

Through Vision Zero SF we commit to working together to prioritize street safety and eliminate traffic deaths in San Francisco.

# SEVERE INJURY TRENDS

December 14, 2021

Presentation to the San Francisco County Transportation Authority (SFCTA) Board

#### **METHODOLOGY**

#### Consistent with:

- American College of Surgeons
- National Trauma Data Bank
- California Dept. of Public Health
- World Health Organization

This following is data from Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG)'s trauma registry to monitor severe injury trends for Vision Zero.

Injury severity in hospital data is categorized using a clinical injury severity scale (ISS) ranging from 1-75\*, as well as whether someone required hospital admission for treatment.

This analysis presents severe injuries from hospital data coded as *critical* (ISS greater than 15) and/or *severe* (all traffic injuries resulting in hospital admission).

For hospital data, critical injury is included in severe injury counts and statistics.

<sup>\*</sup> Injury Severity Scoring (ISS) correlates linearly with mortality, morbidity, hospital stay and other measures of severity.

#### 2020 COVID-19 PANDEMIC

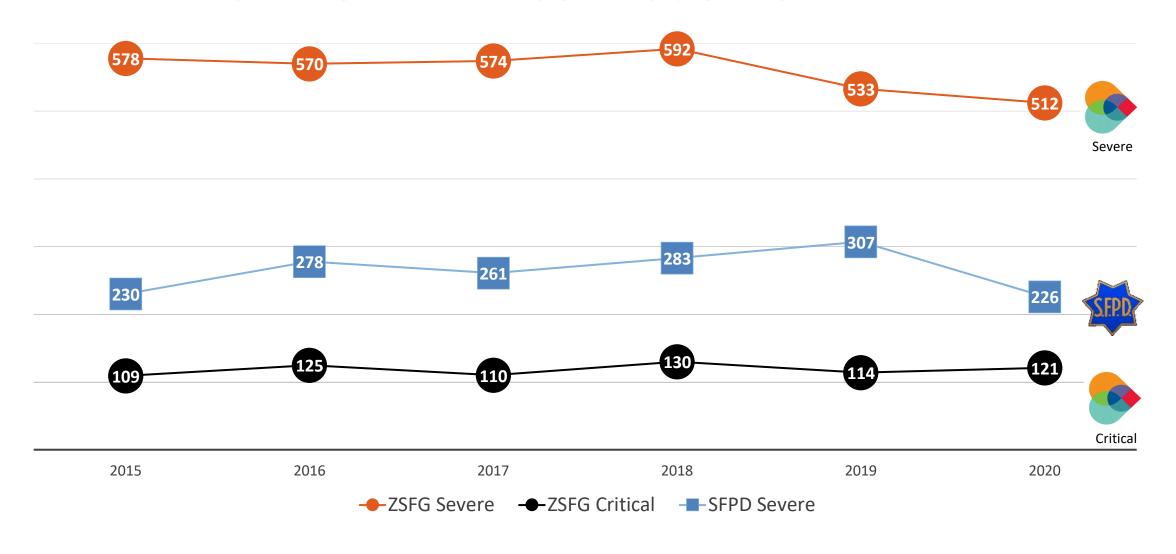
This report includes crash data from 2020 during the pandemic of the coronavirus disease 2019 (COVID-19).

The San Francisco Department of Public Health issued its first Stay at Home Order on Tuesday, March 17, 2020 and, as of the time this presentation was created, continues to advise avoiding high risk settings including workplaces and non-essential travel.

Given the unprecedented social and economic disruption caused by the COVID-19 pandemic, the crash data trends shown in this report for 2020 may be a brief aberration.

Caution should be used when comparing 2020 crash data to previous years as both significant increases or decreases in injuries may be attributable to the short-term effect of the pandemic on transportation patterns.

# **TOTAL SEVERE INJURY COUNTS BY YEAR**



### **OVERALL VISION ZERO SF SEVERE INJURY TRENDS**

**Severe injuries:** Overall severe injuries increased in hospital data through 2017 and 2018 but have since had a steady decline in 2019. The decrease in injuries in 2020 is likely attributable to the COVID-19 pandemic and shelter-in-place public health order.

