roadways and may create an access barrier for students walking to school.

Figure 4.1.9 Existing Pedestrian Conditions

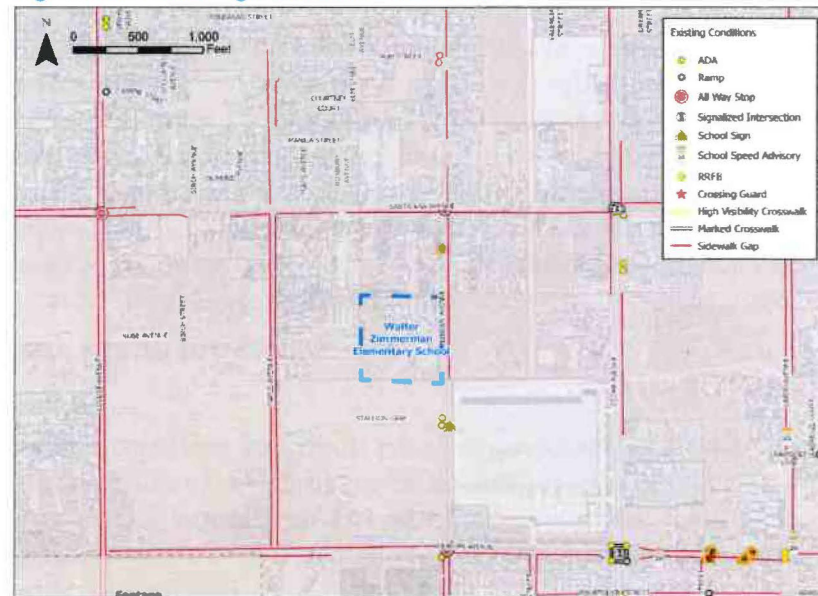


Figure 4.1.10 Pedestrian Evaluation Score

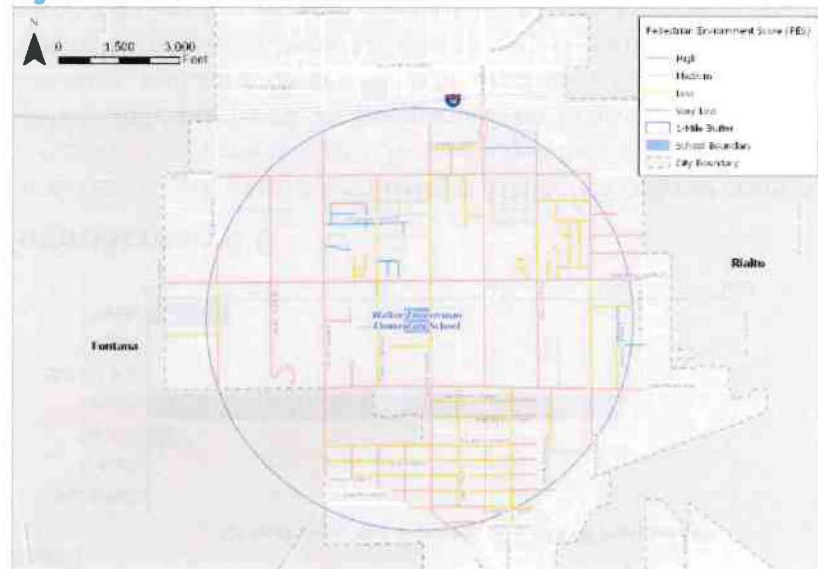
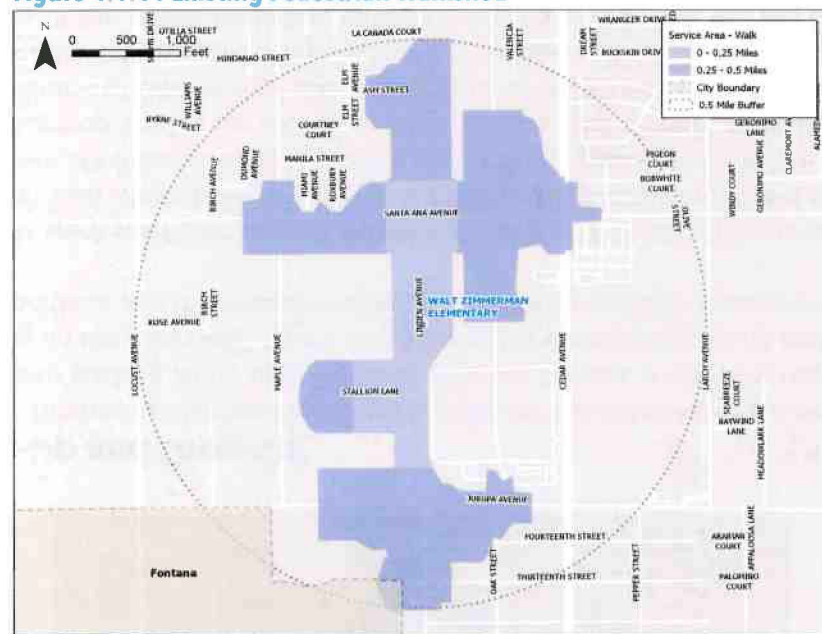


