



# Recommendations to Improve Pedestrian & Bicycle Safety for the Clegg Elementary School & Stacey Middle School Community (Westminster School District)



October 2018



# Acknowledgements

## Planning Committee

Karen McRae	Clegg Elementary School
Amy Adams	Clegg Elementary School
John Staggs	Clegg Elementary School
Coleen Parker	Clegg Elementary School
Kelly Vazquez	Clegg Elementary School
Heidi DeBritton	Stacey Middle School
Bella Ayala	Stacey Middle School
Juan Tomas	Stacey Middle School
Lorena Ortega	Westminster School District Council Parent Teacher Association

We would like to thank the Planning Committee for inviting us into their community and for hosting the Community Pedestrian and Bicycle Safety Training for Clegg Elementary School and Stacey Middle School in the City of Huntington Beach.

Thank you to the Westminster School District Council Parent Teachers Association for providing dinner and refreshments in support of this training, to Theresa Benitez and Brennie Nguyen for interpretation services, to the Automobile Club of Southern California (AAA) for sponsoring child care, and to Clegg Elementary School for providing its Multi-Purpose Room as the venue for this training.



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

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

# Table of Contents

<b>Acknowledgements</b> .....	2
<b>Planning Committee</b> .....	2
<b>Introduction</b> .....	4
<b>Background</b> .....	4
<b>Planning Process</b> .....	5
<b>Existing Conditions</b> .....	6
<b>Pedestrian &amp; Bicycle Collision History</b> .....	6
<b>Walking &amp; Biking Assessment Reflections</b> .....	7
<b>Key Opportunities to Improve Walking and Biking Safety</b> .....	11
<b>Community Recommendations</b> .....	11
<b>Cal Walks/SafeTREC Recommendations</b> .....	13
<b>Appendix A</b> .....	15
<b>Appendix B</b> .....	20

# Recommendations to Improve Pedestrian & Bicycle Safety for the for the Clegg Elementary School & Stacey Middle School Community (Westminster School District)

By Daniel Gonzalez, Miha Tomuta, Wendy Ortiz, California Walks;  
Katherine Chen, Lisa Peterson, UC Berkeley Safe Transportation Research & Education Center

## Introduction

At the invitation of Clegg Elementary School, 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) for the Clegg Elementary School and Stacey Middle School community in Huntington Beach and Westminster. The CPBST is a community-driven pedestrian and bicycle safety action-planning workshop aimed to improve walkability and bikeability across California.

Cal Walks and SafeTREC (Project Team) facilitated the workshop on September 27, 2018 from 4:00 p.m. to 7:00 p.m. in the Clegg Elementary Multi-Purpose Room. Dinner, childcare, simultaneous English-to-Spanish interpretation, and simultaneous English-to-Vietnamese interpretation were provided to maximize community participation. Fifteen (15) individuals attended the workshop, including Clegg Elementary School and Stacey Middle School parents, staff, and Parent Teacher Association (PTA) representatives.

The three (3) 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) three walkability assessments along three key routes; and 3) small group action-planning discussions to prioritize recommendations for the Clegg Elementary School and Stacey Middle School active transportation efforts.

## 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 and to identify pedestrian and bicycle safety priorities and actionable next steps 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 conducts 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.

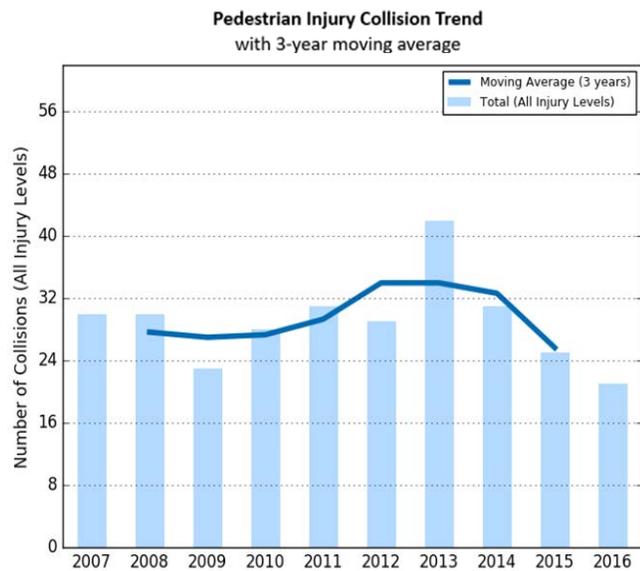
## Planning Process

For each training, The Clegg Elementary School and Stacey Middle School CPBST planning process started in April 2018. The planning process consisted of:

- **Community Plans and Policies Review:** Cal Walks conducted a review of current community planning documents to inform the training and prepare to build off existing efforts. The following documents were reviewed prior to the site visit:
  - [Huntington Beach General Plan Update-Circulation](#), 2017
  - [Huntington Beach Ticket Diversion Program](#), 2016
  - [Huntington Beach Bicycle Safety Letter](#), 2014
  - [Huntington Beach Bicycle Master Plan](#), 2013
  - [Huntington Beach Bikeways Map](#), 2012
  - [Westminster General Plan Update](#), 2016
- **Analysis and Mapping of Pedestrian and Bicycle Injury Data:** SafeTREC used the Statewide Integrated Traffic Records System (SWITRS) and the Transportation Injury Mapping System ([tims.berkeley.edu](https://tims.berkeley.edu)) to analyze pedestrian and bicycle injury data around the Clegg Elementary School and Stacey Middle School campuses, as well as Census data to create collision rates based on population. Patterns of injury collisions, victim characteristics, and demographics were analyzed to inform the planning process for the CPBST.
- **Identification of Priority Discussion Topics for Training:** The Planning Committee identified the area around the Clegg Elementary School and Stacey Middle School campus as the focus of the CPBST to: 1) ensure the safety of community members walking and biking; 2) ensure the safety of students walking and biking; 3) encourage increased walking and biking to school; and 4) partner and collaborate with the City of Huntington Beach and City of Westminster to address community safety concerns.
- **Site Visit and Student Arrival Observations:** The Project Team facilitated an in-person site visit on June 29, 2018 and conducted in-person student arrival observations on September 19, 2018 from 7:30 a.m. to 8:15 a.m. with the Planning Committee at Clegg Elementary School 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. The Project Team used the site visit and student arrival observations to develop the workshop presentation to feature local infrastructure examples and to develop the walking and biking assessment route maps.

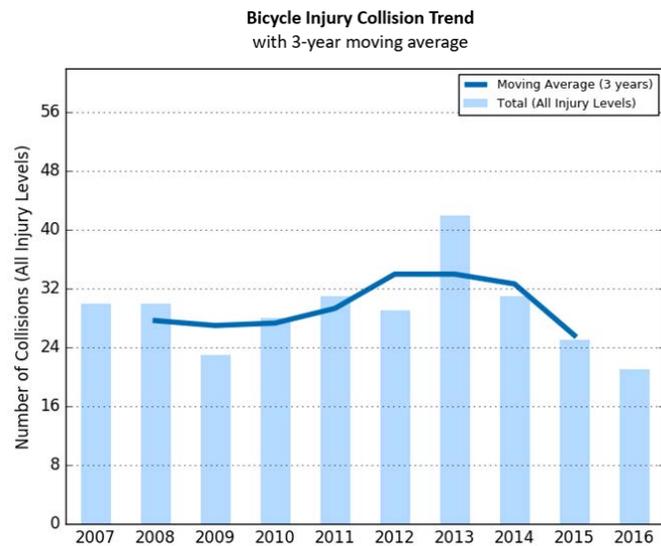
# Existing Conditions

## Pedestrian & Bicycle Collision History<sup>1</sup>



Between 2012-2016, there were 148 pedestrian collisions, including six (6) fatalities and twenty-three (23) severe injuries, within the two-mile radius around Clegg Elementary School and Stacey Middle School. Collisions in this time period are concentrated on larger arterials: Springdale Street, Edwards Street, Goldenwest Street, Westminster Boulevard, and Beach Boulevard/California State Route 39 (CA 39). Collisions primarily occurred during high traffic times on Tuesday and Wednesday afternoons and evenings between 3:00 p.m. to 8:59 p.m. The top two collisions factors for pedestrian collisions are driver failure to yield right-of-way to pedestrians at a crosswalk (39.2%) and

pedestrian failure to yield right-of-way to vehicles (20.3%).<sup>2</sup> Over the 5-year period between 2012-2016, pedestrian collisions appear to be on a downward trajectory.



Between 2012-2016, there were 231 bicycle collisions, including three (3) fatalities and nine (9) severe injuries, within the two-mile radius around Clegg Elementary School and Stacey Middle School. Collisions in this time period are concentrated on larger arterials including: Springdale Street, Edwards Street, Goldenwest Street, Westminster Boulevard, Edinger Avenue, and Beach Boulevard/California State Route 39 (CA 39). The top two collisions factors in collisions involving bicyclists are a driver or bicyclist's failure to drive on the right half of the roadway (39.8) and unsafe turning with or without signaling by a driver or bicyclist (11.3%).<sup>3</sup> Over

the 5-year period between 2012-2016, bicycle collisions appear to be on a downward trajectory.

<sup>1</sup> 2016 SWITRS data are provisional as of March 2018.

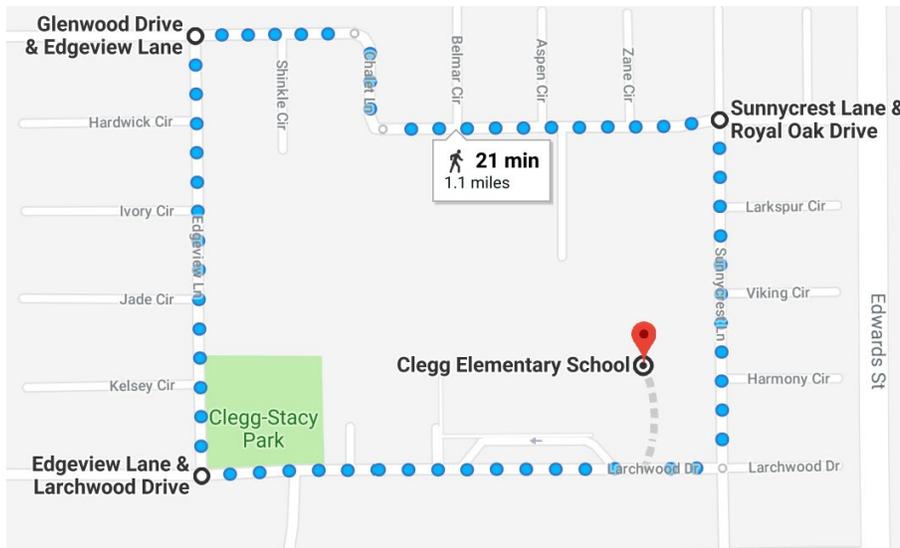
<sup>2</sup> Pedestrians have the right-of-way in marked and unmarked crossings, and drivers are legally required to yield to pedestrians in these instances. However, when pedestrians cross outside of marked or unmarked crossings, pedestrians must yield the right-of-way to drivers. A pedestrian is legally 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.

<sup>3</sup> 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.

