

Summer 2023

Arlanza Elementary School, Riverside Summary and Recommendations Report

Community Pedestrian and Bicycle Safety Training



Berkeley SafeTREC

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Acknowledgements

Thank you to the Planning Committee for inviting us into their community and partnering with us to make Arlanza Elementary School in Riverside, California a safer place to walk and bike.

Our work took place on the ethnohistoric territory of the Payómkawichum/Luiseño and Tongva/Gabrieleno peoples. We recognize that every community member of Arlanza Elementary School has, and continues to benefit from, the use and occupation of Payómkawichum/Luiseño and Tongva/Gabrieleno land.

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This report was prepared in cooperation with the California Office of Traffic Safety (OTS). The opinions, findings, and conclusions expressed in this publication are those of the author(s) and not necessarily those of OTS.

Introduction

The Community Pedestrian and Bicycle Safety Program (CPBST) is a statewide project of UC Berkeley Safe Transportation Research and Education Center (SafeTREC) and California Walks (Cal Walks). The program uses the Safe System Approach to engage residents and safety advocates to develop a community-driven action plan to improve walking and biking safety in their communities and to strengthen collaboration with local officials and agency staff. Cal Walks and SafeTREC (Project Team) worked with the Planning Committee to develop workshop goals and tailor the curriculum to address the community's safety needs and priorities.

The City of Riverside requested a CPBST for Arlanza Elementary School to:

1. Increase walking and biking safety around campus and the surrounding community in order to encourage more people to walk, bike, and use public transportation; and
2. Develop momentum and support for Safe Routes to School programming at Arlanza Elementary School, including the development of a Safe Routes To School Action Plan and Study.

The Arlanza Elementary School CPBST workshop convened the larger local community on March 8, 2023 at the school campus. Seventeen community members participated in the workshop, including Arlanza Elementary School staff and parent volunteers, the City of Riverside, Riverside Police Department, and neighbors.

The following report summarizes the outcomes of the workshop and provides community and Project Team recommendations for continued guidance in project and program implementation.

Safe System Approach

The Project Team adapted the Federal Highway Administration's Safe System framework to make them more impactful for grassroots community engagement. The Safe System approach aims to eliminate all fatal and serious injuries. We emphasize equity as a central component and acknowledge the critical need to strengthen partnerships between transportation professionals and the communities they serve in order to create safe streets for everyone.

For more information about the Safe System Approach, please review our [policy brief](#). To learn more about Safe System strategies, please review our [toolkit](#).



Background

Arlanza Elementary School is located in Riverside County. Per the [California Office of Traffic Safety's Crash Rankings](#), in 2020, Riverside ranked 7th out of 15 cities of similar population size for people killed or injured in a traffic crash (with a ranking of “one” indicating the worst crash rate). Most notably, Riverside ranked 2nd out of 15 cities for bicycle crashes involving a person under the age of 15, and 3rd out of 15 cities for speed related crashes.

Per 2023 Esri Community Analyst data, the City of Riverside has a large number of households with one or more persons with a disability (26 percent). Riverside also has a significant number of households with seniors (12 percent), households without a vehicle (11 percent), and households living below the poverty level (12 percent).

The largest commute pattern outside of single occupancy vehicles to work for those in Riverside is carpooling, with 11 percent of residents carpooling to work as their primary form of transportation. In Riverside, three percent of its population walk to work, two percent take public transportation, and one percent bike to work. The full demographic report from 2023 Esri Community Analyst data can be found in the appendix.



Local Policies and Plans

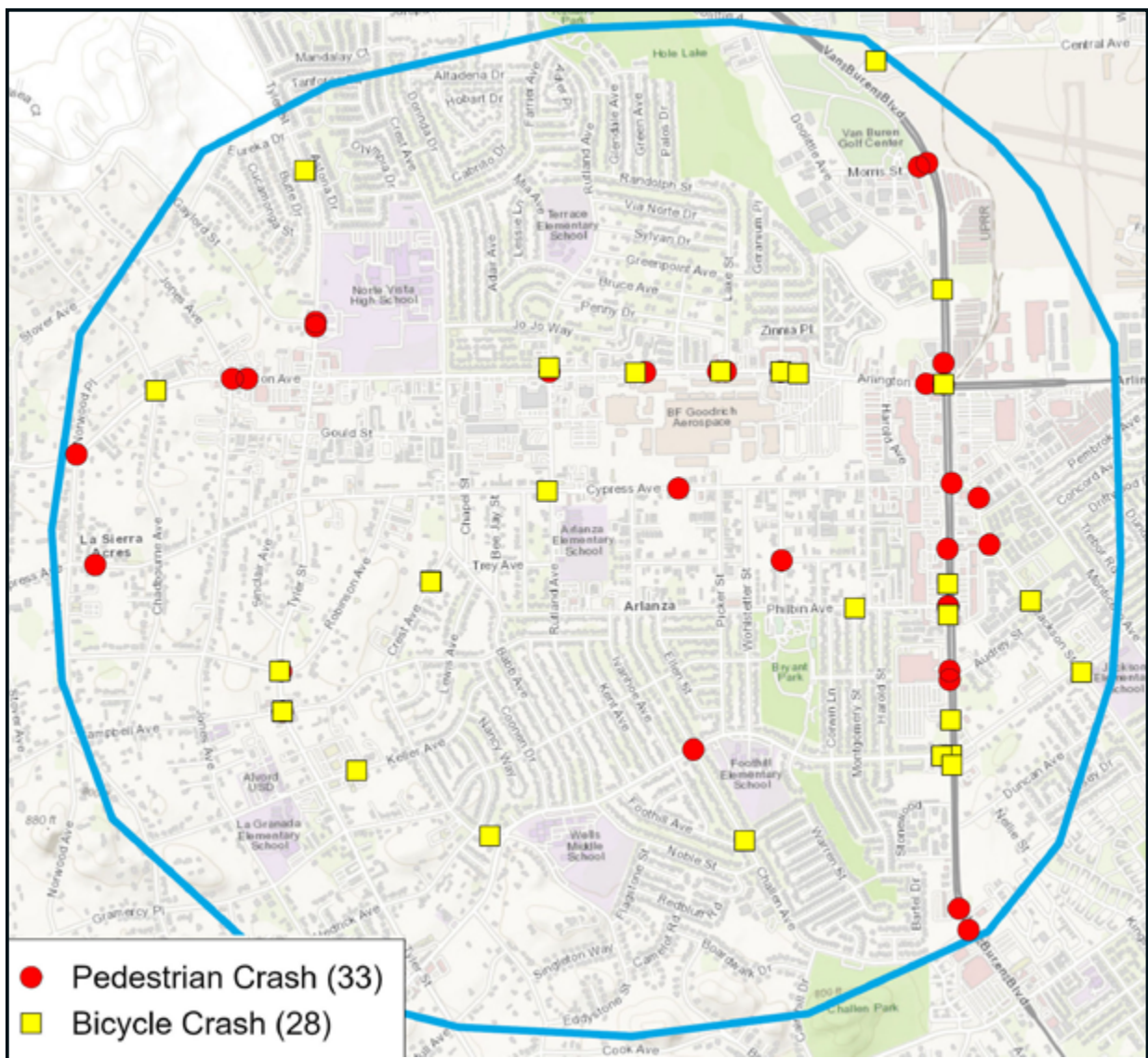
[The School Traffic Circulation Report](#) for Arlanza Elementary School, prepared by City of Riverside Traffic Engineering Division in 2015, details a number of walking and biking safety concerns that were also observed during this CPBST process, including issues with drop off and pick up, red curb violations by parents picking up their students, pedestrians crossing outside of a marked or unmarked crosswalk, illegal U-turns in front of the school, and incomplete sidewalk networks. This report also includes recommendations for these concerns; however, it is unclear how many of these recommendations were adopted by the school after the release of the report.

The 2021 City of Riverside PACT consists of: a Pedestrian Target Safeguarding Plan (PTS), an Active Transportation Plan (AT Plan), a Complete Streets Ordinance (CSO), and a Trails Master Plan (TMP). Surveys administered as part of the community engagement strategy in the Arlanza Neighborhood (Ward 6) named discontinuous sidewalks, lack of shade, and lighting as the main active transportation concerns. Table 4-14 in the Active Transportation Plan outlines recommendations for specific corridors in Ward 6, including adding to the sidewalk network along Challen Avenue, Crest Avenue, Rutland Avenue, and Bee Jay Street.

Pedestrian and Bicycle Crash History

The following data is based on police-reported pedestrian and bicycle crashes resulting in injuries to pedestrians¹ and bicyclists within a one-mile radius of Arlanza Elementary School. Data reported in this section are from the Statewide Integrated Traffic Records Systems (SWITRS) for the years 2012 to 2021. Crash data for 2021 is provisional as of April 2023. A full discussion of the pedestrian and bicycle crash data can be found in the appendix.

The map below shows all of the crashes within the workshop boundaries in which a person was injured and that involved a pedestrian or bicyclist from 2017 to 2021.



*Pedestrian and bicycle crashes within the Arlanza Elementary School focus area.
Data Source SWITRS 2017-2021. 2021 data is provisional as of April 2023.*

¹ A pedestrian is defined as any person who is afoot or using a non-motorized personal conveyance other than a bicycle. This includes skateboards, strollers, wheelchairs, and any electric assistive mobility device.

Arlanza Elementary School Community Workshop Boundaries

The boundaries for this workshop were a one-mile radius from Arlanza Elementary School, which included major corridors like Cypress Avenue, Philbin Avenue, Rutland Avenue, Arlington Avenue and Van Buren Boulevard. The Planning Committee chose these boundaries to include key community destinations, including the campus, Norte Vista High School, Bryant Park, and other nearby schools.

