Traffic Collision Data for 2013

CHARLOTTE

Department of Transportation

Engineering & Operations Division

June 2, 2014

Introduction

The Traffic Safety Section within the Charlotte Department of Transportation is responsible for the compilation and analysis of collisions that occur within the right of way inside the city limits of Charlotte. This data is used to develop projects and programs to address documented collision patterns with the ultimate goal of reducing collisions throughout the City. Included in this report are the collision data and trends from calendar year 2013. The data presented in this report does not include collisions that occurred on the Interstate highways (I-77, I-277, I-85, and I-485) or collisions that occur within private lots and parking areas.

All data used for this report is current at the date of printing. CDOT reserves the right to revise any and all collision information contained herein without providing additional notice. For current information regarding specific locations contact the Traffic Safety Section.

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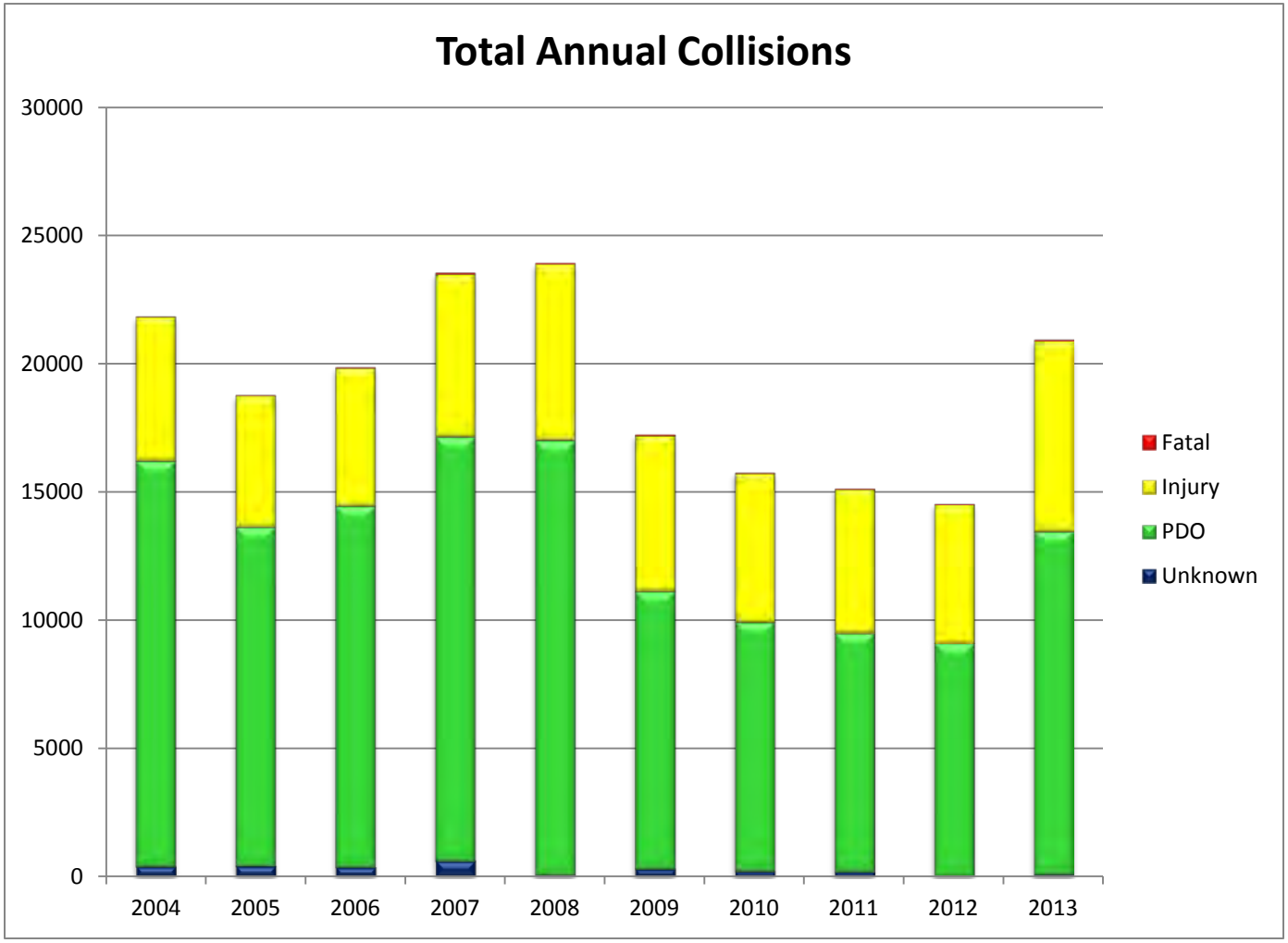
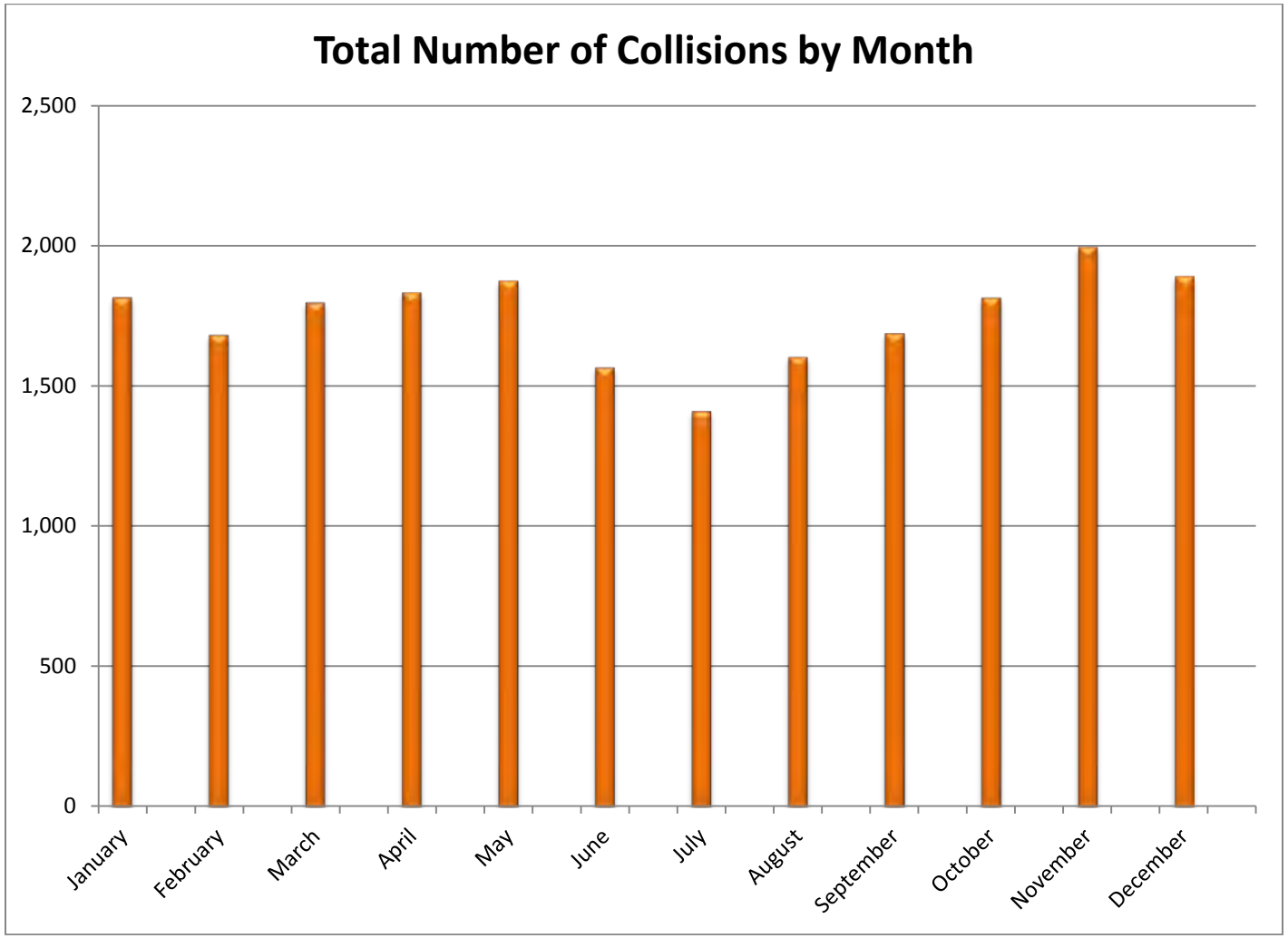
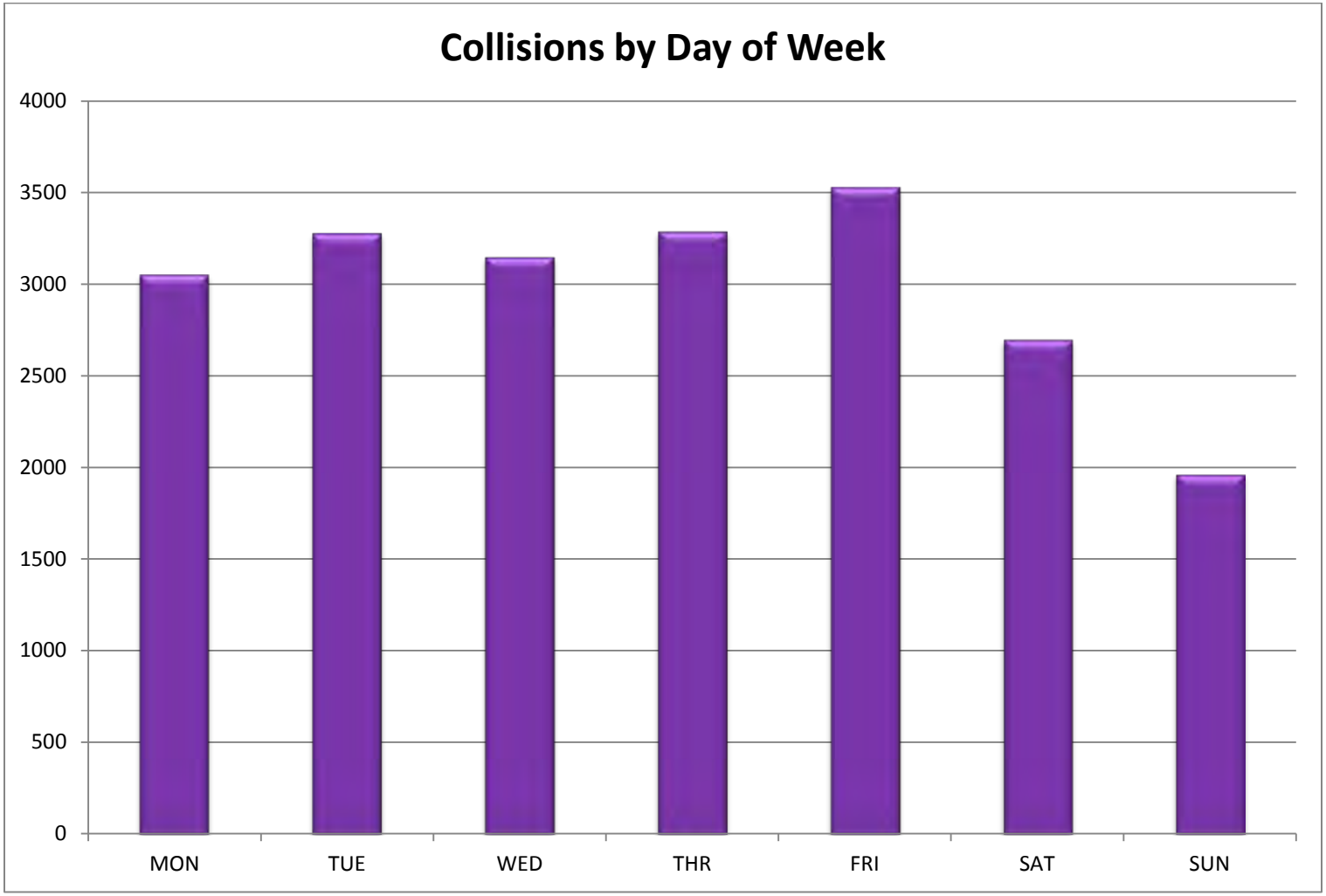
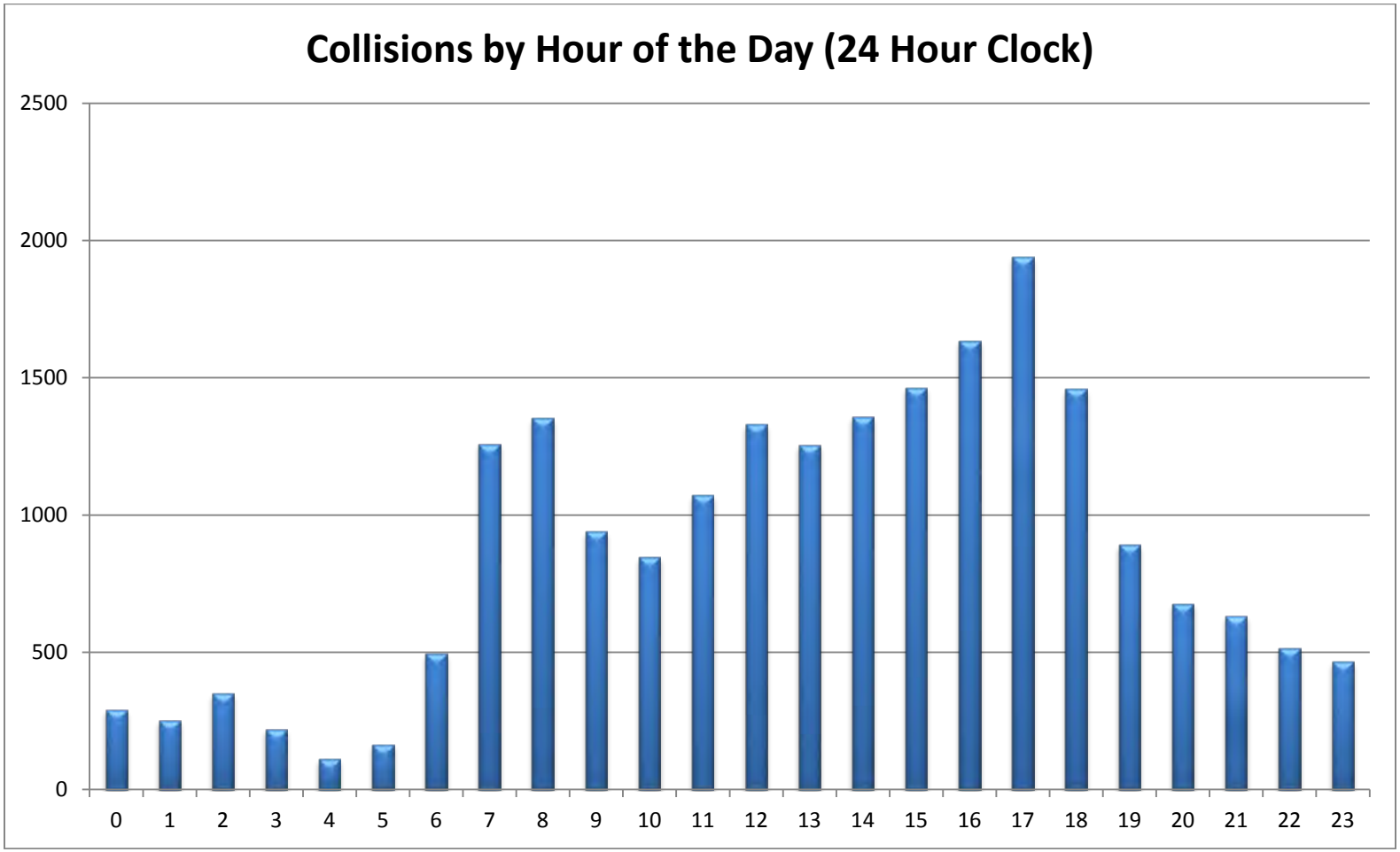

