



# CURBING CHICAGO CAR CRASHES

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# MEET THE TEAM



**Michael Lee**

Data Lover



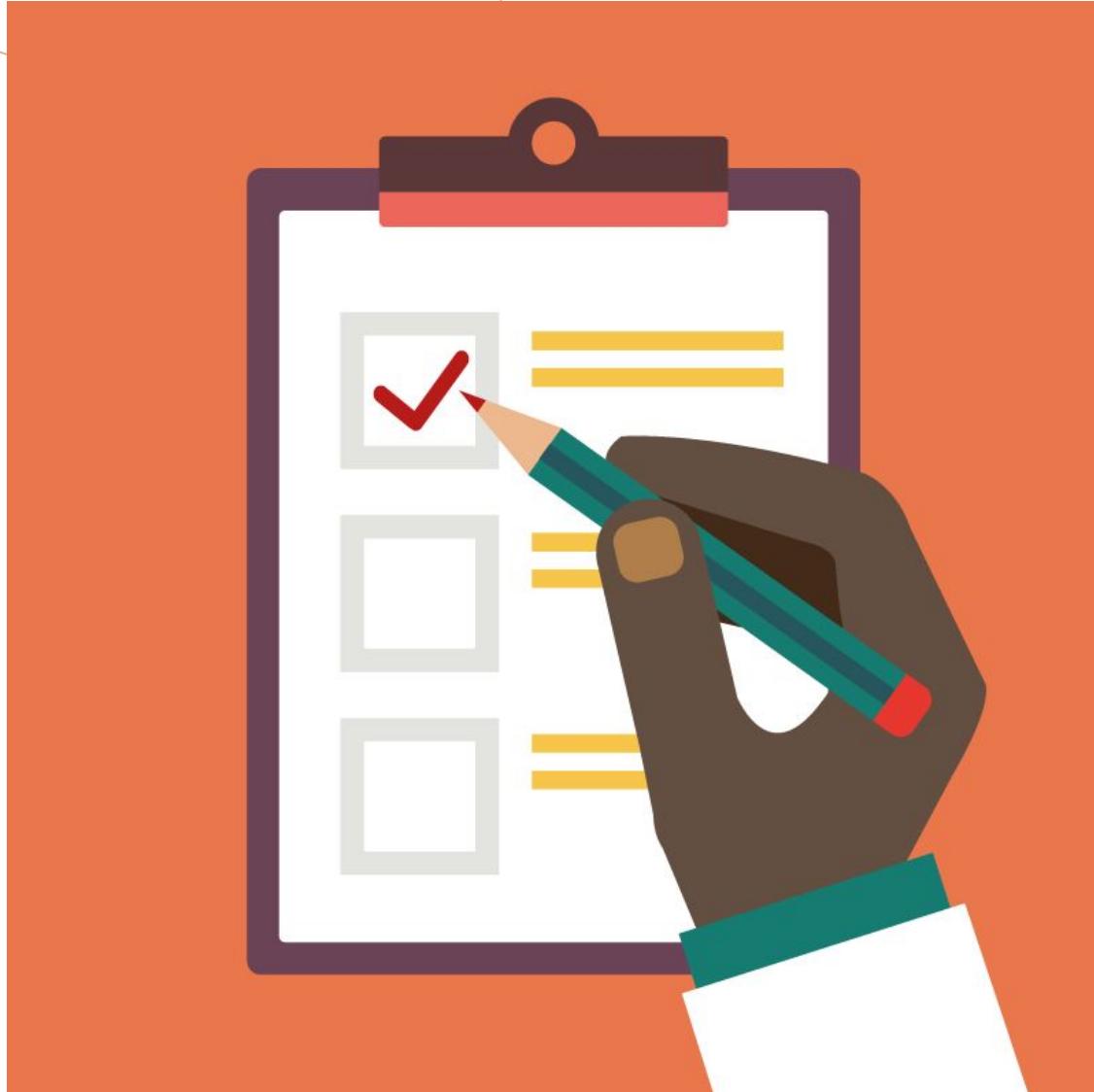
**Carlos McCrum**

Data Scientist



**Doug Mill**

Data Scientist



# Agenda

Business Understanding

Data & Methods

Findings

Conclusion

Future Research

# Business Understanding

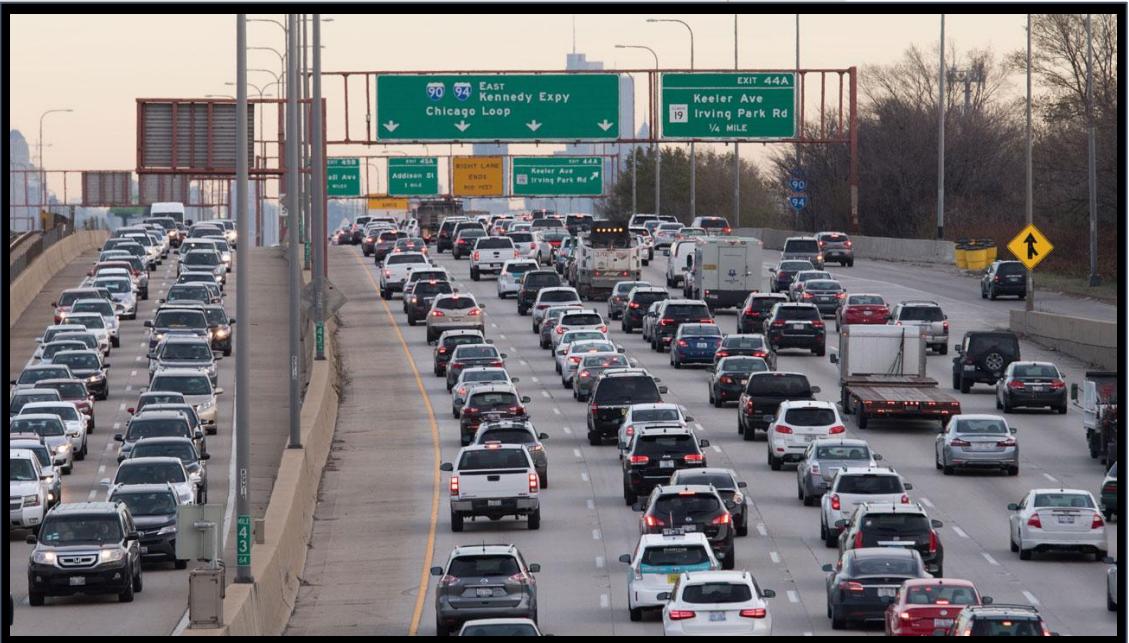
The Vehicle Safety Board of Chicago

Find Cause of Car Accidents

Were These Crashes Preventable?



# Data & Methods



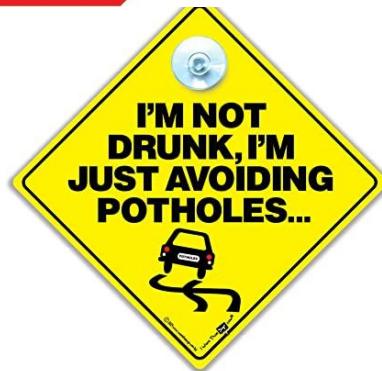
## Car Crashes 2016 - 2020

- From City of Chicago

## Binned Data into Two Columns

- Driver Preventable and Less Preventable

# What is Driver Preventable?



**Driver  
Preventable**

**External  
Factors**

# Vehicle Safety Board's Responsibility

## Serve Tax Payers

Liable for crashes that happen on Highways after knowledge of defect road.