# Walking & Biking Assessment Reflections

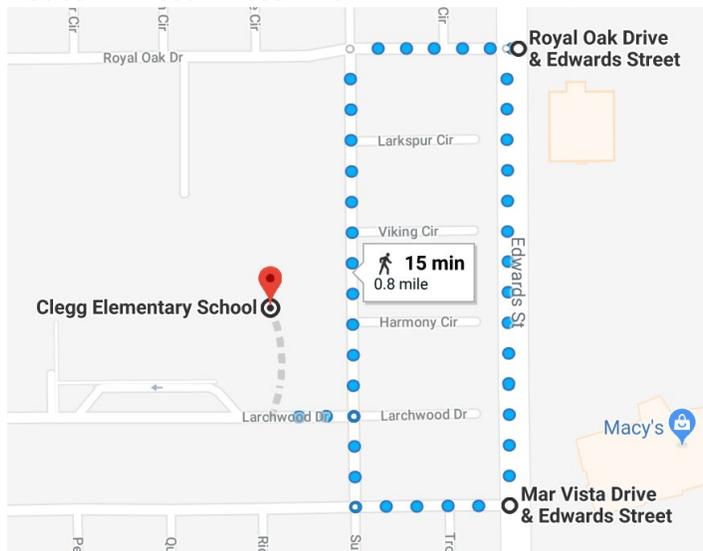
Participants were asked to 1) observe infrastructure conditions and the behavior of all road users; 2) assess the qualitative and emotional experience of walking or biking along the route; 3) identify positive community assets and strategies which can be built upon; and 4) consider how the walking and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

## Route 1: Schools & Clegg-Stacy Park



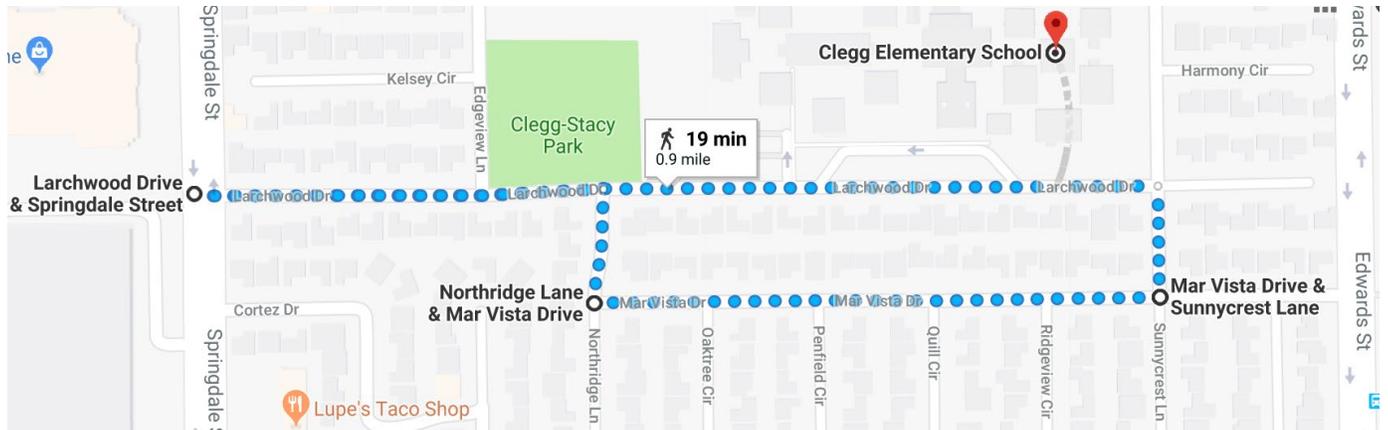
This route focused the streets immediately around Clegg Elementary School and Stacey Middle School, where parents and students walk, bike, and drive to the campuses. Starting the walking assessment at Clegg Elementary School, participants walked west along Larchwood Drive, north along Edgewood Lane, east along Glenwood Drive, and south along Sunnycrest Lane to return to Clegg Elementary School.

## Route 2: Westminster Mall



This route focused on Edwards Street, the major arterial, and on Sunnycrest Lane, the main residential street. Both streets are used by parents and students walking, biking, and driving to and from Clegg Elementary School and Stacey Middle School. Students also use these streets to walk to Westminster Mall after school. Starting the walking assessment at Clegg Elementary School, participants walked east on Larchwood Drive, south on Sunnycrest Lane, east on Mar Vista Drive, north on Edwards Street, west on Royal Oak Drive, and south on Sunnycrest Lane to return to Clegg Elementary School.

### Route 3: Larchwood Drive



This route focused on Larchwood Drive and Mar Vista Drive, which are commonly used routes by parents and students traveling to and from Clegg Elementary School and Stacey Middle School. Starting the walking assessment at Clegg Elementary School, the participants walked west on Larchwood Drive to Springdale Street, east on Larchwood Drive, south on Northridge Lane, east on Mar Vista Drive, north on Sunnycrest Lane, and west on Larchwood Drive to return to Clegg Elementary School.

Following the walking and biking assessment, the participants shared the following reflections:

- **Lack of High-Visibility Crosswalks:** Participants on Route 2 shared their concerns with the lack of high-visibility crosswalk markings at the intersections of Royal Oak Drive/ Sunnycrest Lane and Mar Vista Drive/Sunnycrest Lane in Huntington Beach as well as Royal Oak Drive/Edwards Street in Westminster. There is heavy foot traffic at these intersections from students, parents, and residents walking to and from school and other community destinations. Participants on Route 3 were concerned about the lack of high-visibility markings at the 3-way stops on Larchwood Drive at Edgview Lane and Northridge Lane in Huntington Beach.
- **High Motorist Speeds:** Participants on Route 2 expressed concerns with drivers speeding without regard for the students, parents, and residents walking along Edwards Street, which borders both Huntington Beach and Westminster. Using a speed radar device, participants recorded ten motorists at random. Of this sample, nine out of ten drivers were traveling above the 40 mph speed limit at speeds ranging from 42 mph to 57 mph, which validated residents' ongoing concerns with speeding on Edwards Street from the City of Westminster as they travel downhill.
- **Unsafe Motorist Behaviors:** Workshop participants noted that unsafe motorist behaviors in Huntington Beach and Westminster deter many in the school community from walking and biking in the school because they would rather drive than expose themselves to potential collisions. Participants shared that parents conduct illegal U-turns along Sunnycrest Lane, speed in the school zone, use non designated zones for arrival and dismissal periods, and beckon their children to cross the street unsafely midblock during dismissal time. Pedestrians also noted that motorists often stop midway into the crosswalk, which blocks the path of pedestrians and makes pedestrians and bicyclists uneasy as they navigate their way to school.

- **School Zone Signage:** Participants observed a lack of school zone signage to prompt motorists to drive slower and more attentively. They called for the installation of a school zone sign on the City of Westminster segment of Edwards Boulevard in order to signal to drivers to expect students in the area. Several schools—including Clegg Elementary, Stacey Middle, Westminster High, and Schroeder Elementary School—are all located off of Edwards Boulevard, which is the primary route students use to walk and bike to school and parents use to drive.

- **Loose Dogs:** Participants on Route 1 were concerned about the presence of loose dogs in the Huntington Beach neighborhood. Participants shared that residents often walk their dogs without leashes and dogs regularly escape from resident yards. Participants also shared that many residents do not clean up after their pets and dog waste can be found in landscape buffers along sidewalks and in Clegg Stacey Park.



*A friendly neighborhood reminder to clean up after your pet.*

- **Difficult Crossings at Marked and Unmarked Pedestrian Crossings:** Participants on Route 1 were particularly concerned about pedestrian safety crossing in the standard marked crosswalk at the Northridge Lane/Larchwood Drive intersection. They shared that parents often make U-turns in the intersection during arrival and dismissal times and fail to yield to pedestrians in the crosswalk. Participants supported additional pedestrian crossing enhancements throughout Huntington Beach at intersections leading up to both schools, including Sunnycrest Lane/Larchwood Drive, Larchwood Drive/Edgeview Lane, Sunnycrest Lane/Royal Oak Drive, and Larchwood Drive/Northridge Lane. Supported crossing enhancements include advanced stop bars, high-visibility crosswalk markings, and pedestrian crossing signage to improve safety for students and parents walking and biking to and from school.

Additionally, participants noted that signalized intersections on Edwards Street, where the cities of Huntington Beach and Westminster share a border, are particularly challenging to cross. For example, at Royal Oak Drive, the signal does not have a dedicated left turn phase onto Royal Oak Drive. The result is drivers frequently failing to yield the right-of-way to pedestrians crossing in an effort to make their left turns. Participants also noted that the twenty seconds allocated to cross at Royal Oak Drive is inadequate as they spend approximately five seconds waiting to make sure that drivers are fully stopped before they begin to cross Edwards Street.



*A standard marked crosswalk along Larchwood Drive and North Ridge Lane.*

- **Sidewalk Conditions:** Sidewalk conditions vary along the three assessment routes with differing widths and levels of maintenance. Participants along Route 2 shared that sidewalks are too narrow for families walking. Participants shared that they have seen parents with strollers struggle to navigate Edwards Street in Huntington Beach. The existing sidewalks and adjacent



*Participants walking north on Edwards Street are forced into street due to the narrow sidewalk*

wall do not allow for groups of three or more to walk together, which leads to some students choosing to walk in the street where drivers frequently travel above the 40 mph speed limit. While conducting the assessment, participants walking along Edwards Street in Huntington Beach were forced to walk in the street as the sidewalk was not wide enough to allow for a resident walking two dogs to pass. Following this incident, a participant shared that she would rather walk on the opposite side of Edwards Street in Westminster. Despite there being no sidewalk, without a wall on that side there is enough space to maneuver around other people walking and avoid having to walk in the street.

- **Lack of Bike Facilities:** Participants noted that despite existing bike lanes on Edwards Street in Huntington Beach and Westminster and Springdale Street in Huntington Beach, bicyclists ride on the sidewalk because the bike lanes are narrow and next to very fast moving traffic. Participants noted that bike lanes are too narrow for adults to ride comfortably let alone for parents to feel comfortable allowing their children to ride unsupervised.



*Bicyclist heading west on Royal Oak Drive. Participants shared that the sidewalk is the preferred location to bike for most residents.*



*South on Edwards Street, the bike lanes are mostly in the gutter and are too narrow and too close to high speed drivers for a pleasant riding experience.*

- **Community Assets and Culture:** Participants shared that they appreciate the ample parking space, well-maintained trees and landscaped buffers, clean and level sidewalks, and friendly neighbors that characterize the neighborhood. While on the walking and biking assessment, participants observed community members walking their dogs, running, and biking in the community, which contributed to the vibrant nature of the neighborhood.

## Key Opportunities to Improve Walking and Biking Safety

Following the walking and biking assessment, the Project Team facilitated small-group action planning discussions where participants prioritized and preliminarily planned community programs aimed at reducing the number of injuries and fatalities, as well as increasing the number of people and the frequency of walking and biking in the Clegg and Stacey school communities.

Through a voting process during the training, participants chose to focus on and preliminarily plan for two community programs. Participants self-selected which project they wanted to collaborate on with their fellow participants to develop a plan and discussed:

- The problem the community programs are intended to solve;
- The people, organizations, and agencies that should be involved to implement the community programs;
- Resources needed to implement the community programs; and
- Short-term and long-term action steps to implement the community programs.

