Technical Memorandum

I-290

Preliminary Engineering

and Environmental (Phase I) Study

West of Mannheim Road to East of Cicero Avenue

Crash Analysis

July 2010

Appendix A – Existing Lane Diagrams
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Appendix C – Mainline Crashes and Operations Exhibit
Appendix D – Mainline Segment Diagrams
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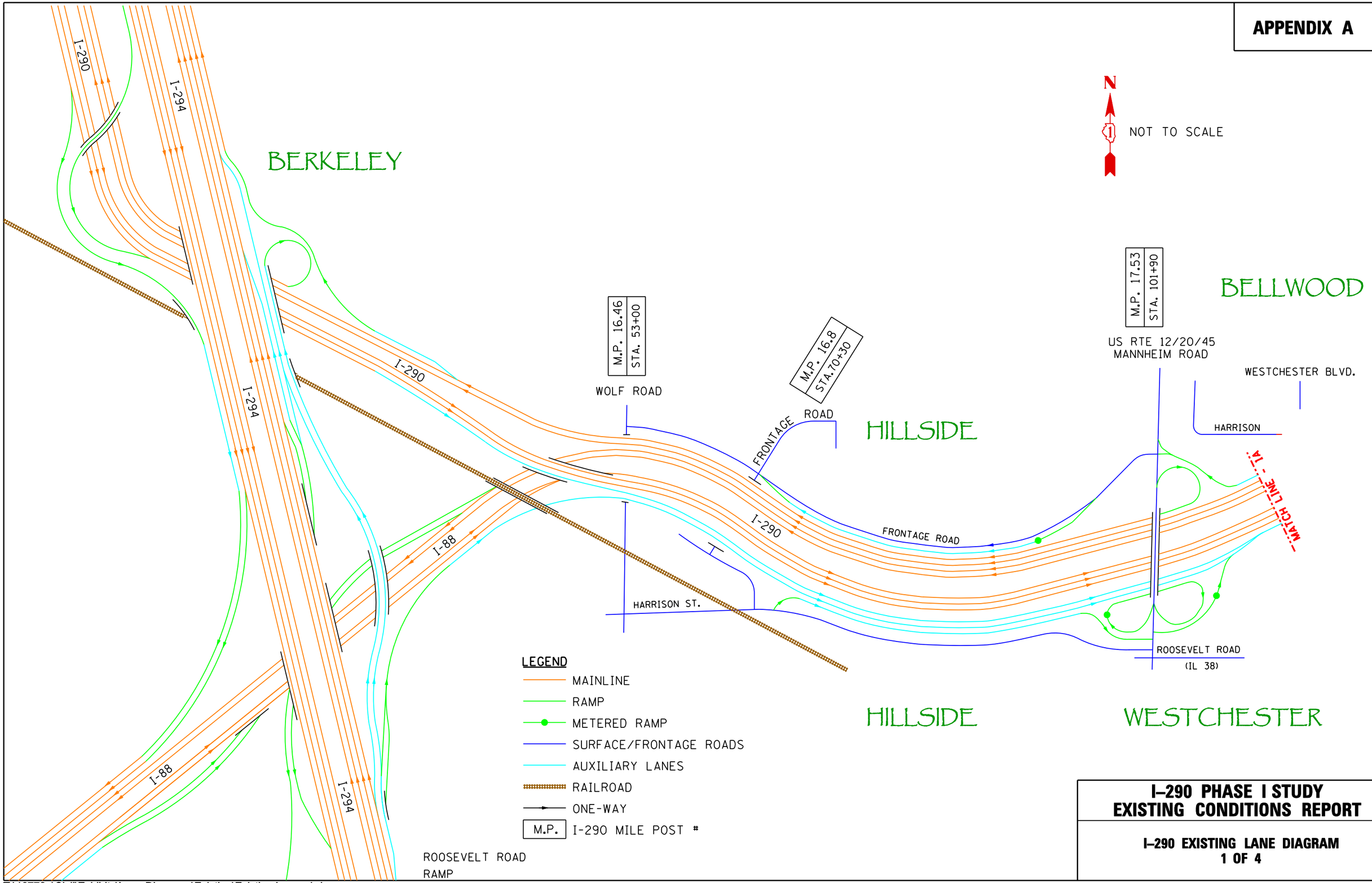
Appendix F – Ramp Crash Summary Report
Appendix G – Crossroad Crash Summary Reports
Appendix H – Crossroad Crash Statistics
Appendix I – Frontage Road Crash Summary Reports
Appendix J – 5% Report Crash Locations
Appendix K - Mainline Severe and 5% Crash Locations

Technical Memorandum

Appendix A

Existing Lane Diagrams

APPENDIX A



I–290 PHASE I STUDY
EXISTING CONDITIONS REPORT

I–290 EXISTING LANE DIAGRAM
1 OF 4

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3/29/2010

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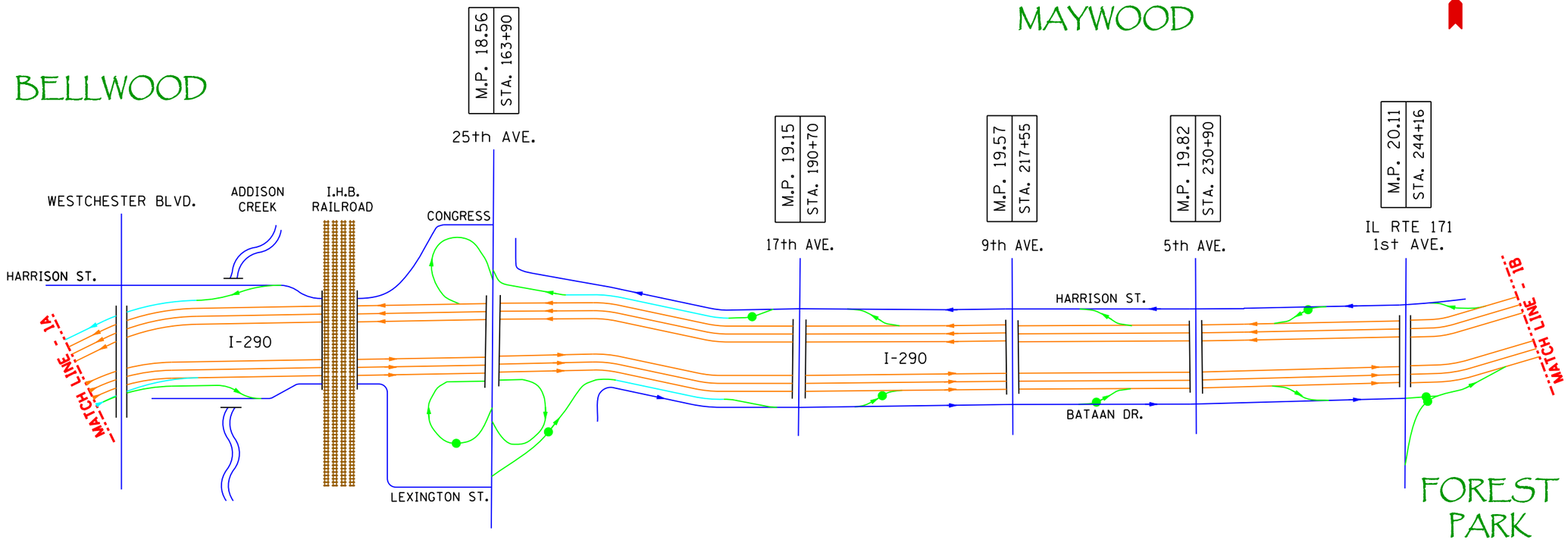

LEGEND

- MAINLINE
- RAMP
- METERED RAMP
- SURFACE/FRONTAGE ROADS
- AUXILIARY LANES
- RAILROAD
- ONE-WAY
- M.P. I-290 MILE POST #

I–290 PHASE I STUDY
EXISTING CONDITIONS REPORT

I–290 EXISTING LANE DIAGRAM
2 OF 4

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APPENDIX A

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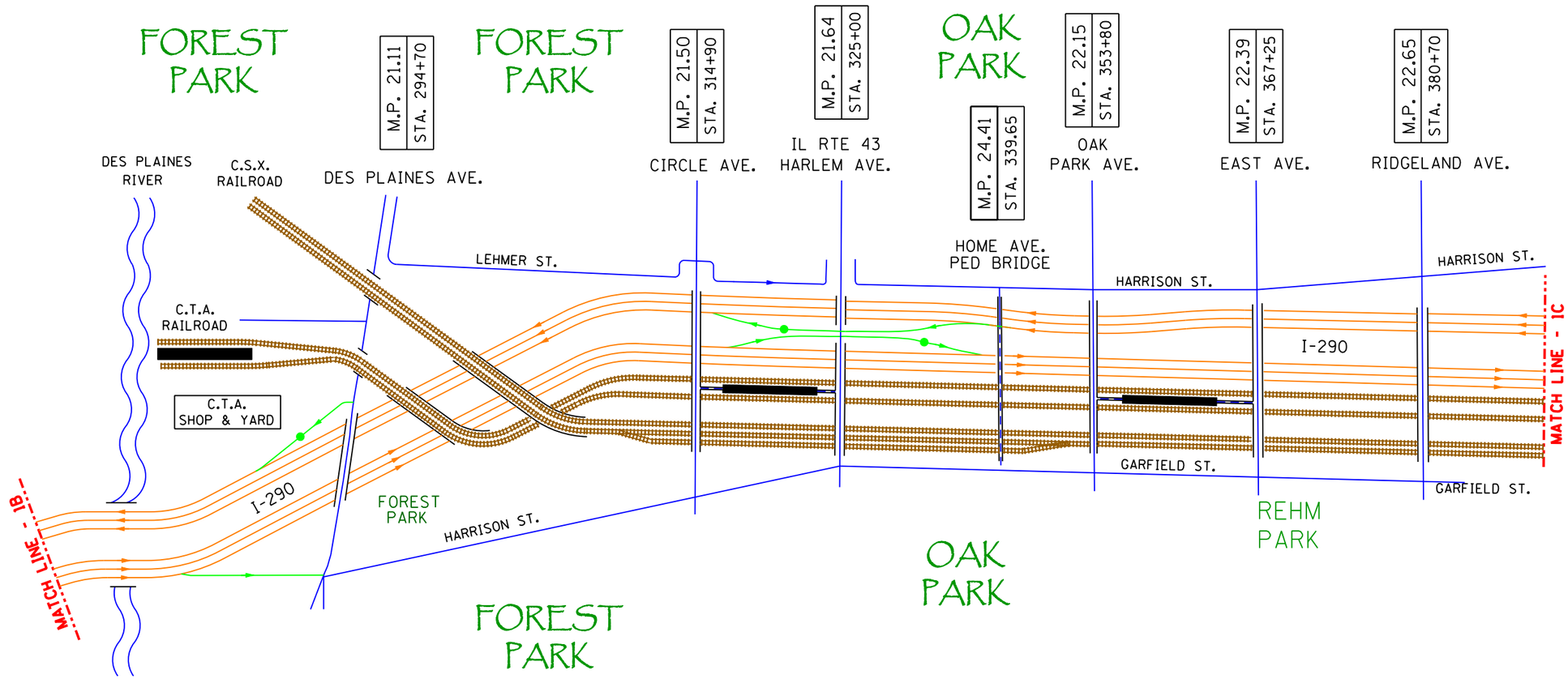

LEGEND

- MAINLINE
- RAMP
- METERED RAMP
- SURFACE/FRONTAGE ROADS
- AUXILIARY LANES
- RAILROAD
- ONE-WAY
- M.P. I-290 MILE POST #

I–290 PHASE I STUDY
EXISTING CONDITIONS REPORT

I–290 EXISTING LANE DIAGRAM
3 OF 4

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3/29/2010

APPENDIX A

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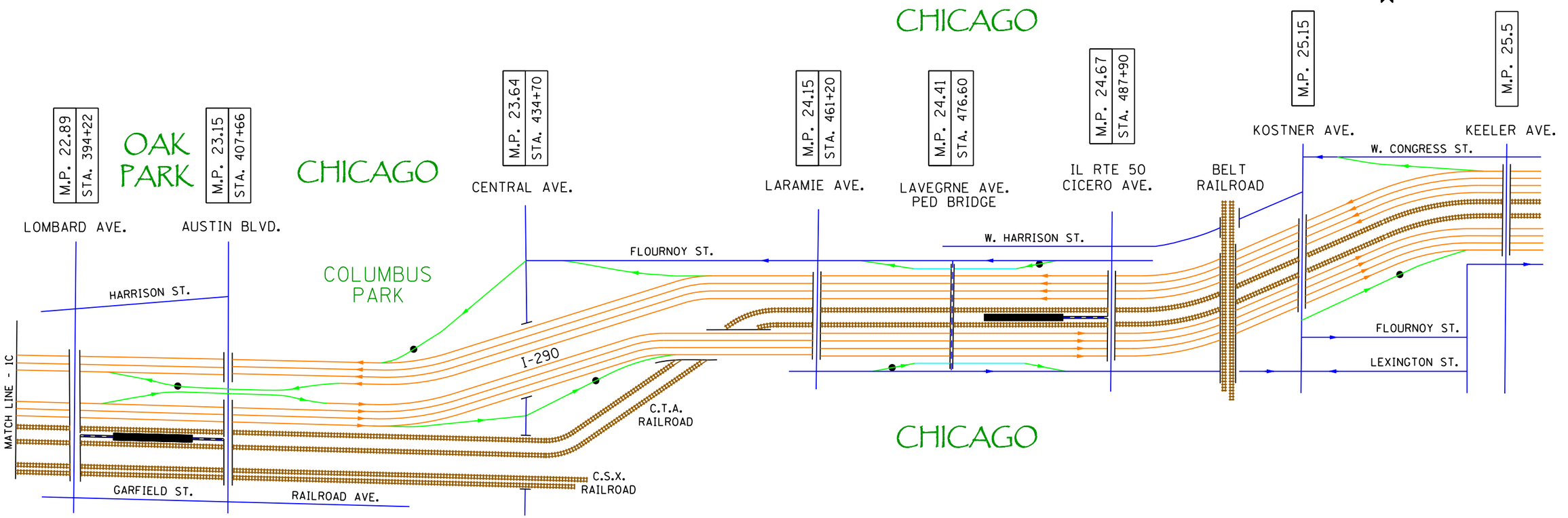

LEGEND

- MAINLINE
- RAMP
- METERED RAMP
- SURFACE/FRONTAGE ROADS
- AUXILIARY LANES
- RAILROAD
- ONE-WAY
- M.P. I-290 MILE POST #

I–290 PHASE I STUDY
EXISTING CONDITIONS REPORT

I–290 EXISTING LANE DIAGRAM
4 OF 4

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3/29/2010

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Appendix B

Comparative Crash Analysis

I-290 Phase I Study - Freeway Crash Rate Comparison (2006 thru 2008)

I-94 (Edens)

Mainline Segments				Length	ADT (Traffic Volume)			3 yr Total Traffic	3 yr Crash Total	Crashes/ Million Veh./ Mile	Crashes Per Mile
From	Mile Sta.	To	Mile Sta.	(miles)	2006	2007	2008	(millions)			
Rt. 14 - Peterson	41.37	Touhy Ave	39.85	1.52	171,900	175,000	161,000	185.4	504	1.8	332
Touhy Ave	39.85	Rt. 58 - Dempster	37.36	2.49	165,500	167,800	159,500	179.9	621	1.4	249
Rt. 58 - Dempster	37.36	Old Orchard Rd	35.46	1.90	154,600	156,300	150,400	168.4	410	1.3	216
Old Orchard Rd	35.46	Lake Ave	34.58	0.88	151,500	155,700	153,000	168.0	161	1.1	183
				6.79			Averages ->	176.3*	1,696	**1.4**	250

I-90 (Kennedy)

Mainline Segments				Length	ADT (Traffic Volume)			3 yr Total Traffic	3 yr Crash Total	Crashes/ Million/ Mile	Crashes Per Mile
From	Mile Sta.	To	Mile Sta.	(miles)	2006	2007	2008	(millions)			
DesPlaines River Rd	78.35	Cumberland Ave.	79.68	1.33	209,700	209,200	318,000	269.0	678	1.9	510
Cumberland Ave.	79.68	Harlem Ave.	81.24	1.56	193,400	204,200	314,400	259.9	521	1.3	334
Harlem Ave.	81.24	Nagle Ave	82.24	1.00	193,800	199,200	298,600	252.4	400	1.6	400
Nagle Ave	82.24	Central Ave.	83.45	1.21	157,500	157,700	257,300	209.0	443	1.8	366
				5.1			Averages ->	248.7*	2,042	**1.6**	400

I-55 (Stevenson)

Mainline Segments				Length	ADT (Traffic Volume)			3 yr Total Traffic	3 yr Crash Total	Crashes/ Million/ Mile	Crashes Per Mile
From	Mile Sta.	To	Mile Sta.	(miles)	2006	2007	2008	(millions)			
La Grange Rd.	279.00	IL-171	282.31	3.31	148,900	152,100	161,400	168.8	550	1.0	166
IL-171	282.31	Central Ave	285.67	3.36	146,100	147,500	160,700	165.8	796	1.4	237
Central Ave	285.67	Cicero Ave.	286.70	1.03	149,900	154,900	166,100	171.9	349	2.0	339
Cicero Ave.	286.70	Pulaski Rd.	287.84	1.14	167,800	171,100	169,000	185.4	407	1.9	357
Pulaski Rd.	287.84	Western Ave.	290.29	2.45	176,400	181,500	176,600	195.1	614	1.3	251
				11.29			Averages ->	175.6*	2,716	**1.4**	241

I-290 (Eisenhower) Focused Phase I Study Area

Mainline Segments				Length	ADT (Traffic Volume)			3 yr Total Traffic	3 yr Crash Total	Crashes/ Million/ Mile	Crashes Per Mile
From	Mile Sta.	To	Mile Sta.	(miles)	2006	2007	2008	(millions)			
I-294	15.50	Wolf Rd.	16.46	0.96	194,500	191,100	192,800	211.1	229	1.1	239
Wolf Rd.	16.46	Mannheim Rd.	17.52	1.06	194,500	191,100	192,800	211.1	407	1.8	384
Mannheim Rd.	17.52	25th Ave.	18.55	1.03	194,500	191,100	192,800	211.1	494	2.3	480
25th Ave.	18.55	17th Ave.	19.05	0.50	194,000	187,400	190,700	208.8	377	3.6	754
17th Ave.	19.05	9th Ave.	19.57	0.52	190,900	180,500	185,700	203.3	123	1.2	237
9th Ave.	19.57	1st Ave.	20.11	0.54	200,600	189,500	195,050	213.6	304	2.6	563
1st Ave.	20.11	DesPlaines Ave.	21.11	1.00	205,500	194,500	200,000	219.0	488	2.2	488
DesPlaines Ave.	21.11	Harlem Ave.	21.64	0.53	190,500	179,400	184,950	202.5	311	2.9	587
Harlem Ave.	21.64	Austin Blvd.	23.15	1.51	195,300	184,200	189,750	207.8	707	2.3	468
Austin Blvd.	23.15	Central Ave.	23.64	0.49	213,100	202,000	207,550	227.3	392	3.5	800
Central Ave.	23.64	Laramie Ave.	24.15	0.51	209,900	198,800	204,350	223.8	297	2.6	582
Laramie Ave.	24.15	Cicero Ave.	24.67	0.52	227,300	216,200	221,750	242.8	243	1.9	467
Cicero Ave.	24.67	Kostner Ave.	25.15	0.48	196,100	188,200	192,150	210.4	187	1.9	390
				9.65			Averages ->	213.7*	4,559	**2.2**	472

I-290 (Eisenhower) 4-Lane Section East of Phase I Study Area

Mainline Segments				Length	ADT (Traffic Volume)			3 yr Total Traffic	3 yr Crash Total	Crashes/ Million/ Mile	Crashes Per Mile
From	Mile Sta.	To	Mile Sta.	(miles)	2006	2007	2008	(millions)			
Kostner Ave.	25.14	Independence Blvd.	25.94	0.80	219,600	210,400	207,300	232.6	389	2.1	486
Independence Blvd.	25.94	Homan Ave.	26.41	0.47	216,200	209,000	213,600	233.2	147	1.3	313
Homan Ave.	26.41	Sacramento Blvd.	26.90	0.49	232,000	226,300	224,200	249.1	208	1.7	424
Sacramento Blvd.	26.90	California Ave.	27.15	0.25	212,700	209,000	216,300	232.9	79	1.4	316
California Ave.	27.15	Western Ave.	27.66	0.51	211,200	209,700	210,300	230.4	144	1.2	282
Western Ave.	27.66	Damen Ave.	28.17	0.51	219,300	217,800	221,200	240.3	156	1.3	306
Damen Ave.	28.17	Paulina St.	28.55	0.38	212,400	210,900	215,100	233.0	134	1.5	353
Paulina St.	28.55	Racine Ave.	29.17	0.62	209,500	206,400	213,100	229.6	301	2.1	485
				4.03			Averages ->	235.0*	1,558	**1.6**	387

* 3-year average traffic volume, weighted by segment length

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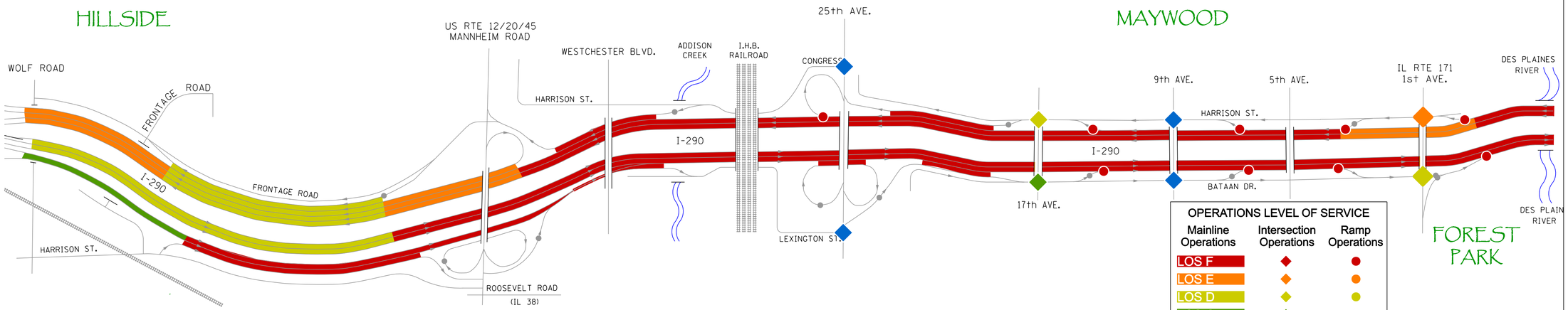
Appendix C

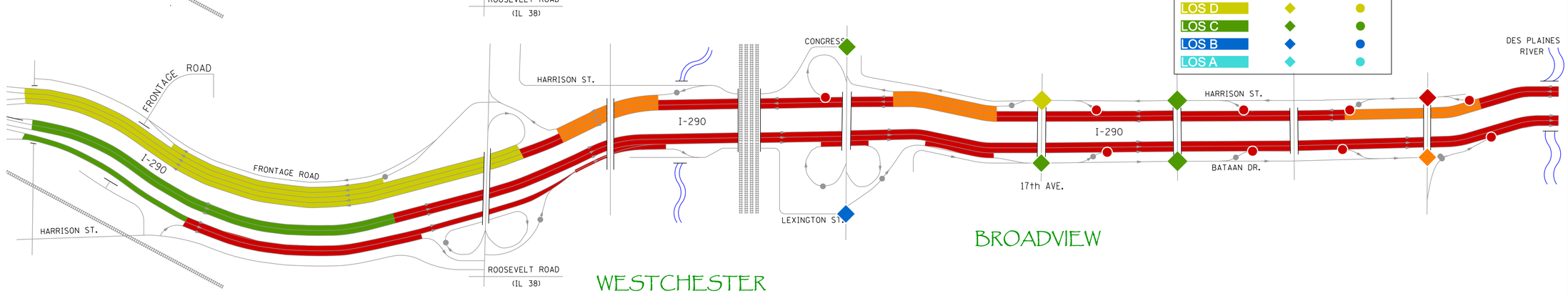
Mainline Crashes and Operations Exhibit

I-290 EISENHOWER EXPRESSWAY
STUDY AREA OPERATIONS & CRASHES

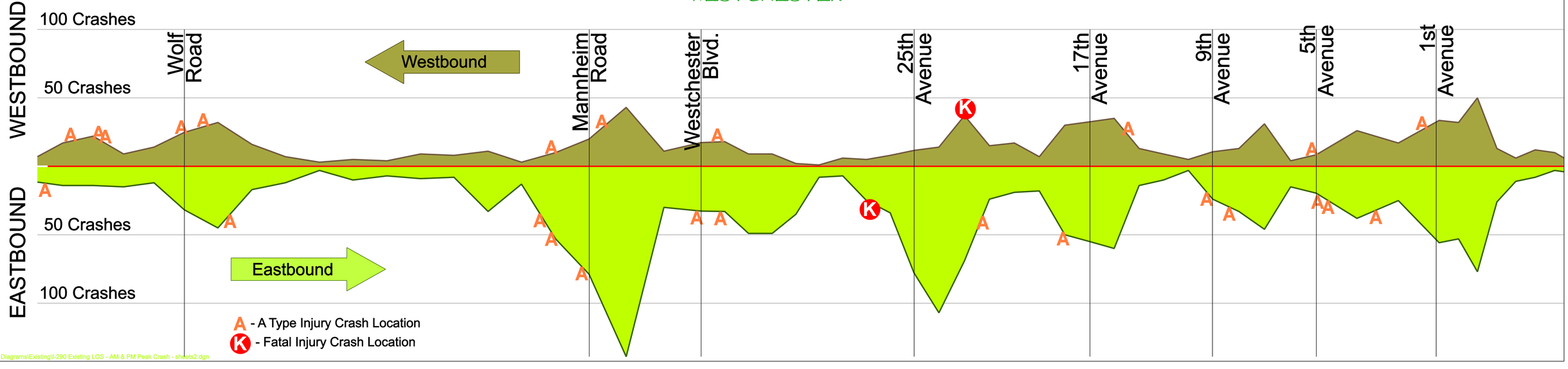
AM Operations



PM Operations



1/10 Mile 2006-2008 Crash Totals



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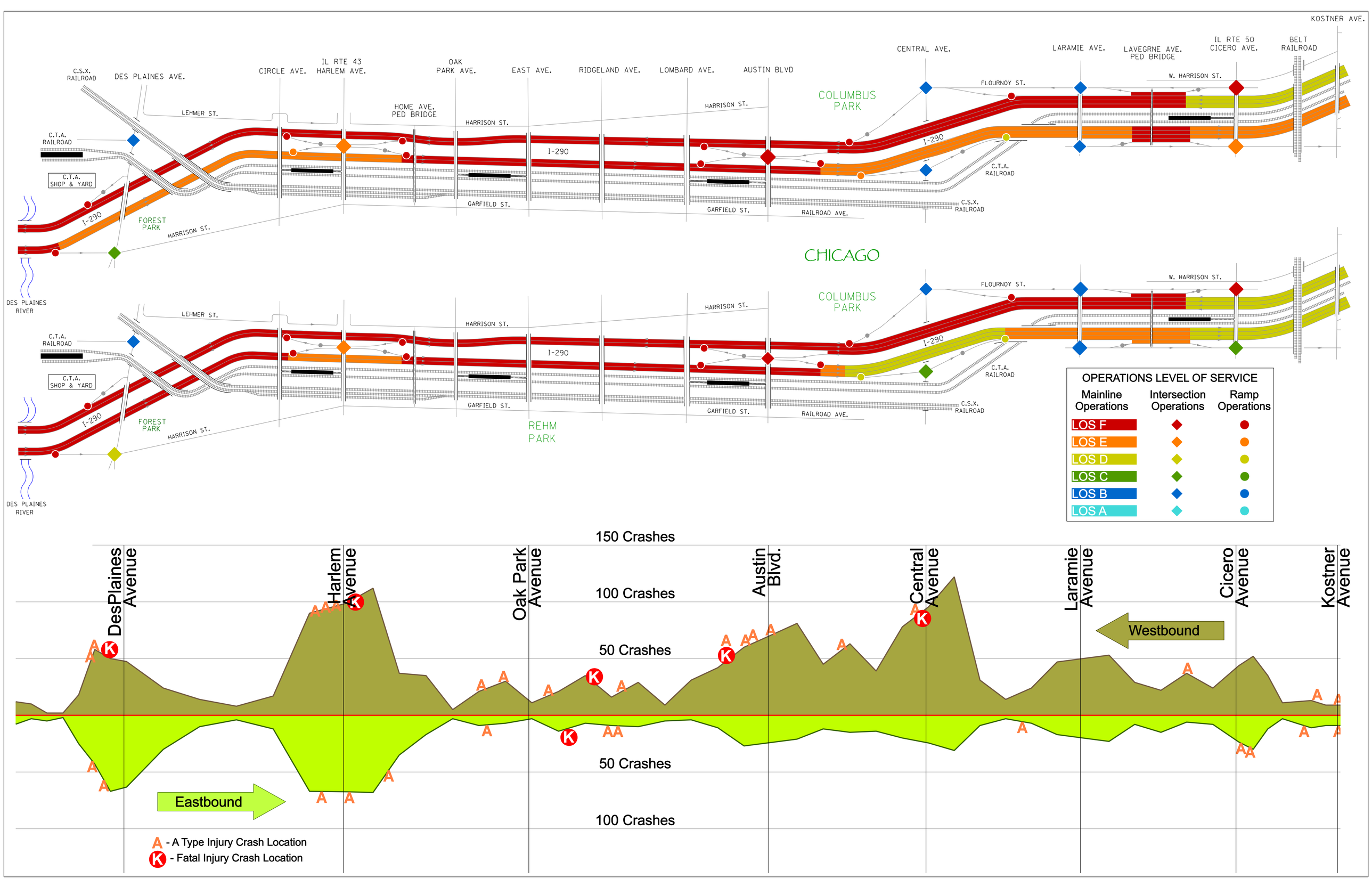
C.S.X. RAILROAD
DES PLAINES AVE.
CIRCLE AVE.
IL RTE 43 HARLEM AVE.
OAK PARK AVE.
EAST AVE.
RIDGELAND AVE.
LOMBARD AVE.
AUSTIN BLVD
CENTRAL AVE.
LARAMIE AVE.
LAVEGRNE AVE. PED BRIDGE
IL RTE 50 CICERO AVE.
BELT RAILROAD
KOSTNER AVE.
LEHMER ST.
HOME AVE. PED BRIDGE
HARRISON ST.
FLOURNOY ST.
W. HARRISON ST.
C.T.A. RAILROAD
C.T.A. SHOP & YARD
I-290
FOREST PARK
GARFIELD ST.
RAILROAD AVE.
C.S.X. RAILROAD
COLUMBUS PARK
CHICAGO
DES PLAINES RIVER
REHM PARK
OPERATIONS LEVEL OF SERVICE
Mainline Operations
Intersection Operations
Ramp Operations
LOS F
LOS E
LOS D
LOS C
LOS B
LOS A

150 Crashes
100 Crashes
50 Crashes
50 Crashes
100 Crashes
DesPlaines Avenue
Harlem Avenue
Oak Park Avenue
Austin Blvd.
Central Avenue
Laramie Avenue
Cicero Avenue
Kostner Avenue
Westbound
Eastbound
A - A Type Injury Crash Location
K - Fatal Injury Crash Location

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Appendix D

Mainline Segment Diagrams

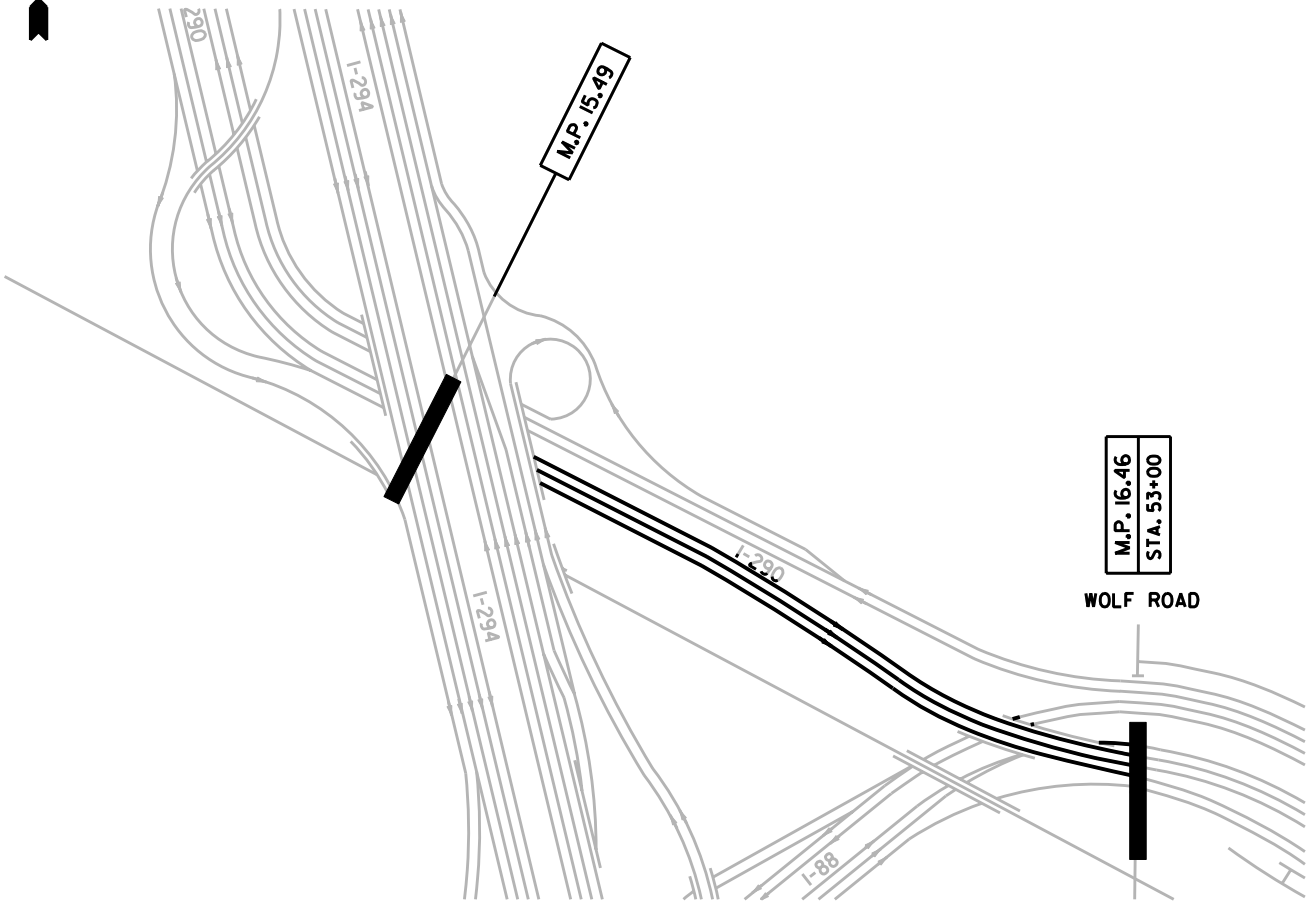
CRASHES BY SEGMENT

MAINLINE SEGMENT EB1

West of Wolf Road to Wolf Road
Length = 0.97 miles

N

NOT TO SCALE



EB1 Eastbound	0.97 Miles	West of Wolf Road to Wolf Road			
RANK (EB)	8 of 9	**Statistics**		**Predominant Crash Factors**	
		Total Crashes:	122	**Crash Type:** Rear end	46%
		Fatalities:	0	**Weather Conditions:** Clear	71%
RATE	126 Crashes/mile	**A Injuries:**	1	**Road Condition:** Dry	62%
		B & C Injuries:	13	**Time Period:** PM Peak	31%
		Total Injuries:	14	**Vehicle Type:** Passenger	70%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	56	46%	36%	21%	25%	96%	73%	23%	2%
Fixed object	32	26%	6%	19%	3%	53%	44%	38%	19%
Sideswipe same direction	26	21%	15%	31%	23%	88%	65%	23%	12%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

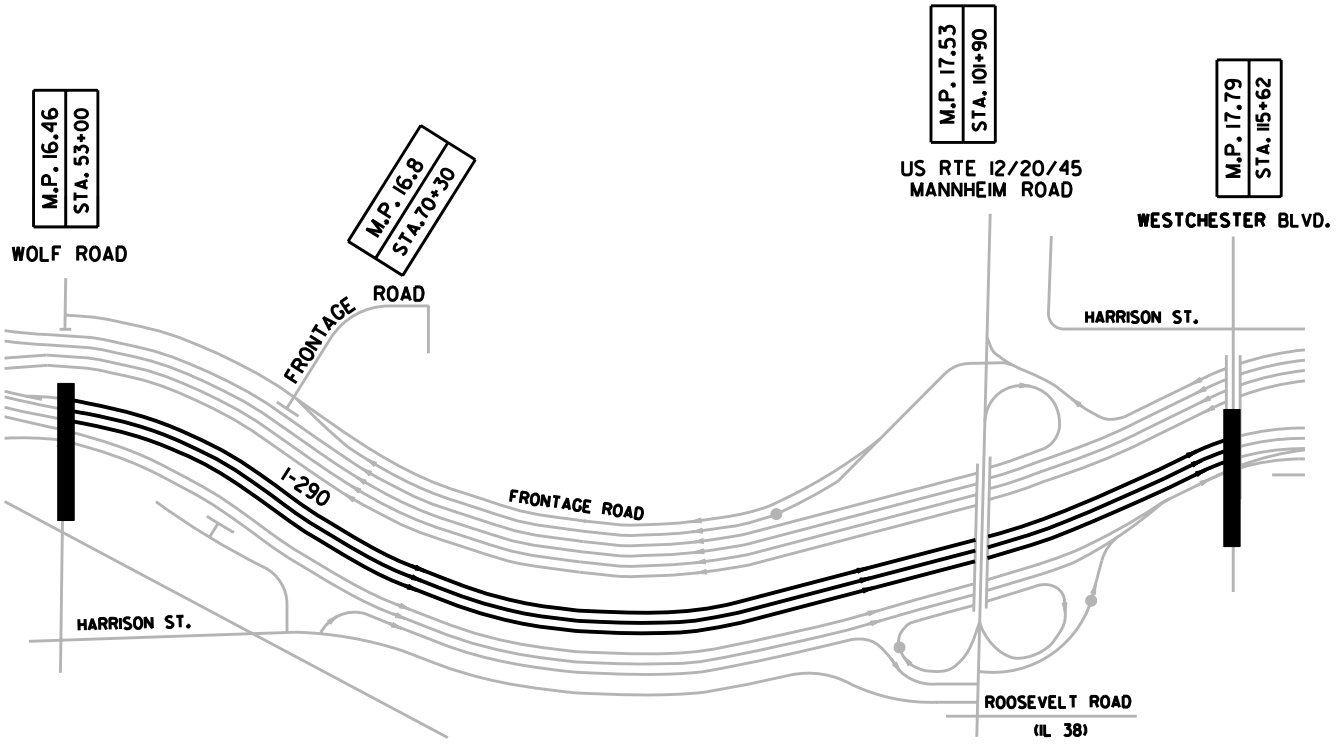
CRASHES BY SEGMENT

MAINLINE SEGMENT EB2

Wolf Road to Westchester Road
Length = 1.33 miles

N

NOT TO SCALE



EB2 Eastbound	1.33 Miles	Wolf Road to Westchester Blvd

RANK (EB)		Statistics		Predominant Crash Factors		
3	of 9	Total Crashes:	393	Crash Type:	Rear end	62%
		Fatalities:	0	Weather Conditions:	Clear	79%
RATE	295 Crashes/mile	A Injuries:	5	Road Condition:	Dry	73%
		B & C Injuries:	21	Time Period:	AM Peak	31%
		Total Injuries:	26	Vehicle Type:	Passenger	69%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	242	62%	33%	30%	25%	97%	80%	13%	5%
Fixed object	67	17%	19%	18%	9%	61%	49%	27%	22%
Sideswipe same direction	65	17%	31%	26%	22%	88%	78%	11%	9%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

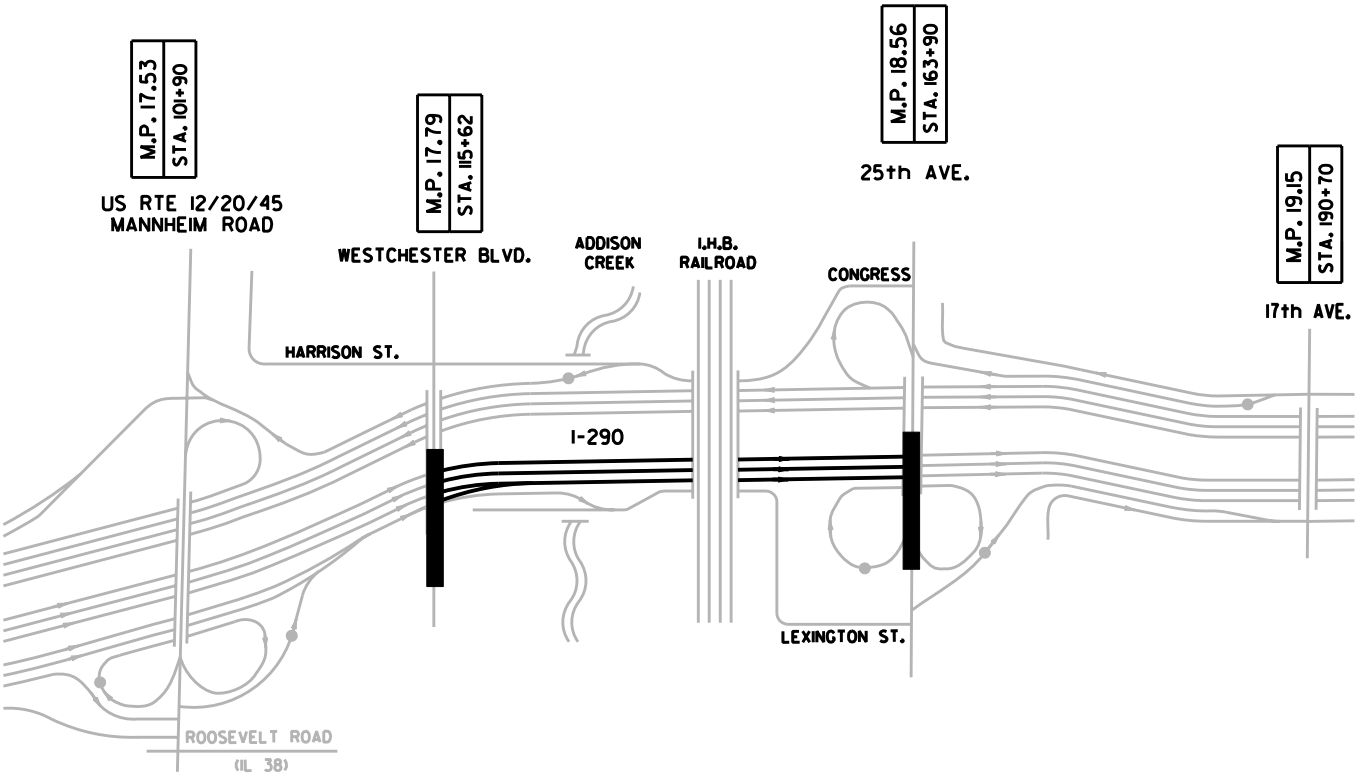
CRASHES BY SEGMENT

MAINLINE SEGMENT EB3

Westchester Boulevard to 25th Avenue
Length = 0.77 miles

N

NOT TO SCALE



EB3 Eastbound	0.77 Miles	Westchester Blvd to 25th Avenue

RANK (EB)	1 of 9
RATE	374 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	288	Crash Type:	Rear end	56%
Fatalities:	1	Weather Conditions:	Clear	82%
A Injuries:	1	Road Condition:	Dry	82%
B & C Injuries:	16	Time Period:	PM Peak	34%
Total Injuries:	18	Vehicle Type:	Passenger	60%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	162	56%	36%	31%	24%	98%	86%	10%	1%
Sideswipe same direction	95	33%	24%	24%	39%	98%	78%	21%	1%
Fixed object	20	7%	15%	10%	15%	60%	60%	15%	25%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

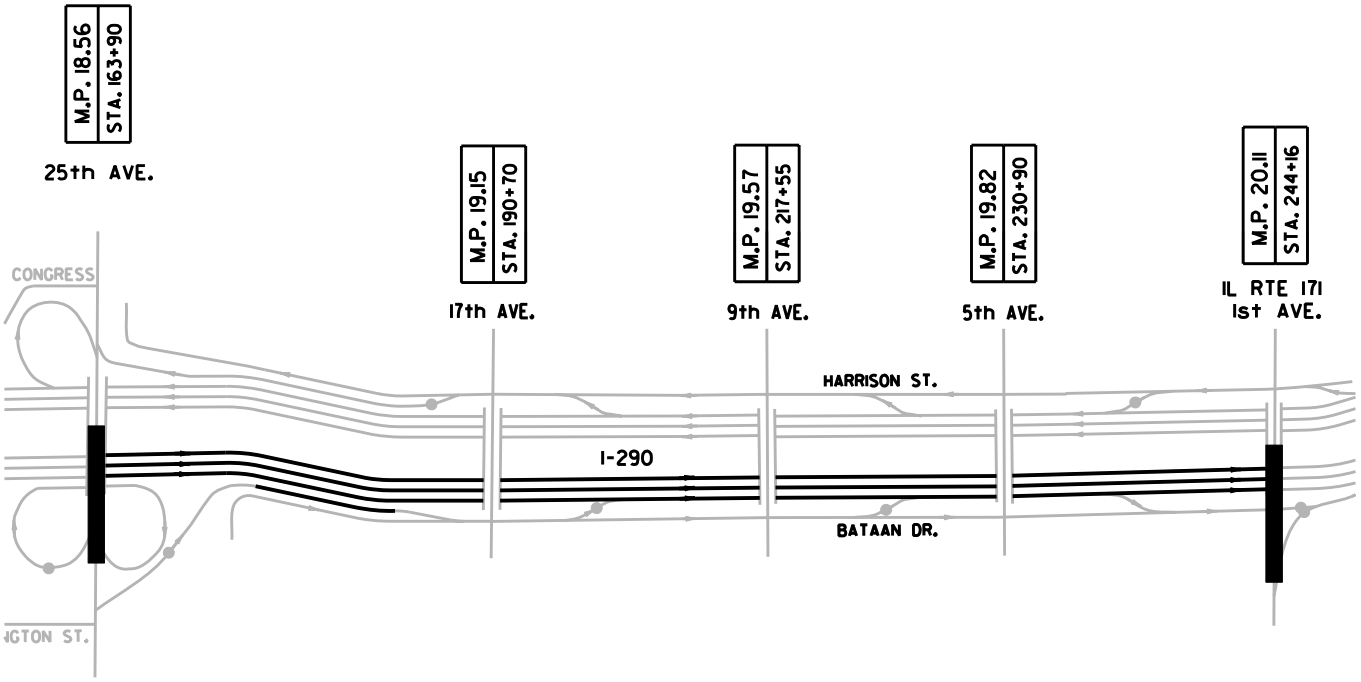
CRASHES BY SEGMENT

MAINLINE SEGMENT EB4

25th Avenue to 1st Avenue
Length = 1.55 miles

N

NOT TO SCALE



EB4 Eastbound	1.55 Miles	25th Avenue to 1st Avenue

RANK (EB)	2 of 9
RATE	329 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	510	Crash Type:	Rear end	78%
Fatalities:	0	Weather Conditions:	Clear	87%
A Injuries:	7	Road Condition:	Dry	82%
B & C Injuries:	34	Time Period:	PM Peak	31%
Total Injuries:	41	Vehicle Type:	Passenger	66%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	397	78%	29%	33%	25%	98%	82%	15%	1%
Sideswipe same direction	76	15%	33%	25%	11%	88%	83%	14%	1%
Fixed object	27	5%	11%	19%	0%	56%	74%	4%	22%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

