



Recommendations to Improve Pedestrian & Bicycle Safety for the City of Arvin



July 2018



Acknowledgements

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We would like to thank the planning committee for inviting us into their community and for planning and hosting the Community Pedestrian and Bicycle Safety Training in Arvin.

We also thank Bike Arvin for providing dinner for the workshop and for offering participants to earn three and half out of ten hours required towards a free bike under Bike Arvin's and Dolores Huerta Foundation's Earn-a-Bike Volunteer Program. Thank you to Caltrans and Grimmway Farms for providing light snacks and refreshments and Haven Drive Middle School for providing the venue and equipment for this workshop. Lastly, we would like to thank the City of Arvin for providing city maps in support of this training and the Arvin City Mayor José Gurrola for welcoming participants to the training.

We would like to acknowledge the many community members and agencies present at the workshop and their dedication to pedestrian and bicycle safety in Arvin. Their collective participation meaningfully informed and strengthened the workshop's outcomes.

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Recommendations to Improve Pedestrian & Bicycle Safety for the Community of Arvin

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Introduction

At the invitation of Bike Arvin and the City of Arvin, California Walks (Cal Walks), the University of California at Berkeley’s Safe Transportation Research and Education Center (SafeTREC) and the Planning Committee collaboratively planned and facilitated a Community Pedestrian and Bicycle Safety Training (CPBST) in Arvin on April 20, 2018. The CPBST is a community-driven pedestrian and bicycle safety action-planning workshop aimed to improve walkability, and bikeability across diverse California communities.

Bike Arvin and the City of Arvin requested a workshop to 1) provide City and County staff, community organizations, and residents with a pedestrian and bicycle safety toolkit to inform future active transportation projects around Haven Drive Middle School; 2) strengthen working relationships between various agencies, organizations and stakeholders to ensure the best outcomes for the residents and students of Arvin; and 3) develop consensus regarding pedestrian and bicycle safety priorities and actionable next steps for the area surrounding Haven Drive Middle School.

Cal Walks and SafeTREC (Project Team) facilitated the workshop on April 20, 2018 from 3:00 PM to 6:30 PM at the Haven Drive Middle School Cafeteria. Dinner, childcare, and simultaneous English-to-Spanish interpretation were provided to maximize community participation. Thirty (30) individuals attended the workshop including residents, students, representatives from the planning committee, Leadership Counsel for Justice and Accountability, Arvin Union School District, and the Arvin Police Department.



Youth participating in the action-planning discussions (left) and community residents listening to the 6E’s presentation (right).

The three and a half (3.5) hour training consisted of: 1) an overview of multidisciplinary approaches to improve pedestrian and bicycle safety using the intersectional 6 E's framework including: Equity & Empowerment, Evaluation, Engineering, Education, Encouragement, and Enforcement; 2) two walkability and one bikeability assessments along three key routes and; 3) small group action-planning discussions to prioritize recommendations for Arvin's active transportation efforts. The Planning Committee's goal was to create safe, convenient, and fun opportunities for children to bicycle and walk to and from Haven Drive Middle School. This report summarizes the workshop proceedings, as well as recommendations for projects, policies, and programs for pedestrian and bicycle safety in Arvin.

Background

The CPBST is a joint project of Cal Walks and SafeTREC that aims to leverage a community's existing strengths to develop a community-driven pedestrian and bicycle safety action plan in collaboration with community partners. For each training, the program convenes a local multi-disciplinary planning committee to tailor and refine the training's curriculum and focus to meet the community's needs. The Project Team conduct pre-training site visits to collect on-the-ground observations of existing walking and biking conditions to adapt the CPBST curriculum and to provide context-specific strategies for the community's existing conditions.

Planning Process

The Arvin CPBST planning process was initiated in December 2017. The planning process consisted of:

- **Community Plans and Policies Review:** Cal Walks conducted a review of current community planning documents to inform the training with local context and prepare to build off existing efforts. The following documents were reviewed prior to the site visit:
 - Kern Region Active Transportation Plan. Kern Council of Governments. January 2018
 - Transportation Concept Report for State Route 223. Caltrans. May 2014.
 - Improving Safety and Mobility in South Kern County: Community Revitalization Strategies. Local Government Commission. February 2013.
- **Analysis and Mapping of Pedestrian and Bicycle Injury Data:** SafeTREC used the Statewide Integrated Traffic Records System (SWITRS) to analyze injury data in Arvin as well as census data to create rates based on population. Patterns of injury collisions, victim characteristics and demographics were analyzed and presented.
- **Identification of Priority Discussion Topics for Training:** Haven Drive Middle School neighborhood. This area was identified as the focus of the Arvin CPBST:
 - To assess existing conditions along Haven Drive, particularly near Haven Drive Middle School, which is experiencing high rates of pedestrian and bicycle traffic from students and community members.
 - To explore potential pedestrian and bicycle infrastructure changes along Haven Drive and adjacent streets.
 - To support and build on existing Safe Routes to School education and encouragement efforts by Bike Arvin and the Dolores Huerta Foundation.
 - To address City, School District, and community concerns related to students getting to and from school along Haven Drive, State Route 223/Bear Mountain Boulevard, and Derby Road.
 - To provide an opportunity for community members to give input on potential future pedestrian and bicycle infrastructure improvements in the City.

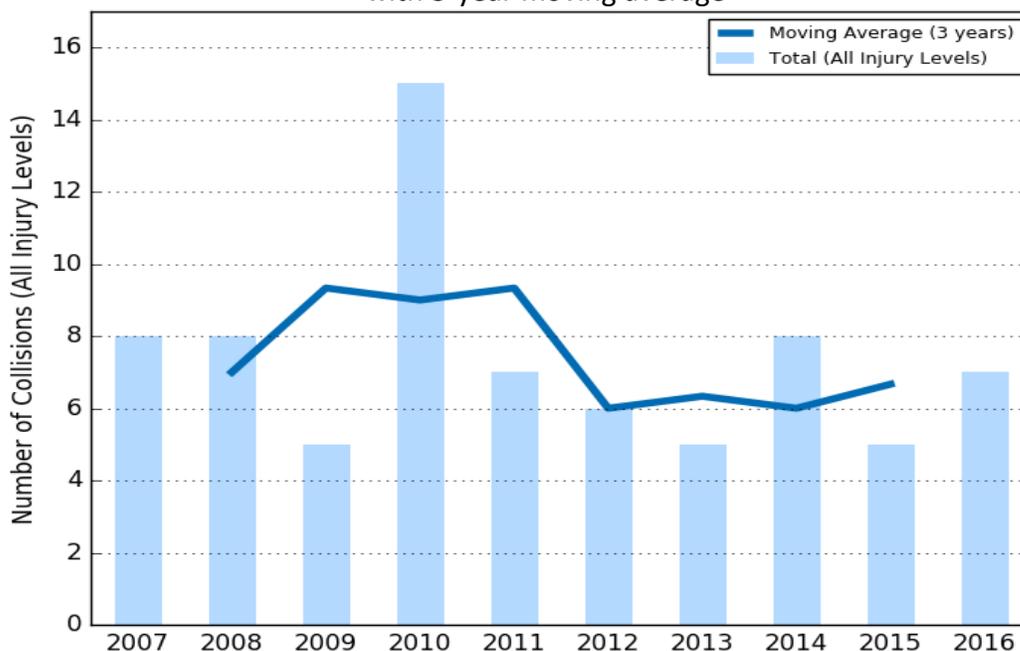
- Site Visit:** The Project Team facilitated an in-person site visit on February 8, 2018 with the Planning Committee at the City of Arvin Police Department to 1) review existing pedestrian and bicycle collision data; 2) collect qualitative data based on in-person observations of existing conditions and travel behaviors and; 3) conduct preliminary walking assessments of the focal neighborhood. Site visit findings were used to develop the workshop presentation, including providing local infrastructure examples and developing the walk/bike assessment route maps. During the site visit, the Planning Committee identified the Arvin Union School District, nearby schools, churches, and Haven Drive Middle School students as key stakeholders to invite to the CPBST.

Existing Conditions

Pedestrian & Bicycle Collision History

Between 2007 - 2016, there were 74 pedestrian collisions, including 2 fatalities and 5 severe injuries in the City of Arvin.¹ Collisions in this time period were concentrated on State Route 223 (SR 223, locally known as Bear Mountain Boulevard), Haven Drive, Meyer Street, and South A Street. The top two primary collision factors for collisions involving pedestrians were drivers failing to yield to a pedestrian with the right-of-way in a crosswalk (25.8%) and pedestrians failing to yield to drivers when crossing outside a marked or unmarked crosswalk² (25.8%). Over the 10-year period between 2007 -2016, pedestrian collisions appear to be on an upward trajectory (Source: SWITRS, 2007-2016).

Pedestrian Collisions Trends
with 3-year moving average

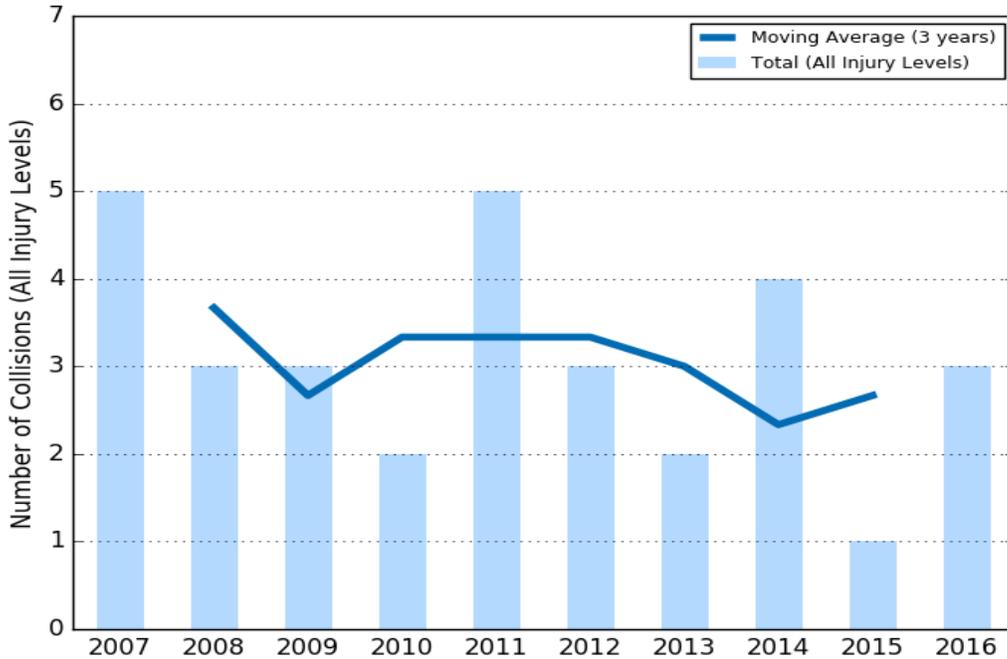


¹ 2015 and 2016 SWITRS data are provisional as of November 2017.

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

Between 2007 - 2016, there were 31 bicycle collisions, and 4 severe injuries in the City of Arvin.³ Collisions in this time period are concentrated on SR 223/Bear Mountain Boulevard, Meyer Street, Walnut Drive, and Sycamore Drive. The top three primary collision factors for collisions involving bicycles were bicyclists or drivers failing to yield the right-of-way when entering or crossing a highway (30.8%), bicyclists or drivers failing to stop or yield at stop signs (15.4%), and drivers, including bicyclists, failing to yield right-of-way in a crosswalk (15.4%)⁴. Over the 10-year period between 2007 - 2016, bicycle collisions appear to be on an upward trajectory (Source: SWITRS, 2007-2016).