## Community Recommendations

Workshop participants provided the following recommendations and next steps for overall pedestrian and bicyclist safety improvements:

### Community Programs, Policies, and Campaigns

- **Crossing Guard Program:** Participants identified a need to restart conversations with the Clegg Elementary School Principal and engage the Stacey Middle School Principal, teachers, and parents in order to build stronger support to fund the crossing guard program, which would benefit students from both schools. Earlier this year, the Clegg Elementary School Principal, parents, and PTA drafted a letter petitioning the City of Huntington Beach to fund a crossing guard at the Royal Oak Drive/Edwards Street intersection, but the process was put on hold as the 2017-2018 school year came to an end. Participants identified the PTA president as a key contact to engage in this ongoing process.



*Participant crossing along Royal Oak Drive onto Edwards Street. Participants identified this intersection as a high priority for a crossing guard due to high motorist speeds.*

Some longer term actions include:

- Making a public comment at the upcoming school district meetings about the need for a crossing guard program and inquiring how Westminster High School and other area schools fund their crossing guard programs.
- Conducting pedestrian counts at the Royal Oak Drive/Edwards Street intersection.
- Gather signatures from parents at Clegg Elementary School and Stacey Middle School to demonstrate community-wide support.

If the City of Huntington Beach is unable to fund the program, participants considered asking the City of Westminster, the Westminster School District, and the Westminster and Huntington Beach Police Departments to fund the needed program since many students live in Westminster.

- **Safe Route to School Education and Encouragement Program:** Participants are concerned with unsafe walking and biking behaviors by parent and students at and surrounding the schools. Participants often observe parents and students alike engaged in unsafe behaviors that can lead to harmful and fatal injuries if a collision were to occur. Rather than a punitive approach, participants outlined a Safe Routes to School program that would target the most unsafe and high-risk pedestrian and bicycle behaviors. The participants of this group—which included residents, parents, a PTA member, and school staff—identified educational pamphlets, e-mail distribution, and educational lawn signs with safe walking and biking tips as the most appropriate strategy for short-term implementation. Participants decided that using existing educational materials and lawn signs would aid in the rapid dissemination of safety messages to students and parents.

Between October 28-30, 2018 leading up to Halloween, participants committed to:

- E-mailing an educational pamphlet to families through the schools' email system;
- Making phone calls to parents with safe walking and biking tips;
- Posting educational information on the the schools' social media accounts;
- Placing educational lawn signs at key intersections leading up to the schools; and
- Organizing a traffic safety rally on October 30th, 2018, where, older students from Clegg Elementary would hold safety messages directed at drivers during school arrival in preparation for that evening's Halloween Trunk or Treat event.

Building off of these safety messaging activities, participants planned to host a Day of Visibility around Daylight Savings Time in November 2018 to share safety messages around distracted driving and safe walking and crossing behaviors. Following these two educational campaigns, participants would like to explore hosting a Walk to School Day event that would encourage students and parents to walk and bike to school rather than arrive by car. Participants identified the Westminster Mall and Buckingham Park as potential meeting points for parents and students to start their walk or bike to school together.

## Cal Walks/SafeTREC Recommendations

California Walks and SafeTREC also submit the following recommendations for consideration by the City of Huntington Beach, City of Westminster, and Clegg Elementary School and Stacey Middle School community:

- **Traffic Calming Measures along Edwards Boulevard from Bolsa Avenue to Westminster Boulevard:** During the site visit and workshop, participants consistently identified Edwards Boulevard as a challenging street for residents to cross and travel on while on foot or bike. ***We recommend the Cities of Westminster and Huntington Beach collaborate to engage residents to identify long-term traffic calming measures, such as implementing a road diet, installing bulb-outs, enhanced crossings, and wider, physically-separated bike lanes.*** Participants also shared concerns about the speed of drivers on this corridor, especially those coming down the I-405 freeway ramps towards Bolsa Avenue where students and community members walk and bike to access Westminster Mall. Traffic calming improvements can decrease driver speeds and improve safety for pedestrians, bicyclists, and drivers. We recommend the Cities of Westminster and Huntington Beach engage the community in order to prepare a future application to the state's [Active Transportation Program](#) to fund these improvements.
- **Lighting Assessment:** The Project Team noted a lack of pedestrian-scale lighting in the areas along Edwards Street, Sunnycrest Lane, and Larchwood Drive in Huntington Beach and Westminster. The majority of lighting is vehicle-oriented street lighting which limits visibility for students, parents, and residents that access the neighborhood by walking or biking. The Project Team ***encourages and recommends the workshop participants collaborate with the City of Huntington Beach, City of Westminster, and residents to perform citywide street night-time lighting assessments*** focused on pedestrian and bicycle lighting needs around Clegg Elementary School, Stacey Middle School, Clegg-Stacy Park, Westminster Mall, and along key pedestrian and bicycle corridors, such as Edwards Street, Springdale Street, Larchwood Drive, Sunnycrest Lane, and Royal Oak Drive. A lighting assessment can be used to identify and inventory nighttime pedestrian-scale lighting needs and identify lighting fixtures in need of repair or replacement, and with an inventory, the City can develop a proactive and equitable plan for streetlight maintenance that is not complaint-driven. Proper street lights provide a sense of safety and security and improve the overall well-being of road users. Lighting should be uniform, consistent, and reduce glare and light pollution.
- **Alternative Remote Arrival and Dismissal Zones:** The Project Team ***recommends that the Planning Committee collaborate with the Westminster School District and Westminster Mall to create an alternative remote arrival and dismissal zones in the Westminster Mall or at other lots near the school.*** Having an off-site arrival and dismissal zone would allow parents who drive their children to school to participate in the growing walking and biking safety efforts being established at the Clegg Elementary School and Stacey Middle School campuses, as well as alleviate the traffic congestion on Sunnycrest Lane and Larchwood Drive where the current arrival and dismissal zones for Clegg Elementary School and Stacey Middle School are located, respectively. We recommend the workshop participants and parents consult the [Safe Routes to](#)

[School Guide: Student Drop-off and Pick-up Guide](#) and the [Safe Routes to School Toolkit](#) to learn about best practices to help guide their efforts.<sup>45</sup>

- **Youth Bicycle Education and Encouragement:** The Project Team *recommends that the Planning Committee collaborate with the Westminster School District, the Westminster and Huntington Beach Police Departments, and the California Highway Patrol to bring annual bicycle rodeos to the Clegg Elementary School and Stacey Middle School campuses.* A bicycle rodeo educates youth on safe bicycling practices and rules of the road through obstacle courses in a controlled environment. Simultaneously, a bicycle rodeo may serve as encouragement for youth to bicycle to and from the Clegg Elementary School and Stacey Middle School campus and in their community.
- **Apply for a Kid’s Plate Grant to Support Encouragement Activities:** The [California Department of Public Health’s Kid’s Plate Grant](#) program 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 the Westminster School District PTA and Huntington Union School PTA explore potential partnerships with their respective School Districts* to support pedestrian and bicycle injury prevention activities at Westminster and Huntington Beach elementary and middle schools, especially around Walk to School Day and Bike to School Day. The funding opportunity could provide additional long-term and site-specific Safe Routes to School education and encouragement programs for Westminster and Huntington Beach Schools.
- **Establish a Task Force between the City, School District, and Police Departments of Westminster and Huntington Beach:** The Project Team recommends that the City, Westminster School District, and the Police Departments of Westminster and Huntington Beach *collaborate to establish a task force on walking and biking safety efforts to ensure that infrastructure improvements made near Clegg Elementary School and Stacey Middle School are coupled with improvements on adjacent routes that may be in another city.* Focusing on complete infrastructure improvements regardless of jurisdictional boundaries through increased coordination will ensure that the facilities are fully usable for all road users.

---

<sup>4</sup> Safe Routes to School Guide: Student Drop-off and Pick-up Guide developed by the Pedestrian and Bicycle Information Center (PBIC) with support from the National Highway Traffic Safety Administration (NHTSA), Federal Highway Administration (FHWA), Centers for Disease Control and Prevention (CDC) and Institute of Transportation Engineers (ITE).

<sup>5</sup> Safe Routes to School Toolkit produced by the Active Transportation Alliance.

## **Appendix A**

Pedestrian and Bicycle Collision Data Analysis  
Workshop Handout

# 2012-2016 STACEY MIDDLE AND CLEGG ELEMENTARY DATA ANALYSES

## Community Pedestrian and Bicycle Safety Training Workshop

### Huntington Beach, CA | September 27, 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 2012-2016 pedestrian and bicycle collision data to help the community better prioritize recommendations that emerge from this workshop. The data presented here is based on collisions within a two-mile radius from Clegg Elementary School and Stacey Middle School in the communities of Huntington Beach and Westminster, but not data for the City of Huntington Beach or City of Westminster as a whole.

## PEDESTRIANS

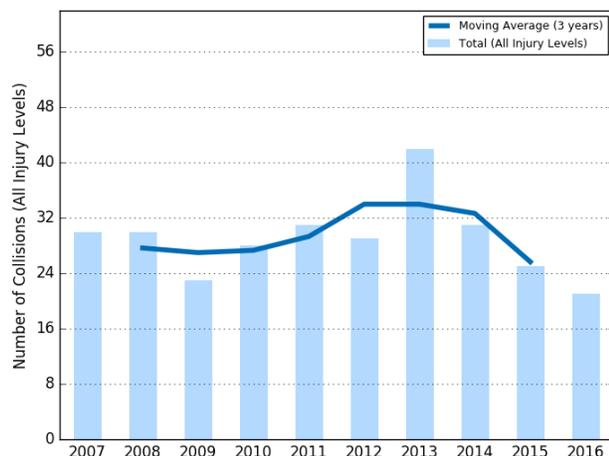


**319** people were killed or injured in **290** pedestrian collisions in the last 10 years (2007-2016).

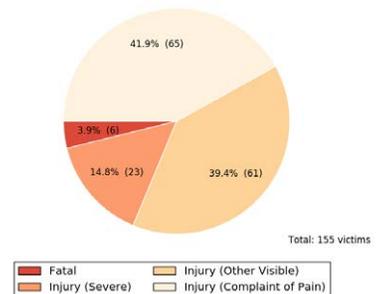
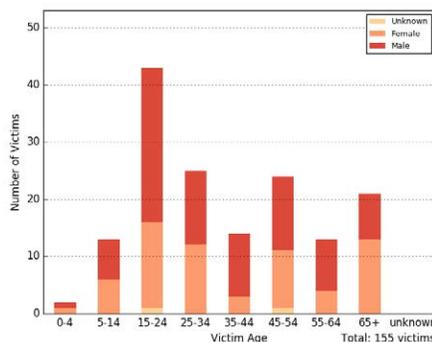
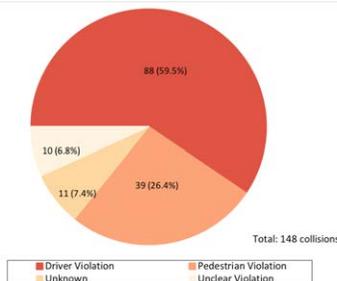
The **three-year moving average** line shows a **downward** trend in pedestrian collisions.\*

There were **25** pedestrian collisions in 2015, but an average of **25.67** pedestrian collisions per year for the 3-year moving 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.



