

Despite a 2023 decrease in traffic fatalities, the consequences of car dependency in Chicago worsen: an analysis of car crash data

Ruben Gallardo

Data Source: City of Chicago

TRAFFIC FATALITIES DECREASED IN 2023, BUT INJURIES CONTINUE TO IMPACT CHICAGOANS

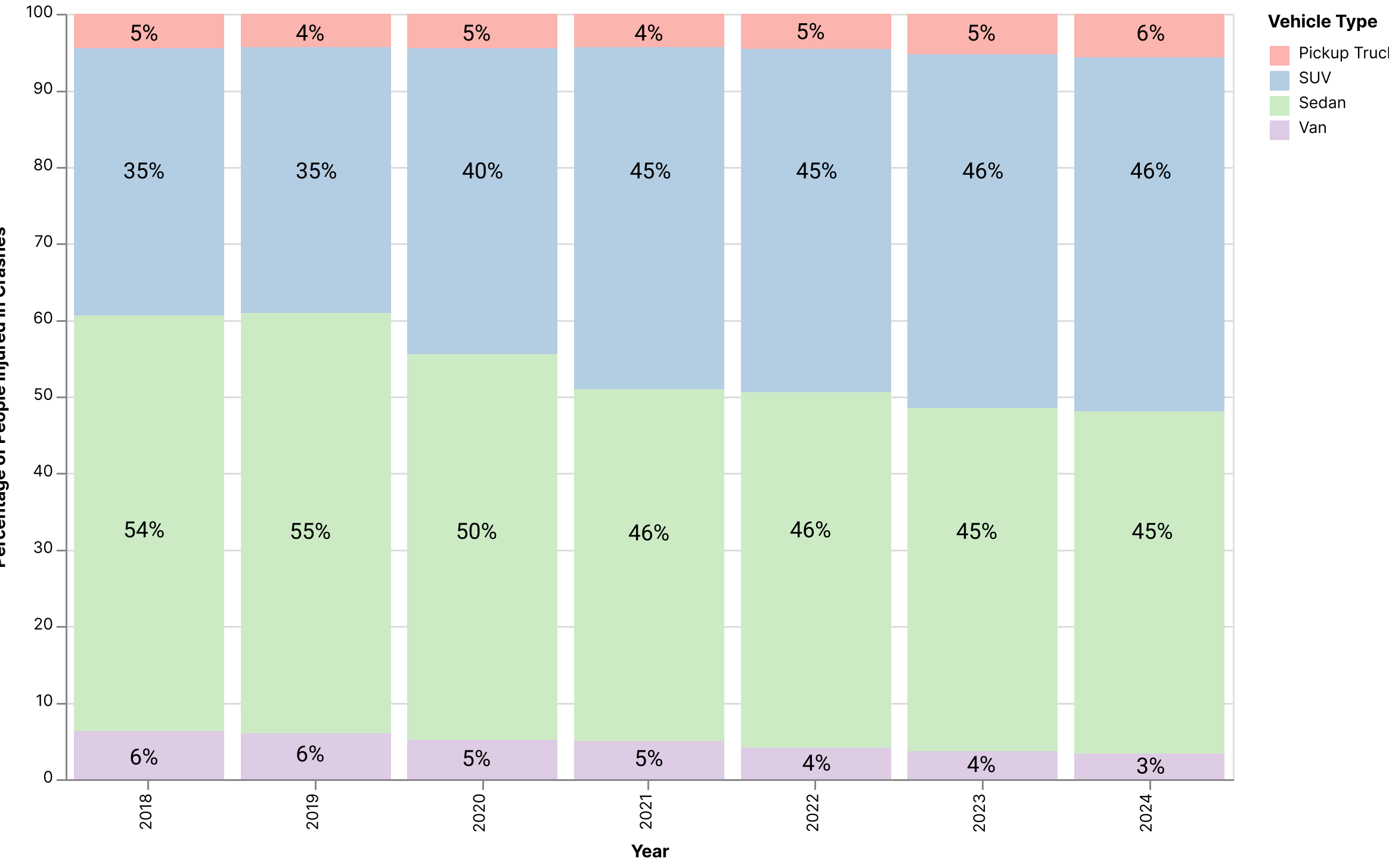
The 2023 report on traffic crashes published by the Chicago Department of Transportation (CDOT) rightfully highlights the 27% reduction in traffic fatalities from a 2021 peak. This report mostly focuses on severe crashes that resulted in fatalities or incapacitating injuries, however, when analyzing the source data further by including all types of injuries a different story emerges.

