Median Treatment Study

Illinois Department of Transportation
District 1, Illinois

Final

July, 2017

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Section 1

Introduction

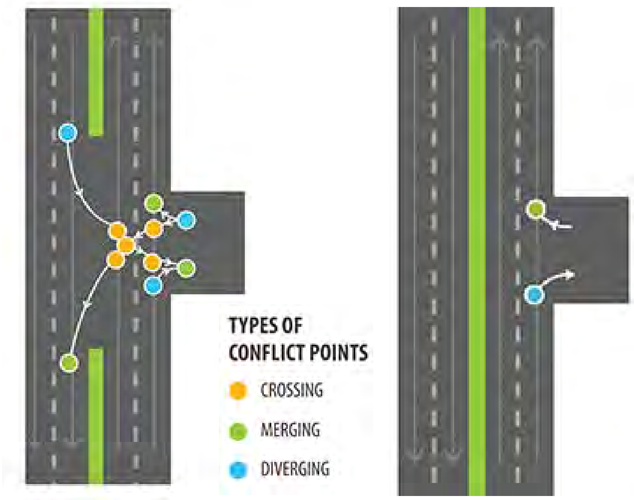
The safety of multilane roadways in northeast Illinois including the five Counties of Cook, Lake, Will, DuPage and McHenry is crucial since they carry higher volumes of traffic through busy neighborhoods. The corridors have mixed land use with diverse transportation demands. The safety of these corridors is important to the users and businesses along them that depend on the transportation facility for daily operations. The safe operation of the roadways is critical for the mobility of the people and success of the commercial establishments along the corridors.

The safety of a transportation facility is directly related to the number of conflict points along its length. The type of medians along a roadway affects access and safety. The impact of the median treatment can have a more pronounced impacts on pedestrian and bicyclist safety. In order to evaluate corridors with different median treatments, the Illinois Department of Transportation (IDOT) initiated a study of the crash experience on representative corridors.

A crash analysis was conducted along eighteen (18) corridors in northeast Illinois to evaluate the crash experience along segments within the study area. The crash analysis was conducted for a five-year period from 2009 to 2013 for the comparison of 5-lane with flush median versus 4-lane with barrier median. The analysis was conducted from 2010 to 2014 for the comparison of 7-lane with flush median versus 6-lane with barrier median using data provided by IDOT and the DuPage County Division of Transportation. Some routes were under construction and the years chosen were the most recently available that did not have construction impacts.

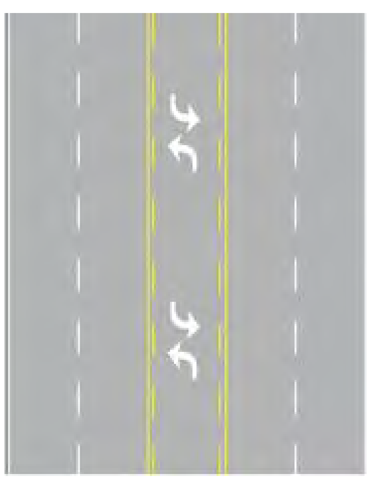
Example Comparison of Conflict Points by Median Treatment

11 Conflict Points vs 2 Conflict Points

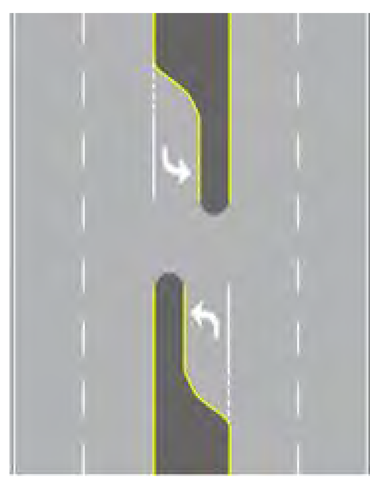


The purpose of the Median Treatment Study was to determine the effect that a particular median type plays in the crash experience along the selected corridors. This study evaluates the crash trends of two median types along regional roadway segments, specifically analyzing the difference between a flush (or mountable median) and a raised barrier median. The crash experience for pedestrians and bicyclists was an important element of the study. The purpose of the study was to identify trends and patterns in the crashes along multi-lane corridors.

Flush Median



Raised Median



A flush median is provided to allow unrestricted access and remove left-turning vehicles from the through lanes. A raised median provides limited access and provides turn lanes at specific locations along the segment. Examples of two median types are depicted above.

The secondary benefits of barrier median were also reviewed. The other objective of the Study was to compare the results of this crash analysis to other studies that have been conducted on a national level. This will provide a comparison to the analysis that will be provided in this report. In addition, the crash reduction factors from the Highway Safety Manual (HSM) were reviewed for implementing different median types. The purpose of these reviews were to compare the findings of various studies.

It should be noted that the purpose of the study was not to function as a predictive study for influencing decisions on future projects. It was also not the intention to either validate or reject the findings of the HSM.

Section 2

Selection of Corridors

As seen in Table 1 and Table 2 below, 18 corridors were selected for this safety study. The corridors were grouped into four categories;

- 5-lane roadways with a flush median
- 4-lane roadways with a raised median
- 7-lane roadways with a flush or mountable median
- 6-lane roadways with a raised median

The selected corridors are similar in nature in order to maintain consistency in the crash evaluation process. All 18 corridors are located within the counties of Cook, Will, DuPage, Lake and McHenry in northeast Illinois. All of the selected corridors are classified as Principal Arterial serving as major roadways in predominately suburban areas. None of the selected corridors are access-controlled routes. They contain no interchanges or grade separated intersections within the study limits. The corridors did not include on-street parking. All of the corridors within the study limits had a mix of residential, commercial, retail, and industrial land uses located adjacent to them.

Table 1. Corridors Analyzed: 5-Lane and 4-Lane

Median Type	Route	Limits	Municipality	County
5-Lane Flush	IL Route 59	Hawthorne Ln to Augusta Ave	West Chicago	DuPage
	IL Route 59	Amendodge Dr to Meadow Dr	Shorewood	Will
	US Route 45	IL Route 83 to Allanson Rd	Mundelein	Lake
	IL Route 38	County Farm Rd to IL Route 53	Wheaton, Glen Ellyn	DuPage
	IL Route 38	Finley Rd to Westmore Ave	Lombard	DuPage
	US Route 30	Hennepin Rd to IL Route 7	Crest Hill, Crystal Lawn	Will
	IL Route120	Ringwood Rd to IL Route 31	McHenry	McHenry
4-Lane Barrier	IL Route 47	Kreutzer Rd to Reed Road	Huntley	McHenry
	US Route 45	Laramie St to IL Route 120	Grayslake	Lake
	IL Route 59	Meadow Dr to Renwick Rd	Shorewood, Plainfield	Will
	IL Route 59	Joseph Ave to 95th St	Plainfield	Will
	IL Route 59	Hawthorne Ln to Diversey Pkwy	West Chicago	DuPage
	IL Route 59	Beaconridge Dr to Royce Rd	Bolingbrook	Will

Table 2. Corridors Analyzed: 7-Lane and 6-Lane

Median Type	Route	Limits	Municipality	County
7-Lane Mountable	IL Route 58	Basswood St to Meacham Rd	Schaumburg	Cook
7-Lane Flush	US Route 45 & 12	Division St to Armitage Ave	Melrose Park	Cook
	IL Route 50	US Route 12 to 111th St	Oak Lawn	Cook
6-Lane Barrier	IL Route 59	95th St to Ogden Ave	Naperville	Cook, Will
	Army Trail Rd	Swift Rd to Bloomingdale Rd	Addison, Glendale Heights, Bloomingdale	DuPage
	IL Route 64	Rohlwing Rd to IL Route 83	Lombard, Villa Park, Elmhurst	DuPage

The 5-lane roadways with a flush median vary in length from 1.42 to 4.65 miles. The ADT along these corridors vary from a low of 18,500 to a high of 38,600 with the minimum change along an individual corridor being 800 and the maximum being 12,600. Speeds along these corridors range from 20 to 45 MPH with the minimum change along an individual corridor being 0 MPH and the maximum being 15 MPH. The number of access points along the corridors range from 52 to 290, excluding signalized intersections. The access density ranges from 36.6 to 65.7 access points per mile. More detailed information on these 5-lane corridors can be found in the Crash Analysis Summary and Segment Maps in Exhibits.

The 4-lane roadways with a raised median vary in length from 1.77 to 5.51 miles. The Average Daily Traffic (ADT) along these corridors vary from a low of 18,200 to a high of 34,200 with the minimum change along an individual corridor being 3,300 and the maximum being 11,700. The ADT's were obtained from the Illinois Department of Transportation (IDOT) website http://www.gettingaroundillinois.com/. Posted speeds along these corridors range from 30 MPH to 45 MPH with the minimum change along an individual corridor being 0 MPH and the maximum being 15 MPH. The number of access points along the corridors range from 18 to 55, excluding signalized intersections. The access density ranges from 9.6 access points per mile to 23.4 access points per mile. More detailed information on these 4-lane corridors can be found in the Crash Analysis Summary and Segment Maps in Exhibits.

The 7-lane roadways with a flush or mountable median vary in length from 1.06 to 2.52 miles. The ADT along these corridors vary from a low of 32,200 to a high of 38,300 with the minimum change along an individual corridor being 0 and the maximum being 6,100. Speeds along these corridors range from 30 to 40 MPH with the minimum change along an individual corridor being 0 MPH and the maximum being 5 MPH. The number of access points along the corridors range from 36 to 169, excluding signalized intersections. The access density ranges from 34.0 to 71.6 access points per mile. More detailed information on these 7-lane corridors can be found in the Crash Analysis Summary and Segment Maps in Exhibits.

The 6-lane roadways with a raised median vary in length from 1.99 to 3.38 miles. The ADT along these corridors vary from a low of 37,300 to a high of 49,000 with the minimum change along an individual corridor being 800 and the maximum being 10,700. Speeds along these corridors range from 35 to 45 MPH with the minimum change along an individual corridor being 5 MPH and the maximum being 10 MPH. The number of access points along the corridors range from 46 to 129, excluding signalized intersections. The access density ranges from 15.2 to 37.1 access points per mile. More detailed information on these 6-lane corridors can be found in the Crash Analysis Summary and Segment Maps in Exhibits.

Section 3

Crash Analysis

The crash data was obtained from the Illinois Department of Transportation (IDOT), for a recent five-year period. The data was provided as summary tables in Adobe Acrobat format for signalized intersections within the corridor limits, segments, and total crashes for the corridor. The summary tables were used to extract relevant data for the analysis.

The crash analysis was conducted for roadway segments. A segment is a portion of roadway that is bound by signalized intersections. It was confirmed that these segments exclude the crashes that are related to the signalized intersections, because intersection crashes are more prevalent than segment crashes and would risk skewing the findings of the study. Crashes related to intersections were removed from the data.

The crashes at signalized intersections were analyzed separately and included in the summary table. The variation of crashes at signalized intersections were reviewed for corridors with and without barriers.

In addition to total crashes, the crash data was broken down and analyzed by the type of crash and the severity of the injury. Crash types were separated into five categories:

- Critical
- Read end
- Pedestrian
- Pedal cyclists
- Other (Excluded)

Critical crashes were types associated with a high injury rate including angle, head on, turning left, and turning right crashes. Other crashes were types not typically affected by median treatment including sideswipes and fixed object crashes. These other crashes were excluded from the study.

The Critical crashes were analyzed separately to understand the difference in patterns between median types for angle, head-on, and turning crashes. The charts are presented in Section 4.

Severity of crashes was broken into five categories:

- Fatal
- Type A
- Type B
- Type C
- Property Damage Only (PDO)

Type A injuries include those where someone associated with the crash is incapacitated. Type B injuries include those where someone associated with the crash is injured but not incapacitated. Type C injuries include those were someone associated with the crash sustains a superficial injury. The number of people killed or injured were not included in the evaluation.

The analysis of the data focused mainly on the crash rates calculated as crashes per year per mile of the corridors. Crash rates were evaluated against similar corridors with a different median type. 5-lane flush median corridors were compared with 4-lane raised median corridors and 7-lane flush (or mountable median) corridors were compared with 6-lane raised median corridors. In addition to this, the crash rates were analyzed against other factors to determine if there is a correlation between the factor and the crash rate:

- ADT
- Posted Speed
- Access Density

The Access Density was calculated by dividing the total access points on both sides of the roadway by the total length of the corridor. Signalized intersections were not counted as access points.

Table 1. Corridors Analyzed: 5-Lane and 4-Lane

Median Type	Route	Limits	ADT		Speed		Access Points
			Low	High	Low	High	
5-Lane Flush	IL Route 59	Hawthorne Ln to Augusta Ave	28100	30100	35	45	121
	IL Route 59	Amendodge Dr to Meadow Dr	21300	28400	35	45	52
	US Route 45	IL Route 83 to Allanson Rd	27000	27800	30	35	73
	IL Route 38	County Farm Rd to IL Route 53	28300	38600	20	35	290
	IL Route 38	Finley Rd to Westmore Ave	33900	36400	35	35	92
	US Route 30	Hennepin Rd to IL Route 7	19300	21100	35	40	147
	IL Route120	Ringwood Rd to IL Route 31	18500	31100	30	45	138
4-Lane Barrier	IL Route 47	Kreutzer Rd to Reed Road	18200	21500	35	45	44
	US Route 45	Laramie St to IL Route 120	20700	28500	30	45	41
	IL Route 59	Meadow Dr to Renwick Rd	24800	28400	40	45	49
	IL Route 59	Joseph Ave to 95th St	27200	33400	45	45	55
	IL Route 59	Hawthorne Ln to Diversey Pkwy	30100	34200	45	45	18
	IL Route 59	Beaconridge Dr to Royce Rd	19900	31600	40	45	44

Table 2. Corridors Analyzed: 7-Lane and 6-Lane

Median Type	Route	Limits	ADT		Speed		Access Points
			Low	High	Low	High	
7-Lane Mountable	IL Route 58	Basswood St to Meacham Rd	36300	36300	40	40	36
7-Lane Flush	US Route 45 & 12	Division St to Armitage Ave	37800	37800	30	35	169
	IL Route 50	US Route 12 to 111th St	32200	38300	35	35	144
6-Lane Barrier	IL Route 59	95th St to Ogden Ave	48200	49000	40	45	46
	Army Trail Rd	Swift Rd to Bloomingdale Rd	41000	45600	40	45	57
	IL Route 64	Rohlwing Rd to IL Route 83	37300	48000	35	45	129

The Crash Analysis Summary tables can be found in Exhibits. The location of the crashes were mapped for each corridor. The Crash Maps are included in the Appendix.

The following points should be noted:

- The data we received was sorted to remove any crashes that were classified as intersection crashes. Depending on the reporting officer at the crash scene and how the crash location was entered into the system, some crashes did appear to be located in an intersection but were not classified as such.
- The influence of law enforcement efforts on corridor crashes was not a factor that was evaluated.
- The crash rates did not account for ADT along the corridor. Accurate ADT data would be required to calculate crash rates accounting for ADT.
- Other studies reviewed included extensive statistical analyses compared to this study that did not conduct any statistical analysis.
- For developing the crash maps, the data we received was sorted to remove any crashes that were classified as intersection crashes. Depending on the reporting officer at the crash scene and how the crash location was entered into the system, some crashes did appear to be located in an intersection because were not classified as intersection crashes.

Section 4

Study Findings

The evaluation of the crash data involved two primary tasks:

I. Review of crash rates

II. Evaluation of crashes at signalized intersections

III. Comparison of crash rates with other factors including ADT, Speed, and Access Density

The detailed evaluation is discussed in this section.

I. Review of Crash Rates

The crash rates were calculated for the following crash types:

a. Total
b. Fatal
c. Type A
d. Type B
e. Type C
f. PDO
g. Critical; to include Angle, Turning and Head-On
h. Rear end
i. Pedestrian
j. Pedal cyclist

The crash rate was calculated as crashes per mile per year.

The total crash rate was calculated for each group of corridors, i.e., 5-Lane, 4-Lane, 7-Lane and 6-Lane segments. The total crash rate was calculated as total crashes for the group divided by total length for the number of year the analysis was conducted. The total crash rates are shown in the tables below.

Table 1. Total Crash Rate: 5-Lane and 4-Lane

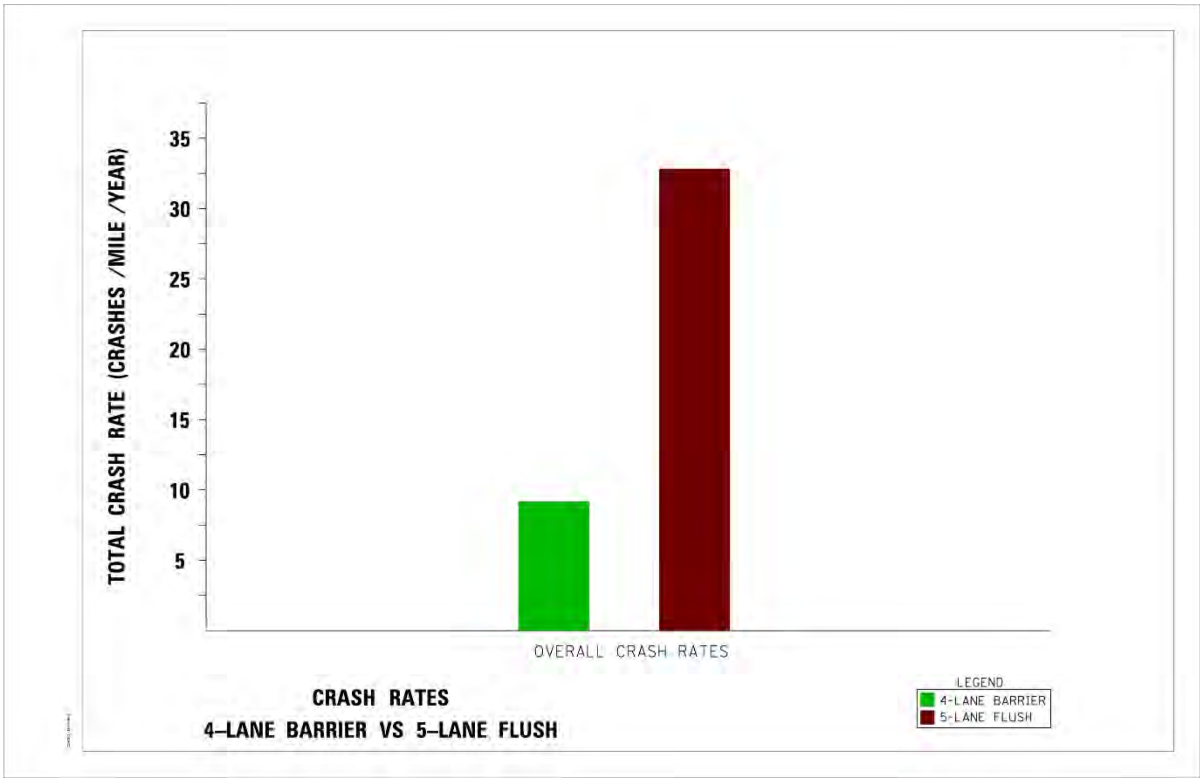
Severity	5-Lane Flush	4-Lane Barrier	Rate Reduction
Fatal	0.10	0.03	**69%**
Type A	1.15	0.33	**71%**
Type B	3.28	0.96	**71%**
Type C	3.64	1.02	**72%**
PDO	25.52	6.81	**73%**
Type	**5-Lane Flush**	**4-Lane Barrier**	**Rate Reduction**
Total	32.81	9.15	**72%**
Critical	10.44	2.13	**80%**
Rear End	16.41	4.61	**72%**
Pedestrian	0.40	0.06	**85%**
Pedal Cyclist	0.31	0.01	**97%**

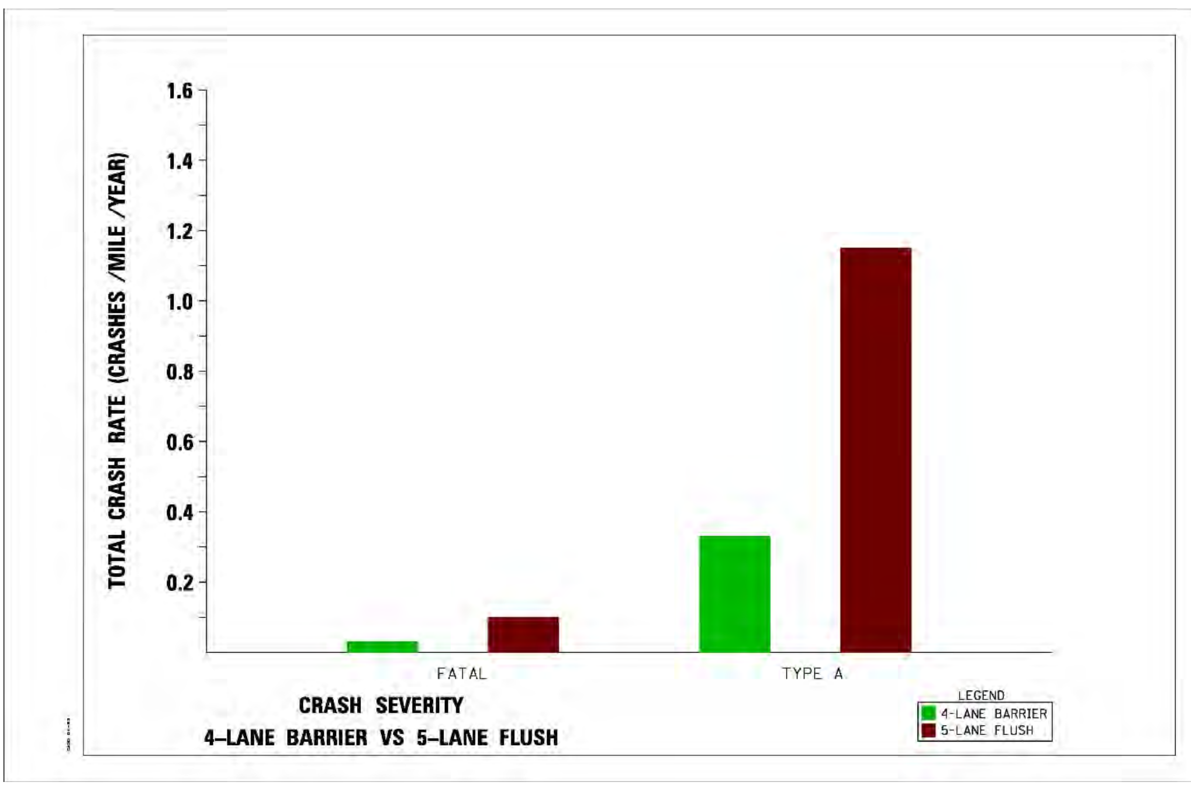
Table 2. Total Crash Rate: 7-Lane and 6-Lane

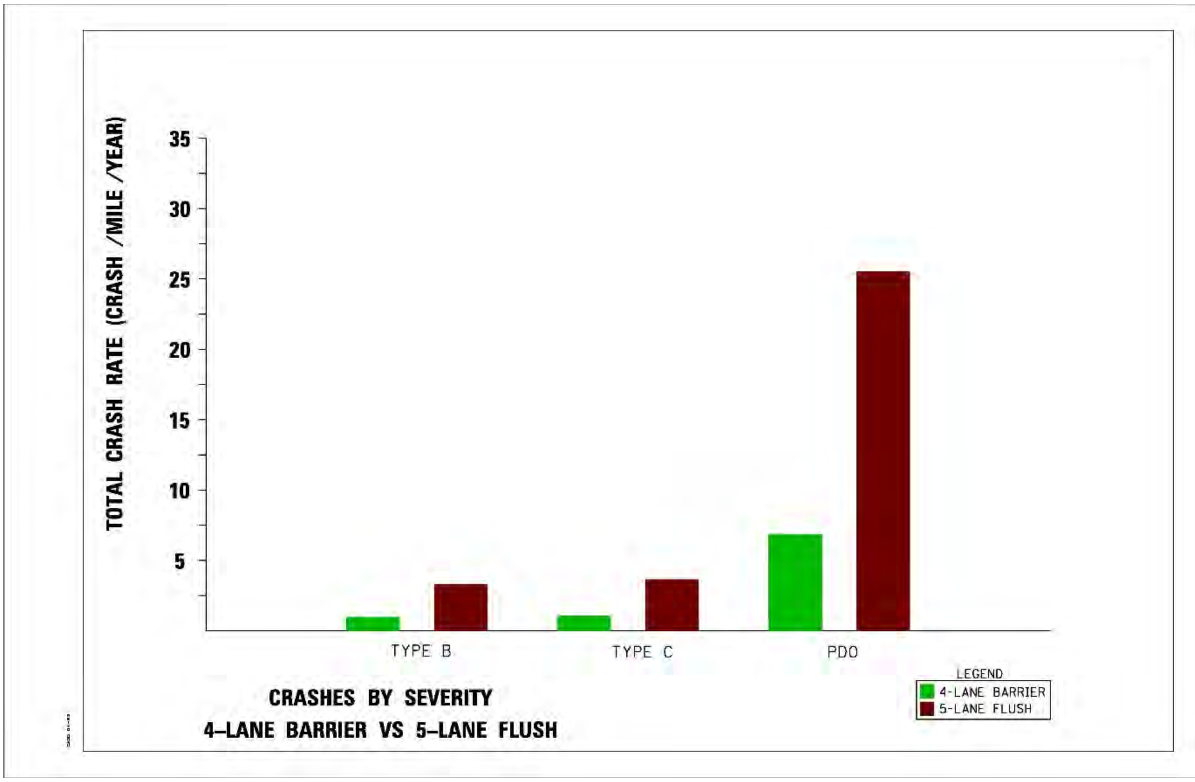
Severity	7-Lane Flush	6-Lane Barrier	Rate Reduction
Fatal	0.18	0.00	**100%**
Type A	0.83	0.67	**20%**
Type B	3.40	1.41	**58%**
Type C	5.66	2.79	**51%**
PDO	31.43	23.75	**24%**
Type	**7-Lane Flush**	**6-Lane Barrier**	**Rate Reduction**
Total	41.62	28.54	**31%**
Critical	11.81	4.36	**63%**
Rear End	17.35	16.49	**5%**
Pedestrian	0.78	0.04	**95%**
Pedal Cyclist	0.36	0.15	**67%**

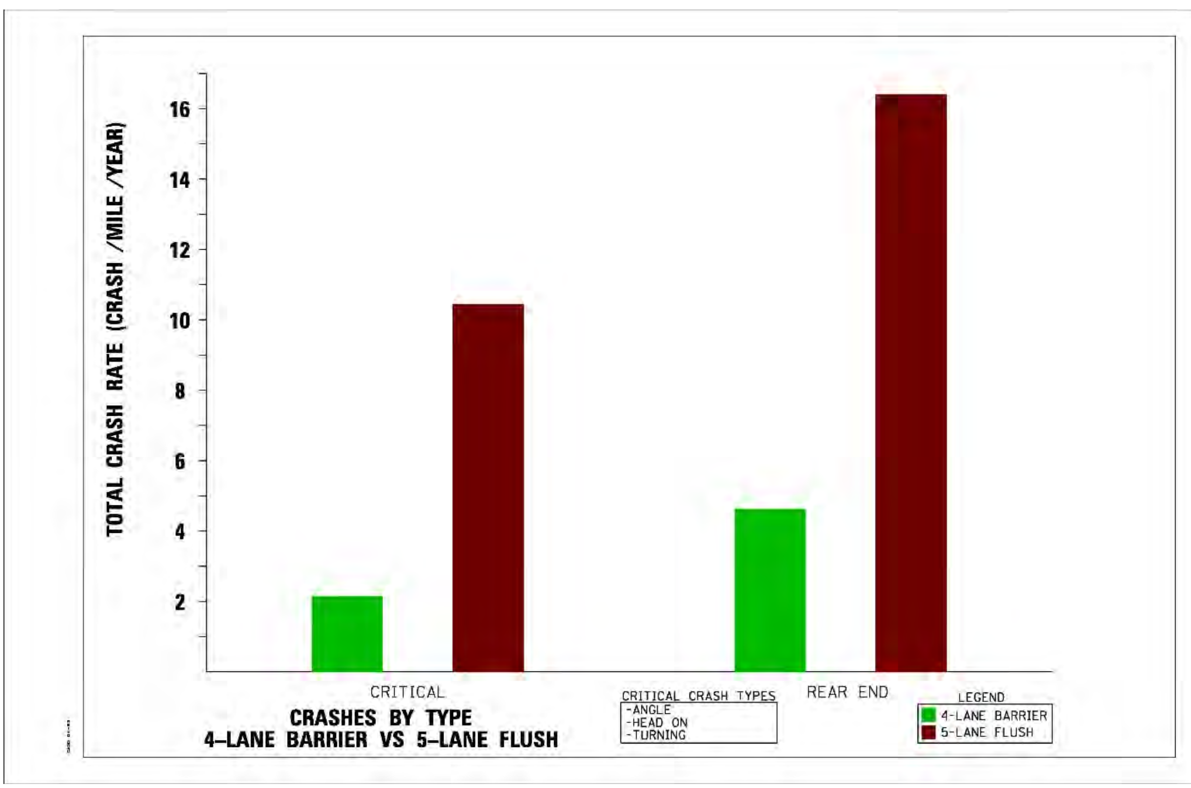
The total crash rates were also represented in charts shown below. In addition to the total crash rates, the minimum and maximum crash rates were also represented in charts for individual segments in each group. These charts for the minimum and maximum crash rates are included in the Charts section of this report. The segments with barrier median had lower crash rates for all crash types.

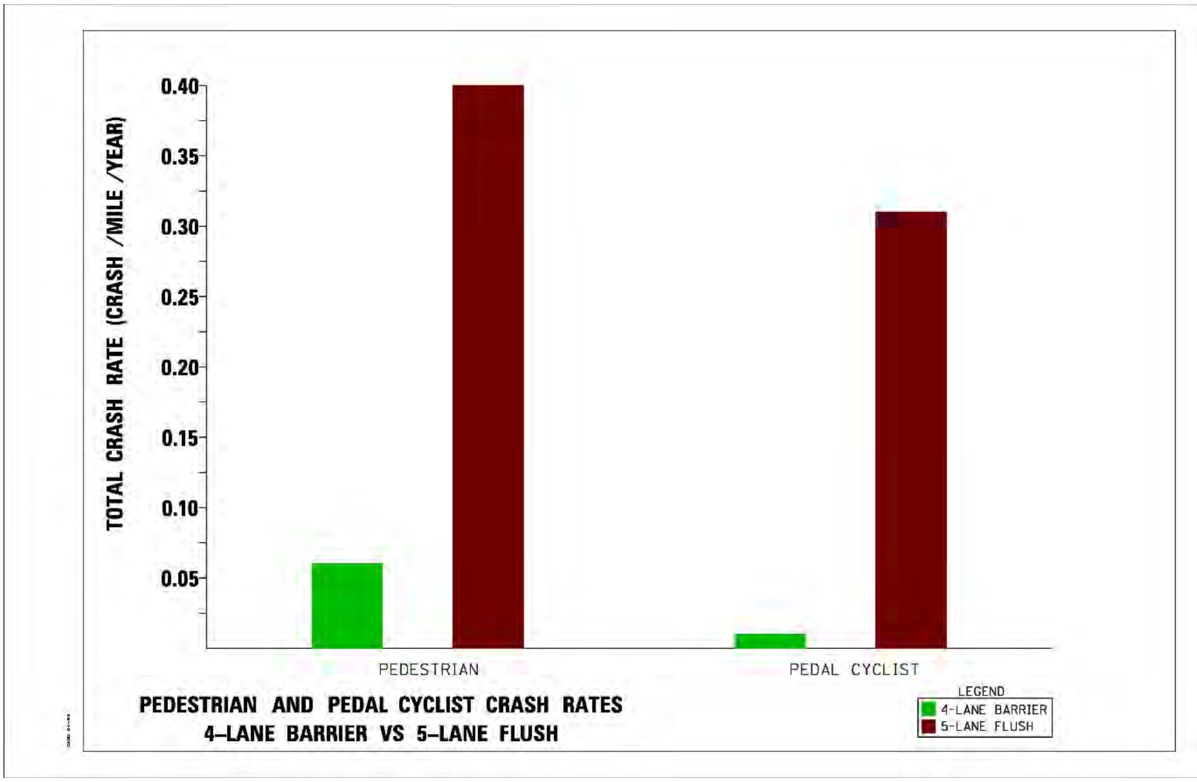
Charts. Total Crash Rate: 5-Lane Flush vs 4-Lane Barrier Segments



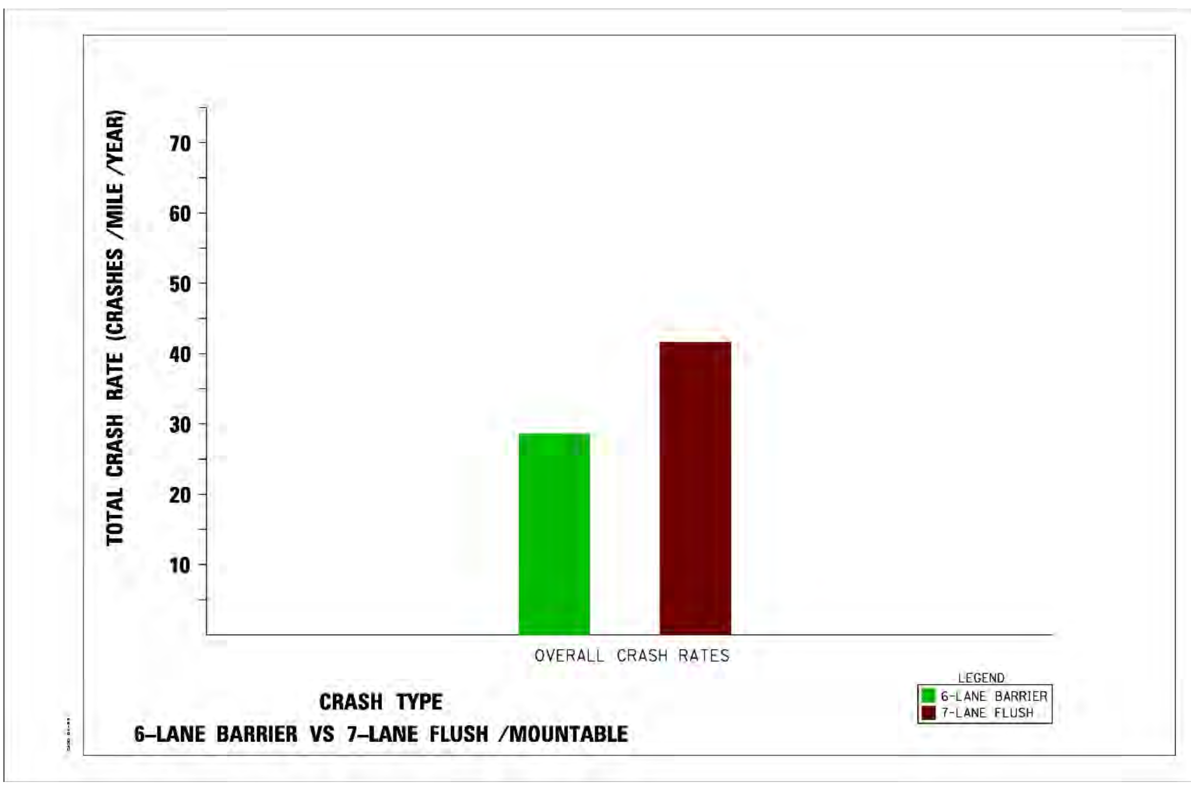


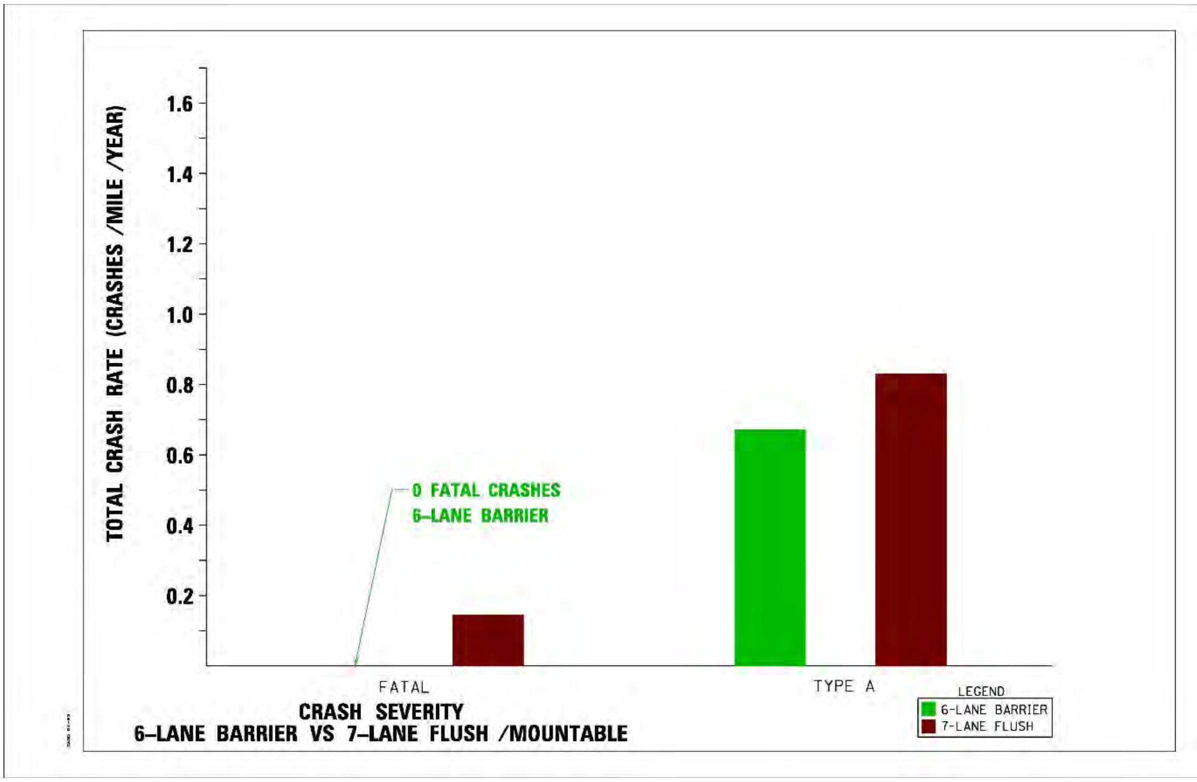

TOTAL CRASH RATE (CRASH /MILE /YEAR)
35
30
25
20
15
10
5
TYPE B
TYPE C
PDO
CRASHES BY SEVERITY
4-LANE BARRIER VS 5-LANE FLUSH
LEGEND
4-LANE BARRIER
5-LANE FLUSH

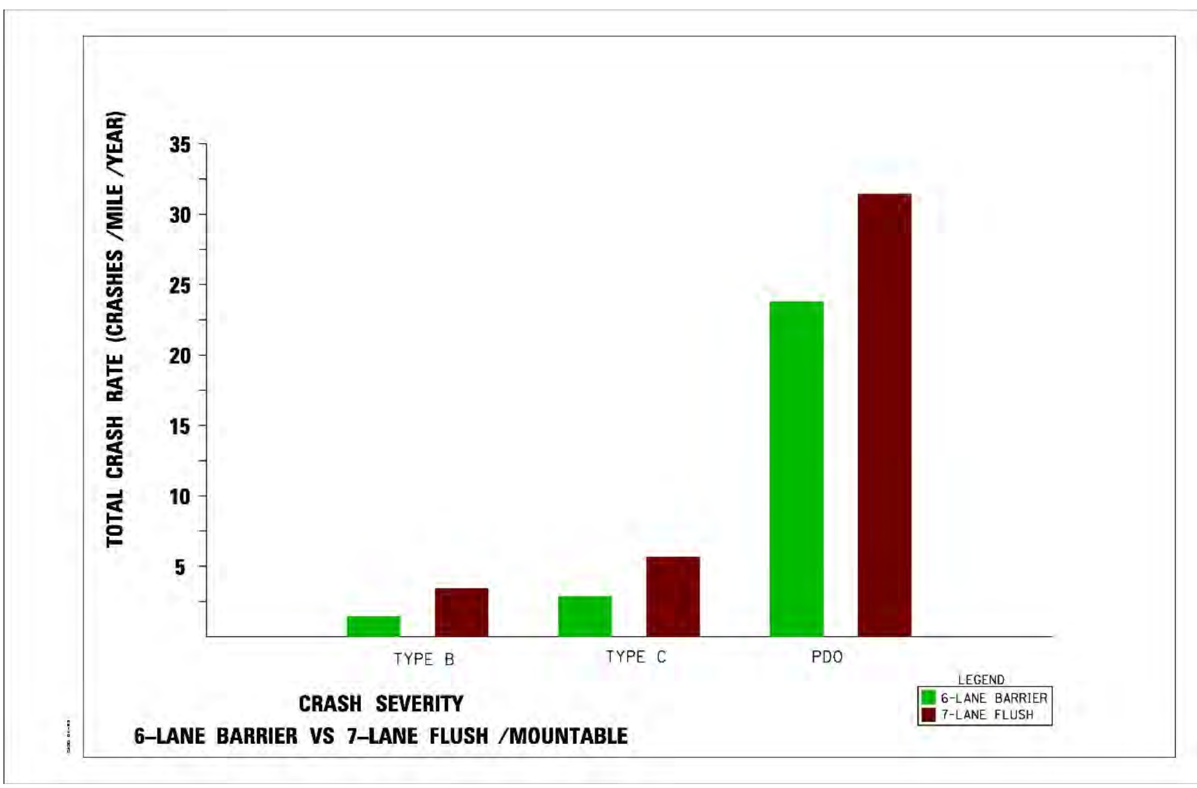

TOTAL CRASH RATE (CRASH /MILE /YEAR)
16
14
12
10
8
6
4
2
CRITICAL
REAR END
CRASHES BY TYPE
4-LANE BARRIER VS 5-LANE FLUSH
CRITICAL CRASH TYPES
-ANGLE
-HEAD ON
-TURNING
LEGEND
4-LANE BARRIER
5-LANE FLUSH

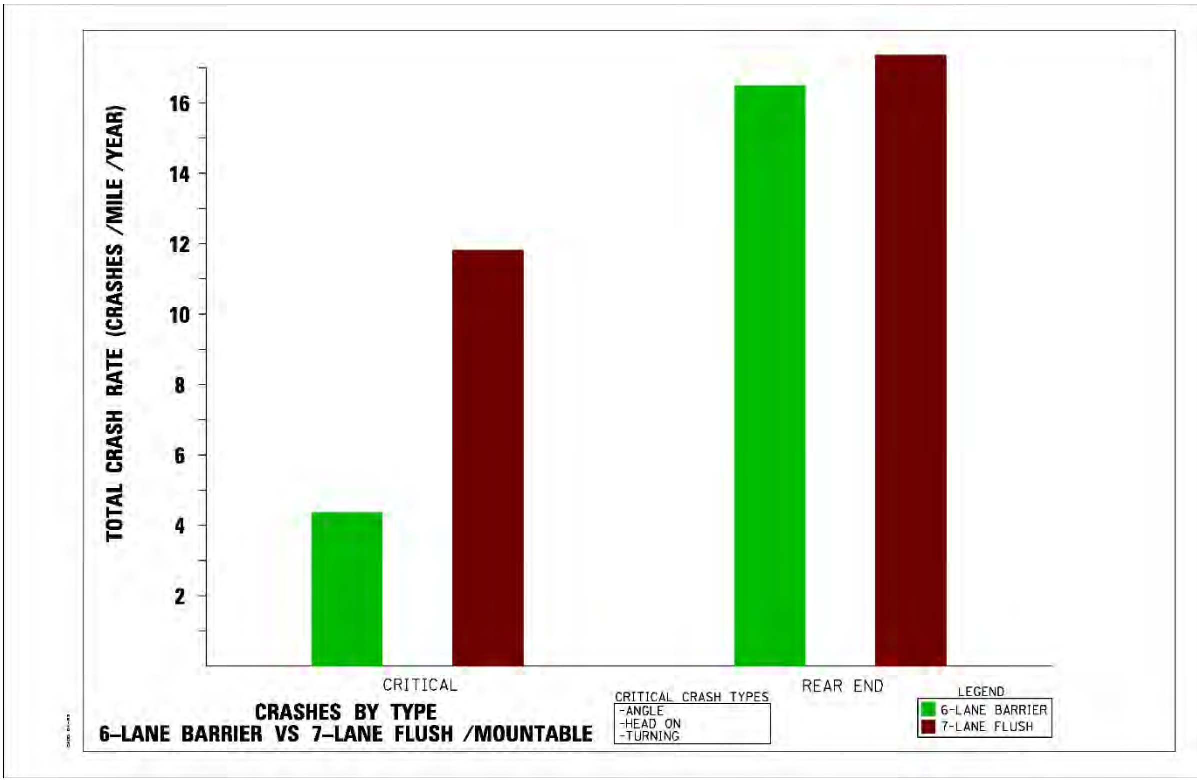


Charts. Total Crash Rate: 7-Lane Flush vs 6-Lane Barrier Segments

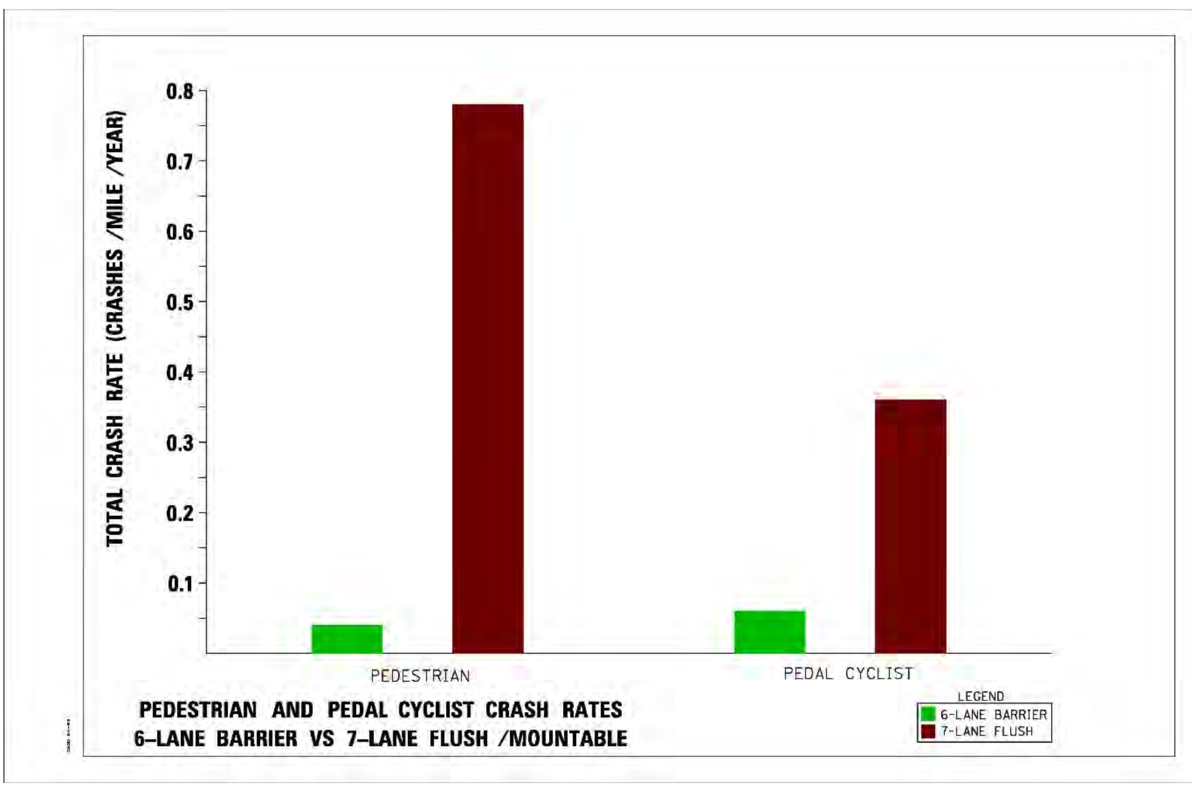



TOTAL CRASH RATE (CRASHES /MILE /YEAR)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0 FATAL CRASHES
6-LANE BARRIER
FATAL
TYPE A
CRASH SEVERITY
6-LANE BARRIER VS 7-LANE FLUSH /MOUNTABLE
LEGEND
6-LANE BARRIER
7-LANE FLUSH


TOTAL CRASH RATE (CRASHES /MILE /YEAR)
35
30
25
20
15
10
5
TYPE B
TYPE C
PDO
CRASH SEVERITY
6-LANE BARRIER VS 7-LANE FLUSH /MOUNTABLE
LEGEND
6-LANE BARRIER
7-LANE FLUSH



TOTAL CRASH RATE (CRASHES /MILE /YEAR)
16
14
12
10
8
6
4
2
CRITICAL
REAR END
CRASHES BY TYPE
6-LANE BARRIER VS 7-LANE FLUSH /MOUNTABLE
CRITICAL CRASH TYPES
-ANGLE
-HEAD ON
-TURNING
LEGEND
6-LANE BARRIER
7-LANE FLUSH



TOTAL CRASH RATE (CRASHES /MILE /YEAR)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
PEDESTRIAN
PEDAL CYCLIST
PEDESTRIAN AND PEDAL CYCLIST CRASH RATES
6-LANE BARRIER VS 7-LANE FLUSH /MOUNTABLE
LEGEND
6-LANE BARRIER
7-LANE FLUSH

The crash types of Angle, Turning and Head-On included in the category of 'Critical' were analyzed separately to understand patterns. The left and right turning crashes were reviewed. For this evaluation, percentage of the types of crashes in the Critical category were calculated and compared. The percentages of crashes with and without barrier median were compared for the segments. The following observations can be made:

- With barrier median, the **percentage** of crashes by type change consistently for the 5 and 4-lane and 7 and 6-lane segments.
- With barrier median, the **percentage** of angle crashes increased, left turn crashes reduced, the right turn crashes stay the same and surprisingly the head-on crash percentage is higher.

This evaluation is included in Exhibits under Critical Crashes Breakdown for both 5 and 4-lane and 7 and 6-lane segments.

II. Evaluation of Crashes at Signalized Intersections

The effect of barrier type along segments on the crashes at signalized intersections was reviewed. The crashes at the signalized intersections were evaluated to see if the crashes were higher at signalized intersections when a barrier was located. The data was reviewed in several ways. The following observations can be made:

- There is not a clear trend with the crashes at signalized intersections.
- We cannot conclude that when a barrier median is present along a segment, the signalized intersection crashes increase.
- The sample size is small for any clear conclusion.

This evaluation is included in the Crash Analysis Summary in Exhibits.

III. Comparison of Crash Rates with other Factors

The maximum crash rates for individual segments were compared with the following factors:

a. ADT
b. Speed, Posted
c. Access Density

The maximum crash rate for individual segments were compared with the factors for each group of corridors, i.e., 5-Lane, 4-Lane, 7-Lane and 6-Lane segments. These charts are included in the Charts section of this report.

Overall the correlation with ADT and Speed was not as significant. However, higher crash rates were associated with higher access density.

Section 5

Review of Other Studies

In order to compare the observations of this study, a review of similar studies was completed. Three (3) studies were chosen for analysis based on similar scope and purpose. In addition to these studies, a review of the Highway Safety Manual (HSM) was undertaken which revealed two crash modification factors (CMF) that are relevant to this study.

Review of HSM

Section 13.4.2.6 of the HSM provides CMF's for the addition of a raised median to a cross section that previously had a Two-Way Left Turn Lane (TWLTL) or was undivided. This base condition has a CMF of 1.0. Introducing a raised median to an urban roadway segment reduces injury related crashes (CMF = 0.78) while slightly increasing PDO crashes (CMF = 1.09). Introducing a raised median to a rural roadway segment reduces injury related crashes (CMF = 0.88) and PDO crashes (CMF = 0.82).

Review of Similar Studies

The first study chosen for review was conducted by the Georgia Department of Transportation (GaDOT). Data points were collected for 986 TWLTL sections and 1,125 raised median sections. The authors of this study analyzed two sets of data, one containing all crashes (including intersection related crashes) and one containing only mid-block crashes, similar to this study. Crash rates for both TWLTL and raised median segments were reported per 100 million vehicle-miles of travel. The study found a 45% reduction in crash rate, a 48% reduction in injury rate, and a 26% reduction in fatality rate when a raised median was present in the cross section. Pedestrian fatality rates were calculated per 100 miles of roadway. A 71%

reduction in pedestrian fatalities was observed when a raised median was present in the cross section.

The second study chosen for review was conducted by GaDOT in conjunction with the Georgia Institute of Technology. Data points in this study were reduced by setting a minimum ADT for segments at 9,500. In total, 20 TWLTL sites and 19 raised median sites were analyzed. The authors of the study analyzed two sets of data, one containing all crashes (including intersection related crashes) and one containing only mid-block crashes, similar to this study. This review will focus on the latter. Crash rates were reported per million vehicle miles traveled as well as accidents per mile per year. The study found a 61.7% reduction in crash rate, a 60.5% reduction in injury rate, and a 0% reduction in fatality rate on 4-lane sections when a raised median was present in the cross section. The authors found a 54.2% reduction in crash rate, a 60.6% reduction in injury rate, and a 50% reduction in fatality rate on a 6-lane section when a raised median was present in the cross section.