## Focus on Non-Driver Preventable

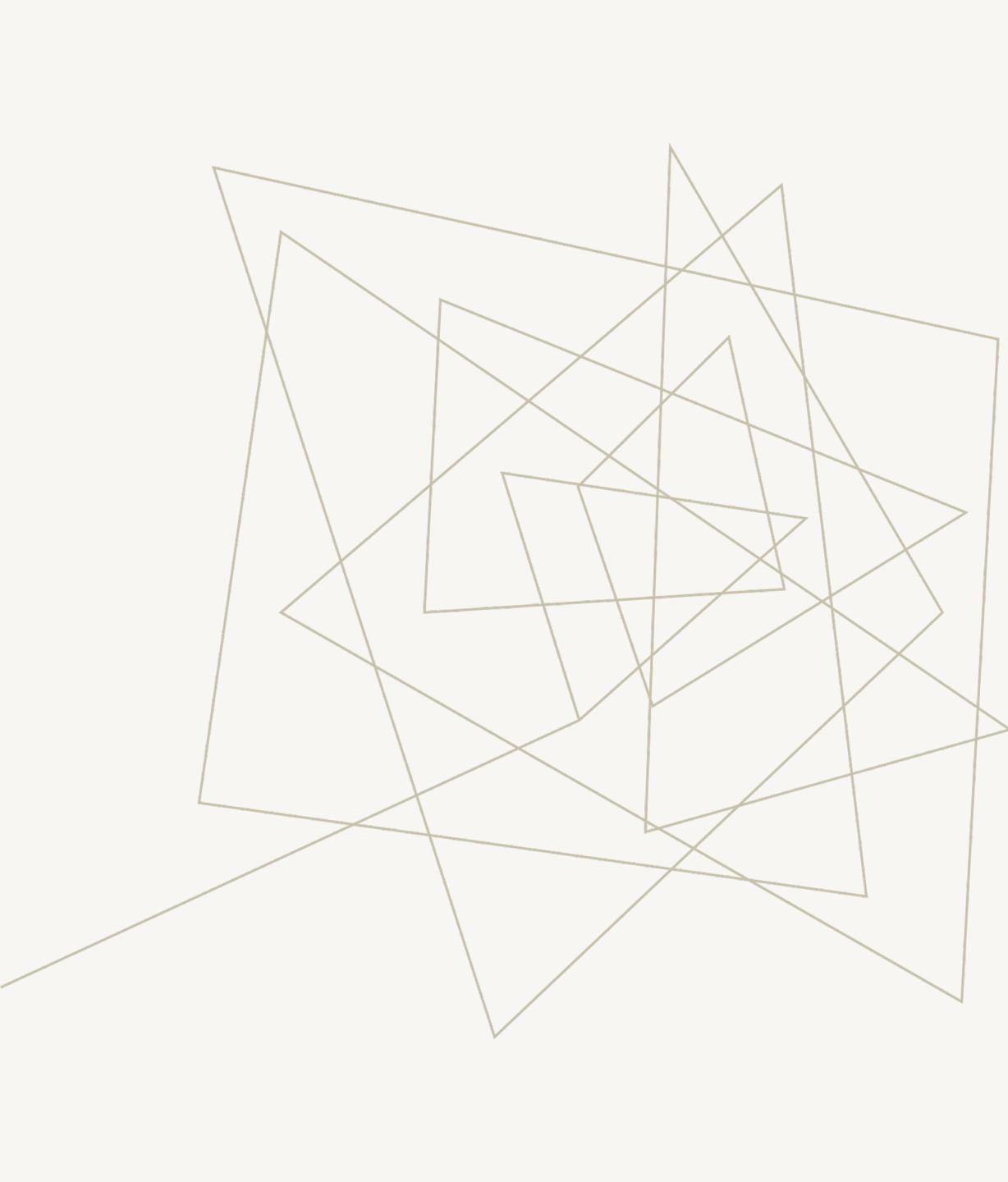
No matter what, drivers will make mistakes

