

James Marshall Elementary School, Modesto

Community Pedestrian & Bicycle Safety Training Summary and Recommendations Report

Creating Safer Streets for Walking and Biking



OCTOBER 2020



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



**James Marshall Elementary School,
Modesto, California**

Acknowledgements

A special thank you to the Planning Committee for inviting us into their community and partnering with us to make James Marshall Elementary School in Modesto a safer place to walk and bike!

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Thank you to James Marshall Elementary School Principal Francisco Guerrero for contracting with Lily Mungia to provide interpretation from Spanish to English in support of this training. We would like to acknowledge the community residents who participated in the workshop. Their collective participation meaningfully informed and strengthened the workshop's outcomes.

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Executive Summary

The Community Pedestrian and Bicycle Safety Training (CPBST) is a statewide project of California Walks (Cal Walks) and the University of California at Berkeley’s Safe Transportation Research and Education Center (SafeTREC). The CPBST program engages residents and safety advocates to develop community-driven action plans to improve walking and biking safety in their communities.

The Marshall Elementary School, Modesto CPBST was collaboratively planned and facilitated by Marshall Elementary School, the Planning Committee, Cal Walks, and SafeTREC (Project Team) to:

1. Improve walking and biking conditions at Marshall Elementary School;
2. Engage and provide education to parents on walking and biking safety; and
3. Create a community vision for walking and biking safety with neighbors.

The September 10, 2020 training consisted of:

- Walking and biking assessments along three (3) key routes;
- An overview of the 3 E’s strategies to improve walking and biking safety using the intersectional 3 E’s framework including: Equity, Engineering, Education; and
- Action planning sessions to prioritize and plan for community programs, and infrastructure projects.

Data

The Project Team and Planning Committee reviewed data which demonstrated a safety concern in the area. Over the 10-year period, 2009 to 2018, both pedestrian injuries and bicycle injuries within the project area appear to be mostly stable. From 2014 to 2018, there were 31 pedestrian victims and 19 bicycle victims around Marshall Elementary School in Modesto. A full discussion of pedestrian and bicycle collisions can be found in the CPBST report.

Modesto: Marshall ES Pedestrian Injury Collisions (2009 - 2018)

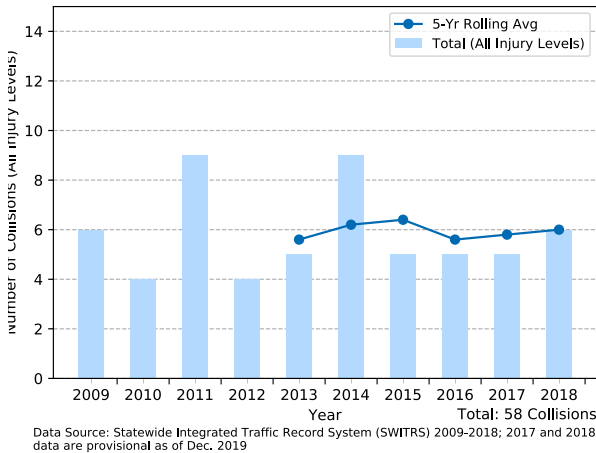


Figure 1: Pedestrian Injury Collisions (2014-2018)

Modesto: Marshall ES Bicycle Injury Collisions (2009 - 2018)

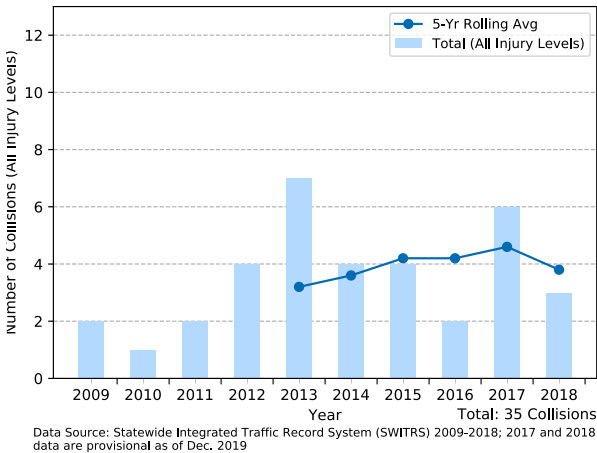


Figure 2: Bicycle Injury Collisions (2014-2018)

PLANNING COMMITTEE

The planning committee consisted of representatives from Catholic Charities Stockton Diocese, James Marshall Elementary School, Stanislaus County Health Services Agency, Stanislaus Council of Governments, Doctors Medical Center, Modesto City Schools Board of Education, City of Modesto, Planning Division and City of Modesto, Rideshare.

WORKSHOP PARTICIPANTS

Workshop participants were community members and/or representatives from the Planning Committee, and Marshall Elementary School staff.

For a more detailed discussion of the workshop, please download the full report on SafeTREC's or Cal Walks' websites.

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

Walking & Biking Assessment

Workshop participants conducted walking and biking assessments along three (3) key routes used by students and parents to get to Marshall Elementary School. Participants were asked to:

- Identify community assets;
- Assess infrastructure conditions; and
- Observe how road users are engaging with the built-environment.

Participants expressed concerns around:

- Sidewalk Connectivity
- Crossing Challenges
- Visibility Challenges
- Road User Behavior
- Stray Dogs
- Lack of Shade Trees

Community Recommendations

During the action-planning sessions, participants prioritized and outlined preliminary plans for the following community programs and infrastructure projects aimed at increasing the health and safety of the community:

- Community Safety and Crossing Guard Program
- Install Rectangular Rapid Flashing Beacons (RRFB) and high-visibility crosswalks at key intersections along Paradise Road
- Roadway improvement projects around Marshall Elementary School

Cal Walks & SafeTREC Recommendations

The following are recommendations for bicycle and pedestrian safety improvements:

- Encourage collaboration between Marshall Elementary School and Doctor's Medical Center of Modesto, which is leading the [Safe Kids Stanislaus County Coalition](#) to provide community education to keep children safe.
- Encourage schools within Modesto and the City of Modesto develop a [SRTS Plan](#) for Marshall Elementary School.
- Develop a community-led walking and biking safety messaging campaign around Marshall Elementary School.
- Explore funding opportunities to implement pedestrian and bicycle facilities recommendations in west Modesto, especially near Marshall Elementary School.

Introduction

The Community Pedestrian and Bicycle Safety Training (CPBST) is a statewide project of California Walks (Cal Walks) and the University of California at Berkeley's Safe Transportation Research and Education Center (SafeTREC). The CPBST engages residents and safety advocates to develop a community-driven action plan to improve walking and biking safety in their communities.

The James Marshall Elementary School (Marshall Elementary School) CPBST in Modesto was collaboratively planned and facilitated by the Planning Committee, Cal Walks, and SafeTREC (Project Team) to:

1. Improve walking and biking conditions at Marshall Elementary School;
2. Engage and provide education to parents on walking and biking safety; and
3. Create a community vision for walking and biking safety with neighbors.

The training took place virtually on September 10, 2020 and convened 52 participants, including community residents, Marshall Elementary School parents, teachers, and students, City of Modesto, Catholic Charities of Stockton Diocese, and Stanislaus Council of Governments.

The training consisted of:

- Walking and biking assessments along three (3) key routes;
- An overview of the 3 E's strategies to improve walking and biking safety: Equity, Engineering, and Education; and
- Action planning sessions to prioritize and plan for community programs, and infrastructure projects.

This report summarizes the workshop proceedings, including the community and Project Team's recommendations for community programs, and infrastructure projects to improve walking and biking safety around Marshall Elementary School in Modesto.

The Planning Process



Step 1: Assemble a Planning Committee - January 2020

- 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 - February 2020

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



Step 3: Conduct CPBST Site Visit - July 31, 2020

- Review current pedestrian and bicycle safety data and conditions
- Discuss workshop logistics
- 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 10, 2020

- 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

Last Updated: 5/14/19

Pedestrian and Bicycle Collision History

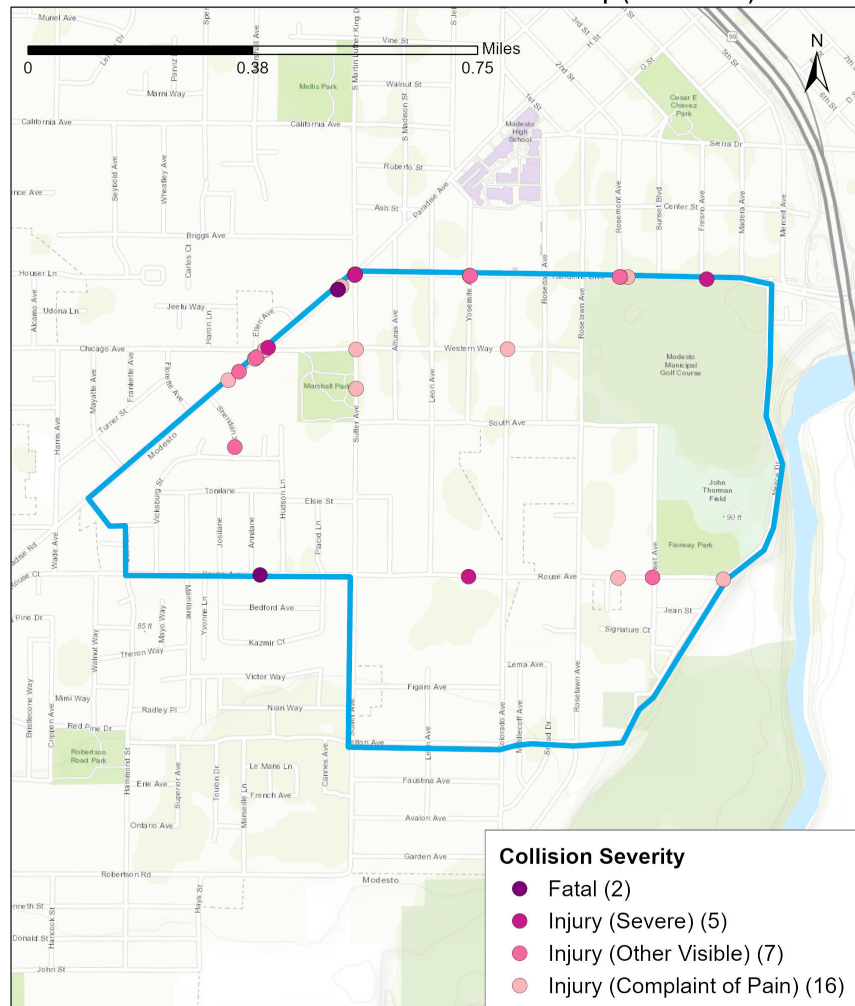
The following data is based on police-reported pedestrian and bicycle collisions resulting in injuries to pedestrians and bicyclists within the area surrounding Marshall Elementary School. The school community boundary for this training is as follows: Paradise Boulevard to the west, Tuolumne Boulevard to the north, Neece Drive to Felton Avenue to the east, and Sutter Avenue to the south. Data reported in this section are from the Statewide Integrated Traffic Records Systems (SWITRS) for the years 2009 to 2018. Collision data for 2017 and 2018 are provisional as of December 2019. A full discussion of the pedestrian and bicycle collision data can be found in Appendix A.

Pedestrian Collisions

Over the 10-year period between 2009 and 2018, pedestrian collisions appear to be mostly stable with a small peak in 2014. In the most recent five years of data available, 2014 to 2018, there were 28 injury collisions involving pedestrians within the ½-mile radius of Marshall Elementary School. Within the school community boundary, pedestrian collisions were concentrated on Paradise Road, Tuolumne Boulevard and Rouse Avenue. Pedestrian collisions occurred in higher numbers on Saturdays and in the evening hours on weekdays. Driver failure to yield right of way to pedestrians at a marked or unmarked crosswalk (46.7%), followed by pedestrian failure to yield right of way to vehicles crossing outside of a marked or unmarked crosswalk (13.3%) and speeding or driving at dangerously high speed given conditions of the road (13.3%) were the top pedestrian collision violations.

There were 31 pedestrian victims, including 2 fatalities and 5 suspected serious injuries. Older adults in the age range of 55-64 were disproportionately affected, with the highest number of pedestrian victims compared to other age groups.

Modesto: Marshall ES Pedestrian Collision Map (2014 - 2018)



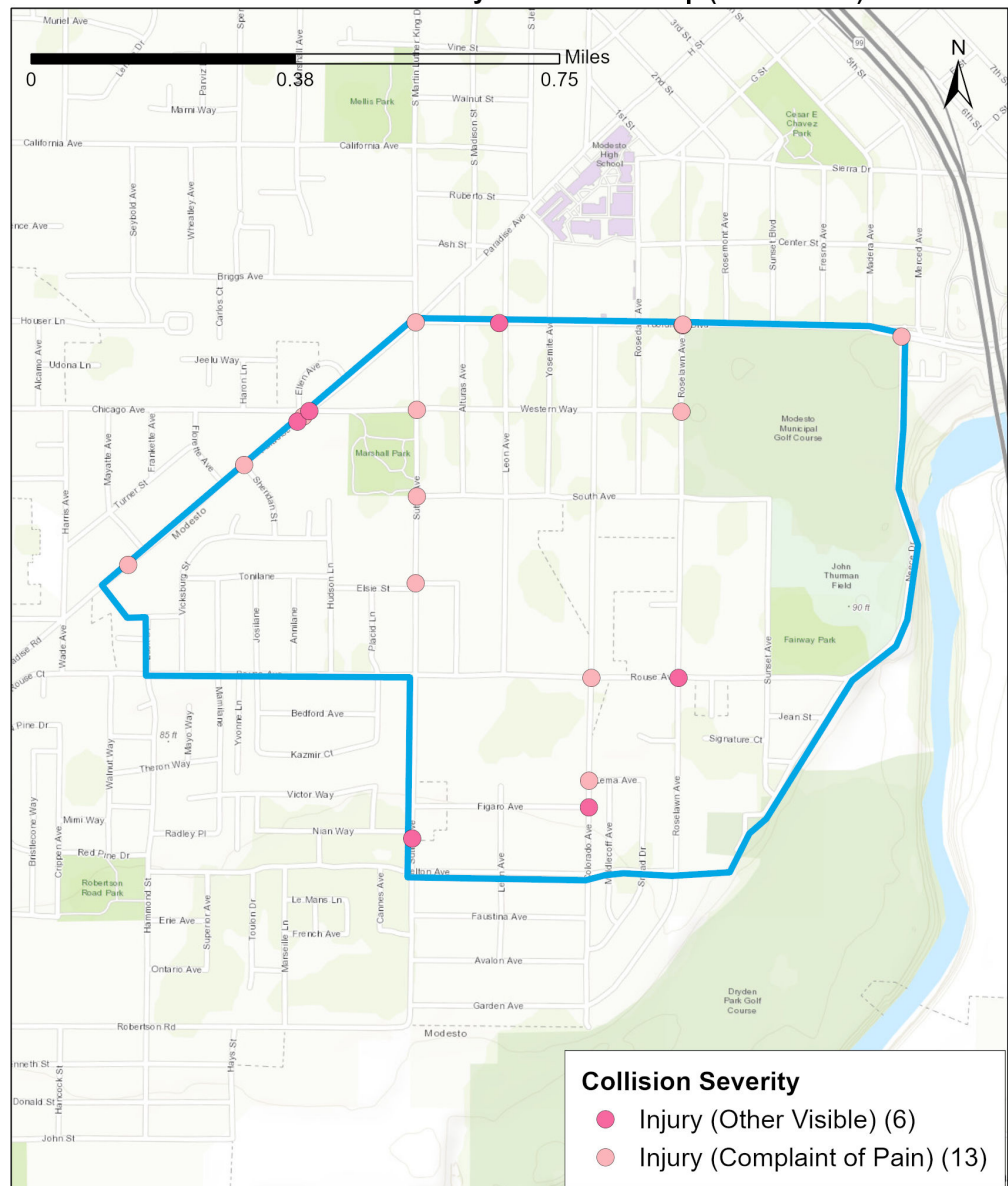
Data Source: Statewide Integrated Traffic Record System (SWITRS) 2014-2018; 2017 and 2018 data are provisional as of Dec. 2019 Date: 3/4/2020

Bicycle Collisions

Over the 10-year period between 2008 and 2019, bicycle collisions appear to be mostly stable. In the most recent five years of data available, 2014 to 2018, there were 21 injury collisions involving bicyclists within the ½ mile radius of Marshall Elementary School. Within the school community boundary, bicycle collisions were concentrated on Paradise Road, Tuolumne Boulevard, Sutter Avenue and Rouse Avenue, similar to pedestrian collision locations. Bicycle collisions occurred during the regular commute hours from 3 p.m. to 6 p.m.