The third study chosen for review was conducted by the University of Nevada, Las Vegas. Data points were collected for 319 midblock segments along 25 roads. All of these roads were 6 and 7 lane sections as there were no 4 and 5 lane sections available in the area. The author of the study analyzed a single set of data (mid-block collisions) using two separate regression models, one that included information such as the width and spacing of mid-block openings and one that focused only on the type of median and the physical characteristics of the segments, which is similar to this study. The study found a 31.5% reduction in the total crash rate and a 23.7% reduction in injury rate when a raised median was present in the cross section.

Table 1. Summary of Literature Review

Reduction in Crash Rates	**Study 1**	**Study 2**		**Study 3**
	Combined Results for All Sections	Results for 4/5 Lane Sections	Results for 6/7 Lane Sections	Results for 6/7 Lane Sections
Total	45.0%	61.7%	54.2%	31.5%
Injury	48.0%	60.5%	60.6%	23.7%
Fatality	26.0%	0.0%	50.0%	N/A

Section 6

Conclusions

The evaluation of the crash data shows that in northeastern Illinois the corridors with a barrier median have lower crash rates. The following conclusions can be drawn from the study:

- There are safety benefits from reducing conflict points along a corridor.
- The overall crash rates were lower for corridors with barrier median
- The crash rates for most crash types were lower for corridors with barrier median
- The crash rates by severity were lower for corridors with barrier median
- Higher reduction in crash rates was observed in critical crash types including angle, turning and head-on crashes
- The reduction in crash rates for the 5-lane vs 4-lane comparison were consistent for various crash types and by severity
- The reduction in crash rates for the 7-lane vs 6-lane comparison were lower and less consistent for various crash types and by severity
- The reduction in crash rates for pedestrian and pedal cyclist crashes was the highest for the 5-lane vs 4-lane comparison and the 7-lane vs 6-lane comparison
- No correlation between crashes and speed or crashes and ADT was found. There is some correlation between crashes and access density. Higher crash rates were observed as access density increased.
- The 6-lane corridors with barrier median had higher crash rates that can be attributed to higher ADT's.
- There are other benefits of barrier median that improve the attractiveness of the corridor. The barrier median provides a refuge for pedestrians. A landscaped median can also have a traffic calming effect on the segment. A safer corridor it more attractive to all users and businesses.

- In an environment where drivers are more distracted and inattentive, a more defined and structured roadway provided by barrier medians is desirable.
- We cannot conclude that when a barrier median is present along a segment, the signalized intersection crashes increase. The sample size is small for any clear conclusion related to the crashes at signalized intersections.
- The findings of this study are mostly consistent with other studies conducted.

Exhibits

Crash Summary Tables
Segment Maps

5 - Lane

vs

4 - Lane

Segments

Crash Analysis Summary: 5-Lane vs 4-Lane Segments

Median Type	Route	Limits	Municipality	County	Classification	ADT		Speed		Predominant Land Use	Access Points	Access Density	Sidewalk	Coverage/Buffer						Shared-Use Path	Coverage/Buffer					
						Low	High	Low	High																	
5-Lane Flush	IL Route 59	Augusta Ave to Hawthorne Ln	West Chicago	DuPage	Principal Arterial	28100	30100	35	45	Residential	121	51.1	Y	W,	P,	P;	E,	P,	P	N						
	IL Route 59	Amendodge Dr to Meadow Dr	Shorewood	Will	Principal Arterial	21300	28400	35	45	Residential	52	36.6	Y	W,	P,	P;	E,	P,	P	Y	W,	P,	N;	E,	P,	N
	US Route 45	IL Route 83 to Allanson Rd	Mundelein	Lake	Principal Arterial	27000	27800	30	35	Commercial/Retail	73	49.7	Y	W,	P,	P;	E,	P,	N	Y	W,	P,	N			
	IL Route 38	County Farm Rd to IL Route 53	Wheaton, Glen Ellyn	DuPage	Principal Arterial	28300	38600	20	35	Residential	290	62.4	Y	N,	P,	P;	S,	P,	N	Y	N,	P,	N;	S,	P,	N
	IL Route 38	Finley Rd to Westmore Ave	Lombard	DuPage	Principal Arterial	33900	36400	35	35	Commercial/Retail	92	52.0	Y	N,	F,	P;	S,	F,	N	N						
	US Route 30	Hennepin Rd to IL Route 7	Crest Hill, Crystal Lawn	Will	Principal Arterial	19300	21100	35	40	Commercial/Retail	147	61.5	Y	N,	P,	P;	S,	P,	P	N						
	IL Route120	Ringwood Rd to IL Route 31	McHenry	McHenry	Principal Arterial	18500	31100	30	45	Commercial/Retail	138	65.7	Y	N,	P,	P;	S,	P,	P	N						
4-Lane Barrier	IL Route 47	Kreutzer Rd to Reed Road	Huntley	McHenry	Principal Arterial	18200	21500	35	45	Commercial/Retail	44	20.6	Y	W,	P,	N;	E,	P,	N	Y	W,	P,	N;	E,	P,	N
	US Route 45	Laramie St to IL Route 120	Grayslake	Lake	Principal Arterial	20700	28500	30	45	Industrial	41	9.6	Y	W,	P,	P;				Y	W,	P,	Y			
	IL Route 59	Meadow Dr to Renwick Rd	Shorewood, Plainfield	Will	Principal Arterial	24800	28400	40	45	Commercial/Retail	49	11.4	Y	W,	P,	P;	E,	P,	P	Y	W,	P,	Y;	E,	P,	N
	IL Route 59	Joseph Ave to 95th St	Plainfield	Will	Principal Arterial	27200	33400	45	45	Commercial/Retail	55	10.0	Y	W,	P,	P;	E,	P,	P	N						
	IL Route 59	Hawthorne Ln to Diversey Pkwy	West Chicago	DuPage	Principal Arterial	30100	34200	45	45	Commercial/Retail	18	10.2	N							N						
	IL Route 59	Beaconridge Dr to Royce Rd	Bolingbrook	Will	Principal Arterial	19900	31600	40	45	Commercial/Retail	44	23.4	Y	W,	P,	P;	E,	P,	P	N						
														Side of Roadway - N/E/S/W	Coverage - Full/Partial	Buffer - Yes/No/Partial	Side of Roadway - N/E/S/W	Coverage - Full/Partial	Buffer - Yes/No/Partial		Side of Roadway - N/E/S/W	Coverage - Full/Partial	Buffer - Yes/No/Partial	Side of Roadway - N/E/S/W	Coverage - Full/Partial	Buffer - Yes/No/Partial

Notes:

Access Density - Access Points/Mile
Crash Rate - Crashes/Yr/Mile
Critical Crashes - Angle, Turning and Head On
Secondary Crashes - Rear End

Median Type	Route	Limits	Length (Miles)	Data Years	Segements Total		Fatal		A		B		C		PDO		Critical		Rear End		Ped		PedL		Intersec. Total		
					Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Intersections	Crash/Intersection
5-Lane Flush	IL Route 59	Augusta Ave to Hawthorne Ln	2.37	2009-2013	168	14.18	3	0.25	12	1.01	17	1.43	17	1.43	119	10.04	38	3.21	78	6.58	5	0.42	1	0.08	195	4	49
	IL Route 59	Amendodge Dr to Meadow Dr	1.42	2009-2013	79	11.13	0	0.00	3	0.42	7	0.99	8	1.13	61	8.59	20	2.82	25	3.52	1	0.14	1	0.14	102	3	34
	US Route 45	IL Route 83 to Allanson Rd	1.47	2009-2013	135	18.37	1	0.14	5	0.68	8	1.09	19	2.59	102	13.88	62	8.44	40	5.44	5	0.68	1	0.14	243	5	49
	IL Route 38	County Farm Rd to IL Route 53	4.65	2009-2013	863	37.12	0	0.00	22	0.95	59	2.54	113	4.86	669	28.77	237	10.19	489	21.03	9	0.39	9	0.39	619	14	44
	IL Route 38	Finley Rd to Westmore Ave	1.77	2009-2013	659	74.46	1	0.11	27	3.05	80	9.04	71	8.02	550	62.15	139	15.71	428	48.36	6	0.68	4	0.45	445	6	74
	US Route 30	Hennepin Rd to IL Route 7	2.39	2009-2013	351	29.37	1	0.08	12	1.00	45	3.77	30	2.51	263	22.01	180	15.06	107	8.95	2	0.17	4	0.33	278	4	70
	IL Route120	Ringwood Rd to IL Route 31	2.10	2009-2013	398	37.90	2	0.19	12	1.14	49	4.67	36	3.43	299	28.48	168	16.00	160	15.24	4	0.38	5	0.48	165	5	33
4-Lane Barrier	IL Route 47	Kreutzer Rd to Reed Road	2.14	2009-2013	113	10.56	0	0.00	7	0.65	13	1.21	8	0.75	85	7.94	24	2.24	67	6.26	0	0.00	0	0.00	207	4	52
	US Route 45	Laramie St to IL Route 120	4.29	2009-2013	137	6.39	1	0.05	9	0.42	8	0.37	21	0.98	98	4.57	6	0.28	78	3.64	1	0.05	0	0.00	357	7	51
	IL Route 59	Meadow Dr to Renwick Rd	4.28	2009-2013	173	8.08	2	0.09	6	0.28	19	0.89	17	0.79	129	6.03	51	2.38	78	3.64	1	0.05	0	0.00	603	8	75
	IL Route 59	Joseph Ave to 95th St	5.51	2009-2013	238	8.64	0	0.00	7	0.25	27	0.98	35	1.27	169	6.13	73	2.65	103	3.74	1	0.04	0	0.00	567	9	63
	IL Route 59	Hawthorne Ln to Diversey Pkwy	1.77	2009-2013	88	9.94	0	0.00	0	0.00	10	1.13	9	1.02	69	7.80	19	2.15	40	4.52	0	0.00	0	0.00	296	3	99
	IL Route 59	Beaconridge Dr to Royce Rd	1.88	2009-2013	160	17.02	0	0.00	4	0.43	18	1.91	11	1.17	127	13.51	39	4.15	92	9.79	3	0.32	1	0.11	524	7	75

Types / Miles / Years	Segment Total	Fatal	A	B	C	PDO	Critical	Rear End	Ped	PedL	Total Intersection Crashes / mile / year	Total Intersection Crashes / # of Intersections
5-Lane Flush Crash Rate	32.81	0.10	1.15	3.28	3.64	25.52	10.44	16.41	0.40	0.31	25.32	49.93
4-Lane Barrier Crash Rate	9.15	0.03	0.33	0.96	1.02	6.81	2.13	4.61	0.06	0.01	25.71	50.05
Crash Reduction	72%	69%	71%	71%	72%	73%	80%	72%	85%	97%	-2%	0%

5 Lane vs 4 Lane Critical Crash Breakdown

5 Lane Flush

IL Route 59 - Augusta Ave to Hawthorn Ln	Angle	LT	RT	O
2009	2	5	0	1
2010	2	3	1	0
2011	5	1	1	1
2012	3	6	1	0
2013	3	2	0	1

IL Route 59 - Amendodge Dr to Meadow Dr	A	LT	RT	O
2009	1	4	0	0
2010	0	3	0	0
2011	1	1	0	0
2012	2	5	0	0
2013	1	2	0	0

US Route 45 - IL Route 83 to Allanson Rd	A	LT	RT	O
2009	6	12	0	0
2010	4	3	2	1
2011	2	6	0	0
2012	1	12	2	0
2013	3	7	1	0

IL Route 120 - Ringwood Rd to IL Route 31	A	LT	RT	O
2009	4	28	10	2
2010	5	29	5	0
2011	2	19	3	0
2012	4	23	2	0
2013	6	21	4	1

IL Route 38 - County Farm Rd to IL Route 53	A	LT	RT	O
2009	11	33	5	2
2010	7	13	6	1
2011	16	35	12	1
2012	14	26	7	3
2013	12	27	4	2

IL Route 38 - Finley Rd to Westmore Ave	A	LT	RT	O
2009	5	19	6	
2010	7	17	5	2
2011	6	14	5	
2012	5	15	5	
2013	3	21	2	2

US Route 30 - Hennpin Rd to IL Route 7	A	LT	RT	O
2009	11	21	1	1
2010	15	21	4	0
2011	12	20	4	1
2012	16	19	1	0
2013	13	18	1	1

Angle	Left	Right	Head-On	Total
210	511	100	23	844

Angle	Left	Right	Head-On
25%	61%	12%	3%

4 Lane Barrier

IL Route 47- Kreutzer Rd to Reed Rd	A	LT	RT	O
2009	3	0	0	2
2010	3	1	0	
2011	6	4	2	
2012		0	0	
2013	2	1	0	

US Route 45 - Laramie St to IL Route 120	A	LT	RT	O
2009		0	0	1
2010		0	0	1
2011		0	2	
2012		0	2	
2013		0	0	

IL Route 59 - Meadow Dr to Renwick Rd	A	LT	RT	O
2009	7	1	1	
2010	10	2	3	2
2011	4	3		
2012	6	1	1	
2013	7	2	1	

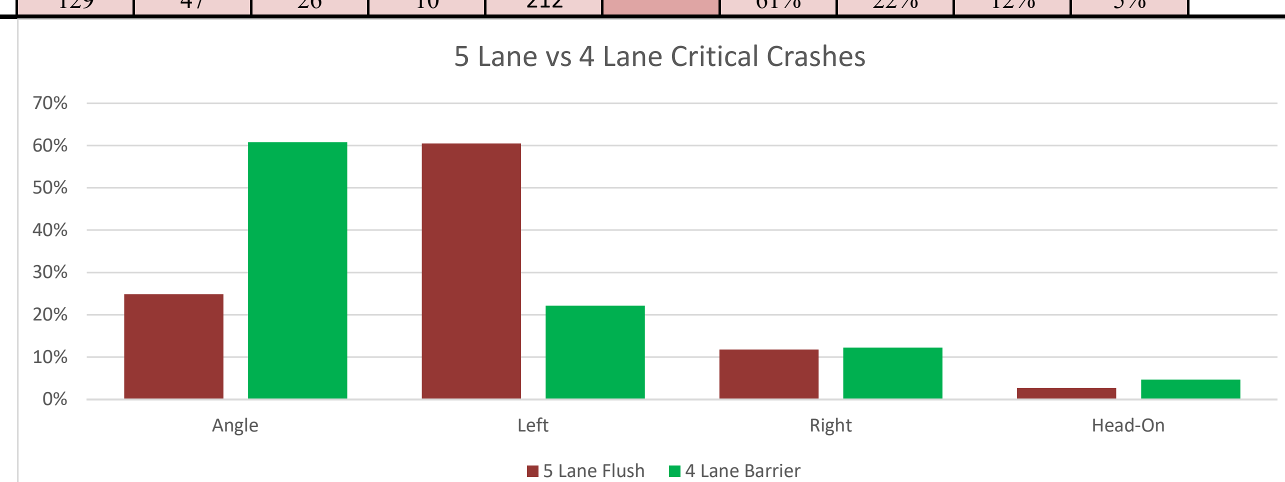
IL Route 59 - Joseph Ave to 95th St	A	LT	RT	O
2009	12	5	1	0
2010	6	5	2	0
2011	7	5	0	0
2012	9	2	3	1
2013	8	7	0	0

IL Route 59 - Hawthorn Ln to Diversey Pkwy	A	LT	RT	O
2009	1	0	0	
2010	5	3	0	
2011	2	0	2	
2012	2	0	0	
2013	3	1	0	

IL Route 53 - Beaconridge Dr to Royce Rd	A	LT	RT	O
2009	6	2	1	
2010	8		3	3
2011	2	1	1	
2012	3	1	1	
2013	7			

Angle	Left	Right	Head-On	Total
129	47	26	10	212

Angle	Left	Right	Head-On
61%	22%	12%	5%



5 - Lane

Flush Median

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 2.36 MILES

EAST ACCESS POINTS: 70 WEST ACCESS POINTS: 51

LEGEND

IL ROUTE 59 – AUGUSTA AVENUE TO HAWTHORNE LANE
5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 2.36 MILES

EAST ACCESS POINTS: 70 WEST ACCESS POINTS: 51

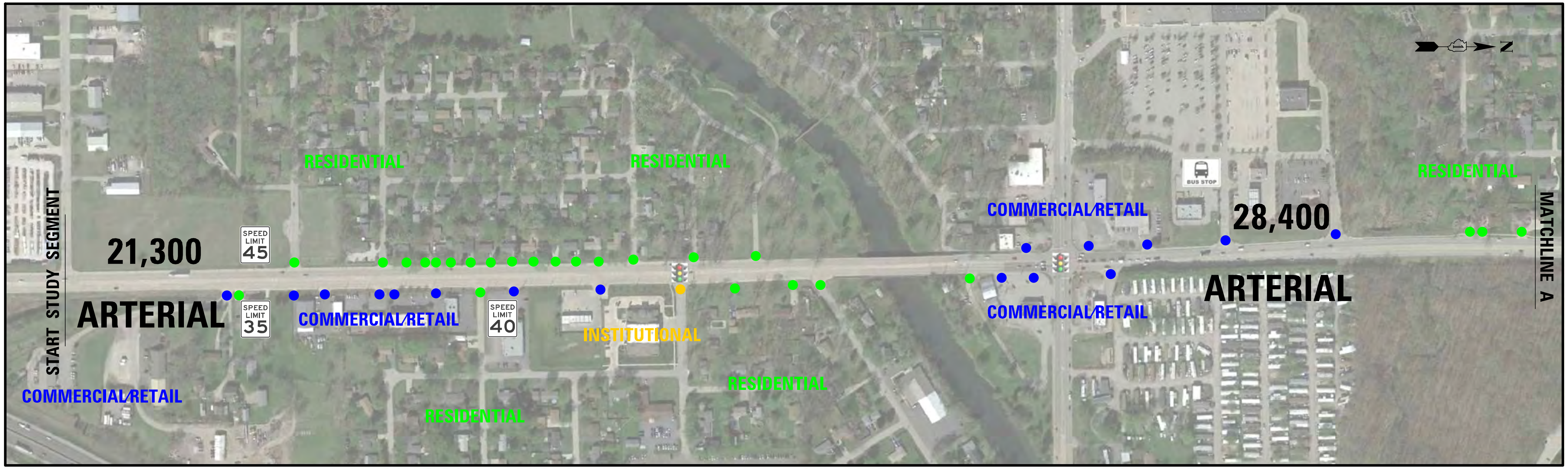
IL ROUTE 59 – AUGUSTA AVENUE TO HAWTHORNE LANE

5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 1.42 MILES

EAST ACCESS POINTS: 23 WEST ACCESS POINTS: 29



IL ROUTE 59 – AMENDODGE DRIVE TO MEADOW DRIVE
5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 1.47 MILES

EAST ACCESS POINTS: 34 WEST ACCESS POINTS: 39

US ROUTE 45 – IL ROUTE 83 TO ALLANSON ROAD
5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.65 MILES

NORTH ACCESS POINTS: 155 SOUTH ACCESS POINTS: 135

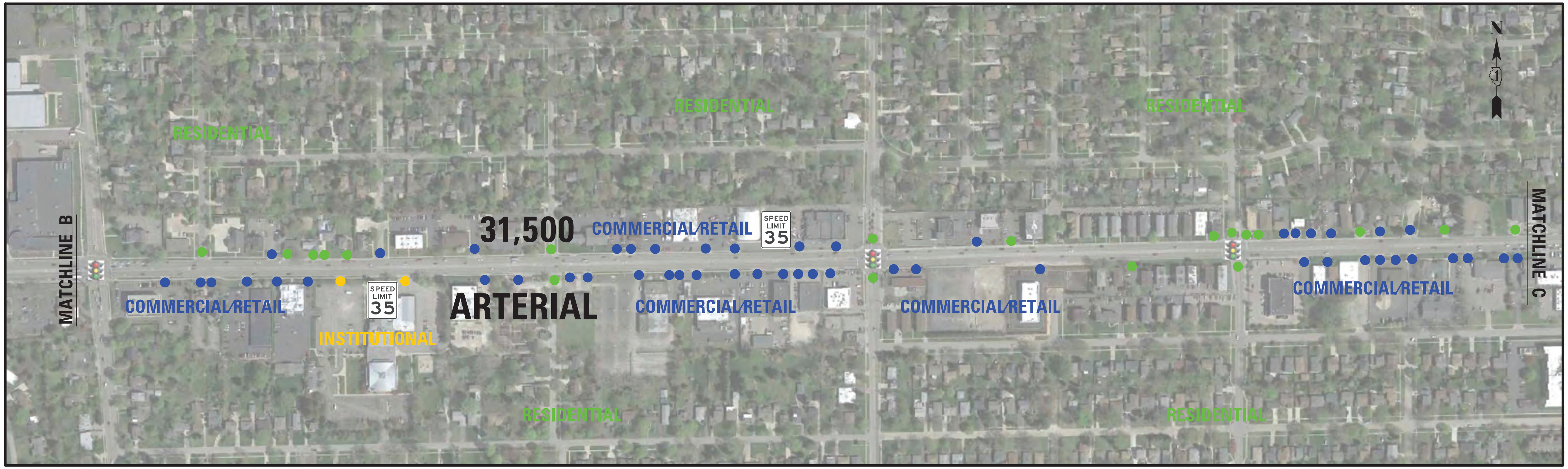
LEGEND

IL ROUTE 38 – COUNTY FARM ROAD TO IL ROUTE 53
5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.65 MILES

NORTH ACCESS POINTS: 155 **SOUTH ACCESS POINTS: 135**



LEGEND

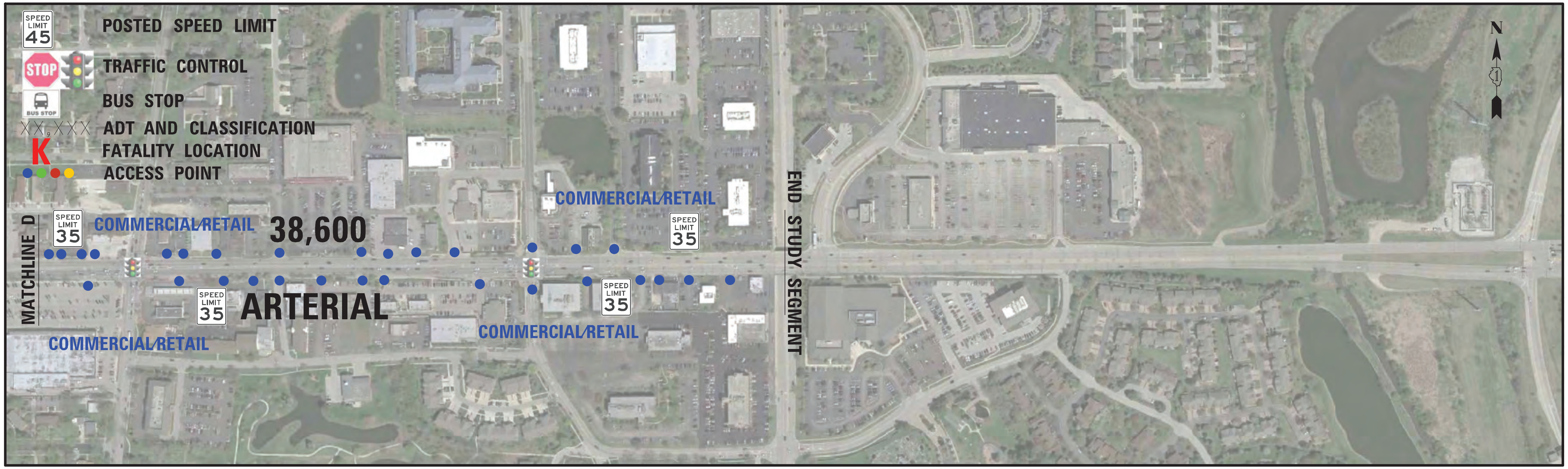
IL ROUTE 38 – COUNTY FARM ROAD TO IL ROUTE 53

5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.65 MILES

NORTH ACCESS POINTS: 155 SOUTH ACCESS POINTS: 135

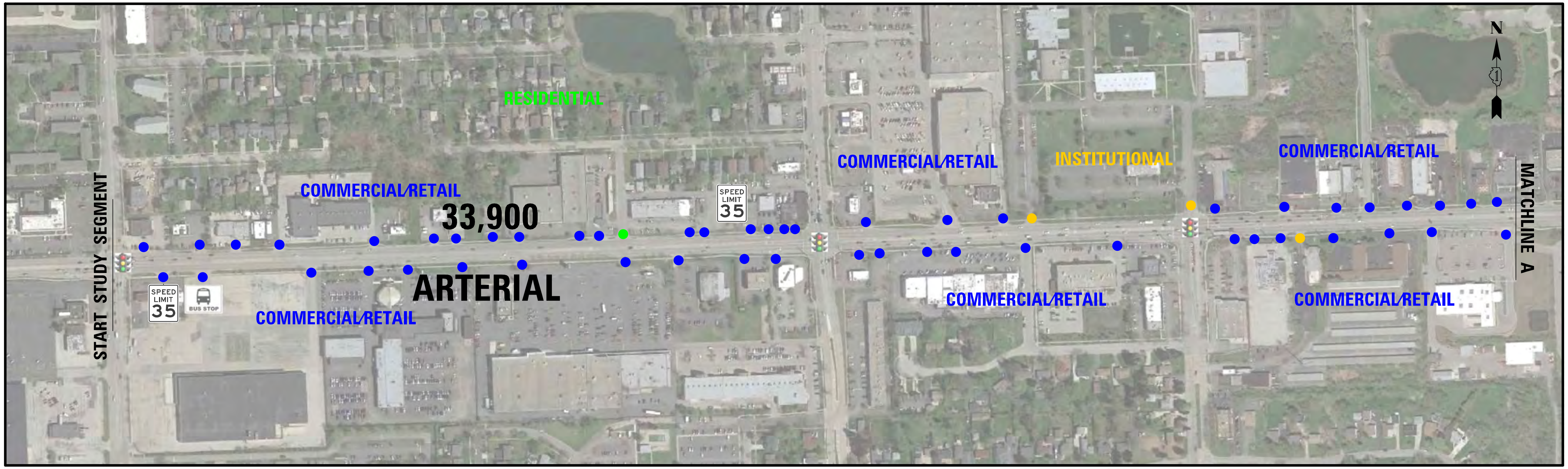


IL ROUTE 38 – COUNTY FARM ROAD TO IL ROUTE 53
5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 1.77 MILES

NORTH ACCESS POINTS: 51   SOUTH ACCESS POINTS: 41



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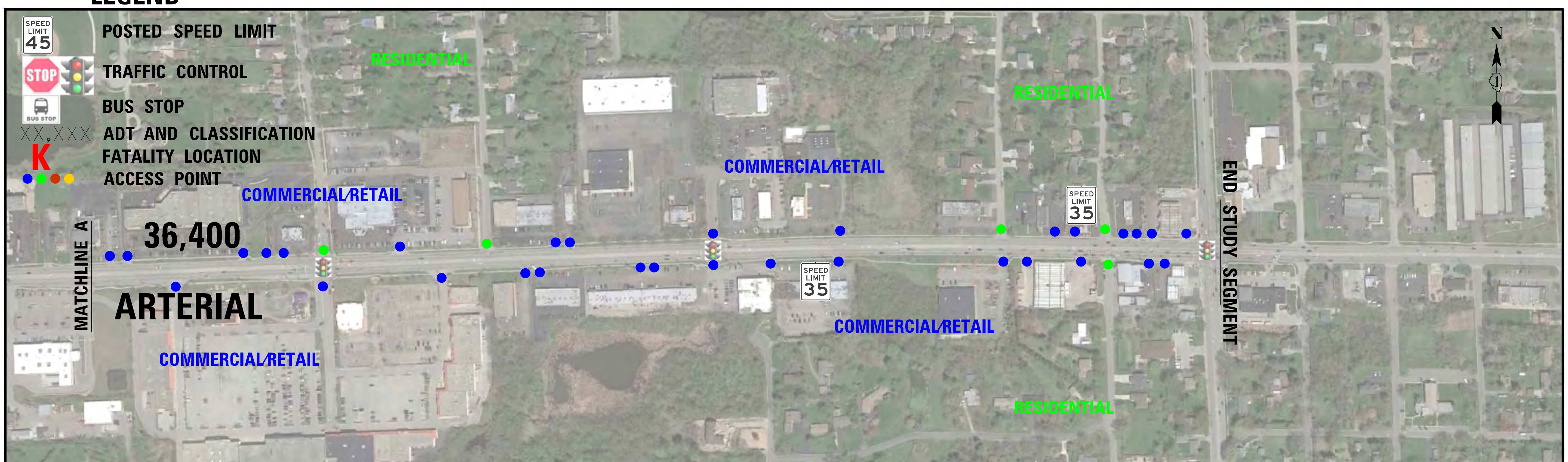


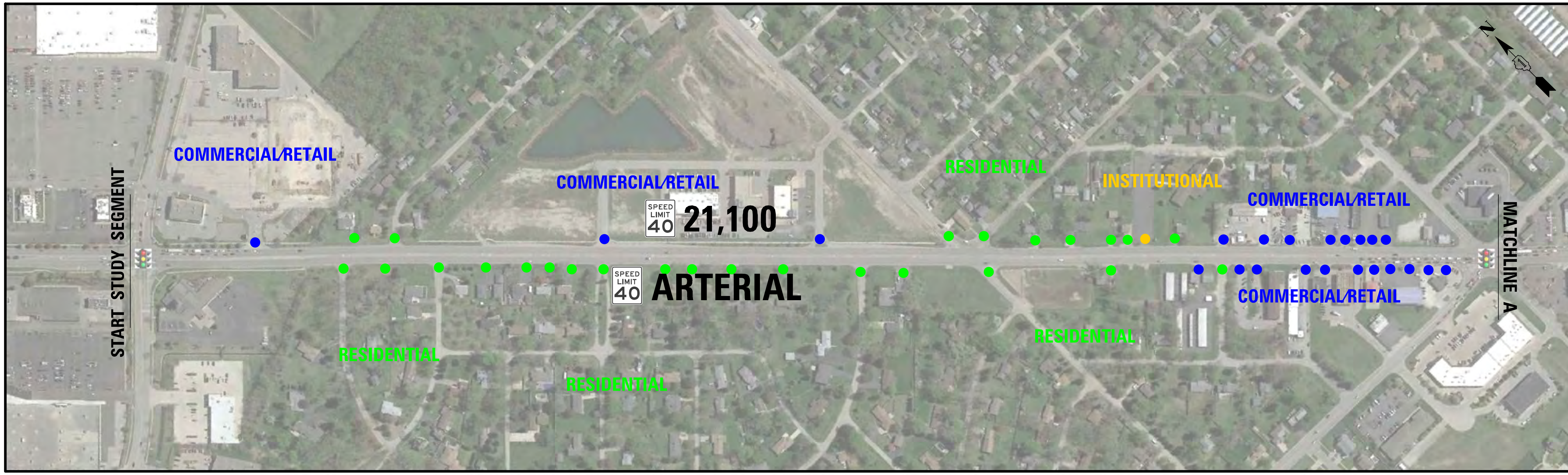
IL ROUTE 38 – FINLEY ROAD TO WESTMORE AVENUE

5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 2.41 MILES

EAST ACCESS POINTS: 77 WEST ACCESS POINTS: 70



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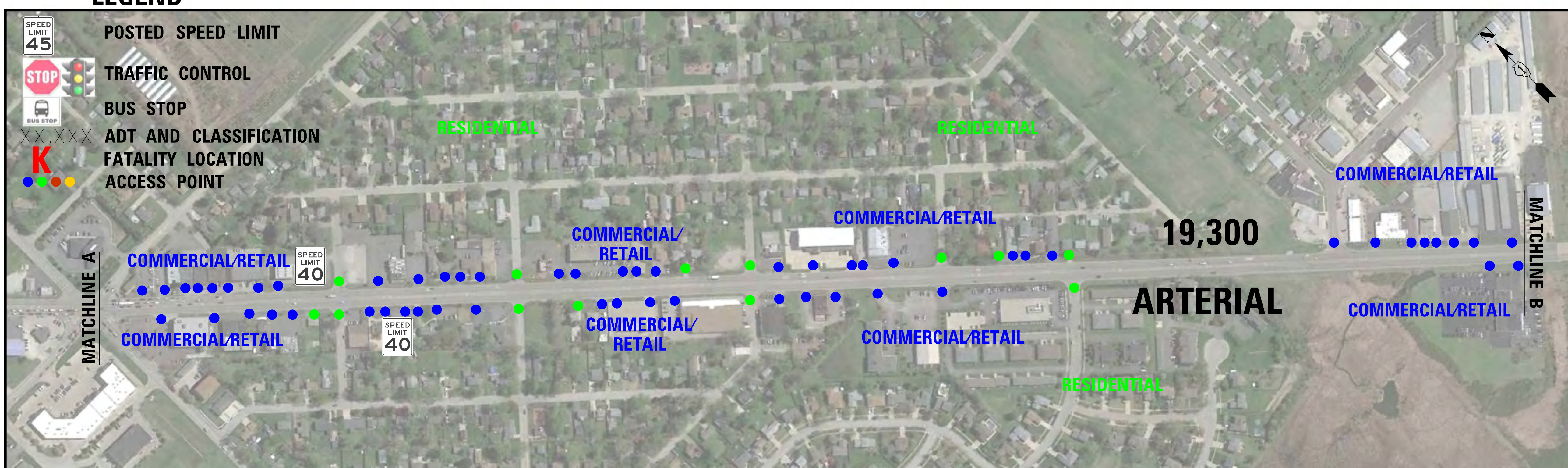


US ROUTE 30 – HENNEPIN ROAD TO IL ROUTE 7
5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 2.41 MILES

EAST ACCESS POINTS: 77 WEST ACCESS POINTS: 70

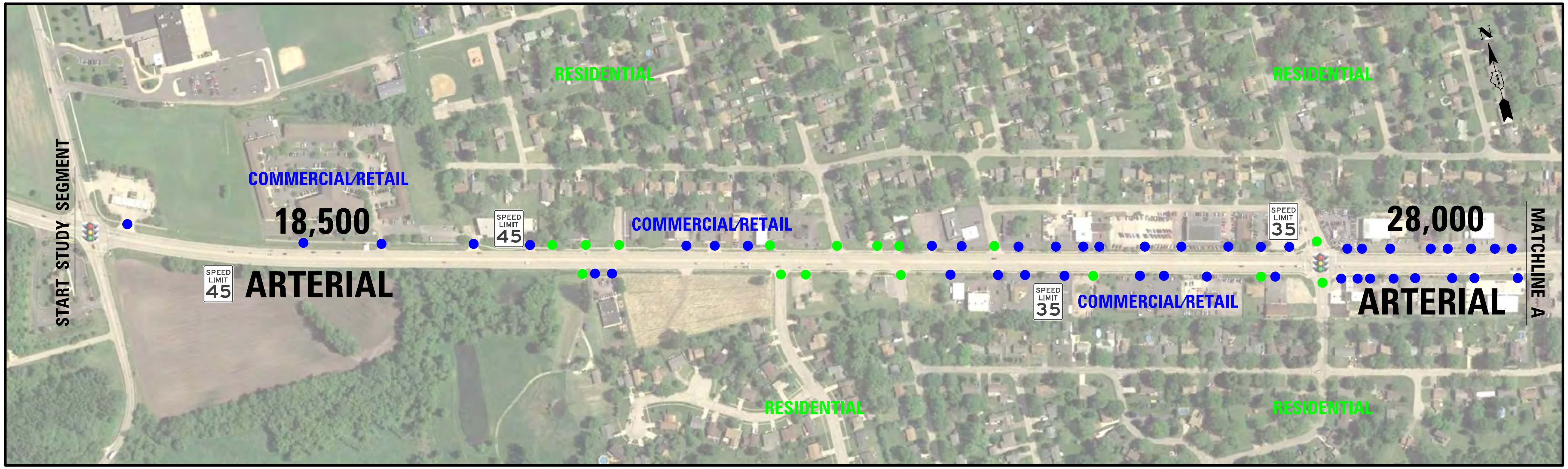
LEGEND

US ROUTE 30 – HENNEPIN ROAD TO IL ROUTE 7
5 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 1.77 MILES

NORTH ACCESS POINTS: 61 SOUTH ACCESS POINTS: 48



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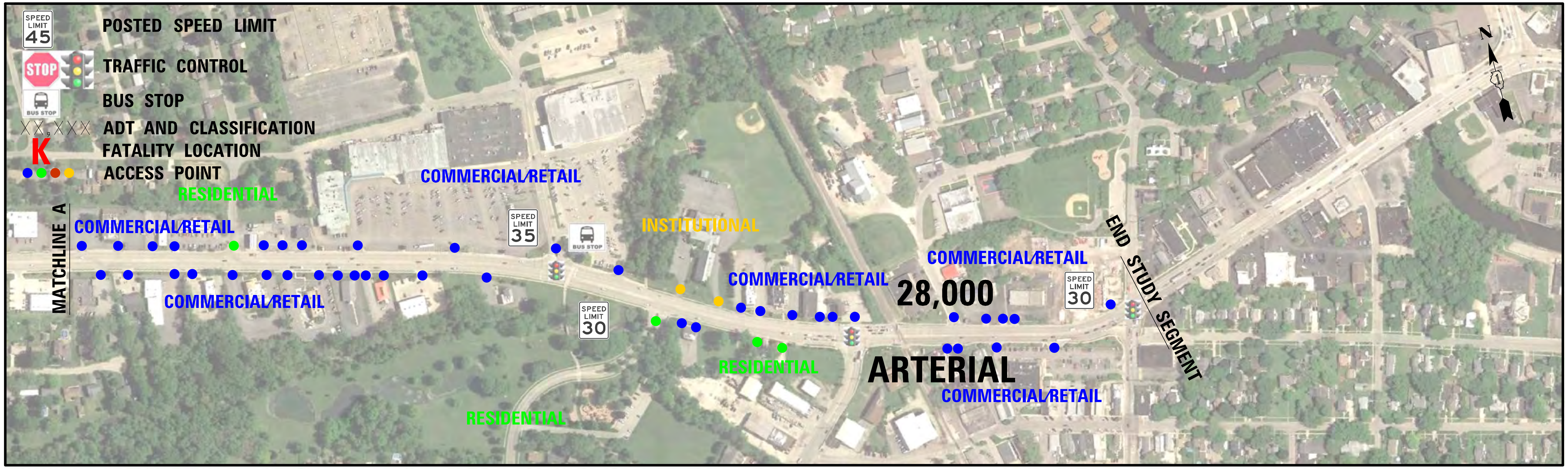


IL ROUTE 120 – RINGWOOD ROAD TO IL ROUTE 31

5 LANE FLUSH MEDIAN

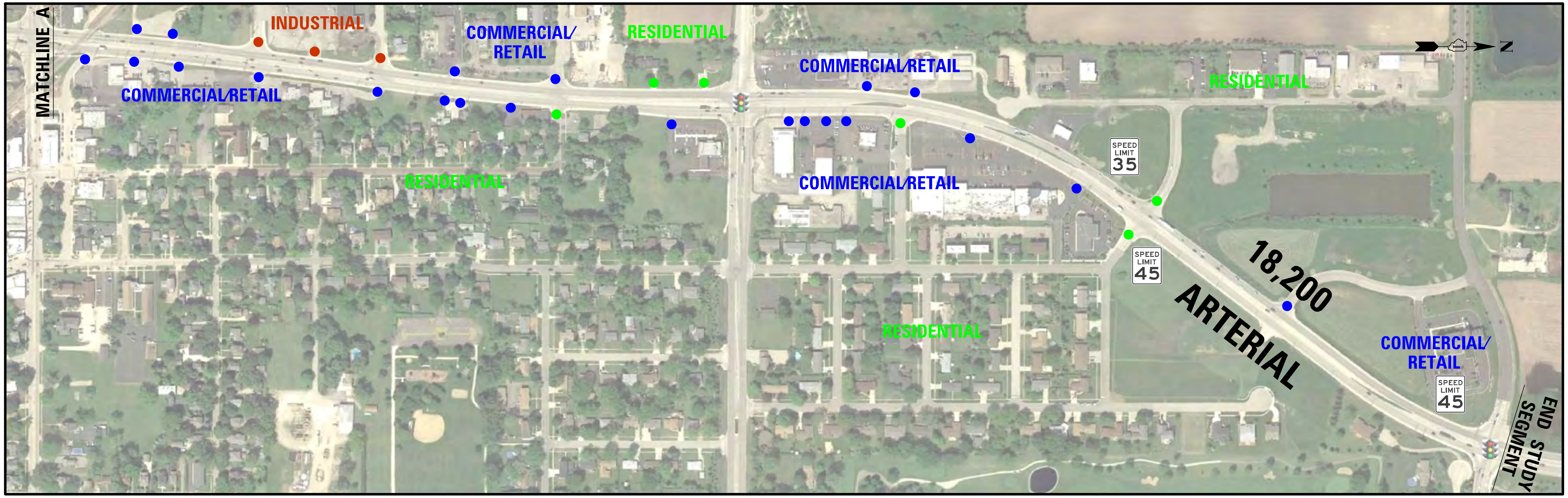
4 - Lane

Barrier Median

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 2.14 MILES

EAST ACCESS POINTS: 27 WEST ACCESS POINTS: 17



IL ROUTE 47 – KREUTZER ROAD TO REED ROAD
4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.29 MILES

EAST ACCESS POINTS: 24 WEST ACCESS POINTS: 17

LEGEND

US ROUTE 45 – LARAMIE STREET TO IL ROUTE 120

4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.29 MILES

EAST ACCESS POINTS: 24 WEST ACCESS POINTS: 17

LEGEND

US ROUTE 45 – LARAMIE STREET TO IL ROUTE 120

4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.29 MILES

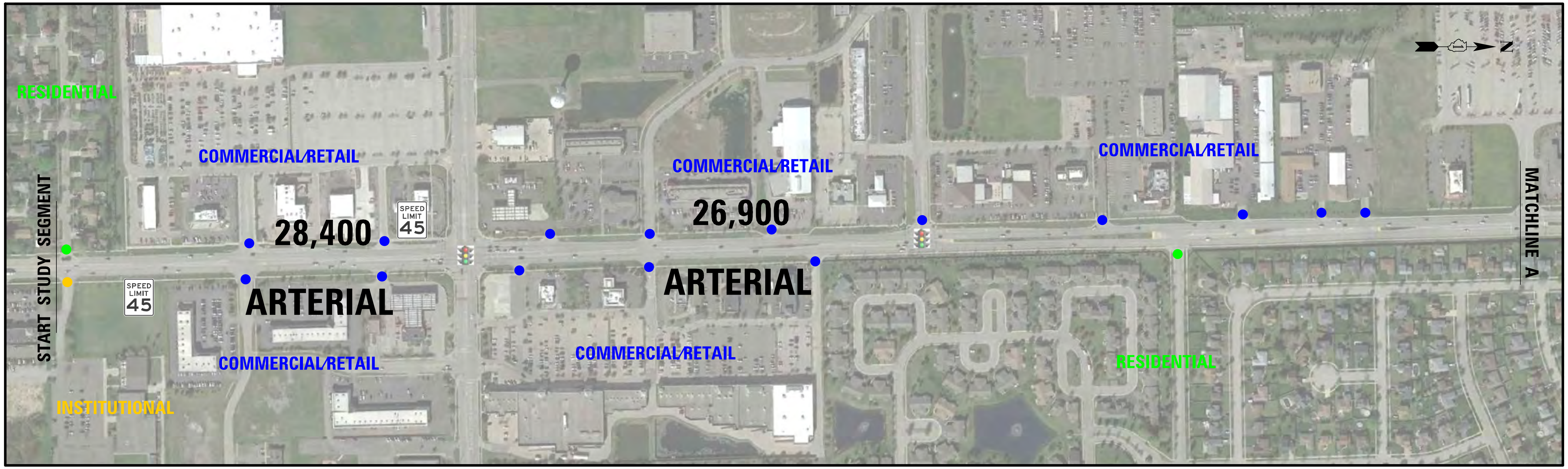
EAST ACCESS POINTS: 24 WEST ACCESS POINTS: 17

US ROUTE 45 – LARAMIE STREET TO IL ROUTE 120
4 LANE BARRIER MEDIAN

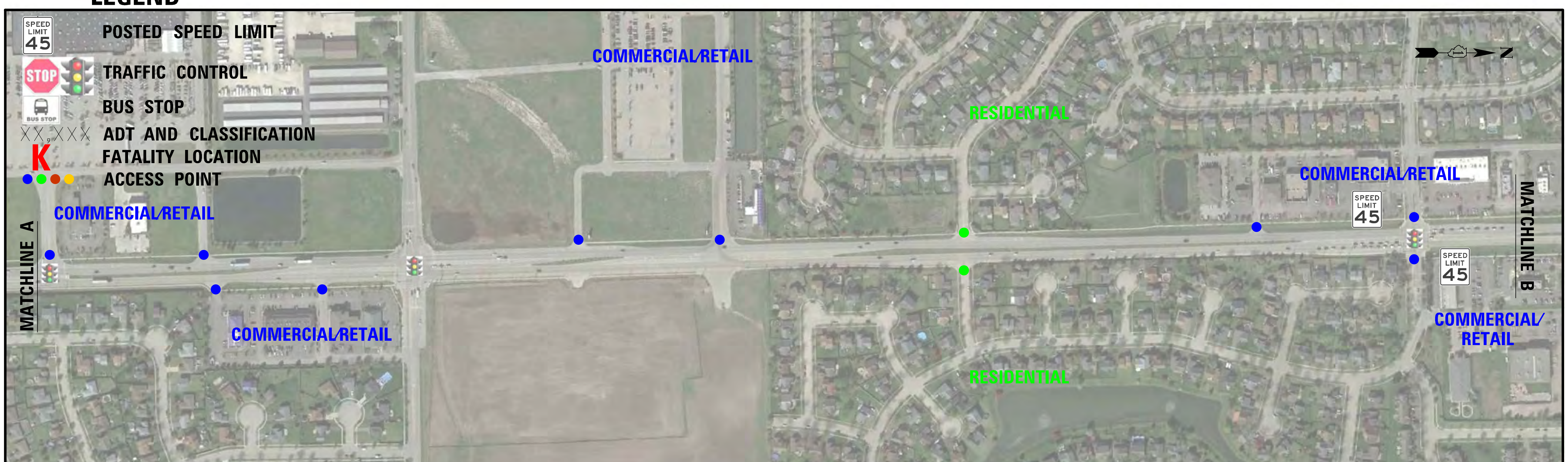
LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.28 MILES

EAST ACCESS POINTS: 22 **WEST ACCESS POINTS: 27**



LEGEND



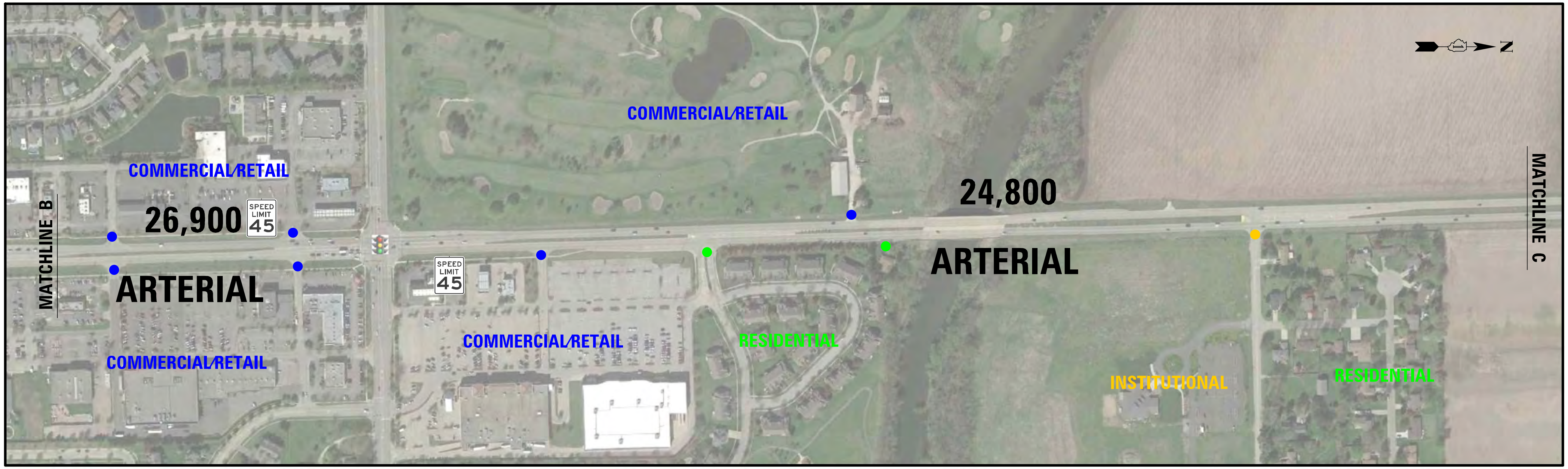
IL ROUTE 59 – MEADOW DRIVE TO RENWICK ROAD

4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.28 MILES

EAST ACCESS POINTS: 22 **WEST ACCESS POINTS: 27**



LEGEND

IL ROUTE 59 – MEADOW DRIVE TO RENWICK ROAD

4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 4.28 MILES

EAST ACCESS POINTS: 22 WEST ACCESS POINTS: 27

LEGEND

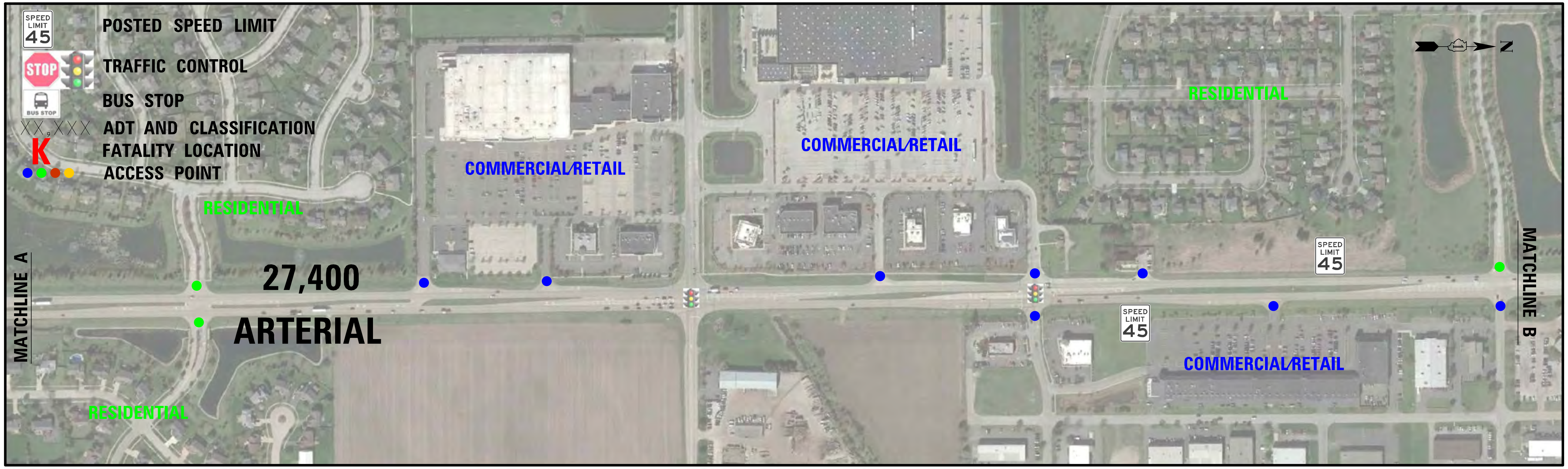
IL ROUTE 59 – MEADOW DRIVE TO RENWICK ROAD
4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 5.51 MILES

EAST ACCESS POINTS: 17 WEST ACCESS POINTS: 37

LEGEND



IL ROUTE 59 – JOSEPH AVENUE TO 95TH STREET

4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 5.51 MILES

EAST ACCESS POINTS: 17 WEST ACCESS POINTS: 37

LEGEND

IL ROUTE 59 – JOSEPH AVENUE TO 95TH STREET
4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 5.51 MILES

EAST ACCESS POINTS: 17 WEST ACCESS POINTS: 37

LEGEND

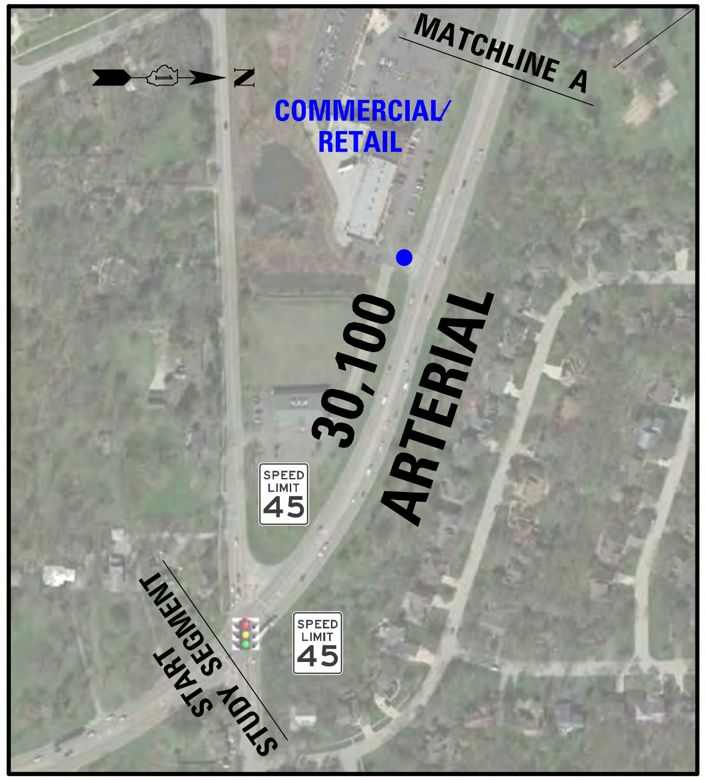
IL ROUTE 59 – JOSEPH AVENUE TO 95TH STREET

