Chicago Transit Authority

Chicago Traffic Crash Trends & Insights for the CTA

Analyzing traffic crash trends and their impact on CTA operations

March 11, 2025

Key Crash Statistics: Scope of Analysis

Chicago Police Traffic Crash Dataset

924,030 total crashes in data set

Peak Crash Times

Morning Peak: 8 AM (49,141 crashes)

Evening Peak: 5 PM (71,538 crashes) (Rush hours have the highest crash volumes)

Common Crash Causes

Top Cause: Failing to yield right-of-way

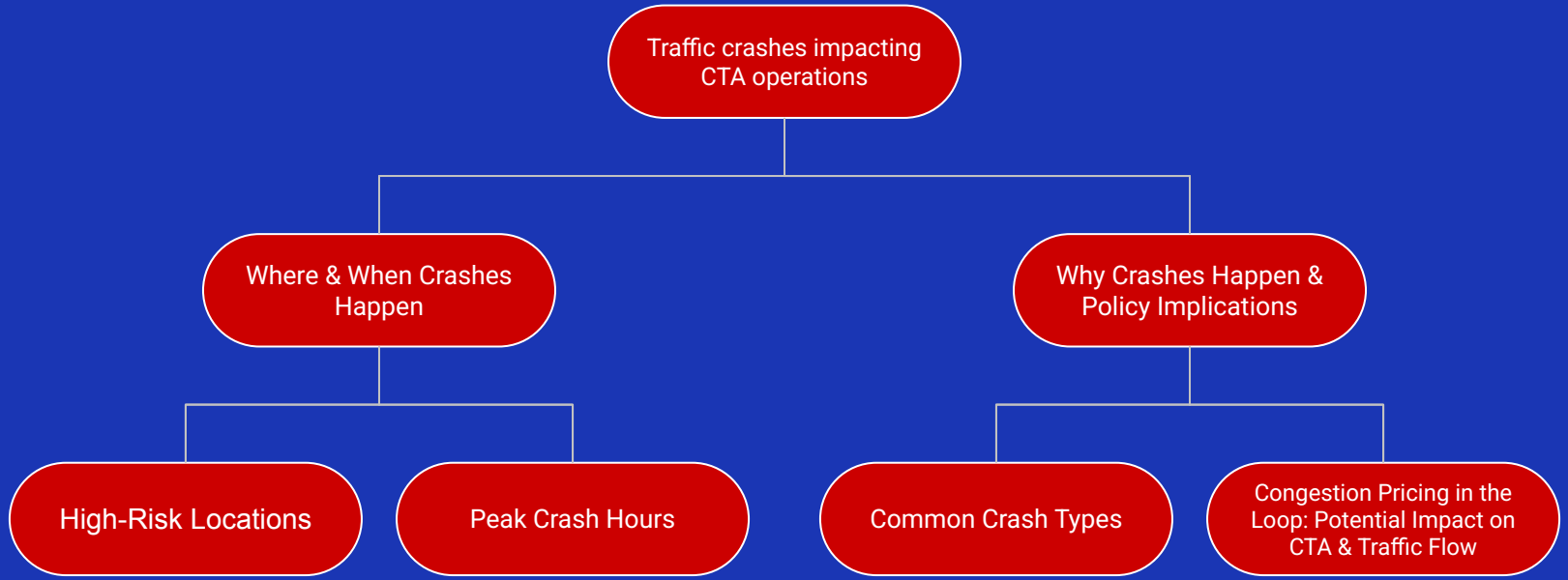
Most Frequent Crash Type: Rear-end collisions (203,729 crashes)

Impact of Road Conditions

Most crashes occur in dry conditions (680,232), but **wet/icy/snowy roads increase risk**

Speed limit 30 MPH has the highest number of crashes (680,749)