CRASHES BY SEGMENT

MAINLINE SEGMENT EB5

1st Avenue to C.S.X. Railroad Overpass
Length = 1.18 miles

N

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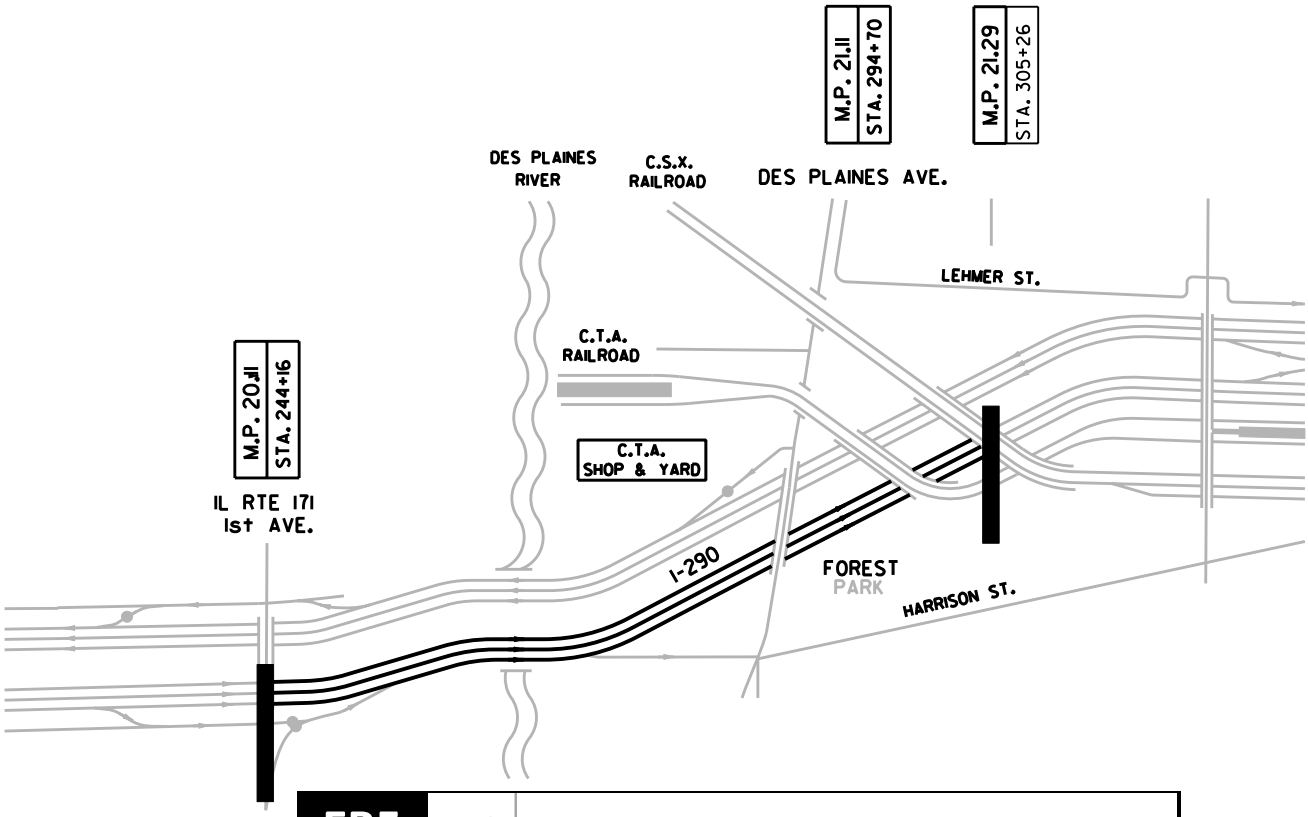


EB5 Eastbound	1.18 Miles	1st Avenue to CSX RR Overpass

RANK (EB): 4 of 9

RATE: 258 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	305	Crash Type:	Rear end	73%
Fatalities:	0	Weather Conditions:	Clear	88%
A Injuries:	2	Road Condition:	Dry	85%
B & C Injuries:	26	Time Period:	AM Peak	29%
Total Injuries:	28	Vehicle Type:	Passenger	72%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	222	73%	33%	24%	22%	94%	85%	11%	1%
Sideswipe same direction	47	15%	28%	21%	23%	83%	89%	6%	4%
Fixed object	29	10%	7%	7%	7%	48%	69%	28%	0%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

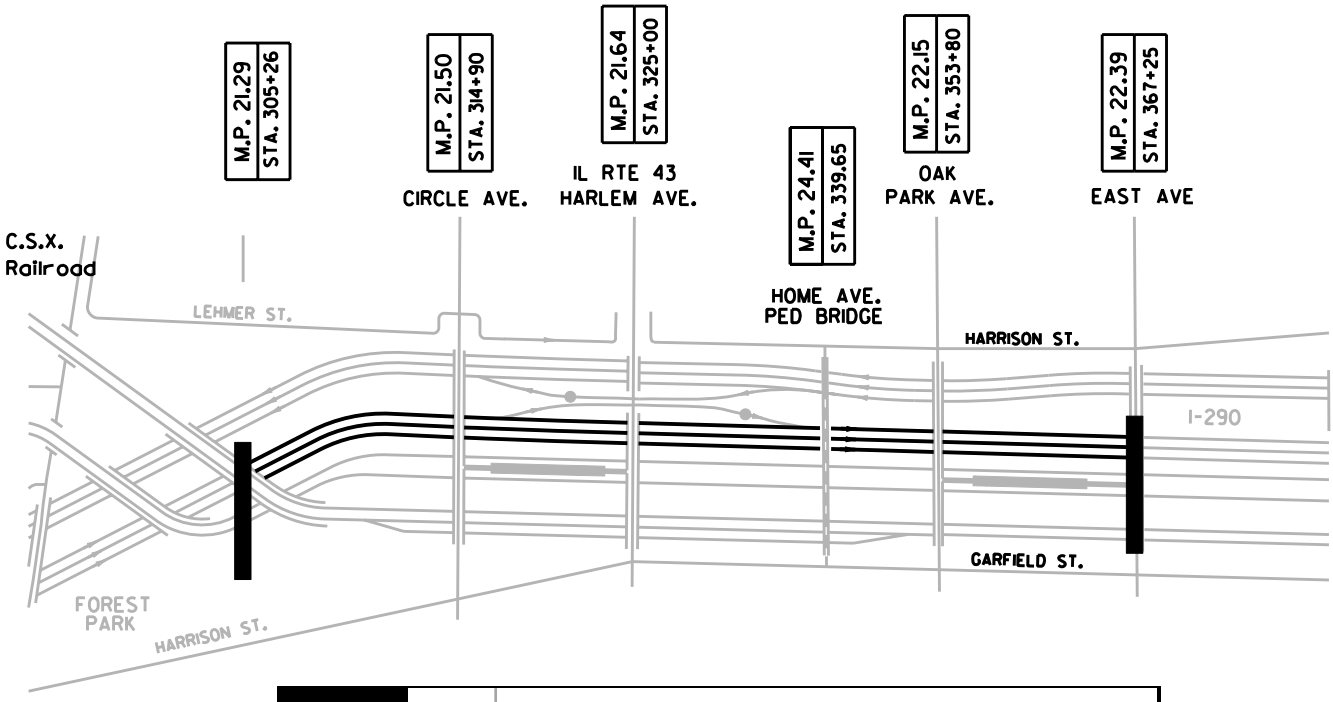
CRASHES BY SEGMENT

MAINLINE SEGMENT EB6

C.S.X. Railroad Overpass to East Avenue
Length = 1.10 miles

N

NOT TO SCALE



EB6 Eastbound	1.10 Miles	CSX RR Overpass to East Ave

RANK (EB)	5 of 9
RATE	218 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	240	Crash Type:	Rear end	70%
Fatalities:	0	Weather Conditions:	Clear	84%
A Injuries:	5	Road Condition:	Dry	81%
B & C Injuries:	19	Time Period:	AM Peak	31%
Total Injuries:	24	Vehicle Type:	Passenger	72%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	168	70%	35%	26%	17%	95%	82%	14%	4%
Sideswipe same direction	48	20%	25%	23%	6%	65%	83%	10%	4%
Fixed object	22	9%	9%	14%	0%	36%	64%	27%	5%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

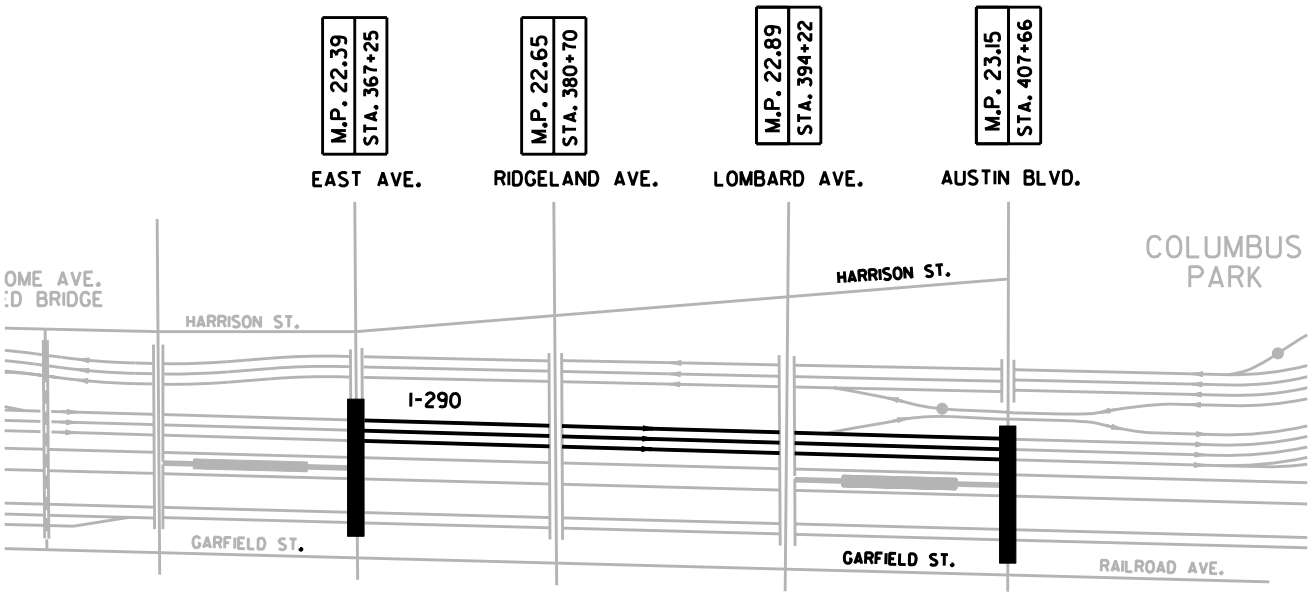
CRASHES BY SEGMENT

MAINLINE SEGMENT EB7

East Avenue to Austin Boulevard
Length = 0.76 miles

N

NOT TO SCALE



EB7 Eastbound	0.76 Miles	East Ave to Austin Boulevard

RANK (EB)	9 of 9
RATE	103 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	78	Crash Type:	Rear end	46%
Fatalities:	1	Weather Conditions:	Clear	83%
A Injuries:	2	Road Condition:	Dry	79%
B & C Injuries:	6	Time Period:	AM Peak	33%
Total Injuries:	9	Vehicle Type:	Passenger	69%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	36	46%	47%	11%	6%	78%	86%	6%	6%
Sideswipe same direction	18	23%	11%	28%	0%	56%	89%	6%	6%
Fixed object	14	18%	43%	7%	0%	50%	57%	14%	29%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

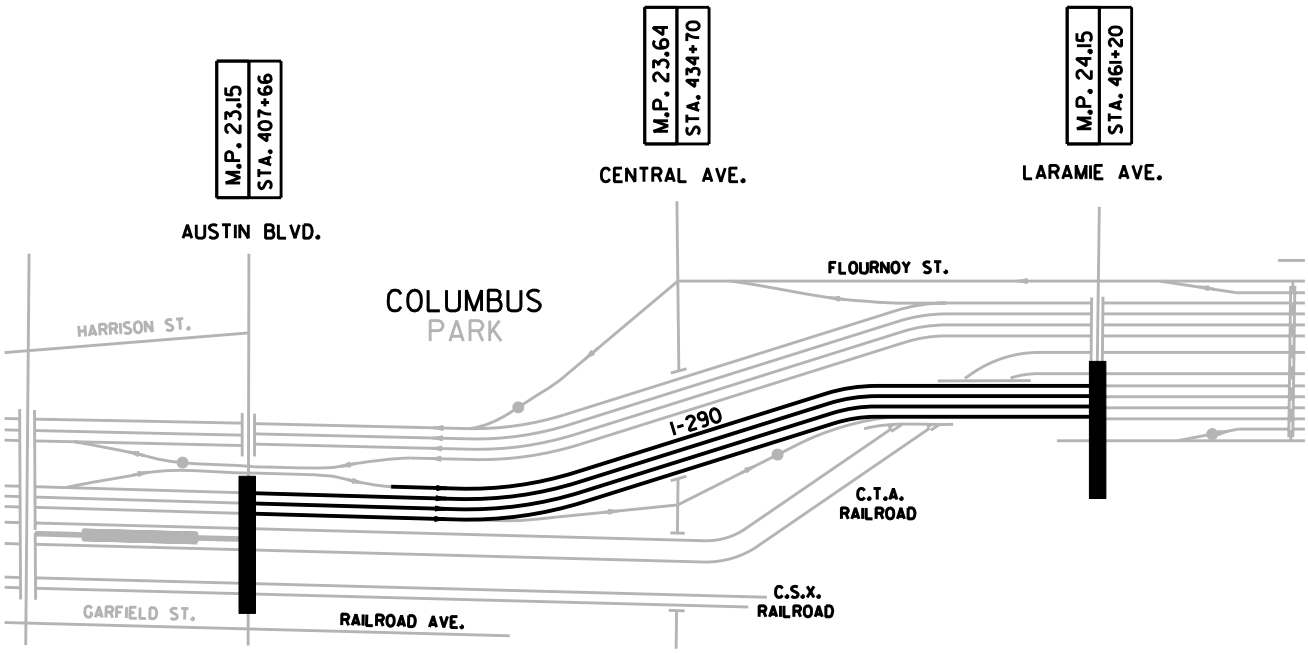
CRASHES BY SEGMENT

MAINLINE SEGMENT EB8

Austin Boulevard to Laramie Avenue
Length = 1.00 miles

N

NOT TO SCALE



EB8 Eastbound	1.00 Miles	Austin Avenue to Laramie Avenue				
RANK (EB)	6 of 9	**Statistics**		**Predominant Crash Factors**		
		Total Crashes:	152	**Crash Type:**	swipe same direc	38%
		Fatalities:	0	**Weather Conditions:**	Clear	76%
RATE	152 Crashes/mile	**A Injuries:**	1	**Road Condition:**	Dry	72%
		B & C Injuries:	11	**Time Period:**	AM Peak	26%
		Total Injuries:	12	**Vehicle Type:**	Passenger	65%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Sideswipe same direction	57	38%	23%	33%	7%	81%	70%	16%	12%
Rear End	55	36%	40%	15%	15%	89%	76%	7%	15%
Fixed object	29	19%	10%	7%	10%	41%	66%	17%	17%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

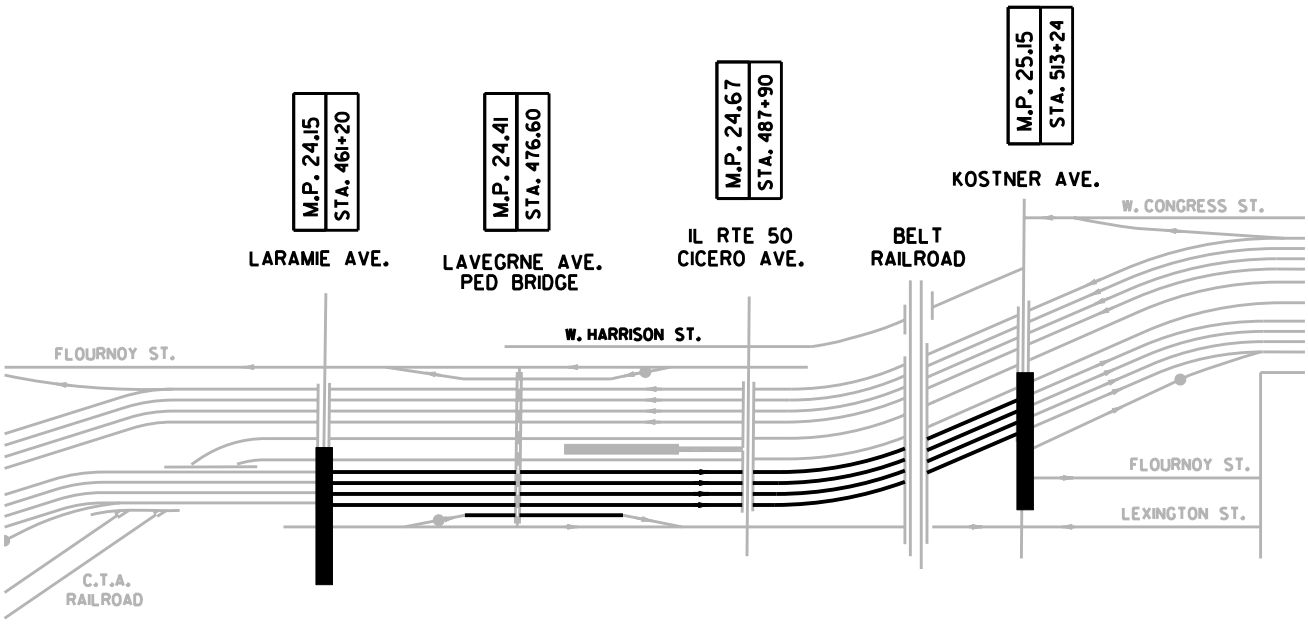
CRASHES BY SEGMENT

MAINLINE SEGMENT EB9

Laramie Avenue to Kostner Avenue
Length = 1.00 miles

N

NOT TO SCALE



EB9 Eastbound	1.00 Miles	Laramie Avenue to Kostner Avenue			
RANK (EB) 7 of 9		**Statistics**		**Predominant Crash Factors**	
		Total Crashes:	132	**Crash Type:** Rear end	52%
		Fatalities:	0	**Weather Conditions:** Clear	77%
RATE 132 Crashes/mile		**A Injuries:**	4	**Road Condition:** Dry	73%
		B & C Injuries:	9	**Time Period:** AM Peak	31%
		Total Injuries:	13	**Vehicle Type:** Passenger	66%

Predominant Crash Type	# of Crashes	%of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	69	52%	42%	25%	12%	90%	78%	19%	1%
Sideswipe same direction	31	23%	26%	13%	16%	58%	68%	23%	10%
Fixed object	24	18%	4%	21%	17%	50%	63%	8%	21%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

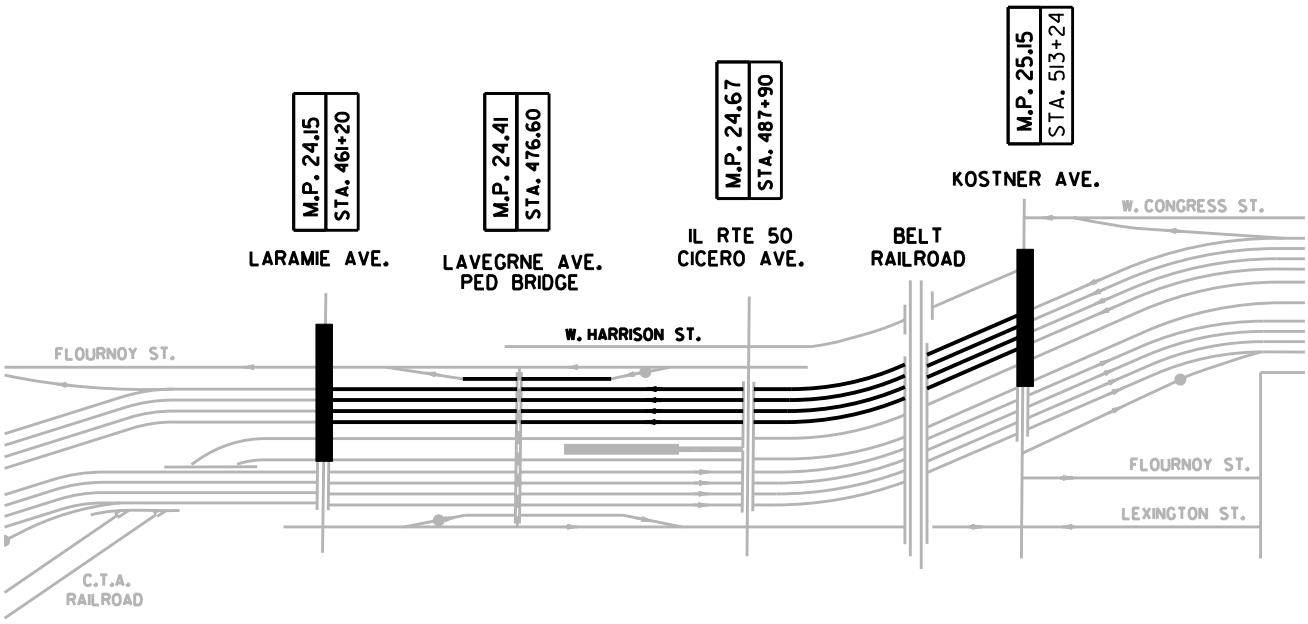
CRASHES BY SEGMENT

MAINLINE SEGMENT WB1

Kostner Avenue to Laramie Avenue
Length = 1.00 miles

N

NOT TO SCALE



WB1 Westbound	1.00 Miles	Kostner Avenue to Laramie Avenue				
RANK (WB)	4 of 9	**Statistics**		**Predominant Crash Factors**		
		Total Crashes:	298	**Crash Type:**	Rear end	72%
		Fatalities:	0	**Weather Conditions:**	Clear	86%
RATE	298 Crashes/mile	**A Injuries:**	3	**Road Condition:**	Dry	84%
		B & C Injuries:	17	**Time Period:**	Midday	37%
		Total Injuries:	20	**Vehicle Type:**	Passenger	67%

Predominant Crash type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	216	72%	20%	41%	33%	97%	88%	9%	2%
Sideswipe same direction	53	18%	17%	34%	9%	74%	77%	19%	2%
Fixed object	26	9%	12%	8%	4%	42%	73%	19%	8%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

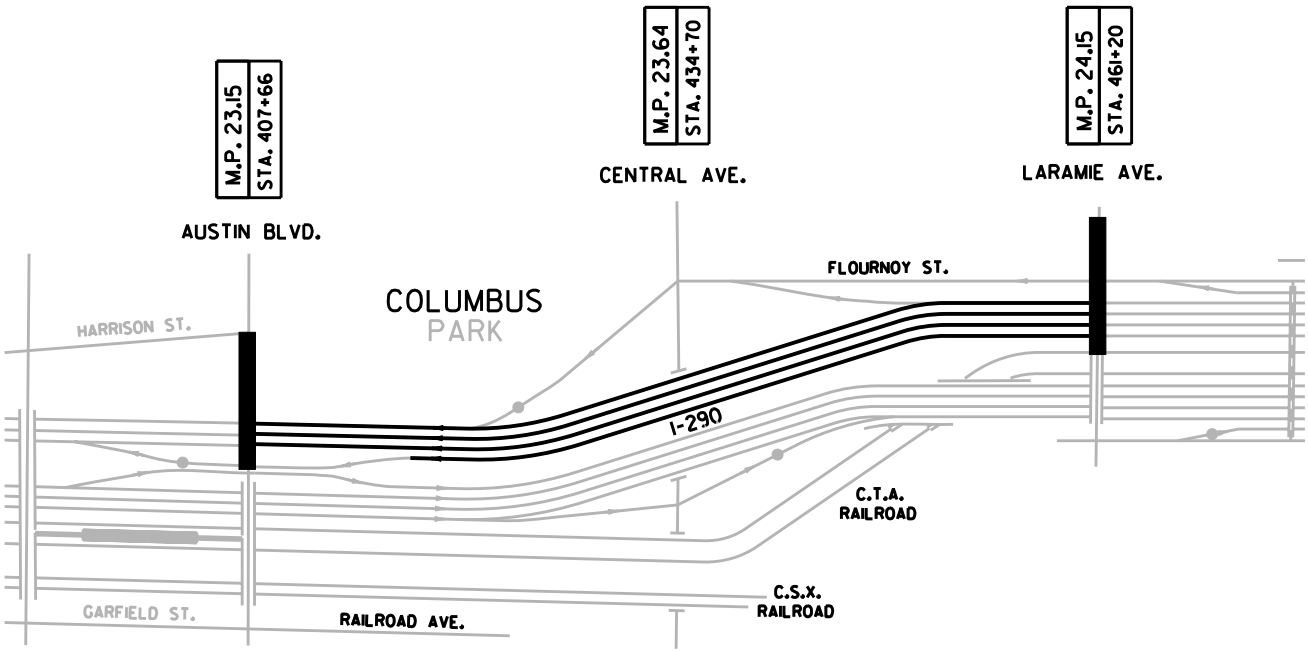
CRASHES BY SEGMENT

MAINLINE SEGMENT WB2

Laramie Avenue to Austin Boulevard
Length = 1.00 miles

N

NOT TO SCALE



WB2 Westbound	1.00 Miles	Laramie Avenue to Austin Avenue

RANK (WB)	1 of 9
RATE	537 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	537	Crash Type:	Rear end	77%
Fatalities:	1	Weather Conditions:	Clear	87%
A Injuries:	6	Road Condition:	Dry	84%
B & C Injuries:	31	Time Period:	PM Peak	32%
Total Injuries:	38	Vehicle Type:	Passenger	70%

Predominant Crash type	# of Crashes	%of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	411	77%	20%	32%	27%	93%	86%	9%	3%
Sideswipe same direction	84	16%	20%	18%	24%	77%	85%	12%	2%
Fixed object	29	5%	14%	10%	0%	41%	52%	28%	21%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

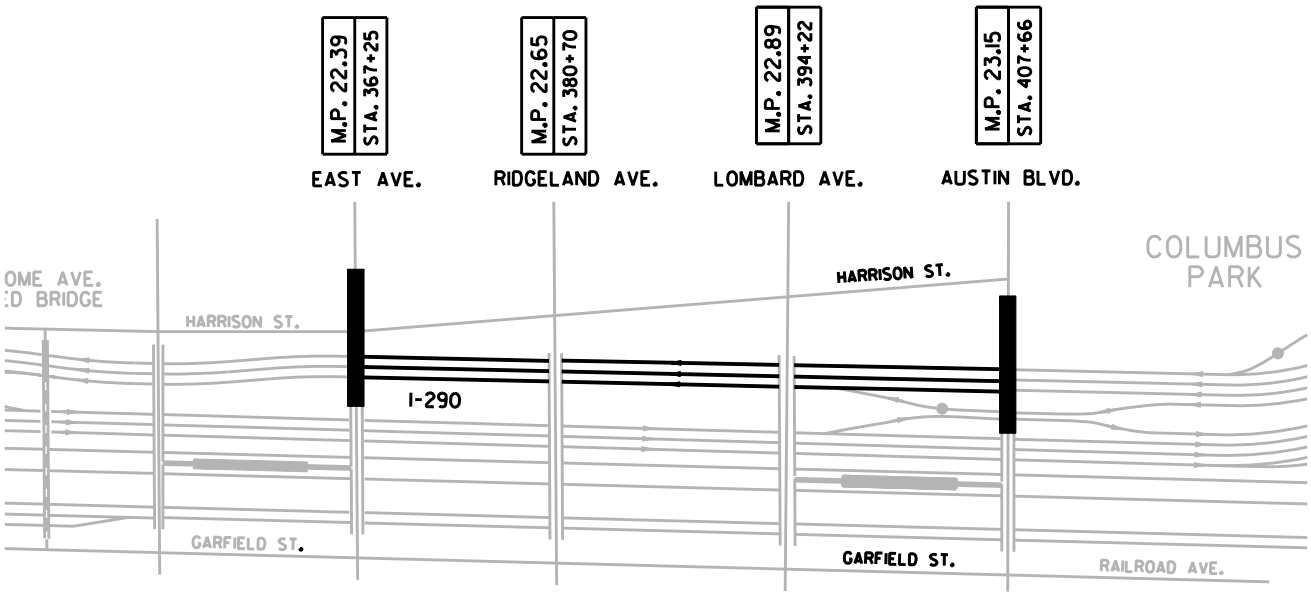
CRASHES BY SEGMENT

MAINLINE SEGMENT WB3

Austin Boulevard to East Avenue
Length = 0.76 miles

N

NOT TO SCALE



WB3 Westbound	0.76 Miles	Austin Boulevard to East Ave			
RANK (WB) 3 of 9		**Statistics**		**Predominant Crash Factors**	
		Total Crashes:	238	**Crash Type:** Rear end	80%
		Fatalities:	2	**Weather Conditions:** Clear	91%
RATE 313 Crashes/mile		**A Injuries:**	6	**Road Condition:** Dry	88%
		B & C Injuries:	22	**Time Period:** Midday	37%
		Total Injuries:	30	**Vehicle Type:** Passenger	72%

Predominant Crash type	# of Crashes	%of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	190	80%	24%	41%	21%	95%	89%	7%	3%
Sideswipe same direction	25	11%	8%	36%	12%	76%	96%	4%	0%
Fixed object	13	5%	23%	23%	0%	62%	62%	15%	23%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

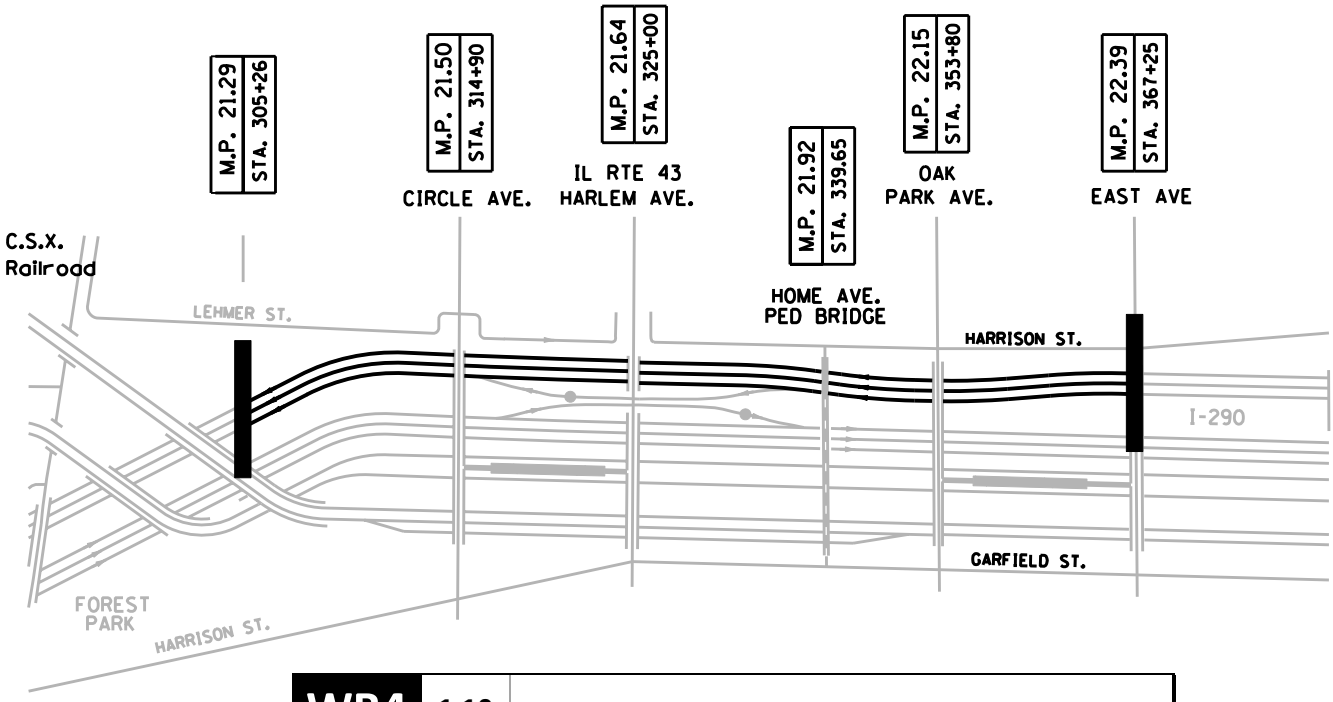
CRASHES BY SEGMENT

MAINLINE SEGMENT WB4

East Avenue to C.S.X. Railroad Overpass
Length = 1.10 miles

N

NOT TO SCALE



WB4 Westbound	1.10 Miles	East Ave to CSX RR Overpass

RANK (WB)	2 of 9
RATE	352 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	387	Crash Type:	Rear end	70%
Fatalities:	1	Weather Conditions:	Clear	86%
A Injuries:	6	Road Condition:	Dry	82%
B & C Injuries:	32	Time Period:	PM Peak	31%
Total Injuries:	39	Vehicle Type:	Passenger	68%

Predominant Crash type	# of Crashes	%of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	269	70%	29%	30%	28%	95%	84%	10%	3%
Sideswipe same direction	70	18%	16%	29%	26%	86%	80%	13%	6%
Fixed object	33	9%	9%	18%	6%	45%	70%	15%	15%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

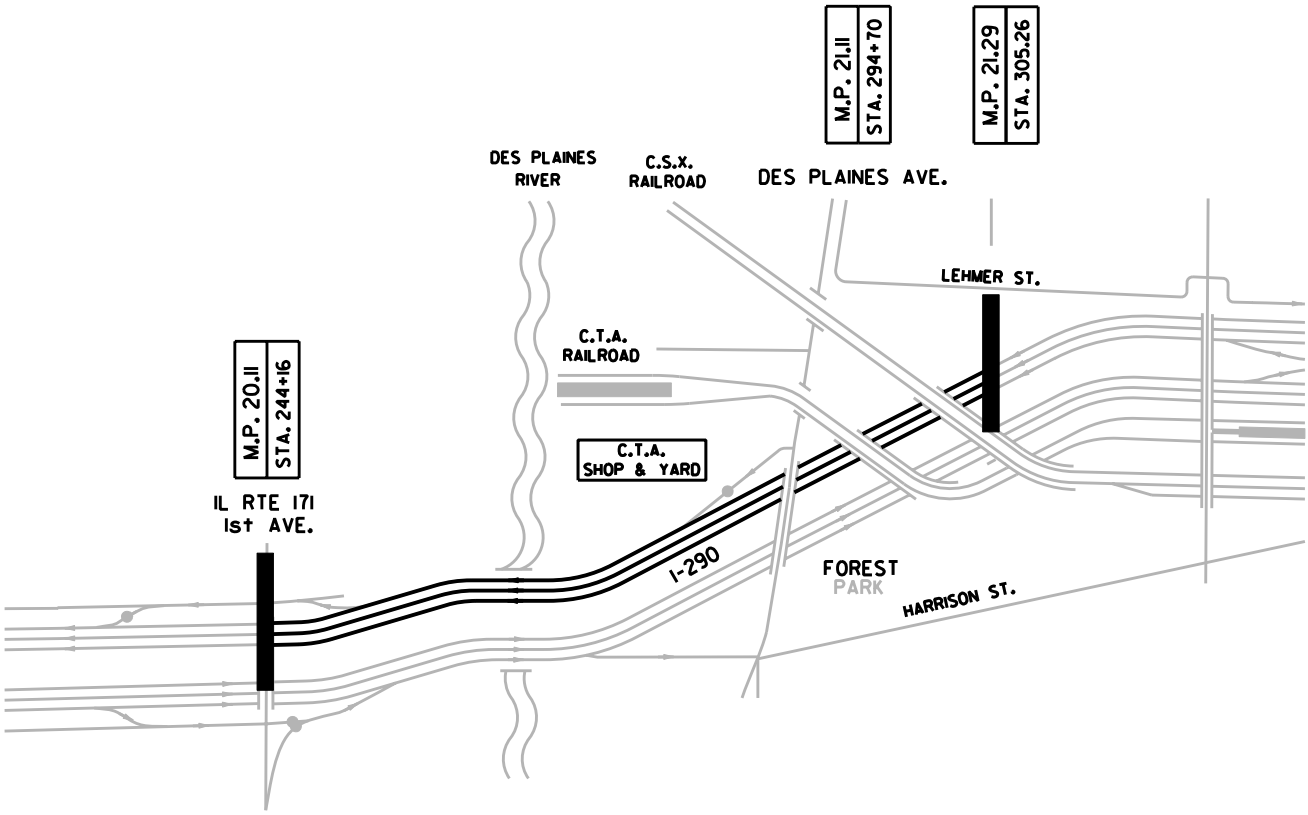
CRASHES BY SEGMENT

MAINLINE SEGMENT WB5

C.S.X. Railroad Overpass to 1st Avenue
Length = 1.18 miles

N

NOT TO SCALE



WB5 Westbound	1.18 Miles	CSX RR Overpass to 1st Avenue			
RANK (WB)	5 of 9	**Statistics**		**Predominant Crash Factors**	
		Total Crashes:	258	**Crash Type:** Rear end	60%
		Fatalities:	1	**Weather Conditions:** Clear	78%
RATE	219 Crashes/mile	**A Injuries:**	2	**Road Condition:** Dry	75%
		B & C Injuries:	16	**Time Period:** AM Peak	28%
		Total Injuries:	19	**Vehicle Type:** Passenger	66%

Predominant Crash type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	154	60%	35%	31%	19%	91%	84%	14%	1%
Sideswipe same direction	50	19%	20%	22%	14%	68%	76%	24%	0%
Fixed object	39	15%	15%	3%	0%	28%	41%	46%	10%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

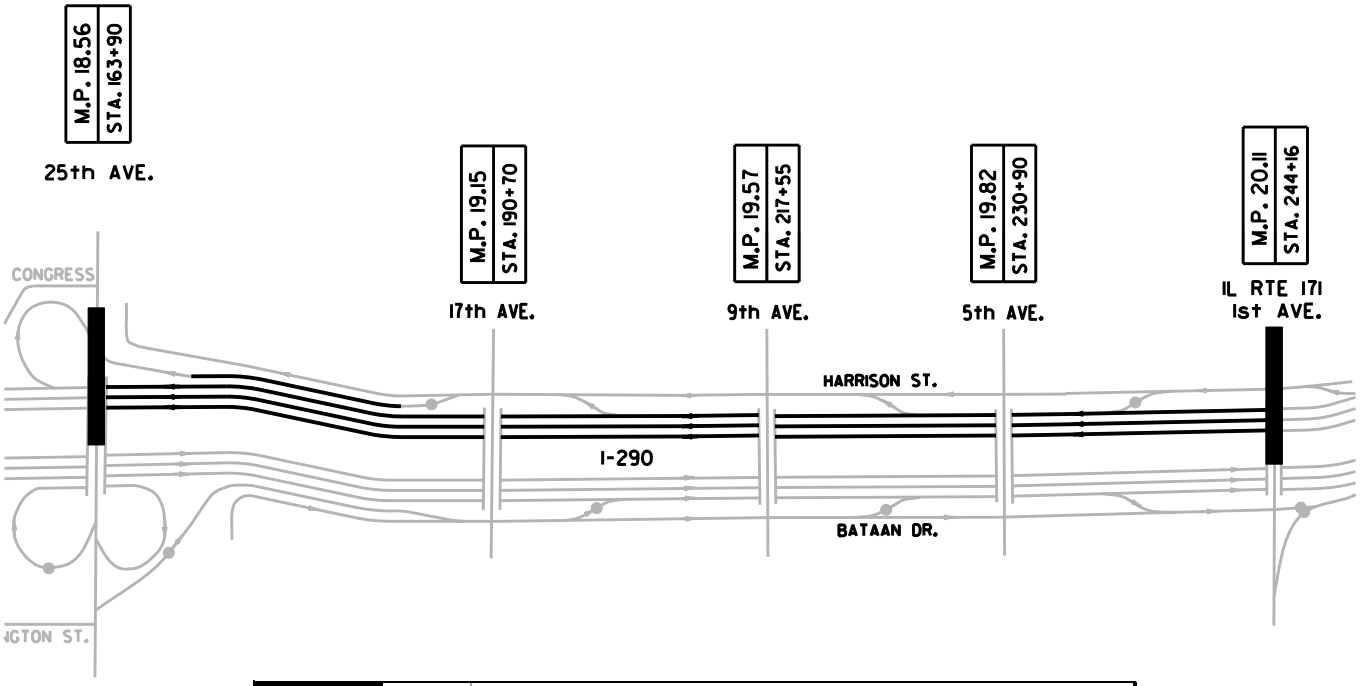
CRASHES BY SEGMENT

MAINLINE SEGMENT WB6

1st Avenue to 25th Avenue
Length = 1.55 miles

N

NOT TO SCALE



WB6 Westbound	1.55 Miles	1st Avenue to 25th Avenue

RANK (WB)	6 of 9
RATE	190 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	294	Crash Type:	Rear end	63%
Fatalities:	1	Weather Conditions:	Clear	87%
A Injuries:	3	Road Condition:	Dry	84%
B & C Injuries:	32	Time Period:	AM Peak	32%
Total Injuries:	36	Vehicle Type:	Passenger	69%

Predominant Crash type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	185	63%	38%	25%	17%	87%	82%	12%	4%
Sideswipe same direction	58	20%	21%	33%	7%	72%	86%	5%	5%
Fixed object	36	12%	19%	19%	6%	64%	81%	11%	8%

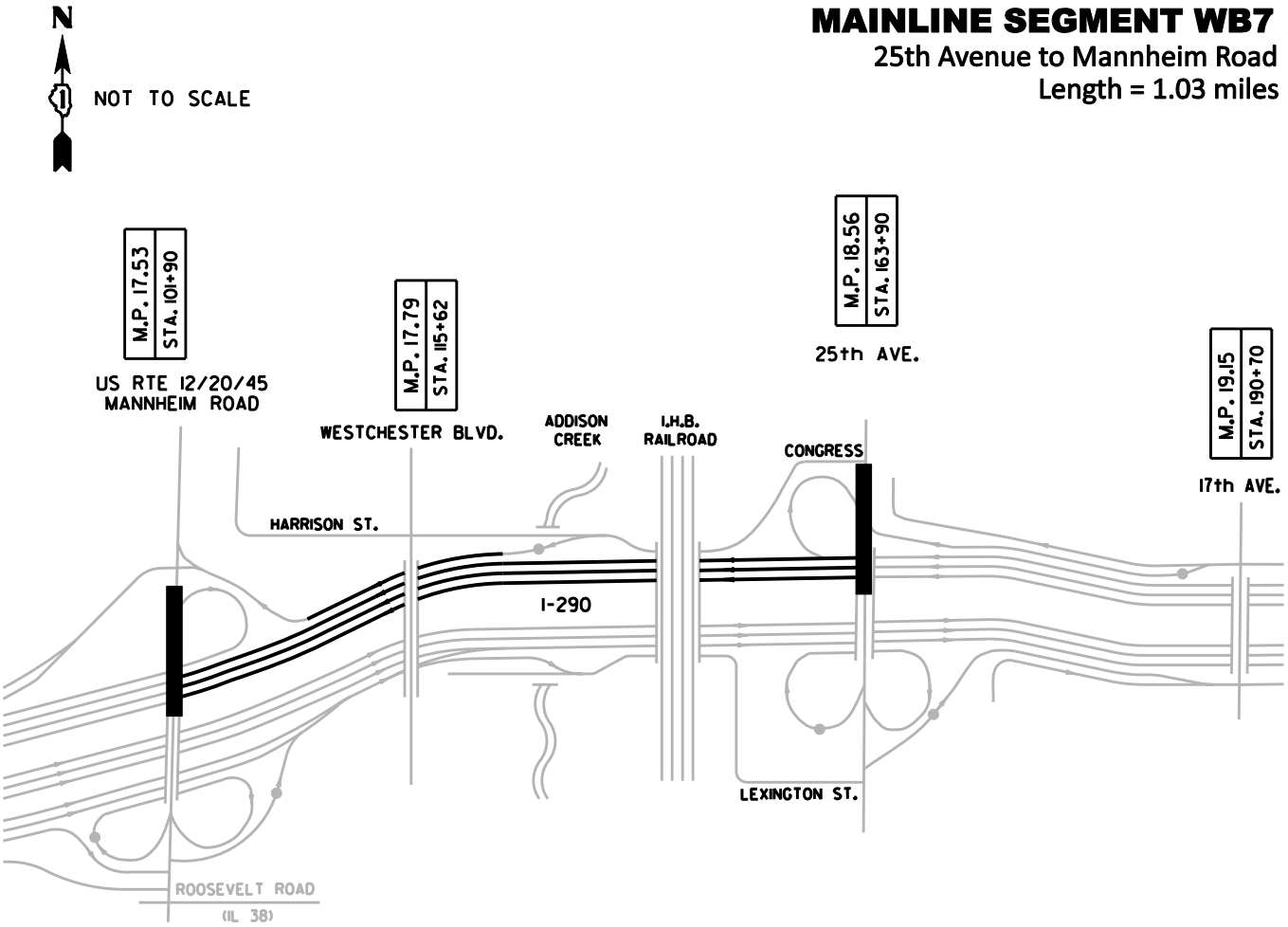
LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

CRASHES BY SEGMENT

MAINLINE SEGMENT WB7

25th Avenue to Mannheim Road
Length = 1.03 miles



WB7 Westbound	1.03 Miles	25th Avenue to Mannheim Road

RANK (WB)	9 of 9
RATE	95 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	98	Crash Type:	Rear end	36%
Fatalities:	0	Weather Conditions:	Clear	79%
A Injuries:	3	Road Condition:	Dry	74%
B & C Injuries:	7	Time Period:	AM Peak	23%
Total Injuries:	10	Vehicle Type:	Passenger	69%

Predominant Crash type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	35	36%	29%	26%	17%	80%	83%	9%	9%
Sideswipe same direction	32	33%	25%	25%	22%	84%	69%	16%	13%
Fixed object	19	19%	11%	0%	0%	26%	68%	21%	11%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

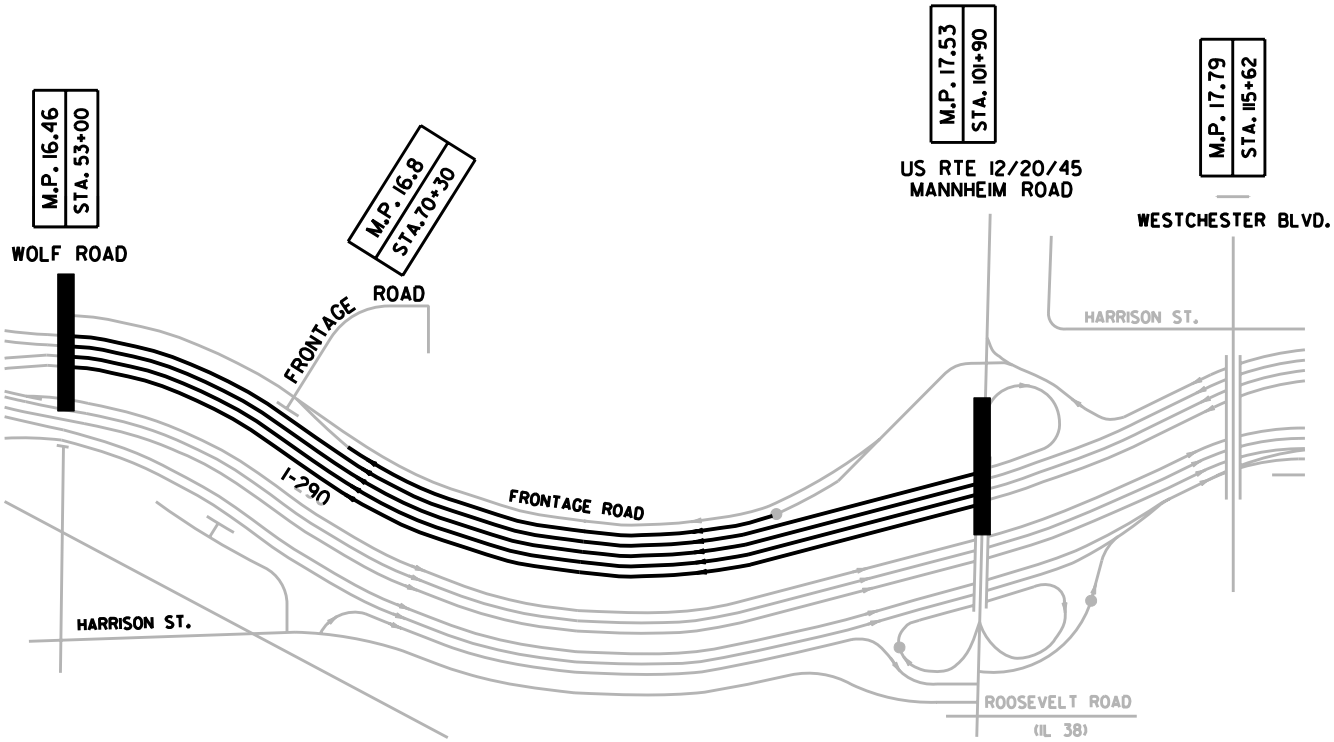
CRASHES BY SEGMENT

MAINLINE SEGMENT WB8

Mannheim Road to Wolf Road
Length = 1.07 miles

N

NOT TO SCALE



WB8 Westbound	1.07 Miles	Mannheim Road to Wolf Road			
RANK (WB) 7 of 9		**Statistics**		**Predominant Crash Factors**	
		Total Crashes:	121	**Crash Type:**	swipe same direc 41%
		Fatalities:	0	**Weather Conditions:**	Clear 77%
RATE 113 Crashes/mile		**A Injuries:**	2	**Road Condition:**	Dry 69%
		B & C Injuries:	8	**Time Period:**	AM Peak 28%
		Total Injuries:	10	**Vehicle Type:**	Passenger 67%

Predominant Crash type	# of Crashes	%of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	41	34%	41%	17%	20%	90%	73%	17%	7%
Sideswipe same direction	50	41%	20%	24%	12%	70%	70%	22%	6%
Fixed object	18	15%	22%	17%	6%	61%	78%	6%	17%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