**59.5%** driver violations  
VS.  
**26.4%** pedestrian violations



**57.4%** of victims were male  
**27.1%** of victims were under age 20  
**13.5%** of victims were age 65+

**18.7%** of victims (or 29 people) were **KILLED** or **SEVERELY INJURED**

\*Unclear violations were committed either by the driver, pedestrian or bicyclist. Unknown is when we do not know what the violation was.

Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2016 is provisional at this time.

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

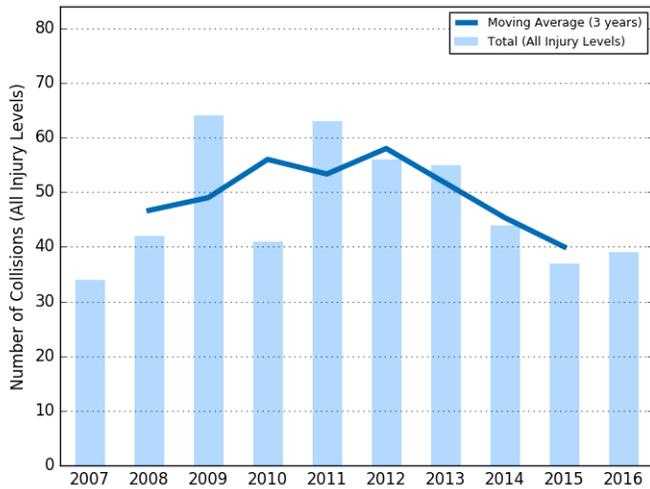
# BICYCLES



485 people were injured in 475 bicycle collisions in the last 10 years (2007-2016).

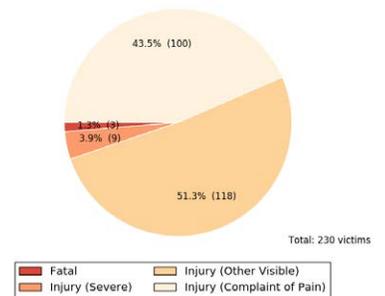
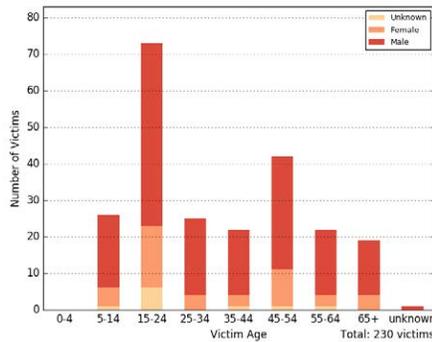
The **three-year moving average** line shows a **downward** trend in bicycle collisions.\*

There were **37** bicycle collisions in 2015, but an average of **40** bicycle collisions per year for the 3-year rolling average between 2015 and 2017.



\* 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.



- 75.7% of victims were male
- 33.5% of victims were under age 20
- 23.5% of victims were male and under age 20

**5.2%** of victims (or 12 people) were **KILLED or SEVERELY INJURED**

## SUMMARY



**34.6** pedestrian fatalities & injuries per 100,000 population in Huntington Beach over the last five years, which is **23.1% more than** Orange County and **3.6% less than** California

**38.0** pedestrian fatalities & injuries per 100,000 population in Westminster over the last five years, which is **35.2% more than** Orange County and **5.8% more than** California



**70.2** bicyclist fatalities & injuries per 100,000 population in Huntington Beach over the last five years, which is **84.3% more than** Orange County and **110.8% more than** California

**51.1** bicyclist fatalities & injuries per 100,000 population in Westminster over the last five years, which is **34.1% more than** Orange County and **53.4% more than** California

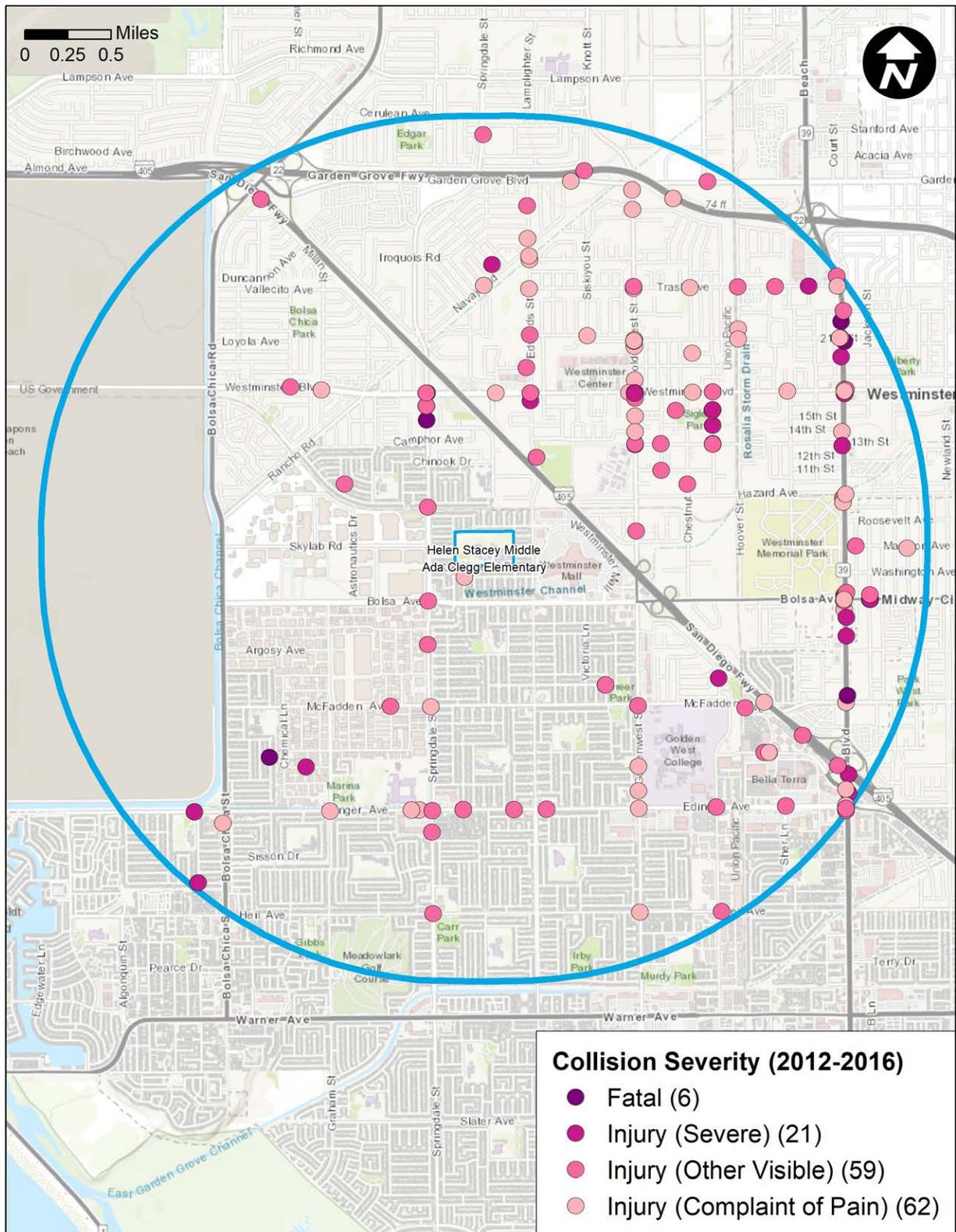
	Yearly Population Rate of Fatalities & Injuries per 100,000 Population Calculated Over a 5-year Period*	
	Pedestrian	Bicyclist
Huntington Beach	34.6	70.2
Westminster	38.0	51.1
Orange County	28.1	38.1
California	35.9	33.3

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

\* The rate per population is calculated by adding the number of fatalities and injuries from 2012 to 2016 divided by five times the population in 2016.

# Pedestrian Collisions 2012-2016

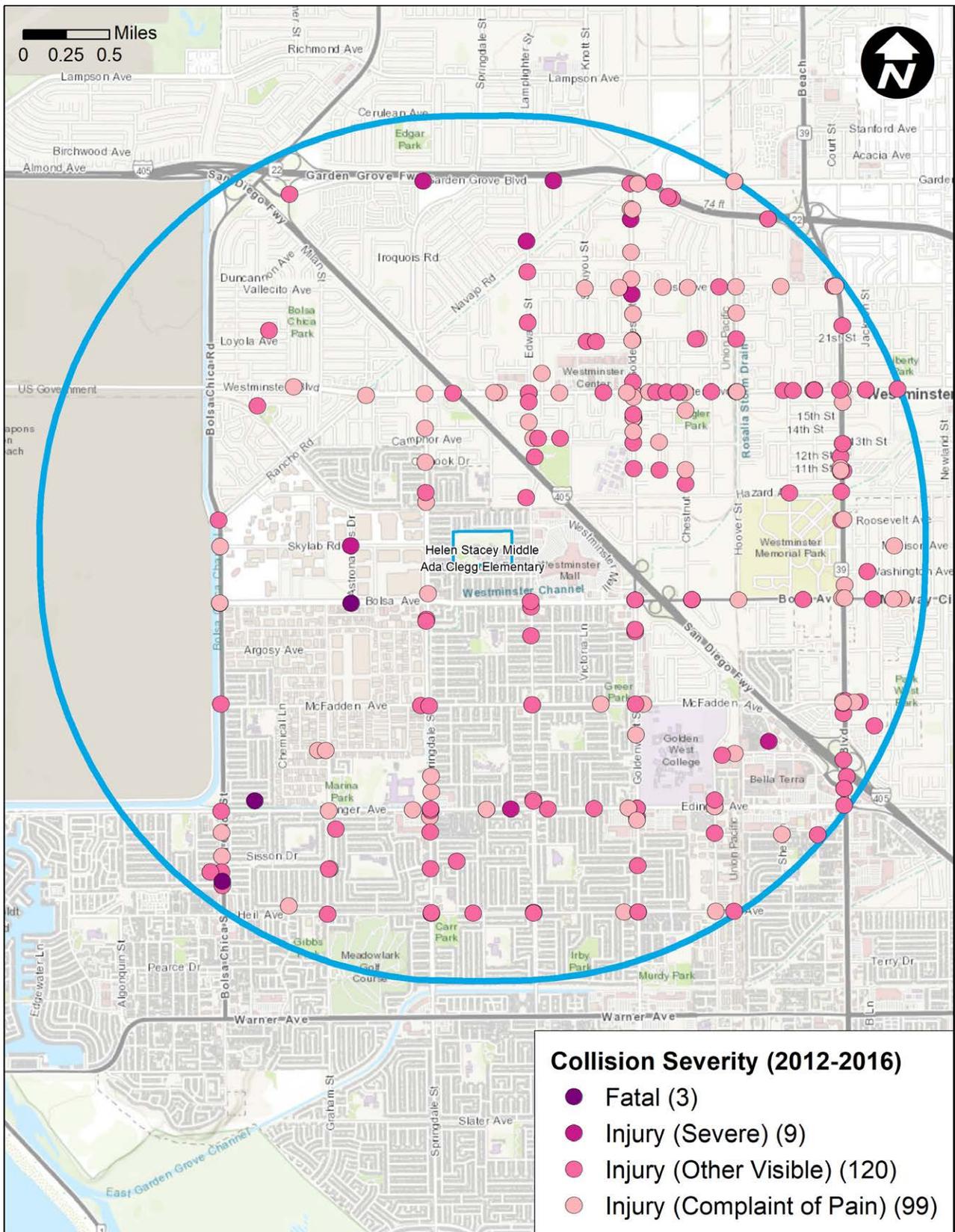
two-mile radius from Clegg Elementary School & Stacey Middle School in Huntington Beach, CA and Westminster, CA



Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2016 is provisional.

