



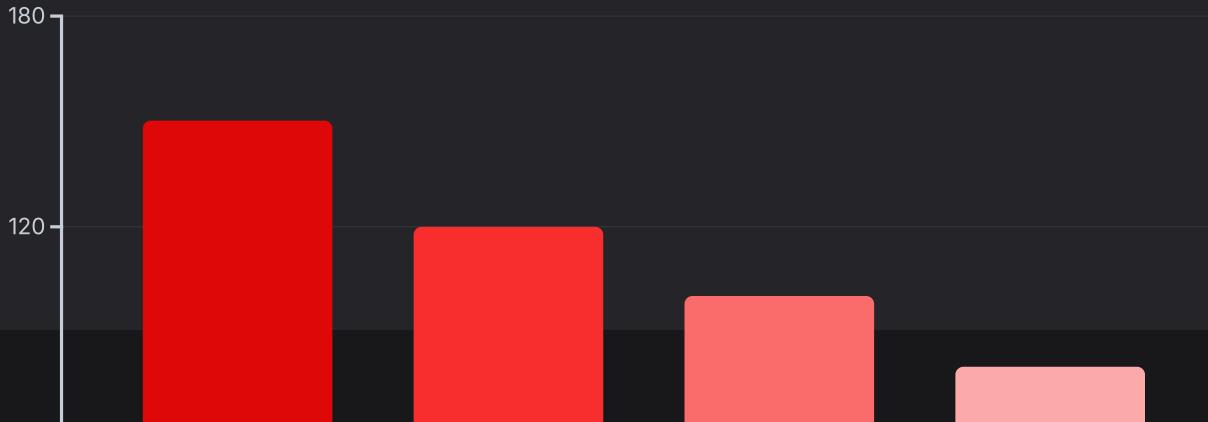
Understanding Factors Increasing Severe Crashes in Chicago

This presentation explores key factors contributing to severe traffic crashes in Chicago. We will identify high-risk areas and propose actionable recommendations for the Chicago Department of Transportation (CDOT).

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Data Overview: Unveiling Crash Hotspots Across the City

Our analysis reveals specific locations with a disproportionately high number of severe crashes. These hotspots require immediate attention and targeted interventions.



Factor 1: The Peril of Nighttime Crashes (Poor Lighting Conditions)

Nighttime significantly increases the risk of severe crashes. Reduced visibility due to poor street lighting is a primary contributor to these incidents.

1 Lower Visibility

Drivers have less time to react to hazards.

2 Pedestrian Risk

Pedestrians are harder to see in the dark.

3 Increased Severity

Accidents at night often lead to more severe outcomes.





Visualizing the Impact: Case Studies of Nighttime Incidents

Specific examples illustrate the devastating impact of poor lighting. These incidents highlight the urgent need for infrastructure improvements.

Intersection A

Multiple severe collisions reported between 9 PM and 2 AM. Lack of clear street lighting cited as a factor.

Road Segment B

Frequent pedestrian accidents due to inadequate sidewalk illumination. Drivers struggle to see individuals.

Underpass C

Poor lighting creates shadows, increasing risks for cyclists and drivers navigating turns.



Factor 2: The Dangers of Rain and Snow (Weather Conditions)

Adverse weather, particularly rain and snow, significantly compromises road safety. Reduced traction and visibility lead to more severe crashes.



Reduced Traction

Wet or icy roads decrease tire grip, increasing stopping distances.



Poor Visibility

Rain and snow impair a driver's ability to see the road.



Increased Braking Time

Slippery conditions necessitate longer braking distances, increasing collision risk.



CDOT Recommendations: Improving Road Safety in Adverse Weather

CDOT can implement several strategies to mitigate weather-related crash risks. Proactive maintenance and rapid response are crucial.

Enhanced Road Maintenance

Increase frequency of salting and plowing during winter storms.



Public Awareness Campaigns

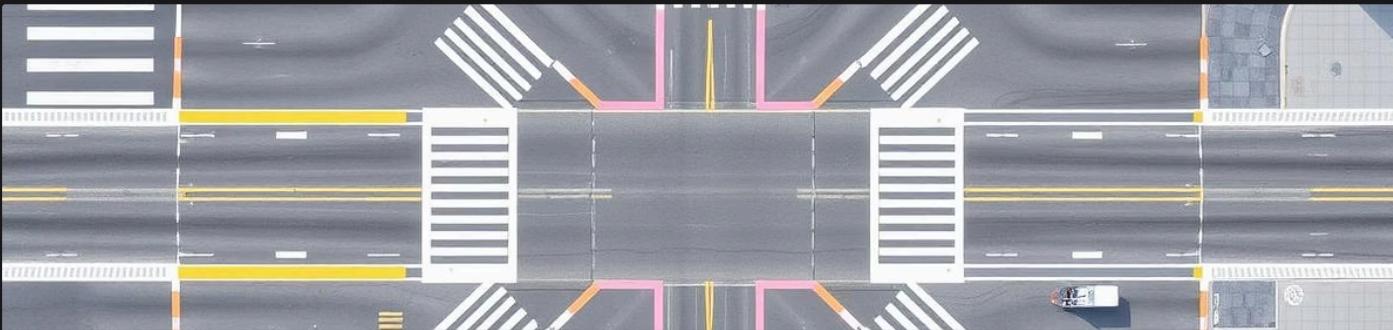
Educate drivers on safe driving practices in rain and snow.



Smart Lighting Systems

Install adaptive lighting that brightens during adverse conditions.





Recommendation: Redesigning High-Risk Intersections to Reduce Accidents

Redesigning problematic intersections is essential. Improved layouts and traffic flow can significantly reduce collision points.



Improved Layout

Optimize lane configurations for smoother traffic flow.

Safer Pedestrian Crossings

Implement clearer markings and signal timing for pedestrians.

Enhanced Signalization

Update traffic lights with adaptive technology for better response.

Visibility Enhancements

Remove obstructions, add mirrors where needed to improve sightlines.

Conclusion: Prioritizing Road Safety Interventions for a Safer Chicago

This analysis provides actionable insights for CDOT to prioritize road safety interventions. Focused efforts can create a safer transportation network for all Chicagoans.

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Key Factors
Identified for severe crash
increases.

3

**Actionable
Recommendations**
Provided for CDOT
implementation.

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Safer City
The ultimate goal of these
interventions.

