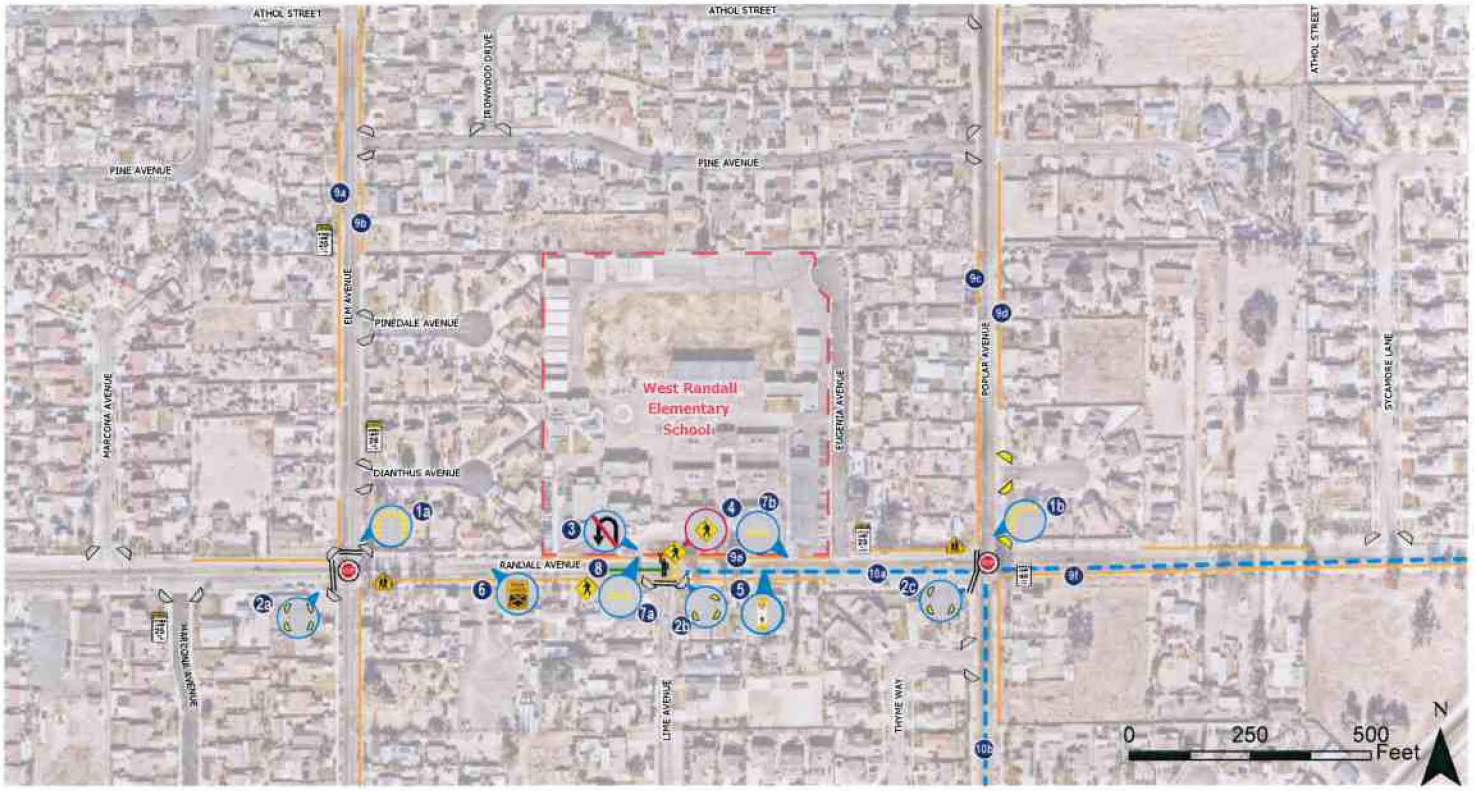
SCHOOL RECOMMENDATIONS

Several improvement opportunities were identified in **the mobility assessment** conducted for West Randall Elementary School. Through the student tallies, it was found that the primary mode of travel for most students commuting to and from West Randall Elementary School was the use of a family vehicle. Parents during the walk audit explained this was due to the pedestrian **environment, as they felt it was** unsafe with **the lack of sidewalks and controlled** crossings.