# Bicyclist collision locations, 2012-2016

two-mile radius from Clegg Elementary School & Stacey Middle School in Huntington Beach, CA and Westminster, CA



Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2016 is provisional.

## **Appendix B**

Pedestrian and Bicycle Collision Data Analysis  
Site Visit Presentation

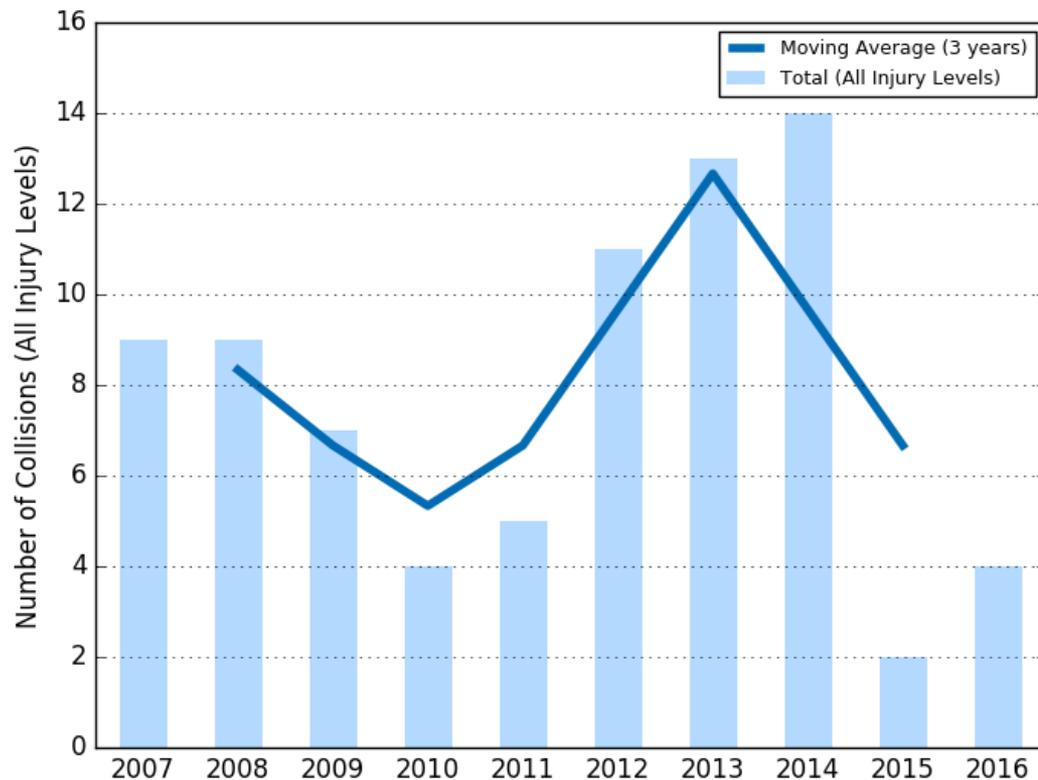
# Community Pedestrian and Bicycle Safety Workshop - Data

## Huntington Beach, CA

### 6/29/18

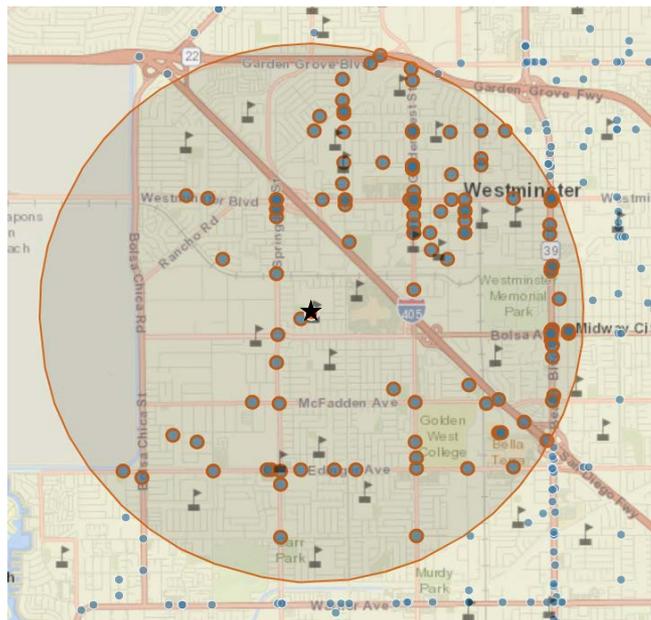
#### Pedestrian Injury Collision Trend

with 3-year moving average

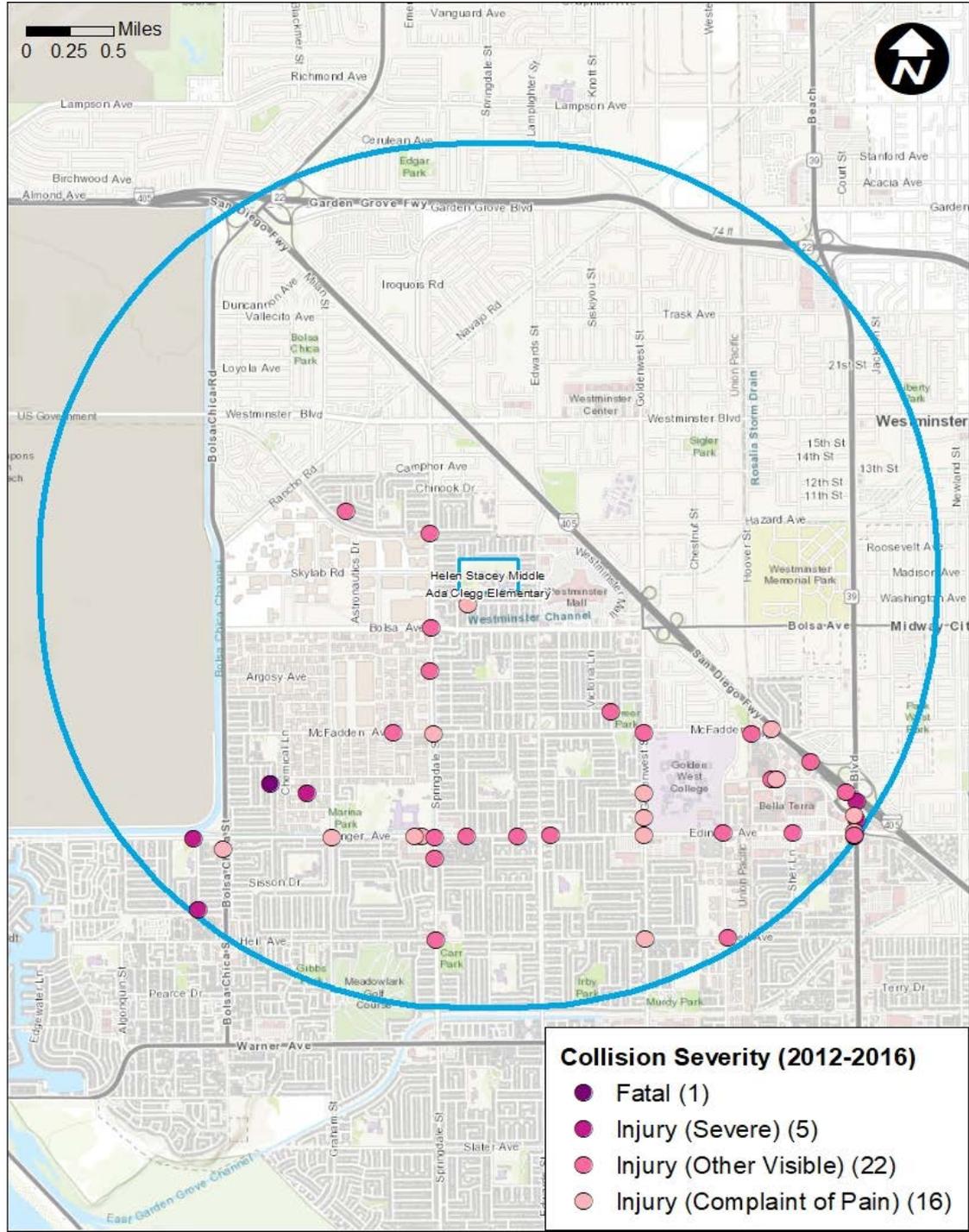


Note: 2015 and 2016 Statewide integrated Traffic Records Systems (SWITRS) data are provisional as of November 2017.

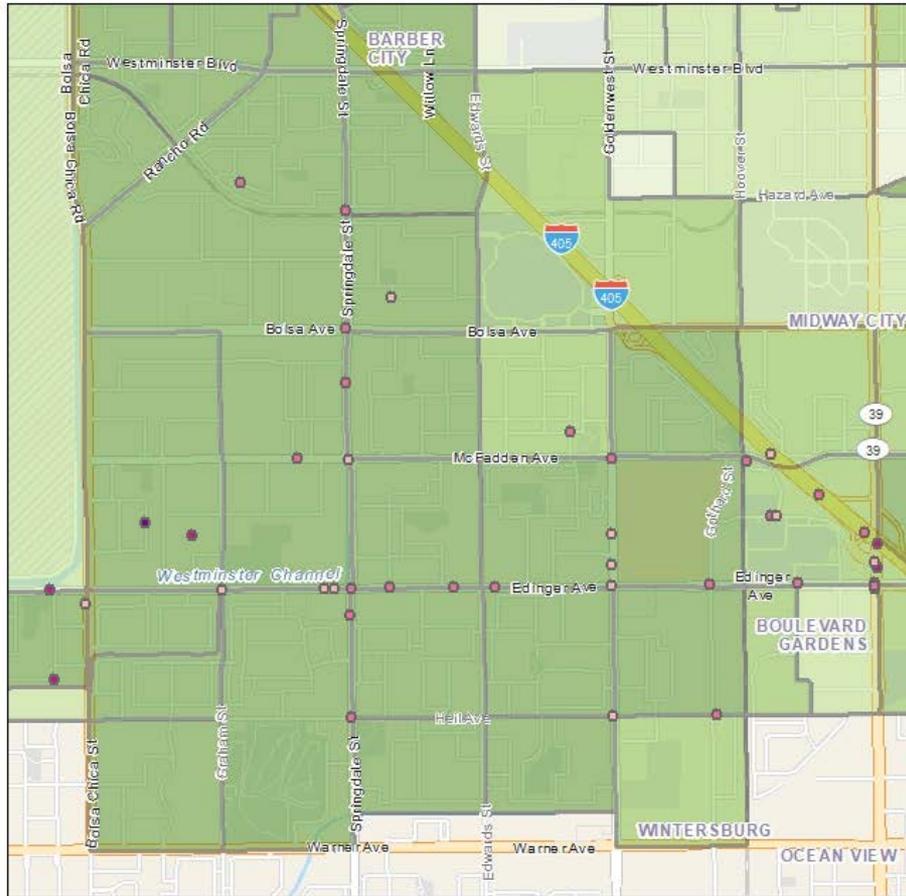
# Pedestrian Injury Collisions 2012-2016