Total Annual Collisions
30000
25000
20000
15000
10000
5000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Fatal
Injury
PDO
Unknown

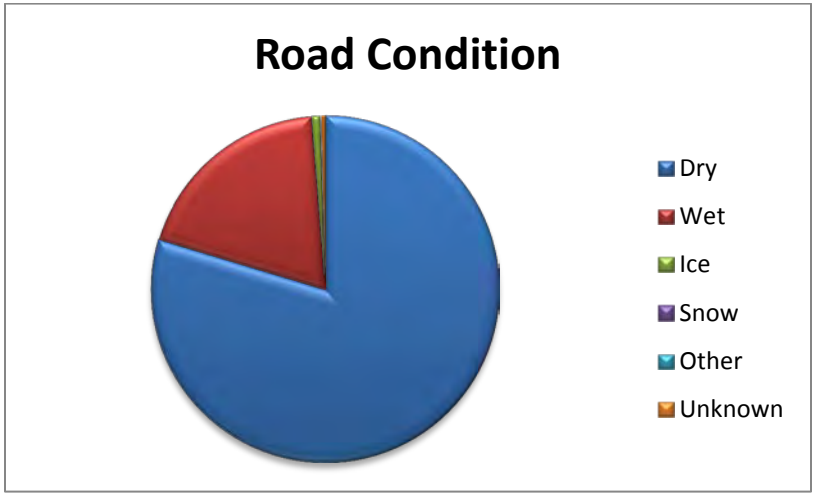
2013 Collision Summary

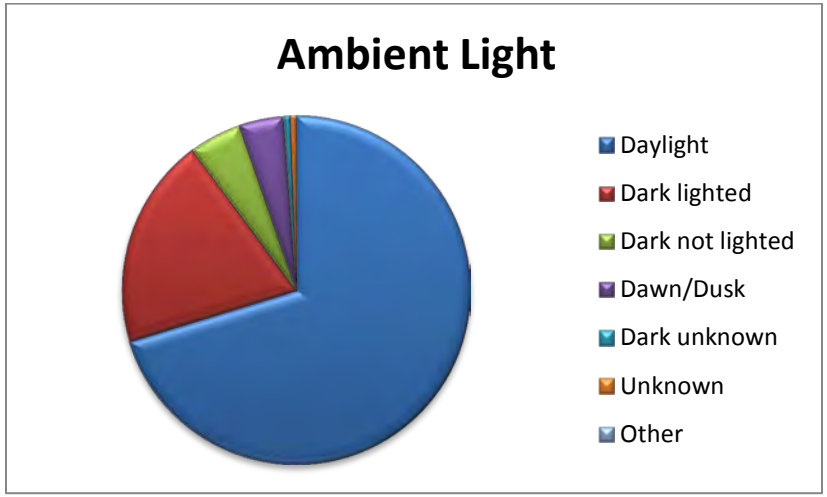



Collisions by Day of Week
4000
3500
3000
2500
2000
1500
1000
500
0
MON
TUE
WED
THR
FRI
SAT
SUN


Collisions by Hour of the Day (24 Hour Clock)
2500
2000
1500
1000
500
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

2013 Collision Summary
Collisions by Environmental Factors

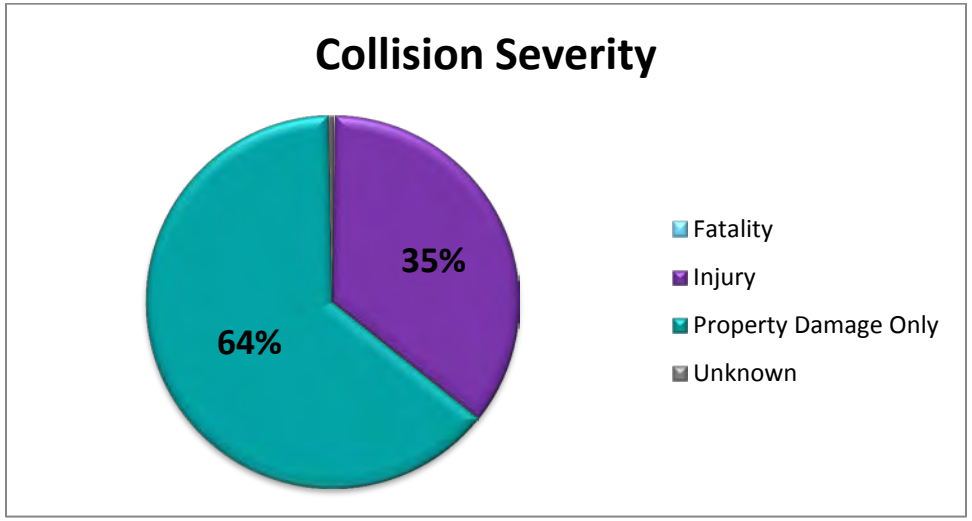




Type of Condition	Total Number of Crashes	Percent of Total
Dry	16,697	79.67%
Wet	3,888	18.55%
Ice	166	0.79%
Water	99	0.47%
Unknown	68	0.32%
Snow	22	0.10%
Slush	10	0.05%
Sand	3	0.01%
Fuel	2	0.01%
Other	2	0.01%
Total	**20,957**	**100%**

Type of Condition	Total Number of Crashes	Percent of Total
Daylight	14,728	70.28%
Dark - lighted roadway	4,105	19.59%
Dark - roadway not lighted	1,028	4.91%
Dawn	482	2.30%
Dusk	365	1.74%
Dark - unknown lighting	131	0.63%
Unknown	113	0.54%
Other	5	0.02%
Total	**20,957**	**100%**

2013 Collision Summary



Injury Type	Total Collisions	Percent of Total Collisions
Fatality*	50	0.24%
Injury	7,436	35.48%
Property Damage Only	13,399	63.94%
Unknown	72	0.34%
Total	**20,957**	**100%**

*Fatal Collisions considered reportable for Annual Report. Number may vary from Charlotte-Mecklenburg Police Department listings