Speeding was cited as a concern on Randall Avenue. This is visible along Randall Avenue where drivers were seen increasing their speed. A speed feedback sign is recommended along **Randall Avenue west of West Randall** Elementary School to discourage speeding in the eastbound direction towards the school.
Another issue that was noted was vehicles making U-turn movements on Randall Avenue near the school bus loop exit driveway. To prevent eastbound U-turn movements near the school bus loop exit driveway, vertical delineators along Randall Avenue near the school bus loop exit driveway and the intersection of Randall Avenue at Lime Avenue, as well as a "No Left Turn" sign at the intersection of Randall Avenue and the school bus loop exit driveway are recommended to reinforce appropriate turning movements near West Randall Elementary School.

To improve visibility and accessibility, high visibility crosswalks, ADA-compliant curb ramps, and sidewalks are recommended at the school frontage and **surrounding** intersections. These **recommendations** are highlighted in Figure 4.12.17. A summary list of recommendations is provided Table 4.12.1.



Existing Infrastructure

ADA Compliant Ramp | Ramp | Signalized Intersection | Crossing Guard | Marked Crosswalk | High-Visibility Crosswalk | Rectangular Rapid Flashing Beacon | School Signage | School Site | All-Way Stop | School Zone Speed Limit Sign

Recommendations

Install High Visibility Crosswalk | Install ADA Curb Ramps | Install Speed Hump | Improve Existing RRFB | Install Speed Feedback Sign | Install Prepare to Yield Sign | Install No U-Turn Sign | Planned Class II Bike Lane (SBCTA) | Construct Sidewalk | Install Centerline Delineators

WEST RANDALL ELEMENTARY SCHOOL

TABLE 4.12.1 WEST RANDALL ELEMENTARY SCHOOL RECOMMENDATIONS

ID	Improvement	Description	Location
1a	High-Visibility Crosswalk	Install high-visibility crosswalk on north, east, and west legs of the intersection	Randall Avenue and Elm Avenue
1b	High-Visibility Crosswalk	Install high-visibility crosswalk on north and west legs of the intersection	Randall Avenue and Poplar Avenue
2a	ADA Compliant Curb Ramps	Install ADA compliant curb ramps on all four corners of the intersection	Randall Ave and Elm Avenue
2b	ADA Compliant Curb Ramps	Install ADA compliant curb ramps on the northeast, southeast, and southwest corners of the intersection	Lime Avenue and Randall Avenue
2c	ADA Compliant Curb Ramps	Install ADA compliant curb ramps on the northwest southeast and southwest corners of the intersection	Randall Avenue and Poplar Avenue
3	No U-turn sign	Refresh the no U-turn sign at end of bus loop	Randall Avenue
4	Install HAWK Signal	Upgrade existing RRFB to a HAWK Signal (*)	Lime Avenue and Randall Avenue
5	Install "Prepare to Yield" sign	Install "Prepare to Yield" sign	Randall Avenue east of Lime Avenue
6	Speed Feedback Sign	Install speed feedback sign	Randall Avenue between Elm Avenue and Lime Avenue
7a	High-Visibility Crosswalk	Install high-visibility crosswalk crossing West School Driveway	Randall Avenue at West School Driveway
7b	High-Visibility Crosswalk	Install high-visibility crosswalk crossing East School Driveway	Randall Avenue at East School Driveway
8	Delineators	Add delineators on Randall Avenue to restrict U-turns on Randall Avenue near the West School Driveway	Randall Avenue at West School Driveway
9a	Sidewalk	Construct sidewalk	Elm Avenue (W) between Athol Street and Randall Avenue
9b	Sidewalk	Construct sidewalk	Elm Avenue (E) between Athol Street and Sequoia Avenue
9c	Sidewalk	Construct sidewalk	Poplar Avenue (W) between Pine Avenue and Randall Avenue
9d	Sidewalk	Construct sidewalk	Poplar Avenue (E) between Athol Street and Hawthorne Avenue
9e	Sidewalk	Construct sidewalk	Randall Avenue (N) from Marcona Avenue and Sycamore Lane
9f	Sidewalk	Construct sidewalk	Randall Avenue (N) from Elm Avenue and Fontana Avenue
10a	Planned Class II Bike Lane (SBCTA)	Coordinate with SBCTA to construct Class II Bike Lanes per SBCTA planned bikeways	Randall Avenue between Lime Avenue and Citrus Avenue
10b	Planned Class II Bike Lane (SBCTA)	Coordinate with SBCTA to construct Class II Bike Lanes per SBCTA planned bikeways	Poplar Avenue between Randall Avenue and Valley Boulevard