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



# Stacey Middle and Clegg Elementary Pedestrian Collision Map (2012 - 2016)



### Collision Severity (2012-2016)

- Fatal (1)
- Injury (Severe) (5)
- Injury (Other Visible) (22)
- Injury (Complaint of Pain) (16)

### 2017 Median Household Income

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

## Pedestrian Injury Collisions by Time of Day and Day of Week

Total: 44 collisions  
\*One unknown time on Sunday

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

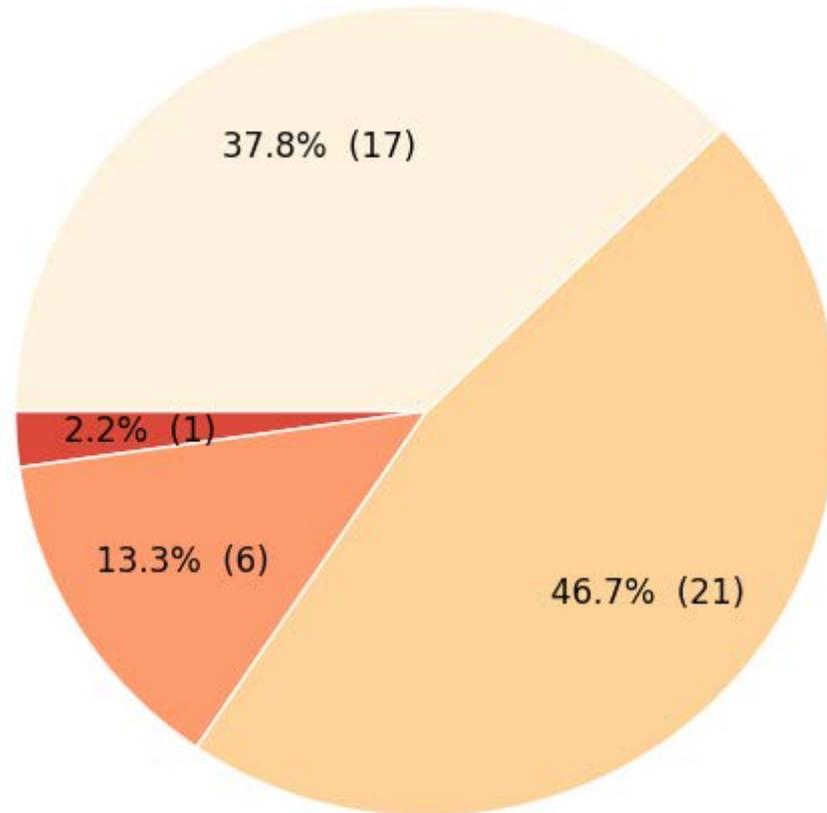
\*The color in this graph refer to how frequently a collision occurs at that time and day

## Top Violations in Pedestrian Injury Collisions

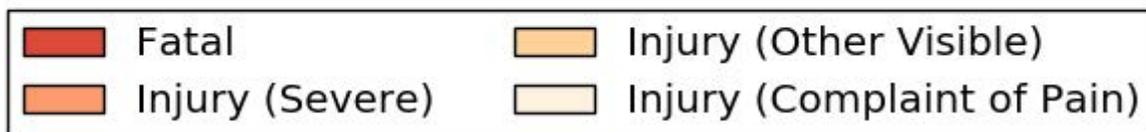
Total: 44 collisions

CVC No.	Description	Freq.	Percent
21950	Driver failure to yield right-of-way to pedestrians at a crosswalk	13	29.5%
21954	Pedestrian failure to yield right-of-way to vehicles	8	18.2%
22107	Unsafe turning with or without signaling	4	9.1%
21453	Red or Stop, vehicles stop at limit line or X-walk. When making right turn at a red light/stop sign driver required to yield to any vehicle approaching so closely as to constitute an immediate hazard	3	6.8%
21456	"Walk" pedestrian failure to yield right-of-way to vehicles already in crosswalk	3	6.8%
0	Unknown	2	4.5%
21956	Pedestrian failure to walk close to the edge of the roadway when there is no sidewalk present	2	4.5%
21461	Drivers cannot disobey regulatory signs/signals	1	2.3%
21755	Driver can pass another driver only if the movement is safe	1	2.3%
21804	Driver failure to yield right-of-way when entering/crossing a highway	1	2.3%
<b>Total</b>		<b>38</b>	<b>86.4%</b>

## Pedestrian Victim Injury Severity

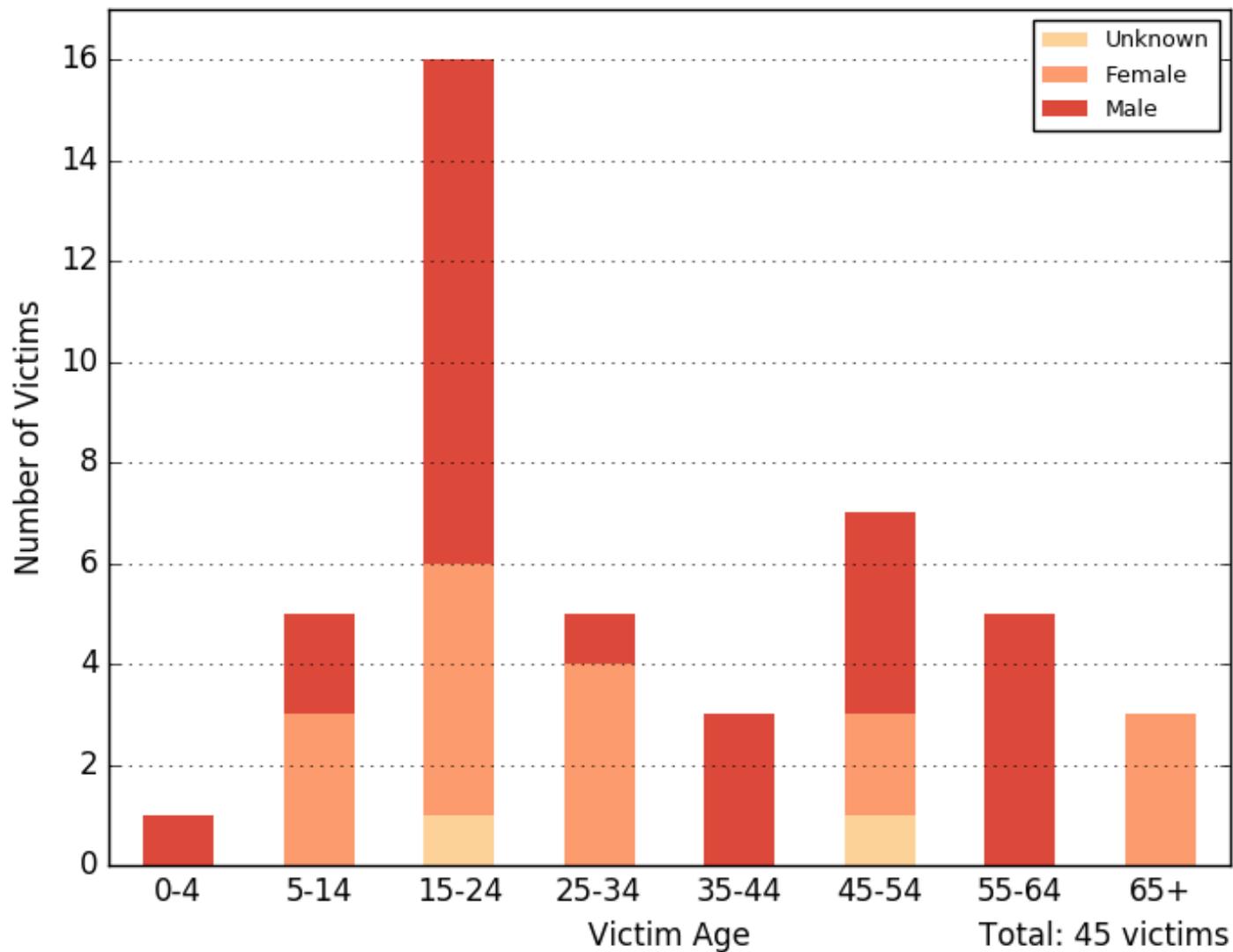


Total: 45 victims



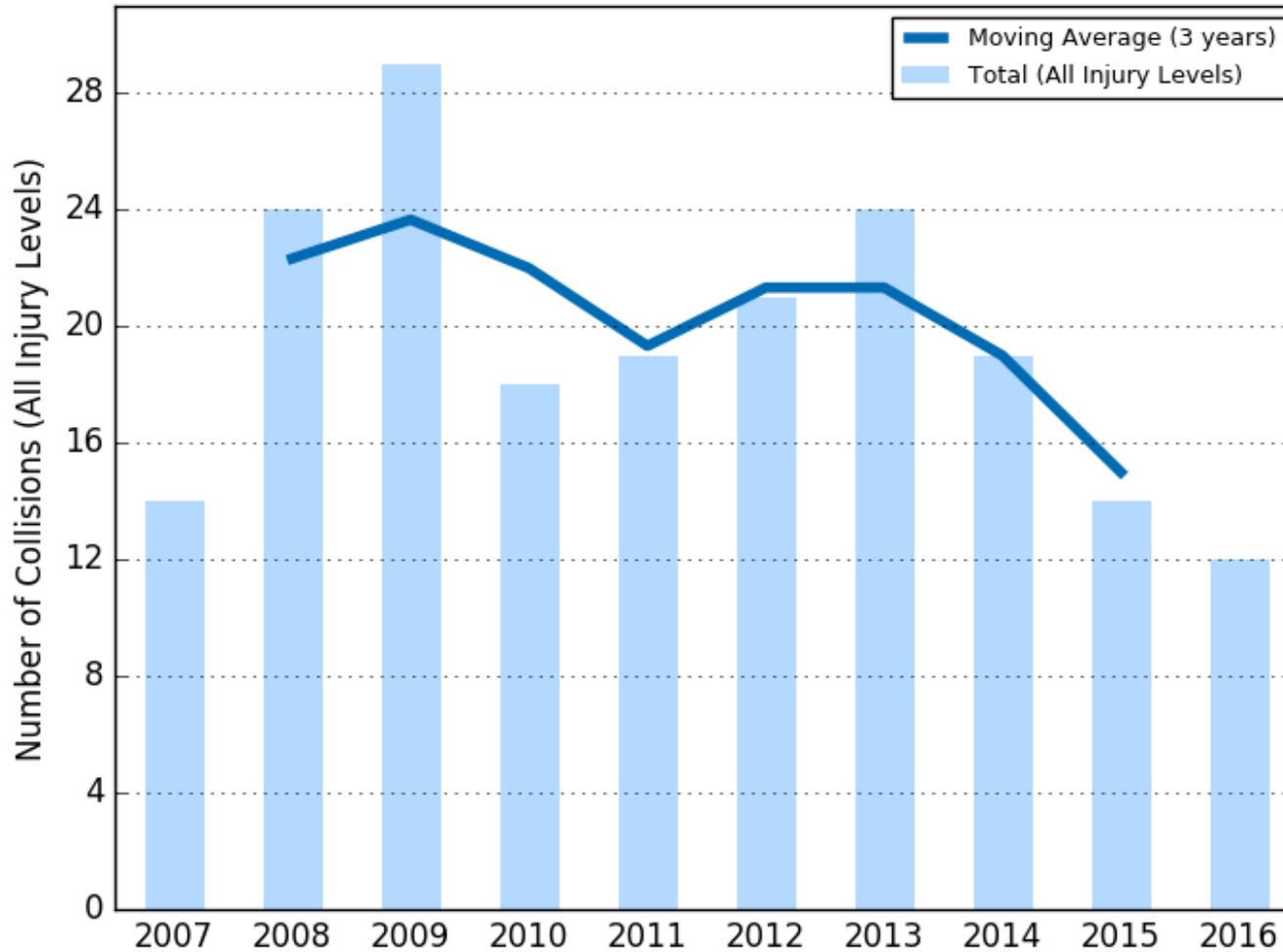
Source: SWITRS, 2012-2016; 2015 and 2016 SWITRS are provisional as of November 2017.