There were 19 bicyclist victims, all resulting in minor injuries to the bicyclist. Adults in the age range of 45-54 were disproportionately affected, comprising 37% of the total number of victims.

Modesto: Marshall ES Bicycle Collision Map (2014 - 2018)



Data Source: Statewide Integrated Traffic Record System (SWITRS) 2014-2018; 2017 and 2018 data are provisional as of Dec. 2019 Date: 3/4/2020

Marshall Asset Map

During the site visit, the Project Team led the Planning Committee through an Asset Mapping exercise to identify resources and assets in the Marshall Elementary School neighborhood that could help them achieve their walking and biking safety goals. Together, they identified the following resources and assets in their community:

People/Personas

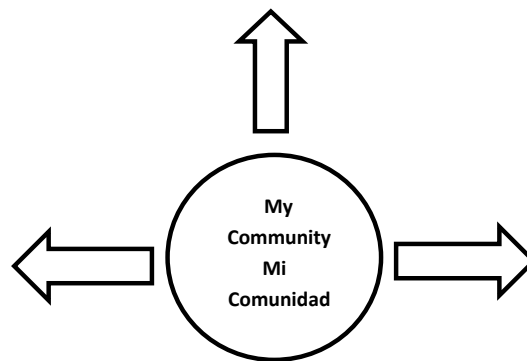
- Perfecto Muniz
- Jas Kandola
- Melissa Aguilar
- Bobby Moser
- Rena
- Roger Orth
- Bruce Lockard
- Adam Barth

Organizations/ Organizaciones

- King Kennedy Center/West Modesto Collaborative
- Catholic Charities Stockton Diocese
- Bridge Community Center
- Sierra Vista Drop in Center
- Safe Kids
- Boys and Girls Club
- Marshall Parents Group

Institutions/ Instituciones

- City of Modesto
- Modesto Police Department
- Modesto Fire Department
- Modesto City Schools
- Modesto Area Express
- Modesto Parks and Recreation
- Maddux Center
- Modesto Nuts



Marshall Elementary School, Modesto, CPBST

In collaboration with:

California Walks | UC Berkeley SafeTREC | James Marshall Elementary School | Stanislaus County Health Services Agency | Modesto City Schools Board of Education | City of Modesto Rideshare | City of Modesto Planning Division | Stanislaus Council of Governments | Doctors Medical Center | Catholic Charities Stockton Diocese | Stanislaus County Health Services Agency

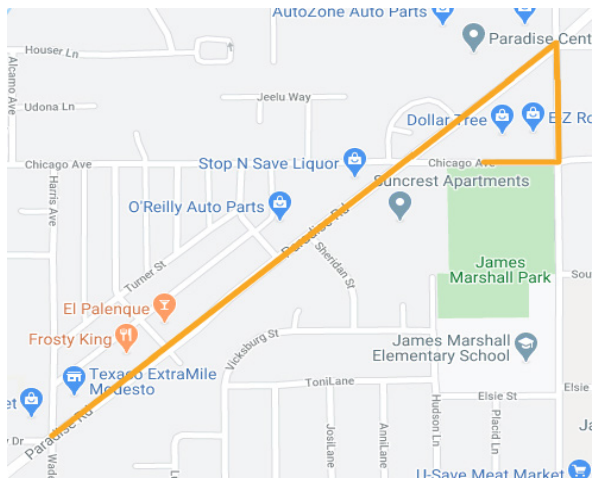
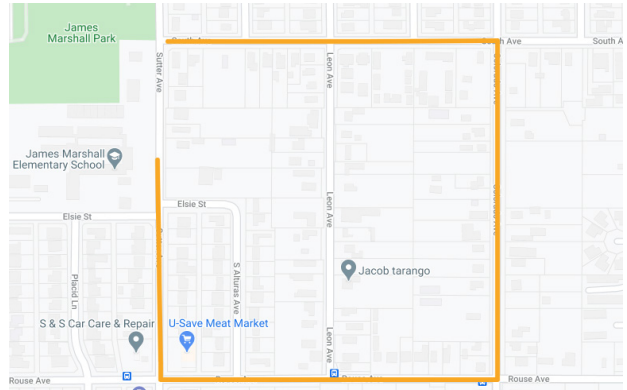
Walking & Biking Assessment

Along the 3 walking and biking assessment routes, participants were asked to:

1. Identify community assets;
2. Assess infrastructure conditions; and
3. Observe how road users are engaging with the built environment.

Walk and Bike Assessment Route 1: Sutter Avenue

Focus: Students and parents walk to and from Marshall Elementary School along Sutter Avenue. There are many safety risks that the Planning Committee wanted to assess including driver behavior and sidewalk gaps.

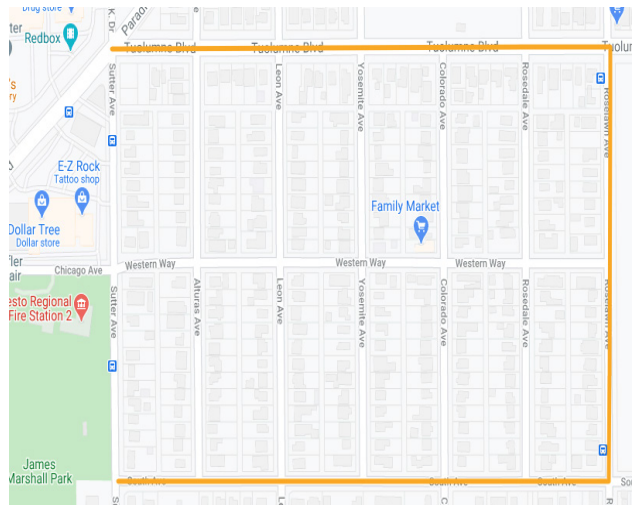


Walk and Bike Assessment Route 2: Paradise Road

Focus: Paradise Road is a highly traveled corridor by all road users, including by pedestrians, bicyclists, and drivers headed to and from Marshall Elementary School. The City is planning a road rightsizing, or lane reduction project that would include installing bike lanes and filling in sidewalk gaps

Walk and Bike Assessment Route 3: Tuolumne Boulevard

Focus: Tuolumne Boulevard is a key arterial in the City that pedestrians and bicyclists use to get to and from James Marshall Elementary School and James Marshall Park. The Planning Committee wanted to assess the challenges for students and parents, as well as those traveling to the senior center on Tuolumne Boulevard.



Assessment Reflections

Following the walking and biking assessments and the Street Story activity, participants shared the following reflections:

Community Assets

- Tuolumne Boulevard, near Roselawn Avenue, is surrounded by trees providing plenty of shade for pedestrians. While this area is relatively close to the freeway, low vehicle volumes create a safe-feeling environment for pedestrians and bicyclists. This space is used by Modesto High School students who run around the perimeter golf course on Roselawn Avenue and community members who use the baseball and soccer fields behind the golf course.



The tree canopy and greenery along Tuolumne Boulevard and neighborhood streets is a community asset.

Sidewalk Connectivity

- Sidewalks on Sutter Avenue, between Chicago Avenue and Tuolumne Boulevard, are narrow. Some bicyclists in this area ride on the sidewalk, creating potential conflict points with pedestrians and students walking to and from Marshall Elementary School.
- Sidewalks on South Avenue, between Roselawn Avenue and Sutter Avenue, are discontinuous. Between Leon Avenue and Sutter Avenue, within a two block radius from Marshall Elementary School, the south side of South Avenue street does not have sidewalks. Children and families walking to or from school have to either walk on the north side of the street—which might not be wide enough to accommodate the flow of pedestrians during school arrival and dismissal times—or walk on the dirt path or road when the dirt path is blocked by cars or when it is covered in puddles of water.



Narrow sidewalks along Sutter Avenue create potential conflict points between bicyclists riding on the sidewalk and pedestrians.



This dirt path and floods along South Avenue. This is pretty common during the rainy season.

Sidewalk Connectivity, cont.

- There are dirt paths instead of sidewalks on the west side of Sutter Avenue and the north side of Elsie Street at the Sutter Avenue/Elsie Street intersection. Drivers often park on these dirt paths when dropping off and picking up their students from Marshall Elementary School and block the pedestrian walkway, forcing pedestrians to walk on the street. This is especially risky during school arrival and dismissal times.



Dirt paths instead of sidewalks at the Sutter Avenue/Elsie Street Intersection.

- The area east of Sutter Avenue from South Avenue to Robertson Road is Stanislaus County. Within those county boundaries, there are missing sidewalks and proper irrigation systems along Elise Street, Rouse Avenue, Alturas Avenue, and Colorado Avenue. These streets are heavily traveled by residents walking to nearby markets or heading to and from Marshall Elementary School. Not having sidewalks forces pedestrians to walk in the dirt paths or on the street, which makes it especially difficult for people using assisted mobility devices. Without sidewalks, there is less protection from drivers for people traveling along these streets.
- During the heavy rain season, there is flooding along the north side of the dirt path on Elsie Street. This flooding forces students to walk on the street because the dirt path gets too muddy for pedestrians to use. Walking on the street is risky, especially during arrival and dismissal time because there is a lot of driver traffic.



The lack of sidewalks on Rouse Avenue forces pedestrians to walk on the road and risk near misses with drivers.



Flooding on Elsie Street forces students to walk in the street because the dirt road gets muddy.

Crossing Challenges

- At the Paradise Avenue/Tuolumne Boulevard intersection, residents are unable to cross the western crosswalk along Sutter Avenue and the southeast crosswalk across Tuolumne Boulevard within the signal timing phase. The southeast crosswalk across Tuolumne Boulevard has a median that does not extend into the crosswalk; however, pedestrians often wait in the median when they are unable to complete the cross during the signal timing phase. Parents shared that students often run in the crosswalks to make it across the street in time. Both crosswalks also have faded standard parallel crosswalk markings that are difficult for approaching drivers to detect. This causes many drivers to stop in the middle of the crosswalk, encroaching on the pedestrian right-of-way.
- The southwest corner of the Paradise Avenue/Tuolumne Boulevard intersection has a wide turning radius which allows drivers traveling northeast on Paradise Road to turn right onto Sutter Avenue without slowing down adequately. There are many near misses between drivers who fail to stop before the crosswalk and pedestrians walking along and across the faded crosswalks on Sutter Avenue.



The five crosswalks at the Paradise Avenue/Tuolumne Boulevard intersection are faded and create potential conflict points between pedestrians in the crosswalk and drivers encroaching in the crosswalk.



Tire friction marks made by drivers traveling northeast on Paradise Road and turning at a high speed onto Sutter Avenue.



The ladder crosswalk markings along Paradise Avenue, at Florette Avenue (left) and Sheridan Street (right) are faded.

- Intersections along Paradise Road, including Ellen Avenue, Sheridan Street, and Florette Avenue are unsignalized and have faded ladder crosswalk markings only at one leg of each intersection. Participants noted that many drivers appear to be driving above the 35 m.p.h. posted speed limit and fail to yield to pedestrians at these intersections. Residents typically have to wait several minutes before drivers traveling in both directions stop for them to cross. Participants have seen many near misses at these intersections, particularly when a driver traveling in one direction stops for a pedestrian in the crosswalk, but the driver traveling in the opposite direction fails to see them.
- The northern ladder crosswalk at the Paradise Avenue/Chicago Avenue intersection is faded and does not span the entire length of Paradise Avenue. On the west end, the marked crosswalk leads pedestrians into parking spaces. The parking spaces are diagonal, so drivers must drive through the crosswalk in order to enter and exit the parking space. This causes near misses with pedestrians who are in the middle of the crosswalk. On the east end, the crosswalk markings end before pedestrians are able to make it safely onto the sidewalk. There are faded bulb-out markings on the east end of the crosswalk; however, they are so faded that most drivers drive through the bulb-outs. This, too, also causes near misses between drivers and pedestrians.



The northern crosswalk at the Paradise Avenue/Chicago Avenue intersection leads pedestrians into parked cars on the west side and drops them off into the street on the east side.



The faded bulb-out marking on the east end of the crosswalk at the Paradise Avenue/Chicago Avenue intersection.

- Tuolumne Boulevard is a 5-lane corridor with two travel lanes in each direction and one turning lane in the center. This corridor has a posted speed limit of 25 miles per hour and is a designated school zone. Some intersections have crossing features. For example, there is a Rectangular Rapid Flashing Beacon (RRFB) at the Tuolumne Boulevard/Yosemite Avenue intersection and a marked crosswalk at the Tuolumne Boulevard/Rosedale Avenue intersection. However, residents entering Modesto High School on the south side cross Tuolumne Boulevard at the unmarked crosswalks at the Colorado Avenue and Leon Avenue intersections. This is risky because they have to wait until there is no vehicle traffic. With no signage or indication of pedestrians here, crossing drivers often do not yield to pedestrians.



