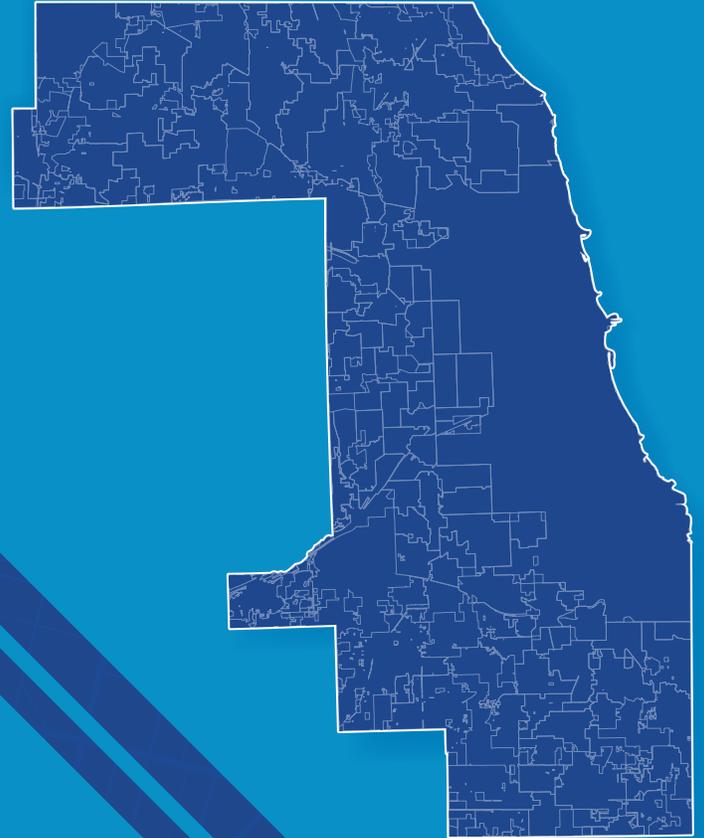


COOK COUNTY

ILLINOIS



SAFE TRAVEL
FOR ALL

Safety Action Plan

December 2025:
Addendum

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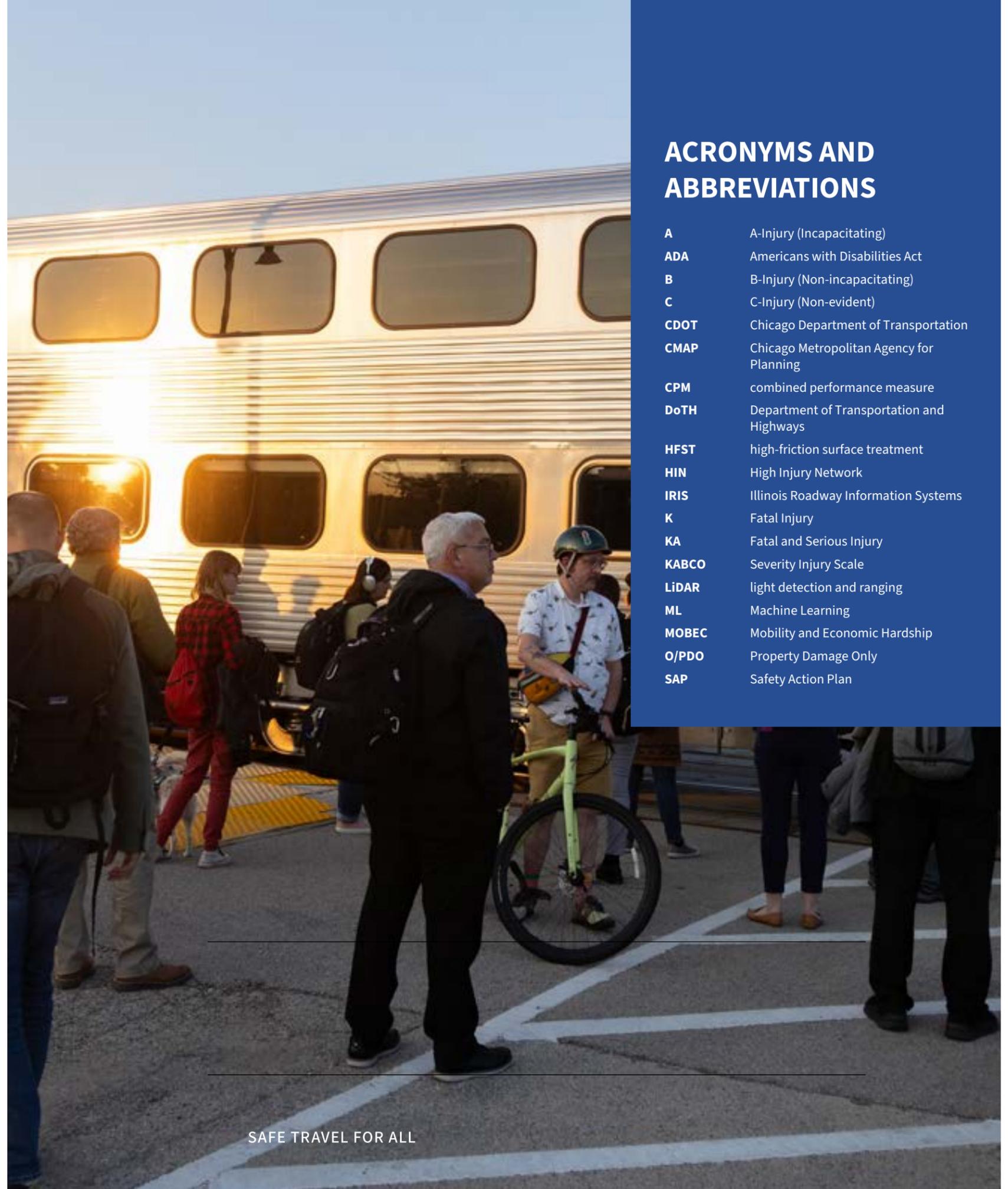
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Results of the analyses are based on data that was received from the Illinois Department of Transportation. Crash data represents years 2018 to 2022 and was obtained from the state police and other enforcement agencies. The data was used "as is" for analysis purposes and should be interpreted accordingly.

ACRONYMS AND ABBREVIATIONS

A	A-Injury (Incapacitating)
ADA	Americans with Disabilities Act
B	B-Injury (Non-incapacitating)
C	C-Injury (Non-evident)
CDOT	Chicago Department of Transportation
CMAP	Chicago Metropolitan Agency for Planning
CPM	combined performance measure
DoTH	Department of Transportation and Highways
HFST	high-friction surface treatment
HIN	High Injury Network
IRIS	Illinois Roadway Information Systems
K	Fatal Injury
KA	Fatal and Serious Injury
KABCO	Severity Injury Scale
LiDAR	light detection and ranging
ML	Machine Learning
MOBEC	Mobility and Economic Hardship
O/PDO	Property Damage Only
SAP	Safety Action Plan



Introduction

This strategic update supplements the Cook County Safety Action Plan (SAP) developed by the Chicago Metropolitan Agency for Planning (CMAP) in partnership with the Cook County (county) Department of Transportation and Highways (DoTH) in May 2025. It provides new and expanded tools and resources for municipalities to support data-driven decision-making, targeted interventions and community-centered traffic safety planning that aims to reduce traffic fatalities and serious injuries, while improving travel safety for all road users.

Traffic fatalities in northeastern Illinois have risen since 2014, especially among people who walk and bicycle and those from low-income communities. Communities of color experience a disproportionate share of traffic fatalities. This trend is unacceptable, preventable and reversible.

The SAP establishes a roadmap for reducing the risk of death and serious injury on roads in the county. By combining community input and data analysis, the SAP identifies practical actions and innovative solutions to make roads within the county safer for all users, with a goal of zero fatalities and serious injuries by 2050.

This December 2025 addendum includes:

- **RAIL ANALYSIS** — New analysis and an interactive webmap that examines more than 1,100 rail collisions across 13 years, enabling visualization of collision patterns and characteristics as well as identification of cluster locations.
- **COMMUNITY IMPACT CONSIDERATIONS** — Comparison of the characteristics of populations with the High Injury Network, offering insights that respond to local needs and prioritize communities most affected.
- **PRIORITY LOCATIONS** — New schematics for 10 priority locations throughout the county, delivering a variety of implementable designs and recommendations for safety improvements as well as updates to the recommended countermeasures from the May 2025 document.
- **SYSTEMIC ANALYSIS** — New analysis that identifies risk factors associated with specific roadway typologies or emphasis areas, which serves as a tool for local agencies to pinpoint proactive and scalable countermeasures and policy guidance for network-level safety improvements.

Together, these elements deliver practical data tools, design-ready materials and analytical guidance that municipalities can apply to improve safety outcomes.



01

INTRODUCTION



02

RAIL ANALYSIS

Stay Informed, Stay Ahead!

We've recently updated this plan's content to bring you the latest insights and information. Continue to the next page to make sure you're working with the most current resources.



The content on the next page corresponds to Section 3, page 3-41 (shown on the left) from the May 2025 Cook County Safety Action Plan.

Safety Analysis: Rail-Related

Rail systems are a vital component of regional mobility, offering essential connectivity for both passengers and freight. In Cook County, where heavily used freight corridors intersect with commuter and urban rail lines, understanding collision patterns is critical for shaping effective interventions. The Illinois Commerce Commission (ICC), [Illinois Operation Lifesaver](#), roadway agencies and rail operators have long collaborated on safety initiatives, particularly at grade crossings where rail lines intersect with other transportation networks. Agencies such as Metra and Amtrak operate multiple lines within the county—some on tracks they own and others through agreements with freight railroads like BNSF Railway (BNSF). These partnerships play a critical role in implementing safety improvements across shared corridors.



BETWEEN 2012-2024

1,106

rail-related collisions were reported

85

collisions per year on average

OVER A 13-YEAR PERIOD

378 fatalities & **361** injuries

were recorded—an average of **56.8 casualties per year**

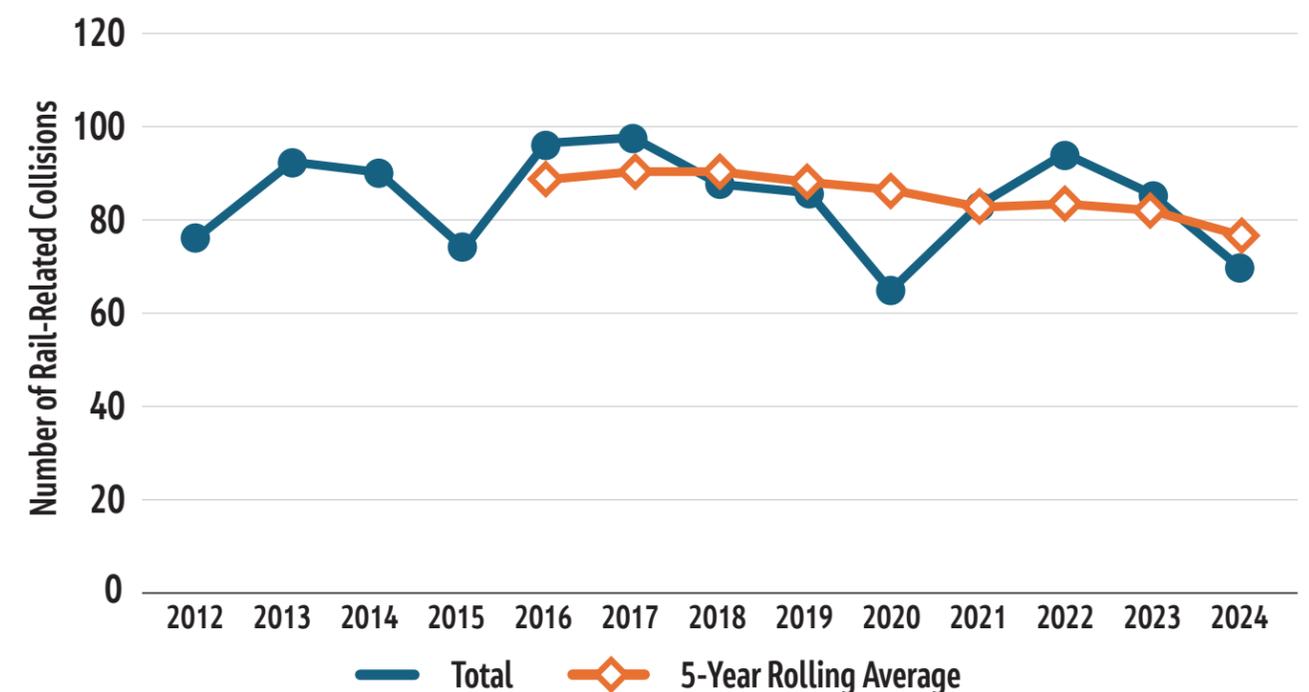
Data Source and Scope

This rail-related analysis focuses on collisions within Cook County from 2012 to 2024, using the regional dataset developed by CMAP, with information from the Illinois Commerce Commission. The dataset includes crashes involving trains and vehicles as well as collisions where no motor vehicle was involved, such as trains striking pedestrians or cyclists. Intentionality was not considered for this analysis. Reported collisions are categorized by time of day, mode involved, location type, collision type and railroad ownership or operating entity. Injury severity details were not provided in the dataset, so comparisons to IDOT crash severity data are not possible. These collisions occurred both at crossings and at non-crossings.

Rail-Related Collision Trends

Between 2012 and 2024, a total of 1,106 rail-related collisions were reported in Cook County, averaging about 85 collisions per year. As shown on Figure 2-1, yearly totals fluctuated—peaking at 98 collisions in 2017 and reaching a low of 64 in 2020. The 5-year rolling average remained relatively stable between 80 and 90 collisions, with a gradual decline beginning in 2018. This pattern indicates that although annual variation exists, the long-term trend has been slightly downward.

Figure 2-1. Rail-Related Collision Trends: Annual Totals and 5-Year Rolling Average



Over this 13-year period, 378 fatalities and 361 injuries were recorded—an average of 56.8 casualties per year. As illustrated on Figure 2-2, fatalities ranged from 21 to 37 per year, peaking in 2019, while injuries varied between 22 and 36 annually, with the highest count of injuries in 2022. Both measures declined after 2019, reaching their lowest combined level in 2023 before a minor increase in 2024. Figure 2-2 also shows that fatalities generally exceeded injuries in most years, except in 2014, 2015 and 2022, when injuries were higher.

Figure 2-2. Rail-Related Fatalities and Injuries, 2012 to 2024

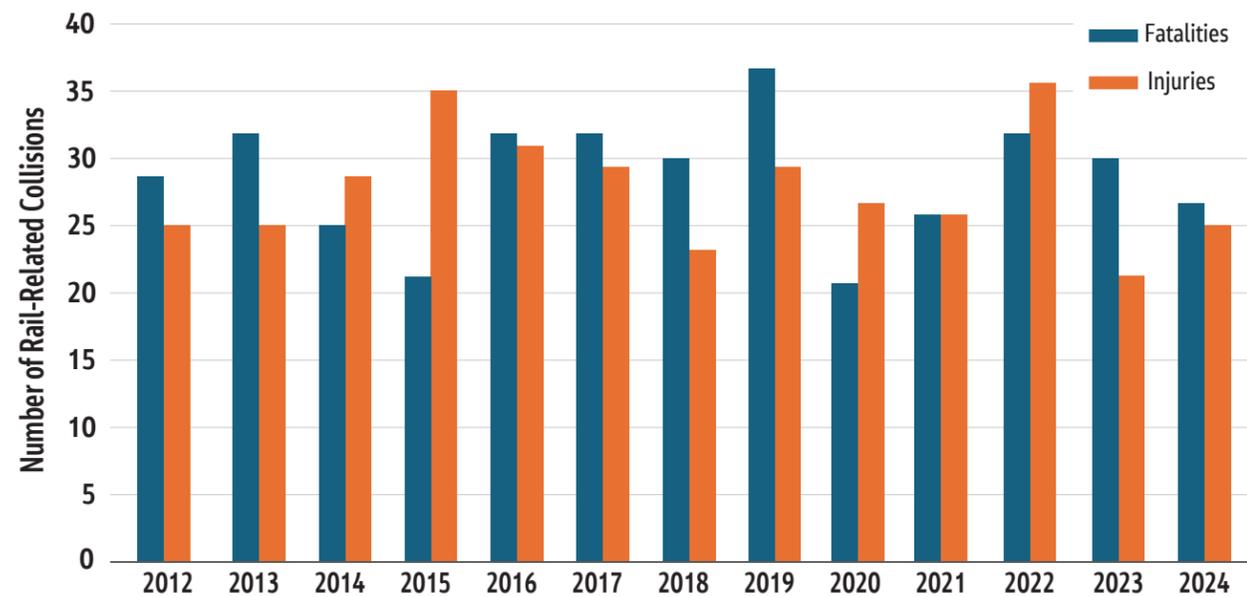
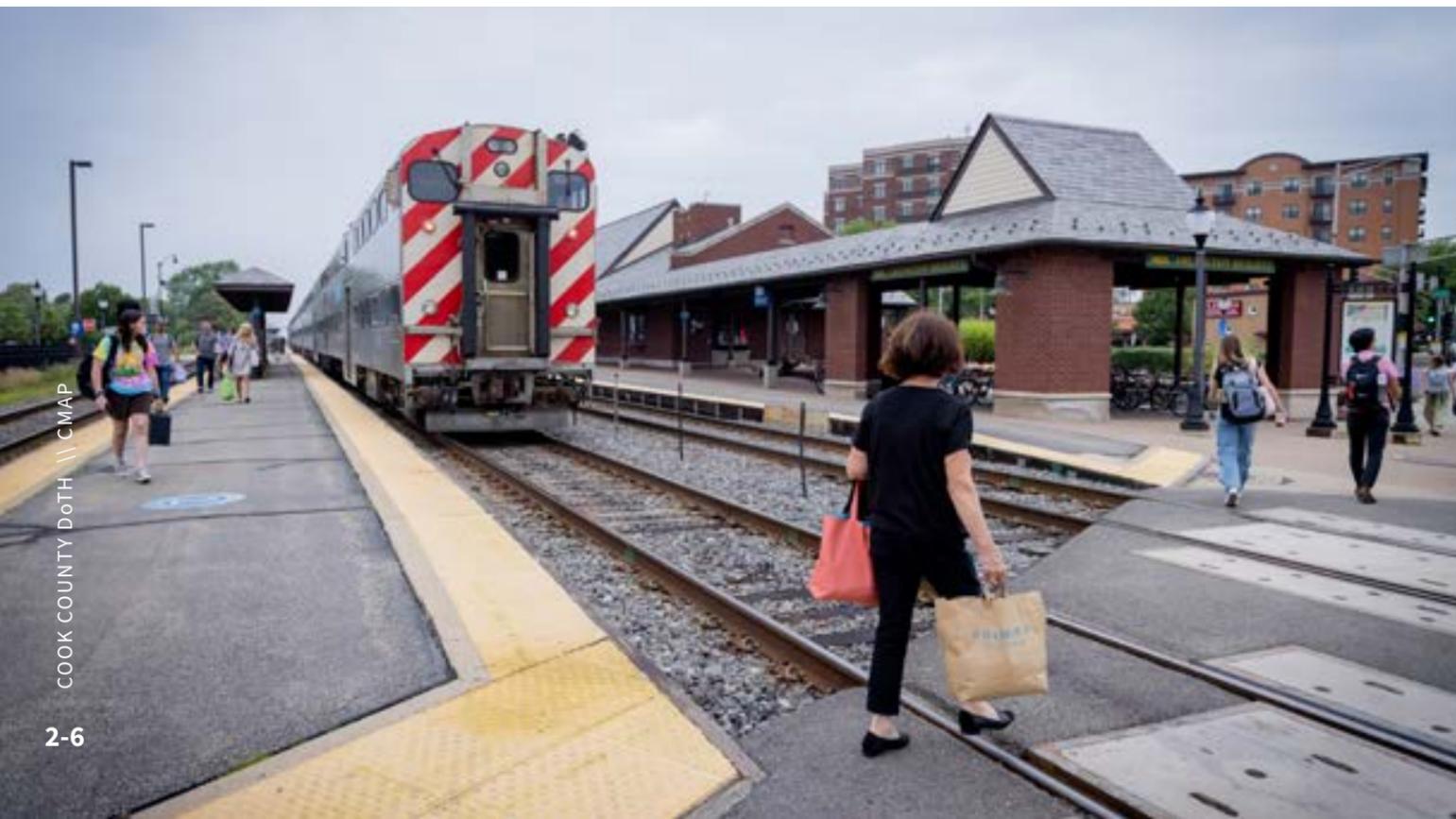


Table 2-1 provides detailed annual totals for collisions, fatalities and injuries, showing notable year-to-year fluctuations alongside an overall downward trend in rail-related collisions and casualties since 2018.

Table 2-1. Cook County Railroad Collisions^Δ, 2012 to 2024

Year	Collisions			Person Injuries		
	PDO* Collisions	Fatal and Injury Collisions	Total	Fatalities	Injuries	Total Fatalities and Injuries
2012	27	51	78	28	25	53
2013	37	57	94	33	25	58
2014	46	47	93	25	28	53
2015	30	46	76	22	35	57
2016	41	56	97	33	31	64
2017	38	60	98	33	29	62
2018	36	51	87	30	23	53
2019	35	51	86	37	29	66
2020	27	37	64	21	27	48
2021	42	42	84	26	26	52
2022	33	63	96	33	36	69
2023	35	49	84	30	22	52
2024	24	45	69	27	25	52
Total	451	655	1,106	378	361	739

Δ - Collisions may result in more than one injury or fatality
 *PDO: property damage only



Spatial Distribution of Rail-Related Collisions

Mapping of rail-related collisions (Figure 2-3A and 2-3B) reveals distinct geographic patterns of rail-related collisions. Overall collisions (Figure 2-3A) cluster densely in the south-central suburbs. Fatal collisions (Figure 2-3B) exhibit a more concentrated distribution—notably on Chicago’s north side and along Metra’s Union Pacific Northwest and BNSF Railway lines—implying that severe outcomes are localized within specific segments rather than evenly spread across the system. These findings highlight priority corridors where targeted investments, such as enhanced fencing, pedestrian barriers and crossing upgrades (including at-grade safety improvements or new grade-separated connections), could yield the highest safety benefits.

Figure 2-3A. Spatial Distribution of Rail-Related Collisions in Cook County, 2012-2024

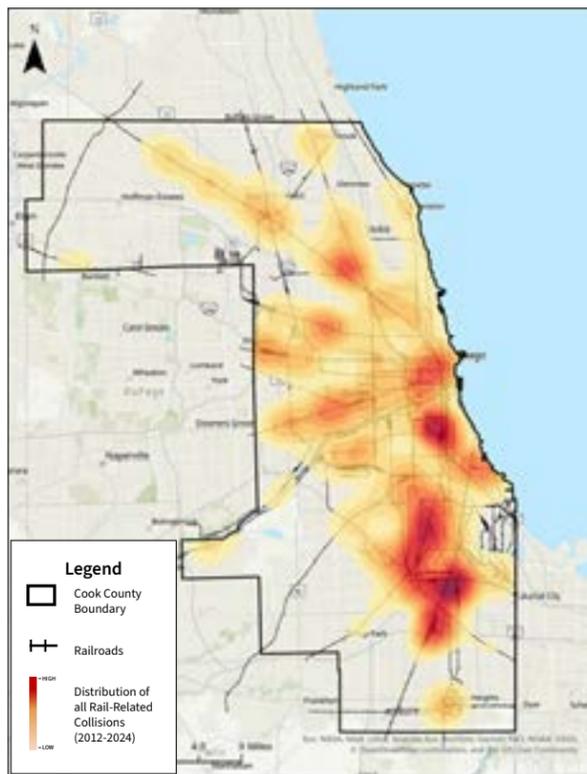
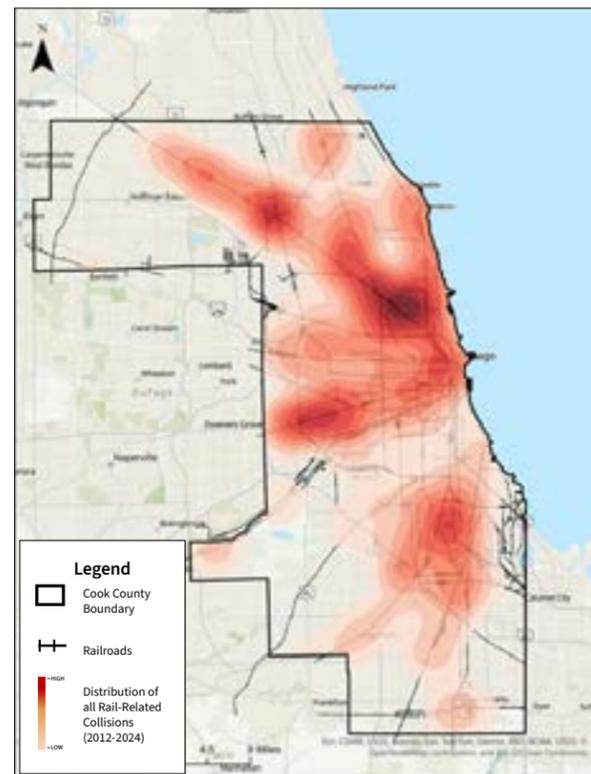


Figure 2-3B. Spatial Distribution of Rail-Related Fatal Collisions in Cook County, 2012-2024



Temporal Patterns of Collisions

Temporal analysis (Figure 2-4A) shows that collision frequency fluctuates throughout the day, with clear highs during rush hour travel periods. Event frequency begins to increase around 6 AM, reaching a morning peak between 7 and 9 AM, decline during midday and surges again between 5 and 6 PM. Fatal and injury collisions remain consistently greater than property-damage-only (PDO) events across all hours. These temporal patterns correspond closely to high-activity roadway hours and likely coincide with higher passenger train frequencies and ridership during peak commuting periods, underscoring the need for active monitoring and dynamic warning systems during peak travel windows.

Complementing this, Figure 2-4B highlights that the severity of outcomes—measured by fatalities and injuries—is most pronounced during the afternoon and evening periods (2:00–8:59 PM), followed by late-night hours. This indicates that not only collision frequency but also severity tends to peak during high-activity travel periods, reinforcing the importance of targeted safety interventions during these times.

Figure 2-4A. Fatal/Injury vs. PDO Rail-Related Collisions by Hour of Day, 2012-2024

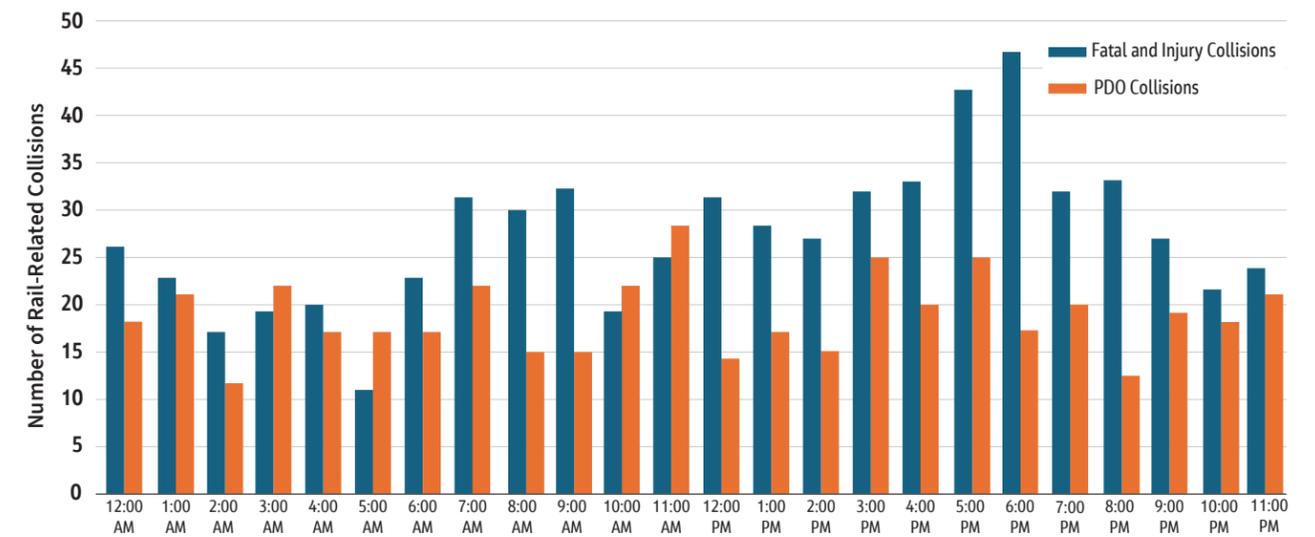
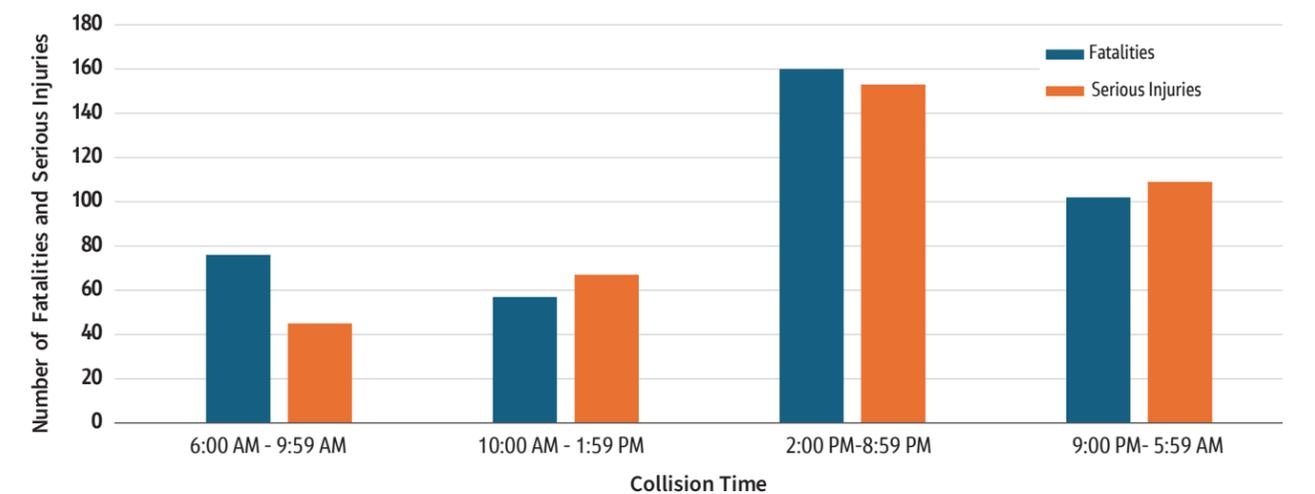


Figure 2-4B. Distribution of Rail-Related Collisions by Time Period in Cook County, 2012-2024



Rail Collisions by Mode

Rail-related collisions by mode (Table 2-2) show that pedestrians are by far the most vulnerable users, accounting for 510 collisions, including 497 fatal or injury cases. Bicycles and motorcycles combined were involved in 11 collisions, with 10 resulting in fatalities or injuries, underscoring the high risk for non-motorized and two-wheeled users. Passenger vehicles experienced 394 collisions, including 124 fatalities or injuries. Trucks and commercial vehicles were involved in 182 collisions, with 22 resulting in deaths or injuries, while obstructions and unknown modes contributed to 9 collisions combined.

To further examine severity trends, Figure 2-5 presents the annual number of fatalities and serious injuries for pedestrians and for passenger vehicles/trucks from 2012 to 2024. Pedestrian collisions consistently outnumber those involving passenger vehicles and trucks, peaking at 50 in 2017 and dropping to a low of 24 in 2020 before rebounding in 2022. Passenger vehicle and truck collisions remain lower overall but show variability, with a high of 24 in 2015 and lows of 10 in 2013 and 2018. These patterns provide insight into whether grade separation projects and at-grade safety improvements have influenced outcomes over time.

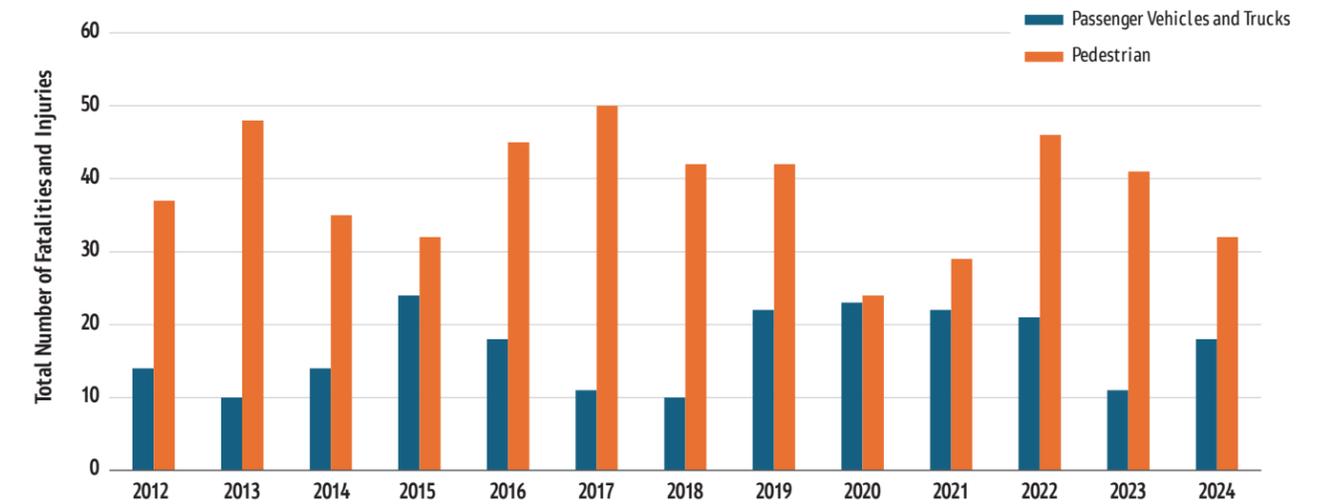
Overall, 655 fatal/injury collisions far exceed the 451 PDO events, confirming that rail-related collisions tend to be severe—especially for vulnerable road users such as pedestrians and bicyclists.