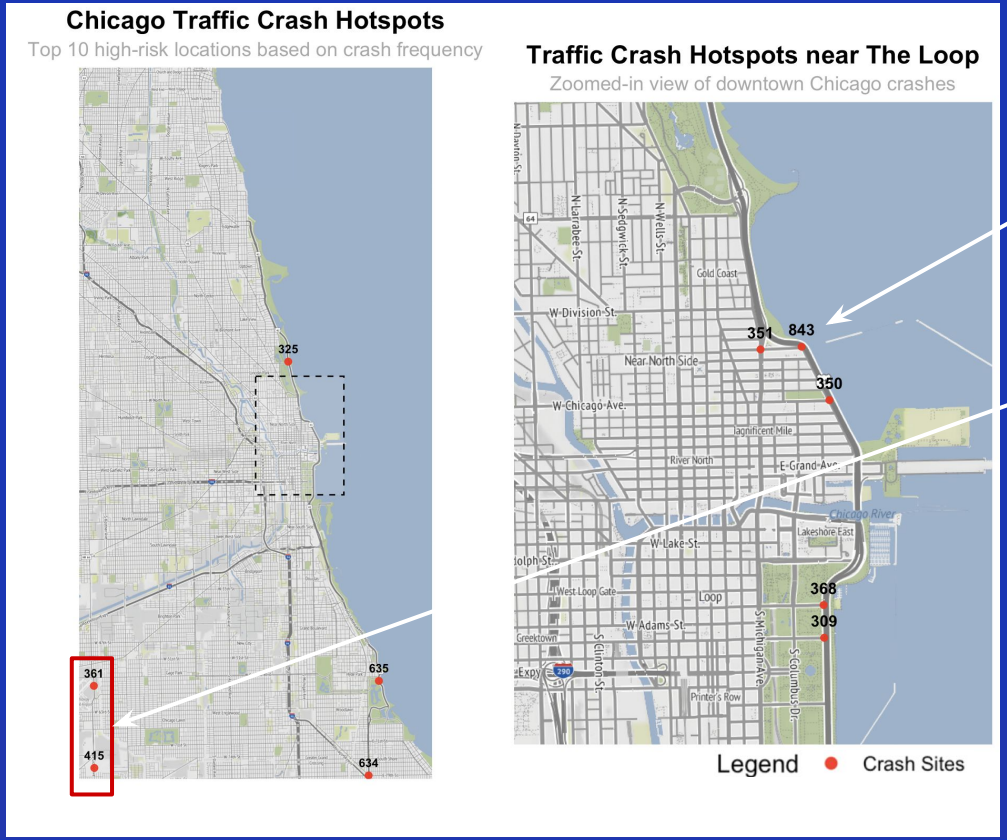
Executive Summary



Section 1: Where & When Crashes Happen

Analyzing where and when crashes happen and their impact on CTA operations

High-Risk Crash Locations

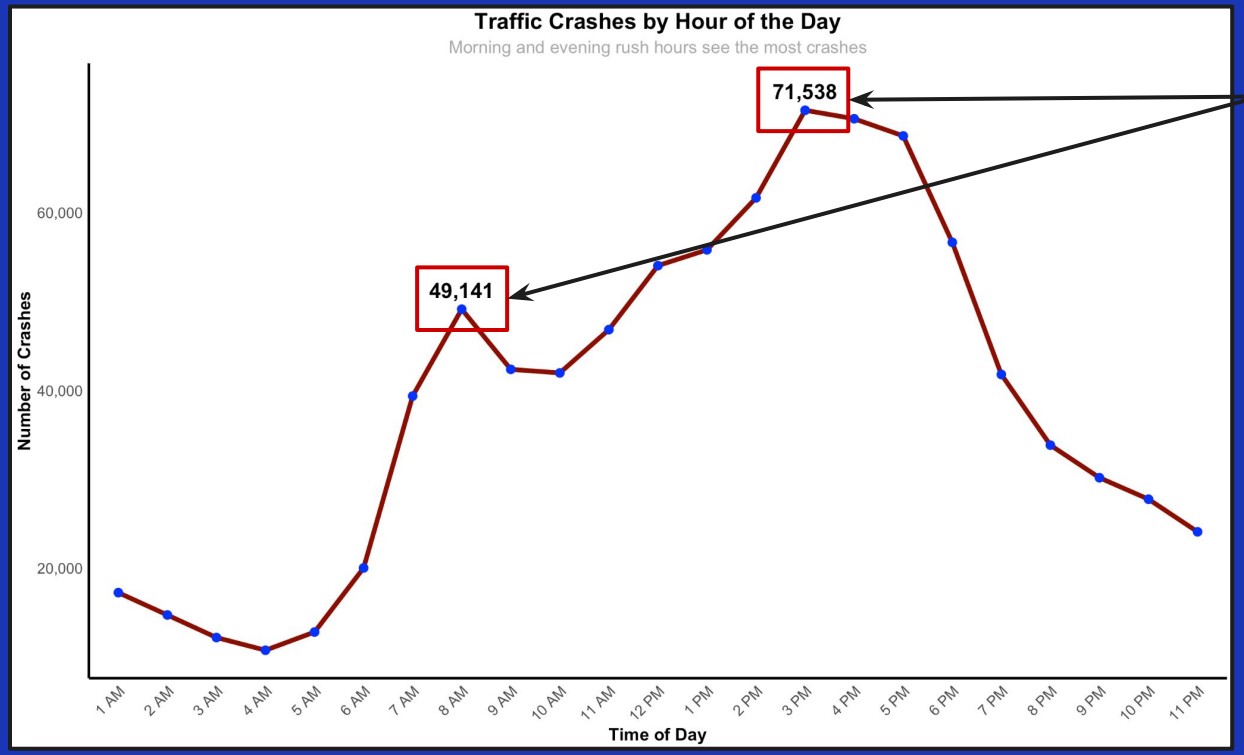


Most crashes occur near the Loop and on key arterial roads

E.g., Western Ave, Pulaski Rd, **Cicero Ave**

CTA bus routes heavily overlap with these crash-prone areas.

Peak Crash Hours



Morning (8 AM) and evening rush hours (3-5 PM) see the most crashes

CTA impact: Peak-hour crashes contribute to bus delays & increased commute times for riders.

Section 2: Why Crashes Happen & Policy Implications

Analyzing the causes and suggesting potential CTA-focused solutions

Most Common Crash Types

Relevance to CTA: Bus stops, turning lanes, and high-traffic intersections contribute to these crashes.

Dedicated bus lanes could reduce rear-end crashes near stops.

Indicative of congestion-related incidents.

Top 5 Most Common Crash Types

Based on reported crash incidents

Crash Type	Number of Crashes
PARKED MOTOR VEHICLE	213,829.00
REAR END	203,729.00
SIDESWIPE SAME DIRECTION	141,921.00
TURNING	133,116.00