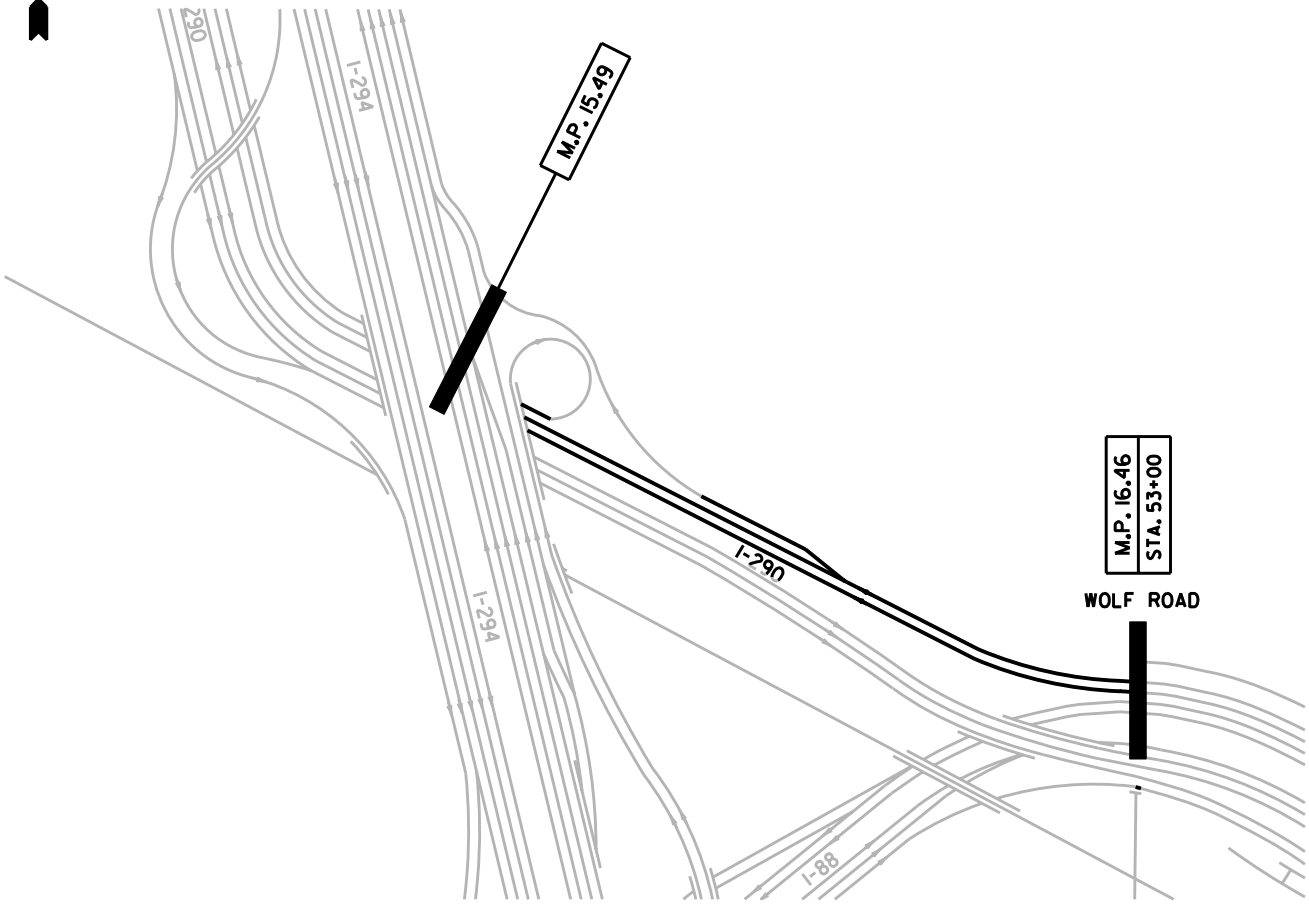
CRASHES BY SEGMENT

MAINLINE SEGMENT WB9

Wolf Road to West of Wolf Road
Length = 0.96 miles

N

NOT TO SCALE



WB9 Westbound	0.96 Miles	Wolf Road to West of Wolf Road

RANK (WB)	8 of 9
RATE	113 Crashes/mile

Statistics		Predominant Crash Factors		
Total Crashes:	108	Crash Type:	Fixed object	34%
Fatalities:	1	Weather Conditions:	Clear	71%
A Injuries:	9	Road Condition:	Dry	66%
B & C Injuries:	13	Time Period:	Early Morning	29%
Total Injuries:	23	Vehicle Type:	Passenger	65%

Predominant Crash Type	# of Crashes	% of All Crashes	AM Peak 6a to 11a	Midday 11a to 4p	PM Peak 4p to 7p	Congested Period 6a to 11p	Dry	Wet	Ice Snow Slush
Rear end	32	30%	28%	13%	13%	75%	84%	9%	3%
Sideswipe same direction	32	30%	22%	13%	22%	78%	72%	13%	13%
Fixed object	37	34%	24%	14%	3%	54%	46%	30%	24%

LEGEND

- MAINLINE LANE
- RAMP, SURFACE STREETS
- METERED RAMP
- ONE-WAY
- RAILROAD
- M.P. I-290 MILE POST

Technical Memorandum

Appendix E

Mainline Segment Crash Summary Reports

I-290 EB & WB

West of Wolf Road to Kostner Avenue

Milepost From	15.49	19.31 Miles
Milepost To	25.15	

Total Crashes	**4559**
Crash Rate	**236.1** crashes/mile

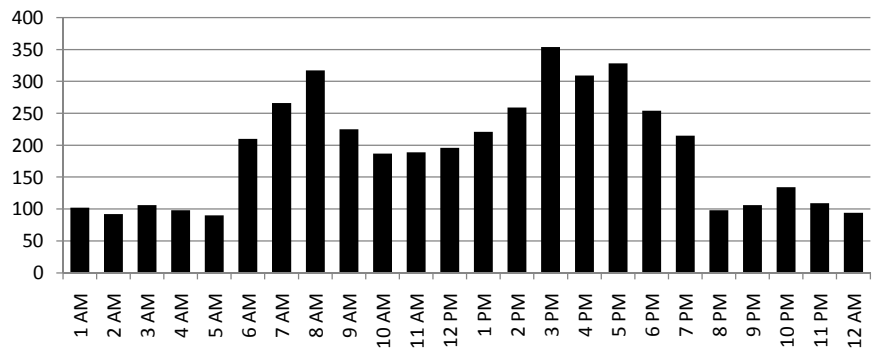
Injury Statistics

Fatal	**9**
A Injury	**68**
B & C Injury	**333**
Total Injuries	**410**
Injury Rate	**21.2** Injuries/mile

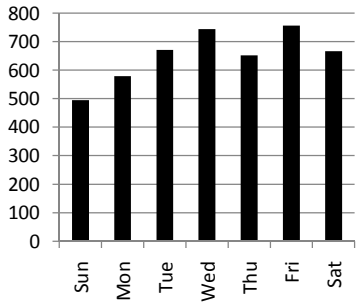
Predominant Crash Factors

Crash Type:	Rear end	64%
Weather Condition:	Clear	83%
Road Condition:	Dry	80%
Lighting Condition:	Daylight	68%
Time of Day:	Midday	27%
Vehicle Type:	Passenger	68%

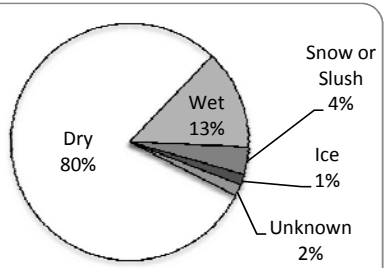
Crashes by Time of Day



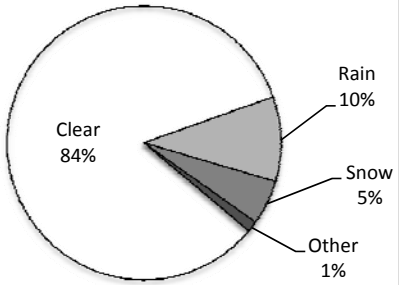
Crashes by Day of Week



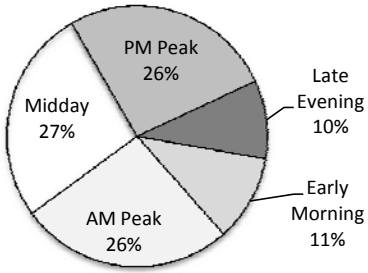
Road Condition



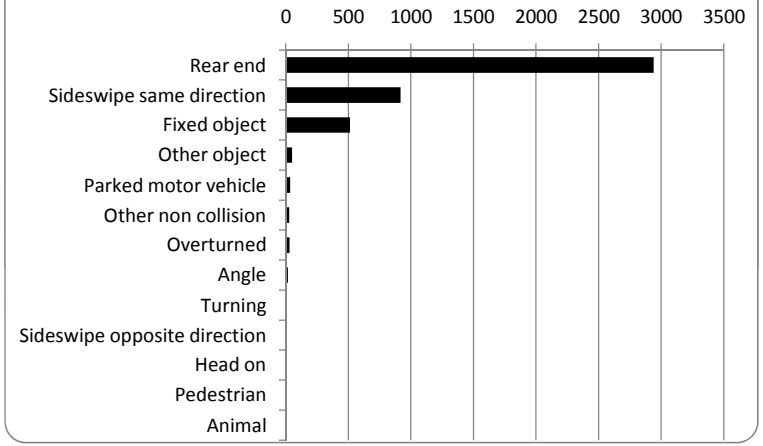
Weather Condition



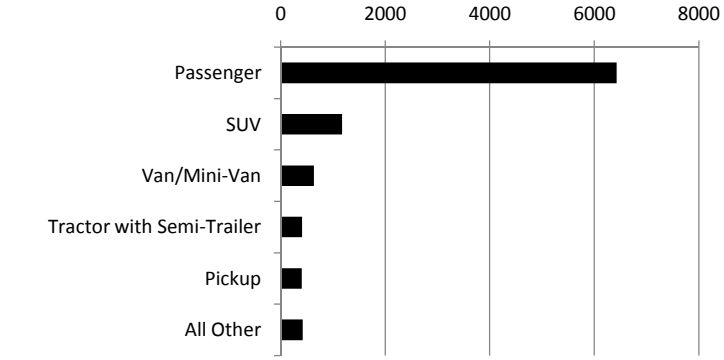
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



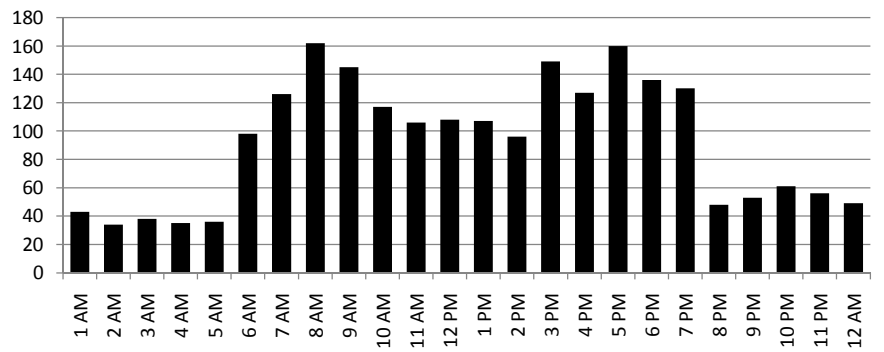
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

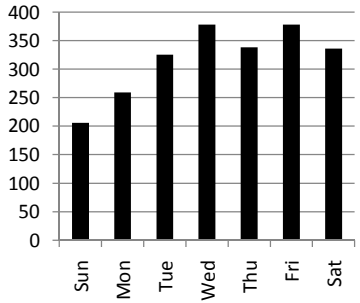
Three Year Crash Statistics

2006, 2007, 2008

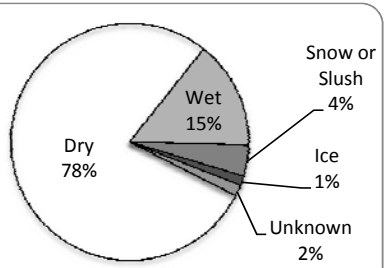
Crashes by Time of Day



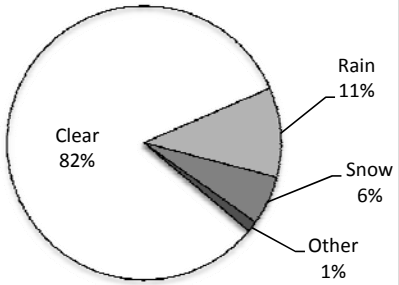
Crashes by Day of Week



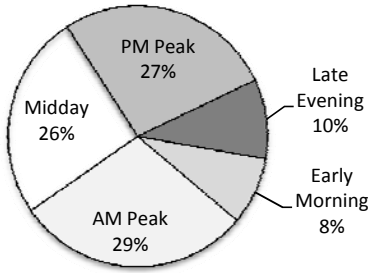
Road Condition



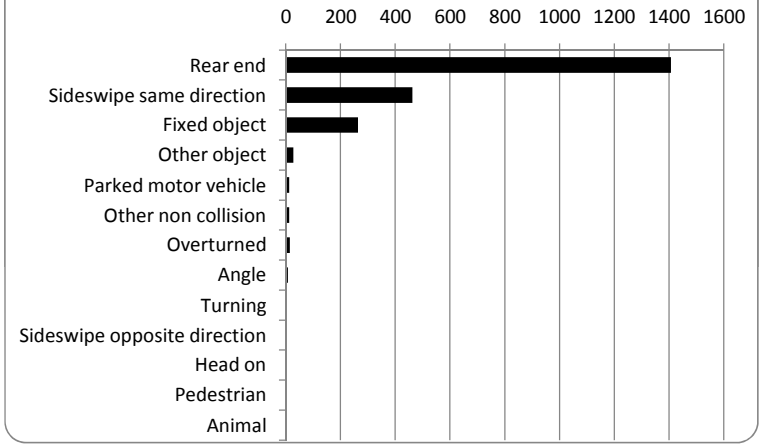
Weather Condition



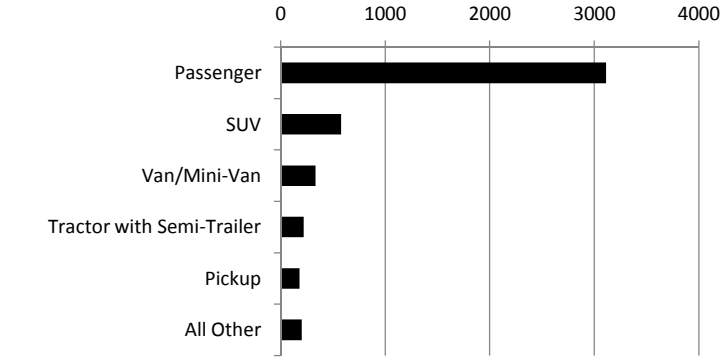
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



I-290 Eastbound	ALL
West of Wolf Road to Kostner Avenue	Eastbound

Milepost From	15.49	9.66 Miles
Milepost To	25.15	

Total Crashes	2220
Crash Rate	229.8 crashes/mile

Injury Statistics

Fatal	2
A Injury	28
B & C Injury	155
Total Injuries	185
Injury Rate	19.2 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	63%
Weather Condition:	Clear	82%
Road Condition:	Dry	78%
Lighting Condition:	Daylight	69%
Time of Day:	AM Peak	29%
Vehicle Type:	Passenger	67%

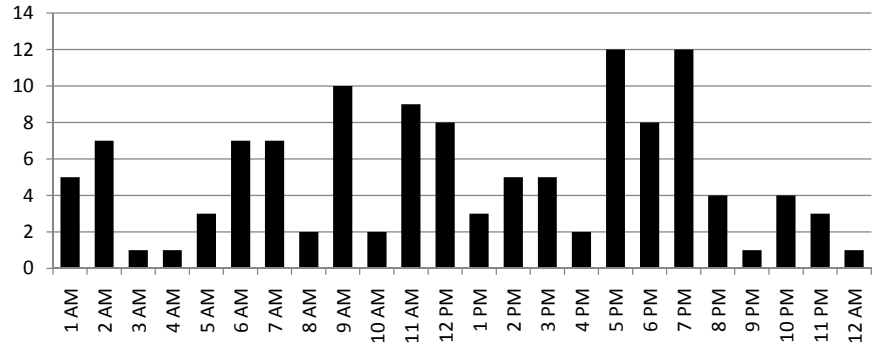
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

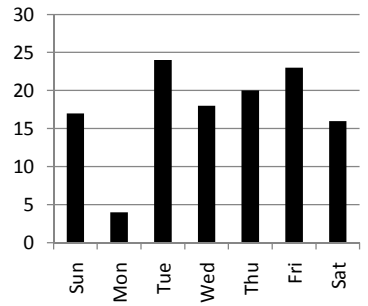
Three Year Crash Statistics

2006, 2007, 2008

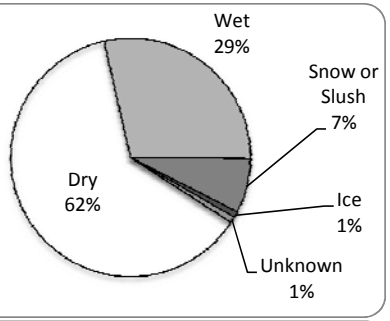
Crashes by Time of Day



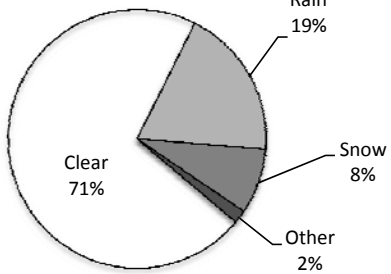
Crashes by Day of Week



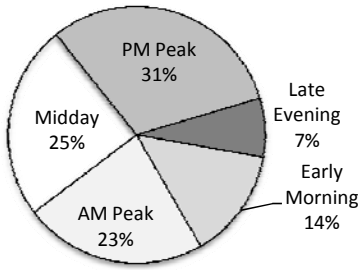
Road Condition



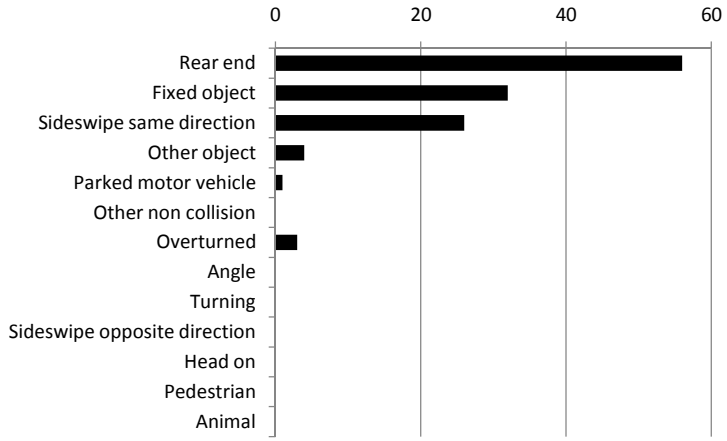
Weather Condition



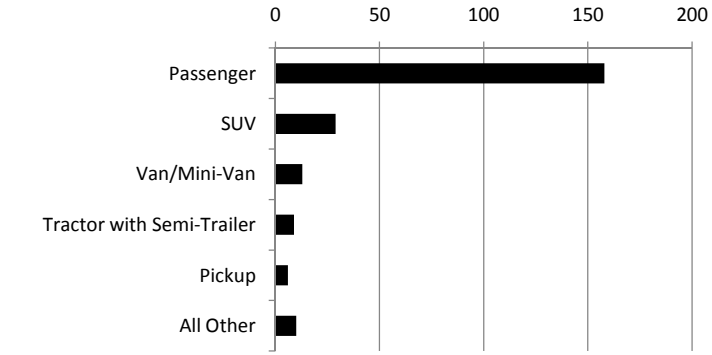
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	EB1
West of Wolf Road to Wolf Road	Eastbound

Milepost From	15.49	0.97 Miles
Milepost To	16.46	

Total Crashes	122
Crash Rate	125.8 crashes/mile

Injury Statistics

Fatal	0
A Injury	1
B & C Injury	13
Total Injuries	14
Injury Rate	14.4 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	46%
Weather Condition:	Clear	71%
Road Condition:	Dry	62%
Lighting Condition:	Daylight	60%
Time of Day:	PM Peak	31%
Vehicle Type:	Passenger	70%

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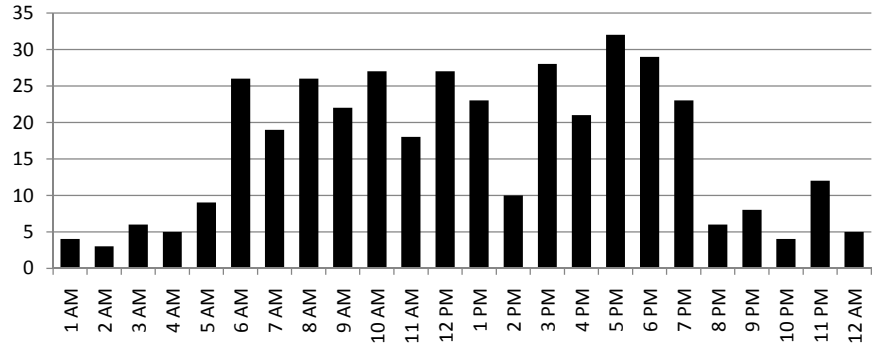
I-290 Preliminary Engineering and Environmental Study (Phase I)

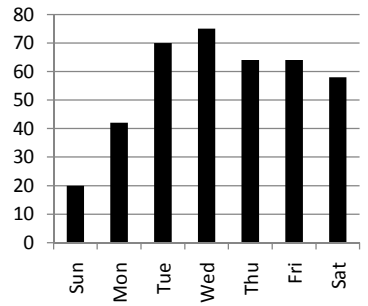
Three Year Crash Statistics

2006, 2007, 2008

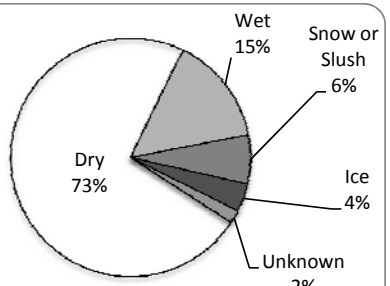
Crashes by Time of Day



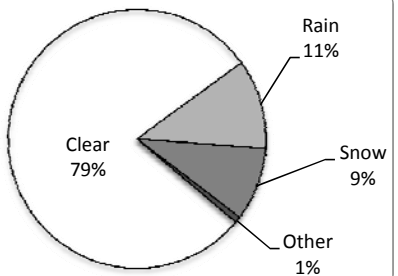
Crashes by Day of Week



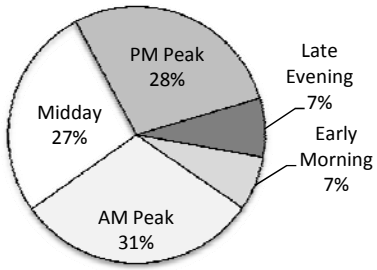
Road Condition



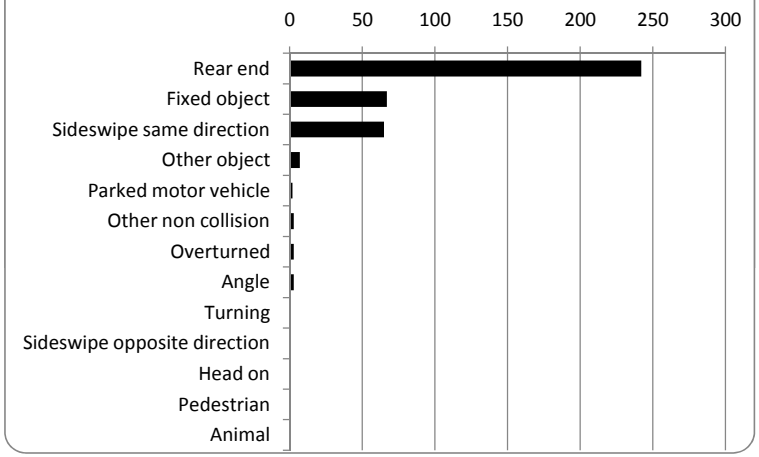
Weather Condition



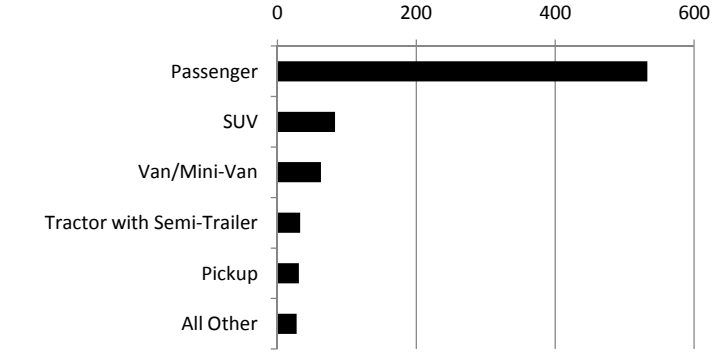
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	EB2
Wolf Road to Westchester Blvd	Eastbound

Milepost From	16.46	1.33 Miles
Milepost To	17.79	

Total Crashes	393
Crash Rate	295.5 crashes/mile

Injury Statistics

Fatal	0
A Injury	5
B & C Injury	21
Total Injuries	26
Injury Rate	19.5 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	62%
Weather Condition:	Clear	79%
Road Condition:	Dry	73%
Lighting Condition:	Daylight	73%
Time of Day:	AM Peak	31%
Vehicle Type:	Passenger	69%

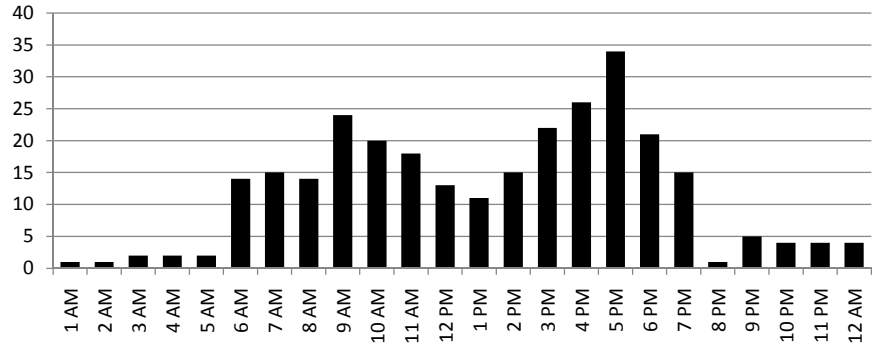
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

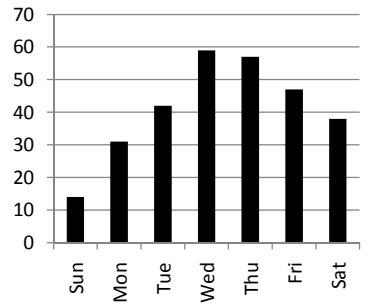
Three Year Crash Statistics

2006, 2007, 2008

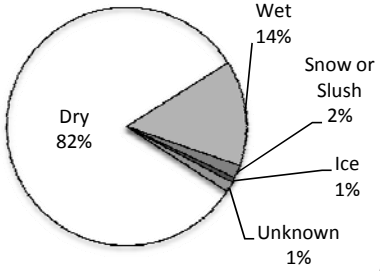
Crashes by Time of Day



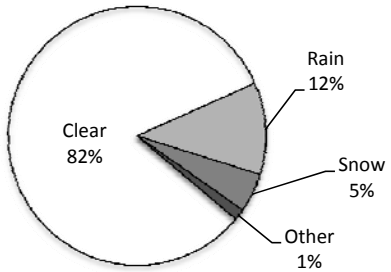
Crashes by Day of Week



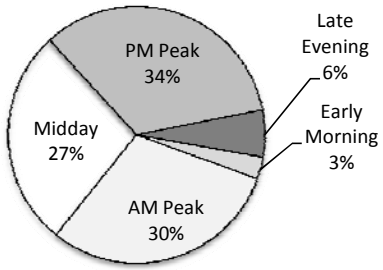
Road Condition



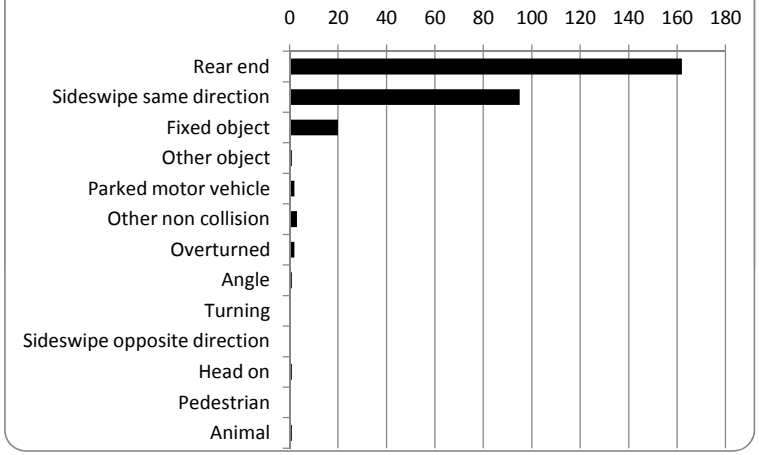
Weather Condition



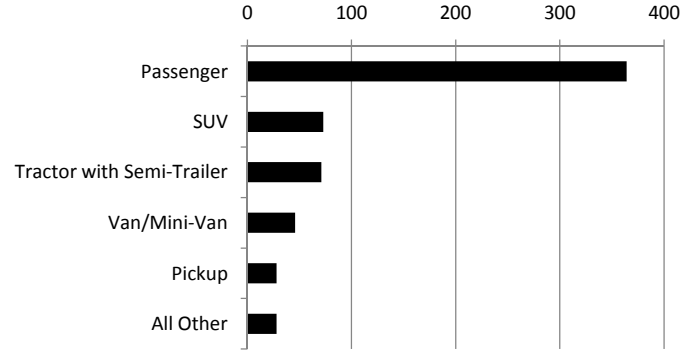
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	EB3
Westchester Blvd to 25th Avenue	Eastbound

Milepost From	17.79	0.77 Miles
Milepost To	18.56	

Total Crashes	288
Crash Rate	374.0 crashes/mile

Injury Statistics

Fatal	1
A Injury	1
B & C Injury	16
Total Injuries	18
Injury Rate	23.4 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	56%
Weather Condition:	Clear	82%
Road Condition:	Dry	82%
Lighting Condition:	Daylight	76%
Time of Day:	PM Peak	34%
Vehicle Type:	Passenger	60%

Illinois Department of Transportation

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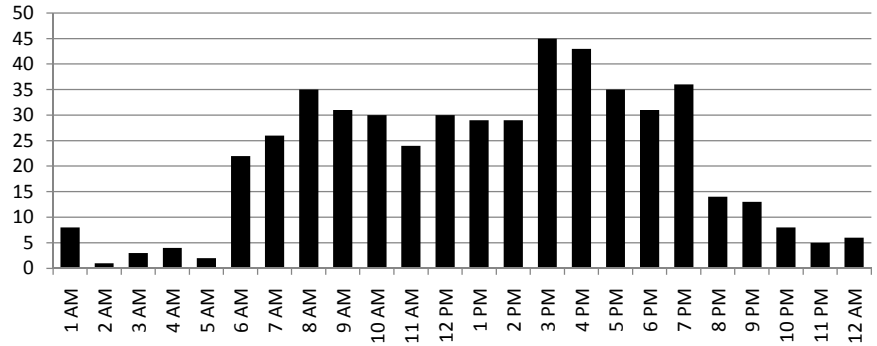
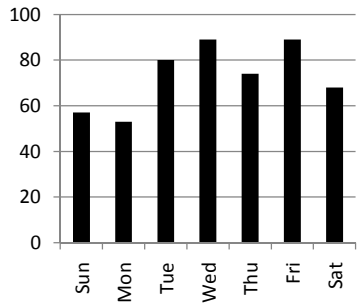
Three Year Crash Statistics

2006, 2007, 2008

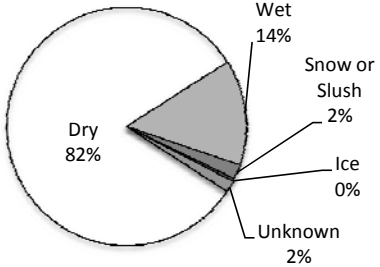
Crashes by Time of Day



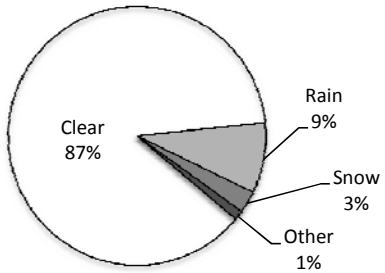
Crashes by Day of Week



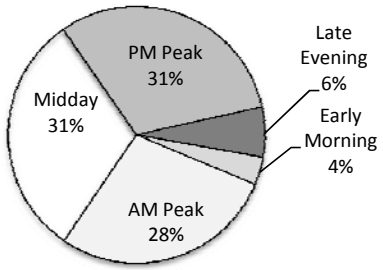
Road Condition



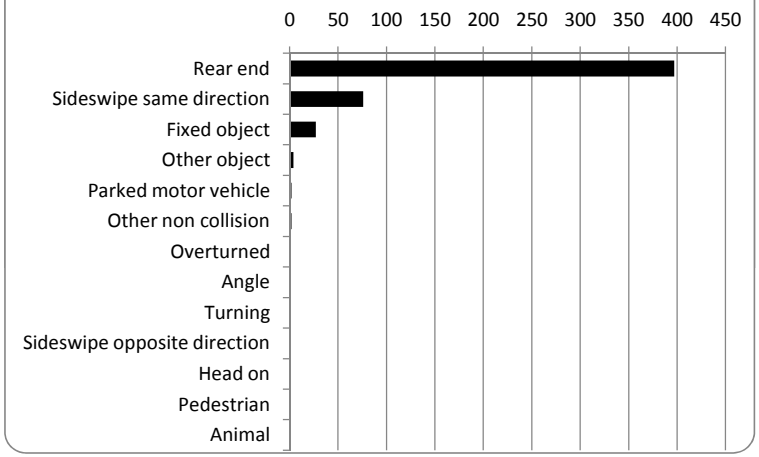
Weather Condition



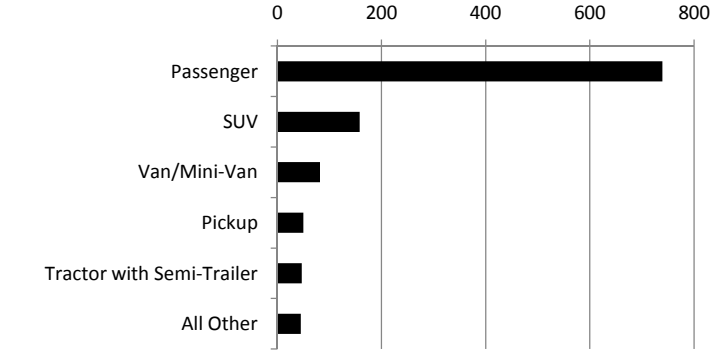
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	EB4
25th Avenue to 1st Avenue	Eastbound

Milepost From	18.56	1.55 Miles
Milepost To	20.11	

Total Crashes	510
Crash Rate	329.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	7
B & C Injury	34
Total Injuries	41
Injury Rate	26.5 Injuries/mile

Predominant Crash Factors

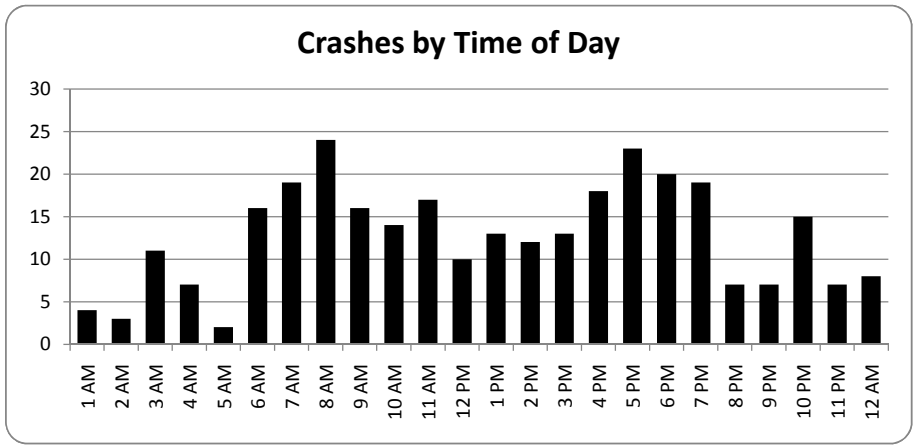
Crash Type:	Rear end	78%
Weather Condition:	Clear	87%
Road Condition:	Dry	82%
Lighting Condition:	Daylight	77%
Time of Day:	PM Peak	31%
Vehicle Type:	Passenger	66%

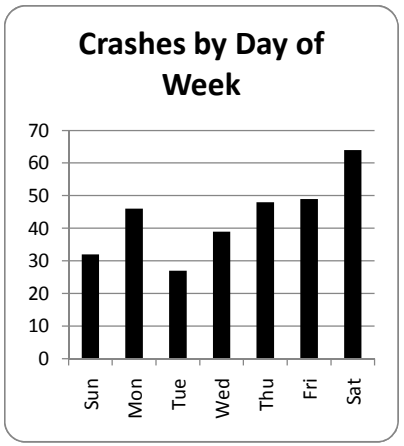
Illinois Department of Transportation

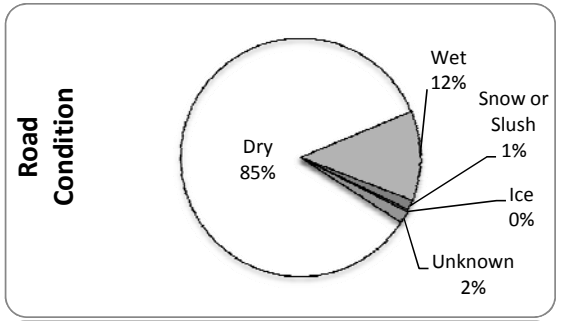
I-290 Preliminary Engineering and Environmental Study (Phase I)

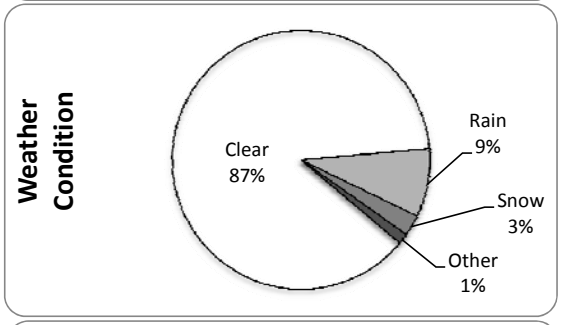
Three Year Crash Statistics

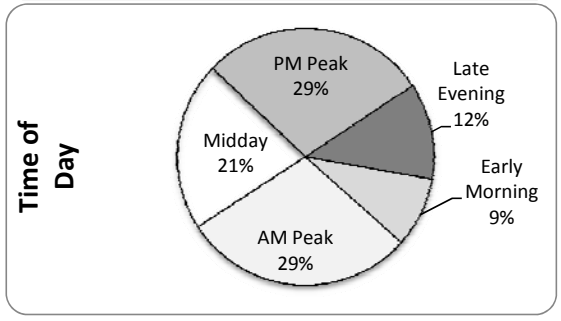
2006, 2007, 2008

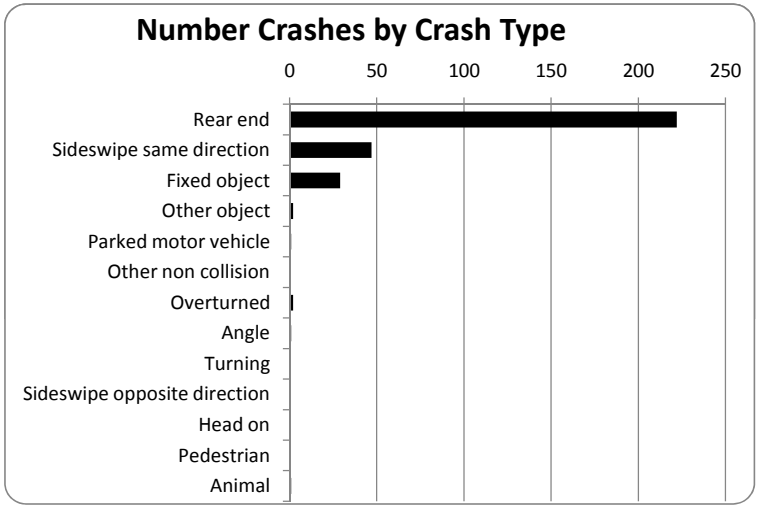


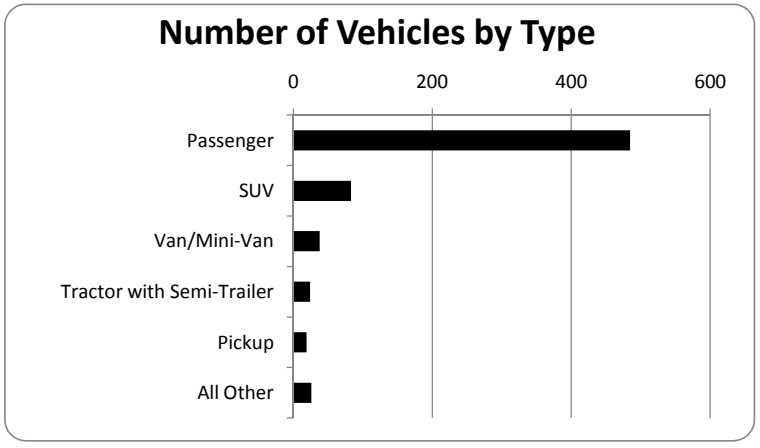












Mainline Segment	EB5
1st Avenue to CSX RR Overpass	Eastbound

Milepost From	20.11	1.18 Miles
Milepost To	21.29	

Total Crashes	305
Crash Rate	258.5 crashes/mile

Injury Statistics	
Fatal	0
A Injury	2
B & C Injury	26
Total Injuries	28
Injury Rate	23.7 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	73%
Weather Condition:	Clear	88%
Road Condition:	Dry	85%
Lighting Condition:	Daylight	66%
Time of Day:	AM Peak	29%
Vehicle Type:	Passenger	72%

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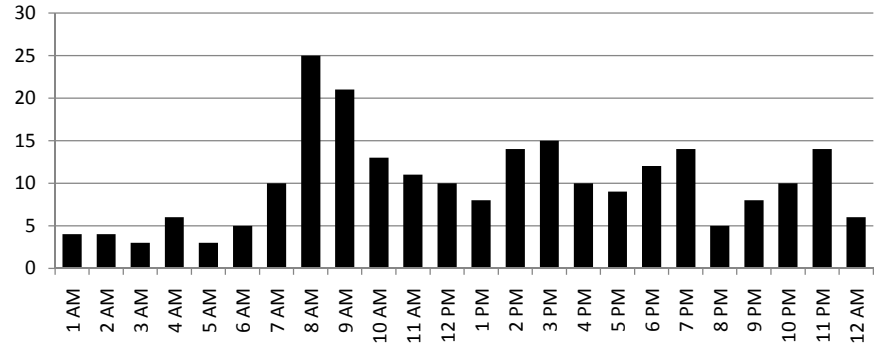
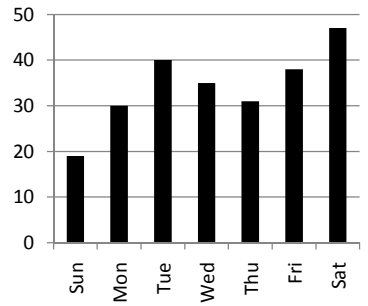
Three Year Crash Statistics

2006, 2007, 2008

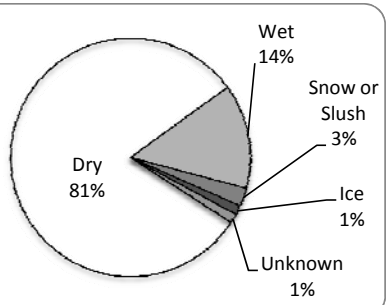
Crashes by Time of Day



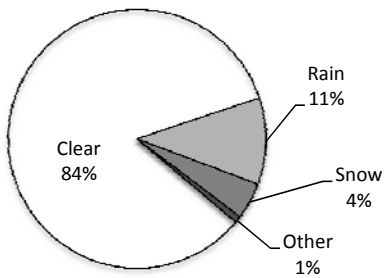
Crashes by Day of Week



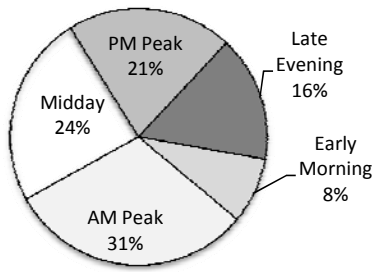
Road Condition



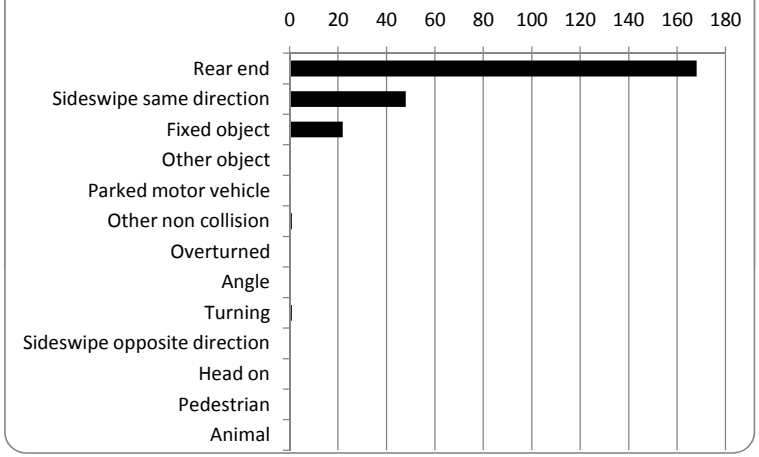
Weather Condition



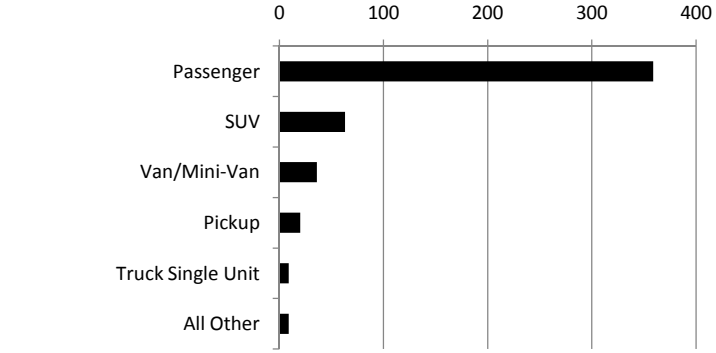
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	EB6
CSX RR Overpass to East Ave	Eastbound

Milepost From	21.29	1.10 Miles
Milepost To	22.39	

Total Crashes	240
Crash Rate	218.2 crashes/mile

Injury Statistics

Fatal	0
A Injury	5
B & C Injury	19
Total Injuries	24
Injury Rate	21.8 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	70%
Weather Condition:	Clear	84%
Road Condition:	Dry	81%
Lighting Condition:	Daylight	67%
Time of Day:	AM Peak	31%
Vehicle Type:	Passenger	72%

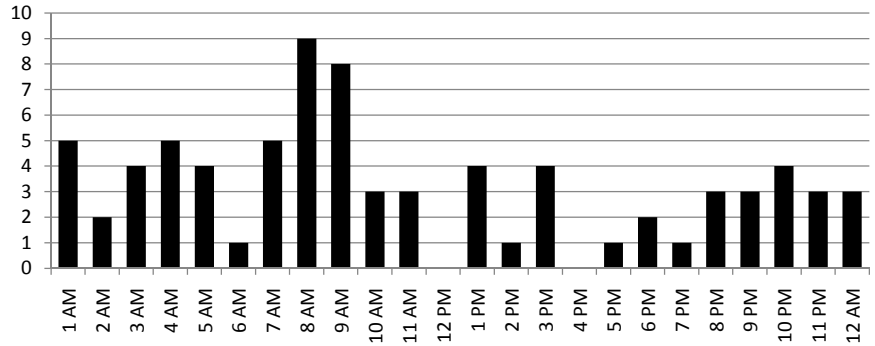
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

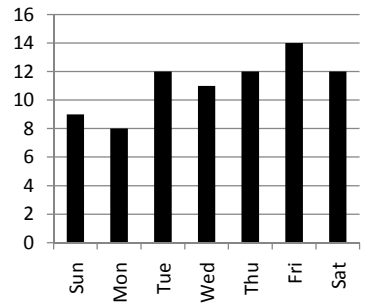
Three Year Crash Statistics

2006, 2007, 2008

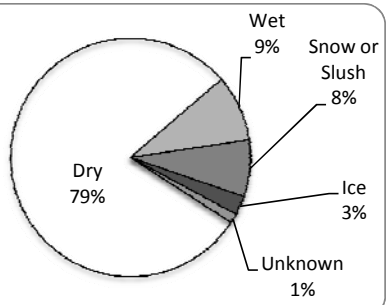
Crashes by Time of Day



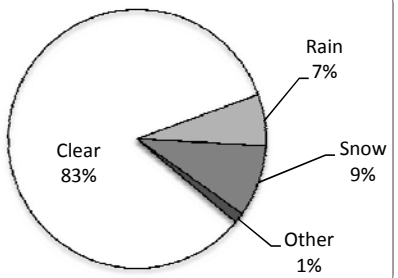
Crashes by Day of Week



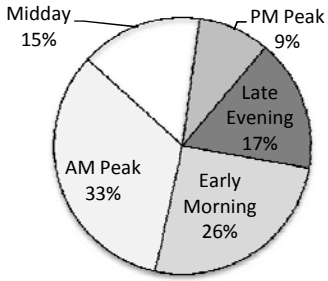
Road Condition



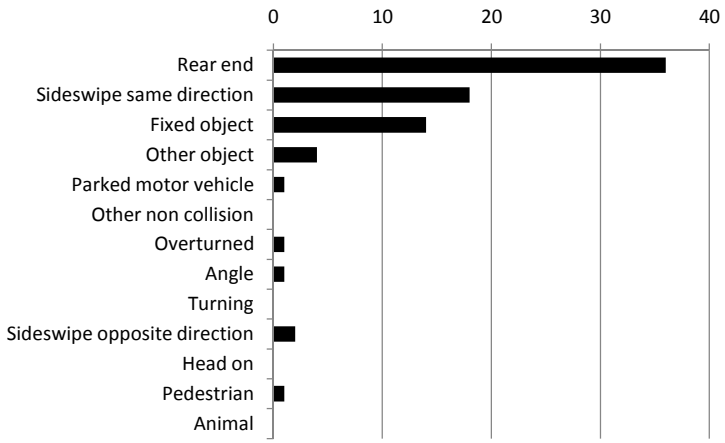
Weather Condition



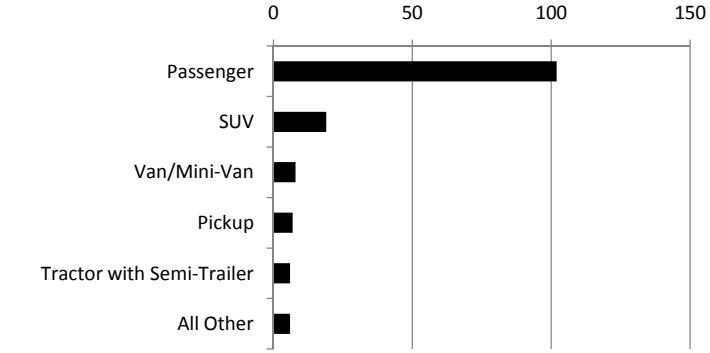
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	EB7
East Ave to Austin Avenue	Eastbound