There is no signage or indicators to drivers that pedestrians might be crossing at the Colorado Avenue/Tuolumne Boulevard intersection.



The southeast entrance to the school is at the Elsie Street/Hudson Lane intersection. It is heavily used by students and parents, but does not have a crossing guard to help direct traffic.

- There is an additional drop-off and pick-up area at the southeast side of Marshall Elementary. The two crosswalks at the Elsie Street/Hudson Lane intersection are faded and inconsistent; the south crosswalk has ladder markings and the west crosswalk has standard parallel markings. There is no crossing guard to direct traffic in this area and drivers seem to be driving above the 25mph speed limit. Furthermore, drivers often do not yield to pedestrians as parents are trying to pick up and drop off their children.

- The Sutter Avenue/Rouse Avenue intersection has standard parallel crosswalks on all four legs that are faded and in some sections, completely missing. The faded crosswalk markings cause drivers to stop in the crosswalk and encroach into the pedestrian right-of-way. This behavior forces them to walk outside of the crosswalk lines.



Drivers don't stop ahead of the faded crosswalk markings at the Sutter Avenue/Rouse Avenue intersection. .

Visibility Challenges

- Street lighting along Paradise Road is oriented towards the street, not the sidewalks where pedestrians may be walking. Participants shared that the lack of pedestrian-scale lighting makes this area feel unsafe for walking at night. They also noted that there is insufficient street lighting illuminating the street, causing near misses with pedestrians crossing at Ellen Avenue, Chicago Avenue, Sheridan Street, and Florette Avenue intersections at night.

Road User Behavior

- The Colorado Avenue/South Avenue intersection has stop signs on the South Avenue leg. Pedestrians crossing Colorado Street where there are no stop signs need to wait for drivers to yield in order to be able to cross the street. Additionally, the crosswalks are unmarked. Crossing thus is difficult because there are no clear indicators drivers that pedestrians might be present.
- In addition to the unmarked crosswalks at this intersection, drivers appear to be driving above the 25 mph speed limit through Colorado Avenue, despite the roads being old and bumpy. South Avenue does not have sidewalks; therefore, bicyclists and pedestrians compete for space along the dirt shoulder and road area.
- The South Avenue/Sutter Avenue T-intersection has two yellow ladder crosswalks along Sutter Avenue and a standard parallel crosswalk along South Avenue. Participants shared that, despite having stop signs on all three legs, drivers still do not yield to pedestrians. Many families and children use these crosswalks and face risks when drivers do not stop.



Pedestrians often wait a long time for drivers to yield at the Colorado Avenue leg of the Colorado Avenue/South Avenue intersection.



The South Avenue/Colorado intersection where drivers appear to be speeding is just within a few blocks away from James Marshall Elementary School



The South Avenue/Sutter Avenue intersection is used by residents to get to the park and Marshall Elementary School.



Parents and students enjoy having the RRFB signal to drivers that pedestrians are crossing, but drivers still speed through the intersection without stopping for pedestrians waiting to cross.

Road User Behavior, cont.

- There is a RRFB on the northwest corner of the Sutter Avenue/Elsie Street intersection. Despite the RRFB, drivers often speed through the intersection and do not yield to pedestrians. Students and parents often feel unsafe crossing here.
- The Sutter Avenue/Rouse Avenue intersection is a 4-way stop with a standard parallel crosswalk on all 4 legs. Participants shared that drivers often do not stop at the stop signs and do not yield to pedestrians. Even though it is one of the safer places to cross because it has marked crosswalks and stop signs at all legs, pedestrians often have to wait a long time for drivers to let them cross.

Stray Dogs

- There are many stray dogs along Sutter Avenue. It is hard to distinguish whether or not they are friendly and they often scare the students walking to and from Marshall Elementary School.

Lack of Shade Trees

- Modesto experiences high temperatures in the summer, making the lack of trees, shaded areas, and bus shelters on Sutter Avenue an uncomfortable walking experience for pedestrians.



Lack of bus shelters and trees make waiting for the bus and walking along Sutter Avenue an uncomfortable walking experience..

Recommendations to Improve Walking and Biking Safety

Community Recommendations

During the action planning sessions, participants prioritized and outlined preliminary plans for community programs and infrastructure projects aimed at increasing the health and safety of the community. Participants considered the following programs/projects:

- Address flooding issues along Sutter Avenue and at the Sutter Avenue/South Avenue intersection;
- Report faded crosswalks via GoModesto;
- Restripe all high-visibility crosswalks;
- Install a Rectangular Rapid Flashing Beacon at the Sutter Avenue/South Avenue intersection;
- Install street-oriented lighting for drivers and pedestrian-scale lighting for pedestrians to increase visibility between all road users;
- Install sidewalk along Elsie Street to provide more protection to pedestrians;
- Develop a student safety patrol program where high school students train elementary school students to be student safety patrols and share walking and biking safety tips;
- Launch a community education campaign to designate safe walking routes, host virtual walking and biking safety training for parents and residents, share walking and biking safety resources, and host a Walk & Bike to School Day activity, including a safety assembly and helmet giveaway; and
- Install crosswalks at the Leon Avenue/Tuolumne Boulevard intersection and Tuolumne Boulevard/Colorado Avenue intersection to create safer crossing conditions for families and children using these unmarked crosswalks.

The following tables summarize the recommendations identified as the highest priority by workshop participants.

Project Name: Community Safety and Crossing Guard Program

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Project Description: Marshall Elementary School parents will develop a crossing guard program to be implemented at the southeast entrance of the school at the Elsie Street/Hudson Lane intersection so parents can help ensure students cross safely. Parents will also work with the school to keep the southeast entrance to the school open 20 minutes longer (as it closes right after the morning bell) so that crossing guards can supervise the area for late-arriving students. The Community Safety Program will address the issues around student safety and promote school attendance. Parents will also advocate for infrastructure changes around the school.

Project Goals:

1. Ensure the safe arrival and dismissal of Marshall Elementary School students;
2. Prevent injury of students and parents by providing a crossing guard at the crosswalks at the Elsie Street/Hudson Lane intersection;
3. Ensure students arriving tardy still make it into the school; and
4. Implement infrastructure changes around the school through parent advocacy.

Action Steps	Timeline	Responsible Party	Resources
<p>Outreach Plan</p> <ul style="list-style-type: none"> • Set up a meeting with Principal Guerrero to develop a plan to recruit parent volunteers for the program. • Talk to yard duty staff and principal about making sure that students are still able to physically enter the school at the southeast entrance even after the gate is closed. • Send out flyers with the students • Use automated calling to send the information to parents 	<p>January 2021</p>	<p>Planning Committee</p>	<p>Student Drop-off and Pick-up Tools</p>

Project Name: Community Safety and Crossing Guard Program, cont.

Action Steps	Timeline	Responsible Party	Resources
<p>Advocate to repaint faded crosswalks at the Elsie Street/Hudson Lane intersection.</p> <ul style="list-style-type: none"> Discuss the crosswalks around the school needed for improvement 	Spring 2021	Parent Group	Make a Request (GoModesto! App)
<p>Train Parents: Develop a series of trainings in Spanish for parents to learn crossing guard guidelines to become cross guards.</p>	Spring 2021	Parent Group	Crossing Guard Guidelines
<p>Implement Program</p> <ul style="list-style-type: none"> Develop calendar and schedule shifts for parent volunteers Purchase crossing guard materials such as vest and stop sign 	Fall 2021	Parent Group	Making Walking and Biking to School a Safe and Fun Activity

Project Name: Install Rectangular Rapid Flashing Beacons (RRFB) and high-visibility crosswalks at key intersections along Paradise Road.

Project Name: Install Rectangular Rapid Flashing Beacons (RRFB) and high-visibility crosswalks at key intersections along Paradise Road.

Project Description: The Planning Committee (PC), Marshall Elementary School staff and parents will work with the City of Modesto to prioritize which unsignalized intersections along Paradise Road could enhance walking and biking safety by installing RRFBs and high-visibility crosswalk markings, including creative crosswalks. Workshop participants have identified the Paradise Road/Sheridan Street and Paradise Road/Chicago Avenue intersections as potential sites for improvement because of the volume of pedestrian traffic in those areas. These intersection improvements can be coupled with the slated reconfiguration of Paradise Road in the Summer 2021.

Project Goals:

1. Improve visibility between drivers and pedestrians at uncontrolled intersections along Paradise Road;
2. Alert drivers that pedestrians are attempting to cross east-west on Paradise Road so they can yield to pedestrians; and
3. Create a brighter and safer environment for pedestrians and bicyclists to travel along Paradise Road.

Action Steps	Timeline	Responsible Party	Resources
<p>Review the City’s plans for slated improvements to Paradise Road</p> <ul style="list-style-type: none"> • PC and Marshall Elementary School staff and parents to read through the City’s plans for reconfiguring Paradise Road to understand slated improvements • PC and Marshall Elementary School staff and parents to share their priorities for RRFBs and high-visibility crosswalk marking installation to the City • PC and Marshall Elementary School staff and parents to advocate to the City to install high-visibility creative crosswalks at the designated intersections 	<p>Fall 2020</p>	<p>Planning Committee</p> <p>Marshall Elementary School Staff and parents</p>	<p>Paradise Road Environmental Fact Sheet</p> <p>Safe Routes to School Guide: Promising Examples & Community Success Stories</p> <p>Safe Routes to School Guide Engineering: Crossing the Street</p>

Project Name: Install Rectangular Rapid Flashing Beacons (RRFB) and high-visibility crosswalks at key intersections along Paradise Road, cont.

Action Steps	Timeline	Responsible Party	Resources
<p>PC, Marshall Elementary School staff and parents advocate for the City to apply for funding for improvements</p> <ul style="list-style-type: none"> PC, Marshall Elementary School staff and parents to stay involved in the progression of enhancements to Paradise Road 	<p>Fall 2020/ Spring 2021</p>	<p>Planning Committee</p>	<p>Potential funding sources:</p> <p>Transformative Climate Communities Sustainable Transportation Equity Project</p> <p>State Highway Operations and Protection Program</p>

Project Name: Roadway Improvement Projects around Marshall Elementary School

Project Name: Roadway Improvement Projects around Marshall Elementary School

Project Description: The Planning Committee will advocate to the City to install short, medium, and long-term engineering projects that support safe walking and biking around Marshall Elementary School. These engineering projects will focus on restriping high visibility crosswalks, installing the RRFB and addressing issues of flooding.

Project Goals:

1. Improve crossing safety for students, parents, and community members around Marshall Elementary School and neighboring destinations, such as neighborhood markets and Modesto High School.
2. Improve flooding conditions.

Action Steps	Timeline	Responsible Party	Resources
<p>Short-term project: High-Visibility Restriping</p> <ul style="list-style-type: none"> • School staff and Planning Committee will work with community residents to submit requests to the City using the GoModesto! App to restripe all marked crosswalks and unmarked crosswalks with high-visibility markings in the school community • School staff and Planning Committee will follow up with City staff on the timeline of improvements 	<p>Fall 2020</p>	<p>CPBST Planning Committee</p>	<p>Make a Request (GoModesto! App)</p> <p>Use the CPBST Summary & Recommendations Report section on Walking and Biking Reflections to prioritize areas of need.</p>

Project Name: Roadway Improvement Projects around Marshall Elementary School, cont.

Action Steps	Timeline	Responsible Party	Resources
<p>Medium-term Project: RRFB</p> <ul style="list-style-type: none"> • Planning Committee will advocate to the City to Install a RRFB at the Sutter Avenue/ South Avenue intersection • Present the need for an RRFB to the to City, including school community reflections, CPBST Summary & Recommendations report and crash data 	<p>Fall 2020 - Spring 2021</p>	<p>CPBST Planning Committee</p>	<p>Make a Request (GoModesto! App)</p> <p>StanCOG & City of Modesto plans</p>
<p>Long-term Projects: Address Flooding Issues</p> <ul style="list-style-type: none"> • The Planning Committee will advocate to the City to address flooding along Sutter Avenue and at the Sutter Avenue/South Avenue intersection 	<p>Fall 2020 - Fall 2021</p>	<p>CPBST Planning Committee</p>	<p>Make a Request (GoModesto! App) GoModesto App</p> <p>CPBST Summary & Recommendations Report</p>

Project Team Recommendations

The Project Team submits the following recommendations for consideration based on short-term, and long-term projections. Implementation of recommendations may take more or less time dependent on individual community factors. .

Short-Term Recommendations

Road Safety Educational Opportunities

The Project Team **recommends Marshall Elementary School staff collaborate with Doctors Medical Center of Modesto, which is leading the [Safe Kids Stanislaus County](#) Coalition to provide community education to keep children safe.** The Safe Kids Stanislaus County Coalition provides education in the form of general safety workshops and car-seat check-ups to prevent injuries. An event hosted by Safe Kids Stanislaus County in collaboration with Marshall Elementary School can help bring awareness about road safety and center children in discussions of road safety. While in-person trainings may not be feasible because of the Covid-19 pandemic, Marshall Elementary School staff can begin planning and identifying potential audiences. Alternatively, school staff and Safe Kids Stanislaus County can also plan for a safety event during Covid-19 in the form of a drive-through exhibit or a virtual meeting.

Develop a Safe Routes to School (SRTS) Plan for Marshall Elementary School

The Project Team **recommends the City of Modesto and Modesto City Schools develop a [SRTS Plan for Marshall Elementary School](#)** to improve walking and biking conditions for students walking to and from schools, particularly along streets that do not have sidewalks. The plan could include ways to safely navigate lack of proper infrastructure at Sutter Avenue, Elsie Street, Paradise Road, and Tuolumne Boulevard. A SRTS Plan can identify key infrastructure enhancements and programming to mitigate potential conflicts with lack of infrastructure and driver habits traveling near schools.

Community-Led Walking and Biking Safety Messaging Campaign

The Project Team **recommends the Planning Committee work with the City to develop a community-led walking and biking safety messaging campaign around Marshall Elementary School.** Safety messages for all road users can be placed throughout the school zone, including utility boxes, bus shelters and key conflict intersections. Messages can highlight common violations preceding pedestrian crashes e.g., failure of drivers to yield right of way to pedestrians and speeding, as well as laws around pedestrian right-of-way at crosswalks. Parents have identified Sutter Avenue, Rouse Avenue, South Avenue, Paradise Road, and Tuolumne Boulevard as areas to target for safety messaging because of the amount of foot traffic from students going to and from James Marshall Elementary School and continuous unsafe driver behavior. Community residents and students can be incorporated into the campaign and model walking and biking to encourage different modes of transportation. The Southern California Association of Government's [GoHuman Campaign](#) can serve as a model for a safety messaging campaign around Marshall Elementary School.