(*) Note: Recommendation will need additional studies to determine warrants

4.13 BEECH AVENUE ELEMENTARY SCHOOL

9206 Beech Ave, Fontana, CA 92335
Fontana Unified School District

Beech Avenue Elementary School is located in unincorporated San Bernardino County, California, within the City of Fontana Sphere of Influence, west of the city boundary. Beech Avenue Elementary School is located on the west side of Beech Avenue between Athol Street and Randall Avenue. The school is located approximately 1.5 miles north of the Interstate 10 (I-10) freeway and approximately 1.0 mile east of Auto Club Speedway, a Nascar racing track. The land use surrounding Beech Avenue Elementary School is primarily residential with some industrial land uses. Figure 4.13.1 shows the school area and the overall context of the school site.

Figure 4.13.1 Context Map

SCHOOL PROFILE

Beech Avenue Elementary School is located within the City of Fontana Sphere of Influence and is a part of the Fontana Unified School District. The school serves approximately 663 students in grades Kindergarten through 6th grade, with a student/teacher ratio of 21:1. The demographic composition of the students is shown in Figure 4.13.2, which shows that Beech Avenue Elementary School has a majority Hispanic population, according to the census estimates. Currently, approximately 92% of Beech Avenue Elementary School students received free or reduced-price lunch during the 2023-2024 school year, which is significantly higher than the state and the county averages (Figure 4.13.3).

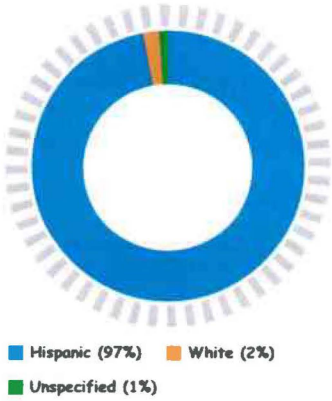


Figure 4.13.2 Demographic Composition

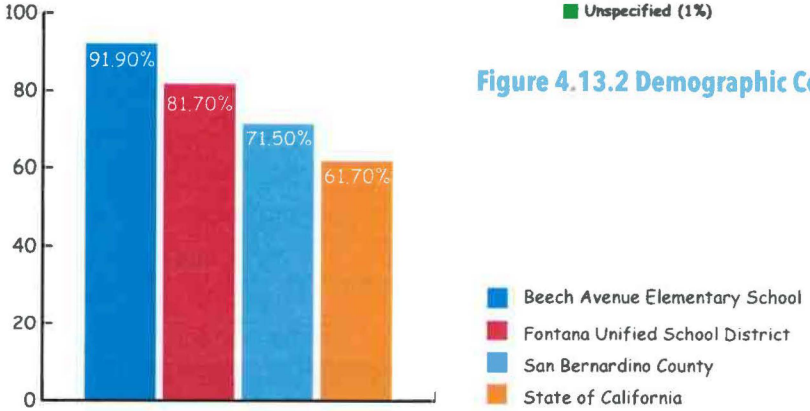


Figure 4.13.3 Free or Reduced Meals (Compare between district and county)

Student Tallies

The Safe Routes to School Student Arrival and Departure Tally Sheet was administered by Beech Avenue Elementary School staff between January 28 to January 30, 2025, to better understand what mode(s) students use to travel to and from the campus. As displayed in Figure 4.13.4, the vast majority of students arrived and departed in a family vehicle (87% average), followed by carpool (7% average), and walk (7% average), respectively. Beech Avenue Elementary School does not have a broader school bus program but does provide buses for students in the SPED program. The buses drop students off at the designated bus loop parallel along Athol Street.