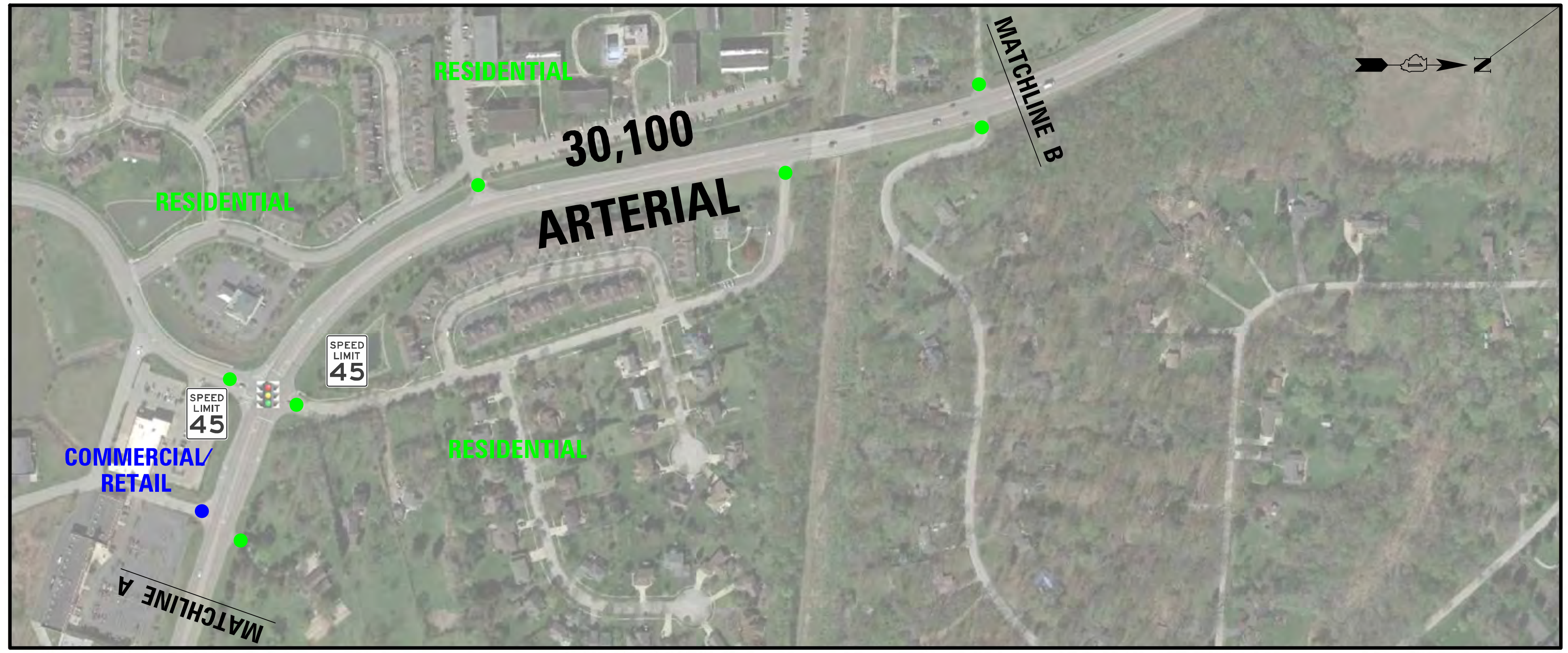
4 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

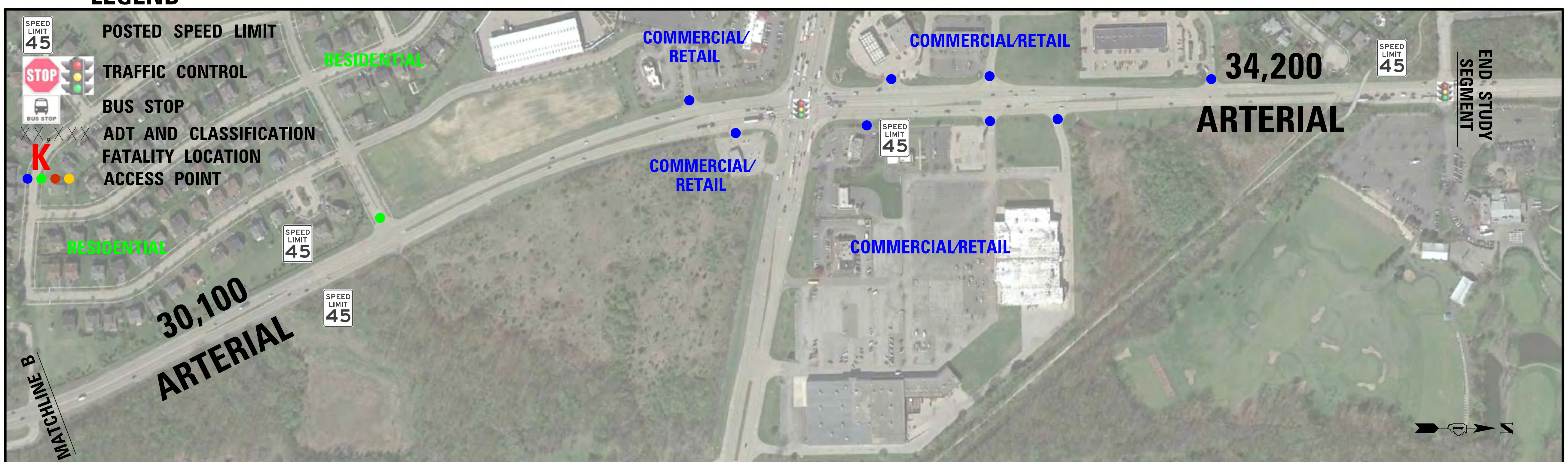
SEGMENT LENGTH: 1.81 MILES

EAST ACCESS POINTS: 8 **WEST ACCESS POINTS: 10**





LEGEND



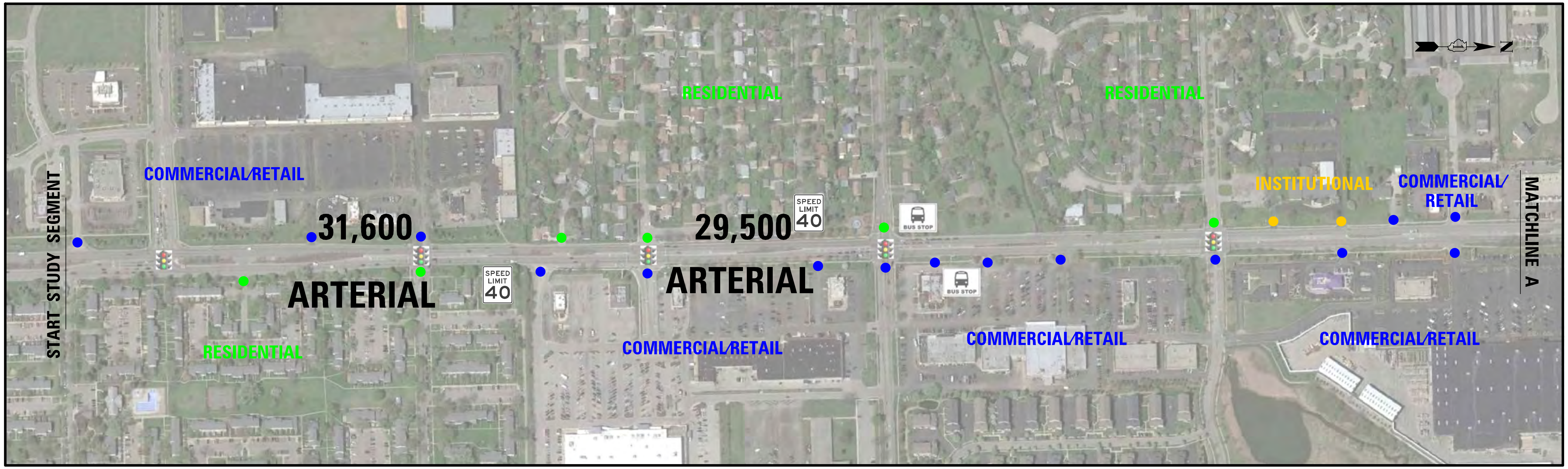
IL ROUTE 59 – HAWTHORNE LANE TO DIVERSEY PARKWAY

4 LANE BARRIER MEDIAN

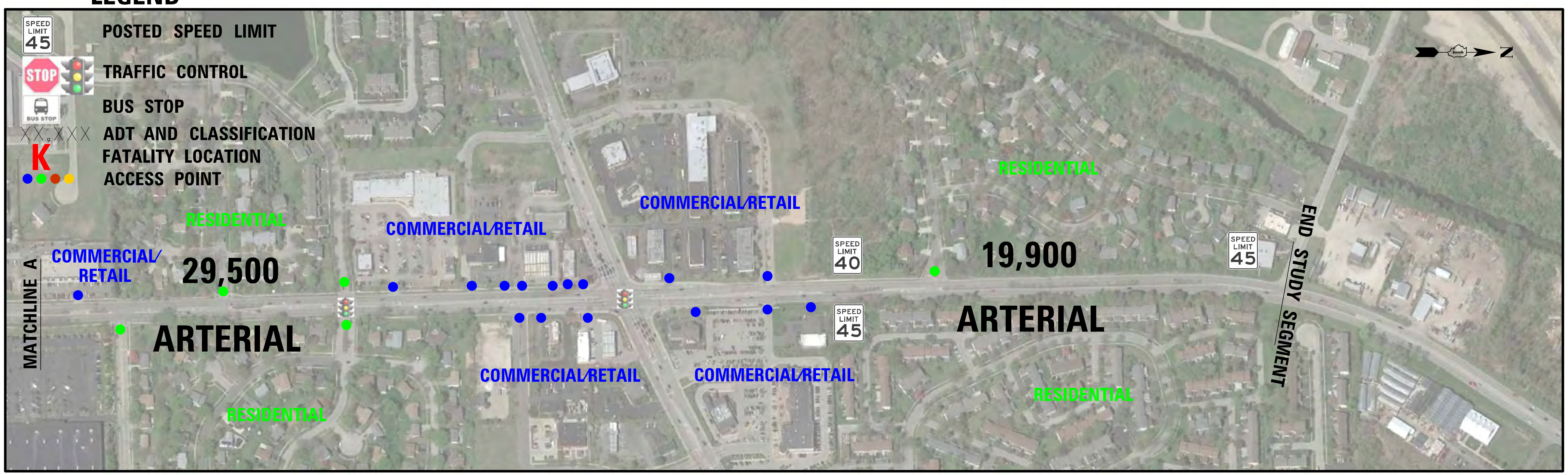
LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 1.89 MILES

EAST ACCESS POINTS: 20 WEST ACCESS POINTS: 24



LEGEND



IL ROUTE 53 – BEACONRIDGE DRIVE TO ROYCE ROAD
4 LANE BARRIER MEDIAN

7 - Lane

vs

6 - Lane

Segments

Crash Analysis Summary: 7-Lane vs 6-Lane Segments

Median Type	Route	Limits	Municipality	County	Classification	ADT		Speed		Predominant Land Use	Access Points	Access Density	Sidewalk	Coverage/Buffer						Shared-Use Path	Coverage/Buffer					
						Low	High	Low	High					Side of Roadway - N/E/S/W	Coverage - Full/Partial	Buffer - Yes/No/Partial	Side of Roadway - N/E/S/W	Coverage - Full/Partial	Buffer - Yes/No/Partial		Side of Roadway - N/E/S/W	Coverage - Full/Partial	Buffer - Yes/No/Partial	Side of Roadway - N/E/S/W	Coverage - Full/Partial	Buffer - Yes/No/Partial
7-Lane Mountable	IL Route 58	Basswood St to Meacham Rd	Schamburg	Cook	Prinicipal Arterial	36300	36300	40	40	Commercial/Retail	36	33.9623	Y	N,	F,	P;	S,	F,	P	N						
7-Lane Flush	US Route 45 & 12	Division St to Armitage Ave	Melrose Park	Cook	Prinicipal Arterial	37800	37800	30	35	Commercial/Retail	169	67.0635	Y	W,	P,	N;	E,	F,	N	Y	W,	P,	N			
	IL Route 50	111TH St to US Route 12	Oak Lawn	Cook	Prinicipal Arterial	32200	38300	35	35	Commercial/Retail	144	71.6418	Y	W,	P,	P;	E,	P,	N	N						
6-Lane Barrier	IL Route 59	95th St to Ogden Ave	Naperville	Cook, Will	Prinicipal Arterial	48200	49000	40	45	Commercial/Retail	46	15.2318	Y	W,	P,	P;	E,	P,	P	N						
	Army Trail Rd	Swift Rd to Bloomingdale Rd	Addison, Glendale Heights, Bloomingdale	Dupage	Prinicipal Arterial	41000	45600	40	45	Commercial/Retail	57	28.6432	Y	N,	P,	N;	S,	P,	N	N						
	IL Route 64	Rohlwing Rd to IL Route 83	Lombard, Villa Park, Elmhurst	Dupage	Prinicipal Arterial	37300	48000	35	45	Commercial/Retail	129	37.069	Y	N,	P,	P;	S,	P,	P	N						

Notes:

Access Density - Access Points/Length
Crash Rate - Crashes/Yr/Mile
Critical Crashes - Angle, Turning and Head Or
Secondary Crashes - Rear End

Median Type	Route	Limits	Length (Miles)	Data Years	Segment Total		Fatal		A		B		C		PDO		Critical		Rear End		Ped		PedL		Intersec. Total		
					Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Rate	Crashes	Intersections	Crash/Intersection
7-Lane Mountable	IL Route 58	Basswood St to Meacham Rd	1.06	2010-2014	193	40.4	1	0.19	2	0.38	17	3.21	43	8.11	151	28.49	43	8.11	119	22.45	1	0.19	2	0.38	303	4.0	76
7-Lane Flush	US Route 45 & 12	Division St to Armitage Ave	2.52	2010-2014	178	14.1	1	0.08	5	0.40	14	1.11	11	0.87	147	11.67	54	4.29	55	4.37	8	0.63	4	0.32	101	7.0	14
	IL Route 50	111TH St to US Route 12	2.01	2010-2014	306	30.4	1	0.10	7	0.70	26	2.59	41	4.08	229	22.79	101	10.05	117	11.64	4	0.40	0	0.00	560	7.0	80
6-Lane Barrier	IL Route 59	95TH St to Ogden Ave	3.02	2010-2014	223	14.8	0	0.00	3	0.20	7	0.46	29	1.92	184	12.19	26	1.72	132	8.74	0	0.00	0	0.00	371	8.0	46
	Army Trail Rd	Bloomingdale Rd to Swift Rd	1.99	2010-2014	129	12.8	0	0.00	4	0.40	13	1.31	17	1.71	95	9.55	28	2.81	98	9.85	0	0.00	1	0.10	228	6.0	38
	IL Route 64	Rohlwing Rd to IL Route 83	3.48	2010-2014	377	21.7	0	0.00	10	0.57	16	0.92	25	1.44	326	18.74	57	3.28	190	10.92	1	0.06	2	0.11	588	12.0	49

	Segment Total	Fatal	A	B	C	PDO	Critical	Rear End	Ped	PedL	Total Intersection Crashes / mile / year	Total Intersection Crashes / # of Intersections
7-Lane Flush Crash Rate	24.22	0.11	0.50	2.04	3.40	18.86	7.08	10.41	0.47	0.21	34.49	53.56
6-Lane Barrier Crash Rate	17.17	0.00	0.40	0.85	1.67	14.25	2.61	9.89	0.02	0.07	27.96	47.21
Crash Reduction	29%	100%	20%	58%	51%	24%	63%	5%	95%	67%	19%	12%

7 Lane vs 6 Lane Critical Crash Breakdown

7 Lane Flush/Mountable Median

US Route 45 & 12 - Division St to Armitage Ave	A	LT	RT	O
2010	4	3	6	2
2011	5	5	3	
2012		2	3	
2013	2	3	2	
2014	4	4	6	

IL Route 58 - Basswood St to Meacham Rd	A	LT	RT	O
2010	4	3	2	
2011	1	4	1	
2012	1	7		
2013	2	5	2	
2014	3	5	3	

IL Route 50 - 111TH St to US Route 12	A	LT	RT	O
2010	6	18	5	1
2011	5	7	3	1
2012	4	11	5	
2013	5	14	2	1
2014	2	7	3	1

Angle	Left	Right	Head-On	Total
48	98	46	6	198

Angle	Left	Right	Head-On
24%	49%	23%	3%

6 Lane Barrier

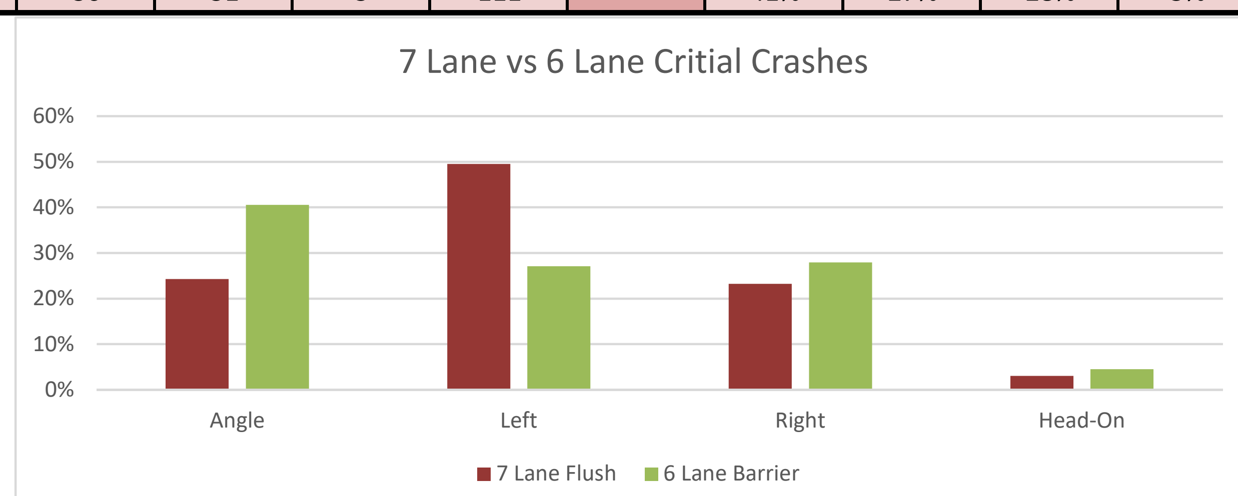
IL Route 59 - 95th St to Ogden Ave	A	LT	RT	O
2010	3	1		
2011	3	3	1	
2012	4		1	
2013	1	1		2
2014	5	1		

Army Trail Rd - Bloomingdale Rd to Swift Rd	A	LT	RT	O
2010	1	3	2	0
2011	0	2	2	1
2012	2	1	1	0
2013	2	1	1	0
2014	6	1	1	1

IL Route 64 - Rholwing Rd to IL Route 83	A	LT	RT	O
2010	4	6	6	
2011	5	1	2	1
2012	3		4	
2013	4	4	5	
2014	2	5	5	

Angle	Left	Right	Head-On	Total
45	30	31	5	111

Angle	Left	Right	Head-On
41%	27%	28%	5%



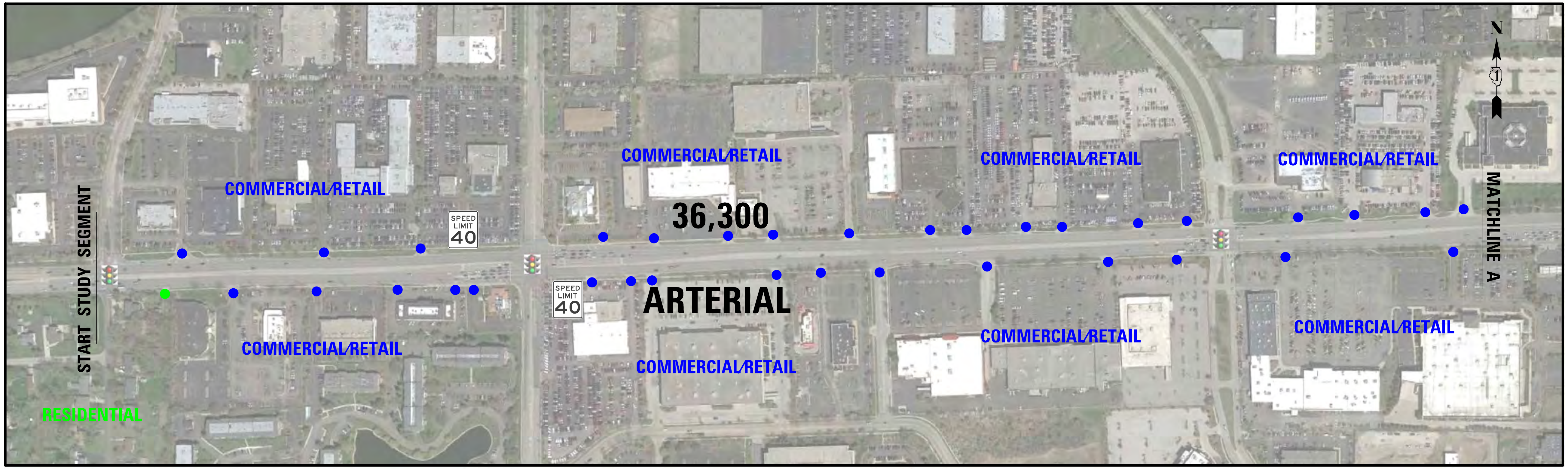
7 - Lane

Mountable Median

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 1.06 MILES

NORTH ACCESS POINTS: 18 SOUTH ACCESS POINTS: 18



LEGEND

IL ROUTE 58 – BASSWOOD STREET TO MEACHAM ROAD

7 LANE MOUNTABLE MEDIAN

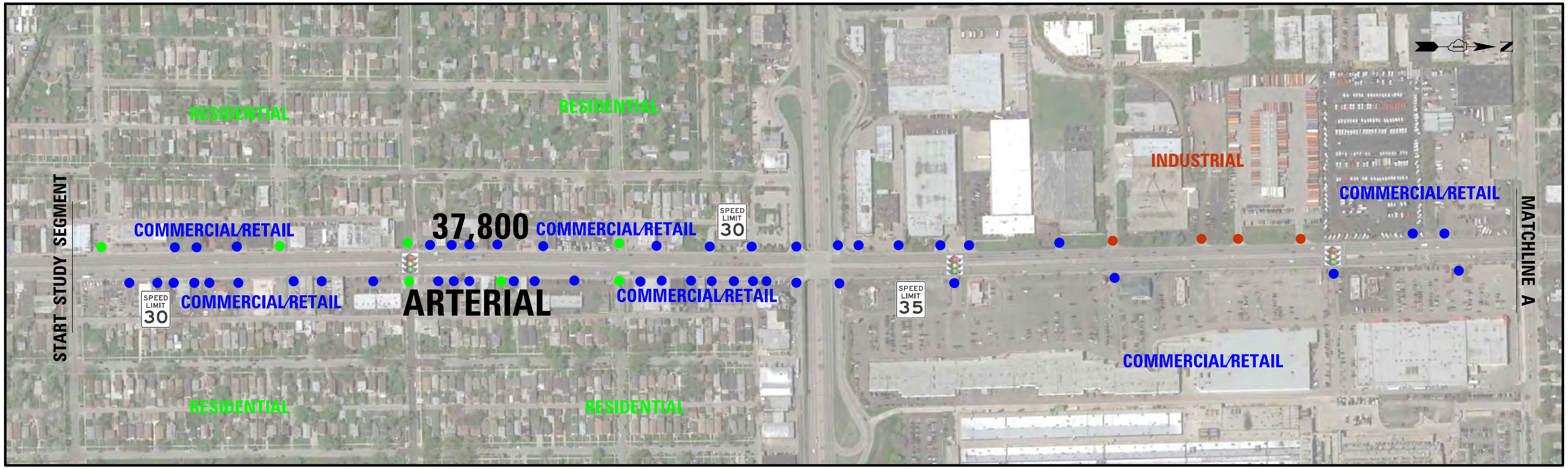
7 - Lane

Flush Median

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

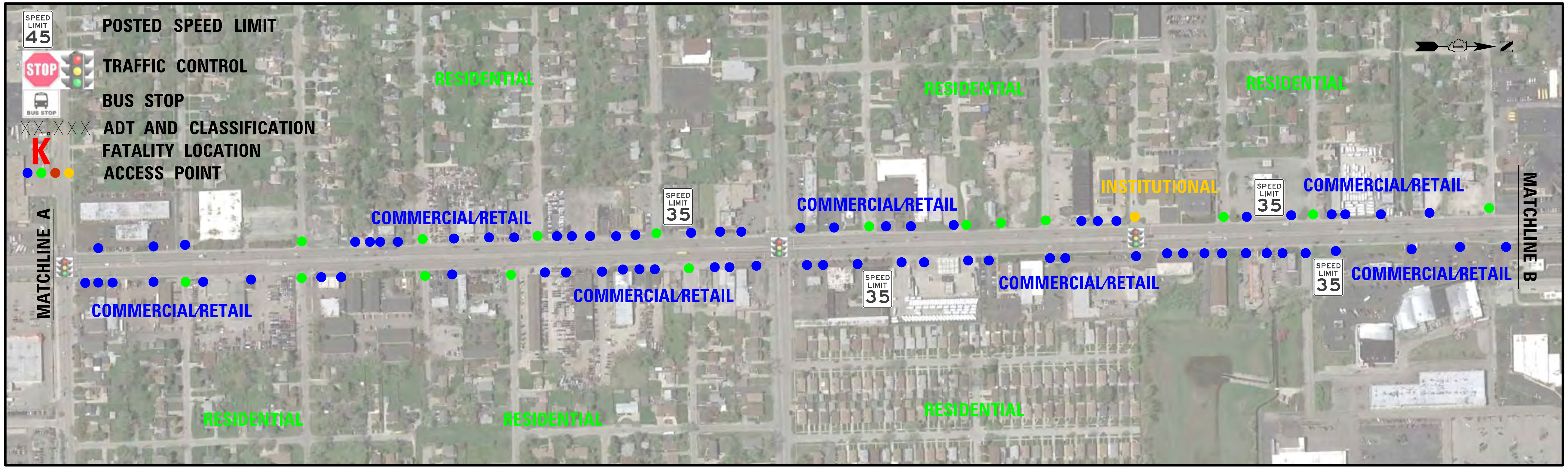
SEGMENT LENGTH: 2.52 MILES

EAST ACCESS POINTS: 90 WEST ACCESS POINTS: 79



LEGEND

SPEED LIMIT 45 POSTED SPEED LIMIT
STOP TRAFFIC CONTROL
BUS STOP
XX,XXX ADT AND CLASSIFICATION
K FATALITY LOCATION
ACCESS POINT



US ROUTE 12 & 45 – DIVISION STREET TO ARMITAGE AVENUE

7 LANE FLUSH MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 2.52 MILES

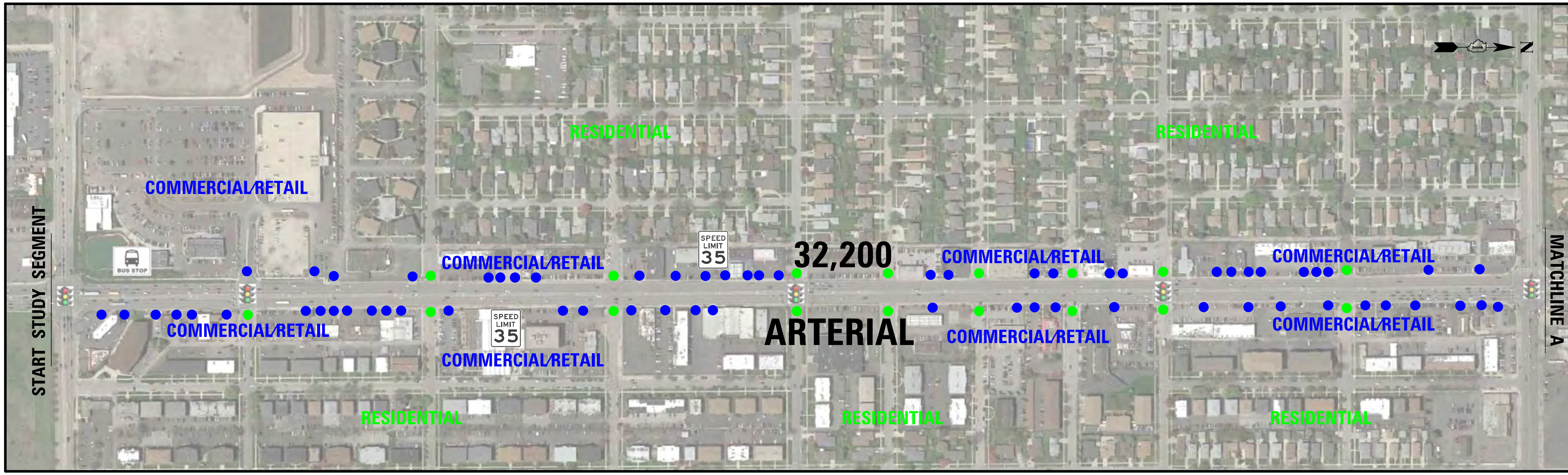
EAST ACCESS POINTS: 90 WEST ACCESS POINTS: 79

US ROUTE 12 & 45 – DIVISION STREET TO ARMITAGE AVENUE
7 LANE FLUSH MEDIAN

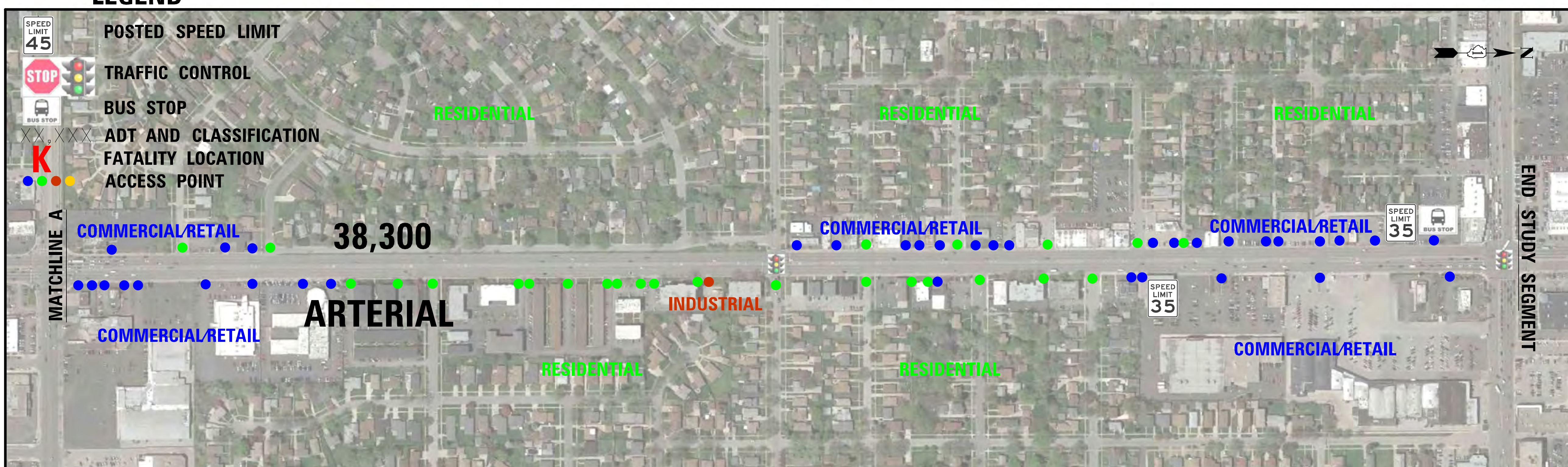
LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 2.01 MILES

EAST ACCESS POINTS: 78 WEST ACCESS POINTS: 66



LEGEND



IL ROUTE 50 – 111TH STREET TO US ROUTE 12

7 LANE FLUSH MEDIAN

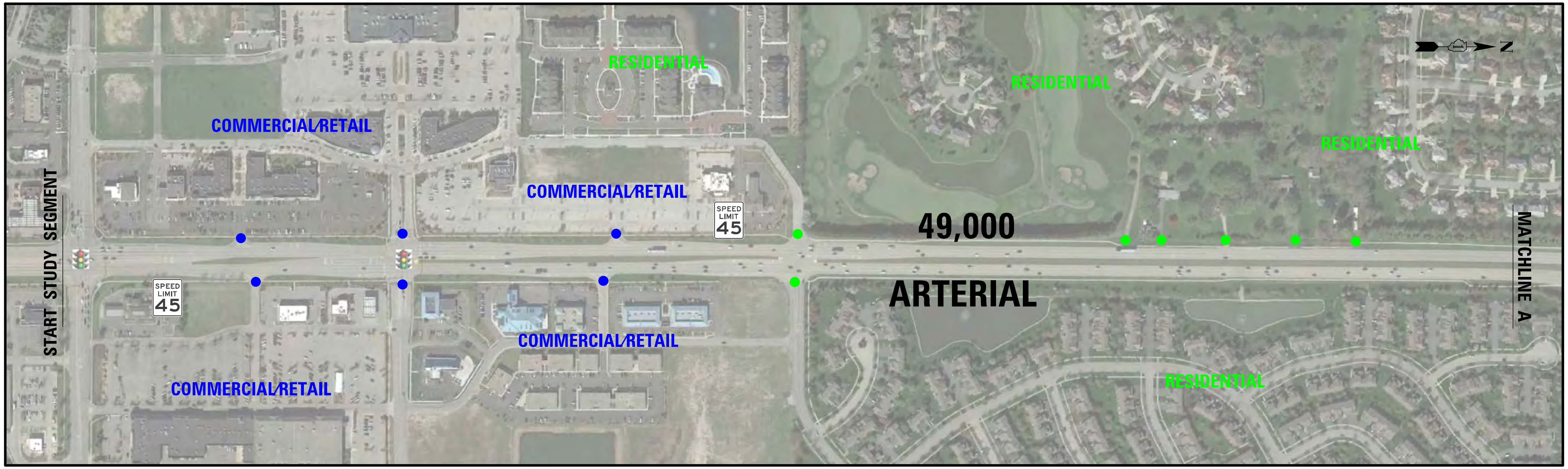
6 - Lane

Barrier Median

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 3.02 MILES

EAST ACCESS POINTS: 27 **WEST ACCESS POINTS: 19**



LEGEND

IL ROUTE 59 – 95TH STREET TO OGDEN AVENUE

6 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 3.02 MILES

EAST ACCESS POINTS: 27 WEST ACCESS POINTS: 19

IL ROUTE 59 – 95TH STREET TO OGDEN AVENUE

6 LANE BARRIER MEDIAN

LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 1.99 MILES

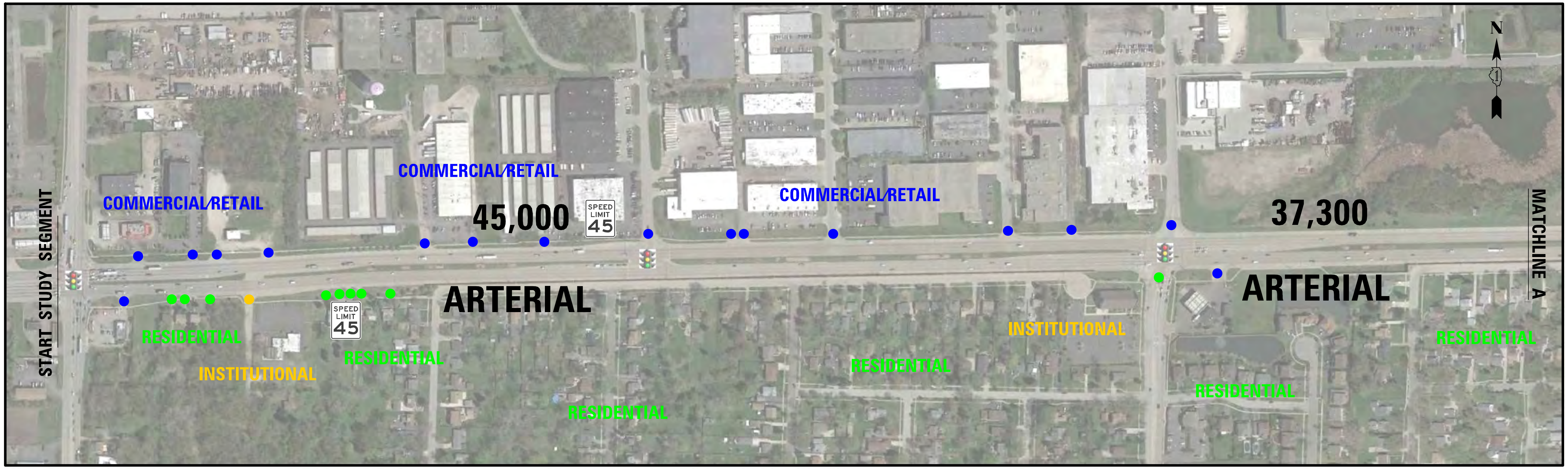
NORTH ACCESS POINTS: 36   SOUTH ACCESS POINTS: 21