Long-Term Recommendations

Statewide Funding Sources for Pedestrian and Bike Infrastructure and Non-Infrastructure Improvement Projects

The Project Team **recommends the City of Modesto explore funding opportunities to implement pedestrian and bicycle facilities recommendations in western Modesto, especially near Marshall Elementary School.** Potential funding sources include:

[The Transformative Climate Communities Program](#) (TCC) is administered by the Strategic Growth Council and the Department of Conservation and funds bicycle and pedestrian facilities projects in California's most disadvantaged communities.

[The Sustainable Transportation Equity Project](#) (STEP) is administered by the Air Resources Board and can support various types of pedestrian and bicycle facilities. Funding is intended to help low-income and disadvantaged communities identify residents' transportation needs.

[The State Highway Operations and Protection Program](#) (SHOPP) is administered by Caltrans and is responsible for planning, developing, managing and reporting the four-year SHOPP portfolio of projects. The Program is the State Highway System's "fix it first" program that funds repairs and preservation, emergency repairs, safety improvements, and some highway operational improvements on the State Highway System. Eligible projects include bike and pedestrian facilities.

Caltrans also manages the [Active Transportation Program](#). The ATP provides funding to communities throughout California to support infrastructure projects, non-infrastructure projects and Plans to further active modes of transportation like walking and biking.

The [California Office of Traffic Safety](#) provides [Pedestrian and Bicycle Safety Grants](#) that promote safe behaviors and the use of roadways when walking or biking. Programs are designed for high-risk populations, including youth and older community members, all in an effort to teach safer driving, bicycling, and walking behaviors.

Appendix A: Data Analysis

Pedestrian and Bicycle Collision Data Analysis

- Marshall Elementary School, Modesto CPBST Workshop Data Factsheet
- Marshall Elementary School, Modesto CPBST Site Visit Data Presentation

Marshall Elementary School Pedestrian & Bicycle Data


Community Pedestrian and Bicycle Safety Training Workshop (CPBST)
Modesto, CA | September 10, 2020


In California, more than one in four people who died in a collision is a pedestrian or bicyclist. There was a 0.8 percent increase in pedestrian deaths from 2016 to 2017 and a 6.5 percent decrease in cycling deaths (FARS 2016 and 2017). 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.

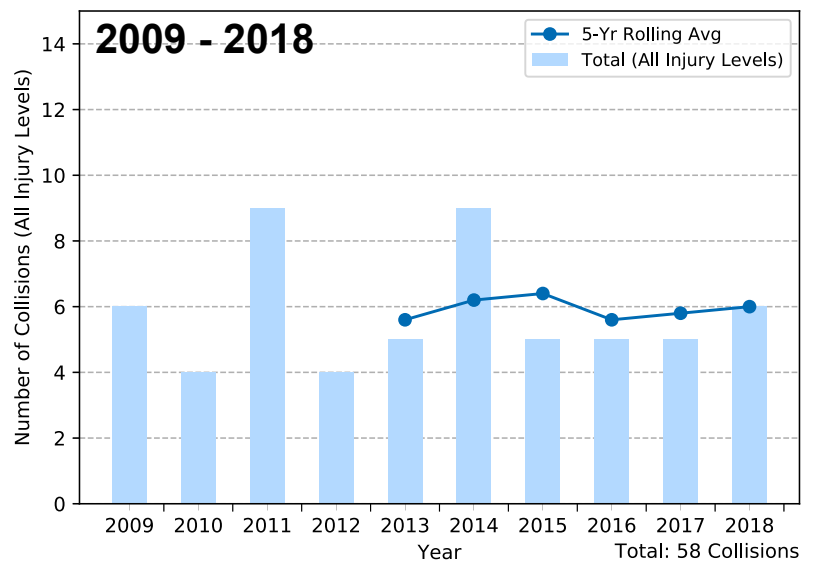
The **local data seen below reflects collision data from the last 5 years (2014-2018)** within a boundar, predetermined by the members of the Planning Comittee around the Marshall Elementary School community.

Pedestrian Collisions Over Time

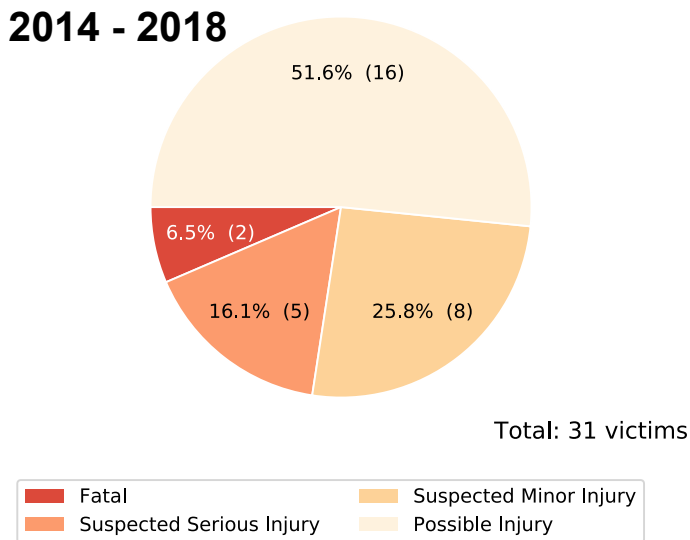
The number of collisions appear to be **mostly stable**.

 **61** pedestrians injured

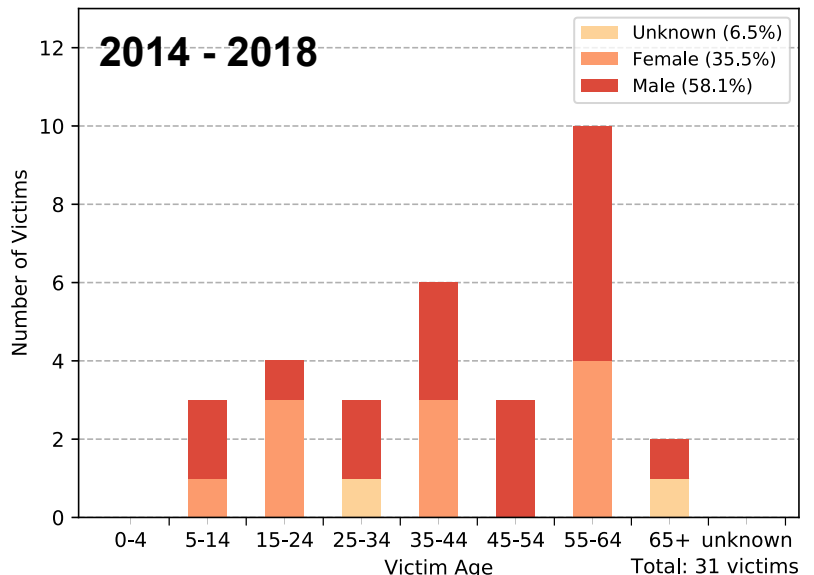
 **58** pedestrian collisions



Victim Injury Severity — Victim Demographics



22.6% fatalities or serious injuries



30.8% of victims were under the age of 25

Bicycle Collisions Over Time

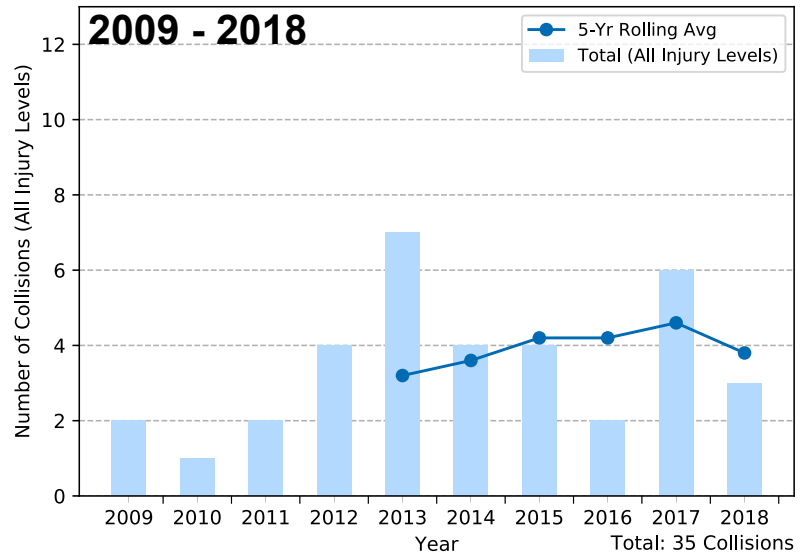
The number of collisions appear to be *mostly stable*.



35 bicyclists injured

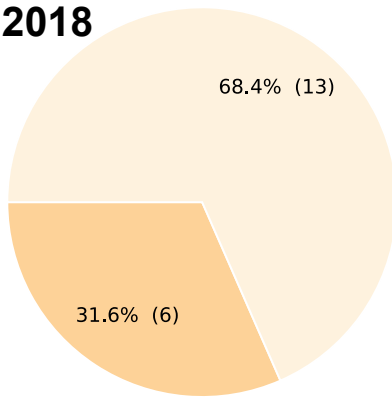


35 bicycle collisions



Victim Injury Severity — Victim Demographics

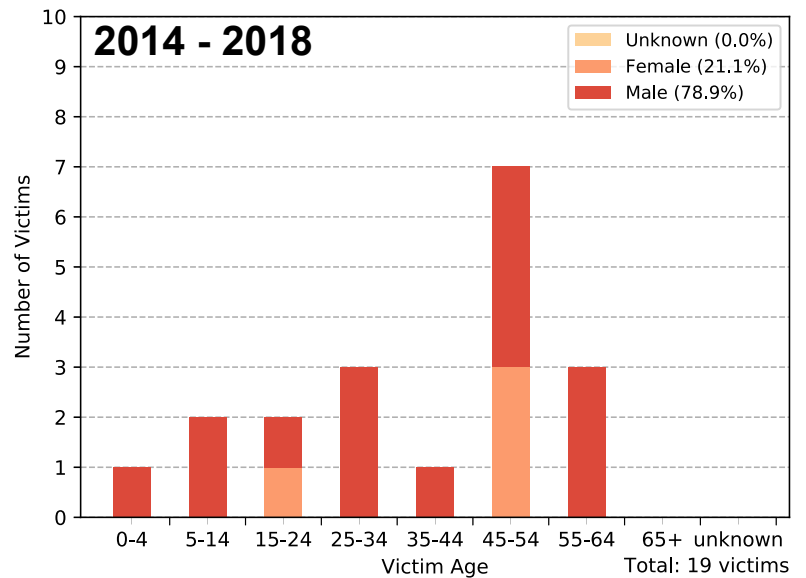
2014 - 2018



Total: 19 victims

■ Suspected Minor Injury
 ■ Possible Injury

All victims suffered minor injuries.



78.9% of victims were male

What other data could help inform decision-making?

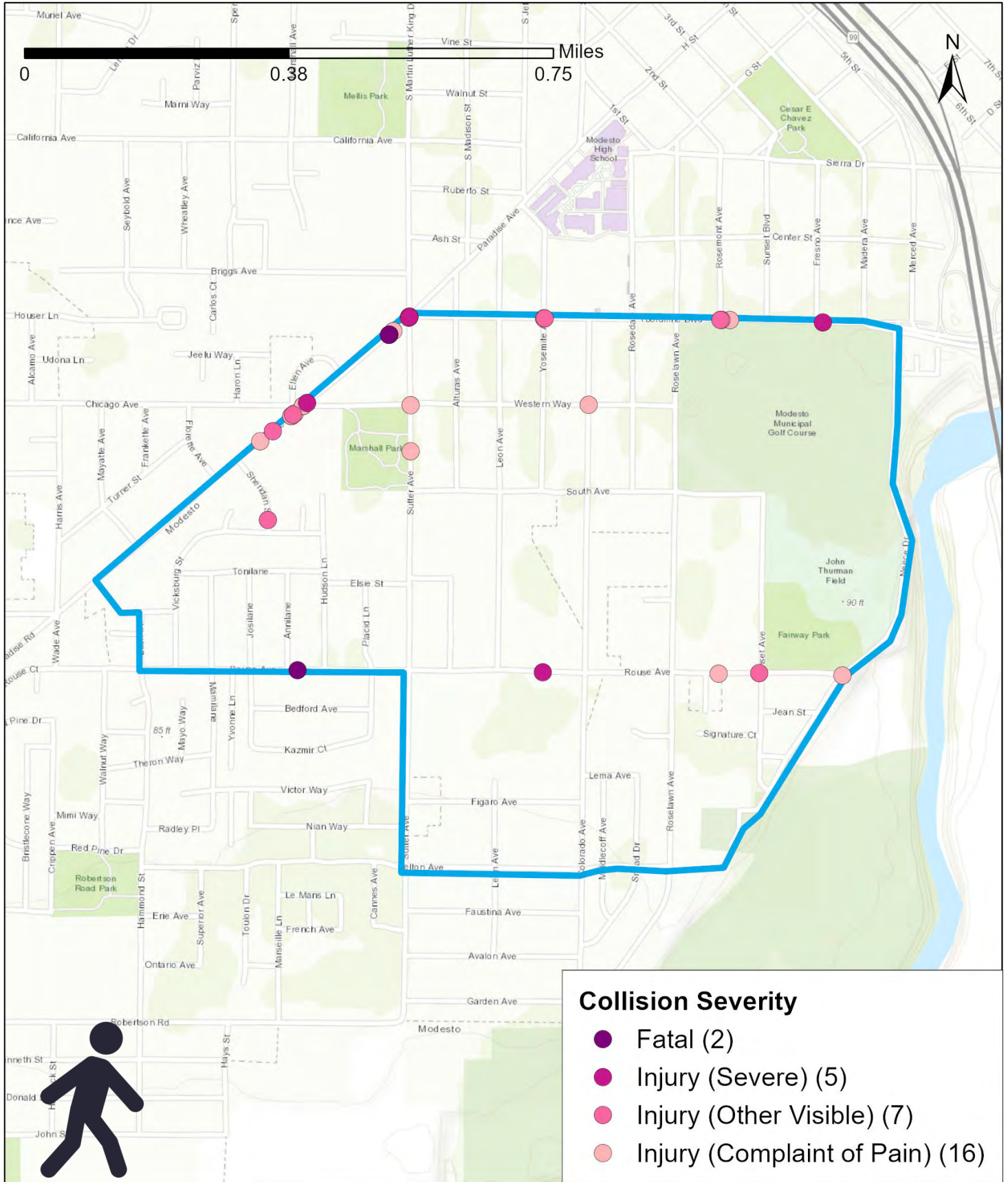
While these numbers do not tell the whole story, do they resonate with your experience?