Bicycle Collisions Trends
with 3-year moving average



A full discussion of 2012-2016 pedestrian and bicyclist collision data prepared by SafeTREC can be found in Appendix A and B.

Equity Concerns

A 2014 Governing Study found that nationwide, pedestrian fatality rates in lower-income communities were more than twice that of higher income communities⁵ Pedestrian collisions in Arvin between 2012-2016 follows a similar trajectory to that of the national study. Of the 28 pedestrian collisions geocoded on the Arvin 2012-2016 pedestrian collision map, 25 were concentrated in the area or on the border of neighborhoods where the median household income is less than \$35,000 per year. Furthermore, of the 28 pedestrian collisions, 13 were geocoded on SR 223/Bear Mountain Boulevard, a

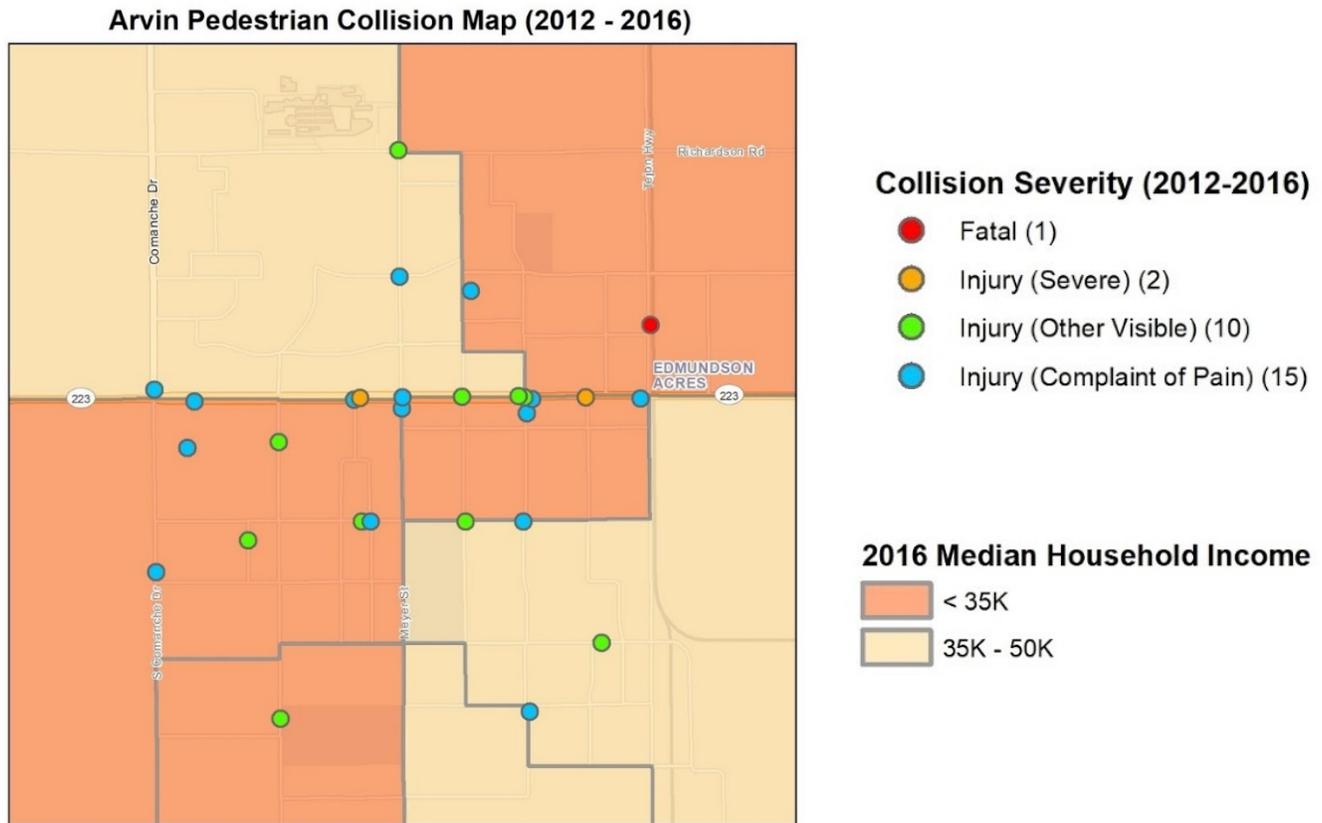
³2015 and 2016 SWITRS data are provisional as of November 2017.

⁴ According to California Vehicle Code 21200, bicycles are considered vehicles, therefore; bicyclists on public streets have the same rights and responsibilities as automobile drivers. This makes it difficult to discern whether a bicyclist or driver is at fault.

⁵ Pedestrian Deaths in Poorer Neighborhoods Report," Governing, August 2014.

Available at <http://www.governing.com/gov-data/pedestrian-deaths-poor-neighborhoods-report.html>

high pedestrian injury corridor that the community frequently uses to access businesses and community services.

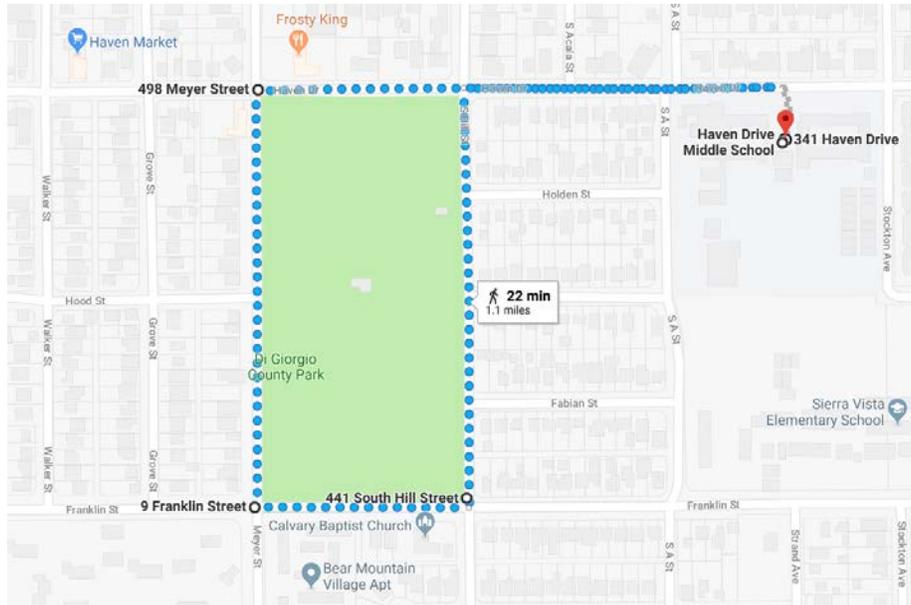


According to participants at the CPBST, Arvin has a robust walking and biking culture; many walk and bike as their main source of transportation to and from work, school, and other community resources. People using the public right of way without the appropriate pedestrian and bicycle safety facilities to keep all road users safe, increases the chances of collisions with vehicles. Although the City of Arvin has installed pedestrian and bicycle facilities near the downtown area, the neighborhoods outside of this area continue to lack adequate walking and biking facilities. One participant at the CPBST stated that the majority of infrastructural projects were concentrated in the downtown area and in North Arvin where the houses have a higher property value. To this point, the City of Arvin responded that the City is committed to bringing infrastructural improvements to the entire community. They further emphasized that the CPBST was brought to Arvin to encourage community participation around pedestrian and bicycle safety priorities.

Walkability & Bikeability Assessment Reflections

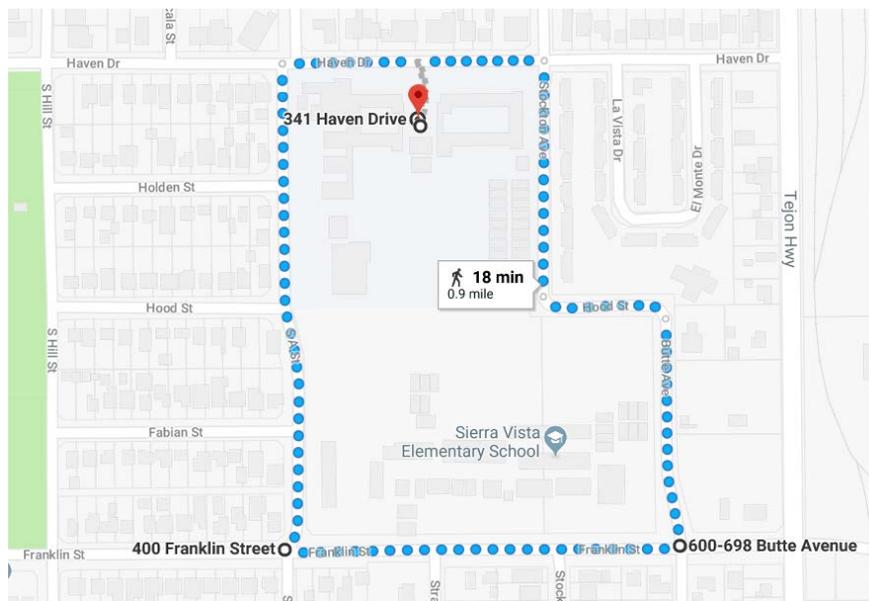
Workshop participants conducted walkability and bikeability assessments along three key routes:

Route 1



The first walking route focused on the infrastructure and walking experience around Di Giorgio Park. Starting the walk assessment at Haven Drive Middle School, the group of observers walked west on Haven Drive, south on Meyer Street, west on Franklin Street, north on South Hill Street, and east on Haven Drive back to Haven Drive Middle School.

Route 2



The second walking route focused on the infrastructure and walking experience around Sierra Vista Elementary School. Starting the walk assessment at Haven Drive Middle School, the group of observers walked west on Haven Drive, south on South A Street, east on Franklin Street, north on Butte Avenue, and west on Haven Drive back to Haven Drive Middle School.

Route 3



The third route was a biking assessment focused on the infrastructure and biking experience around Haven Drive Middle School and Smothermon Park. Starting the bike assessment at Haven Drive Middle School, the cyclists headed west on Haven Drive, south on South A Street, west on Franklin Street, south on Meyer Street, west through Smothermon Park, south on Walnut Drive, east on Olson Way, north on South A Street, east on Langford Avenue, north on Butte Avenue, and west on Haven Drive back to Haven Drive Middle School.

Participants were asked to 1) observe infrastructure conditions and the behavior of all road users; 2) assess the emotional experience of walking or biking along the route; 3) identify positive community assets and strategies which can be built upon; 4) consider how the walking and biking experience might feel different for other vulnerable users.

Following the walkability and bikeability assessment, the participants shared the following reflections:

- **Road Markings:** Bike lanes and mid-lane stripes are faded, especially along the Franklin Street bike lane. Some bicyclists avoid using the bike lane on Meyer Street and Franklin Street because they are installed next to a parking lane without a buffer in what is commonly referred to as the “door zone.”
- **Pavement Conditions:** Many bicyclists have to maneuver suddenly to avoid potholes and cracks in the street, which appears to drivers as unpredictable behavior.



Faded crosswalk and mid-lane markings at the Haven Drive and South A Street intersection near Haven Drive Middle School (left). Cracked and broken pavement along South A Street (right).

- **Sidewalk Conditions:** The lack of accessible ramps along the walking and biking routes makes it difficult for people using assisted mobility devices and young children on scooters and skateboards to maneuver on and off the sidewalk. Many sidewalks are in disrepair and tree roots have uplifted some sidewalks which present tripping hazards for all users. The community noted a tree along SR 223/Bear Mountain Boulevard near the Subway as particularly dangerous for small children, the elderly, and people using assisted mobility devices.



