# Downtown Lancaster Pedestrian & Bicycle Safety Workshop Summary and Recommendations

**Community Pedestrian & Bicycle Safety Training and Action Planning**
Creating Safer Streets for Walking and Biking



California Walks
Stepping Up for Health, Equity, & Sustainability

Berkeley SafeTREC
SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER

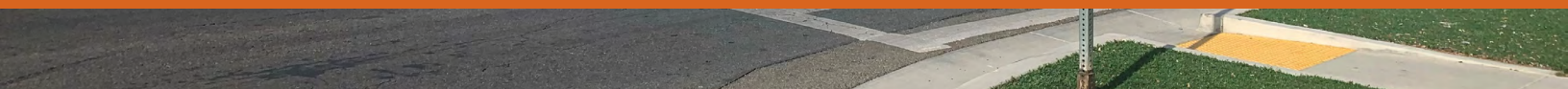
OTS
CALIFORNIA OFFICE OF TRAFFIC SAFETY

**October 2019**

*Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.*




**Downtown Lancaster, California**



# Acknowledgments

We would like to thank the Planning Committee for inviting us into their community to host the Community Pedestrian and Bicycle Safety Training in Lancaster, California.

## Planning Committee

| | |
|---|---|
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*Mural in Downtown Lancaster.*

# Introduction

The City of Lancaster, the Planning Committee, California Walks (Cal Walks), and the University of California at Berkeley's Safe Transportation Research and Education Center (SafeTREC) collaboratively planned and facilitated a Community Pedestrian and Bicycle Safety Training (CPBST) in the Downtown Lancaster community on September 26, 2019 from 4:00 p.m. to 7:00 p.m. at American Heroes Park. The CPBST is a joint project of Cal Walks and SafeTREC (Project Team) that works with local residents and safety advocates to develop a community-driven action plan to improve walking and biking safety in their communities by collaborating with local officials and agency staff.

The Planning Committee identified Downtown Lancaster as the focus for the workshop and had the following workshop goals:

1. Identify and develop pedestrian and bicycle safety priorities and next steps in collaboration with residents, community partners, and agency staff; and
2. Encourage the community to engage in Active Transportation.

The training consisted of:

1. Walking and biking assessments along three key routes;
2. An overview of strategies to improve walking and biking safety using the intersectional 6 E's framework including: Evaluation, Equity & Empowerment, Engineering, Education, Encouragement, and Enforcement; and
3. A small group action-planning session to prioritize and plan for programs, policies, and infrastructure projects.

We would like to acknowledge the 22 participants who attended the workshop including community residents and representatives from the Lancaster School District, Antelope Valley Transit Authority, City of Lancaster, JPW Communications, Lancaster Children's Academic and Recreation Enrichment Success (C.A.R.E.S), Antelope Valley Senior Center, and Lancaster Homeless Impact Commission. Their collective participation meaningfully informed and strengthened the workshop's outcomes.

This report summarizes the workshop proceedings, as well as recommendations for programs, policies, and infrastructure to improve walking and biking safety in Downtown Lancaster.

# The Planning Process

**Step 1: Assemble a Planning Committee** - June 2019

- Enlist key stakeholders to serve as the Planning Committee to define the CPBST workshop goals and refine curriculum to meet the community's needs

**Step 2: Review and Analyze Existing Plans and Data** - June 2019

- Review existing community documents (policies and plans)
- Analyze injury collision data and identify trends

**Step 3: Conduct CPBST Site Visit** June 13, 2019

- Review current pedestrian and bicycle safety data and conditions
- Discuss workshop logisitcs
- Conduct preliminary walk assessments
- Identify instructional activities and goals for the workshop
- Develop outreach and recruitment plan for the workshop

**Step 4: Conduct CPBST Workshop** - September 26, 2019

- Conduct a walking and/or biking assessment
- Participate in workshop instructional activities
- Develop an action plan, including identifying actionable next steps for advancing workshop goals

**Step 5: Implement CPBST Actions** - Ongoing

- Review CPBST report summarizing workshop proceedings and recommendations
- Work with partners to secure resources for programs/projects identified during the CPBST
- Update California Walks and SafeTREC about changes as a result of the CPBST workshop

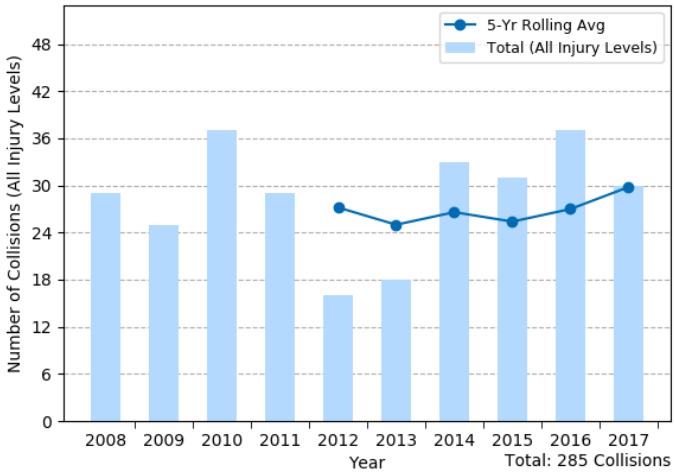
# Pedestrian and Bicycle Collision History

The following data is based on police-reported pedestrian and bicycle collisions resulting in injuries to pedestrians[1] and bicyclists within a two-mile radius of Monte Vista Elementary School in Lancaster, CA. Data reported in this section are from the Statewide Integrated Traffic Records Systems (SWITRS) for the years 2008 to 2017. Collision data for 2016 and 2017 are provisional as of March 2019. A full discussion of the pedestrian and bicycle collision data can be found in Appendix C.

## Pedestrian Collisions

Over the 10-year period from 2008 to 2017, pedestrian collisions stayed relatively stable, except for a dip in 2012 and 2013. In the most recent five years of data available (2013 to 2017), pedestrian collisions were concentrated on main thoroughfares: West Avenue I, Avenue J, Avenue K, and 10th Street West. There were clusters of collisions where 10th Street West intersects Avenue J and West Avenue I. Pedestrian collisions primarily occurred during weekend evenings from 6 p.m. to midnight, as well as during relatively higher traffic volume times on weekdays in the afternoon (3 to 6 p.m.), and evening (6 to 9 p.m.). The top primary collision factors for pedestrian collisions were driver failure to yield the right-of-way to pedestrians at a marked or unmarked crosswalk (34.2%) and pedestrian failure to yield the right-of-way to drivers when crossing outside of a marked or unmarked crosswalk (30.9%).[2] There were 153 pedestrian victims injured, including 13 fatalities and 12 severe injuries. Nearly a third (29.4%) of pedestrian victims were children and youth between the ages of 5 and 24.

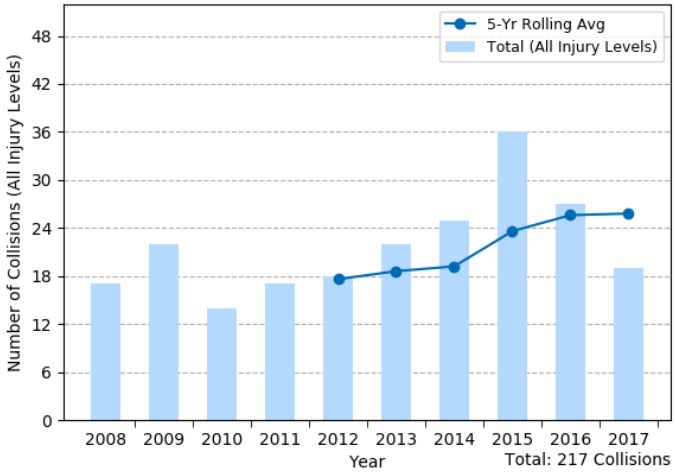
**Downtown Lancaster Pedestrian Injury Collisions (2008 - 2017)**




## Bicycle Collisions

Over the 10-year period from 2008 to 2017, bicycle collisions steadily increased, except for a slight drop in 2017. In the most recent five years of data available (2013 to 2017), bicycle collisions were concentrated on main thoroughfares: Avenue J, Avenue K, 10th Street West, and Sierra Highway. There were clusters of collisions where Avenue J intersects Sierra Highway and where 10th Street West intersects Avenue J and West Avenue I. Bicycle collisions primarily occurred during relatively higher traffic volume times in the early afternoon (12 to 3 p.m.), late afternoon (3 to 6 p.m.), and evening (6 to 9 p.m.). The top primary collision factors for bicycle collisions were failure to drive/ride

**Downtown Lancaster Bicycle Injury Collisions (2008 - 2017)**




*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*

*2 Pedestrians have the right-of-way at marked and unmarked crossings, and drivers are legally required to yield to pedestrians in these instances. However, when pedestrians cross outside of a marked or unmarked crosswalk, pedestrians must yield the right-of-way to drivers. A pedestrian is legally allowed to cross outside of a marked or unmarked crossing between two intersections where one or none of the intersections is signalized but only after the pedestrian yields the right-of-way to oncoming drivers. This is not the same as "jaywalking," which refers to crossing outside of a marked or unmarked crossing between two signalized intersections.*

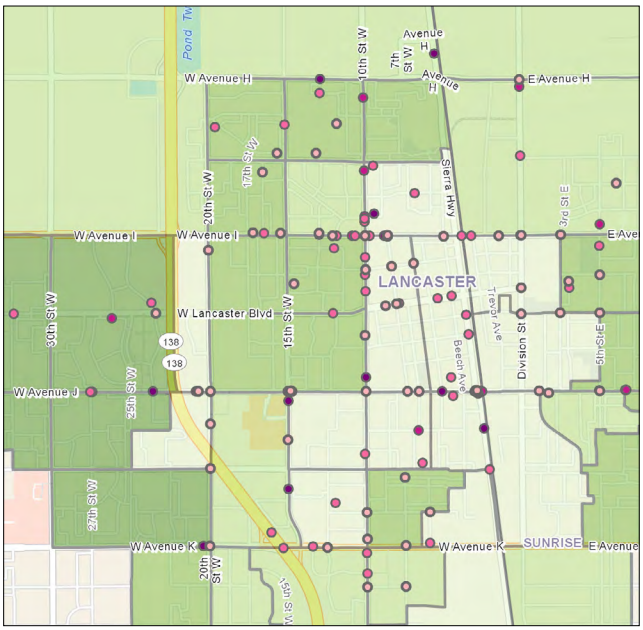
on the right half of the roadway (34.1%).[3] There were 126 bicyclist victims injured, including 10 severe injuries. Over a third (32.6%) of bicyclist victims were children and youth between the ages of 5 and 24.

## Equity Concerns

Equity in this project means working to ensure that all groups of people, regardless of age, race, gender, ability or income, are considered in planning and decision-making processes. For transportation, we aim to address inequities in vulnerable communities, which have disproportionately high levels of injuries. Improving safety requires tackling the complicated interplay between inequities, the walking and biking built environment, and motorist, bicyclist, and pedestrian behaviors.

At the national level, pedestrian fatality rates in lower-income communities are more than twice that of higher income communities.[4] SWITRS, U.S. Census Bureau, and American Community Survey (ACS) data were overlaid with income data to understand how collisions are distributed in this area based on income level. This analysis revealed that a disproportionately high number of collisions occurred in the lower income areas within the two mile radius around Monte Vista Elementary School.

**Downtown Lancaster Pedestrian Collision Map with Income (2008 - 2017)**



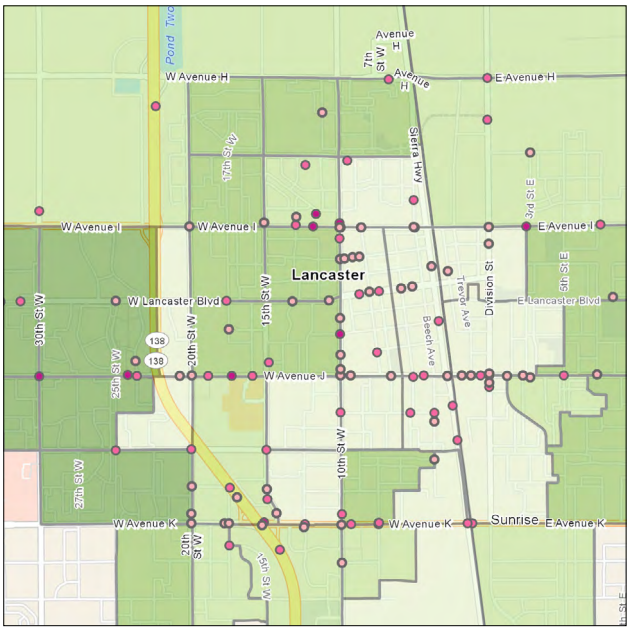

**Collision Severity (2013-2017)**

- Fatal (13)
- Injury (Severe) (12)
- Injury (Other Visible) (57)
- Injury (Complaint of Pain) (67)

**2017 Median Household Income**

- < 35K
- 35K - 50K
- 50K - 75K
- > 75K

**Downtown Lancaster Bicycle Collision Map with Income (2008 - 2017)**




**Collision Severity (2013-2017)**

- Injury (Severe) (10)
- Injury (Other Visible) (56)
- Injury (Complaint of Pain) (63)

**2017 Median Household Income**

- < 35K
- 35K - 50K
- 50K - 75K
- > 75K

*Left: Pedestrian collision map with income. Right: Bicycle collision map with income. Data source: SWITRS 2013-2017. ESRI, US Census Bureau, and ACS.*

*3 These violations could have either been committed by a motor vehicle driver or bicyclist, since bicycles are considered vehicles and therefore must follow all the same rules of the road as vehicles.*

*4 Pedestrian Deaths in Poorer Neighborhoods Report," Governing, August 2014. Available at http://www.governing.com/gov-data/pedestrian-deaths-poor-neighborhoods-report.html*

## Equity Concerns (continued)

Specifically, when comparing pedestrian and bicycle trends near two of Lancaster's public high schools, the national trend is evident. Between 2013 and 2017, there were nearly six times as many collisions within a half-mile of Antelope Valley High School located in an area with a relatively low median household income compared to Lancaster High School located in an area with a higher median household income. It is critical to explore crash risks around any school, particularly those with a demonstrated crash history, as well as pay attention to issues of equity.

# WALKING & BIKING ASSESSMENT

## Routes

Workshop participants conducted walking and biking assessments along three key routes and were asked to:

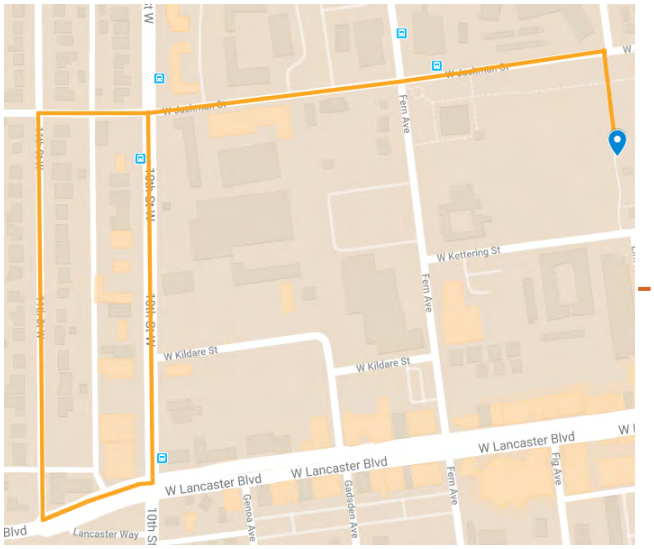
1. Observe infrastructure conditions and the behavior of all road users;
2. Assess the qualitative and emotional experience of walking or biking along the route;
3. Identify positive community assets and strategies which can be built upon; and
4. Consider how the walking and biking experience might feel different for other vulnerable users.

### Route 1 Jackman Street, 10th Street West, and West Avenue I


The first route focused on West Jackman Street, 10th Street West, and West Avenue I, which are common walking and biking routes in the community.

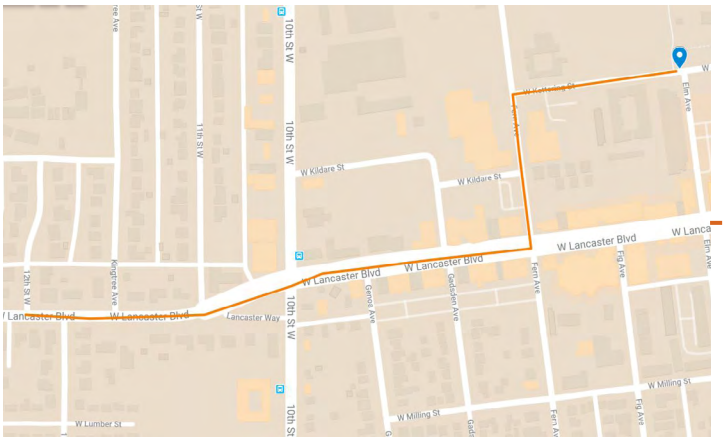
## Routes (continued)

### Route 2 Monte Vista Elementary School




The second route focused on Kingtree Avenue and West Lancaster Boulevard leading to Monte Vista Elementary School.

### Route 3 Downtown Lancaster and the BLVD




The third route focused on Fern Avenue near Lancaster City Hall and West Lancaster Boulevard between 12th Street West and Fern Avenue, which has been redesigned into a walkable business and restaurant district.

## Alternate Activity: Map Assessment

Workshop participants who did not participate in the walking and biking assessments shared their transportation safety experiences walking and biking in Downtown Lancaster as part of an in-class activity. Two residents elected to stay behind during the walking and biking assessment and share their travel experiences using paper maps of the three walking routes. Both residents were affiliated with the Antelope Valley Senior Center and provided feedback on how to better support the needs of older adults and people with disabilities in the Downtown community.

## Reflections

Following the walking and biking assessments and the Map Assessment activity, participants shared the following reflections:

### Poor Pavement Maintenance

- The pavement on 10th Street West is cracked making it difficult for people to walk and those using assistive mobility devices to travel.
- The parking lot pavement and vehicle entrances to businesses on 10th Street West are cracked and slightly elevated making it unsafe for pedestrians and bicyclists who use the driveways as an entryway to the clinic and shops.
- Participants on Route 2 shared that the pavement on West Kettering Street is in need of repair around Monte Vista Elementary School.

*Top: Cracked roadway and lack of sidewalks on 10th Street West, between West Jackman Street and West Lancaster Boulevard. Bottom: Poor pavement condition at the entrance to businesses on 10th Street West.*

## Sidewalks Conditions

- During the in-class Map Assessment, participants reported the unlevel sidewalks at the 10th Street West/West Jackman Street intersection are difficult to navigate for those using wheelchairs.
- Sidewalks along West Jackman Street are narrow and would be difficult for two people using wheelchairs to pass one another or travel side by side. In some areas, the empty landscaping buffer adjacent to the sidewalk is wider than the sidewalk.
- The rock and brick sidewalks on the southwest side of the West Lancaster Boulevard/10th Street West intersection can be uncomfortable and painful to ride on for people using assisted mobility devices and those with back and balance issues.