Milepost From	22.39	0.76 Miles
Milepost To	23.15	

Total Crashes	78
Crash Rate	102.6 crashes/mile

Injury Statistics

Fatal	1
A Injury	2
B & C Injury	6
Total Injuries	9
Injury Rate	11.8 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	46%
Weather Condition:	Clear	83%
Road Condition:	Dry	79%
Lighting Condition:	Daylight	50%
Time of Day:	AM Peak	33%
Vehicle Type:	Passenger	69%

Illinois Department of Transportation

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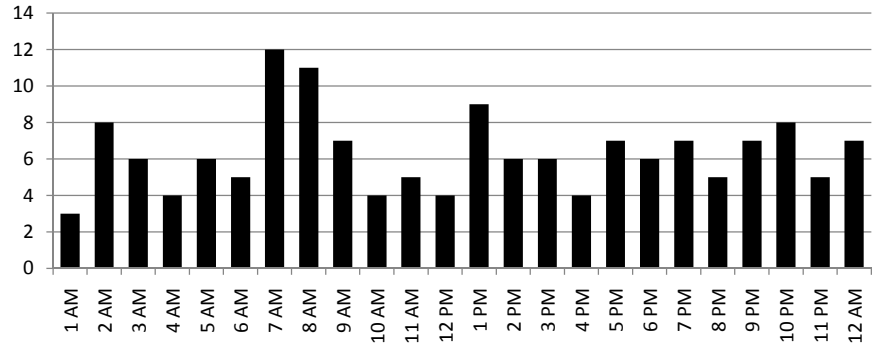
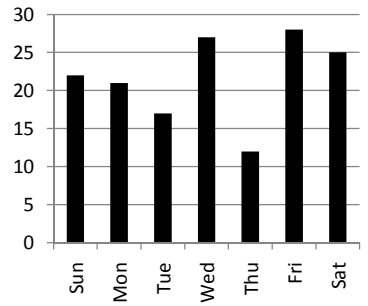
Three Year Crash Statistics

2006, 2007, 2008

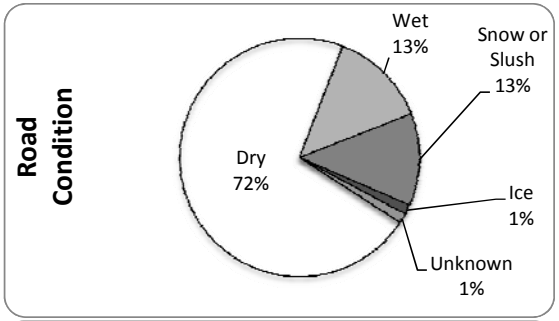
Crashes by Time of Day



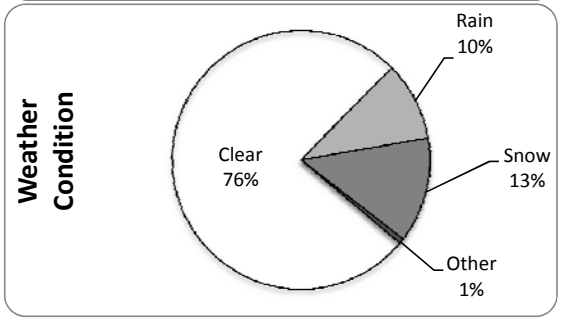
Crashes by Day of Week



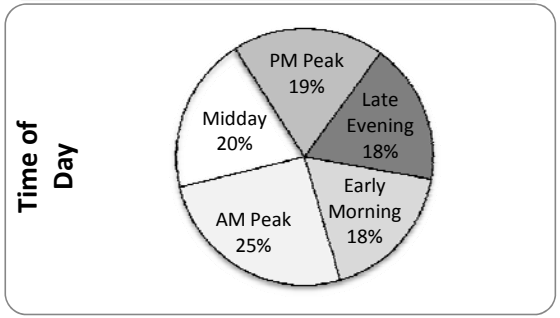
Road Condition



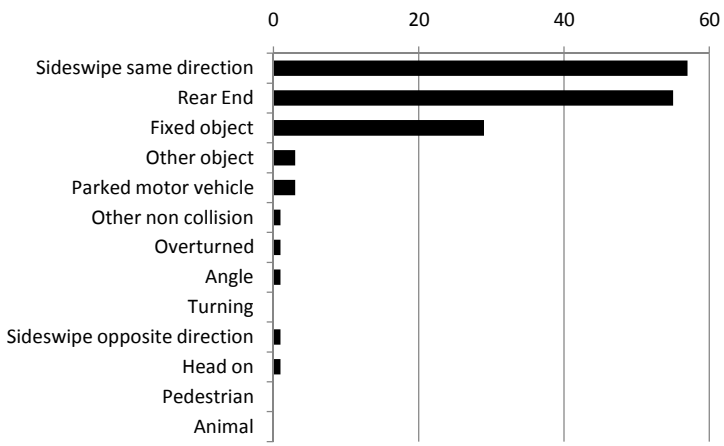
Weather Condition



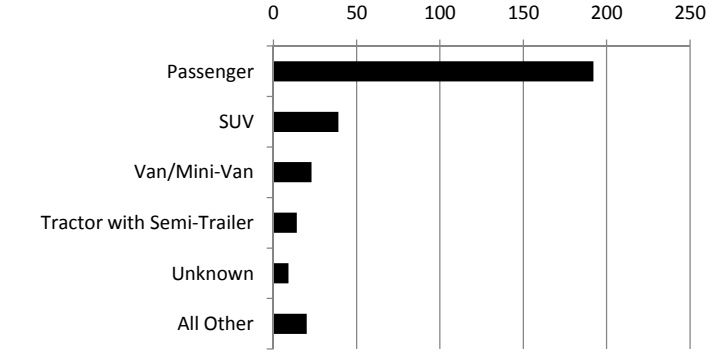
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	EB8
Austin Avenue to Laramie Avenue	Eastbound

Milepost From	23.15	1.00 Miles
Milepost To	24.15	

Total Crashes	152
Crash Rate	152.0 crashes/mile

Injury Statistics

Fatal	0
A Injury	1
B & C Injury	11
Total Injuries	12
Injury Rate	12.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Sideswipe same direction	38%
Weather Condition:	Clear	76%
Road Condition:	Dry	72%
Lighting Condition:	Daylight	56%
Time of Day:	AM Peak	26%
Vehicle Type:	Passenger	65%

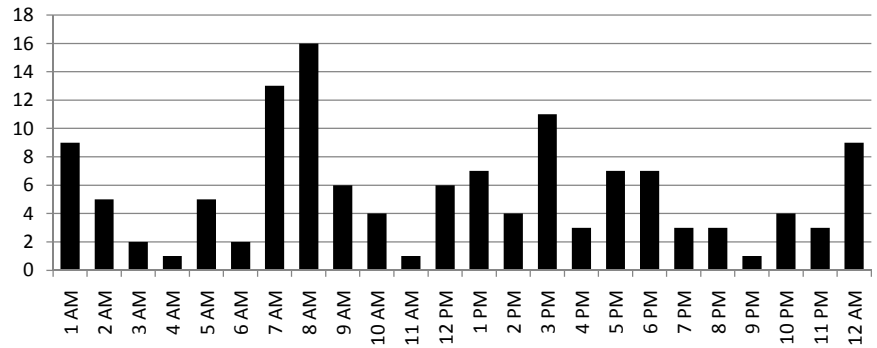
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

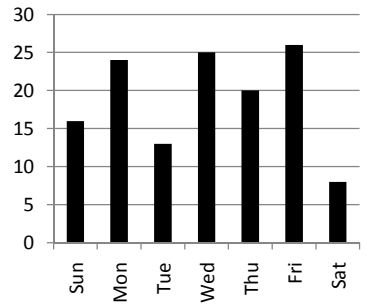
Three Year Crash Statistics

2006, 2007, 2008

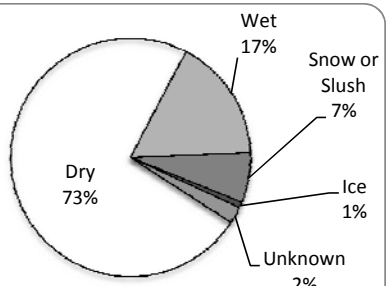
Crashes by Time of Day



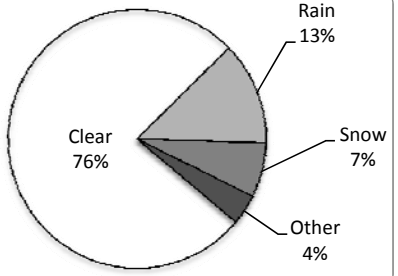
Crashes by Day of Week



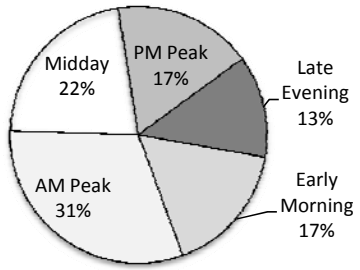
Road Condition



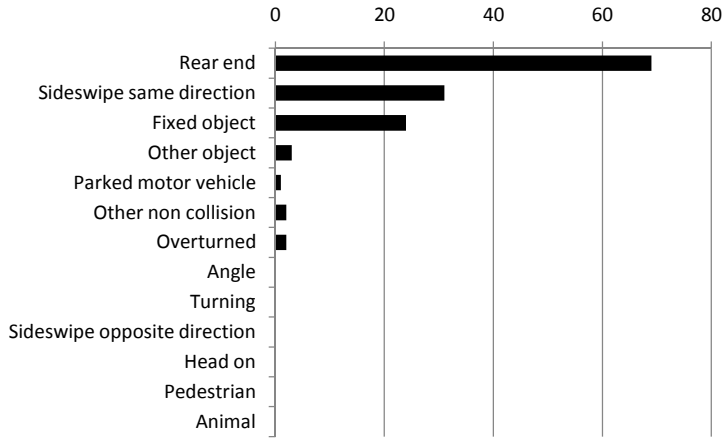
Weather Condition



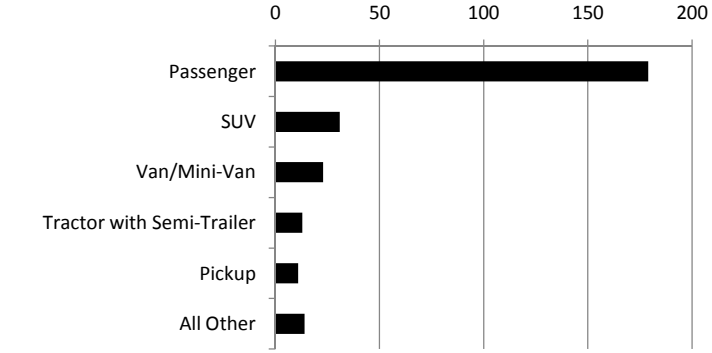
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	EB9
Laramie Avenue to Kostner Avenue	Eastbound

Milepost From	24.15	1.00 Miles
Milepost To	25.15	

Total Crashes	132
Crash Rate	132.0 crashes/mile

Injury Statistics

Fatal	0
A Injury	4
B & C Injury	9
Total Injuries	13
Injury Rate	13.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	52%
Weather Condition:	Clear	77%
Road Condition:	Dry	73%
Lighting Condition:	Daylight	62%
Time of Day:	AM Peak	31%
Vehicle Type:	Passenger	66%

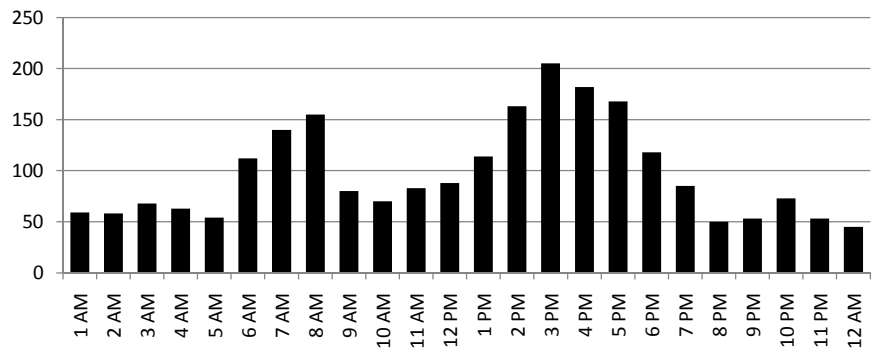
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

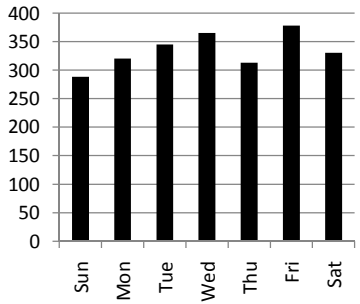
Three Year Crash Statistics

2006, 2007, 2008

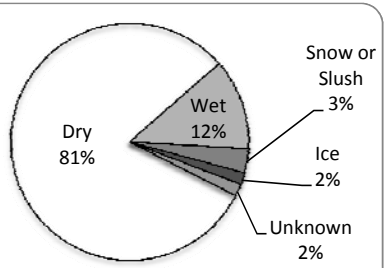
Crashes by Time of Day



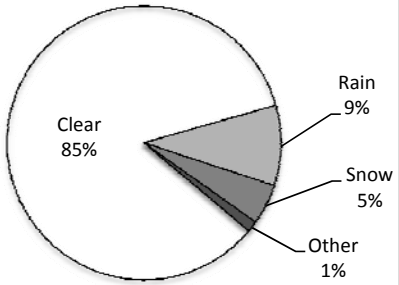
Crashes by Day of Week



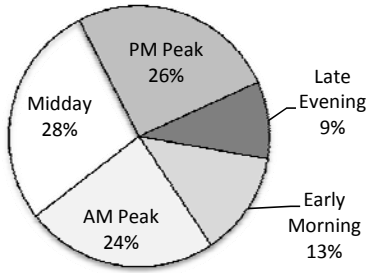
Road Condition



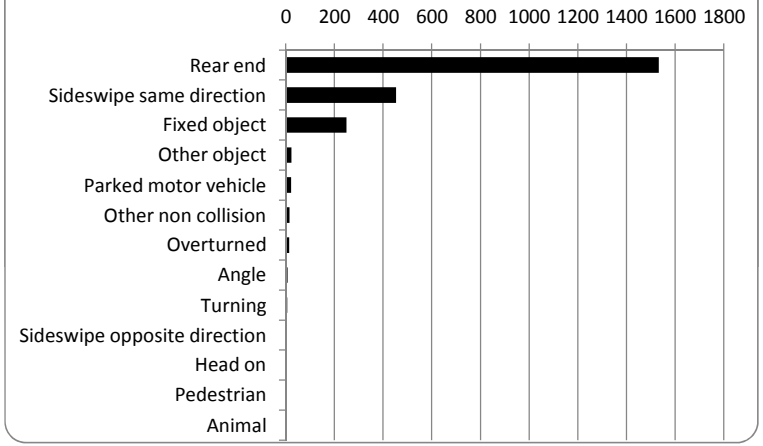
Weather Condition



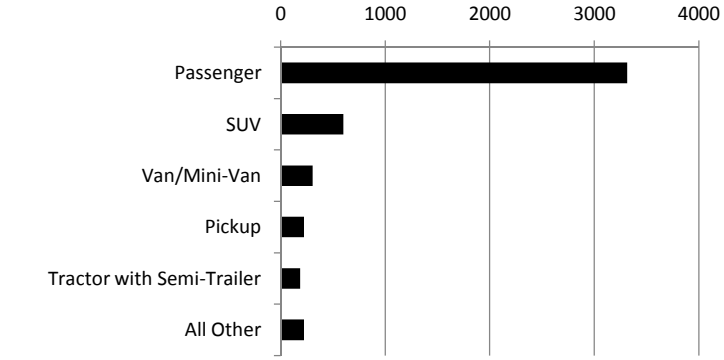
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



I-290 Westbound	ALL
Kostner Avenue to West of Wolf Road	Westbound

Milepost From	25.15	9.65 Miles
Milepost To	15.5	

Total Crashes	2339
Crash Rate	242.4 crashes/mile

Injury Statistics

Fatal	7
A Injury	40
B & C Injury	178
Total Injuries	225
Injury Rate	23.3 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	66%
Weather Condition:	Clear	84%
Road Condition:	Dry	81%
Lighting Condition:	Daylight	67%
Time of Day:	Midday	28%
Vehicle Type:	Passenger	68%

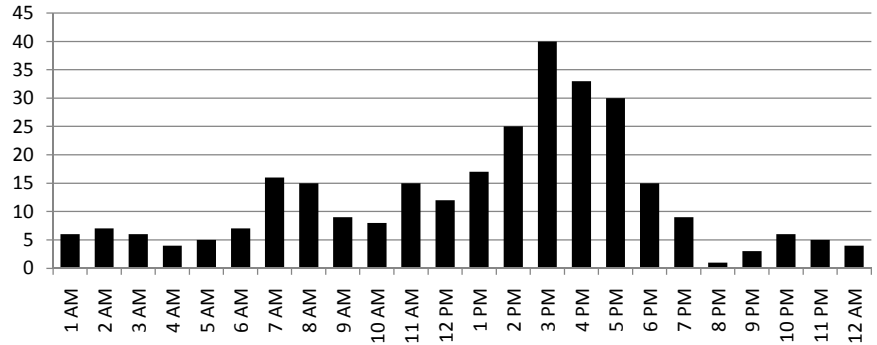
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

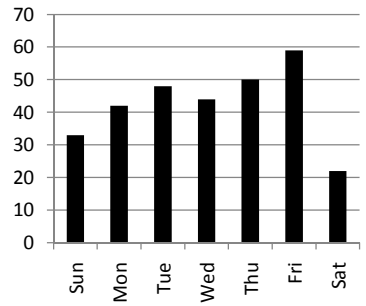
Three Year Crash Statistics

2006, 2007, 2008

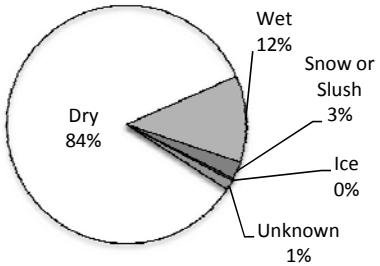
Crashes by Time of Day



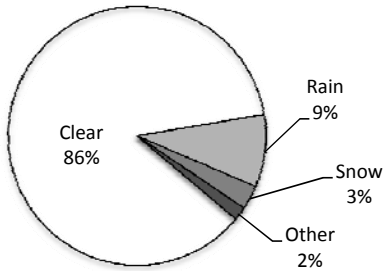
Crashes by Day of Week



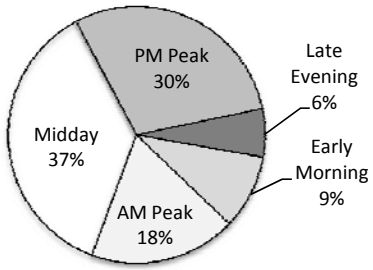
Road Condition



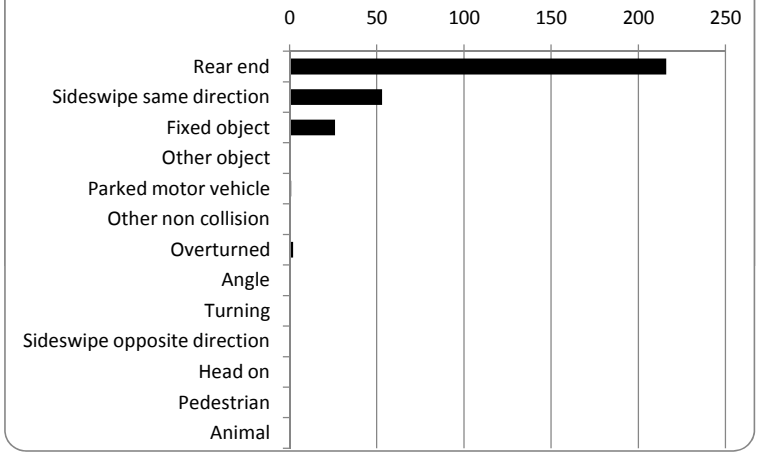
Weather Condition



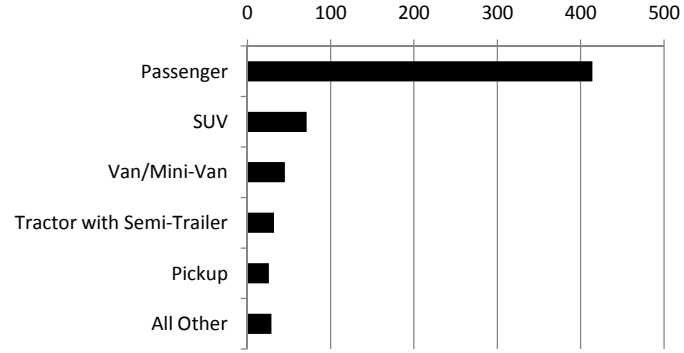
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	WB1
Kostner Avenue to Laramie Avenue	Westbound

Milepost From	25.15	1.00 Miles
Milepost To	24.15	

Total Crashes	298
Crash Rate	298.0 crashes/mile

Injury Statistics

Fatal	0
A Injury	3
B & C Injury	17
Total Injuries	20
Injury Rate	20.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	72%
Weather Condition:	Clear	86%
Road Condition:	Dry	84%
Lighting Condition:	Daylight	76%
Time of Day:	Midday	37%
Vehicle Type:	Passenger	67%

Illinois Department of Transportation

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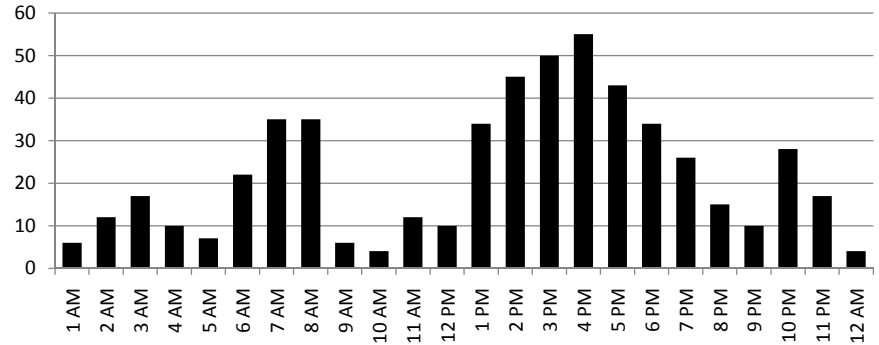
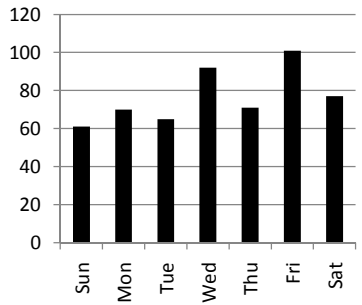
Three Year Crash Statistics

2006, 2007, 2008

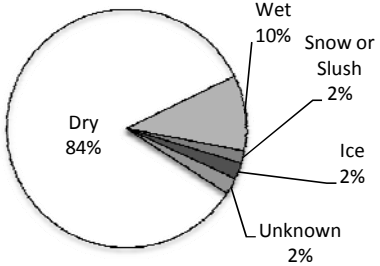
Crashes by Time of Day



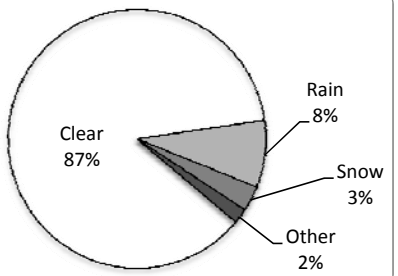
Crashes by Day of Week



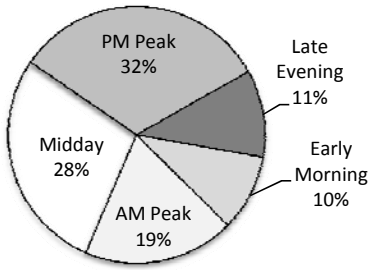
Road Condition



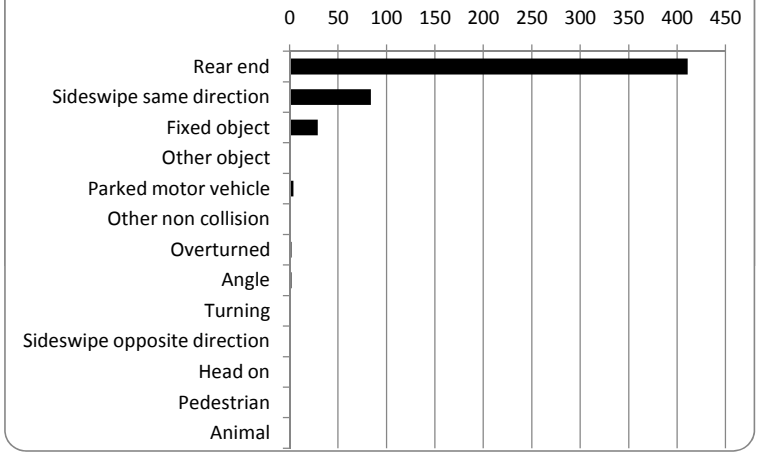
Weather Condition



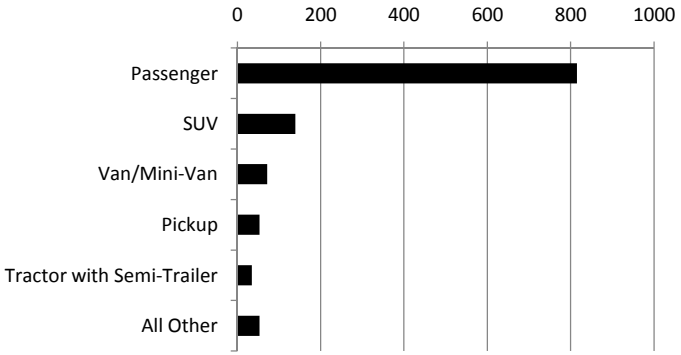
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	WB2
Laramie Avenue to Austin Avenue	Westbound

Milepost From	24.15	1.00 Miles
Milepost To	23.15	

Total Crashes	537
Crash Rate	537.0 crashes/mile

Injury Statistics

Fatal	1
A Injury	6
B & C Injury	31
Total Injuries	38
Injury Rate	38.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	77%
Weather Condition:	Clear	87%
Road Condition:	Dry	84%
Lighting Condition:	Daylight	65%
Time of Day:	PM Peak	32%
Vehicle Type:	Passenger	70%

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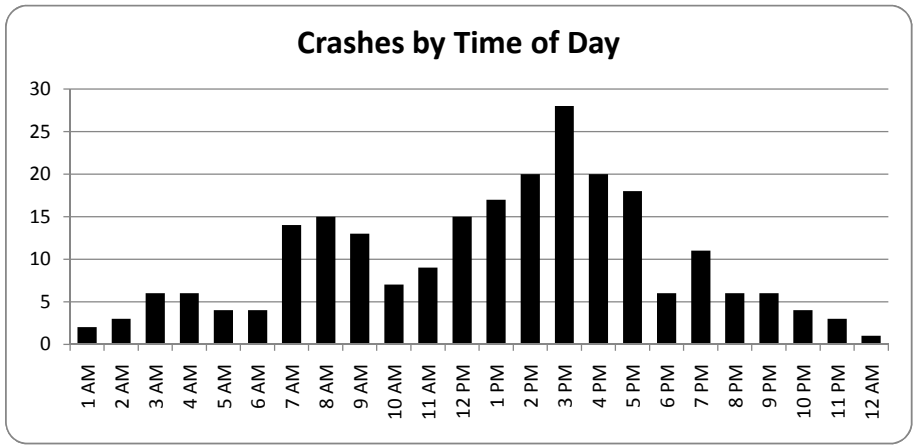
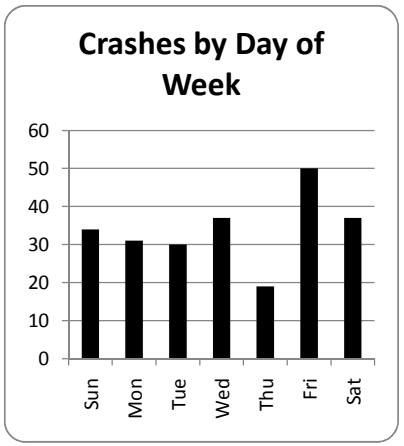
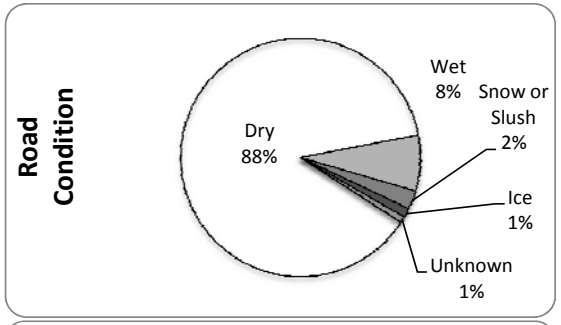
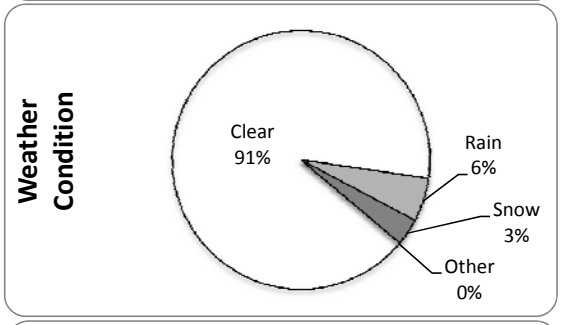
Three Year Crash Statistics

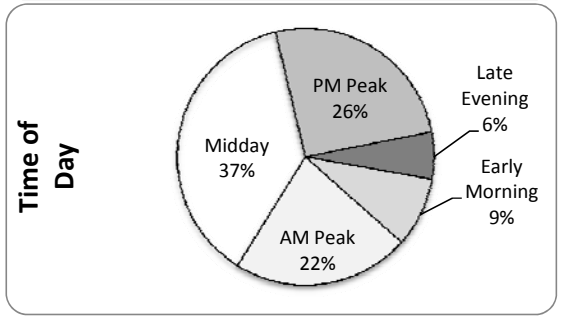
2006, 2007, 2008

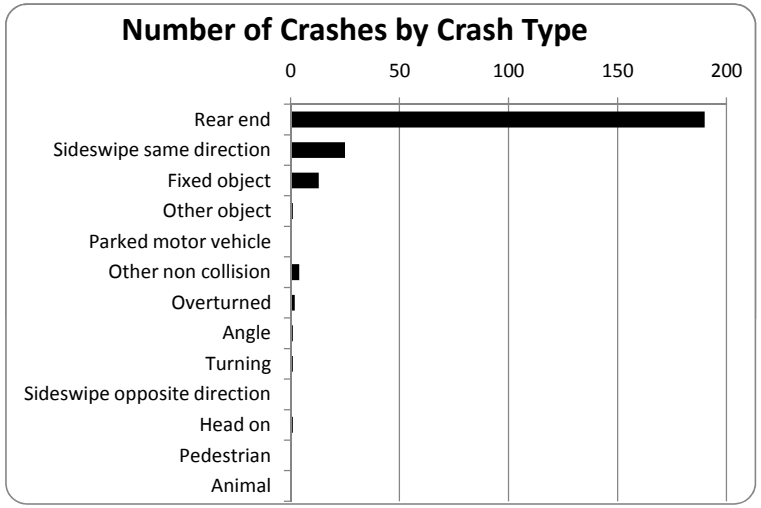


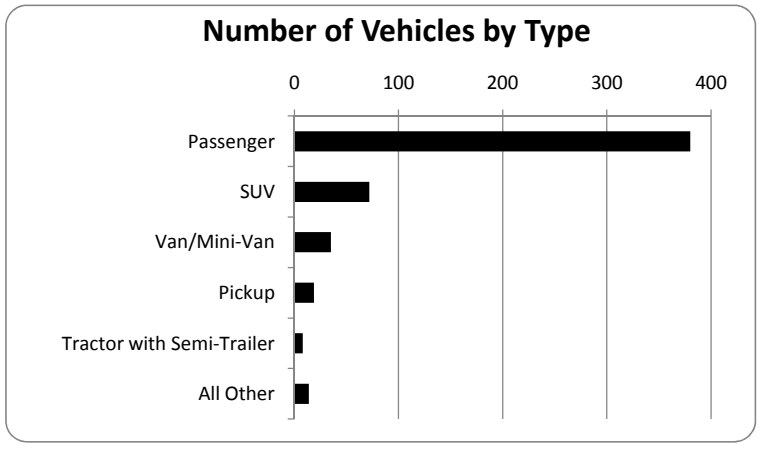












Mainline Segment	WB3
Austin Avenue to East Ave	Westbound

Milepost From	23.15	0.76 Miles
Milepost To	22.39	

Total Crashes	238
Crash Rate	313.2 crashes/mile

Injury Statistics	
Fatal	2
A Injury	6
B & C Injury	22
Total Injuries	30
Injury Rate	39.5 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	80%
Weather Condition:	Clear	91%
Road Condition:	Dry	88%
Lighting Condition:	Daylight	75%
Time of Day:	Midday	37%
Vehicle Type:	Passenger	72%

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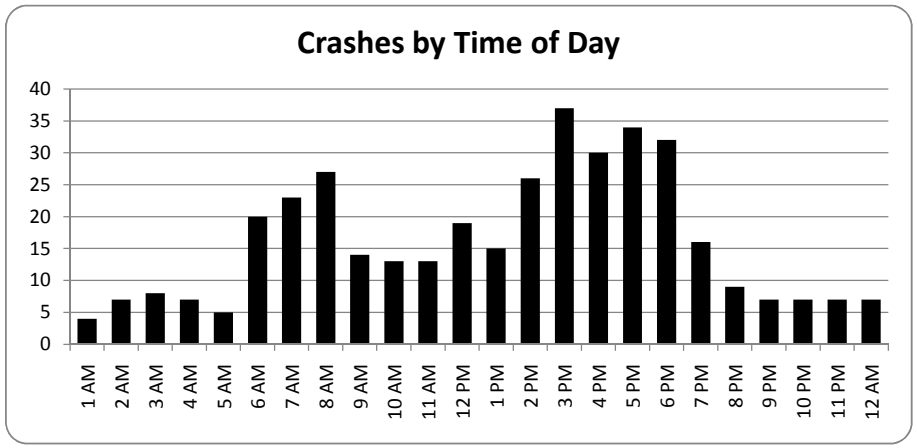
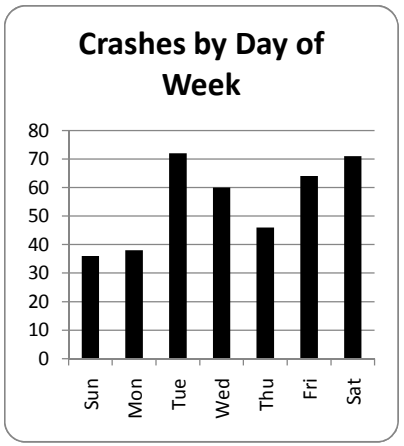
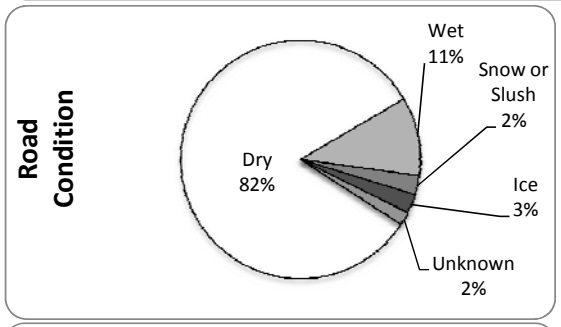
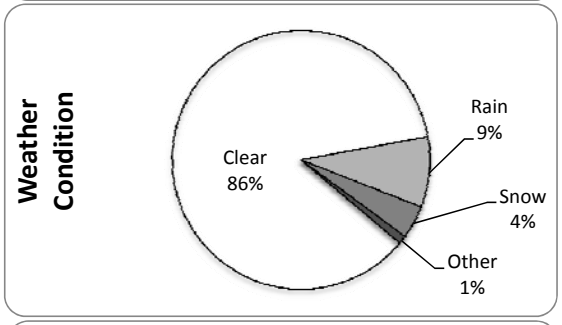
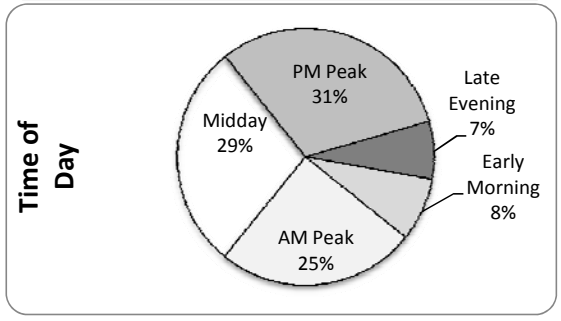
2006, 2007, 2008

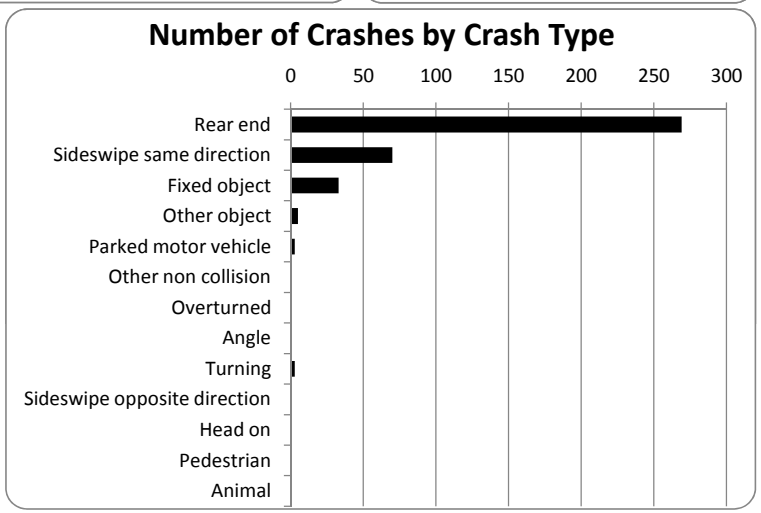


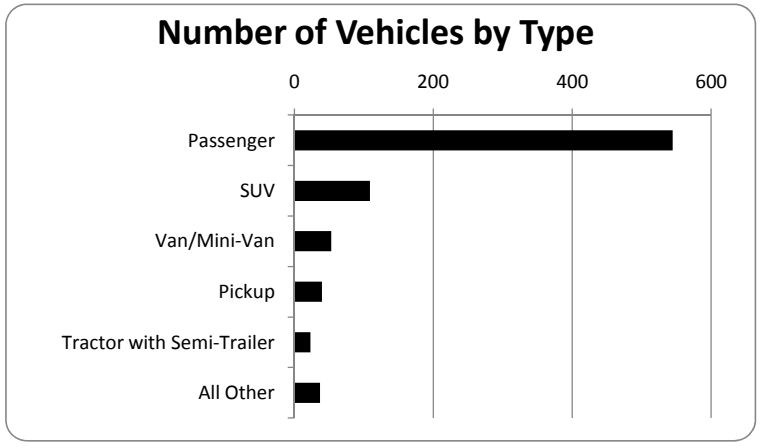












Mainline Segment	WB4
East Ave to CSX RR Overpass	Westbound

Milepost From	22.39	1.10 Miles
Milepost To	21.29	

Total Crashes	387
Crash Rate	351.8 crashes/mile

Injury Statistics	
Fatal	1
A Injury	6
B & C Injury	32
Total Injuries	39
Injury Rate	35.5 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	70%
Weather Condition:	Clear	86%
Road Condition:	Dry	82%
Lighting Condition:	Daylight	72%
Time of Day:	PM Peak	31%
Vehicle Type:	Passenger	68%

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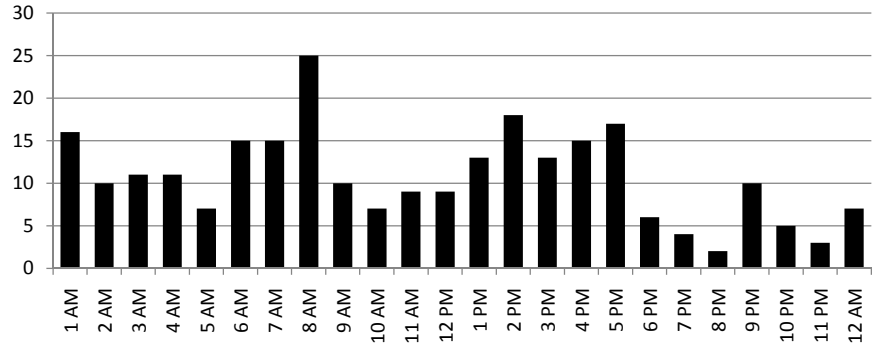
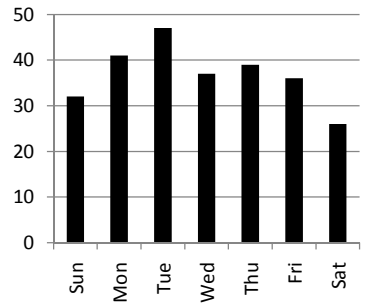
Three Year Crash Statistics

2006, 2007, 2008

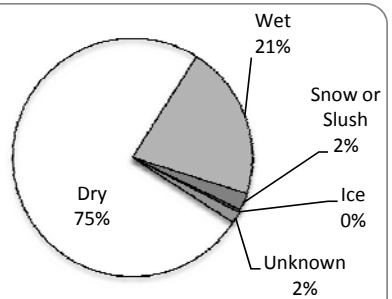
Crashes by Time of Day



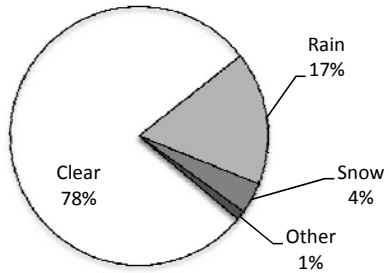
Crashes by Day of Week



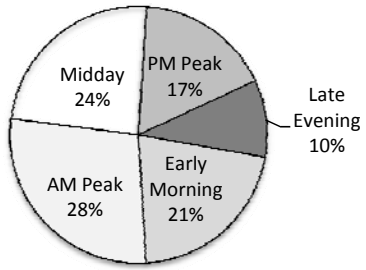
Road Condition



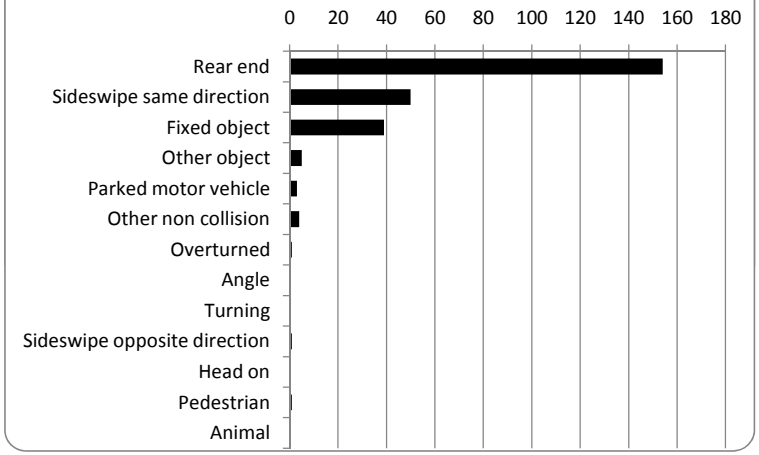
Weather Condition



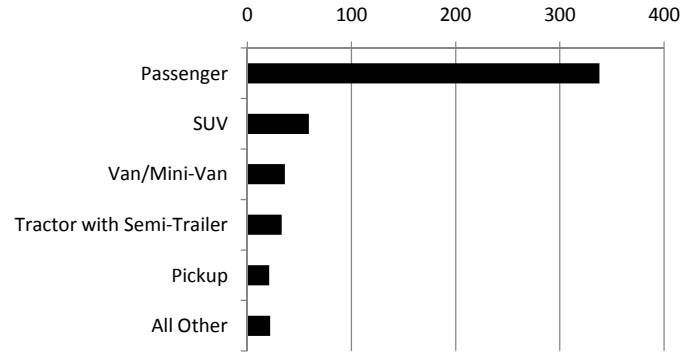
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	WB5
CSX RR Overpass to 1st Avenue	Westbound

Milepost From	21.29	1.18 Miles
Milepost To	20.11	

Total Crashes	258
Crash Rate	218.6 crashes/mile

Injury Statistics

Fatal	1
A Injury	2
B & C Injury	16
Total Injuries	19
Injury Rate	16.1 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	60%
Weather Condition:	Clear	78%
Road Condition:	Dry	75%
Lighting Condition:	Daylight	64%
Time of Day:	AM Peak	28%
Vehicle Type:	Passenger	66%

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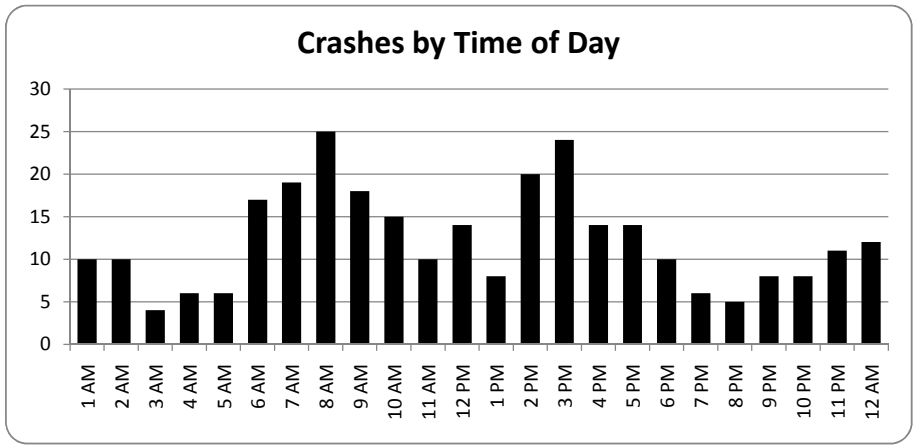
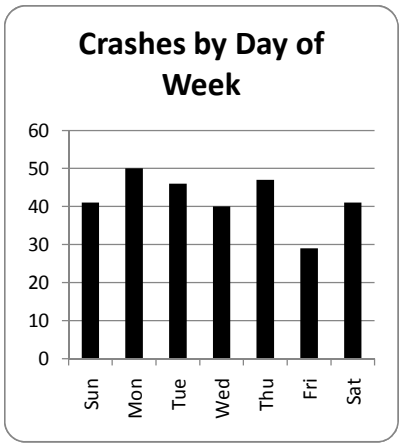
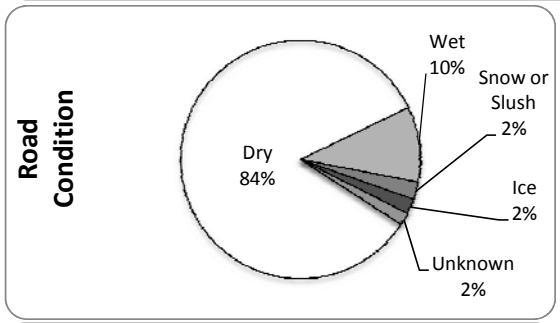
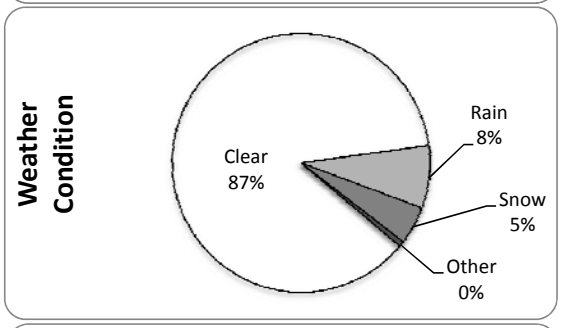
Three Year Crash Statistics