If we take into consideration all the crashes that resulted in injuries from 2018 to 2023, we can observe the lack of progress in reducing this type of crashes in “hot spot” neighborhoods. The top five neighborhoods with most crashes with injuries in 2018 remained almost unchanged in 2023. The neighborhoods of Austin, Humboldt Park, Garfield Park and Englewood maintained their spot in these rankings every year during this period. On the other hand, the Loop is the only neighborhood that saw a reduction in crashes with injuries. The Loop was replaced by Grand Crossing in these rankings in 2020, which was likely caused by the pandemic.

BIGGER CARS = BIGGER PROBLEMS

The car crashes dataset from Chicago also captures the broader trend of increasing vehicle sizes on the road. The Economist reported in August 2024 that the market share of sport utility vehicles (SUV) increased from 6% to 26% between 1990 and 2005. Based on Chicago’s crash data, this trend has continued since the share of SUVs involved in crashes with injuries increased from 35% to 46% between 2018 and 2024. Large vehicles usually result in less injuries for its passengers, but pedestrians or those smaller vehicles suffer worse consequences if they collide with them.

Percentage of People Injured in Crashes by Vehicle Type Involved (2018 - 2024)

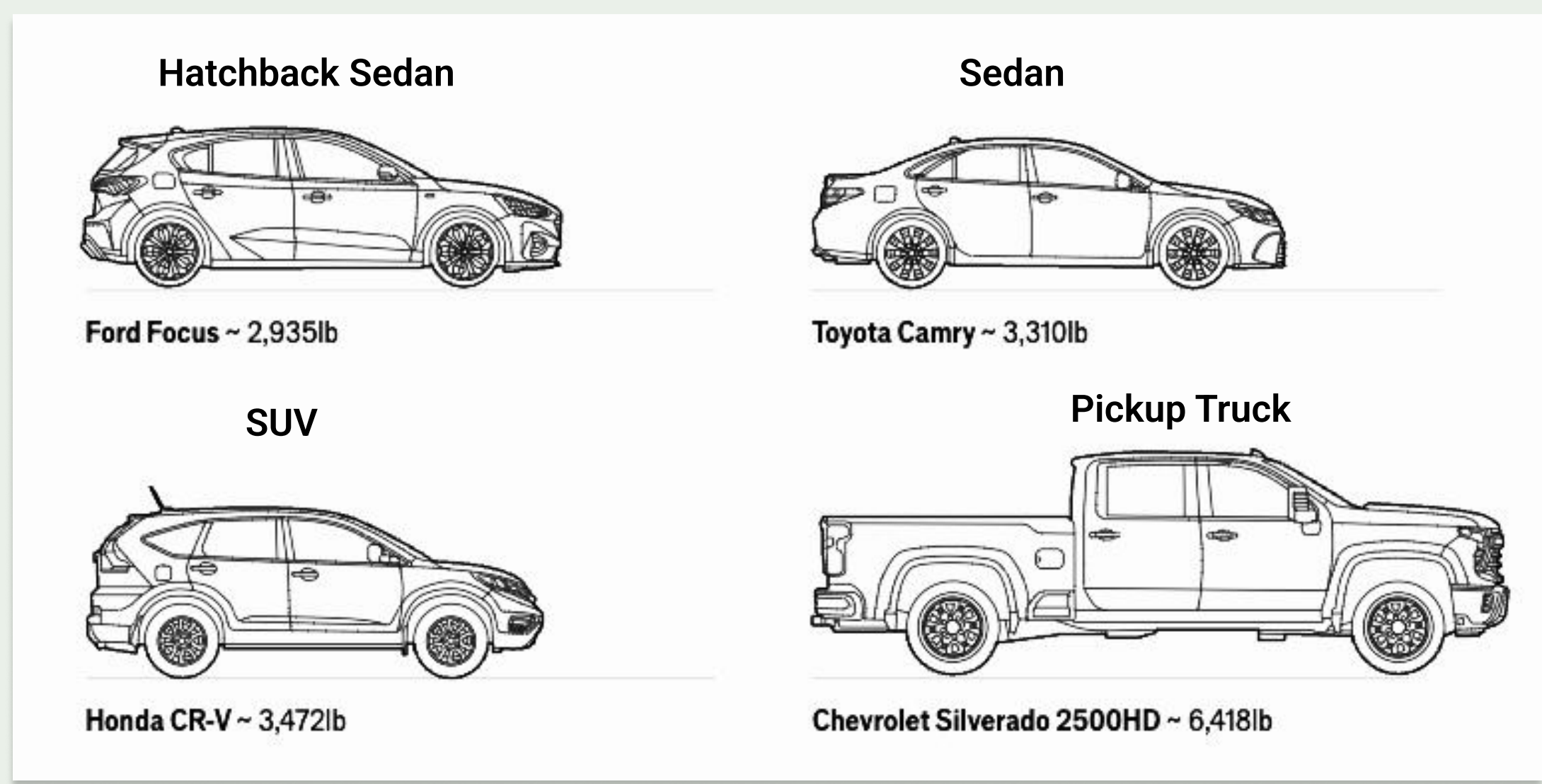


Where are crashes with injuries most common?

Total Number of Crashes by Neighborhood from 2018 to 2023



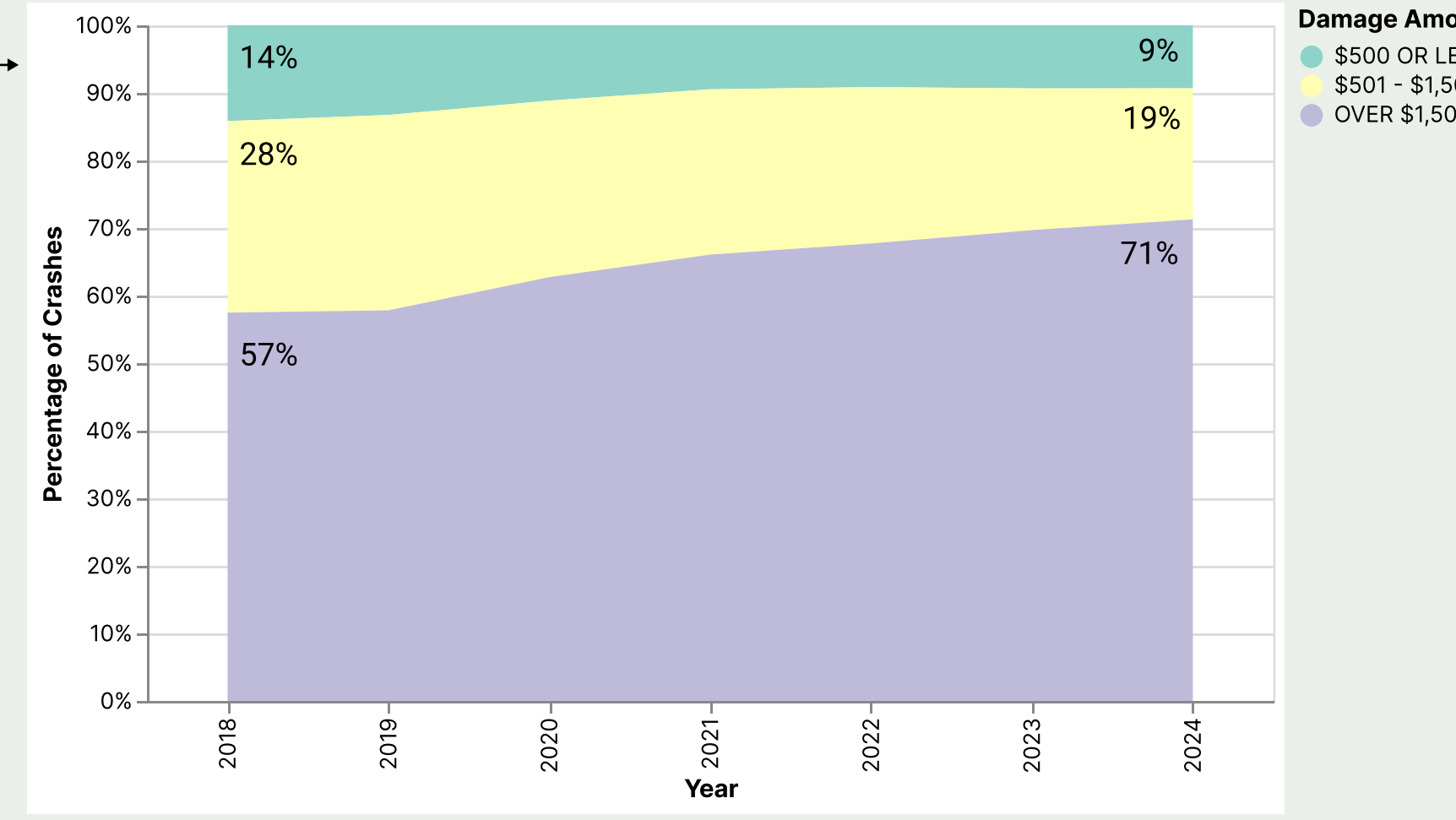
Weight Examples of Different Vehicle Types



