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

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# VISION ZERO COMMITTEE

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October 4, 2019

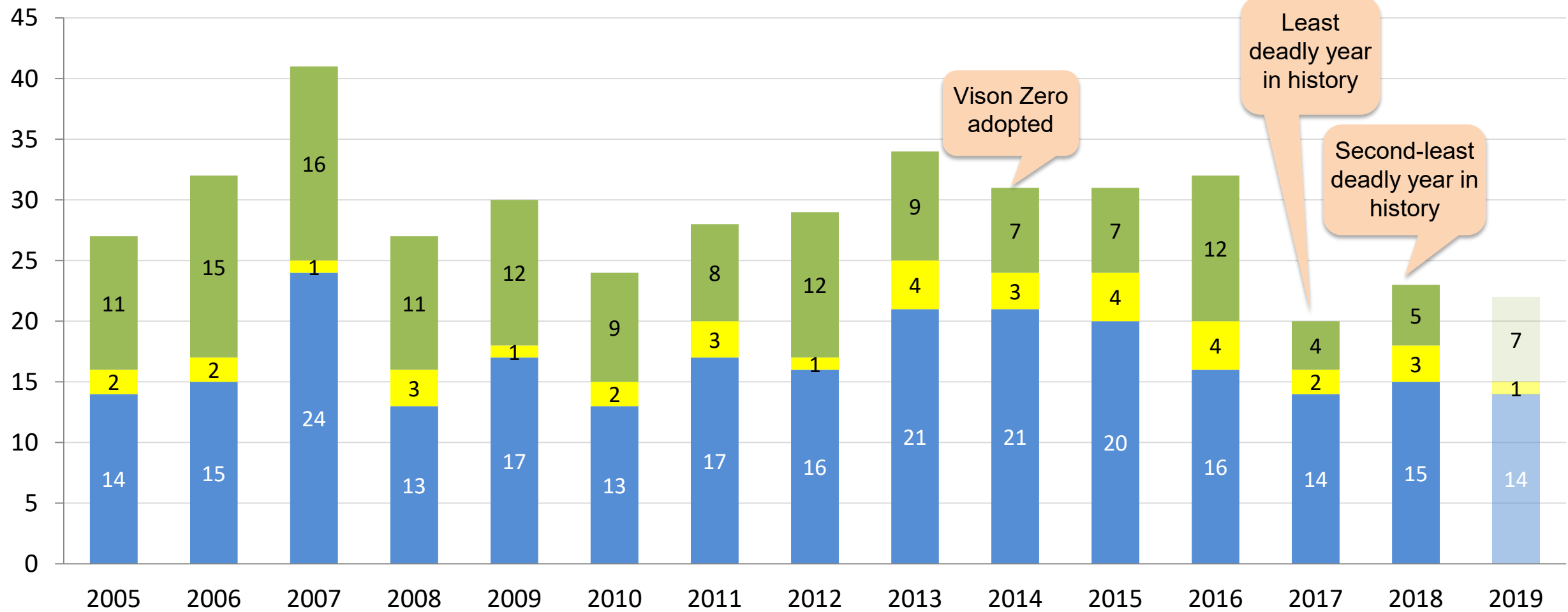


# ITEM 6: 2018 Severe Injuries Report

**SHAMSI SOLTANI (SFDPH)**

# FATALITY TRENDS: MUCH MORE WORK TO DO TO SAVE LIVES

■ People Killed While Walking    ■ People Killed While Biking    ■ People Killed in Vehicles



Vision Zero adopted

Least deadly year in history

Second-least deadly year in history

\*2019 FATALITY COUNTS REFLECT BEST DATA AVAILABLE TO DATE – PARTIAL YEAR ONLY

# SEVERE INJURY MONITORING DIFFERS FROM FATALITY MONITORING

Severe and critical injury monitoring **with Zuckerberg SF General hospital trauma data**, is distinct from fatality monitoring for Vision Zero SF. Includes severe and critical traffic injuries occurring:

- on the freeway
- in the Presidio
- Not at grade MUNI, BART, Caltrain incidents

Also excludes fatalities



## DEFINITIONS AND DATA SOURCES

Two categories from **ZSFGH Trauma Records**:

1. **ZSFGH Severe Traffic Injuries** *Trauma activation and/or hospital admission*
2. **ZSFGH Critical Traffic Injuries** *Ditto above, with Injury Severity Scale (ISS) > 15*  
***Critical injury is included in severe injury counts and statistics.***

**Strengths include:**

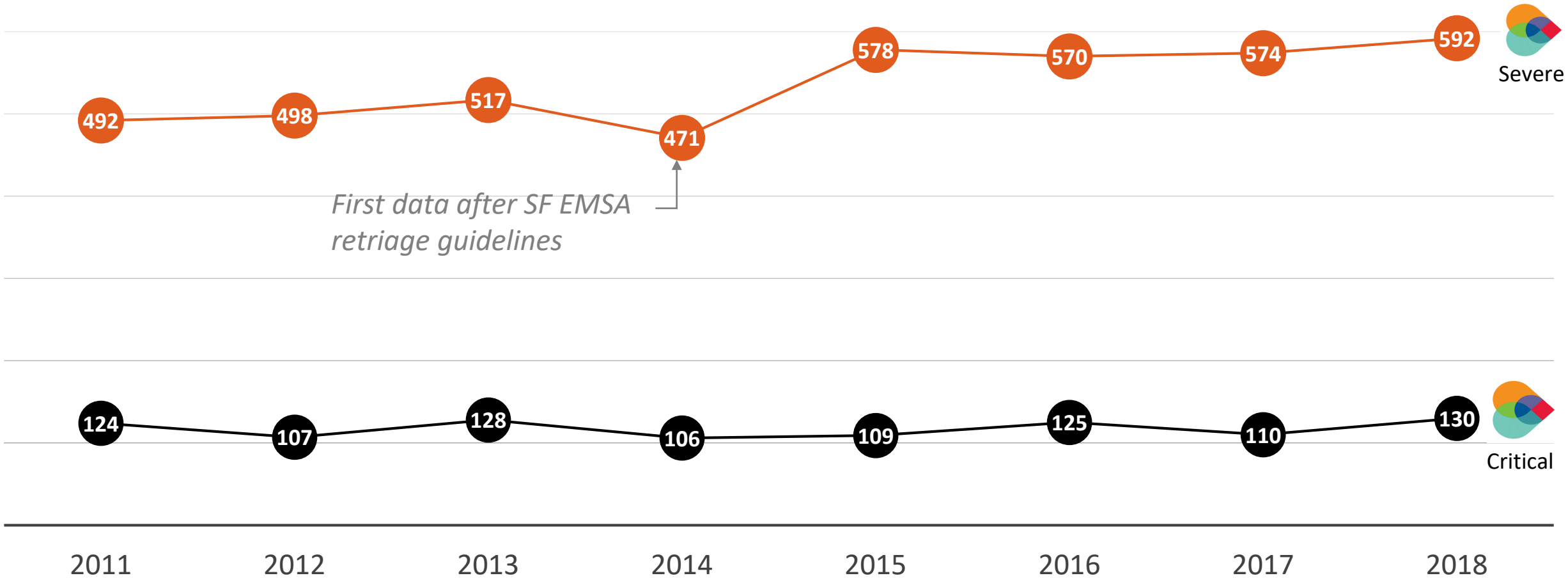
- **Clinical definition** of severe injury
- **Comprehensive Data Source:** ZSFGH is the only Level-I Trauma Center in San Francisco, where the most severe injuries are transported

**SFPD Data Note:** Severe Traffic Injuries reported to SF Police Department were historically the only data available for severe injury reporting. Severe injury in those reports is determined **based on police officer's visual assessment** of injury severity, not clinical determination. Police data is also **missing some severe injuries treated at ZSFGH**, based on recent record linkage completed by SFDPH. Vision Zero SF is thus relying on ZSFGH data for severe injury trend reporting. Summaries of severe injury trends based on SFPD data are still included in the Severe Injury Technical Report for comparison.