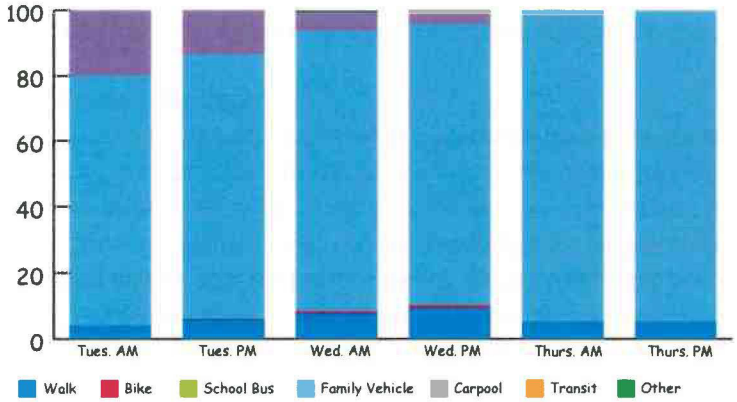


Figure 4.13.4 Beech Avenue Elementary School Student Arrival and Departure Tallies

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 4.13.5 illustrates the CES scores for Beech Avenue Elementary School and its surrounding area, scoring in the 80th to 90th percentile, indicating the area is disproportionately burdened by pollutants.

Figure 4.13.5 CalEnviroScreen 4.0 Score - Beech Avenue Elementary School

Mobility Assessment

A walk audit and on-site meeting for Beech Avenue Elementary School in unincorporated San Bernardino County was conducted on January 30, 2025. The purpose of the event was to identify issues related to student drop-off or pick-up operations 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 deficiencies, 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 the Beech Avenue Elementary School Principal, San Bernardino County staff, Fontana Unified School District staff, CR Associates staff and eight caregivers. Although an online survey was administered as part of the school mobility assessment for Beech Elementary School, no parents/caregivers participated.

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 4.13.6 illustrates the area surrounding Beech Avenue Elementary School, which shows an HPI score of 13.8, indicating less healthy conditions surrounding the school.

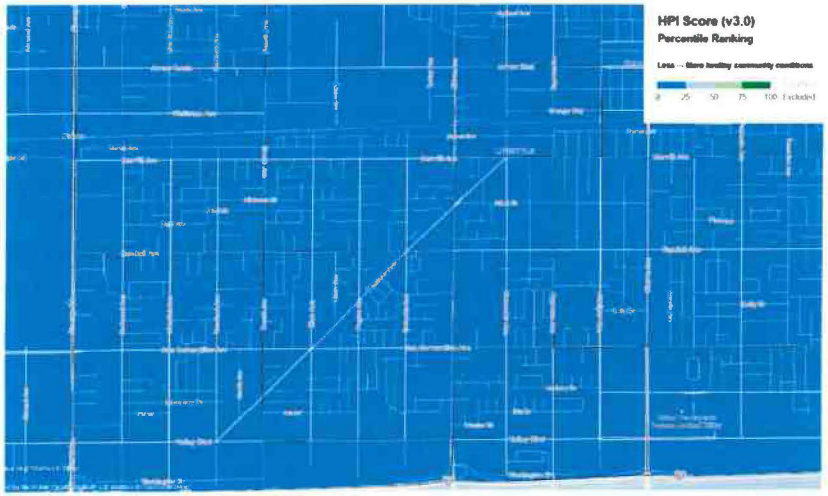


Figure 4.13.6 Healthy Place Index Score - Beech Avenue Elementary School

Walking

Figure 4.13.7 provides an overview of the existing pedestrian network and challenges observed and analyzed. The sidewalk network surrounding Beech Avenue Elementary School is largely incomplete. During the school site visit, it was observed that there were no sidewalks on the north and south sides of Athol Street, Randall Street and Pine Street. Apart from the school frontage, sidewalks were also missing on the east and west sides of Birch Street, and portions of the east and west sides of Hemlock Avenue. Abandoned cars on Beech Avenue and Athol Street were reported by walk audit participants, who noted that pedestrians must walk further into the road to pass those cars. Given the lack of sidewalks, vehicles found speeding along the roadway create additional risk for pedestrians as there is no grade separation.

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 4.13.8 shows the results of the PES scoring. A sidewalk network with medium and high PES scores indicates relatively low stress for walking, whereas a low or very low PES score can be considered a stressful walking environment. The roadways near Beech Avenue Elementary School show primarily low PES scores, with very low scores on Hemlock Avenue, Beech Avenue and Randall Avenue. This indicates a stressful walking environment near the school along these roadways and may create a barrier to walking.