**MISTAKES EVERYONE MAKES!!**



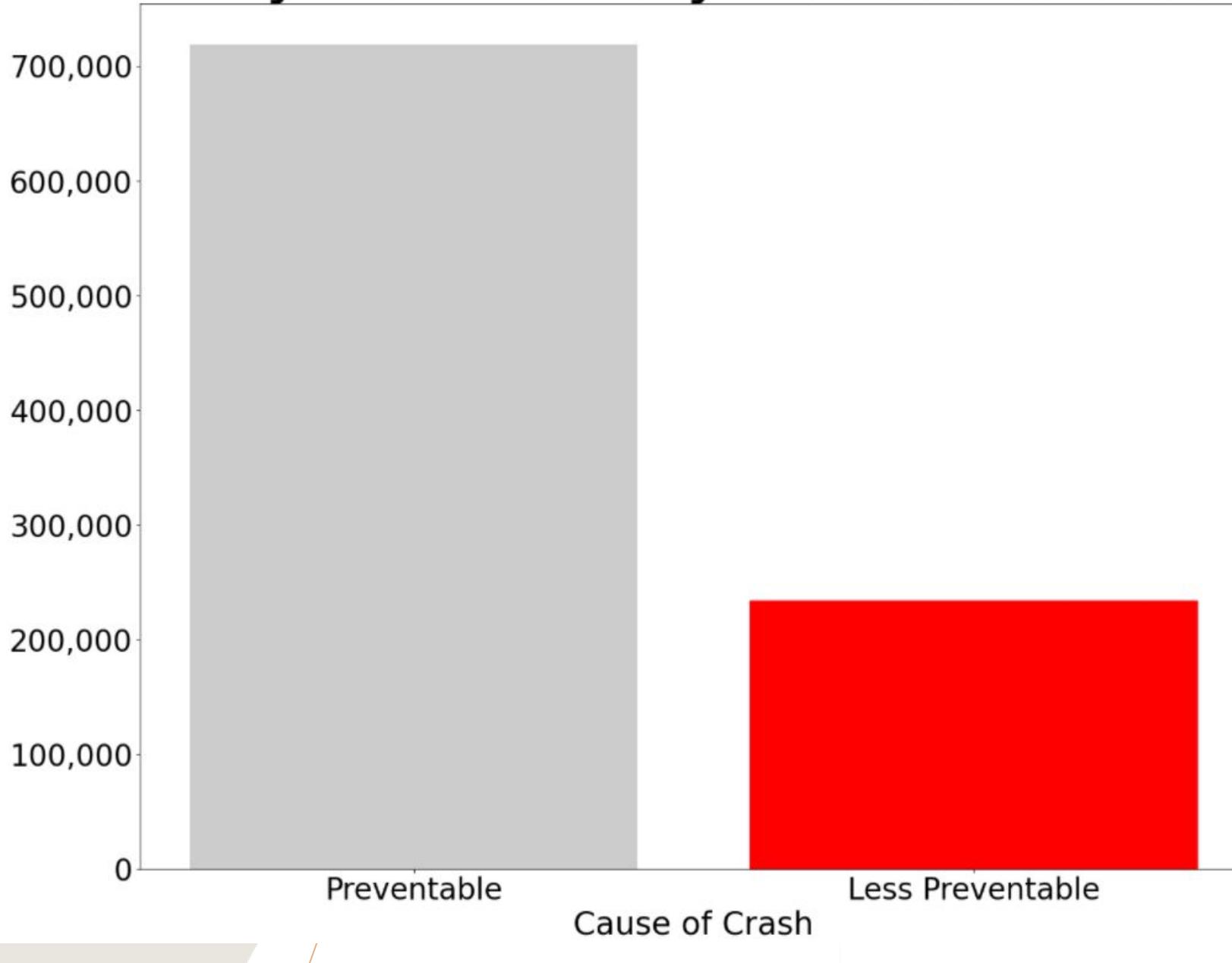
# **Fix Roads In Northern Chicago Area For Immediate Effect**