# VISION ZERO SEVERE TRAFFIC INJURY TRENDS: 2011-2018

## ALL MODES

● ZSFG Severe ● ZSFG Critical



*First data after SF EMSA triage guidelines*



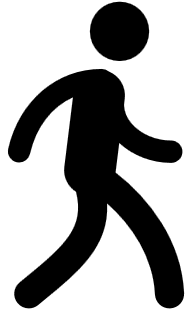
Severe



Critical

**Please note: 1) Critical injury is included in Severe injury counts and statistics. 2) Implementation of Emergency Medical Services Agency triage guidelines during this period led to more patients with severe injury being sent to ZSFG and contributed to increases in severe injuries as reported above.**

## PROPORTIONS OF INJURY BY TRAVEL MODE: ZSFG DATA

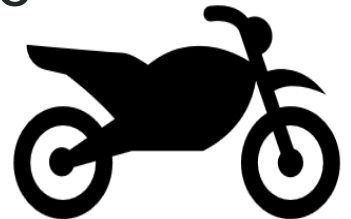


**People walking** comprise ~**one-third** of severe and 30-40% of critical (the most severe) injuries in recent years (2015-2018)

**People in motor vehicles** comprise a major proportion of severe and critical injuries treated at ZSFG in recent years: 27% of severe injuries and 18% of critical injuries in 2018



**People biking and people on motorcycles** each comprise ~**20%** of both severe and critical injuries in recent years (2015-2018)

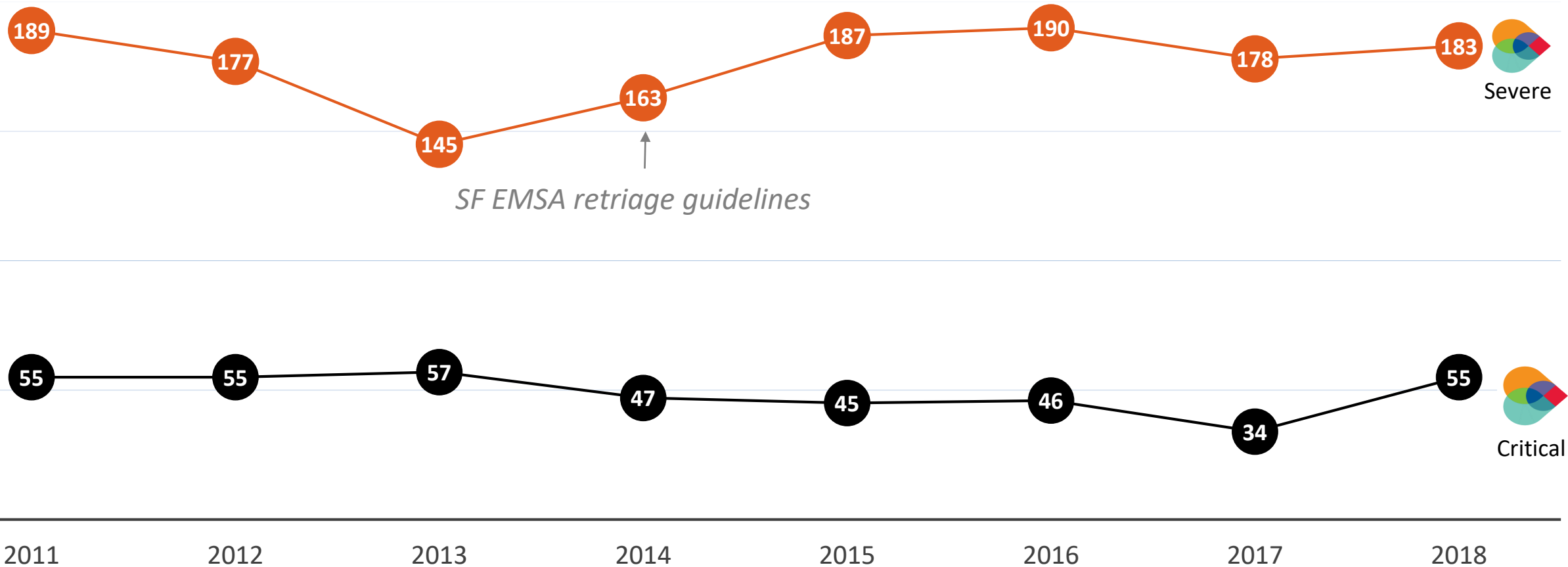


# PEOPLE WALKING



Severe injury counts have been **relatively steady since 2015**.  
**Critical injuries rose back to pre-2014 levels, halting a four-year trend of reduced or stable numbers.**