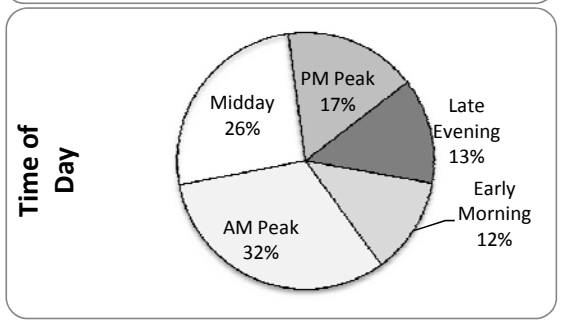
2006, 2007, 2008

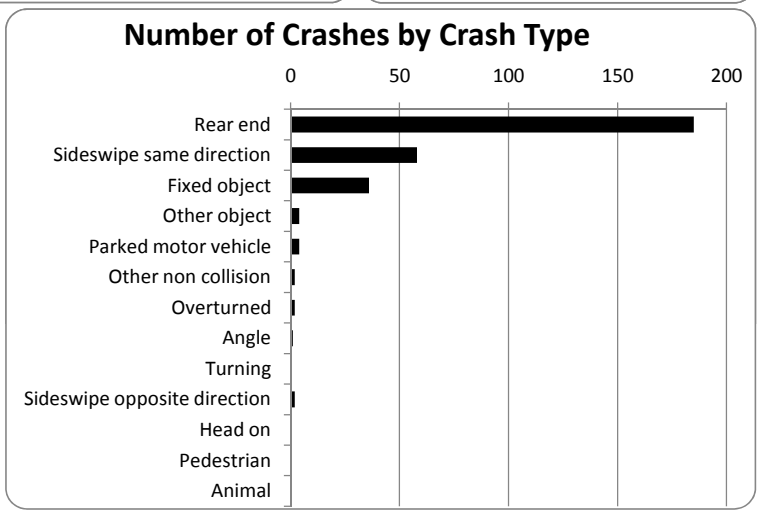


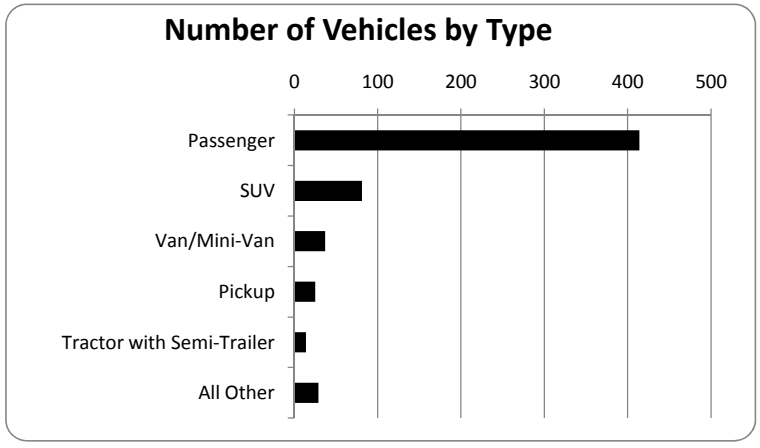












Mainline Segment	WB6
1st Avenue to 25th Avenue	Westbound

Milepost From	20.11	1.55 Miles
Milepost To	18.56	

Total Crashes	294
Crash Rate	189.7 crashes/mile

Injury Statistics	
Fatal	1
A Injury	3
B & C Injury	32
Total Injuries	36
Injury Rate	23.2 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	63%
Weather Condition:	Clear	87%
Road Condition:	Dry	84%
Lighting Condition:	Daylight	67%
Time of Day:	AM Peak	32%
Vehicle Type:	Passenger	69%

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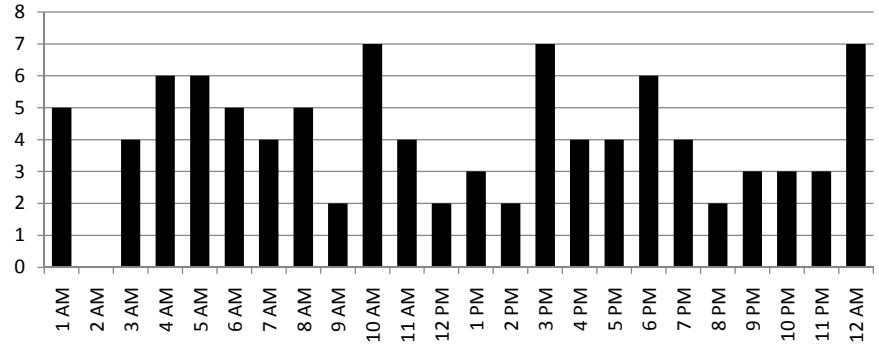
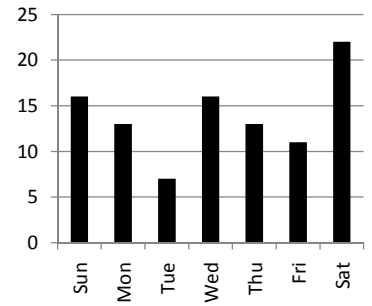
Three Year Crash Statistics

2006, 2007, 2008

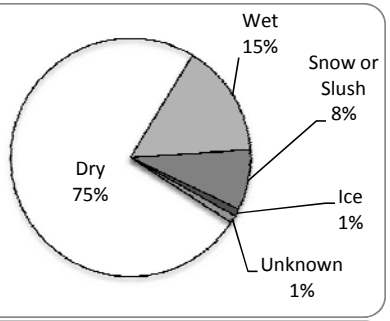
Crashes by Time of Day



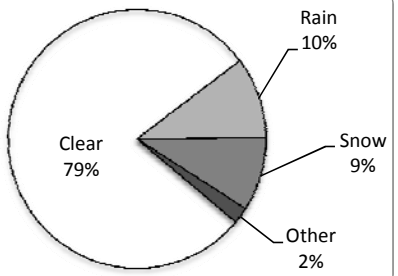
Crashes by Day of Week



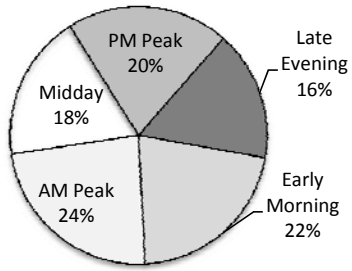
Road Condition



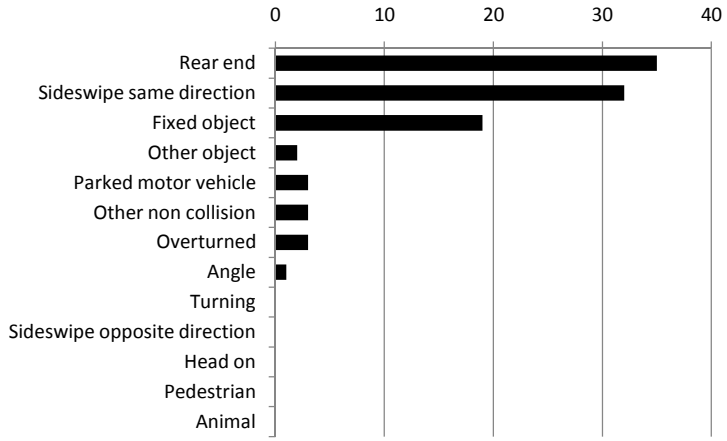
Weather Condition



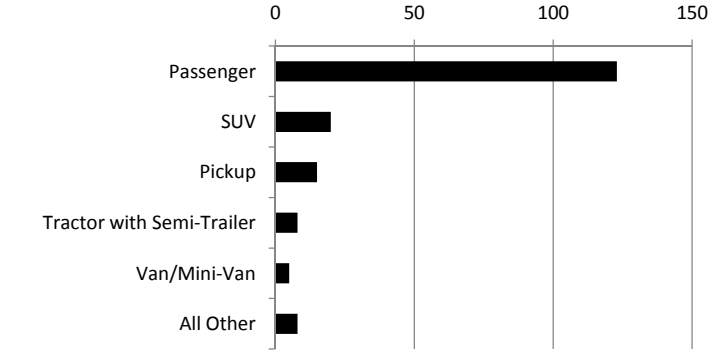
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	WB7
25th Avenue to Mannheim Road	Westbound

Milepost From	18.56	1.03 Miles
Milepost To	17.53	

Total Crashes	98
Crash Rate	95.1 crashes/mile

Injury Statistics	
Fatal	0
A Injury	3
B & C Injury	7
Total Injuries	10
Injury Rate	9.7 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	36%
Weather Condition:	Clear	79%
Road Condition:	Dry	74%
Lighting Condition:	Daylight	54%
Time of Day:	AM Peak	23%
Vehicle Type:	Passenger	69%

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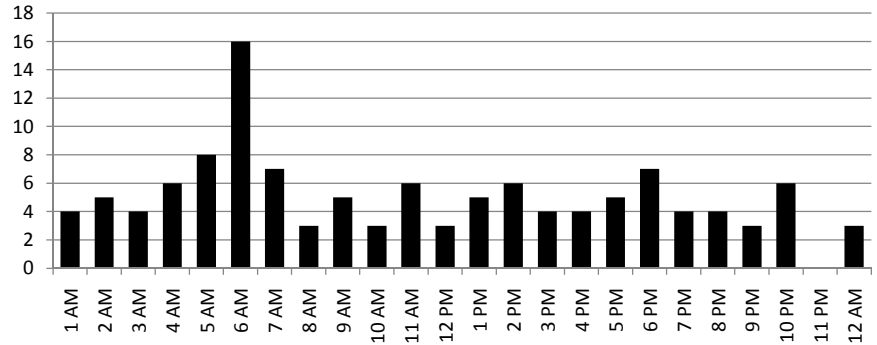
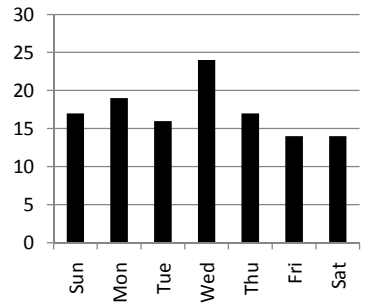
Three Year Crash Statistics

2006, 2007, 2008

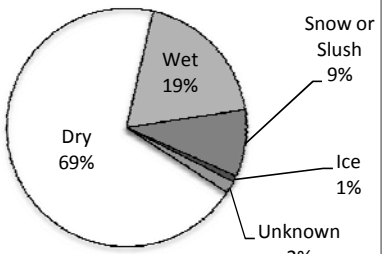
Crashes by Time of Day



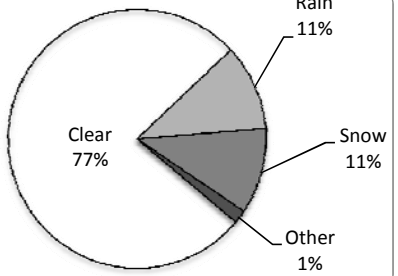
Crashes by Day of Week



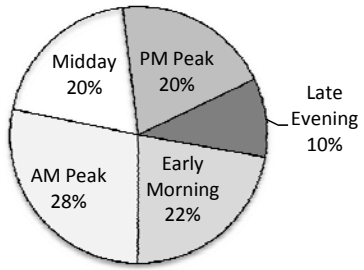
Road Condition



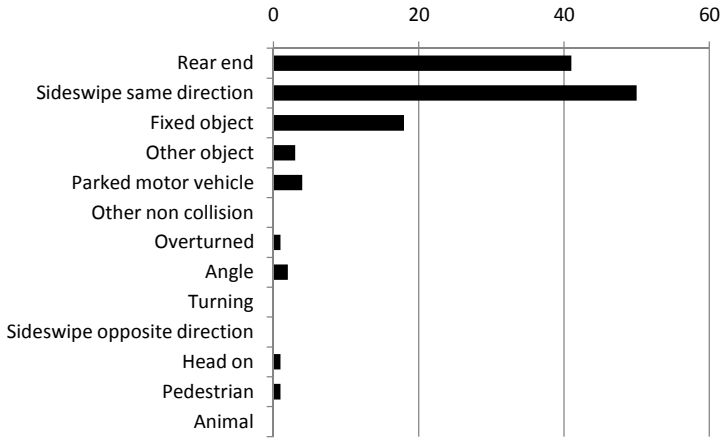
Weather Condition



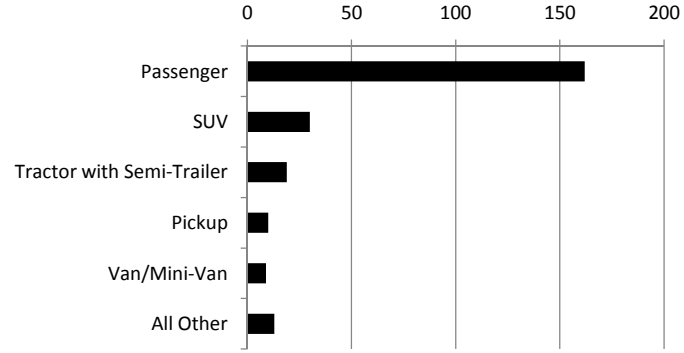
Time of Day



Number of Crashes by Crash Type



Number of Vehicles by Type



Mainline Segment	WB8
Mannheim Road to Wolf Road	Westbound

Milepost From	17.53	1.07 Miles
Milepost To	16.46	

Total Crashes	121
Crash Rate	113.1 crashes/mile

Injury Statistics	
Fatal	0
A Injury	2
B & C Injury	8
Total Injuries	10
Injury Rate	9.3 Injuries/mile

Predominant Crash Factors

Crash Type:	Sideswipe same direction	41%
Weather Condition:	Clear	77%
Road Condition:	Dry	69%
Lighting Condition:	Daylight	60%
Time of Day:	AM Peak	28%
Vehicle Type:	Passenger	67%

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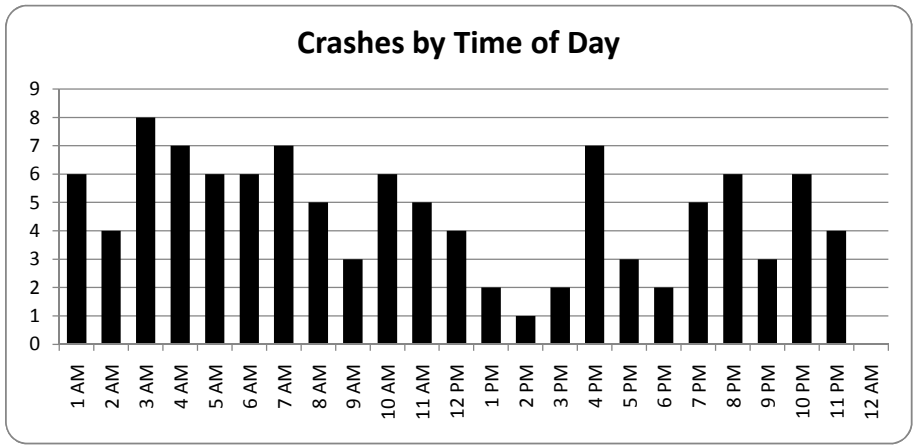
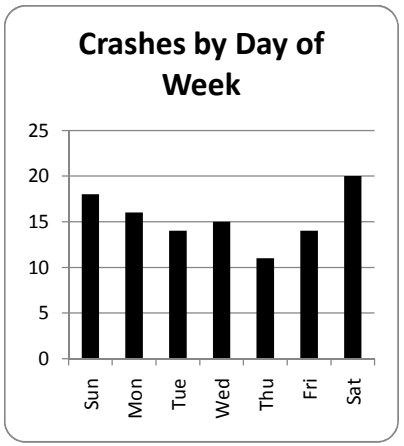
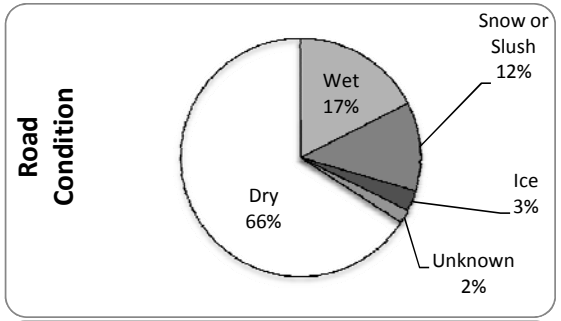
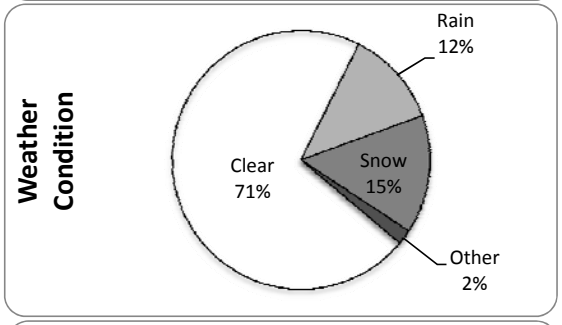
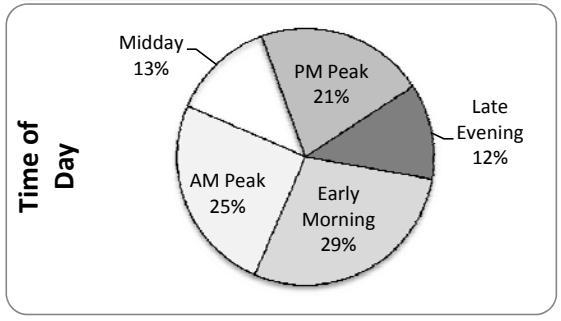
2006, 2007, 2008

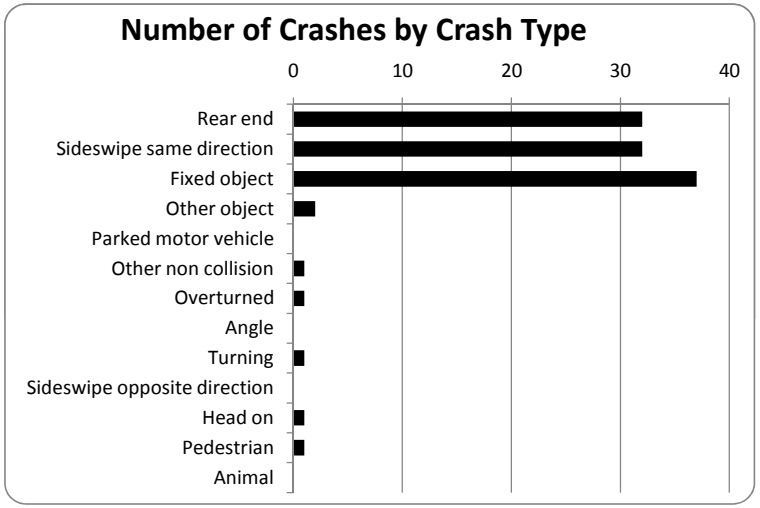


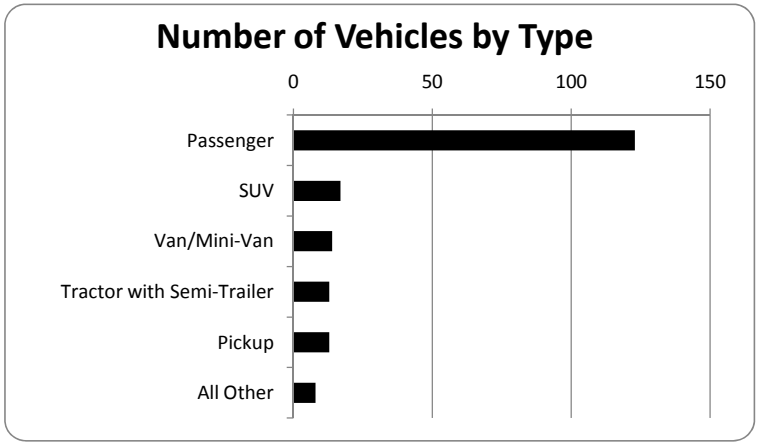












Mainline Segment	WB9
Wolf Road to West of Wolf Road	Westbound

Milepost From	16.46	0.96 Miles
Milepost To	15.5	

Total Crashes	108
Crash Rate	112.5 crashes/mile

Injury Statistics	
Fatal	1
A Injury	9
B & C Injury	13
Total Injuries	23
Injury Rate	24.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Fixed object	34%
Weather Condition:	Clear	71%
Road Condition:	Dry	66%
Lighting Condition:	Darkness, Lighted Road	51%
Time of Day:	Early Morning	29%
Vehicle Type:	Passenger	65%

Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

Three Year Crash Statistics

2006, 2007, 2008

Technical Memorandum

Appendix F

Ramp Crash Summary Report

I-290 Ramp Crash Summary (2006, 2007, 2008)

Ramp	Exit/Entrance	I-290 Direction	Total Crashes	Total Injuries	Predominant Crash Factors									
					Crash Type		Weather		Road Condition		Time Period		Cause	
I-88 to EB I-290	Entrance	EB	49	11	Rear End	47%	Clear	84%	Dry	73%	AM Peak	29%	Straight Ahead	41%
I-290 to EB I-290 C-D	Exit	EB	1	0	Rear End	100%	Clear	100%	Dry	100%	PM Peak	100%	Straight Ahead	100%
Wolf Road to EB I-290 C-D	Entrance	EB	0	0	(none)		(none)		(none)		(none)	0%	(none)	0%
EB I-290 C-D to SB Mannheim Road	Exit	EB	21	5	Rear End	48%	Clear	57%	Dry	48%	Midday	29%	Straight Ahead	43%
EB I-290 C-D to NB Mannheim Road	Exit	EB	5	1	Rear End	60%	Clear	80%	Dry	33%	AM Peak	60%	Straight Ahead	60%
SB Mannheim Road to EB I-290 C-D	Entrance	EB	5	5	Sideswipe-	40%	Rain	40%	Wet	60%	Early	40%	Skidding/Contro	60%
NB Mannheim Road to EB I-290 C-D	Entrance	EB	3	0	Sideswipe-	67%	Clear	67%	Dry	67%	AM Peak	33%	Changing	67%
EB I-290 C-D	Exit	EB	18	6	Rear End	50%	Clear	83%	Dry	56%	AM Peak	39%	Straight Ahead	33%
EB I-290 to 25th Avenue	Exit	EB	3	1	Sideswipe-	67%	Clear	100%	Dry	100%	Midday	67%	Straight Ahead	33%
SB 25th Avenue to EB I-290	Entrance	EB	0	0	(none)		(none)		(none)		(none)	0%	(none)	0%
EB I-290 to NB 25 th Avenue	Exit	EB	5	1	Rear End	60%	Clear	100%	Dry	100%	Midday	40%	Straight Ahead	40%
NB 25th Avenue to EB I-290	Entrance	EB	3	0	Rear End	67%	Clear	100%	Dry	67%	Early	33%	Straight Ahead	33%
EB I-290 to 17th Avenue	Exit	EB	5	1	Fixed Object	40%	Clear	80%	Dry	80%	Early	25%	Straight Ahead	60%
17th Avenue to EB I-290	Entrance	EB	5	0	Fixed Object	40%	Clear	100%	Dry	100%	AM Peak	40%	Straight Ahead	40%
9th Avenue to EB I-290	Entrance	EB	6	1	Rear End	100%	Clear	100%	Dry	83%	AM Peak	33%	Straight Ahead	67%
EB I-290 to 1St Avenue	Exit	EB	2	0	Rear End	50%	Clear	100%	Dry	100%	Midday	100%	Straight Ahead	50%
1St Avenue to EB I-290	Entrance	EB	12	2	Rear End	50%	Clear	83%	Dry	75%	Midday	42%	Straight Ahead	42%
NB 1St Avenue to 1St Avenue Ramp to EB	Entrance	EB	0	0	(none)		(none)		(none)		(none)	0%	(none)	0%
EB I-290 to DES PLAINES Road	Exit	EB	3	0	Rear End	100%	Clear	100%	Dry	67%	AM Peak	33%	Straight Ahead	67%
EB I-290 to Harlem Avenue	Exit	EB	9	13	Sideswipe-	56%	Clear	100%	Dry	100%	Midday	44%	Straight Ahead	44%
Harlem Avenue to EB I-290	Entrance	EB	8	2	Rear End	50%	Clear	88%	Dry	88%	Midday	38%	Straight Ahead	38%
EB I-290 to Austin Blvd	Exit	EB	4	6	Rear End	100%	Clear	100%	Dry	75%	Late Evening	75%	Straight Ahead	75%
Austin Blvd to EB I-290	Entrance	EB	4	0	Fixed Object	50%	Clear	50%	Dry	50%	AM Peak	50%	Skidding/Contro	25%
EB I-290 to Central Avenue	Exit	EB	4	1	Rear End	75%	Clear	75%	Dry	75%	Early	100%	Slow/Stop in	50%
Central Avenue to EB I-290	Entrance	EB	6	1	Rear End	83%	Clear	83%	Dry	83%	AM Peak	50%	Slow/Stop in	50%
Laramie Avenue to EB I-290	Entrance	EB	3	0	Rear End	100%	Clear	100%	Dry	100%	AM Peak	33%	Straight Ahead	100%
EB I-290 to Cicero Avenue	Exit	EB	7	1	Rear End	71%	Clear	100%	Dry	100%	AM Peak	29%	Straight Ahead	71%
Entrance Ramps		14	104	22	Rear End	52%	Clear	83%	Dry	75%	AM Peak	27%	Straight Ahead	39%
Exit Ramps		13	87	36	Rear End	55%	Clear	83%	Dry	71%	Midday	27%	Straight Ahead	46%
Eastbound Total		**27**	**191**	**58**	**Rear End**	**53%**	**Clear**	**83%**	**Dry**	**73%**	**Midday**	**26%**	**Straight Ahead**	**42%**

I-290 Ramp Crash Summary (2006, 2007, 2008)

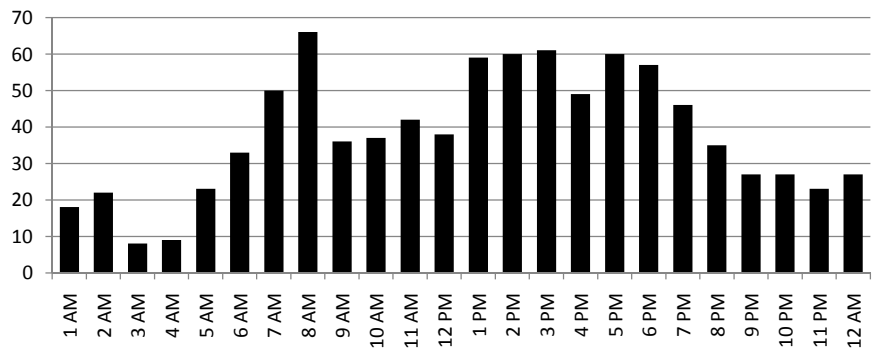
Ramp	Exit/Entrance	I-290 Direction	Total Crashes	Total Injuries	Predominant Crash Factors									
					Crash Type		Weather		Road Condition		Time Period		Cause	
WB I-290 to Wolf Road	Exit	WB	1	0	Overturned	100%	Clear	100%	Dry	100%	Late Evening	100%	Straight Ahead	100%
SB Mannheim Road to WB I-290	Entrance	WB	10	1	Rear End	60%	Clear	90%	Dry	70%	Midday	40%	Straight Ahead	40%
NB Mannheim Road to WB I-290	Entrance	WB	9	4	Overturned	44%	Clear	89%	Dry	89%	Midday	56%	Straight Ahead	44%
WB I-290 to Mannheim Road	Exit	WB	16	2	Fixed Object	56%	Clear	69%	Dry	63%	Early	44%	Straight Ahead	56%
25th Avenue to WB I-290	Entrance	WB	1	0	Rear End	100%	Clear	100%	Dry	100%	Midday	100%	Straight Ahead	100%
WB I-290 to SB 25th Avenue	Exit	WB	6	0	Rear End	83%	Clear	83%	Dry	67%	Midday	40%	Straight Ahead	67%
WB I-290 to NB 25th Avenue	Exit	WB	8	0	Rear End	100%	Clear	75%	Dry	75%	Midday	63%	Straight Ahead	75%
17th Avenue to WB I-290	Entrance	WB	1	0	Rear End	100%	Clear	100%	Dry	100%	PM Peak	100%	Straight Ahead	100%
WB I-290 to 17th Avenue	Exit	WB	0	0	(none)		(none)		(none)		(none)	0%	(none)	0%
WB I-290 to 9th Avenue	Exit	WB	1	4	Rear End	100%	Clear	100%	Dry	100%	Early	100%	Straight Ahead	100%
1St Avenue to WB I-290	Entrance	WB	6	1	Rear End	100%	Clear	100%	Dry	100%	AM Peak	33%	Straight Ahead	50%
WB I-290 to 1St Avenue	Exit	WB	4	0	Rear End	50%	Rain	50%	Dry	50%	AM Peak	25%	Uknown	75%
DES PLAINES Road to WB I-290	Entrance	WB	2	0	Rear End	100%	Clear	100%	Dry	100%	AM Peak	50%	Straight Ahead	50%
Harlem Avenue to WB I-290	Entrance	WB	13	2	Rear End	85%	Clear	92%	Dry	85%	Late Evening	38%	Straight Ahead	62%
WB I-290 to Harlem Avenue	Exit	WB	14	3	Rear End	71%	Clear	86%	Dry	86%	Late Evening	50%	Straight Ahead	57%
Austin Blvd to WB I-290	Entrance	WB	6	2	Rear End	67%	Clear	100%	Dry	83%	Late Evening	50%	Straight Ahead	33%
WB I-290 to Austin Blvd	Exit	WB	10	2	Rear End	80%	Clear	90%	Dry	90%	AM Peak	30%	Straight Ahead	60%
Central Avenue to WB I-290	Entrance	WB	3	2	Rear End	100%	Clear	100%	Dry	100%	Midday	33%	Straight Ahead	100%
WB I-290 to Central Ave	Exit	WB	2	0	Fixed Object	100%	Clear	50%	Dry	100%	Late Evening	100%	Skidding/Contro	50%
WB I-290 to Laramie Avenue	Exit	WB	1	0	Rear End	100%	Clear	100%	Dry	100%	Midday	100%	Straight Ahead	100%
Cicero Avenue to WB I-290	Entrance	WB	5	1	Rear End	100%	Clear	100%	Dry	100%	Midday	60%	Straight Ahead	80%
Entrance Ramps		10	56	13	Rear End	75%	Clear	95%	Dry	88%	Midday	38%	Straight Ahead	55%
Exit Ramps		11	63	11	Rear End	63%	Clear	78%	Dry	76%	Midday	29%	Straight Ahead	60%
Westbound Total		**21**	**119**	**24**	**Rear End**	**69%**	**Clear**	**86%**	**Dry**	**82%**	**Midday**	**33%**	**Straight Ahead**	**58%**
Ramp Total			**310**	**82**	**Rear End**	**59%**	**Clear**	**84%**	**Dry**	**76%**	**Midday**	**29%**	**Straight Ahead**	**48%**

Technical Memorandum

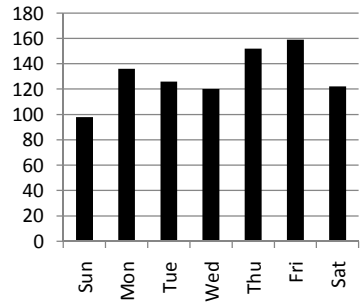
Appendix G

Crossroad Crash Summary Reports

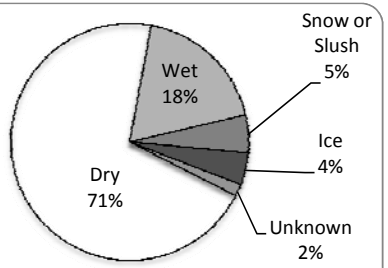
Crashes by Time of Day



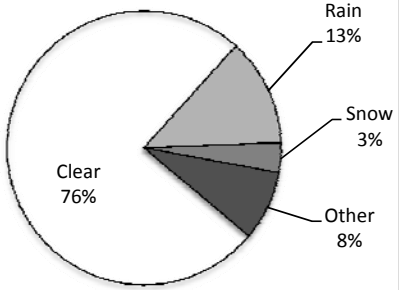
Crashes by Day of Week



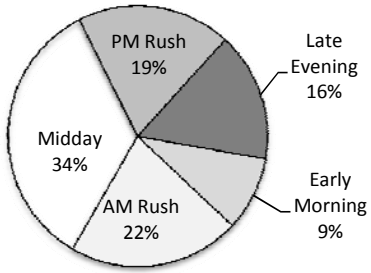
Road Condition



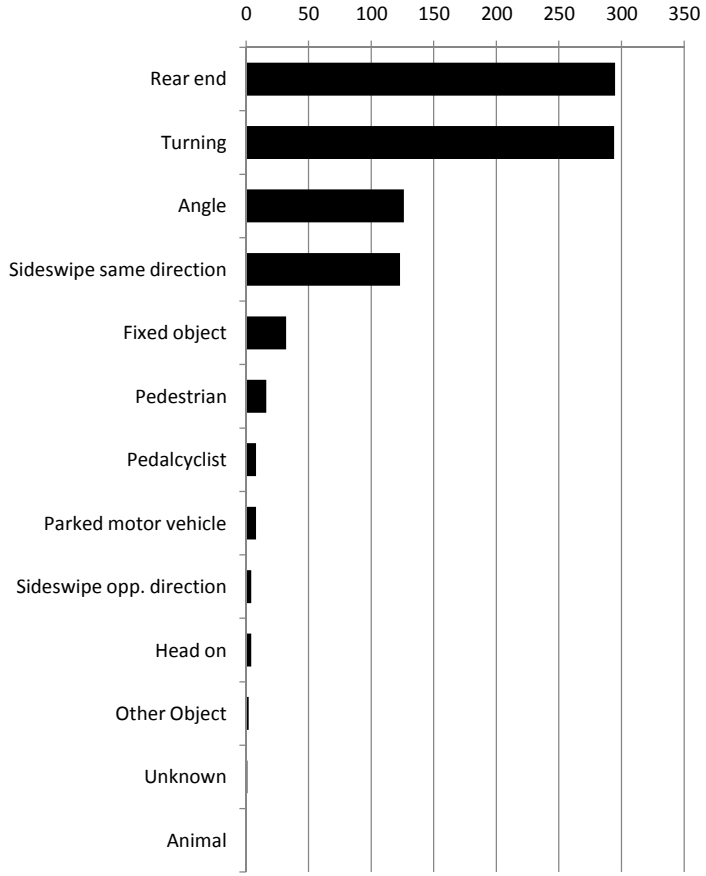
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	Crossroad Total

Total Length	1.76 Miles
Total Crashes	913
Crash Rate	518.8 crashes/mile

Injury Statistics	
Fatal	0
A Injury	22
B & C Injury	165
Total Injuries	187
Injury Rate	106.3 Injuries/mile

Predominant Crash Factors

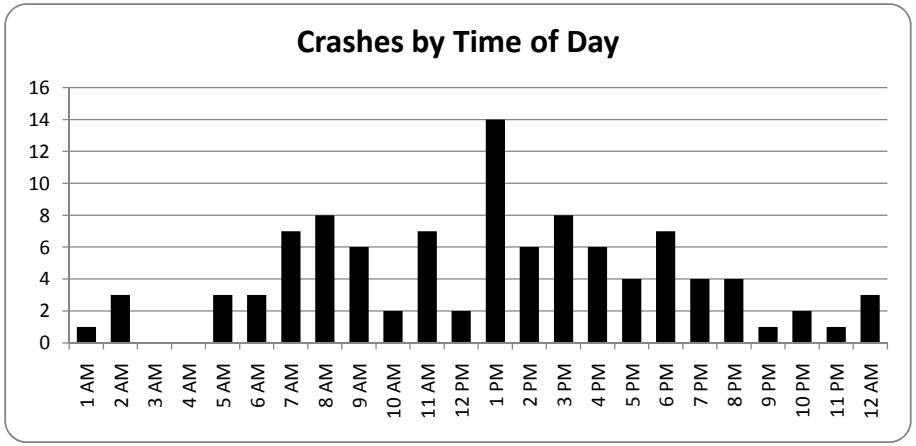
Crash Type:	Rear end	32%
Weather Condition:	Clear	76%
Road Condition:	Dry	70%
Lighting Condition:	Daylight	63%
Time of Day:	Midday	33%
Vehicle Type:	No Data	

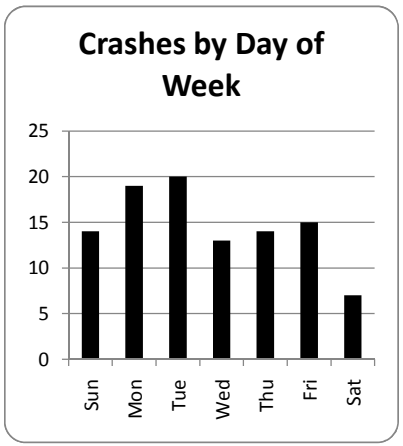
Illinois Department of Transportation

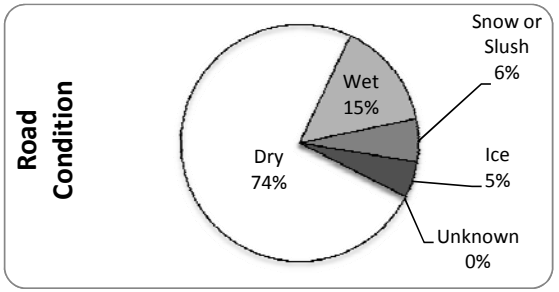
I-290 Preliminary Engineering and Environmental Study (Phase I)

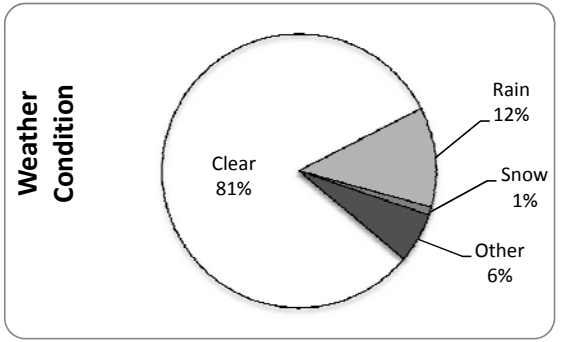
Three Year Crash Statistics

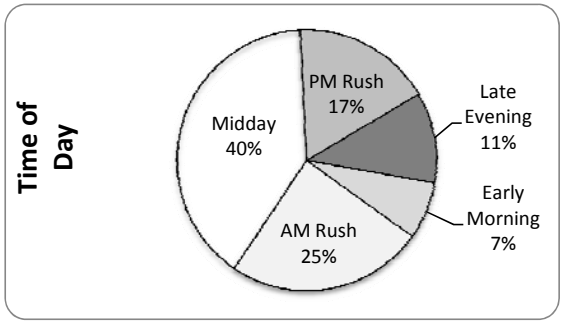
2006, 2007, 2008

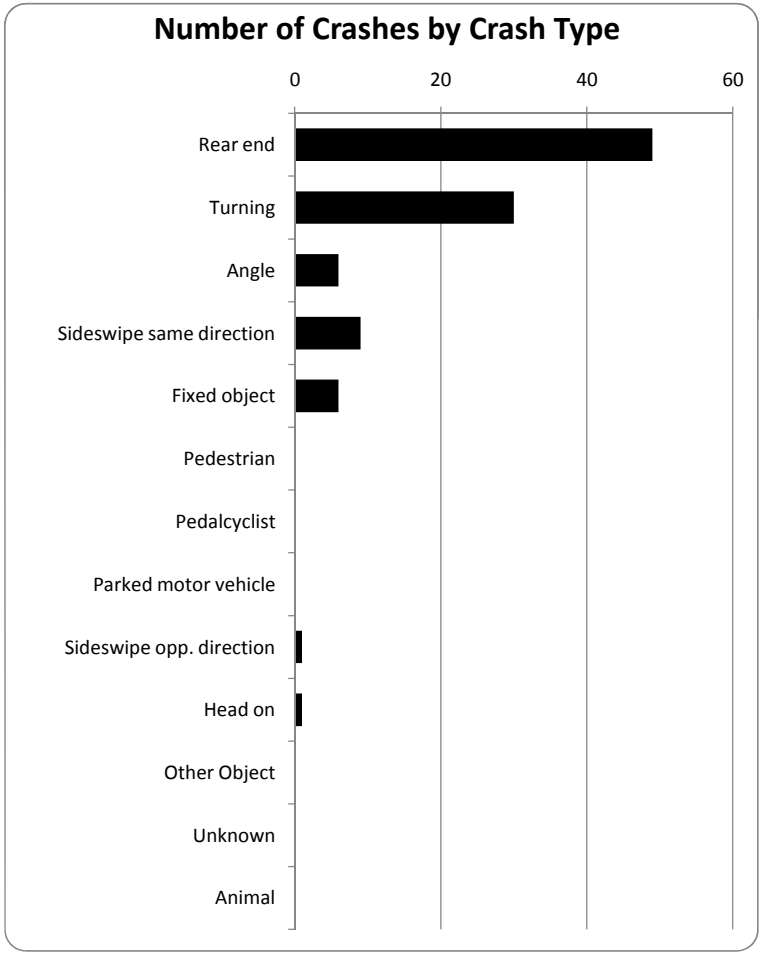












Cross Road	25th Ave
I-290 Access:	Full - Direct/Slip Ramps

Length	0.30 Miles
Total Crashes	102
Crash Rate	340.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	1
B & C Injury	27
Total Injuries	28
Injury Rate	93.3 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	48%
Weather Condition:	Clear	81%
Road Condition:	Dry	75%
Lighting Condition:	Daylight	72%
Time of Day:	Midday	38%
Vehicle Type:	No Data	

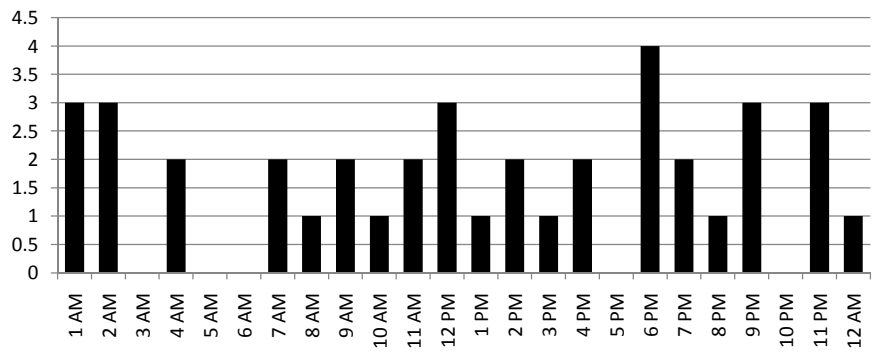
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

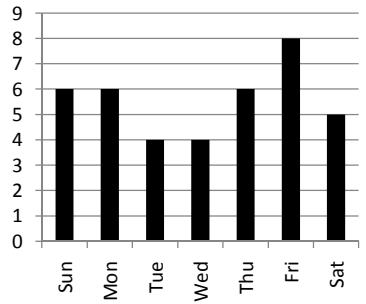
Three Year Crash Statistics

2006, 2007, 2008

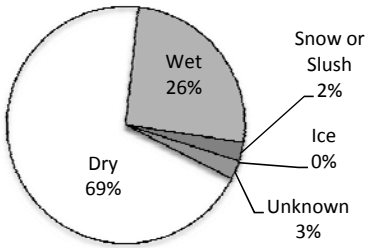
Crashes by Time of Day



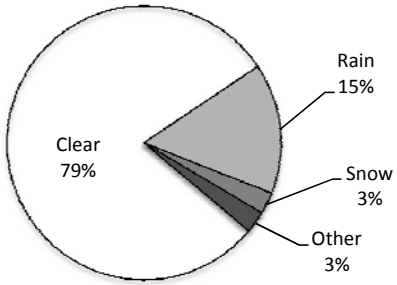
Crashes by Day of Week



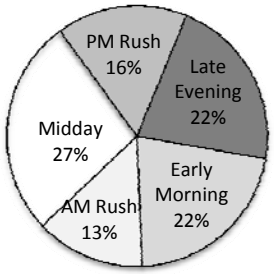
Road Condition



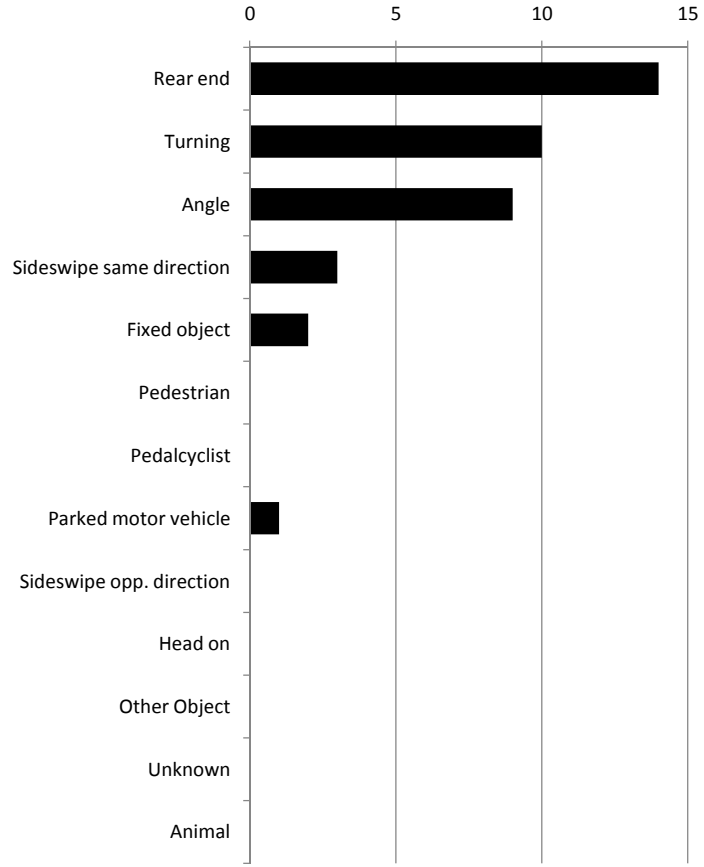
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	17th Ave
I-290 Access:	Full - Slip Ramp
Length	0.06 Miles
Total Crashes	39
Crash Rate	650.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	3
B & C Injury	7
Total Injuries	10
Injury Rate	166.7 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	36%
Weather Condition:	Clear	79%
Road Condition:	Dry	69%
Lighting Condition:	Daylight	54%
Time of Day:	Midday	26%
Vehicle Type:	No Data	

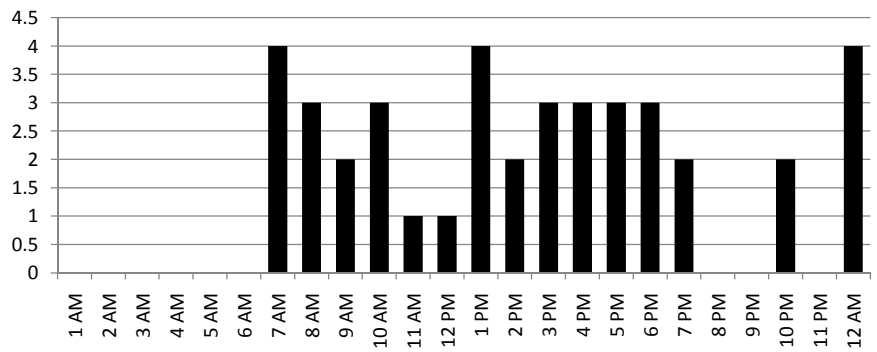
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

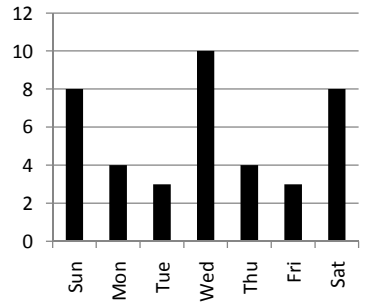
Three Year Crash Statistics

2006, 2007, 2008

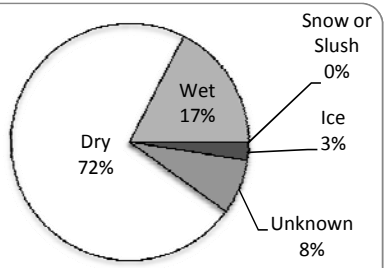
Crashes by Time of Day



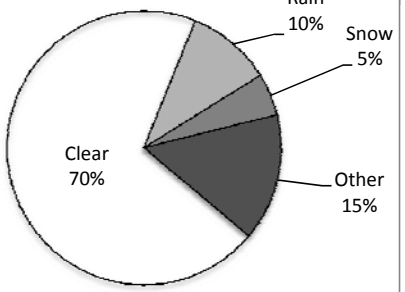
Crashes by Day of Week



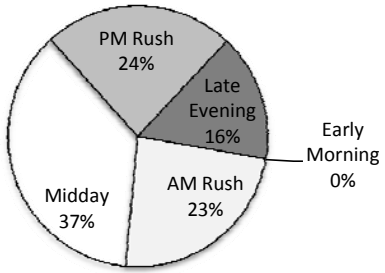
Road Condition



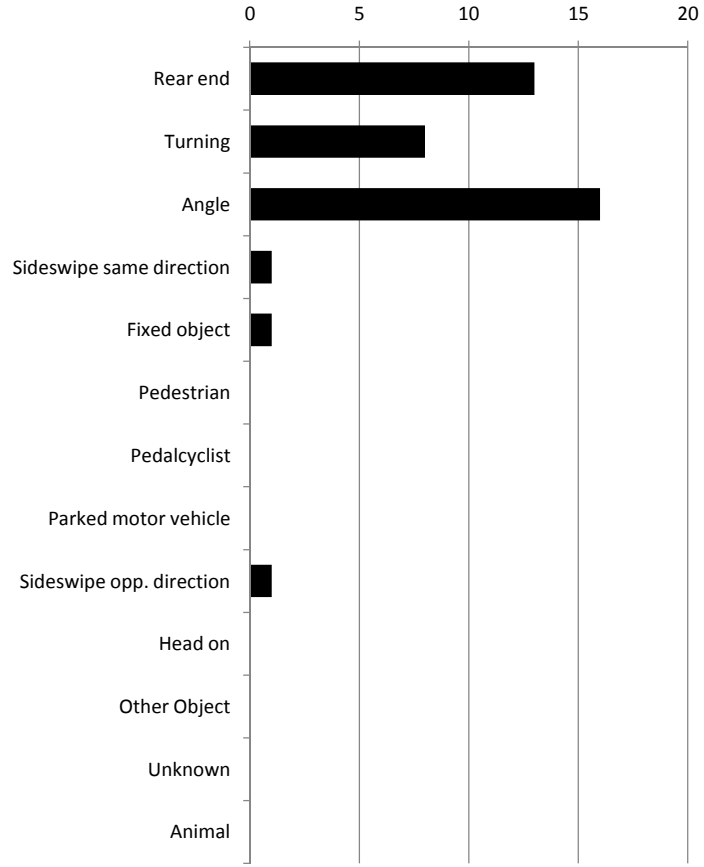
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	9th Ave
I-290 Access:	Partial - Slip Ramp
Length	0.05 Miles
Total Crashes	40
Crash Rate	800.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	1
B & C Injury	5
Total Injuries	6
Injury Rate	120.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Angle	40%
Weather Condition:	Clear	70%
Road Condition:	Dry	73%
Lighting Condition:	Daylight	65%
Time of Day:	Midday	35%
Vehicle Type:	No Data	