Figure 4.1.11 shows the walkshed for Walter Zimmerman Elementary School. The walkshed shows the area which a student can walk a half mile from the school. The walkshed has been reviewed for sidewalk connectivity and accessibility.

One of the biggest concerns expressed during the walk audit was student safety crossing Linden Avenue when parents drop off students on the shoulder on the east side of the street. During the drop-off time, students were seen crossing the street in front of moving cars after being dropped off.

Figure 4.1.11 Existing Pedestrian Walkshed



Riding and Rolling

Currently, there are no bicycle facilities surrounding Walter Zimmerman Elementary School. There are plans to implement a Class II Bike Lane along Santa Ana Avenue and Jurupa Avenue through San Bernardino County Transportation Authority (SBCTA) (Figure 4.1.12).

The bicycle environment was assessed using the bicycle Level of Traffic Stress (LTS) methodology for characterizing cycling environments, as developed by Mekuria, et al (2012) of the Mineta Transportation Institute. LTS takes into account a number of factors to classify the street network into categories according to the level of stress it causes cyclists. The LTS assessment conducted by MBI concluded that the roads immediately surrounding Walter Zimmerman Elementary School have high LTS scores indicating higher stress levels for cyclists (Figure 4.1.13).

Figure 4.1.14 shows the bikeshed for Walter Zimmerman Elementary School. The bikeshed shows the area which a student can bike one mile from the school.