# Findings

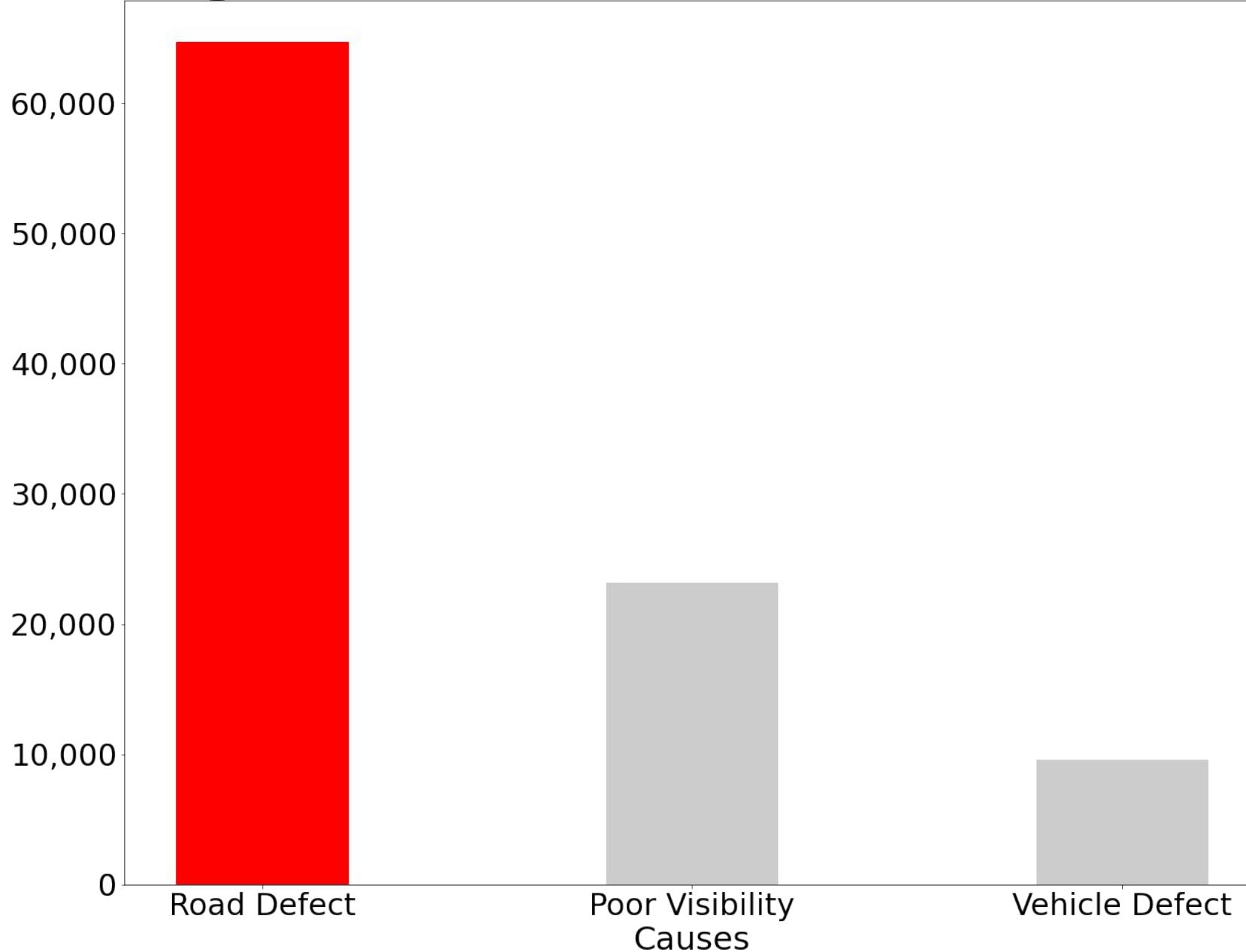
# Primary Contributory Causes of Crashes

