

Figure 4.8.12 Bicycle Level of Traffic Stress

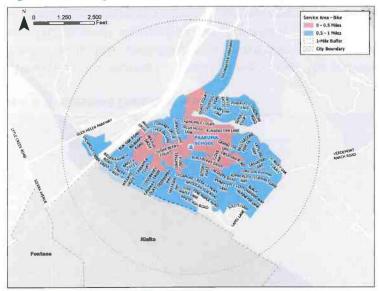


Figure 4.8.13 Existing Bikeshed

Pick-Up and Drop-Off

Pacific High School is accessed via Pacific Street, a four-lane road, and Perris Park Hill Road, a two-lane road. Figure 15 illustrates the existing conditions, and the behaviors observed during the mobility assessment. There are currently three uncontrolled crossings across Pacific Street at Barton Street, Perris Hill Road, and Tippecanoe Avenue. Two of the crossings had a road light that were not functioning. A crossing guard is located at Perris Hill Road and Pacific Street. Students were seen crossing Pacific Street during drop-off. Many vehicles dropping off students were seen double parking on the north side of Pacific Street creating a buildup of traffic. Additionally, the existing Omnitrans bus was seen to be another form of transportation for students.

During the pick-up time, school staff noted that many students walk along Perris Hill Park Road to the existing YMCA and mentioned that they have seen vehicles speeding on the road and not paying attention to students walking on the sidewalk. There were two collisions that occurred on Pacific Street and Perris Hill Road and Tippecanoe Street.

One of the biggest concerns that was mentioned during the walk audit was that the crosswalks at the intersection of Pacific Street and Perris Hill Park Road are very dangerous due to the fact that many drivers coming from Pacific Street do not realize that it is a three way road and drive through the intersection into the existing culvert.

Safety Analysis

Between 2019 and 2023, there were four bicycle, and one pedestrian involved collisions within a half mile radius of Paakumá K-8 School (Figure 4.8.15). All collisions caused the parties involved to have a complaints of pain or visible injuries.

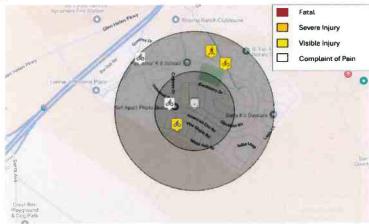


Figure 4.8.15 Bicycle and Pedestrian Involved Collisions (2019-2023)

Travel Pattern Analysis

A travel pattern analysis was conducted for Paakumá K-8 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 4.8.16 and 4.8.17). 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.

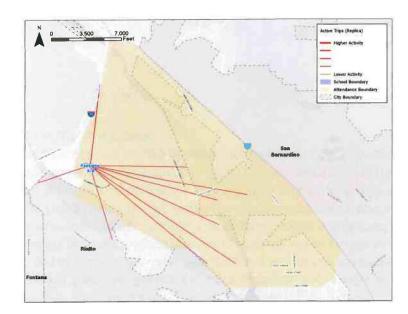


Figure 4.8.16 Active Travel Pattern

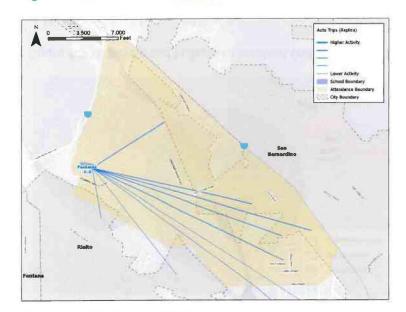
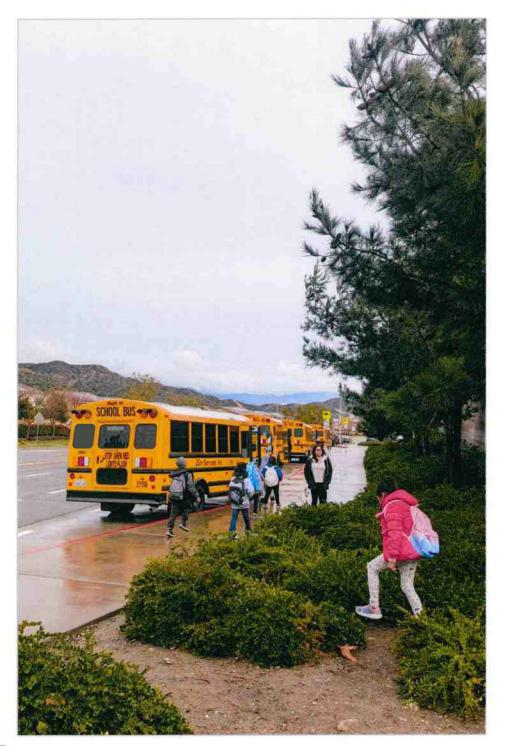


Figure 4.8.17 Auto Travel Pattern



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SCHOOL RECOMMENDATIONS

During the walk audit, several walking and biking challenges were identified. Although a crossing guard currently exists at Sycamore Creek Drive and Clearwater Parkway, students still need to cross four lanes of traffic, and the crossing guard turns the crosswalk into a scramble, so all legs of traffic are stopped. Paakumá Park is also located just east of the school and was noted by the school principal that many students use that as another location for pick-up and dropoff. School staff and parents have observed vehicles speeding on Sycamore Creek Drive and sometimes do not fully stop at the stop signs.