ANGLE	100,727.00

Speed & Roadway Conditions Impact

Why does this matter?

30 MPH zones have the most crashes, covering key CTA routes

Wet, icy, and snowy roads increase risk, especially in winter when CTA is crucial

Top 5 Speed Limits with the Most Crashes

Based on reported crash incidents

Speed Limit (MPH)	Number of Crashes
30	680,749.00
35	60,827.00
25	59,514.00
20	38,753.00
15	32,937.00

Top 5 Roadway Surface Conditions During Crashes

Based on reported crash incidents

Road Condition	Number of Crashes
DRY	680,232.00
WET	120,743.00
SNOW OR SLUSH	30,069.00
ICE	6,620.00
SAND, MUD, DIRT	329.00

Section 3: Policy Recommendation – Congestion Pricing in the Loop

Proposing a data-driven policy solution relevant to CTA & city planning

The Case for Congestion Pricing

High crash rates near the Loop during peak hours.

Refer to Slide 5 for crash hotspots

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Increased CTA bus delays due to congestion during peak hours

Refer to Slide 6 for congestion during peak hours

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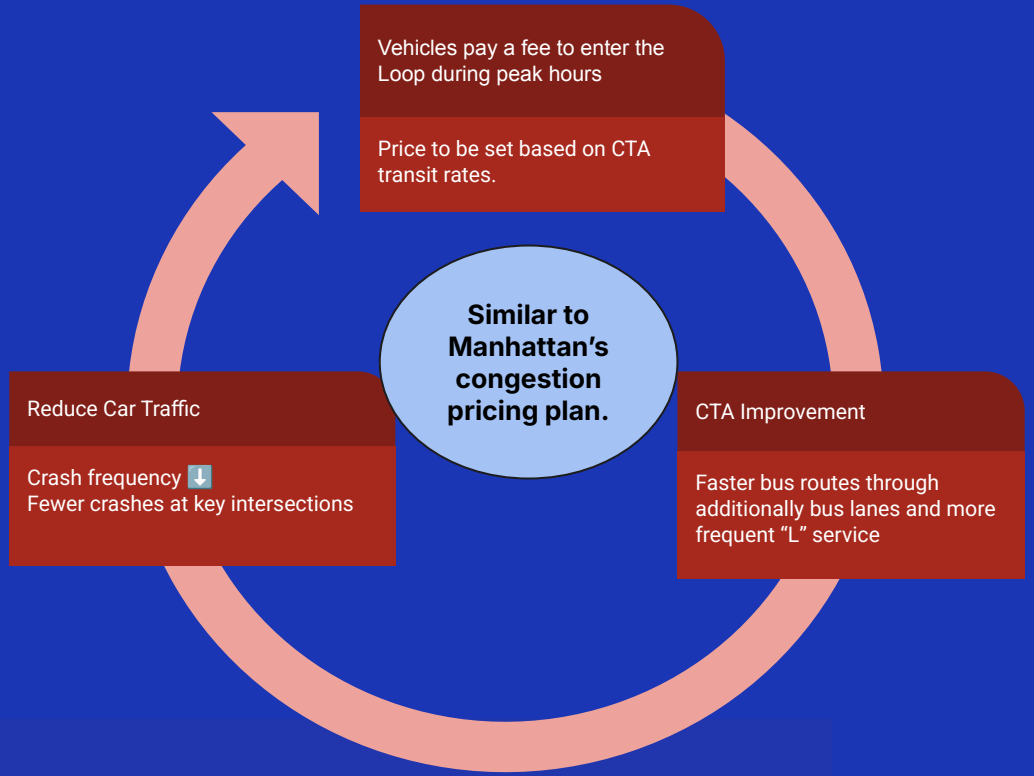
Need for Congestion Pricing