*Wide landscaping buffer and narrow sidewalk on West Jackman Street.*

- Sidewalks are missing along West Jackman Street from 10th Street West to Kingtree Avenue. Participants shared that several students have been injured walking to school along that stretch of roadway.

*<u>Left:</u> A brick sidewalk on West Lancaster Boulevard leading up to the West Lancaster Boulevard/10th Street intersection. <u>Right:</u> Workshop participants discussing the rock sidewalk at the West Lancaster Boulevard/10th Street West intersection.*

## Crossing Challenges

- Participants shared that the pedestrian signal timing at the West Lancaster Boulevard/10th Street West and the West Jackman Street/10th Street West intersections is too short to comfortably cross. Both intersections are used by young students walking to and from schools, as well as people using assistive mobility devices who access nearby commercial areas.
- Standard marked crosswalks throughout the City of Lancaster–including West Jackman Street and West Lancaster Boulevard–are not visible to either drivers or pedestrians even from a short distance. The faded crosswalk markings are even less visible during the summer months when the sun is bright.

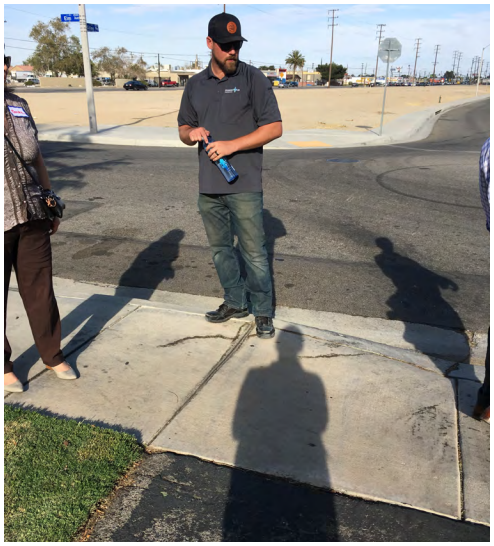

*Faded crosswalk markings on West Jackman Street and 10th Street West.*

- Participants on Route 2 pointed out faded crosswalks along West Kettering Street between 13th Street and Kingtree Avenue. These crosswalks lead directly to Monte Vista Elementary School, and participants requested they be restriped with high-visibility markings.
- The high-visibility crosswalks at Fern Avenue/ West Kettering Street are covered by black soot from the storm drain gutter.

*Faded crosswalk markings on West Jackman Street and Fern Avenue.*

## Accessibility Challenges

- 10th Street West from West Jackman Street to West Lancaster Boulevard lacks sidewalks. A sidewalk exists just north of West Lancaster Boulevard; however, the only access point to the sidewalk is a driveway that has a large lip that is difficult for people using assistive mobility devices to mount.
- Many curb ramps throughout Downtown Lancaster are older apex-style curb ramps. Apex-style curb ramps direct pedestrians diagonally into the intersection rather than perpendicularly to the curb. This requires pedestrians to orient themselves in the direction of travel and can be difficult to navigate for those with vision impairments and those using assistive mobility devices. Current accessibility guidelines recommend two curb ramps at each corner that are perpendicular to the curb. This style of curb ramp runs in the same direction as the pedestrian path of travel and do not require pedestrians to orient themselves when crossing the street.
- The driveway entrance to the Parkwood Apartment Homes on the west side of Elm Avenue near Gilley Way appears to have a cross slope that exceeds the maximum recommended 2%. Large cross slopes are difficult for people using assistive mobility devices to navigate as it they present an increased tipping risk for road users.



*Top Left: A workshop participant in a wheelchair had to continue on the cracked pavement along West Jackman Street despite the presence of a sidewalk due to lack of curb cut. Top Right: Apex-style curb ramps require pedestrians using assistive mobility devices to enter the intersection diagonally and re-orient themselves to the crosswalk. Bottom Left: Driveway along Elm Avenue with large cross slope. Bottom Right: Route 3 participants discuss the driveway's cross slope with City of Lancaster staff.*

## Bike Infrastructure and Bicyclist Behavior

- While bike lanes exist on West Avenue I beginning at 15th Street West, they abruptly end at 10th Street West. The City's Master Plan for Trails and Bikeways proposes remedying this bike lane gap on West Avenue I.
- Participants observed bicyclists riding on the sidewalk facing vehicle traffic on Fern Avenue and West Avenue I.
- Participants expressed discomfort with riding on the street, especially on major streets such as West Avenue I and 10th Street West. Participants shared that they try to ride on smaller side streets to avoid the wide lanes and high speeds of major streets.
- Participants pointed out that the majority of bicyclists in the community are male-identifying and expressed a desire to see more female-identifying riders. They felt that the lack of bike lanes and high motorist speeds deterred female-identifying people from riding.
- One participant commended the City for the steady installment of bike improvements.


*Left: View westbound on West Avenue I bike lane at 10th Street West. Right: Cyclist riding on a bike lane with markings for increased ciclyst visibility.*

## Lighting and Visibility Issues

- West Avenue I has limited street lighting and no pedestrian-scale lighting that leads to community feel unsafe. Participants expressed that it is very dark at night, making it difficult for pedestrians and bicyclists to see and be seen.
- Participants shared that the pedestrian-scale lighting along The BLVD is a significant improvement in the Downtown area and makes it more comfortable and attractive to visit Downtown shops and restaurants.
- Driveways for several businesses along West Jackman Street and 10th Street West are obscured by buildings, which in turn obscure pedestrians walking on the sidewalk from drivers exiting parking lots.
- Participants shared that the sun's glare impacts drivers' view of pedestrians at crosswalks along the BLVD.

*Example of a building obscuring a drivers view of pedestrians walking north towards West Jackman Street.*

## Lack of Shade

- Trees lining the sidewalks adjacent to American Heroes Park provide pedestrians with shade. However, several blocks along West Jackman Street have empty landscaping buffers, which contributes to a hot and uncomfortable environment for people to walk, especially during the summer months.
- Aside from a couple of trees on the southwest corner of Fern Avenue/WestAvenue I, there is limited shade on West Avenue I between 10th Street West and Elm Avenue. Trees are especially needed in the northeast corner of Fern Avenue/WestAvenue I where there is a bus stop.

*Left: Empty landscaping buffer on West Jackman Street. Right: A lack of shade along West Avenue I exposes pedestrians to the hot summer sun.*

## Overgrown Vegetation

- Several untrimmed trees line the sidewalks adjacent to American Heroes Park and impede access and visibility.

*Overgrown and low hanging tree branches force participants to walk around the obstruction.*

## Driver Behavior

- During the walking assessment participants noted that drivers appear to exceed the 40 miles per hour speed limit on 10th Street West.
- There is a lack of speed limit signage on 10th Street West, from West Jackman Street to West Avenue I.


*Photo of the only street sign on the west side of 10th Street West.*

# Recommendations to Improve Walking and Biking Safety in Downtown Lancaster

Participants engaged in small-group action planning discussions to identify community programs and infrastructure projects aimed at increasing the health and safety of the community. Small groups were separated into four thematic areas: encouragement, education, enforcement, and engineering, to brainstorm a list of programs and projects. Each small group then chose one recommendation to prioritize and expand on via preliminary planning, such as Monte Vista Elementary School Walk and Roll to School Day Education Event, Community Biking Day, Bicycle Traffic Ticket DiversionProgram, and Buffered Bike Lanes. The other results of the brainstorm are listed by theme below.

### Education:

- Parent driver education
- Conduct traffic observations at newer traffic safety installations to determine how road users are adjusting to the new infrastructure and determine what educational campaigns are needed to teach the community how to properly use the infrastructure

### Encouragement:

- Install parklets, benches and resting places along unused parking spaces.
- Improve lighting throughout the city.
- Plan bike trains and walking buses on different school campuses
- Plan an event with longer routes that incorporate other modes of transportation such as trains. For example, an outing to Universal City Walk.

### Engineering:

- Widen sidewalks where the landscaping buffer is wider than the sidewalk
- Install pedestrian safety islands on wide streets, near senior and school zones
- Install roundabouts at key locations as a speed calming measure
- Install curb ramps at all intersections throughout the City
- Install rectangular rapid flashing beacons (RRFBs) at key unsignalized intersections, especially near senior zones, school zones, and commercial areas
- Assess and install better lighting fixtures on major streets, such as West Avenue I
- Install improved bus shelters at bus stops with no shading

## Community Recommendations

The following tables summarize the recommendations developed by the community during the workshop.

## Education Project Name: Monte Vista Elementary School Walk and Roll to School Day Education Event

**Project Description:** A walking and biking education event will build off a successful International Walk to School Day event in October 2016 where over 300 Monte Vista students walked and biked to school together. The event will offer parents and students a chance to walk and bike to school and receive walking and biking education.

**Project Goals:**

1. Increase student and parent awareness and practice of safe walking and biking behaviors;
2. Reduce parents' unsafe driving behaviors near the school;
3. Encourage increased and more regular student-parent walking and biking to school;
4. Encourage community to participate in active transportation for health, wellness, recreation, and transportation; and
5. Reduce school-related pedestrian and bicycle collisions and injuries.

| Action Steps | Timeline | Responsible Party | Resources |
|---|---|---|---|
| Develop and implement Monte Vista student safe walking and biking poster contest:<br>● Educate students on safe walking and biking behaviors using existing Safe Routes to School (SRTS) educational materials;<br>● Host a school-wide poster contest for students to design educational safety messages and posters for the Walk to School Day Education event;<br>● Collect designs and award top designs based on contest criteria; and<br>● Scan final designs for large poster and lawn sign printing. | Fall/Winter 2019 | Monte Vista Elementary School staff and students<br><br>Lancaster School District Coordinator of Climate, School Safety & Emergency Management<br><br>Cal Walks | Poster contest rules, materials, criteria |
| Reconvene the Lancaster CPBST Planning Committee with SRTS focus:<br>● Invite partners to a 1-hour preliminary planning meeting to discuss Walk and Roll to School Day event;<br>● Identify a date, time, and location for the meeting and develop meeting agenda; and<br>● Host preliminary meeting and identify potential event dates, times, locations, and activities. Check with Monte Vista Elementary School schedule to avoid conflicts.<br>○ Potential Locations: school, school, district, City Hall, American Heroes Park | Fall/Winter 2019 | Monte Vista Elementary School staff and students<br><br>Lancaster School District Coordinator of Climate, School Safety & Emergency Management<br><br>Cal Walks<br><br>Planning Committee | Meeting Agenda<br><br>CPBST workshop Recommendations Report and Findings<br><br>CPBST Monte Vista Elementary School Collision Data |

## Education Project Name: Monte Vista Elementary School Walk and Roll to School Day Education Event

| Action Steps | Timeline | Responsible Party | Resources |
|---|---|---|---|
| Secure event details:<br>● Confirm event date, time, location with school and partners;<br>● Notify Taco Bell of event and request breakfast burritos for event; and<br>● Identify and invite local organizations and partners to participate in and sponsor the event.<br>○ Bike Shops<br>○ Wellness Centers<br>○ Gyms and Exercise Classes<br>○ City of Lancaster | Fall/Winter 2019 | Monte Vista Elementary School staff and students<br><br>Lancaster School District Coordinator of Climate, School Safety & Emergency Management<br><br>Planning Committee | |
| Develop event promotional and educational materials:<br>● Develop event flyer with day of details and walk and roll routes;<br>● Translate flyer into Spanish;<br>● Develop school announcement schedule using peachjar, robocall, or other prefered method;<br>● Develop educational lawn signs and posters with student safety messages;<br>● Develop short parent education presentation to be presented when students and parents arrive at the school; and<br>● Develop middle school and high school bus rack and bike lock education materials. | Fall/Winter 2019 | Monte Vista Elementary School staff and students<br><br>Lancaster School District Coordinator of Climate, School Safety & Emergency Management<br><br>Planning Committee | |
| Secure incentive prizes:<br>● Secure parent and student incentive prizes and educational materials for the event:<br>○ Reflective items<br>○ Large raffle items<br>○ Donuts and Coffee | Fall/Winter 2019 | Monte Vista Elementary School staff and students<br><br>Lancaster School District Coordinator of Climate, School Safety & Emergency Management<br><br>Planning Committee<br><br>Local businesses | Prizes, materials, and food |

## Education Project Name: Monte Vista Elementary School Walk and Roll to School Day Education Event

| Action Steps | Timeline | Responsible Party | Resources |
|---|---|---|---|
| Secure speed feedback/changeable message sign:<br>● Request changeable message sign from City of Lancaster to be placed along the walking and biking routes to school with walk and roll safety messaging and to alert drivers of their speed. | Fall/Winter 2019 | Monte Vista Elementary School staff and students<br><br>Lancaster School District Coordinator of Climate, School Safety & Emergency Management<br><br>Planning Committee | Speed feedback signage |
| Secure helmets to give away at event:<br>● Request helmets from local health department, SRTS coalitions, bike shops, and businesses; and<br>● Cal Walks to request helmets from Safe Kids Los Angeles. | Fall/Winter 2019 | Lancaster School District Coordinator of Climate, School Safety & Emergency Management<br><br>Cal Walks | Donation Request Letters |
| Host event:<br>● Advertise event to Monte Vista Elementary School community via:<br>○ Flyers;<br>○ Social Media;<br>○ City Website;<br>○ School Peachjar; and<br>● Finalize event details with partners and host event. | April-May 2020 | Monte Vista Elementary School staff and students<br><br>Lancaster School District Coordinator of Climate, School Safety & Emergency Management<br><br>Planning Committee<br><br>City of Lancaster | |

## Encouragement Project Name: Community Biking Day

**Project Description:** A citywide open streets event to encourage community members and residents to ride their bikes and explore the City on bike. Participants are encouraged to bike to work, school, or daily activities and continue biking in the evening to the BLVD Market for a culminating event.

**Project Goals:**

1. Collaborate and strengthen partnerships with all agencies and organizations in Lancaster, including schools, local businesses, and community-based organizations;
2. Encourage student and community physical activity after summer break; and
3. Feature and advertise established community events, such as the BLVD Market farmer's market.

| Action Item | Timeline | Responsible Party | Resources |
|---|---|---|---|
| Convene event planning team<br>● Set up planning meeting time, location, space;<br>● Develop event work plan and timeline;<br>● Assign roles to committee members based on interest and available resources; and<br>● Create a list of potential community partners. | Fall 2019 | Planning Committee | CPBST Planning Committee contact list |
| Meet with Lancaster School District School Board to pitch event idea and garner support<br>● For elementary schools, the event will be framed as a health and healthy lifestyle event, such as Bring Your Bike to School Day; and<br>● Can be in collaboration with the educational event, mentioned above, for Monte Vista Elementary School. | Fall 2019 | Planning team | Candice Vander Hyde, Lancaster Senior Planner to support with logistics |
| Recruit partners to sponsors event needs<br>● Hydration stations along bike routes towards BLVD Market; and<br>● Refreshments and giveaways for families attending closing event at Farmer's Market | Winter 2020 | Planning Team | Candice Vander Hyde, Lancaster Senior Planner<br><br>Sample Sponsorship Letter |

## Encouragement Project Name: Community Biking Day

| Action Item | Timeline | Responsible Party | Resources |
|---|---|---|---|
| Identify, assess, and finalize biking routes:<br>● Meet with parents and school administration from schools to assess the safest routes for bike trains for students | Spring 2020 | School Administration<br><br>Parent Group | Lancaster Event Permit Request<br><br>Safe Routes to School Planning<br><br>Bike Train |
| Meet with City permit office to identify permit needs and secure permit approval for street closures leading up to the BLVD Market | Spring 2020 | | |
| Develop community outreach plan<br>● Develop flyers and social media content;<br>● Create advertisement for City spaces such as parks and recreation venues;<br>● Distribute flyers to schools, businesses, and community organizations; and<br>● Make announcements at participating schools. | Summer 2020 | Participating schools<br><br>Planning Committee<br><br>Participating organizations and businesses<br><br>Volunteers | Sponsor logos<br><br>Flyer and social media templates |
| Finalize event logistics<br>● Set up trainings for community safety monitors to be stationed along evening routes to the BLVD Market;<br>● Go over designated routes to determine hydration stations and public bathroom locations;<br>● Culminating event<br>○ Partner with the BLVD Market organizers<br>○ Keynote speaker who shares the importance of the event | August 2020 | Planning Team | |
| Host Lancaster Bike Day | September 2020 | Planning Team<br><br>Volunteers | Planning Committee can be set up as a collaborative |

## Enforcement Project Name: Bicycle Traffic Ticket Diversion Program

**Project Description:** The Bicycle Traffic Ticket Diversion Program will offer a free Bike Traffic Safety 101 course as an alternative to paying large fines incurred by bicycle traffic violations. Additionally, the course will serve Lancaster residents interested in learning how to safely operate a bicycle, better understand traffic laws, and gain confidence riding a bicycle in an urban environment. The City-sanctioned program will be administered by the Lancaster Sheriff's Station and taught by certified bicycle safety instructors through the City's Parks and Recreation Department.