## Pedestrian Injury Victims by Age and Gender



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

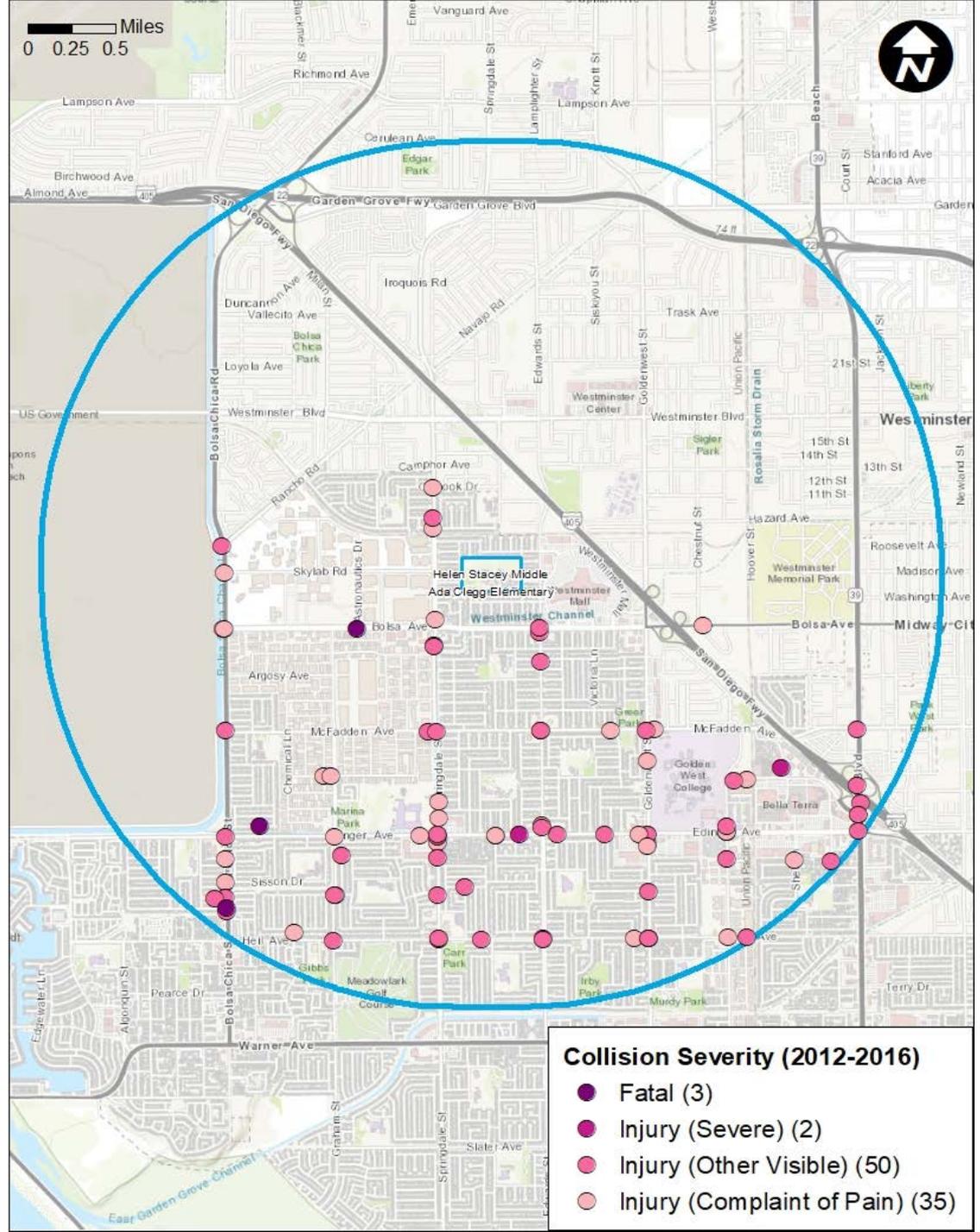
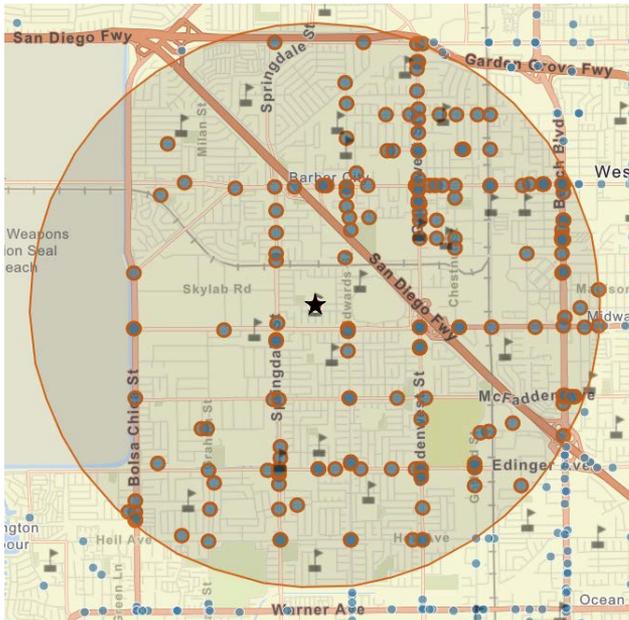
## Bicycle Injury Collision Trend with 3-year moving average



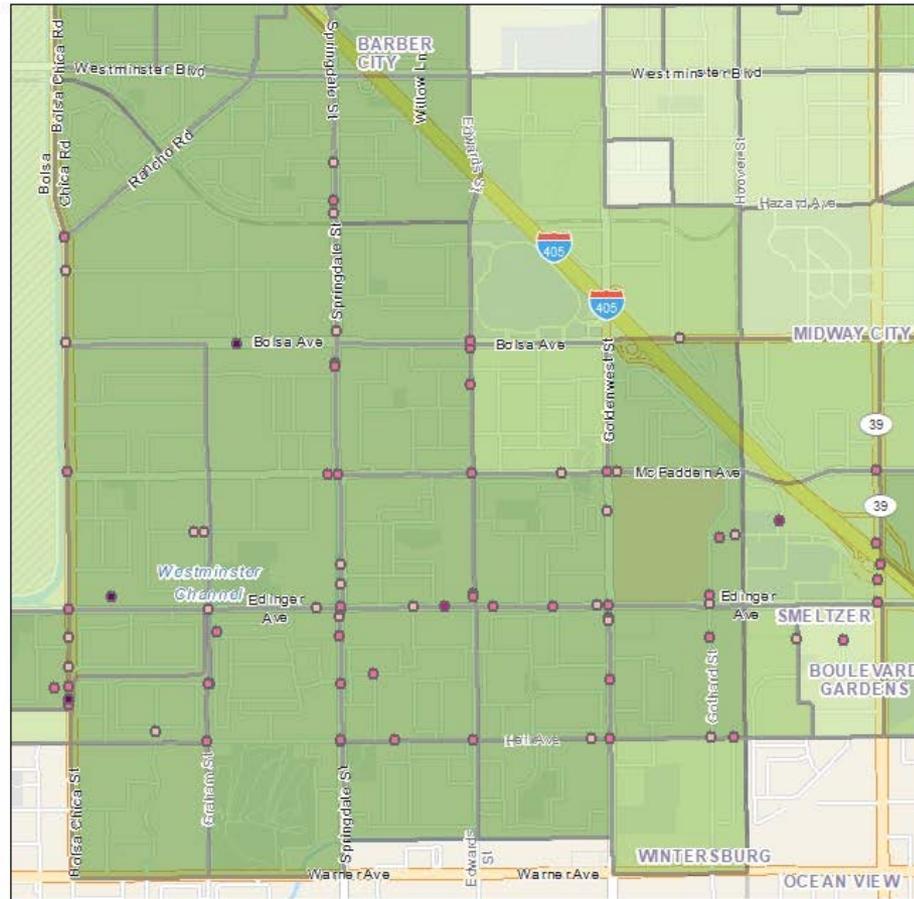
Note: 2015 and 2016 SWITRS data are provisional as of November 2017.