Source: The Economist.

A consequence of more large vehicles on the road such pickup trucks and SUVs is costlier car crashes. 57% of crashes resulted in more than \$1,500 in damages compared to 71% in 2024.

Percentage of Crashes by Damage Amount Category



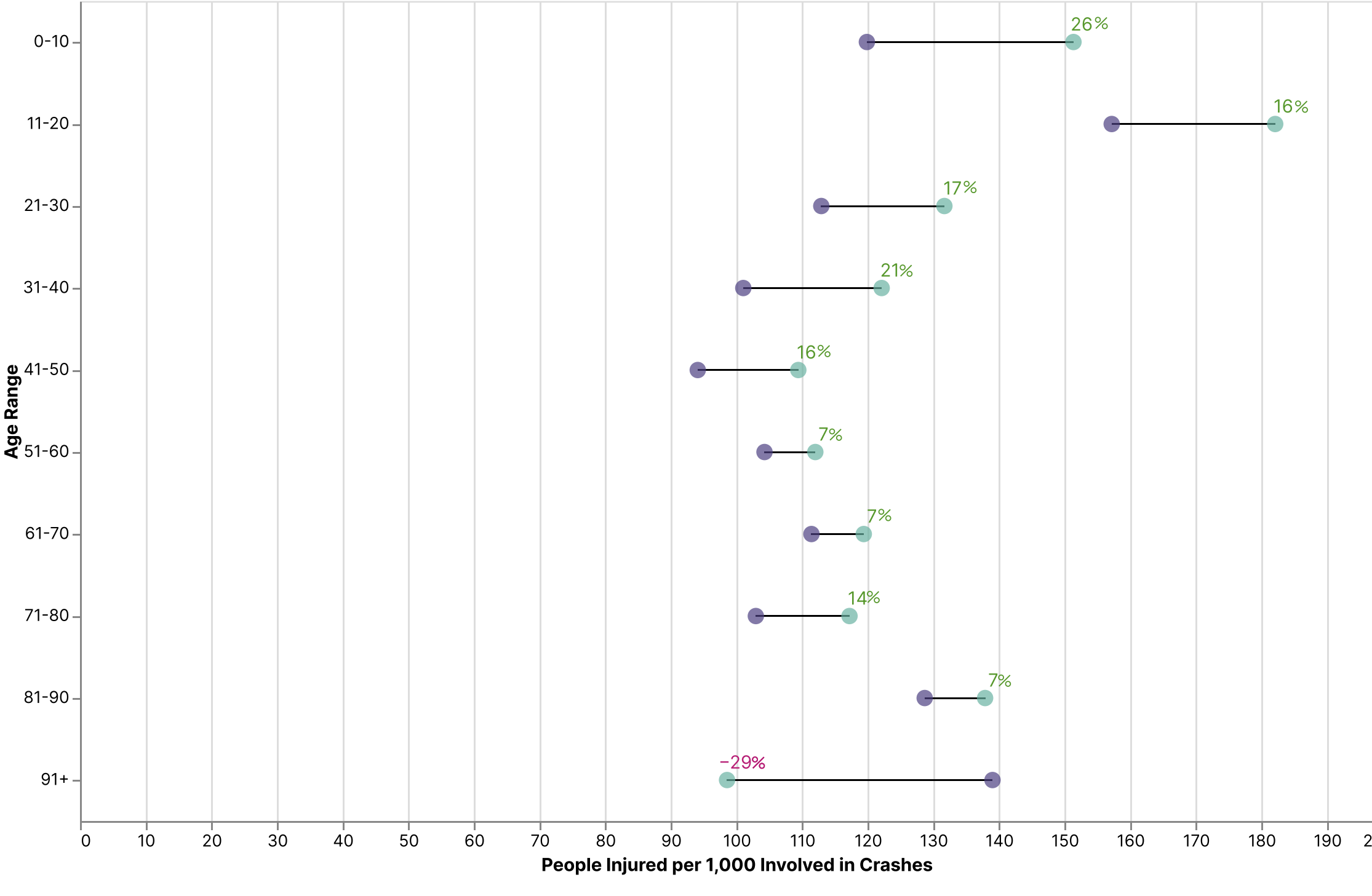
YEARLY COMPARISON REVEALS OTHER NEGATIVE TRENDS THAT DISPROPORTIONATELY IMPACT THE SOUTH SIDE

When we compare the number of crashes with injuries by neighborhood in 2018 to 2023, we can observe that many neighborhoods on the south side experienced an increase in the number of these crashes while most neighborhoods on the north side saw a decrease. Ten neighborhoods also stand out since they saw the largest percentage increases. A few of these neighborhoods (Wrigleyville, Ukrainian Village & Gold Coast) are located on the north side of Chicago, which is a cause of concern since these areas have higher accessibility to public transit.