**Project Goals:**

1. Decrease bicycle traffic violations and collisions;
2. Improve bicycle safety education for bicyclists and drivers;
3. Increase empathy and understanding of the needs of all roadway users;
4. Provide an avenue for low-income residents to reduce or eliminate bike traffic fines; and
5. Encourage families, children, and adults to safely operate a bicycle.

| Action Steps | Timeline | Responsible Party | Resources |
|---|---|---|---|
| Review existing bicycle traffic collision data in the City of Lancaster. Research existing bicycle traffic diversion programs to help determine ticket diversion program requirements.<br><br>UC Berkeley SafeTREC will help gather evidence of bicycle traffic collision history. | September 2019 - December 2019 | Los Angeles County Sheriff's Department<br><br>UC Berkeley SafeTREC | Bike San Gabriel Valley Traffic Diversion Program<br><br>Bike East Bay Bicycle Traffic Safety Program<br><br>The Bike Center<br><br>California Active Transportation Safety Information Pages (CATSIP)<br><br>Assembly Bill, 902: Traffic Diversion Programs<br><br>Statewide Integrated Traffic Records System (SWITRS) Collision Data |
| The City of Lancaster Planning Department will build a partnership with the LA County Sheriff, Lancaster Parks and Recreation Department, and a local NGO, e.g., the Los Angeles Bicycle Coalition, to develop and operate the ticket diversion program. Participation by the police and courts are integral to program success.<br><br>The Program Team will work together to develop short and long-term project goals, define program costs, establish program fee structure, and determine the location, length, and frequency of bicycle traffic classes. | September 2019 - January 2020 | L.A. County Sheriff's Department<br><br>Lancaster Department of Parks and Recreation<br><br>Lancaster Planning Department<br><br>Los Angeles Bicycle Coalition (LABC) | Candice Van Der Hyde, Lancaster Planning Department. |

## Enforcement Project Name: Bicycle Traffic Ticket Diversion Program

| Action Steps | Timeline | Responsible Party | Resources |
|---|---|---|---|
| Develop application for Office of Traffic Safety (OTS) grant program to secure funding to implement the ticket diversion program. | January 2020 | Planning Team | |
| Coordinate with active transportation advocacy groups to hire course instructors and train volunteers or paid staff to teach each bicycle safety course within the Lancaster Department of Parks and Recreation.<br><br>Outreach to local bicycle vendors for bike, helmet, and bicycle light donations.<br><br>Develop class materials and presentations.<br><br>Create communications plan with October 2020 program launch date. | January 2020 - May 2020 | Planning Team<br><br>High Desert Cyclists<br><br>JPW Communications | Los Angeles County Bicycle Coalition (LACBC)<br><br>High Desert Cyclists |
| Kick off pilot traffic ticket diversion program. | October 2020 - December 2020 | Planning Team | |
| Evaluate pilot program:<br>• Use community surveys to collect qualitative data<br>• Use TIMS data to monitor changes in bicycle collisions in the study area over time. | January 2021- February 2022 | Planning Team<br><br>UC Berkeley SafeTREC | Transportation Injury Mapping System (TIMS) |

## Engineering Project Name: Buffered Bike Lanes

**Project Description:** The City of Lancaster will prioritize installing buffered lanes and converting standard bike lanes to buffered bike lanes to increase separation between bicyclists, parked cars, and vehicle traffic.

**Project Goals:**

1. Increase bicyclist protection and safety from parked cars and vehicle traffic;
2. Create a bicycle network that connects people to commercial areas and popular destinations;
3. Encourage more bicyclists to ride in the bike lane versus the sidewalk; and
4. Decrease motorist speeds by decreasing the width of the vehicle lane.

| Action Steps | Timeline | Responsible Party | Resources |
|---|---|---|---|
| City of Lancaster Planning Department to determine if the suggested buffered bike lanes are feasible on the following streets:<br>● Buffered bike lanes in all 4 directions leading up to the Challenger Way/East Avenue K intersection<br>● Sierra Highway | Fall 2019 | City of Lancaster Planning Department | |
| City of Lancaster Planning Department to apply for funding to install prioritized buffered bike lanes | Spring 2020 | City of Lancaster Planning Department | Active Transportation Program (ATP) - Cycle 5<br><br>Sustainable Transportation Planning Grants<br><br>Funding Navigation for California Communities |

## Cal Walks & UC Berkeley SafeTREC Recommendations

### Safe Routes for Older Adults Task Force and Plan

During the workshop, several community residents expressed urgent concern about roadway safety for older adults and people with disabilities traveling in and around Downtown Lancaster. **The Project Team recommends the City of Lancaster partner with the Antelope Valley Senior Center, Antelope Valley Partners for Health, and Antelope Valley Transit Authority to establish a task force to create a Safe Routes for Older Adults Plan.** A Safe Routes for Older Adults task force would begin to address the unique travel and safety needs of Lancaster's aging population and ensure the Downtown area is safe and comfortable for people of all ages and abilities. The Project Team recommends the task force review UC Berkeley SafeTREC's recently published guidebook Safe Routes for Older Adults for reference.

### Review and Adjust Pedestrian Signal Timing

**The Project Team recommends the City of Lancaster review pedestrian signal timing at intersections with heavy pedestrian and bike traffic to determine if travel demand patterns and types of users have changed to adjust the signal timing.** The City of Lancaster has several wide roads where pedestrians must traverse four to five wide vehicle lanes to cross the street, with no pedestrian safety islands for refuge while crossing. Adjusting the pedestrian signal timing at key intersections near schools, senior housing, and commercial areas will ensure that vulnerable community members–like students, older adults, and those using assistive mobility devices–have more time to cross the street.

### Develop a Safe Routes to Parks Plan

**The Project Team recommends the City of Lancaster Planning Department develop a Safe Routes to Parks Plan** to improve walking and biking access and safety to and from City parks. Many families regularly visit American Heroes Park to take part in organized and informal sports and other recreational activities. However, participants shared they normally drive to the park because they feel unsafe walking and biking. Creating a Safe Routes to Parks Plan will allow the City of Lancaster to prioritize street design, signage, wayfinding, bike network connectivity, and improved accessibility on the main roads leading up to City parks.

# Appendix A: Community Plans & Policies Review

Community Plans and Policies Review: Cal Walks conducted a review of current community planning documents to inform the training and prepare to build off existing efforts. The following documents were reviewed prior to the site visit:

Capital Improvement Program (FY 20-23), 2018-2019

Lancaster Master Plan of Complete Streets, 2016

Downtown Immersion Workshop Notes Downtown Walk, 2016

City of Lancaster Americans With Disabilities Act Self-Evaluation and Transition Plan, 2015

Lancaster T.O.D. Zones, 2015

City of Lancaster  Lancaster Safe Routes to School Plan

Proposal to Prepare a Safe Routes to School Master Plan For the City of Lancaster, 2013

City of Lancaster Master Plan for Trails and Bikeways, 2012

City of Lancaster Design Guidelines, 2009

# Appendix B: Resources

Funding Navigation for California Communities

Safe Routes for Older Adults

We Bike NYC: Women and Gender Non-Conforming Led Bike Group

Bus Shelter Guidelines

Safe Routes to Park Action Framework

For a summary of outcomes from past CPBST workshops, please visit:
www.calwalks.org/projects/cpbst and https://safetrec.berkeley.edu/programs/cpbst

# Appendix C: Data Analysis

**Pedestrian and Bicycle Collision Data Analysis**

- Downtown Lancaster CPBST Workshop Data Factsheet
- Downtown Lancaster CPBST Site Visit Data Presentation
- Downtown Lancaster CPBST Site Visit Data Follow-Up

# Downtown Lancaster Pedestrian & Bicycle Data Analyses

## Community Pedestrian and Bicycle Safety Training Workshop (CPBST)

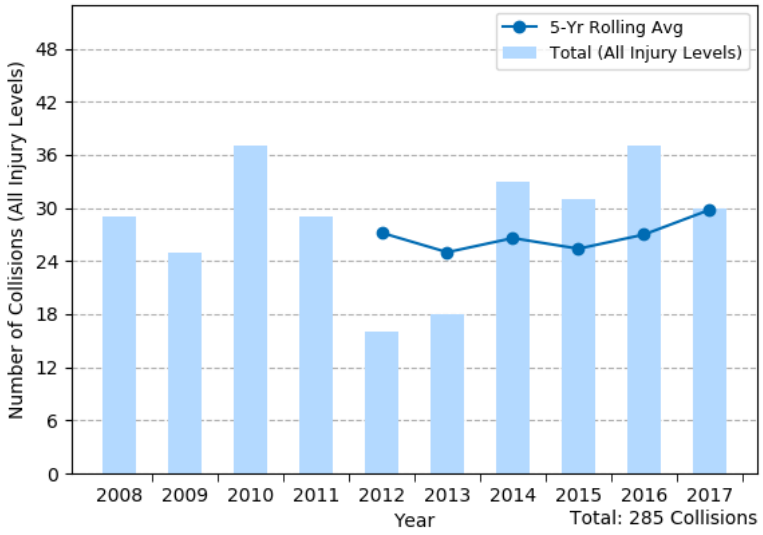
## Lancaster, CA | September 26, 2019

In California, more than one in four people who died in a collision is a pedestrian or bicyclist. There was a 13.9 percent increase in pedestrian deaths from 2015 to 2016 and a 14.0 percent increase in cycling deaths (FARS 2015 and 2016). In this workshop, we provide you with local collision data so that we can identify ways to make walking and biking safer in your community.

The local data seen below reflects collisions within 2-miles of Monte Vista Elementary School in Lancaster per the workshop's planning committee.

## PEDESTRIANS

*How are pedestrian collisions changing over time?*
*What could have caused an increase or decrease in collisions?*



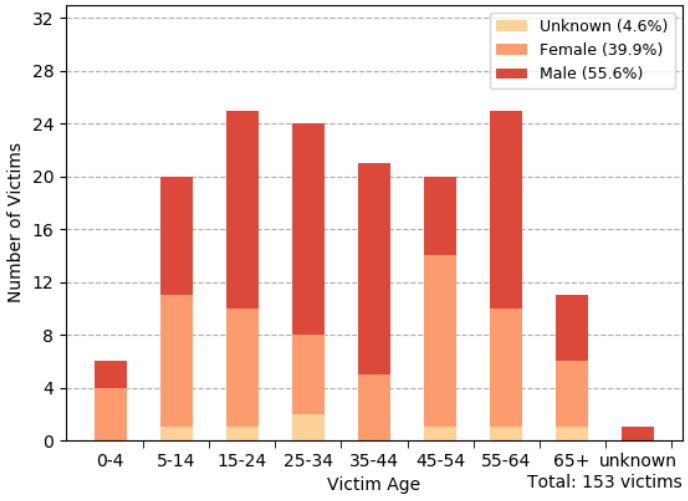

**302** people were killed or injured in **285** pedestrian collisions in the last 10 years (2008-2017)

The number of pedestrian collisions appear to be **increasing** based on the five year rolling average*.

* The five-year rolling average is the average of five consecutive years of data. It provides an overall collision trend over time that accounts for the significant changes in the number of collisions per year.

The following are based on pedestrian collision data for the years 2013-2017:

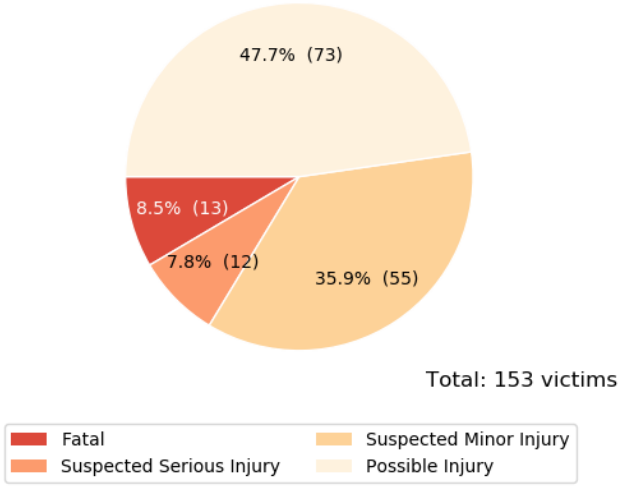
*Who were the victims in these collisions?*




**26.1%** of victims were age 18 or younger

**23.5%** of victims were age 55 or older

*How severe were the victims' injuries?*



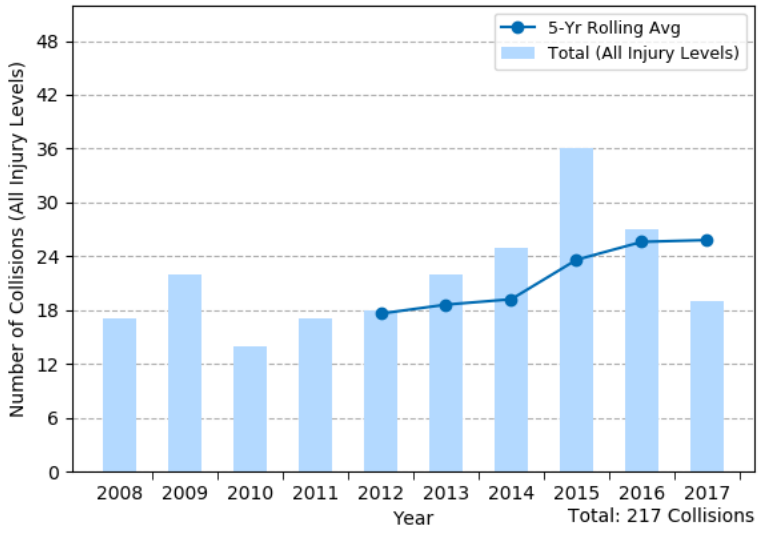

**16.3%** of victims suffered fatal or serious injuries

Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2016 and 2017 are provisional as of March 2019.

*Funding for this program was provided by a grant from the California Office of Traffic Safety through the National Highway Traffic Safety Administration.*

# BICYCLES

*How are bicycle collisions changing over time?*
*What could have caused an increase or decrease in collisions?*



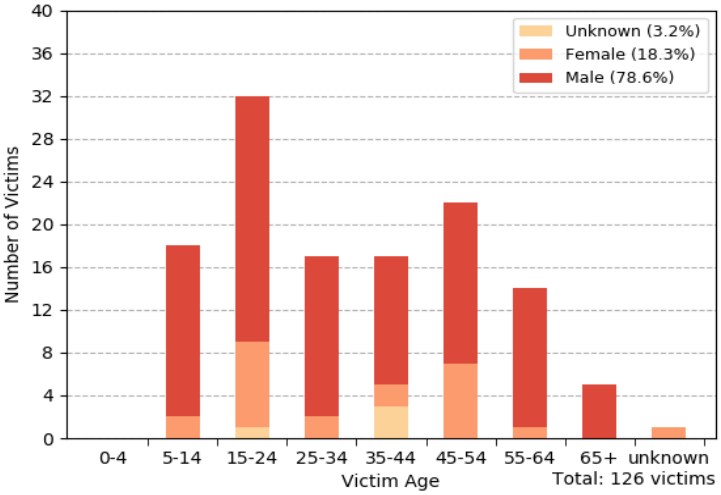

**224** people were killed or injured in **217** bicycle collisions in the last 10 years (2008-2017)

The number of bicycle collisions appear to be **slightly increasing** based on the five year rolling average* despite the decline seen in preliminary 2017 data

* The five-year rolling average is the average of five consecutive years of data. It provides an overall collision trend over time that accounts for the significant changes in the number of collisions per year.

The following are based on bicycle collision data for the years 2013-2017:

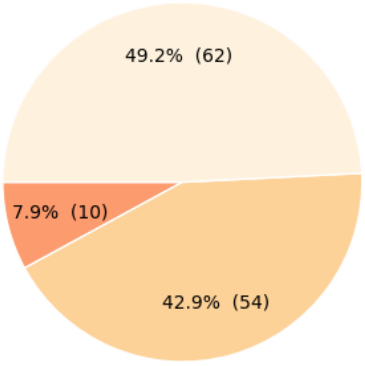
*Who were the victims in these collisions?*

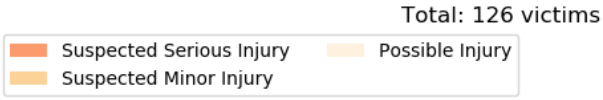



**39.7%** of victims were under age 25

**15.1%** of victims were age 65 or older

*How severe were the victims' injuries?*




**7.9%** of victims suffered serious injuries

- While these numbers do not tell the whole story, do they reflect your experience in your community?
- What kinds of improvement do you think could help make walking and biking safer in your community?
- What other data could help inform decision-making?

To explore collision data in your community, please visit the free tools available through the Transportation Injury Mapping System (tims.berkeley.edu). For additional assistance, please email safetrec@berkeley.edu.

Berkeley SafeTREC
SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER

California Walks

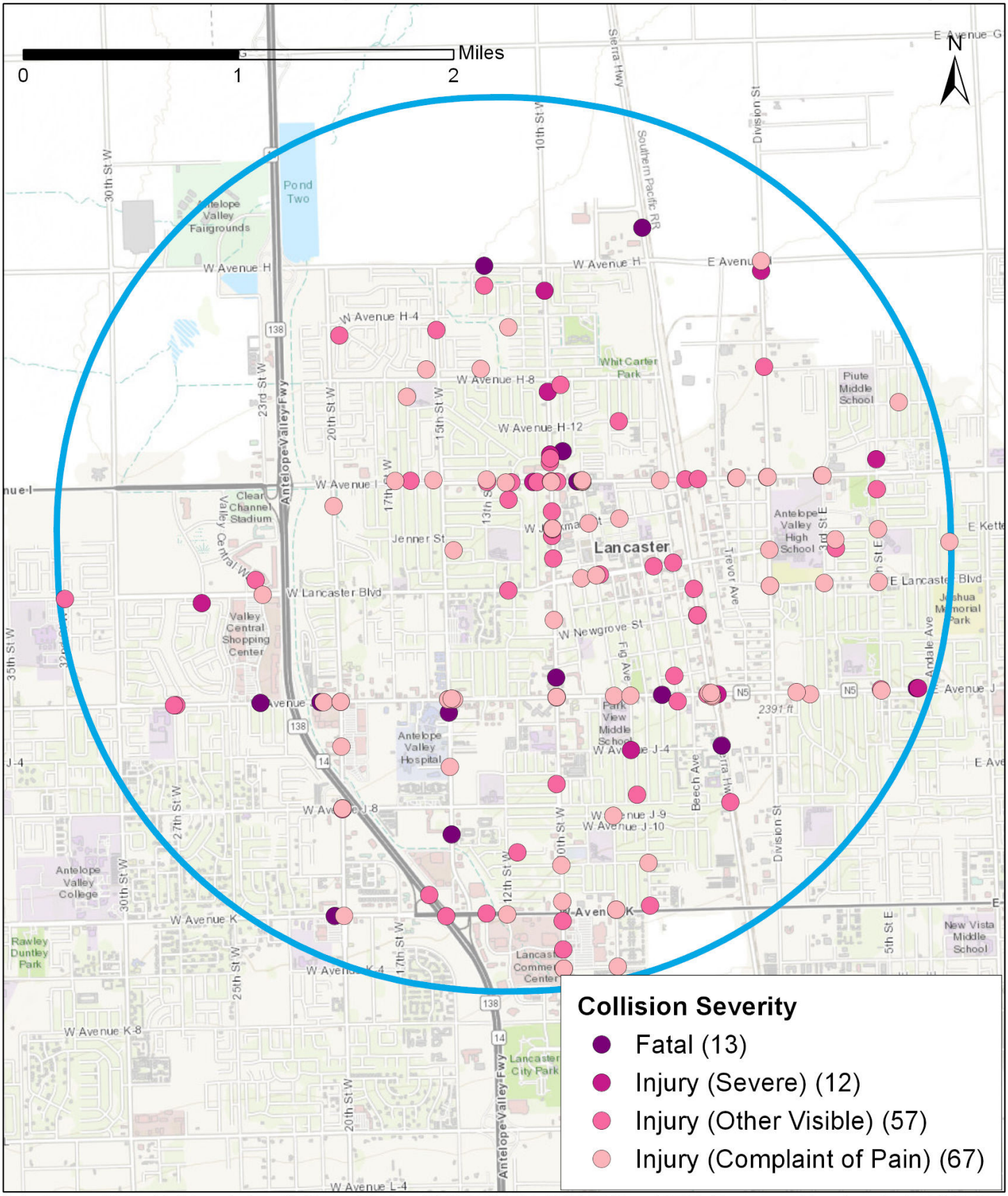
OTS CALIFORNIA OFFICE OF TRAFFIC SAFETY



Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2016 and 2017 are provisional as of March 2019.