Sidewalk ends abruptly on the east side of Haven Drive near the intersection with South Derby Street (left). South Derby Street lacks sidewalks entirely, forcing students to walk in the dirt and unpaved shoulder (right).

- **Walking and Biking Culture:** Participants enjoyed seeing people walk and bike throughout their community and explained that the smaller size of the City allowed for people to walk and bike almost anywhere they need to go. They were pleased they live in a community where parents allow their children to walk and bike to and from school, making it feel safer for other parents to do so as well. Colorful murals make walking and biking in Arvin a more enjoyable experience.
- **Newer Walking and Biking Facilities:** Participants are making full use of the skate park installed at Di Giorgio Park and the new community garden in the Sun Park, both installed in 2017.



Youth ride their scooters after school at the skate park at Di Giorgio Park.

Key Opportunities to Improve Walking and Biking Safety

Following the walkability and bikeability assessment, the Project Team facilitated small-group action planning discussions where participants discussed and prioritized infrastructure improvements for reducing the number of injuries and fatalities, as well as education and encouragement programs aimed at increasing the number of people and the frequency of walking and biking in Arvin.

Participants were asked 1) what education and encouragement programs are needed to cultivate student and parent leadership in pedestrian and bicycle safety efforts? 2) what infrastructure projects are needed to encourage students to walk/bike/roll/take transit to school?

Community Recommendations

Infrastructure Concerns & Priorities

- **Speed Calming Measures:** Residents would like to see the implementation of speed calming measures, such as speed bumps, curb extensions/bulb-outs, pedestrian safety islands and on-street bicycle facilities near school zones.
- **Crossing Enhancements:** Along frequently travelled streets to and from the neighborhood schools, residents would like to see the installation of high-visibility crosswalks with rectangular rapid flashing beacons and a crossing guard to help students cross the street safely. Residents

identified the intersections of Haven Drive/South A Street, South Derby Street/SR 223/Bear Mountain Boulevard, and Haven Drive/Meyer Street for such crossing improvements.

- **Bicycle Enhancements:** Community residents would like to see a well-connected bicycle network throughout Arvin and regular maintenance of existing bike lanes and markings, especially along the Franklin Street and Meyer Street bike lanes. Where applicable, residents would like to see more buffered bike lanes to separate cyclists from vehicular traffic and the “door zone.” Additionally, bicycle parking was requested throughout the community so that residents have a consistent place to park their bicycles as they travel throughout the City.

Community Programs, Policies, and Campaigns

- **Community-wide Walking and Biking Events:** Residents were interested in hosting an Open Streets event in Arvin on SR 223/Bear Mountain Boulevard where residents can walk and bike freely while patronizing the many restaurants and businesses along the corridor. Residents were interested in coupling this event with resource tables and other survey tools to gather community input on the walking and biking infrastructure needed throughout the rest of the City. The youth participants at the training were especially interested in expanding Bike Arvin’s Friday night rides program where they could ride to Banana Lake in Arvin and potentially drive to nearby mountains and beaches and coordinate longer rides along new routes.
- **Cross-Generational Safe Walking and Biking Educational Campaigns:** Residents were very interested in parent and child engagement classes because they believe that both adults and youth need to be involved in order to ensure that youth are walking and biking safely. Residents envisioned these courses as short, fun, 1-hour classes that could be integrated into other larger programs or events to avoid parent burnout. Participants also noted that the periodic Coffee with Principals meetings are a key opportunity to communicate walking and biking safety information. Residents also saw an opportunity to coordinate safety education classes between high school, middle school, and elementary school students. High school students could receive bicycle maintenance classes, while middle school students could be trained to deliver walking and bicycle safety information to elementary school students.

Cal Walks/SafeTREC Recommendations

California Walks and SafeTREC also submit the following recommendations for consideration by the City of Arvin and its residents:

- **Bike Arvin and Safe Kids Kern County Partnership for CDPH Kid’s Plate Grant:** The [California Department of Public Health’s Kid’s Plate Grant](#) funds injury prevention efforts to reduce or eliminate unintentional injuries in children and youth, 0 to 18 years of age. The grant includes bicycle safety as a key focus area. The Project Team **recommends Bike Arvin explore potential partnerships with Safe Kids Kern County** to support pedestrian and bicycle injury prevention activities at Arvin elementary and middle schools, especially around Walk to School Day and Bike to School Day. Since Bike Arvin is currently pursuing a bicycle safety school curriculum program, the Project Team also **recommends reviewing the CDPH Kids Plate Grant** as a potential funding opportunity to provide additional long-term and site-specific Safe Routes to School education and encouragement programs for Arvin Schools and to expand Bike Arvin’s presence and work in the community.
- **Work with Caltrans to implement infrastructure improvements detailed in the Transportation Concept Report (TCR) for SR 223/Bear Mountain Boulevard:** Caltrans completed a TCR in May 2014 that outlines two planned operational projects: a roundabout at SR 183 and SR 223/Bear

Mountain Boulevard and a road widening project along particular segments of SR 223/Bear Mountain Boulevard. The TCR documents discontinuous sidewalks, unmarked crosswalks, non-ADA compliant ramps, lack of pedestrian scale lighting and lack of shade trees on SR 223/Bear Mountain Boulevard as hindrances to a safe walking environment. Although there was stakeholder involvement during the creation of the report, it was mostly conducted via e-mail and telephone and did not explicitly reach out to the community walking and biking along SR 223/Bear Mountain Boulevard. The Project Team **recommends that the City of Arvin conduct walkability and bikeability assessments with residents** along SR 223/Bear Mountain Boulevard to identify precise locations where improvements can be made, along with constructing cultural markers to make SR 223/Bear Mountain Boulevard a community gateway.

- **Develop a Safe Routes to School and Complete Streets Advisory Board:** In 2016, the City of Arvin was awarded a Caltrans Sustainable Transportation Planning Grant to develop a Safe Routes to School and Complete Streets Plan. The Project Team **recommends that the City of Arvin develop a community advisory board for the Safe Routes to School and Complete Streets Plan** to ensure community buy-in and involvement from the beginning stages of plan development.
- **Community Garden at Haven Drive and South Hill Street:** The Project Team **recommends the City collaborate with residents and local community partners to explore the feasibility of a community garden** in the vacant lot located at Haven Drive and South Hill Street. This would require the development of a community garden maintenance and sustainability plan to ensure the garden is cared for and serves the community well into the future. The Project Team also **recommends the City consider partnering with local organizations such as Bike Arvin to include bicycle art installations and other local art** in the community garden to create a greater sense of place.
- **Lighting Assessment:** The Project Team **recommends CPBST partners to collaborate and perform a citywide street lighting assessment** focused on pedestrian- and bicycle-oriented lighting needs around schools, parks, businesses, and along key pedestrian and bicycle corridors. Workshop participants noted a lack of pedestrian-scale lighting around Haven Drive Middle School and Sierra Vista Elementary School, particularly at crosswalks leading up to the schools. Proper street lights provide safety and security and improve the overall well-being of road users. Lighting should be uniform, consistent, and reduce glare and light pollution.
- **Tree and Landscaping Assessment:** The Project Team **recommends the Arvin Union School District conduct a tree and landscaping assessment** of its schools to identify streets and locations where trees can be planted along District property to provide shade along sidewalks students used to walk to and from school. Community members requested shading along Haven Drive, Stockton Avenue, Franklin Street, South A Street around Haven Drive Middle School and Sierra Vista Elementary School. Lastly, the Project Team **recommends the Arvin Union School District and its residents collaborate with the Tree Foundation of Kern County** to solicit tree donations for urban greening around Arvin schools.

Appendix A

Pedestrian and Bicycle Collision Data Analysis

2012-2016 ARVIN DATA ANALYSES

Community Pedestrian and Bicycle Safety Training Workshop April 20, 2018

The goal of the Community Pedestrian and Bicycle Safety Training (CPBST) is to make communities safer and more pleasant for walking and bicycling. This workshop will train local residents and safety advocates in pedestrian and bicycle safety as well as create opportunities for collaboration with local officials and agency staff.

This fact sheet highlights some of the most recent pedestrian and bicycle collision data available to help the community better prioritize recommendations that emerge from this workshop.

PEDESTRIANS

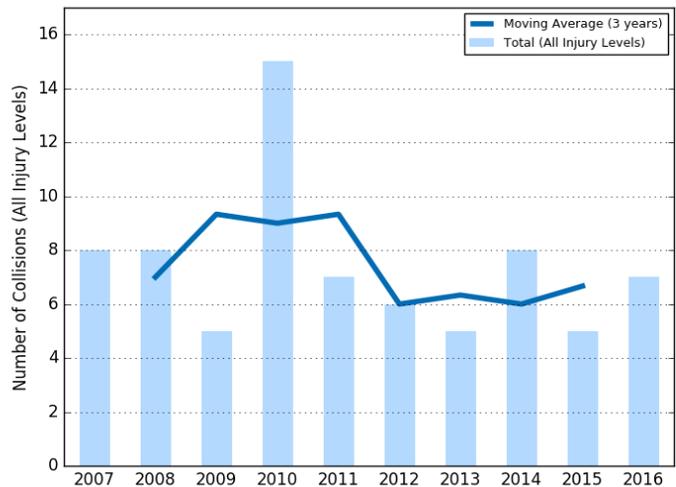


80 people were killed or injured in 74 pedestrian collisions in the last 10 years (2007-2016).

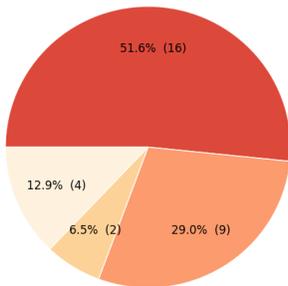
The **three-year moving average** line shows an **upward** trend in pedestrian collisions.*

There were **5** pedestrian collisions in 2015, but an average of **7** pedestrian collisions per year for the 3-year rolling average between 2014 and 2016.

* This line is useful for tracking change over time, especially when the number of collisions changes a lot between years. Data points are at the midpoint of the three years of data specified.



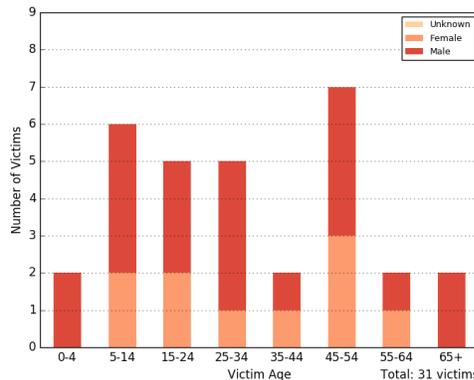
51.6% driver violations
VS.
29.0% pedestrian violations



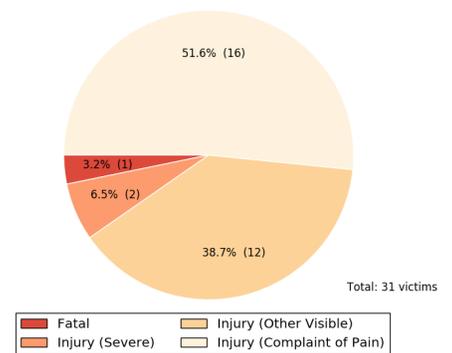
Total: 31 victims



*Unclear violations were committed either by the driver, pedestrian or bicyclist.