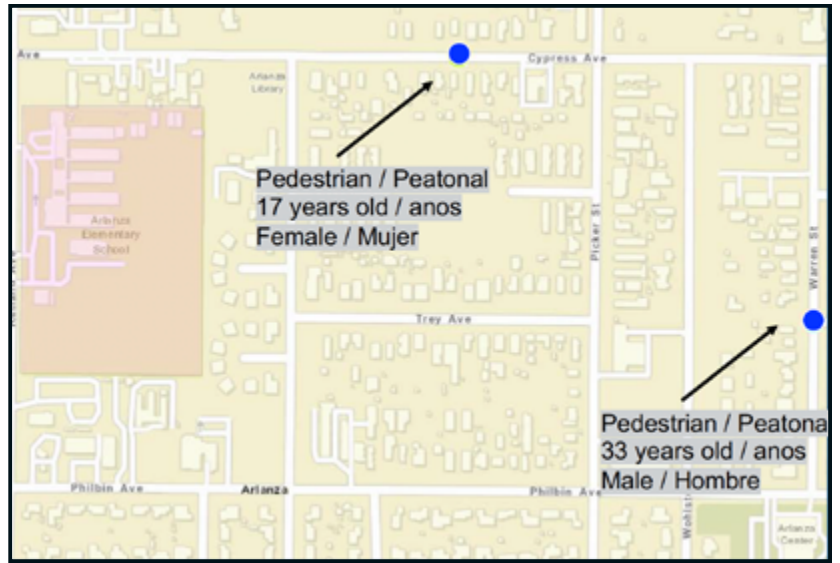
Pedestrian Crashes

Over the 10-year period between 2012 and 2021, pedestrian crashes appear to be steadily decreasing since 2017, with a large drop in 2020 across all types of crashes potentially due to the COVID-19 shelter-in-place orders.² In the most recent five years of data available, 2017 to 2021, there were 33 pedestrian crashes, which includes one pedestrian fatality at the Arlington Avenue/Van Buren Boulevard intersection. Pedestrian crashes were concentrated on both Arlington Avenue and Van Buren Boulevard, which participants agreed are unsafe corridors for those walking and biking. Of the pedestrian crashes, eight occurred between 6 p.m. and 9 p.m., and seven between noon and 3 p.m., time frames which could demonstrate a correlation to school pickup and evening commute hours. Wednesdays and Fridays saw the most crashes, with 13 of the 33 crashes total occurring on these weekdays. A driver not yielding the right-of-way to a pedestrian at a marked or unmarked crosswalk was the primary cause of crashes for 27 percent of all crashes. One-third of crashes were due to a pedestrian failing to yield to vehicles when crossing outside of a marked or unmarked crosswalk.

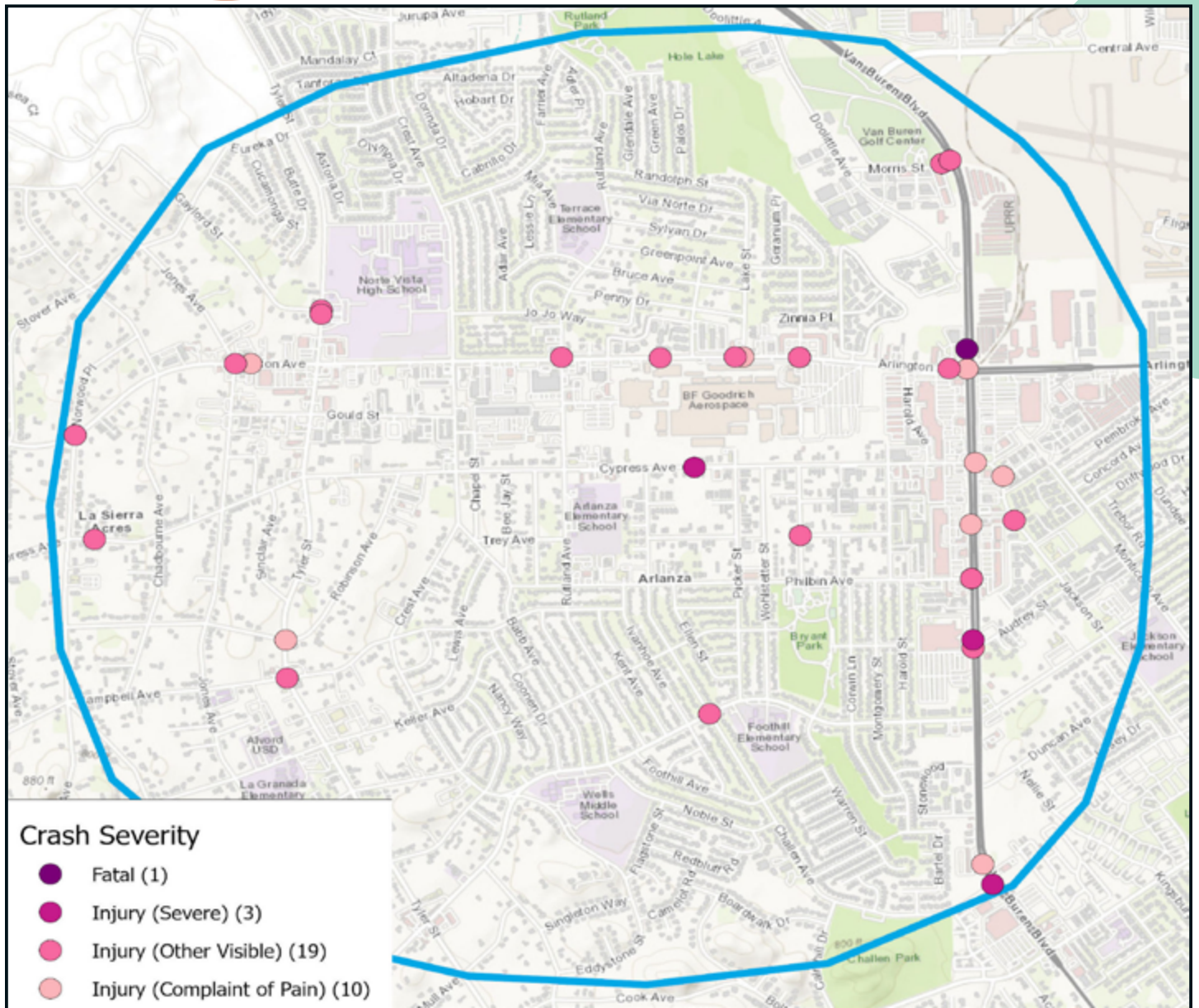
Among the 36 victims of these 33 pedestrian crashes, there was one fatality and three serious injuries, with minor injuries (32 victims) comprising the largest number of total injured victims. Victims aged 20 or younger comprised 24 percent of all pedestrian crash victims. Young adults, aged 25-34, made up a majority of the victims (46 percent). Four crashes occurred within a 0.5 mile radius of campus, two of which were pedestrian crashes. One pedestrian victim was a 17 year old female on Cypress Avenue between Challen Avenue and Picker Street. The second was a 33 year old male at the Trey Avenue/Warren Street intersection.

² However, this decline is not lasting. Nationally, preliminary 2022 data shows an increase in traffic fatalities and of pedestrian fatalities from 2020 figures but a marginal decrease from 2021 ([DOT HS 813 298](#) and [DOT HS 813 448](#)). Nationally, bicycle fatalities show an increase of 10.6 percent between 2021 and 2022.

Pedestrian Crashes



Near campus crashes



Pedestrian crash severity. Data Source SWITRS 2017-2021. 2021 data is provisional as of April 2023.

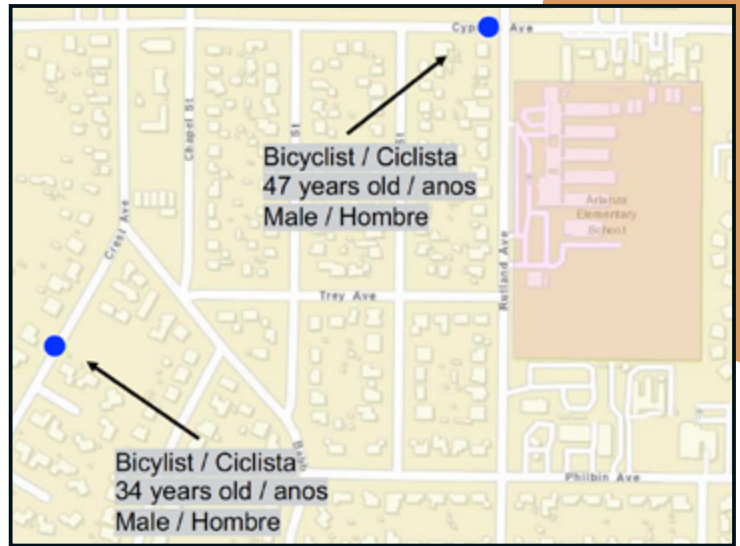
Bicycle Crashes

Over the 10-year period between 2012 and 2021, bicycle crashes appeared to sit between five and eight crashes a year, with a significant drop during COVID-19 shelter-in-place orders. In the most recent five years of data available, 2017 to 2021, 28 bicycle crashes occurred in the focus area. Similar to pedestrian crashes, bicycle crashes were concentrated on Arlington Avenue and Van Buren Boulevard. There was one fatal bicycle crash in the focus area in the past five years, directly in front of Jackson Elementary School. Of the 28 crashes, 12 (43 percent) of the crashes occurred between 6 p.m. and 9 p.m. Six of the 28 crashes occurred on a Friday, with Tuesday and Thursday coming in next with five crashes each. The most common primary crash factor for most of these bicycle crashes was due to a bicyclist riding in the opposite direction on the roadway as motor vehicles, which was associated with six crashes.

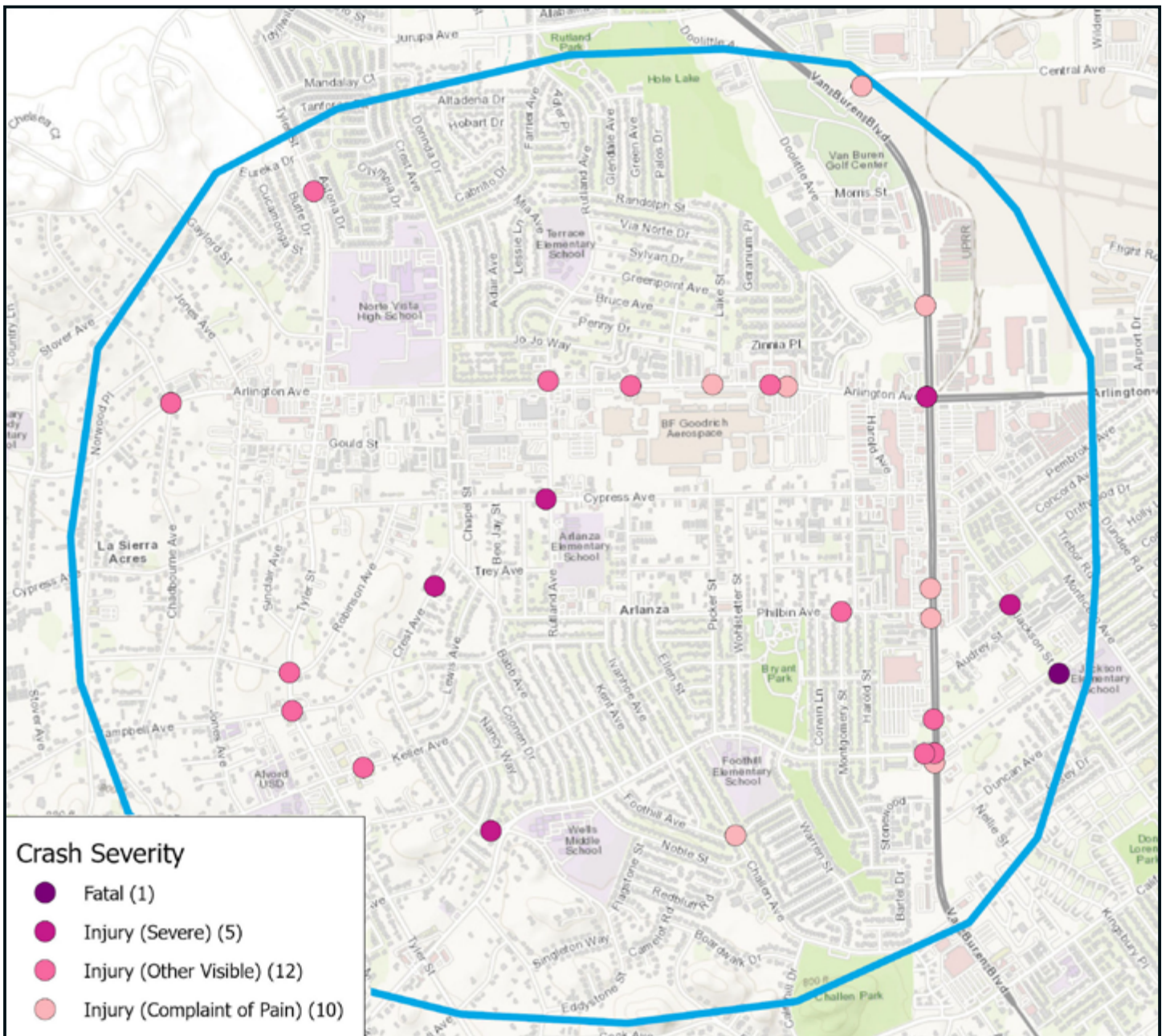
Among the 30 victims of these 28 bicyclist crashes, there was one fatality and six serious injuries. Most bicycle crash victims suffered minor injuries, comprising 23 of the 30 injured victims. Two victims were 20 years old or younger. A majority of crashes were adults between the ages of 25 and 44 (67 percent). Two bicycle crashes occurred within a 0.5 mile radius of campus. One victim was a 34 year old male on Crest Avenue between Babb Avenue and Campbell Avenue. The second was a 47 year old male at the Cypress Avenue/Rutland Avenue intersection.