ARMY TRAIL ROAD – BLOOMINGDALE ROAD TO SWIFT ROAD
6 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 3.48 MILES

NORTH ACCESS POINTS: 58   **SOUTH ACCESS POINTS: 71**



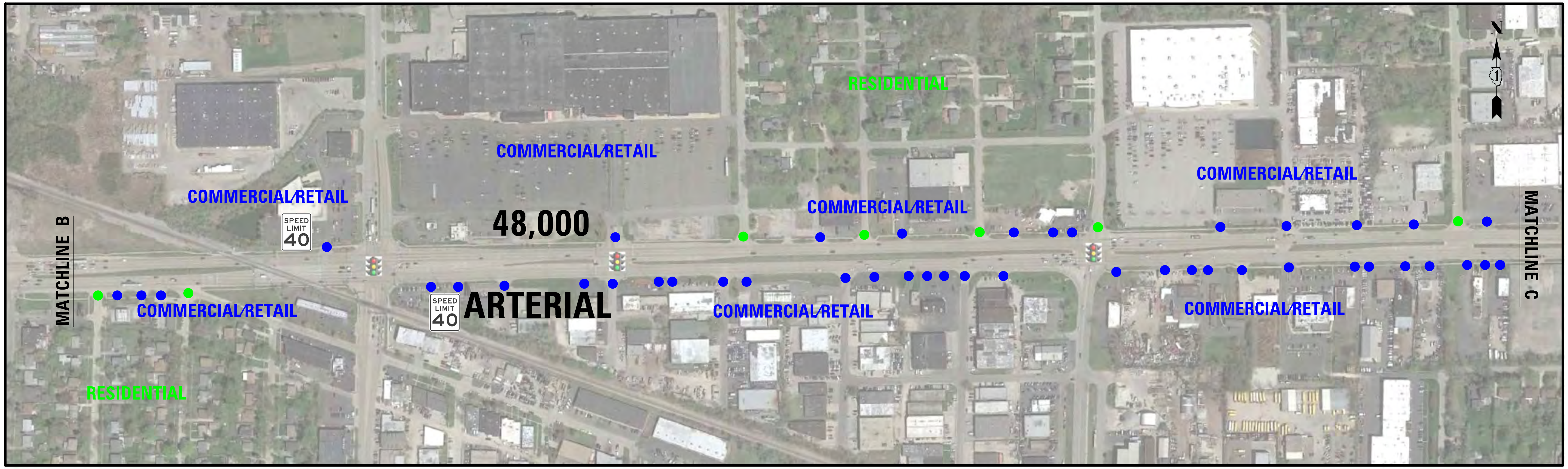
LEGEND

IL ROUTE 64 – ROHLWING ROAD TO IL ROUTE 83
6 LANE BARRIER MEDIAN

LIN ENGINEERING,LTD.
Consulting Engineers
Westmont, Illinois

SEGMENT LENGTH: 3.48 MILES

NORTH ACCESS POINTS: 58 SOUTH ACCESS POINTS: 71



LEGEND

IL ROUTE 64 – ROHLWING ROAD TO IL ROUTE 83

6 LANE BARRIER MEDIAN

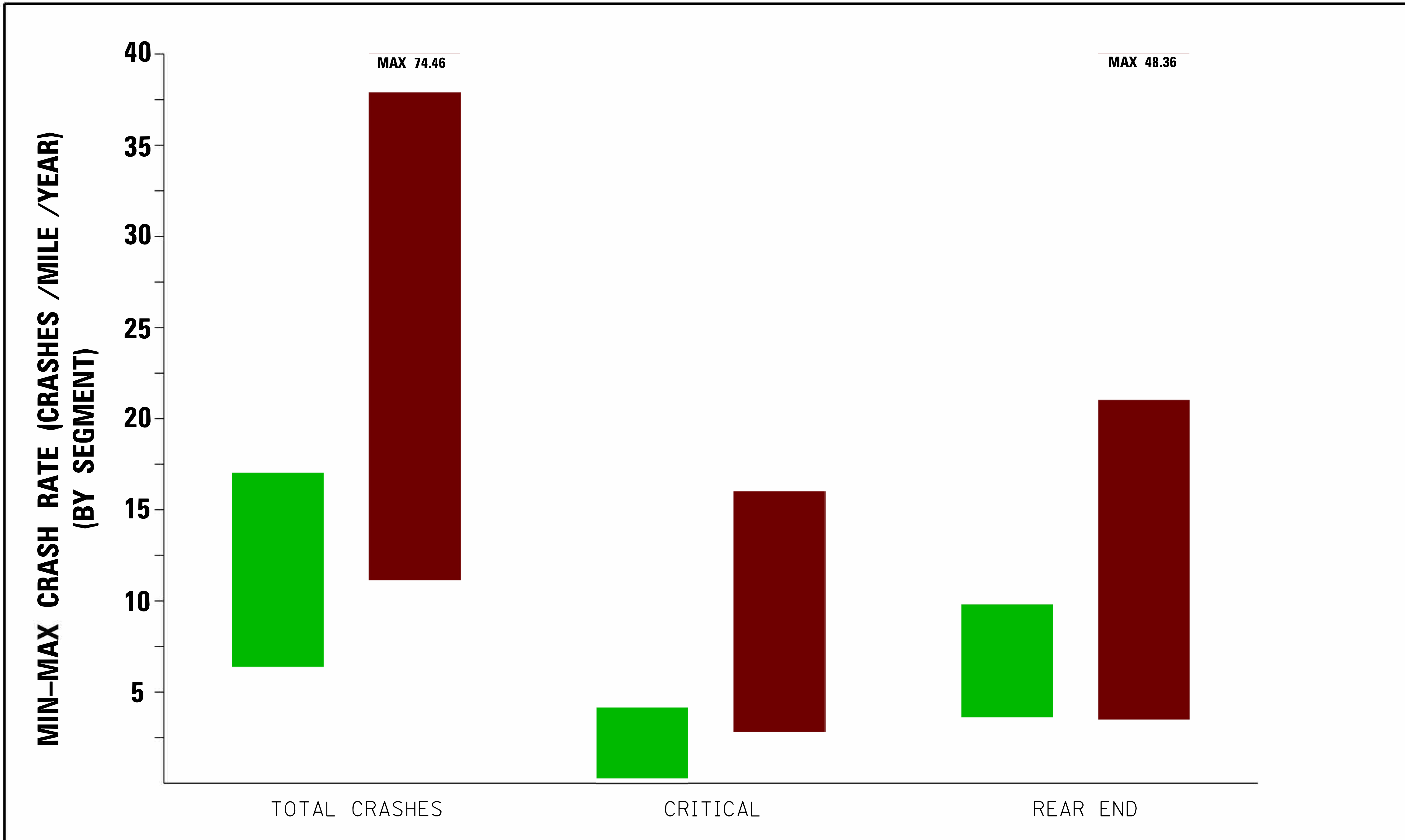
Charts

5 - Lane

vs

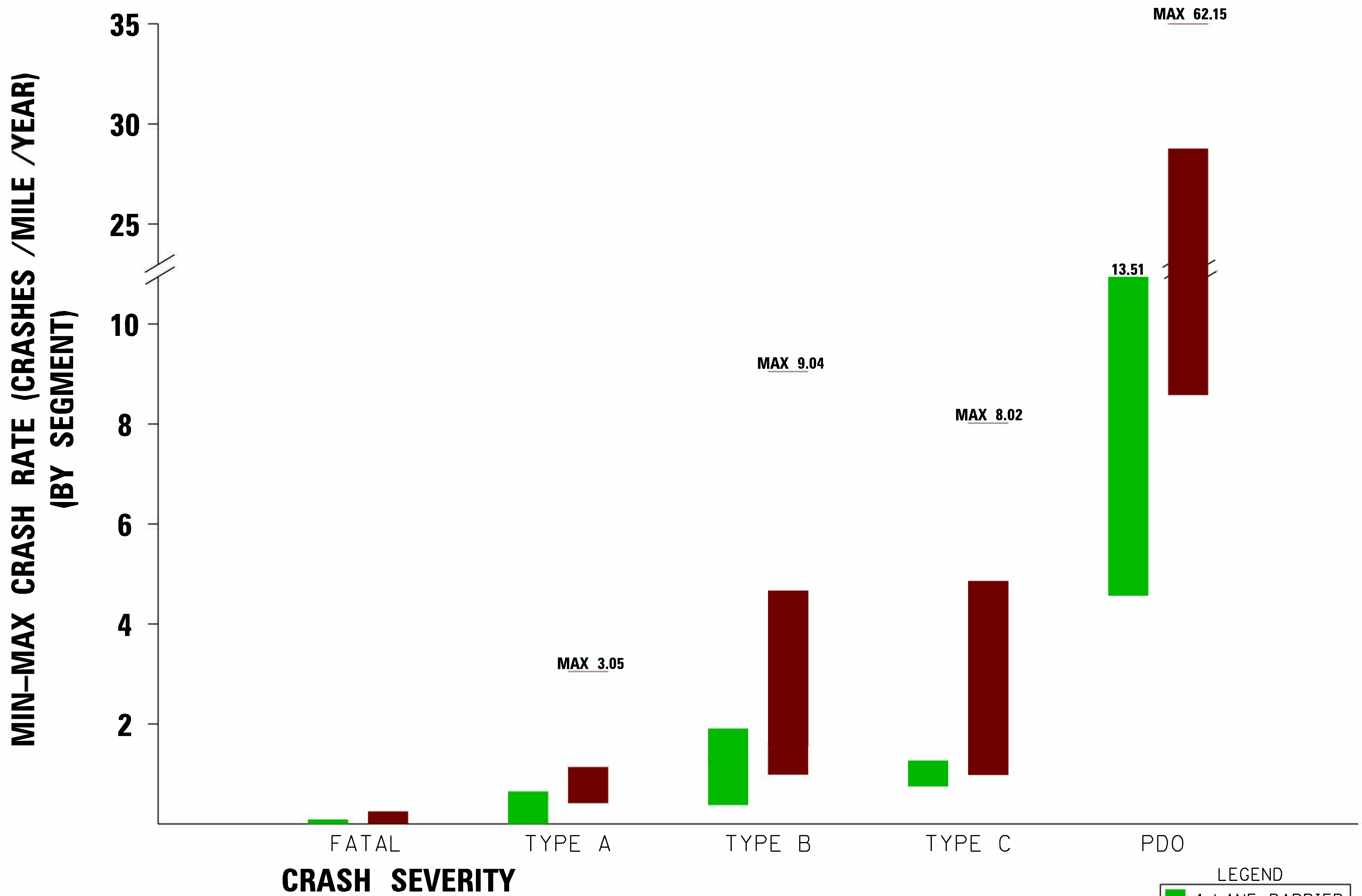
4 - Lane

Segments



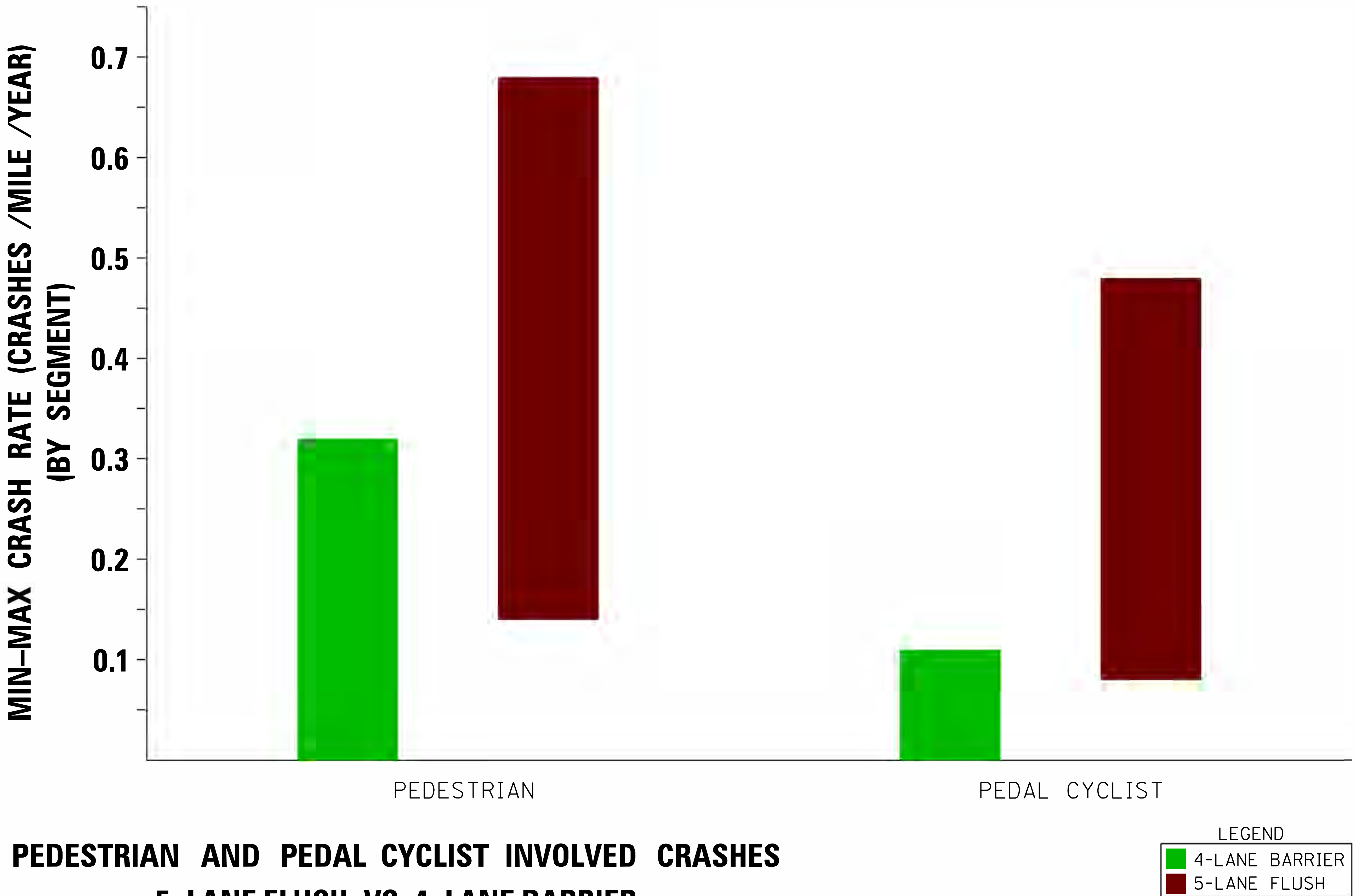
CRASH TYPES

5–LANE FLUSH VS 4–LANE BARRIER



5–LANE FLUSH VS 4–LANE BARRIER

CADD D4–R3

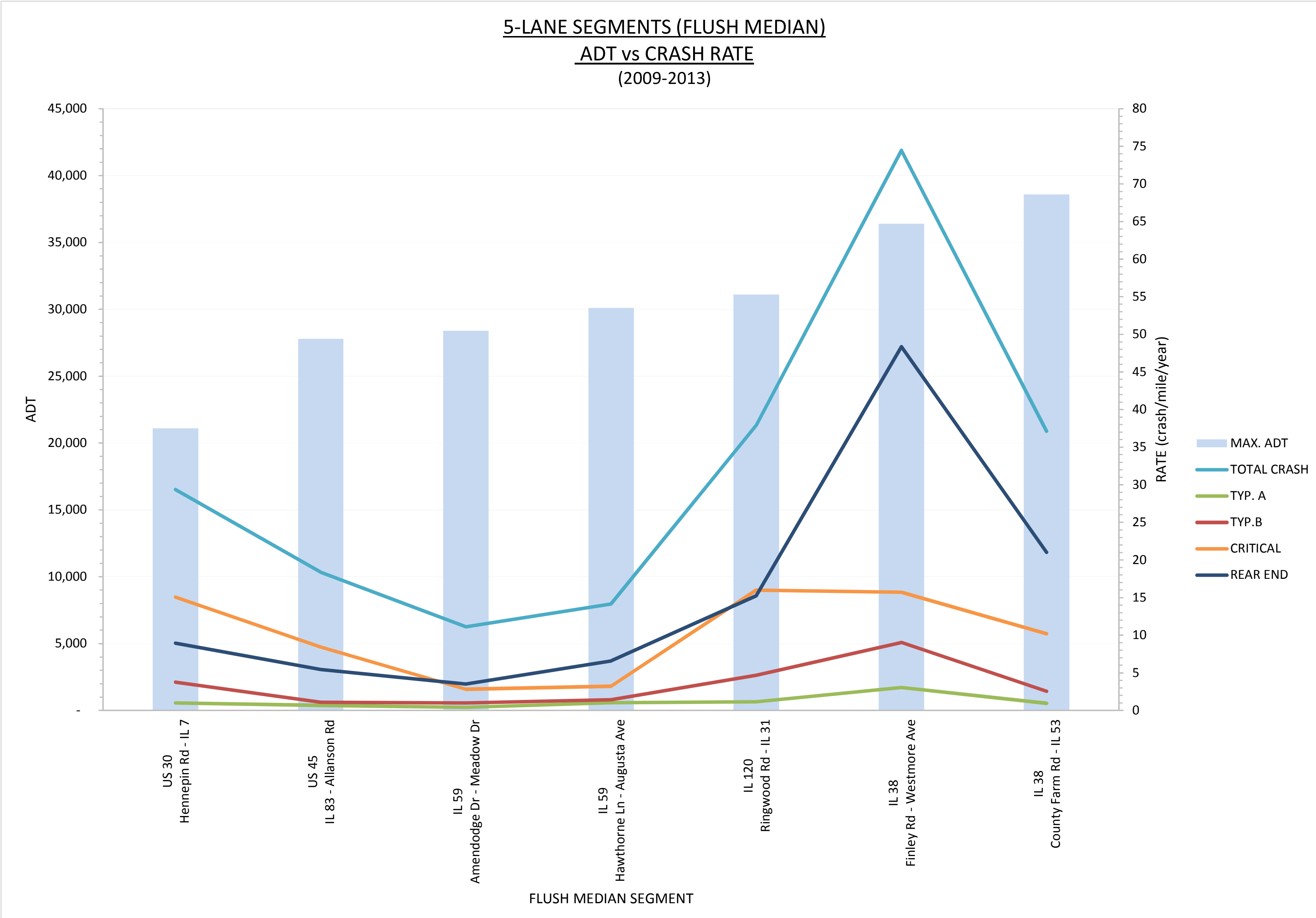


PEDESTRIAN AND PEDAL CYCLIST INVOLVED CRASHES
5–LANE FLUSH VS 4–LANE BARRIER

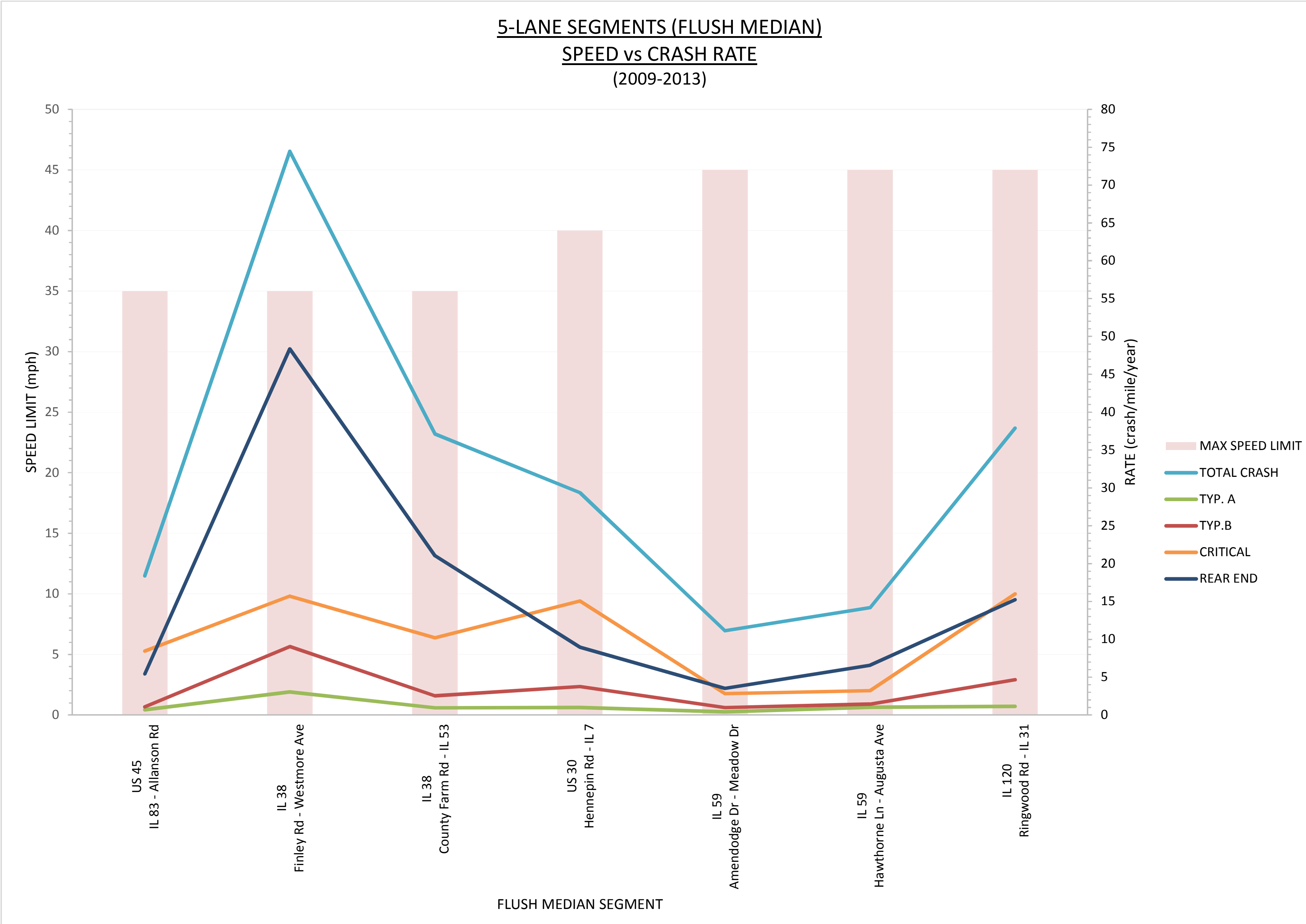
CADD D4–R3

5 - Lane

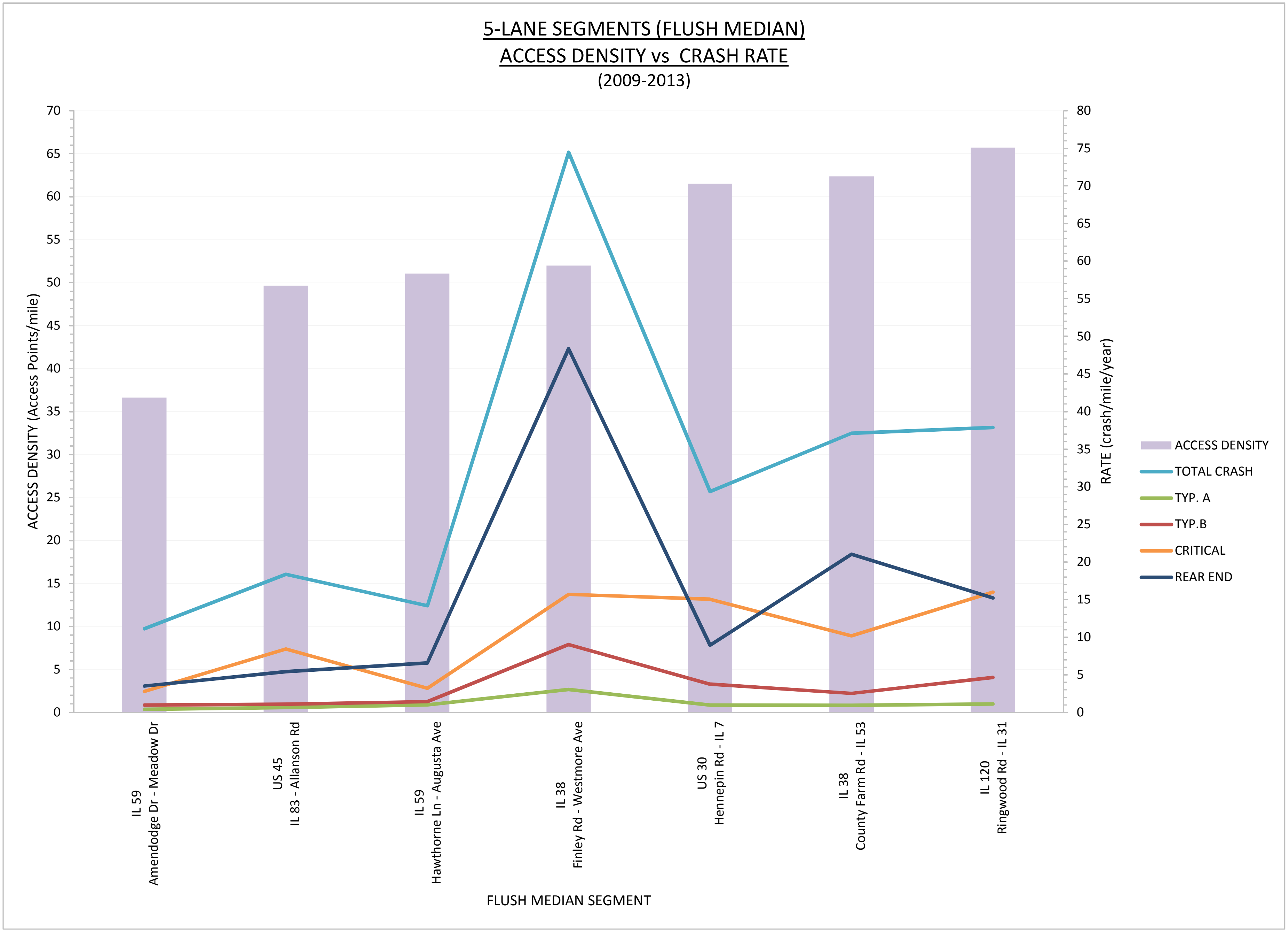
Flush Median



5-LANE SEGMENTS (FLUSH MEDIAN)
ADT vs CRASH RATE
(2009-2013)
ADT
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
RATE (crash/mile/year)
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
MAX. ADT
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
US 30 Hennepin Rd - IL 7
US 45 IL 83 - Allanson Rd
IL 59 Amendodge Dr - Meadow Dr
IL 59 Hawthorne Ln - Augusta Ave
IL 120 Ringwood Rd - IL 31
IL 38 Finley Rd - Westmore Ave
IL 38 County Farm Rd - IL 53
FLUSH MEDIAN SEGMENT

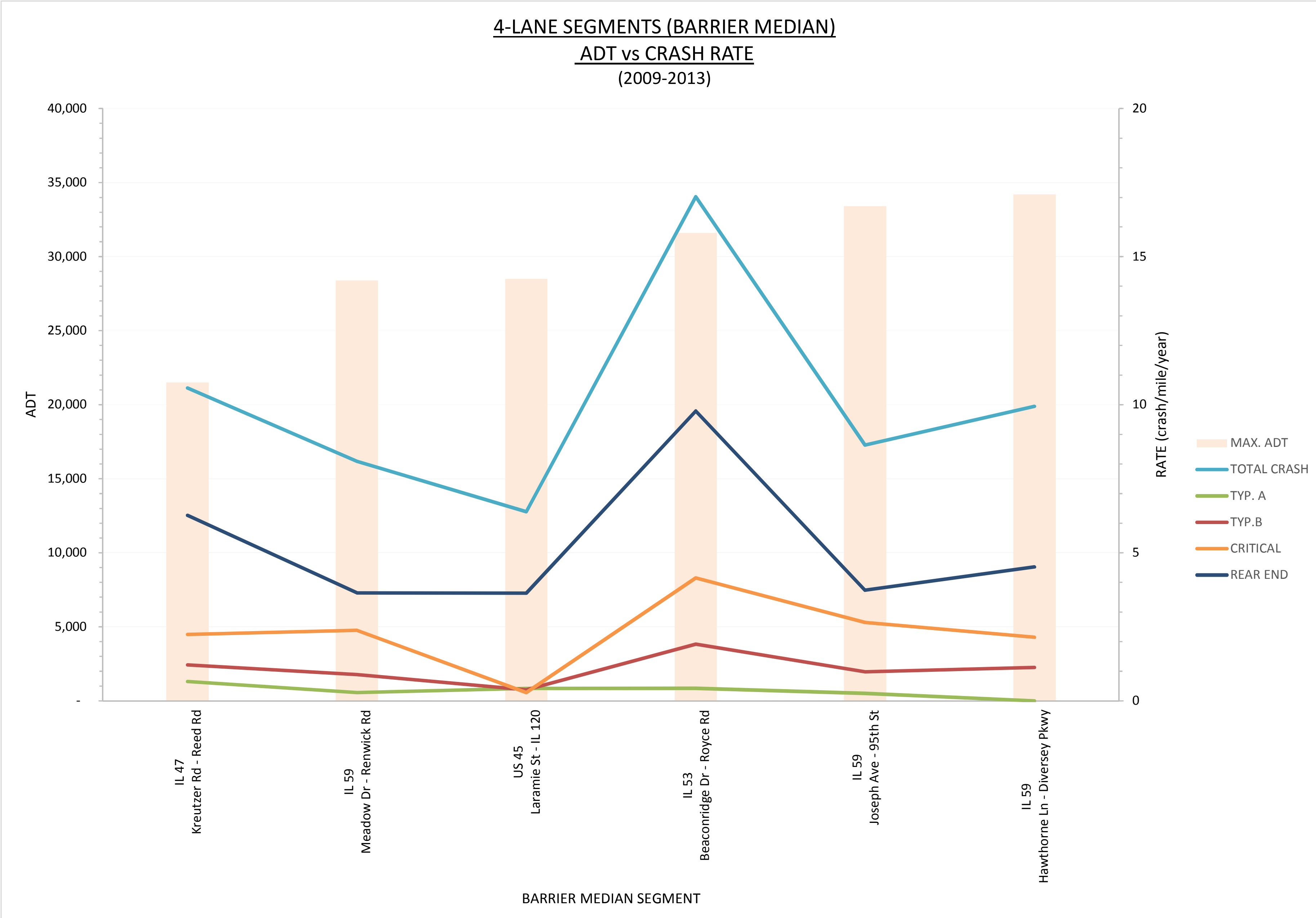


5-LANE SEGMENTS (FLUSH MEDIAN)
SPEED vs CRASH RATE
(2009-2013)
SPEED LIMIT (mph)
RATE (crash/mile/year)
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
MAX SPEED LIMIT
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
US 45
IL 83 - Allanson Rd
IL 38
Finley Rd - Westmore Ave
IL 38
County Farm Rd - IL 53
US 30
Hennepin Rd - IL 7
IL 59
Amendodge Dr - Meadow Dr
IL 59
Hawthorne Ln - Augusta Ave
IL 120
Ringwood Rd - IL 31
FLUSH MEDIAN SEGMENT

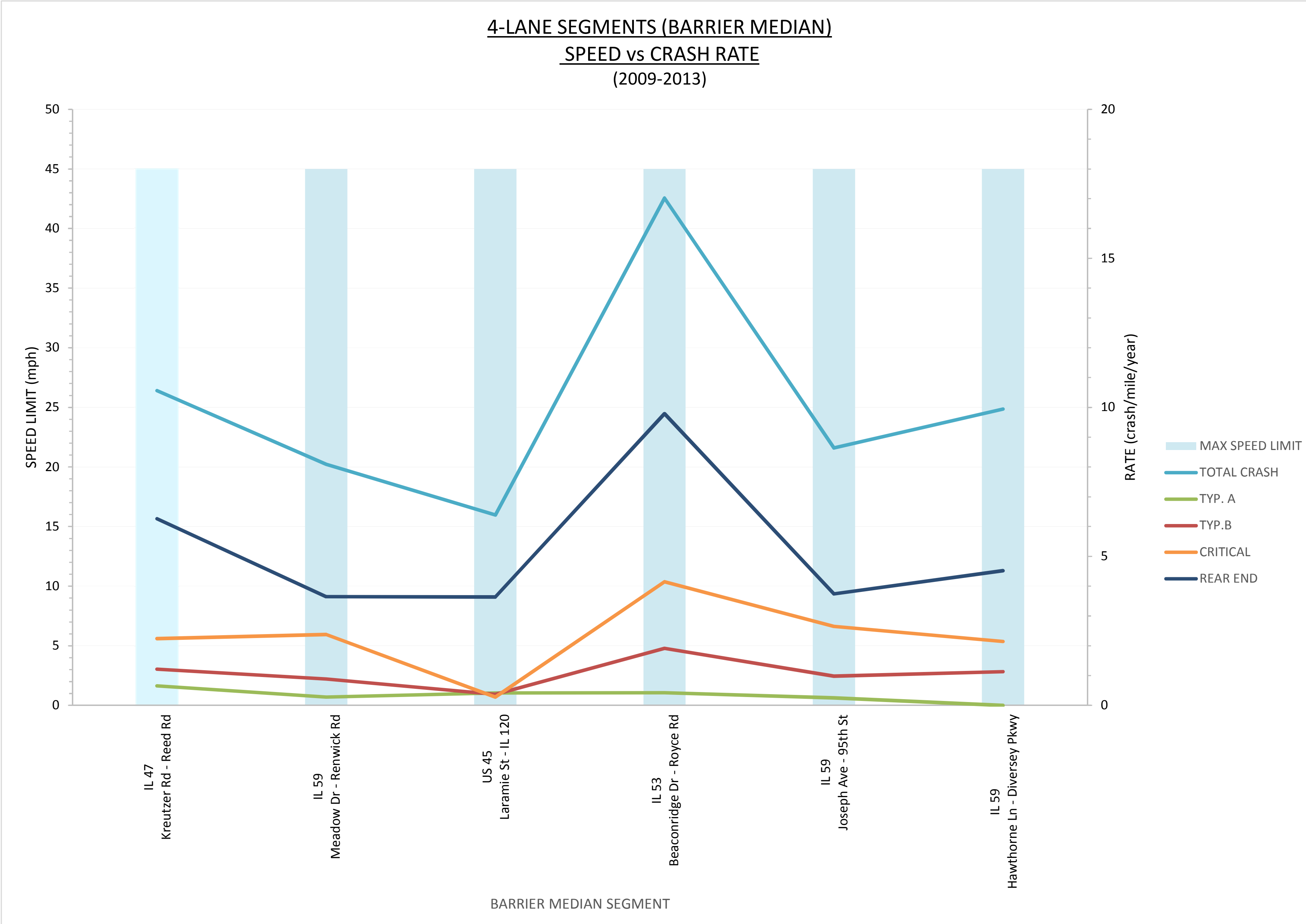

5-LANE SEGMENTS (FLUSH MEDIAN)
ACCESS DENSITY vs CRASH RATE
(2009-2013)
ACCESS DENSITY (Access Points/mile)
RATE (crash/mile/year)
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
IL 59
Amendodge Dr - Meadow Dr
US 45
IL 83 - Allanson Rd
IL 59
Hawthorne Ln - Augusta Ave
IL 38
Finley Rd - Westmore Ave
US 30
Hennepin Rd - IL 7
IL 38
County Farm Rd - IL 53
IL 120
Ringwood Rd - IL 31
FLUSH MEDIAN SEGMENT
ACCESS DENSITY
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END

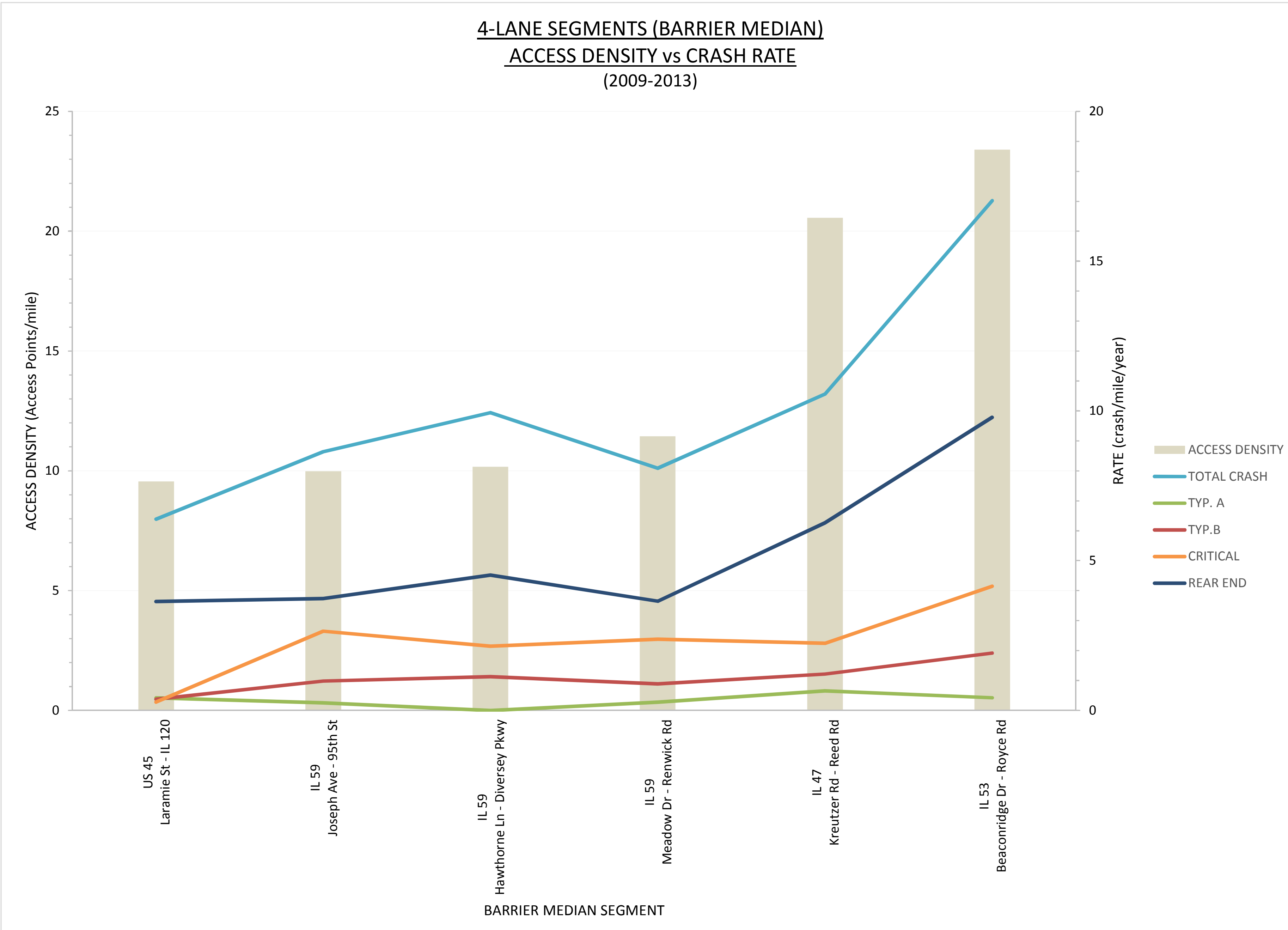
4 - Lane

Barrier Median



4-LANE SEGMENTS (BARRIER MEDIAN)
ADT vs CRASH RATE
(2009-2013)
ADT
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
RATE (crash/mile/year)
20
15
10
5
0
MAX. ADT
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
IL 47
Kreutzer Rd - Reed Rd
IL 59
Meadow Dr - Renwick Rd
US 45
Laramie St - IL 120
IL 53
Beaconridge Dr - Royce Rd
IL 59
Joseph Ave - 95th St
IL 59
Hawthorne Ln - Diversey Pkwy
BARRIER MEDIAN SEGMENT


4-LANE SEGMENTS (BARRIER MEDIAN)
SPEED vs CRASH RATE
(2009-2013)
SPEED LIMIT (mph)
RATE (crash/mile/year)
50
45
40
35
30
25
20
15
10
5
0
20
15
10
5
0
MAX SPEED LIMIT
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
IL 47
Kreutzer Rd - Reed Rd
IL 59
Meadow Dr - Renwick Rd
US 45
Laramie St - IL 120
IL 53
Beaconridge Dr - Royce Rd
IL 59
Joseph Ave - 95th St
IL 59
Hawthorne Ln - Diversey Pkwy
BARRIER MEDIAN SEGMENT

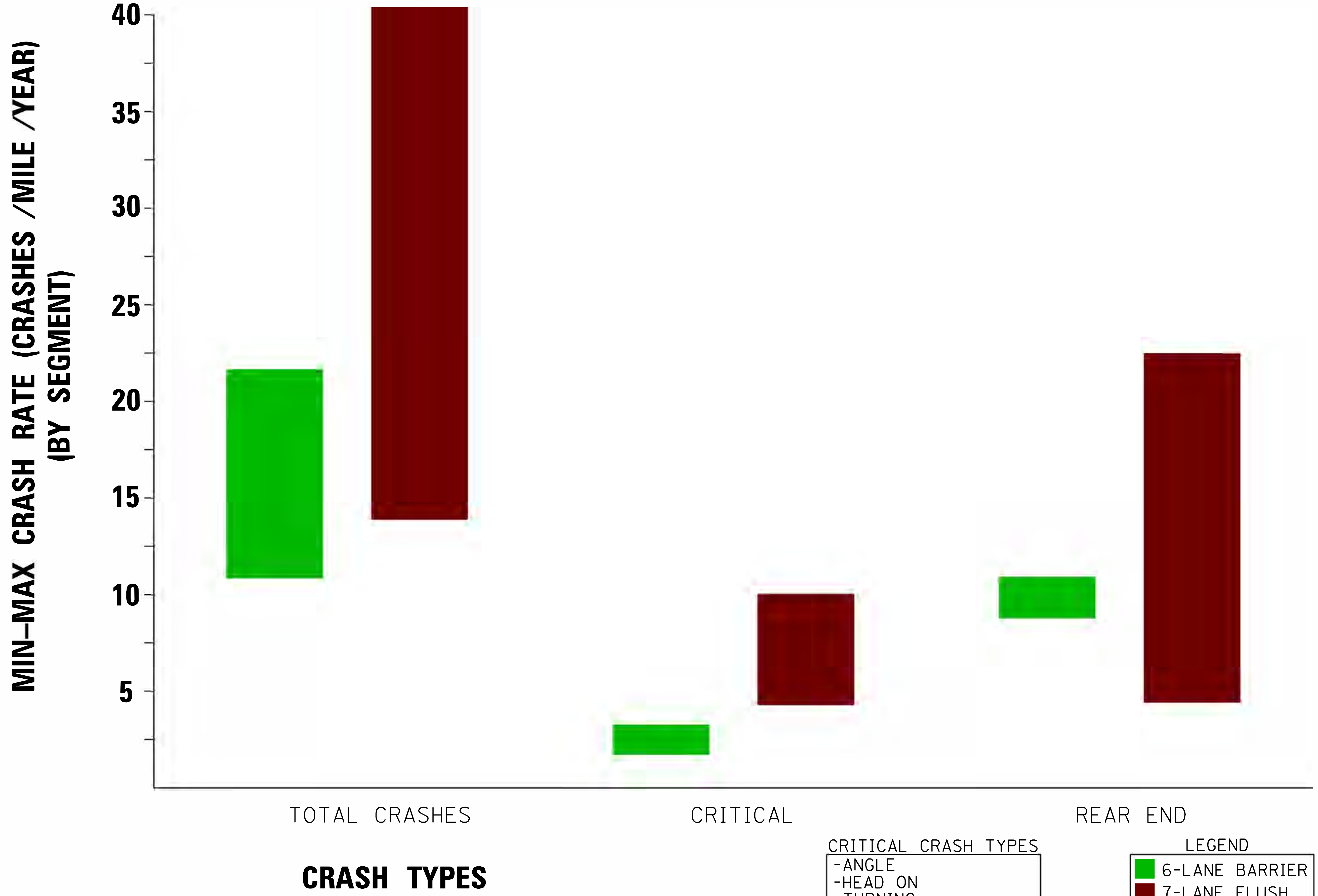

4-LANE SEGMENTS (BARRIER MEDIAN)
ACCESS DENSITY vs CRASH RATE
(2009-2013)
ACCESS DENSITY (Access Points/mile)
RATE (crash/mile/year)
0
5
10
15
20
25
ACCESS DENSITY
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
US 45
Laramie St - IL 120
IL 59
Joseph Ave - 95th St
IL 59
Hawthorne Ln - Diversey Pkwy
IL 59
Meadow Dr - Renwick Rd
IL 47
Kreutzer Rd - Reed Rd
IL 53
Beaconridge Dr - Royce Rd
BARRIER MEDIAN SEGMENT

7 - Lane

vs

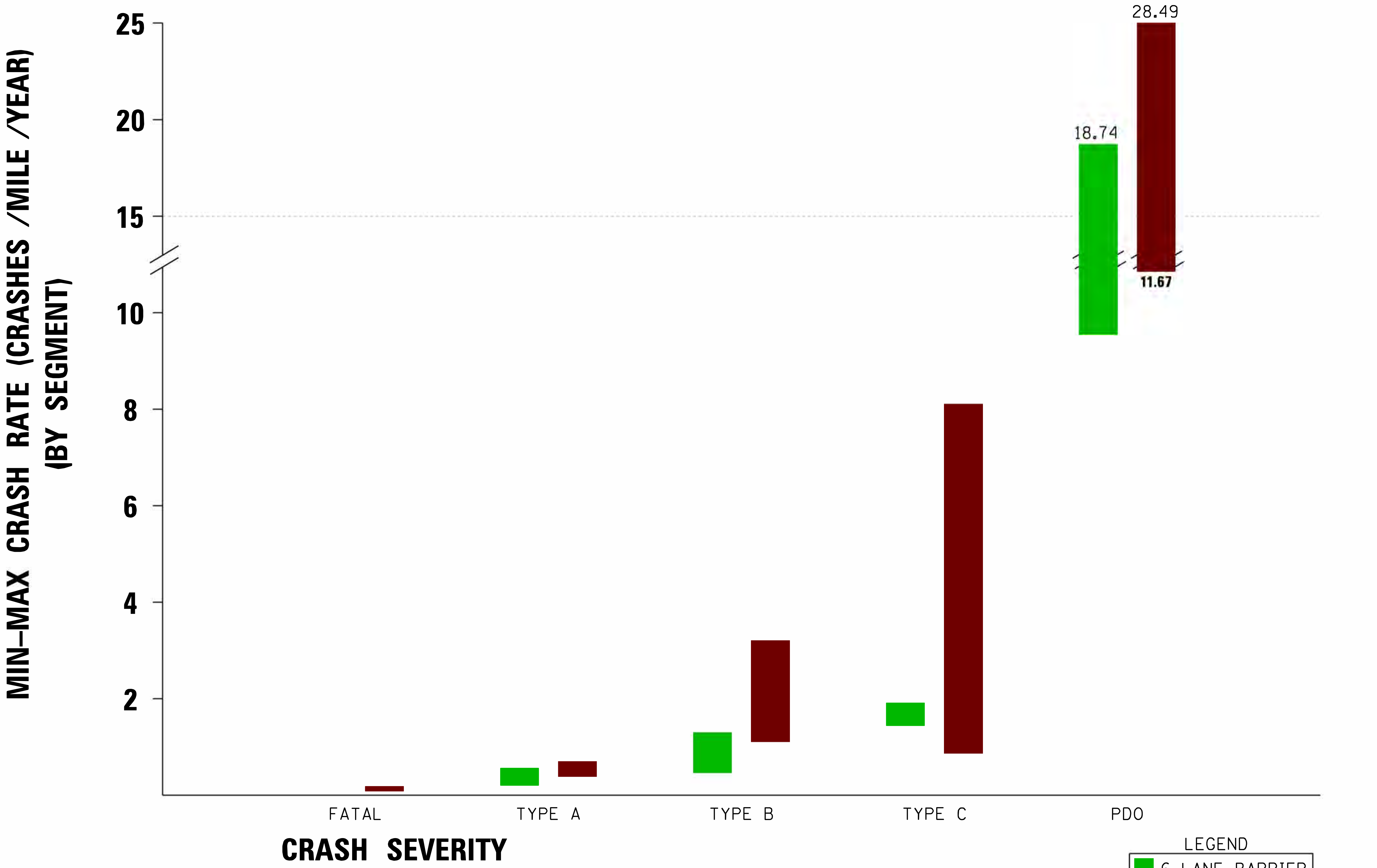
6 - Lane

Segments



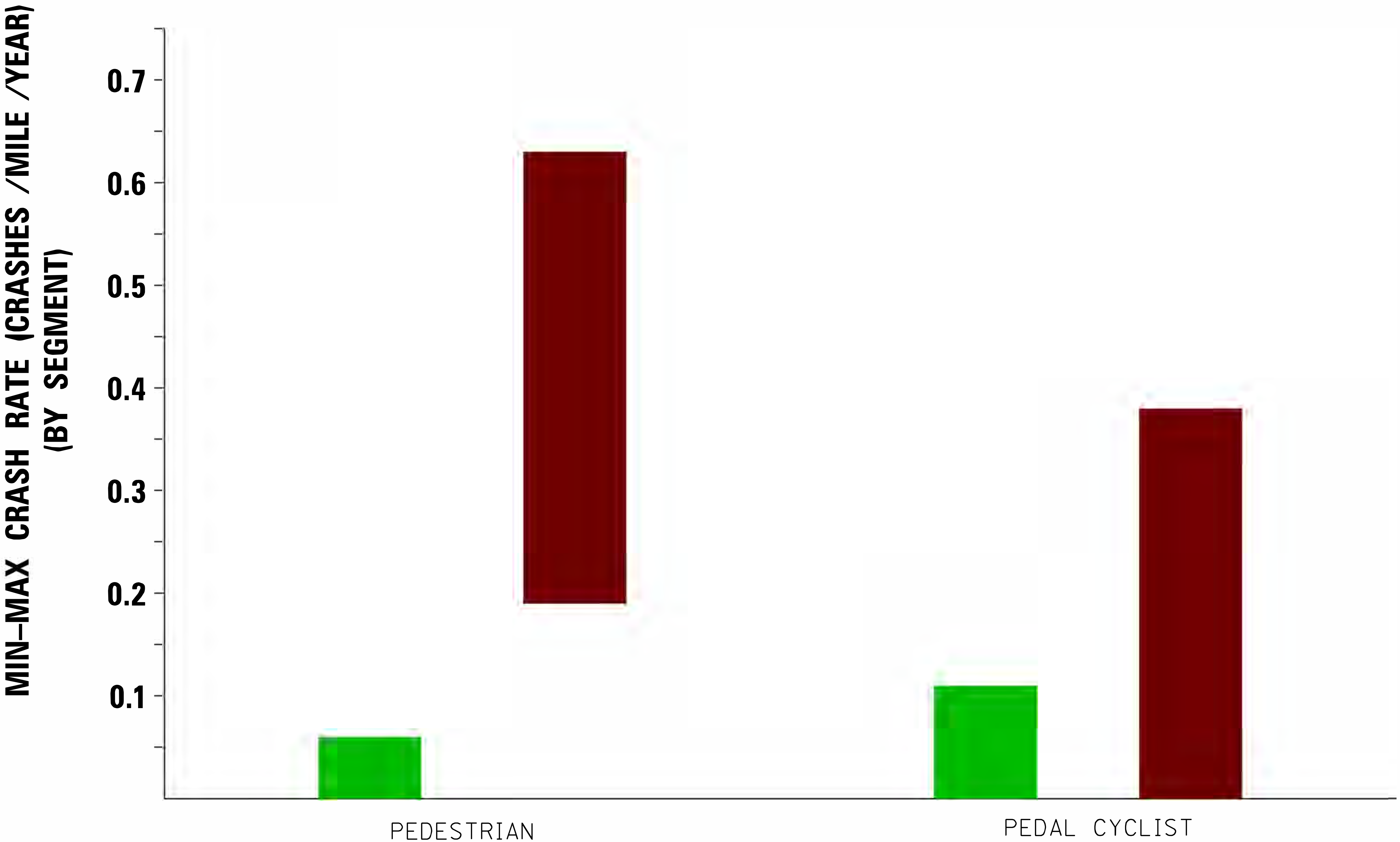
7–LANE FLUSH /MOUNTABLE VS 6–LANE BARRIER

CADD D4–R3



7–LANE FLUSH /MOUNTABLE VS 6–LANE BARRIER

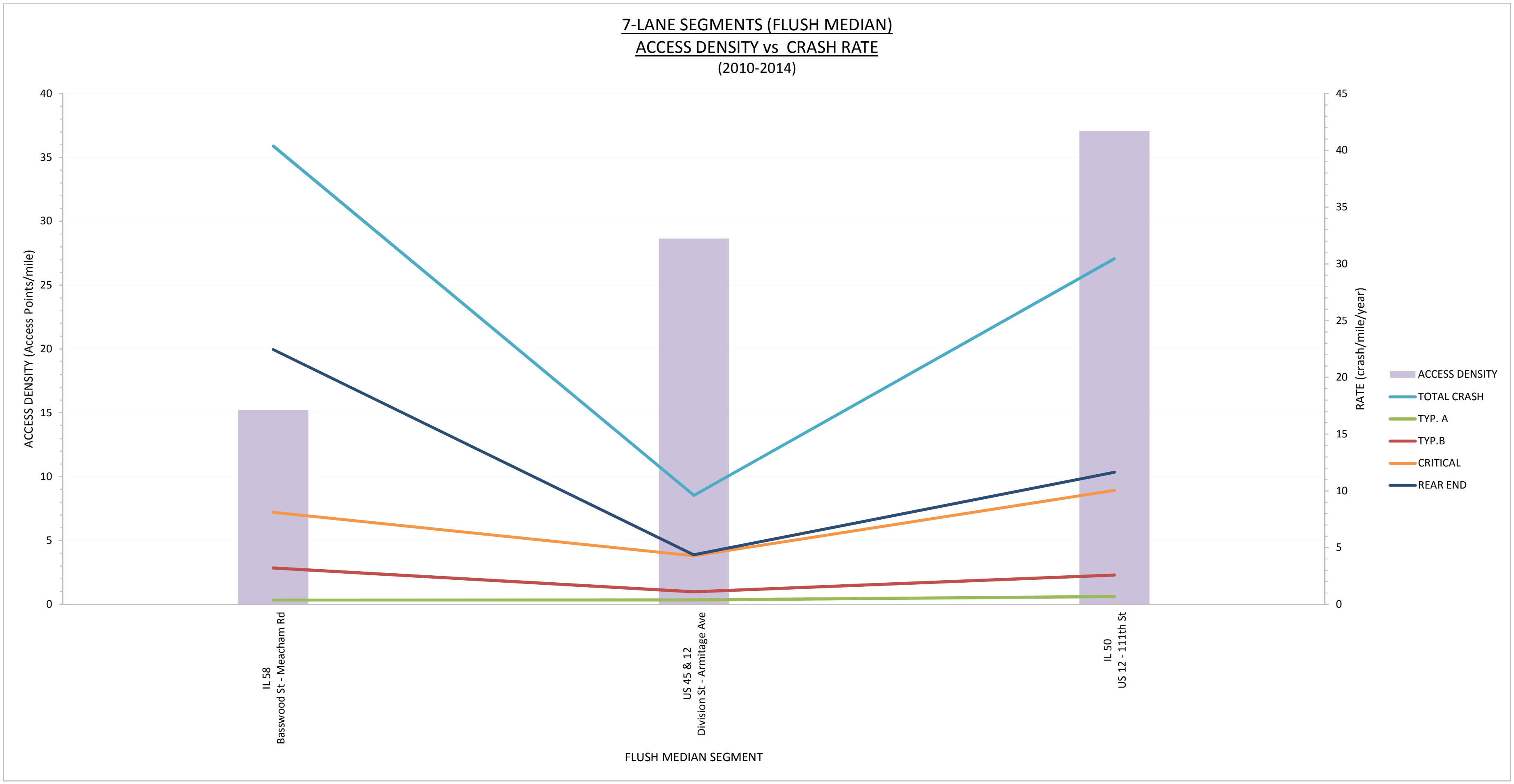
CADD D4–R3

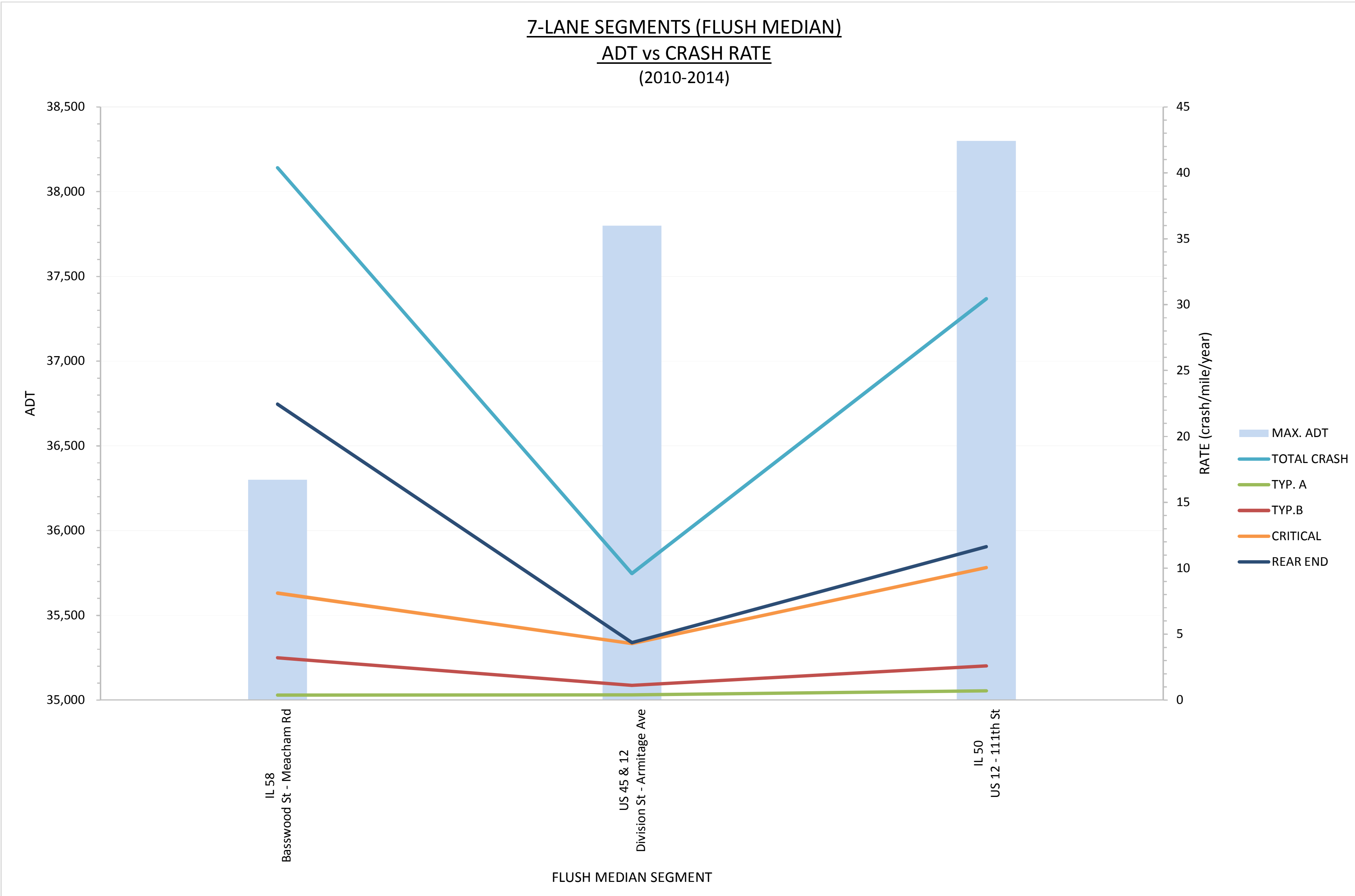


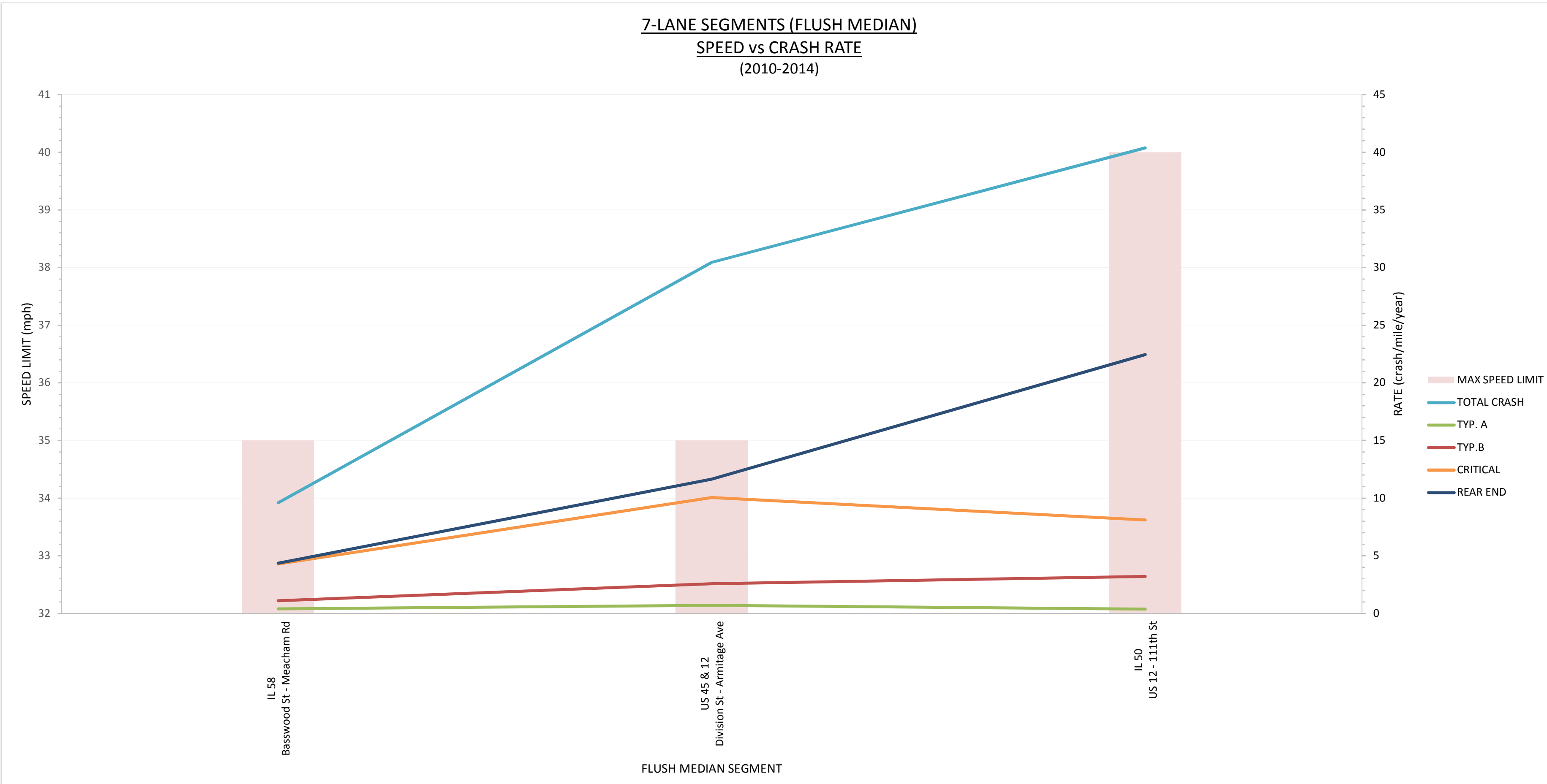
PEDESTRIAN AND PEDAL CYCLIST INVOLVED CRASHES
7–LANE FLUSH /MOUNTABLE VS 6–LANE BARRIER

7 - Lane

Flush Median


7-LANE SEGMENTS (FLUSH MEDIAN)
ACCESS DENSITY vs CRASH RATE
(2010-2014)
ACCESS DENSITY (Access Points/mile)
RATE (crash/mile/year)
0
5
10
15
20
25
30
35
40
45
ACCESS DENSITY
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
IL 58
Basswood St - Meacham Rd
US 45 & 12
Division St - Armitage Ave
IL 50
US 12 - 111th St
FLUSH MEDIAN SEGMENT

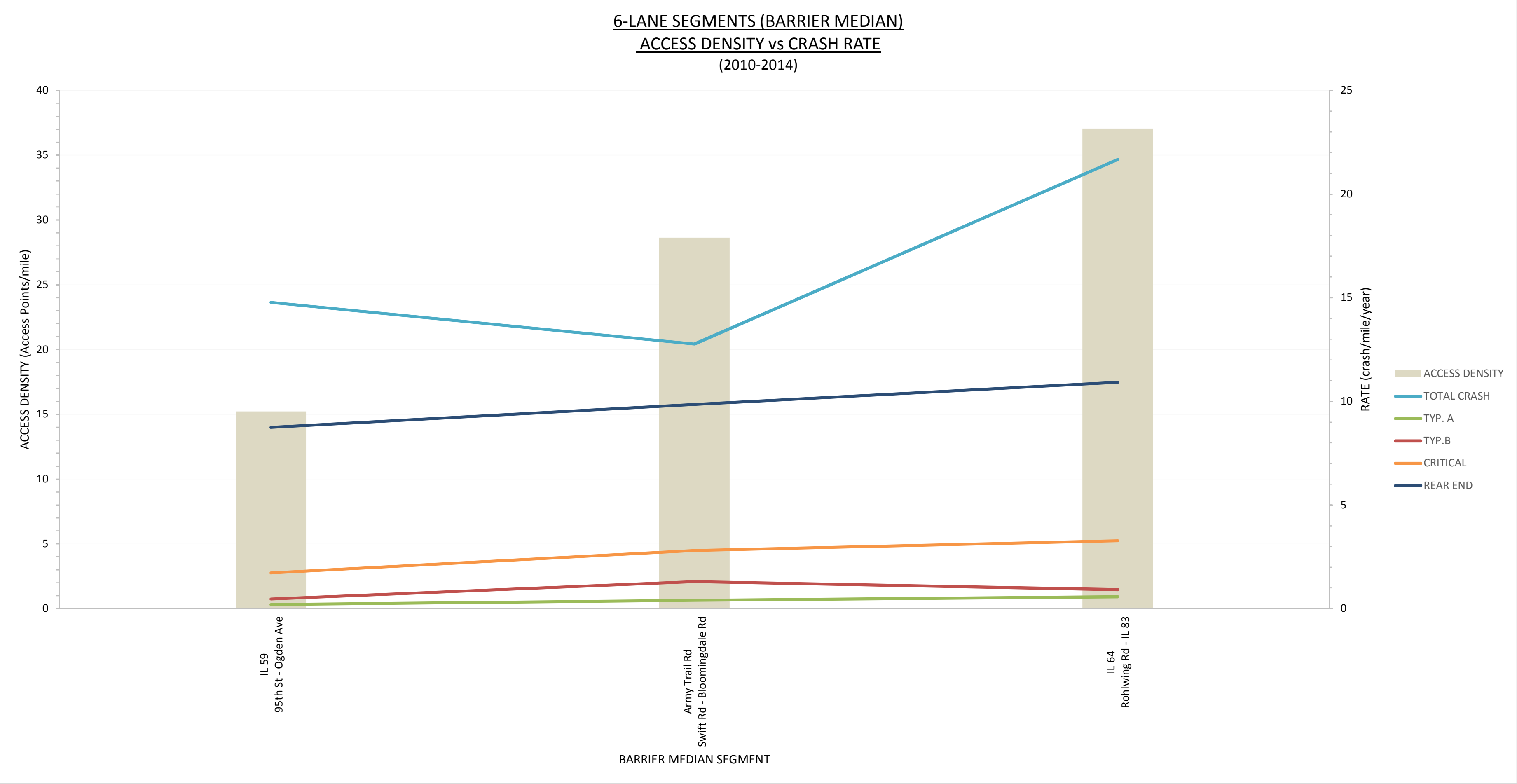

7-LANE SEGMENTS (FLUSH MEDIAN)
ADT vs CRASH RATE
(2010-2014)
ADT
38,500
38,000
37,500
37,000
36,500
36,000
35,500
35,000
RATE (crash/mile/year)
45
40
35
30
25
20
15
10
5
0
MAX. ADT
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
IL 58
Basswood St - Meacham Rd
US 45 & 12
Division St - Armitage Ave
IL 50
US 12 - 111th St
FLUSH MEDIAN SEGMENT