*Funding for this program was provided by a grant from the California Office of Traffic Safety through the National Highway Traffic Safety Administration.*

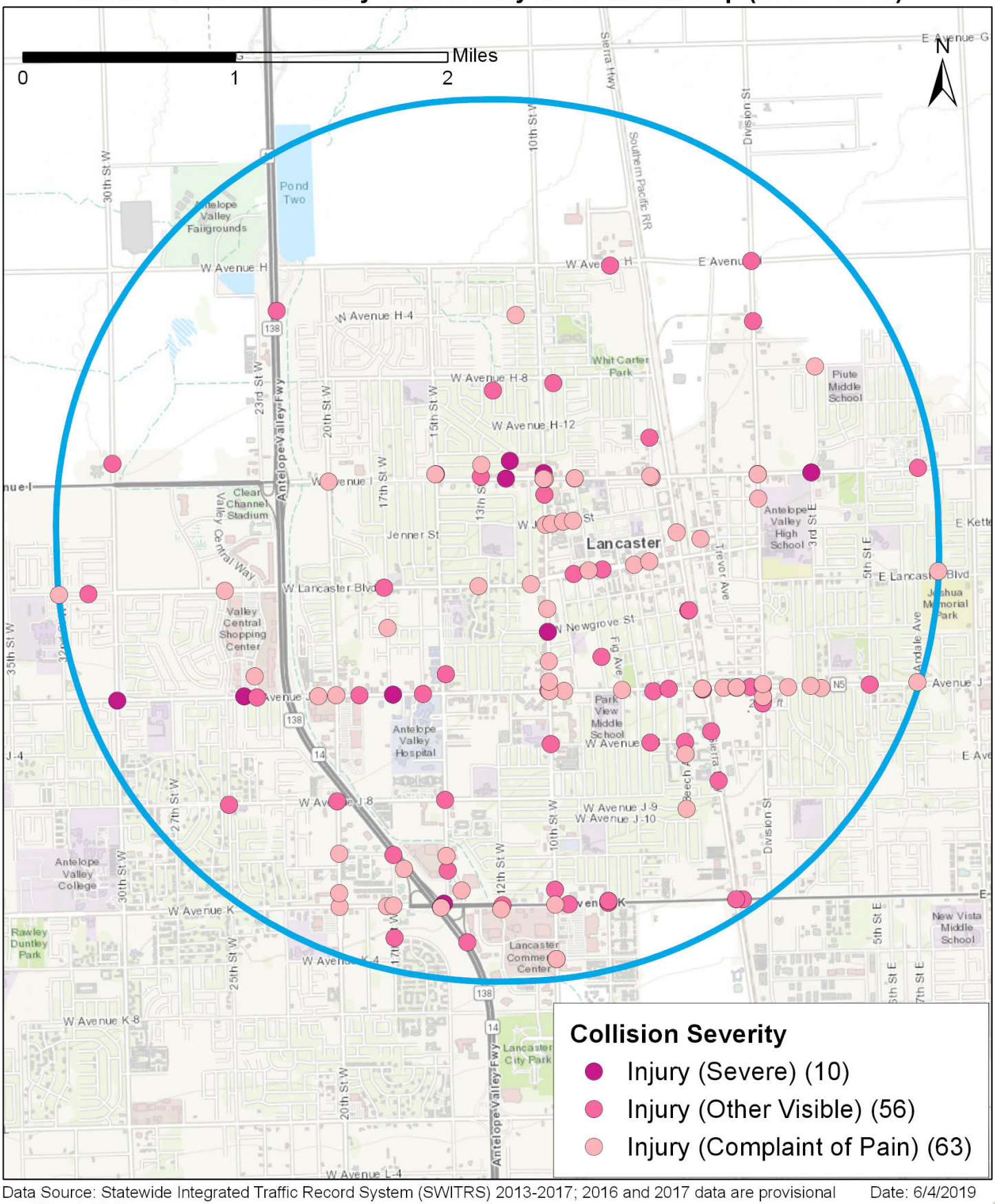
## Monte Vista Elementary School Pedestrian Collision Map (2013 - 2017)




Data Source: Statewide Integrated Traffic Record System (SWITRS) 2013-2017; 2016 and 2017 data are provisional as of March 2019

Date: 6/4/2019

# Monte Vista Elementary School Bicycle Collision Map (2013 - 2017)




Data Source: Statewide Integrated Traffic Record System (SWITRS) 2013-2017; 2016 and 2017 data are provisional as of March 2019

Date: 6/4/2019

# Pedestrian and Bicycle Collision History

## Lancaster, California

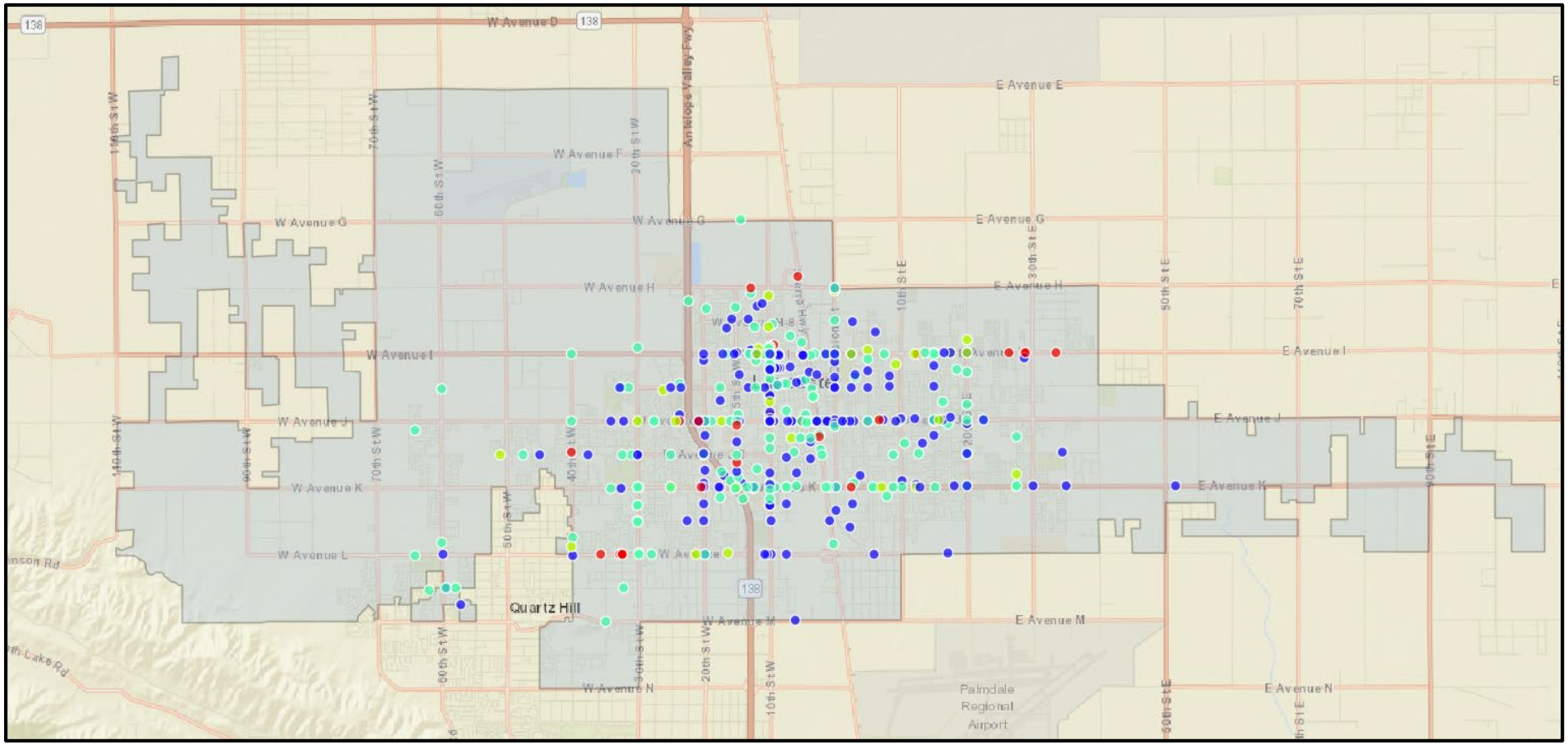
## CPBST Site Visit

Ali von Klan, Program and Policy Analyst
Thursday, June 13, 2019

Berkeley SafeTREC

SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER

# Pedestrian + Bicycle Injury Collisions (2013 – 2017)

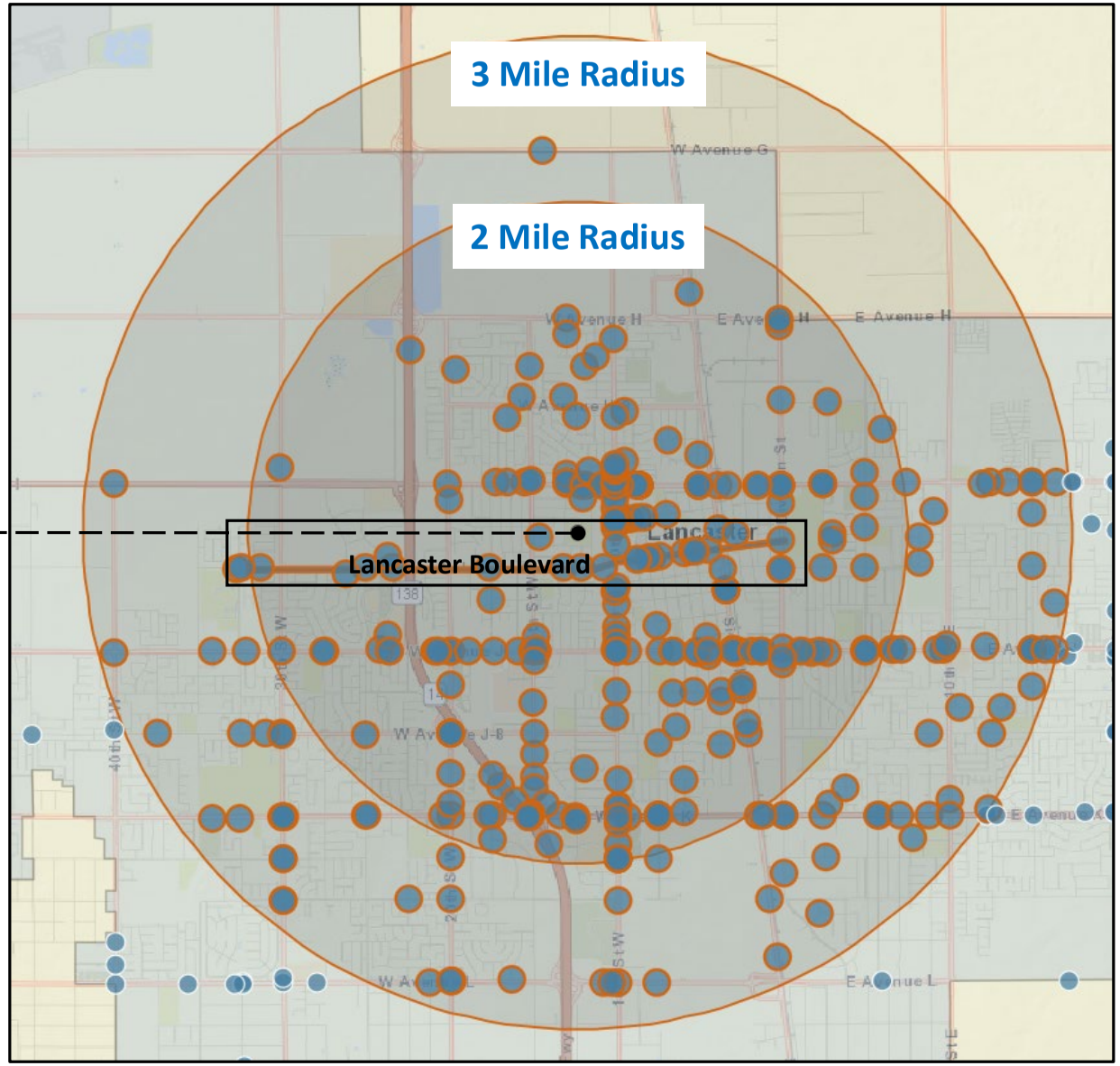



457 Collisions

- Complaints of Pain (188)
- Other Visible Injuries (165)
- Severe Injuries (38)
- Fatalities (24)

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

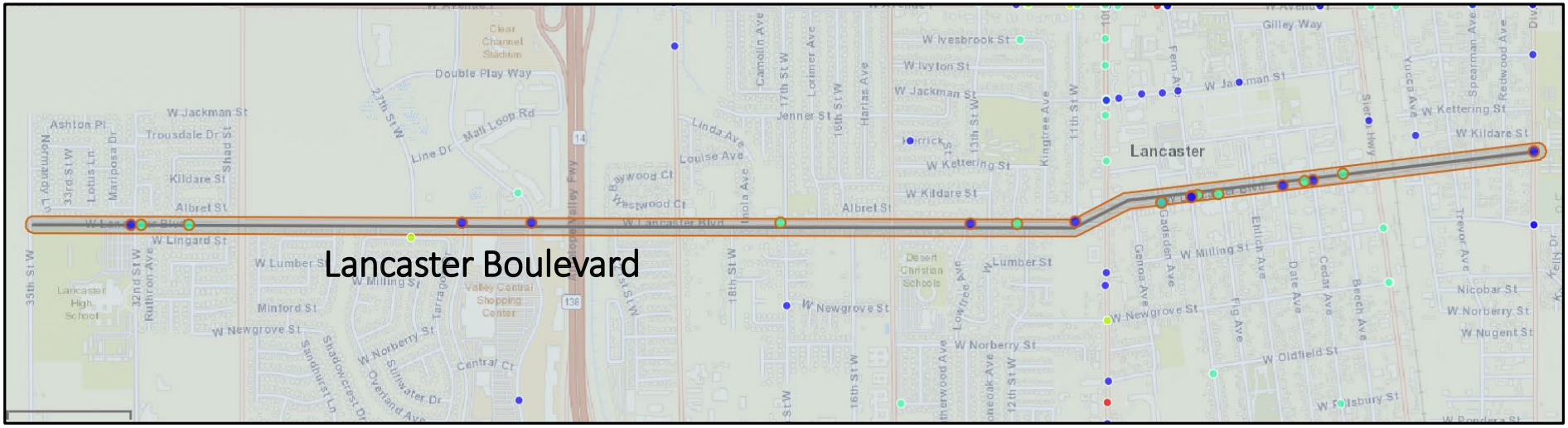
# Pedestrian + Bicycle Injury Collisions (2013 – 2017)




**60%** **of all pedestrian and bicycle injury collisions between 2013 – 2017 occurred within 2 miles of Monte Visa Elementary School.**

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Pedestrian and Bicycle Injury Collisions (2013 – 2017)




20 Collisions

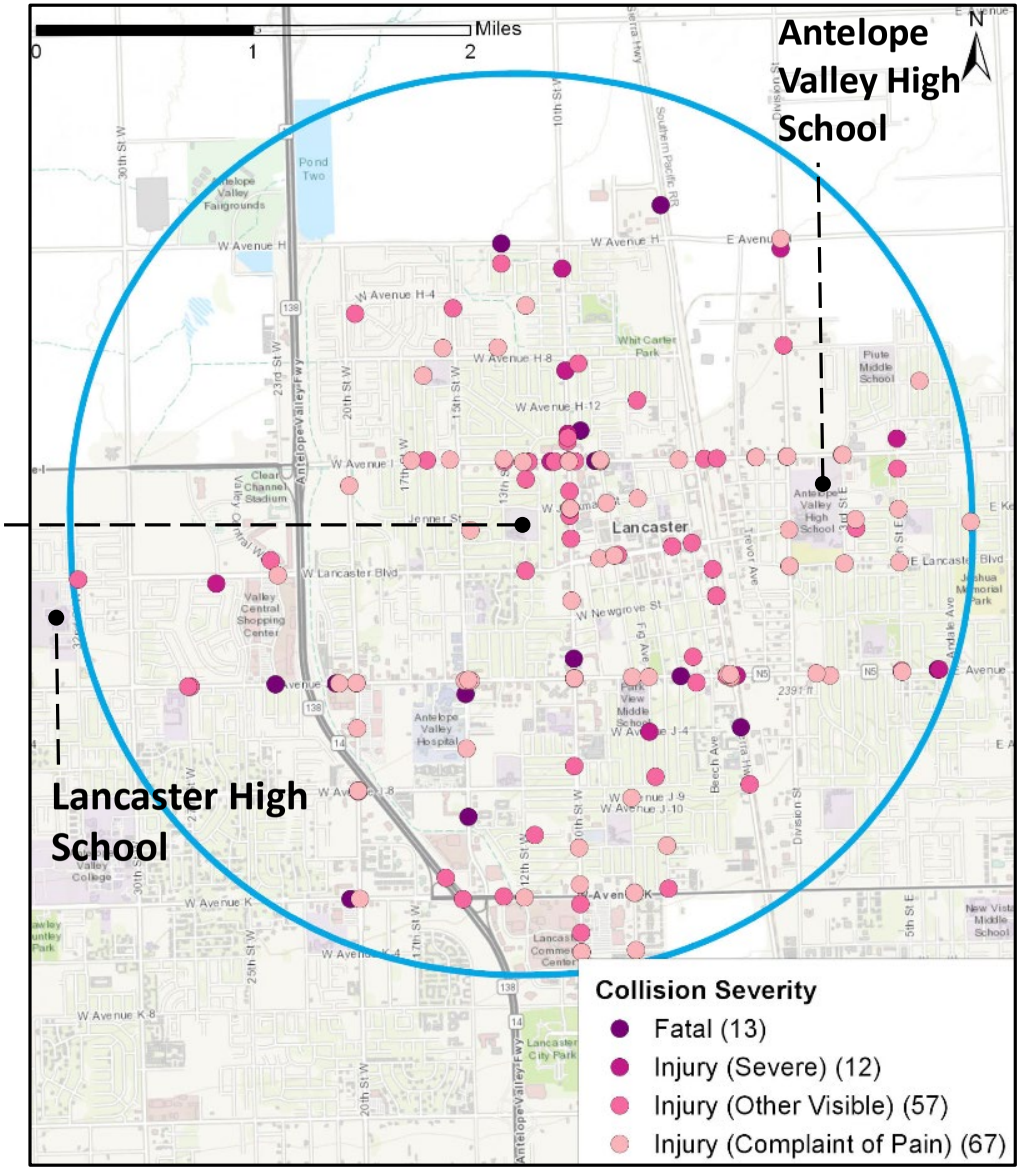
Complaints of Pain (11)