What kinds of improvement do you think could help make walking and biking safer in your community?

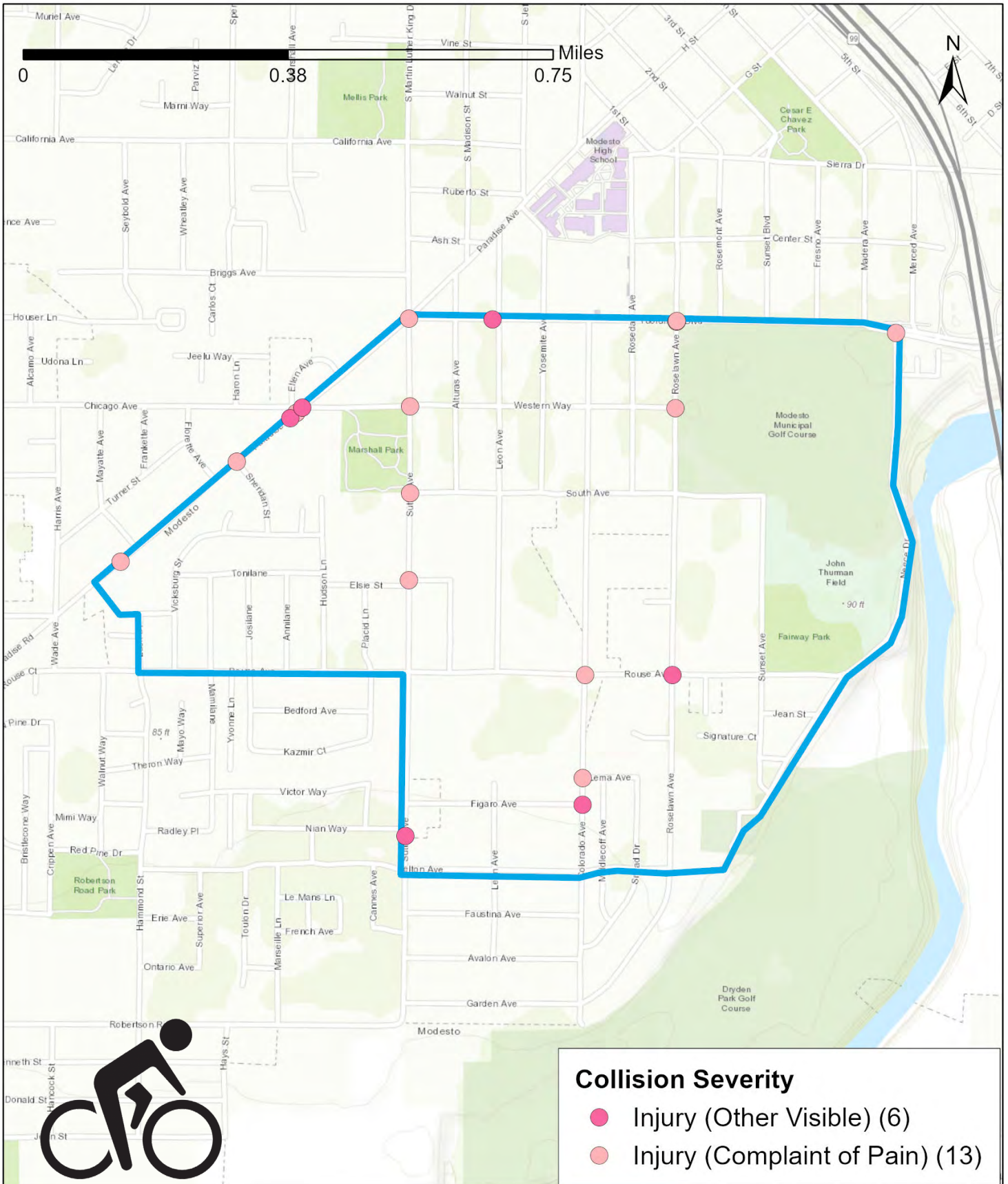
To learn more about collision data in your community, visit the free tools available through the Transportation Injury Mapping System (tims.berkeley.edu). For additional assistance, email us at safetrec@berkeley.edu.



Marshall Elementary School Pedestrian Collision Map (2014 - 2018)



Marshall Elementary School Bicycle Collision Map (2014 - 2018)



Pedestrian and Bicycle Collision History

Marshall Elementary School, Modesto, California

CPBST Site Visit

Friday, July 31, 2020

Ana Lopez

ana.lopez@berkeley.edu

Pedestrian and Bicycle Injury Collisions (2014-2018)

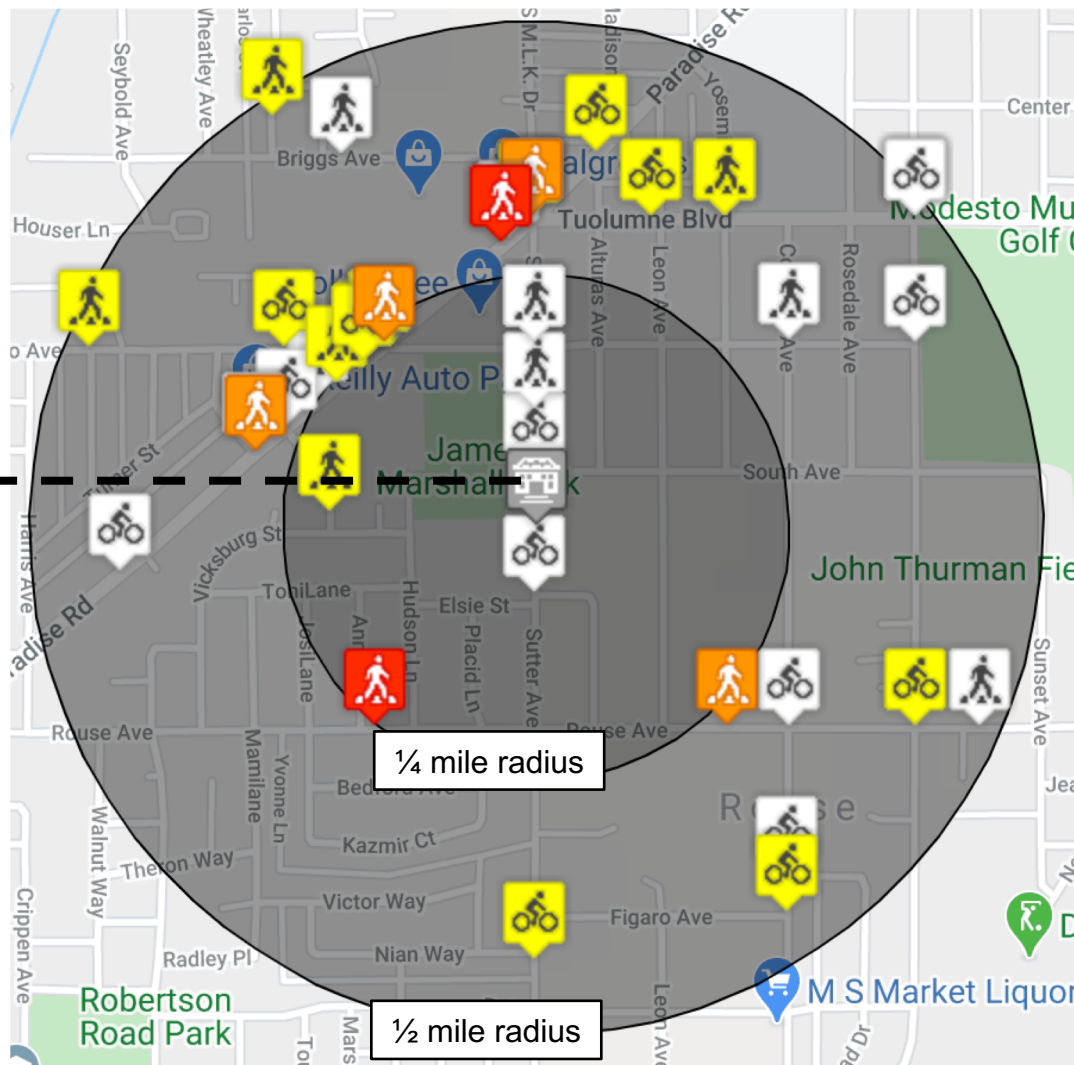


28 pedestrian collisions



21 bicycle collisions

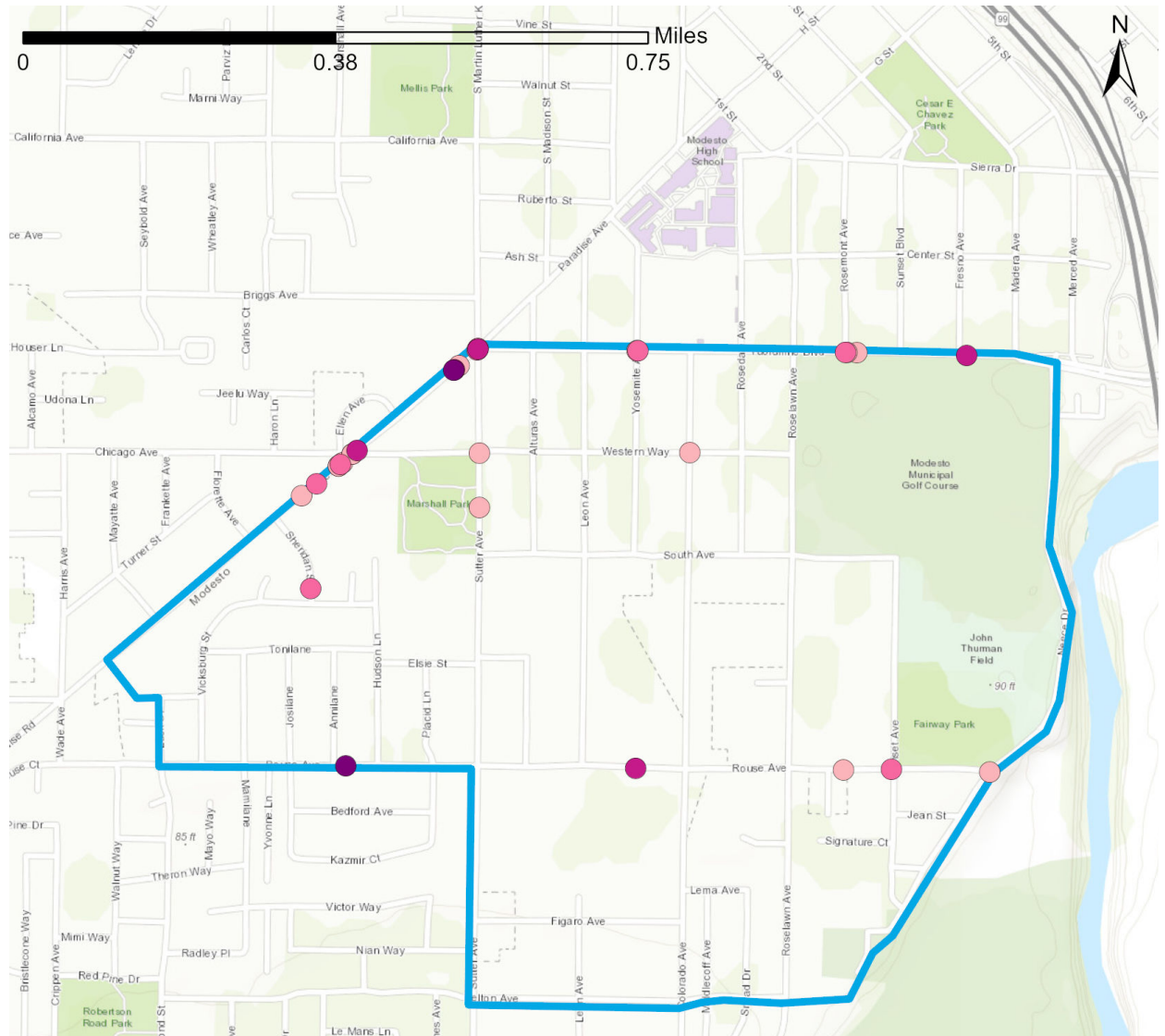
James Marshall
Elementary School
515 Sutter Ave, Modesto 95351



Pedestrian Injury Collisions Map (2014-2018)

Collision Severity

- Fatal (2)
- Injury (Severe) (5)
- Injury (Other Visible) (7)
- Injury (Complaint of Pain) (16)



Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019.