Table 2-2. Rail-Related Collisions by Mode, 2012–2024

Mode	Fatal/Injury Collisions	PDO Collisions	All Collisions
Passenger Vehicle ^[a]	124	270	394
Truck ^[b]	22	160	182
Bike/Motorcycle ^[c]	10	1	11
Pedestrian	497	13	510
Obstruction ^[d]	0	4	4
Unknown ^[e]	2	3	5
Total	655	451	1,106

Notes: ^[a] Passenger Vehicle: Van, SUV, Bus, School Bus, Police Car, Pickup, Other Vehicle, Other M/V, Crew Transport Van, Auto; ^[b] Truck: Truck, Truck-Trailer, Pickup Truck; ^[c] Bike/Motorcycle: Bike-Ped; ^[d] Obstruction: Obstruction, Farm/Const Equip, Chassis; ^[e] Others

Figure 2-5. Trends in Rail-Related Fatalities and Injuries: Pedestrians vs. Passenger Vehicles and Trucks, 2012–2024



Rail Collisions by Location

Severity varies sharply by collision location (Table 2-3). Trespasser events dominate fatal outcomes, resulting in 257 fatalities and 143 injuries—highlighting the extreme danger of unauthorized track access. Public crossings rank second in severity (97 fatalities, 193 injuries), reflecting the high exposure at these interfaces. Pedestrian-crossing collisions, though less frequent, are disproportionately deadly (19 fatalities, 3 injuries). Station collisions are rare but occasionally fatal.

These findings emphasize the need for a multi-layered approach, including trespass-prevention campaigns, crossing upgrades and public-education initiatives, complemented by physical barriers such as fencing and advanced technologies

like motion-detection cameras along rights-of-way to identify trespassers before a collision occurs.

Table 2-3. Rail-Related Fatalities and Injuries by Location, 2012–2024

Location	Fatalities	Injuries
Station	2	0
Trespasser (not at crossing)	257	143
Pedestrian Crossing	19	3
Private Crossing	3	21
Public Crossing	97	193
Unknown	0	1
Totals	378	361

Rail Collisions by Ownership

The distribution of rail-related collisions by ownership, shown on Figure 2-6, reveals a clear concentration among a few major railroad owners. The “Freight” ownership category - without a specific owner identified- accounted for the highest total—498 collisions between 2012 and 2024, representing nearly half of all rail-related collisions in the county. These included 154 trespasser collisions, 118 private-crossing collisions and 226 public-crossing collisions, indicating widespread exposure across the freight network—reflecting the severity of collisions occurring on general freight corridors with extensive network coverage.

As shown in Table 2-4, Union Pacific (UP) experienced the second-highest number of collisions (153 total), driven primarily by 75 trespasser and 68 public-crossing collisions. Metra-owned lines reported 131 collisions and Metra lines (dispatched by Canadian Pacific) reported 96, both dominated by trespassing and public-crossing events typical of commuter rail corridors.

Chicago Transit Authority (CTA) recorded 55 collisions, with the majority involving trespassers (44) and station-area events (2)—a pattern consistent with dense pedestrian activity in urban rail environments. Other rail carriers, including BNSF (33), Norfolk Southern (27), Canadian National (17) and Northeast Illinois Regional Commuter Railroad Corporation (NIRC) (6), contributed a modest share of collisions but still displayed significant trespassing and crossing exposure.

The categories “Other/Unknown” and “Yard” represent an aggregation of rail-related collisions occurring on lines or yards not associated with a specific Class I railroad designation in the dataset.

Table 2-5 reinforces these patterns by breaking down collision locations for each owner. Freight operation stand out for greater numbers of private (157) and public-crossing (226) collisions, whereas CTA, Metra and Amtrak show greater proportions of trespasser and station-related collisions.

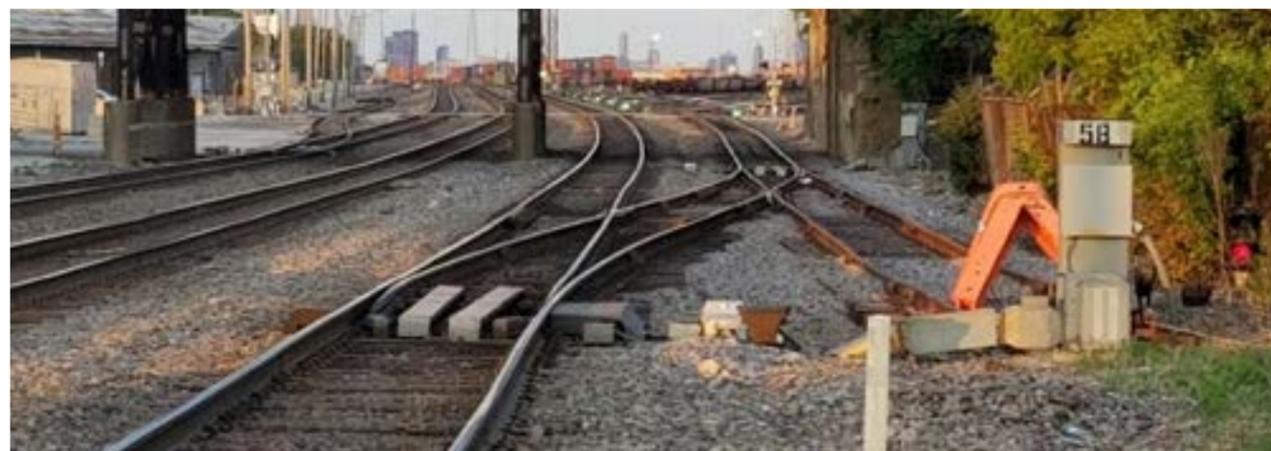


Figure 2-6. Rail-Related Collisions Based on the Railroad Owner, 2012–2024

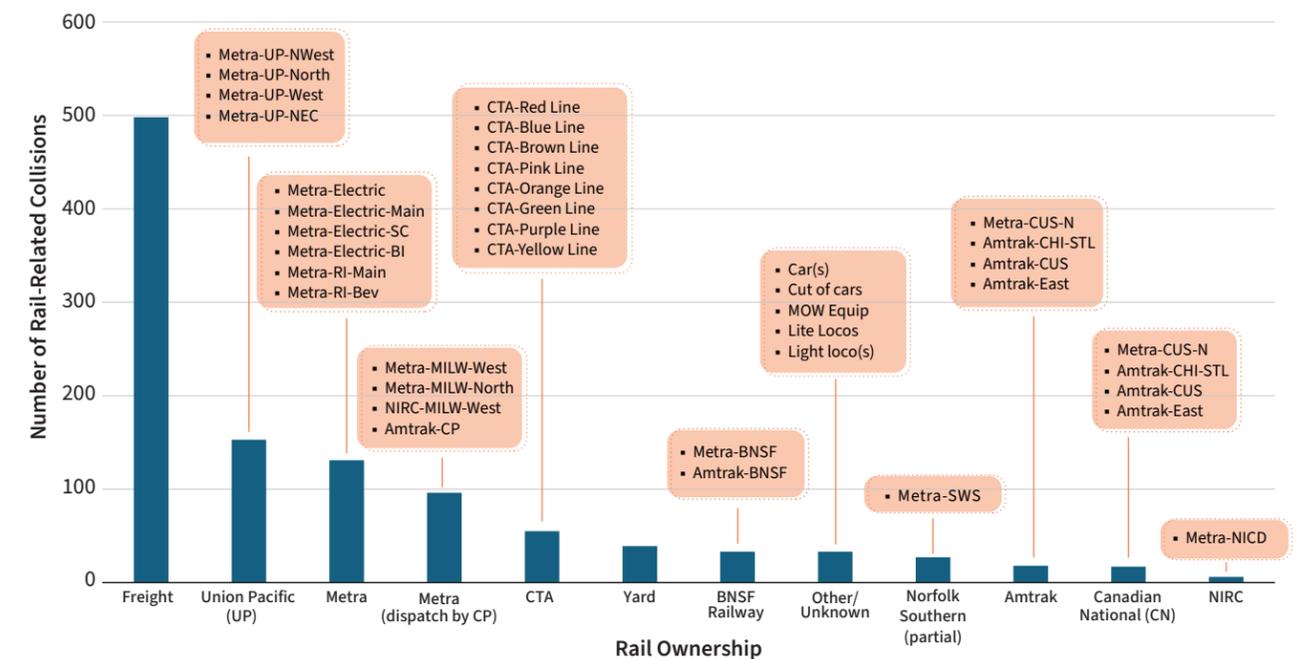


Table 2-4. Rail-Related Fatalities and Injuries by Railroad Ownership, 2012–2024

Ownership	Fatalities	Injuries
Amtrak	11	3
BNSF	21	6
Canadian Pacific/Canadian National (CP)	8	3
CTA	47	30
Freight	98	159
Metra	40	73
Metra (dispatch by CP)	43	25
NIRC	5	0
Norfolk Southern (partial)	10	18
Union Pacific (UP)	93	30
Yard	0	7
Others/Unknown	2	7
Total	378	361

Table 2-5. Rail-Related Collisions by Railroad Ownership and Location, 2012–2024

Ownership	Collision Location						Total
	Station	Trespasser	Pedestrian Crossing	Private Crossing	Public Crossing	Unknown	
Amtrak	0	10	0	6	2	0	18
BNSF	0	18	0	1	14	0	33
CN	0	9	0	1	7	0	17
CTA	2	44	0	0	9	0	55
Freight	0	154	0	118	226	0	498
Metra (dispatch by CP)	0	35	11	2	48	0	96
Metra	0	45	2	0	84	0	131
NIRC	0	4	1	0	1	0	6
Norfolk Southern (partial)	0	9	0	3	15	0	27
UP	0	75	9	1	68	0	153
Yard	0	2	0	32	5	0	39
Others	0	1	0	15	13	0	29
Unknown	0	0	0	0	0	4	4
Total	2	406	23	179	492	4	1,106

Rail Collisions by Operators

When collision counts are regrouped by operating type rather than ownership, as illustrated in Figure 2-7, the relative safety challenges become clearer. Freight operations still account for the majority of collisions, highlighting exposure risks associated with extensive freight corridors and numerous public crossings, rather than specific ownership details. Commuter rail systems, combining Metra-owned and CP-dispatched Metra lines, reported 427 collisions, making them the second-largest category. Their combined casualty total—350 deaths and injuries (Table 2-6)—is the highest among passenger modes and is heavily influenced by 182 trespasser cases and 219 public-crossing collisions, as detailed in Table 2-7.

Table 2-6. Rail-Related Fatalities and Injuries by Operator, 2012–2024

Operator	Fatalities	Injuries
Amtrak	30	9
CTA	47	30
Freight	98	159
Metra	201	149
Yard	0	7
Others/ Unknown	2	7
Total	378	361

Urban transit (CTA), although responsible for only 55 collisions, recorded 77 casualties, showing a much greater severity rate driven by station events and trespassing along open-track segments.

Intercity passenger service (Amtrak) contributed 54 collisions, with 30 fatalities and 9 injuries, mainly at public and private crossings. These patterns highlight Amtrak’s vulnerability where high-speed passenger trains interact with local roadway crossings.

Table 2-7 illustrates that freight and commuter rail systems experience the broadest range of collision location—including private crossings, public crossings and trespasser events—while CTA collisions largely cluster around trespasser and stations and Amtrak is dominated by crossing-related events. Together, these perspectives demonstrate that each operating entity faces distinct safety challenges rooted in their infrastructure characteristics and ridership patterns.

Figure 2-7. Rail-Related Collisions Based on the Railroad Operations, 2012–2024

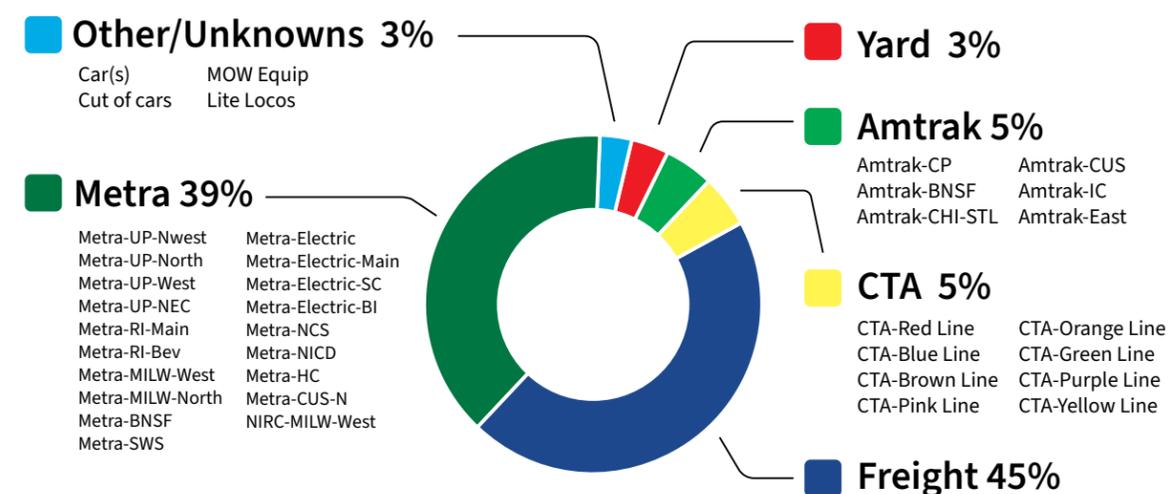


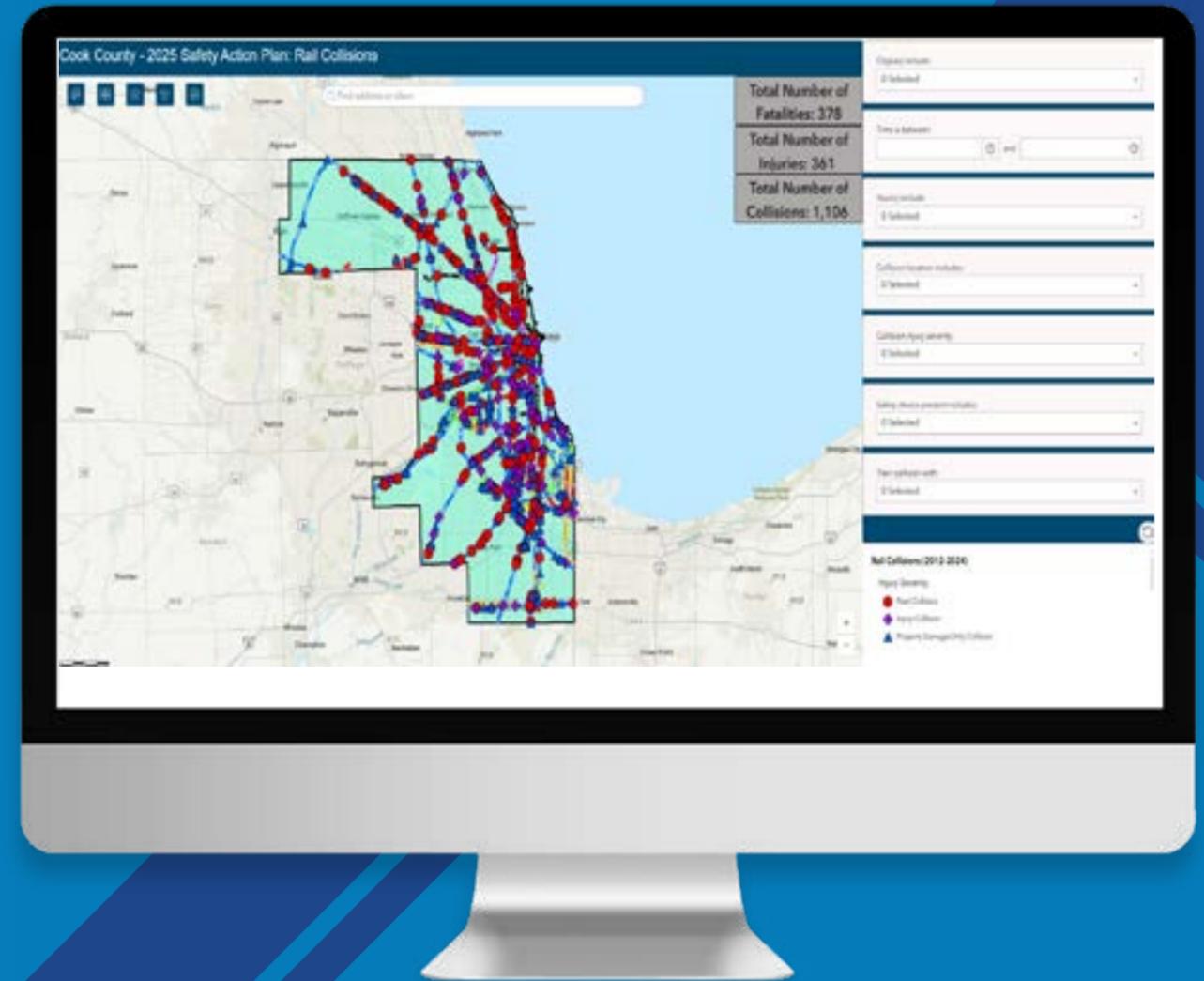
Table 2-7. Rail-Related Collisions by Railroad Operators and Location, 2012–2024

Operator	Collision Location						Total
	Station	Trespasser	Pedestrian Crossing	Private Crossing	Public Crossing	Unknown	
Amtrak	0	23	4	7	20	0	54
CTA	2	44	0	0	9	0	55
Freight	0	154	0	118	226	0	498
Metra	0	182	19	7	219	0	427
Yard	0	2	0	32	5	0	39
Unknown	0	0	0	0	0	4	4
Others	0	1	0	15	13	0	29
Total	2	406	23	179	492	4	1,106

Railroad Collision Webmap

An interactive webmap (Figure 2-8) was developed to allow users to identify rail-collision clusters. This visualization enables users to explore spatial patterns dynamically and prioritize locations for safety interventions. Filters are also present to allow users to manipulate the rail-collision data based on a variety of different characteristics. Options include time of day, injury severity observed, location type and specific municipalities. Once the desired rail collisions are gathered, the associated data can be exported by the user to a variety of different platforms to allow it to be used in additional reporting or grant applications. The webmap can be accessed here: [Cook County Rail Collisions webmap](https://experience.arcgis.com/experience/ea54caff8ffb4f47aed051e7893504fc).

Figure 2-8. Interactive Webmap of Rail-Related Collisions in Cook County, 2012–2024



The webmap can be accessed here:
<https://experience.arcgis.com/experience/ea54caff8ffb4f47aed051e7893504fc>



03

COMMUNITY IMPACT CONSIDERATIONS

Stay Informed, Stay Ahead!

We've recently completed new content to bring you the latest insights and information.

This section presents a new analysis of communities that are disproportionately affected by traffic-related fatalities and serious injuries. The analysis was aimed at informing local safety investments that prioritize populations most impacted. By combining crash data with socioeconomic measures, the analysis identifies where severe traffic outcomes intersect with broader measures of economic and mobility hardship.

Continue to the next page to make sure you're working with the most current resources.

Community Impact Considerations

To advance context-sensitive, data-driven transportation planning, the Chicago Department of Transportation (CDOT) developed the [Mobility and Economic Hardship Index \(MOBEC\)](#). This index highlights communities within Chicago’s borders experiencing the greatest socioeconomic and transportation burdens. This SAP Addendum uses CDOT’s methodology, expanding the MOBEC to all of Cook County.

When paired with the High Injury Network (HIN)—a map showing locations with the highest concentration of fatal and severe traffic-related injuries—the Cook County MOBEC offers critical insight into both where these injuries occur and who is most vulnerable. This integrated approach helps prioritize investments that improve safety and reduce inequities.

Mobility and Economic Hardship Index

The MOBEC Index combines the Hardship and Mobility Indices into a single score, highlighting areas where economic and mobility burdens overlap.

The Hardship Index is a socioeconomic metric based on 2022 5-year American Community Survey (ACS) data and incorporates unemployment, age dependency, educational attainment, per capita income, crowded housing and poverty. The methodology was developed by [Richard P. Nathan and Charles Adams](#)

and correlates strongly with other economic indicators and poorer health outcomes.

The Mobility Index, created by CDOT with the Center for Neighborhood Technology (CNT), measures transportation-related burden using ACS data and CNT’s Housing + Transportation Affordability Index. Its indicators include commute time, percent of the population with a disability and transportation cost as a share of income. CNT’s methodology was adapted to produce a Mobility Index covering all of Cook County.

MOBEC is Census tract level data that was aggregated to municipalities and community areas for reporting in Tables 3-1 and 3-2.

Table 3-1 provides the miles of comprehensive HIN segments per 100 centerline miles, the number of comprehensive HIN intersections per 1,000 intersections and the average MOBEC Index for the 10 municipalities in Cook County with the highest average MOBEC Index, indicating greater hardship. Table 3-2 provides the same information for community areas in the City of Chicago.

High Injury Network and MOBEC

The [HIN Webmap](#), now enhanced with the MOBEC layer, serves as an interactive tool to visualize the spatial relationship between high injury locations and communities with elevated hardship.

Cook County's Top 10

Municipalities with the **highest average MOBEC Index**, indicating greater hardship

Page 3-22 provides data for all municipalities in Cook County.

Table 3-1. HIN Details for Top 10 Municipalities with the Highest MOBEC Index

Municipality	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index
1. Dixmoor	25.7	22.7	65
2. Riverdale	11.8	45.2	64
3. Harvey	9.0	63.0	63
4. Phoenix	6.7	15.4	62
5. Markham	15.8	42.8	62
6. Posen	19.4	27.3	60
7. Calumet Park	13.6	59.3	59
8. Stone Park	13.3	40.0	59
9. Sauk Village	17.1	26.2	59
10. Glenwood	6.6	9.4	58

Table 3-2. HIN Details for Chicago’s Top 10 Community Areas with the Highest MOBEC Index

Community Area	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index
1. Riverdale	18.9	8.3	76
2. Fuller Park	16.5	129.9	67
3. West Englewood	8.8	67.7	65
4. Chicago Lawn	7.6	46.7	63
5. West Garfield Park	15.6	170.3	62
6. Gage Park	9.3	33.9	62
7. South Lawndale	6.1	38.0	61
8. Englewood	11.0	74.6	61
9. East Garfield Park	11.2	143.5	60
10. South Chicago	7.5	36.8	60

Chicago's Top 10

Community Areas with the **highest average MOBEC Index**, indicating greater hardship

Page 3-23 provides data for all community areas within the City of Chicago.

Comprehensive HIN Details for all Municipalities in Cook County

A-D

E-K

L-P

R-W

Municipality	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index	Municipality	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index	Municipality	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index	Municipality	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index
Alsip	8.9	24.6	44	East Dundee	0.0	0.0	18	La Grange	4.0	8.9	13	Richton Park	5.1	14.8	44
Arlington Heights	2.8	4.5	27	East Hazel Crest	14.3	40.8	51	La Grange Park	0.6	4.1	18	River Forest	3.9	4.8	8
Barrington	11.9	0.0	20	Elgin	0.0	0.0	34	Lansing	4.1	11.6	44	River Grove	6.2	0.0	40
Barrington Hills	0.0	29.4	14	Elk Grove Village	1.7	11.7	33	Lemont	5.0	0.0	21	Riverdale	11.8	45.2	64
Bartlett	0.0	3.0	29	Elmhurst	19.4	0.0	47	Lincolnwood	7.1	21.5	36	Riverside	6.8	11.4	24
Bedford Park	11.5	56.6	51	Elmwood Park	2.2	11.6	33	Lynwood	9.9	16.9	53	Robbins	6.1	31.3	57
Bellwood	3.7	17.6	51	Evanston	1.3	4.4	22	Lyons	9.7	32.4	43	Rolling Meadows	4.3	5.7	28
Bensenville	0.0	0.0	53	Evergreen Park	2.8	2.7	26	Markham	15.8	42.8	62	Roselle	0.0	0.0	26
Berkeley	4.8	0.0	47	Flossmoor	2.7	9.6	29	Matteson	6.2	28.5	46	Rosemont	14.1	35.3	43
Berwyn	3.6	14.2	42	Ford Heights	20.9	37.4	51	Maywood	7.0	12.8	54	Sauk Village	17.1	26.2	59
Blue Island	9.1	22.6	58	Forest Park	11.5	16.0	19	McCook	4.8	88.9	43	Schaumburg	1.7	1.2	25
Bridgeview	7.1	26.4	53	Forest View	30.0	76.9	47	Melrose Park	3.5	7.4	50	Schiller Park	14.3	24.4	52
Broadview	4.5	14.6	46	Frankfort	0.0	0.0	26	Merrionette Park	5.3	0.0	45	Skokie	2.4	5.2	34
Brookfield	0.9	8.4	20	Franklin Park	7.2	14.6	50	Midlothian	8.1	3.4	33	South Barrington	2.7	18.8	16
Buffalo Grove	0.0	0.0	27	Glencoe	1.4	0.0	7	Morton Grove	1.8	7.4	30	South Chicago Heights	8.8	29.1	57
Burbank	3.4	15.2	52	Glenview	4.5	8.2	24	Mount Prospect	1.7	5.6	27	South Holland	7.8	7.9	51
Burnham	16.4	13.9	54	Glenwood	6.6	9.4	58	Niles	3.4	16.9	36	Steger	0.0	0.0	52
Burr Ridge	0.1	0.0	16	Golf	0.0	0.0	9	Norridge	0.5	4.1	35	Stickney	9.7	17.1	48
Calumet City	7.3	21.3	51	Hanover Park	0.0	0.0	42	North Riverside	3.6	33.9	38	Stone Park	13.3	40.0	59
Calumet Park	13.6	59.3	59	Harvey	9.0	63.0	63	Northbrook	3.5	1.0	15	Streamwood	0.1	5.8	33
Chicago	7.3	38.2	39	Harwood Heights	6.9	24.4	37	Northfield	2.9	0.0	10	Summit	11.5	21.3	54
Chicago Heights	6.1	27.4	56	Hazel Crest	14.8	35.0	46	Northlake	3.9	8.7	52	Thornton	15.2	0.0	53
Chicago Ridge	7.9	9.6	46	Hickory Hills	8.7	7.2	41	Oak Forest	4.3	8.5	34	Tinley Park	1.5	7.4	26
Cicero	6.1	25.8	56	Hillside	8.2	0.0	32	Oak Lawn	2.7	10.1	38	University Park	0.0	0.0	44
Country Club Hills	11.2	9.2	38	Hinsdale	0.2	0.0	11	Oak Park	3.5	14.0	15	Westchester	2.9	0.0	25
Countryside	8.3	16.7	28	Hodgkins	12.4	34.5	43	Olympia Fields	4.4	31.8	44	Western Springs	3.0	3.0	11
Crestwood	4.9	18.9	41	Hoffman Estates	5.3	12.0	23	Orland Hills	1.5	7.4	30	Wheeling	2.8	5.9	35
Deer Park	0.0	0.0	27	Homer Glen	0.0	0.0	19	Orland Park	0.4	4.5	28	Willow Springs	7.5	5.6	30
Deerfield	0.2	0.0	15	Hometown	0.0	33.3	37	Palatine	0.4	4.1	27	Wilmette	2.6	3.5	11
Des Plaines	4.5	7.8	38	Homewood	4.1	19.5	39	Palos Heights	3.7	2.4	24	Winnetka	1.2	2.7	6
Dixmoor	25.7	22.7	65	Indian Head Park	8.4	0.0	18	Palos Hills	1.5	11.9	39	Woodridge	0.0	0.0	22
Dolton	15.3	35.7	54	Inverness	3.2	10.5	15	Palos Park	7.7	12.3	21	Worth	7.0	8.9	48
				Justice	9.6	5.1	48	Park Forest	5.3	23.5	49				
				Kenilworth	0.0	0.0	6	Park Ridge	0.7	1.2	16				
								Phoenix	6.7	15.4	62				
								Posen	19.4	27.3	60				
								Prospect Heights	2.0	6.4	28				

A-G

Community Area	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index
Albany Park	11.9	38.6	40
Archer Heights	12.5	66.2	57
Armour Square	10.4	92.3	54
Ashburn	6.6	36.3	50
Auburn Gresham	6.2	51.4	57
Austin	9.3	69.0	58
Avalon Park	15.6	72.8	46
Avondale	8.9	36.1	28
Belmont Cragin	7.0	35.6	53
Beverly	1.9	5.5	21
Bridgeport	5.1	21.8	41
Brighton Park	8.7	37.0	59
Burnside	11.6	19.2	57
Calumet Heights	8.0	40.4	39
Chatham	6.8	77.2	52
Chicago Lawn	7.6	46.7	63
Clearing	7.2	28.1	46
Douglas	5.7	76.4	46
Dunning	8.7	20.5	35
East Garfield Park	11.2	143.5	60
East Side	5.1	4.3	56
Edgewater	5.2	35.9	27
Edison Park	5.2	30.9	17
Englewood	11.0	74.6	61
Forest Glen	3.3	17.0	17
Fuller Park	16.5	129.9	67
Gage Park	9.3	33.9	62
Garfield Ridge	5.6	19.6	43
Grand Boulevard	5.0	67.8	47
Greater Grand Crossing	18.8	116.1	55

H-P

Community Area	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index
Hegewisch	12.6	17.9	45
Hermosa	7.3	31.3	53
Humboldt Park	10.2	55.3	47
Hyde Park	6.1	50.6	24
Irving Park	8.7	21.0	27
Jefferson Park	5.3	41.4	30
Kenwood	9.9	22.5	31
Lake View	5.9	40.3	7
Lincoln Park	4.6	15.7	5
Lincoln Square	2.7	19.0	15
Logan Square	5.3	34.0	18
Loop	1.6	107.7	6
Lower West Side	5.9	43.0	41
McKinley Park	8.5	36.1	46
Montclare	9.8	57.4	36
Morgan Park	6.6	29.7	38
Mount Greenwood	4.4	10.9	24
Near North Side	5.0	72.5	4
Near South Side	13.1	59.7	8
Near West Side	6.7	58.6	32
New City	7.9	32.9	58
North Center	2.2	14.7	6
North Lawndale	7.0	71.2	58
North Park	2.8	38.3	37
Norwood Park	7.2	16.4	24
Oakland	11.7	0.0	55
O'Hare	14.6	35.9	40
Portage Park	6.4	47.7	36
Pullman	19.6	52.6	51

R-W

Community Area	Miles of HIN Segments per 100 Centerline Miles	Number of HIN Intersections per 1,000 Intersections	Average MOBEC Index
Riverdale	18.9	8.3	76
Rogers Park	5.1	19.8	37
Roseland	8.9	38.1	56
South Chicago	7.5	36.8	60
South Deering	25.8	43.9	57
South Lawndale	6.1	38.0	61
South Shore	11.5	79.9	51
Uptown	6.2	14.2	23
Washington Heights	8.1	21.7	49
Washington Park	10.2	105.7	55
West Elsdon	1.9	33.6	57
West Englewood	8.8	67.7	65
West Garfield Park	15.6	170.3	62
West Lawn	3.4	41.2	57
West Pullman	6.3	30.9	56
West Ridge	5.0	27.0	45
West Town	6.1	31.2	8
Woodlawn	7.6	79.2	54



04

PRIORITIZATION AND SELECTION

Project Prioritization and Selection

Multiple efforts influenced the process of selecting projects for prioritization. The development of the HIN, Existing Safety Conditions Report and Countermeasure and Policy Recommendations Report, as well as public input received on the project website, all helped guide the focus project prioritization. These efforts help to pinpoint specific locations and roadway safety concerns where the project team then determined the appropriate countermeasures.

The following three subsections provide an outline of how each effort took a different approach to identify 10 project locations prioritized for improvements.

- A.** Projects with High Fatalities and Serious Injuries
- B.** Projects with Systemic Focus
- C.** Projects with Emerging Concerns

These 10 locations are examples of how users of this SAP Addendum can apply strategies and countermeasures to projects identified within their own jurisdictions or locales. Previous sections of the May 2025 version of the SAP provided policies, processes, countermeasures, strategies, programs and improvements that cover a variety of traffic safety concerns. When considering projects for prioritization, these improvements should be considered holistically.