**Critical injuries:** ZSFG counts of critically (the most severely) injured patients during 2017-2020 were relatively stable and within a similar range compared to previous years. Unlike severe injuries, there was no noticeable decrease in critical injuries in 2020.

#### VISION ZERO SF SEVERE INJURY TRENDS BY MODE



**People walking** continue to comprise approximately **one-third** of severe and 31-45% of critical injuries in recent years (2017-2019).

**People in motor vehicles** comprise a **decreasing proportion** of severe and critical injuries treated at ZSFG in recent years, making up 29% of severe injuries and 24% of critical injuries in 2019 compared to 33% and 30% in 2017.

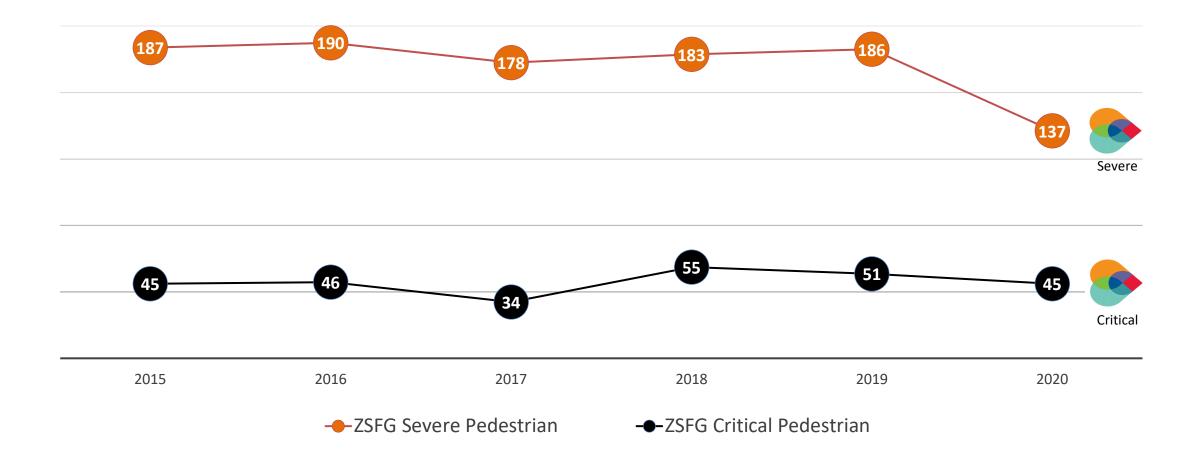




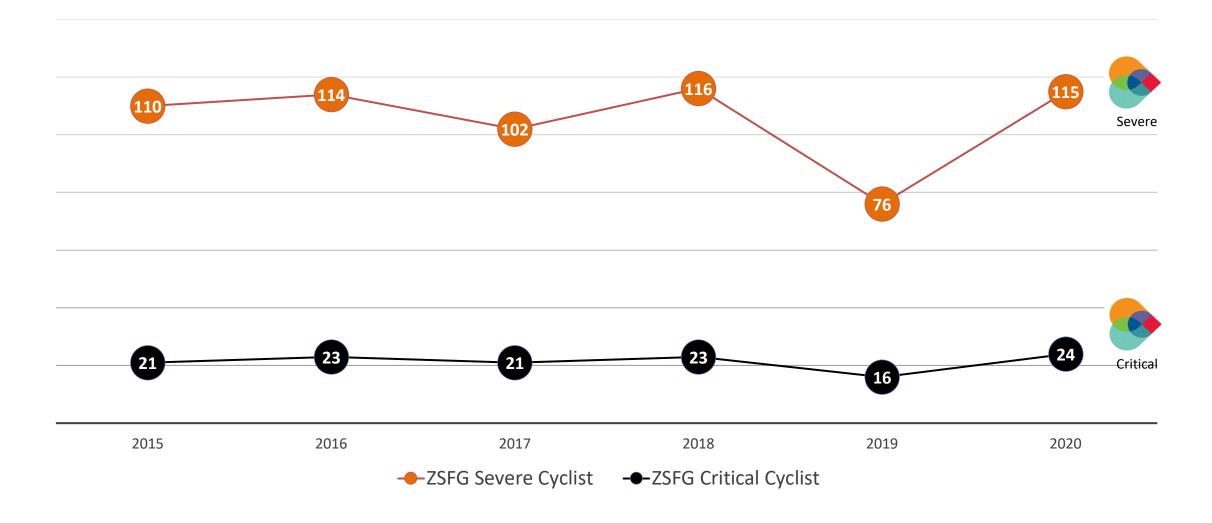
**People biking and people on motorcycles** comprise similar proportions of severe and critical injuries in recent years (2017-2019), **each of approximately 20%** -- a notably higher burden of injury relative to the proportion of trips they represent on SF streets.