● ZSFG Severe Pedestrian ● ZSFG Critical Pedestrian

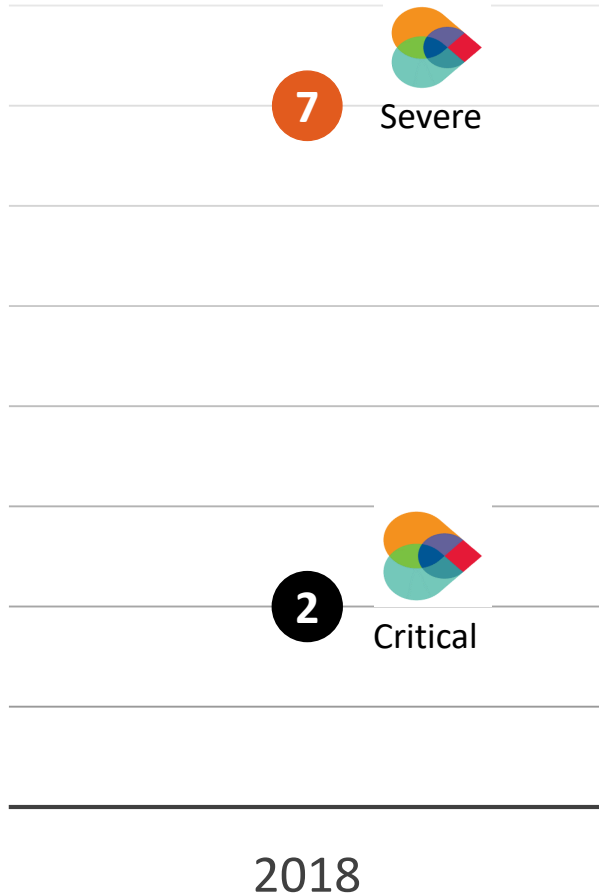


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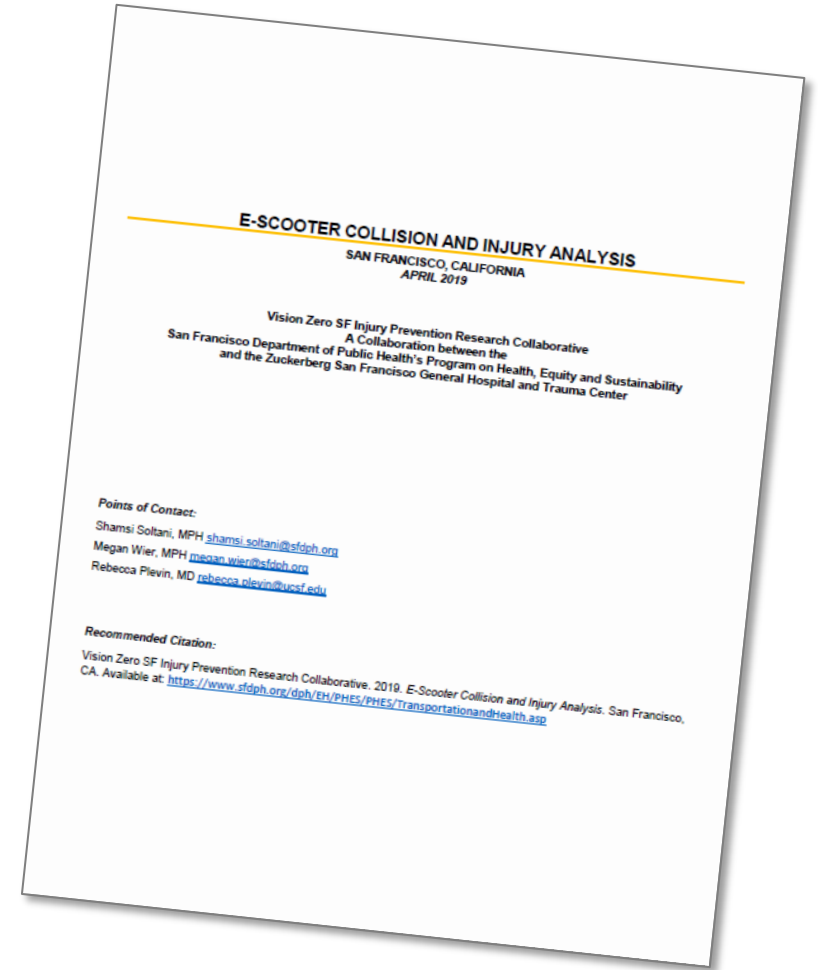
# E-SCOOTER INJURY TRACKING IMPLEMENTED IN 2018

A subset of pedestrian injury.