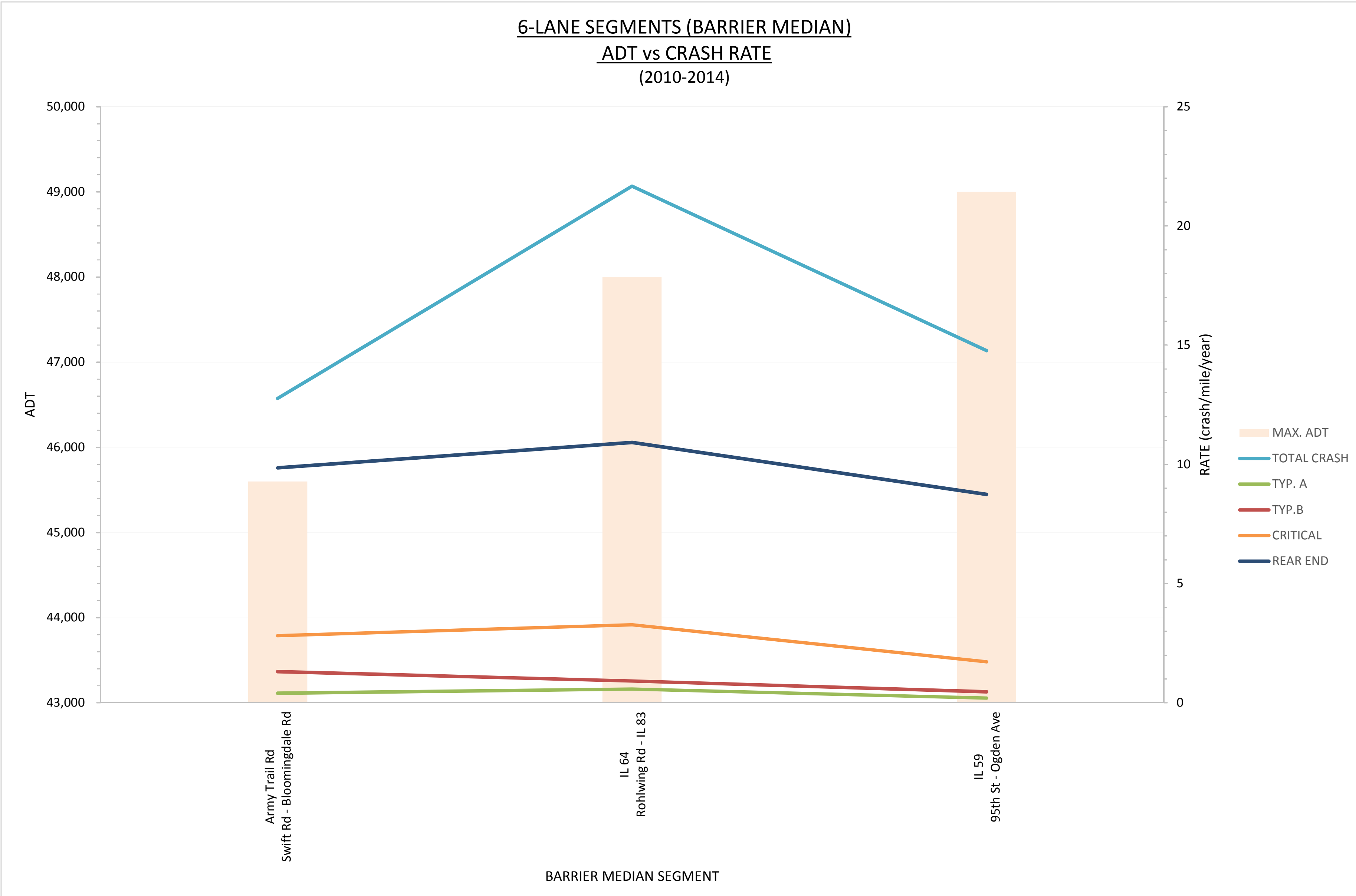


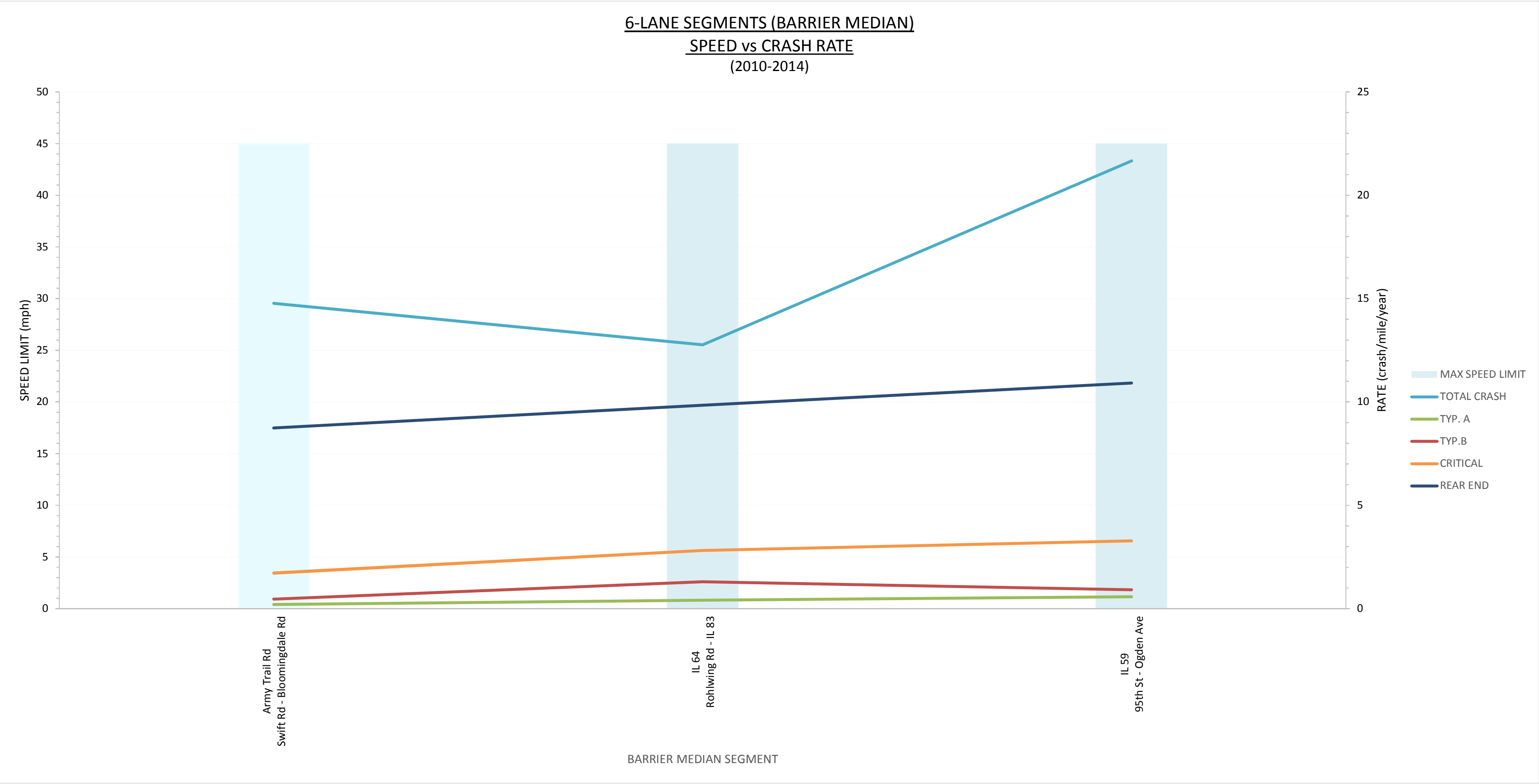
7-LANE SEGMENTS (FLUSH MEDIAN)
SPEED vs CRASH RATE
(2010-2014)
SPEED LIMIT (mph)
RATE (crash/mile/year)
MAX SPEED LIMIT
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
IL 58
Basswood St - Meacham Rd
US 45 & 12
Division St - Armitage Ave
IL 50
US 12 - 111th St
FLUSH MEDIAN SEGMENT

6 - Lane

Barrier Median


6-LANE SEGMENTS (BARRIER MEDIAN)
ACCESS DENSITY vs CRASH RATE
(2010-2014)
ACCESS DENSITY (Access Points/mile)
RATE (crash/mile/year)
0
5
10
15
20
25
30
35
40
0
5
10
15
20
25
IL 59
95th St - Ogden Ave
Army Trail Rd
Swift Rd - Bloomingdale Rd
IL 64
Rohlwing Rd - IL 83
BARRIER MEDIAN SEGMENT
ACCESS DENSITY
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END


6-LANE SEGMENTS (BARRIER MEDIAN)
ADT vs CRASH RATE
(2010-2014)
50,000
49,000
48,000
47,000
46,000
45,000
44,000
43,000
ADT
25
20
15
10
5
0
RATE (crash/mile/year)
MAX. ADT
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END
Army Trail Rd
Swift Rd - Bloomingdale Rd
IL 64
Rohlwing Rd - IL 83
IL 59
95th St - Ogden Ave
BARRIER MEDIAN SEGMENT


6-LANE SEGMENTS (BARRIER MEDIAN)
SPEED vs CRASH RATE
(2010-2014)
SPEED LIMIT (mph)
0
5
10
15
20
25
30
35
40
45
50
RATE (crash/mile/year)
0
5
10
15
20
25
Army Trail Rd
Swift Rd - Bloomingdale Rd
IL 64
Rohlwing Rd - IL 83
IL 59
95th St - Ogden Ave
BARRIER MEDIAN SEGMENT
MAX SPEED LIMIT
TOTAL CRASH
TYP. A
TYP.B
CRITICAL
REAR END

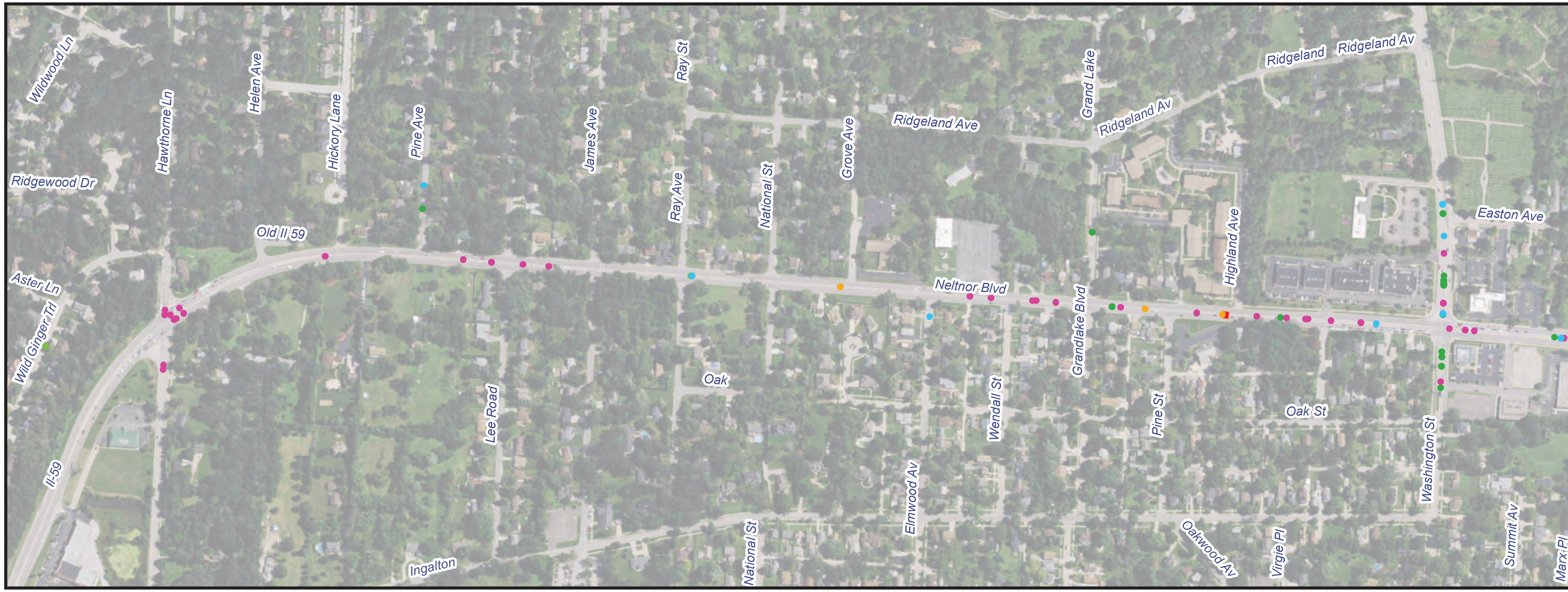
Appendix

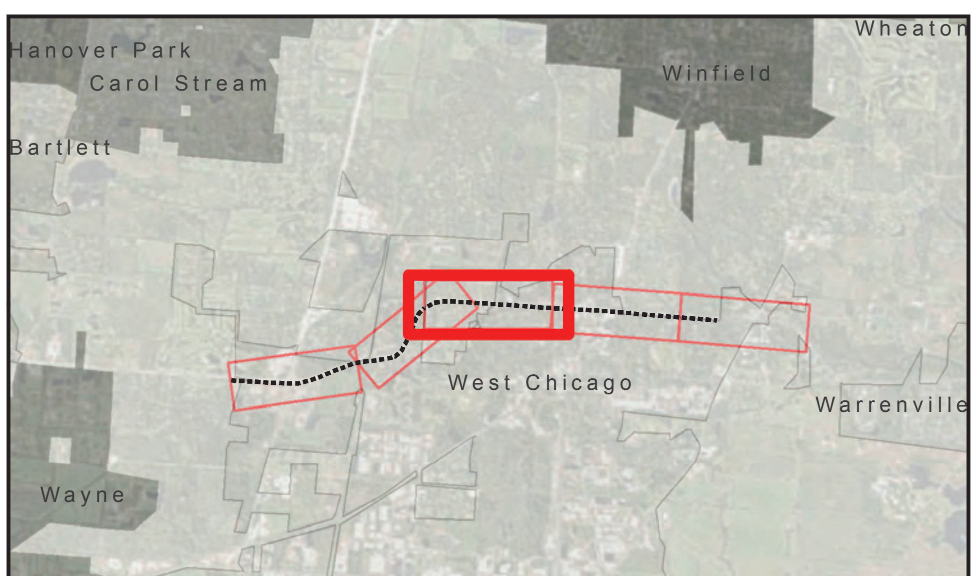
Crash Maps

5 - Lane

Flush Median

Stanley Consultants INC.





Keymap

Legend

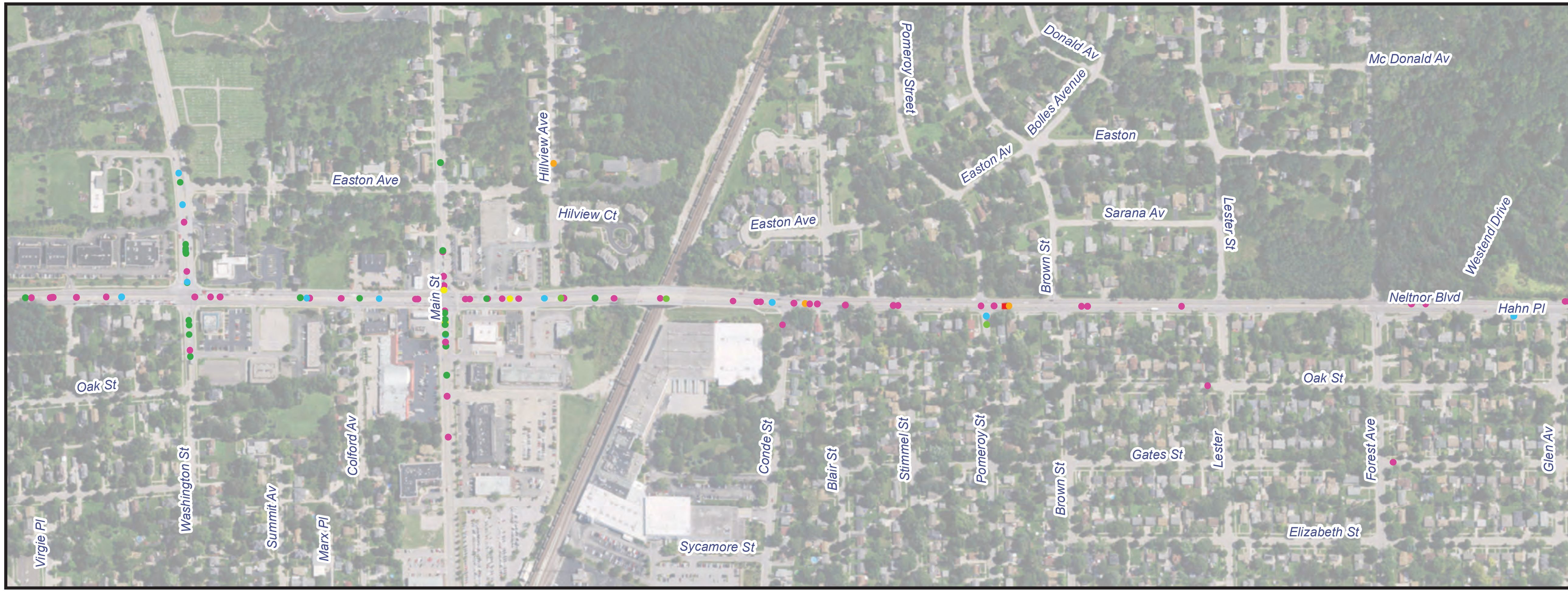
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

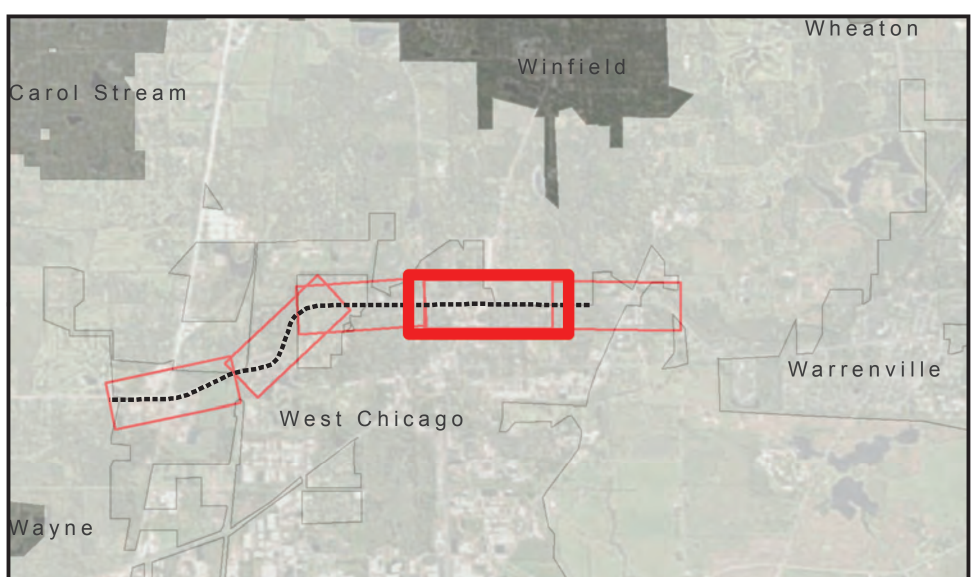
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 59 Hawthorn to Agusta

Stanley Consultants INC.





Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

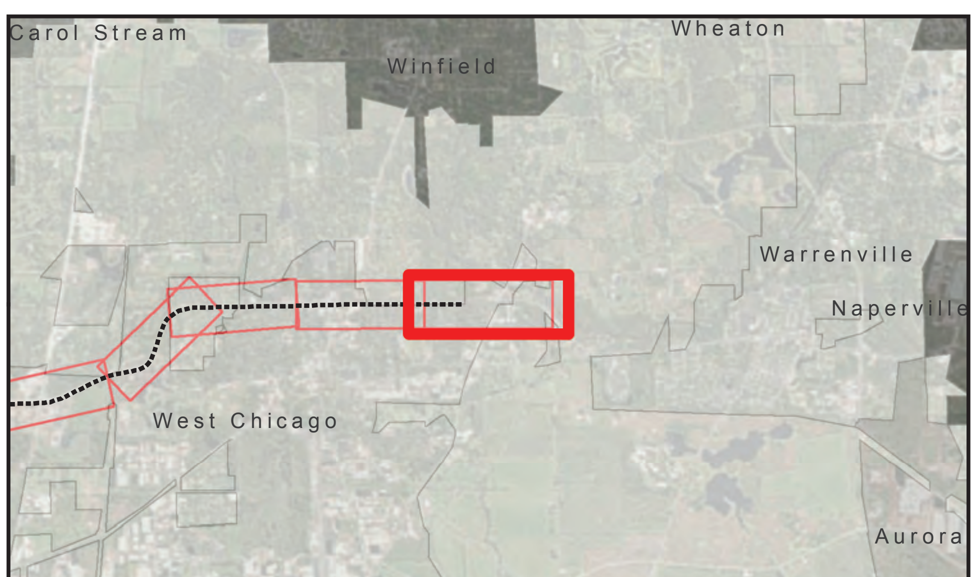
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 59 Hawthorn to Agusta

Stanley Consultants INC.



Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

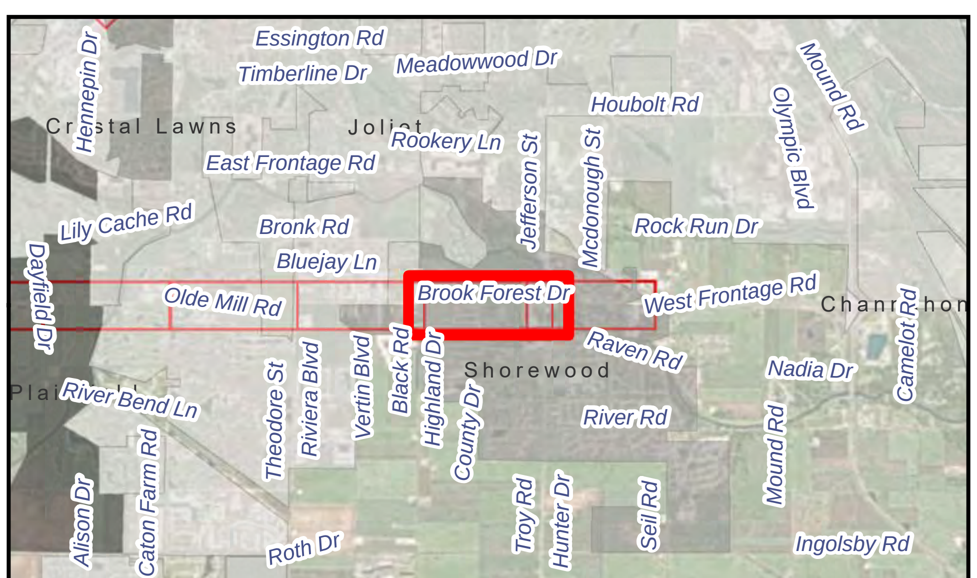
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 59 Hawthorn to Agusta

Stanley Consultants INC.



Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

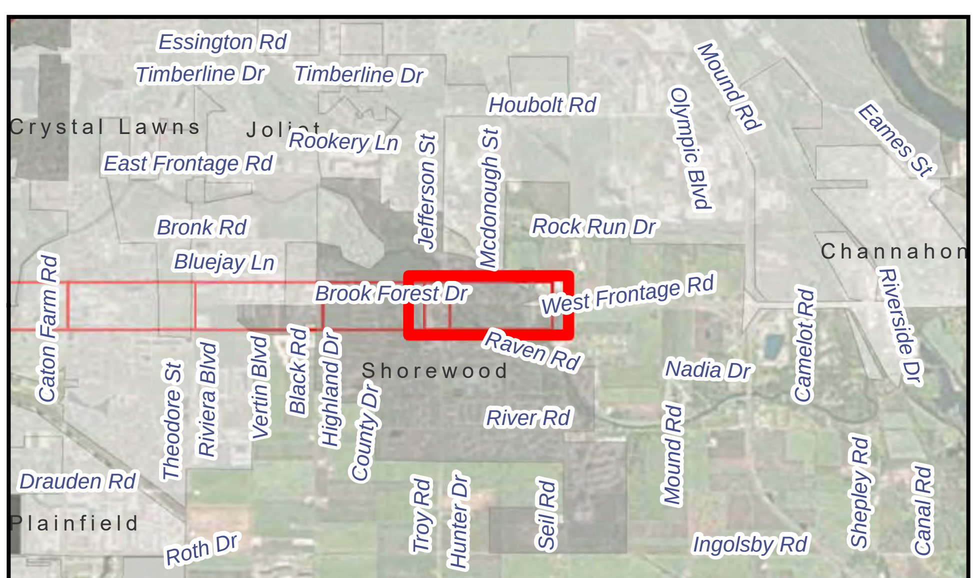
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 59 Amendodge to Meadow

Stanley Consultants INC.



Keymap

Legend

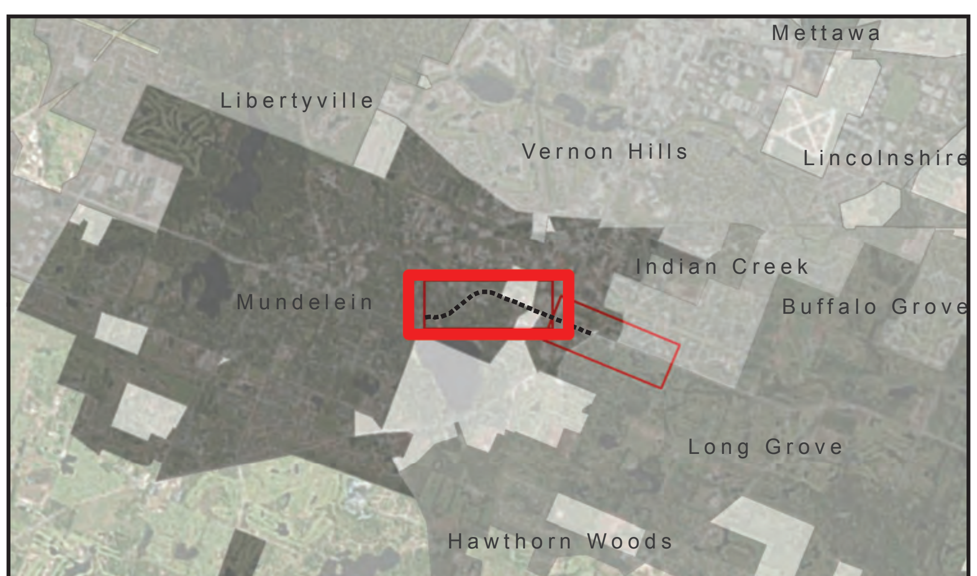
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 59 Amendodge to Meadow

Stanley Consultants INC.



Keymap

Legend

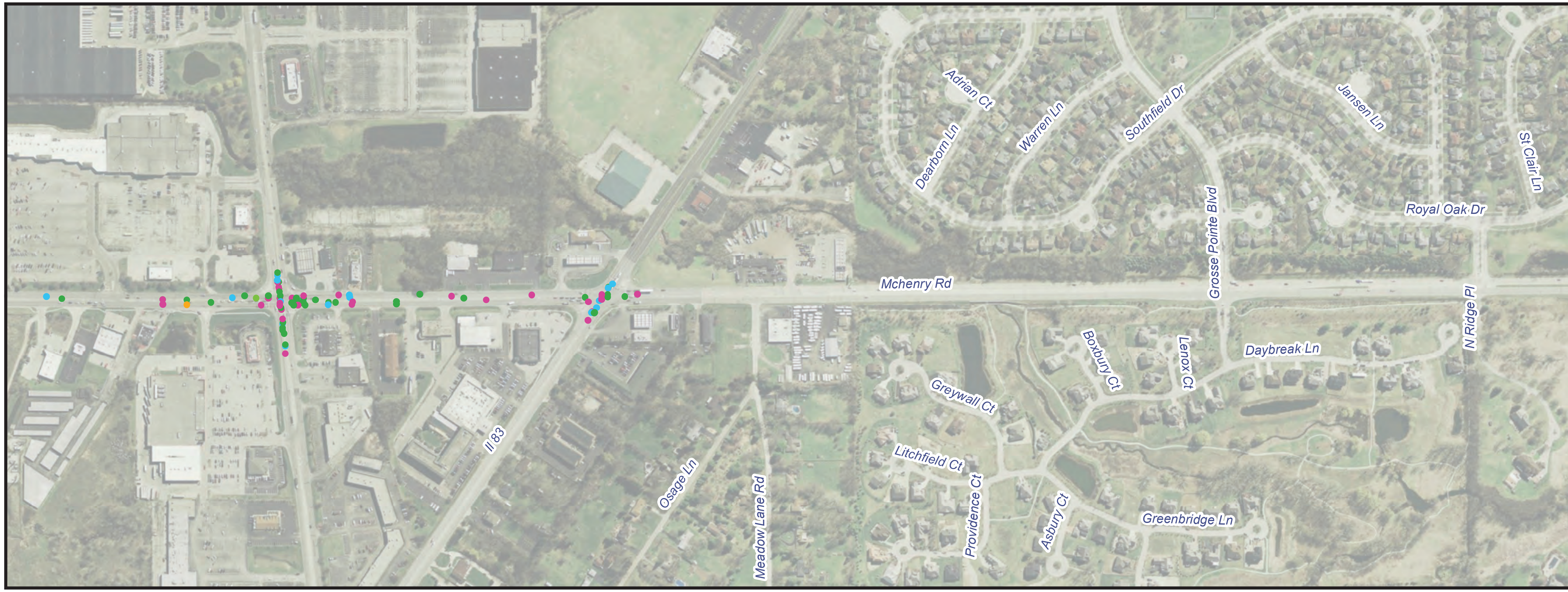
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

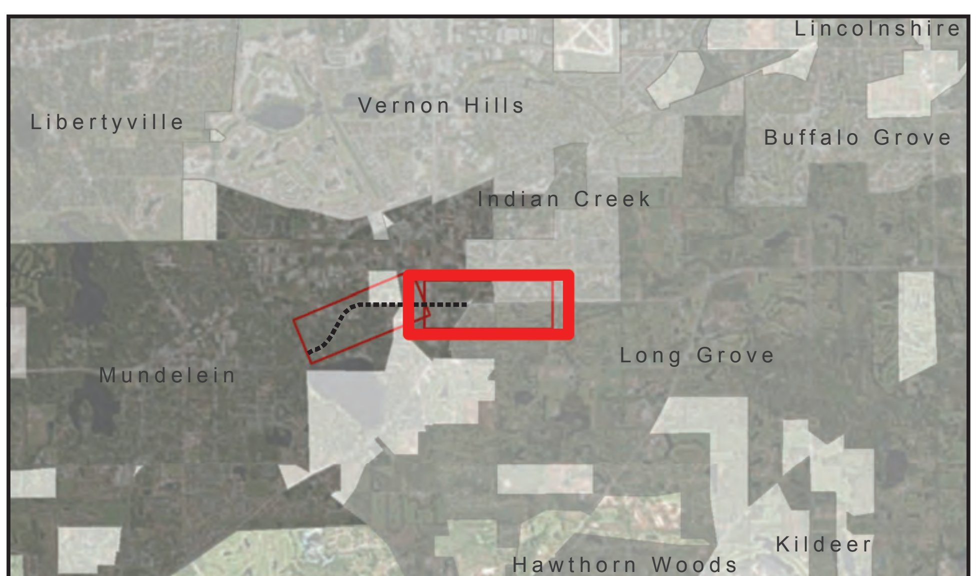
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
US 45 Allanson to IL 83

Stanley Consultants INC.





Keymap

Legend

Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

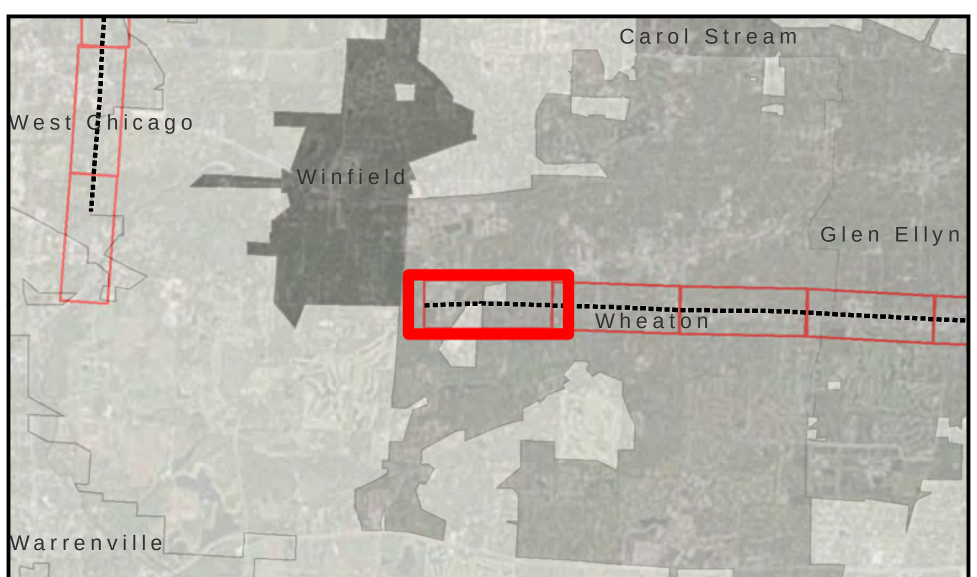
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
US 45 Allanson to IL 83

Stanley Consultants INC.



Keymap

Legend

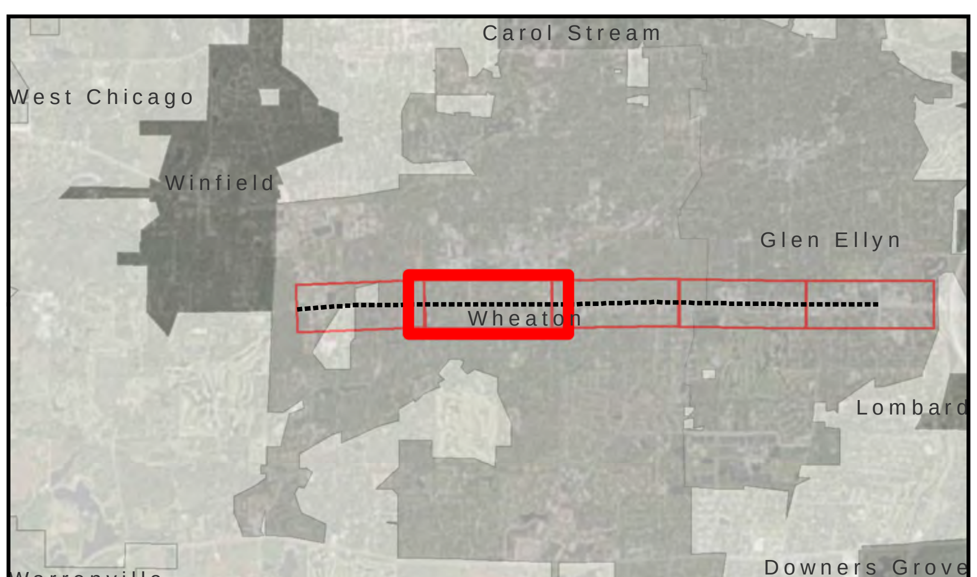
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 38 County Farm to IL 53

Stanley Consultants INC.



Keymap

Legend

Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

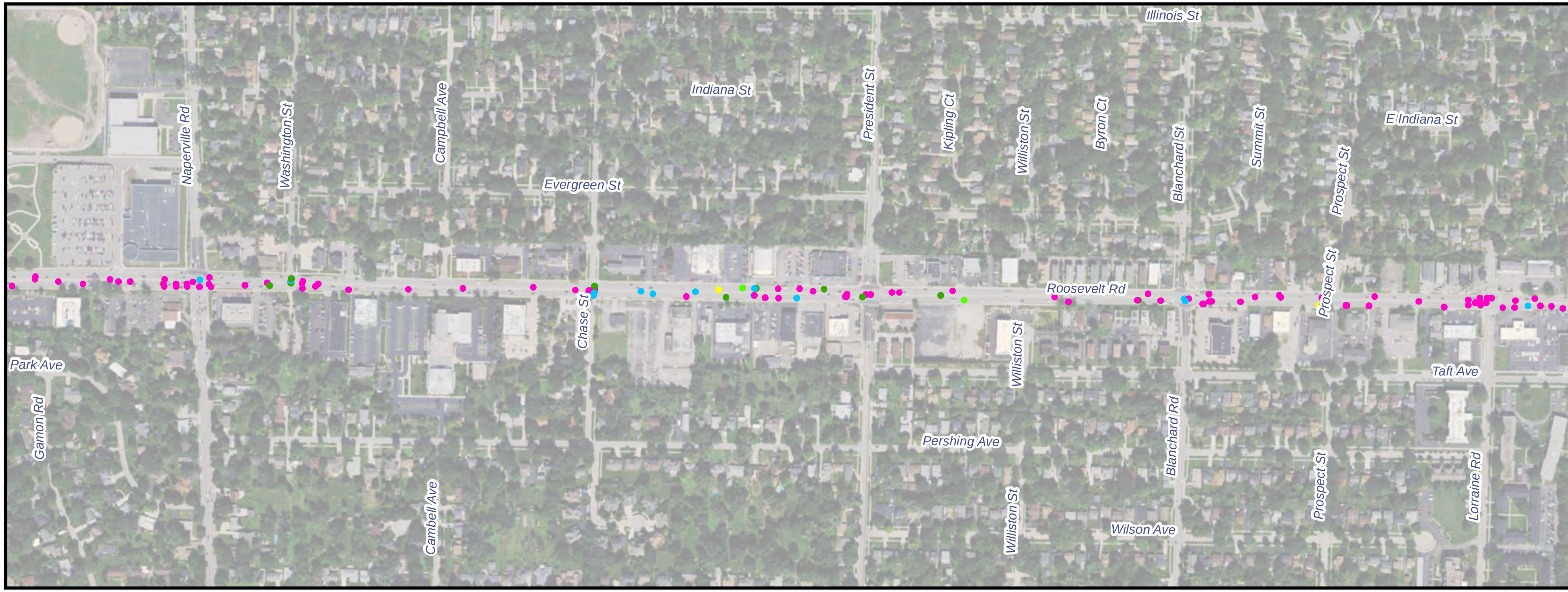
N

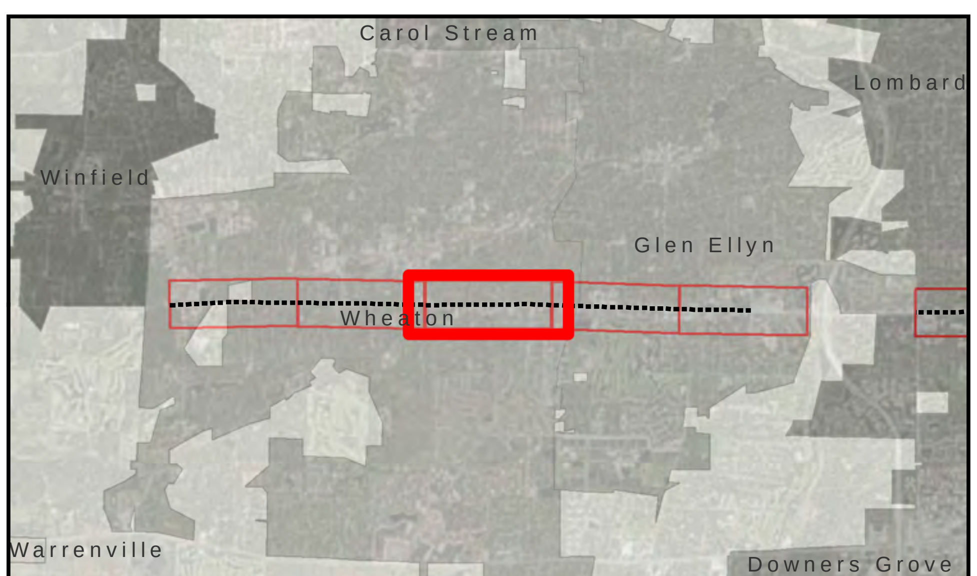
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 38 County Farm to IL 53

Stanley Consultants INC.





Keymap

Legend

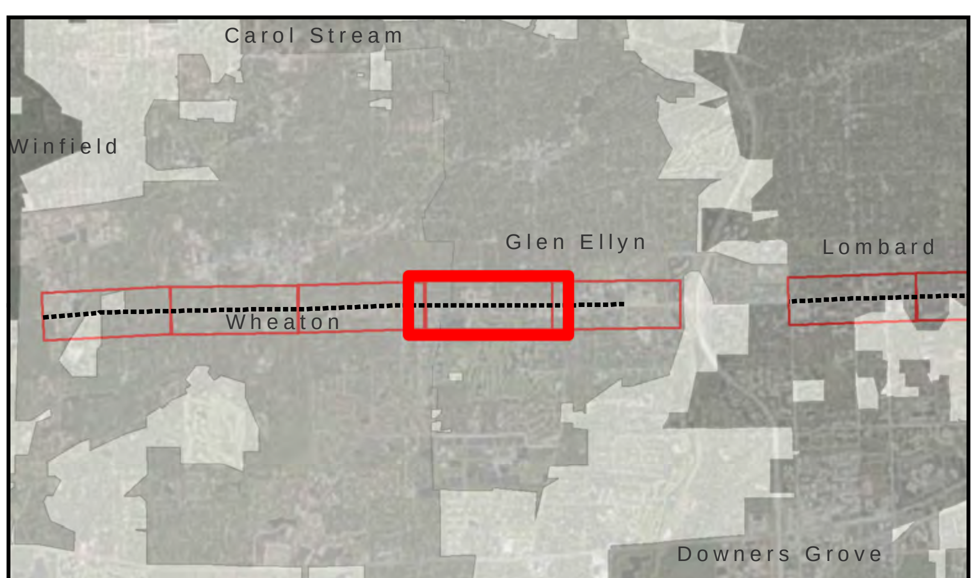
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 38 County Farm to IL 53

Stanley Consultants INC.



Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

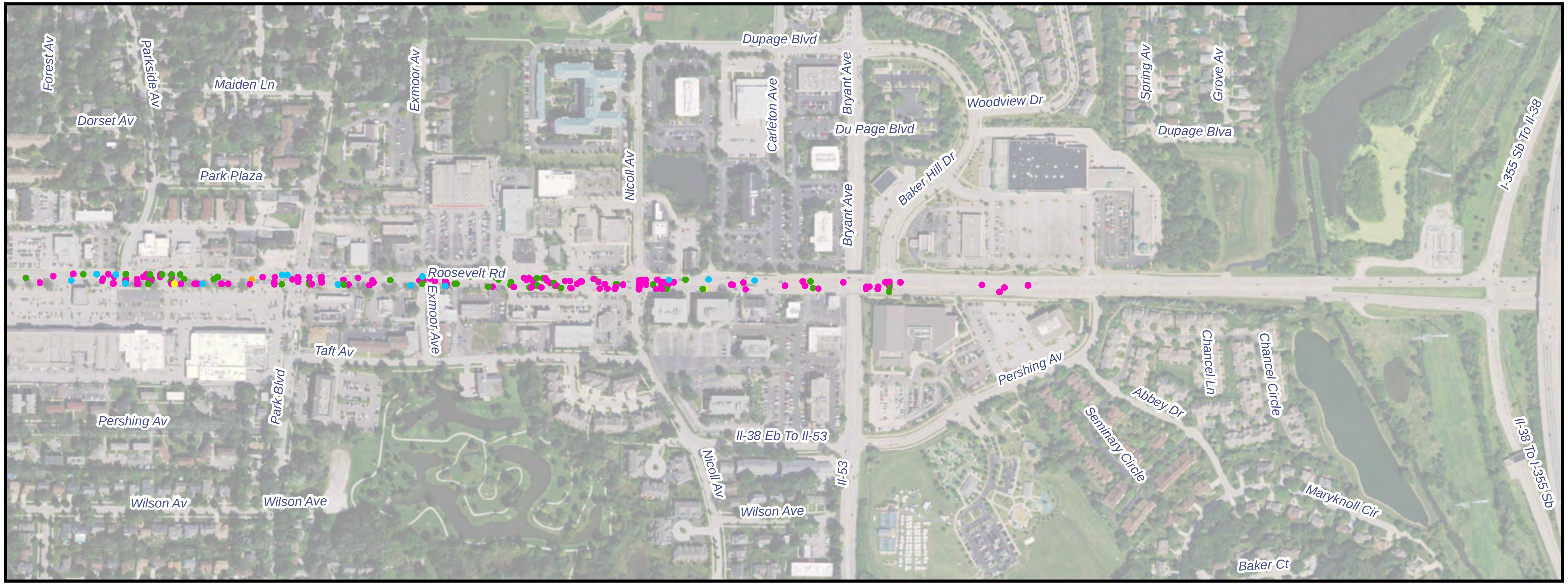
N

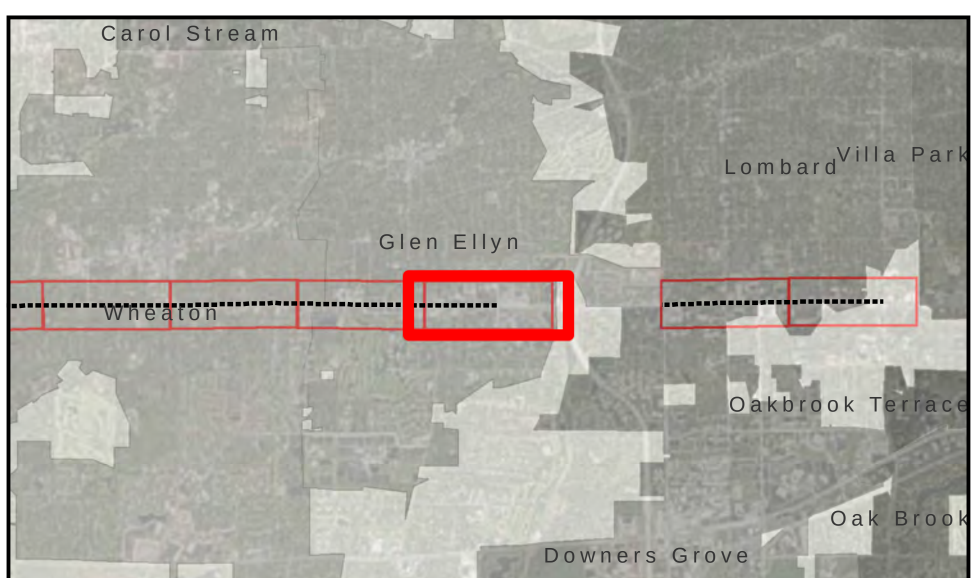
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 38 County Farm to IL 53

Stanley Consultants INC.





Keymap

Legend

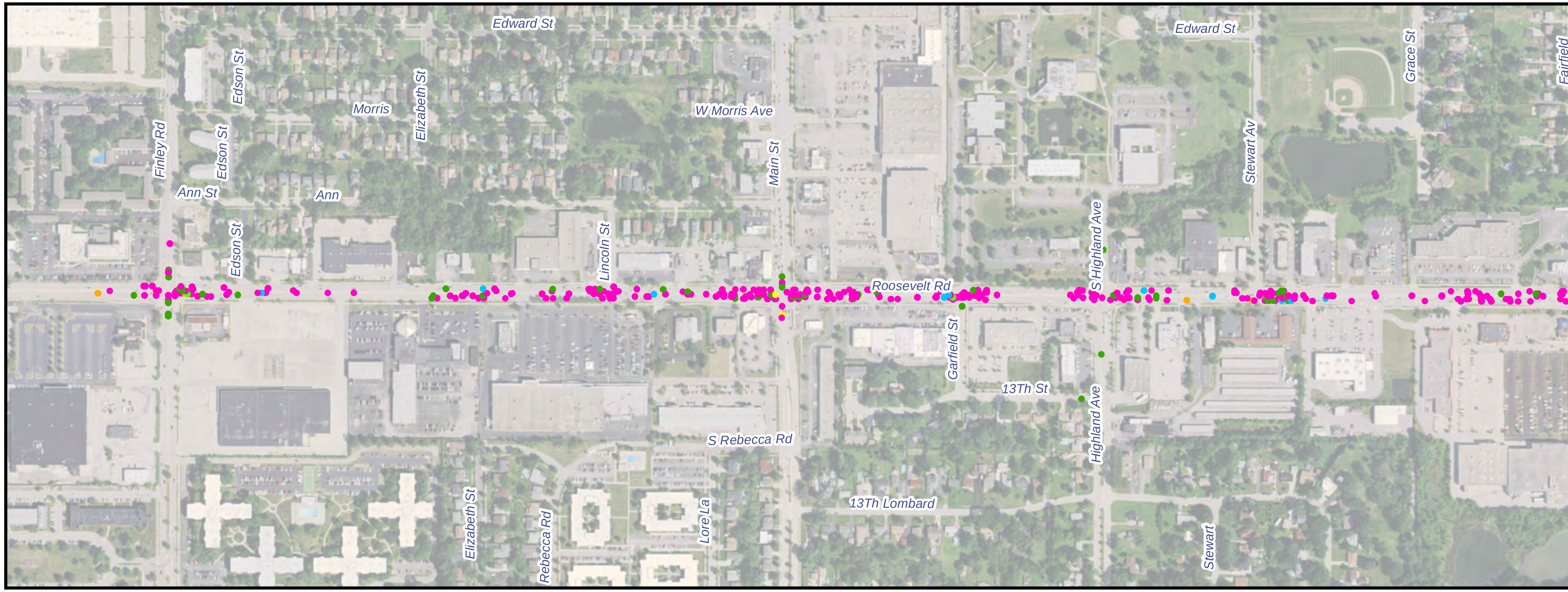
- Fatalities
- Angle
- Pedestrian
- Fixed Object
- Rear End
- Head On
- Turning
- Pedalcyclist

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 38 County Farm to IL 53

Stanley Consultants INC.



Keymap

Legend

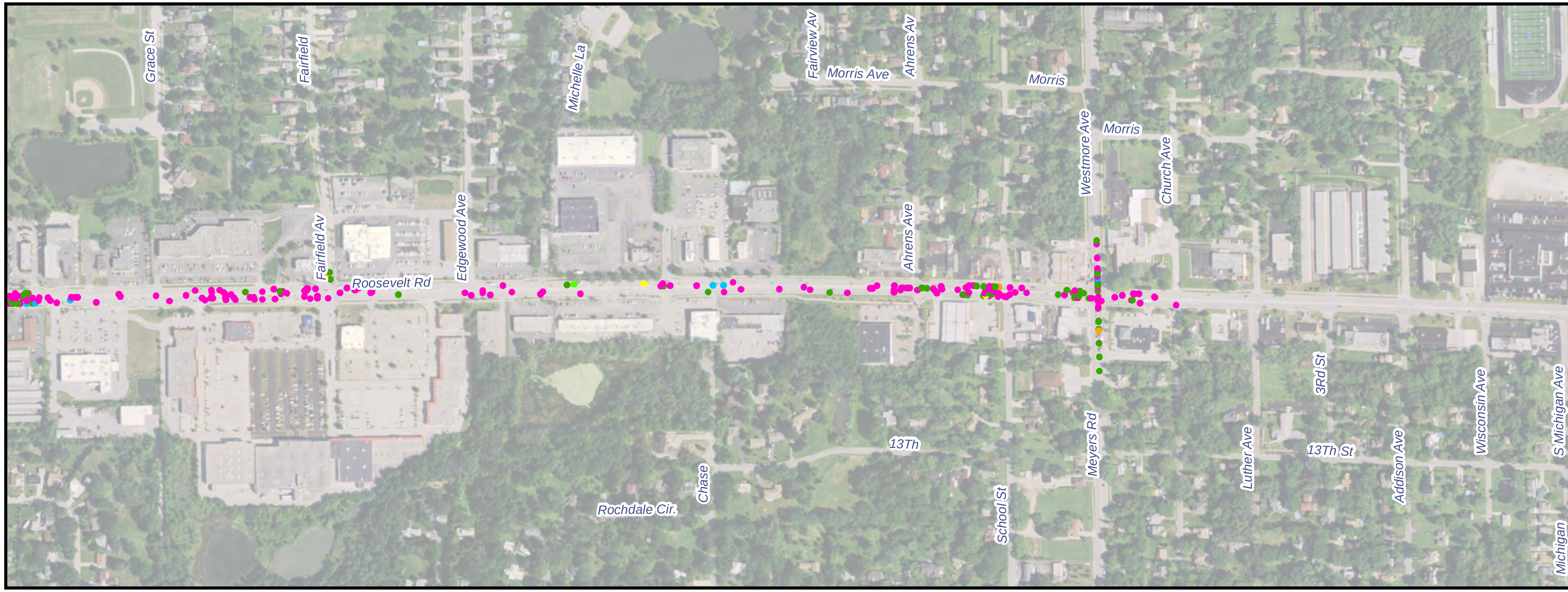
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

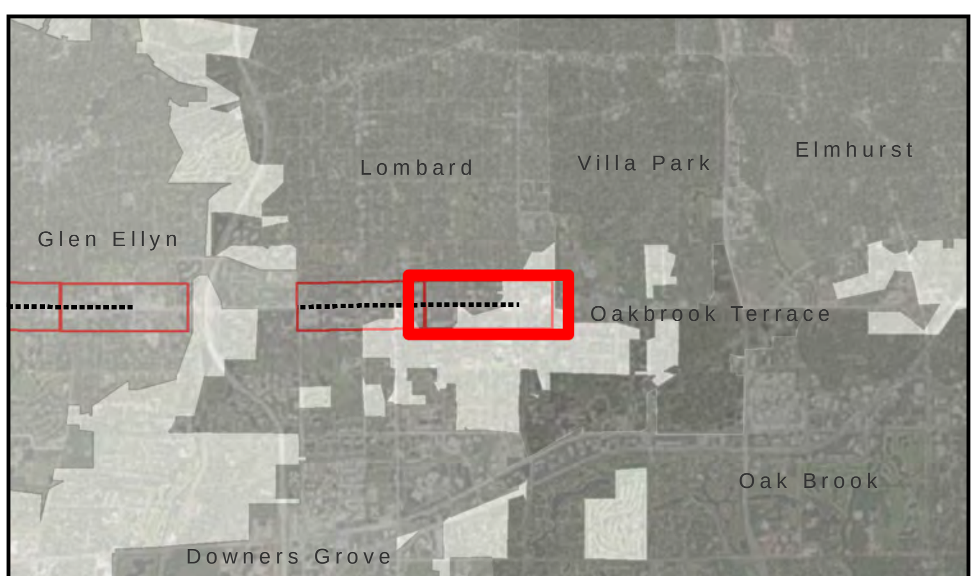
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 38 Finley to Westmore

Stanley Consultants INC.