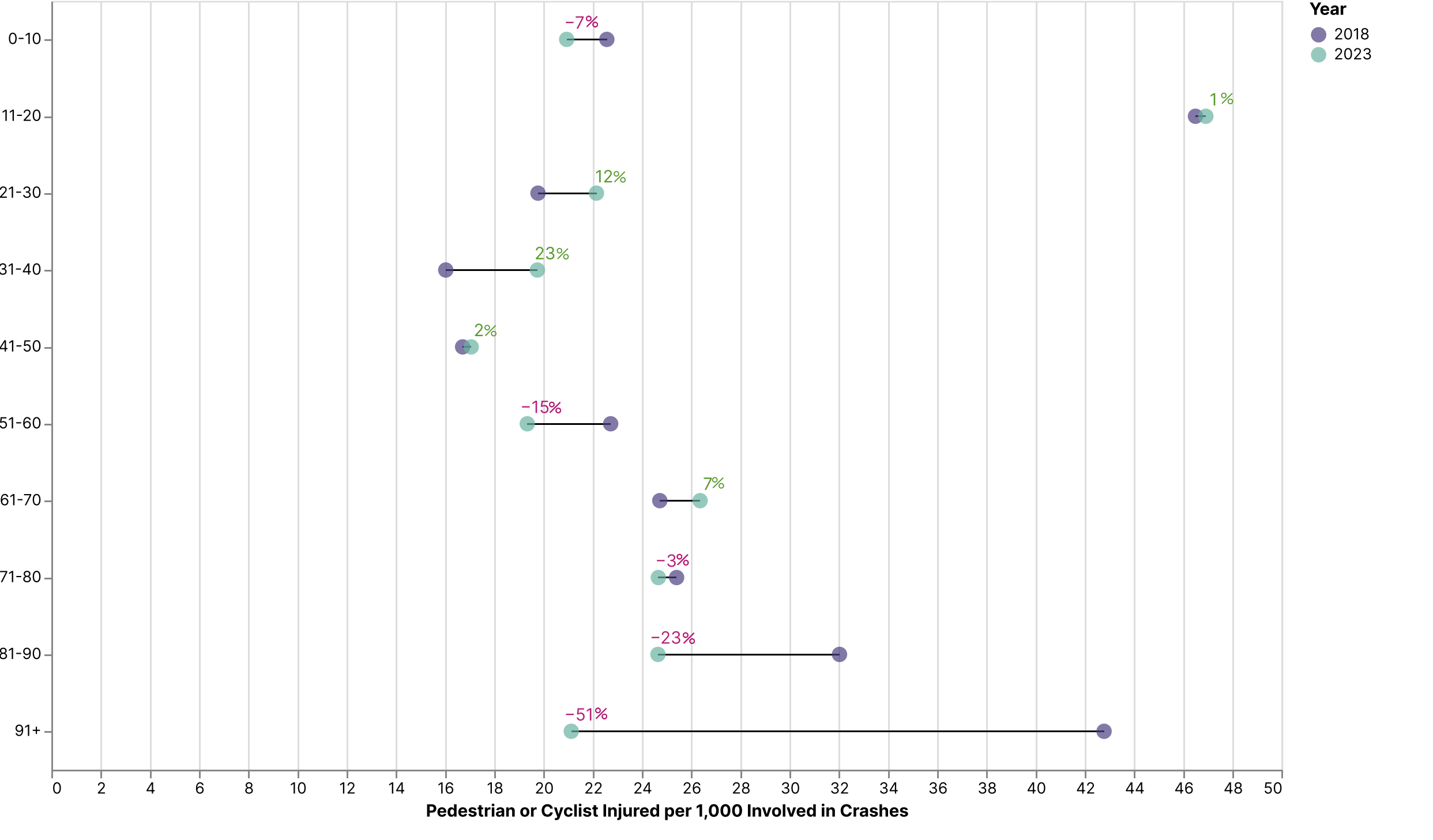
Comparing the injury rate per 1,000 people involved in crashes in 2018 to 2023 by age group also uncovers a negative trend. If we account for everyone involved in a car crash (those inside or outside a vehicle), the injury rate increased for all age groups except for those 91+ and older. If we only consider pedestrians and cyclists, we see a significant increase in the injury rate for those in the 21-30 and 31-40 age groups.

Injury rate for most age groups worsened

People Injured per 1,000 Involved in Crashes by Age Group (2018 vs 2023)