PRIORITIZED LOCATIONS FOR IMPROVEMENTS:

1. North McCormick Boulevard and West Devon Avenue in Lincolnwood
2. Torrence Avenue and Glenwood Lansing Road in Lynwood
3. Milwaukee Avenue and Greenwood Avenue in Niles
4. West 151st Street in Harvey
5. 167th Street in Tinley Park and Oak Forest
6. Miner Street in Downtown Des Plaines
7. Dolton Road and Paxton Avenue in Calumet City
8. Bellwood Avenue and Madison Street in Bellwood
9. Busse Road in Elk Grove Village
10. Illinois Route 83 and Halsted in Harvey

A

PROJECTS WITH High Fatalities and Serious Injuries

The HIN analysis was largely dependent on the number of fatalities and serious injuries that occurred at an intersection or segment. By starting with the HIN locations that required additional safety attention—due to their high observed frequency of fatalities and serious injuries—the project team then applied a prioritization score to each HIN segment and intersection. Figure 4-1 depicts this prioritization score formula. The prioritization scores then guided the focus to locations that appeared on the HIN list with many fatalities and serious injuries and also considered vulnerable road users and equity-focused areas.

Next, crash patterns or common contributing factors were examined to determine the locations. Once a distinguishable pattern was observed, countermeasures were identified.

Figure 4-1. Prioritization Score Formula

$$\text{PRIORITIZATION SCORE} = \text{Number of Fatalities and Serious Injuries} + (0.5 \times \text{Number of Fatalities that involved any type of travel mode}) + (0.25 \times \text{Number of Pedestrian/Pedalcyclist Fatalities and Serious Injuries}) + (0.25 \times \text{Number of Fatalities and Serious Injuries that occurred within equity-focused areas})$$

PRIORITY LOCATION NO. 1 – MULTILANE, SIGNALIZED INTERSECTION

North McCormick Boulevard and West Devon Avenue in Lincolnwood



IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

North McCormick Boulevard and West Devon Avenue in Lincolnwood, IL

Average annual daily traffic (AADT) (McCormick Boulevard) = 29,991 vehicles per day

AADT (Devon Avenue) = 24,800 vehicles per day

MOBEC Index: 41.1-47.7

INTERSECTION PRIORITIZATION SCORE RANK

33rd of 1,152 intersections
(Prioritization score: 14.25; CPM: 10.039)

TRAFFIC CONTROL TYPE

Multiphase, traffic-actuated signal

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Zero offset left-turn lanes with permissive-protected phasing

- North Shore Channel Trail crosses Devon Avenue east of McCormick Boulevard
- Horizontal curve at the southern leg limits sight distance leading to the intersection

NOTABLE CRASH OBSERVATIONS

- 107 all-severity crashes in a 5-year period; 9 fatalities and serious injury crashes
- Turning crashes account for 26.2% of total turning crashes and 33.3% of fatal and serious injury crashes
- Rear-end crashes account for 25.2% of total rear-end crashes

IMPROVEMENTS FOR CONSIDERATION

The 'What' →

Traffic signal visibility improvements:

- Reflective backplates for traffic signal heads
- Place a signal head per lane for every leg, including signal heads for left and right turns
- Remove conflict between advanced traffic signal head and pedestrian crossing signs
- Intersection ahead advanced warning sign or pavement markings

The 'Why' →

Sightlines of the intersection for northbound traffic are hindered due to the horizontal curve leading to the intersection. Improving signal head visibility from farther distances allows drivers to anticipate and prepare for changes in the roadway, as well as advanced warning of the intersection for northbound traffic. The advanced traffic signal on the southeastern and southwestern corners are partially blocked by the pedestrian signs for drivers advancing toward the intersection. All four legs would benefit from the proposed enhancements.

'The What' →

High Friction Surface Treatment: With such a high frequency of rear-end crashes, consider implementing HFST.

'The Why' →

Improved traction can reduce the risk of rear-end crashes by reducing stopping distance in hard-breaking scenarios.

'The What' →

Perform capacity analysis of protected only left-turn phasing.

'The Why' →

Limiting left turning movements to a protected phase only would reduce turning vehicle crashes and potential pedestrian crashes from drivers misjudging the safety of a permissive left-turn.

'The What' →

Lower speed limit: Consider lowering the speed limit to 35 miles per hour (mph). Consider a signal coordination and timing effort with nearby signals to slow traffic to desired speeds.

'The Why' →

The current speed limit along McCormick Boulevard is 40 mph. With 13% of crashes attributing failure to reduce speed as the primary cause, lowering the speed limit by 5 mph would help reduce rear-end crashes.

'The What' →

No Turn on Red signs: Install northbound and westbound No Turn on Red signs.

'The Why' →

Prohibiting right turns on red lights across the North Shore Channel Trail would reduce conflicts between trail users and turning vehicles.

'The What' →

Access management near intersection: Study closure of driveway 50 feet west of intersection on the northern side of Devon, or conversion to right-in only.

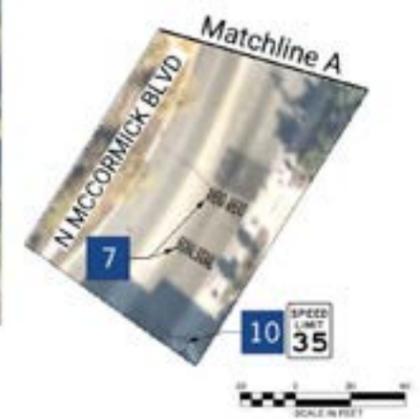
'The Why' →

Limiting driveway access limits conflicts close to the intersection, allowing drivers to focus on the intersection and crosswalk.

HIGH-RISK TYPOLOGY #1 Multilane, Signalized Intersection

Example: North McCormick Boulevard and West Devon Avenue in Lincolnwood
MOBEC index: 41.1-47.7

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Zero offset left-turn lanes with permissive phasing	1	Perform capacity analysis of protected only left-turn phasing	\$ / ✖✖
Trail crossing / Pedestrian activity	2	Install NO TURN ON RED (R10-11) sign	\$ / ✖✖
Horizontal curve on intersection approach, limiting sight distance	3	Install new, longer mast arms to add signal heads aligned with center of left-turn lanes	\$\$ / ✖
	4	Remove pedestrian crossing signs at signal	\$ / ✖
	5	Install signal ahead signs (W3-3) approx. 200 feet upstream of intersection	\$ / ✖
	6	Install retroreflective backplates on all signal heads	\$ / ✖
Speeding-related and rear-end crash patterns	7	Install SIGNAL AHEAD pavement markings approx. 300 feet upstream of intersection	\$ / ✖
	8	Study driveway closure/conversion to right-in only	\$\$\$ / ✖✖✖
	9	Install high friction surface treatment (HFST) approx. 500 feet from southbound and westbound stop bars	\$\$\$ / ✖✖
	10	Perform corridor speed study to justify lowering speed limit from 40 to 35 mph	\$ / ✖✖
	11	Coordinate signal timing with nearby signals to slow traffic to desired speeds	\$\$\$ / ✖✖



Cost/Effort Scale

- \$ / ✖ Low
- \$\$ / ✖✖ Medium
- \$\$\$ / ✖✖✖ High
- \$\$\$\$ / ✖✖✖✖ Very High

AADT

N McCormick Blvd - 29,991 vehicles per day
W Devon Ave - 24,800 vehicles per day

Jurisdiction

N McCormick Blvd - State
W Devon Ave - State west of McCormick;
County east of McCormick

Functional Classification

N McCormick Blvd - Principal Arterial
W Devon Ave - Minor Arterial

LEGEND

- Existing Infrastructure To Remain
- Existing Infrastructure for Removal
- Proposed Improvement
- Existing/Proposed Sign Post
- Existing Light Pole
- Existing Traffic Signal Pole
- Existing Bus Stop
- Proposed High Friction Surface Treatment (HFST)

EXISTING INFRASTRUCTURE

- Pedestrian countdown signal heads (all crossings)
- Existing speed limit sign
- Existing pedestrian warning sign
- Existing emergency vehicle preemption (EVP) equipment
- Existing trail

PRIORITY LOCATION NO. 2 – TWO-LANE, SIGNALIZED INTERSECTION

Torrence Avenue and Glenwood Lansing Road in Lynwood

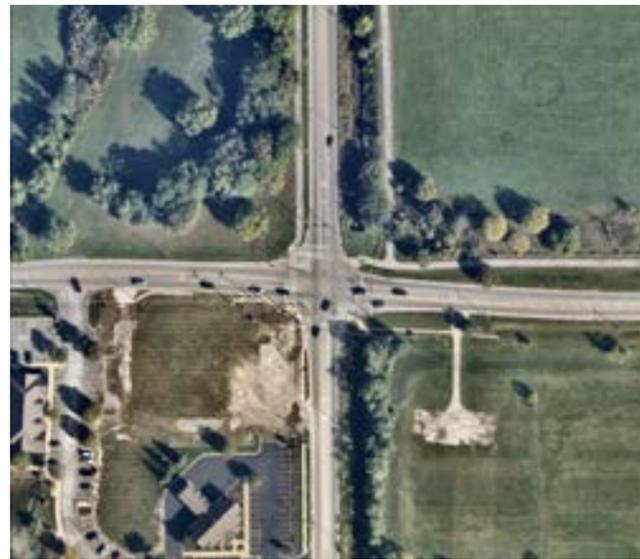


IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

Illinois Route 83/Torrence Avenue and Glenwood Lansing Road in Lynwood, IL

AADT (Torrence Avenue) = 11,943 vehicles per day

AADT (Glenwood Lansing Road) = 10,600 vehicles per day

MOBEC Index: 40.5-50.4

INTERSECTION PRIORITIZATION SCORE RANK

561st of 1,152 intersections (Prioritization score: 5.0; CPM: 5.605)

TRAFFIC CONTROL TYPE

Multiphase, traffic-actuated signal

NOTABLE CRASH OBSERVATIONS

- 24 of 53 (45%) of crashes are rear-end variety
- 1 pedalcyclist crash

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- The Thorn Creek Trail System is located on both shoulders of the northern leg of the intersection (both sides of Torrence Avenue)
- Bus stop on the southeastern corner with no bench or shelter
- Inconsistent pedestrian facilities: sidewalks that are present should be checked for Americans with Disabilities Act (ADA) compliance. There is a wooden utility pole in the center of the sidewalk on the southwestern corner

IMPROVEMENTS FOR CONSIDERATION

The 'What' →

The 'Why' →

HFST: With such a high frequency of rear-end crashes, consider implementing HFST.

Improved traction can reduce the risk of rear-end crashes by reducing stopping distance in hard-breaking scenarios.

The 'What' →

The 'Why' →

Connect sidewalks and upgrade for ADA compliance: Consider extending and connecting sidewalks from the corners of the intersection along Glenwood Lansing Road in both directions and upgrading the existing sidewalk to be ADA compliant, where needed.

Sidewalks provide a safe space outside of the roadway for pedestrians and other vulnerable road users. When there are gaps in the sidewalk, pedestrians may need to enter the roadway where they are more vulnerable to traffic.

The 'What' →

The 'Why' →

Advance warning signs for signal: Consider installing "TRAFFIC SIGNAL AHEAD" signage in advance of the signal on all legs.

There is a significant distance between signals in the area. Adding advance warning signs lets drivers know of a potential need to slow down, allowing the driver more time to adjust their speeds and react to pedestrians.

The 'What' →

The 'Why' →

Retroreflective backplates for signal heads: Consider installing retroreflective backplates on all signal heads at this intersection.

Retroreflective backplates additionally define the signal heads, increasing traffic signal visibility during low-visibility times, such as cloudy weather or dark conditions and from farther distances.

The 'What' →

The 'Why' →

Install concrete bus landing pads: Install ADA-compliant concrete bus landing pads connected to the sidewalk.

Installing ADA-compliant concrete bus landing pads would provide a stable, slip-resistant surface for all passengers during boarding and alighting.

The 'What' →

The 'Why' →

Maintain existing safety features: Refresh the existing pavement markings and maintain existing pedestrian countdown signal heads.

Maintaining existing safety features ensures that safety does not deteriorate due to neglect of traffic control devices.

The 'What' →

The 'Why' →

Implement leading pedestrian interval (LPI) signal phases

Installing dedicated walk signals allows safer crossing of pedestrian and cyclists, particularly for the Thorn Creek Trail crossing.

HIGH-RISK TYPOLOGY #2

Two-Lane, Signalized Intersection

Example: Torrence Avenue and Glenwood Lansing Road in Lynwood
 MOBEC index: 40.5-50.4



AADT
 Torrence Ave - 11,943 vehicles per day
 Glenwood Lansing Rd - 10,600 vehicles per day

Jurisdiction
 Torrence Ave - State
 Glenwood Lansing Rd - County

Functional Classification
 Torrence Ave - Minor Arterial
 Glenwood Lansing Rd - Minor Arterial east of Torrence; Major Collector west of Torrence

LEGEND

- X Existing Infrastructure
- # Proposed Improvement
- Proposed Concrete Sidewalk
- Proposed Concrete Bus Landing Pad
- ⊙ Existing Sign Post
- ⊙ Existing Light Pole
- ⊙ Existing Bus Stop
- ▨ Proposed High Friction Surface Treatment (HFST)

EXISTING INFRASTRUCTURE

- A Pedestrian countdown signal heads
- B Existing speed limit sign
- C Existing trail



Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Presence and crossing of multi-use path	1	Maintain existing pedestrian countdown signal heads at all crossings; implement leading pedestrian interval (LPI) signal phases where appropriate	\$ / ✖✖
Insufficient public transit infrastructure	2	Install ADA-compliant concrete bus landing pads and sidewalk to intersection	\$\$ / ✖✖
Rear end crash patterns	3	Install high friction surface treatment (HFST) approx. 500 feet from existing stop bars	\$\$ / ✖✖
	4	Install retroreflective backplates on all signal heads	\$ / ✖
	5	Install signal ahead signs and/or pavement markings approx. 300 feet upstream of intersection	\$ / ✖
Faded/worn pavement markings	6	Refresh pavement markings	\$ / ✖
Deteriorating/missing sidewalks	7	Connect sidewalks and upgrade for ADA compliance	\$\$ / ✖✖

Cost/Effort Scale

\$ / ✖ Low
 \$\$ / ✖✖ Medium
 \$\$\$ / ✖✖✖ High
 \$\$\$\$ / ✖✖✖✖ Very High

PRIORITY LOCATION NO. 3 – MULTILANE, SIGNALIZED INTERSECTION

Milwaukee Avenue and Greenwood Road in Niles



IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

Milwaukee Avenue and Greenwood Road in Niles, IL
 AADT (Milwaukee Avenue) = 35,900 vehicles per day
 AADT (Greenwood Road) = 17,800 vehicles per day
 MOBEC Index: 33.6-44.6

INTERSECTION PRIORITIZATION SCORE RANK

102nd of 1,152 intersections (Prioritization score: 10.5;
 CPM: 10.064)

TRAFFIC CONTROL TYPE

Multiphase, traffic-actuated signal

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Negative offset left-turn lanes
- Skewed intersection
- Long crossing distances
- Bus stop shelter located on northeastern corner with commercial driveway approximately 50 feet from the intersection/bus stop

NOTABLE CRASH OBSERVATIONS

- 186 total (9 fatal and serious injury) crashes in a 5-year period
- Rear-end crashes account for 34.9% of total crashes and 44.4% of fatal and serious injury crashes
- Turning crashes account for 39.2% of total crashes
- Failing to yield right of way (31.7%) and failing to reduce speed (25.8%) are leading crash causes

IMPROVEMENTS FOR CONSIDERATION

The 'What' →

The 'Why' →

HFST: With more than a quarter of total crashes attributed to failure to slow down and following too closely, consider strategies that help with slowing down vehicles more quickly leading up to and through the intersection.

Improved traction can reduce the risk of rear-end crashes by reducing stopping distance in hard-breaking scenarios.

The 'What' →

Reduce access points near intersection: where multiple access points are available for commercial businesses, consider removing driveways closer than 100 feet from the intersection. At the northeastern corner, two driveways are located 50 feet and 200 feet from the intersection.

The 'Why' →

The northeastern corner has multiple potential conflicts vying for the driver's attention. In addition to vehicles located in the intersection, the driver must watch for pedestrians in the crosswalk, bus riders at the bus stop and drivers entering the roadway from the driveway. Removing the driveway spreads out these conflicts, allowing the driver to focus on the intersection and crosswalk.

'The What' →

Offset left-turn lanes: Currently, the left-turn lanes in all directions have a negative offset or no offset, with a wide median separating opposing lanes. Left-turn lanes could be shifted closer to oncoming traffic by moving a portion of the median between the turn lane and through lanes, creating a positive offset between opposing left-turn lanes.

'The Why' →

When left-turn lanes are in line or negatively offset, the opposing left-turning vehicle can block the view of opposing through traffic. Creating a positive offset between left-turn lanes improves sight distance for the left-turning vehicle where permissive left turns are allowed.

'The What' →

Protected left-turn phasing: With a high percentage of turning crashes, changing to protected left-turn phasing for vehicles turning from Greenwood Road to Milwaukee Avenue should reduce the number of turning crashes.

'The Why' →

Limiting left-turning movements to a protected phase only would remove the potential of a driver mistaking the available gap in traffic for a turning movement. If protected left-turn phasing is implemented, offsetting the left-turn lanes will not be needed.

'The What' →

'The Why' →

Relocate mast arms closer to the stop bar on Greenwood Road

The traffic signals for traffic on Greenwood Road are currently more than 200 feet from the stop bar and use near-side supplemental signals. Moving the primary signals closer to the stop bar would improve visibility of the signals. An evaluation could be conducted to determine the feasibility of moving the poles closer to the intersection.

'The What' →

'The Why' →

Install concrete bus landing pads: Install ADA-compliant concrete bus landing pads connected to sidewalk.

Installing ADA-compliant concrete bus landing pads will provide a stable, slip-resistant surface for all passengers during boarding and alighting.

'The What' →

'The Why' →

Intersection lighting: Consider installing luminaires on all corners of the intersection.

Twenty-five percent of crashes occurred in non-daylight conditions. Intersection lighting would provide increased visibility of the intersection and objects or people in the intersection, in dark conditions.

'The What' →

'The Why' →

Address skewed intersection: Conduct a corridor safety study to potentially right-size the roadway.

Rightsizing the roadway at the intersection would shorten long crossing distances caused by the skewed angle of the intersection for non-motorists. It would also improve driver sightlines and would encourage slower turning vehicle speeds.

'The What' →

'The Why' →

Implement guidance for left-turning vehicles: Consider installing skip dash lines, as well as Keep Right signs and reflector posts, in all medians to help guide left-turning vehicles.

Drivers conducting left turns may have difficulty staying in their lane, due to the skewed alignment of the intersection. Skip dash lines provide lane guidance through the turning movement and reflector posts help drivers identify the median. Reflective taping on signposts and Keep Right signs in the median will also provide additional visibility.

'The What' →

'The Why' →

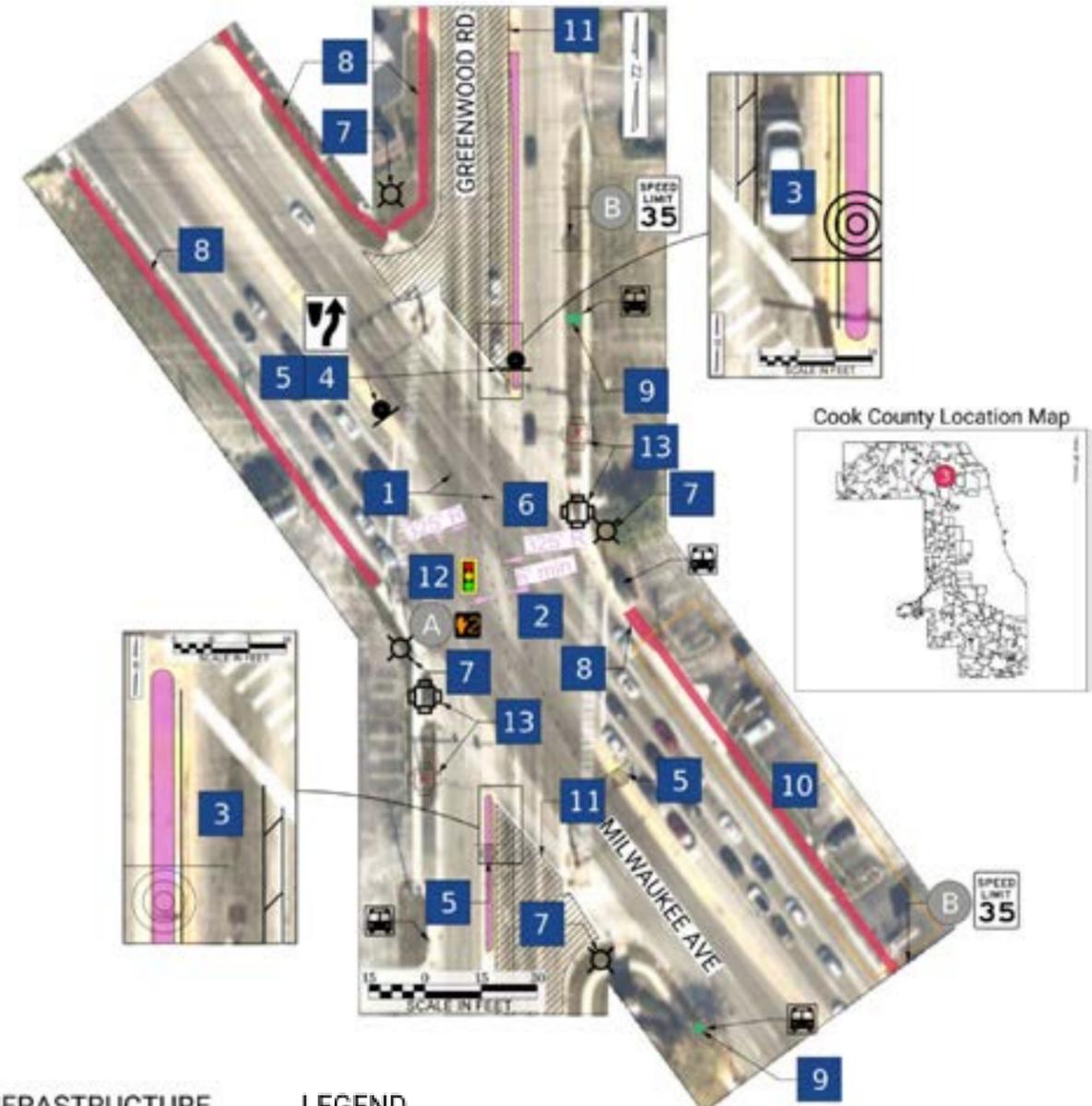
Retroreflective backplates for signal heads: Consider installing retroreflective backplates on all signal heads at this intersection.

Retroreflective backplates additionally define the signal heads, increasing traffic signal visibility during low-visibility times, such as cloudy weather or dark conditions and from farther distances.

HIGH-RISK TYPOLOGY #3 Multilane, Signalized Intersection

Example: Milwaukee Avenue and Greenwood Road in Niles
MOBEC index: 33.6-44.6

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Negative offset left-turn lanes and turning crash pattern	1	Install skip dash lines for left-turning vehicles	\$ / ✖
	2	Convert to protected only left-turn phasing with one leading left-turn and one lagging left-turn	\$ / ✖
	3	Narrow existing concrete medians and install painted median for positive left-turn lane offset	\$\$ / ✖✖
	4	Add 'Keep Right' sign (R4-7) to medians	\$ / ✖
	5	Install retroreflective strip on signposts in the median	\$ / ✖
Skewed intersection	6	Conduct corridor safety study to potentially right-size the roadway	\$\$\$\$ / ✖✖✖✖
Long crossing distances and pedestrian presence	7	Install luminaires on all corners	\$\$ / ✖✖
	8	Connect sidewalks and upgrade for ADA compliance	\$\$ / ✖✖
Driveways near intersection create conflict with traffic and bus stop	9	Install ADA-compliant bus landing pads to connect to sidewalk	\$\$ / ✖
	10	Manage driveway access and reduce access points near intersection	\$\$ / ✖✖✖
Rear-end crash pattern	11	Install high friction surface treatment (HFST) approx. 500 feet from stop bars	\$\$ / ✖✖
	12	Install retroreflective backplates for all signal heads	\$ / ✖
Failure to yield and failure to reduce speed crash patterns	13	Relocate mast arms closer to stop bars	\$\$ / ✖



Cost/Effort Scale

- \$ / ✖ Low
- \$\$ / ✖✖ Medium
- \$\$\$ / ✖✖✖ High
- \$\$\$\$ / ✖✖✖✖ Very High

AADT

Milwaukee Ave - 35,900 vehicles per day
Greenwood Rd - 17,800 vehicles per day

Jurisdiction

Milwaukee Ave - State
Greenwood Rd - State

Functional Classification

Milwaukee Ave - Principal Arterial
Greenwood Rd - Minor Arterial

EXISTING INFRASTRUCTURE

- A Pedestrian countdown signal heads (all crossings)
- B Existing speed limit sign

LEGEND

- X Existing Infrastructure To Remain
- # Proposed Improvement
- Existing/Proposed Sign Post
- Existing/Proposed Light Pole
- Proposed Traffic Signal Relocation
- Existing Bus Stop
- Proposed Narrowed Median
- Proposed Concrete Sidewalk
- Proposed Concrete Bus Landing Pad
- Proposed High Friction Surface Treatment (HFST)

PRIORITY LOCATION NO. 4 – UNDIVIDED, TWO-LANE, LOCAL ROAD

West 151st Street in Harvey



IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

West 151st Street, between Lincoln Avenue and Dixie Highway in Harvey, IL

AADT = 849 vehicles per day

MOBEC Index: 65.9-71.3

SEGMENT HIN RANK

26th of 773 segments (Prioritization score: 9.75; CPM: 15.61)

SEGMENT TYPE

Undivided, two-lane, local road; length = 0.48 mile

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Lack of clear traffic control at intersections

IMPROVEMENTS FOR CONSIDERATION

- Limited sight distances due to roadside vegetation
- Inconsistent road markings
- Missing pavement markings for street parking and centerline
- Unfinished sidewalk connectivity from west to east
- Four fatal or serious injury crashes at Dixie Highway (2018 to 2022), including two crashes involving pedestrians
- Excess pavement width

NOTABLE CRASH OBSERVATION(S)

- High proportion of turning (36%) and angle (24%) crashes
- Most crashes involve failing to yield right-of-way (33%)
- 14% of all crashes are fatal and serious injury crashes

The 'What' →

The 'Why' →

Comprehensive Traffic Calming Strategy: Enhance safety through integrated design interventions

- Lane narrowing with strategic striped parking and centerline psychologically influences driver behavior by making lanes appear more constrained, resulting in lower vehicular speeds. Also consider narrowing roadway cross-section.
- Maintain crosswalks, other pavement markings and vegetation.
- Consider installing speed hump.

The 'What' →

The 'Why' →

Residential Zone Safety Enhancements

- **Improve vehicular and pedestrian safety by:**
- Installing raised crosswalks or raised intersections that create dedicated pedestrian crossing areas.
- Installing small traffic circles that physically interrupt traffic flow.
- Adding curb extensions to shorten crossing distances (with the option to install supplemental stop signs).
- Adding geometric interventions like curb extensions that create physical constraints that naturally reduce vehicle speeds.
- Installing ADA-compliant curb ramps for all street crossings.
- Filling sidewalk gaps and repairing poor quality sidewalk.
- Installing new crosswalks.

The 'What' →

The 'Why' →

Study feasibility of traffic calming: Traffic calming measures to study include roadway narrowing, traffic circles and refuge islands.

West 151st Street is more than 40 feet wide and is overbuilt for the low vehicular volumes. Narrowing curb-to-curb width (with the additional option of restricting parking on one side of the street) would encourage slower vehicle speeds that are more appropriate for the residential land use context.

The 'What' →

The 'Why' →

Install pedestrian median refuge island with marked crosswalks and pedestrian hybrid beacons (PHBs)

Pedestrian crossing improvements would help prevent pedestrian crashes at this location.

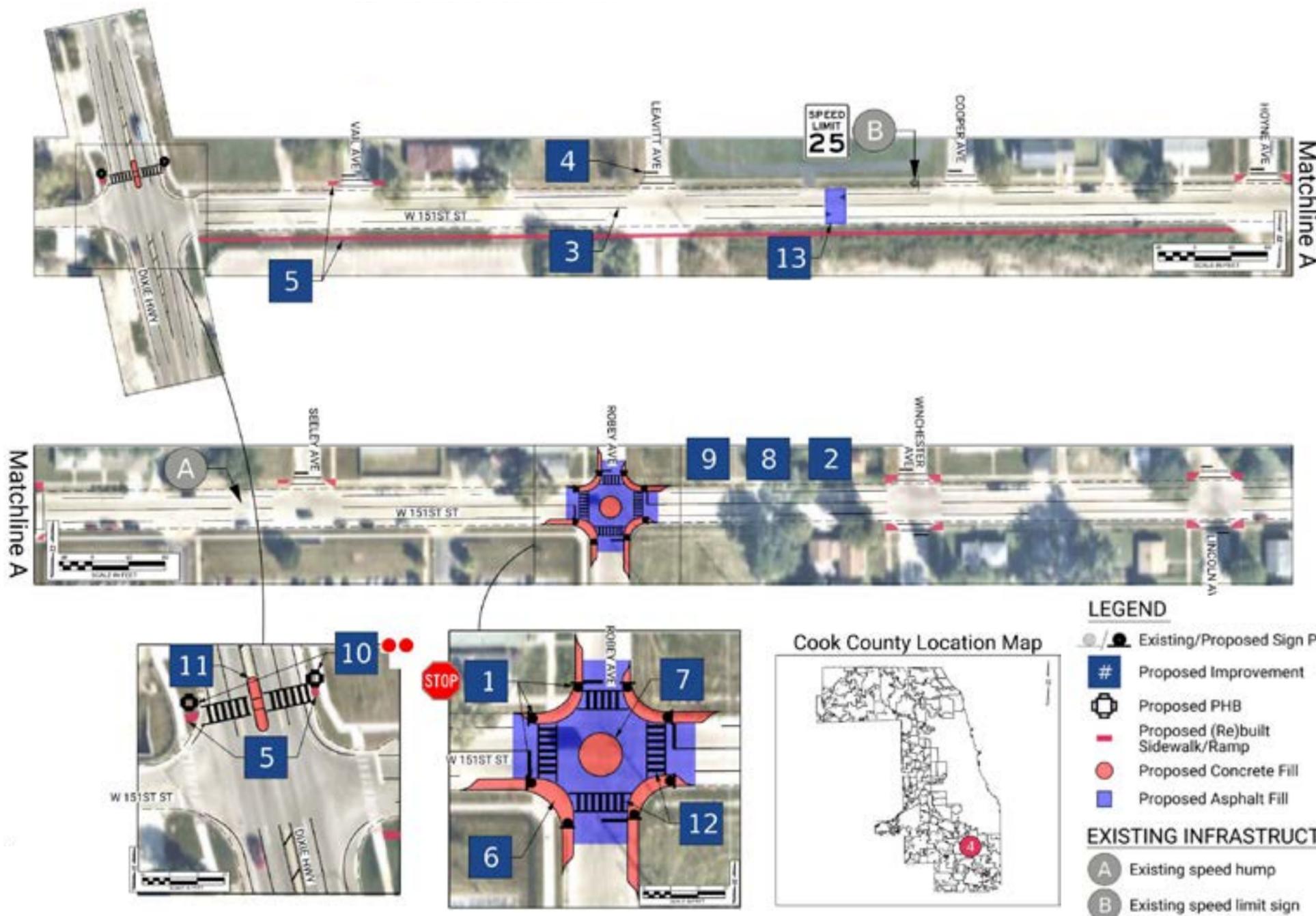
HIGH-RISK TYPOLOGY #4

Undivided, Two-Lane Local Road

Example: West 151st Street in Harvey

MOBEC index: 65.9-71.3

#	Potential Safety Features
1	Install supplemental stop signs
2	Maintain existing vegetation
3	Stripe parking lanes and centerline to visually narrow roadway
4	Maintain crosswalks and other existing pavement markings
5	Fill sidewalk gaps, install ADA-compliant curb ramps and install missing crosswalks
6	Install curb extensions (may require feasibility study)
7	Install small traffic circles (may require feasibility study)
8	Reconstruct roadway to narrow the existing pavement width
9	Implement traffic calming measures (e.g. roadway narrowing, traffic circles and refuge islands) (may require feasibility study)
10	Install Pedestrian Hybrid Beacon (PHB)
11	Install pedestrian median refuge island with marked crosswalks
12	Install raised crosswalk or intersection (may require feasibility study)
13	Install speed hump



HIGH-RISK TYPOLOGY #4

Undivided, Two-Lane Local Road

Example: West 151st Street in Harvey

MOBEC index: 65.9-71.3

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Lack of clear traffic control at intersections	1	Install supplemental stop signs	\$ / ✖
Vegetation limits sight distance	2	Maintain existing vegetation	-
Missing markings for street parking and centerline	3	Stripe parking lanes and centerline to visually narrow roadway	\$ / ✖
	4	Maintain crosswalks and other existing pavement markings	-
Incomplete sidewalk connectivity	5	Fill sidewalk gaps, install ADA-compliant curb ramps and install missing crosswalks	\$\$ / ✖✖
Excess pavement width	6	Install curb extensions (may require feasibility study)	\$\$ / ✖✖-✖✖✖
	7	Install small traffic circles (may require feasibility study)	\$\$\$ / ✖✖✖
	8	Reconstruct roadway to narrow the existing pavement width	\$\$\$\$ / ✖✖✖✖
History of fatal and serious injury crashes, including involving pedestrians	9	Implement traffic calming measures (e.g. roadway narrowing, traffic circles and refuge islands) (may require feasibility study)	\$\$\$\$ / ✖✖✖✖
	10	Install Pedestrian Hybrid Beacon (PHB)	\$\$\$ / ✖✖✖
	11	Install pedestrian median refuge island with marked crosswalks	\$\$ / ✖✖
	12	Install raised crosswalk or intersection (may require feasibility study)	\$\$-\$\$\$ / ✖✖✖
	13	Install speed hump	\$-\$\$ / ✖✖-✖✖✖

Cost/Effort Scale

- \$ / ✖ Low
- \$\$ / ✖✖ Medium
- \$\$\$ / ✖✖✖ High
- \$\$\$\$ / ✖✖✖✖ Very High



B

PROJECTS WITH Systemic Focus

Additional projects were identified using the systemic or risk-based approach. With the risk-based approach, some locations identified for improvements may not exhibit a history of fatalities and serious injuries. But the risk-based approach involved using the results of the HIN and observing which characteristics were most frequently observed with high-crash locations. Some of the characteristics could be as broad as being a state jurisdiction location, while other characteristics could be as detailed as focusing on the numbers of lanes within specific functional classifications. These categories are frequently referred to as typologies. Within this systemic project prioritization, the typologies are similar, but not identical to, the typologies discussed in Section 5 of the May 2025 SAP.