■ ZSFG Severe E-Scooter

■ ZSFG Critical E-Scooter



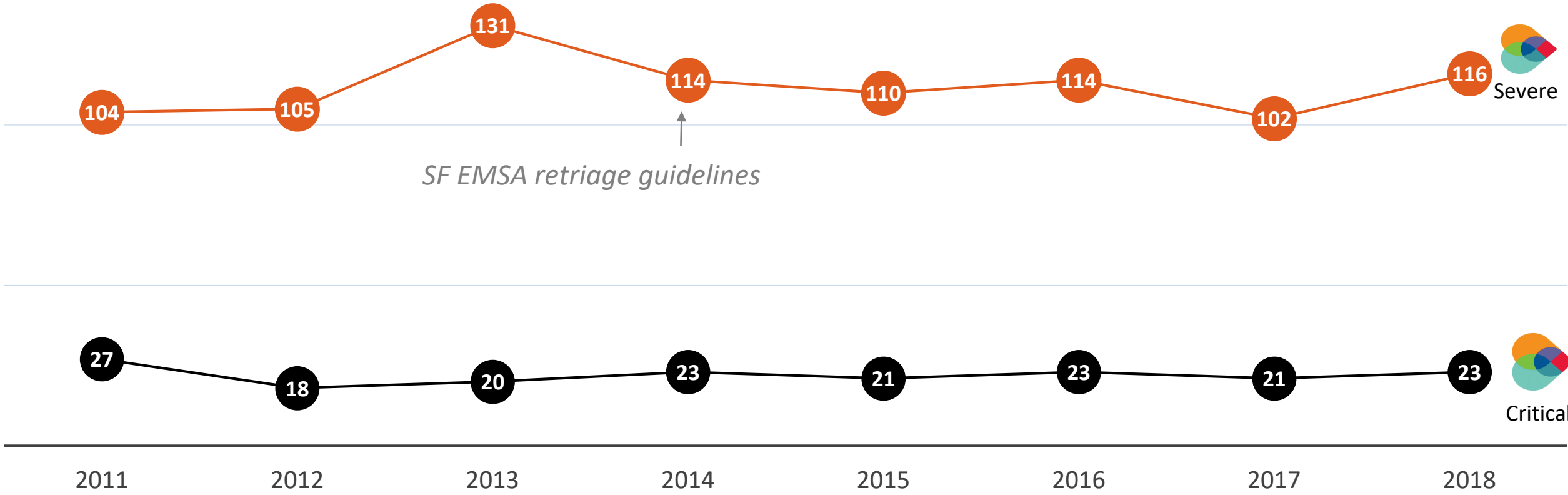
[www.sfdph.org/dph/EH/PHES/PHES/TransportationandHealth.asp](https://www.sfdph.org/dph/EH/PHES/PHES/TransportationandHealth.asp)

# PEOPLE ON BICYCLES



Severe and Critical injury counts have been relatively steady since 2014.