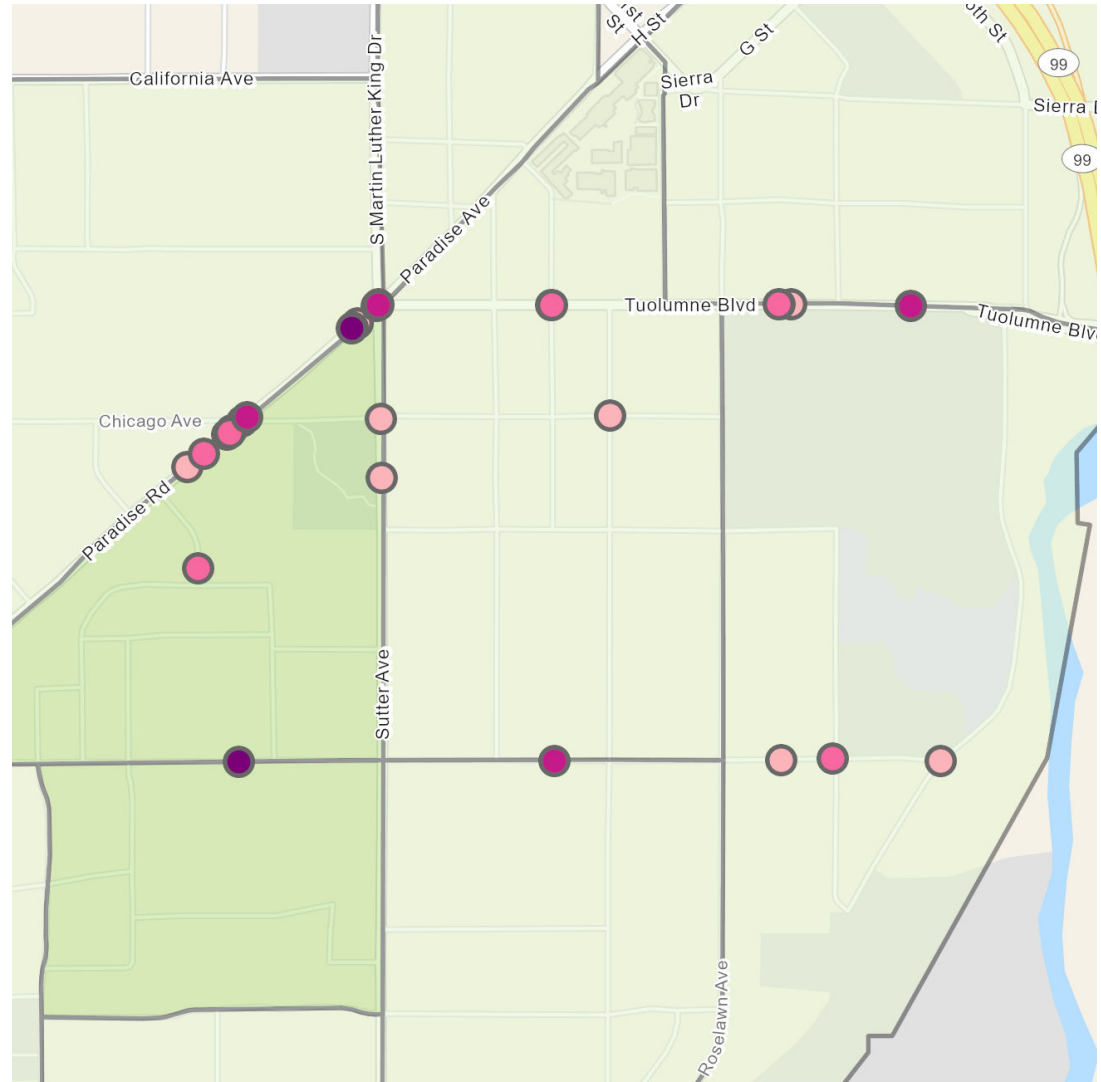
Pedestrian Injury Collisions Map with Income (2014-2018)

Collision Severity (2014-2018)

- Fatal (2)
- Injury (Severe) (5)
- Injury (Other Visible) (7)
- Injury (Complaint of Pain) (16)

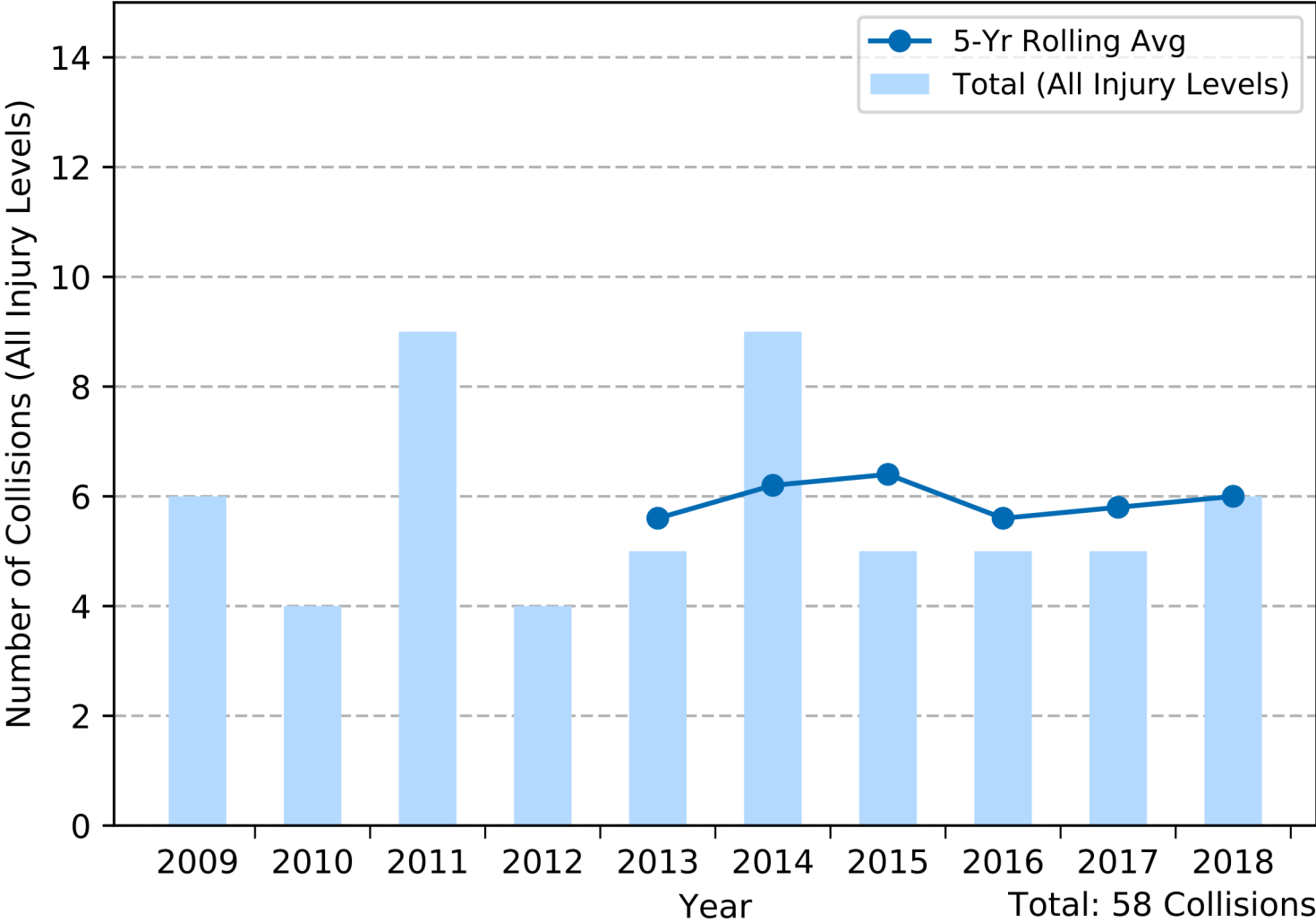
2017 Median Household Income

- < 35K
- 35K - 50K



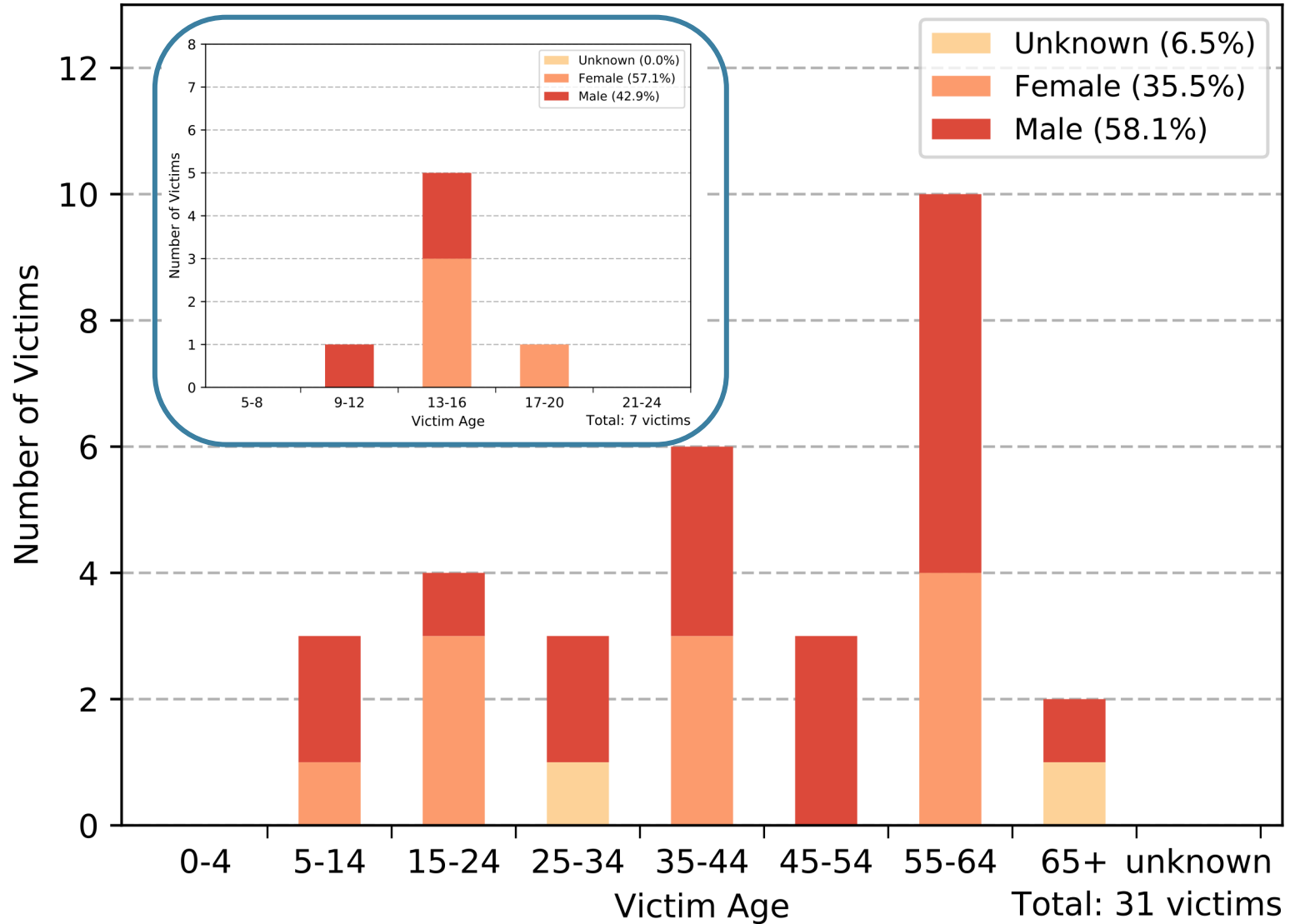
Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019.
Demographics – ESRI, US Census Bureau, and ACS

Pedestrian Injury Collisions Trend (2009-2018)



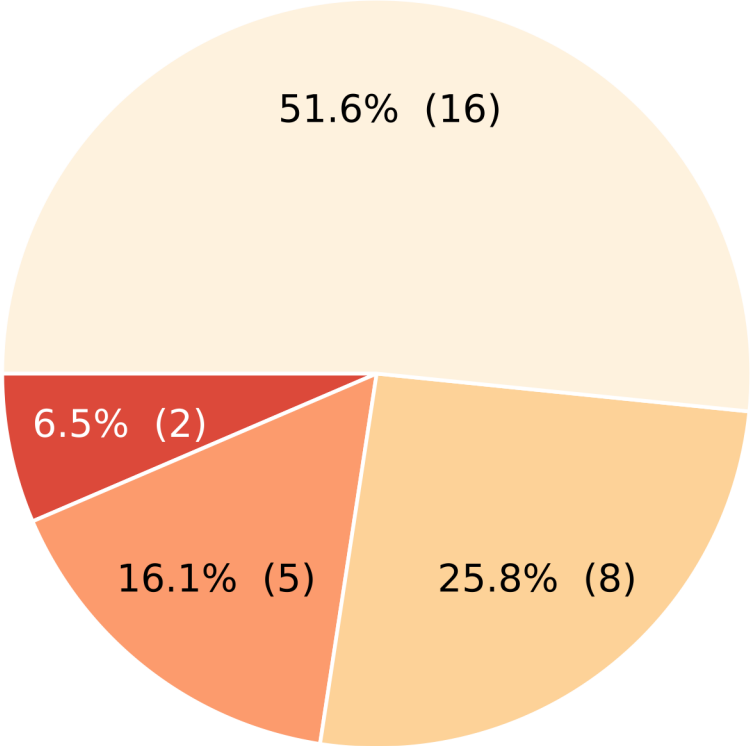
Data Source: Statewide Integrated Traffic Records System (SWITRS) 2009-2018; 2018 data is provisional as of Dec 2019.

Pedestrian Victim Injury (2014-2018) by age and gender



Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019.

Pedestrian Victim Severity (2014-2018)



Total: 31 victims



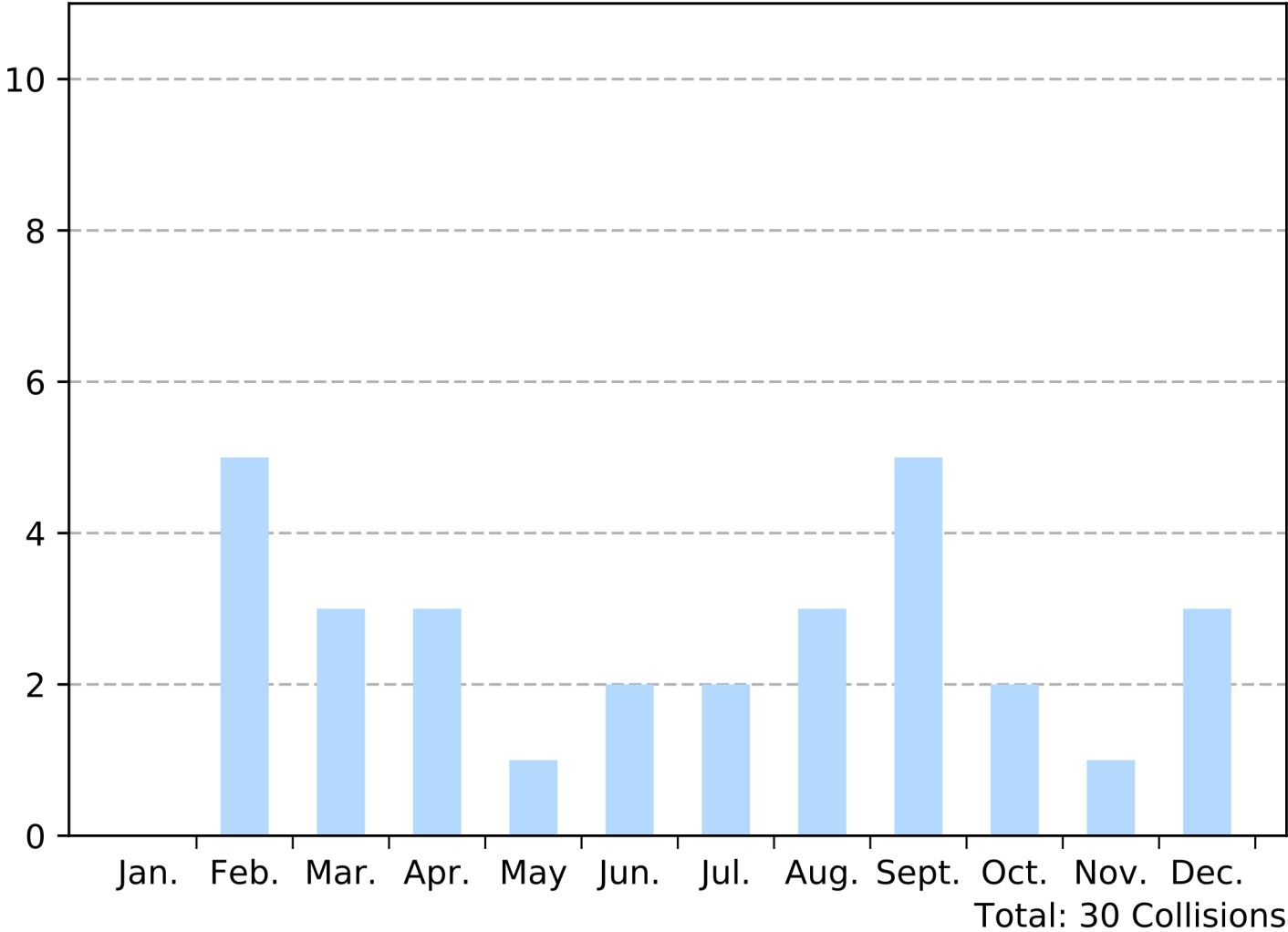
Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019.