Figure 4.1.12 Existing and Planned Bicycle Conditions

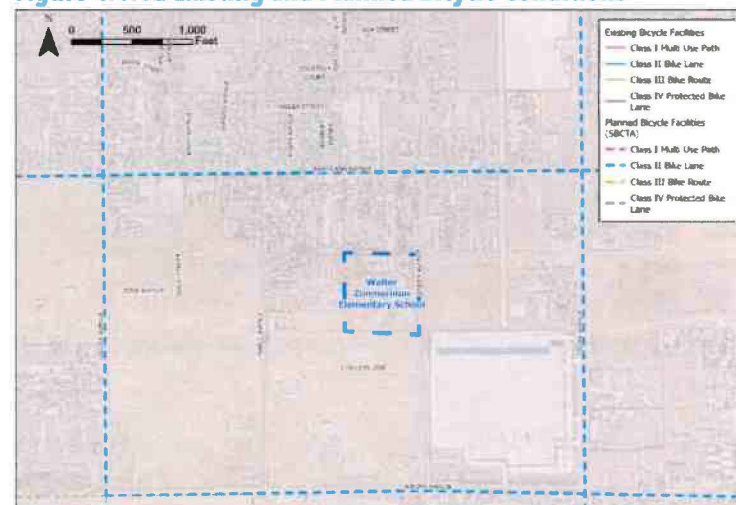


Figure 4.1.13 Bicycle Level of Traffic Stress

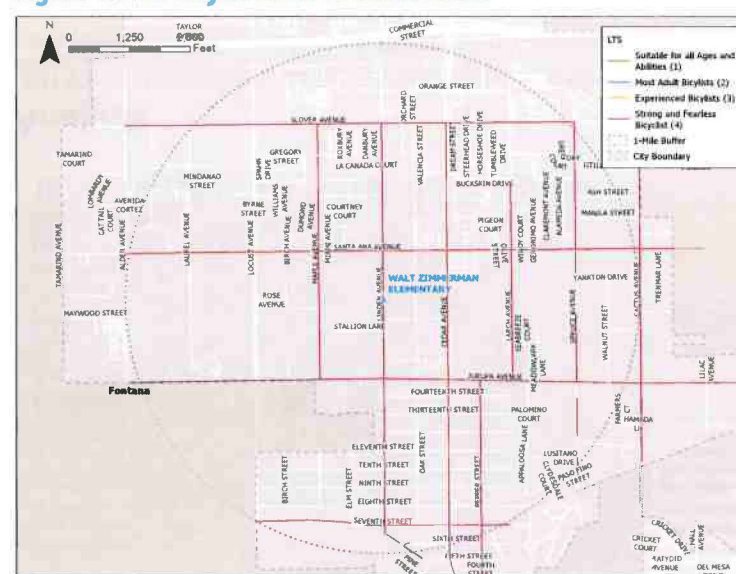


Figure 4.1.14 Existing Bikeshed

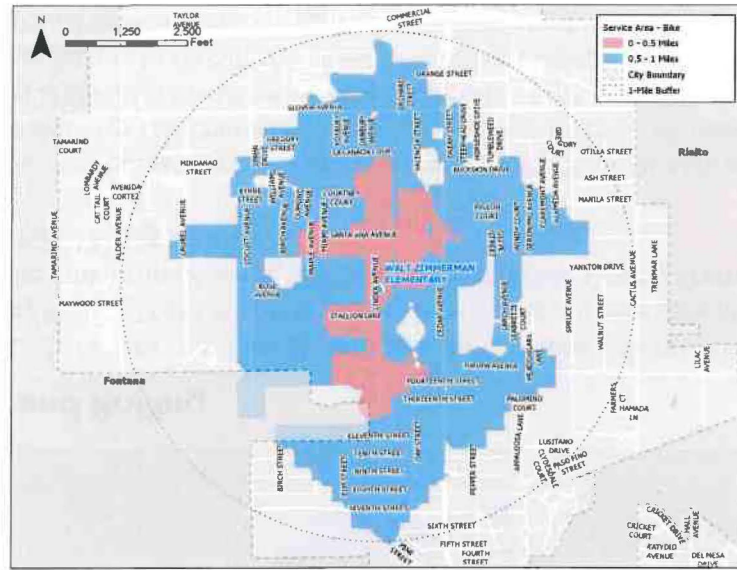


Figure 4.1.15 Existing Pick-Up and Drop-Off Vehicle Behavior

Pick-Up and Drop-Off

Walter Zimmerman Elementary School is accessed via Linden Avenue, a two-lane road with parking along both sides, and Jurupa Avenue, a two-lane road with parking on the north side. Figure 4.1.15 illustrates the existing pick-up and drop-off conditions, and the behaviors observed during the mobility assessment.

Parents were seen dropping off students as early as 7:00 AM. There is a single drop-off loop where parents can drop off children in the existing school parking lot. There are three buses that are the only vehicles allowed to enter the school entrance loop. During the school site observations, parents were seen dropping off children on both the west side and east side of Linden Avenue, usually double parked, resulting in traffic delays. School staff recognize that parents double park in front of the school and allow students to cross Linden Avenue, mixing with vehicle traffic.

Safety Analysis

Between 2019 and 2023, there were five bicycle collisions and three pedestrian collisions within a half mile radius of Walter Zimmerman Elementary School (Figure 16). The collisions included 1 fatality, 3 severe injuries; 3 visible injuries, and 1 complaint of pain. Within a quarter mile radius of the school there were 2 bicycle collisions. No pedestrian collisions were reported. The fatality involved a male who was struck and killed by a motorist while attempting to cross Jurupa Avenue.