Bicycle Crashes



Near campus crashes



Bicycle crash severity. Data Source SWITRS 2017-2021. 2021 data is provisional as of April 2023.

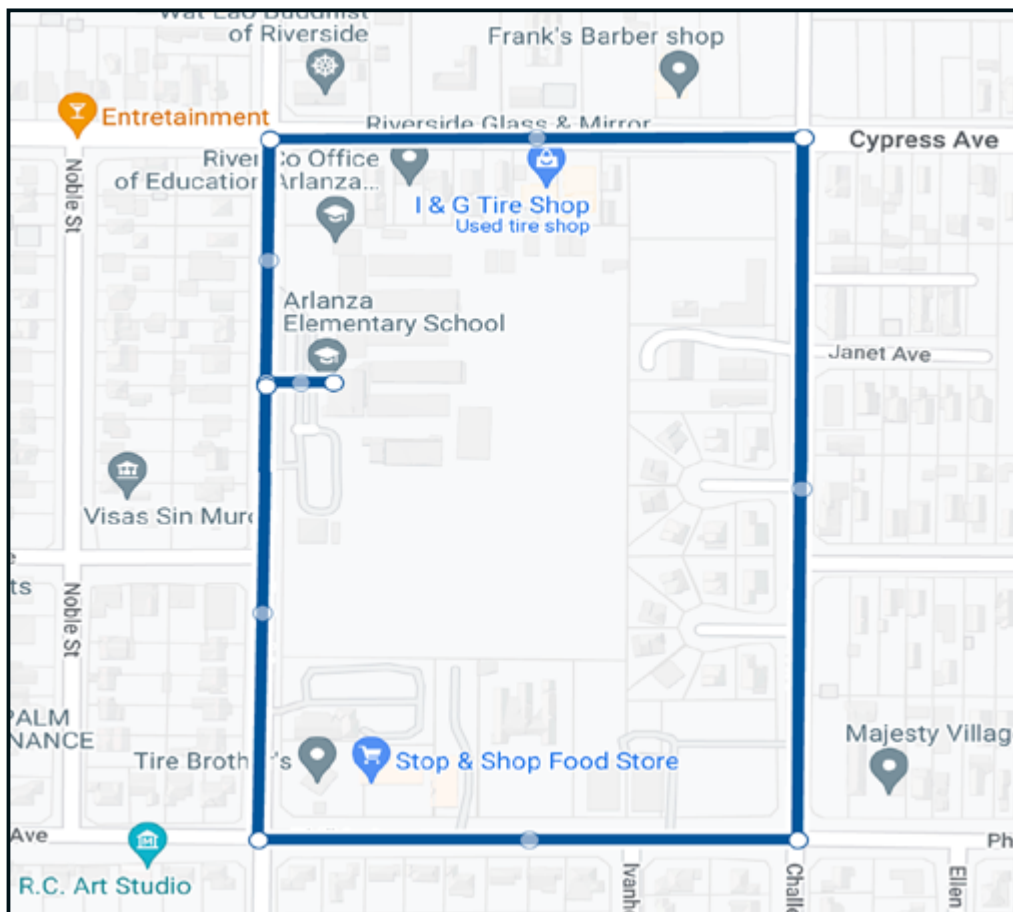
Walking and Biking Assessments

During the workshop, the Project Team and participants participated in walking and biking safety assessments along two routes frequently traveled by community residents. Participants were asked to identify community assets, assess infrastructure conditions, and share how road users engage with the built environment. The following is a summary of the walking and biking assessment.

Route 1: Arlanza Elementary School Perimeter

Focus:

Students and parents of Arlanza Elementary School walk and travel along Challen Avenue, Cypress Avenue, Philbin Avenue, and Rutland Avenue to access the school from the surrounding neighborhood. Students and families from Terrace Elementary School and Norte Vista High School also use Cypress Avenue and Rutland Avenue to walk and bike to and from school. Philbin Avenue is also a major thoroughfare for students, parents, and other community members.



Walking Assessment, Route One

Strengths:

Arlanza Elementary School has an active parent volunteer group, [Padres Unidos](#) (United Parents), and neighbors who are interested in ensuring students' safety, whether they get to school by bike, foot, or car.

1. The Arlanza Community Center on Philbin Avenue is less than one mile away from Arlanza Elementary School. The Center provides essential services to the entire community, including enrichment and physical activities for youth, access to a computer lab, mentorship opportunities, senior programs, sports, and more.
2. There is an island in the school parking lot in front of the school that parents use for safe pick-ups and drop-offs.
3. School administrators and the City of Riverside have expressed a commitment to the safety and wellness of those walking and biking to and from campus, with the goal of creating an individualized Safe Routes to School Action and Safety Plan for each school.
4. School crossing guards help schoolchildren and parents safely cross the street at the Philbin Avenue/Rutland Avenue intersection and the Rutland Avenue/Cypress Avenue intersection.



RIGHT: A group of parent volunteers walk back to campus after a walking and biking safety assessment around the neighborhood.



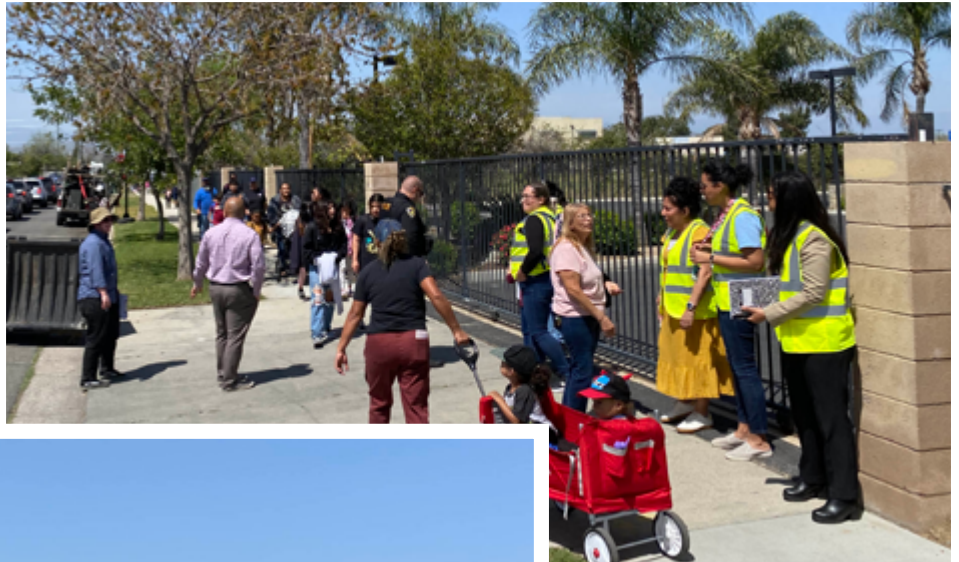
LEFT: Arlanza Community Center is located in Bryant Park which is also a fun place for the community to gather and play.



RIGHT: Chess/checkers picnic tables and the playground at Bryant Park.

Concerns:

1. Drivers appear to drive above the 25 MPH and 30 MPH posted speed limits along Rutland Avenue, Cypress Avenue, Challen Avenue, and Philbin Avenues. Speeding drivers pose a serious risk to those walking and biking, because higher vehicle speeds increase the likelihood of serious or fatal injuries, especially for vulnerable populations like schoolchildren.
2. Parents are supposed to line up on Rutland Avenue in front of the school during pick-ups and drop-offs. However, there is not enough space for the volume of parents to queue, which leads to congestion, double-parking, driving on the opposite lane to pass other drivers, and performing illegal U-turns midblock. This creates an environment where it is extremely difficult to navigate safely by foot or bike to Arlanza Elementary School. Many families opt to drive to school to avoid potential injuries, adding to the congestion. Participants said that part of this congestion is exacerbated by the move to an all-day schedule for kindergarten students instead of the previous half-day schedule.
3. Drivers often fail to make a complete stop at stop signs, leading to near misses and crashes with pedestrians. Both of the school crossing guards shared that they have been hit by drivers who failed to stop at the Rutland Avenue/Philbin Avenue intersection.
4. Many parents cross mid-block and outside of a legal crosswalk in front of the school to drop off or pick up their children from school. This puts pedestrians at risk of being hit by those driving who are not expecting pedestrians to cross mid-block or outside of painted crosswalks.
5. Paved sidewalks are missing at the south end of Philbin Avenue and west end of Challen Avenue, forcing families to cross the street mid-block or walk in the dirt. Participants shared that these areas get muddy during the rainy season which means that there are dozens of families and students walking in the middle of the street during inclement weather. The unpaved road is also challenging to navigate for parents with strollers and people with limited mobility.



RIGHT: Families walking to and from school at pick up time.



LEFT: Traffic congestion on Rutland Avenue in front of the school.