67.7% of victims were male
38.7% of victims were under age 20
6.5% of victims were age 65+



Total: 31 victims

9.7%
of victims (or 3 people) were
KILLED or SEVERELY INJURED

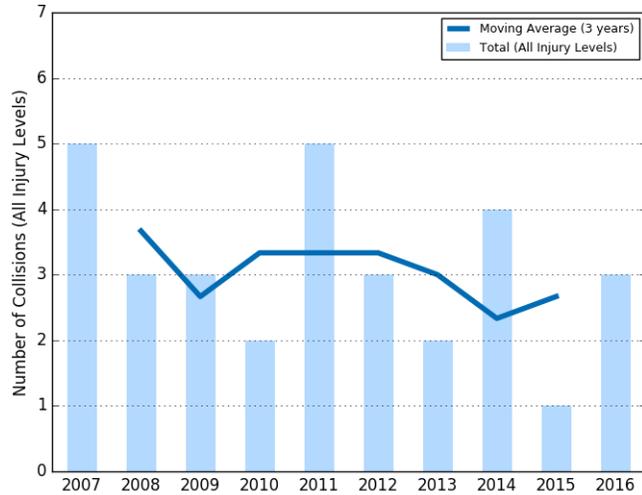
BICYCLES



32 people were injured in 31 bicycle collisions in the last 10 years (2007-2016).

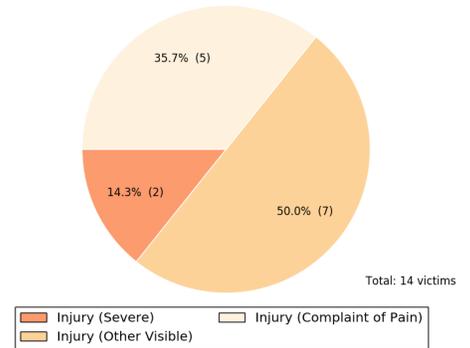
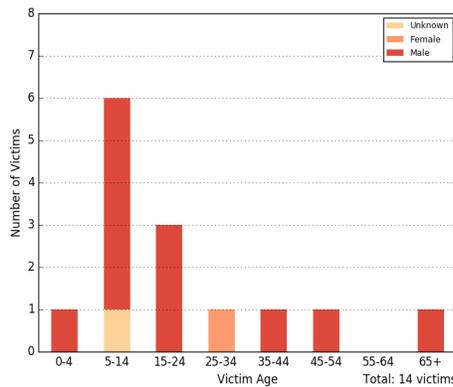
The **three-year moving average** line shows an **upward** trend in bicycle collisions.*

There was **1** bicycle collision in 2015, but an average of **2.67** bicycle collisions per year for the 3-year rolling average between 2014 and 2016.



* This line is useful for tracking change over time, especially when the number of collisions changes a lot between years. Data points are at the midpoint of the three years of data specified.

Bicycles must follow all the same rules of the road as vehicles. As a result, we cannot break down violations by driver vs. bicyclist.



- 85.7% of victims were male
- 71.4% of victims were under age 20
- 7.1% of victims were age 65+

14.3%
of victims (or 2 people)
SEVERELY INJURED

SUMMARY



29.4 pedestrian fatalities & injuries per 100,000 population over the last five years, which is **1.0% less than** Kern County and **18.1% less than** California



13.3 bicyclist fatalities & injuries per 100,000 population over the last five years, which is **23.1% less than** Kern County and **60.1% less than** California

	Rate of fatalities & injuries per 100,000 population* (2012-2016)	
	Pedestrian	Bicyclist
Arvin	29.4	13.3
Kern County	29.7	17.3
California	35.9	33.3

Source: U.S. Census Bureau, Population Division (2016 population data).

* The rate per population is calculated by summing the number of fatalities and injuries of pedestrian or bicyclist victims from 2012 to 2016 divided by five times the population in 2016.

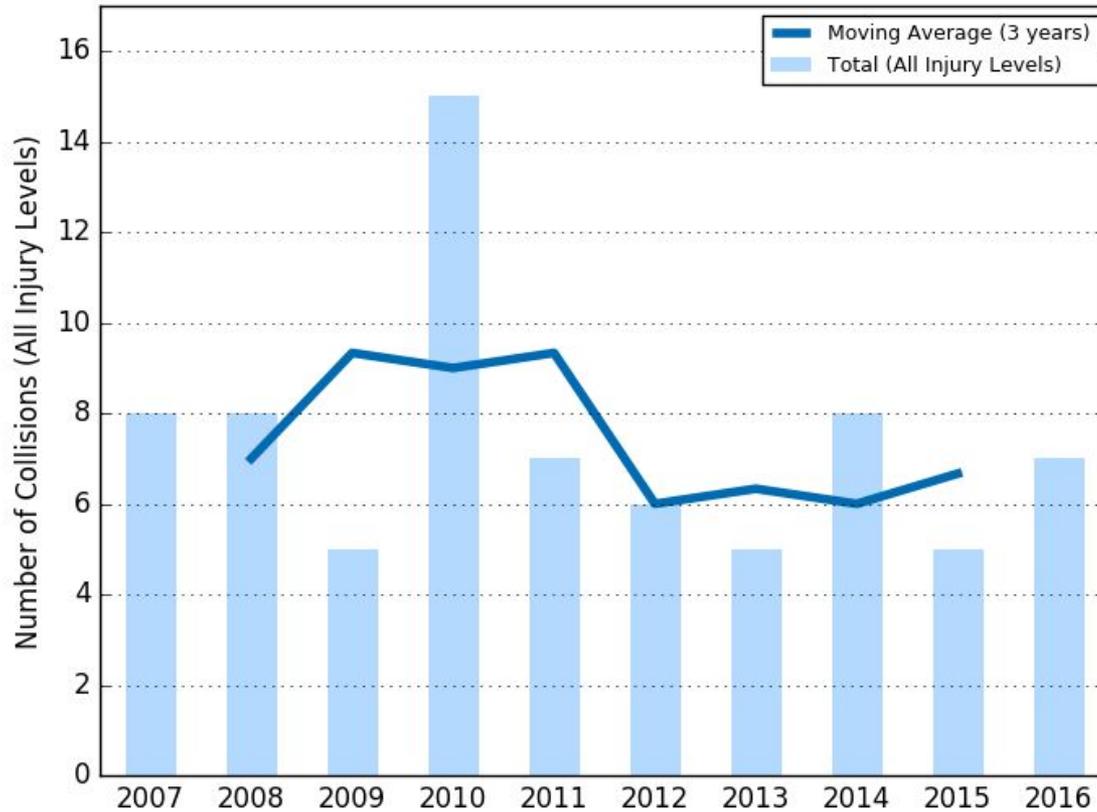
Appendix B

Pedestrian and Bicycle Collision Data Analysis
Site Visit Presentation

Community Pedestrian and Bicyclist Safety Workshop Site Visit Arvin, CA 2/8/18

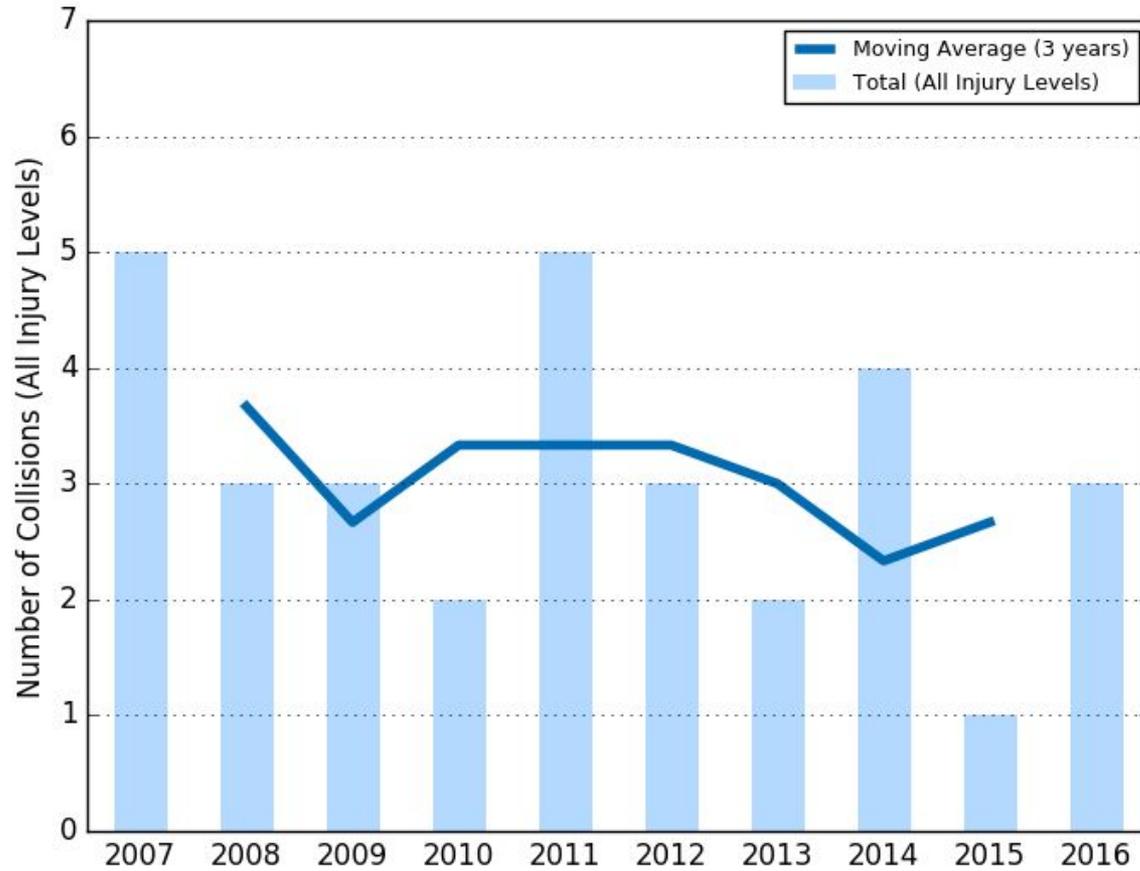
2007-2016 Data. Note: 2015 and 2016 SWITRS data are provisional as of November 2017.