● ZSFG Severe Cyclist    ● ZSFG Critical Cyclist



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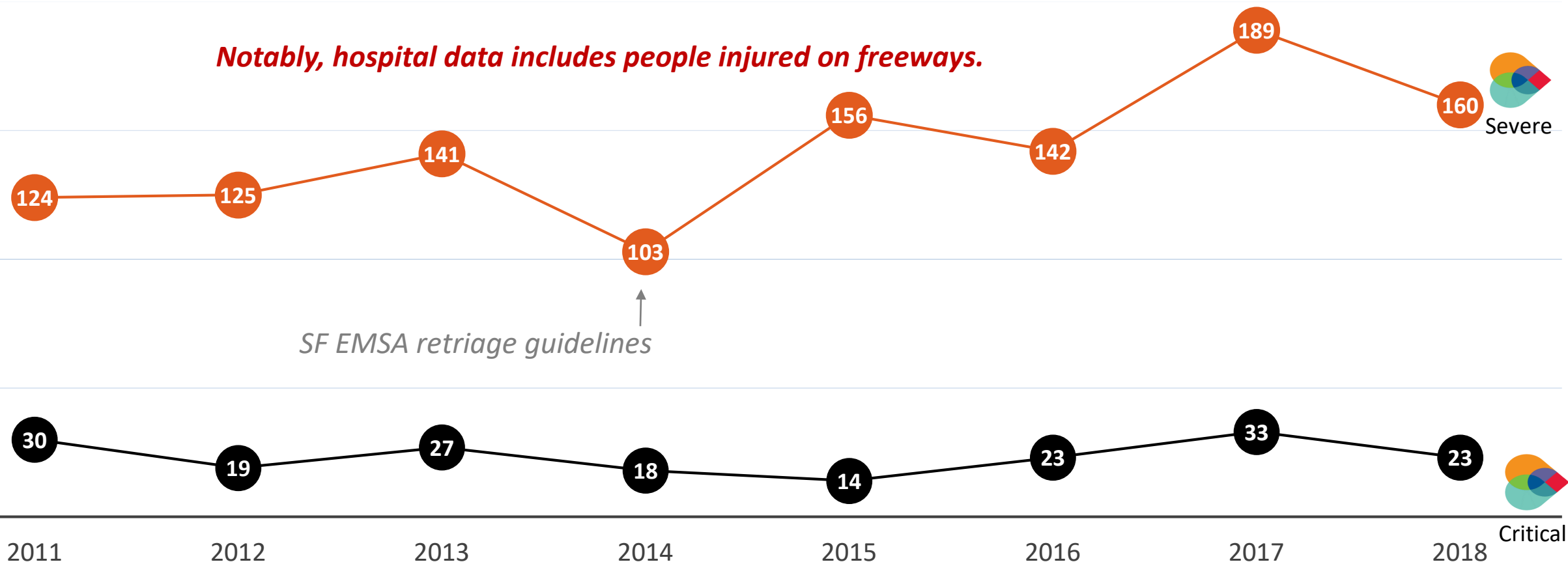
# PEOPLE IN MOTOR VEHICLES



Severe injuries decreased in 2018, partially countering a 2017 increase.

Critical injuries have decreased compared to 2017, though are higher than recent lows.

● ZSFG Severe MV ● ZSFG Critical MV



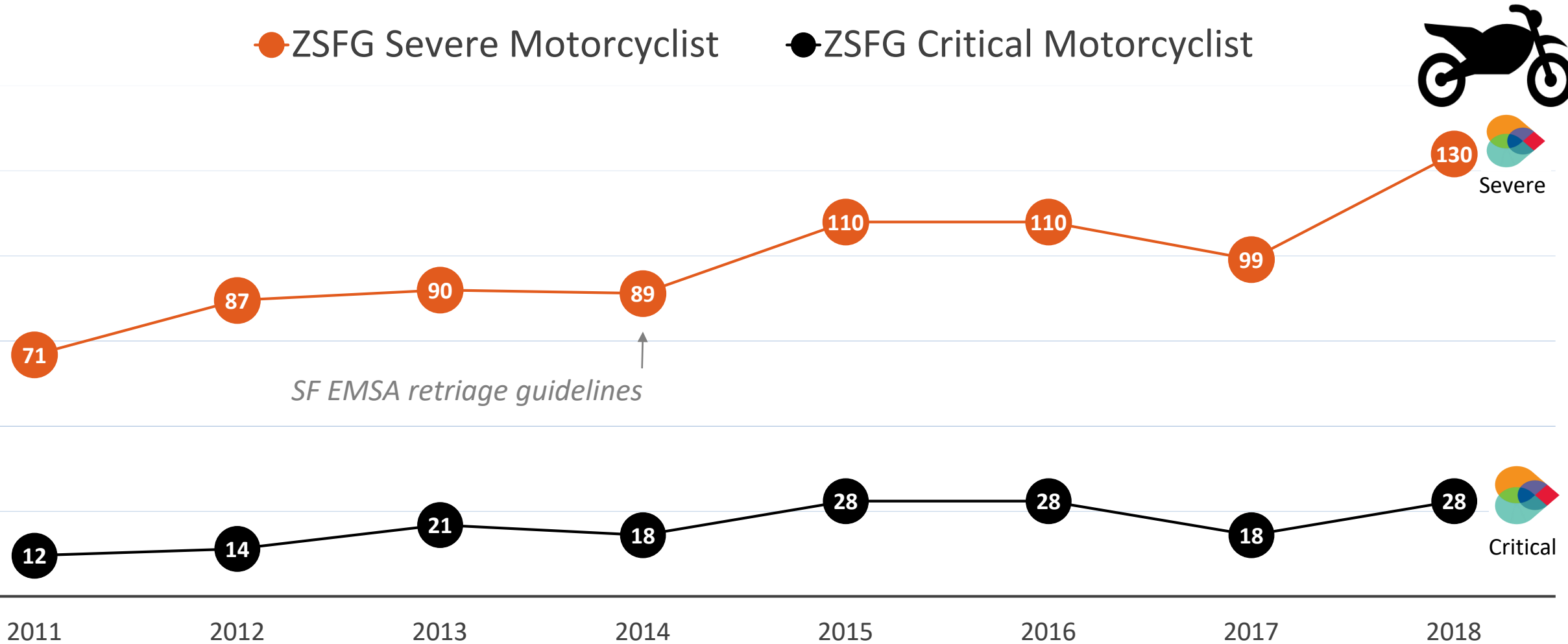
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# PEOPLE ON MOTORCYCLES