Figure 4.1.16 Bicycle and Pedestrian Involved Collisions (2019-2023)



Travel Pattern Analysis

A travel pattern analysis was conducted for Walter Zimmerman Elementary School to understand how students may be traveling to the campus. Origin-Destination data was downloaded from the Replica Big Data platform, and ArcGIS and Python were used to process the data. Featuring the school site as the destination, the analysis provides insights into the magnitude of trips made to-and-from the surrounding neighborhoods. The neighborhoods are defined by Traffic Analysis Zones (TAZs) that fall within the school's attendance boundary. The analysis is performed by travel mode for both active travel, which includes walking and biking, and auto travel. The resulting maps display the number of trips by these two modes between the neighborhood TAZs and the TAZ where the school is located.

For each neighborhood, the number of trips made by each travel type was shown using lines on a map (Figure 4.1.17 and 4.1.18). A thicker line means more people are estimated to travel using that mode from that TAZ. Line thickness can be compared within the same mode of travel, such as comparing two walking routes from two different TAZs. One can also get a general sense of how walking and driving compare by looking at both sets of lines from the same TAZ side by side. For example, a thicker line for auto, compared to active for a particular TAZ indicates more of an interest to drive compared to walking or biking. It should be noted the lines are scaled differently with regards to trips for each mode of travel (auto and active), so they should not be compared directly. This data helps reveal how people tend to travel based on several factors, such as the existing walking or biking environment, land uses, physical barriers, population densities, and the layout of the roadway network.