# Bicycle Injury Collisions 2012-2016

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



# Stacey Middle and Clegg Elementary Bicycle Collision Map (2012 - 2016)



### Collision Severity (2012-2016)

- Fatal (3)
- Injury (Severe) (2)
- Injury (Other Visible) (50)
- Injury (Complaint of Pain) (35)

### 2017 Median Household Income

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

## Bicycle Injury Collisions by Time of Day and Day of Week Total: 90 collisions

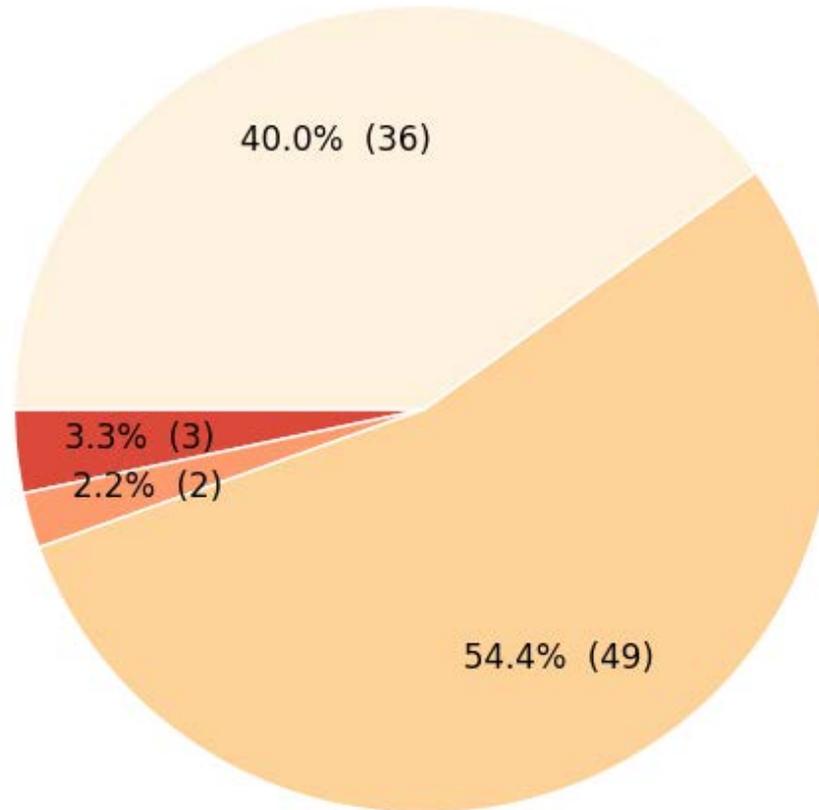
09:00PM-11:59PM	2	1	3	1	2	0	0
06:00PM-08:59PM	2	3	1	0	0	0	0
03:00PM-05:59PM	1	5	6	3	6	0	0
Noon-02:59PM	4	0	3	2	3	2	6
09:00AM-11:59AM	3	0	3	3	1	3	1
06:00AM-08:59AM	3	3	2	3	4	0	0
03:00AM-05:59AM	1	1	1	0	0	0	0
Midnight-02:59AM	1	0	0	0	1	0	0
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

\*The color in this graph refer to how frequently a collision occurs at that time and day

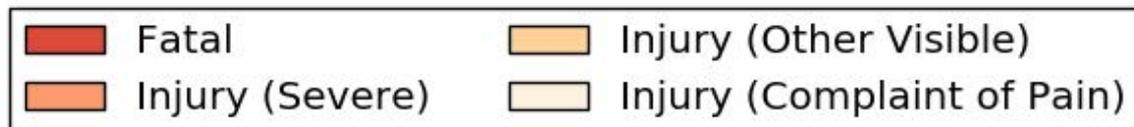
## Top Violations in Bicycle Injury Collisions

CVC No.	Description	Freq.	Percent
21650	Failure to drive on right half of the roadway (with some exceptions)	37	41.1%
22107	Unsafe turning with or without signaling	14	15.6%
0	Unknown	11	12.2%
21801	Failure to yield right-of-way to incoming cars while turning left or making U-turn	6	6.7%
21658	Failure to drive vehicle in single lane	5	5.6%
22350	Speeding on the highway	5	5.6%
21200	Bicyclists on the highway share the same rights and are subject to the same laws as vehicles	3	3.3%
21453	Red or Stop, vehicles stop at limit line or X-walk. When making right turn at a red light/stop sign driver required to yield to any vehicle approaching so closely as to constitute an immediate hazard	2	2.2%
21802	Failure to stop or yield right-of-way at a stop sign.	2	2.2%
21209	Drivers shall not drive in the bicycle lane except under certain conditions	1	1.1%
<b>Total</b>		<b>86</b>	<b>95.6%</b>

## Bicycle Victim Injury Severity

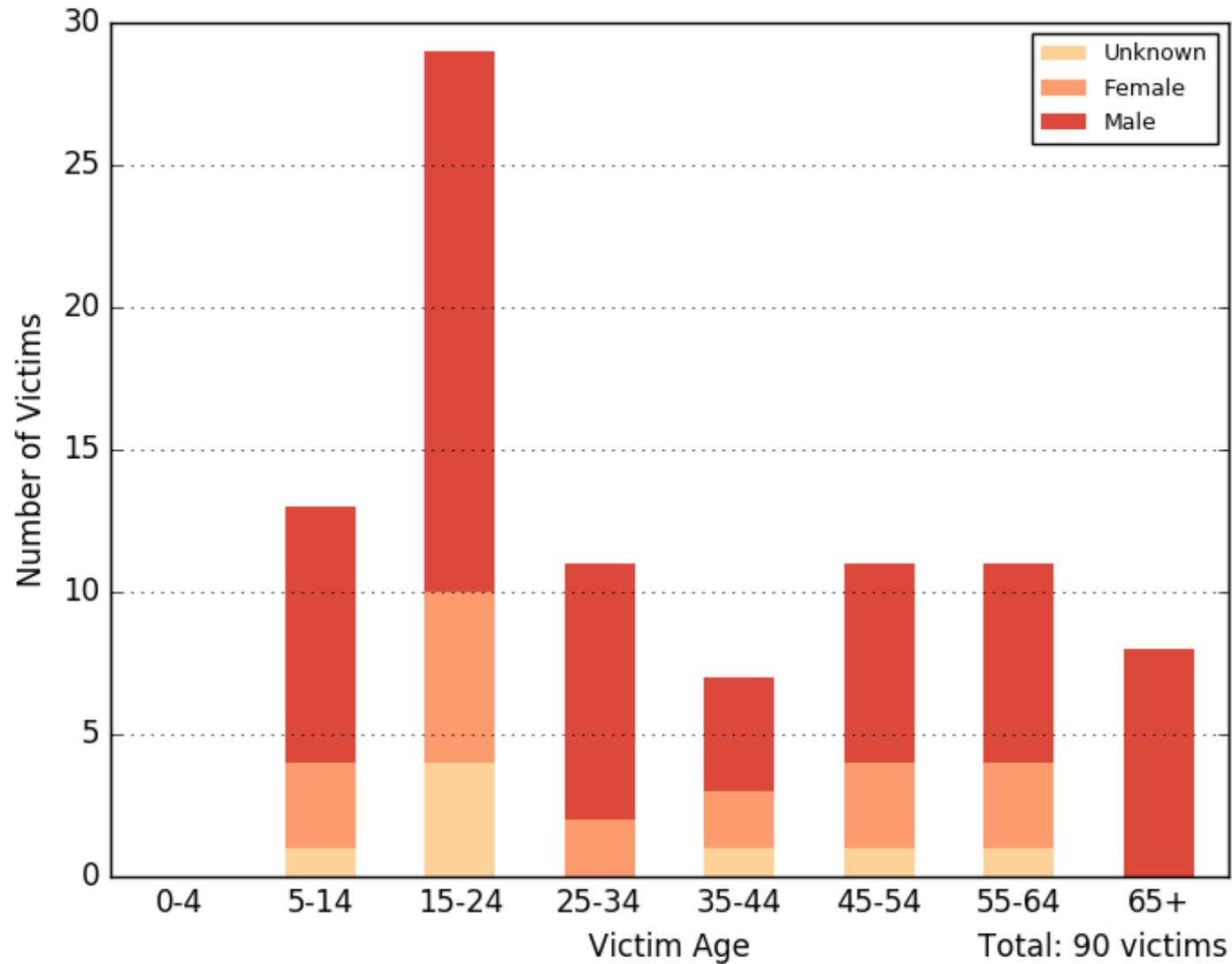


Total: 90 victims



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

## Bicycle Injury Victims by Age and Gender



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

# Ada Clegg Elementary

6311 Larchwood Drive | Huntington Beach |  
Orange County | CDS: 30667460119925

# Helen Stacey Middle

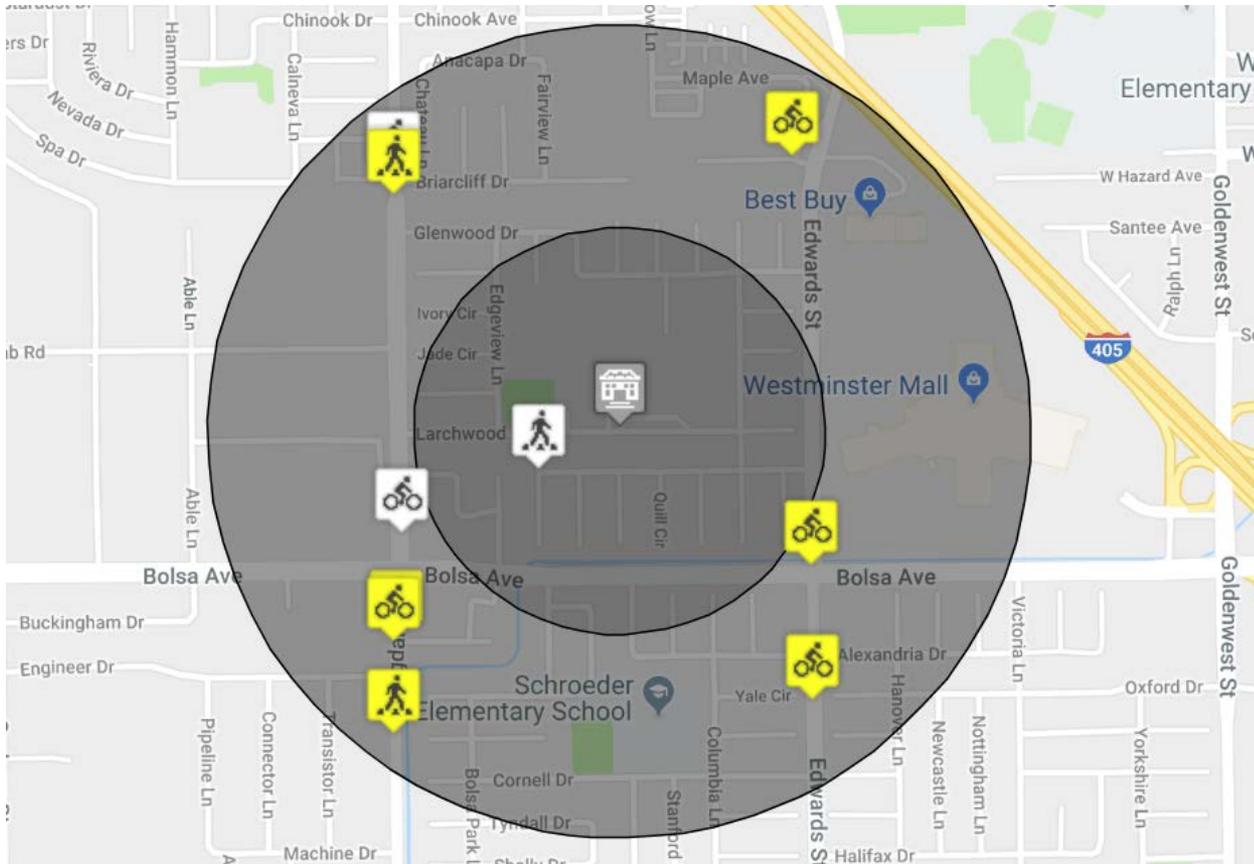
6311 Larchwood Drive | Huntington Beach |  
Orange County | CDS: 30667466030712

Types of Collisions:  Bicycle  Pedestrian

Collision Severity:  Fatal  Severe Injury  Other Visible Injury  Complaint of Pain

Years: 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 \* 2016 \*

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



Radius	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Pedestrian	Bicycle	Total
<1/4 mi.	0	0	0	1	1	0	1
1/4 - 1/2 mi.	0	0	7	2	2	7	9
Total	0	0	7	3	3	7	10

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/>