2013 Collision Summary
Collisions by Motorist Contributing Circumstances

Contributing Circumstances	Total Collisions	Percent of Total Collisions
Inattention	4,656	22.22%
Failure to reduce speed	3,885	18.54%
Failed to yield right of way	2,803	13.38%
Unable to determine	2,056	9.81%
No contributing circumstances indicated	789	3.76%
Followed to closely	756	3.61%
Improper turn	701	3.34%
Disregarded traffic signals	699	3.34%
Improper lane change	618	2.95%
Unknown	560	2.67%
Other improper passing	461	2.20%
Exceeded safe speed for conditions	440	2.10%
Alcohol use	293	1.40%
Overcorrected / oversteered	259	1.24%
Operated vehicle in erratic, reckless, careless, negligent or aggressive manner	227	1.08%
Improper backing	219	1.04%
Exceeded authorized speed limit	190	0.91%
Crossed centerline / going wrong way	186	0.89%
Disregarded stop sign	172	0.82%
Swerved or avoided due to wind, slippery surface, vehicle, object, non-motorist	139	0.66%
Visibility obstructed	133	0.63%
Other improper passing	124	0.59%
Operated defective equipment	91	0.43%
Disregarded other traffic signs	76	0.36%
Driver distracted by electronic communication device (cellphone, texting, etc.)	73	0.35%
Driver distracted by other inside the vehicle	72	0.34%
Disregarded road markings	63	0.30%
Use of improper lane	49	0.23%
Driver distracted by external distraction	45	0.21%
Driver distracted by other electronic device (navigation device, DVD player, etc.)	30	0.14%
Disregarded yield sign	26	0.12%
Drug use	21	0.10%
Right turn on red	15	0.07%
Improper parking	15	0.07%
Passed stopped school bus	5	0.02%
Improper or no signal	5	0.02%
Passed on curve	3	0.01%
TOTAL	**20,957**	**100%**

Collision Rates by Volume

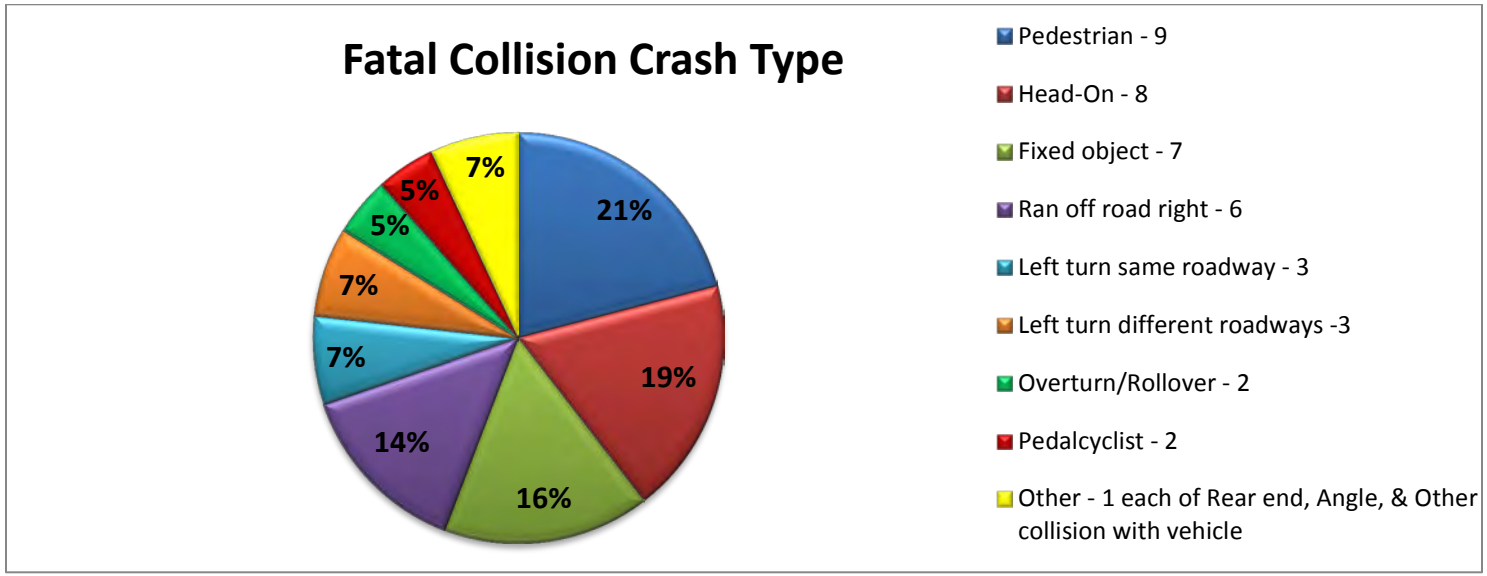
Year	VMT	Total Collisions	Collisions Per Million Vehicle Miles	Fatal Collisions	Fatal Collisions Per Million Vehicle Miles
2004	20,095,648	21,860	1,088	39	1.94
2005	22,412,325	18,802	839	51	2.28
2006	22,343,242	19,892	890	63	2.82
2007	22,516,834	22,224	987	52	2.31
2008	22,051,666	22,401	1,016	43	1.90
2009	20,333,841	17,648	868	41	1.97
2010	19,717,761	15,799	801	29	1.47
2011	19,101,681	15,147	793	38	1.99
2012	19,552,898	14,514	742	44	2.25
2013	19,753,300	20,957	1,061	43	2.18

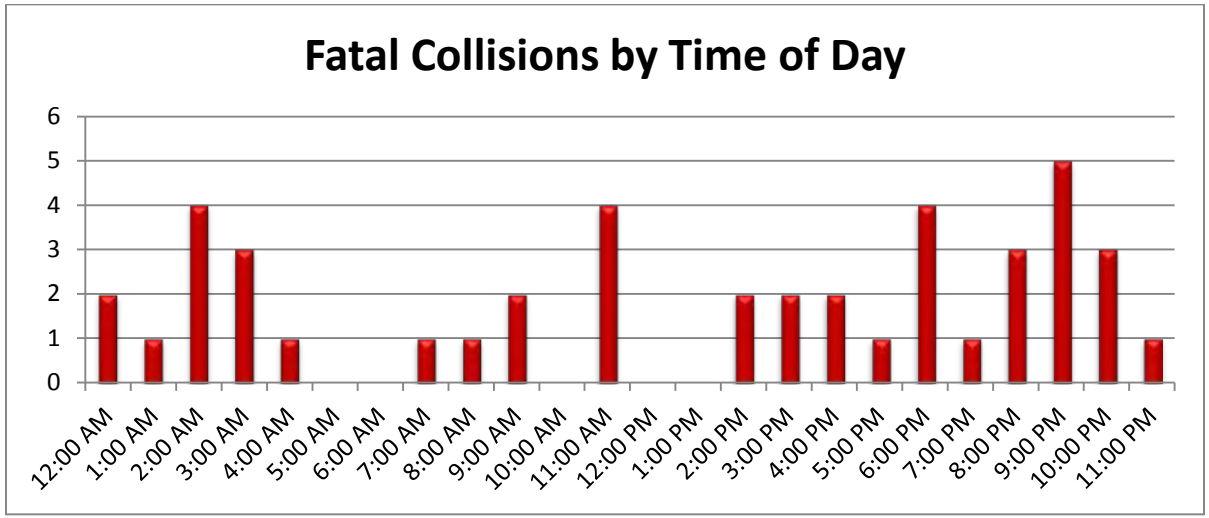
Pedestrian & Bicycle Collisions by Population

Year	Population	Pedestrian Collisions	Pedestrian Collisions Per 10,000 Persons	Bicycle Collisions	Bike Collisions Per 10,000 Persons
2004	614,330	223	3.63	105	1.71
2005	632,760	198	3.13	79	1.25
2006	640,270	230	3.59	92	1.44
2007	664,342	311	4.68	91	1.37
2008	674,752	345	5.11	114	1.69
2009	692,097	297	4.29	83	1.20
2010	731,424	305	4.17	95	1.30
2011	731,424	252	3.45	90	1.23
2012	775,202	299	3.86	112	1.44
2013	796,921	317	3.98	101	1.27

2013 Collision Summary

Fatal Collision Summary – 50 Fatalities in 43 Fatal Collisions





2014 High Accident Location (HAL) List

CDOT releases the annual High Accident Location (HAL) list to accomplish two goals. The first goal of releasing the HAL is to prioritize and identify locations that can benefit from spot safety improvements that will reduce the number of collisions. The list is also used to support the ranking and prioritization needs of many transportation related programs. The second goal is to heighten motorist awareness of locations that have an elevated crash rate. The 2014 HAL is based on data collected during the 2013 calendar year.