Figure 4.13.7 Existing Pedestrian Conditions

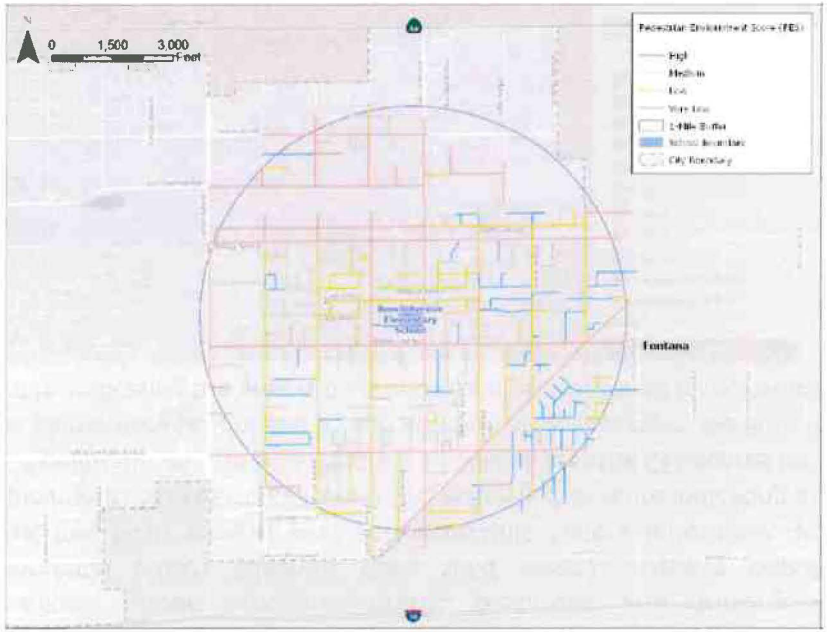


Figure 4.13.8 Pedestrian Evaluation Score

Figure 4.13.9 shows the walkshed for Beech Avenue Elementary School. The walkshed shows the area where a student can walk one-half mile from the school. The walkshed has been reviewed for sidewalk connectivity and accessibility.

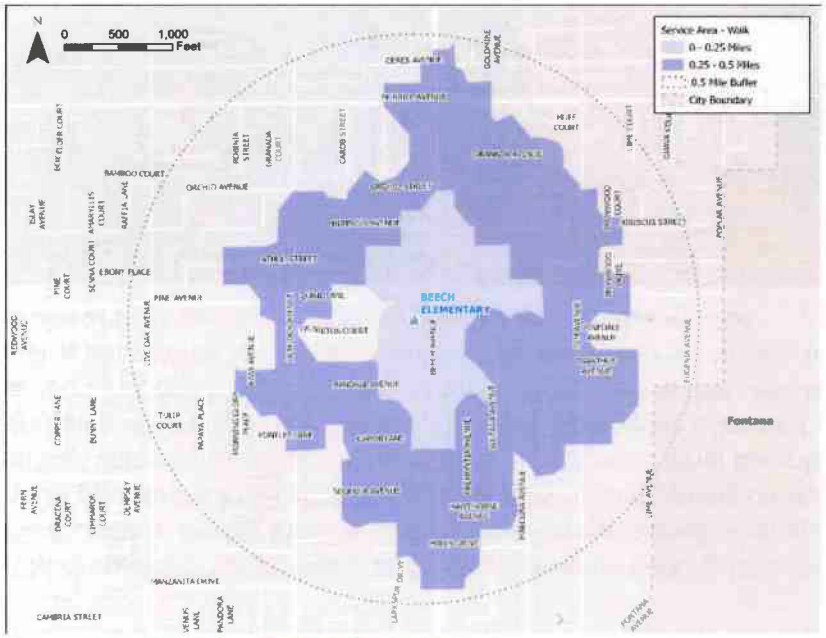


Figure 4.13.9 Existing Pedestrian Walkshed

Riding and Rolling

Currently, there are no bicycle facilities surrounding Beech Avenue Elementary School. There are no plans to implement bicycle facilities within the school vicinity.

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 classifies the street network into categories according to the level of stress it causes cyclists, taking into account a number of factors. The LTS assessment conducted by MBI concluded that the roads immediately surrounding Beech Avenue Elementary School have LTS scores of 2 and 4, indicating a combination of low and high stress levels for cyclists (Figure 4.13.10).