Other Visible Injuries (9)

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Pedestrian Injury Collisions (2013-2017)

**Monte Vista Elementary School**
**2-mile Radius**
**149 Pedestrian Injury Collisions**




**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

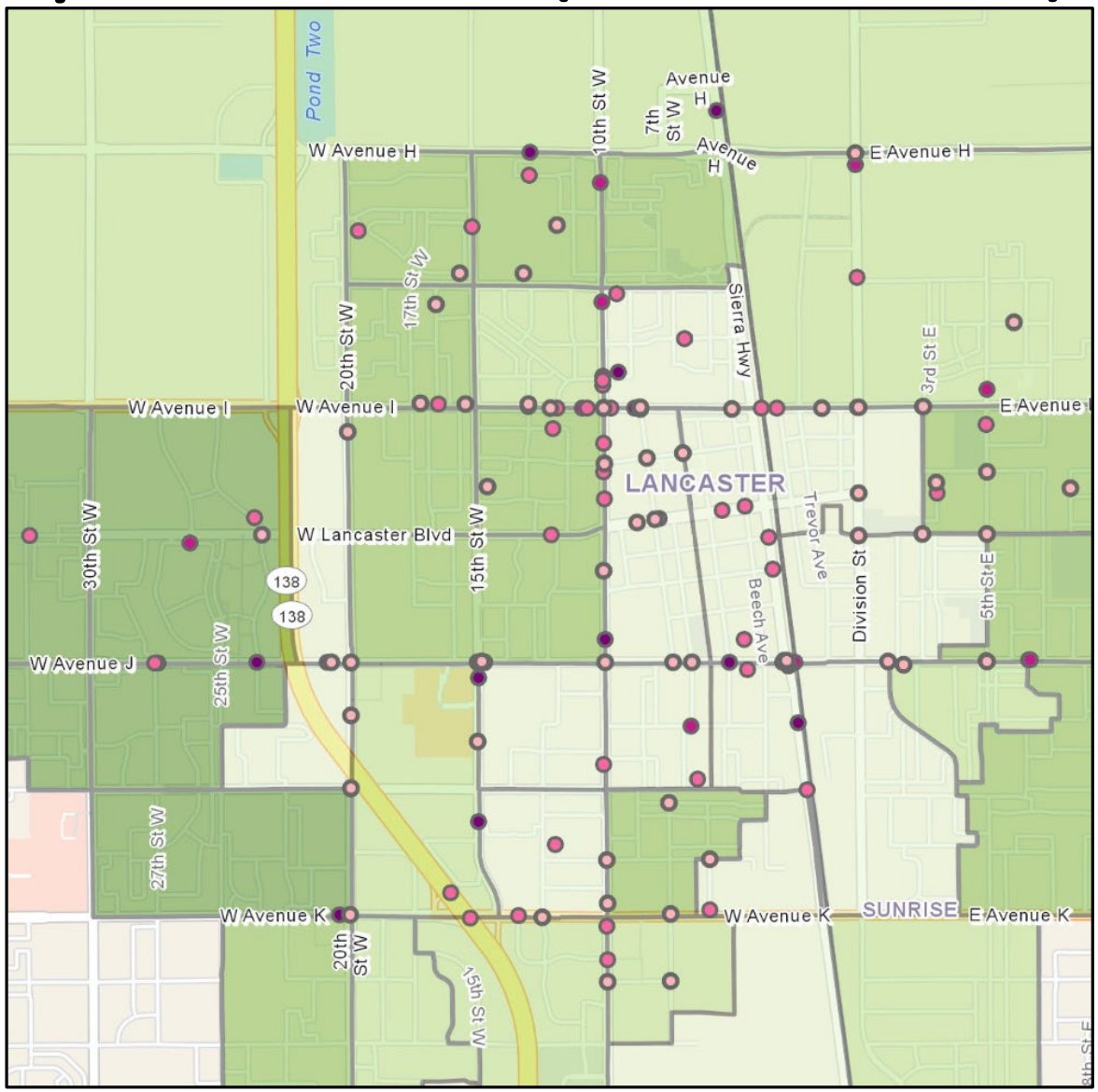
# Pedestrian Injury Collisions (2013-2017)

**2017 Median Household Income**

- < 35K
- 35K - 50K
- 50K - 75K
- > 75K

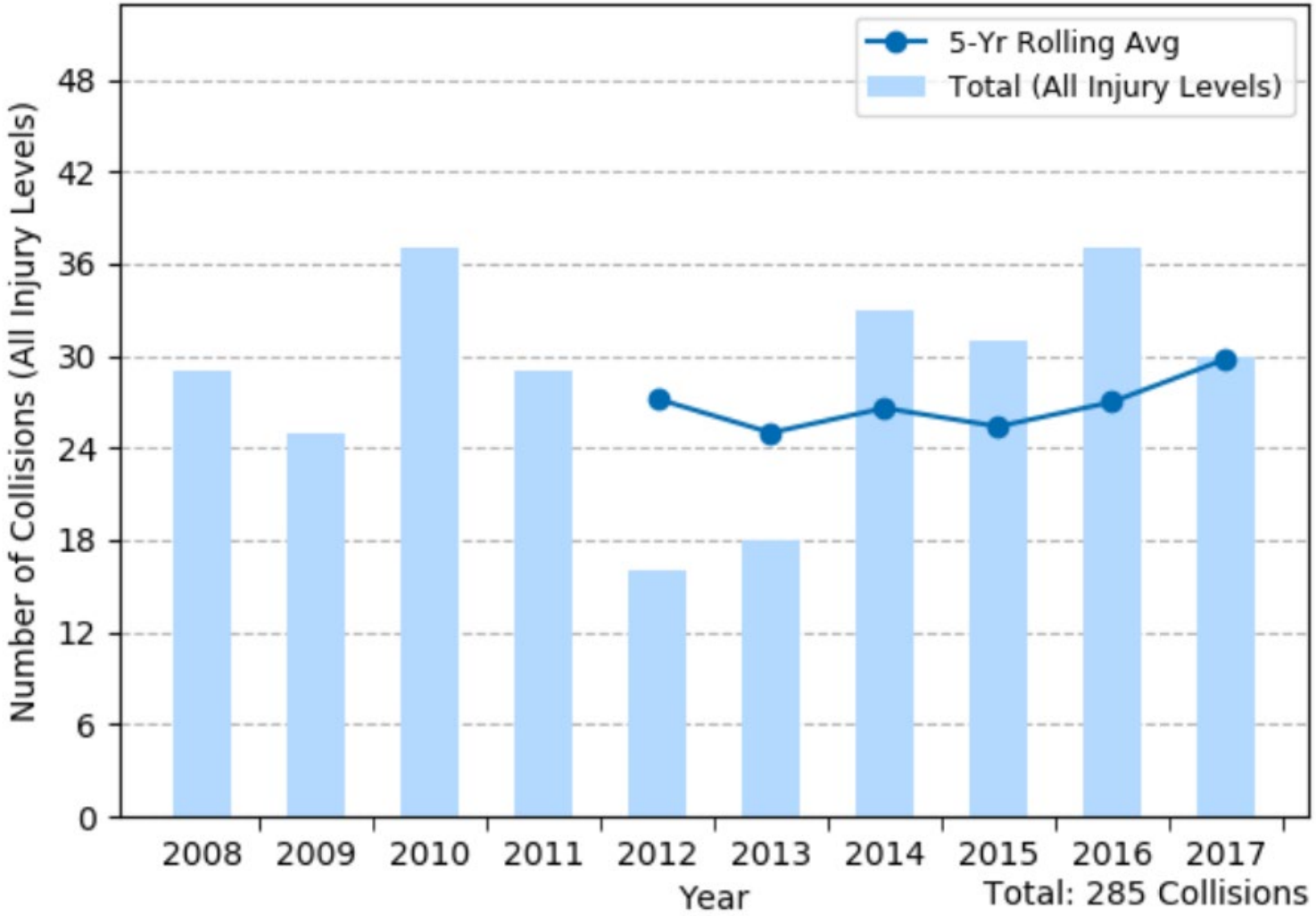
**Collision Severity (2013-2017)**

- Fatal (13)
- Injury (Severe) (12)
- Injury (Other Visible) (57)
- Injury (Complaint of Pain) (67)



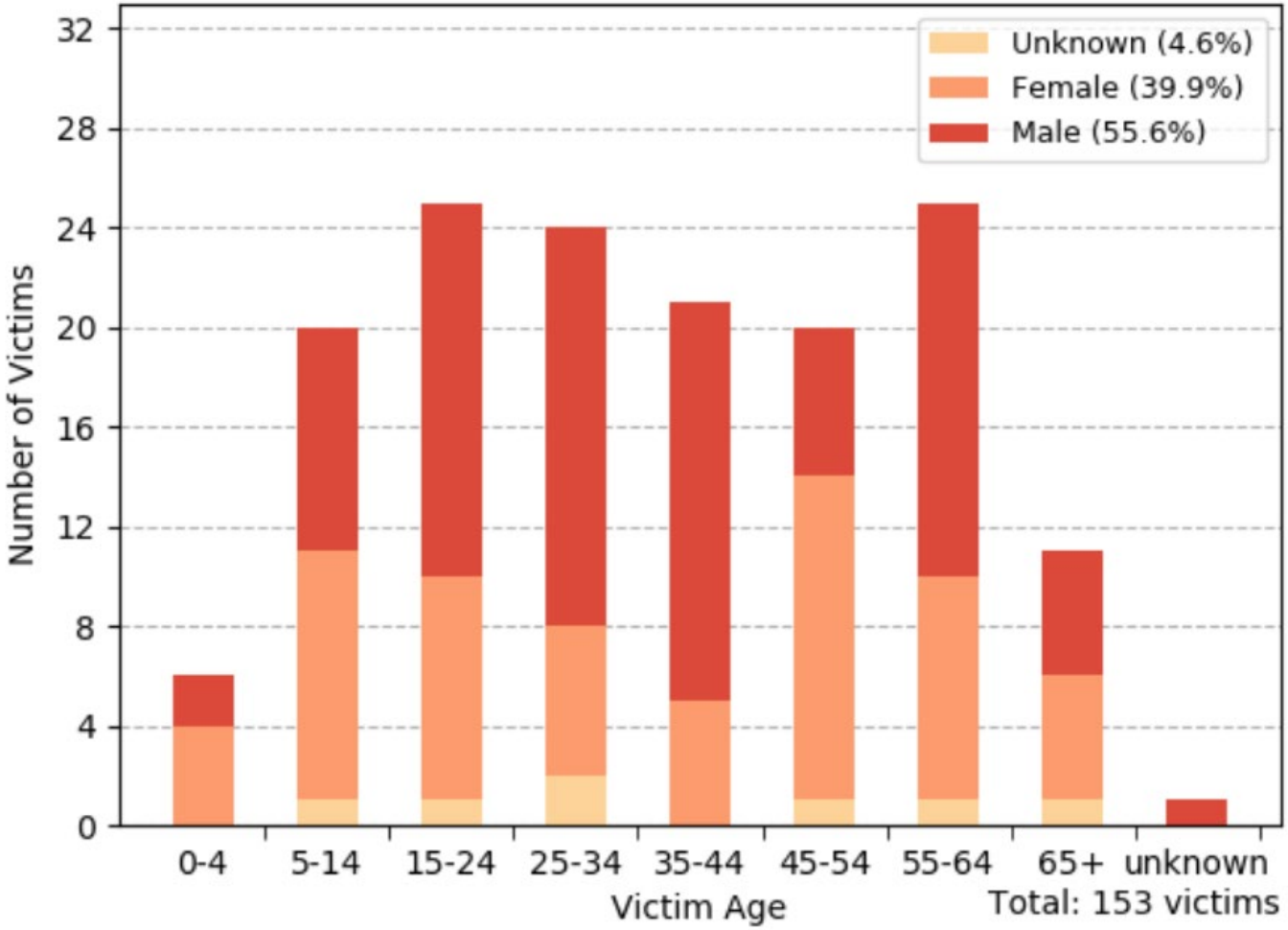

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Pedestrian Injury Collision Trend
## with 5-year rolling average



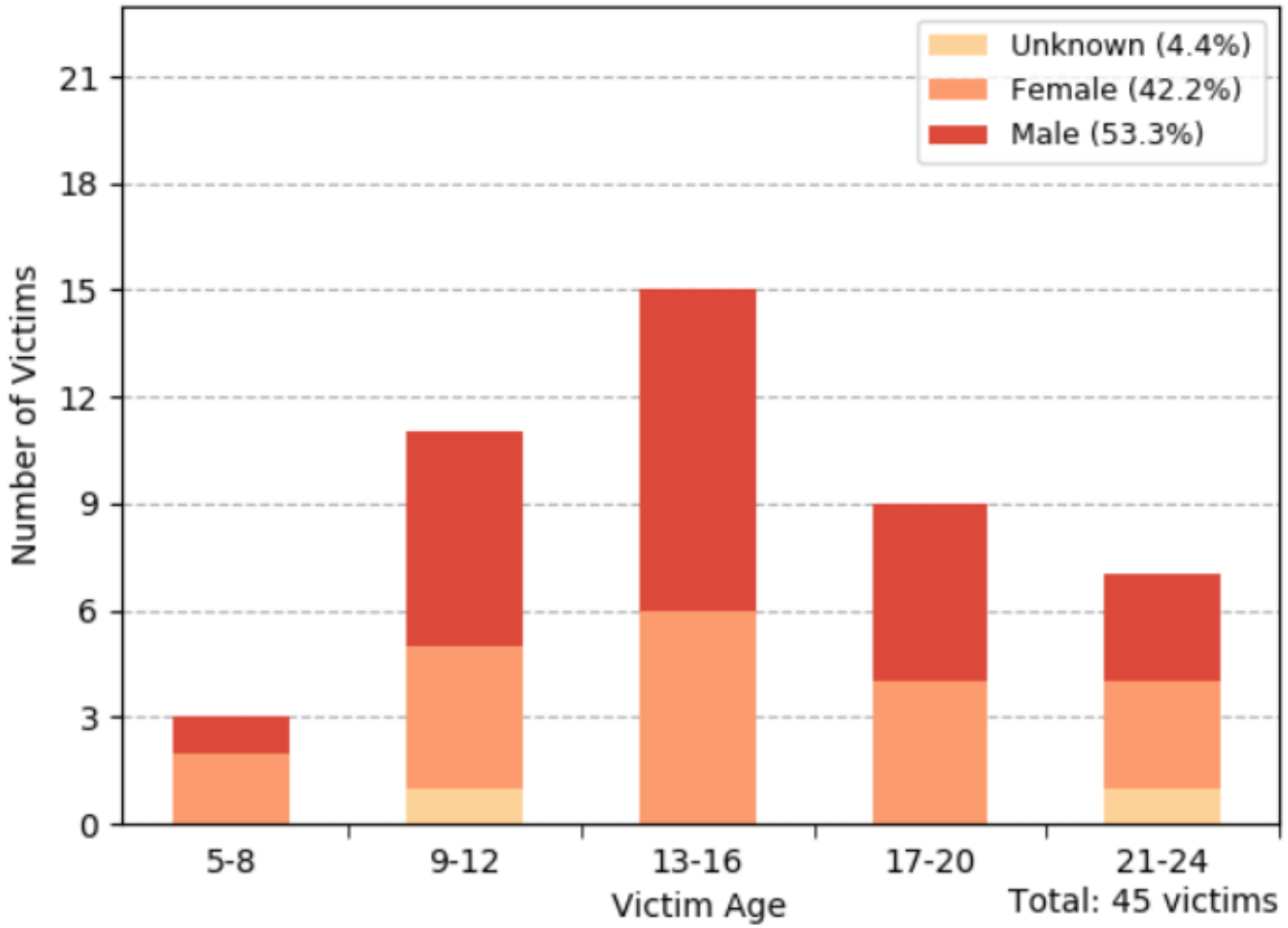

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Pedestrian Victim Injury
## by age and gender



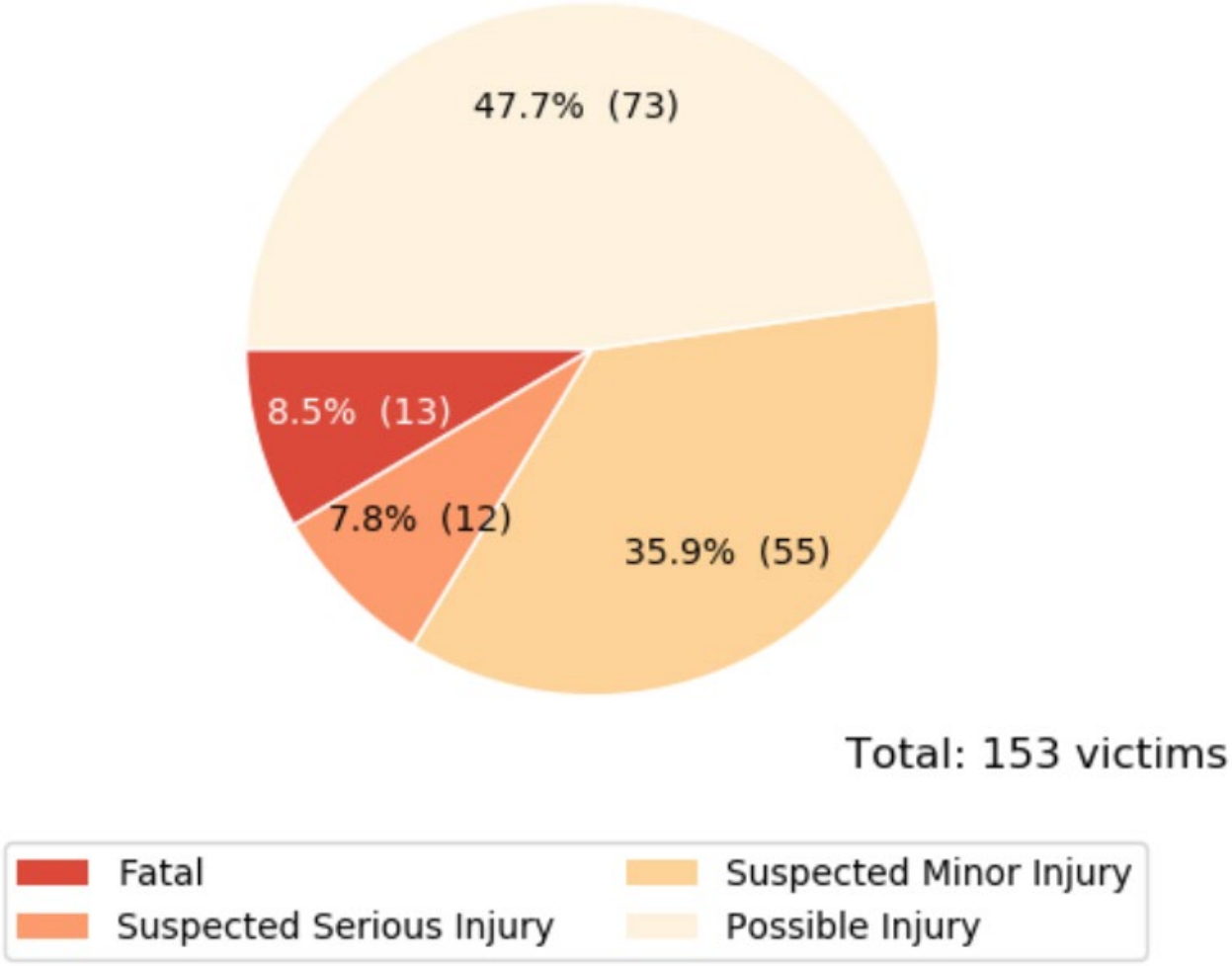

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Pedestrian Victim Injury
## by age and gender (child/youth)