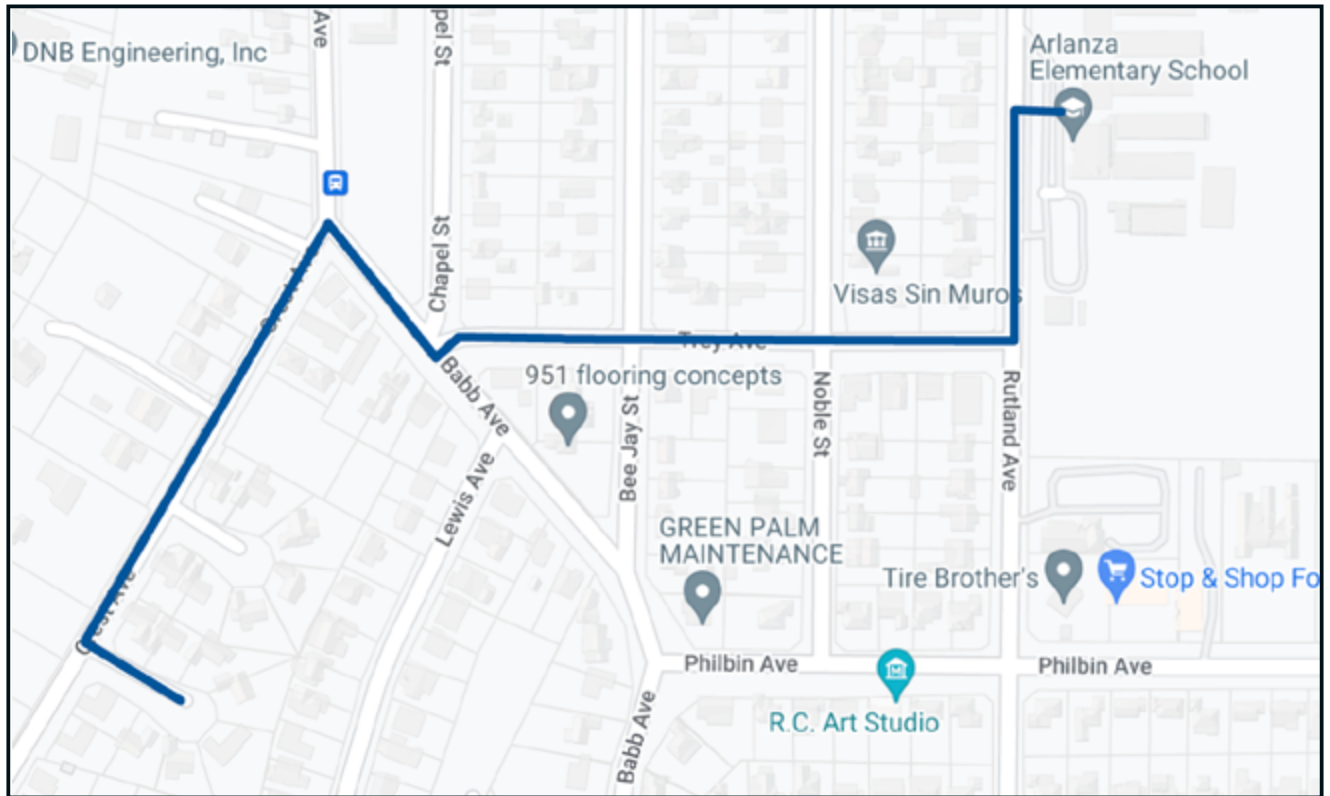


RIGHT: Workshop participants walk on the unpaved sidewalk or in the street along Challen Avenue.

Route 2: Trey Avenue

Focus:

This route focused on Trey Avenue and Crest Avenue, which are minor neighboring streets that families and students take to walk and drive to and from Arlanza Elementary School.



Walking Assessment, Route Two

Strengths:

1. Arlanza Elementary School has a strong culture of walking to and from school because many families live near the school. Parents shared that more students started biking to school because there is an on-campus bike parking lot.
2. Pedestrian-scale lighting has been installed throughout this route. These lights provide great illumination for pedestrians and bicyclists as they travel through the neighborhood during sunset or at night time. The grass in the furnishing zone adjacent to the lighting also provides a buffer between pedestrians, on the relatively narrow sidewalk, and the road.



LEFT: Workshop participants stop in front of the pedestrian-scale lighting at the Rutland Avenue/Trey Avenue intersection.



ABOVE: Parents wait in front of Arlanza Elementary School for their students to be dismissed.

Concerns:

1. The standard yellow crosswalk markings at the Trey Avenue/Rutland Avenue intersection are faded and difficult for drivers traveling in both directions on Rutland Avenue to see. Drivers often fail to stop at the intersection and give the right of way to pedestrians, causing many near misses at this pivotal intersection near the school.
2. There is a lack of shade trees along this route, making it very uncomfortable to walk and bike in the neighborhood during the summer months. Climate is often a deterrent for families to walk and bike to school.
3. There are dozens of dogs in this neighborhood that bark loudly as people walk or bike by. Several times during the walking and biking assessment, participants had to cross the street to avoid barking dogs. Participants shared that they are often scared of the dogs getting loose and that they are a deterrent to walking and biking.
4. The sidewalk network in this neighborhood is incomplete. There is an unpaved dirt shoulder along Babb Avenue, north of Trey Avenue, and on both sides of Crest Avenue, west of the Crest Avenue/Babb Avenue intersection. These areas get muddy during the rainy season, forcing pedestrians into the narrow street with cars. This leads to the risk of near misses as pedestrians and drivers share a single lane of roadway, and drivers seem to speed through these small streets.
5. Drivers do “donuts” at the Trey Avenue/Babb Avenue intersection because of how wide the intersection is. Participants shared that they are often woken up by the noise and that they fear for their safety when drivers do “donuts” in the daytime.

RIGHT: Faded crosswalk markings make it difficult for drivers to see the upcoming intersection.



LEFT: Workshop participants walk in the street along Crest Avenue because of the lack of a sidewalk.



RIGHT: The dirt shoulder along Babb Avenue forces people using assisted mobility devices or parents with strollers onto the street.



LEFT: Workshop participants stop to discuss at a shaded corner of the Trey Avenue/Babb Avenue intersection.

Recommendations

The recommendations in this report are based on observed pedestrian and bicycle safety concerns, Safe System strategies, and workshop participants' priorities. The suggested timelines and resources needed for implementation are estimated based on general pedestrian and bicycle safety best practices and may need to be further tailored by the community.

Workshop participants were assigned into two groups to identify infrastructure projects and community programs to create a safer environment for those walking and biking. Participants offered the following recommendations for their community and were able to start the planning process for a select few.

Community Recommendations

Participants offered the following programmatic and infrastructure recommendations to create a safer environment for walking and biking. General priorities included:

- **Addressing Speed**

- Reduce the school zone speed limit around Arlanza Elementary School and other local schools.
- Lower speed limits neighborhood-wide to prioritize the safety of those walking and biking.
- Install school zone signage between 500-1000 feet of the school perimeter in all directions to encourage drivers to slow down while driving through the school zone.
- Address driver speeds through posted speed limit signs, painting the center line along more narrow streets, installing speed radar trailers at key intersections, and sponsoring a community education campaign to bring awareness to the dangers of speeding.

- **Addressing Congestion**

- Explore use of the empty lot at the corner of Rutland and Cypress Avenues, adjacent to the school, as an alternate location for pick-ups and drop-offs where parents can park and walk their children to campus to mitigate traffic congestion.
- Open a second entrance to campus to help alleviate traffic congestion during pick-up and drop-off.

- **Addressing Pedestrian and Bicyclist Safety**

- Install protected bike lanes on Wells Avenue.
- Install more trees and sidewalks, along with more street cleaning in the neighborhood.
- Fill potholes next to the school and in the surrounding neighborhood.
- Clear sidewalks, especially those obstructed by properties or cars.
- Install pedestrian-scale lighting and speed humps where needed.
- Complete the sidewalk network by paving dirt sidewalks and pushing residential fences to the actual boundary of their property.
- Develop a parent-led safety patrol project, where parent volunteers work with school administration to hold other parents accountable to properly dropping off and picking up their children.
- Conduct placemaking around campus, where the community is actively involved in planning how to activate their public spaces to best fit their needs.

- **Community Accountability**

- Create and foster a culture of community accountability around driving, walking, and biking safely.
- Provide driver education for teenagers and adults, with an emphasis on how to keep vulnerable populations, like children and seniors walking in the neighborhood, safe.
- Create safety messaging around traveling to and from campus through the use of pamphlets, emails, robocalls, and/or posters located near drop-off and pick-up areas.
- Formalize the parent group on campus so that they can grow their base and have a greater impact on student safety and wellness. The parent group can collaborate with the Mas Mujeres Activas en la Salud Promotoras group in the neighborhood.
- Develop Safe Routes to School programming, including bike rodeos and monthly trainings on bike safety for families.
- Educate students on how to safely use helmets and lights when biking to and from school.
- Encourage families and students to bike more through fun community bike rides, and an earn-a-bike program for students.



ABOVE: Workshop participants reimagined the use of the empty lot the school recently acquired.

Arlanza Elementary School Traffic Safety Project

Project Goals:

1. Reduce driver speeds by installing traffic calming infrastructure and lowering speed limits.
2. Create a culture of community accountability where neighbors work together to educate themselves and others about how to safely drive, walk, or bike around the neighborhood.

This project seeks to create a community culture of safe driving and respect for those walking and biking through speed reduction and traffic calming. In doing so, residents aim to decrease the number of crashes related to speeding, risky driver behaviors, and failure to yield the right-of-way to pedestrians and bicyclists.

Encompassing a half-mile radius from Arlanza Elementary School, the following groups can be engaged: Arlanza Elementary School administration, parents, and students, the City of Riverside, and the larger Arlanza Elementary School neighborhood.

Portions of the project, like paint and posts, can be installed at the beginning of the 2023-2024 school year. Longer term infrastructure projects may take two-plus years to complete.

Action Steps:

1. City planners work with school administration to apply for funding to install speed feedback signs at key intersections where speeding is an issue.
2. City planners research a potential temporary speed hump program, where the City can install speed humps around the neighborhood for a designated amount of time, rotating the location as needed.
3. School administration, parent volunteers, and neighbors research potential opportunities to build traffic safety advocates who can champion safety projects at City Hall.

Resources:

[SCAG Kit of Parts](#), [Quick-Build Guide](#), [Safe Systems Strategies for Bicyclists and Pedestrians Toolkit](#)

Safe System Strategies:

Curb Extension (Bulbout), Daylighting, Designated Safe Routes, High-Visibility Road Markings and Signage, Hybrid Beacon (HAWK), Neighborhood Speed Awareness Program, Quick-Build Project, Raised Crosswalk, Reduced Speed Limit Zone, Speed Hump, Temporary Demonstration Project

Arlanza Elementary School Safety Messaging Campaign Project

Project Goals:

1. Develop a safety messaging campaign aimed at the Arlanza Elementary School neighborhood.
2. Provide opportunities for schoolchildren to take part in the project, potentially including designing safety messaging and potential artistic crosswalks or street murals.