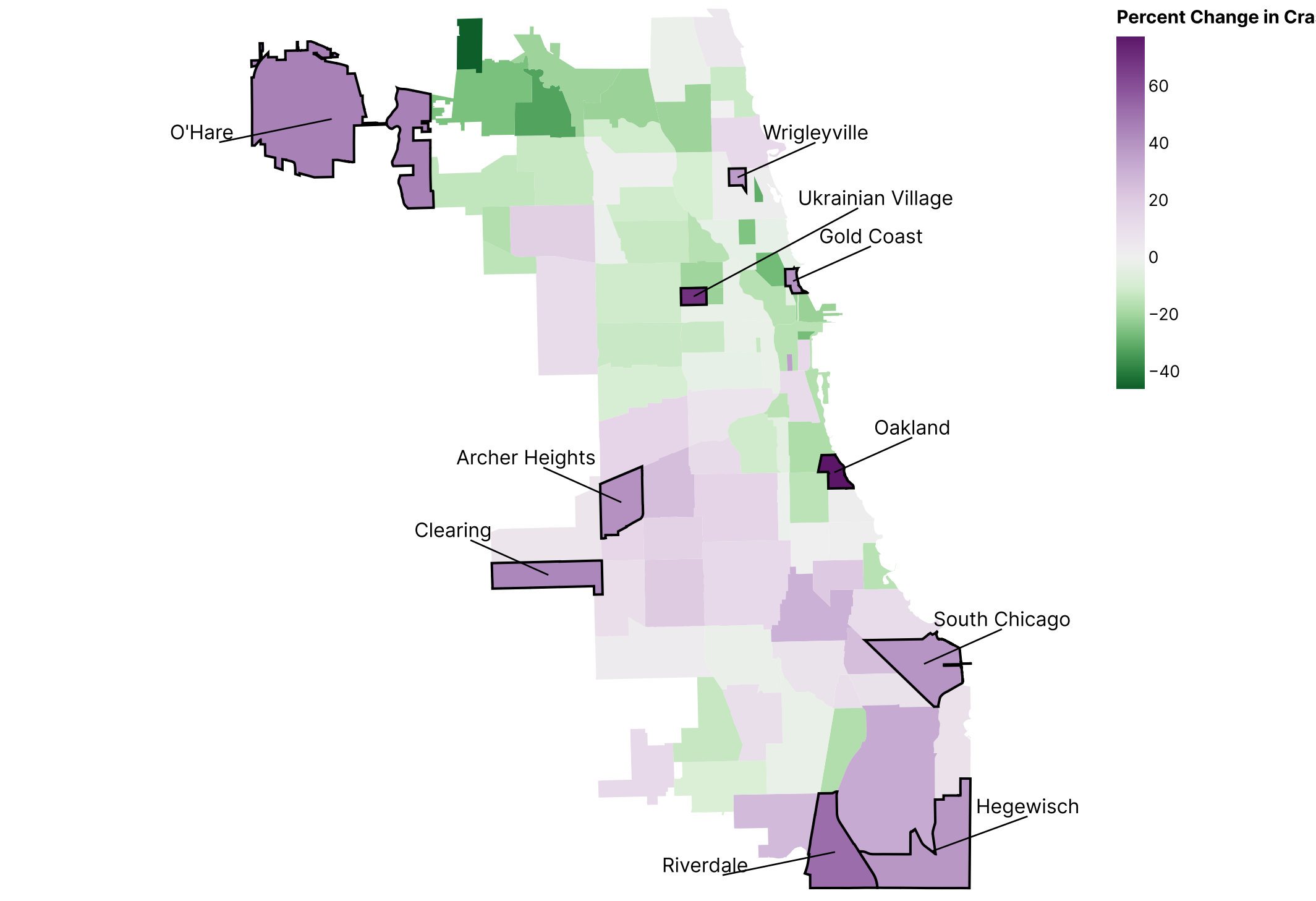


Pedestrians or Cyclists Injured per 1,000 Involved in Crashes by Age Group (2018 vs 2023)



Which neighborhoods saw an increase in crashes with injuries?

Percentage Change in Crashes with Injuries (2018 vs 2023)