There are bicycle and pedestrian improvements that are recommended around the school. Curb extensions are recommended at Sycamore Creek Drive and Clearwater Parkway and Flowing Plum Way to decrease the crossing length, provide a larger space for pedestrians to wait prior to crossing, while also increasing their visibility. Curb extensions are also a form of traffic calming that visibly narrows the roadway. Speed feedback signs are recommended along Sycamore Creek Drive to provide an additional traffic calming feature that deters speeding. At Paakumā Park, a high-visibility crosswalk will increase pedestrian visibility across Sycamore Creek Drive.



PAAKUMA K-8 SCHOOL

TABLE 4.8.1 PAAKUMA K-8 SCHOOL RECOMMENDATIONS

ID	Improvement	Description	Location
1a	Speed Feedback Sign	Install speed feedback sign on south side of Sycamore Creek Drive for eastbound vehicles	Sycamore Creek Drive
1b		Install speed feedback sign on north side of Sycamore Creek Drive for westbound vehicles	
2	Curb Extensions	Install curb extensions on all four corners of the intersection	Sycamore Creek Drive and Clearwater Parkway
3	No U-Turn Sign	Install a no U-turn sign on both sides of the street	Sycamore Creek Drive between Clearwater Parkway and Flowering Plum Way
4	Curb Extensions	Install curb extensions on all four corners of the intersection	Sycamore Creek Drive and Flowering Plum Way
5	High-Visibility Crosswalk	Install high-visibility crosswalk on all four legs of the intersection	Sycamore Creek Drive and Flowering Plum Way
6	High-Visibility Crosswalk	Install high-visibility crosswalk on south leg of intersection	Sycamore Creek Drive and Clove Way

4.9 NEWMARK ELEMENTARY SCHOOL

4121 N 3rd Ave, San Bernardino, CA 92407 San Bernardino City Unified School District

Newmark Elementary School is located in northern San Bernardino County. The school is located within San Bernardino City's sphere of influence. Newmark Elementary School is located approximately two miles north-west of the State Route 18 (SR-18) and approximately three miles from the Interstate 215 (I-215) and Interstate 210 (I-210) interchange. The existing land use surrounding Newmark Elementary School is primarily residential. Figure 1 shows the school area and the overall context of the school site.

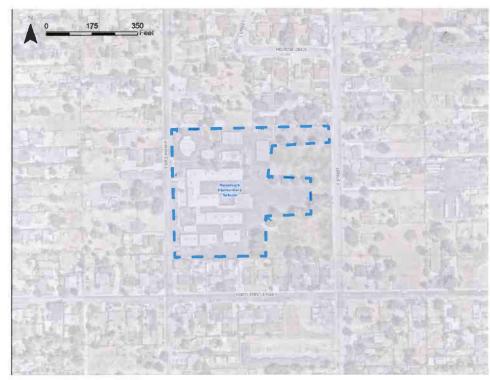


Figure 4.9.1 Context Map

SCHOOL PROFILE

Newmark Elementary is located within the City of San Bernardino and is a part of the San Bernardino City Unified School District. During the 2023-24 school year, enrollment was approximately 400 students in grades K-6 with a student/ teacher ratio of 19:1. The demographic composition of the students is shown in Figure 4.9.2 shows the school has a dominant Hispanic population according to the census estimates. Additionally, 93% of Newmark Elementary School students received free or reduced-price lunch during the 2023-2024 school year which is significantly higher than the rest of the county (Figure 4.9.3)

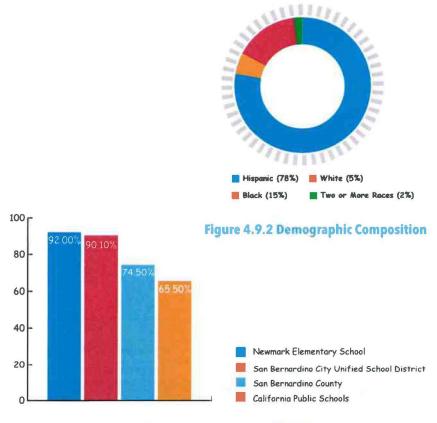


Figure 4.9.3 Free or Reduced Meals (Compare between district and county)

Student Tallies

The Safe Routes to School Student Arrival and Departure Tally Sheet was administered by Newmark Elementary School staff from February 3rd to February 7th, 2025, to better understand what mode(s) students use to travel to and from the campus. As displayed in Figure 4.9.4, the vast majority of students arrived and departed in a family vehicle (77% average), followed by walking (15% average), then school bus (3% average), respectively. Newmark Elementary School has multiple school buses that drop students off at the front entrance of the school.