HAL Calculation Methodology

The calculation for the HAL is as follows;

Step 1. Select all intersections with 15 or more collisions in a 3 year period

Step 2. Select any intersections not identified above having 5 or more collisions with 75% occurring in the current year (2013).

Step 3. Calculate crash rates for all intersections meeting above criteria.

(C*1,000,000)/(V*N*365)

where;

C= 3 years' collisions

V= Intersection Volume

N= Number of years

Step 4. Determine HAL cutoff, should be an even number and allow for at least 50 locations. The cutoff for 2008 data was a crash rate of 1.30. The cutoff for 2009 and 2013 data is a crash rate of 1.20. The cutoff for 2010, 2011, and 2012 data was 1.10.

Two versions of the HAL list are presented on the following pages: rank order and alphabetical by street name.

ID	Location	Collisions 2011	2012	2013	3 Years Total	2013Avg volume	Crash Rate	Rank	Prior Year Rank	Notes
12038	E 8TH ST & N COLLEGE ST	6	10	2	18	6100	2.69	1	2	Average Daily Traffic (ADT) from 2012
11956	E 9TH ST & N COLLEGE ST	6	6	8	20	7600	2.40	2	3	ADT from 2012
9902	CAMBRIDGE COMMONS DR & HARRISBURG RD	16	15	7	38	14600	2.38	3	1	Recent Spot Safety Project/Roundabout
12721	S CHURCH ST & W HILL ST & W JOHN BELK RA	9	7	11	27	10600	2.33	4	8	ADT from 2012
13667	E 7TH ST & HAWTHORNE LN	24	10	22	56	25300	2.02	5	7	
10100	ASHLEY RD & FREEDOM DR & TUCKASEEGEE RD	33	31	22	86	40900	1.92	6	6	
12135	E 7TH ST & N COLLEGE ST	5	12	13	30	14400	1.90	7	9	
4698	LAWING RD & MIRANDA RD & OAKDALE RD & SUNSET RD	4	4	8	16	7900	1.85	8	4	
12896	E 6TH ST & N MCDOWELL ST	6	11	20	37	18300	1.85	9	65	ADT from 2010
4061	DAVID COX RD & LAKEVIEW RD & OLD STATESVILLE RD	7	5	17	29	14700	1.80	10	68	
13912	CHARLOTTETOWNE AV & E JOHN BELK RA & KENILWORTH AV	28	18	39	85	43800	1.77	11	35	
11693	E 12TH ST & N COLLEGE ST	0	8	7	15	7800	1.76	12	37	ADT from 2012
11311	MILTON RD & N SHARON AMITY RD	19	16	18	53	27800	1.74	13	18	
13600	3RD-4TH CONNECTOR ST & E 4TH ST & N KINGS DR & S KINGS DR	30	37	34	101	53100	1.74	14	5	
8847	E SUGAR CREEK RD & N TRYON ST & W SUGAR CREEK RD	23	36	45	104	55900	1.70	15	10	
7380	REAGAN DR & W SUGAR CREEK RD	26	26	31	83	45900	1.65	16	21	
14442	CENTRAL AV & N SHARON AMITY RD	31	38	30	99	54800	1.65	17	24	
12076	N CHURCH ST & W 5TH ST	10	9	10	29	16800	1.58	18	51	
27388	CONLAN CR & JOHN J DELANEY DR	14	8	12	34	19800	1.57	19	23	ADT from 2010
8329	BEATTIES FORD RD & LASALLE ST	12	22	15	49	28800	1.55	20	31	
5266	DOUG MAYES PL & J W CLAY BV	5	6	9	20	11800	1.55	21	26	
8515	ATANDO AV & STATESVILLE AV	16	14	23	53	31300	1.55	22	13	
17273	BILLY GRAHAM PY & S TRYON ST & W WOODLAWN RD	38	25	43	106	64200	1.51	23	27	
13763	CENTRAL AV & EASTWAY DR	34	18	35	87	53100	1.50	24	16	
12618	E 5TH ST & N CALDWELL ST	11	6	8	25	15300	1.49	25	11	
24904	PINEVILLE-MATTHEWS RD & PROVIDENCE RD	45	27	41	113	69200	1.49	26	25	ADT from 2012
12775	E 4TH ST & S CALDWELL ST	9	9	20	38	23400	1.48	27	38	
8181	FREEDOM DR & TODDVILLE RD	9	5	9	23	14300	1.47	28	14	
11232	BARRINGTON DR & MILTON RD	3	11	8	22	13700	1.47	29	17	
12695	E TRADE ST & N CALDWELL ST & S CALDWELL ST	7	13	12	32	20000	1.46	30	34	
51371	N TRYON ST_UNIVERSITY POINTE BV	15	20	21	56	35200	1.45	31	12	
7701	NEWELL-HICKORY GROVE RD & OLD CONCORD RD	7	3	7	17	10,800	1.44	32	95	Estimated ADT
15253	ALBEMARLE RD & E W T HARRIS BV	40	29	45	114	73800	1.41	33	22	
12013	FREEDOM DR & W MOREHEAD ST	18	13	19	50	32400	1.41	34	48	ADT from 2012
13590	CAMDEN RD & S TRYON ST & W SUMMIT AV	3	8	12	23	15200	1.38	35		ADT from 2012
5060	MALLARD CREEK RD & OLD MALLARD CREEK RD	7	3	20	30	20,000	1.37	36		ADT from 2012
12186	E 11TH ST & E BROOKSHIRE FR RA & N DAVIDSON ST	8	10	12	30	20100	1.36	37	46	
5704	E W T HARRIS BV & N TRYON ST & W W T HARRIS BV	23	35	52	110	73800	1.36	38	43	ADT from 2012
13343	CHARLOTTETOWNE AV & E 7TH ST & E INDEPENDENCE BV	17	9	18	44	29700	1.35	39	20	