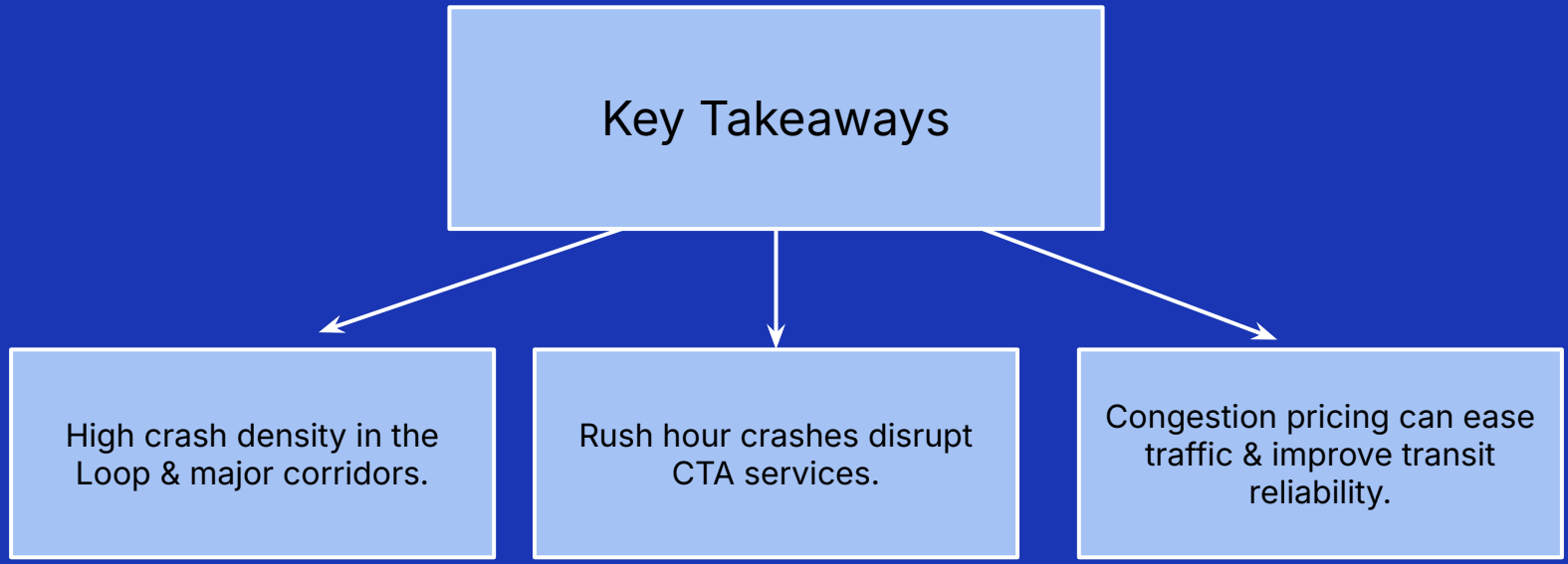
- Potential Benefits:
  - Fewer private vehicles → Reduced crashes.
  - Improved bus travel times & reliability.

How Congestion Pricing Would Work



Conclusion: Key Takeaways & Next Steps for CTA Consideration

How the CTA can mitigate crash risks and improve mobility in high-impact areas


Key Takeaways
High crash density in the Loop & major corridors.
Rush hour crashes disrupt CTA services.
Congestion pricing can ease traffic & improve transit reliability.

Next Steps for CTA Consideration

1. Partner with CDOT to assess congestion pricing impact & feasibility.
2. Implement bus priority measures in high-crash areas.
3. Develop targeted crash reduction strategies for key transit routes.

Final Thoughts

By leveraging congestion pricing and data-driven transit improvements, CTA can enhance efficiency and safety for Chicago's commuters.

Thank You