Pedestrian Collisions (2014-2018) by Time of Day and Day of Week

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
09:00PM-11:59PM	0	1	2	1	1	1	0	6
06:00PM-08:59PM	2	1	1	0	0	2	0	6
03:00PM-05:59PM	2	1	0	0	1	1	0	5
Noon-02:59PM	1	0	0	0	0	1	0	2
09:00AM-11:59AM	0	0	0	1	0	2	0	3
06:00AM-08:59AM	1	1	1	1	1	0	1	6
03:00AM-05:59AM	0	0	0	0	1	1	0	2
Midnight-02:59AM	0	0	0	0	0	0	0	0
Total	6	4	4	3	4	8	1	30

Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019.

Pedestrian Collisions (2014-2018) by Month



Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019.

Pedestrian Collisions (2014-2018) by Type of Violation (Top Violations)

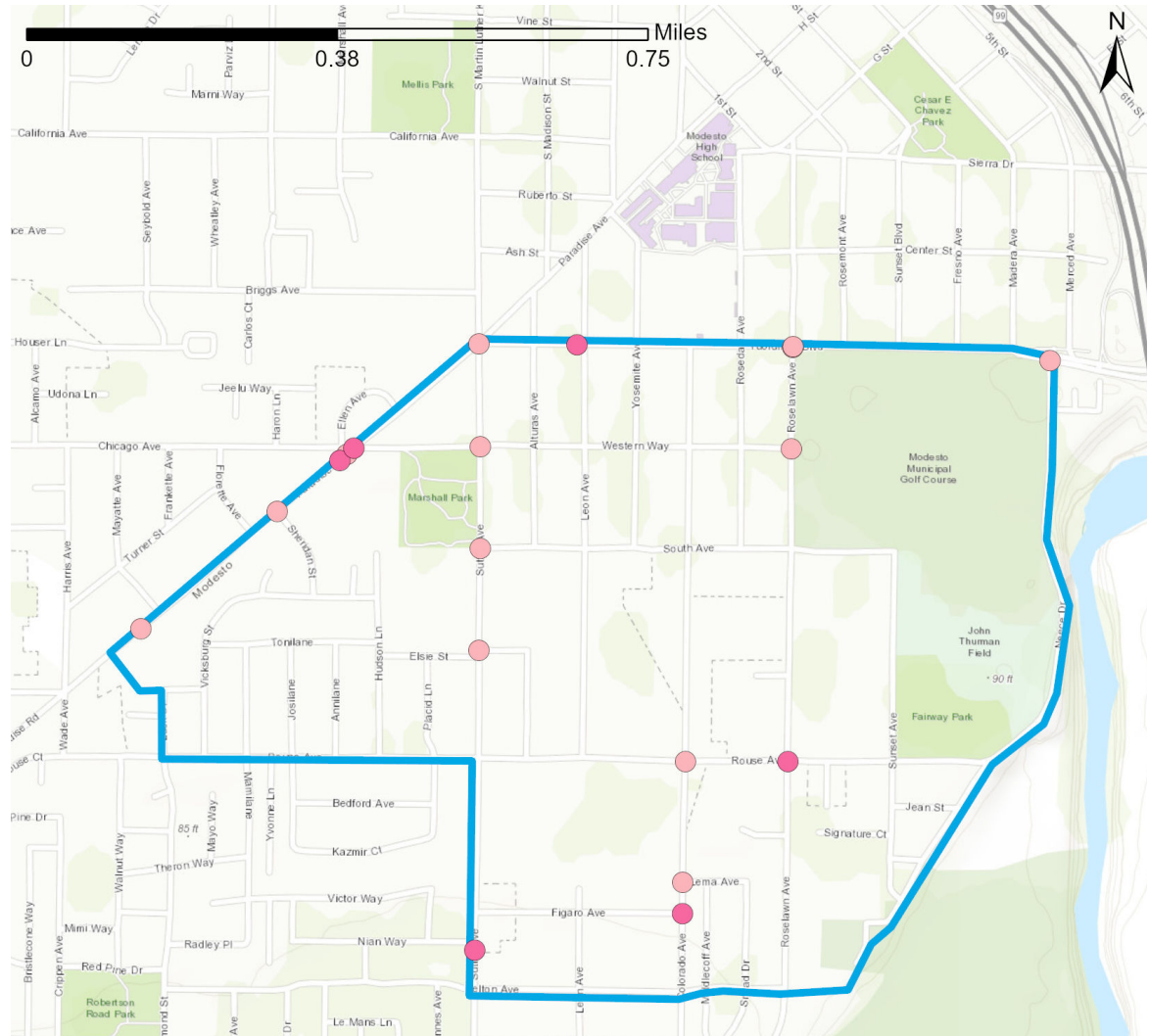
Total: 30 Collisions

CVC No.	Description	Number of Collisions
21950	Driver failure to yield right-of-way to pedestrians at a marked or unmarked crosswalk	14 (46.7%)
21954	Pedestrian failure to yield right-of-way to vehicles when crossing outside of a marked or unmarked crosswalk	4 (13.3%)
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 (13.3%)
22107	Unsafe turning or moving right or left on a roadway Turning without signaling	3 (10.0%)
21703	Following another vehicle too closely	1 (3.3%)
21951	Failure to stop for a vehicle that has already stopped to permit pedestrian crossing when approaching from behind	1 (3.3%)

Bicycle Injury Collisions Map (2014-2018)



Collision Severity

- Injury (Other Visible) (6)
- Injury (Complaint of Pain) (13)



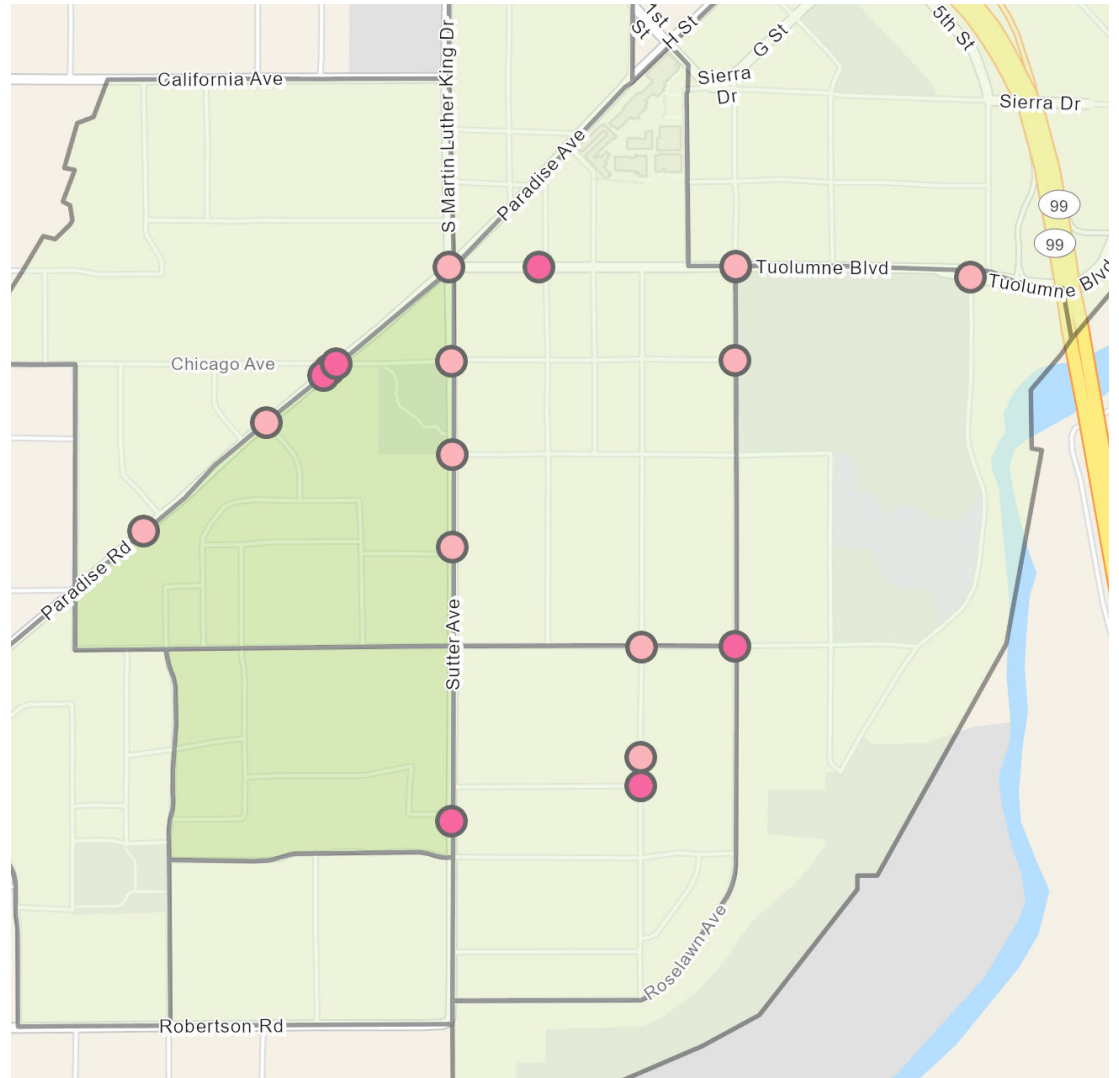
Bicycle Injury Collisions Map with Income (2014-2018)

Collision Severity (2014-2018)

-  Injury (Other Visible) (6)
-  Injury (Complaint of Pain) (13)