By identifying the typologies of most concern in this Addendum of the Systemic Analysis (Section 5), this allows for a system-wide application of improvements, even while there may not be a clear and present crash pattern at a specific location. However, if the location exhibits similar characteristics to a particular typology that is frequently found to include certain risk factors, then a proactive application of countermeasures is appropriate. This provides opportunities for many locations to receive safety improvements if they satisfy the typology criteria.

The improvements in the following three systemic focus project examples may be applied to other roadways with similar typologies and characteristics. Additionally, some of the systemic projects in this subsection may not have CPM scores or prioritization scores as high as the projects listed in Section 4.A.

PRIORITY LOCATION NO. 5 – UNDIVIDED, MINOR ARTERIAL

167th Street in Tinley Park and Oak Forest



IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

167th Street, between Central Avenue and Cicero Avenue in Tinley Park, IL

AADT = 15,400 vehicles per day

MOBEC Index: 23.3-39.2

SEGMENT PRIORITIZATION SCORE RANK

173rd of 773 segments (Prioritization score: 7.5; CPM: 6.58)

SEGMENT TYPOLOGY FOR SYSTEMIC APPLICATIONS

Four-lane, undivided, minor arterial; length = 0.94 mile

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Large number of access points, leading to and from residences, creating multiple conflict points
- Without a dividing area between the two directions of traffic, vehicles must complete the turn in one action, crossing multiple lanes of traffic at once

NOTABLE CRASH OBSERVATIONS

- High proportion of rear end (40%) and turning (18%) crashes
- 46% of all crashes occurred in non-daylight conditions

IMPROVEMENTS FOR CONSIDERATION FOR THIS TYPOLOGY

‘The What’ →

‘The Why’ →

Install temporary vehicle speed feedback signs: Improved speed management can reduce speeds and reduce severe crash outcomes on principal arterials.

Arterials involve high volumes of passenger vehicles and truck traffic, which can lead to severe crash outcomes with higher speeds. Speed limits are typically not well-followed on these streets. All crash types can be reduced in severity and frequency with better speed management.

‘The What’ →

‘The Why’ →

Install two-way left-turn lane

Adding a two-way left-turn lane provides left-turning vehicles with dedicated space to wait for a safe gap in traffic and reduces their exposure to rear end crashes. Travel lanes would need to be narrowed to create available space for a two-way left-turn lane, which may help reduce vehicle speeds.

‘The What’ →

‘The Why’ →

Install new crosswalk, ADA-compliant ramps and sidewalk. Update timing plan for new pedestrian phase and install pedestrian signals)

Currently there are no crosswalks or pedestrian phases for the intersection of 167th Street and Cicero Avenue. A crosswalk and pedestrian phase at this signalized intersection would provide another crossing location for pedestrians seeking access to the Tinley Creek Trail.

‘The What’ →

‘The Why’ →

Update and install additional street lighting

Additional lighting along the corridor, in addition to updated lighting at intersections, would increase visibility in dark conditions.

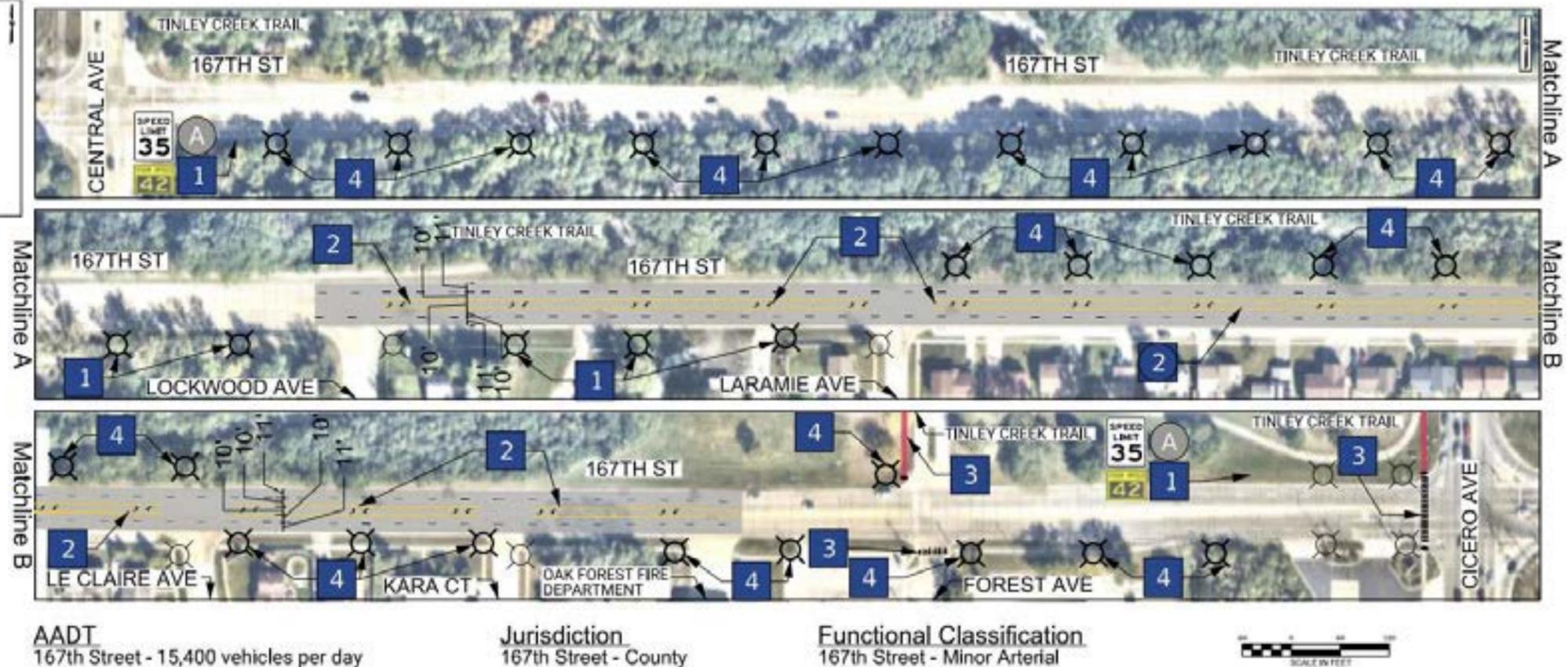
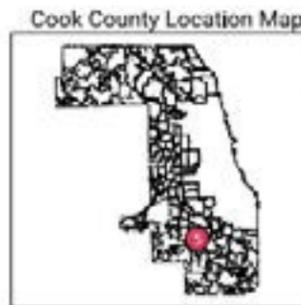
HIGH-RISK TYPOLOGY #5

Undivided, Minor Arterial

Example: 167th Street (Central Ave to Cicero Ave) in Tinley Park and Oak Forest
 MOBEC index: 23.3-39.2

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Wide lanes encourage speeding	1	Install temporary vehicle speed feedback (W13-20aP) plaque below existing speed limit signs	\$ / ✖
Left-turning vehicles must cross all lanes in one action	2	Narrow lanes and install two-way left-turn lane	\$-\$\$\$ / ✖✖
High number of driveways create multiple conflict points			
High proportion of rear-end crashes	3	Install new crosswalk, ADA-compliant ramps and sidewalks; update timing plan for new pedestrian phase and install pedestrian signals	\$\$ / ✖✖
Trail crossing and pedestrian presence			
	4	Update and install additional street lighting	\$\$ / ✖✖✖

Cost/Effort Scale
 \$ / ✖ Low
 \$\$ / ✖✖ Medium
 \$\$\$ / ✖✖✖ High
 \$\$\$\$ / ✖✖✖✖ Very High



PRIORITY LOCATION NO. 6 – RAILROAD CORRIDOR

Miner Street in Downtown Des Plaines

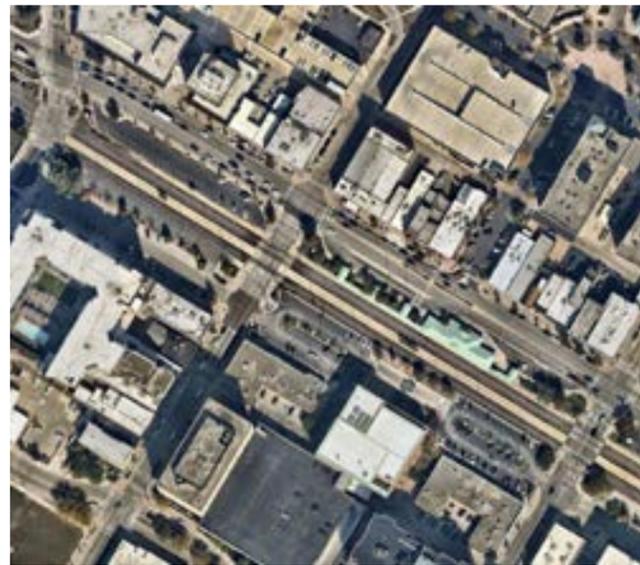


IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

Metra UP-NW line running parallel to Miner Street between Graceland Avenue and Pearson Street in Des Plaines, IL

Rail owned by Metra UP

MOBEC Index: 33.2-42.3

SEGMENT PRIORITIZATION SCORE RANK

Not applicable

SEGMENT TYPOLOGY FOR SYSTEMIC APPLICATIONS

Railroad; length = 0.21 mile

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Quiet zone – segment with multiple, consecutive grade crossings where train horns are not routinely sounded
- Train station, between Pearson Street and Lee Street, indicates increased pedestrian activity
- Less than 40 feet between the intersections and railroad tracks
- Detectable warning surface missing from the northeastern corner of Metra rail and Pearson Street

NOTABLE CRASH OBSERVATIONS

- Six pedestrian casualties
- Three auto/semi crashes (2 casualties and 1 PDO)
- All collisions at or near crossings

IMPROVEMENTS FOR CONSIDERATION FOR THIS TYPOLOGY*

‘The What’ →

Sensor-based rail track monitoring devices: Sensors, light detection and ranging (LiDAR) or cameras; communication network; reporting system; and smart gates.

- Train arrival prediction systems
- Obstacle detection and warning systems

‘The Why’ →

Real-time data on rail activity could be collected and distributed to various platforms, including 911 response systems, traffic management tools and dynamic messaging signs, improving safety and efficiency at rail crossings. LiDAR or cameras could detect obstacles (vehicles, pedestrians, objects) in the crossing area and the information could be distributed to the train operator to potentially prevent collisions.

‘The What’ →

Police officer and railroad employee training for suicide prevention and mental health funding

Collisions occur at rail-highway intersections that may be attributed to suicide.

Investing in mental health programs in the area provide resources for those seeking help with failing mental health. Police officers with training for people struggling with their mental health provide another resource to prevent these types of deaths.

‘The What’ →

Reduce points of conflict: Channelize pedestrian paths to limit crossing locations and consider closing Pearson Street from Miner Street to Ellinwood Street.

‘The Why’ →

By eliminating an at-grade crossing, the potential for collisions between trains and vehicles, or pedestrians, is significantly reduced. Sidewalks could be reduced to one side of the roadway, eliminating one point of conflict for pedestrians per roadway. Pearson Street could be a good candidate for closure as it is a two-way street crossing the tracks near a train station and other pedestrian generators. There is limited space for vehicles between the tracks and Miner Street. Vehicles could be rerouted to River Road or Lee Street.

'The What' →

Construct raised median or channelization devices

A raised median or channelization would create a barrier preventing vehicles from driving into the opposing lane to go around a closed gate. Converting the parking lots at Pearson to right-in, right-out using splitter islands could help reduce left turns onto the tracks and discourage turning movements over the raised median.

'The Why' →

'The What' →

Upgrade gates to four-quadrant gates

Four-quadrant gates would extend the area blocked by the gate to entire width of roadway, reducing the possibility of going around the gate.

'The Why' →

'The What' →

Provide a detectable warning surface at all crossings leading to the railroad tracks

Detectable warning surfaces provide tactile warning to alert pedestrians of the boundary between the sidewalk and the roadway, or tracks. These warning surfaces help visually impaired individuals, or distracted pedestrians, making for safer crossings.

'The Why' →

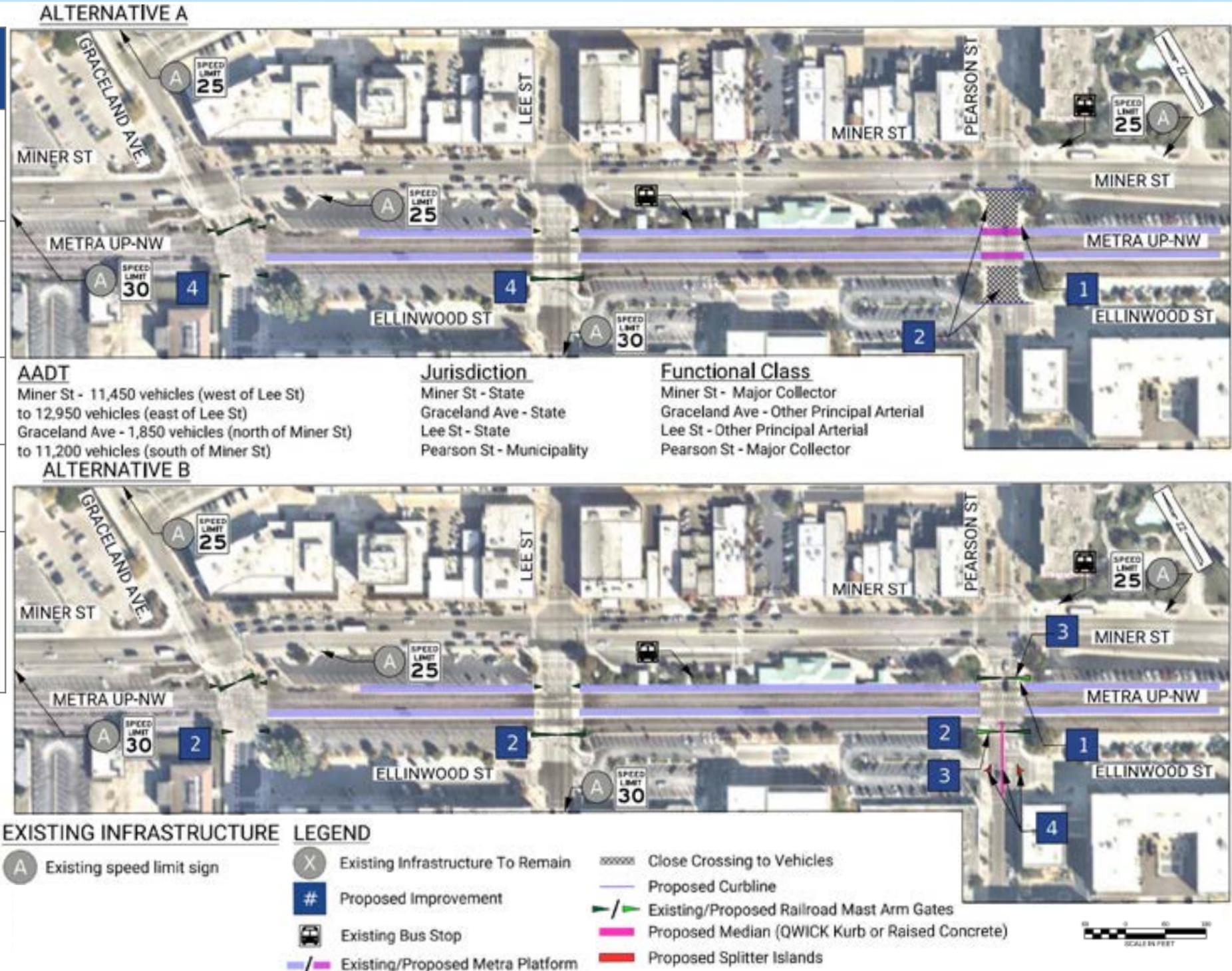
* Optimal change in physical conditions or operation practice to address the safety issue to be identified in a detailed evaluation study.



HIGH-RISK TYPOLOGY #6 Railroad Corridor

Example: Miner Street in Downtown Desplaines
MOBEC index: 33.2-42.3

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Heightened pedestrian activity due to Metra station	1	Install detectable warning surfaces at all crossings leading to railroad tracks	\$\$ / ✖
Quiet zone with multiple, consecutive rail grade crossings	2	Consider minimizing railroad conflicts by restricting vehicle access at certain crossings	\$\$\$\$ / ✖✖✖✖
Less than 40 ft between intersections and railroad tracks	3	Install four-quadrant gates on two-way streets	\$\$\$ - \$\$\$\$ / ✖✖✖
	4	Install sensor-based rail crossing monitoring devices	\$\$\$ - \$\$\$\$ / ✖✖✖
Vehicles entering / exiting adjacent driveways or lots may be unaware of approaching train	5	Construct raised median/channelization device; Convert nearby parking lots to right-in right-out	\$\$-\$\$\$ / ✖✖✖✖



Cost/Effort Scale

- \$/ ✖ Low
- \$\$/ ✖✖ Medium
- \$\$\$ / ✖✖✖ High
- \$\$\$\$ / ✖✖✖✖ Very High



PRIORITY LOCATION NO. 7 – THREE LEG, MINOR LEG STOP-CONTROLLED INTERSECTIONS

Dolton Road & Paxton Avenue in Calumet City



IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

Dolton Road and Paxton Avenue in Calumet City, IL

AADT (Dolton Road) = 14,700 vehicles per day

AADT (Paxton Avenue) = 752 vehicles per day

MOBEC Index: 63.4

INTERSECTION PRIORITIZATION SCORE RANK

376th of 1,152 intersections (Prioritization score: 6.25; CPM: 7.15)

TRAFFIC CONTROL TYPE FOR SYSTEMIC APPLICATIONS

Minor leg stop-control

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Skewed intersection leads to higher-speed turns
- Stop bar is nonexistent on the minor leg approach
- Potential sightline issues with nearby fencing, vegetation and parked vehicles
- Four-lane road with no center turn lane

NOTABLE CRASH OBSERVATIONS

- Twelve total crashes occurred between 2018 and 2022
- A quarter of all crashes were serious injury crashes
- Two of the three serious injury crashes were turning crashes

IMPROVEMENTS FOR CONSIDERATION

The 'What' →

The 'Why' →

Pavement marking improvements

Installing a stop bar on the minor leg would provide a clear location for motorists on the minor leg to stop and observe oncoming traffic for adequate gaps.

The 'What' →

The 'Why' →

Reconfigure skewed three leg intersections to a right-angle

- Reconfiguration would remove the skewed intersection and the ability for westbound Dolton Avenue vehicles to take the right-turn at high speeds.
- Drivers would have better sight lines with a right-angle approach of upcoming traffic. Additionally, crossing distances for pedestrians and bicyclists would be reduced.

The 'What' →

The 'Why' →

Remove obstructions to sightlines: Remove trees or other obstructions that block vision of and for vehicles turning out of the minor leg. Restrict parking near the entrance to the minor leg, if applicable

Drivers need proper vision when turning out of the minor leg to avoid conflicts and to determine an acceptable gap. Systemically, three leg intersections with a skew angle should be routinely evaluated to ensure drivers have adequate vision.

The 'What' →

The 'Why' →

Offset sidewalk to provide buffer from roadway

Sidewalks provide a safe space outside of the roadway for pedestrians and other vulnerable road users. When there is no buffer between the sidewalk and roadway, pedestrians may be more at risk due to closer proximity to surrounding vehicle traffic.

The 'What' →

The 'Why' →

Implement road diet to reduce number of travel lanes

A road diet can help reduce speeds and crash severity. Installing pavement markings, turning lanes, crosswalk and pedestrian refuge island can reduce the roadway to one travel lane in each direction.

HIGH-RISK TYPOLOGY #7

Three Leg, Minor Leg Stop-controlled Intersection

Example: Dolton Road and Paxton Avenue in Calumet City
 MOBEC index: 63.4

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Skewed intersection and higher speed turns	1	Reconfigure skewed approach to right-angle with bump outs	\$\$ / ✖✖
Stop bar missing from minor approach	2	Install stop bar pavement marking	\$ / ✖
Potential sightline issues with obstructions/vegetation	3	Remove sightline obstructions; treat vegetation	\$ / ✖
Proximity to highway off-ramp and potential for high speeds	4	Implement road diet to reduce number of travel lanes; install new pavement markings, turning lanes, crosswalk and pedestrian refuge island	\$\$\$-\$\$\$\$ / ✖✖✖✖
History of severe crashes	5	Offset sidewalk to provide buffer from roadway; plant street trees in buffer	\$\$\$ / ✖✖✖



Cost/Effort Scale

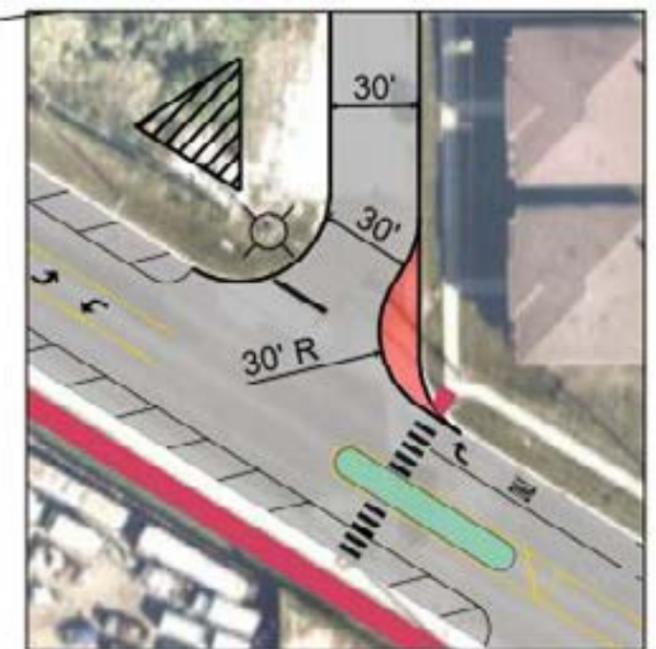
- \$ / ✖ Low
- \$\$ / ✖✖ Medium
- \$\$\$ / ✖✖✖ High
- \$\$\$\$ / ✖✖✖✖ Very High

EXISTING INFRASTRUCTURE

(A) Existing speed limit sign

LEGEND

- (X) Existing Infrastructure
- (#) Proposed Improvement
- (⊗) Existing Light Pole
- (—) Proposed Curblines
- (—) Proposed Concrete Sidewalk
- (▨) Remove Sightline Obstructions
- (■) Proposed Concrete or Paint and Post
- (—) Proposed Pedestrian Refuge Island



AADT
 Dolton Rd - 14,700 vehicles per day
 Paxton Ave - 752 vehicles per day

Jurisdiction
 Dolton Rd - Municipality
 Paxton Ave - Municipality

Functional Classification
 Dolton Rd - Minor Arterial
 Paxton Ave - Local

PRIORITY LOCATION NO. 8 – UNSIGNALIZED, LOCAL ROADS

Bellwood Avenue and Madison Street in Bellwood

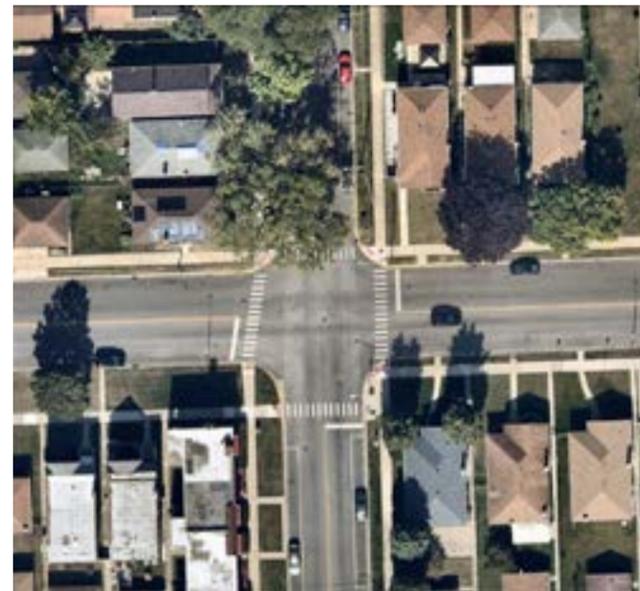


IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

Madison Street and Bellwood Avenue in Bellwood, IL

AADT (Madison Street) = 5,450 vehicles per day

AADT (Bellwood Avenue) = 1,850 vehicles per day

MOBEC Index: 56.1

For systemic applications, consider locations with available on-street parking available (which would be removed after implementation of a roundabout) or intersections with sufficient space in each quadrant due to roundabouts generally having larger footprints

INTERSECTION PRIORITIZATION SCORE RANK

551st of 1,152 intersections
(Prioritization score: 3.5; CPM score: 4.98)

INTERSECTION TYPOLOGY FOR SYSTEMIC APPLICATIONS

Minor leg stop-controlled or all-way stop intersections on local/local intersections

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Need for improved pedestrian facilities
- Frequently observed left turns
- Relatively balanced traffic volumes
- Large ‘open’ intersections that encourage ‘roll and go’ at the stop sign instead of full stops
- Wide travel lanes at intersection approaches that encourage higher speeds

NOTABLE CRASH OBSERVATIONS

- Turning, rear-end and angle as the predominant crash types
- Failure to yield/stop as a frequent contributing factor

IMPROVEMENTS FOR CONSIDERATION

The ‘What’ →

The ‘Why’ →

Install roundabout

- Roundabouts reduce the number of conflict points at an intersection from 32 to 8. Better traffic flows result in reduced wait times. Additionally, roundabouts have a longer service life compared to traffic signals.
- Implementing a series of roundabouts along a route provides continual visual friction, resulting in lower speeds throughout the corridor.
- Pedestrian crossing movements may be included in roundabouts and frequently feature a refuge island-like aspect for vulnerable road users.

The ‘What’ →

The ‘Why’ →

Daylighting: Restrict vehicle parking near crosswalks.

Intersection daylighting improves visibility at crossings by removing visual obstructions near intersections to enhance pedestrian safety.

The ‘What’ →

The ‘Why’ →

Signage visibility improvements: Install a second stop sign posted on left, reflective strips on signposts, light-emitting diode (LED) lights on sign outline

Reflective strips and LED lights on existing signs increase visibility and improve driver awareness, especially at nighttime and low-light conditions.

The ‘What’ →

The ‘Why’ →

Reduce speed limit on Madison Street corridor from 30 to 25 mph

Performing a speed study can help justify lowering the speed limit from 30 to 25 mph. Reducing speeds can improve safety outcomes for all road users.

HIGH-RISK TYPOLOGY #8

Unsignalized, Local Roads

Example: Madison Street and Bellwood Avenue in Bellwood
 MOBEC index: 56.1

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Long crossing distances Parked vehicles reduce pedestrian visibility	1	Install ADA-compliant concrete curb extensions to enforce parking restrictions and reduce crossing distances (Daylighting; Shown in Alternative A)	\$\$-\$\$\$ / ✖✖-✖✖✖
Wide travel lanes at intersection approaches encourages higher speeds	2	Lower speed limit from 30 to 25 mph (requires corridor speed study)	\$ / ✖✖-✖✖✖
Large intersection encourages 'roll and go' instead of fully compliant stopping behaviors	3	Install solar-powered LED flashing stop signs (R1-1) with retroreflective posts	\$\$ / ✖
	4	Install ADA compliant roundabout with traversable islands (Shown in Alternative B)	\$\$\$ / ✖✖✖-✖✖✖✖

Cost/Effort Scale

- \$ / ✖ Low
- \$\$ / ✖✖ Medium
- \$\$\$ / ✖✖✖ High
- \$\$\$\$ / ✖✖✖✖ Very High

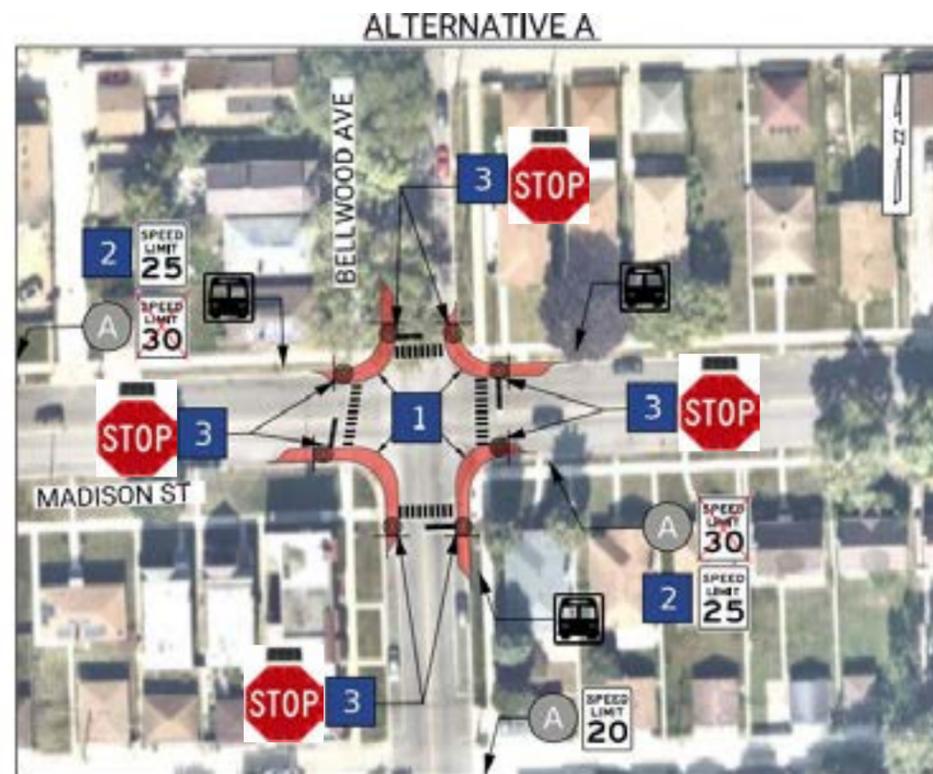


EXISTING INFRASTRUCTURE

(A) Existing speed limit sign

LEGEND

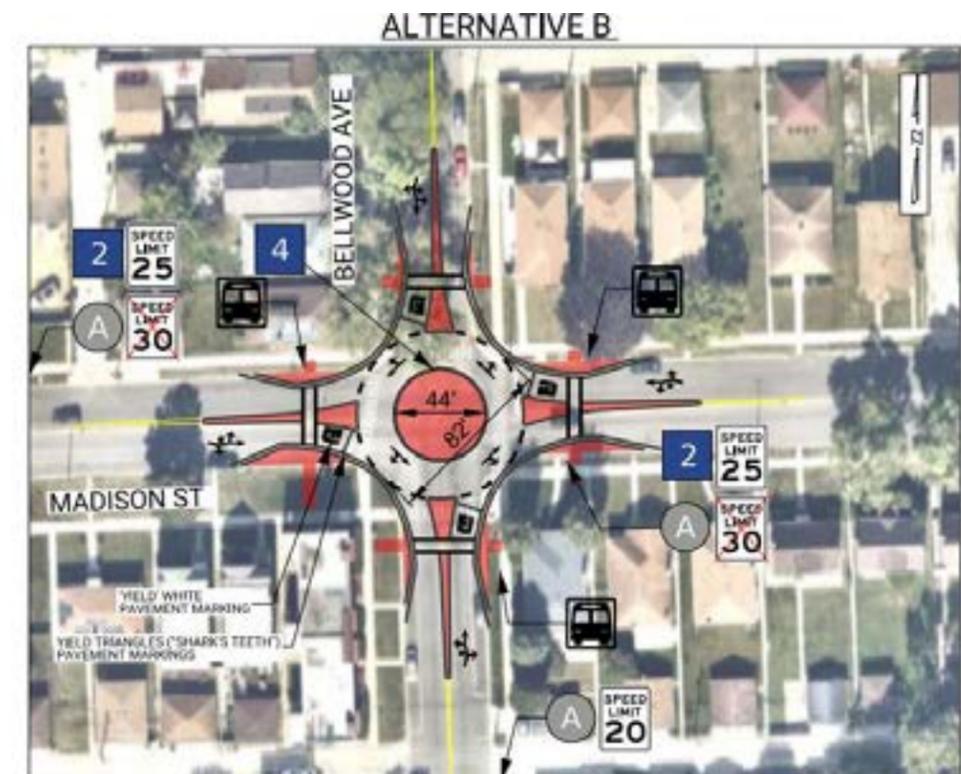
- (X) Existing Infrastructure
- (#) Proposed Improvement
- (S) Proposed Sign Post
- (—) Proposed Concrete Fill or Curb
- (Bus) Existing Bus Stop



AADT
 Madison St - 5,450 vehicles per day
 Bellwood Ave - 1,850 vehicles per day

Jurisdiction
 Madison St - Municipality
 Bellwood Ave - Municipality

Functional Classification
 Madison St - Major Collector
 Bellwood Ave - Minor Collector





PROJECTS WITH Emerging Concerns

Public input was a main driver in prioritizing additional projects. The Cook County SAP website gathered hundreds of comments from the public. Many of these comments expressed concerns about pedestrian or bicyclist issues. While the prioritization score formula shown earlier in this section includes a weighting variable for crashes that include non-motorists, this subsection focuses explicitly on locations that exhibit a need for improved multi-modal facilities. Like Section 4.B, there may be projects identified in this section that do not have a high CPM or prioritization score. The Ogden Avenue Corridor Improvement Project is a local project moving forward toward construction and includes many improvements for non-vehicular users.