Figure 4.13.11 shows the bikeshed for Beech Avenue Elementary School. The bikeshed shows the area where a student can bike one mile from the school.

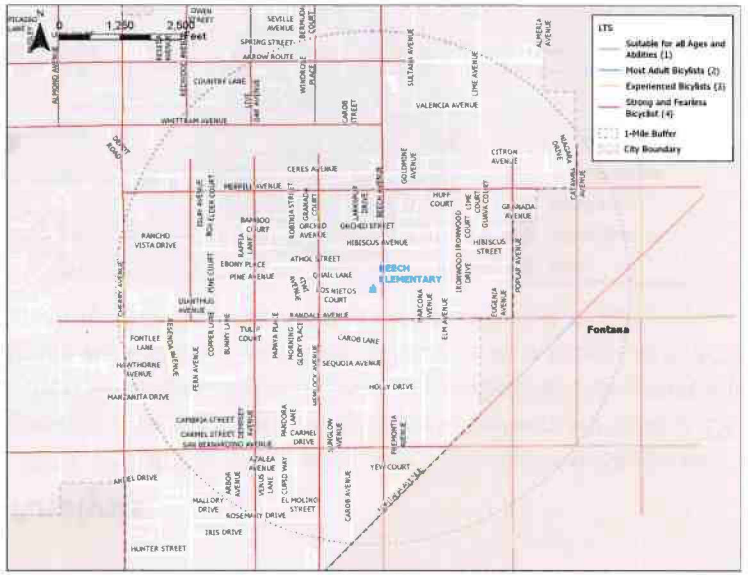


Figure 4.13.10 Bicycle Level of Traffic Stress

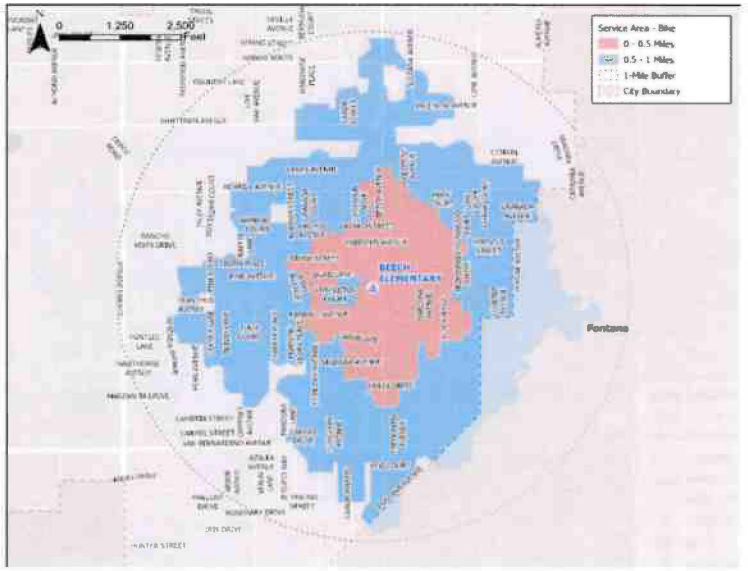


Figure 4.13.11 Existing Bikeshed

Pick-Up and Drop-Off

Beech Avenue Elementary School is accessed via Beech Avenue and Pine Avenue. Figure 4.13.12 illustrates the existing conditions and the behaviors observed during the mobility assessment.

There are currently two crossing guards. There is one crossing guard at the intersection of Beech Avenue and Pine Avenue. This intersection includes a Rectangular Rapid Flashing Beacon (RRFB) controlled crossing with a standard marked crosswalk and signage. The second crossing guard is located at the intersection of Beech Avenue and Randall Avenue. This intersection is a controlled crossing with a standard marked crosswalk and signage. The following signs are present along the east and west sides of Beech Avenue:

- "School Crossing Ahead"
- "School Zone Speed Limit"
- "Tow-Away No Parking Commercial Vehicles 5 Tons Gross Weight or Over"
- "No Parking Anytime"

Some parents that are dropping off their children are noted to park along Beech Avenue and cross the street with their children.