This project seeks to create a community culture of safe driving and respect for those walking and biking through safety messaging and placemaking. In doing so, residents can decrease the number of crashes related to speeding, dangerous driver behaviors, and failure to yield the right-of-way to pedestrians and bicyclists.

Encompassing a half-mile radius from Arlanza Elementary School, the following groups can be engaged: Arlanza Elementary School administration, parents, and students, the City of Riverside, and the larger Arlanza Elementary School neighborhood.

Portions of the project, like education materials, can be dispersed at the beginning of the 2023-2024 school year. Longer term infrastructure projects may take two-plus years to complete. school year. Longer term infrastructure projects may take two-plus years to complete.

Resources:

[Pop-up Placemaking ToolKit](#),
[Heads Up Safety Campaign](#),
[Safety Tips for Pedestrians](#),
[OTS Go Safely CA](#)

Safe System Strategies:

Bike Rodeo, Bike Train, Community Liaison/ Promotores Campaign, Designated Safe Routes, Helmet/Light Distribution, Participatory Campaign, Placemaking, Safe Passages Program, Safety Messaging Campaign, Safe Routes to School (SRTS) Community Program, Walking School Bus

Action Steps are on the next page

Arlanza Elementary School Safety Messaging Campaign Project, continued

Action Steps:

1. School administration, with support from City planners, create a mass email highlighting the importance of traffic safety to send to all parents at Arlanza Elementary School and other nearby elementary, middle, and high schools before the first day of school.
2. School administration and City planners work with parent volunteers to create an educational program on how parents can safely drive to and from school, how to safely pick up and drop off their children, and how to prioritize vulnerable populations like children and seniors walking around the neighborhood.
3. Create a Safety Messaging Campaign to create an awareness around traffic safety.
 - a) School administration works with Arlanza Elementary School to create an art contest where children help design the safety messaging campaign elements, including the message and the artwork.
 - b) School administration and parent volunteers print lawn signs with safety message and offer signs to neighbors to post in their front yard.
 - c) School administration and parent volunteers print safety messaging posters and attach to the school's fencing.
4. School administration, parent volunteers, and neighbors research potential opportunities for the installation of artistic crosswalks and/or street murals at and near campus to bring awareness to pedestrian infrastructure and create placemaking opportunities.

Arlanza Elementary School Safe Routes to School (SRTS) Action and Safety Plan Project

Project Goals:

1. Create a safe, comfortable environment for schoolchildren and their families to walk and bike to and from school.
2. Provide opportunities for parents to get involved in creating a safer school environment.
3. Develop parent champions for traffic safety at and near campus.
4. Provide opportunities for the school community to advocate for and champion infrastructure and programmatic changes at and around campus.

The City of Riverside and the Arlanza Elementary School community will develop a SRTS Action and Safety Plan to improve walking and biking to and from schools, particularly along streets that are challenging to navigate due to driver speeds, lack of crosswalks, and lack of sidewalks. The plan could include the development of a map of Safe Routes to and from school that inventories crosswalks, sidewalk gaps, bike lanes, and other infrastructure elements that aid in creating the most comfortable route for a parent and their children. The plan can also help identify infrastructure enhancements and programming.

Encompassing a half-mile radius from Arlanza Elementary School, the following groups can be engaged: School administration, the City of Riverside, schoolchildren, parents, neighbors

Portions of the project, like education materials, can be dispersed at the beginning of the 2023-2024 school year. Longer term infrastructure projects may take two-plus years to complete.

Resources:

[How To Create Pop-Up Safe Routes to School Projects, Defining Roles and Partnerships for Safe Routes to School, School Streets Toolkit, Go Safely CA](#)

Action Steps and Safe System Strategies are on the next page

Arlanza Elementary School Safe Routes to School (SRTS) Action and Safety Plan Project, continued

Action Steps:

1. Parents and school administration relaunch SRTS program at Arlanza Elementary School, starting with identifying a SRTS coordinator.
2. Parents and school administration research and create plastic A-frame signs that provide instructions on how to properly pick-up and drop-off students.
 - a) An example of a local school currently implementing this approach is Magnolia Elementary School, who can be a potential resource for how to create the signs.
3. School administration open the second lane of the island located in front of the school, which will create twice the space for drop-offs and pick-ups. School administration will create an educational pamphlet on how to safely navigate across the lane of vehicle travel.
4. Work with the City of Riverside lengthen the loading zone on Rutland Avenue south until the stop sign at the Rutland/Trey Avenues intersection to provide more space for queuing.

Safe System Strategies:

Bike Train, Curb Extension (Bulbout), Daylighting, Designated Safe Routes, High-Visibility Road Markings and Signage, Hybrid Beacon (HAWK), Neighborhood Speed Awareness Program, Quick-Build Project, Raised Crosswalk, Reduced Speed Limit Zone, Safe Passages Program, Safe Routes to School (SRTS) Community Program, Speed Hump, Temporary Demonstration Project, Walking School Bus

Action Steps are continued on the next page

Arlanza Elementary School Safe Routes to School (SRTS) Action and Safety Plan Project, continued

5. School administration, City planners, and parents work with local bicycle advocacy organizations like the [Inland Empire Biking Alliance](#) to plan and hold a traffic safety class, including a bike rodeo with a helmet/light giveaway to educate students and parents on how to drive and bike safely to and from school.
6. Parents and students advocate for and champion key infrastructure changes near campus, including striped bike lanes, high-visibility signs, and crosswalks.

Project Team Recommendations

The Project Team recommends the following for local stakeholder consideration.

Statewide Funding Sources for Pedestrian and Bike Infrastructure Projects

The Project Team recommends the City of Riverside explore funding opportunities to implement pedestrian and bicycle infrastructure and programming recommendations in the Arlanza neighborhood, especially near Arlanza Elementary School. Traffic calming infrastructure like speed humps is an important priority area for funding and would provide the City of Riverdale with support installing and maintaining these safety improvements. Potential funding sources include:

- [Caltrans' Active Transportation Program for infrastructure or non-infrastructure projects](#)
- [The Office of Traffic Safety Grants Program for non-infrastructure projects](#)
- [Safe Streets and Roads for All \(SS4A\) Grant Program for infrastructure and non-infrastructure projects](#)

Funding for Safe Routes to School Coordinator

Safe Routes to School (SRTS) programming is a multi-pronged approach that promotes walking and biking to school through infrastructure improvements, safety education, and incentives to encourage more families and students to walk and bike to school. SRTS programming also improves community safety, increases student physical activity, and helps address issues in pick-up and drop-off zones. The Project Team recommends Arlanza Elementary School explore partnering with Riverside County Department of Health, Riverside University Health System, Southern California Association of Governments (SCAG), the City of Riverside, and/or Alvord Unified School District to apply for funding for a full-time SRTS Coordinator. Having a dedicated staff member responsible for creating programs and organizing parents to advocate for change will be crucial to maintaining community momentum built during Arlanza's CPBST planning and workshop. The following resources can be referenced for additional information about SRTS programming:

- [Safe Routes to School Guide](#)
- [Starting and Running a Safe Routes to School Program, Safe Routes Partnership](#)
- [Safe Routes National Center for Safe Routes to School](#)

Quick-Build Program

The Project Team recommends that City Planners work to create quick-build project programs in Riverside, especially in the Arlanza neighborhood. Because safety improvements are needed in the short term, a quick-build program brings low-cost and effective safety improvements to the community. City Planners may also use these projects to try new infrastructure or project-specific elements planned for long-term projects. For Arlanza Elementary School, a quick-build program may include infrastructure elements, such as bulbouts to shorten crossing distances, mid-block and/or raised crosswalks, and speed humps or tables to reduce vehicle speeds near campus.

In the past three years, quick-builds have gained popularity and adoption by transit agencies across California because they are a swift and cost-effective way to improve the safety of those walking and biking in communities. The California Bicycle Coalition, alongside Alta Planning, published the [Quick-Build Guide](#) as a resource for communities looking to implement quick-build projects. As more resources become available, the Association of Bay Area Governments adds more resources to the [Quick-Build Resource Library](#). Potential funding sources may include [Caltrans' Active Transportation Program](#), [PeopleForBikes Community Grant Program](#), [AARP Community Challenge](#), and the [SCAG Kit of Parts](#).

Restructure Drop-off and Pick-up Zone

The Project Team recommends Arlanza Elementary School partner with the City of Riverside Traffic Engineering Department to develop a new pick-up and drop-off zone at the school that takes advantage of the empty field on the south side of the school and the empty parking lot at the north side of the school. The school has space to create a plan that serves all road users without needing to find funding for or install new infrastructure.

Continued on the next page

The Traffic Engineering Department can create a few mock up plans of the new pick-up and drop-off zones and the school can host a series of focus groups or a parent survey to decide which model would be most effective. Parent input in the planning process builds investment in the new design and helps ensure that the new plans are appropriate for the school community, thus having the intended impact. After plans are selected, the school should send newsletters home, schedule robocalls to parents, and/or host assemblies to teach parents how to use the new zones properly. The parent group at the school can also volunteer to monitor pick-up and drop-off so that they can talk to parents, answer any questions they may have, and maintain the integrity of the new zones.

Appendix

- [CPBST Site Visit Data Presentation](#)
- [Esri Community Demographics](#)

CPBST Site Visit

Visita al sitio del programa CPBST

April 19, 2023

Berkeley SafeTREC
SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER



1



Agenda

Introduction
Site Visit Objectives
Crash Data Presentation
Workshop Logistics
Walking and Biking Assessment



Evaluación de la Seguridad Peatonal y Ciclista

Agenda

Introducción
Objetivos de la Visita al Sitio
Presentación de Datos de Choques
Logística del Taller
Evaluación de la Seguridad Peatonal y Ciclista

2

Site Visit Objectives **Objetivos de la visita al sitio**

- Review and discuss walking and biking crash data
 - Discuss workshop logistics and our outreach plan
 - Assess and take photos of the route/area we will assess at the workshop
 - Identify next steps for the planning process and workshop
-
- Revisar y discutir los datos de choques de peatones y ciclistas.
 - Discutir la logística del taller y nuestro plan de divulgación.
 - Evaluar y tomar fotos de la ruta/área que evaluaremos en el taller.
 - Identificar los próximos pasos para el proceso de planificación y el taller.

3

Arlanza Elementary School, Riverside **Pedestrian and Bicycle Crash History**

**El Historial de Choques que Involucraron a Peatones y
Ciclistas en la vecindad de Escuela Primaria Arlanza**

4

What is a pedestrian crash? ¿Qué es un choque de peatones?