City of Charlotte
Department of Transportation
Traffic Safety Section

ID	Location	Collisions 2011	2012	2013	3 Years Total	2013Avg volume	Crash Rate	Rank	Prior Year Rank	Notes
15195	ALBEMARLE RD & FARM POND LN	25	25	33	83	56100	1.35	40	55	
7441	W SUGAR CREEK RD & WILSON LN	11	6	9	26	17,600	1.35	41	52	Estimated ADT
4866	E MALLARD CREEK CHURCH RD & N TRYON ST & W MALLARD CREEK CHURCH RD	26	26	31	83	57100	1.33	42	32	
12863	E 3RD ST & S CALDWELL ST	5	10	14	29	20200	1.31	43	41	
24549	I-485 RA & SOUTH BV	20	16	30	66	46300	1.30	44		
15287	ALBEMARLE RD & N SHARON AMITY RD	24	39	37	100	70200	1.30	45	47	
11625	E 11TH ST & N COLLEGE ST	8	9	17	34	24000	1.29	46	85	
4175	LAKEVIEW RD & STATESVILLE RD	5	4	8	17	12000	1.29	47	63	
15117	ALBEMARLE RD & CENTRAL AV	13	32	23	68	48,500	1.28	48	81	Estimated ADT
15542	CLANTON RD & N I-77 EXIT 7 RA	7	7	15	29	20800	1.27	49		ADT from 2012
13158	E JOHN BELK RA_S CALDWELL ST	14	17	12	43	30900	1.27	50	19	
12089	E 12TH ST & N DAVIDSON ST	5	11	15	31	22300	1.27	51		
5525	J W CLAY BV & MCCULLOUGH DR & W W T HARRIS BV	21	34	40	95	68700	1.26	52	74	ADT from 2012
3146	MALLARD CREEK RD & ODELL SCHOOL RD	3	10	4	17	12,300	1.26	53	15	Estimated ADT
11677	E 11TH ST & N TRYON ST & W 11TH ST	12	5	11	28	20300	1.26	54	71	
17151	E INDEPENDENCE BV & IDLEWILD RD	28	33	48	109	79400	1.25	55	64	
11145	S I-77 EXIT 10B RA & W TRADE ST	6	6	9	21	15,300	1.25	56		
14091	E 7TH ST & N CASWELL RD & PECAN AV	10	9	13	32	23400	1.25	57	30	ADT from 2012
11639	PARKWOOD AV & PEGRAM ST	10	4	9	23	16900	1.24	58		
11262	EASTWAY DR & FRONTENAC AV & SHAMROCK DR	22	13	26	61	45000	1.24	59	56	
10622	MULBERRY CHURCH RD & QUEEN CITY DR	6	7	11	24	17800	1.23	60	33	
11237	N I-77 EXIT 10B RA & W TRADE ST	10	5	13	28	20800	1.23	61	53	
9768	EASTWAY DR & THE PLAZA	17	21	29	67	49800	1.23	62	69	
23292	RIVERBIRCH DR & SHARON LAKES RD & SHARON RD WEST	7	10	12	29	21600	1.23	63		
12711	E STONEWALL ST & S TRYON ST & W STONEWALL ST	7	9	15	31	23300	1.22	64		ADT from 2012
21296	E ARROWOOD RD & ENGLAND ST & OLD PINEVILLE RD	14	5	5	24	18100	1.21	65		
12542	ASHLEY RD & WILKINSON BV	24	10	25	59	44900	1.20	66		ADT from 2010

ID	Location	Collisions 2011	2012	2013	3 Years Total	2013Avg volume	Crash Rate	Rank	Prior Year Rank	Notes
13600	3RD-4TH CONNECTOR ST & E 4TH ST & N KINGS DR & S KINGS DR	30	37	34	101	53100	1.74	14	5	
15117	ALBEMARLE RD & CENTRAL AV	13	32	23	68	48,500	1.28	48	81	Estimated ADT
15253	ALBEMARLE RD & E W T HARRIS BV	40	29	45	114	73800	1.41	33	22	
15195	ALBEMARLE RD & FARM POND LN	25	25	33	83	56100	1.35	40	55	
15287	ALBEMARLE RD & N SHARON AMITY RD	24	39	37	100	70200	1.30	45	47	
10100	ASHLEY RD & FREEDOM DR & TUCKASEEGEE RD	33	31	22	86	40900	1.92	6	6	
12542	ASHLEY RD & WILKINSON BV	24	10	25	59	44900	1.20	66		ADT from 2010
8515	ATANDO AV & STATESVILLE AV	16	14	23	53	31300	1.55	22	13	
11232	BARRINGTON DR & MILTON RD	3	11	8	22	13700	1.47	29	17	
8329	BEATTIES FORD RD & LASALLE ST	12	22	15	49	28800	1.55	20	31	
17273	BILLY GRAHAM PY & S TRYON ST & W WOODLAWN RD	38	25	43	106	64200	1.51	23	27	
9902	CAMBRIDGE COMMONS DR & HARRISBURG RD	16	15	7	38	14600	2.38	3	1	Recent Spot Safety Project/Roundabout
13590	CAMDEN RD & S TRYON ST & W SUMMIT AV	3	8	12	23	15200	1.38	35		ADT from 2012
13763	CENTRAL AV & EASTWAY DR	34	18	35	87	53100	1.50	24	16	
14442	CENTRAL AV & N SHARON AMITY RD	31	38	30	99	54800	1.65	17	24	
13343	CHARLOTTETOWNE AV & E 7TH ST & E INDEPENDENCE BV	17	9	18	44	29700	1.35	39	20	
13912	CHARLOTTETOWNE AV & E JOHN BELK RA & KENILWORTH AV	28	18	39	85	43800	1.77	11	35	
15542	CLANTON RD & N I-77 EXIT 7 RA	7	7	15	29	20800	1.27	49		ADT from 2012
27388	CONLAN CR & JOHN J DELANEY DR	14	8	12	34	19800	1.57	19	23	ADT from 2010
4061	DAVID COX RD & LAKEVIEW RD & OLD STATESVILLE RD	7	5	17	29	14700	1.80	10	68	
5266	DOUG MAYES PL & J W CLAY BV	5	6	9	20	11800	1.55	21	26	
12186	E 11TH ST & E BROOKSHIRE FR RA & N DAVIDSON ST	8	10	12	30	20100	1.36	37	46	
11625	E 11TH ST & N COLLEGE ST	8	9	17	34	24000	1.29	46	85	
11677	E 11TH ST & N TRYON ST & W 11TH ST	12	5	11	28	20300	1.26	54	71	
11693	E 12TH ST & N COLLEGE ST	0	8	7	15	7800	1.76	12	37	ADT from 2012
12089	E 12TH ST & N DAVIDSON ST	5	11	15	31	22300	1.27	51		
12863	E 3RD ST & S CALDWELL ST	5	10	14	29	20200	1.31	43	41	
12775	E 4TH ST & S CALDWELL ST	9	9	20	38	23400	1.48	27	38	
12618	E 5TH ST & N CALDWELL ST	11	6	8	25	15300	1.49	25	11	
12896	E 6TH ST & N MCDOWELL ST	6	11	20	37	18300	1.85	9	65	ADT from 2010
13667	E 7TH ST & HAWTHORNE LN	24	10	22	56	25300	2.02	5	7	
14091	E 7TH ST & N CASWELL RD & PECAN AV	10	9	13	32	23400	1.25	57	30	ADT from 2012
12135	E 7TH ST & N COLLEGE ST	5	12	13	30	14400	1.90	7	9	
12038	E 8TH ST & N COLLEGE ST	6	10	2	18	6100	2.69	1	2	Average Daily Traffic (ADT) from 2012
11956	E 9TH ST & N COLLEGE ST	6	6	8	20	7600	2.40	2	3	ADT from 2012
21296	E ARROWOOD RD & ENGLAND ST & OLD PINEVILLE RD	14	5	5	24	18100	1.21	65		
17151	E INDEPENDENCE BV & IDLEWILD RD	28	33	48	109	79400	1.25	55	64	
13158	E JOHN BELK RA_S CALDWELL ST	14	17	12	43	30900	1.27	50	19	
4866	E MALLARD CREEK CHURCH RD & N TRYON ST & W MALLARD CREEK CHURCH RD	26	26	31	83	57100	1.33	42	32	