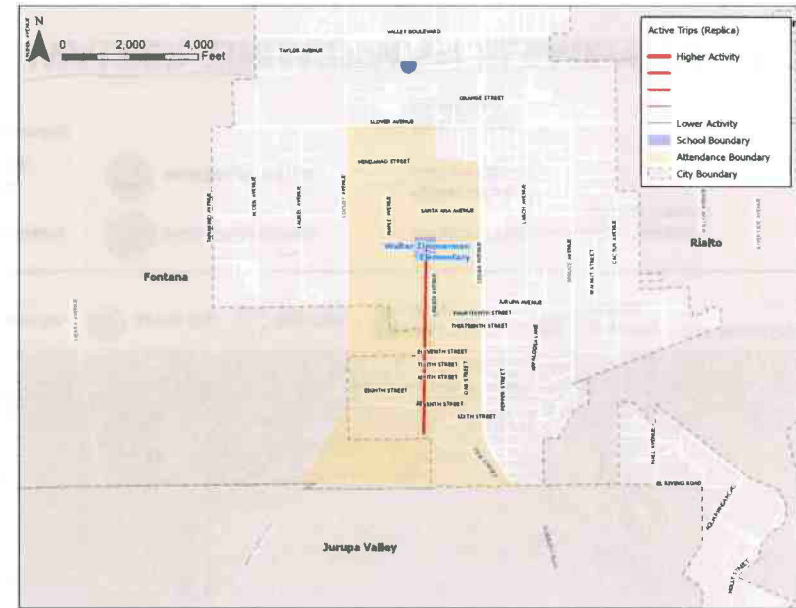


Figure 4.1.17 Active Travel Pattern

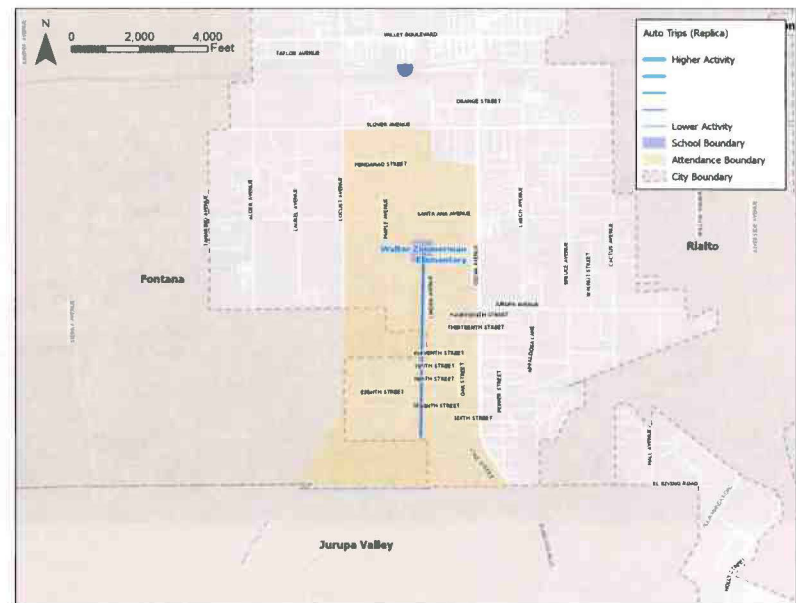
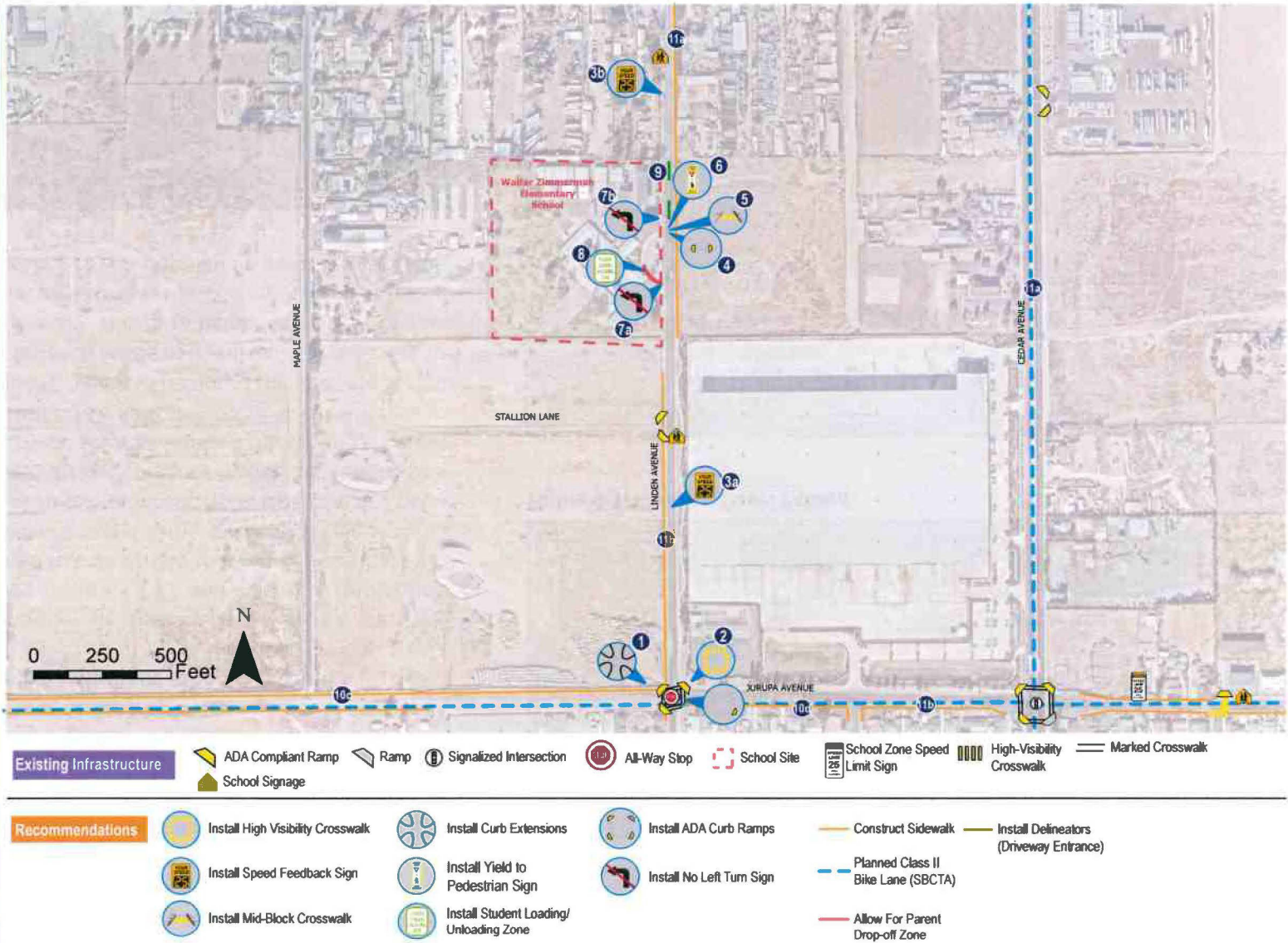