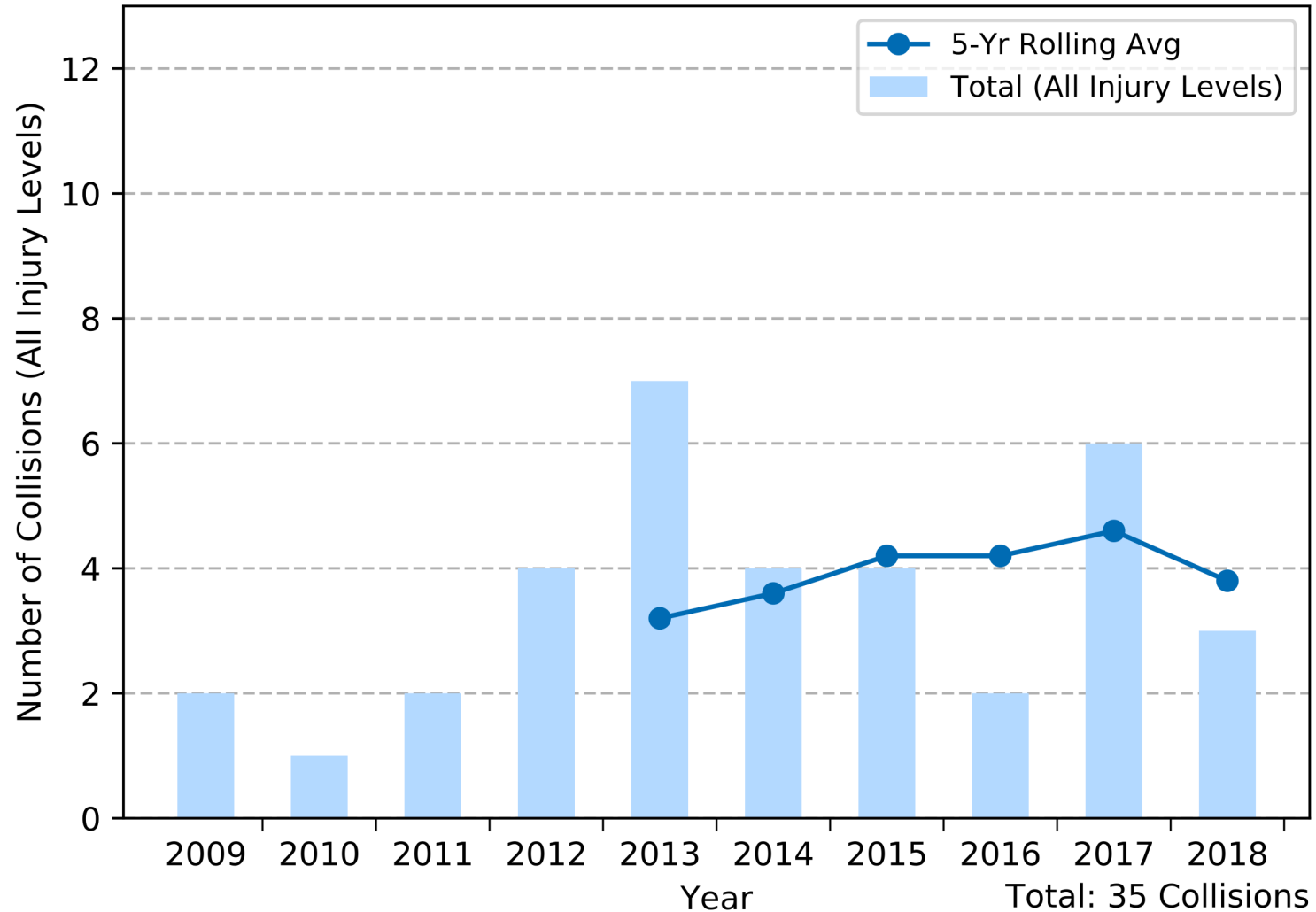
2017 Median Household Income

-  < 35K
-  35K - 50K

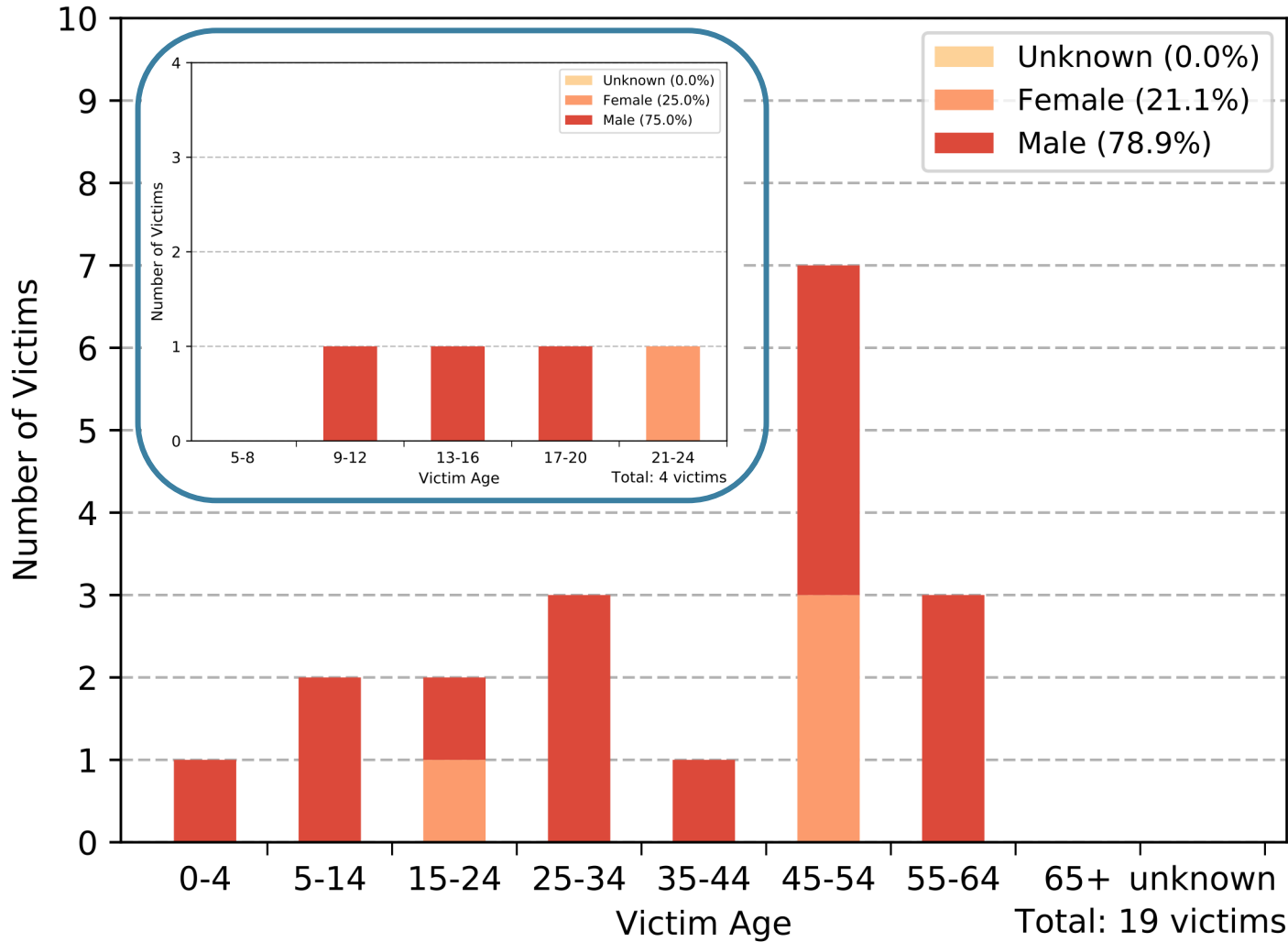


Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019. Demographics – ESRI, US Census Bureau, and ACS

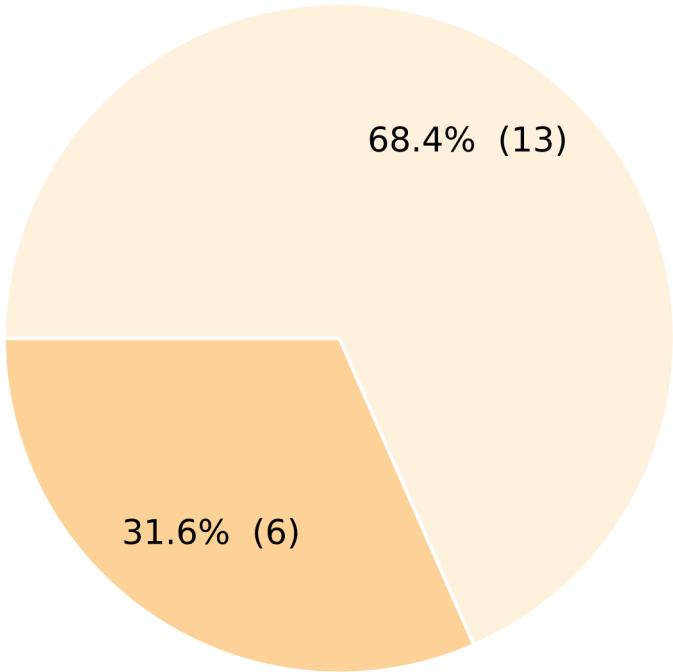
Bicycle Injury Collisions Trend (2009-2018)



Bicycle Victim Injury (2014-2018) by age and gender



Bicycle Victim Severity (2014-2018)



Total: 19 victims

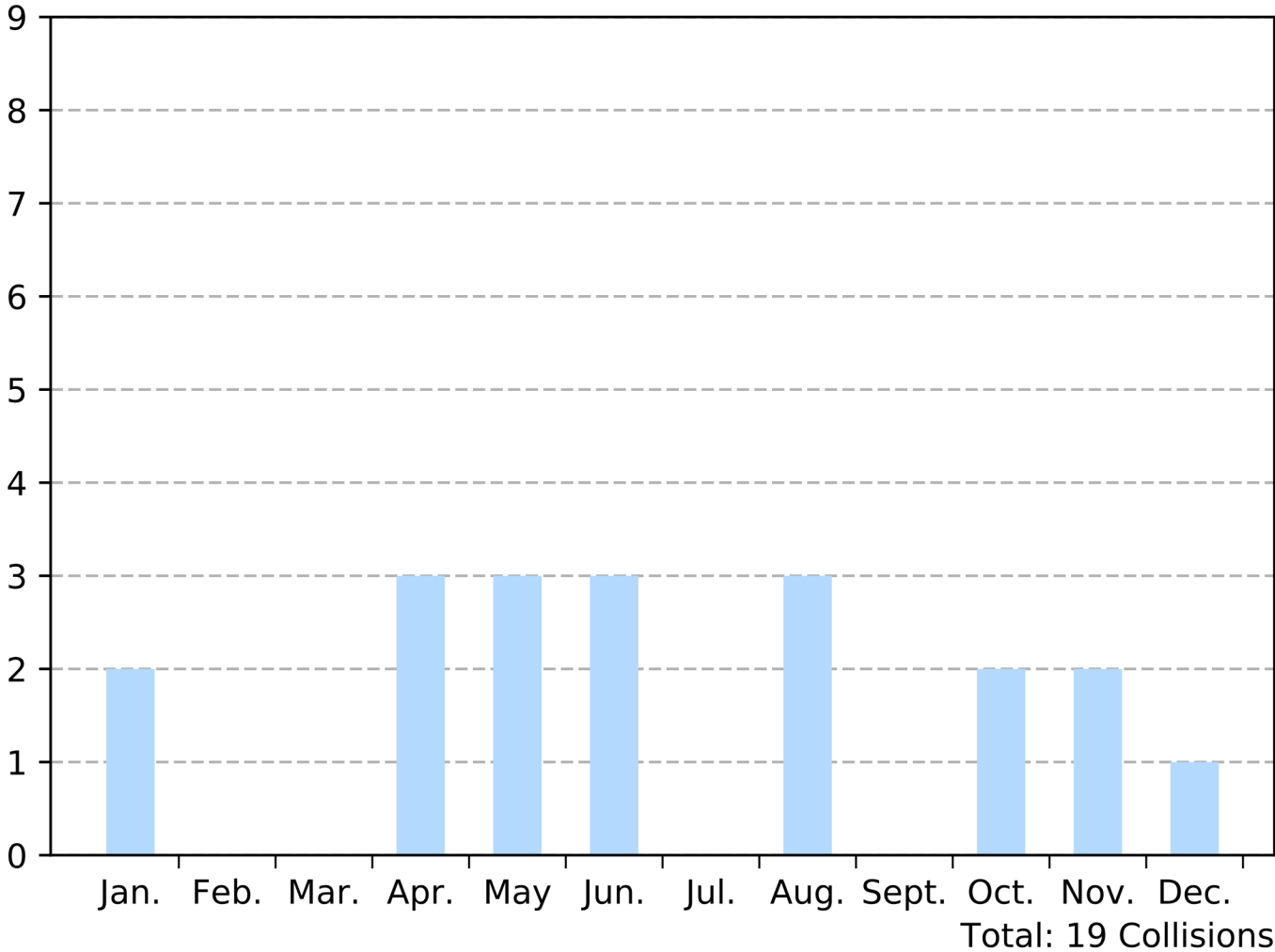


Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019.

Bicycle Collisions (2014-2018) by Time of Day and Day of Week

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
09:00PM-11:59PM	0	1	1	0	0	0	1	3
06:00PM-08:59PM	0	0	0	1	1	1	0	3
03:00PM-05:59PM	1	2	0	1	2	0	0	6
Noon-02:59PM	0	0	0	0	0	2	0	2
09:00AM-11:59AM	0	0	0	0	0	0	1	1
06:00AM-08:59AM	0	0	0	3	0	0	0	3
03:00AM-05:59AM	0	0	0	0	0	0	1	1
Midnight-02:59AM	0	0	0	0	0	0	0	0
Total	1	3	1	5	3	3	3	19

Bicycle Collisions (2014-2018) by Month



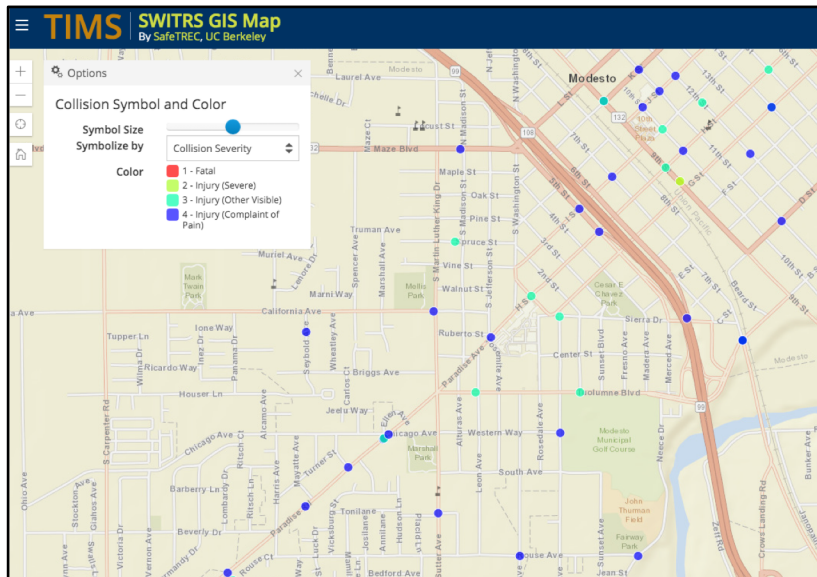
Data Source: Statewide Integrated Traffic Records System (SWITRS) 2014-2018; 2018 data is provisional as of Dec 2019.

Bicycle Collisions (2014-2018) by Type of Violation (Top Violations)

Total: 19 Collisions

CVC No.	Description	Number of Collisions
21804	Driver failure to yield right-of-way when entering/crossing a highway	3 (15.8%)
21451	Driver or pedestrian failure to yield right-of-way at an intersection or adjacent crosswalk	2 (10.5%)
21801	Driver failure to yield right-of-way when making a left turn or U-turn	2 (10.5%)
21802	Failure to stop or yield right-of-way at a stop sign	2 (10.5%)
22100	Driver failure to make a right or left turn as close to the roadway edge as possible, with exceptions. Driver turning before an intersection or leaving the intersection in a lawfully unavailable lane, with exceptions	2 (10.5%)
22107	Unsafe turning or moving right or left on a roadway Turning without signaling	2 (10.5%)

Additional Resources



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.

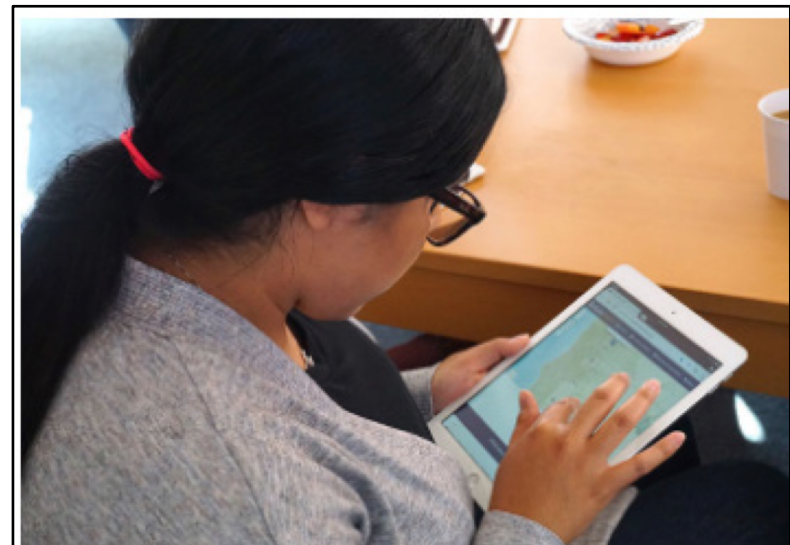
<https://streetstory.berkeley.edu>

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>



Thank you for your interest in the Community Pedestrian and Bicycle Safety Program. For more information, please visit:

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

safetrec@berkeley.edu or cpbst@calwalks.org