**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Pedestrian Victim Injury
## by injury severity




**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Pedestrian Collisions
## by time of day and day of week

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday | Total |
|---|---|---|---|---|---|---|---|---|
| 09:00PM-11:59PM | 1 | 3 | 2 | 2 | 1 | 5 | 7 | 21 |
| 06:00PM-08:59PM | 3 | 8 | 3 | 5 | 5 | 8 | 3 | 35 |
| 03:00PM-05:59PM | 8 | 4 | 7 | 5 | 3 | 6 | 3 | 36 |
| Noon-02:59PM | 2 | 5 | 5 | 3 | 4 | 1 | 3 | 23 |
| 09:00AM-11:59AM | 3 | 3 | 6 | 0 | 1 | 1 | 2 | 16 |
| 06:00AM-08:59AM | 2 | 2 | 2 | 1 | 3 | 0 | 2 | 12 |
| 03:00AM-05:59AM | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 4 |
| Midnight-02:59AM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| Total | 20 | 26 | 26 | 19 | 17 | 21 | 20 | 149 |

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Pedestrian Collisions
## by type of violation

Total: 149 Collisions

| CVC No. | Description | Number of Collisions |
|---|---|---|
| 21950 | Driver failure to yield right-of-way to pedestrians at a marked or unmarked crosswalk | 51 (34.2%) |
| 21954 | Pedestrian failure to yield right-of-way to vehicles when crossing outside of a marked or unmarked crosswalk | 46 (30.9%) |
| 21955 | Pedestrian failure to cross at crosswalks between adjacent traffic signal controlled intersections | 8 (5.4%) |
| 22106 | Unsafe starting or backing of a vehicle on a highway | 5 (3.4%) |
| 21956 | Pedestrian failure to walk close to the edge of the roadway when there is no sidewalk present / Pedestrian failure to walk on the left-hand edge of the roadway when outside of a business or resident district, unless crossing is not possible | 5 (3.4%) |
| 22350 | Speeding on the highway / Driving at a dangerously high speed given highway conditions like weather, visibility, traffic, and highway measurements, or driving at a speed that endangers people or property | 4 (2.7%) |
| 21453 | Failure to stop at a limit line or crosswalk at a red light Failure to yield right-of-way to pedestrian when turning on a red light | 3 (2.0%) |
| 21804 | Driver failure to yield right-of-way when entering/crossing a highway | 3 (2.0%) |
| 22107 | Unsafe turning or moving right or left on a roadway Turning without signaling | 2 (1.3%) |
| 22450 | Driver failure to stop at a limit line or crosswalk at a stop sign / (ND ): Driver failure to stop for a stop sign before a limit line; otherwise, a crosswalk or intersection entrance Driver failure to stop at limit line before railroad; or, before entering | 2 (1.3%) |

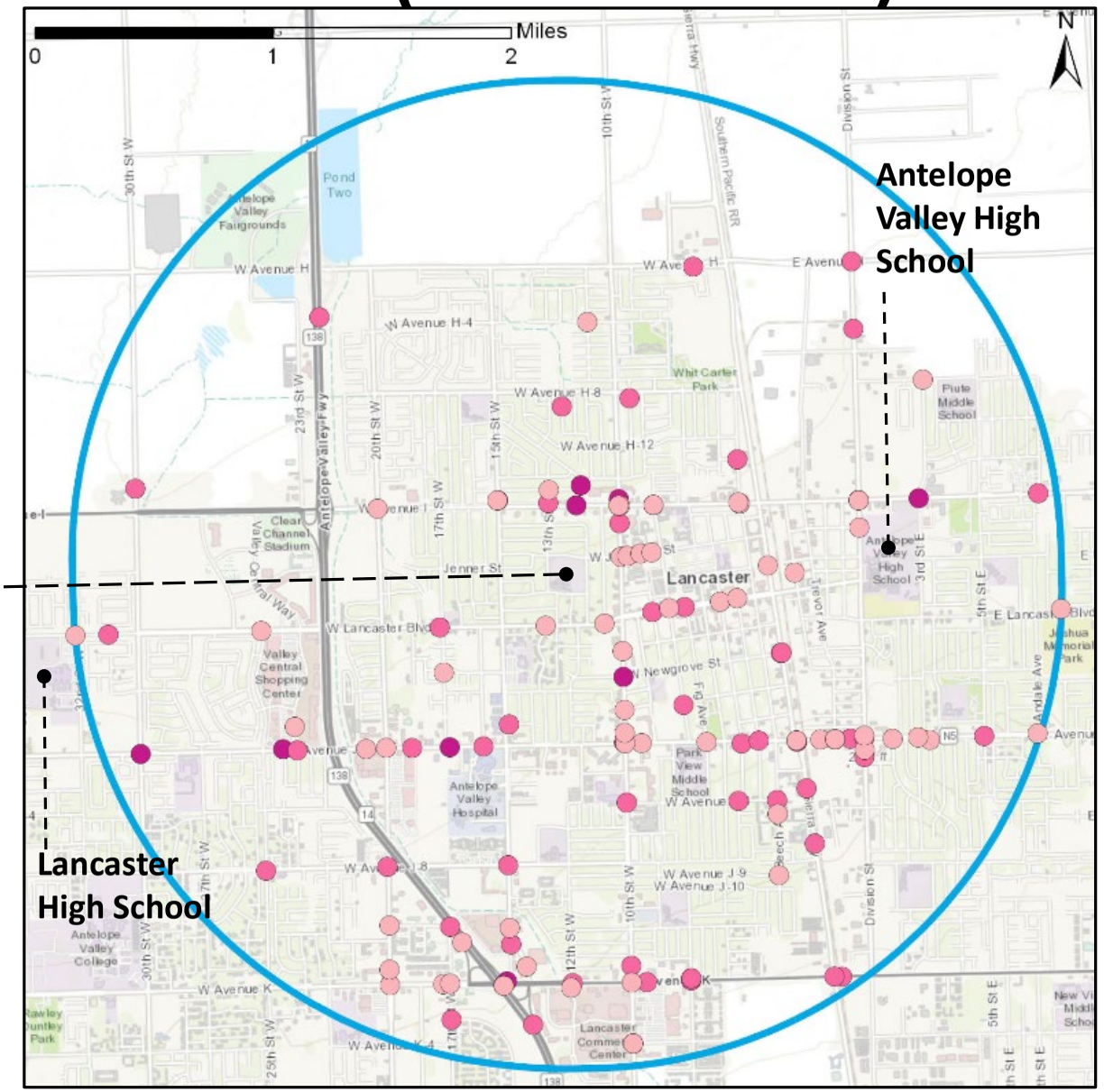
**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Bicycle Injury Collisions (2013-2017)

**Monte Vista Elementary School**

**2-mile radius**

**129 Bicycle Injury Collisions**




**Collision Severity**

- Injury (Severe) (10)
- Injury (Other Visible) (56)
- Injury (Complaint of Pain) (63)

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

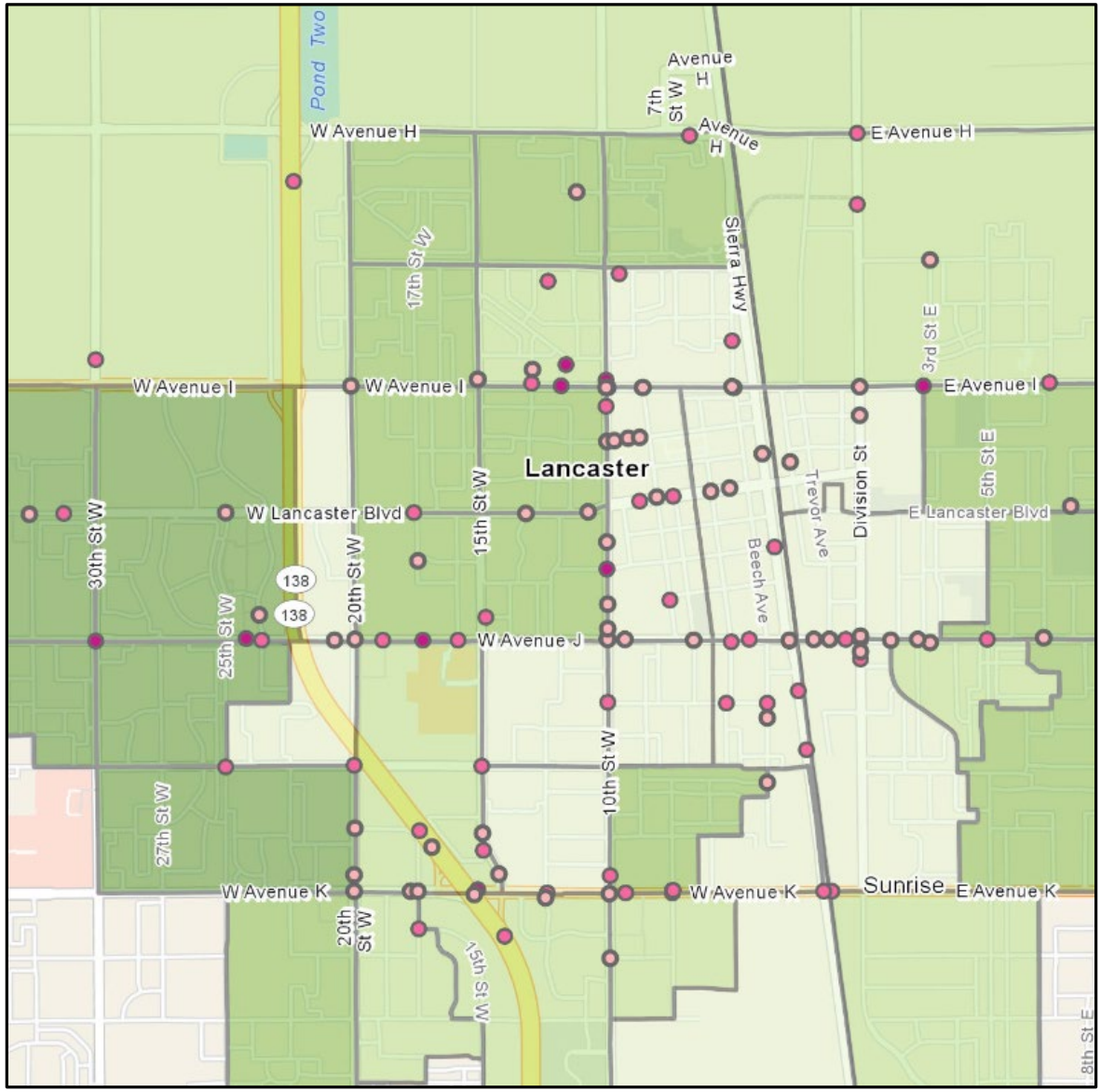
# Bicycle Injury Collisions (2013-2017)

**2017 Median Household Income**

- < 35K
- 35K - 50K
- 50K - 75K
- > 75K

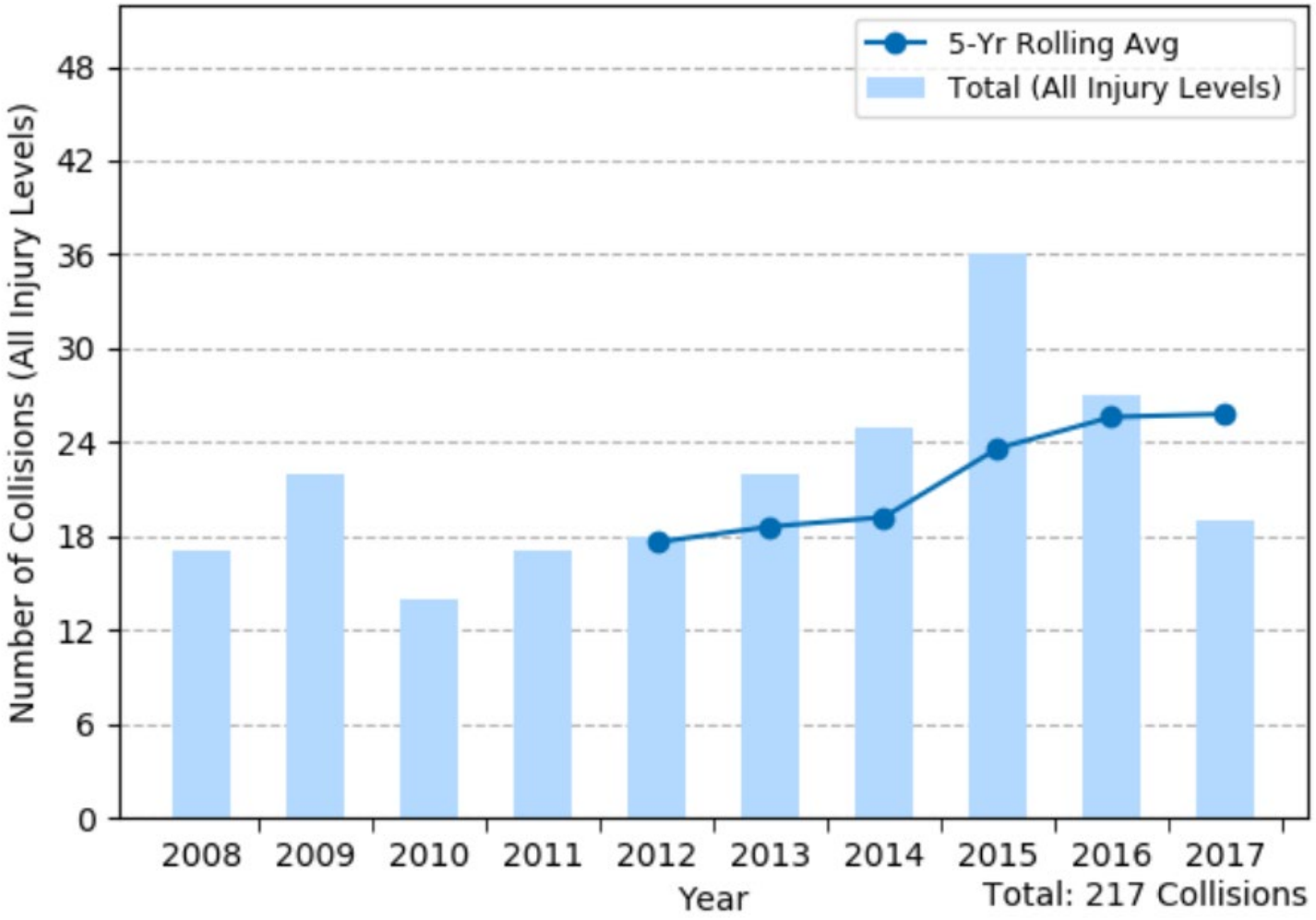
**Collision Severity (2013-2017)**

- Injury (Severe) (10)
- Injury (Other Visible) (56)
- Injury (Complaint of Pain) (63)



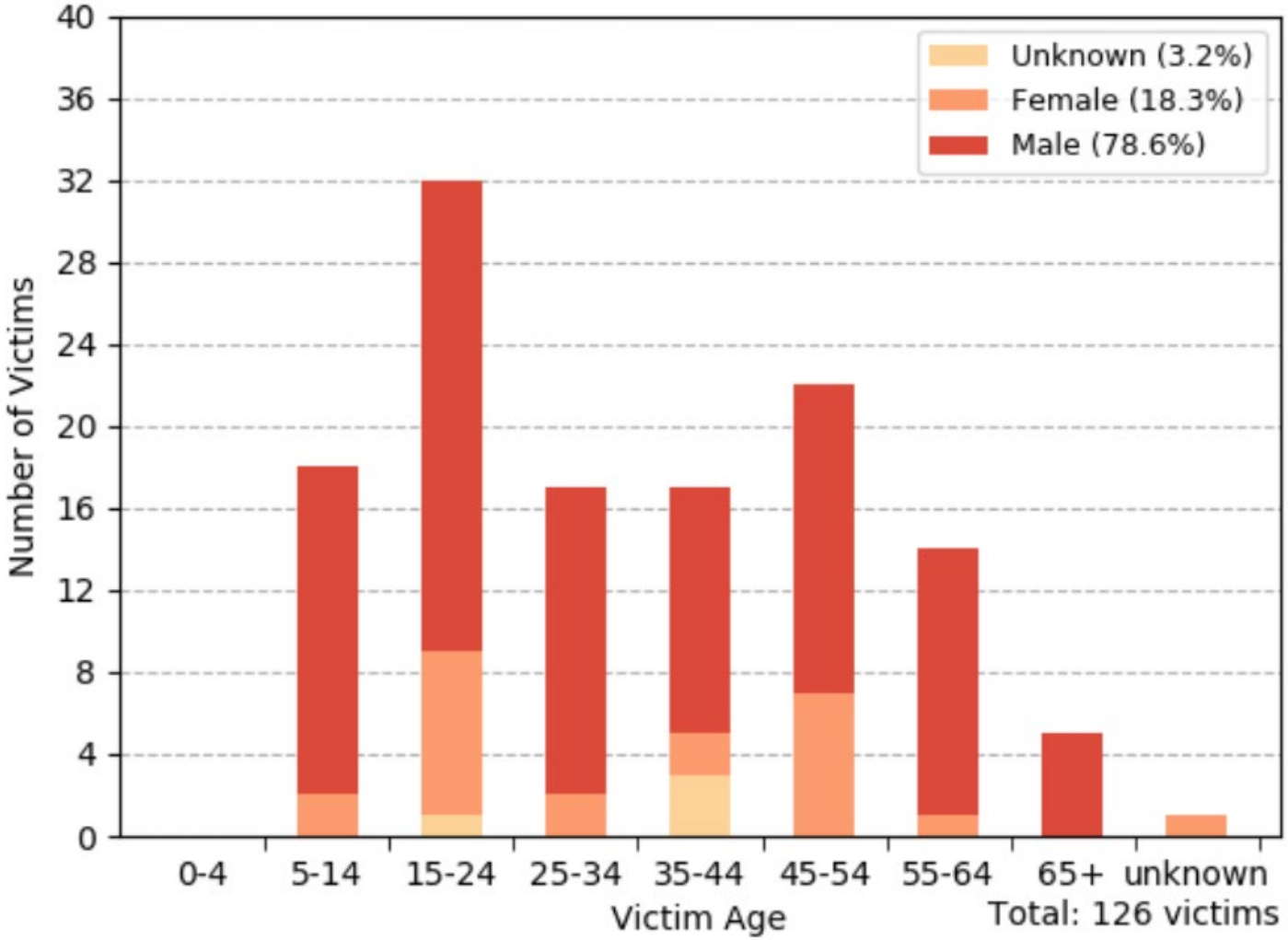

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Bicycle Injury Collision Trend
## with 5-year rolling average