Pedestrian-motor vehicle crash

- Includes a person afoot, on a skateboard, stroller, wheelchair, electric assistive mobility device

One crash may result in multiple pedestrian victims.

Choque entre un peatón y un vehículo motorizado

- Incluye a una persona a pie, en monopatín, cochecito/carreola, silla de ruedas, dispositivo eléctrico de movilidad asistida

Un choque puede resultar múltiples víctimas entre los peatones.

5

What is a bicycle crash? ¿Qué es un choque de bicicleta?



Bicycle-motor vehicle crash

- Bicycles are considered vehicles and therefore violations committed by a “driver” could have been committed by a motor vehicle driver or bicyclist.

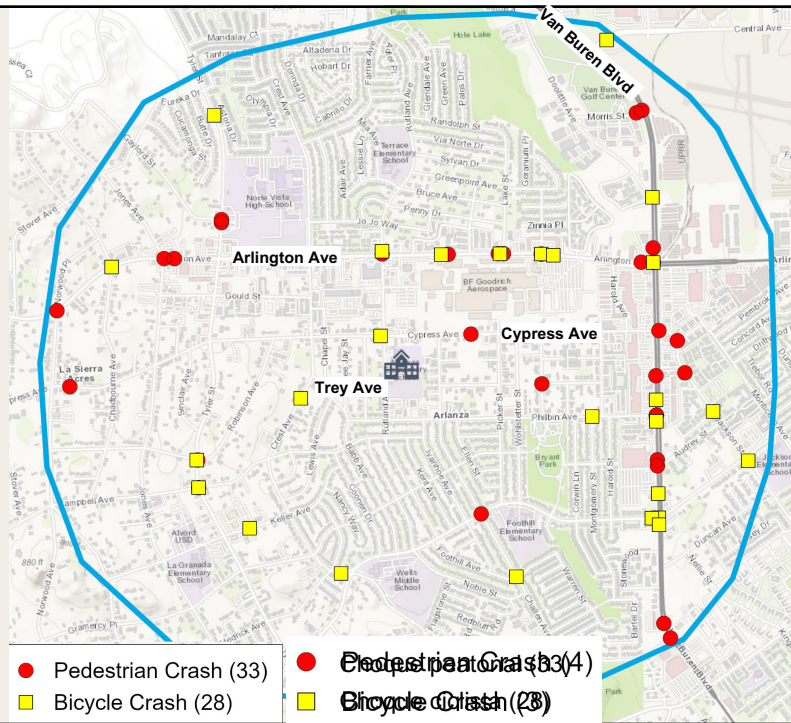
Choque entre una bicicleta y un vehículo de motor

- Las bicicletas se consideran vehículos y, por lo tanto, las infracciones cometidas por un "conductor" podrían haber sido cometidas por un conductor de vehículo de motor o por un ciclista.

6

Overview of crashes within a one-mile radius of Arlanza ES, 2017-2021

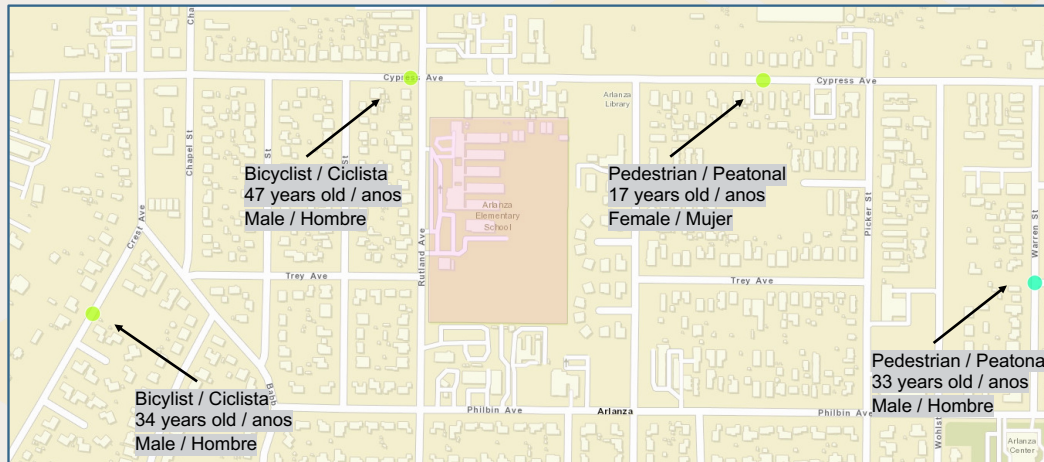
Resumen de choques en Arlanza EP, 2017-2021



Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.



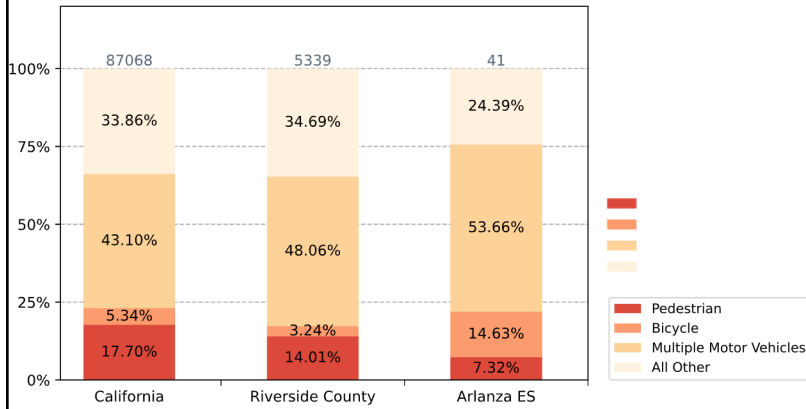
Crashes near Arlanza ES Choques cerca de Arlanza EP



How does Riverside County compare to other areas? ¿Cómo se compara Condado de Riverside con otras áreas?

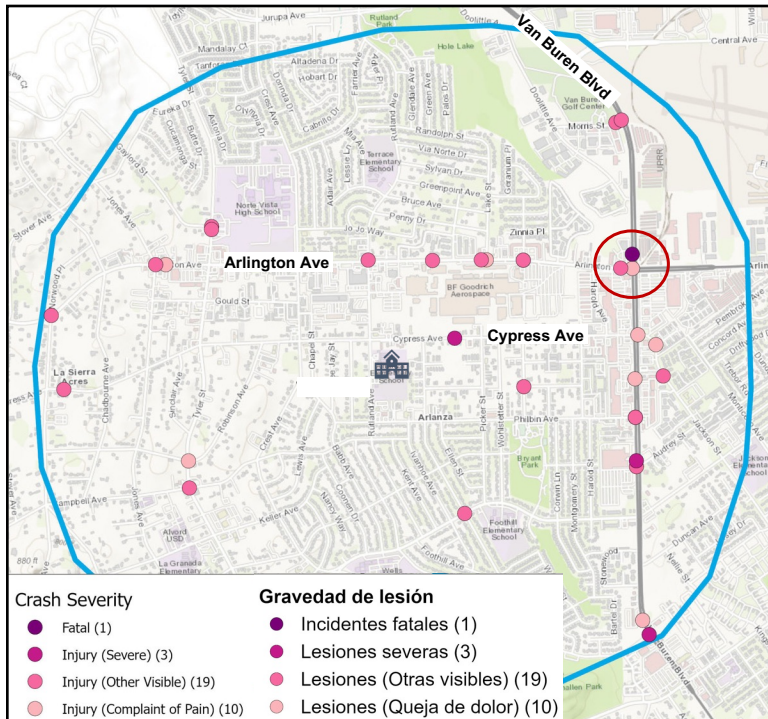
Fatal and Serious Injury Crashes by Involvement 2017-2021 Choques mortales y con lesiones graves por implicación 2017-2021

Fatal and Serious Injury Crashes by Involvements 2017 - 2021



- Within a one-mile radius of Arlanza Elementary School there are over 4.5x the amount of bicycle crashes than Riverside County.
- Dentro de un radio de una milla de la Escuela Primaria Arlanza hay más de 4.5 veces la cantidad de choques de bicicletas que en el condado de Riverside.

Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.



Pedestrian Crashes 2017-2021 Choques de peatones 2017-2021

Most pedestrian crashes were concentrated on Van Buren Boulevard and Arlington Avenue.

There was 1 fatal pedestrian crash at Van Buren Boulevard and Arlington Avenue.

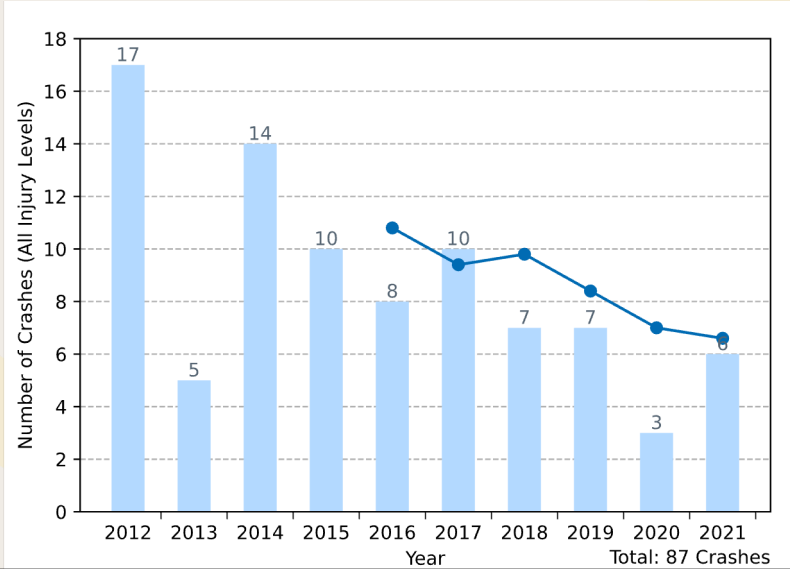
Los choques se concentraron a lo largo de Bulevar de Van Buren y Avenida de Arlington.

Hubo 1 choque fatal de peatones en Bulevar de Van Buren y Avenida de Arlington.

Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.

Pedestrian Crashes 2012-2021

Choques de peatones 2012-2021



Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.

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Pedestrian Crashes 2017-2021

By time of day and week

Choques de peatones 2017-2021

por hora de día y día de semana

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
09:00PM-11:59PM	1	0	0	1	1	1	0	4
06:00PM-08:59PM	0	1	2	0	2	1	2	8
03:00PM-05:59PM	0	0	2	0	1	0	1	4
Noon-02:59PM	1	2	0	0	2	2	0	7
09:00AM-11:59AM	0	0	1	0	1	0	0	2
06:00AM-08:59AM	2	2	0	1	0	0	1	6
03:00AM-05:59AM	0	0	1	1	0	0	0	2
Midnight-02:59AM	0	0	0	0	0	0	0	0
Total	4	5	6	3	7	4	4	33

Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.