Pedestrian Collisions Trends
with 3-year moving average

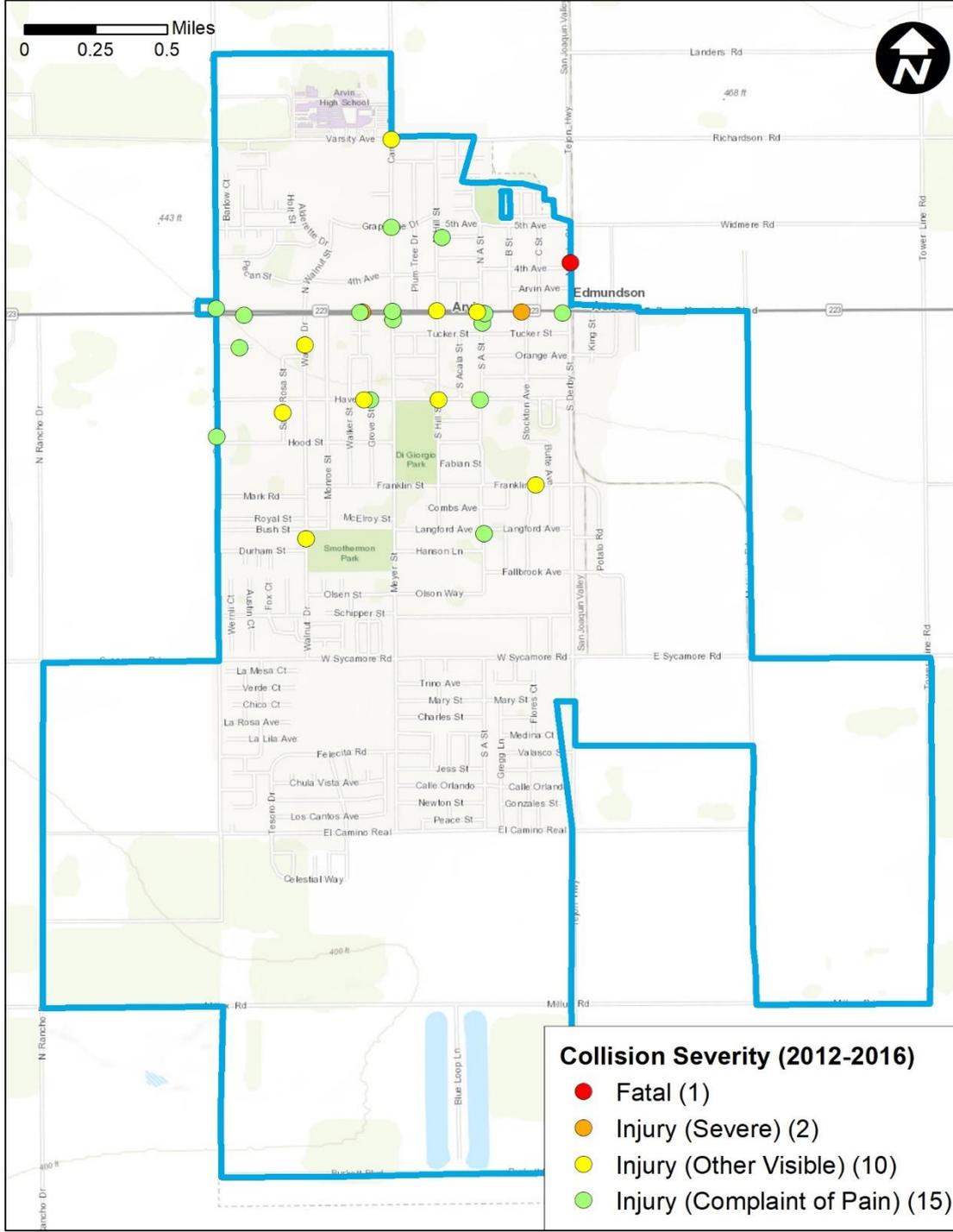


2007-2016 Data. Note: 2015 and 2016 SWITRS data are provisional as of November 2017.

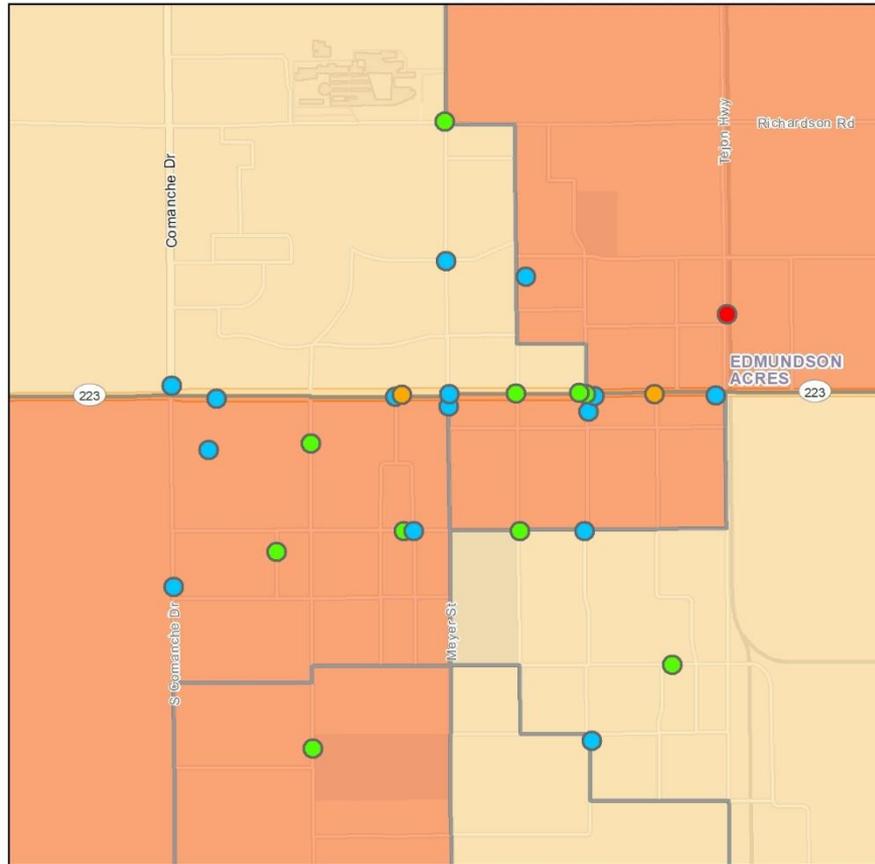
Bicycle Collisions Trends with 3-year moving average



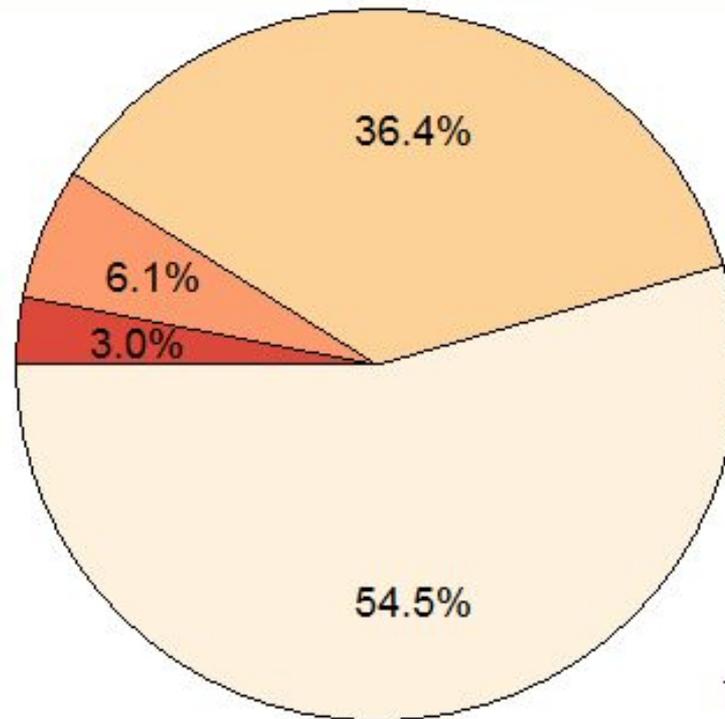
Pedestrian Collisions
 2012-2016 Data.
 Note: 2015 and 2016
 SWITRS data are
 provisional as of
 November 2017.



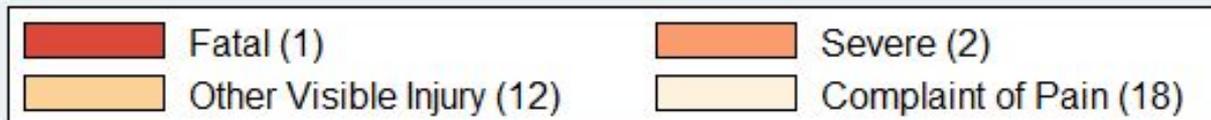
Arvin Pedestrian Collision Map (2012 - 2016)