Severe injuries increased 30% from 2017 to 2018.

Critical injuries increased relative to 2017, to 2016 levels.

● ZSFG Severe Motorcyclist    ● ZSFG Critical Motorcyclist



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# OVERALL CRITICAL AND SEVERE INJURY TRENDS ARE STABLE

## More to learn:

- Where **severe and critical injuries are concentrated** will be analyzed when **linkage of 2016-2018 police:hospital data** is complete in 2020
  - Intersection level data will be available
  - More comprehensive data on crash and socio-demographic factors
- **Factors contributing to increase in severe motorcycle injuries**
- **Factors contributing to increase in critical pedestrian injuries after recent decline**

## WHY AREN'T SEVERE INJURIES DECLINING

### DESPITE SIGNIFICANT VZ INVESTMENTS? *SOME FACTORS:*

**More People:** Nearly 150,000 **new residents** between 2010 and 2020 with 170,000 **new jobs** during the same period (Plan Bay Area 2040)

**More Vehicles:** Increase in **daily vehicle miles** travelled (VMT) by over 630,000 miles between 2010-2016 and TNCs account for 47% of this increase, according to SFCTA estimates. Recent 2019 study by Fehr & Peers on behalf of Uber and Lyft indicate reports that TNCs account for 12.8% of the total VMT on San Francisco roadways.

**Aging Population:** One in five residents are **seniors**, more vulnerable to severe injury. The Bay Area's senior population is forecasted to grow by 137% by 2040.

**Increasing Homelessness:** **15% increase in people living on the streets** from 2015-2019 - where exposure to traffic is highest, combined with increased physical and mental health issues for people without housing.

## WE NEED TRANSFORMATIVE, EVIDENCE-BASED SYSTEMWIDE TOOLS



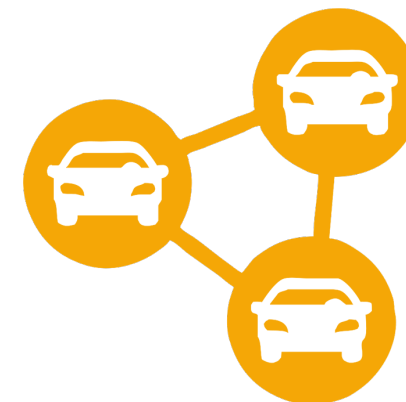
**Automated  
Enforcement**



**Urban Speed  
Limit  
Setting**



**Pricing and  
Reducing  
Vehicle Miles  
Travelled**



**Local Regulation  
Of Transportation  
Network  
Companies**



**Thank you!**