ACTIVE TRANSPORTATION PROJECT HIGHLIGHT: OGDEN AVENUE, FROM PULASKI ROAD TO ROOSEVELT ROAD

The Ogden Avenue Corridor Improvements Project is an opportunity to reimagine Ogden Avenue as a multimodal transportation corridor, as a hub for community activity and catalyst for economic development. The goals of the project are to improve safety for all users of this corridor, repurpose and activate public spaces and transform this corridor into one that reflects the unique identity of North Lawndale. Potential improvements include roadway geometry alterations; full width resurfacing; drainage improvements; new sidewalk, curb and gutter; ADA ramps and crosswalk upgrades; repurposing of service drives; street lighting; traffic signal upgrades; pavement markings and signage; paver parkways; side

street improvements to the alleys; site furniture and seating areas; community identifiers including light pole and neighborhood gateway; and street trees and landscaping. Many of these improvements aim to improve the safety of the corridor for all modes of travel, with an anticipated construction start date of 2025 and estimated cost of \$102 million. This corridor had 1,303 crashes from 2017-2021, including 22 bicyclist crashes and 31 pedestrian crashes. Pedestrians/bicyclists represented 20 percent of all K, A and B crashes. Some of the active transportation improvements include bump-outs, raised crosswalks, curb extensions, shorter pedestrian crossings, pedestrian refuge islands and raised, off-street bike lanes.

PRIORITY LOCATION NO. 9 – MULTILANE, PRINCIPAL ARTERIAL

Busse Road in Elk Grove Village

LOCATION DETAILS

Busse Road between Oakton Street/IL-83 and Howard Street in Elk Grove Village, IL

AADT = 30,200 vehicles per day

MOBEC Index: 36.9-69.4

SEGMENT PRIORITIZATION SCORE RANK

262nd of 773 segments
(Prioritization score: 5.75; CPM: 3.61)

SEGMENT TYPE

Divided, multilane segment; length = 0.36 mile

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Lack of pedestrian facilities for crossing Busse Road between Oakton Street and Landmeier Road (0.73 mile), including crosswalks and pedestrian signals
- Lack of stop bars and signage at driveways
- Many access points into and out of commercial parking lots

NOTABLE CRASH OBSERVATIONS

- 23 all-severity crashes from 2018 to 2022
- Four crashes involved a fatality or serious injury
- Two fatalities and one serious injury for vulnerable road users

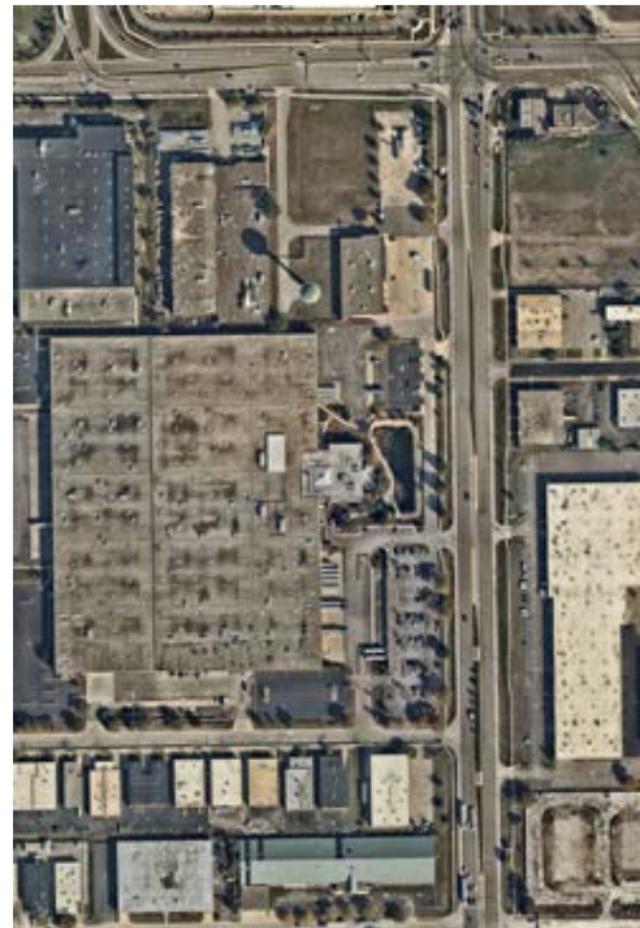


IMAGE SOURCE: NEARMAP 2025

IMPROVEMENTS FOR CONSIDERATION FOR THIS TYPOLOGY

'The What' →

Comprehensive Pedestrian Crossing Improvements at Howard Street

'The Why' →

Install high-visibility continental- or ladder-style crosswalks leading to refuge islands: These bold markings dramatically increase crosswalk visibility from a distance, making pedestrian crossing zones unmistakable to approaching drivers.

When adding crosswalks, implement pedestrian refuge islands in the existing raised median: These protected spaces in the median of the roadway allow pedestrians to cross one direction of traffic at a time, reducing the urgency of needing to make the full crossing in one movement.

With the addition of a crosswalk at Howard Street, rebuild ramps to ADA standards, study feasibility of reducing corner radii on the southwestern and northeastern corners and implement pedestrian-actuated signals.

On the access points and side streets, refresh stop bars and crosswalks. These markings remind drivers to watch for pedestrians.

'The What' →

Implement speed enforcement measures, including temporary speed feedback signs in combination with enforcement campaign: Improved speed management can reduce speeds and reduce severe crash outcomes on principal arterials.

The Why' →

This principal arterial has a posted speed limit of 45 mph, which can lead to more severe crash outcomes. All crash types—especially for vulnerable road users—can be reduced in severity and frequency with better speed management.

'The What' →

Reduction of driveway access points

The Why' →

Principal arterials typically have large numbers of businesses and larger parking lots, which creates an excessive number of driveways for vehicles to exit and enter. This creates conflicting scenarios with turning vehicles, as drivers on the main road may not be expecting non-motorists to cross the side streets or they might not be expecting vehicles to suddenly apply the brake and turn into a parking lot. Additionally, recent studies have shown that closing excess access points does not have a negative impact on the frequency of customer visits.

HIGH-RISK TYPOLOGY #9 Multilane, Principal Arterial

Example: Busse Road in Elk Grove Village
MOBEC index: 36.9-69.4



LEGEND

- Existing Infrastructure To Remain
- Proposed Improvement
- Existing Bus Stop
- Existing Sign Post
- Existing Light Pole
- Proposed Concrete Fill and Curb

EXISTING INFRASTRUCTURE

- Pedestrian countdown signal heads (all crossings)
- Existing speed limit sign
- Existing trail

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Lack of pedestrian facilities, including crosswalks and pedestrian signals	1	Install pedestrian refuge islands	\$\$ / ✖✖
	2	Install high-visibility continental ladder-style crosswalks	\$ / ✖
	3	Upgrade all corner ramps to meet ADA standards and install new pedestrian signal heads	\$\$ / ✖
	4	Implement pedestrian-actuated signals with push buttons and pedestrian signal heads; maintain existing pedestrian signal heads	\$\$ / ✖✖
Lack of stop bars and signage at driveways	5	Refresh pavement markings, including missing/faded stop bars	\$ / ✖
Multiple access points into and out of commercial lots	6	Manage/reduce driveway access points	\$\$ / ✖✖✖
History of severe crashes	7	Implement speed enforcement measures, including temporary speed feedback (W13-20aP) plaques in combination with enforcement campaign	\$ / ✖✖✖
	8	Reduce corner radii on intersection legs (may require feasibility study)	\$\$-\$\$\$\$ / ✖✖-✖✖✖

AADT

Busse Road - 30,200 vehicles per day

Jurisdiction

Busse Road - State

Functional Classification

Busse Road - Principal Arterial south of Oakton; Minor Arterial north of Oakton

Cost/Effort Scale

- \$ / ✖ Low
- \$\$ / ✖✖ Medium
- \$\$\$ / ✖✖✖ High
- \$\$\$\$ / ✖✖✖✖ Very High

PRIORITY LOCATION NO. 10 – MULTILANE, SIGNALIZED INTERSECTION

Illinois Route 83/Sibley Boulevard and Halsted Street in Harvey



IMAGE SOURCE: NEARMAP 2025

LOCATION DETAILS

East 147th Street and Illinois Route 1/Halsted Street in Harvey.

MOBEC Index: 60.1-62.7

INTERSECTION PRIORITIZATION SCORE RANK

2nd of 1,152 intersections (Prioritization score: 24.50; CPM: 18.16)

TRAFFIC CONTROL TYPE

Multiphase, traffic-actuated signal

NOTABLE RISK FACTORS FOR THIS TYPOLOGY

- Lack of pedestrian infrastructure
- Negative offset left-turn lanes
- Business and retail on all corners introduce additional driveways near the intersection

NOTABLE CRASH OBSERVATIONS

- All fatal and serious injury crashes at this intersection involved pedestrians
- Half of pedestrian crashes are nighttime crashes
- Turning crashes account for 39% of all crashes

IMPROVEMENTS FOR CONSIDERATION

The 'What' →

The 'Why' →

Comprehensive Pedestrian Crossing Improvements

Protect vulnerable road users and reduce pedestrian crash risk:

Add leading pedestrian interval (LPI) signal phases: Installing dedicated walk signals with timing calibrated to accommodate slower-moving pedestrians assists pedestrians and cyclists can cross safely without feeling rushed.

Install No Turn On Red signs on all approaches: No Turn On Red signs reduce the risk of conflicts between pedestrians and turning vehicles at an intersection with a history of fatal and severe injury crashes involving pedestrians.

Signal adjustments for pedestrian crashes: Consider “rest on red” signal operation after dark to address the pattern of nighttime crashes involving pedestrians.

The 'What' →

The 'Why' →

Reduce width of roadway

Narrower lanes: Reducing travel lanes from standard 12-foot to 10- or 11-foot-wide naturally calms traffic and creates space to widen medians.

The 'What' →

Improve turn lane configuration

The 'Why' →

Enhance driver visibility of pedestrians and reduce turning-vehicle conflicts:

Install "No Turn on Red" restrictions: This simple regulatory change reduces conflicts between right-turning vehicles and pedestrians, particularly important at intersections with high pedestrian volumes.

Consider changing left-turn phasing from protected/ permitted to protected only phasing: Limiting left-turning movements to a protected phase only would reduce turning vehicle crashes and potential pedestrian crashes from drivers misjudging the safety of a permissive left turn. If protected, only left-turn phasing is implemented, offsetting the left-turn lanes would not be needed.

Convert painted medians to concrete: changing from painted to concrete medians would improve median visibility to drivers and prevent vehicles from crossing into oncoming traffic.

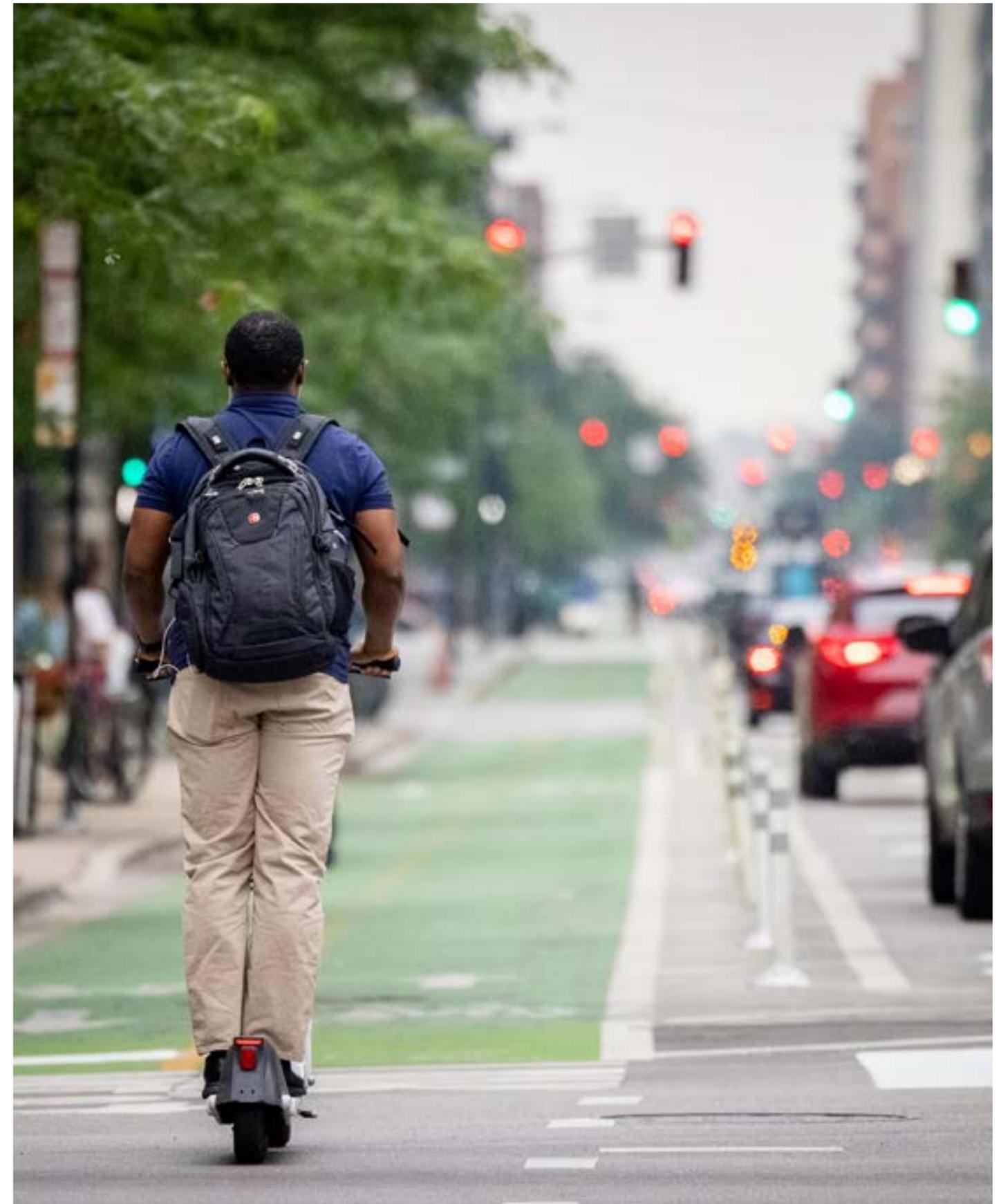
Adjust all signal heads to more closely align with the lane centers of the opposing approach: Improved alignment between lane centers and signal heads improves visibility of the signal heads and driver compliance.

The 'What' →

Narrow driveways located near intersection and consider driveway consolidation

The 'Why' →

Narrowing and consolidating driveways offers an opportunity to move turning movements farther away from the intersection to separate driveway turning movements from intersection turning movements. Additionally, narrower driveways reduce the amount of time pedestrians are exposed to conflicting turning.



HIGH-RISK TYPOLOGY #10

Multilane, Signalized Intersection

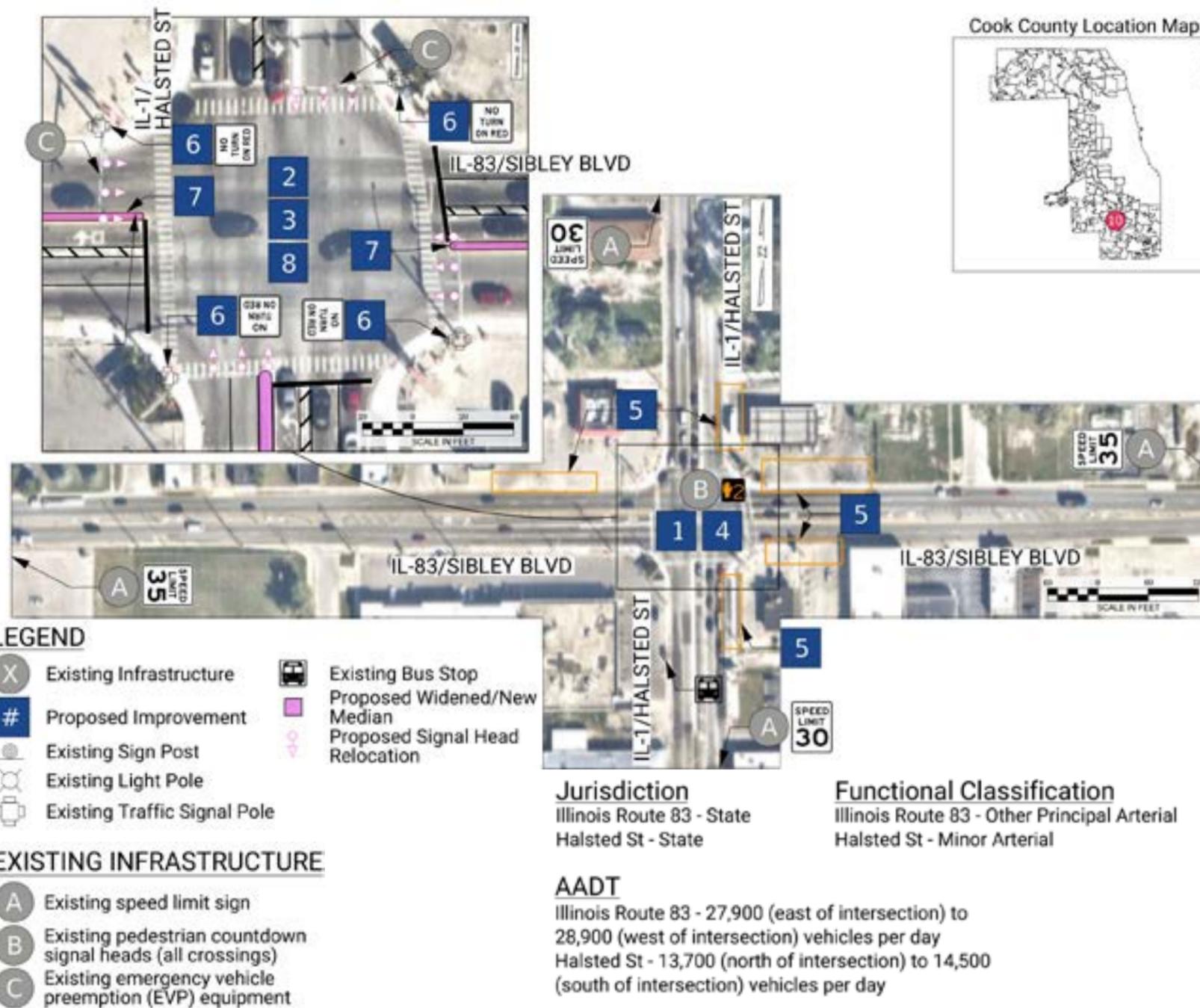
Example: Illinois Route 83 and Halsted Street in Harvey

MOBEC index: 60.1-62.7

Risk Factors	#	Potential Safety Features	Approx. Cost & Effort
Lack of pedestrian infrastructure and history of severe crashes involving pedestrians	1	Implement leading pedestrian interval (LPI) signal phases	\$ / ✖✖
History of severe crashes	2	Reduce travel lane widths, widen painted medians and widen concrete median	\$\$\$ / ✖✖✖
	3	Adjust all signal heads to more closely align with the lane centers of the opposing approach	\$\$ / ✖✖
Negative offset left-turn lanes	4	Change left-turn phasing from protected/permitted to protected only phasing at all approaches	\$ / ✖
Commercial land use on all corners introduce additional driveways near intersection	5	Narrow driveways located near intersection and consider driveway consolidation	\$\$ / ✖✖✖
Turning crash patterns	6	Install NO TURN ON RED signs (R10-11) on all approaches	\$ / ✖
	7	Convert painted medians to concrete	\$\$\$ / ✖✖✖
Pattern of nighttime crashes involving pedestrians	8	Consider "rest on red" signal operation after dark	\$\$\$ / ✖✖✖

Cost/Effort Scale

\$ / ✖	Low	\$\$\$ / ✖✖✖	High
\$\$ / ✖✖	Medium	\$\$\$\$ / ✖✖✖✖	Very High





05

SYSTEMIC ANALYSIS

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Systemic Analysis

The systemic safety approach is a proactive, risk-based methodology designed to reduce severe crashes across entire roadway networks rather than focusing solely on high-crash locations. Unlike traditional site analysis, which targets isolated 'hot spots,' systemic analysis evaluates aggregate crash data and roadway characteristics to identify roadway and intersection attributes associated with severe crash types, such as intersection turning collisions, roadway departures and pedestrian crashes.

The systemic safety approach is designed with local agencies and municipalities in mind—particularly those that lack the staff, technical capabilities, or resources to conduct complex, location-specific crash analyses. Traditional “spot location” methods often fail on low-volume and local roads because crashes are dispersed and accurate roadway information data can be sparse. The systemic approach solves this challenge by shifting from reactive, site-specific improvements to a proactive, risk-based strategy that evaluates roadway characteristics across the entire network. This enables agencies to implement proven, low-cost countermeasures broadly, without requiring extensive analytical expertise or large-scale data systems.

This approach emphasizes risk-based identification of roadway features linked to high-severity crashes, even where crash frequency is low. It follows a two-pronged strategy: first, identify crash types and roadway profiles most at risk for those crashes; second, implement low-cost, proven countermeasures broadly across similar-risk locations, often referred to as typologies.

Application of the systemic safety approach offers several benefits. It reduces fatalities and serious injuries more effectively than spot improvements, adapts to varying data availability and supports prioritization of data collection. This approach enhances public confidence through proactive safety programs, integrates into planning and maintenance policies and enables development of multi-year safety programs aligned with the Safe System Approach principle: Safety is Proactive.

The intent of this process is clear: to identify the variables that most strongly influence the frequency of fatal and serious injury crashes. Rather than focusing solely on crash history, this systemic analysis considered a variety of risk factors, such as presence of sidewalks, presence of curb/gutter, median width and number of travel lanes. By screening and prioritizing locations based on these characteristics, agencies can target improvements where they will have the greatest impact on reducing severe crashes.

Implementation involves identifying target crash types and risk factors through systemwide data analysis, screening and prioritizing locations based on these risks, selecting countermeasures that address specific identified hazards and prioritizing projects considering funding and timelines.

Examples of Systemic Countermeasures:

- **Signalized Intersections:** reflective backplates, protected left-turn phases, pedestrian countdown signals.
- **Non-Signalized Intersections:** Enhanced lighting, larger stop signs, flashing beacons, raised medians/refuge islands, transverse rumble strips.
- **Roadway Segments:** Upgraded reflectivity for signing and markings, shoulder and centerline rumble strips, guardrails, bike lanes.

This approach is not theoretical; it has been applied successfully across the country and is recognized as a tried, tested and proven method for improving roadway safety. States like Minnesota and counties such as Thurston County in Washington have demonstrated its effectiveness, reporting significant reductions in severe crashes after implementing systemic improvements. Supported by the Federal Highway Administration, the systemic approach has become a cornerstone of modern safety planning, offering local agencies a practical, cost-effective way to save lives on our roadways.

Systemic Approach Overview

The Cook County SAP incorporated a systemic analysis designed to proactively identify roadway profiles most at risk for target crashes across the entire network rather than focusing solely on High Injury Network locations. This effort was structured to help local agencies prioritize proactive safety improvements and scale them.

The project team concentrated on approximately 30 key variables that are associated with higher occurrences of severe crashes. By analyzing these 30 characteristics collectively, the team sought to understand how combinations of roadway features contribute to higher crash risk.

To achieve this, the team used a supervised learning regression decision tree machine learning (ML) algorithm to evaluate variable combinations defining different roadway profiles. This approach allowed the identification of the combinations of roadway attributes most strongly associated with fatal and serious injury crashes. The result was a robust, data-driven framework that enables Cook County DoTH and its municipalities to implement proactive, targeted, cost-effective safety countermeasures across multiple locations. ML significantly enhanced the systemic analysis by:

- **Capturing Complex Interactions:** ML detected nonlinear relationships among the 30 variables, uncovering patterns that traditional methods would miss.
- **Improving Predictive Accuracy:** ML models define crash risk under different roadway configurations, enabling precise prioritization of interventions.
- **Supporting Network-Level Decisions:** Generated a comprehensive risk map for thousands of segments and intersections, ensuring proactive, systemwide improvements.
- **Building Confidence:** Validated predictions against historical crash data, strengthening the evidence base for funding and implementation.

Strengths of this Approach

This systemic, machine-learning-driven method combined scale, precision and practicality. It allows Cook County stakeholders to move beyond reactive, location-specific fixes and instead implement a proactive, risk-based strategy that addresses dispersed severe crashes across the network. By leveraging advanced analytics, the Cook County SAP Addendum provides actionable insights that local agencies can use, even with limited resources, to make data-driven decisions that save lives. This approach aligns with national best practices, ensures cost-effective investments and sets a new standard for comprehensive roadway safety planning.

One opportunity to improve systemic analysis approaches is further development of data and better accuracy of data. Speed limits and traffic volumes are two examples of data that have meaningful impacts on crash frequency and/or severity. If data is uncollected or out-of-date, it becomes undesirable for inclusion in any advanced analysis. By focusing future efforts on improving the quality of the data, systemic analysis would greatly benefit.

Summary Tables

The ML analysis approach was applied to 16 different roadway and target crash scenarios utilizing nearly 30 geometric, operational, and location attributes resulting in the following Typology Tables. These Typology Tables define different priority of roadways using the presence or absence of the attributes found to show a statistical difference in average crash density or frequency across each scenario. These attributes help to understand where target crashes are more likely to occur. It is important to note that the presence or absence of an attribute does not necessarily mean any one attribute or combination of attributes are contributing factors to crashes. While certain roadway and operational attributes may be causal factors, the systemic analysis is intended to help prioritize locations based on relative risk, not identify what factors are impacting the crashes.

Priority levels of high and medium are generally thought have additional crash risk for that particular typology. The length of cumulative roadways, number of individual roadways, crash density (crashes per year per mile), percentage over overall network length and percentage of target crash type captured are shown on the right-most columns for roadway tables. For intersection tables, the number of intersections, crash frequency, percentage of overall intersections represented and percentage of target crash type captured are shown on the right-most columns. It is important to observe these crash densities and the different variables that make up each typology within each table. These are the roadway configurations that should be investigated further for improvements.

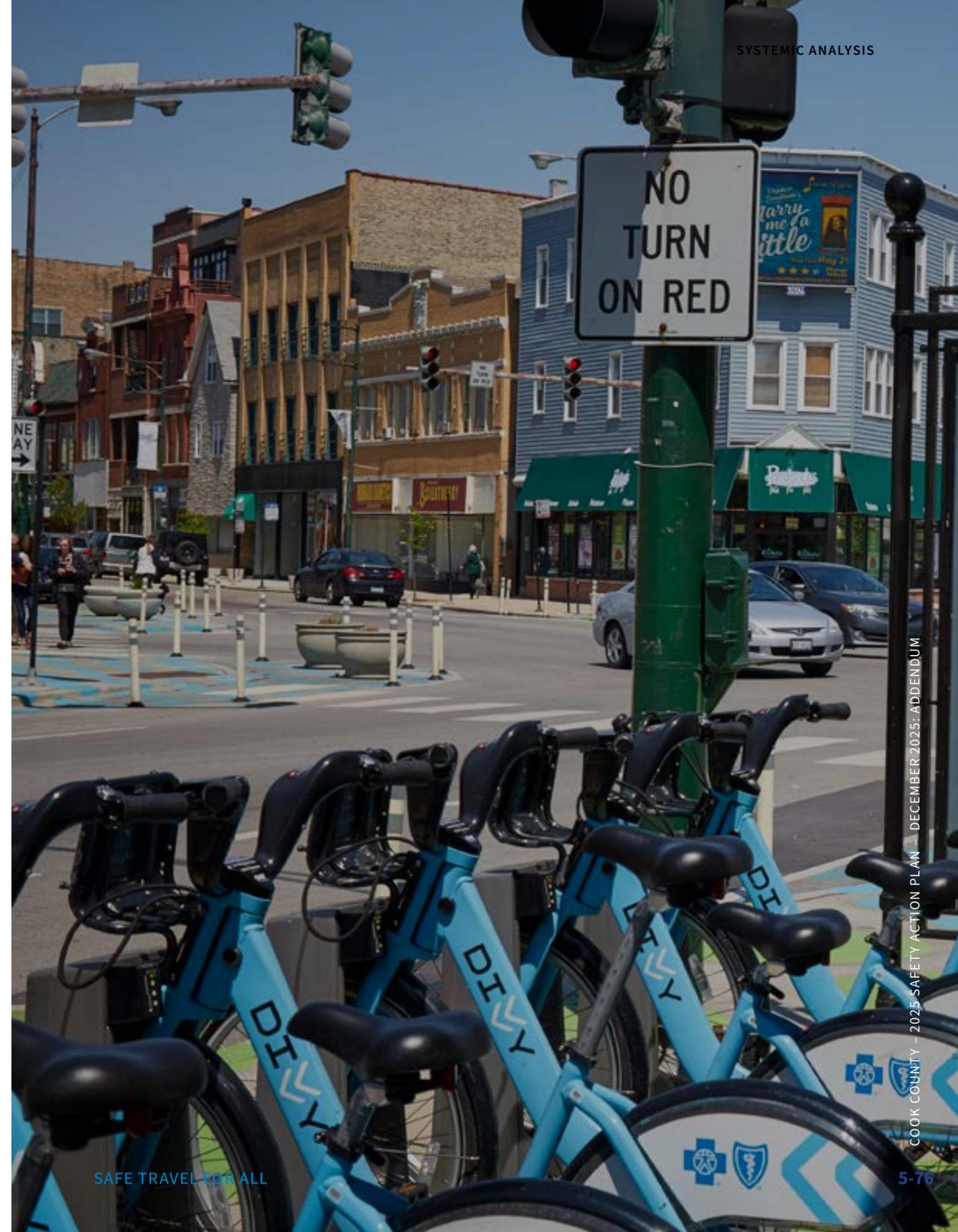


For simplicity, the Typology Tables – High and Medium Priority Levels sub-section is limited to the High and Medium priority level defined by through the systemic analysis based on relative risk of a target crash occurring within each roadway/target crash scenario analyzed. The full tables with all priority levels are shared in the Typology Tables – All Priorities Levels sub-section. Additionally, many of the different data variables used in the analysis are explained in the Typology Variable Definitions sub-section. Some attributes considered in the analysis are straightforward observations captured within available data, such as whether an intersection is signalized. Other attributes are calculated from available data and present deeper insights on how roadways or intersections can be categorized, such as Major to Minor Approach Volumes Ratio for intersections. In the case of Major to Minor Approach Volume Ratio, we can better understand how the balance or imbalance in intersection approach volumes impacts different crash types. Ratios around 1.0 would indicate a balance between the different approach volumes, while numbers greater than 1.0 show indicate higher major approach volumes. Understanding the demands of the major and minor approaches can provide insights into the different categories of locations that may warrant further investigations.

In general, the sequencing of the tables shows typology results for the City of Chicago, while the next table shows the same typology, but for the Suburbs (outside of the City of Chicago). The final two tables represent typologies for limited access roadways in all of Cook County. The title of each table also indicates if all crash severities (KABCO) were considered or if only fatal and serious injury crashes (KA) were considered.