Pedestrian Victim Injury Severity



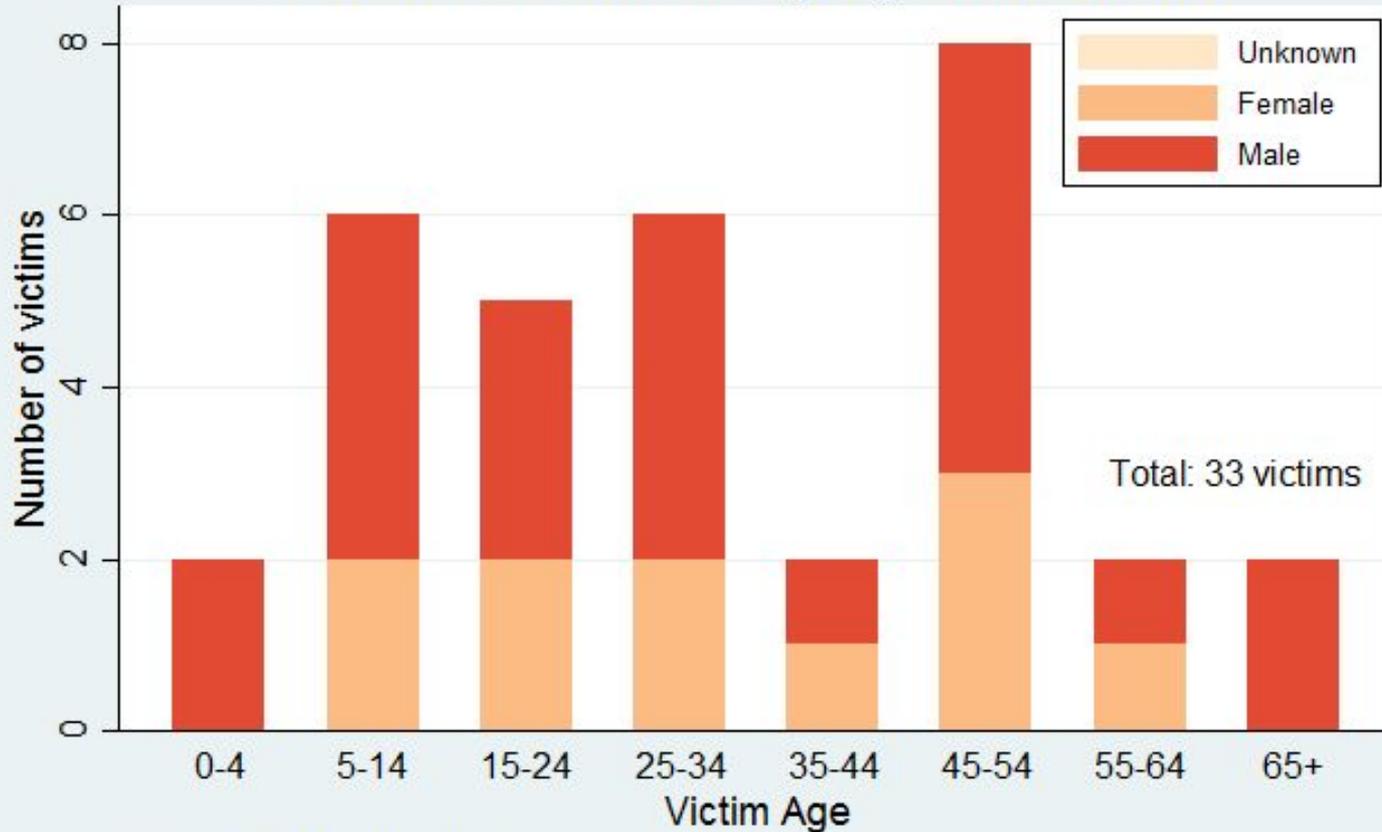
Total: 33 victims



Source: SWITRS 2012-2016*

*2015 & 2016 data are provisional as of November 2017

Pedestrian Victims by Age and Gender



Source: SWITRS 2012-2016*

*2015 & 2016 data are provisional as of November 2017

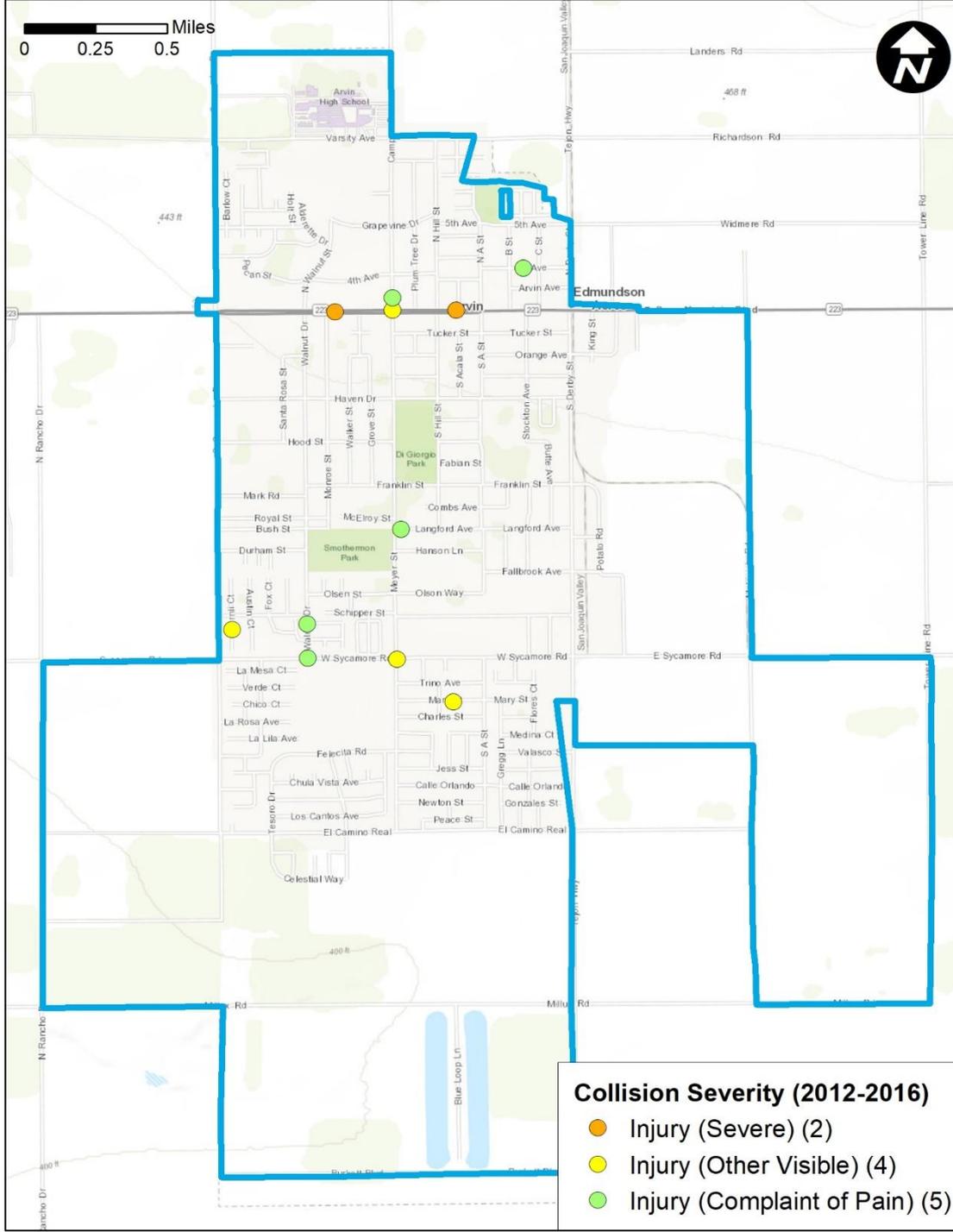
Pedestrian Collisions by Time of Day and Day of Week

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Midnight-2:59AM	0	1	0	0	0	0	0	1
3AM-5:59AM	0	1	0	0	0	0	0	1
6AM-8:59AM	0	2	0	3	1	1	0	7
9AM-11:59AM	0	0	0	1	0	0	0	1
Noon-2:59PM	0	0	0	0	1	0	1	2
3PM-5:59PM	0	1	1	2	1	0	0	5
6PM-8:59PM	1	2	4	1	0	2	3	13
9PM-11:59PM	1	0	0	0	0	0	0	1
Total	2	7	5	7	3	3	4	31

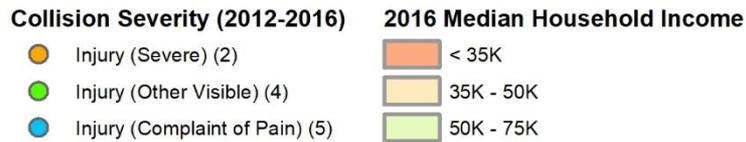
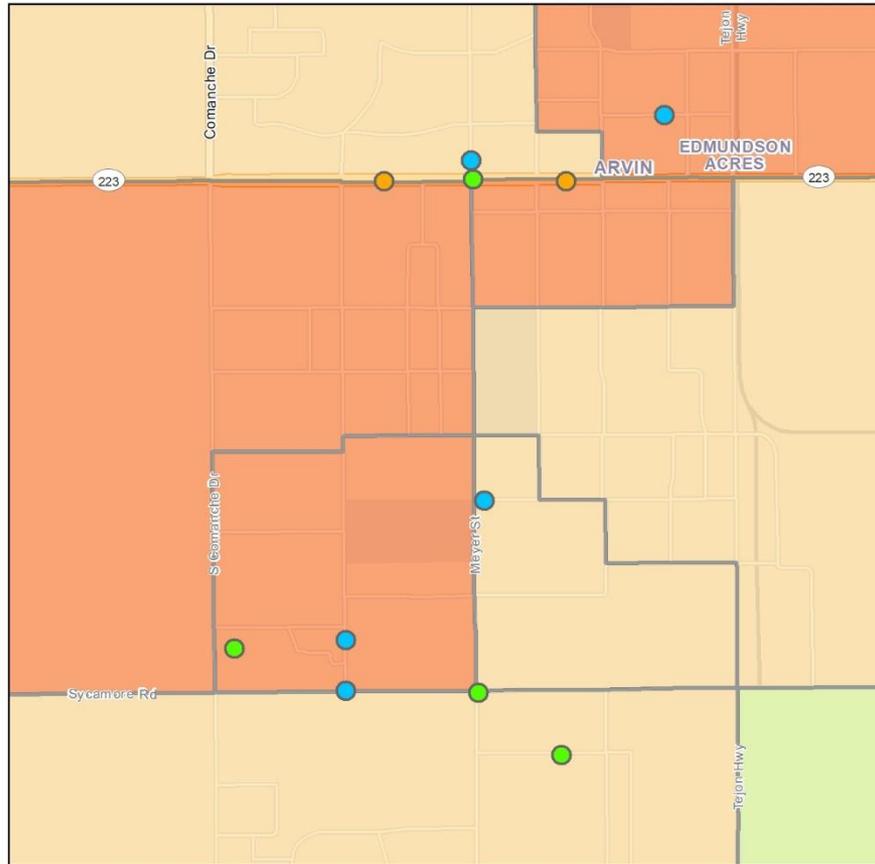
Violations (with # and %)

CVC No.	Description	N	%
21950	Driver must yield to pedestrian right of way in a crosswalk	8	25.8%
21954	Pedestrian must yield right-of-way to vehicles at areas that aren't crosswalks.	8	25.8%
22106	Starting or backing while unsafe	5	16.1%
0	Unknown/Unreported	4	12.9%
22107	Unsafe turn with/without signaling	2	6.5%
21712	Passengers can only ride on portions of vehicles designated for people.	1	3.2%
21956	At intersections, pedestrians can't cross anywhere except at a crosswalk	1	3.2%
22350	Speeding on the highway	1	3.2%
22450	Driver didn't stop behind limit line at stop sign.	1	3.2%

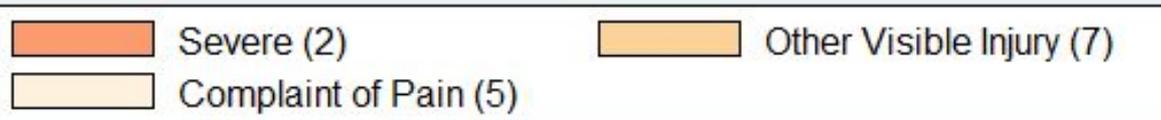
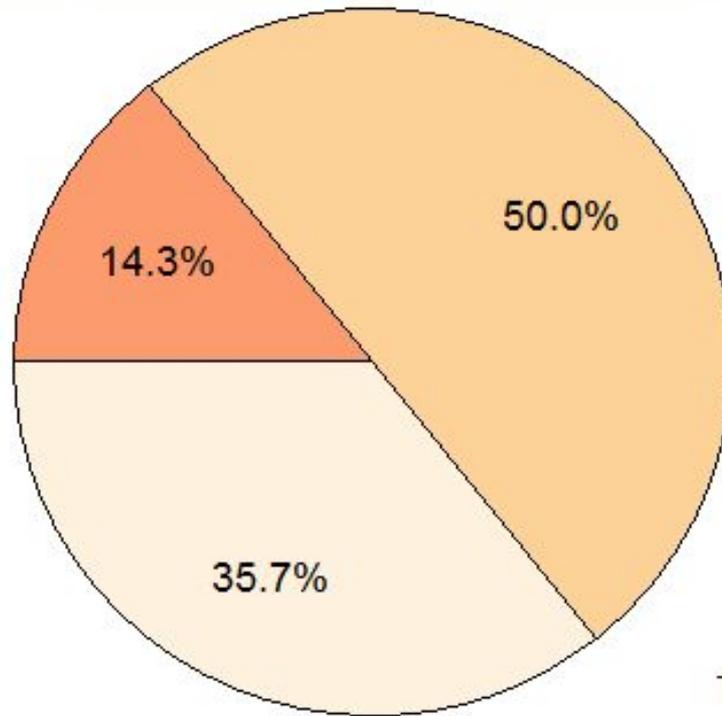
Bicycle Collisions
 2012-2016 Data.
 Note: 2015 and 2016
 SWITRS data are
 provisional as of
 November 2017.