Keymap

Legend

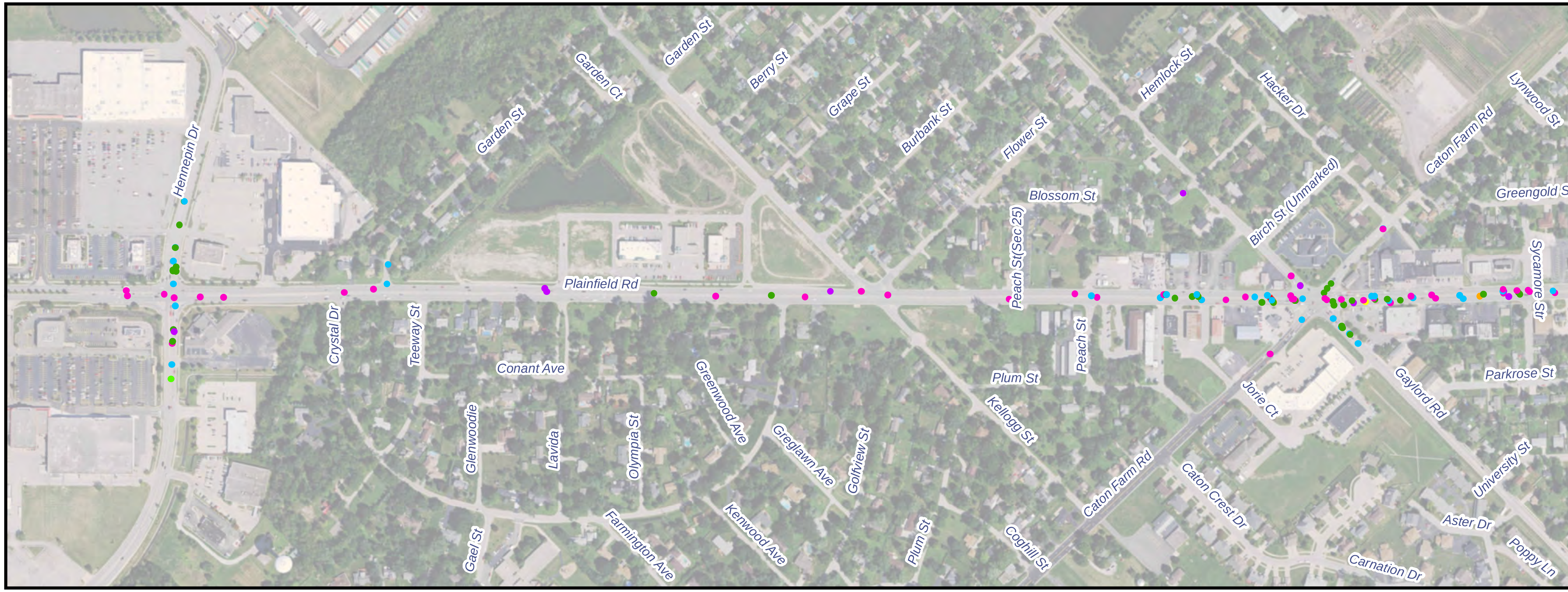
- Fatalities
- Angle
- Pedestrian
- Fixed Object
- Rear End
- Head On
- Turning
- Pedalcyclist

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 38 Finley to Westmore

Stanley Consultants INC.



Keymap

Legend

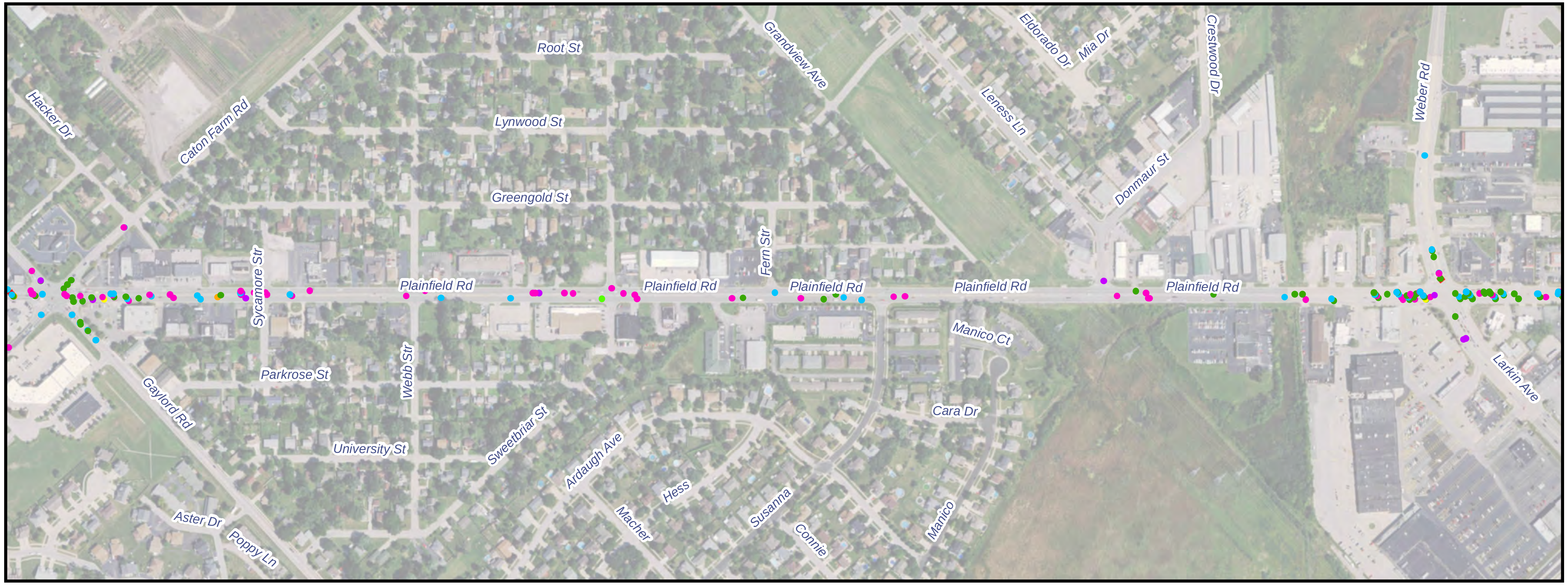
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

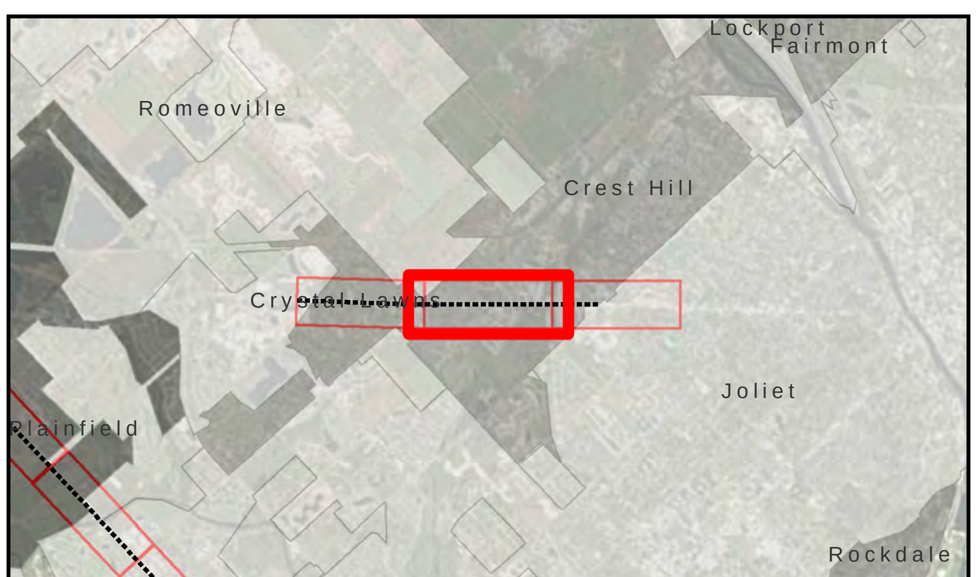
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
US 30 Hennepin to IL 7

Stanley Consultants INC.





Keymap

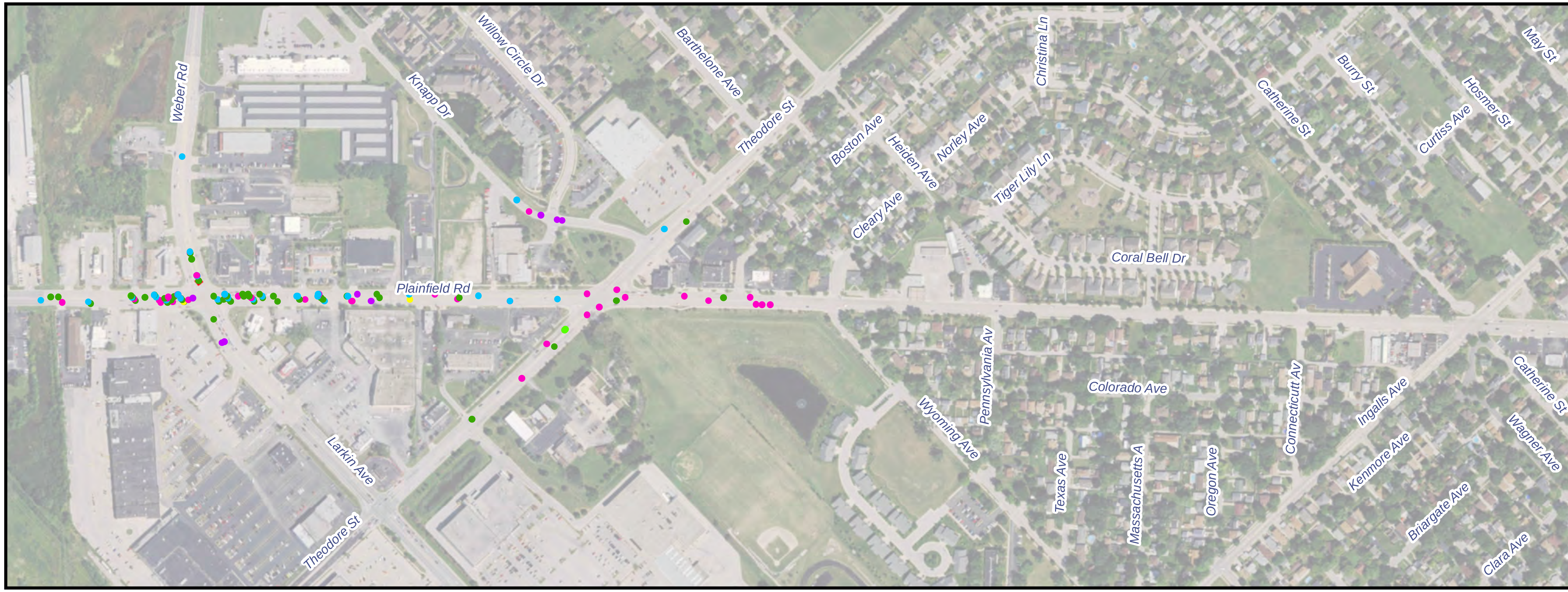
Legend

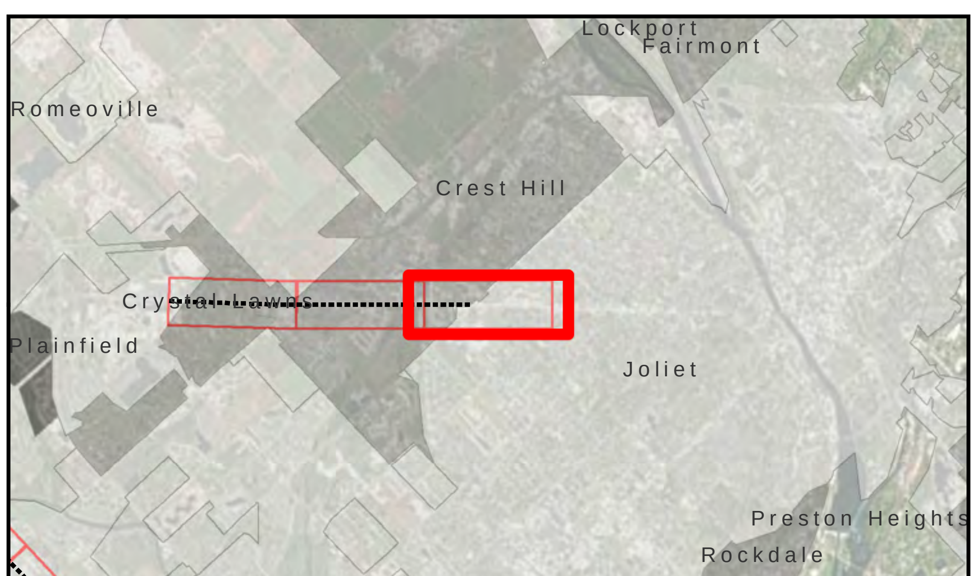
- Fatalities
- Angle
- Pedestrian
- Fixed Object
- Rear End
- Head On
- Turning
- Pedalcyclist

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
US 30 Hennepin to IL 7





Keymap

Legend

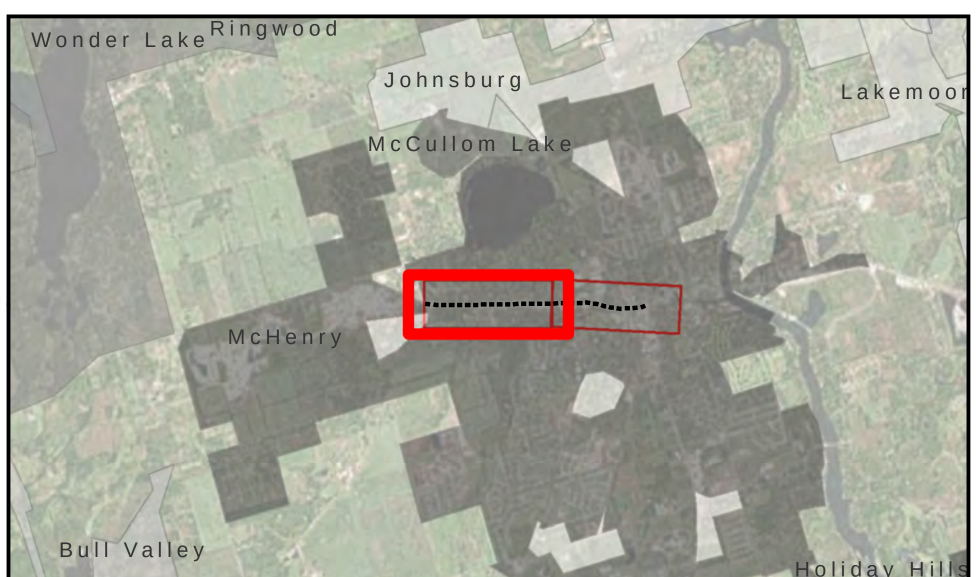
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
US 30 Hennepin to IL 7

Stanley Consultants INC.



Keymap

Legend

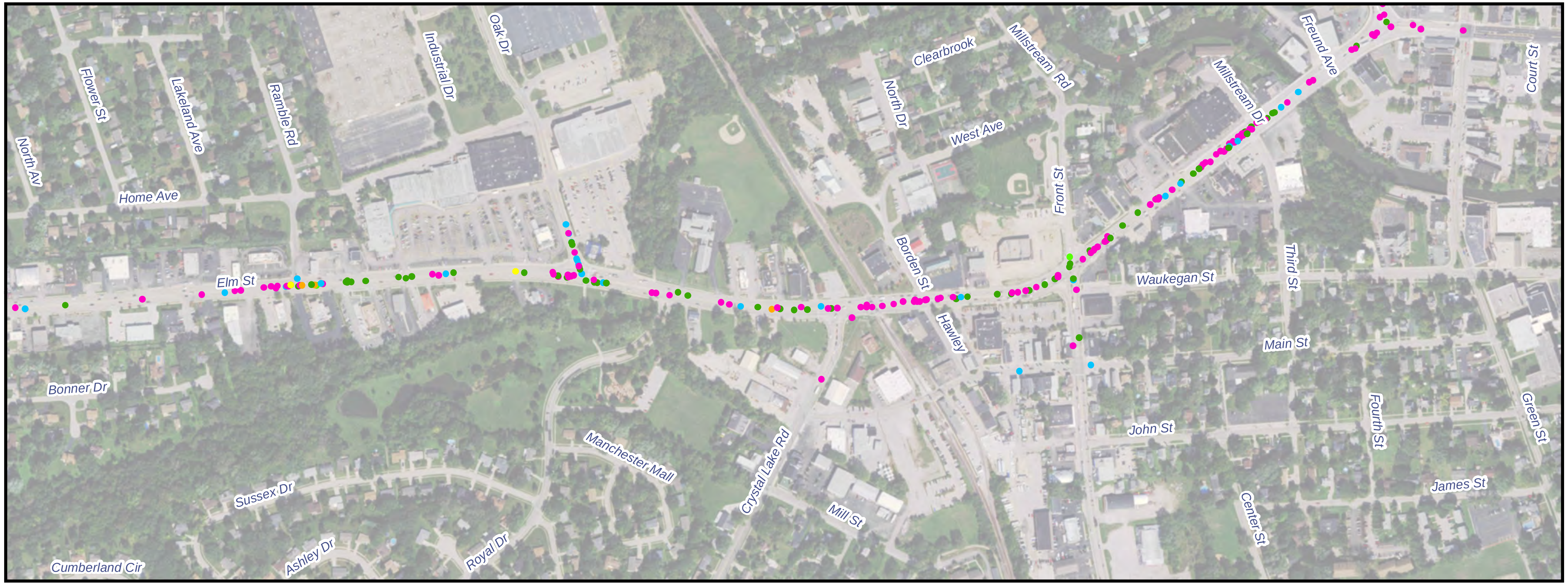
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
5 Lane Flush
IL 120 Ringwood to IL 31

Stanley Consultants INC.



Keymap

Legend

- Fatalities
- Angle
- Pedestrian
- Fixed Object
- Rear End
- Head On
- Turning
- Pedalcyclist

0 0.05 0.1 Miles

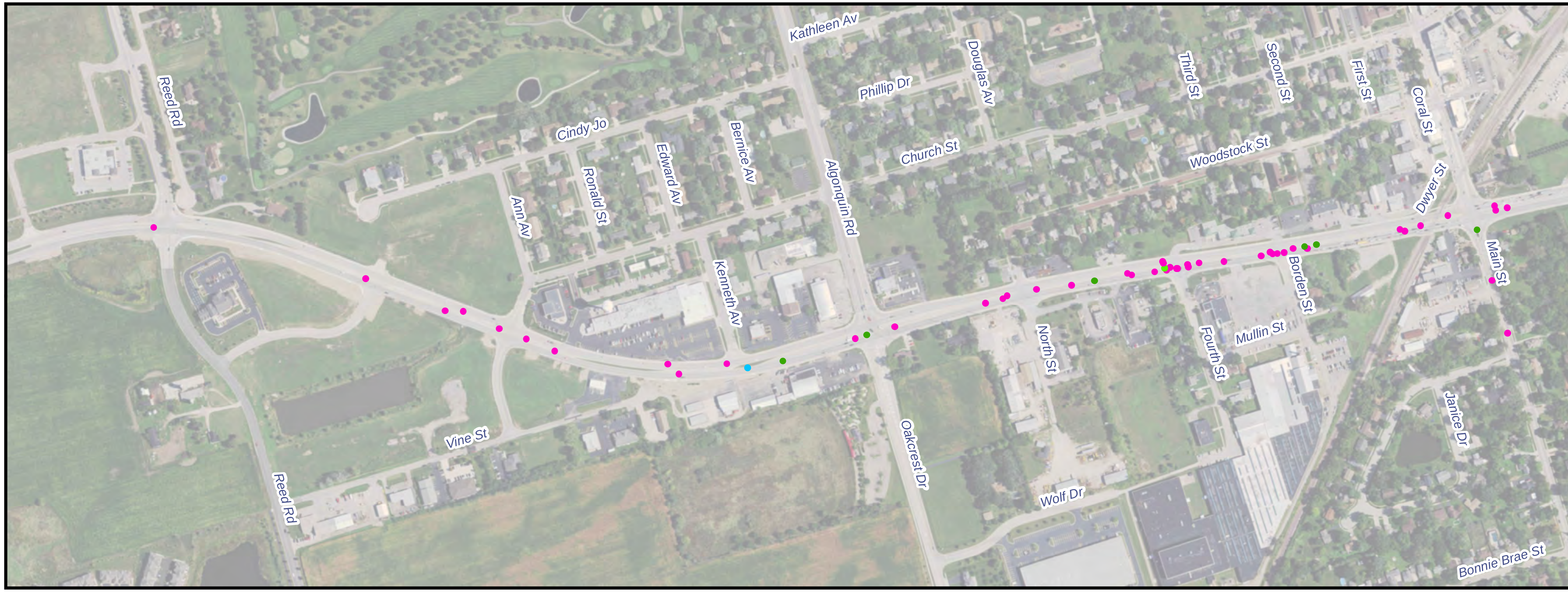
1 in = 0.1 miles

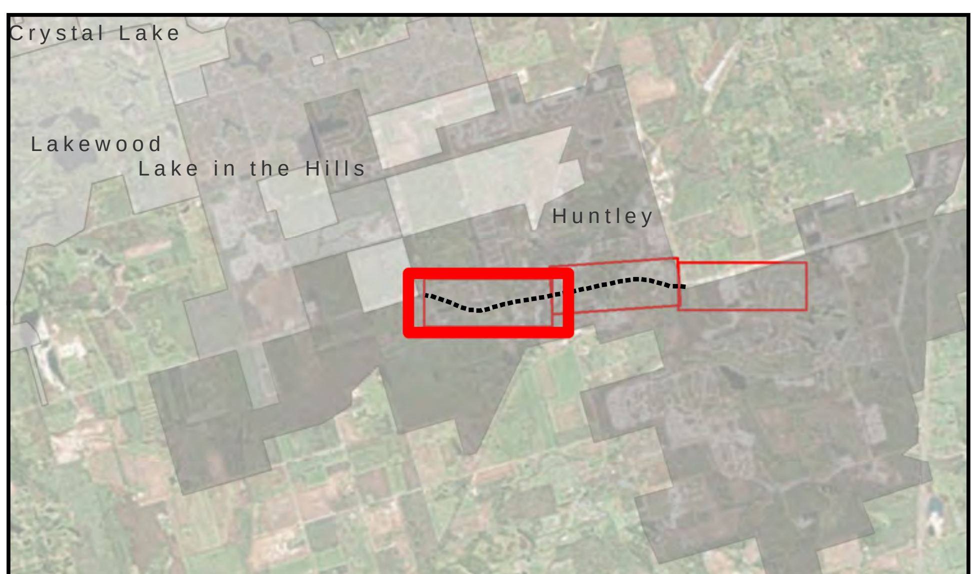
Accident Locations (2009-2013)
5 Lane Flush
IL 120 Ringwood to IL 31

4 - Lane

Barrier Median

Stanley Consultants INC.





Keymap

Legend

Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

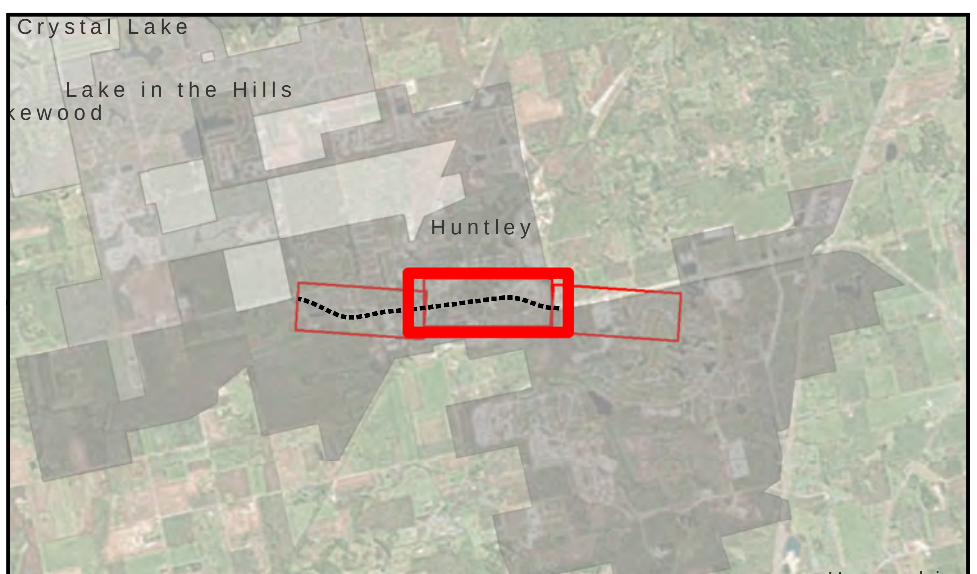
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 47 Kreutzer to Reed

Stanley Consultants INC.



Keymap

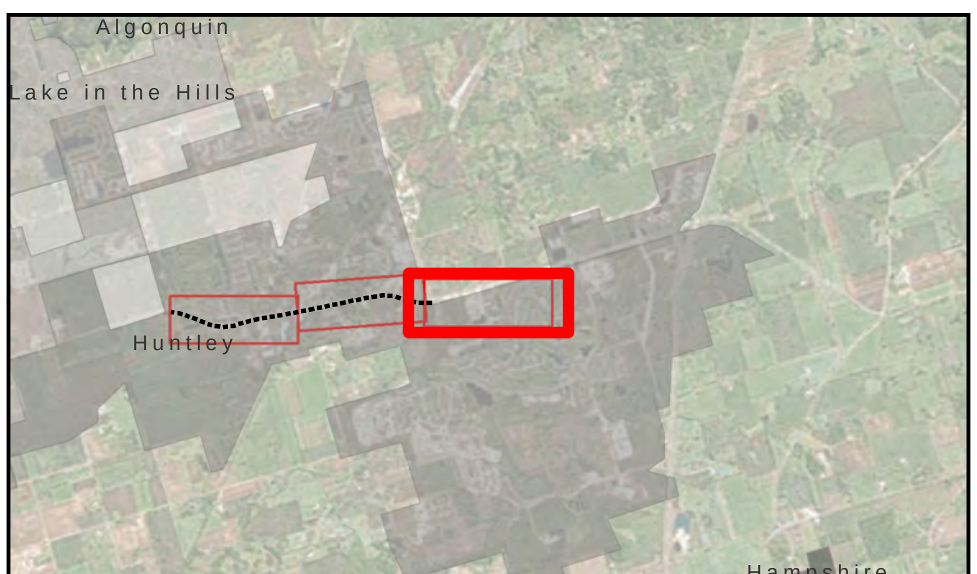
Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 47 Kreutzer to Reed



Keymap

Legend

Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

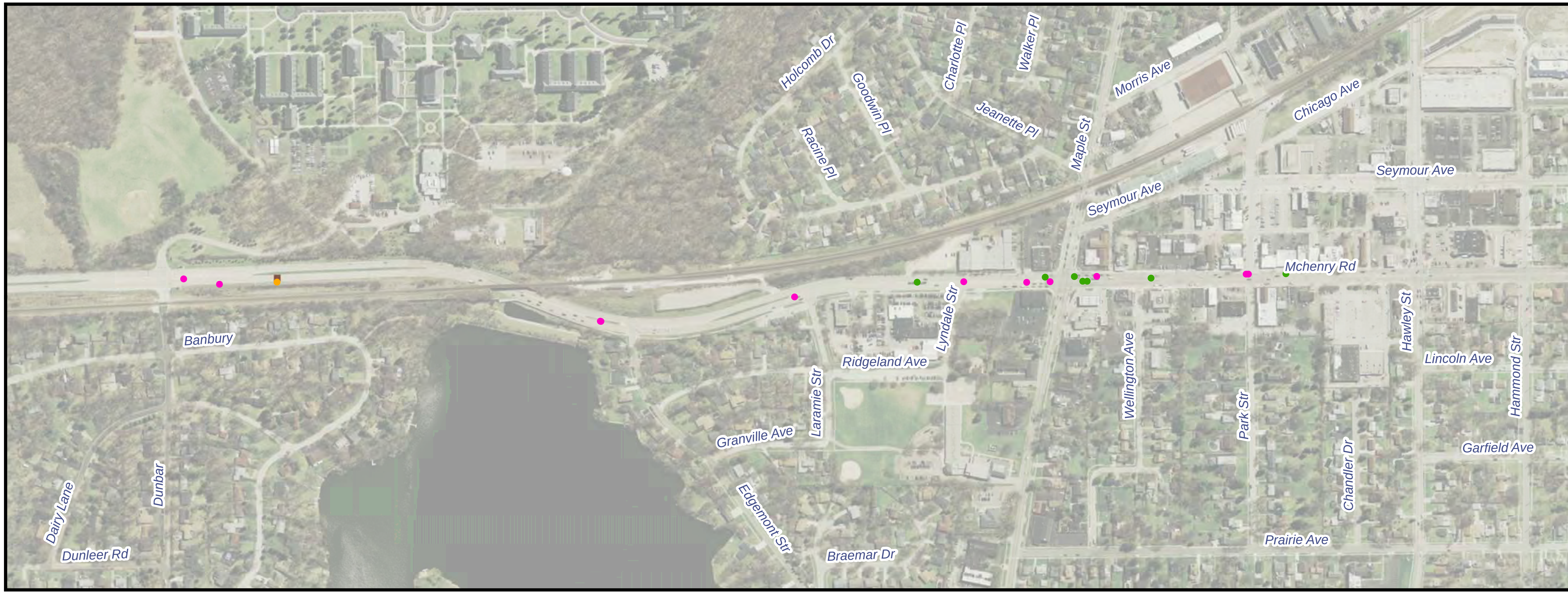
N

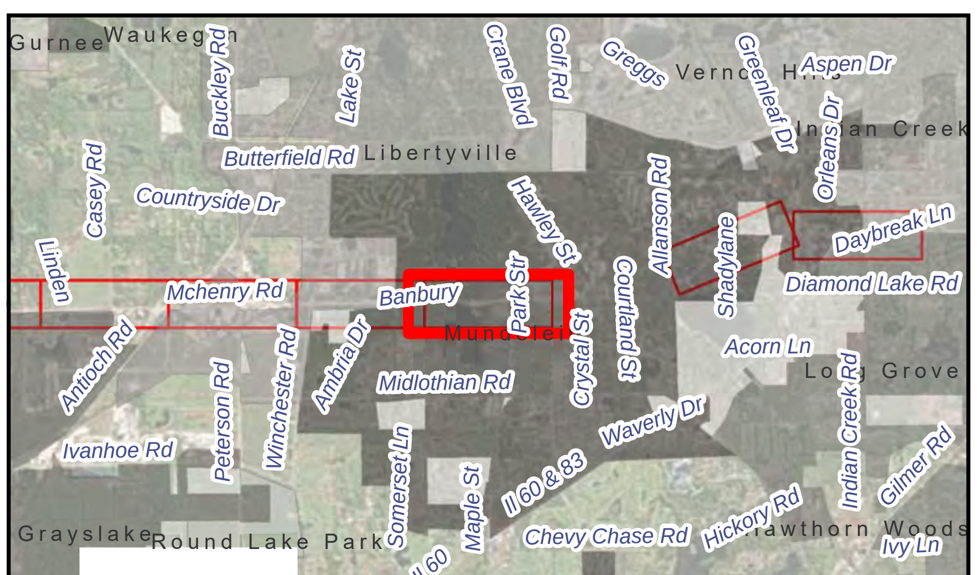
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 47 Kreutzer to Reed

Stanley Consultants INC.





Keymap

Legend

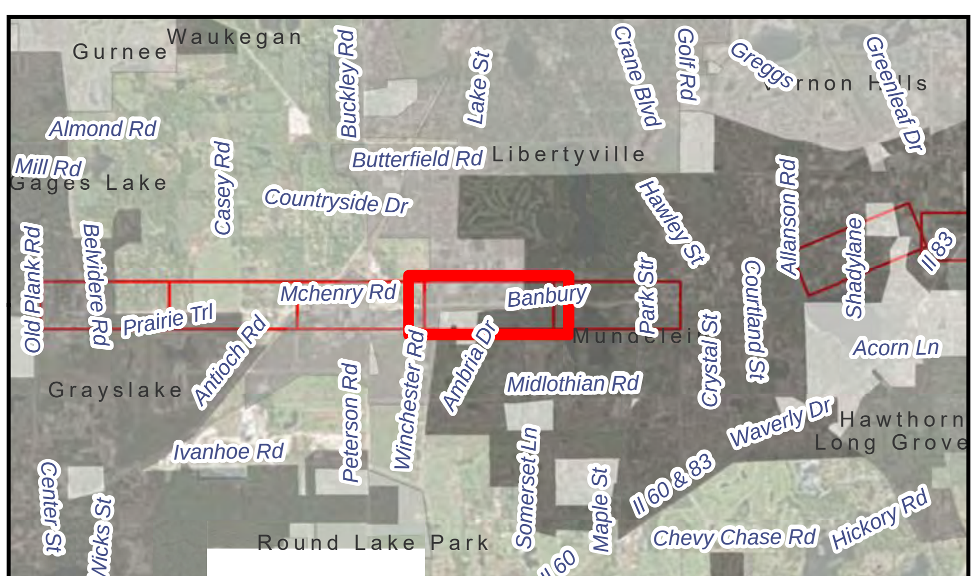
- Fatalities
- Angle
- Pedestrian
- Fixed Object
- Rear End
- Head On
- Turning
- Pedalcyclist

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
US 45 Laramie to IL 120

Stanley Consultants INC.



Keymap

Legend

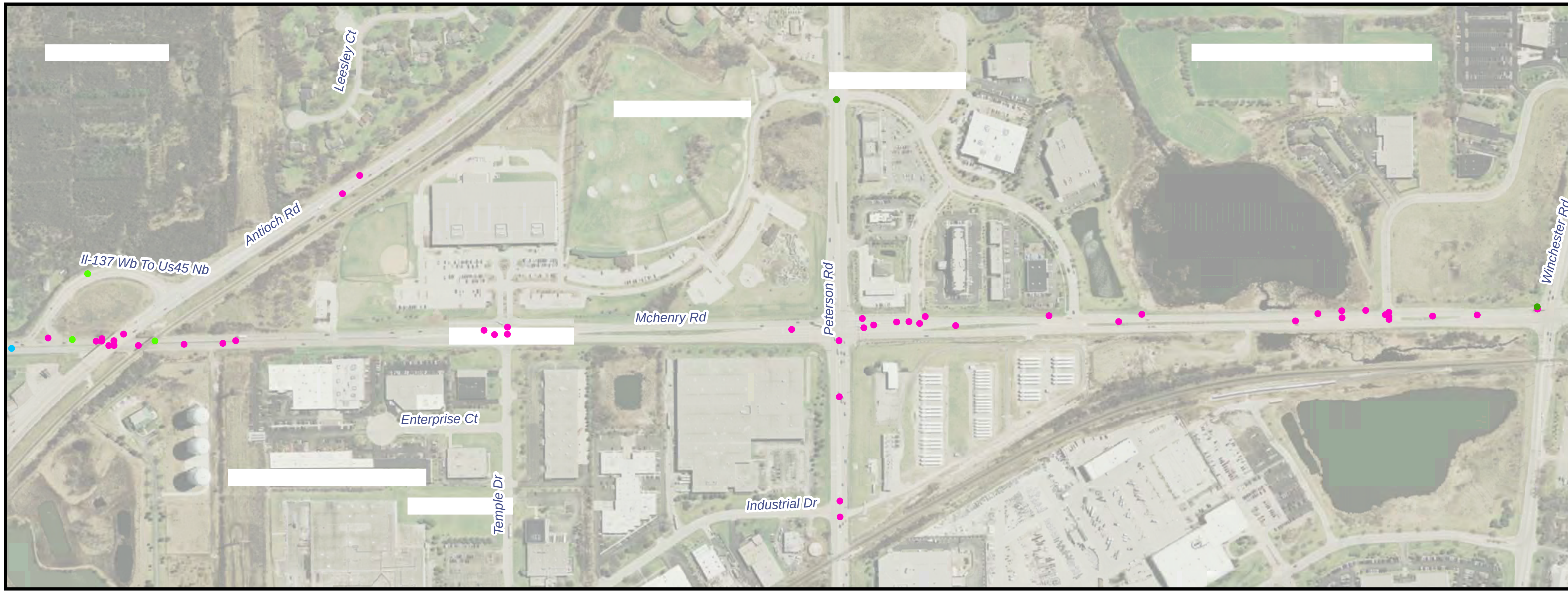
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

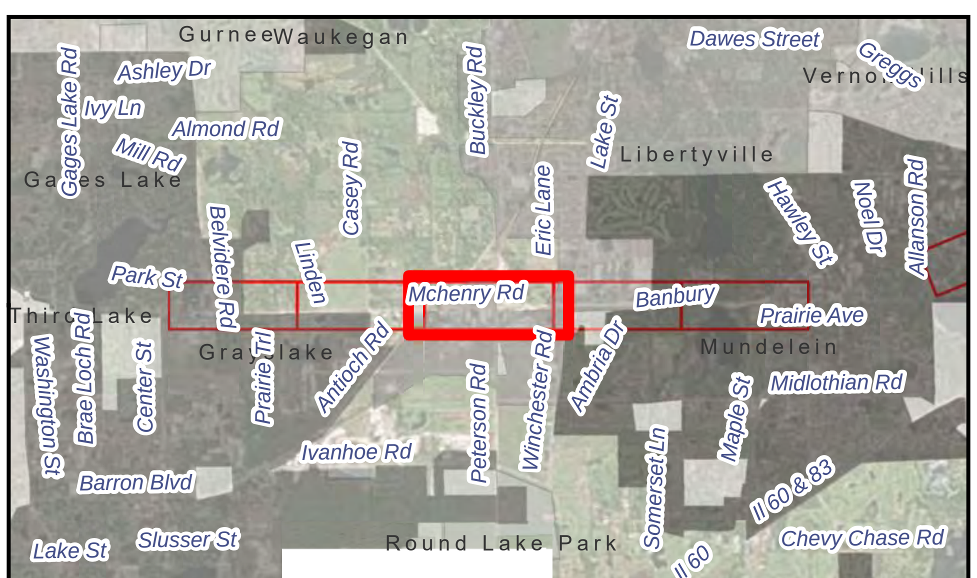
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
US 45 Laramie to IL 120

Stanley Consultants INC.





Keymap

Legend

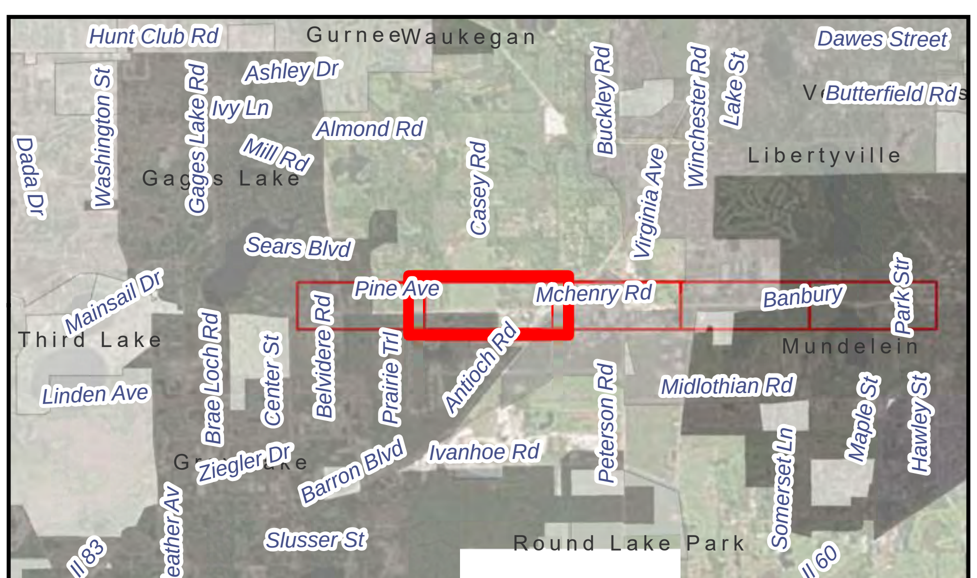
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
US 45 Laramie to IL 120

Stanley Consultants INC.



Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

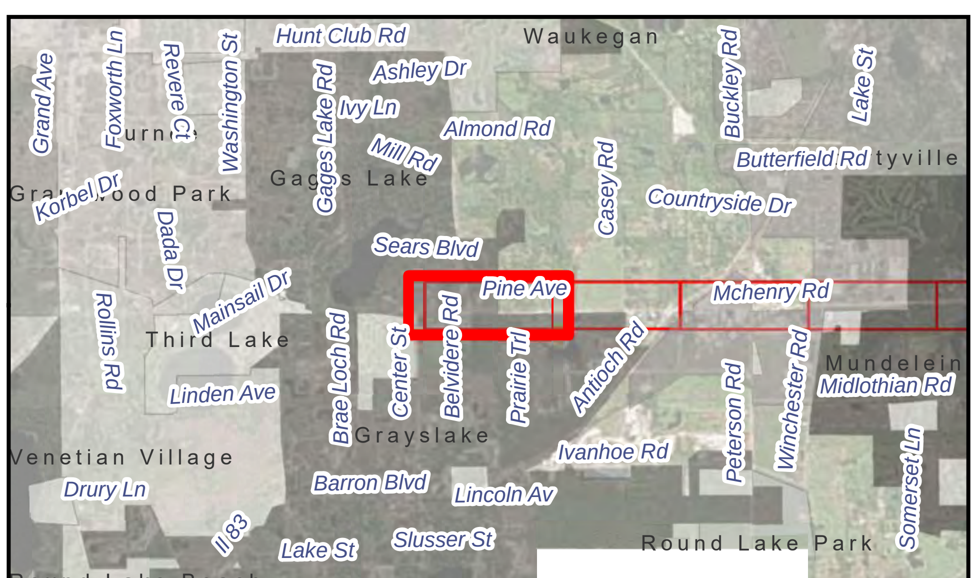
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
US 45 Laramie to IL 120

Stanley Consultants INC.



Keymap

Legend

- Fatalities
- Angle
- Pedestrian
- Fixed Object
- Rear End
- Head On
- Turning
- Pedalcyclist

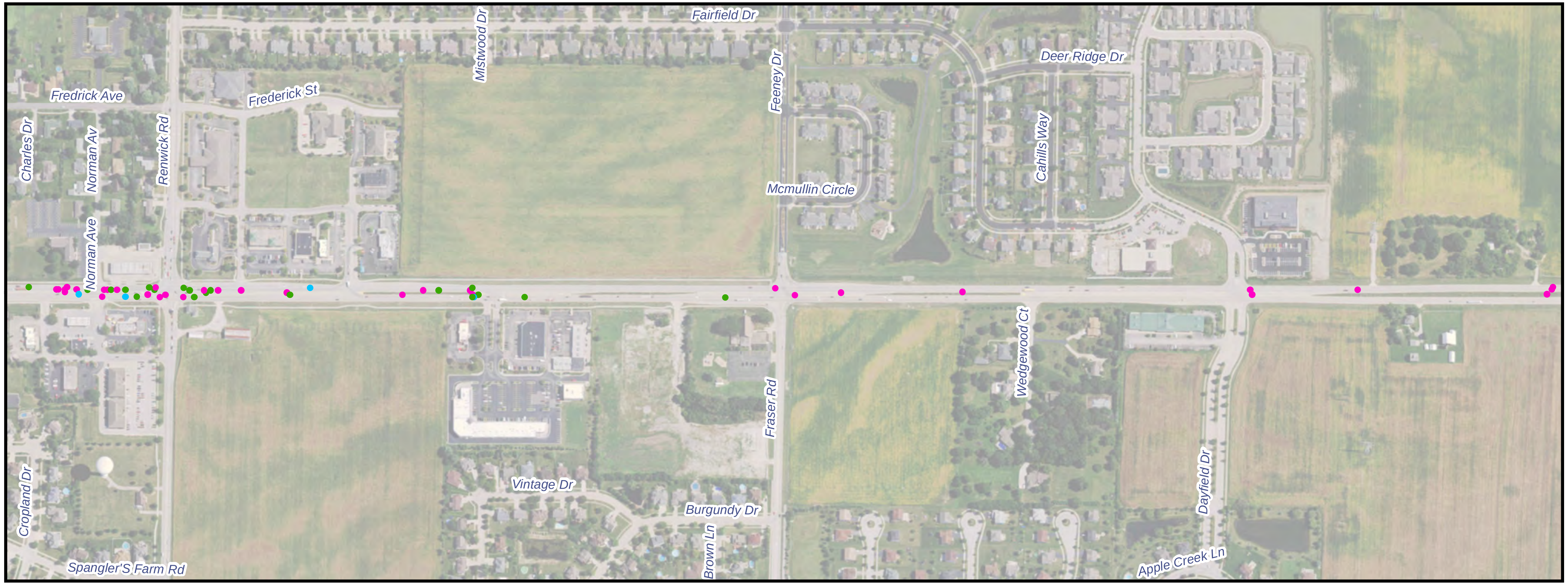
N

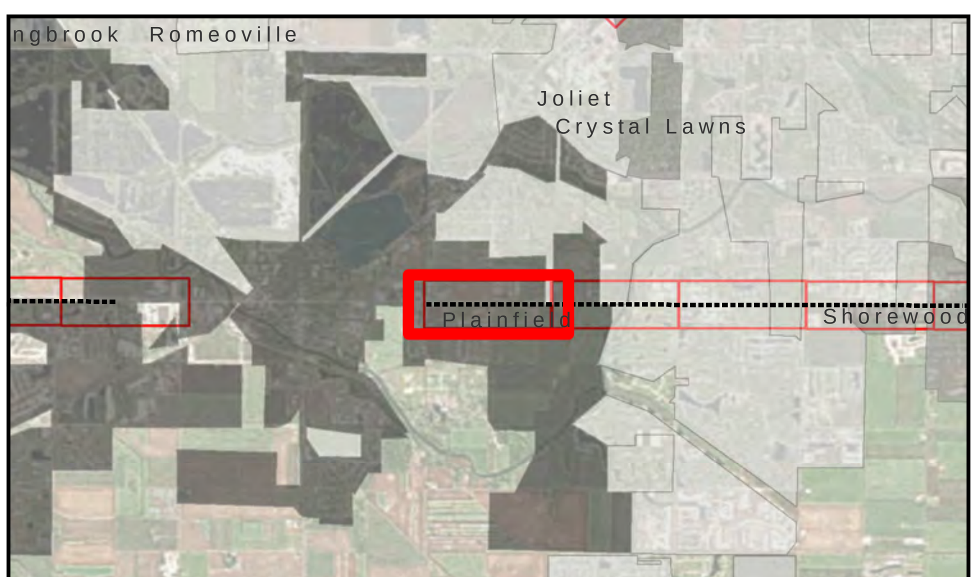
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
US 45 Laramie to IL 120

Stanley Consultants INC.





Keymap

Legend

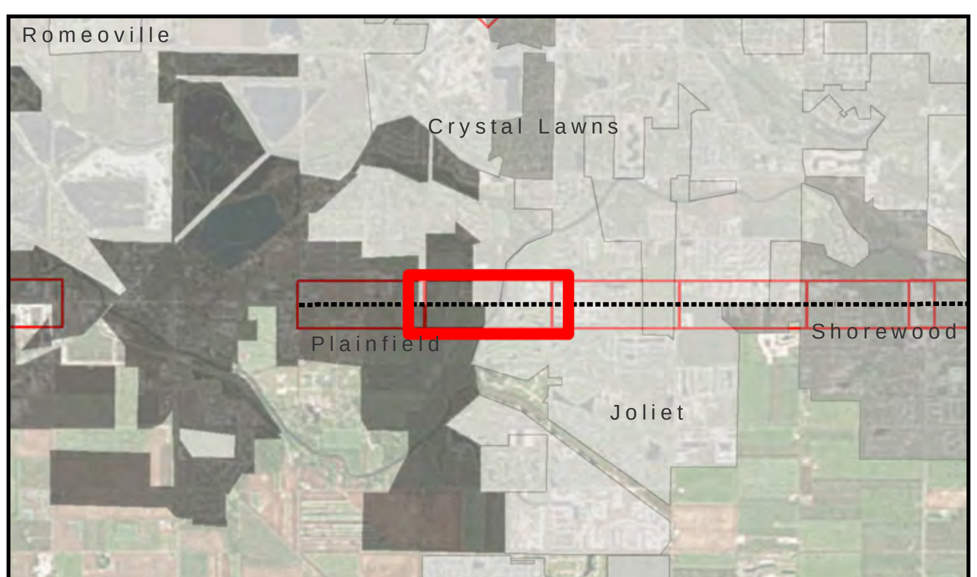
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Renwick to Meadow

Stanley Consultants INC.



Keymap

Legend

Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

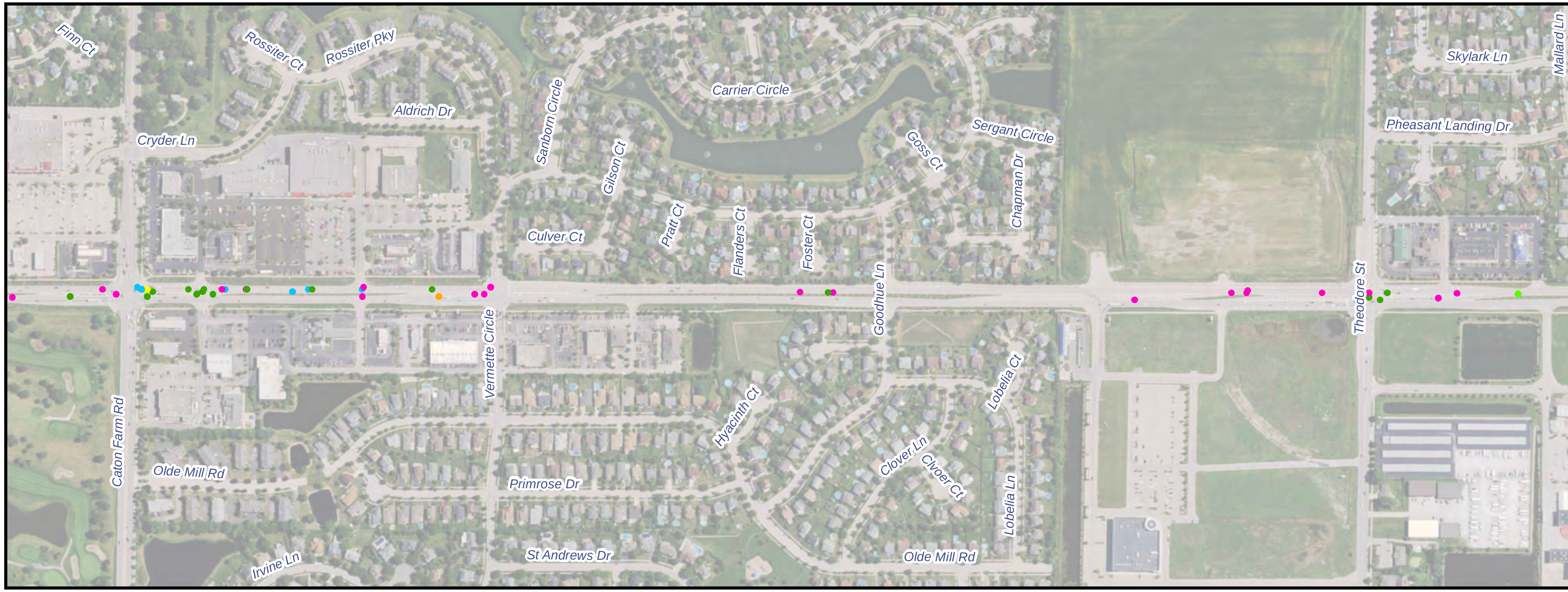
N

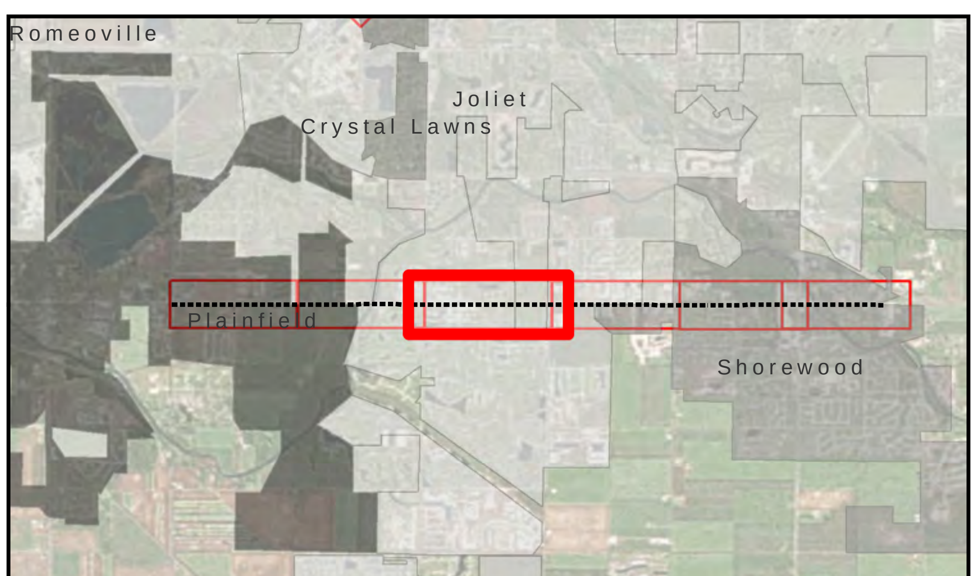
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Renwick to Meadow

Stanley Consultants INC.