TPOLOGY AND EMPHASIS AREA LIST:

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Typology Tables – High and Medium Priority Levels

Table 5-1. Speeding-Related KA Crashes on Full Access Roadways in the City of Chicago

Row	Priority Level	Turn Lane Present	No. of Lanes	Median Present	Traversable Median	Curb/Gutter Present	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Sidewalk Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	No	5 or Greater	Any/All	Any/All	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	19.43	187	0.318	0.5%	5.5%
2	High	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	10.13	201	0.25	0.3%	2.5%
3	Medium	Yes	3 or Greater	Any/All	Yes	Any/All	Any/All	Any/All	Yes	Non-Residential	Any/All	26.72	604	0.175	0.7%	8.5%
4	Medium	No	1 to 3	Yes	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	27.73	263	0.169	0.7%	5.5%
5	Medium	Yes	3 or Greater	Any/All	Any/All	Any/All	Yes	Any/All	Yes	Residential	Any/All	21.6	392	0.15	0.6%	4.0%
6	Medium	Yes	1 to 2	Any/All	Any/All	Any/All	Any/All	No	Yes	Any/All	Greater than 50	16.41	326	0.117	0.4%	4.0%

Notable observations for Table 5-1 include:

- Row 1: No. of Lanes is 5 or more
- Row 3: Both a turn lane and sidewalk are present in a non-residential area

Table 5-2. Speeding-Related KA Crashes on Full Access Roadways outside of the City of Chicago

Row	Priority Level	State Route	Turn Lane Present	No. of Lanes	Median Present	Traversable Median	Shoulder Width (ft.)	Metra Station	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Yes	3 or Greater	Any/All	No	Any/All	Yes	Transportation/Utilities/Communication	Greater than 25	13.52	201	0.23	0.2%	2.8%
2	High	Any/All	No	3 or Greater	No	Any/All	Any/All	Yes	Non-Transportation/Utilities/Communication	Greater than 50	11.56	102	0.206	0.1%	4.3%
3	Medium	Any/All	No	3 or Greater	Any/All	Any/All	Greater than 9.5 feet	Any/All	Transportation/Utilities/Communication	Any/All	9.8	120	0.139	0.1%	1.4%
4	Medium	Yes	Yes	1 to 2	Any/All	Any/All	Any/All	Any/All	Residential, Commercial	Any/All	9.05	137	0.128	0.1%	3.6%
5	Medium	Any/All	Any/All	3 or Greater	Yes	Any/All	Any/All	Any/All	Commercial, Open Space/Agriculture/Water, Non-Transportation/Utilities/Communication	Greater than 50	9.46	114	0.11	0.1%	2.8%
6	Medium	Any/All	Yes	3 or Greater	Any/All	Any/All	Any/All	No	Non-Residential, Transportation/Utilities/Communication	Greater than 25	35.54	569	0.1	0.4%	5.7%

Notable observations for Table 5-2 include:

- The top 3 rows all have 3 or more lanes
- The top 2 rows have a Metra Station in proximity

Table 5-3. Roadway Departure KA Crashes on Full Access Roadways in the City of Chicago

Row	Priority Level	State Route	No. of Lanes	Traversable Median	Median Width	Curb/Gutter Present	Shoulder Width (ft.)	One-Way Road	On-Street Parking Present	CTA Rail Stop, Loop Link, or Pace Pulse	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	5 or Greater	No	9 feet and Less	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	7.07	108	1.706	0.2%	3.2%
2	High	Any/All	5 or Greater	Any/All	Greater than 37 feet	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	8.99	121	1.003	0.2%	2.7%
3	Medium	Any/All	5 or Greater	Yes	9 feet and Less	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	5.81	107	0.939	0.2%	1.3%
4	Medium	Any/All	1 to 2	Any/All	Any/All	No	Greater than 1.5 feet	Any/All	Any/All	Any/All	Any/All	Any/All	17.76	100	0.737	0.5%	0.8%
5	Medium	Yes	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Institutional	Greater than 50	48.19	731	0.64	1.3%	7.8%
6	Medium	Any/All	5 or Greater	Any/All	5.5 feet and Less	Any/All	Any/All	Any/All	Any/All	Yes	Any/All	Any/All	11.19	106	0.626	0.3%	1.8%
7	Medium	Any/All	1 to 2	Any/All	Any/All	Yes	Any/All	No	No	Any/All	Non-Residential	Any/All	17.94	208	0.571	0.5%	2.9%
8	Medium	Any/All	5 or Greater	Any/All	9-37 feet	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	11.75	177	0.555	0.3%	2.8%
9	Medium	Any/All	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	No	Non-Commercial	50 or Less	38.41	549	0.517	1.0%	4.8%

Notable observations for Table 5-3 include:

- The top 3 rows all have 5 or more lanes
- Row 3: The median is traversable and 9 feet or less
- The top 3 rows do not have a CTA Rail Stop, Loop Link, or Pace Pulse in proximity

Table 5-4. Roadway Departure KA Crashes on Full Access Roadways outside of the City of Chicago

Row	Priority Level	Turn Lane Present	No. of Lanes	Median Width	Shoulder Width (ft.)	On-Street Parking Present	Metra Station	Sidewalk Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	3 or Greater	12.5 feet and Less	Any/All	No	Yes	Any/All	Any/All	Greater than 50	52.66	591	0.405	0.6%	6.2%
2	Medium	Yes	3 or Greater	Any/All	Any/All	Any/All	Yes	Any/All	Non-Residential	50 or Less	25.33	479	0.367	0.3%	2.0%
3	Medium	Yes	1 to 2	Any/All	Greater than 4.5 feet	Any/All	Any/All	Any/All	Non-Residential	Any/All	5.3	102	0.322	0.1%	0.3%
4	Medium	Any/All	5 or Greater	Greater than 11.5 feet	Any/All	Any/All	Any/All	Any/All	Residential	50 or Less	7.28	107	0.301	0.1%	0.7%
5	Medium	Any/All	3 or Greater	12.5 feet and Less	Any/All	No	No	Any/All	Any/All	Greater than 50	178.19	2000	0.266	2.1%	14.7%
6	Medium	Any/All	3 or Greater	Greater than 12.5 feet	Any/All	Any/All	Any/All	Any/All	Non-Commercial, Transportation/ Utilities/ Communication	Greater than 50	9.01	126	0.236	0.1%	0.6%
7	Medium	Any/All	3 or Greater	Any/All	Any/All	Any/All	No	No	Non-Residential	50 or Less	97.76	1268	0.231	1.2%	5.8%

Notable observations for Table 5-4 include:

- Rows 1 and 2 have 3 or more lanes
- 2 of the top 3 rows are in a non-residential area

Table 5-5. All Intersection-Related KA Crashes in the City of Chicago

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Commercial	Yes	Any/All	1.005–3.41	Yes	Any/All	Greater than 45	496	0.577	2.0%	21.3%
2	Medium	Any/All	Yes	Yes	Greater than 3.41	Yes	Any/All	Greater than 30	141	0.383	0.6%	4.0%
3	Medium	Non-Commercial	Yes	Any/All	1.005–3.41	Yes	Any/All	Greater than 45	111	0.369	0.5%	3.1%
4	Medium	Any/All	Yes	Any/All	1.005–3.41	Yes	Any/All	15–45	362	0.363	1.5%	9.8%
5	Medium	Any/All	Yes	No	Greater than 3.41	Yes	Yes	Greater than 30	185	0.291	0.8%	4.0%
6	Medium	Any/All	Yes	Any/All	1.005–3.41	Yes	Any/All	Less than 15	342	0.273	1.4%	6.9%
7	Medium	Any/All	Yes	Yes	Greater than 3.41	Yes	Any/All	30 or Less	116	0.272	0.5%	2.4%
8	Medium	Non-Residential	Yes	Any/All	1.005 or Less	Any/All	Any/All	Any/All	112	0.271	0.5%	2.3%
9	Medium	Any/All	Yes	Any/All	1.005–3.41	No	Any/All	Greater than 45	102	0.261	0.4%	2.0%
10	Medium	Any/All	Yes	Any/All	1.005–3.41	No	Any/All	45 or Less	126	0.244	0.5%	2.3%
11	Medium	Any/All	Yes	No	3.41–11.38	Yes	Any/All	30 or Less	102	0.216	0.4%	1.6%
12	Medium	Any/All	Yes	No	Greater than 3.41	Yes	No	Greater than 30	295	0.207	1.2%	4.5%

Notable observations for Table 5-5 include:

- Row 1 is designated as a 4-leg signalized intersection with a Major/Minor Road AADT Ratio of 1 to 3.4 in a Commercial land use area
- The top 18 rows are all signalized intersections, with the top seven having 4 legs

Table 5-6. All Intersection-Related KA Crashes outside of the City of Chicago

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	Transit Stop Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Any/All	Yes	Yes	Any/All	Any/All	Yes	Any/All	Greater than 60	141	0.515	0.3%	8.7%
2	Medium	Non-Residential	Yes	Yes	Any/All	Any/All	Yes	Any/All	45–60	120	0.433	0.2%	6.2%
3	Medium	Any/All	Yes	Yes	2.635 or Less	No	Any/All	Any/All	30–45	166	0.314	0.3%	6.2%
4	Medium	Residential	Yes	Yes	Any/All	Any/All	Yes	Any/All	45–60	261	0.278	0.5%	8.7%
5	Medium	Non-Residential	Yes	Yes	Any/All	No	Any/All	Any/All	30 or Less	105	0.242	0.2%	3.0%
6	Medium	Any/All	Yes	No	Any/All	Any/All	Yes	Any/All	Greater than 45	155	0.199	0.3%	3.7%
7	Medium	Any/All	Yes	Yes	Any/All	Any/All	No	Any/All	Greater than 45	173	0.177	0.3%	3.7%
8	Medium	Any/All	Yes	Yes	Greater than 2.635	No	Any/All	Any/All	30–45	159	0.176	0.3%	3.4%
9	Medium	Any/All	Yes	No	Any/All	Any/All	Yes	No	45 or Less	148	0.146	0.3%	2.6%
10	Medium	Any/All	No	Any/All	Greater than 21.81	No	Any/All	Any/All	Greater than 60	102	0.141	0.2%	1.7%
11	Medium	Residential	Yes	Yes	Any/All	No	Any/All	Any/All	30 or Less	286	0.134	0.6%	4.6%
12	Medium	Any/All	Yes	Yes	Any/All	Yes	Any/All	Any/All	30–45	124	0.123	0.2%	1.8%

Notable observations for Table 5-6 include:

- The top 14 of 15 rows are all designated as signalized intersections
- The top five rows have at least one route that is state jurisdiction

Table 5-7. Intersection-Related Pedestrian KABCO Crashes in the City of Chicago

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Commercial	Yes	Any/All	1.885 or Less	Any/All	Yes	Any/All	Any/All	Greater than 45	331	0.75	1.4%	15.4%
2	Medium	Commercial	Yes	Any/All	1.885–3.455	Any/All	Yes	Any/All	Any/All	Greater than 45	205	0.569	0.8%	7.2%
3	Medium	Commercial	Yes	No	3.455 or Less	Any/All	Yes	Any/All	Any/All	45 or Less	333	0.561	1.4%	11.6%
4	Medium	Commercial	Yes	Yes	3.455 or Less	Any/All	Yes	Any/All	Any/All	45 or Less	333	0.419	1.4%	8.6%
5	Medium	Commercial	Yes	Any/All	Greater than 3.455	Any/All	Yes	Any/All	Any/All	Greater than 60	181	0.399	0.7%	4.5%
6	Medium	Commercial	Yes	Any/All	3.455–11.14	Any/All	Yes	Any/All	Any/All	60 or Less	305	0.317	1.2%	6.0%
7	Medium	Any/All	Yes	Any/All	Any/All	No	No	Yes	Any/All	Any/All	154	0.313	0.6%	3.0%
8	Medium	Commercial	Yes	Any/All	Greater than 11.14	Any/All	Yes	Any/All	Any/All	60 or Less	298	0.256	1.2%	4.7%
9	Medium	Non-Commercial	Yes	Any/All	Greater than 10.49	Any/All	Yes	Any/All	Any/All	Any/All	103	0.252	0.4%	1.6%
10	Medium	Non-Commercial, Institutional	Yes	Any/All	3.455 or Less	Any/All	Yes	Any/All	Any/All	Any/All	112	0.234	0.5%	1.6%
11	Medium	Any/All	Yes	Any/All	Any/All	Yes	No	Yes	Yes	Any/All	146	0.229	0.6%	2.1%
12	Medium	Non-Transportation/Utilities/Communication	Yes	Any/All	Greater than 3.79	Any/All	No	No	Any/All	Any/All	130	0.188	0.5%	1.5%

Notable observations for Table 5-7 include:

- The top 12 rows are all designated as signalized intersections, while nine of those have 4 legs
- The top 6 rows are flagged as commercial land use

Table 5-8. Intersection-Related Pedestrian KABCO Crashes outside of the City of Chicago

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Any/All	Yes	Yes	Any/All	Any/All	Any/All	Yes	Yes	Any/All	149	0.255	0.3%	8.0%
2	Medium	Commercial	Yes	Yes	Any/All	Any/All	Yes	Yes	No	Any/All	693	0.167	1.4%	24.5%
3	Medium	Any/All	Yes	No	Any/All	Any/All	Any/All	Yes	Yes	Any/All	137	0.15	0.3%	4.4%
4	Medium	Any/All	Yes	No	4.725 or Less	Any/All	Yes	Yes	No	Any/All	124	0.098	0.2%	2.6%
5	Medium	Commercial	Yes	Yes	Any/All	Any/All	No	Yes	No	Any/All	212	0.093	0.4%	4.2%
6	Medium	Any/All	No	Any/All	Greater than 29.41	No	Any/All	Yes	Any/All	Greater than 45	247	0.063	0.5%	3.3%
7	Medium	Non-Commercial	Yes	Yes	Any/All	Any/All	Any/All	Yes	No	Any/All	153	0.061	0.3%	2.0%
8	Medium	Residential, Commercial	Yes	Any/All	Any/All	Any/All	Yes	No	Any/All	Any/All	193	0.061	0.4%	2.5%
9	Medium	Any/All	Yes	No	Greater than 4.725	Any/All	Yes	Yes	No	Any/All	100	0.05	0.2%	1.1%

Notable observations for Table 5-8 include:

- The top seven rows all include the presence of a Pace or CTA Bus Stop
- Eight out of the nine top rows are designated as signalized intersections
- Rows 1 and 2 both intersect with a state route

Table 5-9. Intersection-Related Bicyclists KABCO Crashes in the City of Chicago

Row	Priority Level	Land Use	Signalized	All Stop	Major/Minor Road AADT Ratio	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Any/All	Yes	Any/All	3.305 or Less	Any/All	Any/All	No	Yes	Less than 15	130	0.445	0.5%	7.4%
2	Medium	Any/All	Yes	Any/All	3.305 or Less	Any/All	Any/All	Yes	Yes	Less than 15	179	0.308	0.7%	7.0%
3	Medium	Commercial	Yes	Any/All	3.25 or Less	Yes	Any/All	Any/All	Any/All	15 to 45	314	0.266	1.3%	10.6%
4	Medium	Any/All	Yes	Any/All	Greater than 12.84	Any/All	Any/All	Any/All	Yes	Less than 15	101	0.263	0.4%	3.4%
5	Medium	Any/All	Yes	Any/All	3.305–12.84	Any/All	Any/All	Any/All	Yes	Less than 15	117	0.195	0.5%	2.9%
6	Medium	Commercial	Yes	Any/All	3.25 or Less	Yes	Any/All	Any/All	Any/All	Greater than 45	524	0.181	2.1%	12.1%
7	Medium	Any/All	Yes	Any/All	3.235 or Less	Any/All	Any/All	Any/All	No	Less than 15	184	0.162	0.8%	3.8%
8	Medium	Any/All	Yes	Any/All	Greater than 13.93	Yes	Any/All	Any/All	Any/All	15 to 60	185	0.13	0.8%	3.1%
9	Medium	Any/All	No	Yes	Greater than 8.725	Any/All	Any/All	Any/All	Any/All	Less than 15	100	0.12	0.4%	1.5%
10	Medium	Any/All	Yes	Any/All	Any/All	No	Yes	Any/All	Yes	Greater than 15	138	0.119	0.6%	2.1%
11	Medium	Any/All	Yes	Any/All	3.25–5.665	Yes	Any/All	Any/All	Any/All	Greater than 15	228	0.111	0.9%	3.2%
12	Medium	Non-Commercial	Yes	Any/All	3.25 or Less	Yes	Any/All	Any/All	Any/All	Greater than 15	193	0.111	0.8%	2.7%
13	Medium	Any/All	Yes	Any/All	Greater than 13.93	Yes	Any/All	Any/All	Any/All	Greater than 60	113	0.11	0.5%	1.6%
14	Medium	Any/All	Yes	Any/All	Greater than 3.235	Any/All	Any/All	Any/All	No	Less than 15	152	0.107	0.6%	2.1%

Notable observations for Table 5-9 include:

- The top three rows all have a Major to Minor Road AADT ratio of 3.305 or less
- The top eight rows are all designated as signalized intersections

Table 5-10. Intersection-Related Bicyclists KABCO Crashes outside of the City of Chicago

Row	Priority Level	Land Use	Signalized	All Stop	State Jurisdiction	Major/ Minor Road AADT Ratio	4 Legs	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Open Space/ Agriculture/ Water	Yes	Any/All	Any/All	Any/All	Yes	Yes	No	Yes	Any/All	105	0.16	0.2%	4.4%
2	Medium	Any/All	Yes	Any/All	Any/All	Any/All	Yes	Any/All	Yes	Any/All	Any/All	194	0.147	0.4%	7.5%
3	Medium	Non-Open Space/ Agriculture/ Water	Yes	Any/All	Any/All	Any/All	Yes	Yes	No	Yes	Any/All	191	0.091	0.4%	4.5%
4	Medium	Any/All	Yes	Any/All	Any/All	Any/All	Yes	No	No	Yes	Greater than 30	111	0.088	0.2%	2.6%
5	Medium	Commercial	Yes	Any/All	Any/All	Any/All	Yes	Yes	No	No	Any/All	610	0.083	1.2%	13.2%
6	Medium	Any/All	Yes	Any/All	Any/All	Any/All	No	Any/All	Yes	Any/All	Any/All	103	0.064	0.2%	1.7%
7	Medium	Any/All	No	Yes	Any/All	Any/All	Yes	Any/All	Any/All	Yes	Any/All	188	0.062	0.4%	3.0%
8	Medium	Any/All	Yes	Any/All	Yes	Any/All	No	Yes	No	Any/All	45 or Less	144	0.061	0.3%	2.3%
9	Medium	Any/All	Yes	Any/All	Any/All	Any/All	Yes	No	No	Yes	30 or Less	150	0.057	0.3%	2.2%
10	Medium	Any/All	Yes	Any/All	Any/All	2.61 or Less	Yes	No	No	No	Any/All	134	0.051	0.3%	1.8%
11	Medium	Any/All	No	Yes	Any/All	Any/All	Yes	Any/All	Any/All	No	30 or Less	149	0.048	0.3%	1.9%

Notable observations for Table 5-10 include:

- Row 1 lists the presence of a bikeway and bus stop at a signalized 4-leg intersection in an Open Space/Agriculture/Water land use area
- The top six out of eight rows have the presence of transit services in the form of either a bus stop or CTA Rail Stop, Loop Link, or Pace Pulse
- The top five rows are all designated as a 4-leg, signalized intersection

Table 5-11. Pedestrian KABCO Crashes on Full Access Roadways in the City of Chicago

Row	Priority Level	Functional Class	State Route	Turn Lane Present	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Any/All	Yes	Any/All	Any/All	Non-Residential, Commercial, Non-Industrial	Greater than 50	24.26	573	6.882	0.6%	5.8%
2	High	Any/All	No	Yes	Yes	Any/All	Commercial, Non-Industrial	50 or Less	16.51	331	6.121	0.4%	3.2%
3	Medium	Any/All	Any/All	Yes	Any/All	Any/All	Residential, Commercial, Non-Industrial	Greater than 50	25.4	447	4.747	0.7%	4.1%
4	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Yes	Any/All	Non-Residential, Commercial	Any/All	46.28	589	4.125	1.2%	4.5%
5	Medium	Any/All	Any/All	Yes	No	Any/All	Non-Residential, Commercial, Non-Industrial	50 or Less	16.19	412	3.788	0.4%	2.3%
6	Medium	Any/All	Yes	Yes	Yes	Any/All	Commercial, Non-Industrial	50 or Less	17.35	368	3.655	0.5%	2.3%
7	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Yes	Yes	Residential	Less than 25	45.29	311	3.284	1.2%	4.9%
8	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	No	Any/All	Non-Residential, Commercial	Greater than 50	30.07	371	3.218	0.8%	2.7%
9	Medium	Any/All	Any/All	Yes	Yes	Any/All	Non-Commercial	Any/All	13.49	333	3.127	0.4%	1.4%
10	Medium	Any/All	Any/All	Yes	No	Any/All	Residential, Commercial, Non-Industrial	50 or Less	19.5	377	2.636	0.5%	2.0%

Notable observations for Table 5-11 include:

- 7 of the top 10 rows have a turn lane
- The top 6 rows all include a commercial land use

Table 5-12. Pedestrian KABCO Crashes on Full Access Roadways outside of the City of Chicago

Row	Priority Level	Functional Class	State Route	Turn Lane Present	No. of Lanes	On-Street Parking Present	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Sidewalk Present	Land Use	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Any/All	Yes	1 to 3	Yes	Yes	Any/All	Any/All	Any/All	Non-Residential	3.62	102	4.445	0.04%	1.4%
2	Medium	Any/All	Any/All	Yes	4 or Greater	Yes	Yes	Any/All	Any/All	Any/All	Non-Residential	8.28	164	2.279	0.1%	2.0%
3	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	No	Yes	Yes	Yes	Any/All	Any/All	14.74	107	2.069	0.2%	1.7%
4	Medium	Any/All	Any/All	Yes	1 to 3	Yes	Yes	Any/All	Any/All	Any/All	Residential	9.48	188	1.754	0.1%	2.2%
5	Medium	Any/All	Yes	Yes	Any/All	No	Yes	Any/All	Any/All	Any/All	Commercial, Non-Industrial	152.32	2403	1.377	1.8%	20.7%
6	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Yes	Yes	Yes	Yes	Any/All	Any/All	20.04	133	1.215	0.2%	2.7%
7	Medium	Any/All	Any/All	Yes	4 or Greater	Yes	Yes	Any/All	Any/All	Any/All	Residential	8.58	138	1.133	0.1%	1.2%
8	Medium	Any/All	Yes	Yes	Any/All	No	Yes	Any/All	Yes	Any/All	Non-Commercial	9.34	196	1.071	0.1%	0.8%
9	Medium	Any/All	Any/All	Yes	Any/All	Any/All	No	Any/All	Yes	No	Any/All	8.89	105	1.063	0.1%	0.3%

Notable observations for Table 5-12 include:

- 7 of the top 9 rows have a turn lane
- The top 8 rows have a Pace or CTA bus stop
- The top 2 rows are not in a residential area

Table 5-13. Bicyclist KABCO Crashes on Full Access Roadways in the City of Chicago

Row	Priority Level	Functional Class	State Route	Turn Lane Present	Median Present	Median Width	CTA Rail Stop, Loop Link, or Pace Pulse	Sidewalk Present	Bikeway Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Other Principal Arterial, Minor Arterial	Any/All	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Non-Institutional	Less than 25	19.29	314	3.743	0.5%	4.3%
2	Medium	Major Collector	No	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Any/All	Less than 25	53.27	339	2.522	1.4%	10.0%
3	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Non-Residential, Commercial	25 or Greater	14.16	303	2.263	0.4%	2.2%
4	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	Yes	Yes	No	Any/All	Less than 25	15.44	330	1.986	0.4%	2.2%
5	Medium	Other Principal Arterial, Minor Arterial	Any/All	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Institutional	Less than 25	12.12	121	1.894	0.3%	1.8%
6	Medium	Major Collector	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Any/All	Less than 25	18.97	207	1.619	0.5%	2.0%
7	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	Any/All	Any/All	Yes	Non-Residential, Commercial	25 or Greater	19.55	222	1.449	0.5%	1.8%
8	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Residential, Commercial	25 or Greater	18.44	284	1.391	0.5%	1.6%
9	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	No	Not Applicable	Any/All	Any/All	No	Commercial	25 or Greater	34.21	758	1.313	0.9%	3.5%
10	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	Any/All	Yes	No	Commercial	Less than 25	66.95	597	1.198	1.8%	5.4%

Table 5-13. Bicyclist KABCO Crashes on Full Access Roadways in the City of Chicago (continued)

Row	Priority Level	Functional Class	State Route	Turn Lane Present	Median Present	Median Width	CTA Rail Stop, Loop Link, or Pace Pulse	Sidewalk Present	Bikeway Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
11	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	No	Yes	No	Any/All	Less than 25	12.77	268	1.186	0.3%	1.2%

Notable observations for Table 5-13 include:

- 7 of the top 8 rows have a bikeway present
- 5 of the top 6 rows have a sidewalk present
- Row 2: Specifically classified as a major collector

Table 5-14. Bicyclist KABCO Crashes on Full Access Roadways outside of the City of Chicago

Row	Priority Level	Functional Class	Turn Lane Present	Median Width	On-Street Parking Present	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Sidewalk Present	Bikeway Present	Land Use	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Yes	2.5 feet and Less	Any/All	Yes	Any/All	Yes	Yes	Non-Residential	8.48	188	2.226	0.1%	2.0%
2	Medium	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Non-Residential, Non-Transportation/Utilities/Communication	10.38	152	1.403	0.1%	1.2%
3	Medium	Any/All	Yes	Any/All	Any/All	Yes	Yes	Yes	No	Non-Residential	11.92	235	1.276	0.1%	1.9%
4	Medium	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	No	Any/All	Yes	Any/All	Any/All	Institutional	23.22	134	1.062	0.3%	2.0%

Notable observations for Table 5-14 include:

- Row 1: Both a sidewalk and bikeway are present
- The top 3 rows include a non-residential land use type

Table 5-15. Speeding-Related KA Crashes on Access Controlled Roadways in Cook County

Row	Priority Level	Median Width	Shoulder Width (ft.)	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Greater than 39.5 feet	9-11.5 feet	Residential	Any/All	24.91	100	0.215	5.0%	4.69%
2	Medium	21-39.5 feet	9-11.5 feet	Residential	Any/All	18.21	111	0.11	3.6%	18.75%
3	Medium	Greater than 21 feet	9-11.5 feet	Non-Residential	Greater than 50	12.29	106	0.086	2.5%	7.81%
4	Medium	Greater than 21 feet	Greater than 11.5 feet	Any/All	Greater than 50	38.9	242	0.071	7.8%	25%
5	Medium	Greater than 21 feet	9-11.5 feet	Non-Residential	50 or Less	15.82	133	0.063	3.2%	7.81%

Notable observations for Table 5-15 include:

- The top 3 rows have a shoulder width of 9 to 11.5 feet; the top 2 rows are also Residential land
- Rows 3 through 6 have a median width greater than 21 feet

Table 5-16. Roadway Departure KA Crashes on Access Controlled Roadways in Cook County

Row	Priority Level	Functional Class	Private Route	Median Width	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Interstate only	No	19.5-35 feet	Greater than 50	9.95	83	2.313	2.0%	13.07%
2	Medium	Interstate only	No	Greater than 63 feet	Greater than 50	15.37	102	1.401	3.1%	12.56%
3	Medium	Interstate, Expressway, or Freeway	No	17-18.5 feet	50 or Less	9.47	91	1.105	1.9%	5.43%

Notable observations for Table 5-16 include:

- Rows 1 and 2 are both interstates with MOBEC Index greater than 50, but Row 1 has a median width of 19.5 to 35 feet whereas Row 2 has a median greater than 63 feet



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APPENDICES

Appendix A: Typology Variable Definitions

The following definitions are shared to help provide guidance on how the typology variables are constructed.

- Using the **"KEY_RT_APP"** column in IRIS roadway dataset, ramp facilities were defined using code 4/ramp.
- Using the **"LN_SPC"** column in the IRIS roadway dataset, the presence of a turn lane was defined using codes:
 - 1/right and left turn lanes
 - 2/right turn lane
 - 3 left turn lane
 - 4/bi-directional turn lane
- The **"MED_WTH"** column in the IRIS roadway dataset defined the median width.
- Using the **"MED_TYP"** in the IRIS roadway dataset, a traversable median was considered present if any of the following codes were observed:
 - 1/unprotected – sod, treated earth or gravel
 - 4/rumble strip or chatter bar
 - 5/painted (excludes bi-directional turn lanes)
 - 7/M-2.12 traversable median – asphalt or concrete having a low-profile curb
- Using the **"MED_TYP"** in the IRIS roadway dataset, a non-traversable median was defined as any of the following codes:
 - 2/curbed – any raised median except M-2.12
 - 3/positive barrier – barriers which positively preclude vehicle crossover into opposing lanes
 - 6/high tension cable median barrier (HTC)
- The MOBEC Index is discussed further in Section 2 and can be viewed in the HIN webmap.
- If an active rail crossing was located within the predefined intersection buffer distance (250 ft. for signalized intersections and 150 ft. for all others), then an active rail crossing was considered present. This applies to both at-grade and grade-separated crossings.
- The **"FC"** column in the IRIS roadway dataset defined the functional classification (Illinois 5-year).
- Using the **"PRK_LT"** and **"PRK_RT"** columns in IRIS roadway dataset, parking facilities were considered present if any of the following codes were observed:
 - 2/parallel parking
 - 3/diagonal parking
 - 4/other
- A transit stop was considered present if any of the following were true:
 - Pace/CTA bus stop was located within 0.25 miles
 - CTA rail stops, Pace Pulse Milwaukee Line, or CTA Loop Link stop was located within 0.5 miles
 - Metra rail station was located within 0.75 miles
- Number of lanes is defined based on the prevailing number of through-traffic lanes for both directions during peak hour operation.
- One-way roads were defined using the **"OP_1_2_WAY"** column in the IRIS roadway dataset if the input was equal to code 1/one-way.
- A curb and gutter were considered present if the **"O_SHD1_TYP"** in the IRIS roadway dataset was equal to any of the following codes:
 - 8/"V" gutter
 - 9/curb and gutter
- A roadway with curb and gutter shoulder was considered to have a shoulder of zero width.
- For many spatial relationships involving roadways, a roadway 'buffer' was required to assign adjacent variables. The roadway buffers were calculated using the approximate width of the roadway, plus a multiplier, to account for the rest of the road right-of-way. This allowed the analysis to consider a variety of roadway cross-sections and prevented too many unique approaches to assign variables.
 - One example of this would be the comparison of an expressway to a local road and their relation to the surrounding land use types. The local road would generally have land use types (likely residential) within 40-50 feet of the roadway centerline. Yet, an expressway might have land use types (possibly commercial/industrial) much further, roughly 80-100 feet, from the centerline. For this reason, a 'buffer' was applied to roadways to assist in the spatial assignment process.
 - The width of the roadway was calculated adding the following fields from the IRIS roadway dataset: SHD1_WTH (Shoulder 1 width), SHD2_WTH (Shoulder 2 width), LN_SPC_WTH (Lanes special width), MED_WTH (Median width), O_SHD1_WTH (Outside shoulder 1 width), O_SHD2_WTH (Outside shoulder 2 width), SURF_WTH (Surface width). A multiplier was then applied to the roadway width to acquire adjacent features.

- For many spatial relationships involving intersections, an intersection ‘buffer’ was required to assign adjacent variables. Signalized intersections utilized a 250-foot buffer, while a non-signalized intersections utilized a 150-foot buffer. Since intersections are represented by a single point in geographic information systems (GIS), the buffer was applied to interact with surrounding land uses, presence of bike paths, proximity to transit stops, etc.
 - If the buffer was not applied, it is unlikely that GIS linework for variables like bike paths or transit stops would intersect with the intersection point.

PRESENCE OF SIDEWALKS

- Sidewalks were considered present if there was a sidewalk parallel to the roadway for any portion of the roadway. Cross-street sidewalks on intersecting road segments were not considered.
- For intersections, any sidewalk segment that fell within the predefined intersection buffer distance was included as presence if sidewalks.
- Sidewalks were not considered present for any Interstates, expressways and freeways.
- On-street and off-street bikeways (bikeways present) were defined using the following criteria:
 - For on-street bikeways facilities, presence within 25 feet of the road segment.
 - For off-street bikeways, presence within 125 feet of the road segment
 - For off-street bikeways, the assignment of the bikeway being present included trails, sidepaths and greenways.
 - For the assignment of on-street bikeways, dedicated bike lanes and bike signage routes are included, along with dedicated routes by the local jurisdiction(s) that lack proper signage and lane markings.
- Crash density for segments is given as total crashes per mile of segment per year. Crash density for intersections is given as total crashes per intersection per year.

LAND USE

- All land use types were considered that were adjacent to the roadway. This includes land use types on both sides of the roadway and all quadrants of the intersection.
 - In some cases, land use types were not adjacent to the roadway. In these instances, a buffer was used to assign the nearest adjacent land use type(s).
 - A land use type listed as "non-commercial" implies the location does not have any commercial assigned as a land use. The same concept applies to other land use types that start with “non”.