Arvin Bicycle Collision Map (2012 - 2016)



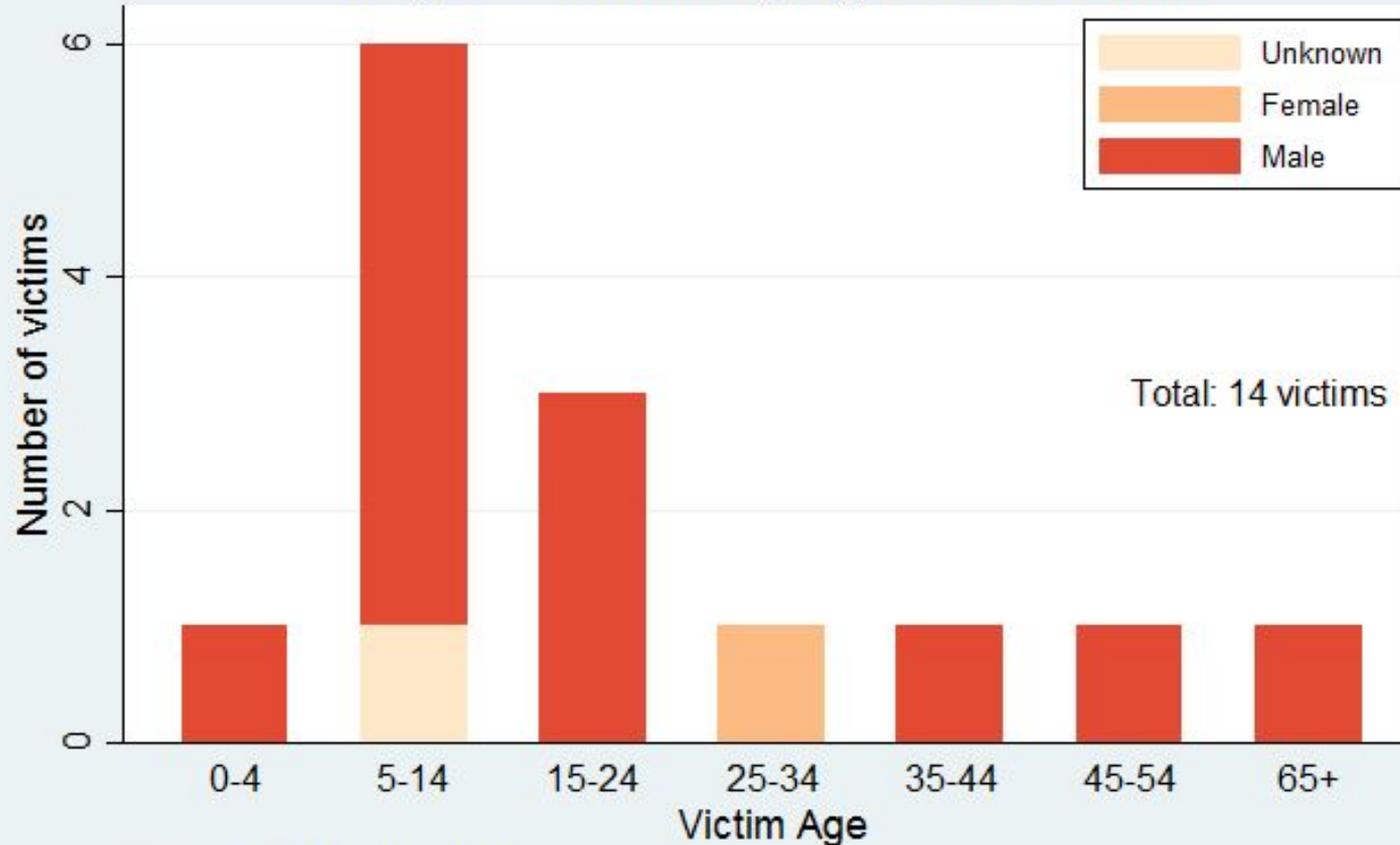
Bicycle Victim Injury Severity



Source: SWITRS 2012-2016*

*2015 & 2016 data are provisional as of November 2017

Bicycle Victims by Age and Gender



Source: SWITRS 2012-2016*

*2015 & 2016 data are provisional as of November 2017

Bicycle Collisions by Time of Day and Day of Week

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Midnight-2:59AM	0	0	0	0	0	0	0	0
3AM-5:59AM	0	0	0	0	0	0	0	0
6AM-8:59AM	0	0	0	0	0	0	0	0
9AM-11:59AM	0	0	0	0	0	0	0	0
Noon-2:59PM	0	1	0	0	0	0	1	2
3PM-5:59PM	1	0	3	2	1	1	0	8
6PM-8:59PM	0	0	1	0	1	0	1	3
9PM-11:59PM	0	0	0	0	0	0	0	0
Total	1	1	4	2	1	1	1	13

Violations (with # and %)

CVC No.	Description	N	%
21804	Did not yield when entering/crossing a highway.	4	30.8%
21802	Did not stop/yield at stop sign.	2	15.4%
21950	Driver must yield to pedestrian right of way in a crosswalk	2	15.4%
21208	Signal to turn must be made 100 feet before turn	1	7.7%
21650	Failure to drive on right half of roadway.	1	7.7%
21658	Driver didn't stay in lane.	1	7.7%
22106	Starting or backing while unsafe	1	7.7%
22350	Speeding on the highway	1	7.7%

Types of Collisions:

Bicycle Pedestrian

Collision Severity:

Fatal Severe Injury Other Visible Injury Complaint of Pain

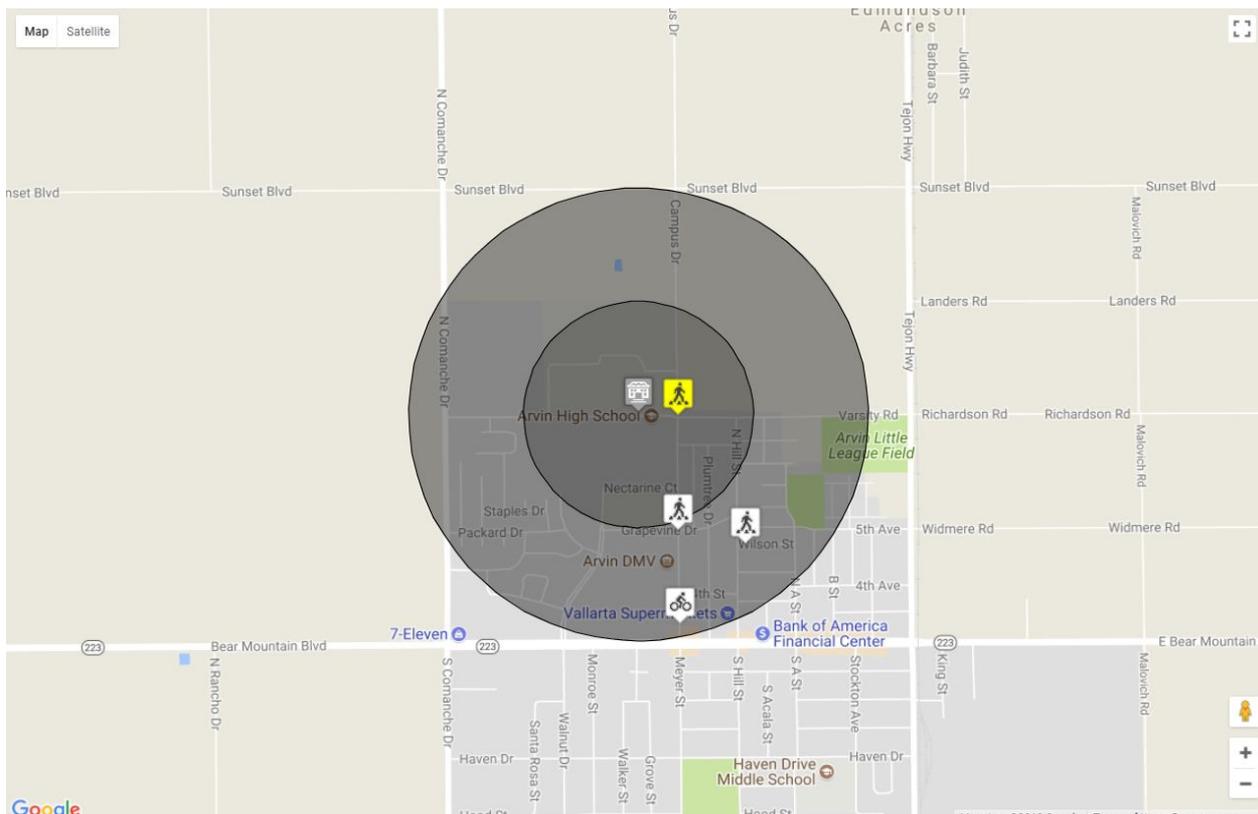
Years:



* 2015 - 2016 data is provisional and subject to change.