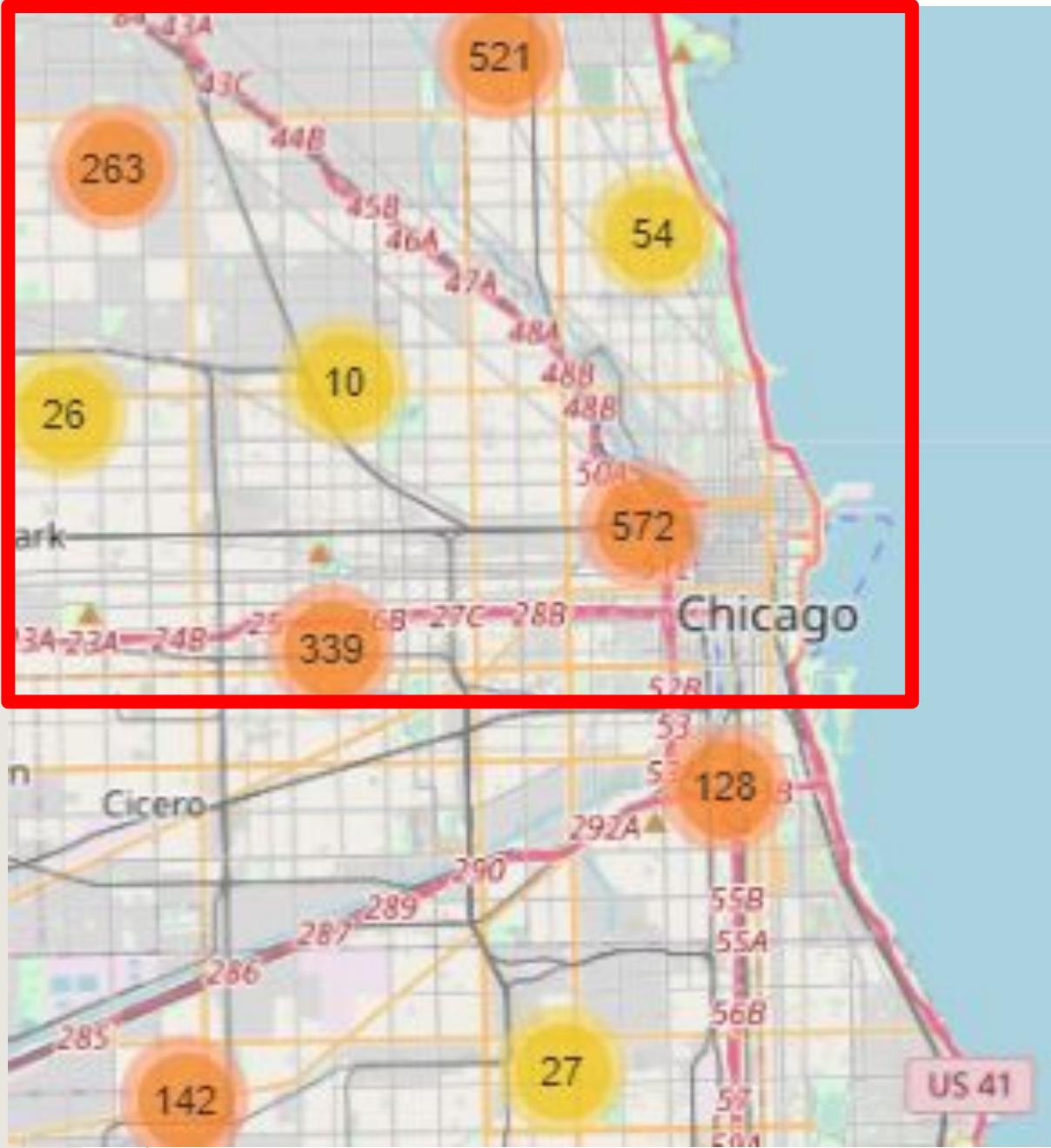


**25% of crashes  
were Less  
Preventable**

- Road Defects
- Poor Visibility
- Vehicle Defects

# Categories of Less Preventable Crashes

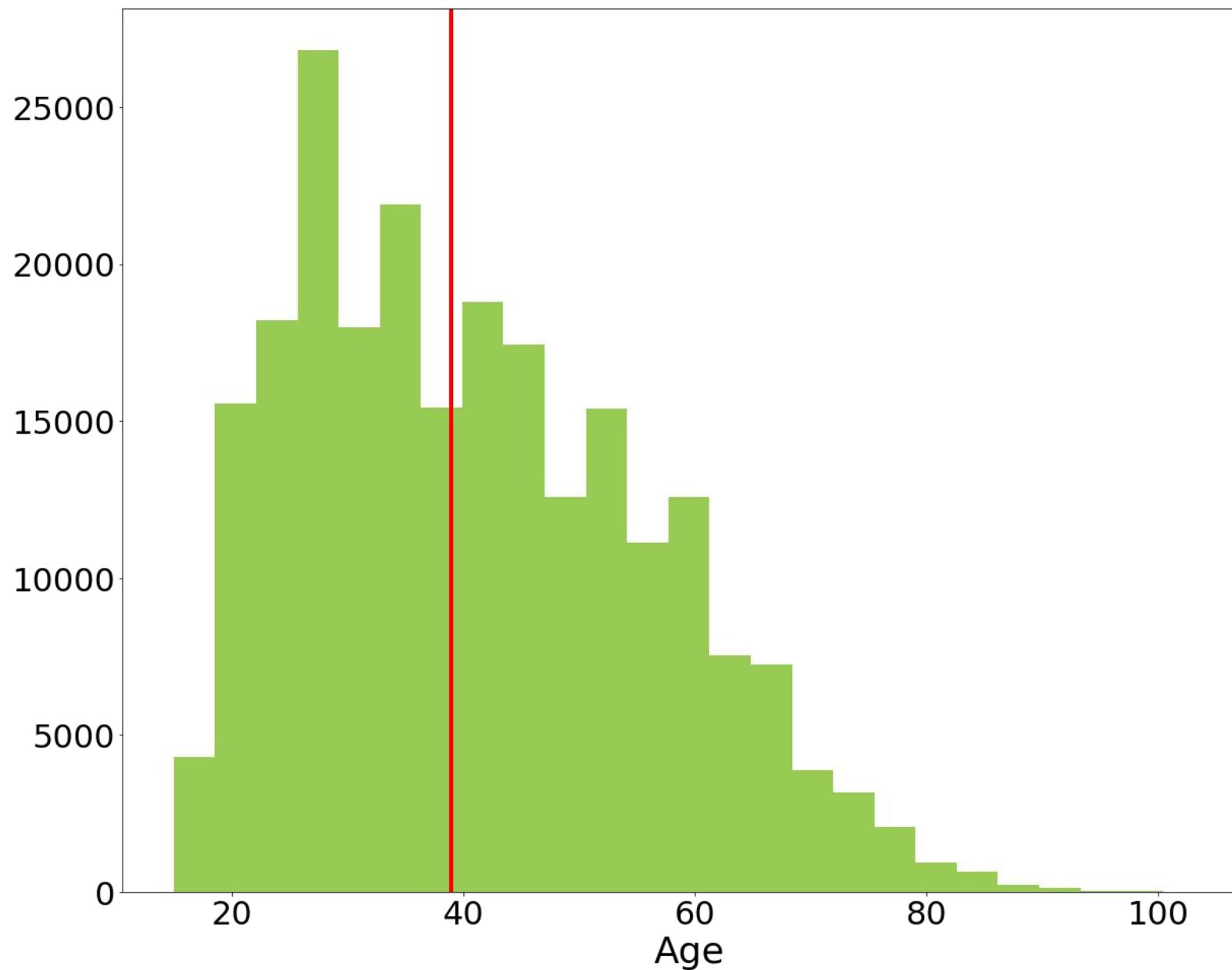




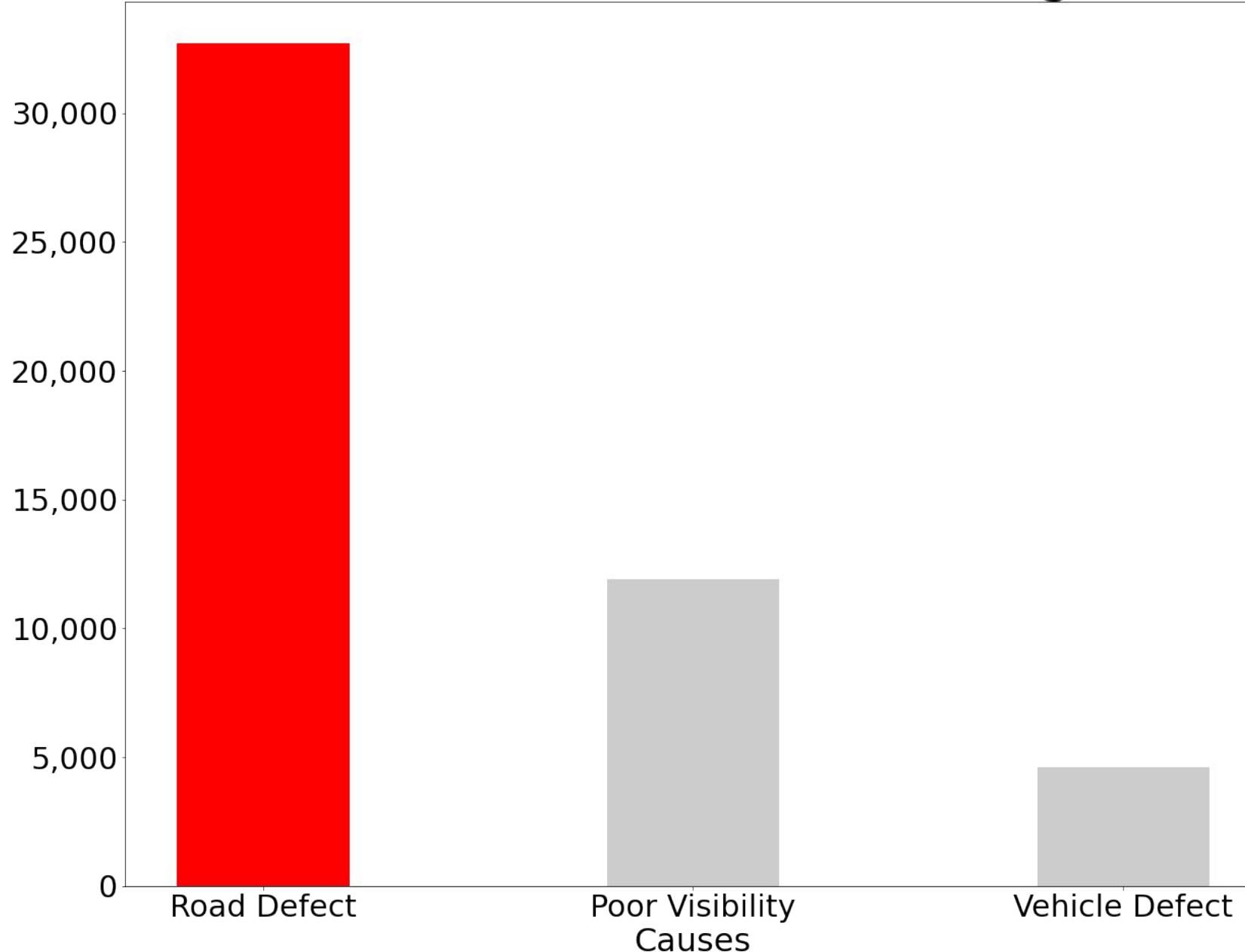
## Fix Road Defects

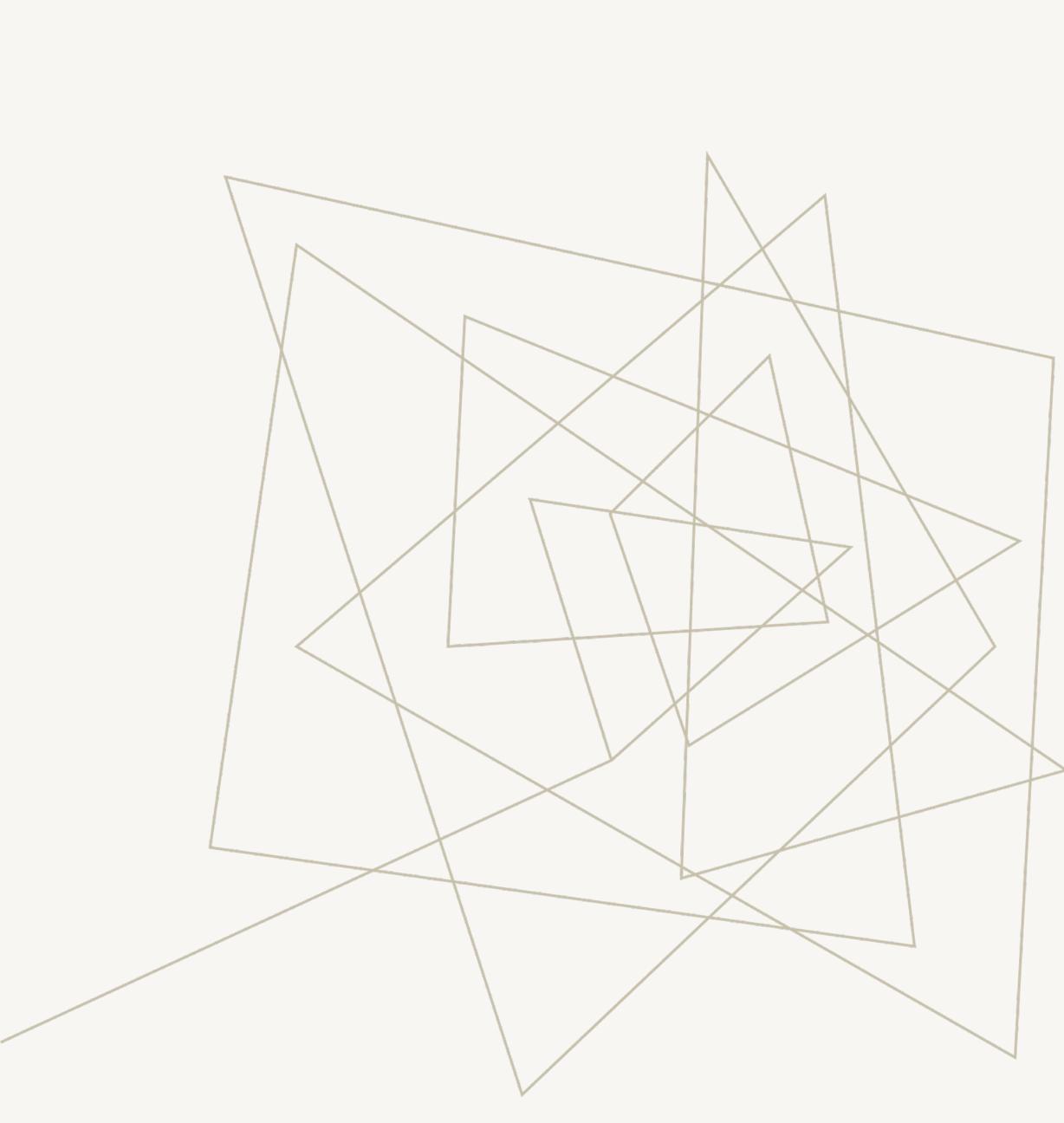