ID	Location	Collisions 2011	2012	2013	3 Years Total	2013Avg volume	Crash Rate	Rank	Prior Year Rank	Notes
12711	E STONEWALL ST & S TRYON ST & W STONEWALL ST	7	9	15	31	23300	1.22	64		ADT from 2012
8847	E SUGAR CREEK RD & N TRYON ST & W SUGAR CREEK RD	23	36	45	104	55900	1.70	15	10	
12695	E TRADE ST & N CALDWELL ST & S CALDWELL ST	7	13	12	32	20000	1.46	30	34	
5704	E W T HARRIS BV & N TRYON ST & W W T HARRIS BV	23	35	52	110	73800	1.36	38	43	ADT from 2012
11262	EASTWAY DR & FRONTENAC AV & SHAMROCK DR	22	13	26	61	45000	1.24	59	56	
9768	EASTWAY DR & THE PLAZA	17	21	29	67	49800	1.23	62	69	
8181	FREEDOM DR & TODDVILLE RD	9	5	9	23	14300	1.47	28	14	
12013	FREEDOM DR & W MOREHEAD ST	18	13	19	50	32400	1.41	34	48	ADT from 2012
24549	I-485 RA & SOUTH BV	20	16	30	66	46300	1.30	44		
5525	J W CLAY BV & MCCULLOUGH DR & W W T HARRIS BV	21	34	40	95	68700	1.26	52	74	ADT from 2012
4175	LAKEVIEW RD & STATESVILLE RD	5	4	8	17	12000	1.29	47	63	
4698	LAWING RD & MIRANDA RD & OAKDALE RD & SUNSET RD	4	4	8	16	7900	1.85	8	4	
3146	MALLARD CREEK RD & ODELL SCHOOL RD	3	10	4	17	12,300	1.26	53	15	Estimated ADT
5060	MALLARD CREEK RD & OLD MALLARD CREEK RD	7	3	20	30	20,000	1.37	36		ADT from 2012
11311	MILTON RD & N SHARON AMITY RD	19	16	18	53	27800	1.74	13	18	
10622	MULBERRY CHURCH RD & QUEEN CITY DR	6	7	11	24	17800	1.23	60	33	
12076	N CHURCH ST & W 5TH ST	10	9	10	29	16800	1.58	18	51	
11237	N I-77 EXIT 10B RA & W TRADE ST	10	5	13	28	20800	1.23	61	53	
51371	N TRYON ST_UNIVERSITY POINTE BV	15	20	21	56	35200	1.45	31	12	
7701	NEWELL-HICKORY GROVE RD & OLD CONCORD RD	7	3	7	17	10,800	1.44	32	95	Estimated ADT
11639	PARKWOOD AV & PEGRAM ST	10	4	9	23	16900	1.24	58		
24904	PINEVILLE-MATTHEWS RD & PROVIDENCE RD	45	27	41	113	69200	1.49	26	25	ADT from 2012
7380	REAGAN DR & W SUGAR CREEK RD	26	26	31	83	45900	1.65	16	21	
23292	RIVERBIRCH DR & SHARON LAKES RD & SHARON RD WEST	7	10	12	29	21600	1.23	63		
12721	S CHURCH ST & W HILL ST & W JOHN BELK RA	9	7	11	27	10600	2.33	4	8	ADT from 2012
11145	S I-77 EXIT 10B RA & W TRADE ST	6	6	9	21	15,300	1.25	56		
7441	W SUGAR CREEK RD & WILSON LN	11	6	9	26	17,600	1.35	41	52	Estimated ADT

2013 Intersection Safety Warrant List (same as 2012)

As part of the Charlotte Department of Transportation's goal of providing a safe transportation system for all road users, the Traffic Safety Section has developed a list of locations that have promise as sites for safety improvements. Additionally, this list provides a more stable picture of the collision patterns at locations throughout the City to aid in the development of capital projects and programs. City of Charlotte staff is the primary user of this information; however, other transportation professionals may find the information helpful in developing projects and programs. The warrant list will be updated every 2 years.

The following are a few key points regarding the warrant list that may be helpful to non-primary users of this information:

- The locations are selected and prioritized using many crash-related factors. Some of the factors include frequency, rate, severity and crash pattern. To find more information on the screening process, you can consult the Appendix included in the full report.
- This listing is not based strictly on highest rate, injuries or frequency. Thus it is **not** an effort to list "the most dangerous locations."
- The locations listed in this publication are only preliminary candidates for safety improvements. The final decision to install safety countermeasures at a location will depend upon the findings of a detailed engineering investigation, the availability of funds and other various factors.

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants				2013 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	X-4	P-4	Alcohol	
667	3RD-4TH CONNECTOR ST_CHARLOTTETOWNE AV	Yes	84	X									
578	3RD-4TH CONNECTOR ST_E 4TH ST_N KINGS DR	Yes	174	X									5
5777	A AV EAST_BEATTIES FORD RD_N HOSKINS RD	No	28			X							
2232	ABBEYDALE DR_N SHARON AMITY RD	No	10			X							
1601	ALBEMARLE RD_BLAIR RD	Yes	53	X		X							
2278	ALBEMARLE RD_CABARRUS RD	No	27	X		X							
22716	ALBEMARLE RD_CENTRAL AV	Yes	84		X	X	X						
1077	ALBEMARLE RD_CLEAR CREEK COMMERCE DR_ROCKY RIVER CHURCH RD	Yes	20			X							
21	ALBEMARLE RD_COPPER CREEK CT_LAKE FOREST RD EAST	Yes	46			X							
133	ALBEMARLE RD_E INDEPENDENCE BV	No	20			X							
722	ALBEMARLE RD_FARM POND LN	Yes	146			X					X		55
4478	ALBEMARLE RD_GRAFTON PL	No	12			X							
22908	ALBEMARLE RD_I-485 RA	Yes	27	X		X							
7975	ALBEMARLE RD_OLDE SAVANNAH RD	No	10			X							
1003	ALBEMARLE RD_PIERSON DR	No	15			X							
326	ALBEMARLE RD_WINTERHAVEN DR	Yes	80			X			X				
363	ALEXANDER RD_PINEVILLE-MATTHEWS RD	Yes	33			X							
184	ALEXANDER RD_PROVIDENCE RD_REA RD	Yes	66			X							
503	ALLEGHANY ST_CRISMAN ST	No	14			X		X					
423	ALLEGHANY ST_FREEDOM DR	Yes	52			X							
1070	ALLEGHANY ST_WILKINSON BV	No	33	X		X							
2077	ALLEN RD SOUTH_N GRAHAM ST	No	11			X							
909	ALLISTER DR_E W T HARRIS BV	No	16			X							
2181	AMITY PL_N SHARON AMITY RD_PIERSON DR	No	13			X							
1359	ARBORETUM DR_PINEVILLE-MATTHEWS RD	No	31	X		X							
1644	ARBORETUM SHOPPING CENTER DR_PROVIDENCE RD	Yes	27	X									
386	ARBORETUM VIEW_PINEVILLE-MATTHEWS RD	Yes	49	X									
311	ARBORWAY_FAIRVIEW RD	No	11			X							
5293	ARCHDALE DR_CHERRYCREST LN	No	16			X							
9659	ARCHDALE DR_MONTCREST DR	No	10			X							
715	ARCHDALE DR_N I-77 EXIT 4 RA_NATIONS FORD RD	Yes	27			X							
1034	ARDREY KELL RD_COMMUNITY HOUSE RD	Yes	32			X							
16551	ARDREY KELL RD_LONGMONT DR	No	10			X							
23054	ARDREY KELL RD_MARVIN RD	Yes	27			X							
4105	ARDSLEY RD_QUEENS RD_QUEENS RD WEST	No	20					X					
4543	ARLINGTON AV_S CALDWELL ST_SOUTH BV	No	20			X							
345	ARNOLD DR_CENTRAL AV	No	10			X							
1473	ARNOLD DR_EASTWAY DR	No	44			X							
1407	ARVIN DR_COCHRANE DR_STATESVILLE RD	No	14			X							
6193	ASHCRAFT LN_PARK RD	No	10			X							
2104	ASHLEY RD_BULLARD ST	No	15			X							
1533	ASHLEY RD_JOY ST	No	22			X							
982	ASHLEY RD_SCOTT FUTRELL DR	Yes	29	X									
923	ASHLEY RD_TUCKASEEGEE RD	Yes	49	X									
697	ASHLEY RD_WILKINSON BV	Yes	70			X							
85	ASHMORE DR_MONROE RD	No	22			X							
954	ATANDO AV_LASALLE ST_N I-77 EXIT 12 RA	Yes	20			X							
1489	ATANDO AV_STATESVILLE AV	Yes	85			X							13
4108	AUDREY ST_EASTWAY DR	No	28			X							
114	AUSTIN DR_N TRYON ST	No	42			X							
9151	BALLANTYNE COMMONS PY_COACHMAN CR	No	15			X							
5199	BALLANTYNE COMMONS PY_DURANT BV	No	28	X									
1978	BALLANTYNE COMMONS PY_ELM LN	Yes	51	X									
825	BALLANTYNE COMMONS PY_JOHN J DELANEY DR	No	47	X									
979	BALLANTYNE COMMONS PY_NORTH COMMUNITY HOUSE RD	Yes	34	X		X							
5417	BALLANTYNE COMMONS PY_TOM SHORT RD	Yes	20			X							
5715	BALLANTYNE CROSSING AV_JOHNSTON RD	No	24			X							
2356	BANNER ELK DR_SUNSET RD	No	36	X		X							
2073	BARCLAY DOWNS DR_BULFINCH RD	No	24			X		X					
381	BARRINGER DR_REMOUNT RD	Yes	17			X							
1156	BARRINGER DR_WEST BV	No	10			X							
495	BARRINGTON DR_MILTON RD	No	43	X		X		X					17
165	BARTON CREEK DR_N TRYON ST	No	37	X		X							