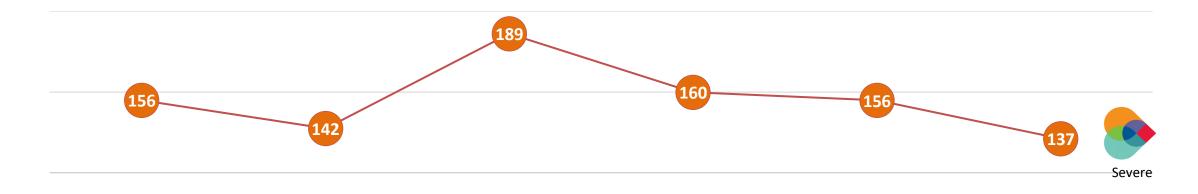
# PEDESTRIAN SEVERE INJURY COUNTS BY YEAR

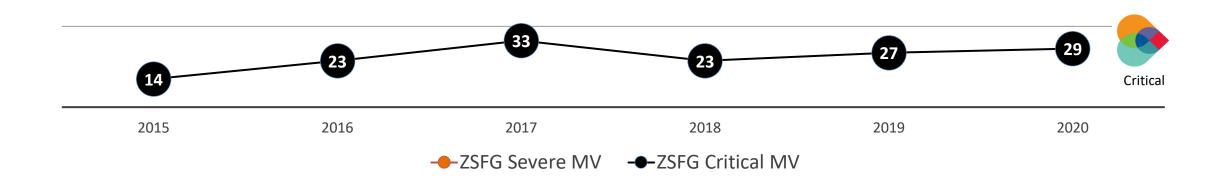


# **BICYCLIST SEVERE INJURY COUNTS BY YEAR**

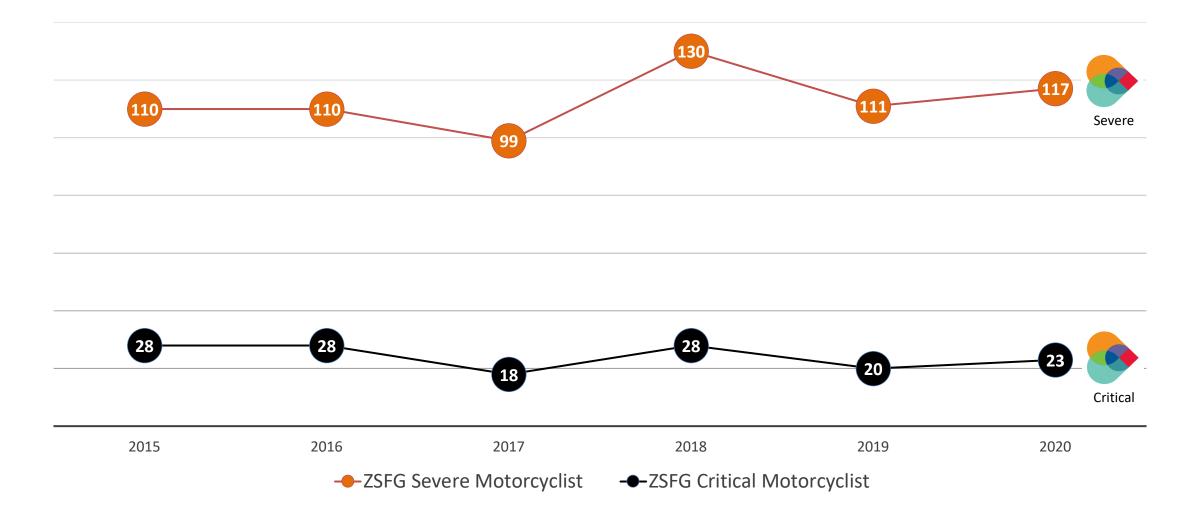


# MOTOR VEHICLE SEVERE INJURY COUNTS BY YEAR





# **MOTORCYCLE SEVERE INJURY COUNTS BY YEAR**



### VISION ZERO SF SEVERE INJURY TRENDS BY MODE

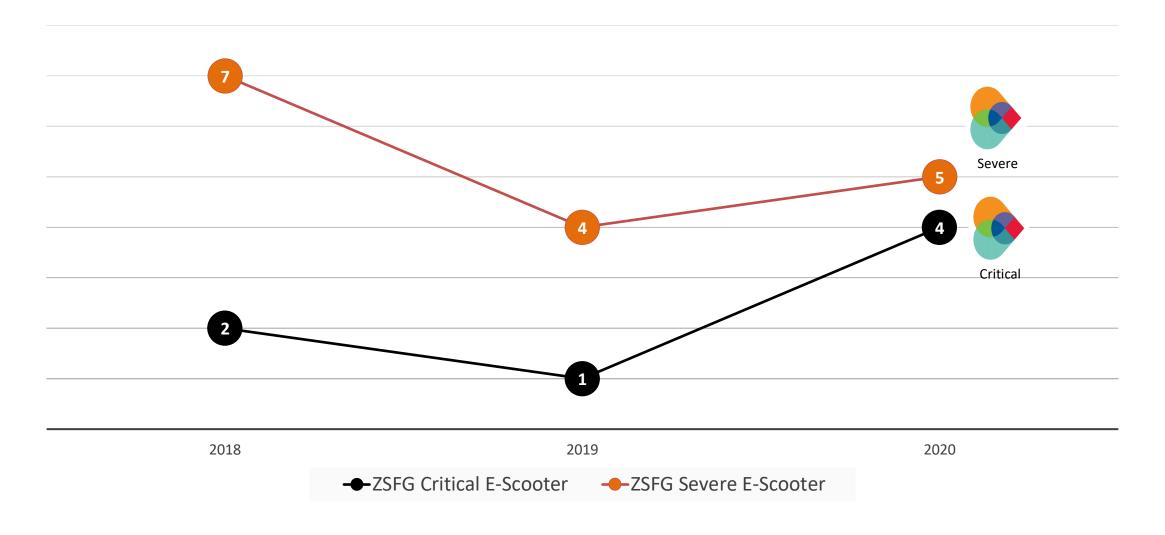


In 2018 ZSFG began tracking injuries associated with use of standing electric scooters, following increased use of the devices.

Year 2020 data show five severe (requiring hospital admission) e-scooter related injuries, and of these four were critical injuries. These data do not include fatal injuries: for the first time in 2020 two riders of e-scooters died in San Francisco.

Taken together, these data indicate this emerging mode may be particularly vulnerable to traffic injury.

# **E-SCOOTER SEVERE INJURY COUNTS BY YEAR**



#### **NEXT STEPS**

SFPD and ZSFG injury assessments represent overlapping populations and do not compare severity between data sources. Some of the injured people in police data are also captured in hospital injury data, while some injured people are included in police or hospital data only.

SFDPH maintains the **San Francisco's Transportation-related Injury Surveillance System** which found that ~60% of records classified as severe appeared both in police and hospital data, with notably differences in proportion captured in hospital-only data based on travel mode.

The linked data from 2013-2019 will become the primary data source to analyze severe injury trends and will be used to update San Francisco's Vision Zero High Injury Network.



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