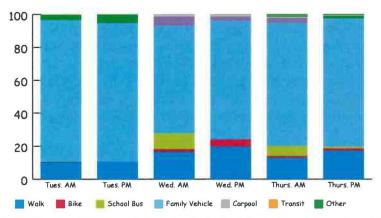


Figure 4.9.4 Newmark Elementary School Student Arrival and Departure Tallies

Mobility Assessment

A walk audit and on-site meeting for Newmark Elementary in San Bernardino was conducted on February 5, 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 walk audit included the Newmark Elementary School Principal and staff, police officers, San Bernardino County staff, and Michael Baker International staff.

Although an online survey was administered as part of the school mobility assessment for Newmark Elementary School, unfortunately, no parents/caregivers participated.

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. Indicators used to identify communities include exposures (traffic, pesticides, and drinking water), environmental effects (cleanup sites, solid waste), sensitive populations (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 4.9.5 illustrates the CES scores for the census tract where Newmark Elementary School is located, scoring in the 60th to 70th percentile range which indicates the area is moderately burdened by pollutants. For this region, the highest exposures to pollutants are ozone, lead from housing, and toxic releases, in that order.



Figure 4.9.5 CalEnviroScreen 4.0 Score - Newmark Elementary School

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 4.9.6 illustrates the HPI scores for the census tract Newmark Elementary is located within. The HPI score of 14.2 indicates less than healthy conditions surrounding the school.



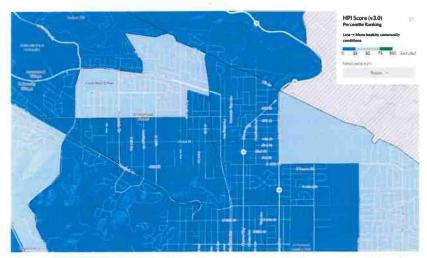


Figure 4.9.6 Healthy Place Index Score - Newmark Elementary School

Walking

Figure 4.9.7 provides an overview of the existing pedestrian network and challenges observed and analyzed. There is existing sidewalks on both sides of 3rd Avenue in front of the school. There are also sidewalks surrounding the school along 41st Street, F Street and 48th Street. Although there is a sidewalk right in front of the school, students were observed walking along 3rd Avenue on the west side of the parking with oncoming traffic after being dropped off.

During the walk audit, speeding and pedestrian/vehicle conflicts were observed along 3rd Avenue frequently. Students trying to cross 3rd Avenue from the west side of the street were observed walking into oncoming traffic after being dropped off. This intersection is controlled by stop signs in the east-west direction only. The back of the school along F Street is also another area for pick-up and drop-off. It was noted by the principal that speeding was also a concern along this street.

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 4.9.8 shows the results of the PES scoring. A sidewalk network with medium and high PES scores indicates low stress for walking, whereas a low or very low PES score can be considered a stressful walking environment. 3rd Avenue is shown to have a medium PES score, indicating a fairly low stress walking environment. Other roadways surrounding Newmark Elementary

School show primarily low PES scores. This indicates a stressful walking environment near the school along these roadways and may create an access barrier to walking.



Figure 4.9.7 Existing Pedestrian Conditions



Figure 4.9.8 Pedestrian Evaluation Score



Figure 4.9.9 shows the walkshed for Newmark 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.

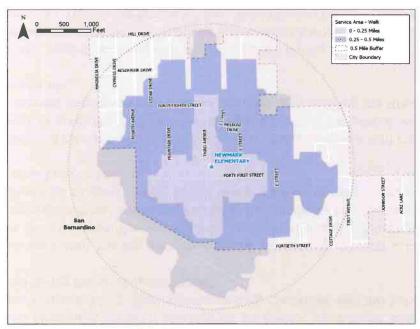


Figure 4.9.9 Existing Pedestrian Walkshed

Riding and Rolling

Currently, there are no bicycle facilities surrounding Newmark Elementary School. There are plans to implement a Class II Bike Lane along E Street through SBCTA (Figure 4.9.10).

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 considers 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 Newmark Elementary School have high LTS scores indicating higher stress levels for cyclists (Figure 4.9.11).

Figure 4.9.12 shows the bikeshed for Newmark Elementary School. The bikeshed shows the area which a student can bike one mile from the school.



Figure 4.9.10 Existing and Planned Bicycle Condition

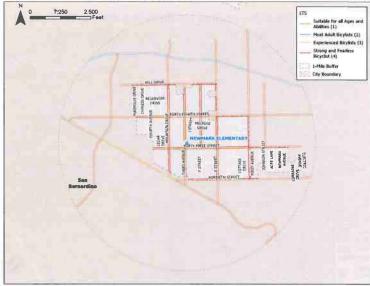


Figure 4.9.11 Bicycle Level of Traffic Stress