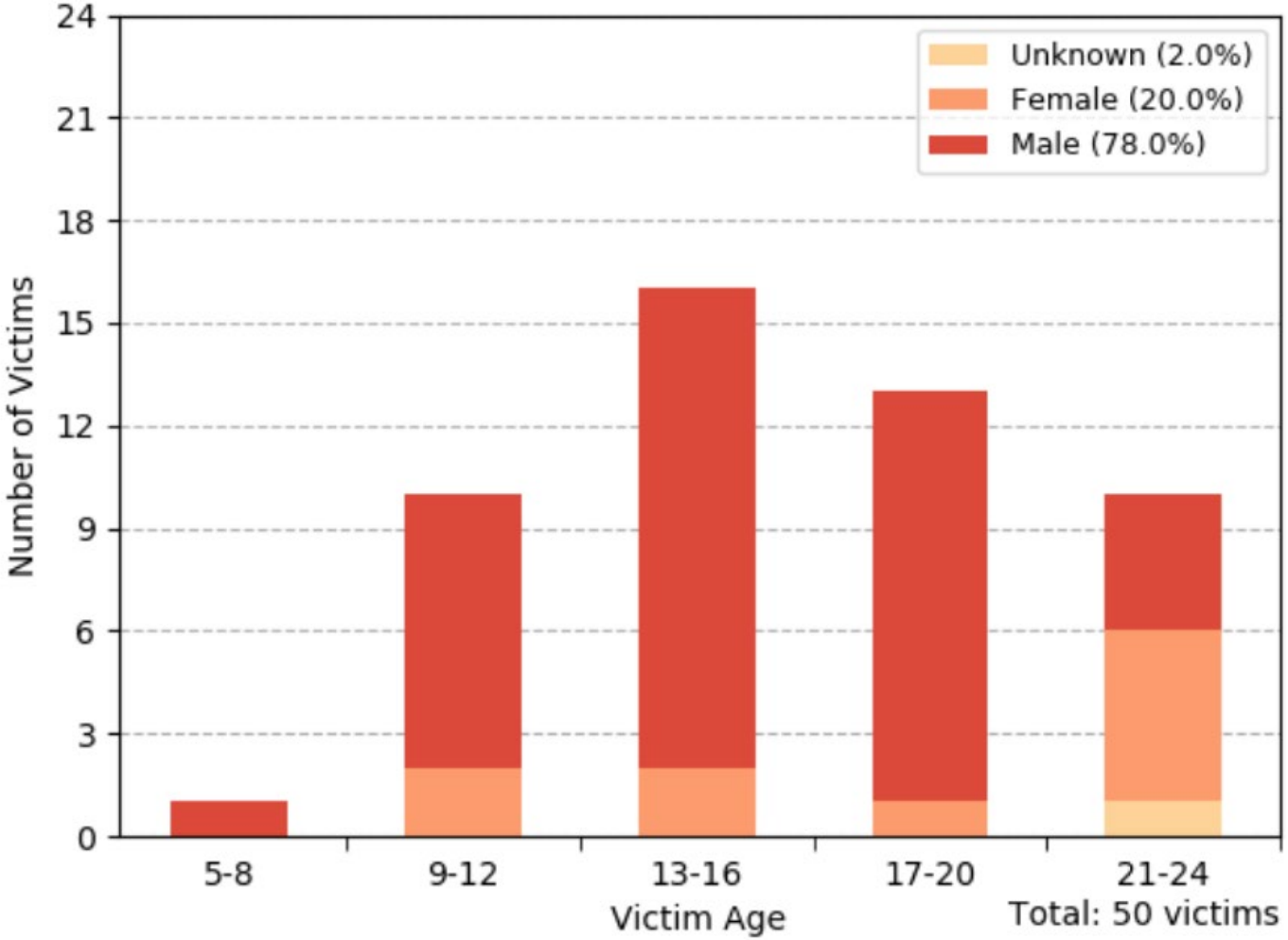

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Bicycle Victim Injury
## by age and gender



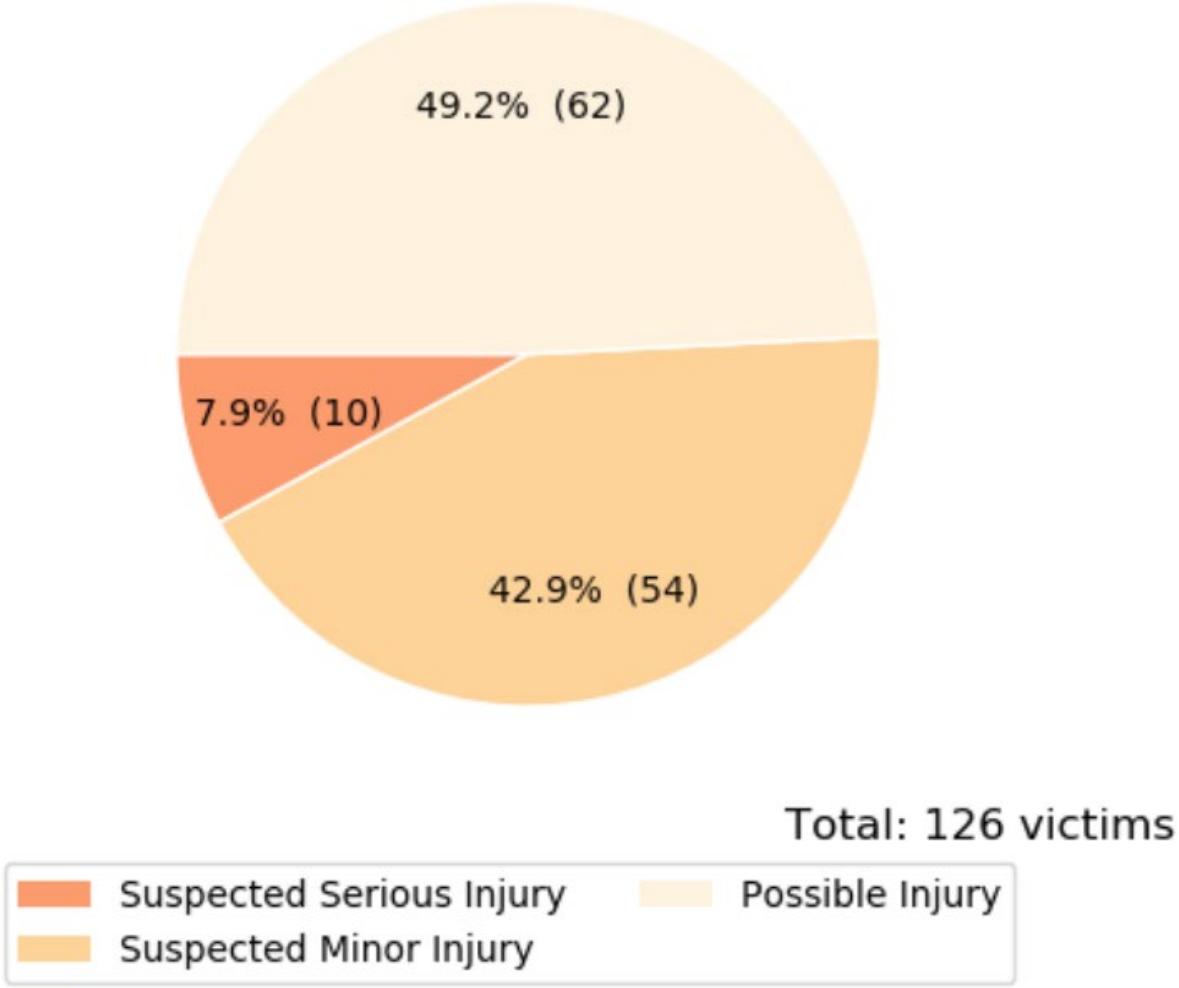

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Bicycle Victim Injury
## by age and gender (child/youth)




**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Bicycle Victim Injury
## by injury severity




**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Bicycle Collisions
## by time of day and day of week

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday | Total |
|---|---|---|---|---|---|---|---|---|
| 09:00PM-11:59PM | 1 | 0 | 2 | 3 | 1 | 1 | 0 | 8 |
| 06:00PM-08:59PM | 1 | 2 | 2 | 5 | 4 | 7 | 4 | 25 |
| 03:00PM-05:59PM | 7 | 3 | 7 | 6 | 6 | 3 | 2 | 34 |
| Noon-02:59PM | 8 | 6 | 5 | 5 | 4 | 1 | 1 | 30 |
| 09:00AM-11:59AM | 0 | 2 | 4 | 0 | 2 | 2 | 2 | 12 |
| 06:00AM-08:59AM | 1 | 2 | 5 | 6 | 1 | 1 | 0 | 16 |
| 03:00AM-05:59AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Midnight-02:59AM | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 3 |
| Total | 18 | 15 | 25 | 26 | 19 | 16 | 10 | 129 |

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

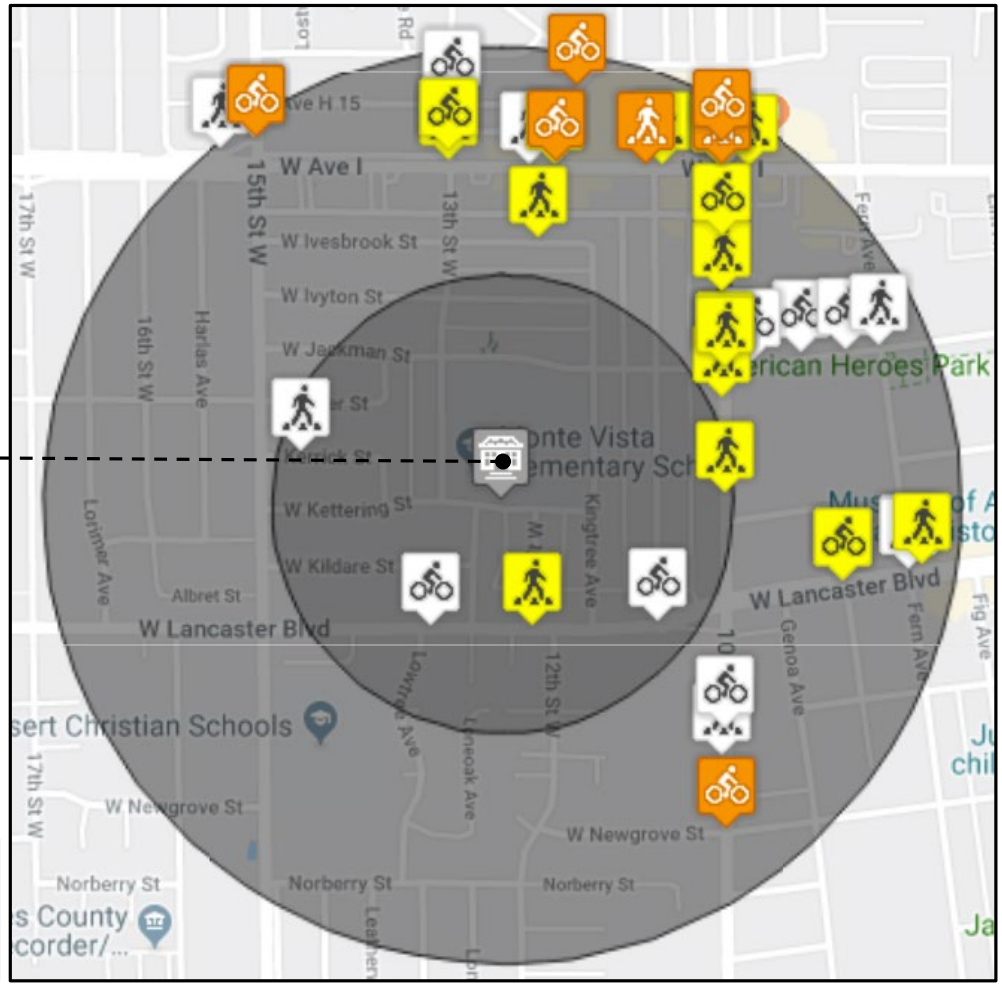
# Bicycle Collisions
## by type of violation

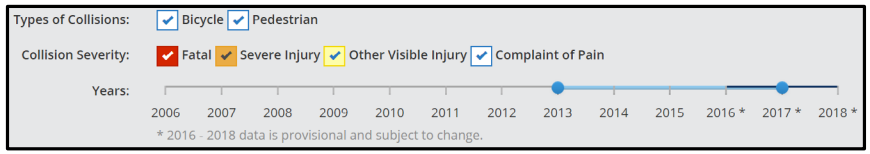
| CVC No. | Description | Number of Collisions |
|---|---|---|
| 21650 | Failure to drive/ride on right half of the roadway (with some exceptions) | 44 (34.1%) |
| 21804 | Driver failure to yield right-of-way when entering/crossing a highway | 14 (10.9%) |
| 22107 | Unsafe turning or moving right or left on a roadway  Turning without signaling | 14 (10.9%) |
| 21453 | Failure to stop at a limit line or crosswalk at a red light  Failure to yield right-of-way to pedestrian when turning on a red light | 10 (7.8%) |
| 21802 | Failure to stop or yield right-of-way at a stop sign | 9 (7.0%) |
| 21202 | Bicyclist failure to ride on right edge of roadway if riding below the normal speed of traffic | 5 (3.9%) |
| 22350 | Speeding on the highway /  Driving at a dangerously high speed given highway conditions like weather, visibility,  traffic, and highway measurements, or driving at a speed that endangers people or property | 5 (3.9%) |
| 22450 | Driver failure to stop at a limit line or crosswalk at a stop sign / (ND ): Driver failure to stop for a stop sign before a limit line; otherwise, a crosswalk or intersection entrance  Driver failure to stop at limit line before railroad; or, before entering | 5 (3.9%) |
| 21760 | Driver failure to pass a bicyclist following previous rules of passing, to pass leaving at least three feet, or to pass at a reasonably slow speed in a safe manner | 5 (3.9%) |
| 21801 | Driver failure to yield right-of-way when making a left turn or U-turn | 4 (3.1%) |

**Data Source**: Statewide Integrated Traffic Records System (SWITRS),
2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Monte Vista Elementary

1235 West Kettering Street
Lancaster, CA
Los Angeles County
CDS: 19646676014724



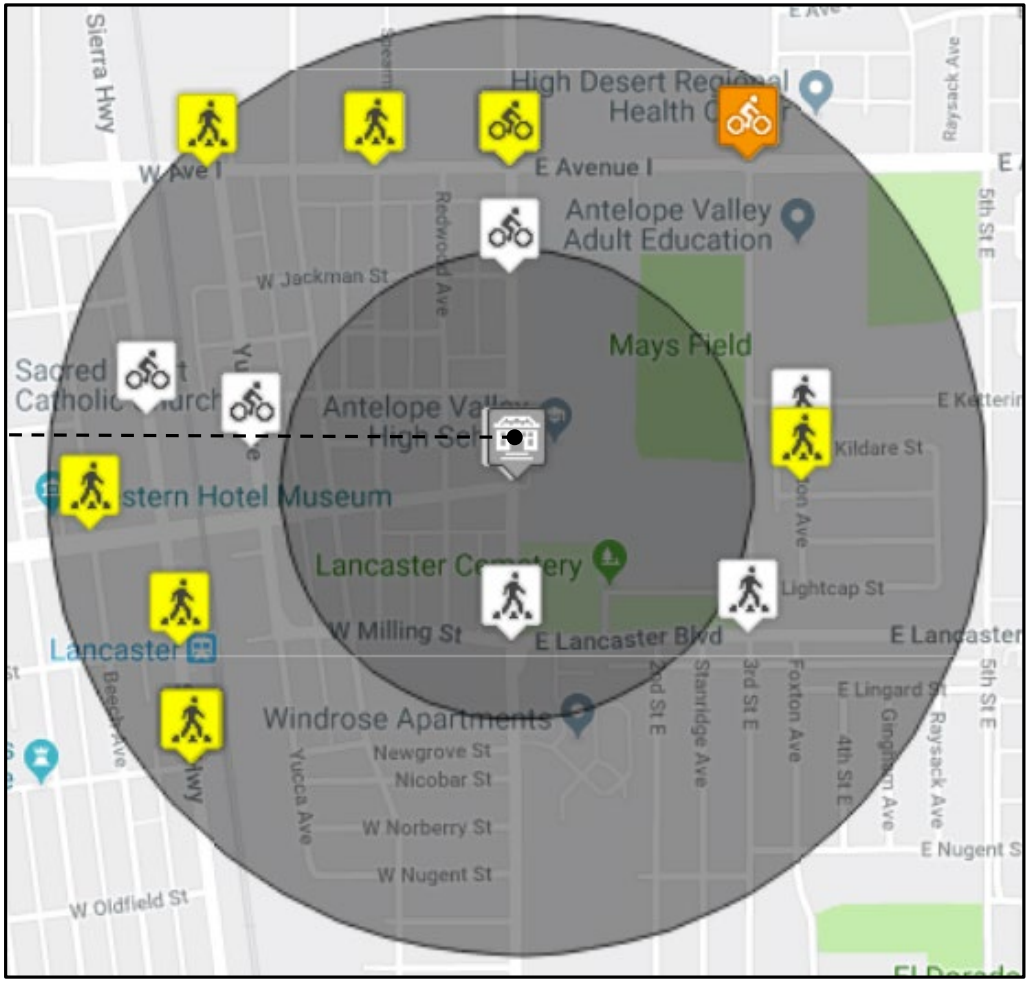

| Radius | Fatal | Severe Injury | Visible Injury | Complaint of Pain | Pedestrian | Bicycle | Total |
|---|---|---|---|---|---|---|---|
| *<¼ mi.* | 0 | 0 | 2 | 3 | 3 | 2 | **5** |
| *¼ - ½ mi.* | 0 | 7 | 15 | 19 | 22 | 19 | **41** |
| *Total* | 0 | 7 | 17 | 22 | 25 | 21 | **46** |