TYPOLGY AND EMPHASIS AREA LIST:

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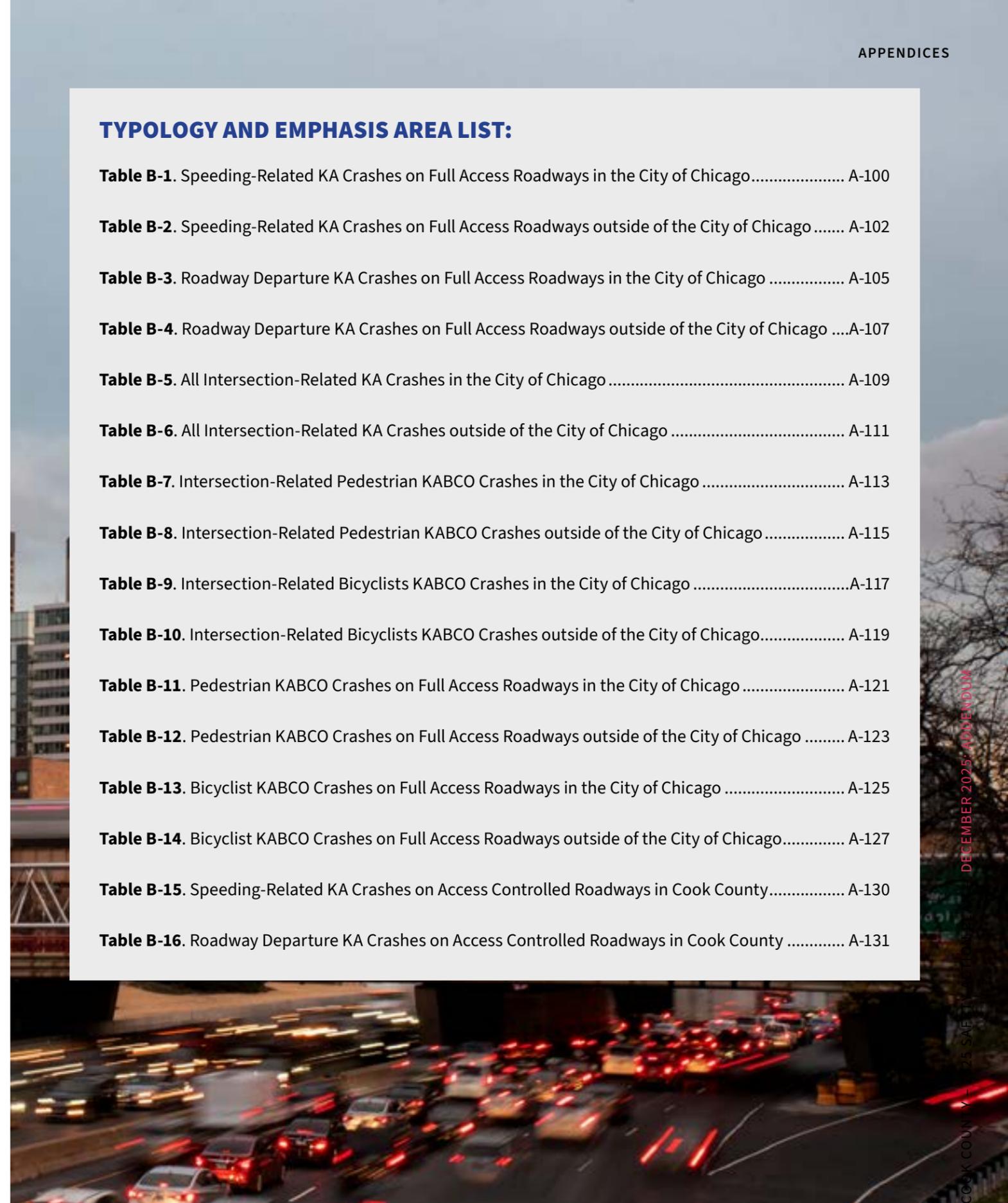
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Appendix B: Typology Tables – All Priorities Levels

Table B-1. Speeding-Related KA Crashes on Full Access Roadways in the City of Chicago

Row	Priority Level	Turn Lane Present	No. of Lanes	Median Present	Traversable Median	Curb/Gutter Present	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Sidewalk Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	No	5 or Greater	Any/All	Any/All	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	19.43	187	0.318	0.5%	5.5%
2	High	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	10.13	201	0.25	0.3%	2.5%
3	Medium	Yes	3 or Greater	Any/All	Yes	Any/All	Any/All	Any/All	Yes	Non-Residential	Any/All	26.72	604	0.175	0.7%	8.5%
4	Medium	No	1 to 3	Yes	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	27.73	263	0.169	0.7%	5.5%
5	Medium	Yes	3 or Greater	Any/All	Any/All	Any/All	Yes	Any/All	Yes	Residential	Any/All	21.6	392	0.15	0.6%	4.0%
6	Medium	Yes	1 to 2	Any/All	Any/All	Any/All	Any/All	No	Yes	Any/All	Greater than 50	16.41	326	0.117	0.4%	4.0%
7	Low	Yes	3 or Greater	Any/All	No	Any/All	Any/All	Any/All	Yes	Non-Residential	Any/All	30.76	714	0.085	0.8%	4.5%
8	Low	No	5 or Greater	Any/All	Any/All	Any/All	No	Any/All	No	Any/All	Any/All	14.16	172	0.053	0.4%	3.0%
9	Low	Yes	1 to 2	Any/All	Any/All	Any/All	Yes	Any/All	Yes	Any/All	50 or Less	15.61	344	0.031	0.4%	1.0%
10	Low	No	1 to 3	No	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	557.7	3171	0.03	14.6%	26.5%
11	Low	Yes	3 or Greater	Any/All	Any/All	Any/All	No	Any/All	Yes	Residential	Any/All	34.46	655	0.026	0.9%	2.0%
12	Low	No	1 to 4	Any/All	Any/All	No	Any/All	Any/All	Any/All	Non-Residential	Greater than 50	88.76	559	0.025	2.3%	3.0%
13	Low	No	4	Any/All	No	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	160.21	1246	0.023	4.2%	8.0%
14	Low	No	4	Any/All	Yes	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	77.01	1064	0.01	2.0%	4.0%
15	Low	No	1 to 4	Any/All	Any/All	No	Any/All	Any/All	Any/All	Non-Residential	50 or Less	120.93	860	0.006	3.2%	2.0%

Table B-1. Speeding-Related KA Crashes on Full Access Roadways in the City of Chicago (continued)

Row	Priority Level	Turn Lane Present	No. of Lanes	Median Present	Traversable Median	Curb/Gutter Present	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Sidewalk Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
16	Low	No	1 to 4	Any/All	Any/All	No	Any/All	Any/All	Any/All	Residential	Greater than 50	1232.65	3945	0.004	32.3%	12.0%
17	Low	No	1 to 4	Any/All	Any/All	No	Any/All	Any/All	Any/All	Residential	50 or Less	1328.59	5803	0.001	34.8%	4.0%
18	Very Low	No	5 or Greater	Any/All	Any/All	Any/All	No	Any/All	Yes	Any/All	Any/All	7.39	113	0	0.2%	0.0%
19	Very Low	Yes	1 to 2	Any/All	Any/All	Any/All	No	Any/All	Yes	Any/All	50 or Less	17.64	391	0	0.5%	0.0%
20	Very Low	Yes	1 to 2	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Any/All	Greater than 50	7.02	117	0	0.2%	0.0%

Table B-2. Speeding-Related KA Crashes on Full Access Roadways outside of the City of Chicago

Row	Priority Level	State Route	Turn Lane Present	No. of Lanes	Median Present	Traversable Median	Shoulder Width (ft.)	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	No Transit Stop Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Yes	3 or Greater	Any/All	No	Any/All	Any/All	Any/All	Yes	Any/All	Transportation/ Utilities/ Communication	Greater than 25	13.52	201	0.23	0.2%	2.8%
2	High	Any/All	No	3 or Greater	No	Any/All	Any/All	Any/All	Any/All	Yes	Any/All	Non-Transportation/ Utilities/ Communication	Greater than 50	11.56	102	0.206	0.1%	4.3%
3	Medium	Any/All	No	3 or Greater	Any/All	Any/All	Greater than 9.5 feet	Any/All	Any/All	Any/All	Any/All	Transportation/ Utilities/ Communication	Any/All	9.8	120	0.139	0.1%	1.4%
4	Medium	Yes	Yes	1 to 2	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Residential, Commercial	Any/All	9.05	137	0.128	0.1%	3.6%
5	Medium	Any/All	Any/All	3 or Greater	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Commercial, Open Space/ Agriculture/ Water, Non-Transportation/ Utilities/ Communication	Greater than 50	9.46	114	0.11	0.1%	2.8%
6	Medium	Any/All	Yes	3 or Greater	Any/All	Any/All	Any/All	Any/All	Any/All	No	Any/All	Non-Residential, Transportation/ Utilities/ Communication	Greater than 25	35.54	569	0.1	0.4%	5.7%
7	Low	No	No	1 to 2	Any/All	Any/All	Any/All	No	Yes	Any/All	Any/All	Any/All	Any/All	18.87	135	0.074	0.2%	0.7%
8	Low	Any/All	Yes	3 or Greater	Any/All	Yes	Any/All	Any/All	Any/All	Yes	Any/All	Transportation/ Utilities/ Communication	Greater than 25	9.4	142	0.067	0.1%	1.4%
9	Low	Any/All	Yes	3 or Greater	No	Any/All	Any/All	Any/All	Any/All	Yes	Any/All	Non-Transportation/ Utilities/ Communication	Greater than 50	7.18	126	0.053	0.1%	0.7%
10	Low	Yes	Any/All	3 or Greater	No	Any/All	Any/All	Any/All	Any/All	No	Any/All	Non-Transportation/ Utilities/ Communication	Greater than 50	40.16	453	0.05	0.5%	6.4%

Table B-2. Speeding-Related KA Crashes on Full Access Roadways outside of the City of Chicago (continued)

Row	Priority Level	State Route	Turn Lane Present	No. of Lanes	Median Present	Traversable Median	Shoulder Width (ft.)	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	No Transit Stop Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
11	Low	Any/All	Any/All	3 or Greater	Yes	No	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Open Space/ Agriculture/ Water, Non-Transportation/ Utilities/ Communication	Greater than 50	8.43	163	0.031	0.1%	1.4%
12	Low	Yes	No	1 to 2	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Yes	Residential	Any/All	45.31	246	0.027	0.5%	2.1%
13	Low	Yes	Yes	1 to 2	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Residential, Non-Commercial	Any/All	9.48	177	0.023	0.1%	0.7%
14	Low	Any/All	No	3 or Greater	Any/All	Any/All	9.5 feet and Less	Any/All	Any/All	Any/All	Any/All	Transportation/ Utilities/ Communication	Any/All	224.88	1621	0.012	2.7%	8.5%
15	Low	Any/All	Any/All	3 or Greater	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Transportation/ Utilities/ Communication	50 or Less	512.76	6624	0.01	6.1%	16.3%
16	Very Low	Yes	No	1 to 2	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	No	Residential	Any/All	70	456	0.008	0.8%	3.6%
17	Very Low	No	Yes	1 to 2	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	95.13	1289	0.007	1.1%	2.1%
18	Very Low	Any/All	Yes	3 or Greater	Any/All	Any/All	Any/All	Any/All	Any/All	No	Any/All	Residential, Transportation/ Utilities/ Communication	Greater than 25	32.69	343	0.006	0.4%	0.7%
19	Very Low	Any/All	Any/All	3 or Greater	Yes	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Open Space/ Agriculture/ Water, Non-Transportation/ Utilities/ Communication	Greater than 50	50.36	841	0.003	0.6%	1.4%
20	Very Low	Yes	Any/All	1 to 2	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Residential	Any/All	68.71	702	0.003	0.8%	1.4%

Table B-2. Speeding-Related KA Crashes on Full Access Roadways outside of the City of Chicago (continued)

Row	Priority Level	State Route	Turn Lane Present	No. of Lanes	Median Present	Traversable Median	Shoulder Width (ft.)	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	No Transit Stop Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
21	Very Low	Yes	Any/All	1 to 2	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	111.95	914	0.001	1.3%	0.7%
22	Very Low	No	No	1 to 2	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	Any/All	Any/All	6553.78	33734	0.001	77.8%	29.8%
23	Very Low	No	No	1 to 2	Any/All	Any/All	Any/All	Yes	Yes	Any/All	Any/All	Any/All	Any/All	424.57	1818	0.001	5.0%	1.4%
24	Very Low	Any/All	Yes	3 or Greater	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Transportation/ Utilities/ Communication	25 or Greater	25.96	367	0	0.3%	0.0%
25	Very Low	No	Any/All	3 or Greater	No	Any/All	Any/All	Any/All	Any/All	No	Any/All	Non-Transportation/ Utilities/ Communication	Greater than 50	20.07	183	0	0.2%	0.0%
26	Very Low	Any/All	Yes	3 or Greater	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Commercial, Transportation/ Utilities/ Communication	Any/All	8.34	137	0	0.1%	0.0%

Table B-3. Roadway Departure KA Crashes on Full Access Roadways in the City of Chicago

Row	Priority Level	State Route	No. of Lanes	Traversable Median	Median Width	Curb/Gutter Present	Shoulder Width (ft.)	One-Way Road	On-Street Parking Present	CTA Rail Stop, Loop Link, or Pace Pulse	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	5 or Greater	No	9 feet and Less	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	7.07	108	1.706	0.2%	3.2%
2	High	Any/All	5 or Greater	Any/All	Greater than 37 feet	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	8.99	121	1.003	0.2%	2.7%
3	Medium	Any/All	5 or Greater	Yes	9 feet and Less	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	5.81	107	0.939	0.2%	1.3%
4	Medium	Any/All	1 to 2	Any/All	Any/All	No	Greater than 1.5 feet	Any/All	Any/All	Any/All	Any/All	Any/All	17.76	100	0.737	0.5%	0.8%
5	Medium	Yes	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Institutional	Greater than 50	48.19	731	0.64	1.3%	7.8%
6	Medium	Any/All	5 or Greater	Any/All	5.5 feet and Less	Any/All	Any/All	Any/All	Any/All	Yes	Any/All	Any/All	11.19	106	0.626	0.3%	1.8%
7	Medium	Any/All	1 to 2	Any/All	Any/All	Yes	Any/All	No	No	Any/All	Non-Residential	Any/All	17.94	208	0.571	0.5%	2.9%
8	Medium	Any/All	5 or Greater	Any/All	9-37 feet	Any/All	Any/All	Any/All	Any/All	No	Any/All	Any/All	11.75	177	0.555	0.3%	2.8%
9	Medium	Any/All	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	No	Non-Commercial	50 or Less	38.41	549	0.517	1.0%	4.8%
10	Low	No	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Institutional	Greater than 50	41.14	606	0.404	1.1%	4.4%
11	Low	Any/All	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Residential, Institutional	Greater than 50	22.07	340	0.404	0.6%	3.2%
12	Low	Any/All	1 to 2	Any/All	Any/All	Yes	Any/All	No	Yes	Any/All	Non-Residential	Any/All	61.47	980	0.345	1.6%	5.6%
13	Low	Any/All	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Residential, Commercial	50 or Less	53.04	924	0.324	1.4%	5.2%
14	Low	Any/All	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Residential, Institutional	Greater than 50	51.65	348	0.251	1.4%	4.1%

Table B-3. Roadway Departure KA Crashes on Full Access Roadways in the City of Chicago (continued)

Row	Priority Level	State Route	No. of Lanes	Traversable Median	Median Width	Curb/Gutter Present	Shoulder Width (ft.)	One-Way Road	On-Street Parking Present	CTA Rail Stop, Loop Link, or Pace Pulse	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
15	Low	Any/All	1 to 2	Any/All	Any/All	Yes	Any/All	Yes	Any/All	Any/All	Non-Residential, Commercial	Any/All	11.11	106	0.223	0.3%	0.9%
16	Low	Any/All	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Residential, Commercial	50 or Less	113.61	1058	0.188	3.0%	7.8%
17	Low	Any/All	5 or Greater	Any/All	Greater than 5.5 feet	Any/All	Any/All	Any/All	Any/All	Yes	Any/All	Any/All	13.57	186	0.158	0.4%	0.8%
18	Low	Any/All	1 to 2	Any/All	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Residential	Any/All	498.94	2917	0.126	13.1%	23.1%
19	Low	Any/All	3 to 4	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Yes	Non-Commercial	50 or Less	20.1	313	0.124	0.5%	0.9%
20	Very Low	Any/All	1 to 2	Any/All	Any/All	Yes	Any/All	Yes	Any/All	Any/All	Non-Residential, Non-Commercial	Any/All	16.77	149	0.034	0.4%	0.3%
21	Very Low	Any/All	1 to 2	Any/All	Any/All	No	1.5 feet and Less	Any/All	Any/All	Any/All	Any/All	Any/All	2744.33	10993	0.019	71.9%	15.7%

Table B-4. Roadway Departure KA Crashes on Full Access Roadways outside of the City of Chicago

Row	Priority Level	Turn Lane Present	No. of Lanes	Median Present	Median Width	Shoulder Width (ft.)	On-Street Parking Present	Metra Station	Sidewalk Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	3 or Greater	Any/All	12.5 feet and Less	Any/All	No	Yes	Any/All	Any/All	Greater than 50	52.66	591	0.405	0.6%	6.2%
2	Medium	Yes	3 or Greater	Any/All	Any/All	Any/All	Any/All	Yes	Any/All	Non-Residential	50 or Less	25.33	479	0.367	0.3%	2.0%
3	Medium	Yes	1 to 2	Any/All	Any/All	Greater than 4.5 feet	Any/All	Any/All	Any/All	Non-Residential	Any/All	5.3	102	0.322	0.1%	0.3%
4	Medium	Any/All	5 or Greater	Any/All	Greater than 11.5 feet	Any/All	Any/All	Any/All	Any/All	Residential	50 or Less	7.28	107	0.301	0.1%	0.7%
5	Medium	Any/All	3 or Greater	Any/All	12.5 feet and Less	Any/All	No	No	Any/All	Any/All	Greater than 50	178.19	2000	0.266	2.1%	14.7%
6	Medium	Any/All	3 or Greater	Any/All	Greater than 12.5 feet	Any/All	Any/All	Any/All	Any/All	Non-Commercial, Transportation/ Utilities/ Communication	Greater than 50	9.01	126	0.236	0.1%	0.6%
7	Medium	Any/All	3 or Greater	Any/All	Any/All	Any/All	Any/All	No	No	Non-Residential	50 or Less	97.76	1268	0.231	1.2%	5.8%
8	Low	No	3 or Greater	Any/All	Any/All	Any/All	Any/All	Yes	Any/All	Non-Residential	50 or Less	23.37	317	0.155	0.3%	1.6%
9	Low	Any/All	3 or Greater	Any/All	Greater than 12.5 feet	Any/All	Any/All	Any/All	Any/All	Non-Commercial, Non-Transportation/ Utilities/ Communication	Greater than 50	8.83	139	0.15	0.1%	0.7%
10	Low	Any/All	3 or Greater	Any/All	12.5 feet and Less	Any/All	Yes	No	Any/All	Any/All	Greater than 50	13.62	114	0.148	0.2%	0.5%
11	Low	Yes	1 to 2	Any/All	Any/All	Greater than 4.5 feet	Any/All	Any/All	Any/All	Residential	Any/All	7.63	107	0.142	0.1%	0.4%
12	Low	Any/All	3 or Greater	Any/All	Greater than 12.5 feet	Any/All	Any/All	Any/All	Any/All	Residential, Commercial	Greater than 50	9.72	116	0.141	0.1%	0.3%

Table B-4. Roadway Departure KA Crashes on Full Access Roadways outside of the City of Chicago (continued)

Row	Priority Level	Turn Lane Present	No. of Lanes	Median Present	Median Width	Shoulder Width (ft.)	On-Street Parking Present	Metra Station	Sidewalk Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
13	Low	Yes	1 to 2	Any/All	Any/All	4.5 feet and Less	Any/All	Any/All	Any/All	Non-Open Space/ Agriculture/ Water	Any/All	72.24	1181	0.138	0.9%	2.7%
14	Low	Any/All	3 to 4	No	Not Applicable	Any/All	Any/All	Any/All	Any/All	Residential	50 or Less	202.1	1649	0.119	2.4%	8.6%
15	Low	Any/All	3 or Greater	Any/All	Any/All	Any/All	Any/All	No	Yes	Non-Residential	50 or Less	129.56	2080	0.104	1.5%	5.3%
16	Low	Any/All	5 or Greater	Any/All	11.5 feet and Less	Any/All	Any/All	Any/All	Any/All	Residential	50 or Less	12.22	151	0.102	0.1%	0.6%
17	Low	Yes	1 to 2	Any/All	Any/All	4.5 feet and Less	Any/All	Any/All	Any/All	Open Space/ Agriculture/ Water	Greater than 50	8.5	107	0.101	0.1%	0.3%
18	Very Low	Any/All	3 to 4	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Residential	50 or Less	230.02	2701	0.066	2.7%	7.6%
19	Very Low	Any/All	3 or Greater	Any/All	12.5 feet and Less	Any/All	Yes	Yes	Any/All	Any/All	Greater than 50	9.82	101	0.063	0.1%	0.6%
20	Very Low	Yes	1 to 2	Any/All	Any/All	4.5 feet and Less	Any/All	Any/All	Any/All	Open Space/ Agriculture/ Water	50 or Less	60.02	757	0.025	0.7%	1.0%
21	Very Low	No	1 to 2	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	7253.16	37354	0.018	86.1%	39.2%
22	Very Low	Any/All	3 or Greater	Any/All	Greater than 12.5 feet	Any/All	Any/All	Any/All	Any/All	Non-Residential, Commercial	Greater than 50	10.62	167	0.017	0.1%	0.3%

Table B-5. All Intersection-Related KA Crashes in the City of Chicago

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Commercial	Yes	Any/All	1.005–3.41	Any/All	Yes	Any/All	Greater than 45	496	0.577	2.0%	21.3%
2	Medium	Any/All	Yes	Yes	Greater than 3.41	Any/All	Yes	Any/All	Greater than 30	141	0.383	0.6%	4.0%
3	Medium	Non-Commercial	Yes	Any/All	1.005–3.41	Any/All	Yes	Any/All	Greater than 45	111	0.369	0.5%	3.1%
4	Medium	Any/All	Yes	Any/All	1.005–3.41	Any/All	Yes	Any/All	15–45	362	0.363	1.5%	9.8%
5	Medium	Any/All	Yes	No	Greater than 3.41	Any/All	Yes	Yes	Greater than 30	185	0.291	0.8%	4.0%
6	Medium	Any/All	Yes	Any/All	1.005–3.41	Any/All	Yes	Any/All	Less than 15	342	0.273	1.4%	6.9%
7	Medium	Any/All	Yes	Yes	Greater than 3.41	Any/All	Yes	Any/All	30 or Less	116	0.272	0.5%	2.4%
8	Medium	Non-Residential	Yes	Any/All	1.005 or Less	Any/All	Any/All	Any/All	Any/All	112	0.271	0.5%	2.3%
9	Medium	Any/All	Yes	Any/All	1.005–3.41	Any/All	No	Any/All	Greater than 45	102	0.261	0.4%	2.0%
10	Medium	Any/All	Yes	Any/All	1.005–3.41	Any/All	No	Any/All	45 or Less	126	0.244	0.5%	2.3%
11	Medium	Any/All	Yes	No	3.41–11.38	Any/All	Yes	Any/All	30 or Less	102	0.216	0.4%	1.6%
12	Medium	Any/All	Yes	No	Greater than 3.41	Any/All	Yes	No	Greater than 30	295	0.207	1.2%	4.5%
13	Low	Any/All	Yes	Yes	Greater than 3.41	Any/All	No	Any/All	Any/All	135	0.169	0.6%	1.7%
14	Low	Residential	Yes	Any/All	1.005 or Less	Any/All	Any/All	Any/All	Greater than 45	125	0.163	0.5%	1.5%
15	Low	Any/All	Yes	No	Greater than 13.05	Any/All	No	Any/All	Any/All	165	0.153	0.7%	1.9%
16	Low	Residential	Yes	Any/All	1.005 or Less	Any/All	Any/All	Any/All	45 or Less	128	0.13	0.5%	1.2%

Table B-5. All Intersection-Related KA Crashes in the City of Chicago (continued)

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
17	Low	Any/All	Yes	No	Greater than 11.38	Any/All	Yes	Any/All	30 or Less	161	0.122	0.7%	1.5%
18	Low	Any/All	Yes	No	3.41–13.05	Any/All	No	Any/All	Any/All	133	0.107	0.5%	1.1%
19	Very Low	Any/All	No	Yes	3.44–19	No	Any/All	Any/All	45 or Less	102	0.084	0.4%	0.6%
20	Very Low	Any/All	No	Any/All	Greater than 3.44	No	Any/All	Any/All	Greater than 45	1852	0.067	7.6%	9.2%
21	Very Low	Institutional	No	No	Greater than 3.44	No	Any/All	Any/All	45 or Less	199	0.055	0.8%	0.8%
22	Very Low	Any/All	No	Yes	Greater than 19	No	Any/All	Any/All	45 or Less	325	0.052	1.3%	1.3%
23	Very Low	Non-Institutional	No	No	Greater than 3.44	No	Any/All	Any/All	45 or Less	674	0.035	2.8%	1.7%
24	Very Low	Any/All	No	Any/All	Greater than 3.44	Yes	Any/All	Any/All	Any/All	3886	0.024	15.9%	6.9%
25	Very Low	Any/All	No	Any/All	3.44 or Less	Any/All	Any/All	Any/All	Any/All	14051	0.006	57.5%	6.4%

Table B-6. All Intersection-Related KA Crashes outside of the City of Chicago

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	Transit Stop Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Any/All	Yes	Yes	Any/All	Any/All	Yes	Any/All	Greater than 60	141	0.515	0.3%	8.7%
2	Medium	Non-Residential	Yes	Yes	Any/All	Any/All	Yes	Any/All	45–60	120	0.433	0.2%	6.2%
3	Medium	Any/All	Yes	Yes	2.635 or Less	No	Any/All	Any/All	30–45	166	0.314	0.3%	6.2%
4	Medium	Residential	Yes	Yes	Any/All	Any/All	Yes	Any/All	45–60	261	0.278	0.5%	8.7%
5	Medium	Non-Residential	Yes	Yes	Any/All	No	Any/All	Any/All	30 or Less	105	0.242	0.2%	3.0%
6	Medium	Any/All	Yes	No	Any/All	Any/All	Yes	Any/All	Greater than 45	155	0.199	0.3%	3.7%
7	Medium	Any/All	Yes	Yes	Any/All	Any/All	No	Any/All	Greater than 45	173	0.177	0.3%	3.7%
8	Medium	Any/All	Yes	Yes	Greater than 2.635	No	Any/All	Any/All	30–45	159	0.176	0.3%	3.4%
9	Medium	Any/All	Yes	No	Any/All	Any/All	Yes	No	45 or Less	148	0.146	0.3%	2.6%
10	Medium	Any/All	No	Any/All	Greater than 21.81	No	Any/All	Any/All	Greater than 60	102	0.141	0.2%	1.7%
11	Medium	Residential	Yes	Yes	Any/All	No	Any/All	Any/All	30 or Less	286	0.134	0.6%	4.6%
12	Medium	Any/All	Yes	Yes	Any/All	Yes	Any/All	Any/All	30–45	124	0.123	0.2%	1.8%
13	Low	Any/All	Yes	No	Any/All	Any/All	No	Any/All	Greater than 45	149	0.086	0.3%	1.5%
14	Low	Any/All	Yes	Yes	Any/All	Yes	Any/All	Any/All	30 or Less	132	0.085	0.3%	1.3%
15	Low	Any/All	Yes	No	4.955 or Less	Any/All	Yes	Yes	45 or Less	104	0.071	0.2%	0.9%
16	Low	Commercial	No	Any/All	Greater than 8.925	No	Any/All	Any/All	45–60	349	0.065	0.7%	2.7%

Table B-6. All Intersection-Related KA Crashes outside of the City of Chicago (continued)

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	Transit Stop Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
17	Low	Any/All	Yes	No	Greater than 4.955	Any/All	Yes	Yes	45 or Less	100	0.062	0.2%	0.7%
18	Low	Any/All	No	Any/All	8.925–21.81	No	Any/All	Any/All	Greater than 60	105	0.061	0.2%	0.8%
19	Very Low	Any/All	No	Any/All	Greater than 8.925	Yes	Any/All	Any/All	Greater than 60	436	0.052	0.9%	2.7%
20	Very Low	Any/All	Yes	No	Any/All	Any/All	No	Any/All	45 or Less	382	0.048	0.8%	2.2%
21	Very Low	Non-Commercial	No	Any/All	Greater than 8.925	No	Any/All	Any/All	45–60	328	0.043	0.7%	1.7%
22	Very Low	Any/All	No	Any/All	Any/All	No	Any/All	Any/All	45 or Less	1263	0.031	2.5%	4.6%
23	Very Low	Any/All	No	Any/All	Greater than 8.925	Yes	Any/All	Any/All	60 or Less	5580	0.018	11.2%	12.0%
24	Very Low	Any/All	No	Any/All	8.925 or Less	Any/All	Any/All	Any/All	Any/All	38763	0.003	78.1%	14.7%

Table B-7. Intersection-Related Pedestrian KABCO Crashes in the City of Chicago

Row	Priority Level	Land Use	Signalized	All Stop	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Commercial	Yes	Any/All	Any/All	1.885 or Less	Any/All	Yes	Any/All	Any/All	Greater than 45	331	0.75	1.4%	15.4%
2	Medium	Commercial	Yes	Any/All	Any/All	1.885–3.455	Any/All	Yes	Any/All	Any/All	Greater than 45	205	0.569	0.8%	7.2%
3	Medium	Commercial	Yes	Any/All	No	3.455 or Less	Any/All	Yes	Any/All	Any/All	45 or Less	333	0.561	1.4%	11.6%
4	Medium	Commercial	Yes	Any/All	Yes	3.455 or Less	Any/All	Yes	Any/All	Any/All	45 or Less	333	0.419	1.4%	8.6%
5	Medium	Commercial	Yes	Any/All	Any/All	Greater than 3.455	Any/All	Yes	Any/All	Any/All	Greater than 60	181	0.399	0.7%	4.5%
6	Medium	Commercial	Yes	Any/All	Any/All	3.455–11.14	Any/All	Yes	Any/All	Any/All	60 or Less	305	0.317	1.2%	6.0%
7	Medium	Any/All	Yes	Any/All	Any/All	Any/All	No	No	Yes	Any/All	Any/All	154	0.313	0.6%	3.0%
8	Medium	Commercial	Yes	Any/All	Any/All	Greater than 11.14	Any/All	Yes	Any/All	Any/All	60 or Less	298	0.256	1.2%	4.7%
9	Medium	Non-Commercial	Yes	Any/All	Any/All	Greater than 10.49	Any/All	Yes	Any/All	Any/All	Any/All	103	0.252	0.4%	1.6%
10	Medium	Non-Commercial, Institutional	Yes	Any/All	Any/All	3.455 or Less	Any/All	Yes	Any/All	Any/All	Any/All	112	0.234	0.5%	1.6%
11	Medium	Any/All	Yes	Any/All	Any/All	Any/All	Yes	No	Yes	Yes	Any/All	146	0.229	0.6%	2.1%
12	Medium	Non-Transportation/Utilities/Communication	Yes	Any/All	Any/All	Greater than 3.79	Any/All	No	No	Any/All	Any/All	130	0.188	0.5%	1.5%
13	Low	Commercial	No	Yes	Any/All	Greater than 13.14	Any/All	Any/All	Any/All	Any/All	Greater than 15	119	0.187	0.5%	1.4%
14	Low	Non-Commercial, Non-Institutional	Yes	Any/All	Any/All	3.455 or Less	Any/All	Yes	Any/All	Any/All	Any/All	111	0.168	0.5%	1.2%
15	Low	Any/All	Yes	Any/All	Any/All	Any/All	Yes	No	Yes	No	Any/All	132	0.167	0.5%	1.4%

Table B-7. Intersection-Related Pedestrian KABCO Crashes in the City of Chicago (continued)

Row	Priority Level	Land Use	Signalized	All Stop	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
16	Low	Commercial	No	Yes	Any/All	6.335–13.14	Any/All	Any/All	Any/All	Any/All	Greater than 15	145	0.148	0.6%	1.3%
17	Low	Non-Transportation/ Utilities/ Communication	Yes	Any/All	Any/All	3.79 or Less	Any/All	No	No	Any/All	Any/All	138	0.143	0.6%	1.2%
18	Low	Non-Commercial	Yes	Any/All	Any/All	3.455–10.49	Any/All	Yes	Any/All	Any/All	Any/All	103	0.138	0.4%	0.9%
19	Low	Commercial	No	Yes	Any/All	Greater than 6.335	Any/All	Any/All	Any/All	Any/All	Less than 15	110	0.125	0.5%	0.9%
20	Very Low	Transportation/ Utilities/ Communication	Yes	Any/All	Any/All	Any/All	Any/All	No	No	Any/All	Any/All	222	0.094	0.9%	1.3%
21	Very Low	Commercial	No	Yes	Any/All	6.335 or Less	Any/All	Any/All	Any/All	Any/All	Any/All	230	0.085	0.9%	1.2%
22	Very Low	Non-Commercial	No	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	646	0.059	2.6%	2.4%
23	Very Low	Any/All	No	No	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	19839	0.016	81.2%	19.3%

Table B-8. Intersection-Related Pedestrian KABCO Crashes outside of the City of Chicago