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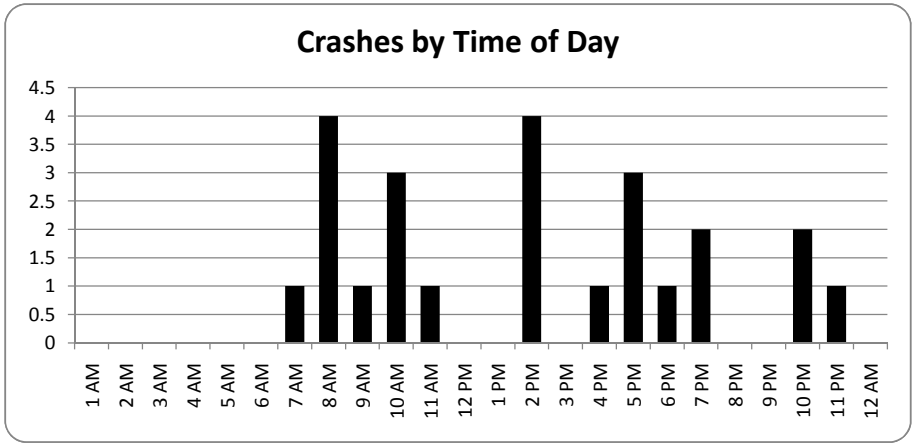
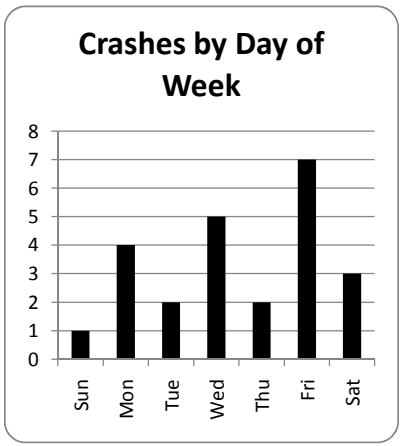
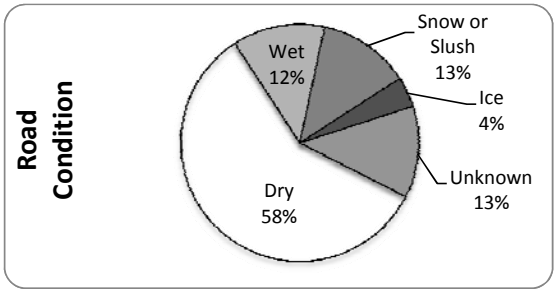
I-290 Preliminary Engineering and Environmental Study (Phase I)

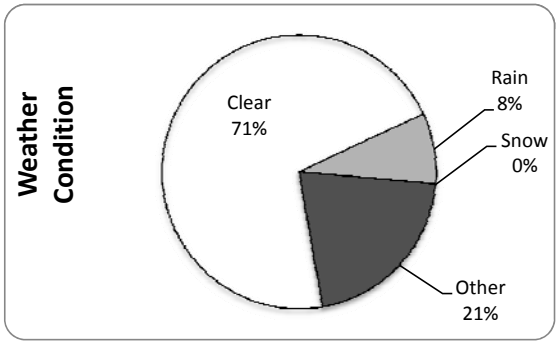
Three Year Crash Statistics

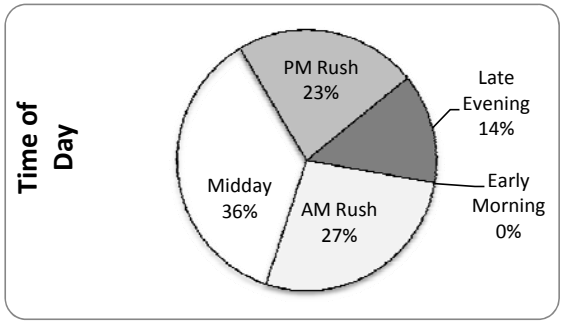
2006, 2007, 2008

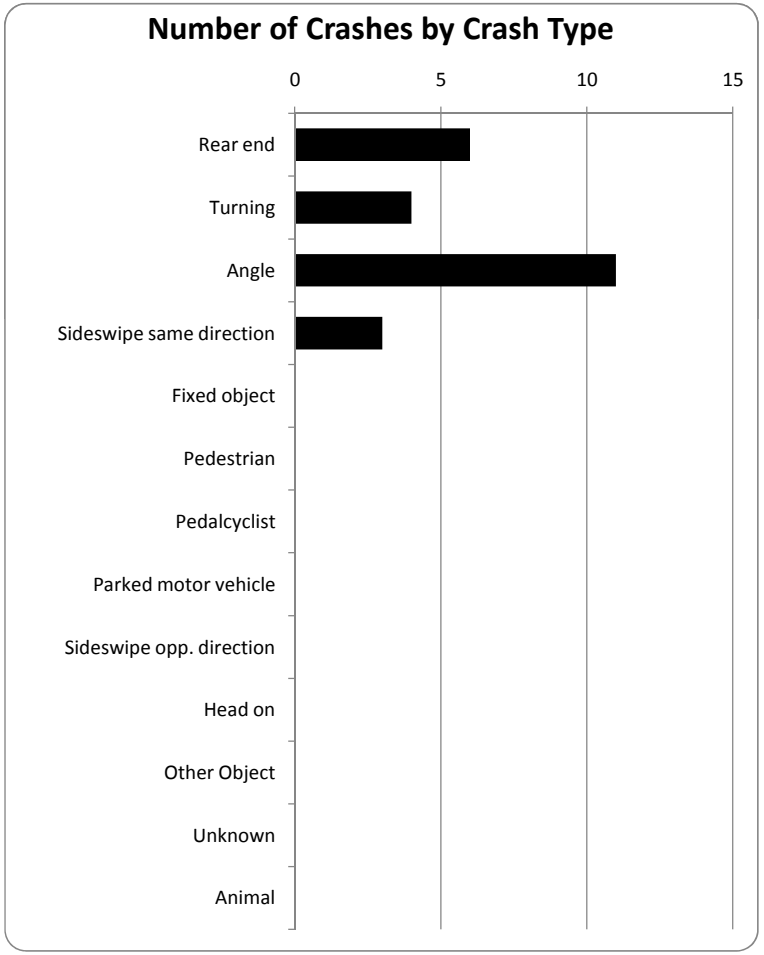












Cross Road	5th Ave
I-290 Access:	No Access
Length	0.04 Miles
Total Crashes	24
Crash Rate	600.0 crashes/mile

Injury Statistics		
	Fatal	0
	A Injury	0
	B & C Injury	6
	Total Injuries	6
	Injury Rate	150.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Angle	46%
Weather Condition:	Clear	71%
Road Condition:	Dry	58%
Lighting Condition:	Daylight	75%
Time of Day:	Midday	33%
Vehicle Type:	No Data	

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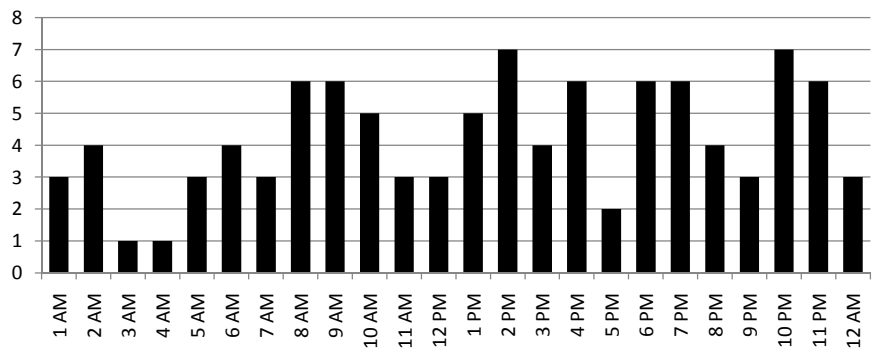
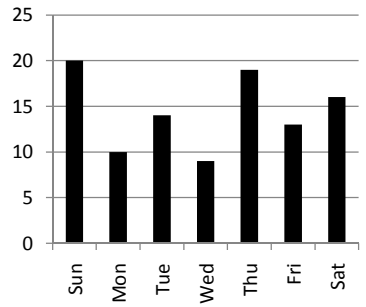
Three Year Crash Statistics

2006, 2007, 2008

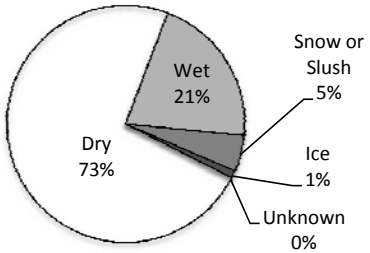
Crashes by Time of Day



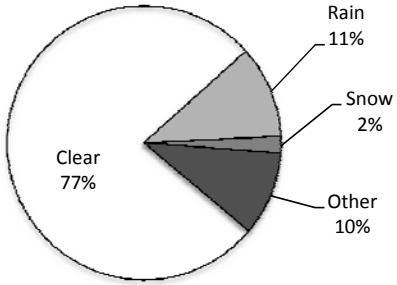
Crashes by Day of Week



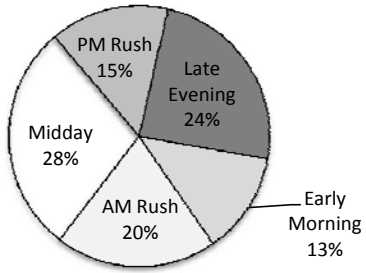
Road Condition



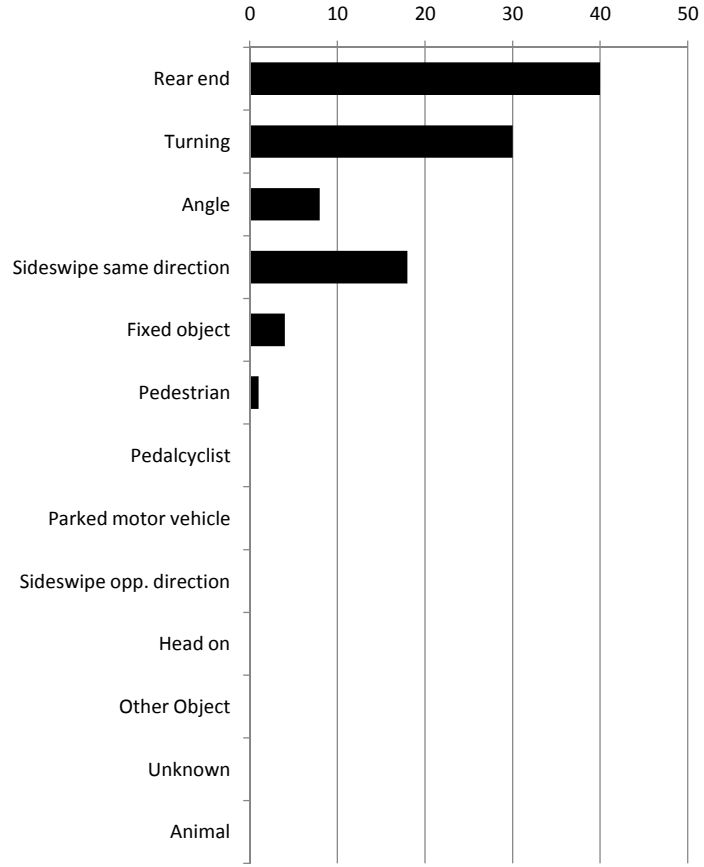
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	1ST Ave (IL 171)
I-290 Access:	Full - Slip Ramp

Length	0.13 Miles
Total Crashes	101
Crash Rate	776.9 crashes/mile

Injury Statistics

Fatal	0
A Injury	2
B & C Injury	9
Total Injuries	11
Injury Rate	84.6 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	40%
Weather Condition:	Clear	77%
Road Condition:	Dry	73%
Lighting Condition:	Daylight	56%
Time of Day:	Midday	27%
Vehicle Type:	No Data	

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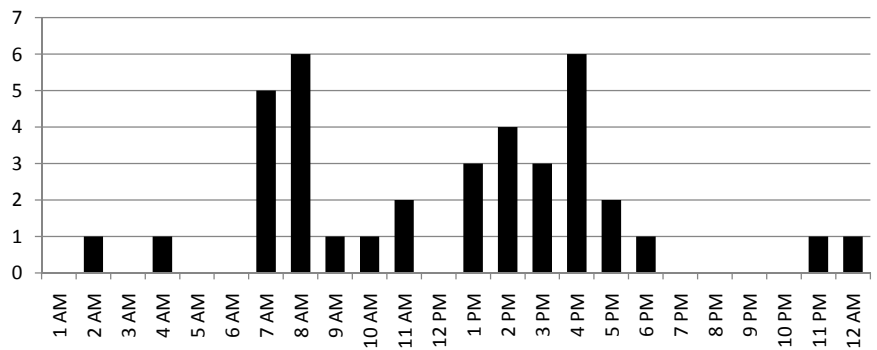
I-290 Preliminary Engineering and Environmental Study (Phase I)

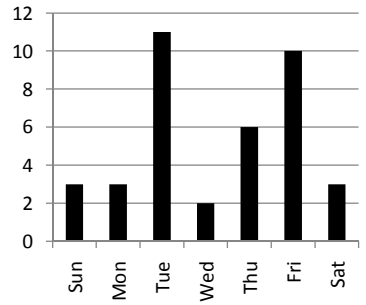
Three Year Crash Statistics

2006, 2007, 2008

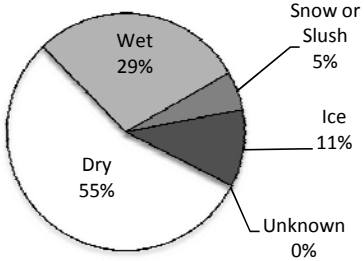
Crashes by Time of Day



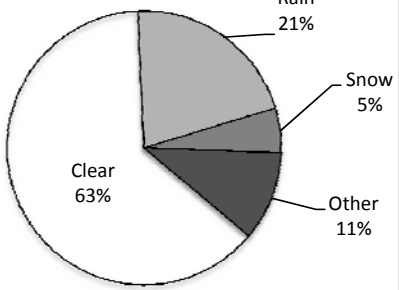
Crashes by Day of Week



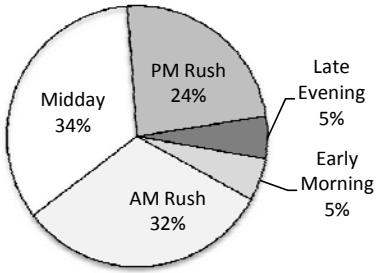
Road Condition



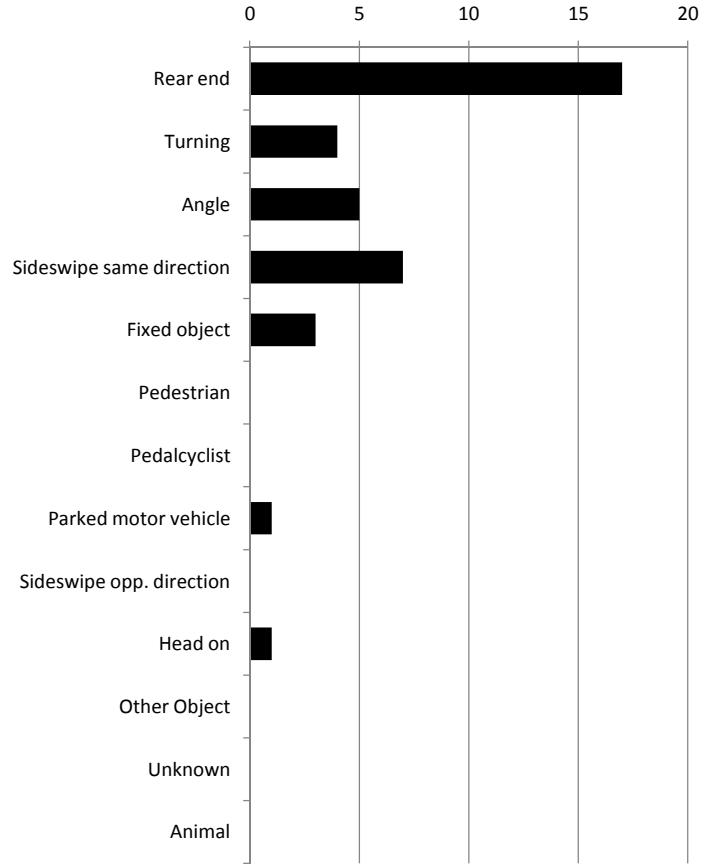
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	Des Plaines Ave
I-290 Access:	Partial - Diamond

Length	0.11 Miles
Total Crashes	38
Crash Rate	345.5 crashes/mile

Injury Statistics		
	Fatal	0
	A Injury	0
	B & C Injury	7
	Total Injuries	7
	Injury Rate	63.6 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	45%
Weather Condition:	Clear	63%
Road Condition:	Dry	55%
Lighting Condition:	Daylight	79%
Time of Day:	Midday	34%
Vehicle Type:	No Data	

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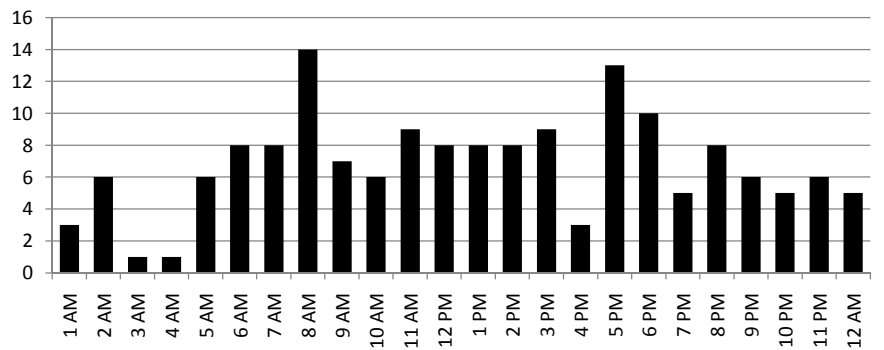
I-290 Preliminary Engineering and Environmental Study (Phase I)

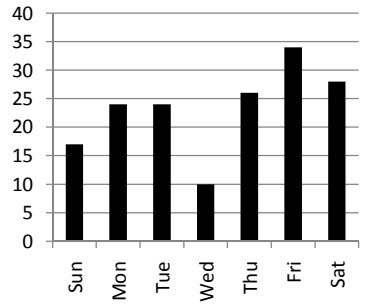
Three Year Crash Statistics

2006, 2007, 2008

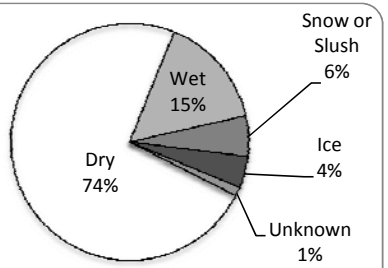
Crashes by Time of Day



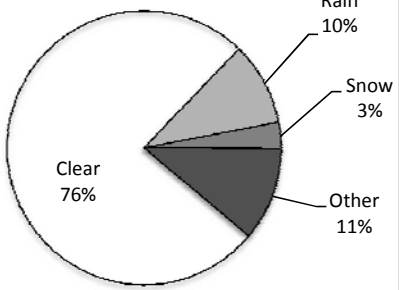
Crashes by Day of Week



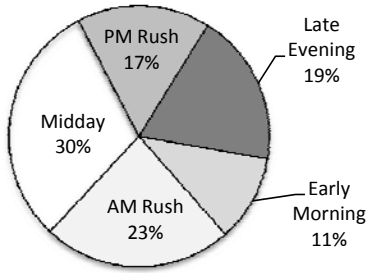
Road Condition



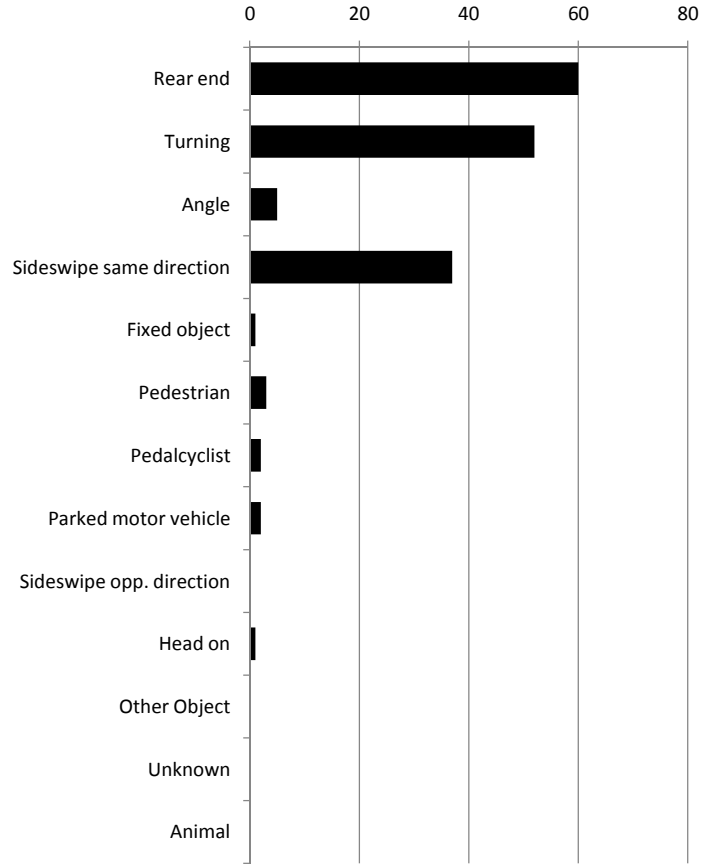
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	Harlem Ave
I-290 Access:	Full - Single Point

Length	0.15 Miles
Total Crashes	163
Crash Rate	1086.7 crashes/mile

Injury Statistics	
Fatal	0
A Injury	3
B & C Injury	20
Total Injuries	23
Injury Rate	153.3 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	37%
Weather Condition:	Clear	76%
Road Condition:	Dry	74%
Lighting Condition:	Daylight	59%
Time of Day:	Midday	29%
Vehicle Type:	No Data	

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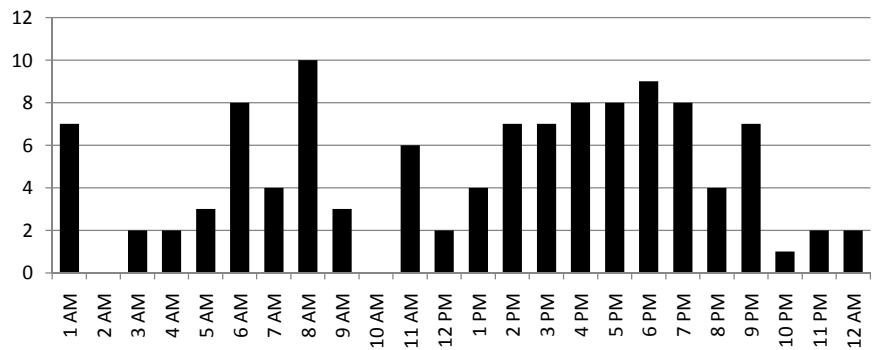
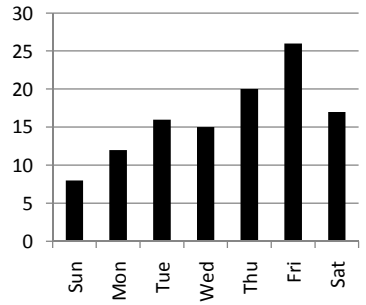
Three Year Crash Statistics

2006, 2007, 2008

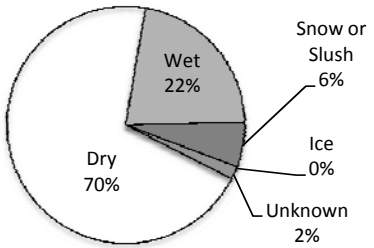
Crashes by Time of Day



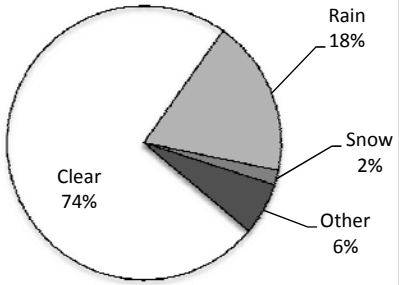
Crashes by Day of Week



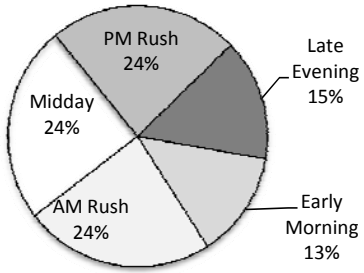
Road Condition



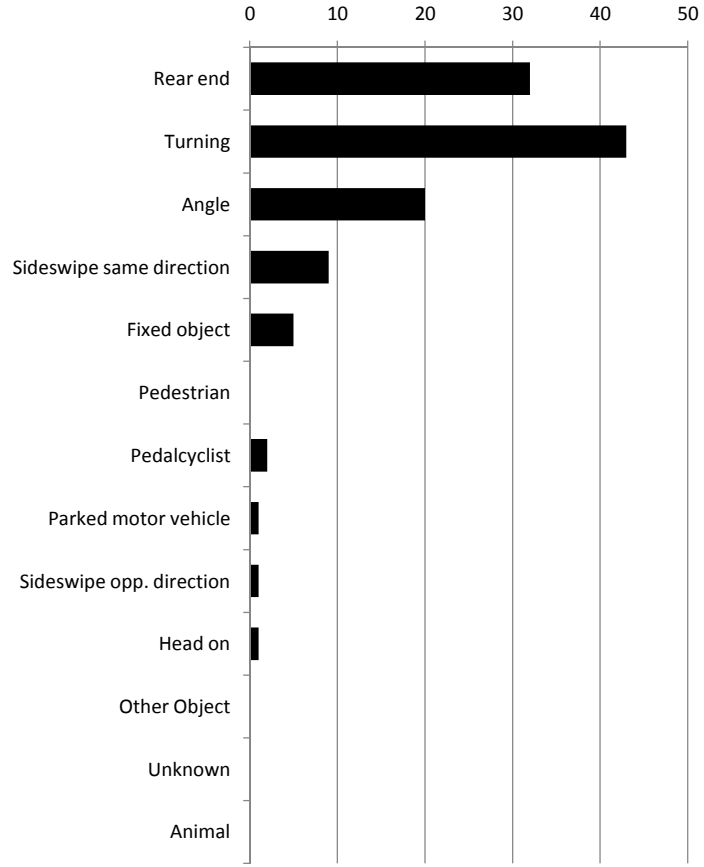
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	Austin Blvd
I-290 Access:	Full - Single Point
Length	0.03 Miles
Total Crashes	114
Crash Rate	3800.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	2
B & C Injury	24
Total Injuries	26
Injury Rate	866.7 Injuries/mile

Predominant Crash Factors

Crash Type:	Turning	38%
Weather Condition:	Clear	74%
Road Condition:	Dry	70%
Lighting Condition:	Daylight	57%
Time of Day:	Midday	23%
Vehicle Type:	No Data	

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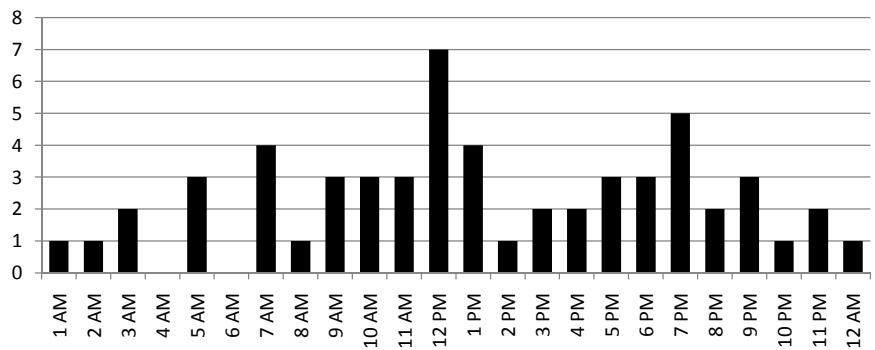
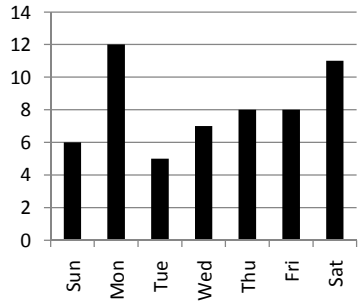
Three Year Crash Statistics

2006, 2007, 2008

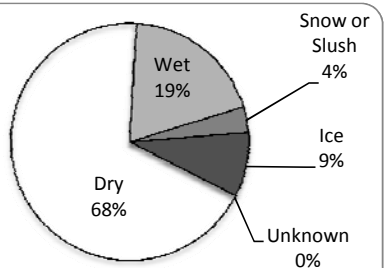
Crashes by Time of Day



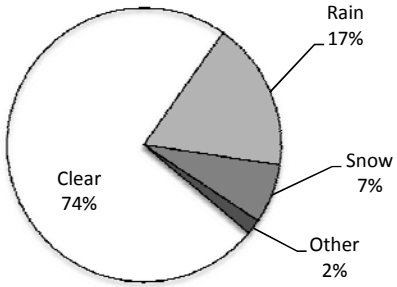
Crashes by Day of Week



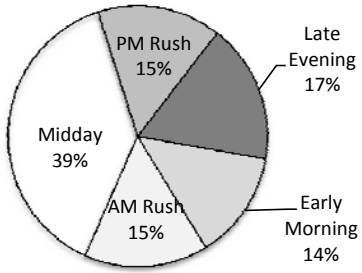
Road Condition



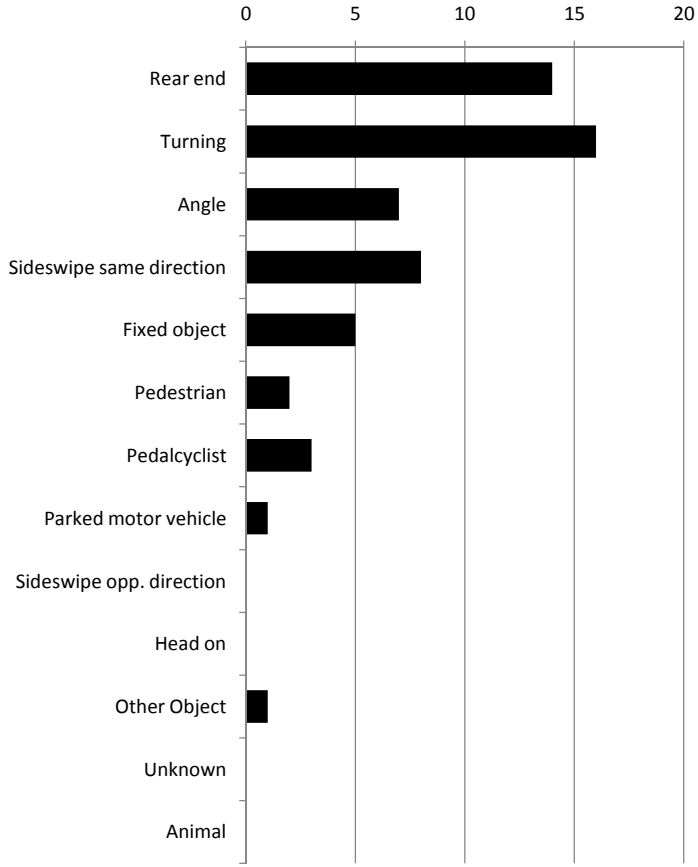
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	Central Ave
I-290 Access:	Full - Diamond

Length	0.08 Miles
Total Crashes	57
Crash Rate	712.5 crashes/mile

Injury Statistics

Fatal	0
A Injury	2
B & C Injury	18
Total Injuries	20
Injury Rate	250.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Turning	28%
Weather Condition:	Clear	74%
Road Condition:	Dry	68%
Lighting Condition:	Daylight	60%
Time of Day:	Midday	35%
Vehicle Type:	No Data	

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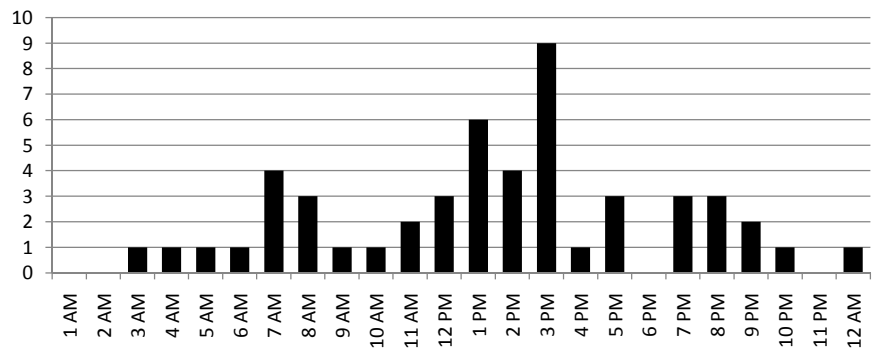
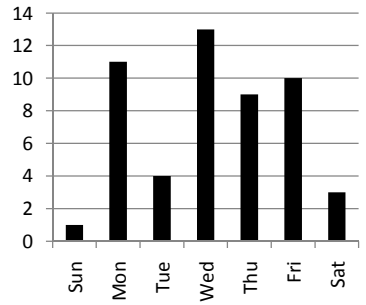
Three Year Crash Statistics

2006, 2007, 2008

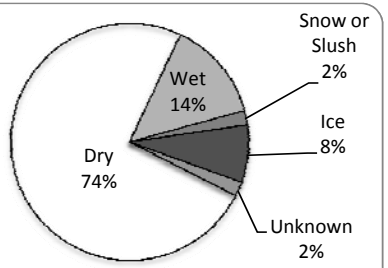
Crashes by Time of Day



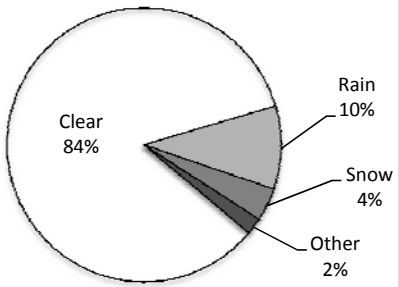
Crashes by Day of Week



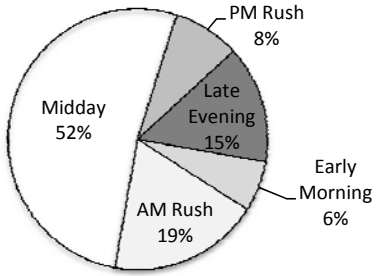
Road Condition



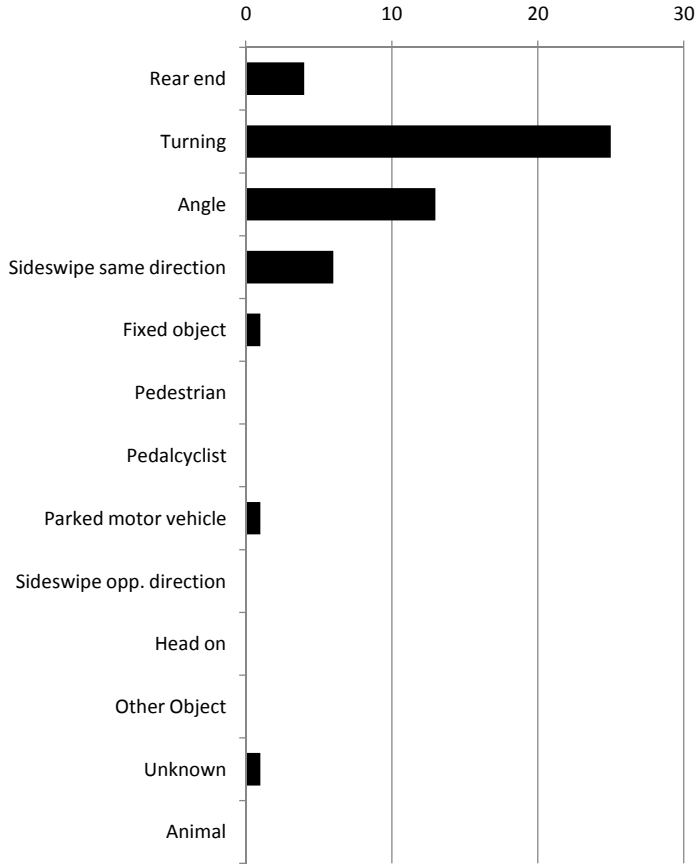
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	Laramie Ave
I-290 Access:	Partial - Slip Ramp
Length	0.06 Miles
Total Crashes	51
Crash Rate	850.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	1
B & C Injury	11
Total Injuries	12
Injury Rate	200.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Turning	49%
Weather Condition:	Clear	84%
Road Condition:	Dry	75%
Lighting Condition:	Daylight	69%
Time of Day:	Midday	49%
Vehicle Type:	No Data	

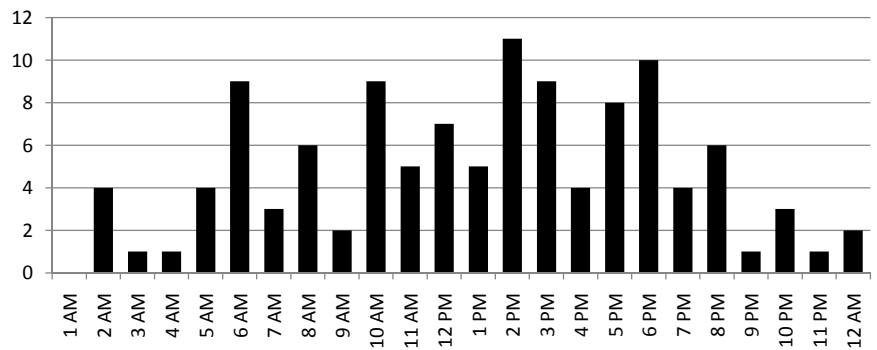
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

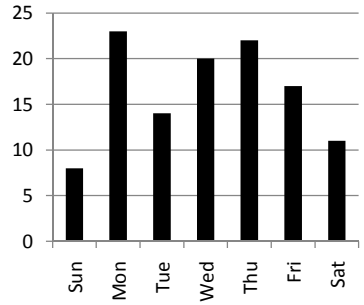
Three Year Crash Statistics

2006, 2007, 2008

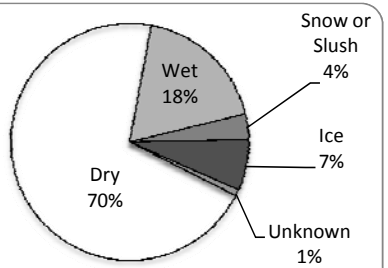
Crashes by Time of Day



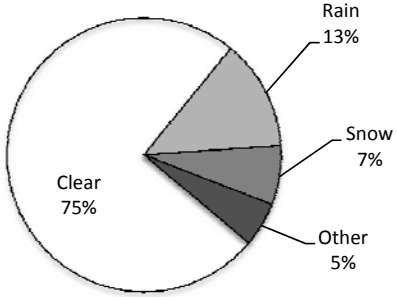
Crashes by Day of Week



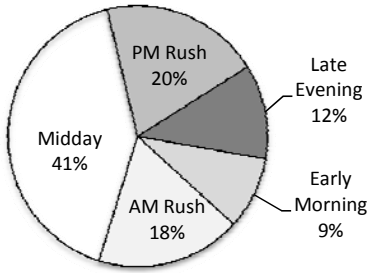
Road Condition



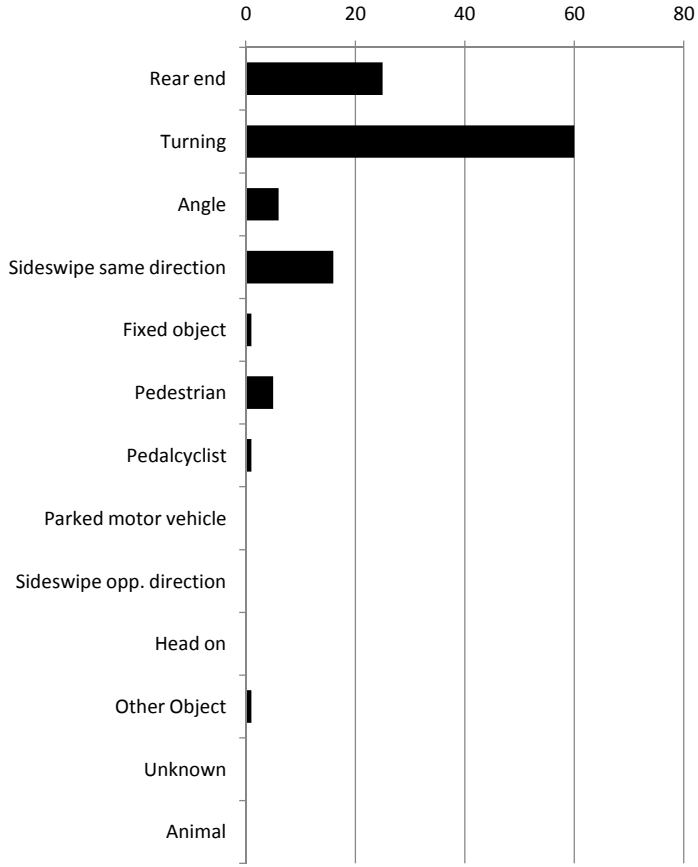
Weather Condition



Time of Day



Number of Crashes by Crash Type



Cross Road	Cicero Ave (IL 50)
I-290 Access:	Partial - Slip Ramp

Length	0.16 Miles
Total Crashes	115
Crash Rate	718.8 crashes/mile

Injury Statistics

Fatal	0
A Injury	3
B & C Injury	16
Total Injuries	19
Injury Rate	118.8 Injuries/mile

Predominant Crash Factors

Crash Type:	Turning	52%
Weather Condition:	Clear	75%
Road Condition:	Dry	70%
Lighting Condition:	Daylight	65%
Time of Day:	Midday	40%
Vehicle Type:	No Data	

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Appendix H

Cross Road Crash Statistics

Individual Cross Road Crash Statistics - Listed by Rank

Time Period		# of Crashes	% of All Crashes	Predominant Crash Type			Dry	Wet	Ice Snow Slush
				Rear end	Turning	Sideswipe same direction			
Harlem Ave	**Access: Full - Single Point**								**Rank = 1**
AM Peak	6a to 11a	43	26%	26%	30%	40%	79%	7%	9%
Midday	11a to 4p	42	26%	50%	17%	24%	79%	2%	5%
PM Peak	4p to 7p	26	16%	38%	42%	8%	77%	12%	12%
Congested Period	6a to 11p	135	83%	37%	31%	25%	77%	13%	7%
Total Crashes		163	100%	37%	32%	23%	74%	15%	7%
Cicero Ave (IL 50)	**Access: Partial - Slip Ramp**								**Rank = 2**
AM Peak	6a to 11a	29	25%	3%	66%	21%	66%	24%	3%
Midday	11a to 4p	37	32%	32%	46%	11%	76%	3%	8%
PM Peak	4p to 7p	22	19%	23%	64%	9%	59%	32%	0%
Congested Period	6a to 11p	102	89%	21%	55%	14%	69%	20%	4%
Total Crashes		115	100%	22%	52%	14%	70%	18%	4%
Austin Blvd	**Access: Full - Single Point**					Angle			**Rank = 3**
AM Peak	6a to 11a	25	22%	36%	36%	20%	68%	20%	8%
Midday	11a to 4p	26	23%	31%	31%	27%	65%	4%	4%
PM Peak	4p to 7p	25	22%	24%	40%	24%	68%	20%	12%
Congested Period	6a to 11p	96	84%	28%	36%	21%	70%	22%	7%
Total Crashes		114	100%	28%	38%	18%	70%	22%	7%
25th Ave	**Access: Full - Direct/Slip Ramps**								**Rank = 4**
AM Peak	6a to 11a	26	25%	50%	19%	23%	69%	19%	8%
Midday	11a to 4p	37	36%	57%	30%	3%	81%	3%	0%
PM Peak	4p to 7p	17	17%	35%	41%	6%	76%	6%	12%
Congested Period	6a to 11p	91	89%	48%	31%	10%	73%	16%	7%
Total Crashes		102	100%	48%	29%	9%	75%	15%	6%
1st Ave (IL 171)	**Access: Full - Slip Ramp**								**Rank = 5**
AM Peak	6a to 11a	24	24%	42%	33%	13%	75%	25%	0%
Midday	11a to 4p	22	22%	27%	36%	23%	68%	5%	9%
PM Peak	4p to 7p	14	14%	43%	21%	29%	79%	14%	7%
Congested Period	6a to 11p	80	79%	41%	29%	19%	71%	24%	4%
Total Crashes		101	100%	40%	30%	18%	73%	21%	5%
Central Ave	**Access: Full - Diamond**								**Rank = 6**
AM Peak	6a to 11a	11	19%	9%	27%	18%	55%	27%	18%
Midday	11a to 4p	17	30%	18%	41%	24%	82%	6%	0%
PM Peak	4p to 7p	8	14%	25%	13%	13%	50%	25%	0%
Congested Period	6a to 11p	47	82%	23%	28%	17%	68%	17%	4%
Total Crashes		57	100%	25%	28%	14%	68%	19%	4%
Laramie Ave	**Access: Partial - Slip Ramp**								**Rank = 7**
AM Peak	6a to 11a	10	20%	10%	40%	20%	60%	20%	10%
Midday	11a to 4p	24	47%	4%	54%	8%	83%	4%	4%
PM Peak	4p to 7p	4	8%	0%	75%	0%	50%	25%	0%
Congested Period	6a to 11p	47	92%	6%	47%	13%	74%	13%	4%
Total Crashes		51	100%	8%	49%	12%	75%	14%	4%
9th Ave	**Access: Partial - Slip Ramp**								**Rank = 8**
AM Peak	6a to 11a	12	30%	33%	25%	0%	67%	33%	0%
Midday	11a to 4p	11	28%	18%	36%	0%	73%	9%	9%
PM Peak	4p to 7p	9	23%	44%	11%	0%	78%	11%	0%
Congested Period	6a to 11p	36	90%	36%	22%	3%	69%	19%	8%
Total Crashes		40	100%	33%	20%	3%	73%	18%	8%

Individual Cross Road Crash Statistics - Listed by Rank

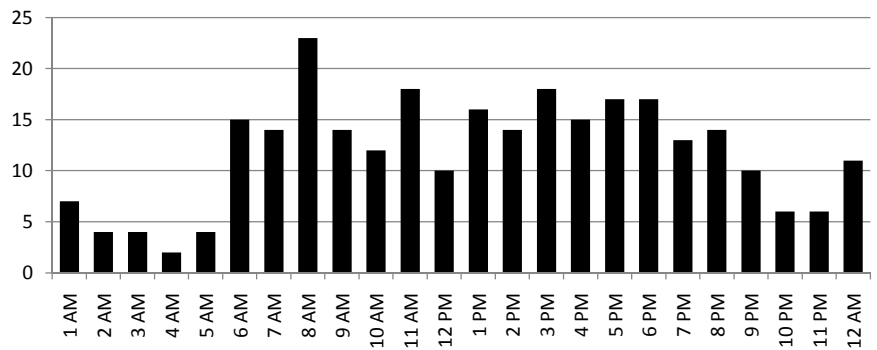
Time Period		# of Crashes	% of All Crashes	Predominant Crash Type			Dry	Wet	Ice Snow Slush
				Rear end	Turning	Sideswipe same direction			
Des Plaines Ave		**Access: Partial - Diamond**							**Rank = 10**
AM Peak	6a to 11a	13	34%	54%	8%	31%	69%	31%	0%
Midday	11a to 4p	12	32%	42%	17%	17%	50%	8%	8%
PM Peak	4p to 7p	9	24%	56%	0%	11%	33%	44%	0%
Congested Period	6a to 11p	34	89%	50%	9%	21%	53%	32%	3%
Total Crashes		38	100%	45%	11%	18%	55%	29%	5%
Oak Park Ave		**Access: No Access**							**Rank = 11**
AM Peak	6a to 11a	6	23%	33%	33%	17%	67%	0%	33%
Midday	11a to 4p	5	19%	20%	20%	20%	80%	20%	20%
PM Peak	4p to 7p	5	19%	80%	0%	0%	20%	20%	0%
Congested Period	6a to 11p	24	92%	4%	17%	17%	67%	8%	13%
Total Crashes		26	100%	35%	19%	15%	65%	12%	12%
5th Ave		**Access: No Access**							**Rank = 12**
AM Peak	6a to 11a	9	38%	33%	22%	0%	56%	11%	33%
Midday	11a to 4p	5	21%	40%	40%	0%	60%	20%	20%
PM Peak	4p to 7p	5	21%	20%	0%	20%	40%	20%	20%
Congested Period	6a to 11p	23	96%	26%	17%	13%	57%	13%	26%
Total Crashes		24	100%	25%	17%	13%	58%	13%	25%
Ridgeland Ave		**Access: No Access**							**Rank = 13**
AM Peak	6a to 11a	5	26%	20%	0%	20%	80%	0%	20%
Midday	11a to 4p	8	42%	50%	13%	13%	63%	13%	13%
PM Peak	4p to 7p	2	11%	50%	50%	0%	0%	100%	0%
Congested Period	6a to 11p	17	89%	35%	24%	12%	59%	18%	18%
Total Crashes		19	100%	37%	26%	11%	63%	16%	16%
East Ave		**Access: No Access**							**Rank = 14**
AM Peak	6a to 11a	2	15%	0%	50%	0%	100%	0%	0%
Midday	11a to 4p	3	23%	33%	33%	0%	67%	33%	33%
PM Peak	4p to 7p	8	62%	13%	0%	0%	75%	13%	13%
Congested Period	6a to 11p	13	100%	15%	15%	0%	77%	8%	15%
Total Crashes		13	100%	15%	15%	0%	77%	8%	15%
Circle Ave		**Access: No Access**							**Rank = 15**
AM Peak	6a to 11a	1	11%	100%	0%	0%	0%	100%	0%
Midday	11a to 4p	2	22%	0%	0%	0%	100%	50%	0%
PM Peak	4p to 7p	5	56%	40%	0%	0%	40%	60%	0%
Congested Period	6a to 11p	9	100%	33%	0%	0%	44%	56%	0%
Total Crashes		9	100%	33%	0%	0%	44%	56%	0%
Lombard Ave		**Access: No Access**							**Rank = 16**
AM Peak	6a to 11a	0	0%	0%	0%	0%	0%	0%	0%
Midday	11a to 4p	0	0%	0%	0%	0%	0%	0%	0%
PM Peak	4p to 7p	1	50%	0%	0%	0%	0%	0%	100%
Congested Period	6a to 11p	2	100%	0%	0%	0%	50%	0%	50%
Total Crashes		2	100%	0%	0%	0%	50%	0%	50%