Keymap

Legend

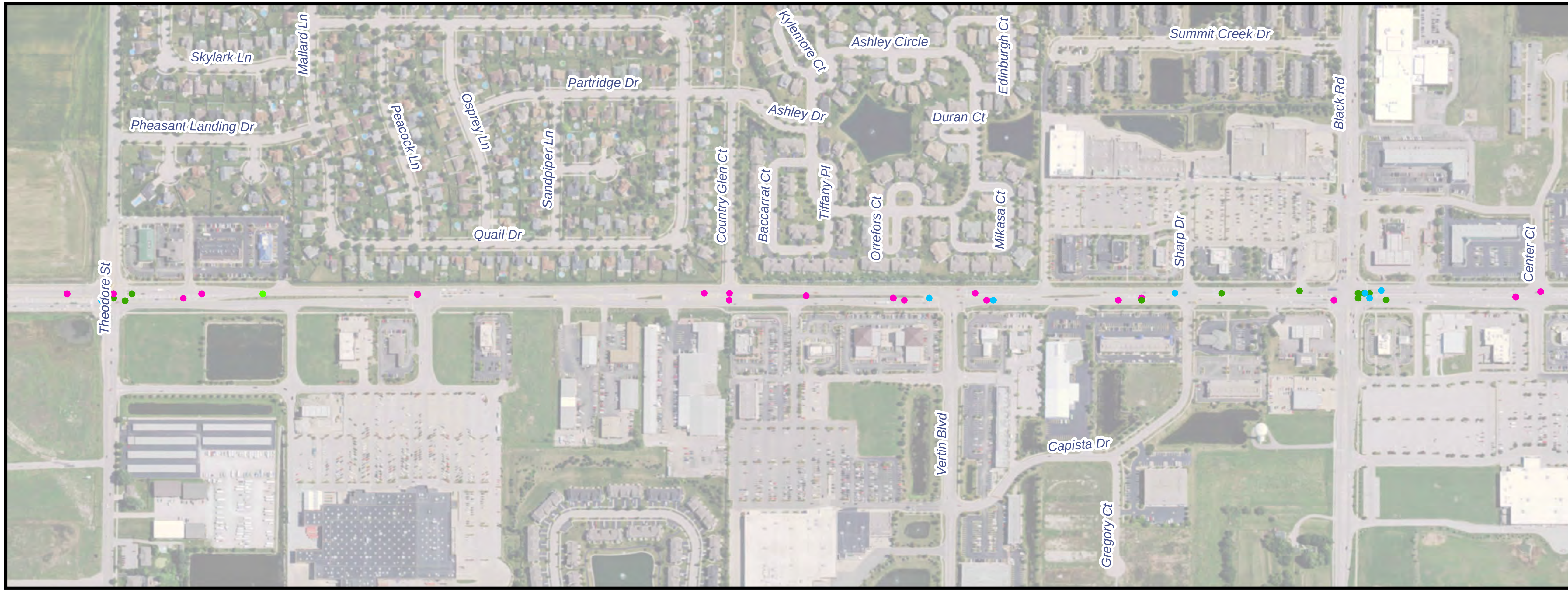
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

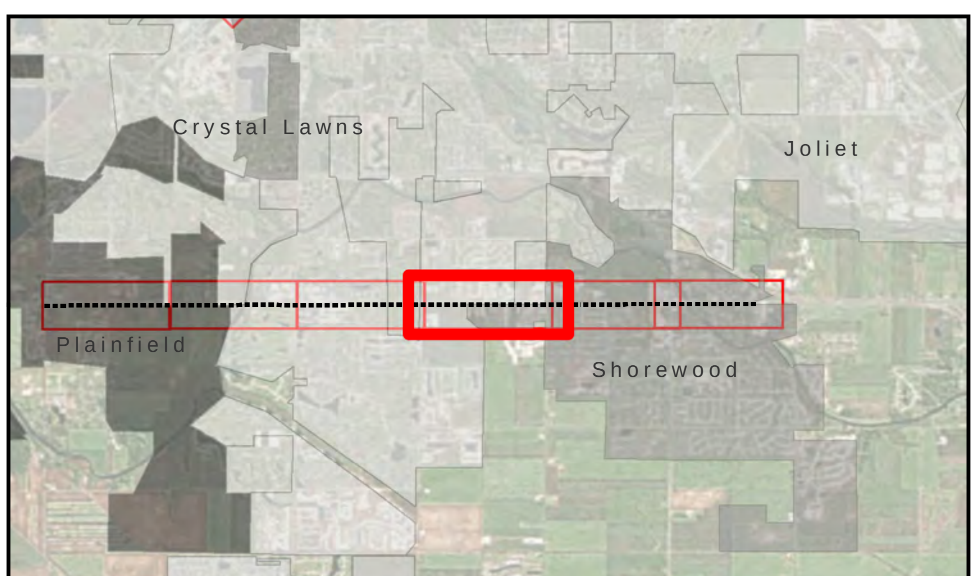
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Renwick to Meadow

Stanley Consultants INC.





Keymap

Legend

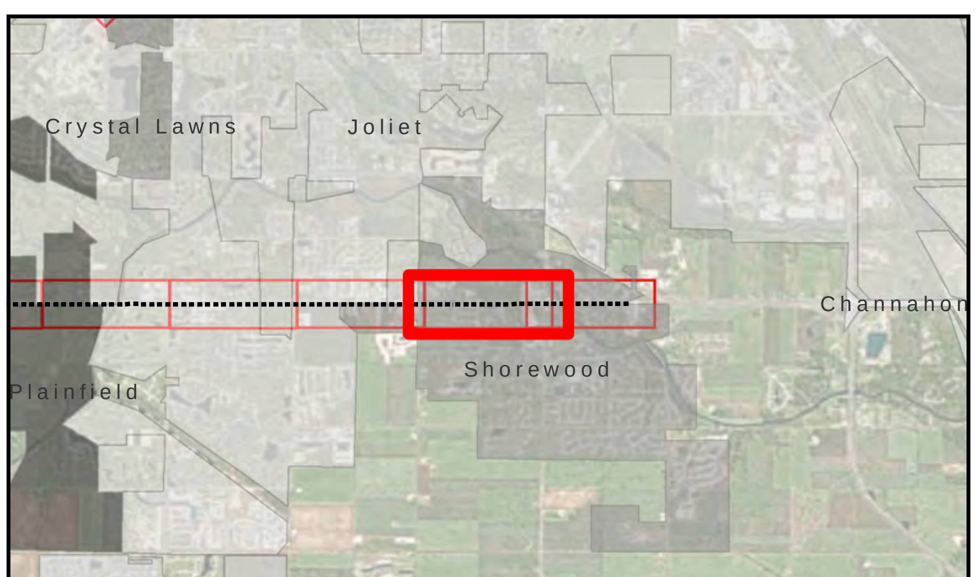
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Renwick to Meadow

Stanley Consultants INC.



Keymap

Legend

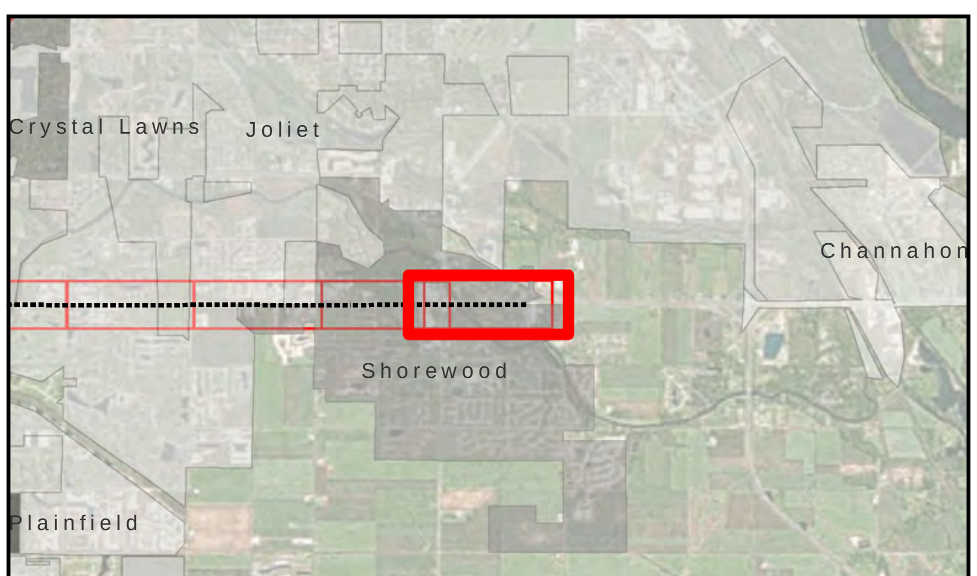
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Renwick to Meadow

Stanley Consultants INC.



Keymap

Legend

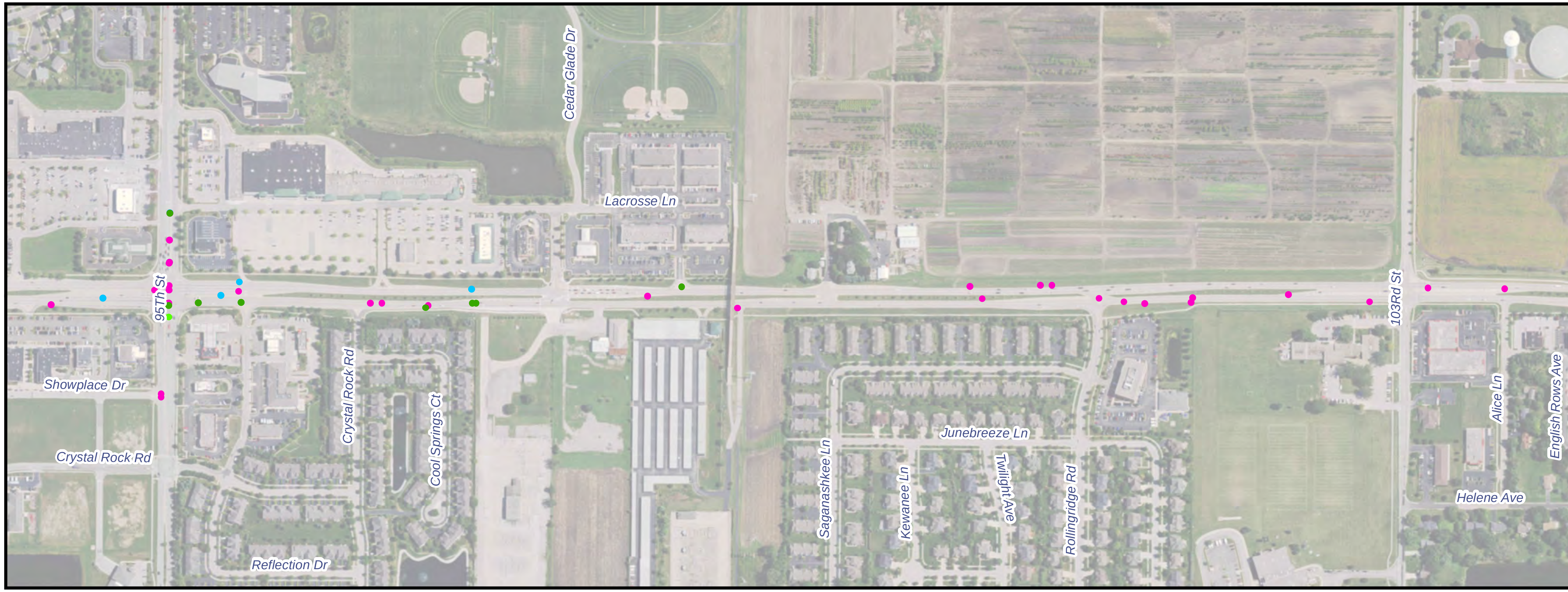
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

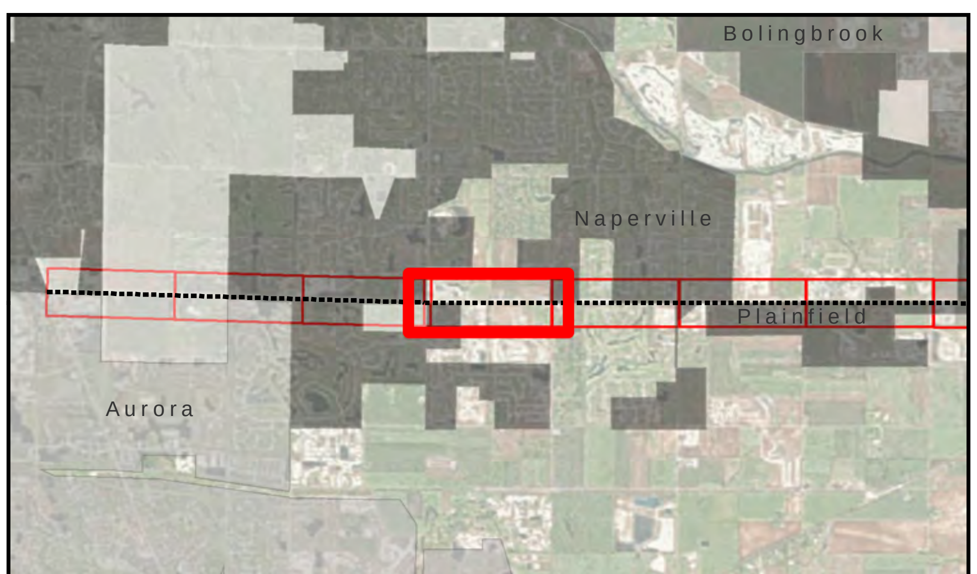
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Renwick to Meadow





Keymap

Legend

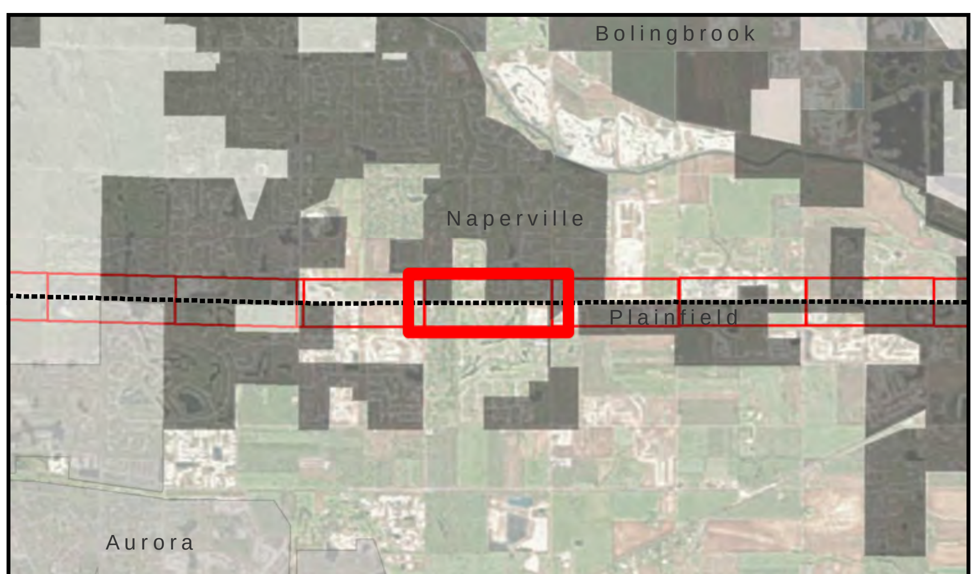
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 95th to Joseph

Stanley Consultants INC.



Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

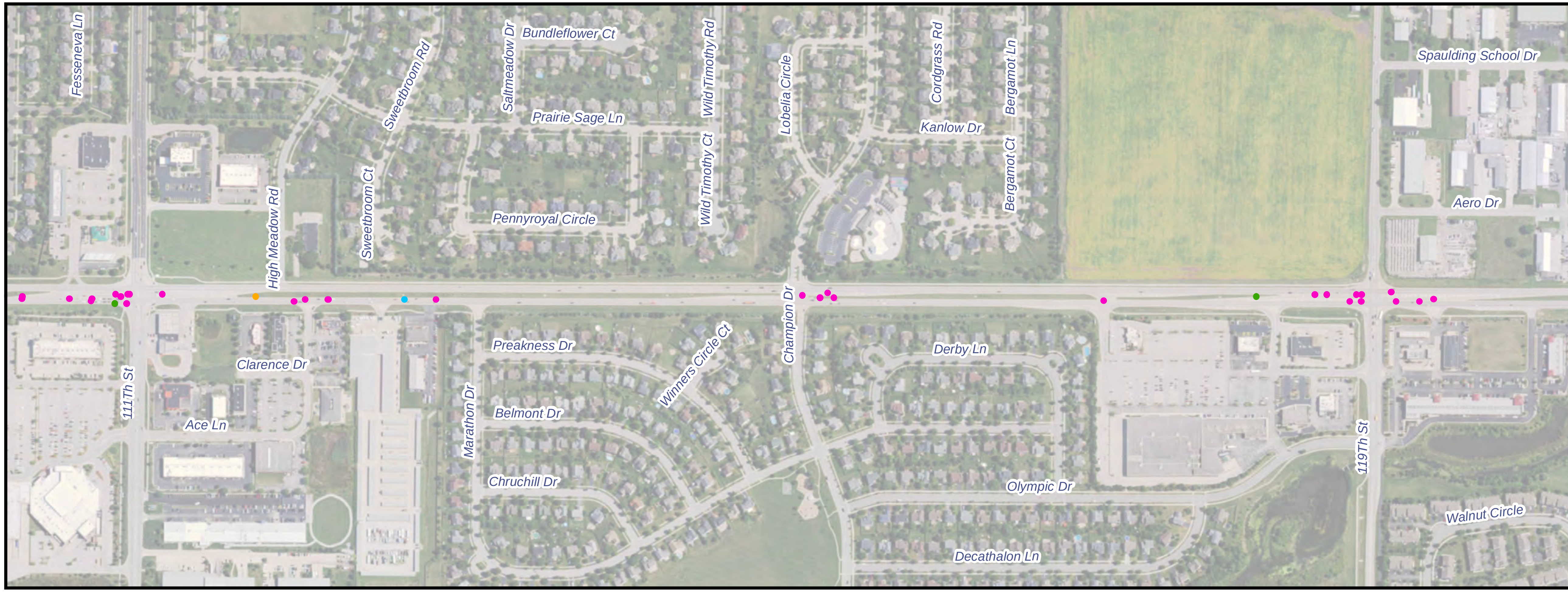
N

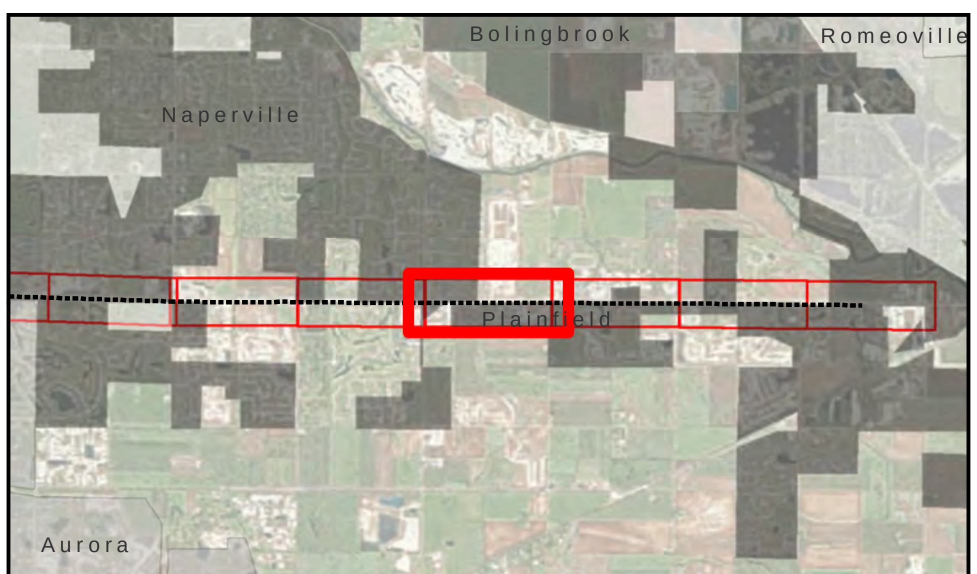
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 95th to Joseph

Stanley Consultants INC.





Keymap

Legend

Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

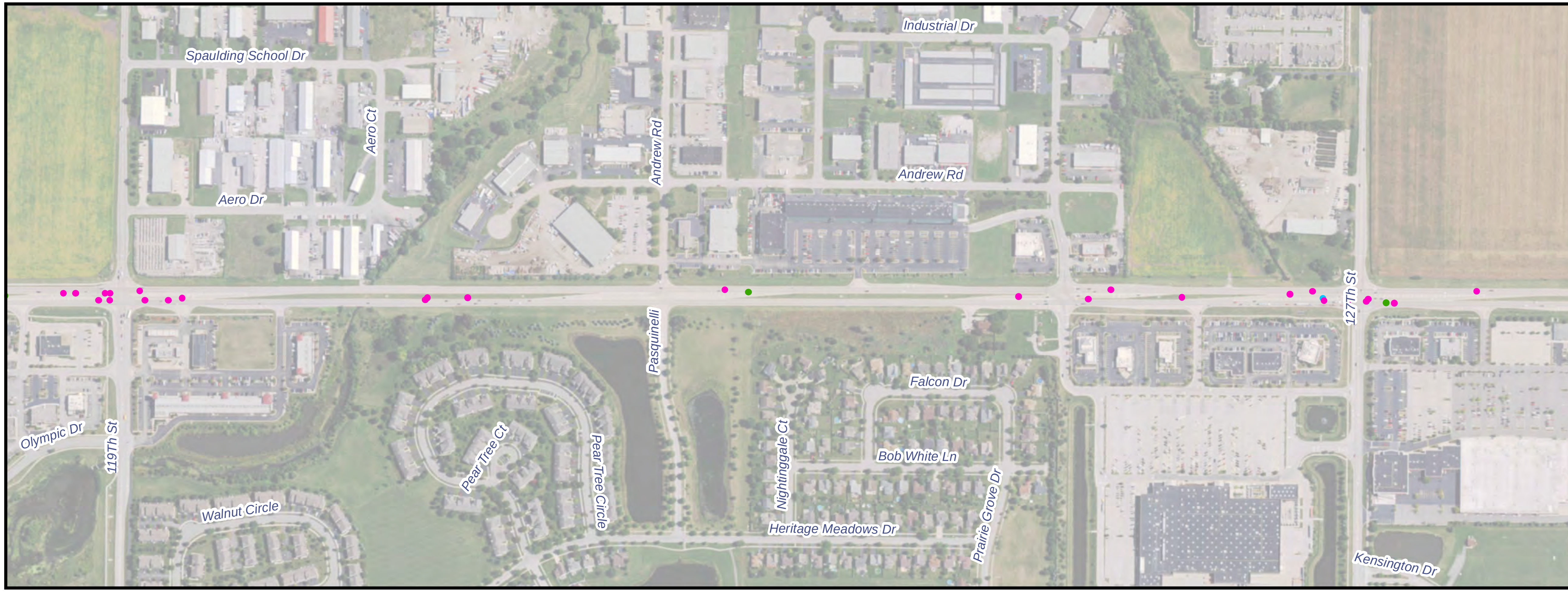
N

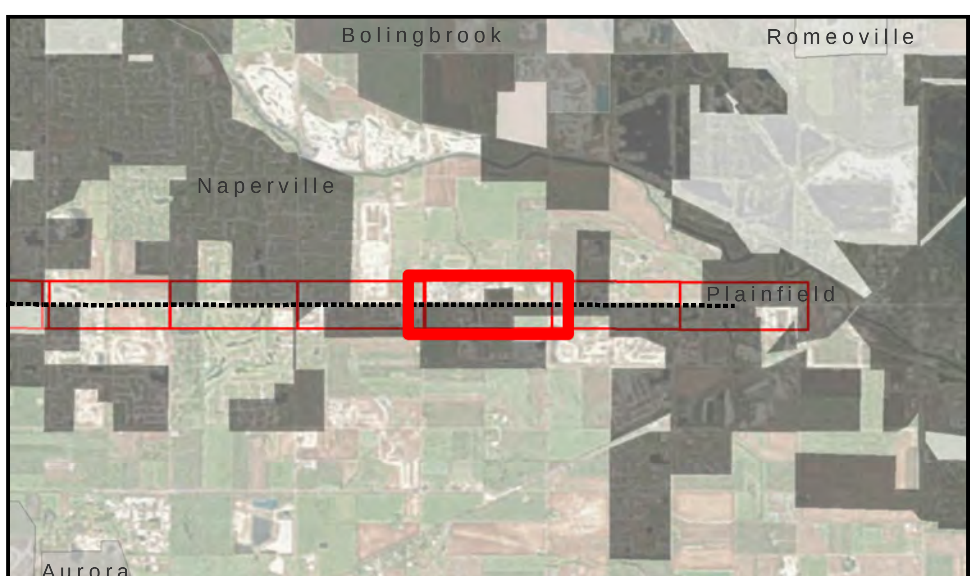
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 95th to Joseph

Stanley Consultants INC.





Keymap

Legend

Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

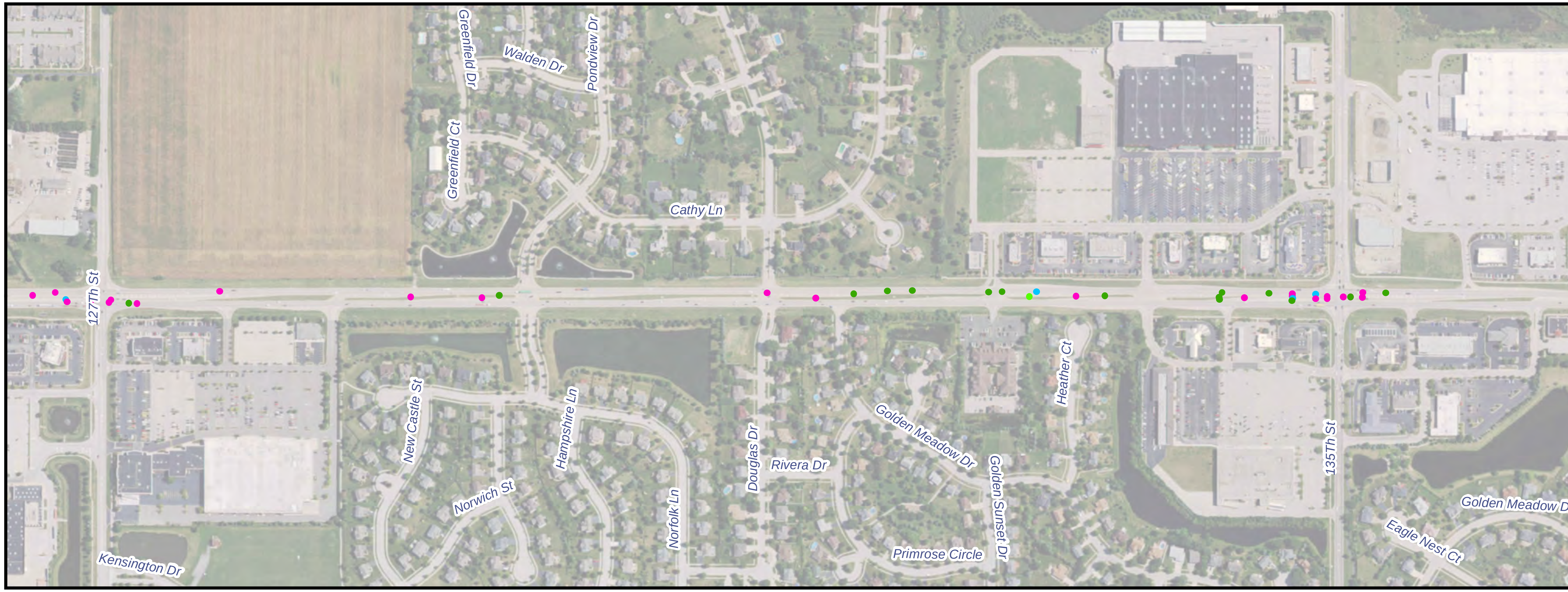
N

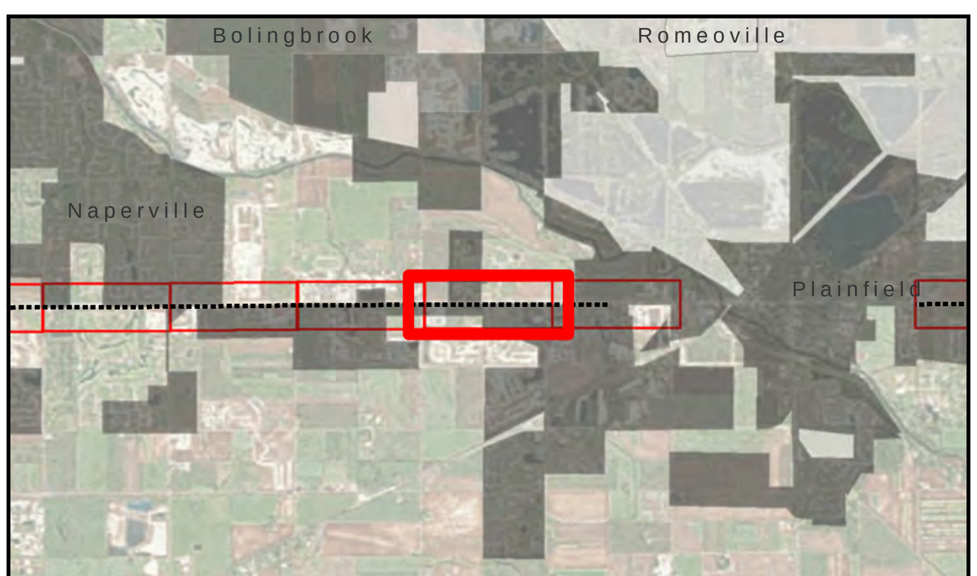
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 95th to Joseph

Stanley Consultants INC.





Keymap

Legend

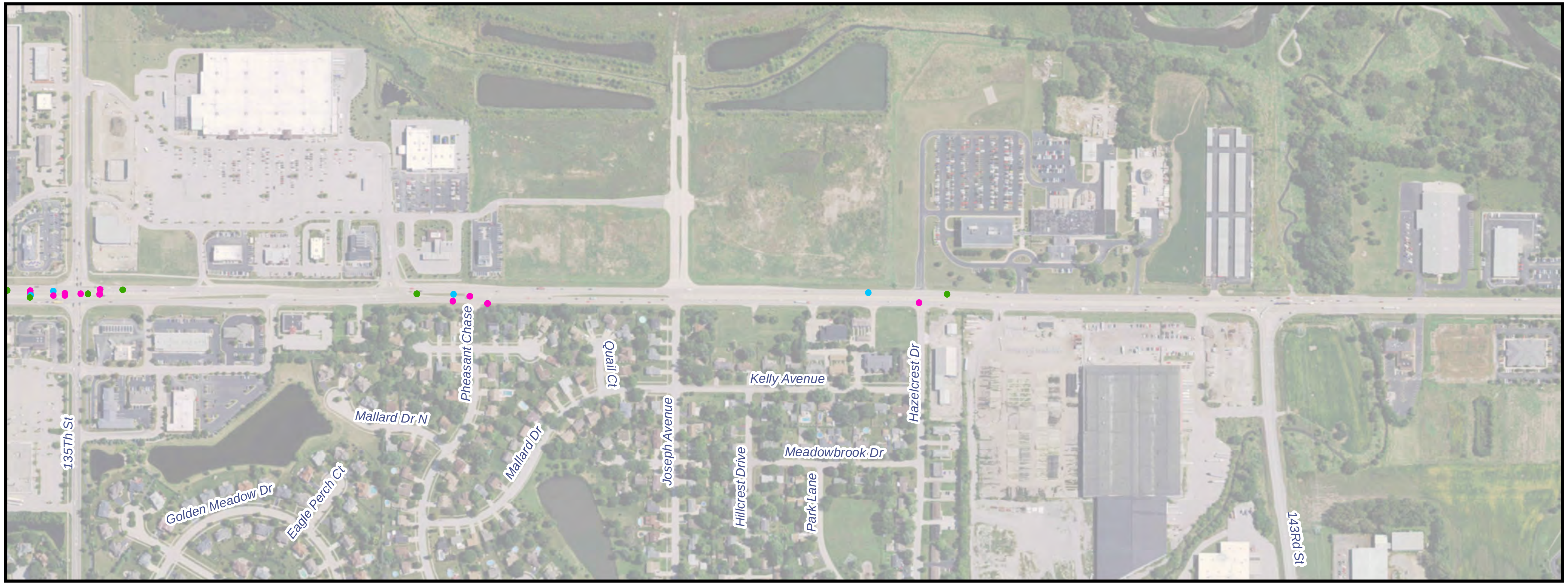
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

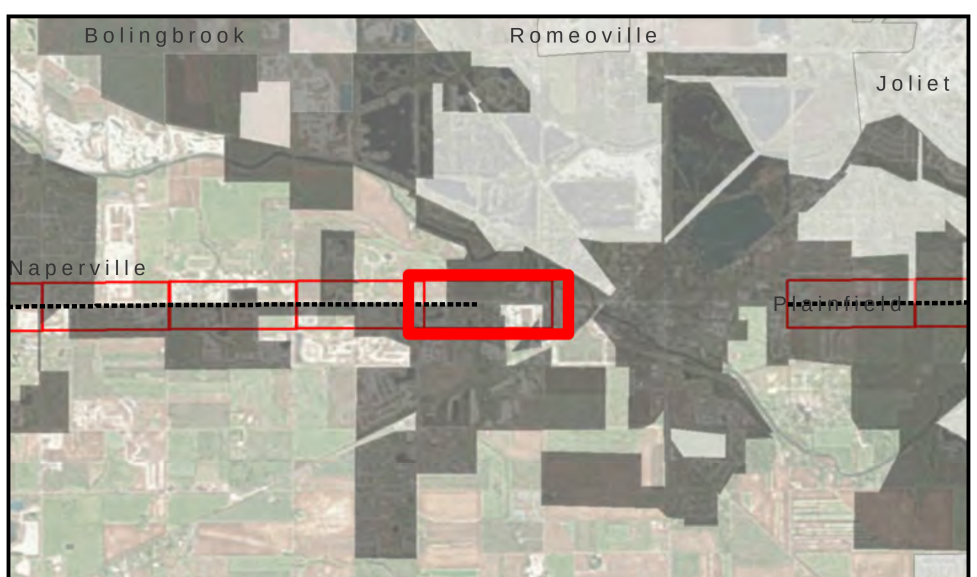
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 95th to Joseph

Stanley Consultants INC.





Keymap

Legend

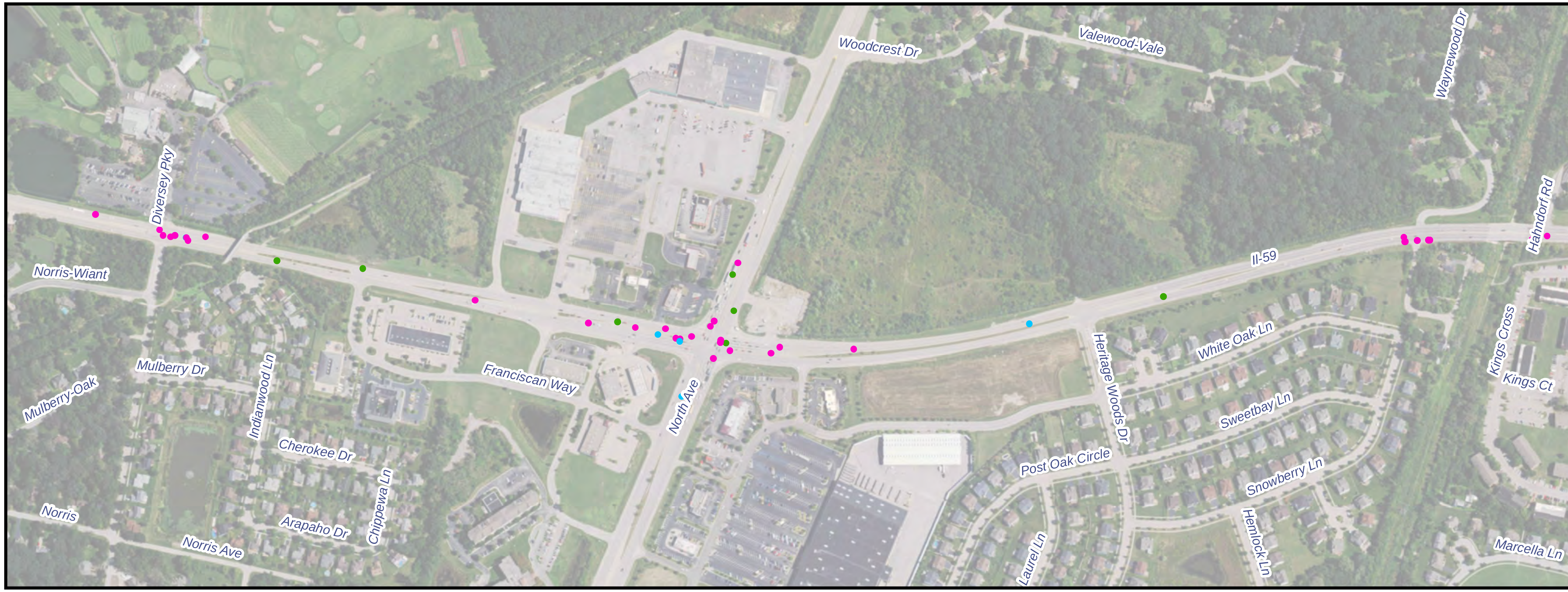
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

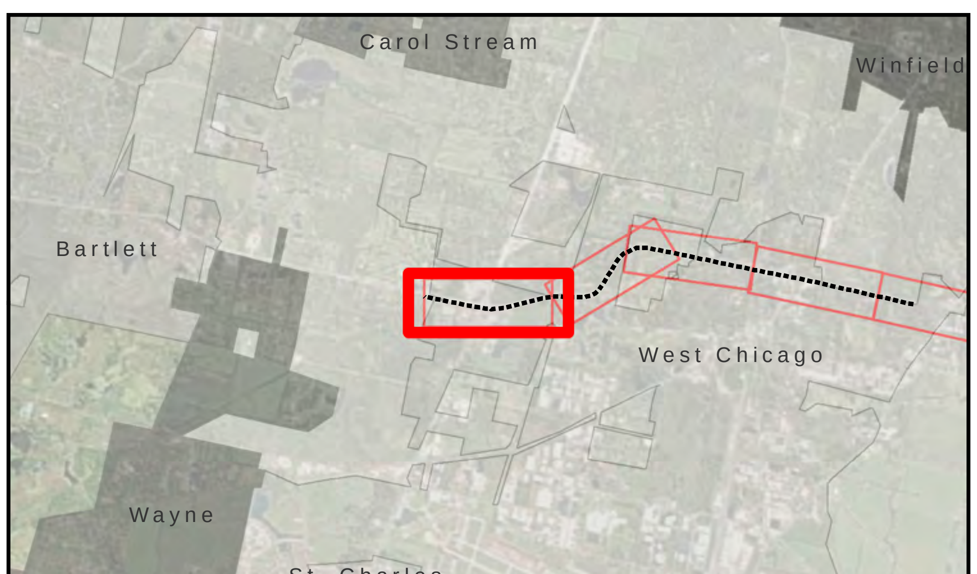
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 95th to Joseph





Keymap

Legend

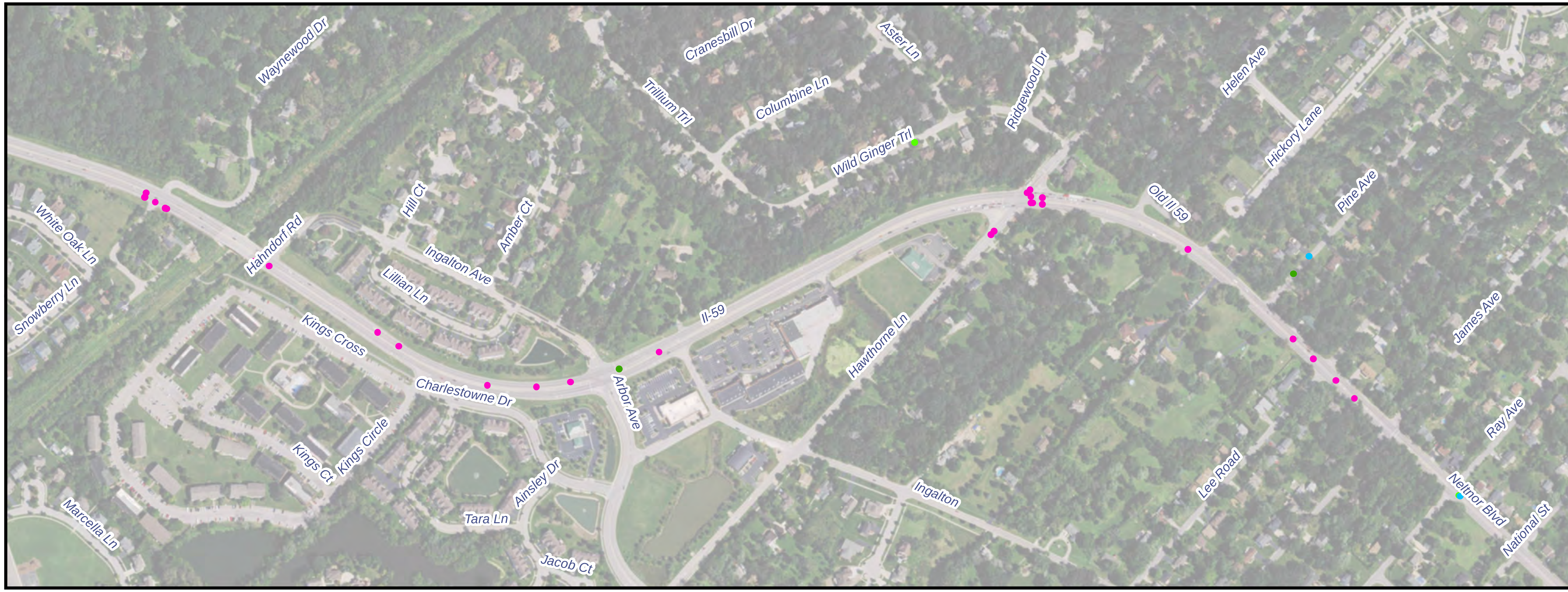
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

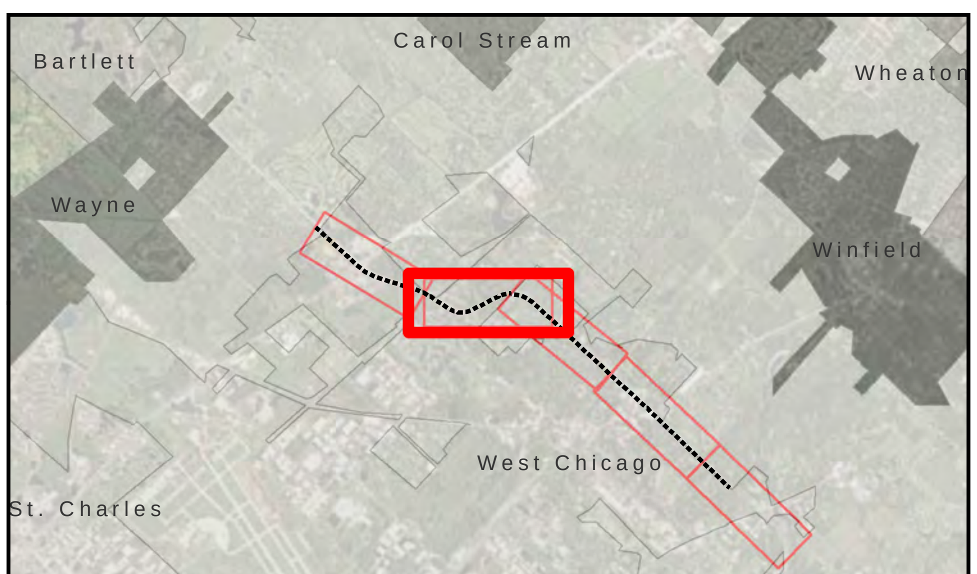
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Diversey to Hawthorn

Stanley Consultants INC.





Keymap

Legend

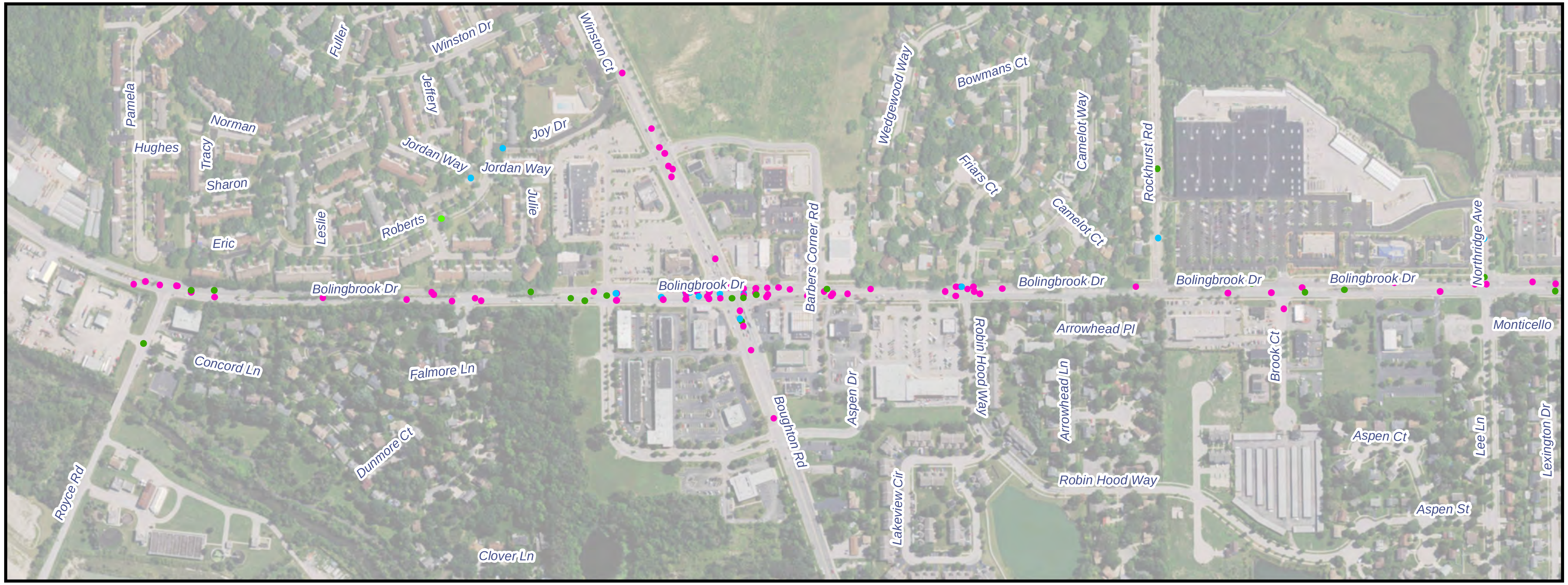
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Diversey to Hawthorn

Stanley Consultants INC.



Keymap

Legend

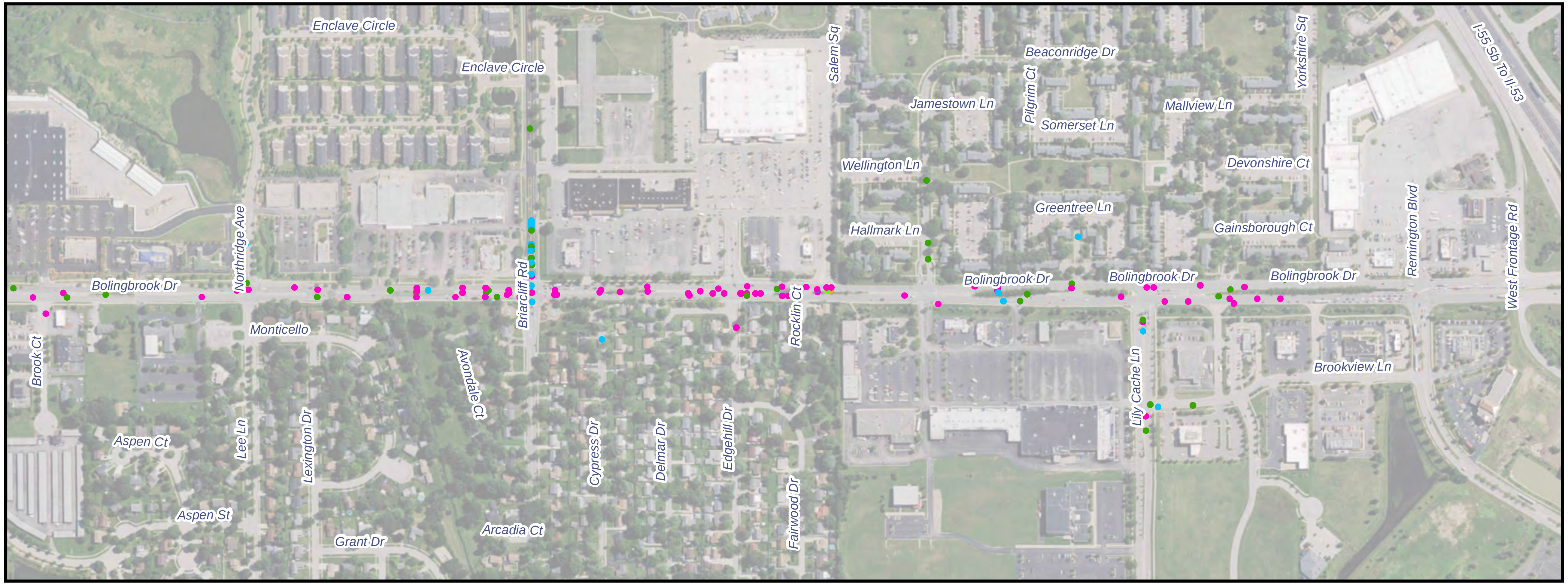
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

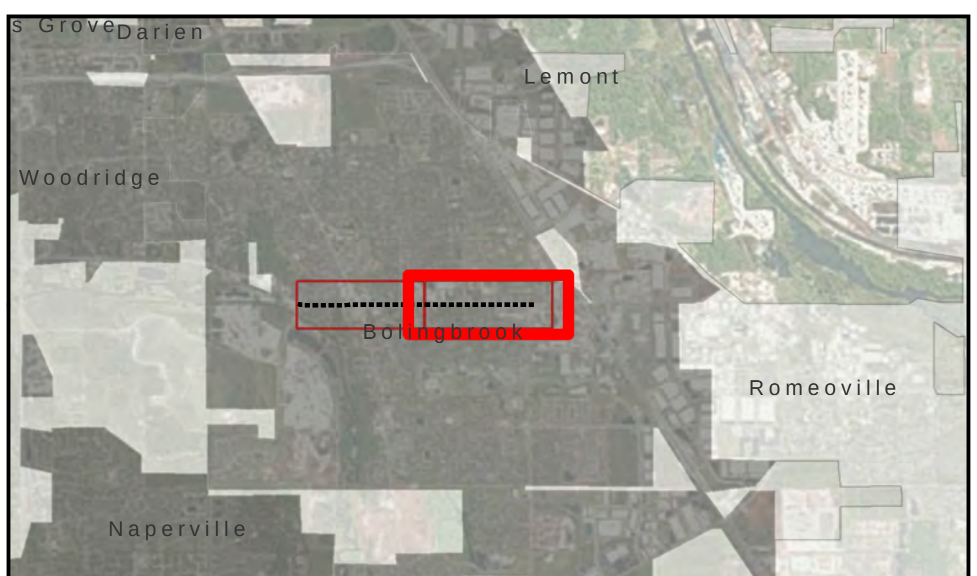
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Beaconridge to Royce

Stanley Consultants INC.





Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

0 0.05 0.1 Miles

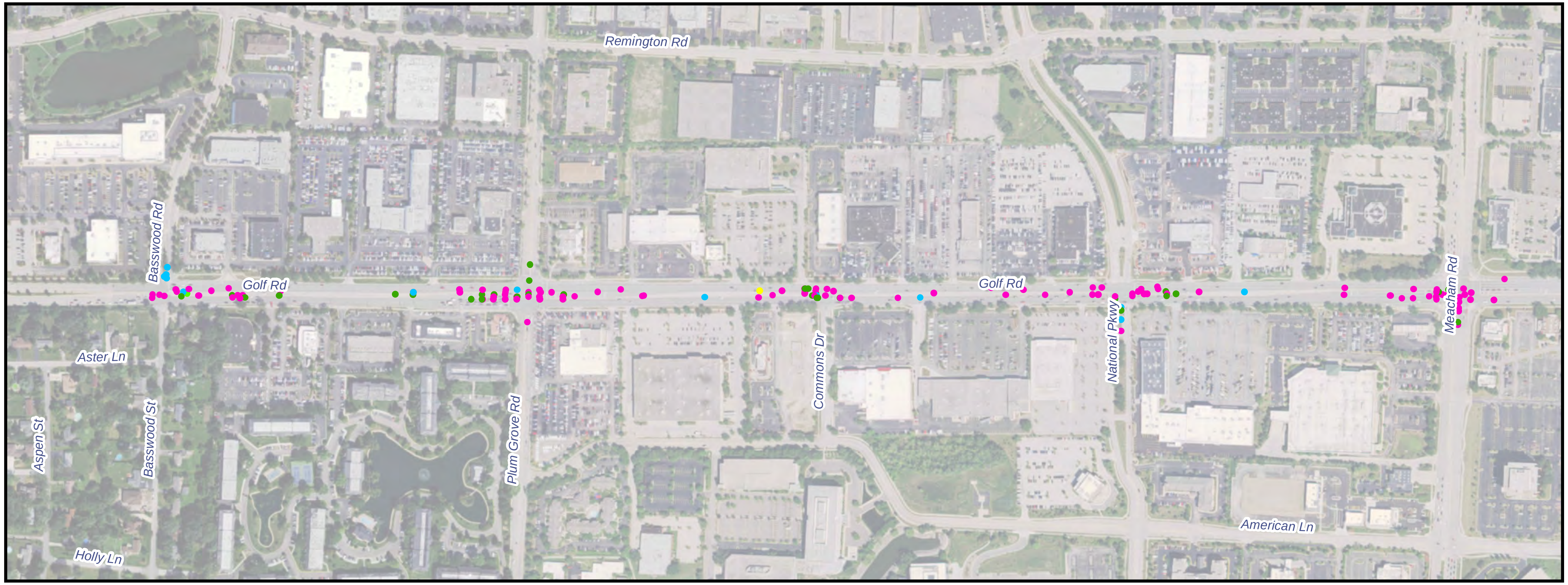
1 in = 0.1 miles

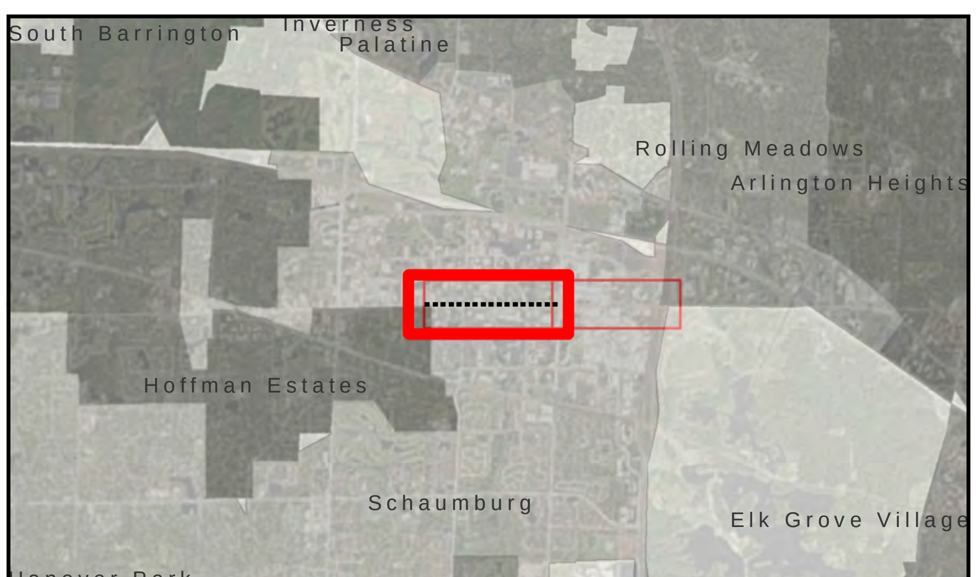
Accident Locations (2009-2013)
4 Lane Barrier
IL 59 Beaconridge to Royce

7 - Lane

Flush Median

Stanley Consultants INC.





Keymap

Legend

- Fatalities
- Angle
- Pedestrian
- Fixed Object
- Rear End
- Head On
- Turning
- Pedalcyclist

N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
7 Lane Mountable
IL 58 Basswood to Meacham

Stanley Consultants INC.

Keymap

Legend

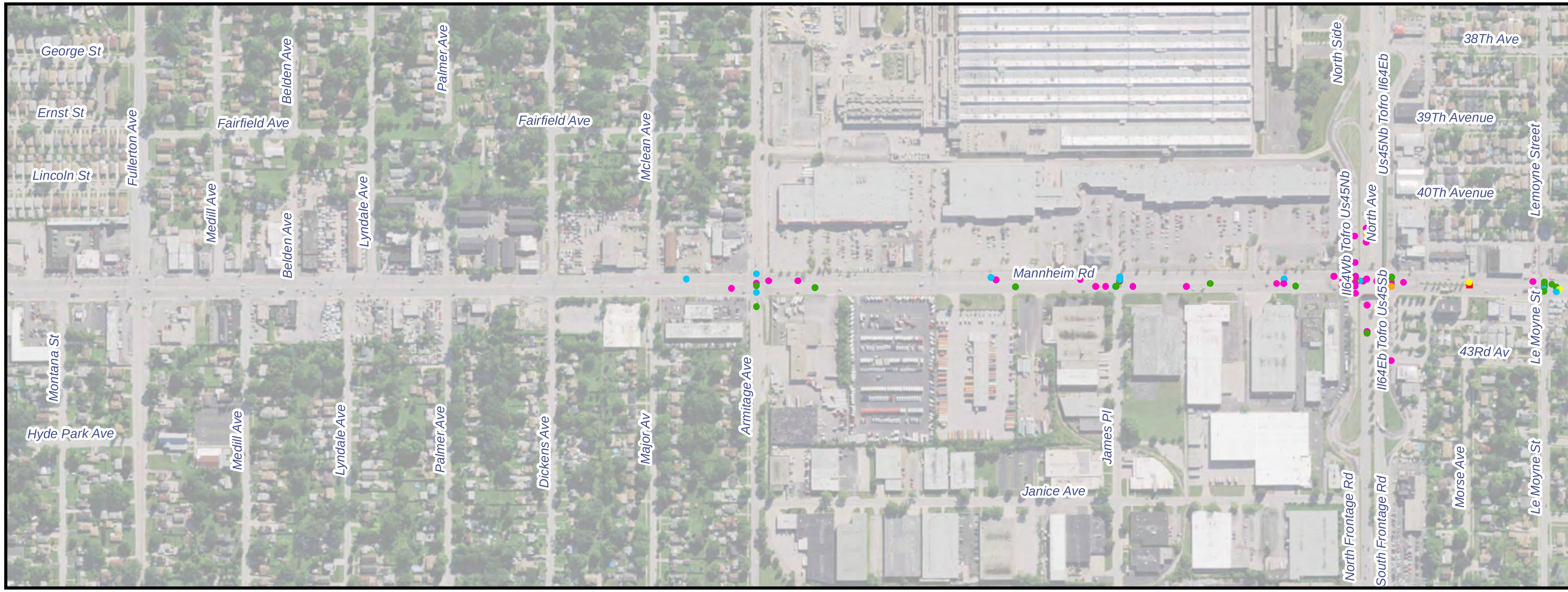
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

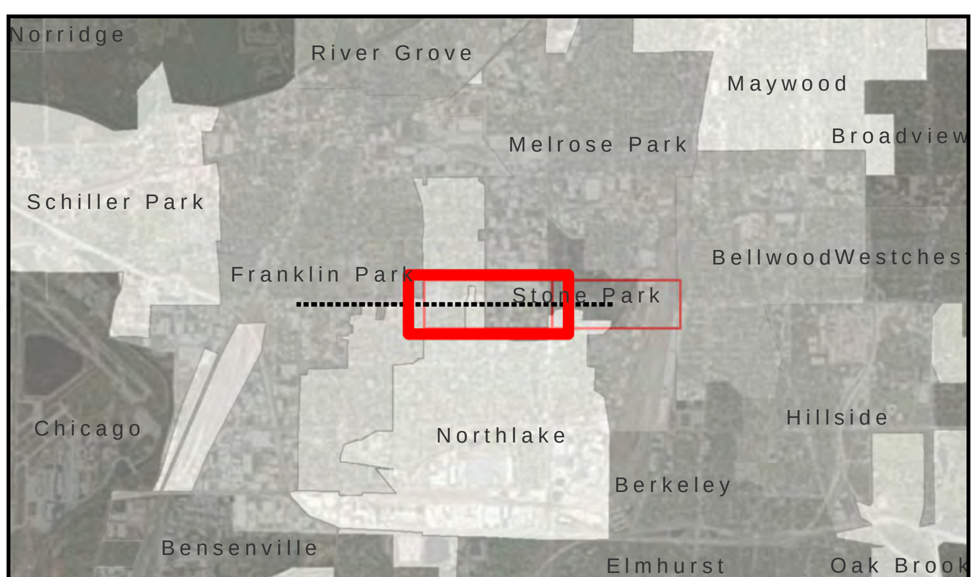
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
7 Lane Mountable
IL 58 Basswood to Meacham

Stanley Consultants INC.





Keymap

Legend

- Fatalities
- Angle
- Pedestrian
- Fixed Object
- Rear End
- Head On
- Turning
- Pedalcyclist

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
7 Lane Flush
US 12-45 Division to Armitage

Stanley Consultants INC.

Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

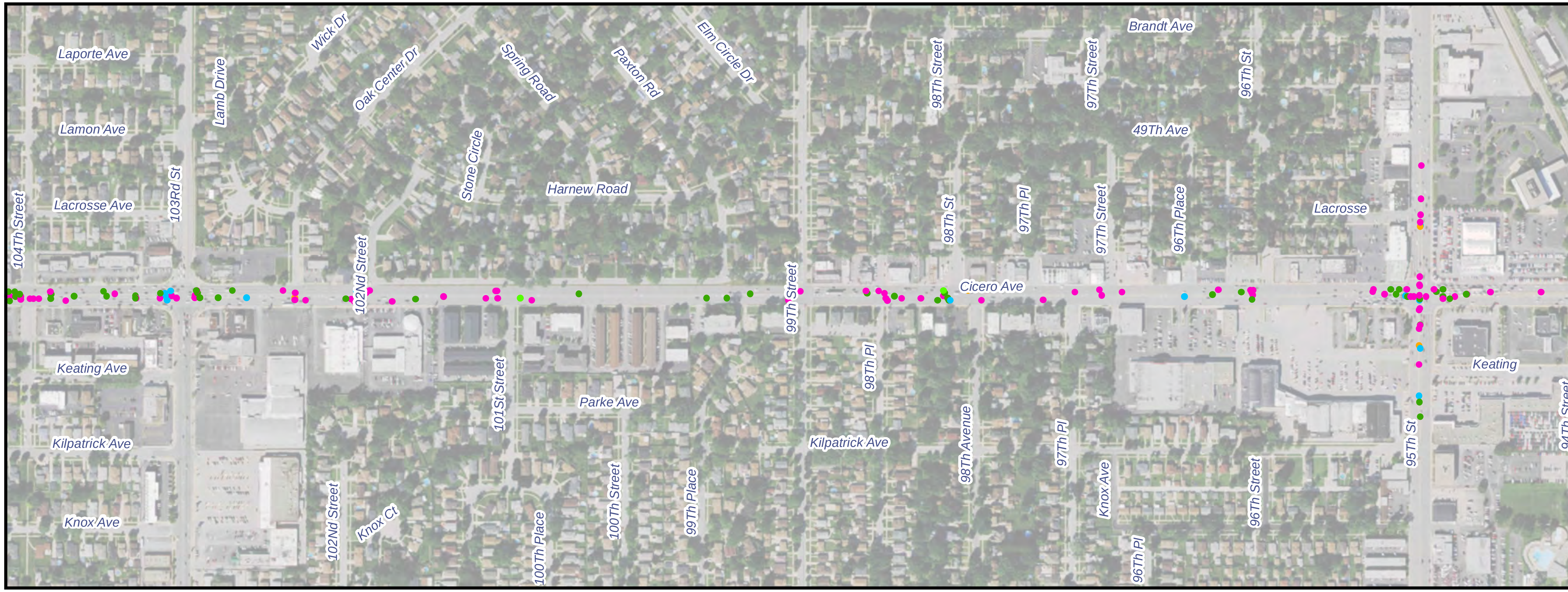
N

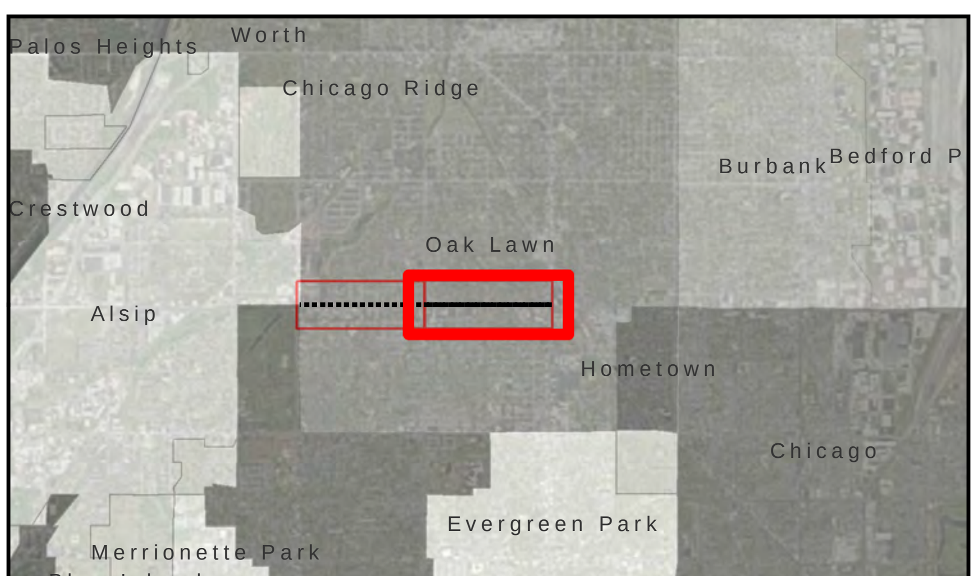
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
7 Lane Flush
US 12-45 Division to Armitage

Stanley Consultants INC.





Keymap

Legend

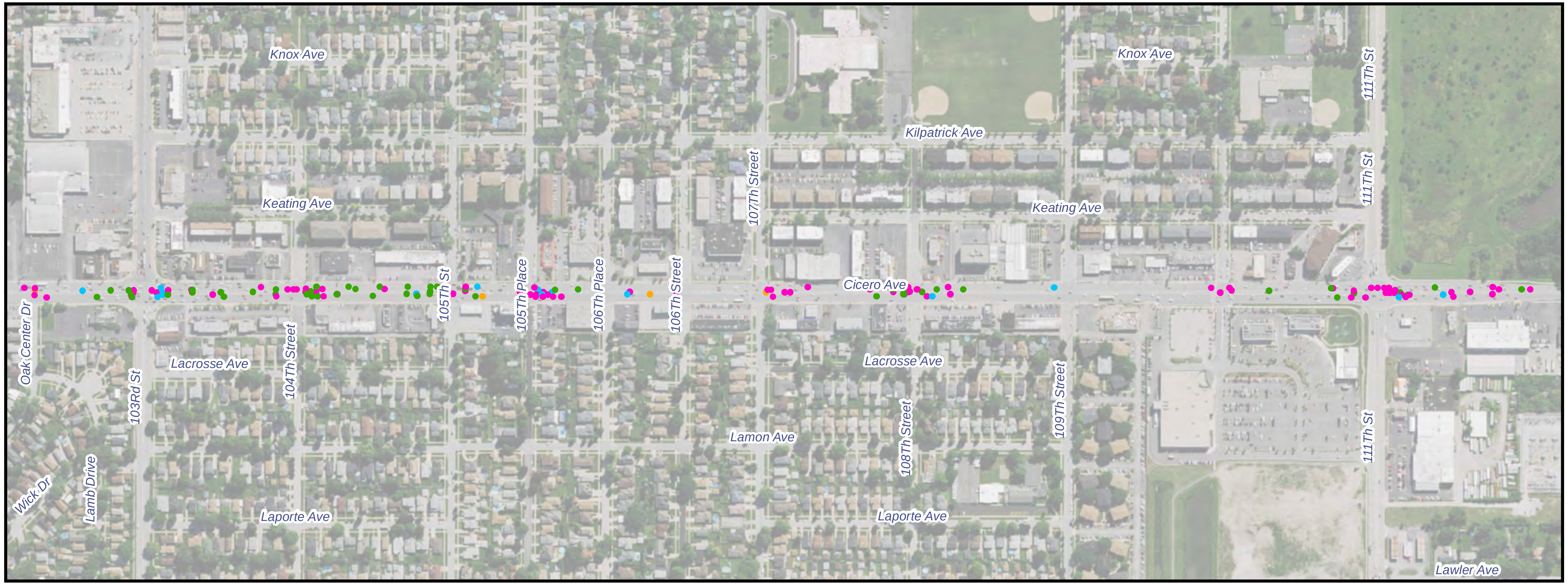
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

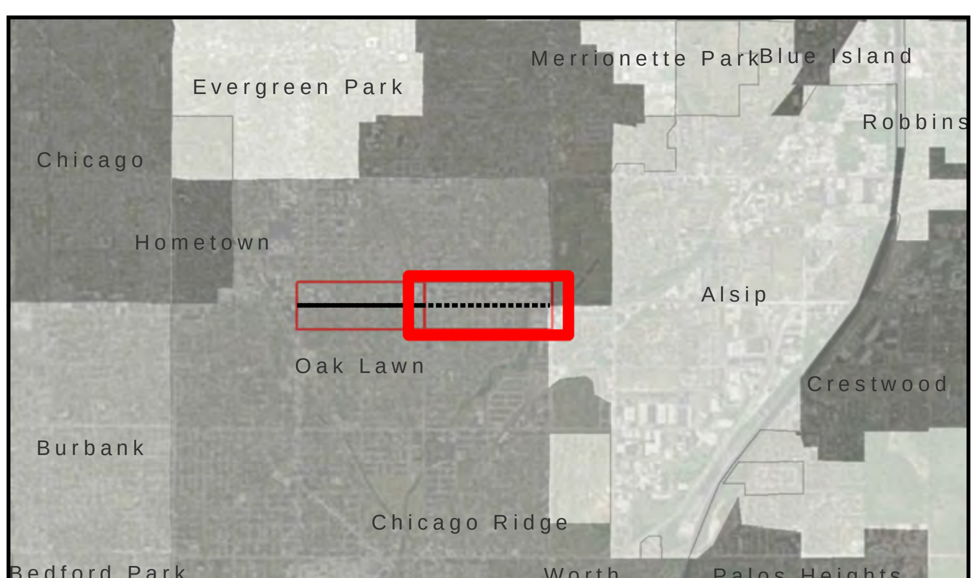
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
7 Lane Flush
IL 50 US 12 to 111th St

Stanley Consultants INC.





Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

0 0.05 0.1 Miles

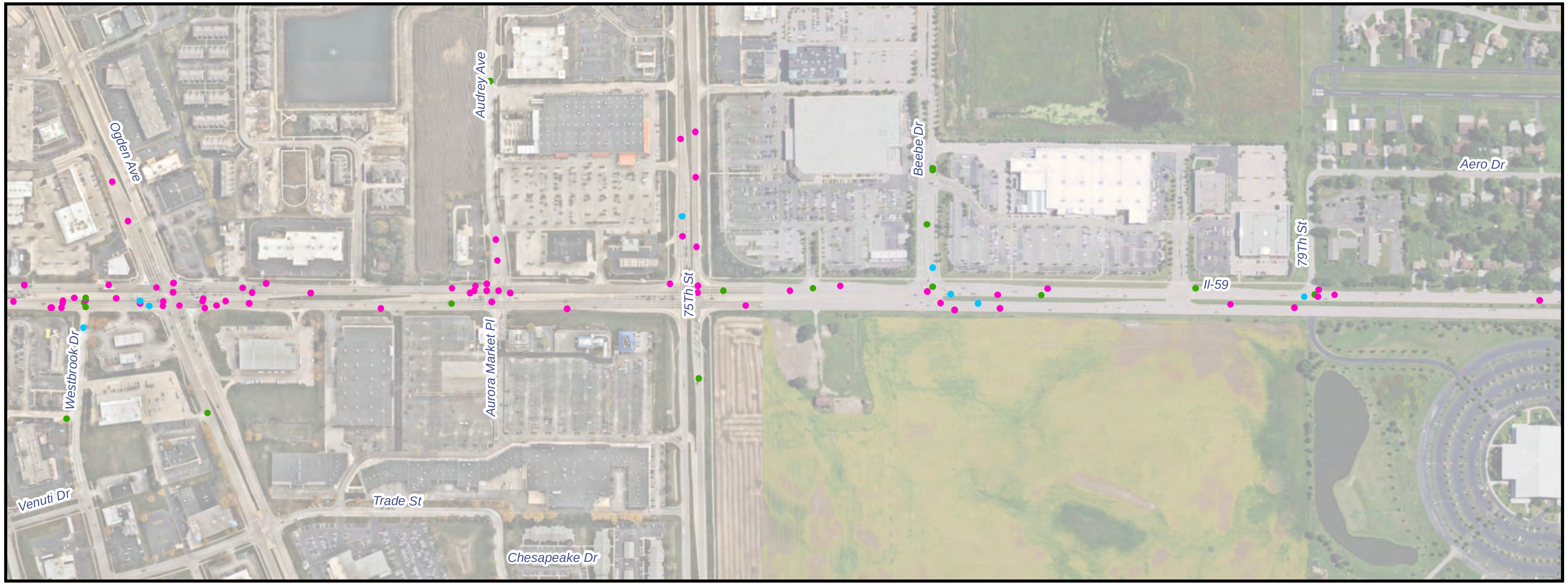
1 in = 0.1 miles

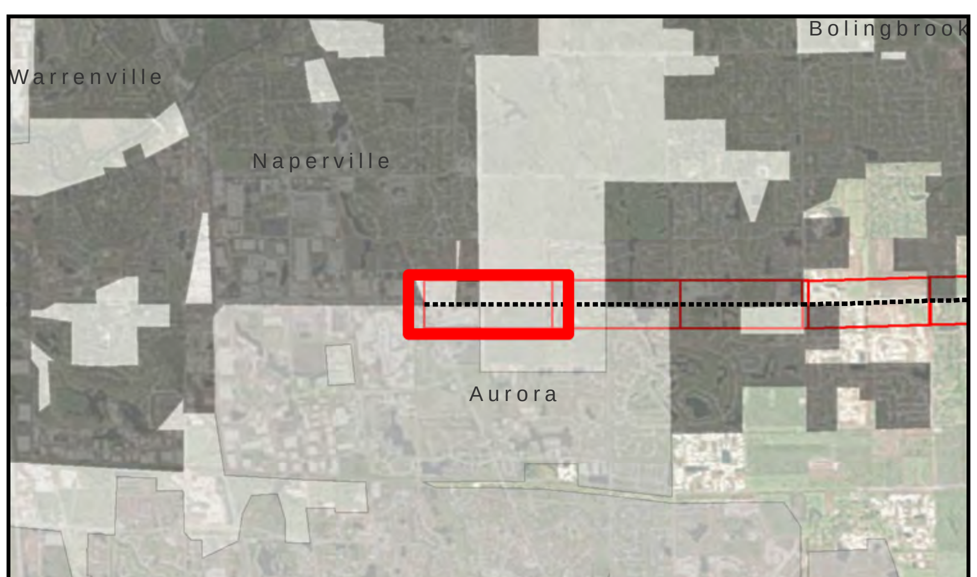
Accident Locations (2009-2013)
7 Lane Flush
IL 50 US 12 to 111th St

6 - Lane

Barrier Median

Stanley Consultants INC.





Keymap

Legend

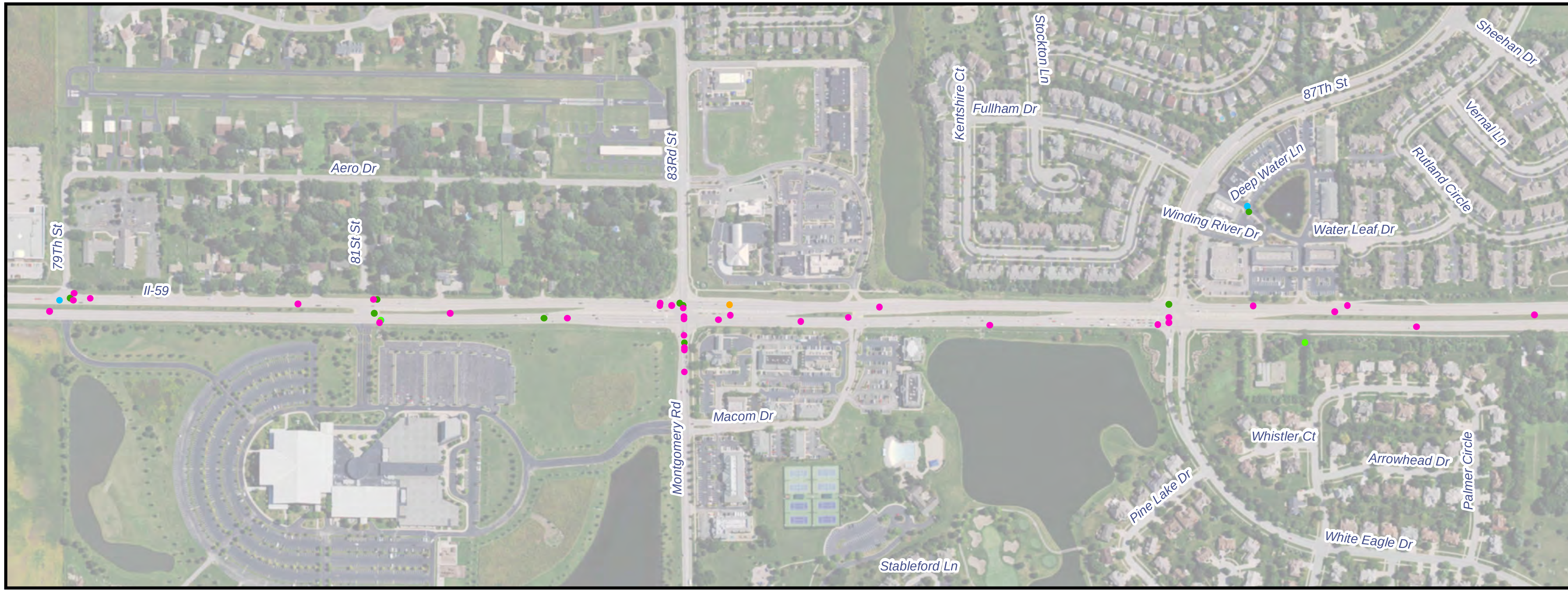
Fatalities
Angle
Fixed Object
Head On
Pedalcyclist
Pedestrian
Rear End
Turning

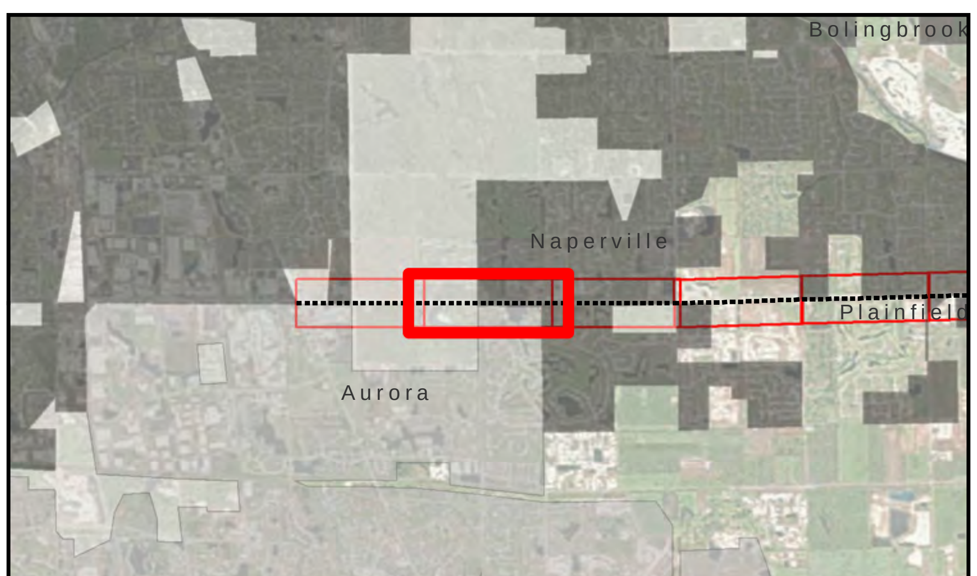
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
IL 59 Ogden to 95th

Stanley Consultants INC.





Keymap

Legend

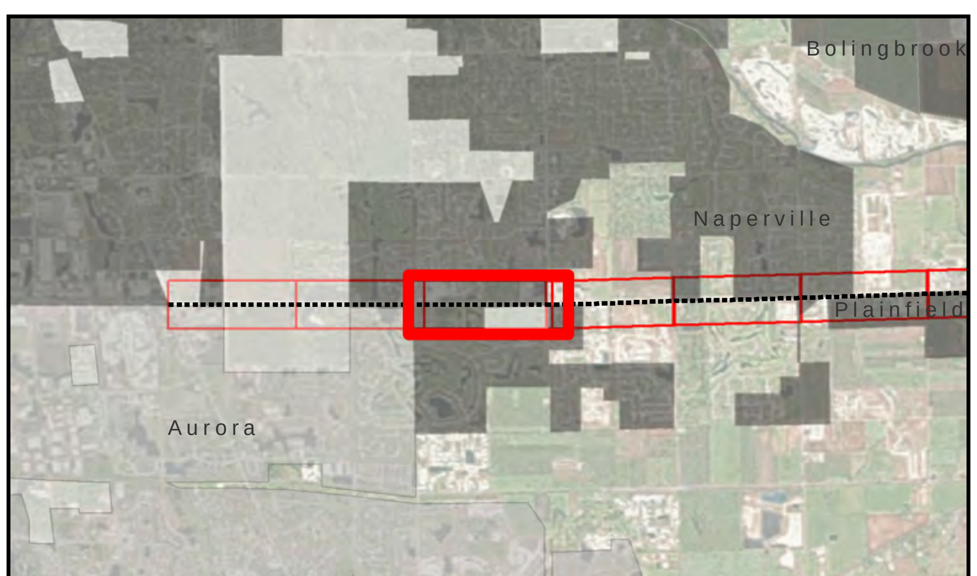
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
IL 59 Ogden to 95th

Stanley Consultants INC.



Keymap

Legend

Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
IL 59 Ogden to 95th

Stanley Consultants INC.

Keymap

Legend

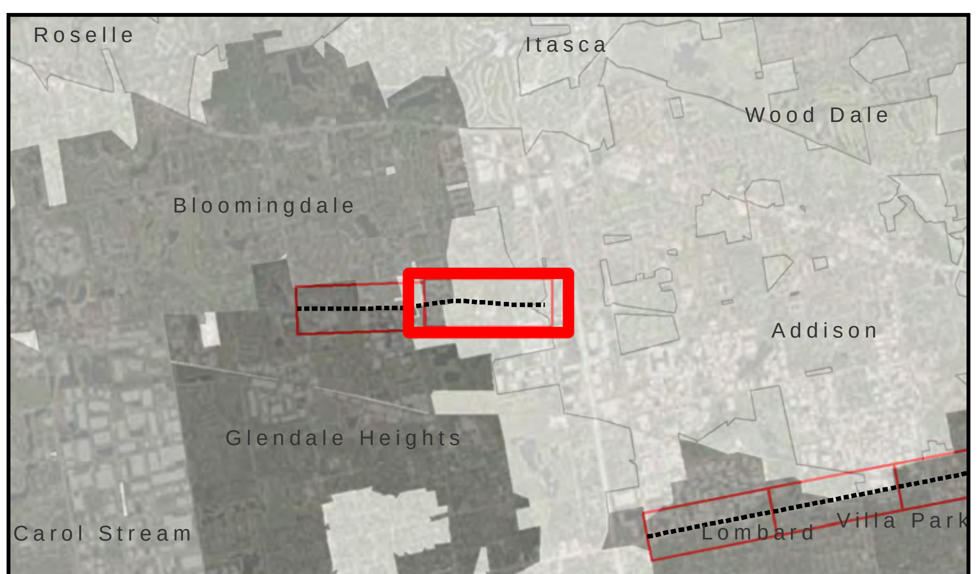
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
Army Trail Road Swift to Bloomingdale

Stanley Consultants INC.



Keymap

Legend

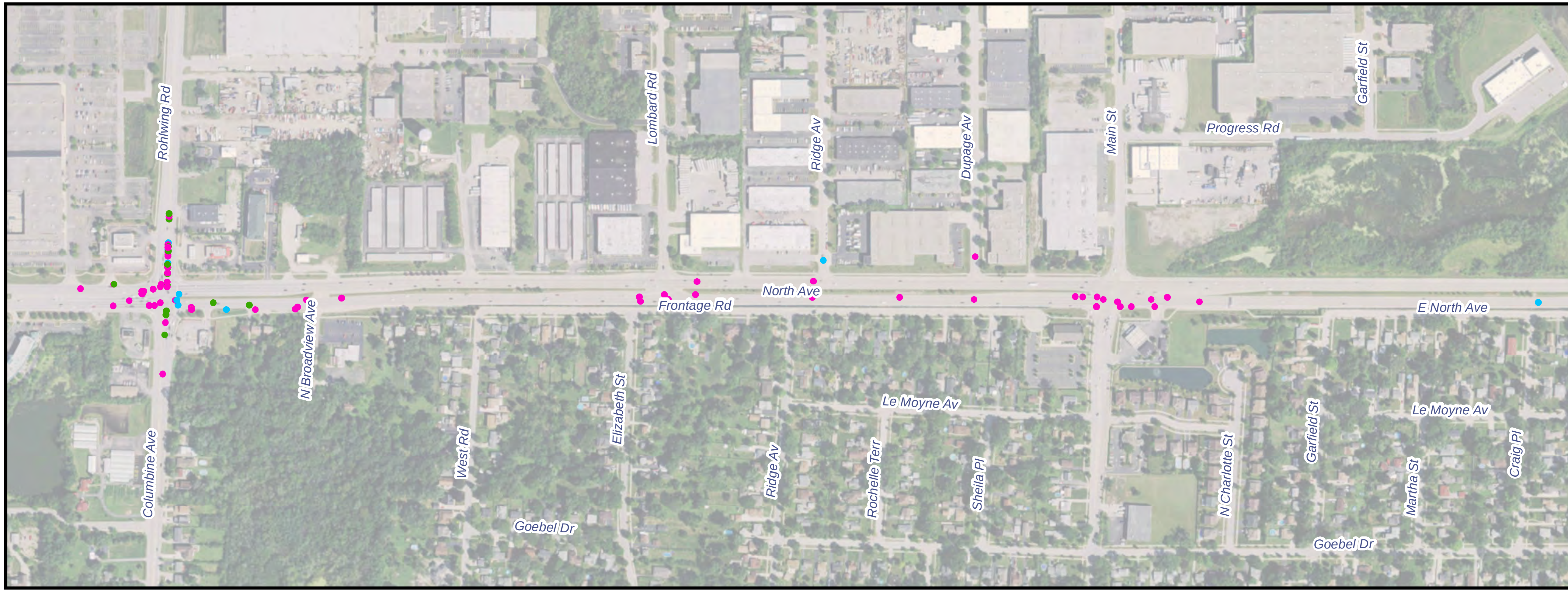
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

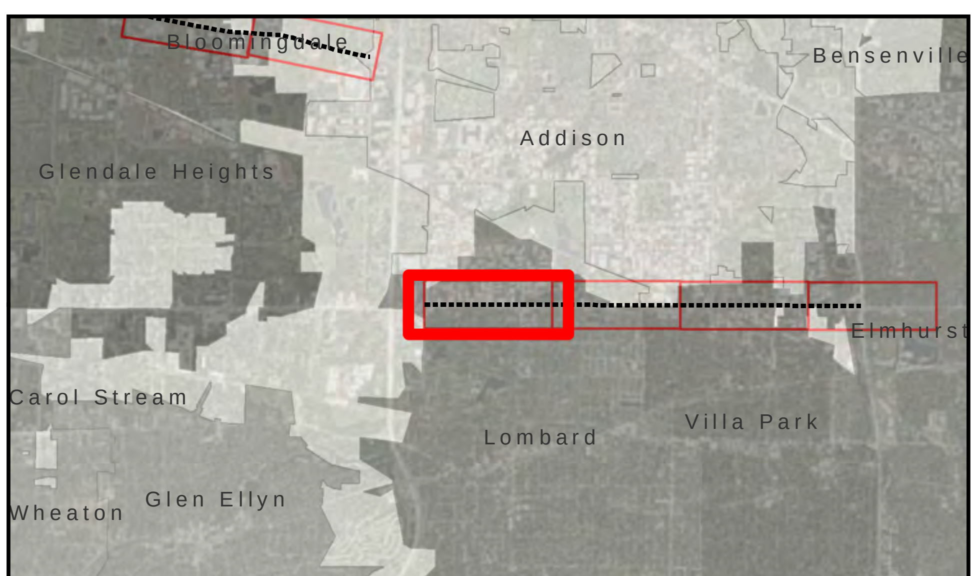
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
Army Trail Road Swift to Bloomingdale





Keymap

Legend

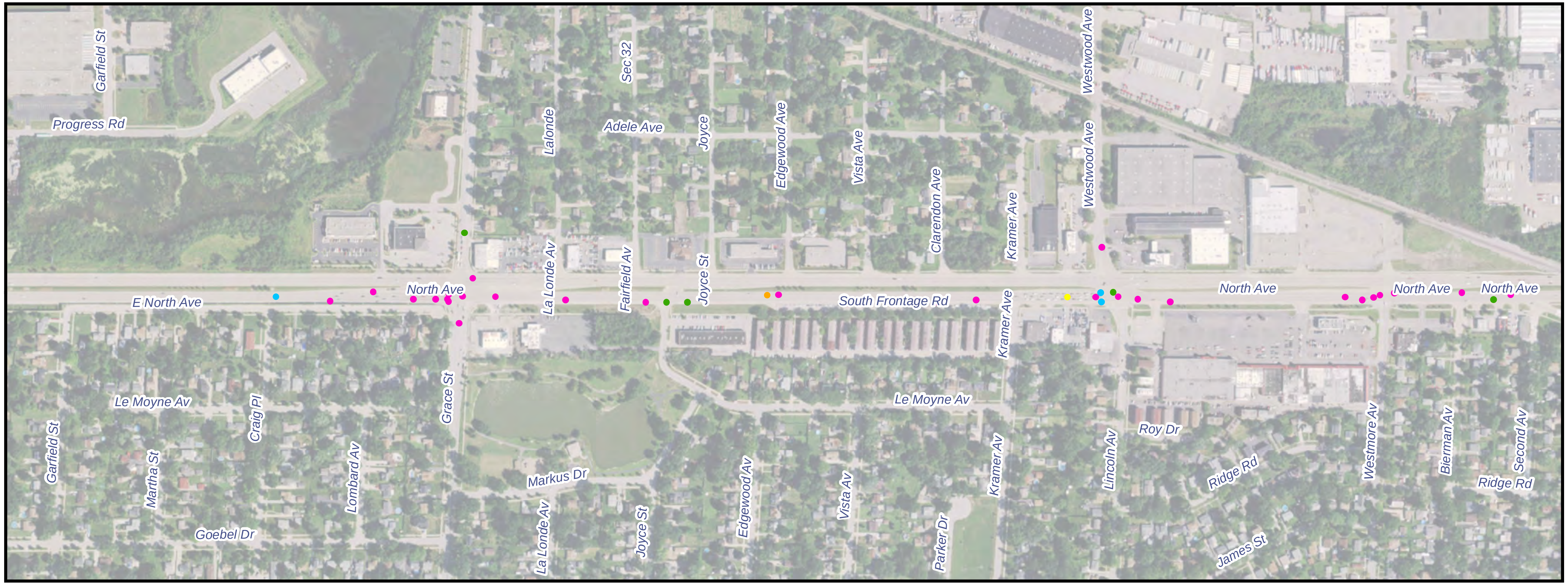
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

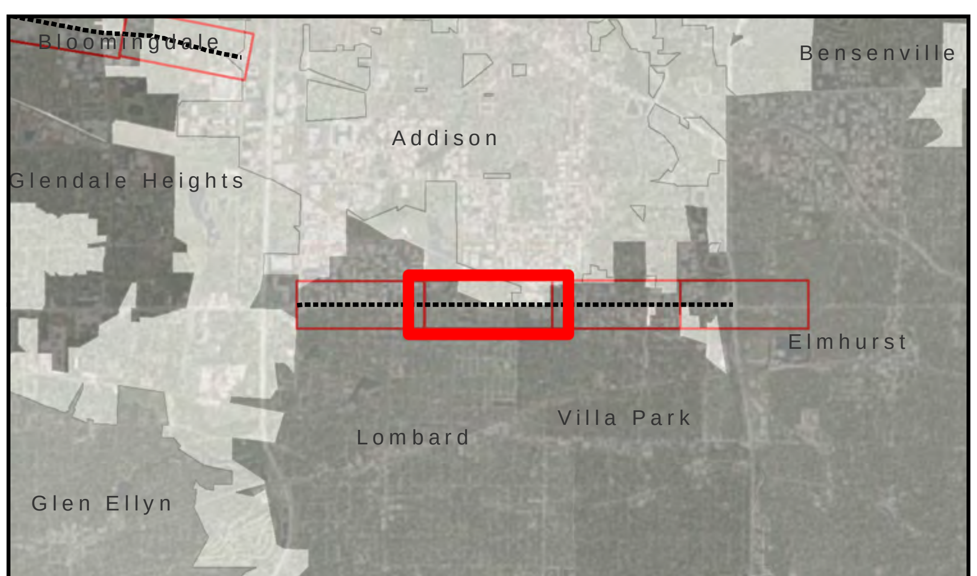
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
IL 64 Rohlwing to IL 83

Stanley Consultants INC.





Keymap

Legend

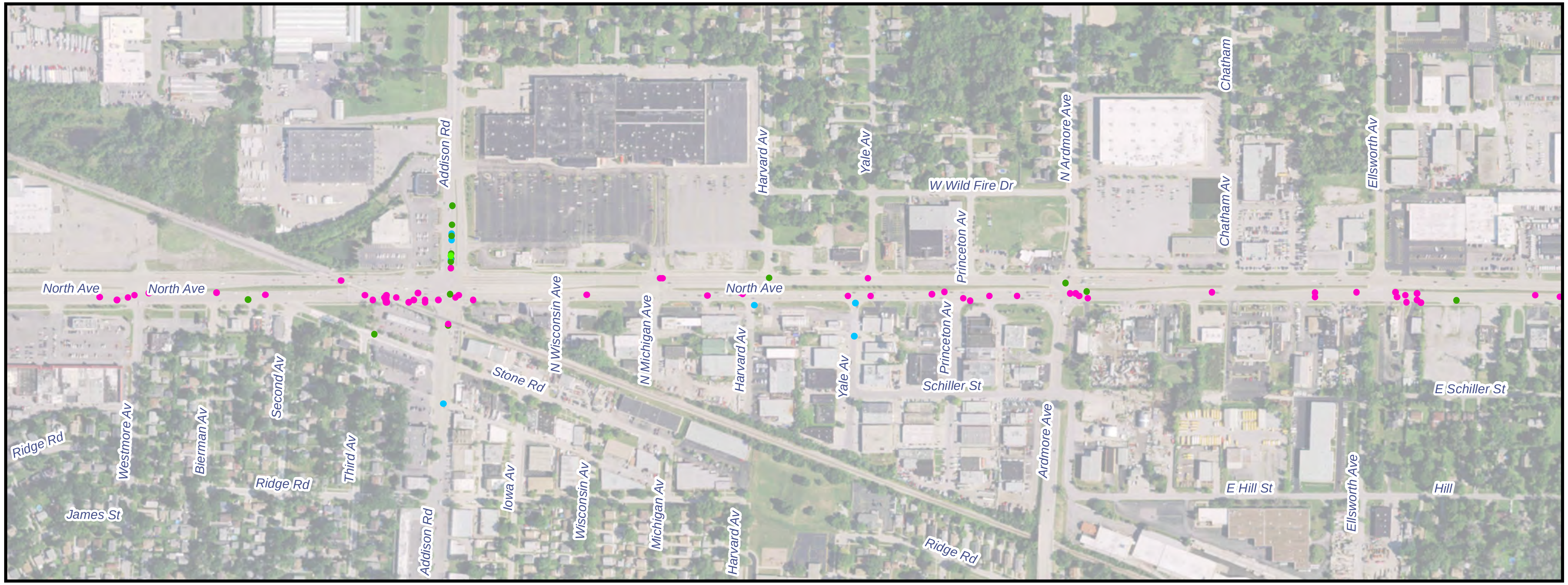
- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

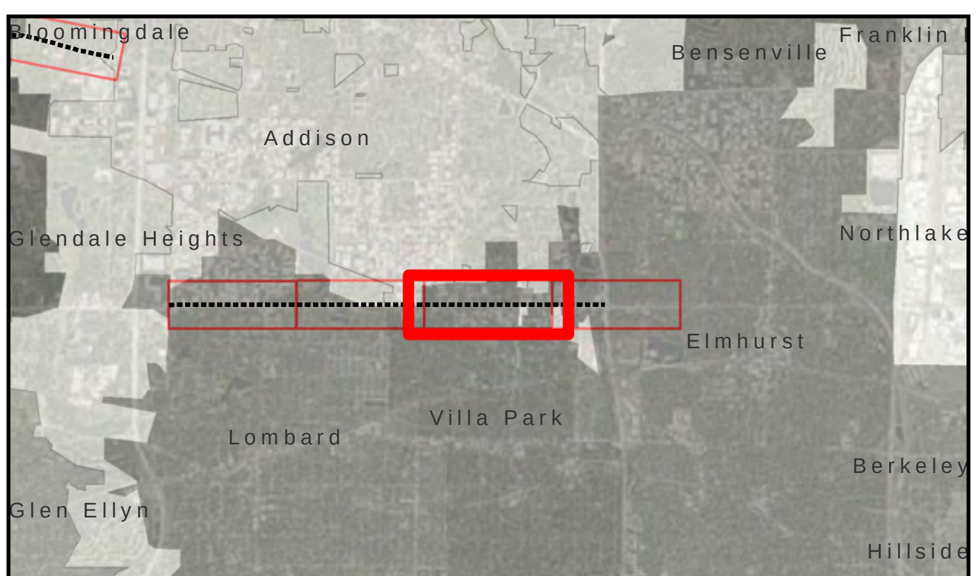
N

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
IL 64 Rohlwing to IL 83





Keymap

Legend

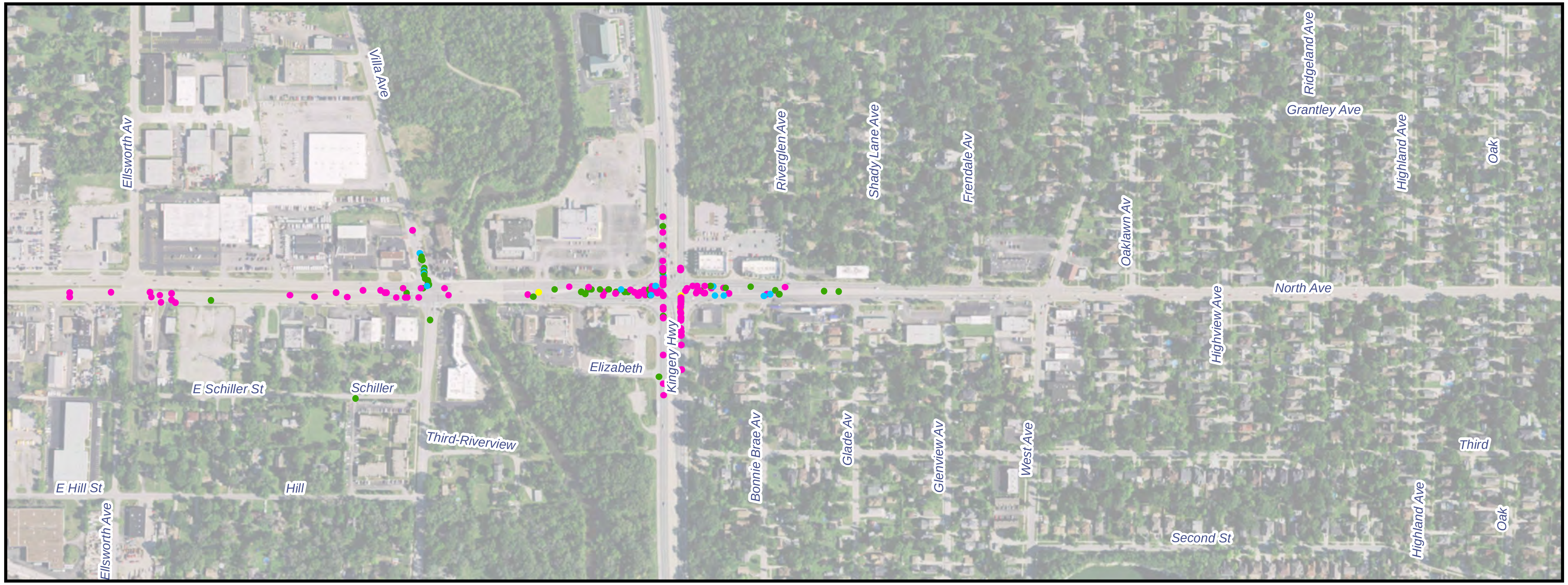
Fatalities	Angle	Pedestrian
	Fixed Object	Rear End
	Head On	Turning
	Pedalcyclist	

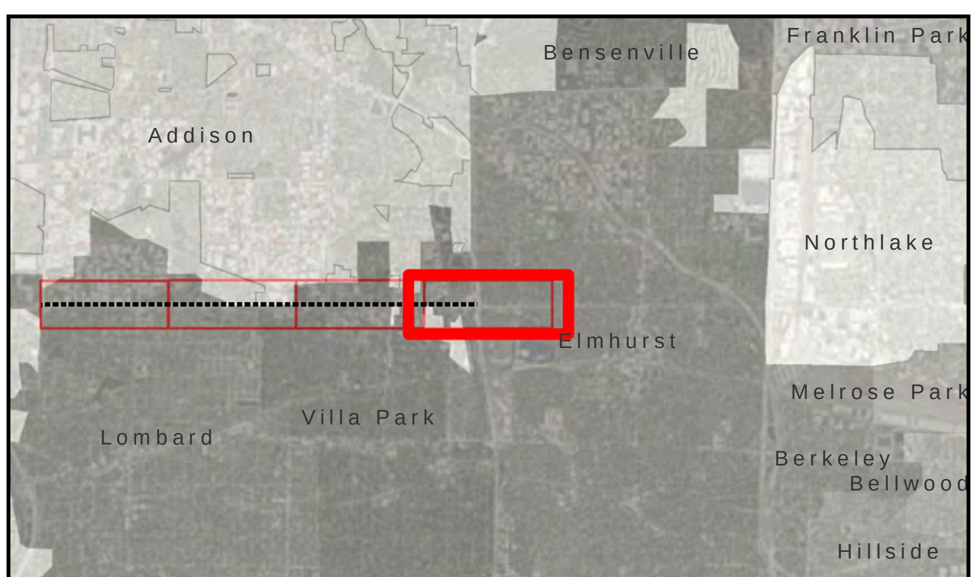
0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
IL 64 Rohlwing to IL 83

Stanley Consultants INC.





Keymap

Legend

- Fatalities
- Angle
- Fixed Object
- Head On
- Pedalcyclist
- Pedestrian
- Rear End
- Turning

0 0.05 0.1 Miles

1 in = 0.1 miles

Accident Locations (2009-2013)
6 Lane Barrier
IL 64 Rohlwing to IL 83