Currently, drop-offs occur primarily at the Beech Avenue parking lot in front of the school campus. During the site visit, parents were observed arriving nearly 30 minutes prior to the first bell. Many parents were seen dropping off students at the official unloading area right in front of the school, while other parents were seen dropping off along Beech Avenue. The staff parking lot is located within the bus loop just north of the school. School staff recognize that vehicles use unofficial spots to drop off students such as the north and south side of Pine Avenue and at the intersection of Beech Avenue and Randall Avenue.

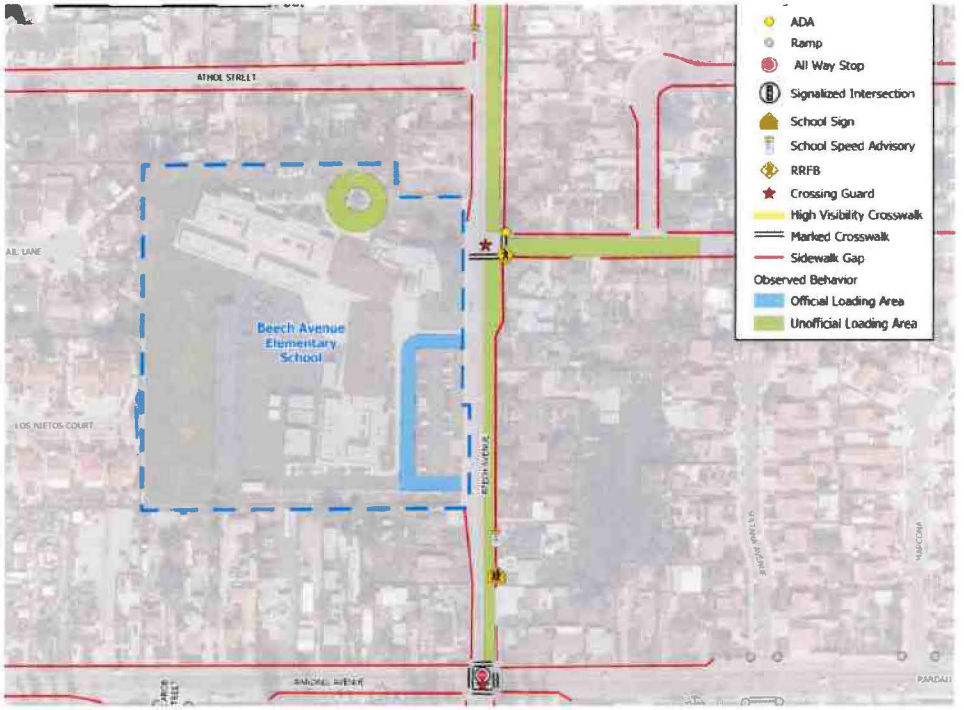


Figure 4.13.12 Existing Pick-Up and Drop-Off Vehicle Behavior

Safety Analysis

Between 2019 and 2023, there were eight bicycle and pedestrian collisions within a one-half mile radius of Beech Avenue Elementary School. Of the eight collisions, there were two collisions involving pedestrians who sustained severe injuries. These were located on Hemlock Avenue near Quail Lane (2023) and on Hemlock Avenue near Granada Avenue (2019) (Figure 4.13.13).

Figure 4.13.13 Bicycle and Pedestrian Involved Collisions (2019-2023)

Travel Pattern Analysis

A travel pattern analysis was conducted for West Randall 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 the tools 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, which refers to travel by car. 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 is shown using lines on a map (see Figure 14 and Figure 15 for active trip and auto trip maps, respectively). A thicker line means more people are estimated to travel using that mode of transportation from that neighborhood. Line thickness can be compared within the same type of travel, such as comparing two walking routes. One can also get a general sense of how walking and driving compare by looking at both sets of lines side by side. However, the lines are scaled differently for each mode of travel, 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. For Beech Avenue Elementary School, auto and active modes have similar magnitudes for each respective mode. It should be noted that there is a TAZ to the north of the school that shows slightly higher activity for active trips, compared to auto trips, and one TAZ to the northeast that shows slightly higher activity for auto trips compared to active trips. The slight difference in activity in the TAZ northeast of the school may be due to poor active transportation connectivity northeast of the school, active infrastructure barriers, more car-dominant lifestyles or a longer distance between the school and the respective TAZ compared to other TAZs. However, this difference is not particularly significant.