Technical Memorandum

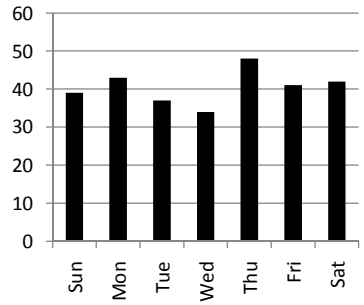
Appendix I

Frontage Road Crash Summary Reports

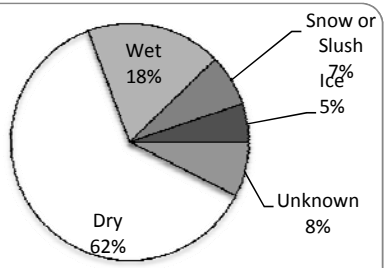
Crashes by Time of Day



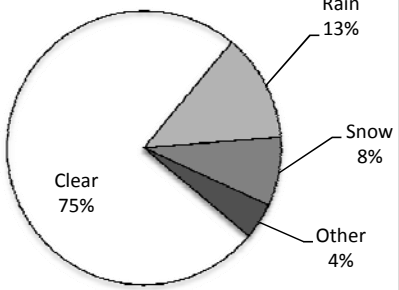
Crashes by Day of Week



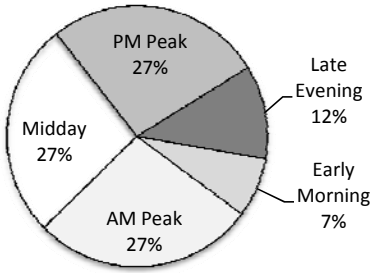
Road Condition



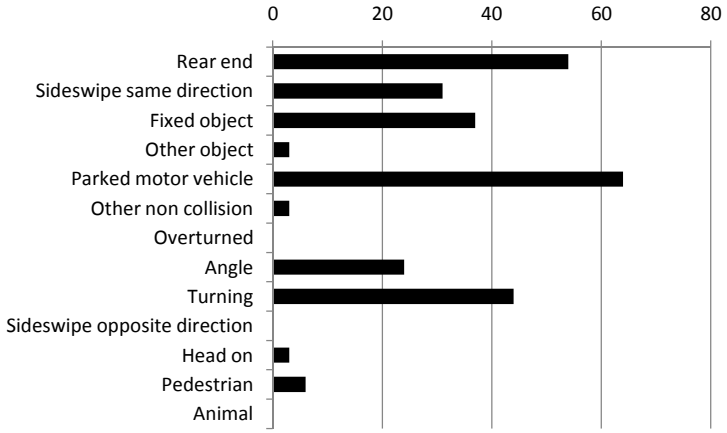
Weather Condition



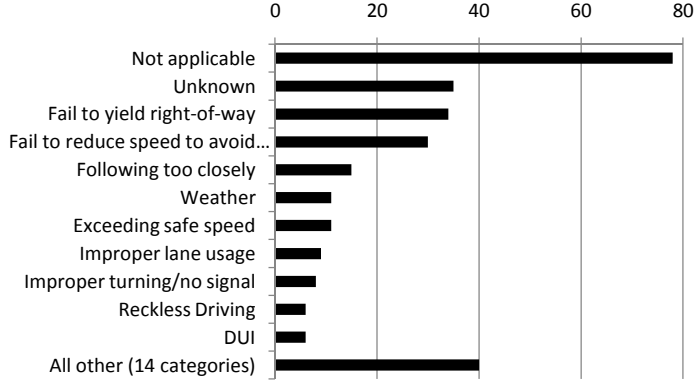
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads	ALL
Length	11.28 Miles
Total Crashes	**284**
Crash Rate	**25.2** crashes/mile

Injury Statistics		
	Fatal	**0**
	A Injury	**4**
	B & C Injury	**42**
	Total Injuries	**46**
	Injury Rate	**4.1** Injuries/mile

Predominant Crash Factors

Crash Type:	Parked motor vehicle	24%
Weather Condition:	Clear	75%
Road Condition:	Dry	62%
Lighting Condition:	Daylight	62%
Time of Day:	AM Peak	27%
Vehicle Type:	Fail to yield right-of-way	12%

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Three Year Crash Statistics

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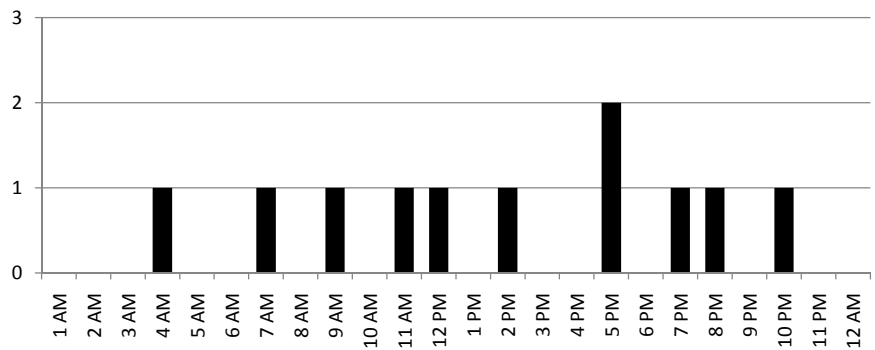
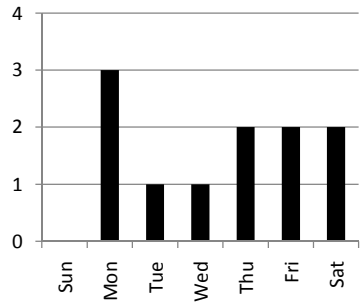
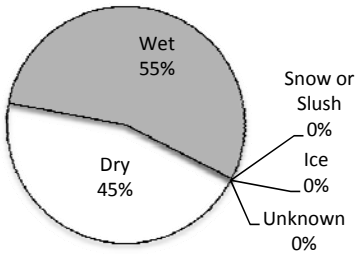
Crashes by Time of Day



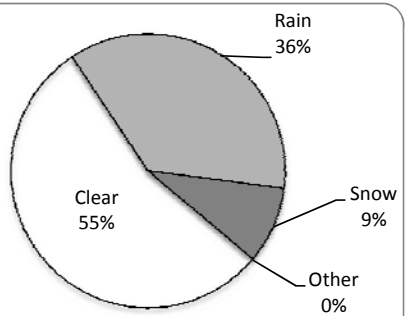
Crashes by Day of Week



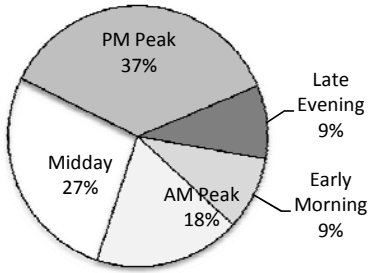
Road Condition



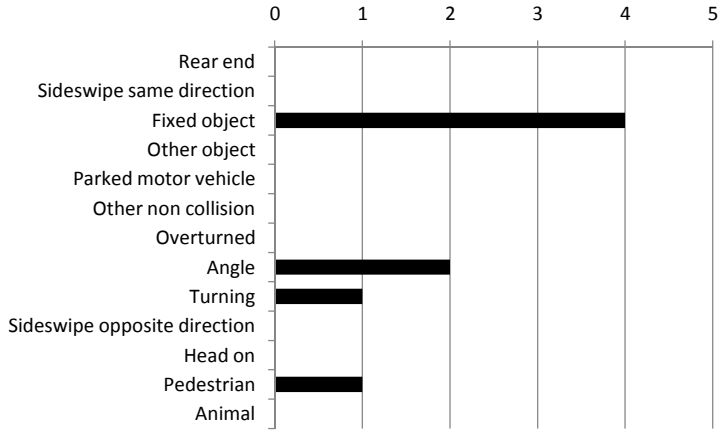
Weather Condition



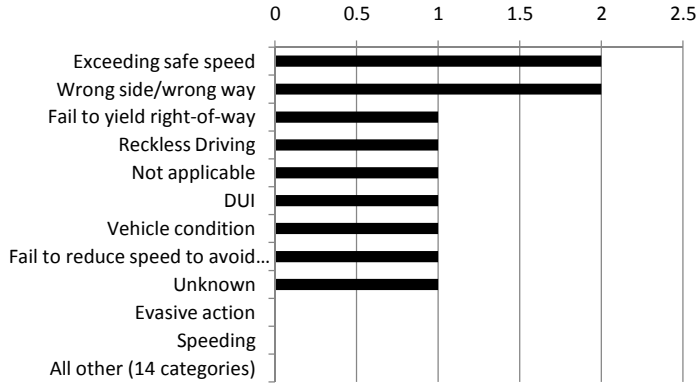
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		A
Harrison Street	Bellwood Ave to 25th Ave	2 Way

Length	0.78 Miles
Total Crashes	11
Crash Rate	14.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	6
Total Injuries	6
Injury Rate	7.7 Injuries/mile

Predominant Crash Factors

Crash Type:	Fixed object	50%
Weather Condition:	Clear	55%
Road Condition:	Wet	55%
Lighting Condition:	Daylight	64%
Time of Day:	PM Peak	36%
Vehicle Type:	Exceeding safe speed	18%

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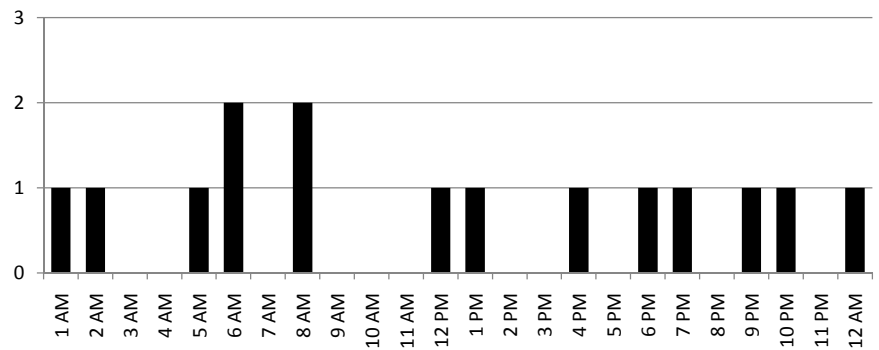
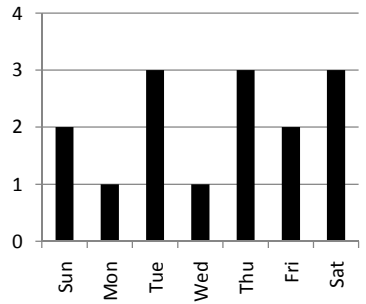
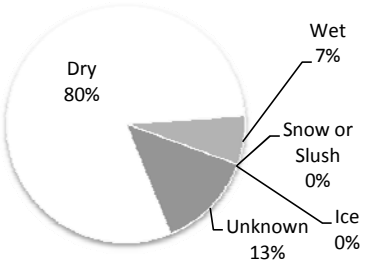
Crashes by Time of Day



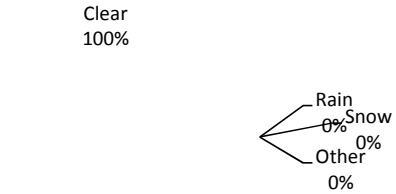
Crashes by Day of Week



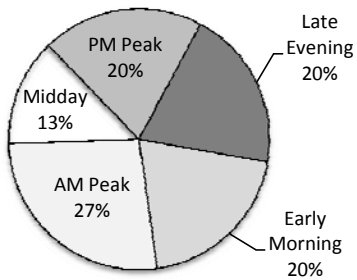
Road Condition



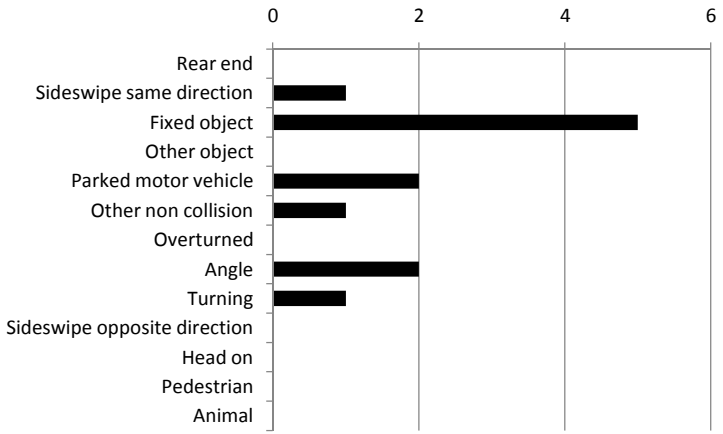
Weather Condition



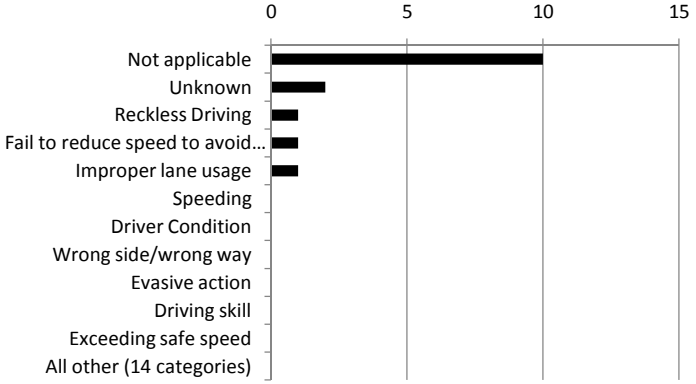
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		B
Harrison Street	24th Ave to 1st Ave	1 Way, (WB)

Length	1.46 Miles
Total Crashes	15
Crash Rate	10.3 crashes/mile

Injury Statistics	
Fatal	0
A Injury	2
B & C Injury	6
Total Injuries	8
Injury Rate	5.5 Injuries/mile

Predominant Crash Factors

Crash Type:	Fixed object	42%
Weather Condition:	Clear	100%
Road Condition:	Dry	80%
Lighting Condition:	Darkness, Lighted Road	40%
Time of Day:	AM Peak	27%
Vehicle Type:	ail to reduce speed to avoid cra	7%

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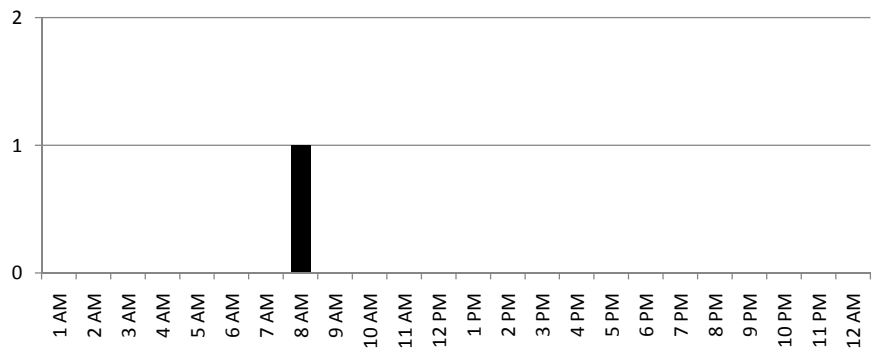
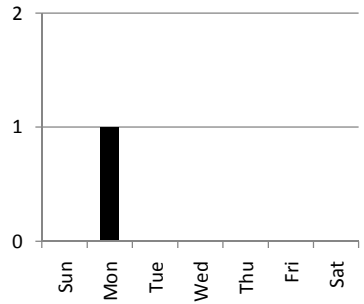
Three Year Crash Statistics

2006, 2007, 2008

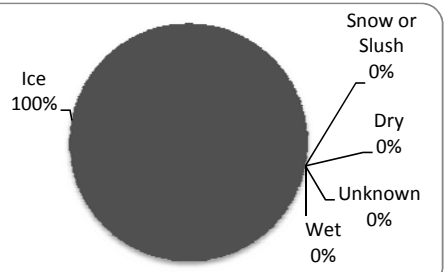
Crashes by Time of Day



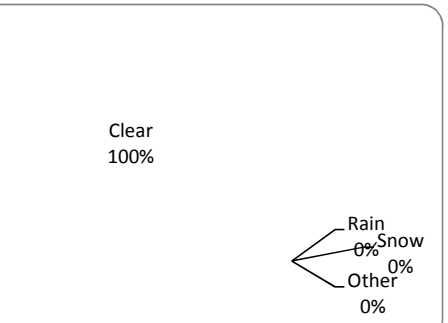
Crashes by Day of Week



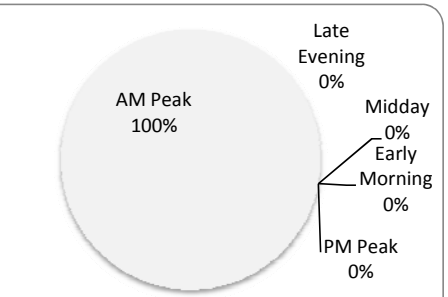
Road Condition



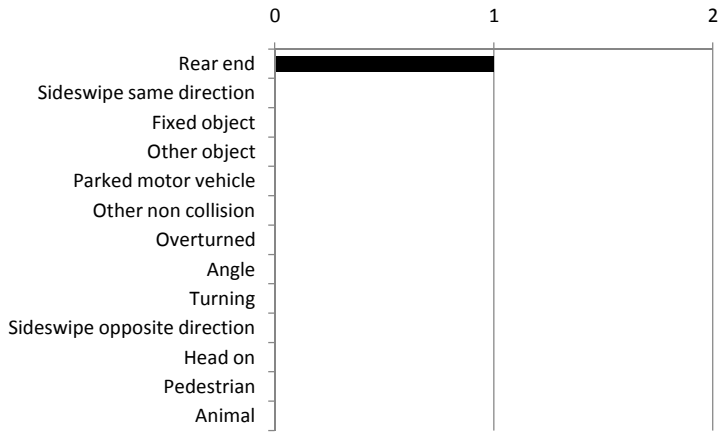
Weather Condition



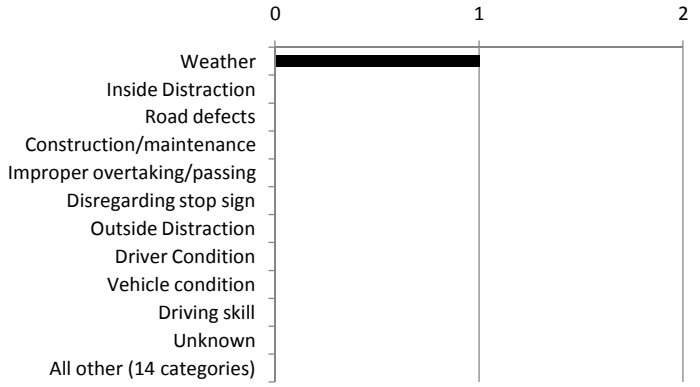
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		C
Wedgewood Dr.	Suffolk Drive to I-290 ramp	2 Way

Length	0.25 Miles
Total Crashes	1
Crash Rate	4.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	0
Total Injuries	0
Injury Rate	0.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	100%
Weather Condition:	Clear	100%
Road Condition:	Ice	100%
Lighting Condition:	Daylight	100%
Time of Day:	AM Peak	100%
Vehicle Type:	Construction/maintenance	0%

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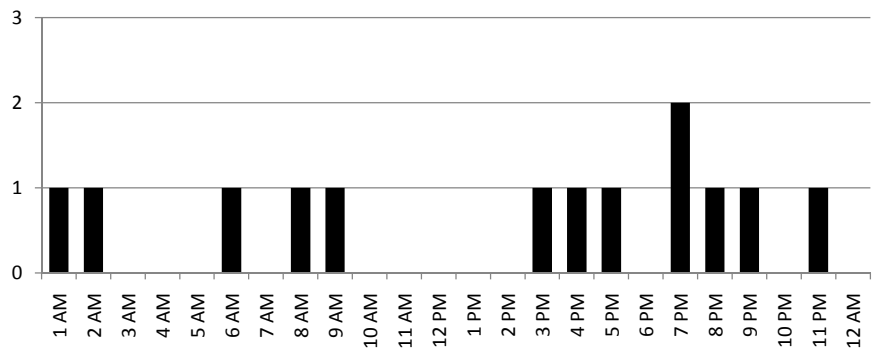
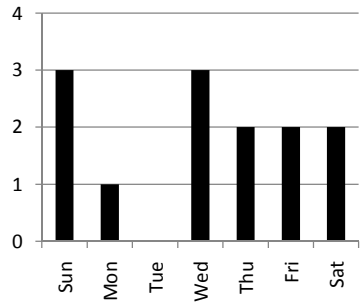
Three Year Crash Statistics

2006, 2007, 2008

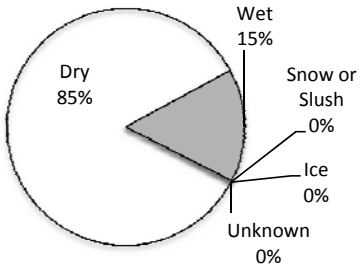
Crashes by Time of Day



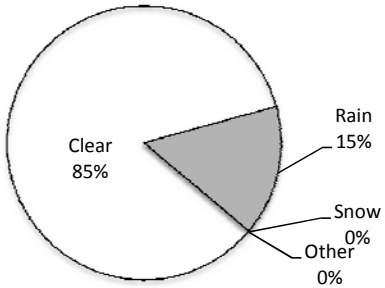
Crashes by Day of Week



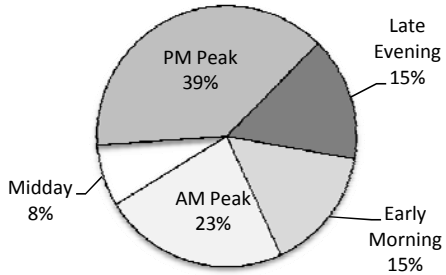
Road Condition



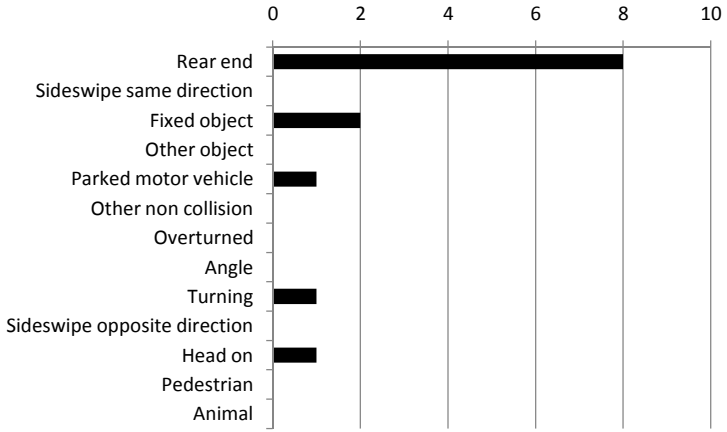
Weather Condition



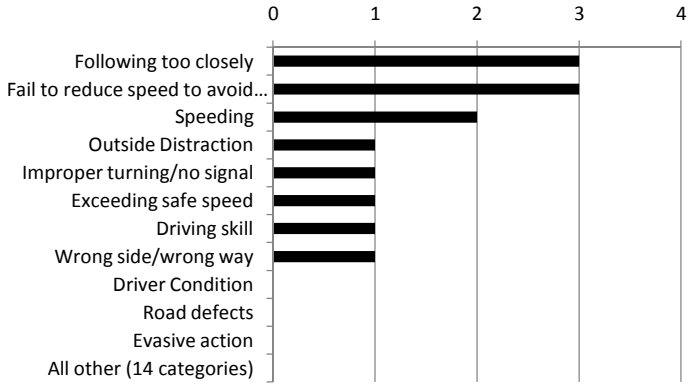
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		D
Indian Joe Dr.	I-290 ramp to N. of Beach Street	2 Way

Length	0.13 Miles
Total Crashes	13
Crash Rate	101.8 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	4
Total Injuries	4
Injury Rate	31.3 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	62%
Weather Condition:	Clear	85%
Road Condition:	Dry	85%
Lighting Condition:	Daylight	54%
Time of Day:	PM Peak	38%
Vehicle Type:	ail to reduce speed to avoid cra	23%

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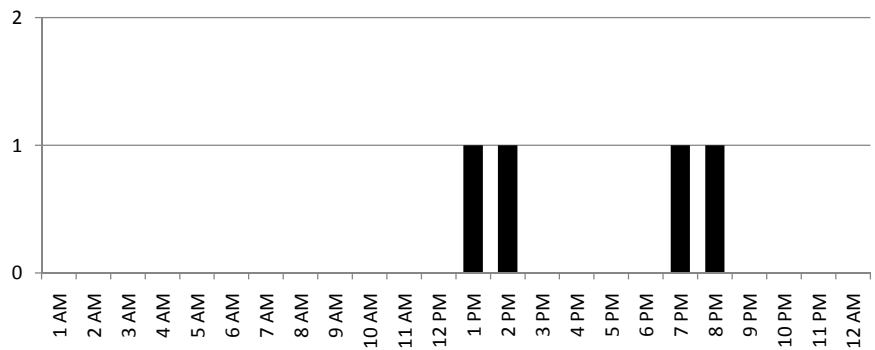
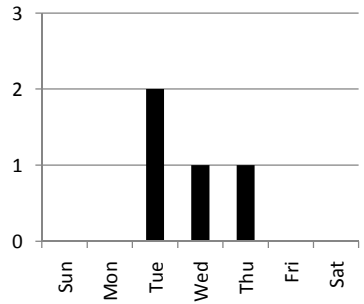
Three Year Crash Statistics

2006, 2007, 2008

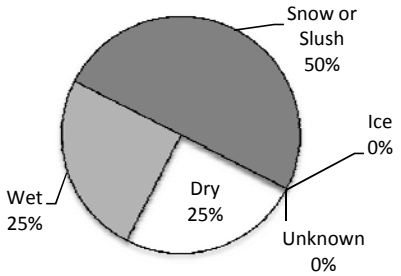
Crashes by Time of Day



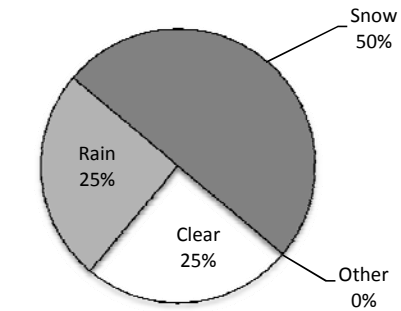
Crashes by Day of Week



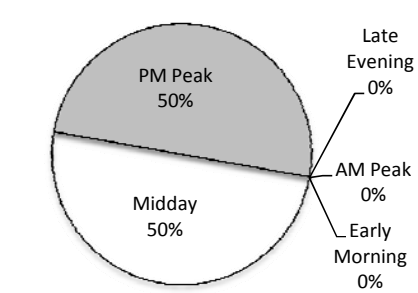
Road Condition



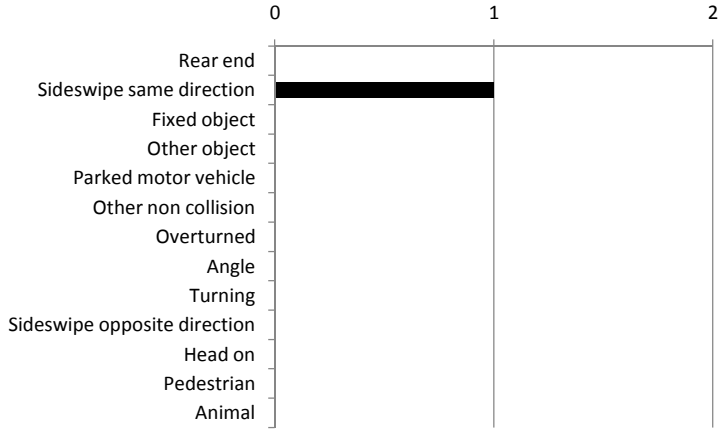
Weather Condition



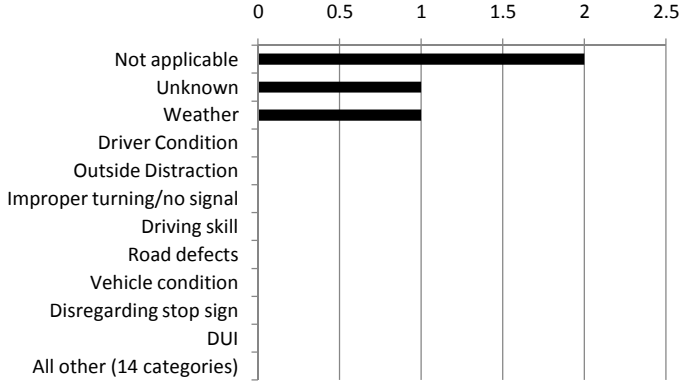
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		E
Beach Street	Indian Joe Dr. to Lexington	2 Way

Length	0.10 Miles
Total Crashes	4
Crash Rate	40.5 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	0
Total Injuries	0
Injury Rate	0.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Sideswipe same direction	100%
Weather Condition:	Snow	50%
Road Condition:	Snow or Slush	50%
Lighting Condition:	Daylight	50%
Time of Day:	Midday	50%
Vehicle Type:	Construction/maintenance	0%

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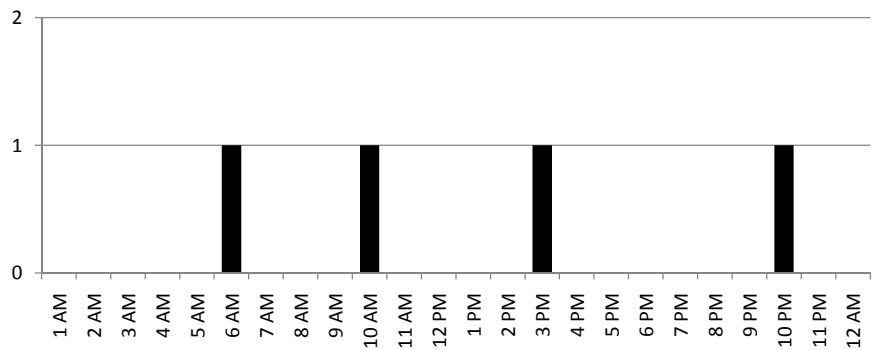
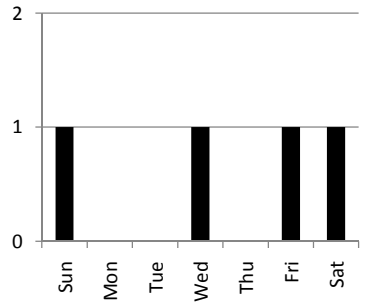
Three Year Crash Statistics

2006, 2007, 2008

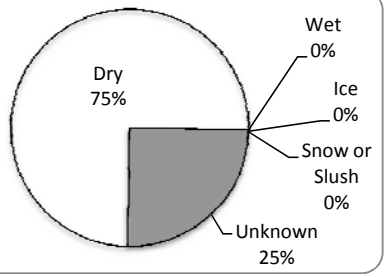
Crashes by Time of Day



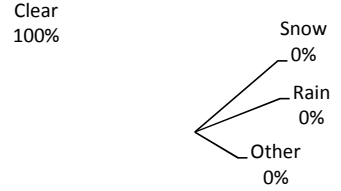
Crashes by Day of Week



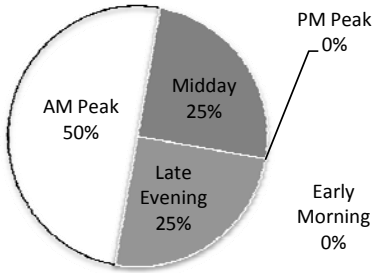
Road Condition



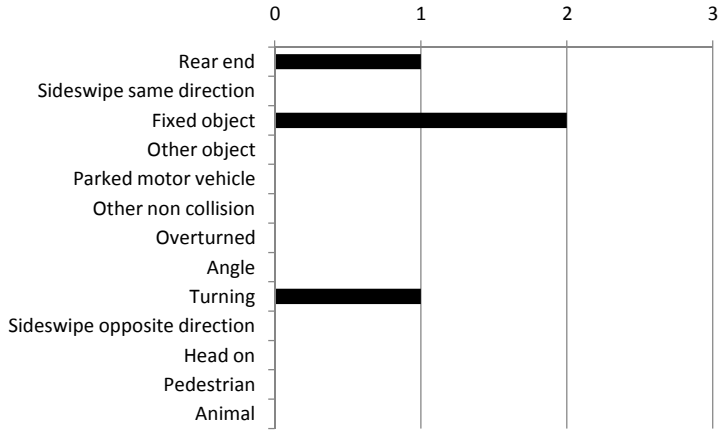
Weather Condition



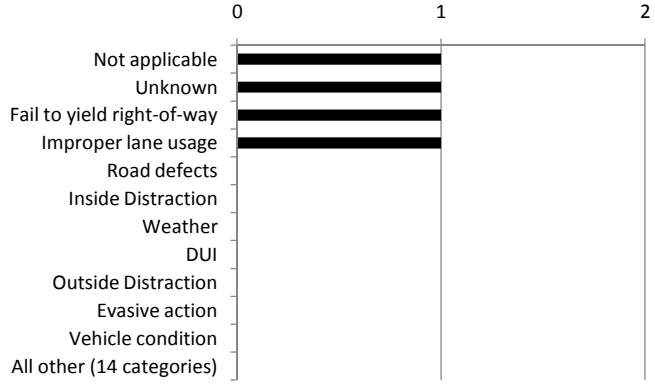
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		F
Lexington St.	Beach Street to 25th Ave	2 Way

Length	0.12 Miles
Total Crashes	4
Crash Rate	32.5 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	0
Total Injuries	0
Injury Rate	0.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Fixed object	50%
Weather Condition:	Clear	100%
Road Condition:	Dry	75%
Lighting Condition:	Daylight	50%
Time of Day:	AM Peak	50%
Vehicle Type:	Fail to yield right-of-way	25%

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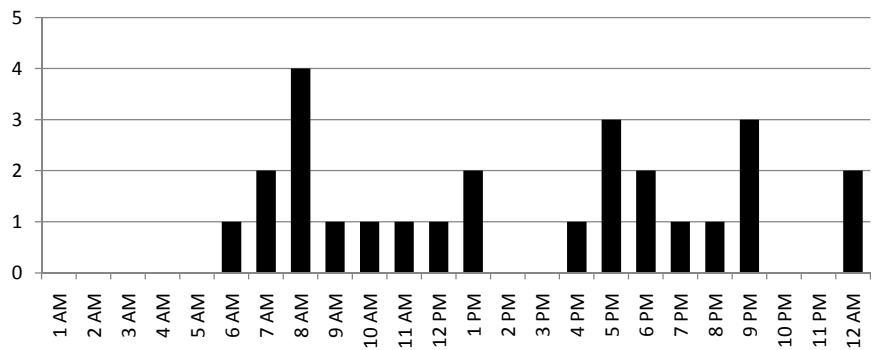
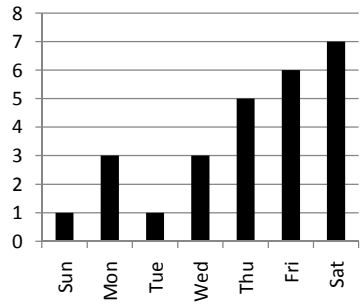
Three Year Crash Statistics

2006, 2007, 2008

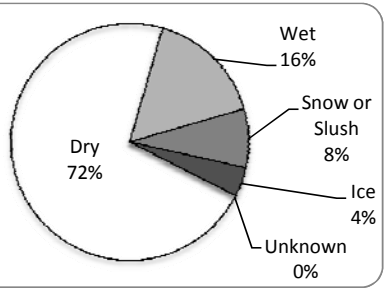
Crashes by Time of Day



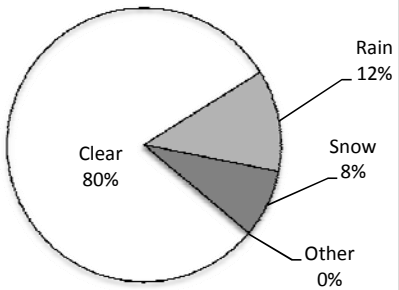
Crashes by Day of Week



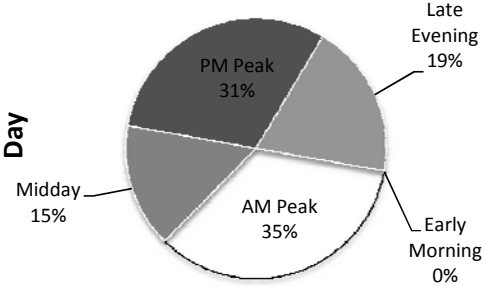
Road Condition



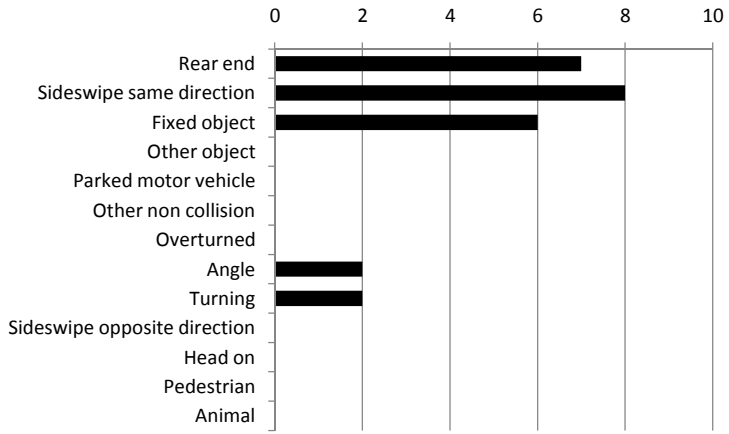
Weather Condition



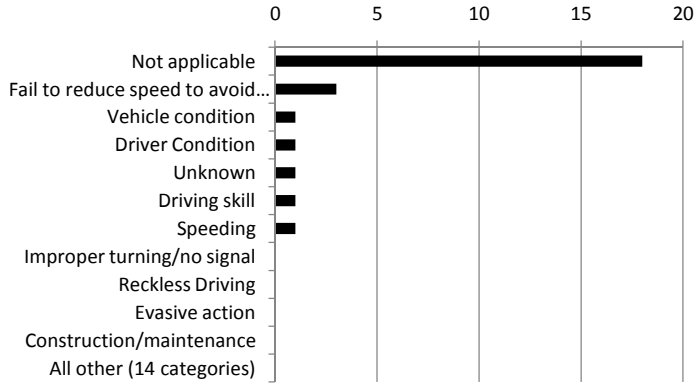
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		G
Bataan Drive	23rd Ave to 1st Ave	**1 Way, (EB)**

Length	1.39 Miles
Total Crashes	**26**
Crash Rate	**18.7** crashes/mile

Injury Statistics	
Fatal	**0**
A Injury	**1**
B & C Injury	**1**
Total Injuries	**2**
Injury Rate	**1.4** Injuries/mile

Predominant Crash Factors

Crash Type:	Sideswipe same direction	32%
Weather Condition:	Clear	80%
Road Condition:	Dry	72%
Lighting Condition:	Daylight	73%
Time of Day:	AM Peak	35%
Vehicle Type:	ail to reduce speed to avoid cra	12%

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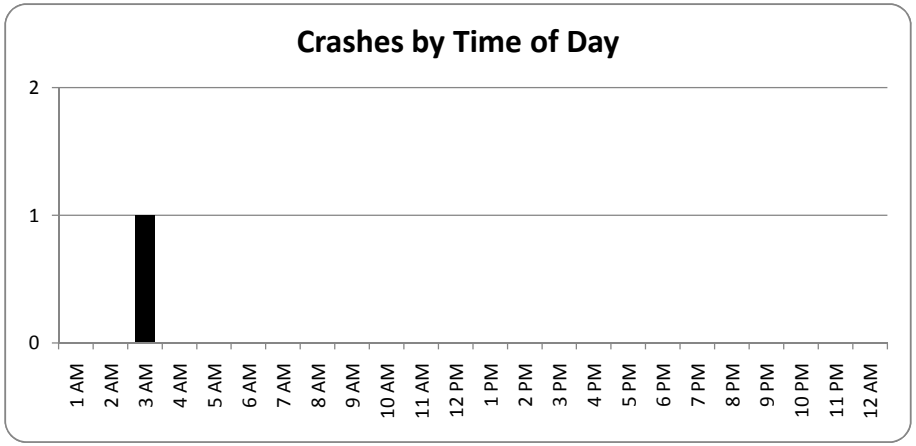
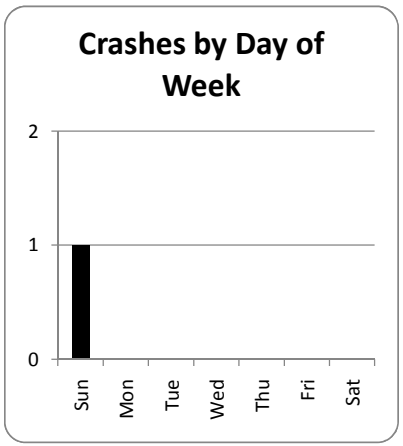
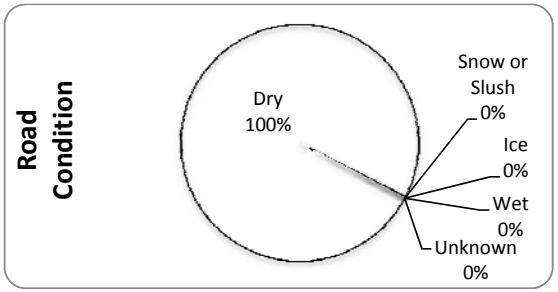
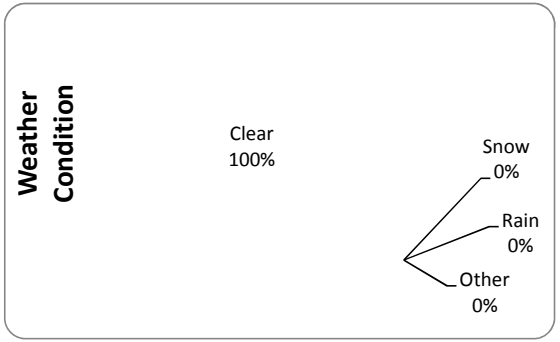
Three Year Crash Statistics

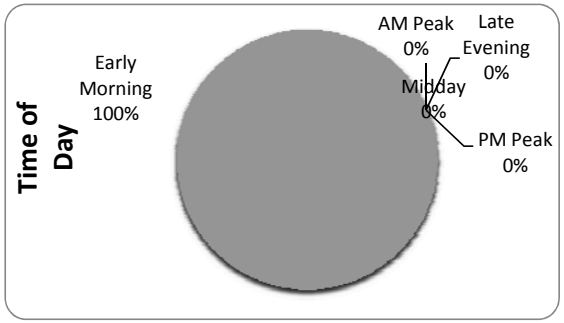
2006, 2007, 2008

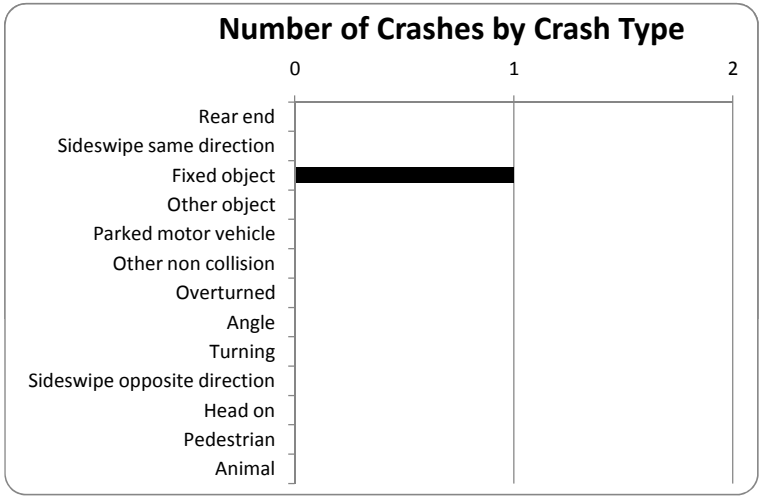


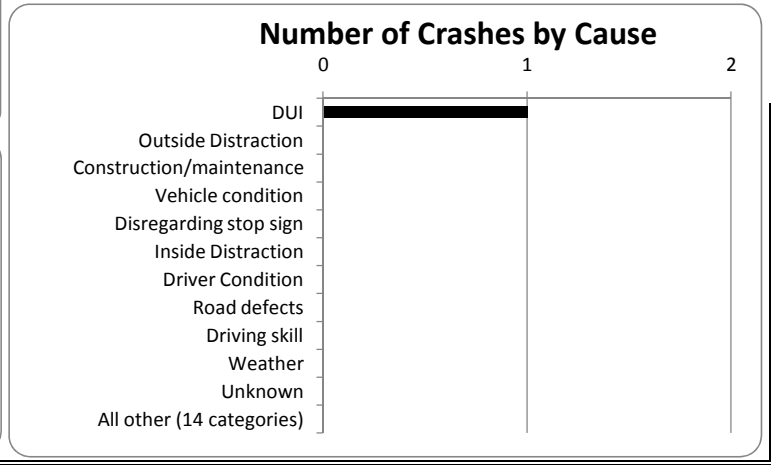












Frontage Roads		H
Lehmer St	Elgin Ave to Lathrop	2 Way

Length	0.50 Miles
Total Crashes	1
Crash Rate	2.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	0
Total Injuries	0
Injury Rate	0.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Fixed object	100%
Weather Condition:	Clear	100%
Road Condition:	Dry	100%
Lighting Condition:	Darkness, Lighted Road	100%
Time of Day:	Early Morning	100%
Vehicle Type:	DUI	100%

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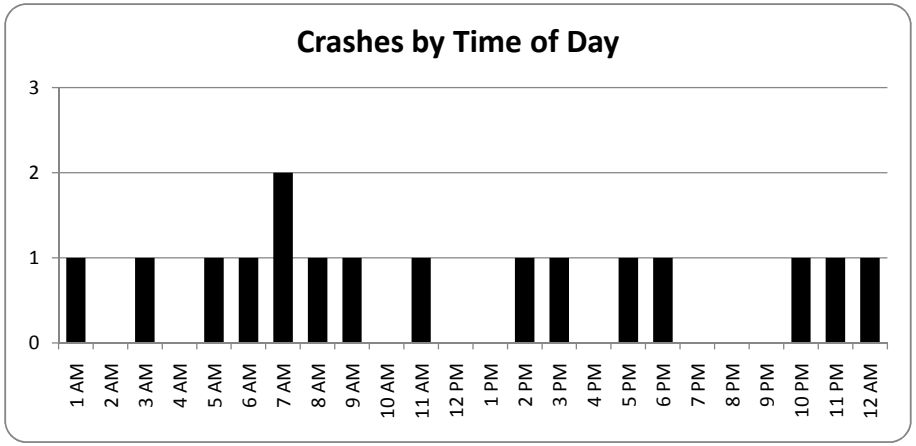
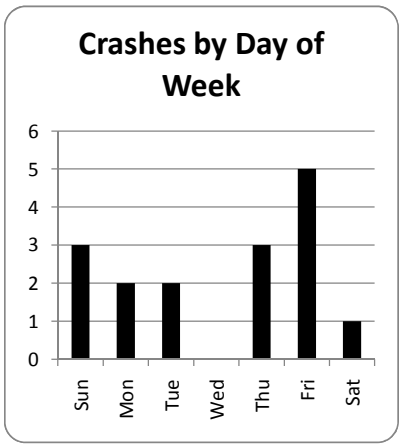
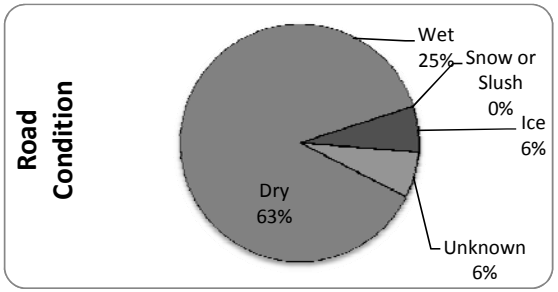
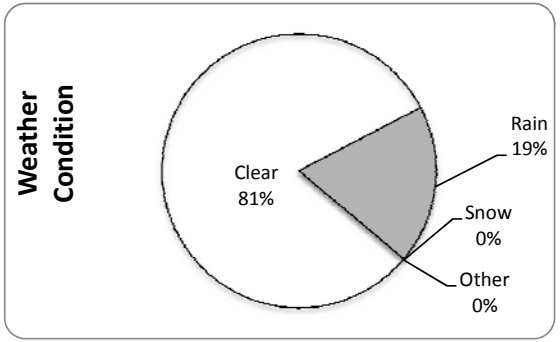
Three Year Crash Statistics