Figure 4.1.18 Auto Travel Pattern

SCHOOL RECOMMENDATIONS

Several walking and biking challenges were identified during the mobility assessment conducted for Walter Zimmerman Elementary School. There are currently missing sidewalk segments, missing curb ramps and crosswalks, and observed speeding along Linden Avenue. There are currently no bicycle facilities along Linden Avenue or the surrounding roadways. It is important to note that Walter Zimmerman Elementary School is planning to move locations, so the following recommendations are considered **quick builds that can help with walking and biking conditions while the new campus is being built.**

Several projects to improve walking and biking conditions around Walter Zimmerman Elementary School are recommended. Speed feedback signs are recommended along Linden Avenue to discourage speeding. As part of SBCTA's **Active Transportation Plan**, Class II bike lanes have been planned along Jurupa Avenue. To improve accessibility, ADA-compliant curb ramps, high-visibility crosswalks, and sidewalks are recommended at the school frontage and surrounding intersections. These recommendations are highlighted in the graphic provided. A summary list of recommendations is provided in Table 4.1.1.



WALTER ZIMMERMAN ELEMENTARY SCHOOL

TABLE 4.1.1 WALTER ZIMMERMAN ELEMENTARY SCHOOL RECOMMENDATIONS

ID	Improvement	Description	Location
1	Curb Extension	Install curb extensions on all four corners of the intersection	Jurupa Avenue and Linden Avenue
2	High-Visibility Crosswalk	Install high-visibility crosswalk on all four legs of the intersection	Jurupa Avenue and Linden Avenue
3a	Speed Feedback Sign	Install speed feedback signs along Linden Avenue to discourage speeding	Linden Avenue south of school
3b			Linden Avenue north of school
4	ADA Compliant Curb Ramps	Install ADA curb ramps on the east and west sides of road	Linden Avenue and School Frontage
5	Mid-Block Crosswalk	Install a high-visibility mid-block crosswalk in the east-west direction on Linden Avenue	Linden Avenue and School Frontage
6	Yield to Pedestrian Sign	Install a yield to pedestrian sign in the center of the mid-block crossing	Linden Avenue and School Frontage
7a	No Left Turn Sign	Install no left turn signs at school exits	Linden Avenue and School Frontage
7b			
8	Student Loading/Unloading Sign	Recommend school to open up front driveway for parents as an additional option for pick up and drop off	Linden Avenue and School Frontage
9	Delineators	Install flexible centerline delineators along Linden Avenue to prevent left turns out of the driveways and to funnel in left turns into the driveway	Linden Avenue and School Frontage
10a	Sidewalk	Construct sidewalk on east side of Linden Avenue	South of the school to Santa Ana Avenue
10b		Construct a sidewalk on the west side of Linden Avenue	South of school to Jurupa Avenue
10c		Construct sidewalk on both sides of Jurupa Avenue	Locust Avenue to Linden Avenue
10d		Construct sidewalk on the south side of Jurupa Avenue	Linden Avenue to Cedar Avenue
11a	Class II Bike lanes (SBCTA Planned)	Coordinate with SBCTA to construct Class II Bike Lanes per SBCTA planned bikeways	Cedar Avenue from Randall Avenue to El Rivino Road
11b		Coordinate with SBCTA to construct Class II Bike Lanes per SBCTA planned bikeways	Jurupa Avenue from Locust Avenue to W. Willow Avenue