- Northern Chicago

## Ages of Drivers involved in Less Preventable Crashes:

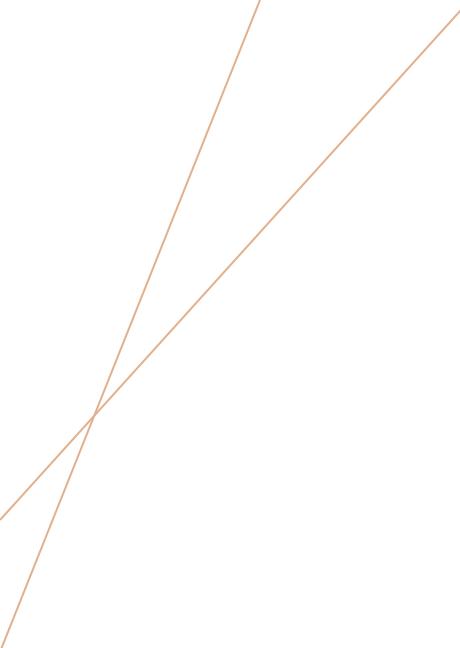


# Less Preventable Crashes for Ages 20-39





# Conclusion



# Recommendations

- Fixing roads that our model pointed to
- Focus on repairing roads in North Chicago area.
- Create a program to educate drivers on preventable crashes.

# Key Takeaways

## Invest in Roads



Repair damaged roads  
that potentially lead ↓  
crashes immediately.

## Invest in People



Incentive Program  
targeting age group  
20-39

## Focus on Hot-Spots



Target hot-spot areas  
where crashes were  
less preventable

# Future Research



Economic data on crashes

Surrounding cities and towns for comparison

Impact public transportation has on crashes

# THANK YOU

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# Appendix



## Preventable Crashes Ages 20-39