12

Pedestrian Crashes By injury severity

Choques de peatones Por gravedad de las lesiones a las víctimas

36 victims were injured in 33 pedestrian crashes.

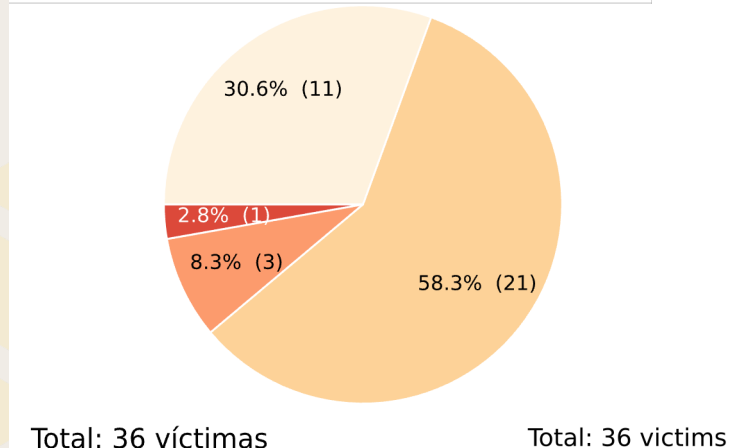
36 víctimas resultaron heridas en 33 choques de peatones.

One of those victims was killed.

Una de esas víctimas sufrió una fatalidad.

Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.

■ infracción cometida por el conductor ■ infracción cometida por el ciclista
■ infracción cometida por el peatón ■ no está claro quién cometió la infracción



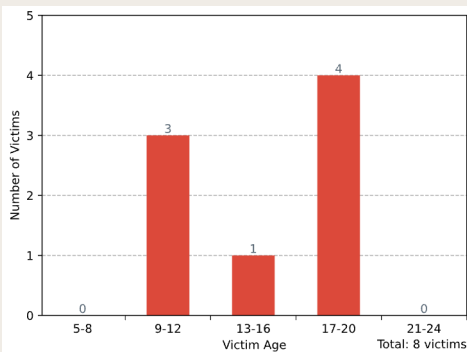
■ Fatal ■ Suspected Minor Injury
■ Suspected Serious Injury ■ Possible Injury

Pedestrian Crashes 2017-2021 By victim age and gender

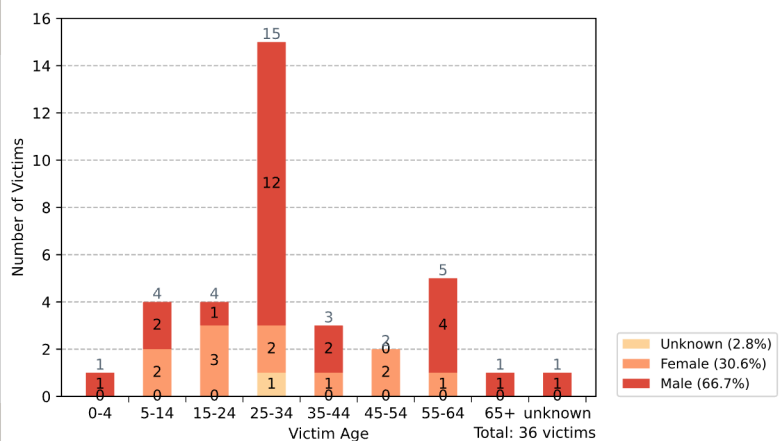
Choques de peatonates Por edad y sexo de la víctima

8 victims were 20 years old or younger.

8 víctimas tenían 20 años o menos.



Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.



Pedestrian Crashes 2017-2021

Most frequently cited violations in injury crashes

Choques de peatones 2017-2021

Las infracciones más citadas en los choques con heridos

9

crashes

21950. Driver failure to yield to pedestrians at a marked or unmarked crosswalk. / *Fracaso por parte del motorista de ceder el paso a los peatones que están en un cruce marcado o no marcado.*

11

crash

21954. Pedestrian failure to yield to vehicles when crossing outside of a marked or unmarked crosswalk. / *Fracaso por parte del peatón de ceder el derecho de paso a los vehículos al cruzar fuera de un cruce marcado o no marcado.*

Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.

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Bicycle Crashes 2017-2021

Choques de ciclistas 2017-2021

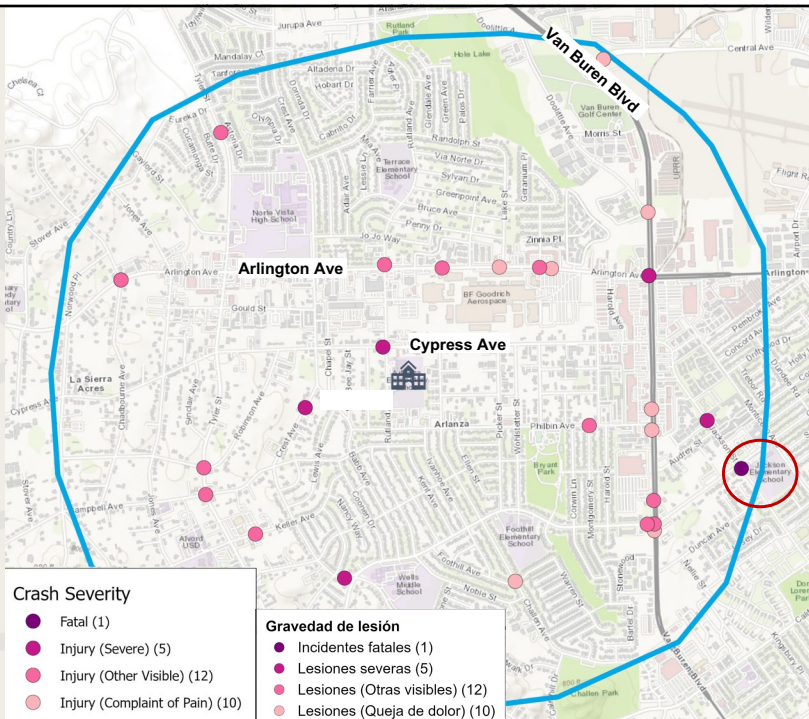
Most bicycle crashes were concentrated on Van Buren Boulevard and Arlington Avenue.

There was 1 fatal bicyclist crash at Colorado Avenue and Jackson Street.

Los choques se concentraron a lo largo de Bulevar de Van Buren y Avenida de Arlington.

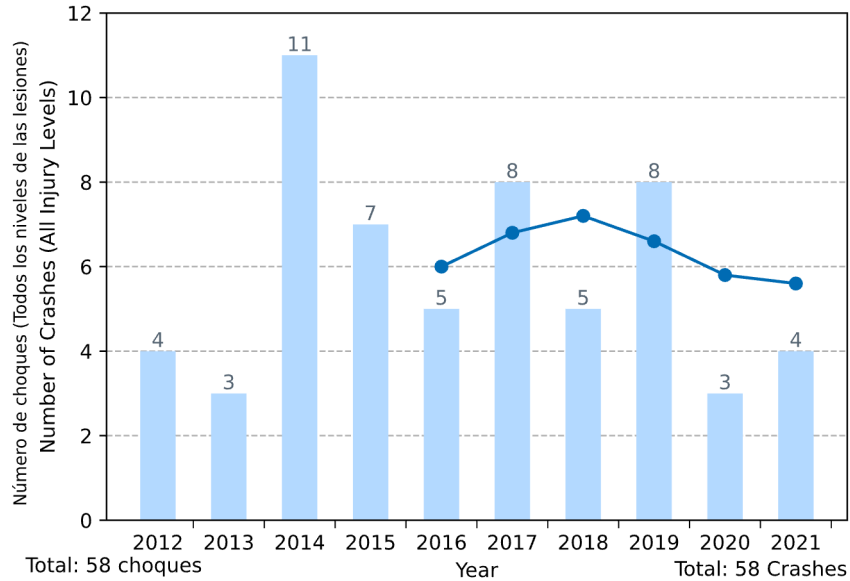
Hubo 1 choque fatal de peatones en Avenida de Colorado y Calle de Jackson.

Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.



16

Bicycle Crashes 2012-2021 Choques de ciclistas 2012-2021



Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.

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Bicycle Crashes 2017-2021 By time of day and week Choques de ciclistas 2017-2021 por hora de día y día de semana

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
09:00PM-11:59PM	0	1	0	0	2	1	1	5
06:00PM-08:59PM	1	2	3	3	2	1	0	12
03:00PM-05:59PM	1	1	0	1	1	0	1	5
Noon-02:59PM	0	0	0	0	0	0	0	0
09:00AM-11:59AM	1	1	0	0	0	0	0	2
06:00AM-08:59AM	0	0	0	1	0	0	2	3
03:00AM-05:59AM	0	0	0	0	0	0	0	0
Midnight-02:59AM	0	0	0	0	1	0	0	1
Total	3	5	3	5	6	2	4	28

Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.

18

Bicycle Crashes 2017-2021 By injury severity

Choques de ciclistas gravedad de las lesiones a las víctimas

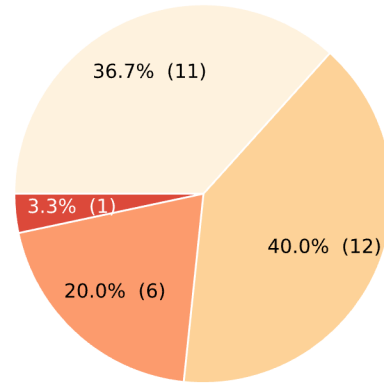
30 victims were injured in 28 bicycle crashes.

30 víctimas resultaron heridas en 28 choques de ciclistas.

One of those victims was killed.

Una de esas víctimas sufrió una fatalidad.

■ infracción cometida por el conductor ■ infracción cometida por el ciclista
■ infracción cometida por el peatón ■ no está claro quién cometió la infracción



Total: 30 víctimas

Total: 30 victims

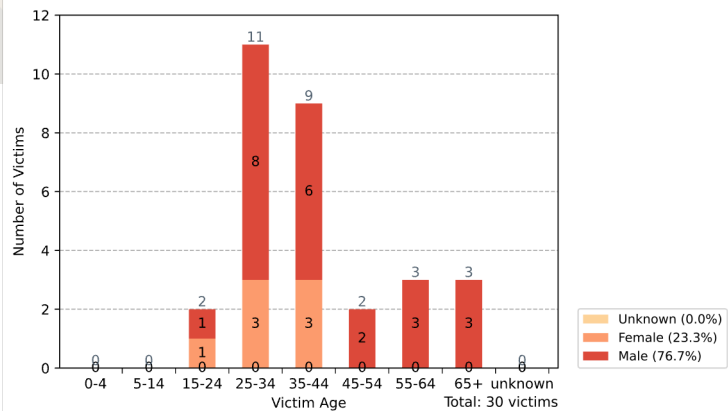
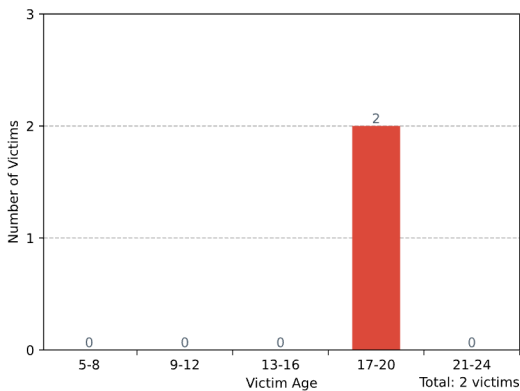
■ Fatal ■ Suspected Minor Injury
■ Suspected Serious Injury ■ Possible Injury

Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.