21

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Antelope Valley High School

44900 North Division Street
Lancaster, CA
Los Angeles County
CDS: 2461930213



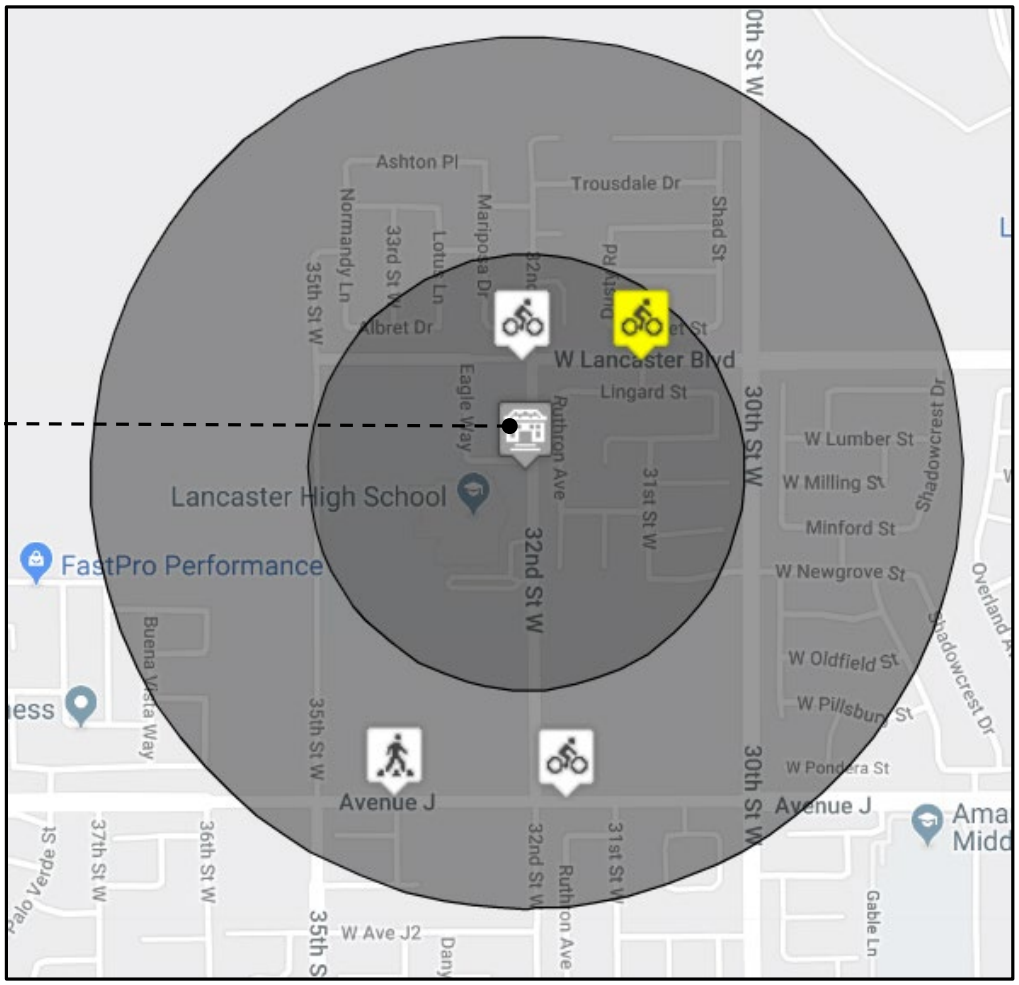


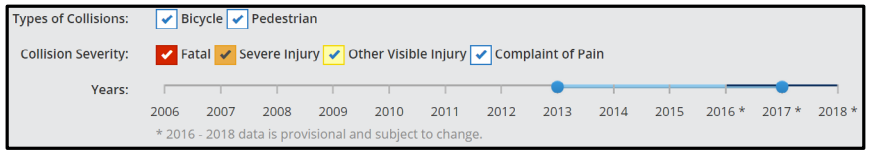
| Radius | Fatal | Severe Injury | Visible Injury | Complaint of Pain | Pedestrian | Bicycle | Total |
|---|---|---|---|---|---|---|---|
| *<¼ mi.* | 0 | 0 | 0 | 4 | 3 | 1 | **4** |
| *¼ - ½ mi.* | 0 | 1 | 11 | 9 | 14 | 7 | **21** |
| *Total* | 0 | 1 | 11 | 13 | 17 | 8 | **25** |

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Lancaster High School

4701 32nd Street West
Lancaster, CA
Los Angeles County
CDS: 19642461995844



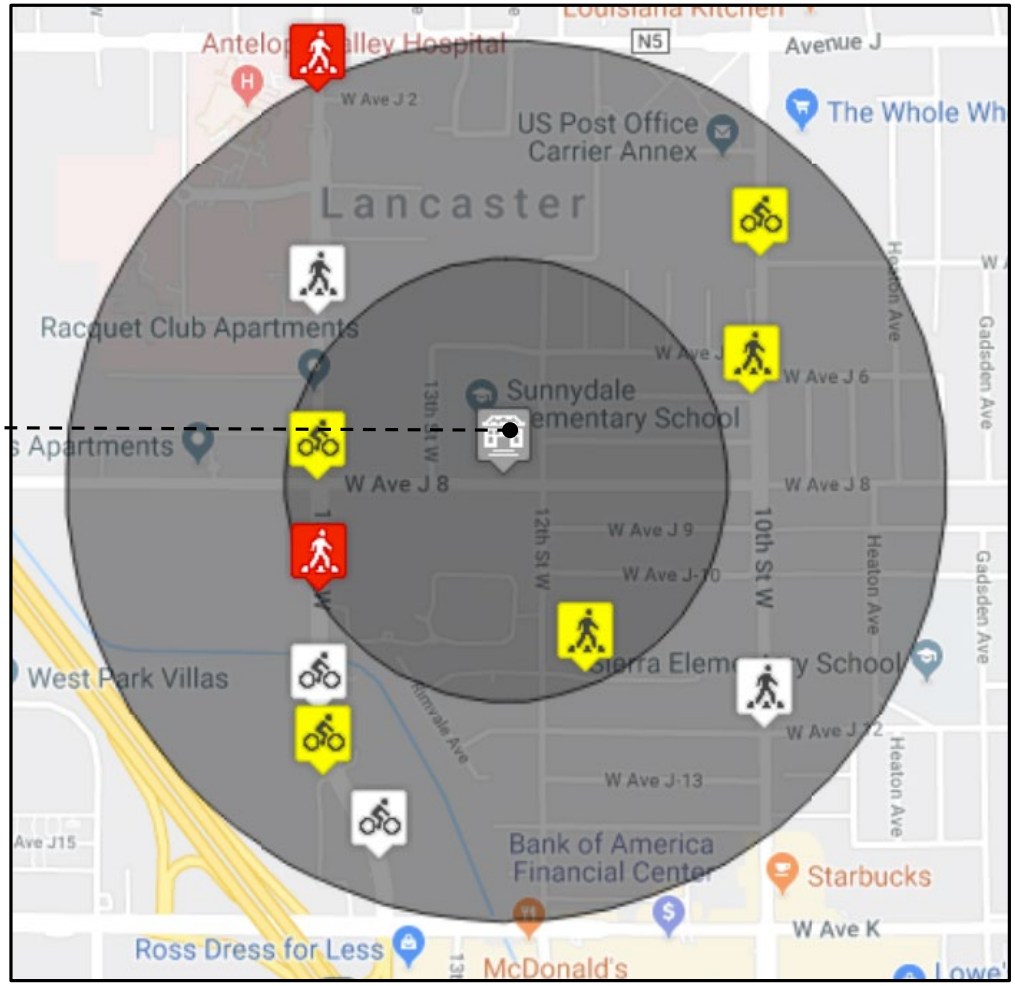




| Radius | Fatal | Severe Injury | Visible Injury | Complaint of Pain | Pedestrian | Bicycle | Total |
|---|---|---|---|---|---|---|---|
| *<¼ mi.* | 0 | 0 | 1 | 1 | 0 | 2 | **2** |
| *¼ - ½ mi.* | 0 | 0 | 0 | 2 | 1 | 1 | **2** |
| *Total* | 0 | 0 | 1 | 3 | 1 | 3 | **4** |

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Sunnydale Elementary

1233 West Avenue J-8
Lancaster, CA
Los Angeles County
CDS: 19646676014765

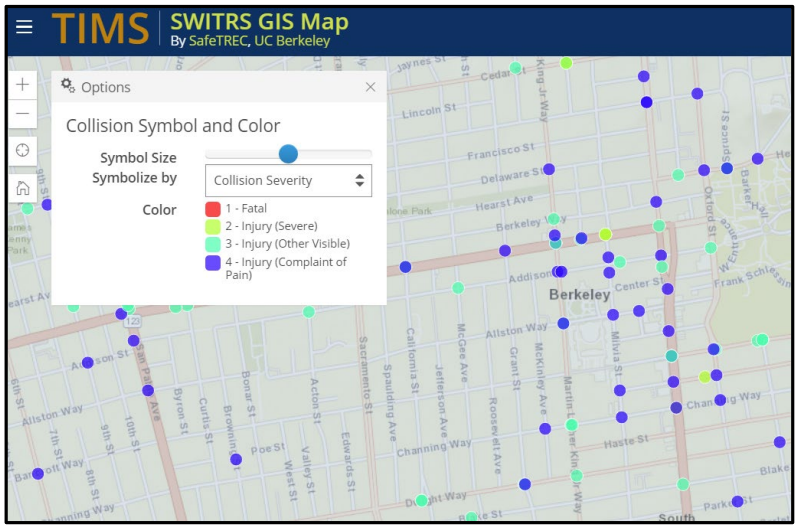




| Radius | Fatal | Severe Injury | Visible Injury | Complaint of Pain | Pedestrian | Bicycle | Total |
|---|---|---|---|---|---|---|---|
| *<¼ mi.* | 1 | 0 | 2 | 0 | 2 | 1 | **3** |
| *¼ - ½ mi.* | 1 | 0 | 3 | 4 | 4 | 4 | **8** |
| *Total* | 2 | 0 | 5 | 4 | 6 | 5 | **11** |

**Data Source**: Statewide Integrated Traffic Records System (SWITRS), 2013-2017. Collision data for 2016 and 2017 are provisional as of March 2019.

# Additional Resources




## 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).

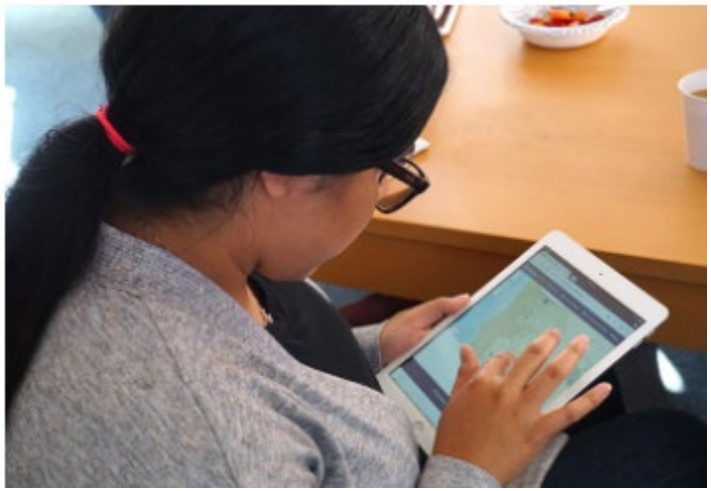
To further explore collision data, register for a free account to access the tools and resources on TIMS.

https://tims.berkeley.edu

## 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.

https://streetstory.berkeley.edu



Berkeley SafeTREC
SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER

# Lancaster CPBST 2019

## SUPPLEMENTAL DATA

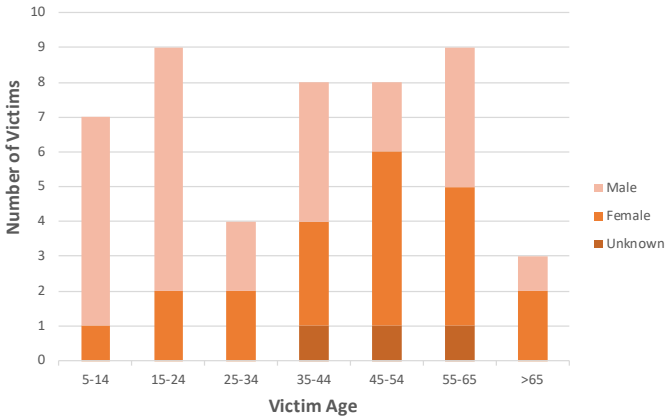
## BICYCLIST AND PEDESTRIAN VICTIMS NEAR SCHOOLS

### MONTE VISTA ELEMENTARY

Between 2013 and 2017, fourty-eight pedestrian and bicyclist injuries or fatalities occurred within a quarter and half mile radius of Monte Vista Elementary School.

Those victims tended to skew younger than twenty-four years-old and older than thirty-five years-old. Over a third (33.33%) of victims were youth or young adults.

**Pedestrian and Bicyclist Victims by Age and Gender**

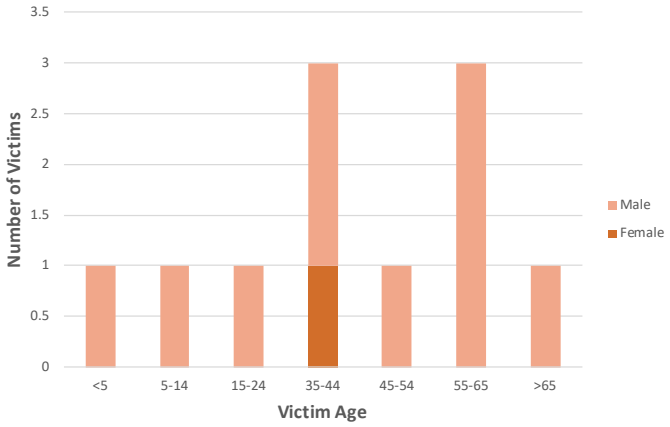



### SUNNYDALE ELEMENTARY

Between 2013 and 2017, eleven pedestrian and bicyclist injuries or fatalities occurred within a quarter and half mile radius of Sunnydale Elementary School.

Victims older than thirty-five were over represented in the collision data. Older adults over fifty-five years-old represented over a third (36.3%) of roadway victims.

**Pedestrian and Bicyclist Victims by Age and Gender**






BerkeleySafeTREC

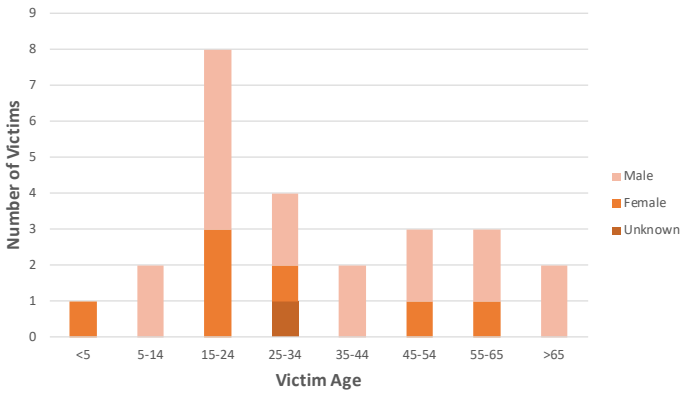
*Data Source: Statewide Integrated Traffic Records System (SWITRS) 2013 - 2017; 2016 - 2017 are provisional as of March 2019.*

## ANTELOPE VALLEY HIGH SCHOOL

Between 2013 and 2017, twenty-five pedestrian and bicyclist injuries or fatalities occurred within a quarter and half mile radius of Antelope Valley School.

Not surprisingly, students and young adults formed one of the largest group of traffic victims.

**Pedestrian and Bicyclist Victims by Age and Gender**




# CRASH DATA BY TIME OF DAY AND MONTH

## PEDESTRIAN COLLISIONS (2013 - 2017)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight - 2:59 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:00 AM - 5:59 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 4 |
| 6:00 AM - 8:59 AM | 0 | 2 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 2 | 2 | 2 | 12 |
| 9:00 AM - 11:59 AM | 0 | 1 | 0 | 1 | 0 | 2 | 3 | 2 | 2 | 3 | 1 | 1 | 16 |
| 12:00 PM - 2:59 PM | 1 | 0 | 5 | 2 | 1 | 1 | 1 | 3 | 2 | 3 | 2 | 2 | 23 |
| 3:00 PM - 5:59 PM | 5 | 3 | 4 | 0 | 2 | 1 | 0 | 1 | 4 | 6 | 5 | 5 | 36 |
| 6:00 PM - 8:59 PM | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 1 | 8 | 2 | 3 | 35 |
| 9:00 PM - 11:59 PM | 4 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 21 |
| Total | 12 | 11 | 12 | 6 | 10 | 9 | 12 | 14 | 11 | 25 | 13 | 14 | 149 |

## BICYCLE COLLISIONS (2013 - 2017)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight - 2:59 AM | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| 3:00 AM - 5:59 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 6:00 AM - 8:59 AM | 0 | 2 | 1 | 1 | 3 | 4 | 0 | 0 | 1 | 0 | 3 | 1 | 16 |
| 9:00 AM - 11:59 AM | 2 | 1 | 1 | 3 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 12 |
| 12:00 PM - 2:59 PM | 6 | 5 | 0 | 1 | 3 | 1 | 3 | 3 | 4 | 0 | 2 | 2 | 30 |
| 3:00 PM - 5:59 PM | 0 | 4 | 4 | 4 | 4 | 2 | 1 | 3 | 2 | 2 | 5 | 3 | 34 |
| 6:00 PM - 8:59 PM | 1 | 3 | 4 | 2 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 25 |
| 9:00 PM - 11:59 PM | 0 | 1 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 0 | 1 | 0 | 8 |
| Total | 9 | 16 | 11 | 11 | 16 | 13 | 7 | 12 | 10 | 3 | 14 | 7 | 129 |





*Data Source: Statewide Integrated Traffic Records System (SWITRS) 2013 - 2017; 2016 - 2017 are provisional as of March 2019.*