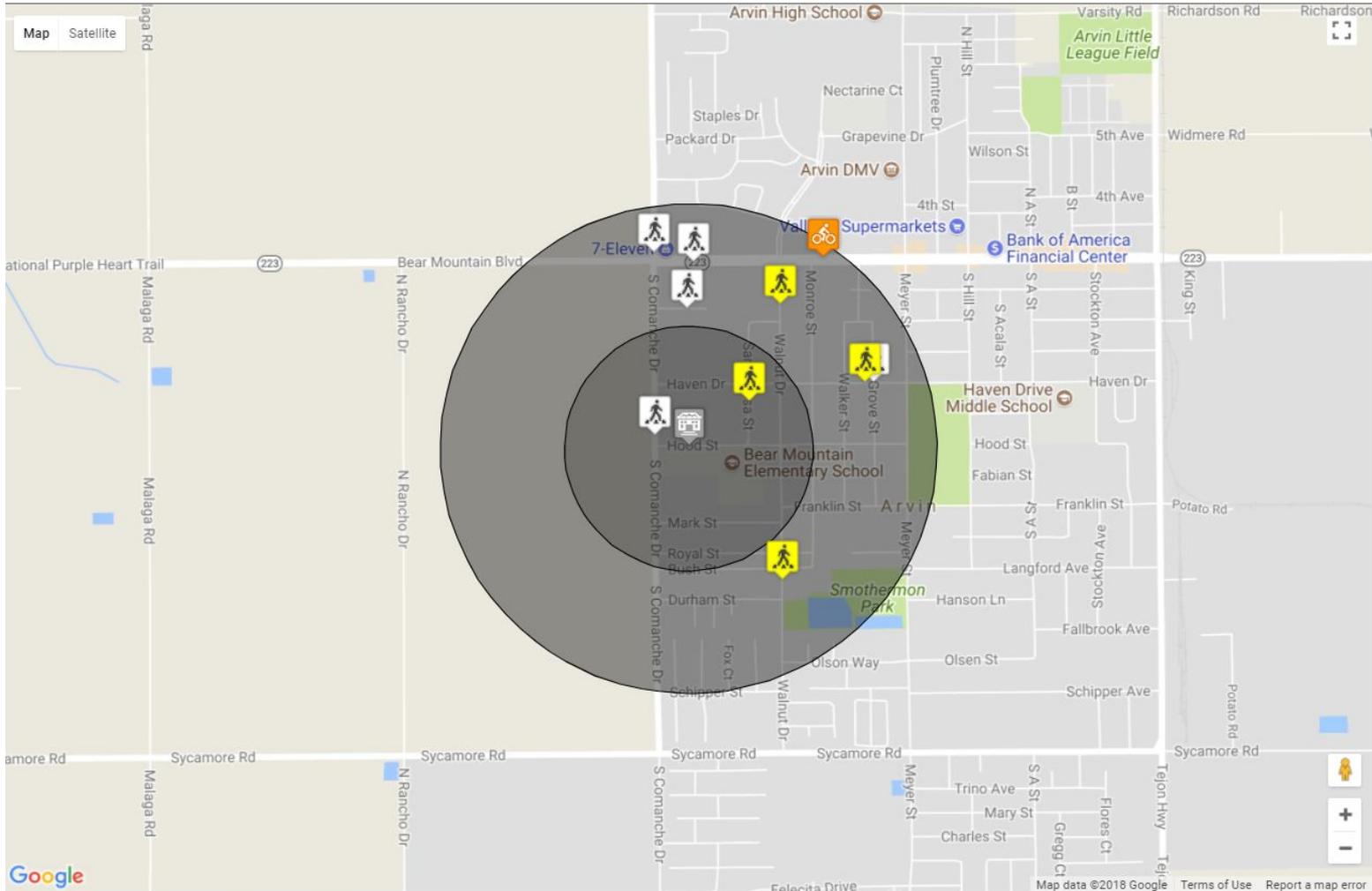
Arvin High

900 Varsity Road | Arvin | Kern County



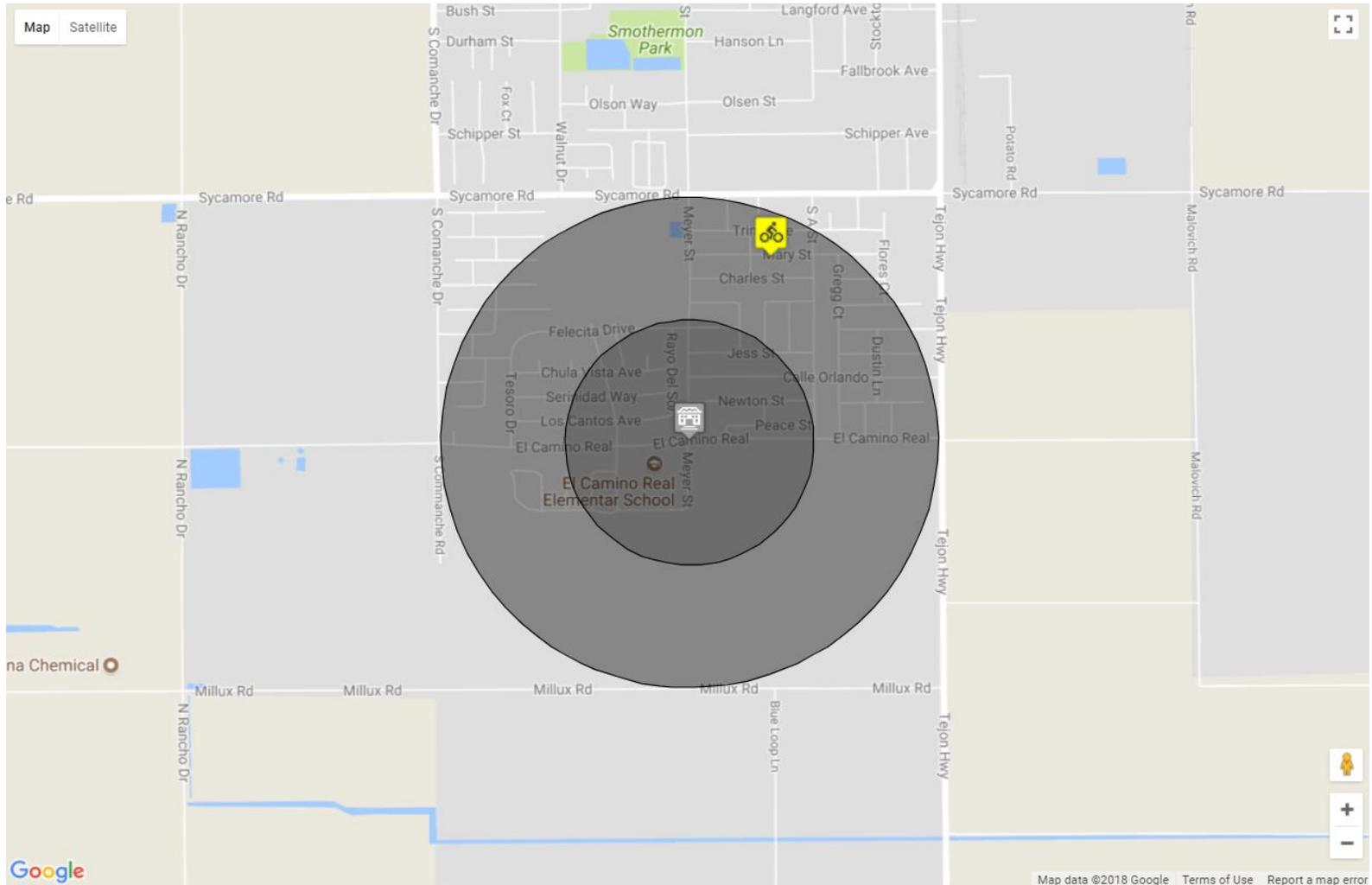
Bear Mountain Elementary

1501 Hood Street | Arvin | Kern County



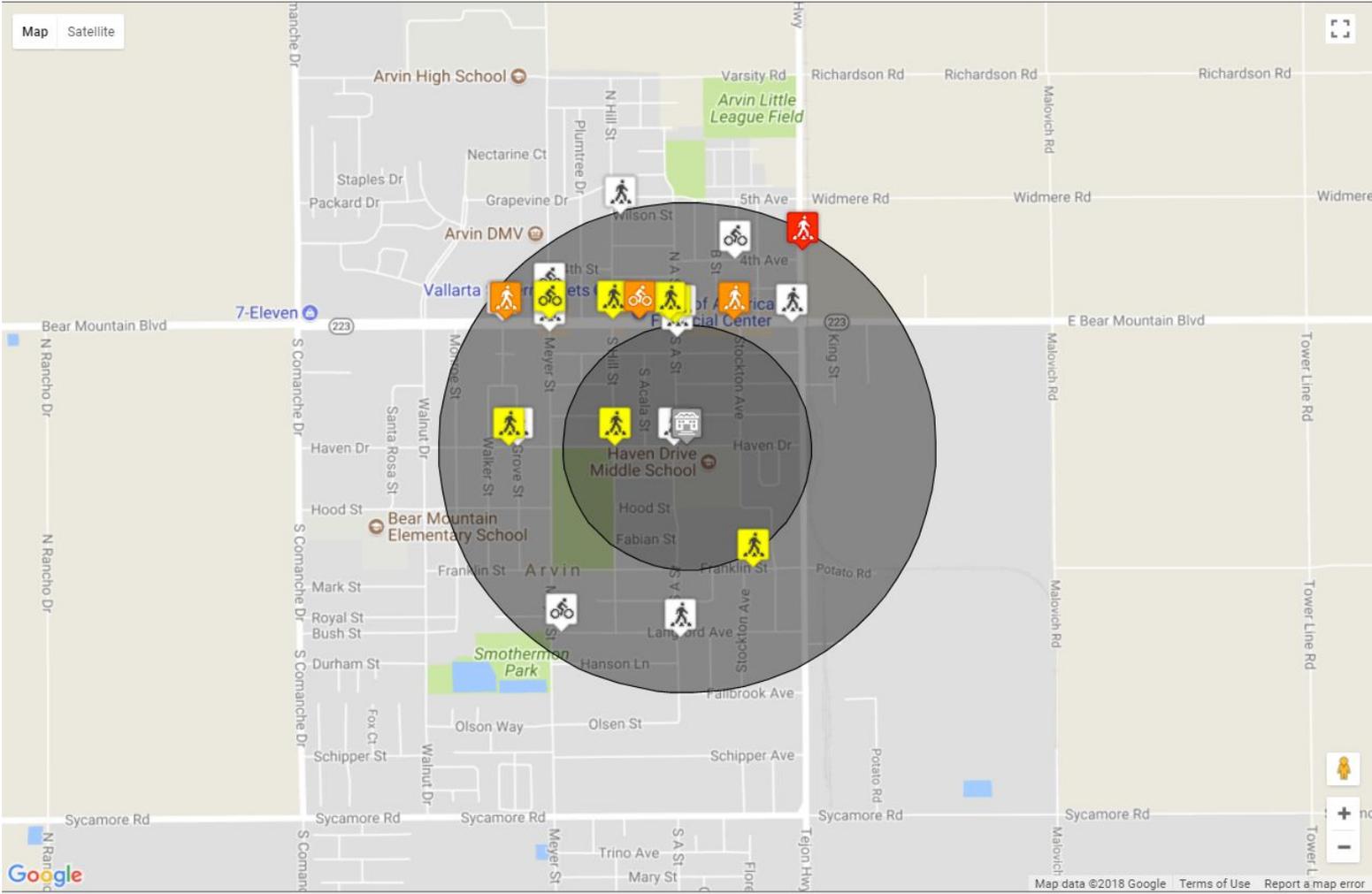
El Camino Real Elementary

911 El Camino Real Road | Arvin | Kern County



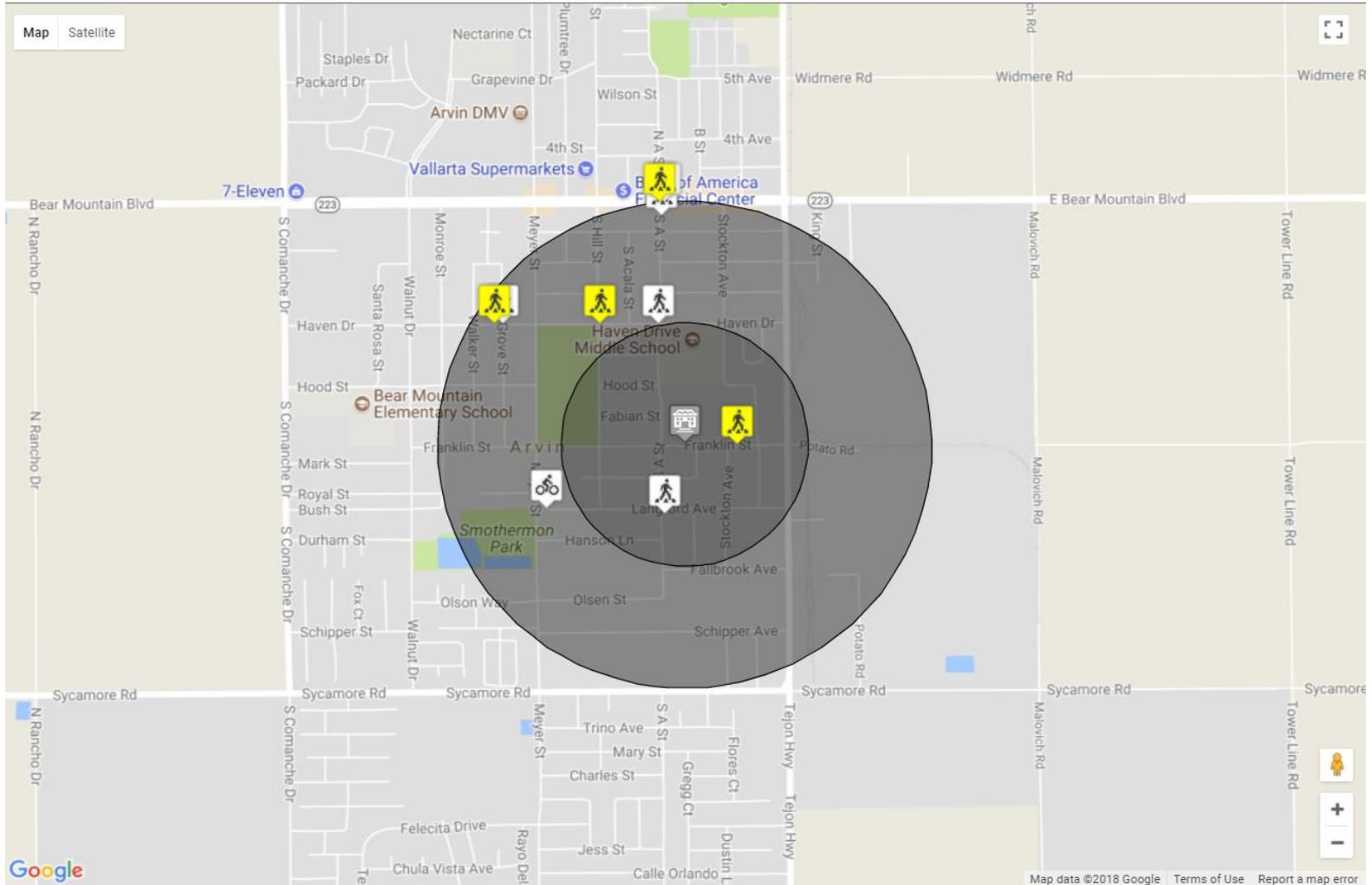
Haven Drive Middle

341 Haven Drive | Arvin | Kern County



Sierra Vista Elementary

300 Franklin Street | Arvin | Kern County



The Transportation Injury Mapping System (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/>