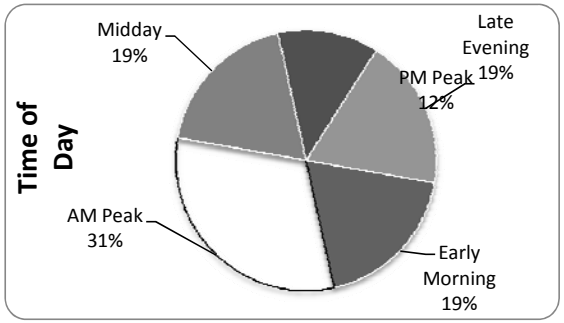
2006, 2007, 2008

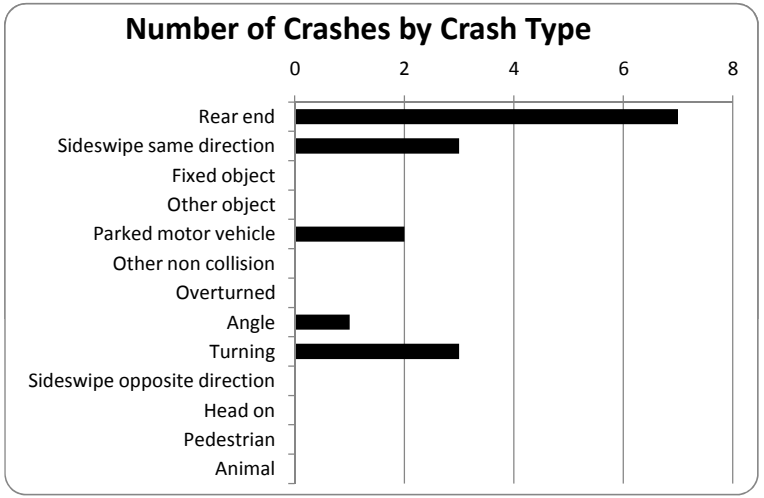


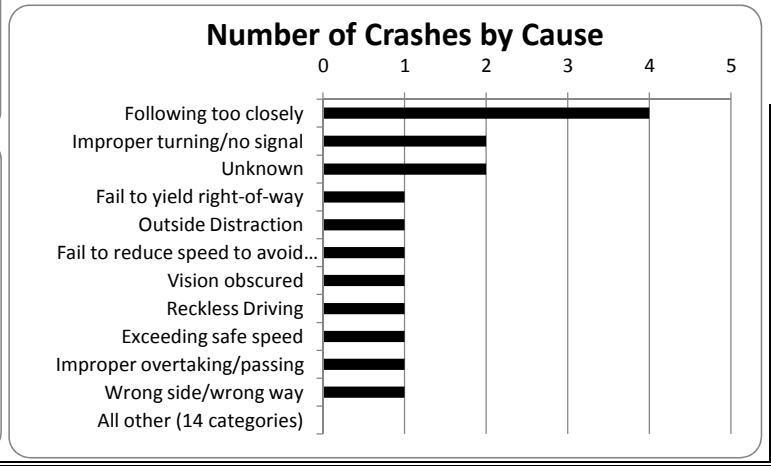












Frontage Roads		I
Harrison Street	Harlem Ave to DesPlaines Ave.	2 Way

Length	0.59 Miles
Total Crashes	16
Crash Rate	27.3 crashes/mile

Injury Statistics		
	Fatal	0
	A Injury	0
	B & C Injury	3
	Total Injuries	3
	Injury Rate	5.1 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	44%
Weather Condition:	Clear	81%
Road Condition:	Dry	63%
Lighting Condition:	Daylight	63%
Time of Day:	AM Peak	31%
Vehicle Type:	Following too closely	25%

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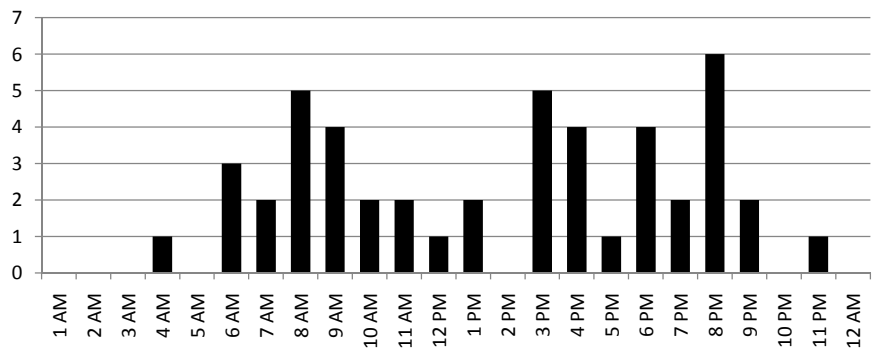
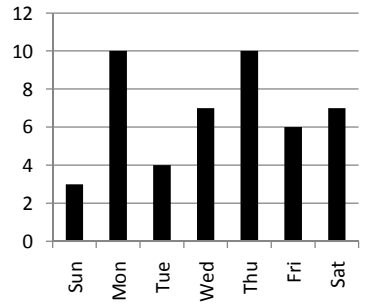
Three Year Crash Statistics

2006, 2007, 2008

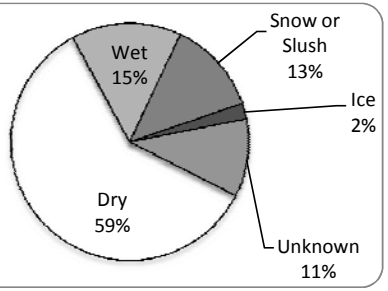
Crashes by Time of Day



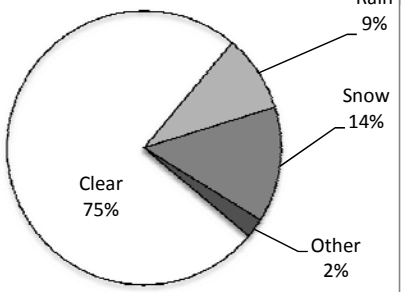
Crashes by Day of Week



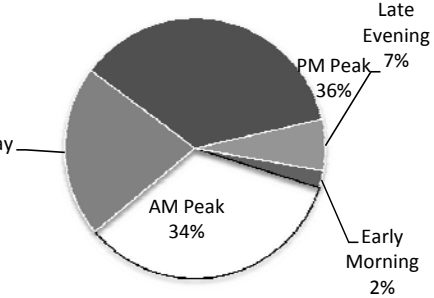
Road Condition



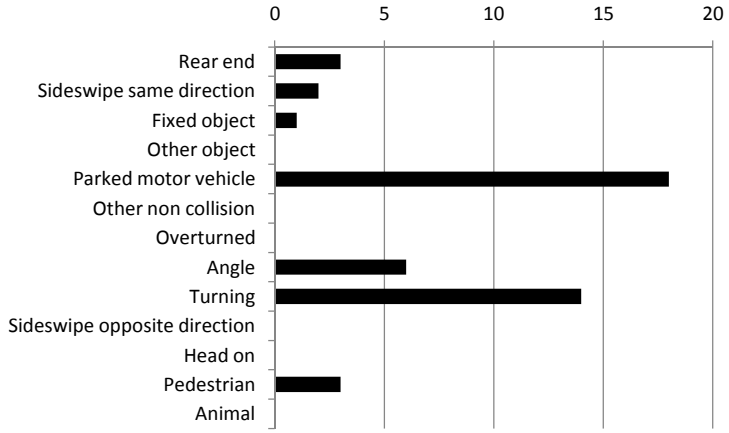
Weather Condition



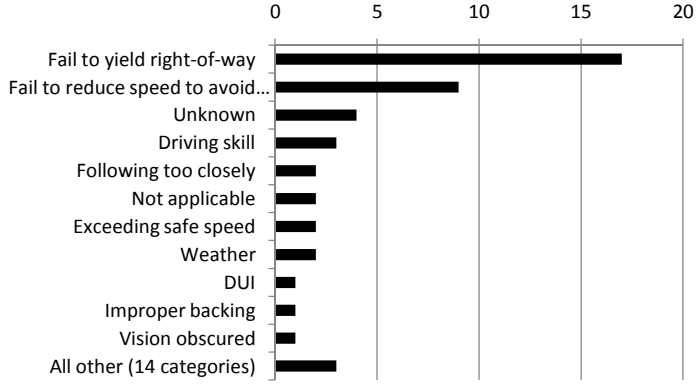
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		J
Harrison Street	Maple Ave to Austin Blvd	2 Way

Length	1.51 Miles
Total Crashes	47
Crash Rate	31.2 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	4
Total Injuries	4
Injury Rate	2.7 Injuries/mile

Predominant Crash Factors

Crash Type:	Parked motor vehicle	38%
Weather Condition:	Clear	75%
Road Condition:	Dry	60%
Lighting Condition:	Daylight	60%
Time of Day:	PM Peak	36%
Vehicle Type:	Fail to yield right-of-way	36%

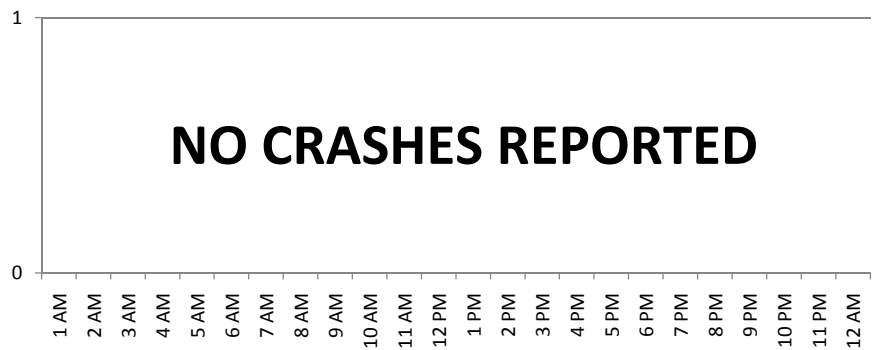
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

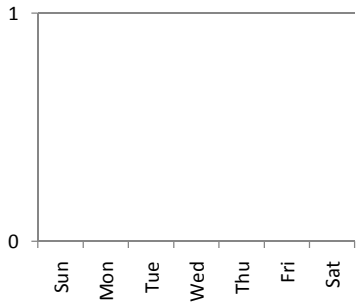
Three Year Crash Statistics

2006, 2007, 2008

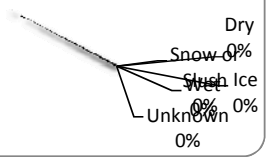
Crashes by Time of Day



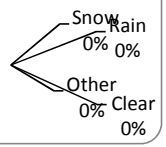
Crashes by Day of Week



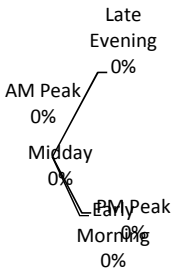
Road Condition



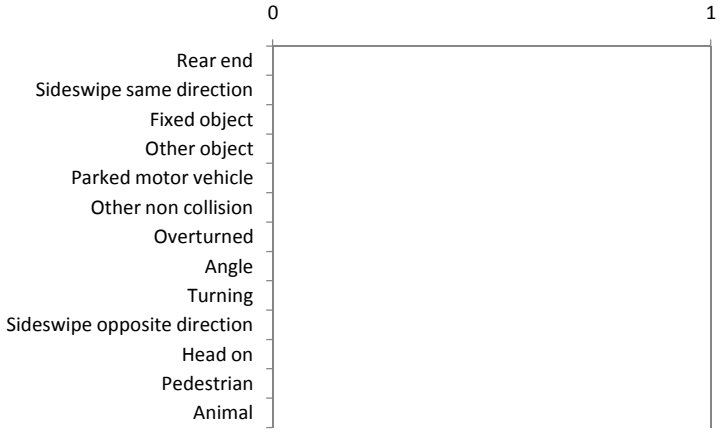
Weather Condition



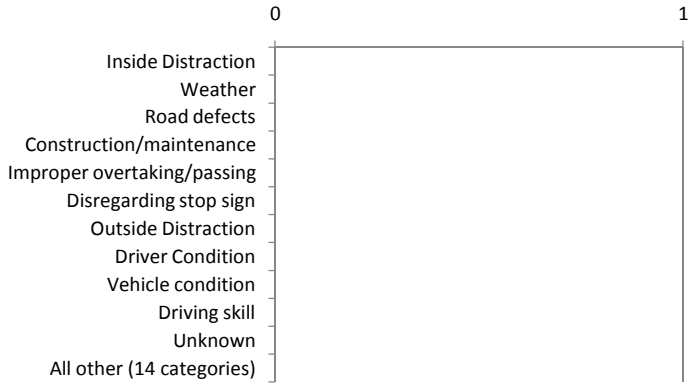
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		K
Flournoy Street	Highland Ave to Humphrey St.	2 Way

Length	0.28 Miles
Total Crashes	0
Crash Rate	0.0 crashes/mile

Injury Statistics		
	Fatal	0
	A Injury	0
	B & C Injury	0
	Total Injuries	0
	Injury Rate	0.0 Injuries/mile

Predominant Crash Factors

Crash Type:	None	0%
Weather Condition:	None	0%
Road Condition:	None	0%
Lighting Condition:	None	0%
Time of Day:	None	0%
Vehicle Type:	None	0%

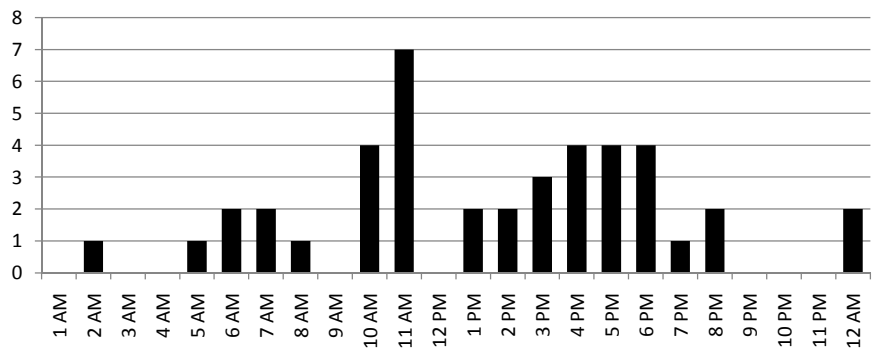
Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

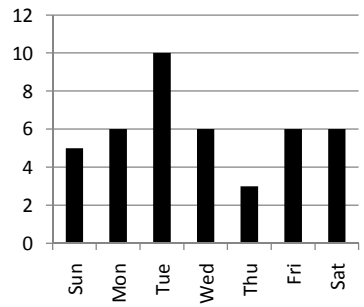
Three Year Crash Statistics

2006, 2007, 2008

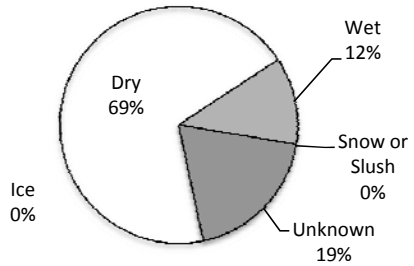
Crashes by Time of Day



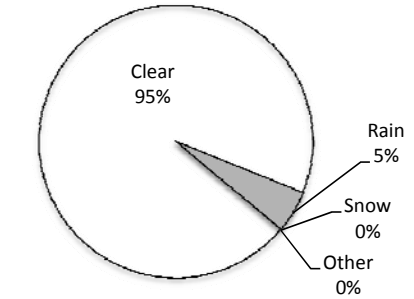
Crashes by Day of Week



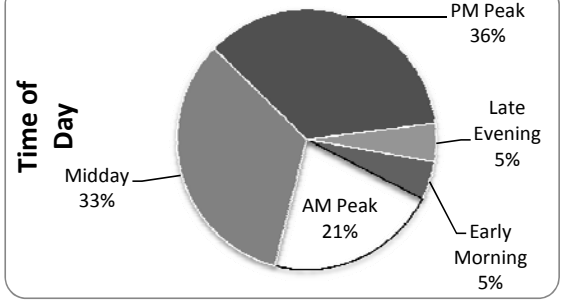
Road Condition



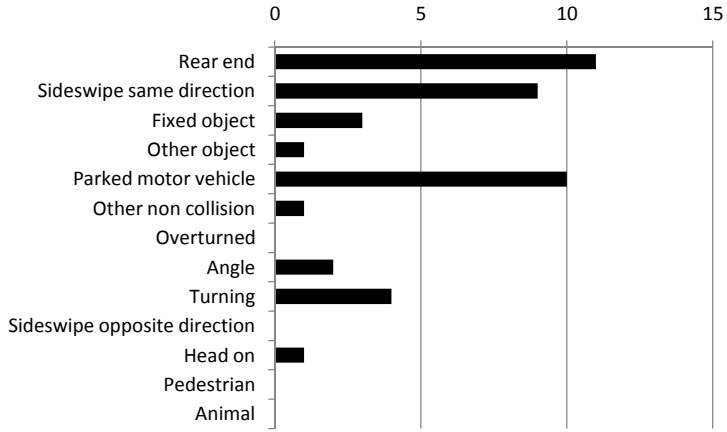
Weather Condition



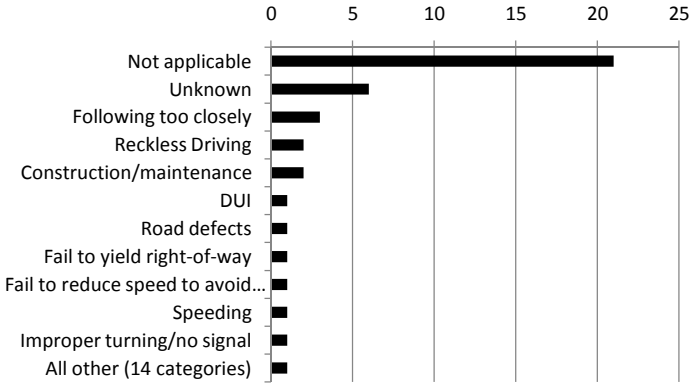
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		L
Flournoy Street	Central Ave to Kilpatrick Ave	1 Way, (WB)

Length	1.13 Miles
Total Crashes	42
Crash Rate	37.1 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	6
Total Injuries	6
Injury Rate	5.3 Injuries/mile

Predominant Crash Factors

Crash Type:	Rear end	26%
Weather Condition:	Clear	95%
Road Condition:	Dry	69%
Lighting Condition:	Daylight	64%
Time of Day:	PM Peak	36%
Vehicle Type:	Following too closely	7%

Illinois Department of Transportation

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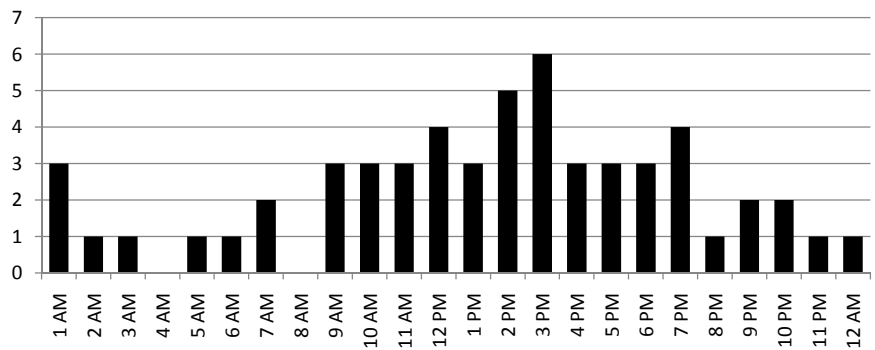
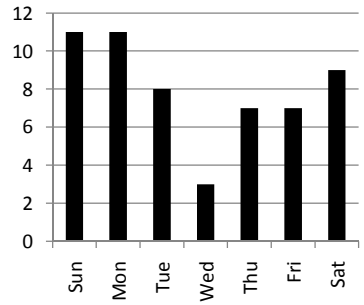
Three Year Crash Statistics

2006, 2007, 2008

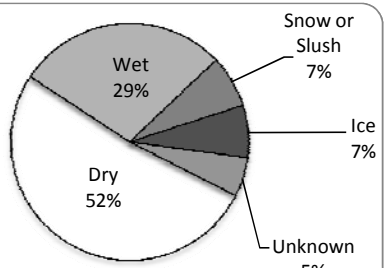
Crashes by Time of Day



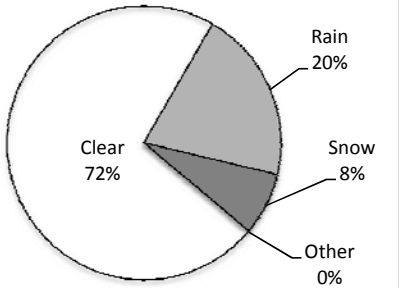
Crashes by Day of Week



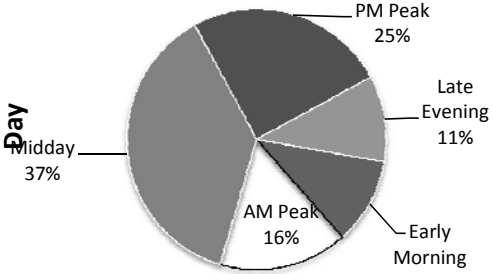
Road Condition



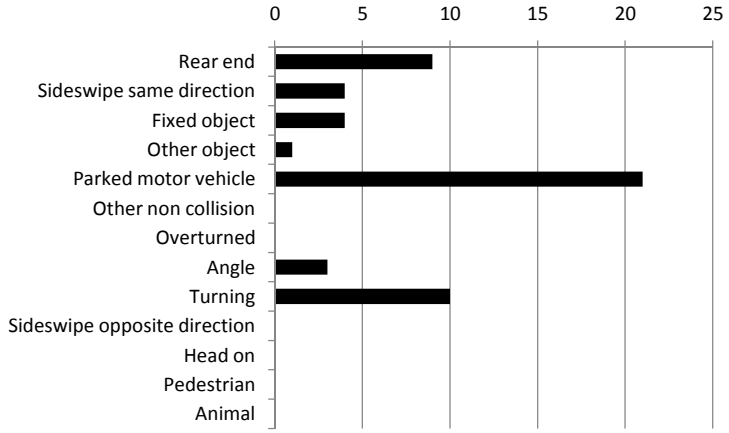
Weather Condition



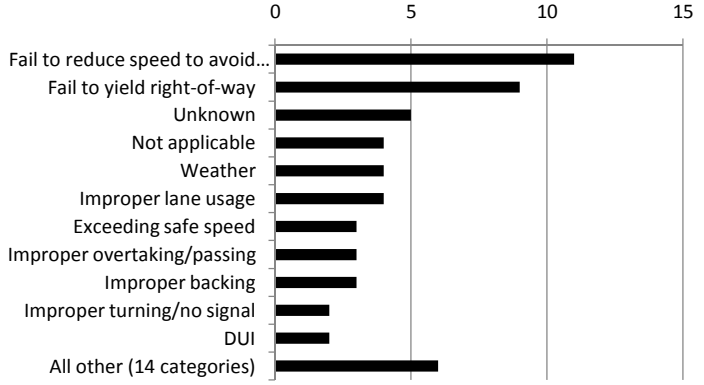
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		M
Garfield Street	Harlem Ave to Austin Blvd	2 Way

Length	1.57 Miles
Total Crashes	56
Crash Rate	35.7 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	9
Total Injuries	9
Injury Rate	5.7 Injuries/mile

Predominant Crash Factors

Crash Type:	Parked motor vehicle	40%
Weather Condition:	Clear	72%
Road Condition:	Dry	52%
Lighting Condition:	Daylight	61%
Time of Day:	Midday	38%
Vehicle Type:	ail to reduce speed to avoid cra	20%

Illinois Department of Transportation

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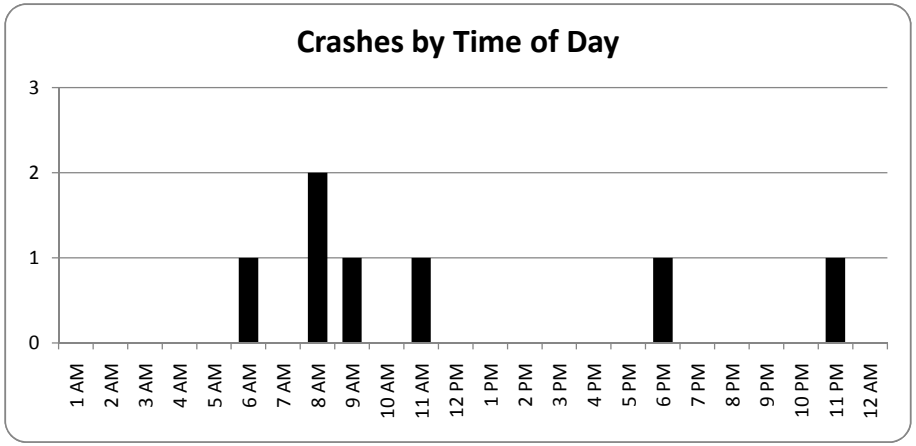
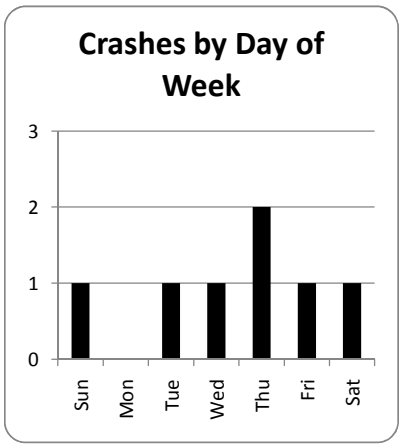
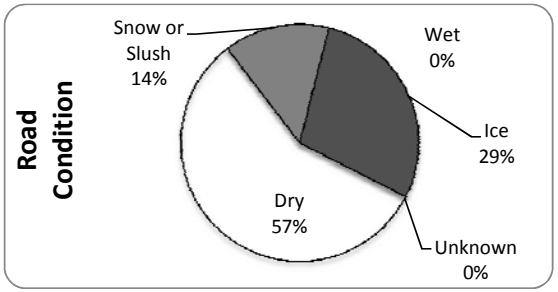
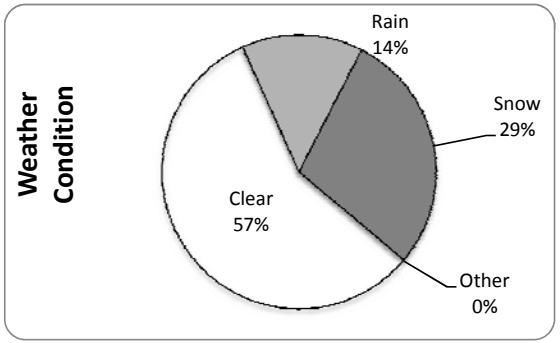
Three Year Crash Statistics

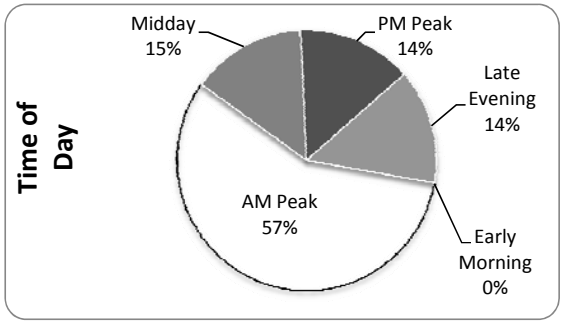
2006, 2007, 2008

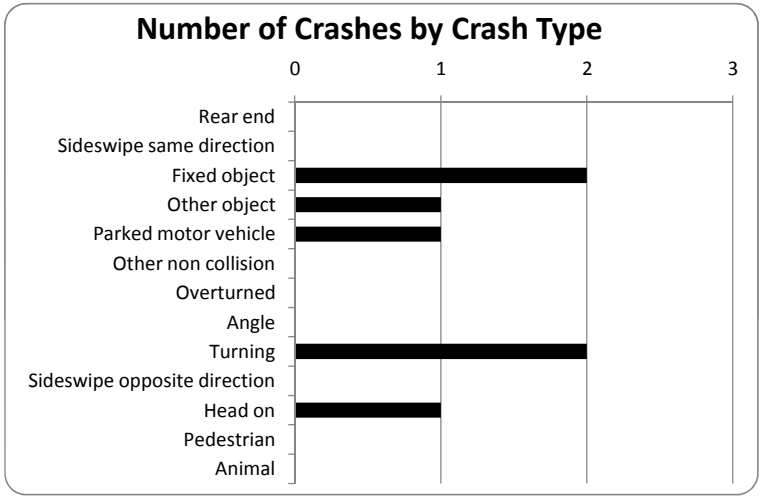


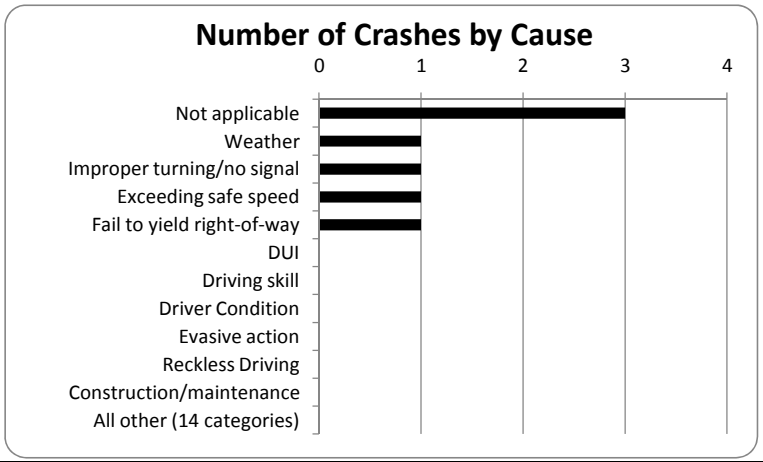












Frontage Roads		N
Railroad St	Austin Blvd to Menard Ave	2 Way

Length	0.25 Miles
Total Crashes	7
Crash Rate	28.0 crashes/mile

Injury Statistics	
Fatal	0
A Injury	0
B & C Injury	0
Total Injuries	0
Injury Rate	0.0 Injuries/mile

Predominant Crash Factors

Crash Type:	Fixed object	29%
Weather Condition:	Clear	57%
Road Condition:	Dry	57%
Lighting Condition:	Daylight	71%
Time of Day:	AM Peak	57%
Vehicle Type:	Exceeding safe speed	14%

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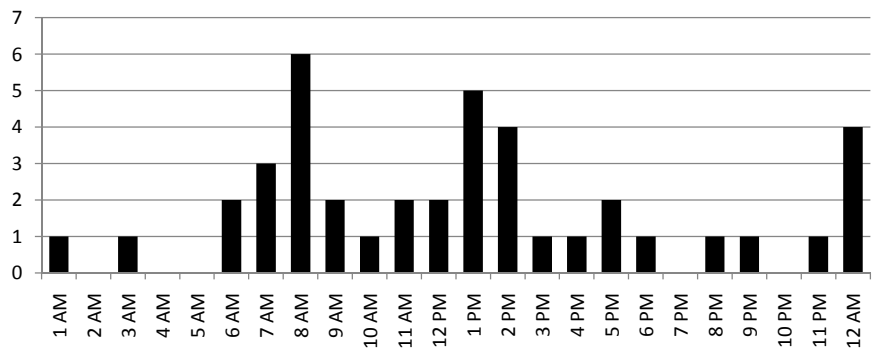
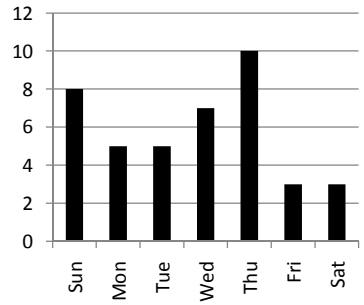
Three Year Crash Statistics

2006, 2007, 2008

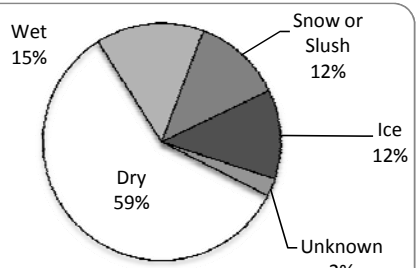
Crashes by Time of Day



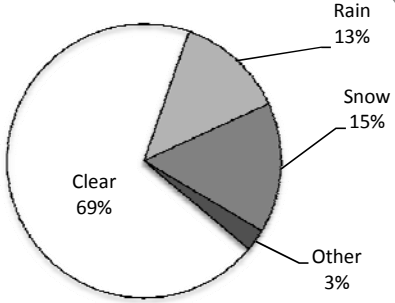
Crashes by Day of Week



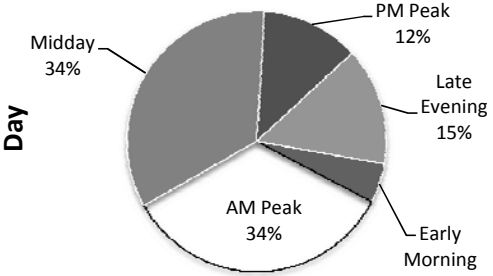
Road Condition



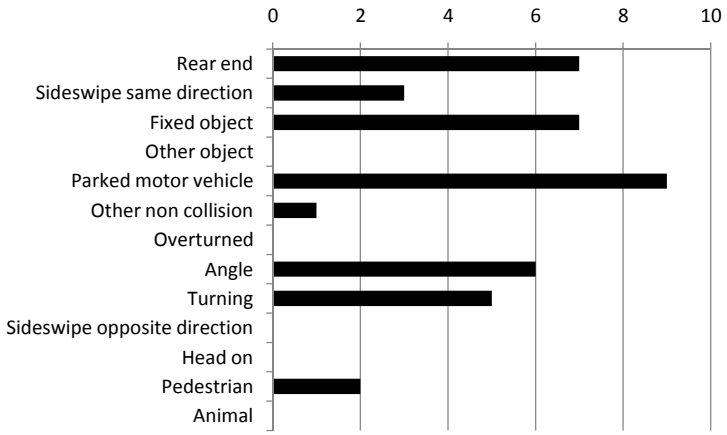
Weather Condition



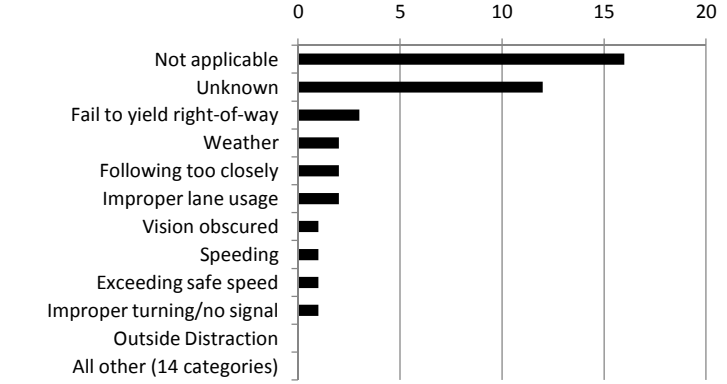
Time of Day



Number of Crashes by Crash Type



Number of Crashes by Cause



Frontage Roads		O
Lexington St.	Long Ave to Kostner	1 Way, (EB)

Length	1.22 Miles
Total Crashes	41
Crash Rate	33.6 crashes/mile

Injury Statistics	
Fatal	0
A Injury	1
B & C Injury	3
Total Injuries	4
Injury Rate	3.3 Injuries/mile

Predominant Crash Factors

Crash Type:	Parked motor vehicle	23%
Weather Condition:	Clear	69%
Road Condition:	Dry	59%
Lighting Condition:	Daylight	71%
Time of Day:	AM Peak	34%
Vehicle Type:	Fail to yield right-of-way	7%

Illinois Department of Transportation

I-290 Preliminary Engineering and Environmental Study (Phase I)

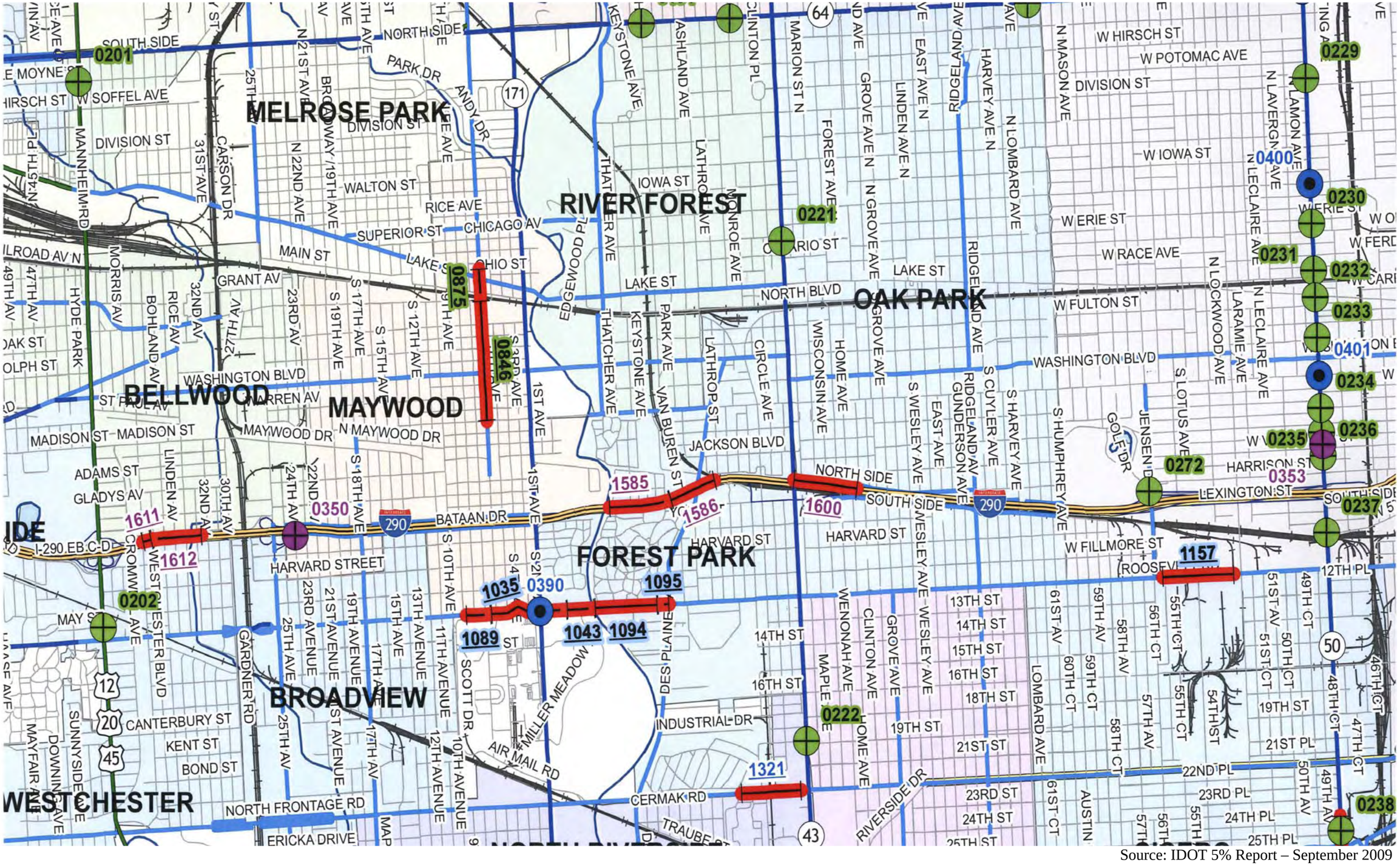
Three Year Crash Statistics

2006, 2007, 2008

Technical Memorandum

Appendix J

5% Report Crash Locations



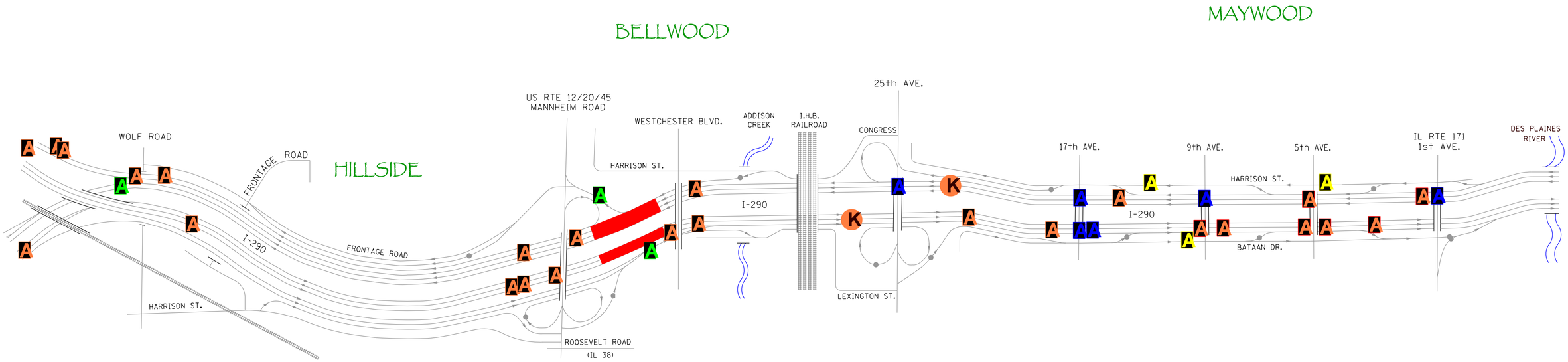
Source: IDOT 5% Report – September 2009

Technical Memorandum

Appendix K

Study Area Severe and 5% Crash Locations

I-290 EISENHOWER EXPRESSWAY
STUDY AREA SEVERE AND 5% CRASH LOCATIONS



5% Crash Locations

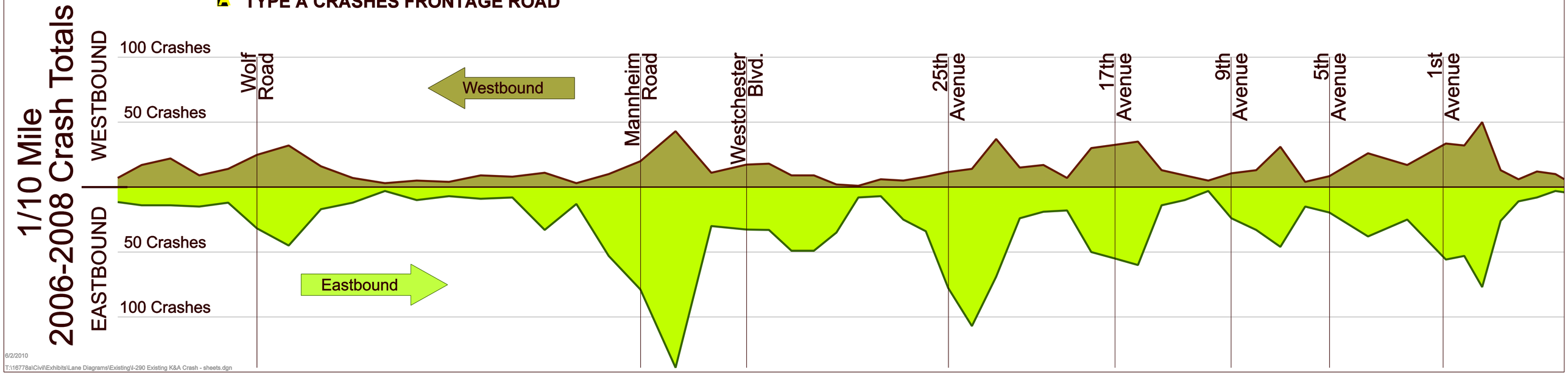
TYPE A CRASHES MAINLINE

TYPE K CRASHES MAINLINE

TYPE A CRASHES CROSSROADS

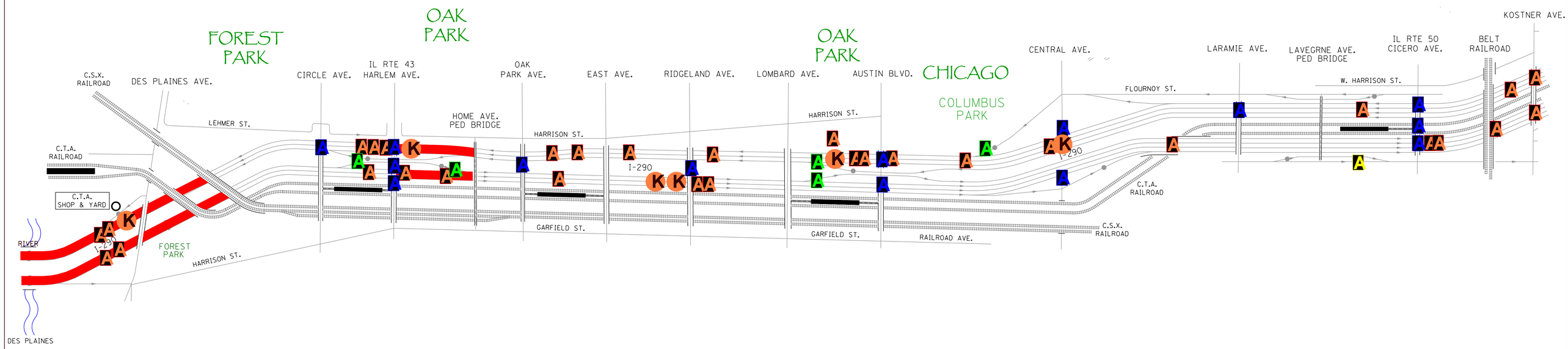
TYPE A CRASHES RAMPS

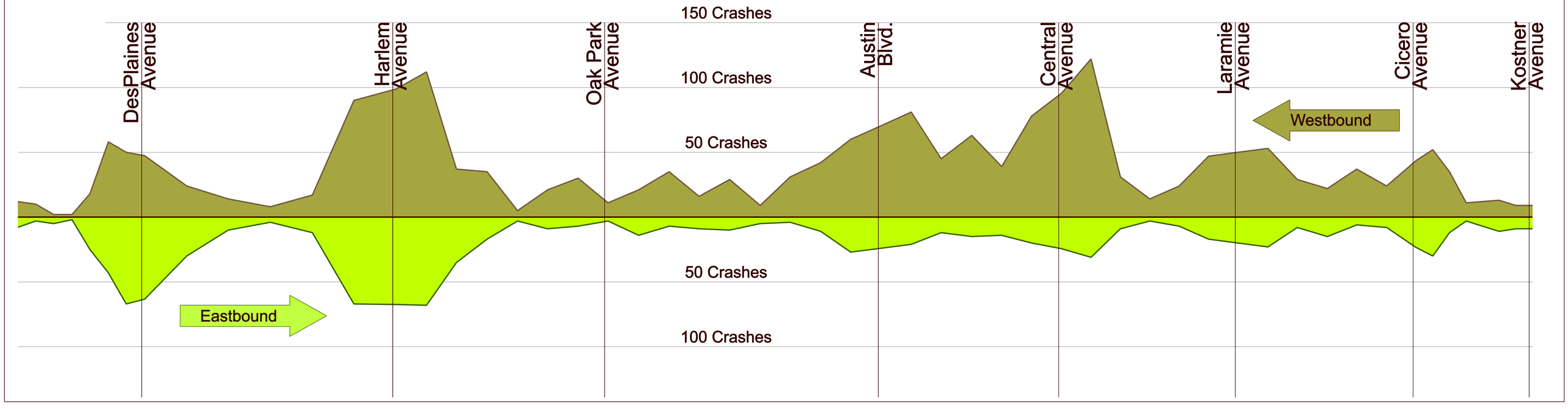
TYPE A CRASHES FRONTAGE ROAD



6/2/2010

T:\16778a\Civil\Exhibits\Lane Diagrams\Existing\I-290 Existing K&A Crash - sheets.dgn


FOREST PARK
OAK PARK
OAK PARK
CHICAGO
COLUMBUS PARK
C.S.X. RAILROAD
DES PLAINES AVE.
CIRCLE AVE.
IL RTE 43 HARLEM AVE.
OAK PARK AVE.
EAST AVE.
RIDGELAND AVE.
LOMBARD AVE.
AUSTIN BLVD.
CENTRAL AVE.
LARAMIE AVE.
LAVEGRNE AVE. PED BRIDGE
IL RTE 50 CICERO AVE.
BELT RAILROAD
KOSTNER AVE.
LEHMER ST.
HOME AVE. PED BRIDGE
HARRISON ST.
FLOURNOY ST.
W. HARRISON ST.
C.T.A. RAILROAD
C.T.A. SHOP & YARD
I-290
GARFIELD ST.
RAILROAD AVE.
RIVER
DES PLAINES


DesPlaines Avenue
Harlem Avenue
Oak Park Avenue
Austin Blvd.
Central Avenue
Laramie Avenue
Cicero Avenue
Kostner Avenue
150 Crashes
100 Crashes
50 Crashes
50 Crashes
100 Crashes
Westbound
Eastbound