4.2 SLOVER MOUNTAIN HIGH SCHOOL

18829 Orange St, Bloomington, CA 92316
Colton Joint Unified School District

Slover Mountain High School is a continuation school located in central Bloomington, California on the southwest corner of the intersection of Orange Street and Larch Avenue. The school is located approximately 0.4 miles south of Interstate 10 (I-10) and approximately 1.8 miles northeast of Kessler Park. The existing land use surrounding Slover Mountain High School includes a warehouse and industrial uses with residential to the south. The industrial uses consist of the Union Pacific West Rail operations to the west and large warehouse buildings to the north. Figure 4.2.1 shows the school area and the overall context of the school site.



Figure 4.2.1 Context Map

SCHOOL PROFILE

Slover Mountain High School is located within the unincorporated community of Bloomington, California and is part of the Colton Joint Unified School District. During the 2023-24 school year, enrollment was approximately 243 students in grades 11-12 with a student-to-teacher ratio of 19:1. Figure 4.2.2 shows the demographic composition of the students which is similar to the community of Bloomington as a whole, having a dominant Hispanic population according

to the census estimates. According to the California Department of Education in 2023-2024, 16% of the students were English learners and 37.5% were English proficient. Additionally, 90.1% of Slover Mountain High School students received free or reduced-price lunch during the 2023-2024 school year, which is significantly higher than the state and the county. (Figure 4.2.3)

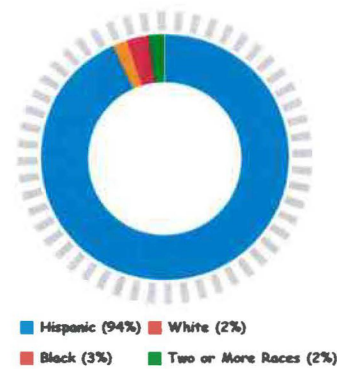


Figure 4.2.2 Demographic Composition

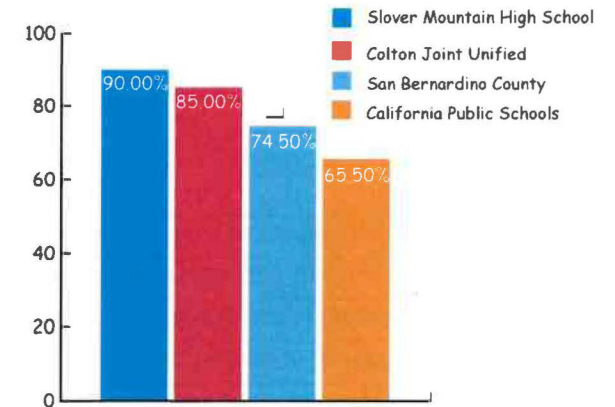


Figure 4.2.3 Free or Reduced Meals (Compare between district and county)

Student Tallies

The Safe Routes to School Student Arrival and Departure Tally Sheet was administered by Slover Mountain High School staff from January 28th through January 30th, 2025, to better understand what mode(s) students use to travel to and from the campus. As displayed in Figure 4.2.4, students traveled using only two modes, school bus and family vehicle. On average, about two thirds of the students (65.9%) arrived and departed on a school bus, while the remaining third of students were

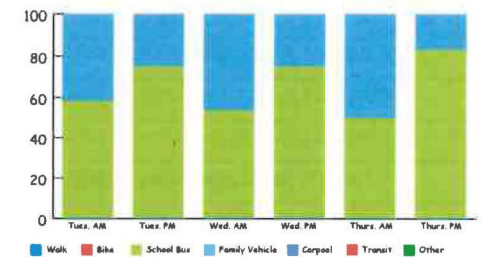


Figure 4.2.4 Slover Mountain High School Student Arrival and Departure Tallies