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Any/All	Yes	Yes	Any/All	Any/All	Any/All	Yes	Yes	Any/All	149	0.255	0.3%	8.0%
2	Medium	Commercial	Yes	Yes	Any/All	Any/All	Yes	Yes	No	Any/All	693	0.167	1.4%	24.5%
3	Medium	Any/All	Yes	No	Any/All	Any/All	Any/All	Yes	Yes	Any/All	137	0.15	0.3%	4.4%
4	Medium	Any/All	Yes	No	4.725 or Less	Any/All	Yes	Yes	No	Any/All	124	0.098	0.2%	2.6%
5	Medium	Commercial	Yes	Yes	Any/All	Any/All	No	Yes	No	Any/All	212	0.093	0.4%	4.2%
6	Medium	Any/All	No	Any/All	Greater than 29.41	No	Any/All	Yes	Any/All	Greater than 45	247	0.063	0.5%	3.3%
7	Medium	Non-Commercial	Yes	Yes	Any/All	Any/All	Any/All	Yes	No	Any/All	153	0.061	0.3%	2.0%
8	Medium	Residential, Commercial	Yes	Any/All	Any/All	Any/All	Yes	No	Any/All	Any/All	193	0.061	0.4%	2.5%
9	Medium	Any/All	Yes	No	Greater than 4.725	Any/All	Yes	Yes	No	Any/All	100	0.05	0.2%	1.1%
10	Low	Commercial	No	Any/All	Greater than 33	Yes	Any/All	Any/All	Any/All	Greater than 45	408	0.039	0.8%	3.4%
11	Low	Residential, Non-Commercial	Yes	Any/All	Any/All	Any/All	Yes	No	Any/All	Any/All	179	0.039	0.4%	1.5%
12	Low	Institutional	No	Any/All	Greater than 4.35	No	Any/All	Yes	Any/All	45 or Less	219	0.037	0.4%	1.7%
13	Low	Any/All	Yes	No	Any/All	Any/All	No	Yes	No	Greater than 45	111	0.036	0.2%	0.9%
14	Low	Any/All	No	Any/All	4.35–29.41	No	Any/All	Yes	Any/All	Greater than 45	695	0.033	1.4%	4.9%
15	Low	Non-Residential	Yes	Any/All	Any/All	Any/All	Yes	No	Any/All	Any/All	155	0.026	0.3%	0.9%
16	Low	Any/All	Yes	No	Any/All	Any/All	No	Yes	No	45 or Less	166	0.024	0.3%	0.9%

Table B-8. Intersection-Related Pedestrian KABCO Crashes outside of the City of Chicago (continued)

Row	Priority Level	Land Use	Signalized	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
17	Low	Non-Institutional	No	Any/All	Greater than 4.35	No	Any/All	Yes	Any/All	45 or Less	817	0.02	1.6%	3.4%
18	Low	Any/All	Yes	Any/All	Any/All	Any/All	No	No	Any/All	Any/All	333	0.017	0.7%	1.2%
19	Low	Commercial	No	Any/All	Greater than 33	Yes	Any/All	Any/All	Any/All	45 or Less	401	0.017	0.8%	1.5%
20	Low	Commercial	No	Any/All	4.35–33	Yes	Any/All	Any/All	Any/All	Any/All	1980	0.011	4.0%	4.8%
21	Low	Any/All	No	Any/All	Greater than 4.35	No	Any/All	No	Any/All	Any/All	1003	0.011	2.0%	2.4%
22	Very Low	Non-Commercial	No	Any/All	Greater than 4.35	Yes	Any/All	Any/All	Any/All	Any/All	5200	0.005	10.5%	5.1%
23	Very Low	Any/All	No	Any/All	4.35 or Less	Any/All	Any/All	Any/All	Any/All	Any/All	35956	0.002	72.4%	15.2%

Table B-9. Intersection-Related Bicyclists KABCO Crashes in the City of Chicago

Row	Priority Level	Land Use	Signalized	All Stop	Major/Minor Road AADT Ratio	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Any/All	Yes	Any/All	3.305 or Less	Any/All	Any/All	No	Yes	Less than 15	130	0.445	0.5%	7.4%
2	Medium	Any/All	Yes	Any/All	3.305 or Less	Any/All	Any/All	Yes	Yes	Less than 15	179	0.308	0.7%	7.0%
3	Medium	Commercial	Yes	Any/All	3.25 or Less	Yes	Any/All	Any/All	Any/All	15 to 45	314	0.266	1.3%	10.6%
4	Medium	Any/All	Yes	Any/All	Greater than 12.84	Any/All	Any/All	Any/All	Yes	Less than 15	101	0.263	0.4%	3.4%
5	Medium	Any/All	Yes	Any/All	3.305–12.84	Any/All	Any/All	Any/All	Yes	Less than 15	117	0.195	0.5%	2.9%
6	Medium	Commercial	Yes	Any/All	3.25 or Less	Yes	Any/All	Any/All	Any/All	Greater than 45	524	0.181	2.1%	12.1%
7	Medium	Any/All	Yes	Any/All	3.235 or Less	Any/All	Any/All	Any/All	No	Less than 15	184	0.162	0.8%	3.8%
8	Medium	Any/All	Yes	Any/All	Greater than 13.93	Yes	Any/All	Any/All	Any/All	15 to 60	185	0.13	0.8%	3.1%
9	Medium	Any/All	No	Yes	Greater than 8.725	Any/All	Any/All	Any/All	Any/All	Less than 15	100	0.12	0.4%	1.5%
10	Medium	Any/All	Yes	Any/All	Any/All	No	Yes	Any/All	Yes	Greater than 15	138	0.119	0.6%	2.1%
11	Medium	Any/All	Yes	Any/All	3.25–5.665	Yes	Any/All	Any/All	Any/All	Greater than 15	228	0.111	0.9%	3.2%
12	Medium	Non-Commercial	Yes	Any/All	3.25 or Less	Yes	Any/All	Any/All	Any/All	Greater than 15	193	0.111	0.8%	2.7%
13	Medium	Any/All	Yes	Any/All	Greater than 13.93	Yes	Any/All	Any/All	Any/All	Greater than 60	113	0.11	0.5%	1.6%
14	Medium	Any/All	Yes	Any/All	Greater than 3.235	Any/All	Any/All	Any/All	No	Less than 15	152	0.107	0.6%	2.1%
15	Low	Commercial	No	Yes	Greater than 8.725	Any/All	Any/All	Any/All	Any/All	Greater than 15	199	0.081	0.8%	2.1%
16	Low	Any/All	No	No	11.93–18.38	Any/All	Any/All	Any/All	Yes	Less than 15	209	0.074	0.9%	2.0%

Table B-9. Intersection-Related Bicyclists KABCO Crashes in the City of Chicago (continued)

Row	Priority Level	Land Use	Signalized	All Stop	Major/Minor Road AADT Ratio	4 Legs	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
17	Low	Any/All	Yes	Any/All	Any/All	No	No	Any/All	Yes	Greater than 15	197	0.063	0.8%	1.6%
18	Low	Any/All	Yes	Any/All	5.665–13.93	Yes	Any/All	Any/All	Any/All	Greater than 15	227	0.059	0.9%	1.7%
19	Low	Non-Commercial	No	Yes	Greater than 8.725	Any/All	Any/All	Any/All	Any/All	Greater than 15	184	0.048	0.8%	1.1%
20	Low	Any/All	No	No	Greater than 18.38	Any/All	Any/All	Any/All	Yes	Less than 15	127	0.047	0.5%	0.8%
21	Low	Any/All	Yes	Any/All	Any/All	No	Any/All	Any/All	No	Greater than 15	355	0.043	1.5%	1.9%
22	Low	Any/All	No	Yes	8.725 or Less	Any/All	Any/All	Any/All	Any/All	Any/All	767	0.038	3.1%	3.7%
23	Low	Any/All	No	No	Greater than 11.93	Any/All	Any/All	Any/All	No	Less than 15	309	0.024	1.3%	0.9%
24	Low	Any/All	No	No	Greater than 11.93	Any/All	Any/All	Any/All	Any/All	Greater than 15	3699	0.02	15.1%	9.2%
25	Very Low	Any/All	No	No	11.93 or Less	Any/All	Any/All	Any/All	Any/All	Any/All	15495	0.006	63.4%	11.5%

Table B-10. Intersection-Related Bicyclists KABCO Crashes outside of the City of Chicago

Row	Priority Level	Land Use	Signalized	All Stop	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
1	High	Open Space/ Agriculture/ Water	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Yes	No	Yes	Any/All	105	0.16	0.2%	4.4%
2	Medium	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Any/All	Yes	Any/All	Any/All	194	0.147	0.4%	7.5%
3	Medium	Non-Open Space/ Agriculture/ Water	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Yes	No	Yes	Any/All	191	0.091	0.4%	4.5%
4	Medium	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Yes	No	No	Yes	Greater than 30	111	0.088	0.2%	2.6%
5	Medium	Commercial	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Yes	No	No	Any/All	610	0.083	1.2%	13.2%
6	Medium	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	No	Any/All	Yes	Any/All	Any/All	103	0.064	0.2%	1.7%
7	Medium	Any/All	No	Yes	Any/All	Any/All	Any/All	Yes	Any/All	Any/All	Yes	Any/All	188	0.062	0.4%	3.0%
8	Medium	Any/All	Yes	Any/All	Yes	Any/All	Any/All	No	Yes	No	Any/All	45 or Less	144	0.061	0.3%	2.3%
9	Medium	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Yes	No	No	Yes	30 or Less	150	0.057	0.3%	2.2%
10	Medium	Any/All	Yes	Any/All	Any/All	2.61 or Less	Any/All	Yes	No	No	No	Any/All	134	0.051	0.3%	1.8%
11	Medium	Any/All	No	Yes	Any/All	Any/All	Any/All	Yes	Any/All	Any/All	No	30 or Less	149	0.048	0.3%	1.9%
12	Low	Any/All	No	Yes	Any/All	3.02 or Less	Any/All	Yes	Any/All	Any/All	No	Greater than 30	104	0.038	0.2%	1.0%
13	Low	Non- Commercial	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Yes	No	No	Any/All	110	0.038	0.2%	1.1%
14	Low	Any/All	Yes	Any/All	Yes	Any/All	Any/All	No	Yes	No	Any/All	Greater than 45	122	0.033	0.2%	1.0%
15	Low	Any/All	Yes	Any/All	No	Any/All	Any/All	No	Any/All	No	Any/All	30-45	133	0.029	0.3%	1.0%

Table B-10. Intersection-Related Bicyclists KABCO Crashes outside of the City of Chicago (continued)

Row	Priority Level	Land Use	Signalized	All Stop	State Jurisdiction	Major/Minor Road AADT Ratio	3 Legs	4 Legs	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Bikeway Present	MOBEC Index	No. of Intersections	Crash Frequency	% of Intx	% of Target Crashes
16	Low	Any/All	Yes	Any/All	Any/All	Greater than 2.61	Any/All	Yes	No	No	No	Any/All	129	0.028	0.3%	0.9%
17	Low	Any/All	Yes	Any/All	Yes	Any/All	Any/All	No	No	No	Any/All	Any/All	140	0.026	0.3%	0.9%
18	Low	Any/All	No	No	Any/All	Greater than 5.075	No	Any/All	Any/All	Any/All	Any/All	Any/All	2572	0.019	5.2%	12.8%
19	Low	Any/All	Yes	Any/All	No	Any/All	Any/All	No	Any/All	No	Any/All	30 or Less	190	0.016	0.4%	0.8%
20	Low	Any/All	No	Yes	Any/All	Greater than 3.02	Any/All	Yes	Any/All	Any/All	No	Greater than 30	162	0.015	0.3%	0.6%
21	Low	Any/All	No	Yes	Any/All	Any/All	Any/All	No	Any/All	Any/All	Any/All	Any/All	254	0.014	0.5%	0.9%
22	Very Low	Any/All	No	No	Any/All	Greater than 5.075	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	7512	0.008	15.1%	15.2%
23	Very Low	Any/All	Yes	Any/All	No	Any/All	Any/All	No	Any/All	No	Any/All	Greater than 45	139	0.006	0.3%	0.2%
24	Very Low	Any/All	No	No	Any/All	5.075 or Less	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	35985	0.002	72.5%	18.3%

Table B-11. Pedestrian KABCO Crashes on Full Access Roadways in the City of Chicago

Row	Priority Level	Functional Class	State Route	Turn Lane Present	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Any/All	Yes	Any/All	Any/All	Non-Residential, Commercial, Non-Industrial	Greater than 50	24.26	573	6.882	0.6%	5.8%
2	High	Any/All	No	Yes	Yes	Any/All	Commercial, Non-Industrial	50 or Less	16.51	331	6.121	0.4%	3.2%
3	Medium	Any/All	Any/All	Yes	Any/All	Any/All	Residential, Commercial, Non-Industrial	Greater than 50	25.4	447	4.747	0.7%	4.1%
4	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Yes	Any/All	Non-Residential, Commercial	Any/All	46.28	589	4.125	1.2%	4.5%
5	Medium	Any/All	Any/All	Yes	No	Any/All	Non-Residential, Commercial, Non-Industrial	50 or Less	16.19	412	3.788	0.4%	2.3%
6	Medium	Any/All	Yes	Yes	Yes	Any/All	Commercial, Non-Industrial	50 or Less	17.35	368	3.655	0.5%	2.3%
7	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Yes	Yes	Residential	Less than 25	45.29	311	3.284	1.2%	4.9%
8	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	No	Any/All	Non-Residential, Commercial	Greater than 50	30.07	371	3.218	0.8%	2.7%
9	Medium	Any/All	Any/All	Yes	Yes	Any/All	Non-Commercial	Any/All	13.49	333	3.127	0.4%	1.4%
10	Medium	Any/All	Any/All	Yes	No	Any/All	Residential, Commercial, Non-Industrial	50 or Less	19.5	377	2.636	0.5%	2.0%
11	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Yes	No	Residential	Less than 25	55.6	343	1.915	1.5%	4.1%
12	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Yes	Any/All	Residential, Transportation/Utilities/Communication	25 or Greater	98.47	402	1.892	2.6%	6.6%

Table B-11. Pedestrian KABCO Crashes on Full Access Roadways in the City of Chicago (continued)

Row	Priority Level	Functional Class	State Route	Turn Lane Present	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
13	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Yes	Any/All	Non-Residential, Non-Commercial	Any/All	32.32	389	1.882	0.8%	1.3%
14	Low	Any/All	Any/All	Yes	Any/All	Any/All	Commercial, Industrial	Any/All	21.3	322	1.783	0.6%	1.6%
15	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	No	Any/All	Non-Residential, Commercial	50 or Less	24.05	336	1.614	0.6%	1.3%
16	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	No	Any/All	Residential, Commercial	Greater than 50	141.02	708	1.568	3.7%	8.4%
17	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Yes	Any/All	Residential, Non-Transportation/Utilities/Communication	25 or Greater	59.22	404	1.412	1.6%	3.7%
18	Low	Any/All	Any/All	Yes	No	Any/All	Non-Commercial	Any/All	26.35	581	1.3	0.7%	1.1%
19	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	No	Any/All	Residential, Commercial	50 or Less	123.03	719	1.152	3.2%	5.2%
20	Low	Other Principal Arterial, Minor Arterial, Major Collector	No	No	No	Any/All	Non-Commercial	Any/All	55.55	517	1.108	1.5%	1.4%
21	Very Low	Minor Arterial, Major Collector	Yes	No	No	Any/All	Non-Commercial	Any/All	27.56	301	0.386	0.7%	0.5%
22	Very Low	Minor Collector, Local	Any/All	No	Any/All	Any/All	Any/All	Any/All	2862.2	11597	0.324	75.0%	31.4%
23	Very Low	Other Principal Arterial	Yes	No	No	Any/All	Non-Commercial	Any/All	33.9	396	0.162	0.9%	0.2%

Table B-12. Pedestrian KABCO Crashes on Full Access Roadways outside of the City of Chicago

Row	Priority Level	Functional Class	State Route	Turn Lane Present	No. of Lanes	On-Street Parking Present	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Sidewalk Present	Land Use	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Any/All	Yes	1 to 3	Yes	Yes	Any/All	Any/All	Any/All	Non-Residential	3.62	102	4.445	0.04%	1.4%
2	Medium	Any/All	Any/All	Yes	4 or Greater	Yes	Yes	Any/All	Any/All	Any/All	Non-Residential	8.28	164	2.279	0.1%	2.0%
3	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	No	Yes	Yes	Yes	Any/All	Any/All	14.74	107	2.069	0.2%	1.7%
4	Medium	Any/All	Any/All	Yes	1 to 3	Yes	Yes	Any/All	Any/All	Any/All	Residential	9.48	188	1.754	0.1%	2.2%
5	Medium	Any/All	Yes	Yes	Any/All	No	Yes	Any/All	Any/All	Any/All	Commercial, Non-Industrial	152.32	2403	1.377	1.8%	20.7%
6	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Yes	Yes	Yes	Yes	Any/All	Any/All	20.04	133	1.215	0.2%	2.7%
7	Medium	Any/All	Any/All	Yes	4 or Greater	Yes	Yes	Any/All	Any/All	Any/All	Residential	8.58	138	1.133	0.1%	1.2%
8	Medium	Any/All	Yes	Yes	Any/All	No	Yes	Any/All	Yes	Any/All	Non-Commercial	9.34	196	1.071	0.1%	0.8%
9	Medium	Any/All	Any/All	Yes	Any/All	Any/All	No	Any/All	Yes	No	Any/All	8.89	105	1.063	0.1%	0.3%
10	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Yes	Yes	Yes	No	Any/All	Any/All	18.44	107	0.888	0.2%	1.1%
11	Low	Any/All	No	Yes	Any/All	No	Yes	Any/All	Any/All	Any/All	Commercial, Non-Industrial	53.38	715	0.645	0.6%	3.5%
12	Low	Any/All	Yes	Yes	Any/All	No	Yes	Any/All	Any/All	Any/All	Commercial, Industrial	24.32	316	0.598	0.3%	2.0%
13	Low	Any/All	Yes	Yes	Any/All	No	Yes	Any/All	No	Any/All	Non-Commercial	39.55	716	0.507	0.5%	2.1%

Table B-12. Pedestrian KABCO Crashes on Full Access Roadways outside of the City of Chicago (continued)

Row	Priority Level	Functional Class	State Route	Turn Lane Present	No. of Lanes	On-Street Parking Present	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	Metra Station	Sidewalk Present	Land Use	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
14	Low	Any/All	Any/All	Yes	3 or Greater	Any/All	No	Any/All	Yes	Yes	Any/All	11.68	160	0.483	0.1%	0.6%
15	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	Yes	No	Any/All	Any/All	Any/All	588.79	4491	0.387	7.0%	19.1%
16	Low	Any/All	No	Yes	Any/All	No	Yes	Any/All	Any/All	Any/All	Non-Residential, Non-Commercial	7.16	137	0.374	0.1%	0.3%
17	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	No	Yes	Yes	No	Any/All	Any/All	22.35	207	0.215	0.3%	0.8%
18	Low	Any/All	Any/All	Yes	Any/All	Any/All	No	Any/All	No	Any/All	Any/All	207.34	2975	0.159	2.5%	3.9%
19	Low	Any/All	Any/All	Yes	1 to 2	Any/All	No	Any/All	Yes	Yes	Any/All	11.6	179	0.15	0.1%	0.2%
20	Low	Any/All	No	Yes	Any/All	No	Yes	Any/All	Any/All	Any/All	Residential, Non-Commercial	32.85	426	0.145	0.4%	0.7%
21	Low	Any/All	No	Yes	Any/All	No	Yes	Any/All	Any/All	Any/All	Commercial, Industrial	11.2	108	0.125	0.1%	0.2%
22	Very Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	No	Any/All	Any/All	Any/All	Any/All	492.77	3436	0.073	5.8%	3.5%
23	Very Low	Minor Collector, Local	Any/All	No	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	6670.24	34205	0.034	79.2%	29%

Table B-13. Bicyclist KABCO Crashes on Full Access Roadways in the City of Chicago

Row	Priority Level	Functional Class	State Route	Turn Lane Present	Median Present	Median Width	CTA Rail Stop, Loop Link, or Pace Pulse	Sidewalk Present	Bikeway Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Other Principal Arterial, Minor Arterial	Any/All	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Non-Institutional	Less than 25	19.29	314	3.743	0.5%	4.3%
2	Medium	Major Collector	No	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Any/All	Less than 25	53.27	339	2.522	1.4%	10.0%
3	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Non-Residential, Commercial	25 or Greater	14.16	303	2.263	0.4%	2.2%
4	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	Yes	Yes	No	Any/All	Less than 25	15.44	330	1.986	0.4%	2.2%
5	Medium	Other Principal Arterial, Minor Arterial	Any/All	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Institutional	Less than 25	12.12	121	1.894	0.3%	1.8%
6	Medium	Major Collector	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Yes	Any/All	Less than 25	18.97	207	1.619	0.5%	2.0%
7	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	Any/All	Any/All	Yes	Non-Residential, Commercial	25 or Greater	19.55	222	1.449	0.5%	1.8%
8	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Yes	Residential, Commercial	25 or Greater	18.44	284	1.391	0.5%	1.6%
9	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	No	Not Applicable	Any/All	Any/All	No	Commercial	25 or Greater	34.21	758	1.313	0.9%	3.5%
10	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	Any/All	Yes	No	Commercial	Less than 25	66.95	597	1.198	1.8%	5.4%
11	Medium	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	No	Yes	No	Any/All	Less than 25	12.77	268	1.186	0.3%	1.2%
12	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Yes	Any/All	Any/All	Any/All	No	Commercial	25 or Greater	33.44	663	0.861	0.9%	2.3%

Table B-13. Bicyclist KABCO Crashes on Full Access Roadways in the City of Chicago (continued)

Row	Priority Level	Functional Class	State Route	Turn Lane Present	Median Present	Median Width	CTA Rail Stop, Loop Link, or Pace Pulse	Sidewalk Present	Bikeway Present	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
13	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Any/All	Any/All	Any/All	Any/All	No	Yes	Any/All	Less than 25	14.78	148	0.816	0.4%	0.5%
14	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Any/All	Any/All	Greater than 9 feet	Any/All	No	No	Any/All	Less than 25	8.71	119	0.756	0.2%	0.1%
15	Low	Other Principal Arterial, Minor Arterial, Major Collector	No	No	Any/All	Any/All	Any/All	Any/All	Yes	Residential	25 or Greater	156.19	691	0.755	4.1%	9.6%
16	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Commercial	25 or Greater	28.91	652	0.672	0.8%	1.5%
17	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	Any/All	Any/All	Yes	Non-Residential, Non-Commercial	25 or Greater	21.05	224	0.59	0.6%	0.5%
18	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	Any/All	Yes	No	Non-Commercial	Less than 25	18.05	223	0.531	0.5%	0.7%
19	Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	No	Any/All	Any/All	Any/All	Any/All	No	Any/All	25 or Greater	327.33	2601	0.447	8.6%	12.0%
20	Low	Other Principal Arterial, Minor Arterial, Major Collector	Yes	No	Any/All	Any/All	Any/All	Any/All	Yes	Residential	25 or Greater	44.39	261	0.368	1.2%	1.6%
21	Low	Minor Collector, Local	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	2864.7	11653	0.18	75.1%	35.1%
22	Very Low	Other Principal Arterial, Minor Arterial, Major Collector	Any/All	Any/All	Any/All	9 feet and Less	Any/All	No	No	Any/All	Less than 25	12.19	149	0.027	0.3%	0.1%

Table B-14. Bicyclist KABCO Crashes on Full Access Roadways outside of the City of Chicago

Row	Priority Level	Functional Class	Turn Lane Present	Median Width	On-Street Parking Present	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	No Transit Stop Present	Sidewalk Present	Bikeway Present	Land Use	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Yes	2.5 feet and Less	Any/All	Yes	Any/All	Any/All	Yes	Yes	Non-Residential	8.48	188	2.226	0.1%	2.0%
2	Medium	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Residential, Non-Transportation/Utilities/Communication	10.38	152	1.403	0.1%	1.2%
3	Medium	Any/All	Yes	Any/All	Any/All	Yes	Yes	Any/All	Yes	No	Non-Residential	11.92	235	1.276	0.1%	1.9%
4	Medium	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	No	Any/All	Yes	Any/All	Any/All	Any/All	Institutional	23.22	134	1.062	0.3%	2.0%
5	Low	Any/All	Yes	Any/All	Yes	Yes	Any/All	Any/All	Yes	Any/All	Residential	12.48	224	0.986	0.1%	1.8%
6	Low	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	Yes	Any/All	Yes	Any/All	Any/All	Any/All	Residential, Non-Institutional	17.24	123	0.836	0.2%	1.3%
7	Low	Any/All	Yes	Any/All	Any/All	Yes	No	Any/All	Yes	No	Non-Residential	89.25	1643	0.688	1.1%	8.3%
8	Low	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	Yes	Any/All	Any/All	Any/All	Any/All	Any/All	Non-Residential, Transportation/Utilities/Communication	21.08	172	0.658	0.3%	1.1%
9	Low	Any/All	Yes	Any/All	No	Yes	Any/All	Any/All	Yes	Any/All	Residential	29.36	423	0.643	0.3%	2.4%
10	Low	Any/All	Yes	Any/All	Any/All	Yes	Any/All	Any/All	No	Yes	Any/All	11.08	166	0.572	0.1%	1.2%
11	Low	Any/All	Yes	Greater than 2.5 feet	Any/All	Yes	Any/All	Any/All	Yes	Yes	Non-Residential	15.35	238	0.558	0.2%	1.2%

Table B-14. Bicyclist KABCO Crashes on Full Access Roadways outside of the City of Chicago (continued)

Row	Priority Level	Functional Class	Turn Lane Present	Median Width	On-Street Parking Present	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	No Transit Stop Present	Sidewalk Present	Bikeway Present	Land Use	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
12	Low	Any/All	Yes	Any/All	Yes	Yes	Any/All	Any/All	Yes	Any/All	Residential	5.47	100	0.537	0.1%	0.4%
13	Low	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	Yes	Any/All	Yes	Any/All	Any/All	Any/All	Residential, Institutional	26.84	117	0.485	0.3%	2.9%
14	Low	Other Principal Arterial	Yes	Any/All	Any/All	Yes	Any/All	Any/All	No	No	Open Space/ Agriculture/Water	6.69	115	0.437	0.1%	0.2%
15	Low	Any/All	Yes	Any/All	No	Yes	Any/All	Any/All	Yes	Any/All	Residential	126.52	1572	0.355	1.5%	6.5%
16	Low	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	Yes	Any/All	No	No	Any/All	Any/All	Residential	169.68	903	0.332	2.0%	6.2%
17	Low	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	2 feet and Less	No	Any/All	Yes	Any/All	Any/All	Any/All	Non-Institutional	11.75	110	0.284	0.1%	0.7%
18	Low	Any/All	Yes	Any/All	Any/All	No	Any/All	Any/All	Any/All	Any/All	Any/All	239.51	3419	0.233	2.8%	7.2%
19	Low	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Greater than 2 feet	No	Any/All	Yes	Any/All	Any/All	Any/All	Non-Institutional	7.02	105	0.215	0.1%	0.2%
20	Low	Other Principal Arterial	Yes	Any/All	Any/All	Yes	Any/All	Any/All	No	No	Non-Open Space/ Agriculture/Water	14.99	261	0.158	0.2%	0.5%

Table B-14. Bicyclist KABCO Crashes on Full Access Roadways outside of the City of Chicago (continued)

Row	Priority Level	Functional Class	Turn Lane Present	Median Width	On-Street Parking Present	Pace or CTA Bus Stop	CTA Rail Stop, Loop Link, or Pace Pulse	No Transit Stop Present	Sidewalk Present	Bikeway Present	Land Use	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
21	Low	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	No	Any/All	No	Any/All	Any/All	Any/All	Any/All	1061.78	7432	0.136	12.6%	16.0%
22	Low	Minor Arterial, Major Collector, Minor Collector, Local	Yes	Any/All	Any/All	Yes	Any/All	Any/All	No	No	Commercial	14.97	221	0.117	0.2%	0.3%
23	Very Low	Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector	No	Any/All	Yes	Any/All	No	Yes	Any/All	Any/All	Residential	36.01	185	0.049	0.4%	0.3%
24	Very Low	Local	No	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	Any/All	6442.37	33253	0.033	76.4%	34.1%
25	Very Low	Minor Arterial, Major Collector, Minor Collector, Local	Yes	Any/All	Any/All	Yes	Any/All	Any/All	No	No	Non-Commercial	13.52	223	0.023	0.2%	0.1%

Table B-15. Speeding-Related KA Crashes on Access Controlled Roadways in Cook County

Row	Priority Level	State Route	Median Width	Shoulder Width (ft.)	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Any/All	Greater than 39.5 feet	9-11.5 feet	Residential	Any/All	24.91	100	0.215	5.0%	4.69%
2	Medium	Any/All	21-39.5 feet	9-11.5 feet	Residential	Any/All	18.21	111	0.11	3.6%	18.75%
3	Medium	Any/All	Greater than 21 feet	9-11.5 feet	Non-Residential	Greater than 50	12.29	106	0.086	2.5%	7.81%
4	Medium	Any/All	Greater than 21 feet	Greater than 11.5 feet	Any/All	Greater than 50	38.9	242	0.071	7.8%	25%
5	Medium	Any/All	Greater than 21 feet	9-11.5 feet	Non-Residential	50 or Less	15.82	133	0.063	3.2%	7.81%
6	Low	No	Greater than 21 feet	Greater than 11.5 feet	Any/All	50 or Less	37.64	167	0.042	7.5%	14.06%
7	Low	Any/All	21 feet and Less	2.5-4.5 feet	Any/All	Any/All	18.06	134	0.031	3.6%	3.12%
8	Low	Yes	Greater than 21 feet	Greater than 11.5 feet	Non-Residential	50 or Less	14.09	163	0.024	2.8%	4.69%
9	Low	Any/All	21 feet and Less	Greater than 11.5 feet	Any/All	Any/All	26.35	190	0.019	5.3%	4.69%
10	Low	Any/All	Greater than 21 feet	9 feet and Less	Any/All	Any/All	16.44	116	0.01	3.3%	3.12%
11	Low	Any/All	21 feet and Less	5.5-11.5 feet	Transportation/ Utilities/ Communication	Any/All	91.97	550	0.007	18.4%	6.25%
12	Very Low	Any/All	21 feet and Less	2.5 feet and Less	Any/All	Any/All	89.96	677	0	18.0%	0%
13	Very Low	Any/All	21 feet and Less	4.5-11.5 feet	Non- Transportation/ Utilities/ Communication	Any/All	56.09	387	0	11.2%	0%
14	Very Low	Any/All	21 feet and Less	4.5-5.5 feet	Transportation/ Utilities/ Communication	Any/All	25.69	158	0	5.1%	0%
15	Very Low	Yes	Greater than 21 feet	Greater than 11.5 feet	Residential	50 or Less	12.96	133	0	2.6%	0%

Table B-16. Roadway Departure KA Crashes on Access Controlled Roadways in Cook County

Row	Priority Level	Functional Class	Private Route	Median Width	Shoulder Width (ft.)	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
1	High	Interstate only	No	19.5-35 feet	Any/All	Any/All	Greater than 50	9.95	83	2.313	2.0%	13.07
2	Medium	Interstate only	No	Greater than 63 feet	Any/All	Any/All	Greater than 50	15.37	102	1.401	3.1%	12.56
3	Medium	Interstate, Expressway, or Freeway	No	17-18.5 feet	Any/All	Any/All	50 or Less	9.47	91	1.105	1.9%	5.43
4	Low	Interstate, Expressway, or Freeway	No	Greater than 18.5 feet	10.5 feet and Less	Any/All	25 or Less	21.58	160	0.845	4.3%	9.68
5	Low	Interstate only	No	17-19.5 feet	Any/All	Any/All	Greater than 50	6.48	52	0.783	1.3%	4.07
6	Low	Interstate, Expressway, or Freeway	No	Greater than 68 feet	Greater than 10.5 feet	Any/All	50 or Less	7.31	90	0.573	1.5%	3.06
7	Low	Interstate only	No	35-63 feet	Any/All	Any/All	Greater than 50	15.23	128	0.564	3.0%	8.15
8	Low	Interstate, Expressway, or Freeway	No	Greater than 18.5 feet	10.5 feet and Less	Any/All	25-50	6.19	77	0.321	1.2%	1.87
9	Low	Interstate, Expressway, or Freeway	Yes	Greater than 17 feet	Any/All	Any/All	Greater than 50	26.29	111	0.307	5.3%	7.13
10	Low	Interstate, Expressway, or Freeway	Any/All	7-17 feet	Any/All	Any/All	Any/All	12.9	90	0.271	2.6%	3.23
11	Low	Interstate, Expressway, or Freeway	No	18.5-68 feet	Greater than 10.5 feet	Any/All	50 or Less	34.17	288	0.234	6.8%	8.15
12	Low	Interstate, Expressway, or Freeway	Yes	Greater than 17 feet	Any/All	Residential	50 or Less	30.97	95	0.195	6.2%	5.77
13	Low	Interstate, Expressway, or Freeway	Yes	17-30.5 feet	Any/All	Non-Residential, Non-Open Space/ Agriculture/ Water	50 or Less	12.62	57	0.155	2.5%	2.21

Table B-16. Roadway Departure KA Crashes on Access Controlled Roadways in Cook County (continued)

Row	Priority Level	Functional Class	Private Route	Median Width	Shoulder Width (ft.)	Land Use	MOBEC Index	Length of Segments (miles)	No. of Segments	Crash Density	% Length of Network	% of Target Crashes
14	Low	Freeway only	No	Greater than 17 feet	Any/All	Any/All	Greater than 50	9.45	70	0.11	1.9%	1.19
15	Very Low	Interstate, Expressway, or Freeway	Yes	Greater than 30.5 feet	Any/All	Non-Residential, Non-Open Space/ Agriculture/ Water	50 or Less	6.87	62	0.075	1.4%	0.51
16	Very Low	Interstate, Expressway, or Freeway	Any/All	7 feet and Less	Greater than 7.5 feet	Any/All	Greater than 50	265.46	1761	0.063	53.2%	12.92
17	Very Low	Interstate, Expressway, or Freeway	Yes	Greater than 17 feet	Any/All	Non-Residential, Open Space/ Agriculture/ Water	50 or Less	9.07	50	0.036	1.8%	1.02

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