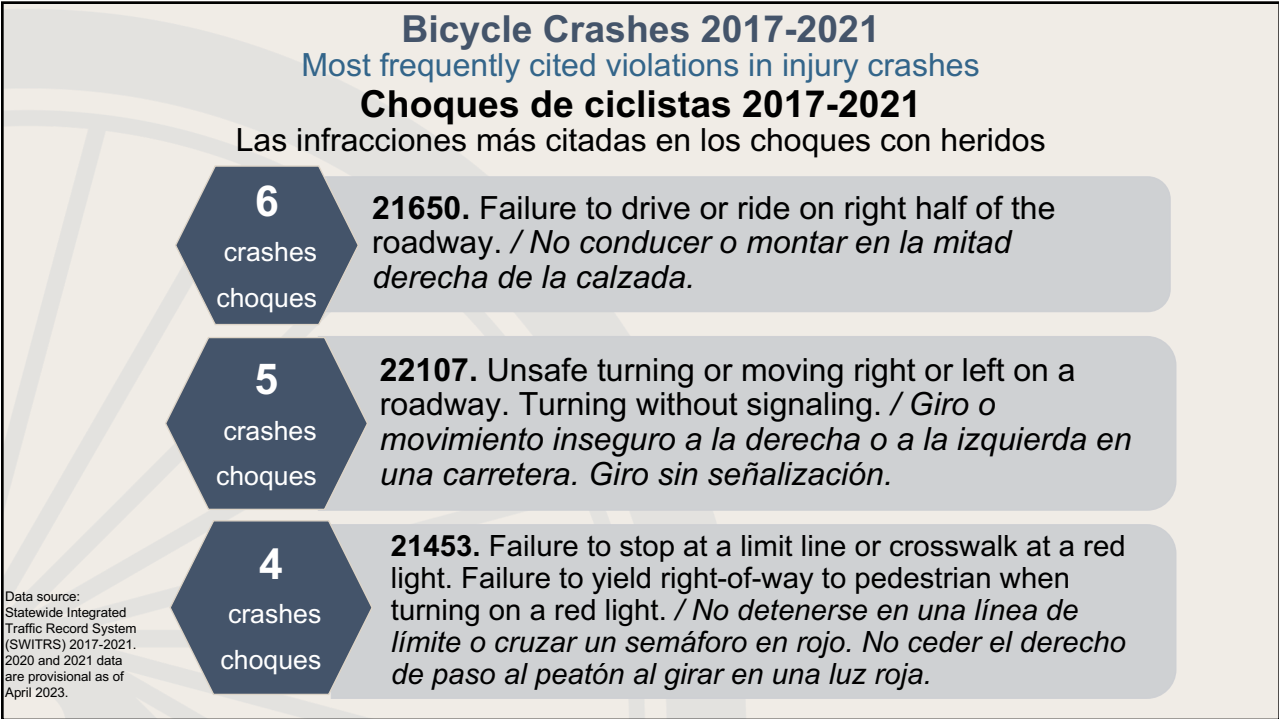
Bicycle Crashes 2017-2021 By victim age and gender

Choques de ciclistas Por edad y sexo de la víctima

Two victims were 20 or younger.
 Dos víctimas tenían 20 años o menos.



Data source: Statewide Integrated Traffic Record System (SWITRS) 2017-2021. 2020 and 2021 data are provisional as of April 2023.



Additional Resources

Recursos Adicionales

Street Story

Street Story is a tool for collecting community feedback on transportation safety issues.

Share stories on Street Story of where you've been in a crash or near miss, or where you feel safe or unsafe traveling.

Historias de la Vía Pública

Street Story es una herramienta para recopilar comentarios de la comunidad sobre cuestiones de seguridad en el transporte.

Comparta en Street Story las historias de los lugares en los que ha sufrido un choque o ha estado a punto de sufrirlo, o los lugares en los que se siente seguro o inseguro al viajar.

streetstory.berkeley.edu





Transportation Injury Mapping System (TIMS)

TIMS is a web-based tool that allows users to analyze and map data from California's Statewide Integrated Traffic Records System (SWITRS).

To further explore collision data, register for a free account to access the tools and resources on TIMS.

TIMS es una herramienta basada en la web que permite a los usuarios analizar y mapear los datos del Sistema Integrado de Registros de Tráfico del Estado de California (SWITRS).

Para seguir explorando los datos de colisiones, regístrese para obtener una cuenta gratuita y acceder a las herramientas y recursos de TIMS.

tims.berkeley.edu

Workshop Logistics

Logística del Taller

Date and Time: Monday, May 8th, 8 am - 11:30 am

Location: Arlanza ES

Outreach Plan

Fecha y hora: Lunes, 8 de mayo, 8 am - 11:30 am

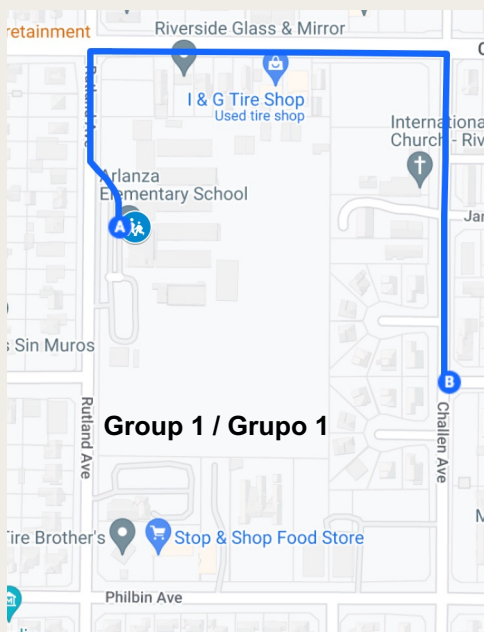
Ubicación: Arlanza EP

Plan de Divulgación

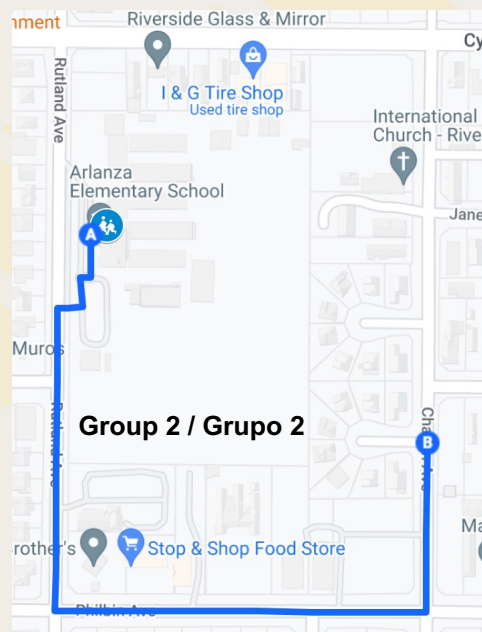
23

Walking and Biking Assessment

Evaluación de la Seguridad Peatonal y Ciclista



Group 1 / Grupo 1

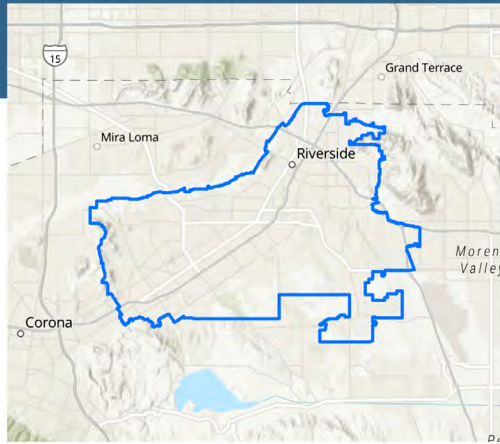


Group 2 / Grupo 2

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Riverside

Community Pedestrian and Bicycle Safety Program



Key Facts



26%

Households with 1+ Persons with a Disability

Vulnerable Population



12%

Population 65+



11%

Households without a vehicle



12%

Households Below the Poverty Level

Commute Profile



2%

Took Public Transportation



11%

Carpooled



3%

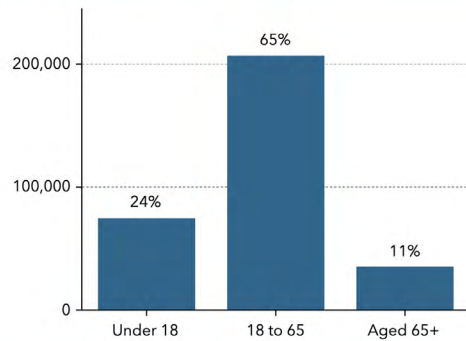
Walked to Work



1%

Bike to Work

Population by Age



Race and Ethnicity

The largest group: Hispanic Origin (Any Race) (55.18)

The smallest group: Pacific Islander Alone (0.36)

Indicator ▲	Value	Diff
White Alone	35.57	-4.71
Black Alone	6.30	-0.16
American Indian/Alaska Native Alone	2.01	+0.16
Asian Alone	7.52	+0.20
Pacific Islander Alone	0.36	+0.02
Other Race	30.80	+4.14
Two or More Races	17.44	+0.35
Hispanic Origin (Any Race)	55.18	+5.22

Bars show deviation from Riverside County

Household Income (2021)

Median Household Income	\$78,731	
Household Income less than \$15,000	7,613	8%
Household Income \$15,000-\$24,999	5,603	6%
Household Income \$25,000-\$34,999	5,742	6%
Household Income \$35,000-\$49,999	9,496	10%
Household Income \$50,000-\$74,999	17,120	18%
Household Income \$75,000-\$99,999	15,558	16%
Household Income \$100,000-\$149,999	19,264	20%
Household Income \$150,000-\$199,999	8,981	9%
Household Income \$200,000 or greater	7,834	8%

Thank you for your interest in the Community Pedestrian and Bicycle Safety Training Program.

For more information, please visit:

<https://safetrec.berkeley.edu/programs/cpbst> or
<https://www.calwalks.org/cpbst>

For questions, please email:

safetrec@berkeley.edu or cpbst@calwalks.org

This report was prepared in cooperation with the California Office of Traffic Safety (OTS). The opinions, findings, and conclusions expressed in this publication are those of the author(s) and not necessarily those of OTS.



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