# **Citywide Crash Analysis**



### **Crash Landscape in Oakland**

Crashes are an all-too regular occurrence on Oakland's streets. Fatalities and injuries from crashes impact many lives and collectively cost Oaklanders hundreds of millions of dollars per year. The City of Oakland analyzed nearly 2,000 injury crashes from 2012-2016 to understand how they affect Oaklanders and how to effectively focus safety efforts.

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weekly severe or fatal injuries

\$900 Million

yearly cost of traffic crashes in Oakland, or 6% of the total annual income of all City residents. This includes lost quality of life, property damage, lost work time, medical care, and other costs. <sup>1</sup>

**4** 76%

severe or fatal injuries increase between 2012 and 2016

## What Kinds of Crashes are Happening on Our Streets?

## HIGH SPEEDS ARE MORE DEADLY

HIT BY A VEHICLE TRAVELING AT 20 MPH

of 10 pedestrians survive HIT BY A VEHICLE TRAVELING AT MPH

5 out of 10 pedestrian

pedestrians survive HIT BY A VEHICLE TRAVELING AT MPH

lout of 10 pedestrians survive AND SPEED MATTERS IN OAKLAND



Just over 1 in 4 Oaklanders killed are involved in a crash where **speed** is a primary factor

SYSTEM CHANGE, NOT JUST BEHAVIOR CHANGE, IS CRITICAL



3 in 4 bicyclists killed are hit by a sober driver. While the influence of alcohol and drugs can be deadly, it's not the full story.

### INJURIES ARE CONCENTRATED AT INTERSECTIONS



75% of Oaklanders' severe or fatal injuries occur at **intersections** 



Driver failure to yield to a pedestrian at a crosswalk accounts for over 1/3 of pedestrian fatalities or severe injuries



Oaklanders are killed or severly injured by left-turning vehicles at over 4 times

the rate of right-turning vehicles

#### **ESPECIALLY AT SIGNALIZED INTERSECTIONS**



Under 10% of intersections in Oakland are signalized intersections



but nearly 50% of fatalities occur at signalized intersections



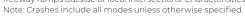
Broadside crashes at signalized intersections

account for

nearly 20% of all fatal or severe injury motor vehicle crashes

<sup>1</sup>Total crash cost from "Crash Cost Analysis for the City of Oakland," May 2018; total annual income from American Community Survey (ACS), 2012-2016. Direct costs to City of Oakland through litigation payout associated with traffic safety totaled \$250,000 between 2011 and 2016.







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### Who is Most Impacted by Crashes?

Reported crash data reveal that certain demographic groups and geographic areas experience a disproportionate share of crashes in Oakland. However, the data may not tell the full story. Research shows that police reports can miss 20% or more of crashes due to underreporting, especially from black injury victims. It has also been shown that driver biases can contribute to crash racial inequities, as people in vehicles do not yield as often to people of color on foot. <sup>2</sup>

#### **VULNERABLE ROAD USERS**

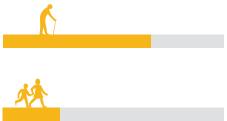


People walking, biking, and taking public transit make up under 30% of commute trips



but experience nearly 50% of severe or fatal injuries

### **AGE INEQUITIES IN OAKLAND CRASHES**



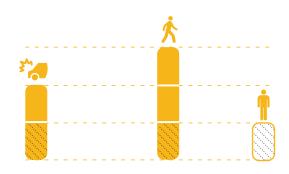
67% of Older
Oaklanders' (65+)
fatalities occur while walking

compared to only 26% for Oaklanders of all other ages



Older Oaklanders (65+) are more than 2 times as likely to be killed in a crash compared to all other Oaklanders

### **RACIAL INEQUITIES IN OAKLAND CRASHES**



30% of streets in majority Asian census tracts fall on the City of Oakland Pedestrian High Injury Network - the highest percentage of any ethnicity <sup>3</sup>

Black Oaklanders are

2 times as likely to be killed or severely injured in a crash (all modes) 3 times

as likely to be killed or severely injured while **walking**  compared to all other Oaklanders

<sup>2</sup>Underreporting from Sciortino, S., Vassar, M., Radetsky, M., & Knudson, M. M. (2005). San Francisco pedestrian injury surveillance: mapping, under-reporting, and injury severity in police and hospital records. Accident Analysis & Prevention, 37(6), 1102-1113; driver yielding disparity from Goddard, T., Kahn, K. B., & Adkins, A. (2015). Racial bias in driver yielding behavior at crosswalks. Transportation research part F: traffic psychology and behaviour, 33, 1-6.

<sup>&</sup>lt;sup>3</sup> Equity Indicators Report, Office of Race & Equity, 2018.