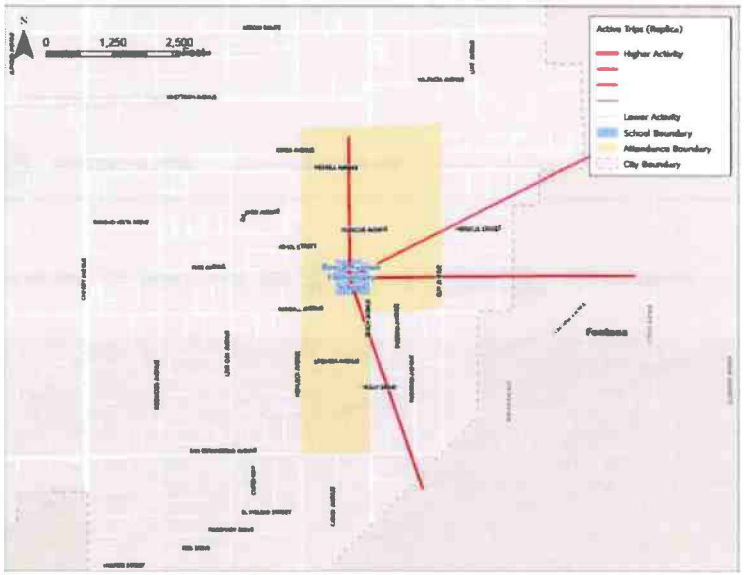


Figure 4.13.14 Active Travel Pattern

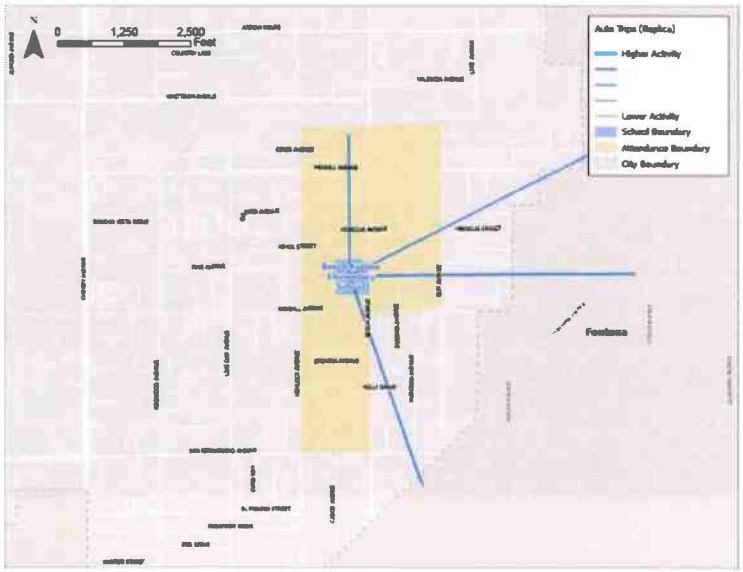


Figure 4.13.15 Auto Travel Pattern

SCHOOL RECOMMENDATIONS

Several improvement opportunities were identified in the mobility assessment conducted for Beech Avenue Elementary School. Through the student tallies, it was found that the primary mode of travel for most students commuting to and from Beech Avenue Elementary School was via a family vehicle. Parents during the walk audit explained this was due to the pedestrian environment, as they felt it was unsafe with the lack of controlled crossings and sidewalks.

There are two controlled crossings near the school. One is an RRFB crossing at the intersection of Pine Avenue and Beech Avenue, and one is an all-way stop-controlled intersection at Randall Avenue and Beech Avenue. Both crossings have a crossing guard, but some vehicles were seen during the walk audit speeding through the crossings, and caregivers reported that these intersections are difficult for pedestrians to cross. There is also no bicycle infrastructure near the school.

Further, speeding was cited as a main concern for parents in the areas surrounding the school. This is visible along Beech Avenue where drivers were seen increasing their speed.
A speed feedback sign is recommended along Beech Avenue to discourage speeding. To improve visibility and accessibility, high visibility crosswalks, ADA-compliant curb ramps, and sidewalks are recommended at the school frontage and surrounding intersections. These recommendations are highlighted in Figure 4.13.16. A summary list of recommendations is provided in Table 4.13.1.

BEECH AVENUE ELEMENTARY SCHOOL