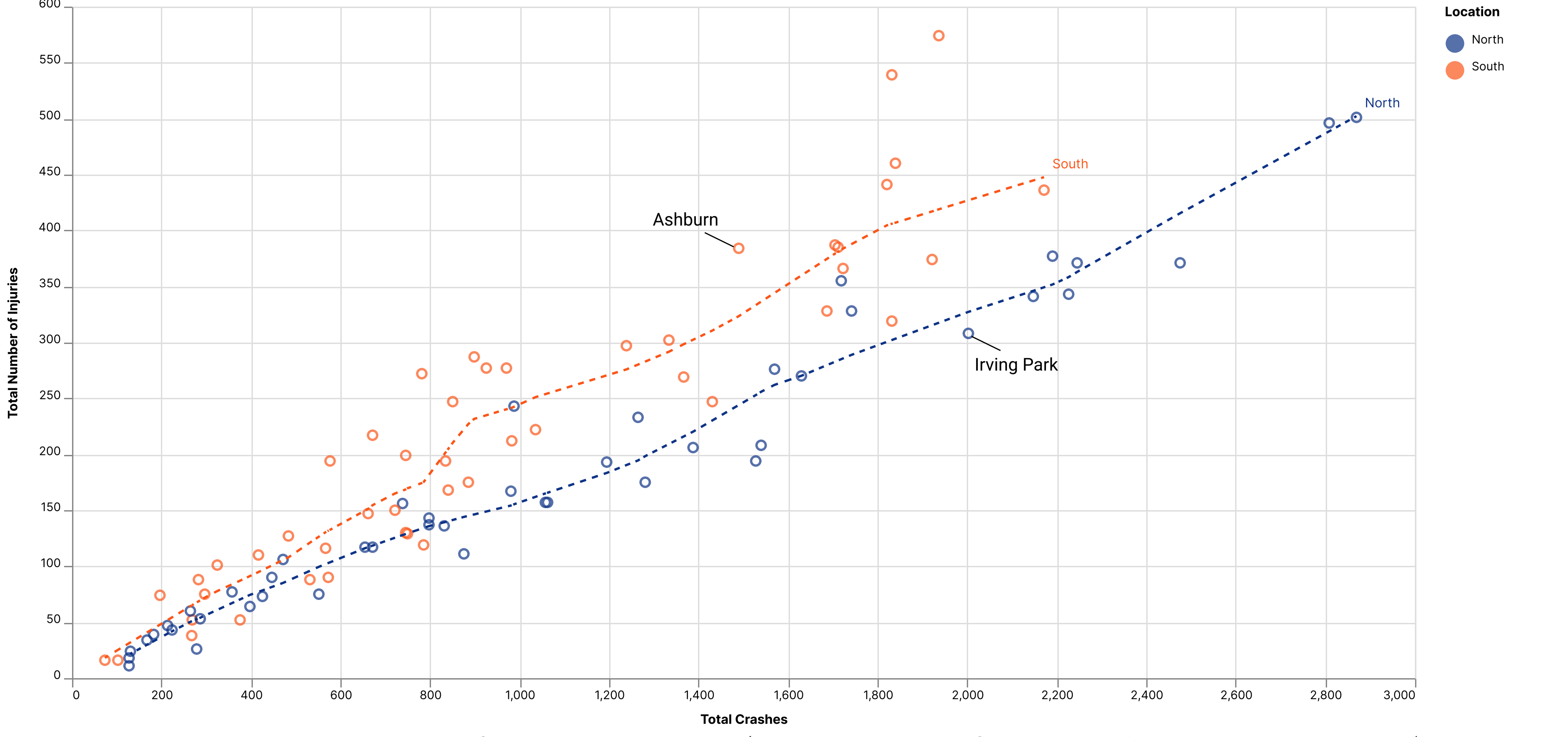


Top 10 Neighborhoods with Largest Increase Labeled

WORSE INJURY OUTCOMES FROM TRAFFIC CRASHES IN SOUTH SIDE NEIGHBORHOODS

The scatter plot to the left shows a data point for each Chicago neighborhood. The trend lines for each group of neighborhoods show that crashes on the south side result in more injuries than those in the north. For example, a north side neighborhood like Irving Park had 2,003 crashes, but these crashes only resulted in 308 injuries. On the other hand, Ashburn, south side neighborhood, had less crashes (1,490) and more injuries (384). This illustrates how the legacy of racial segregation continues to live on.

Total Crashes vs. Total Number of Injuries by Neighborhood (2023)



Note: Outlier neighborhoods were excluded from the scatter plot above (Austin, Englewood, Garfield Park, Grand Crossing and Humboldt Park).