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants				2013 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	X-4	P-4	Alcohol	
1279	BATHURST DR_IDLEWILD RD	No	17			X							
14129	BAY ST_PECAN AV	No	9							X			
700	BAYBROOK LN_PINEVILLE-MATTHEWS RD	No	32			X							
5611	BEATTIES FORD RD_BOOKER AV_OAKLAWN AV	Yes	43	X		X							
20	BEATTIES FORD RD_CATHERINE SIMMONS AV	No	37	X		X					X		
1994	BEATTIES FORD RD_CINDY LN_GRIERS GROVE RD	Yes	39	X									
5396	BEATTIES FORD RD_FAIRDALE DR_FRIENDSHIP VILLAGE PL	No	13			X							
1211	BEATTIES FORD RD_FRENCH ST	Yes	34	X		X							
8127	BEATTIES FORD RD_HILDEBRAND ST	No	14			X							
2127	BEATTIES FORD RD_KELLER AV	No	18						X				
1741	BEATTIES FORD RD_LASALLE ST	Yes	78	X		X					X		31
1098	BEATTIES FORD RD_MT HOLLY-HUNTERSVILLE RD	Yes	19			X							
8263	BEATTIES FORD RD_RUSSELL AV	No	19			X							
5325	BEATTIES FORD RD_S I-85 EXIT 37 RA_SIR BAILEY DR	Yes	34			X							
14452	BEATTIES FORD RD_SLATER RD	No	10			X							
382	BEATTIES FORD RD_SUNSET RD	Yes	86	X		X							
303	BEATTIES FORD RD_W BROOKSHIRE RA	Yes	20			X							
8042	BEECHWAY CR_N TRYON ST	No	12			X							
2034	BELLHAVEN BV_MT HOLLY-HUNTERSVILLE RD_ROZZELLES FERRY RD	Yes	40	X		X							
2164	BELMONT AV_N CALDWELL ST_PARKWOOD AV	No	11			X							
254	BELMONT AV_N DAVIDSON ST	No	30	X		X		X					
1282	BELMONT AV_SEIGLE AV	No	21					X					
656	BENNETT ST_N TRYON ST	No	38	X		X							
1542	BENTLEY PL_EASTWAY DR	No	25			X							
2048	BERKELEY PLACE DR_W MALLARD CREEK CHURCH RD	No	57				X						54
4606	BERRYHILL RD_THRIFT RD_TUCKASEEGEE RD	Yes	11			X							
737	BILLY GRAHAM PY_MORRIS FIELD DR	Yes	86			X							
493	BILLY GRAHAM PY_S TRYON ST_W WOODLAWN RD	Yes	135			X							27
951	BILLY GRAHAM PY_WEST BV	Yes	92			X							
25483	BLAKENEY GREENS BV_REA RD	Yes	34	X		X							
1240	BLUE HERON DR_PINEVILLE-MATTHEWS RD	No	16			X							
1216	BONNIE CONE LN_E MALLARD CREEK CHURCH RD_MARY ALEXANDER RD	Yes	31	X									
1241	BOYER ST_OLD DOWD RD	No	32	X		X							
413	BRADFORD DR_EDGEWOOD RD_FREEDOM DR	Yes	50			X							
1762	BROOK RD_CLEMSON AV_THE PLAZA	Yes	22			X							
4096	BROOKSHIRE BV_CENTRE ST_IDAHO DR_W BROOKSHIRE FR	No	16			X							
23954	BROOKSHIRE BV_DMV DR	Yes	9			X							
213	BROOKSHIRE BV_HOVIS RD	No	13					X					
1751	BROOKSHIRE BV_HOVIS RD	No	26			X							
38614	BROOKSHIRE BV_I-485 RA	Yes	17			X							
188	BROOKSHIRE BV_N I-85 EXIT 36 RA	No	77					X					
1354	BROOKSHIRE BV_N I-85 EXIT 36 RA_N I-85 HY	Yes	59			X							
8075	BROOKSHIRE BV_NANCE COVE RD_ROZZELLES FERRY RD	Yes	24			X							
2109	BROOKSHIRE BV_OLD PLANK RD	No	17			X		X					
2146	BROOKSHIRE BV_PLEASANT GROVE RD	Yes	26			X							
5622	BROOKSHIRE BV_S I-85 EXIT 36 RA _S I-85 HY	Yes	41				X						
10625	BROWNE RD_HAMPTON PLACE DR	No	13			X							
1126	BROWN-GRIER RD_SANDY PORTER RD_W ARROWOOD RD	Yes	37	X		X							
1185	BROWNS AV_FREEDOM DR	No	24			X							
1381	BROWNS AV_TUCKASEEGEE RD	No	11			X							
232	BUICK DR CONFERENCE DE_E INDEPENDENCE BV	Yes	84								X		
562	CALIBRE CROSSING DR_CROSS POINT CR_E INDEPENDENCE BV	No	26	X									
4253	CAMBRIDGE COMMONS DR_HARRISBURG RD	No	86	X		X		X					1
8671	CAMBRIDGE RD_PARK RD_POINDEXTER DR	Yes	13			X	X						
387	CAMP GREENE ST_FREEDOM DR	Yes	52			X							
501	CAMP GREENE ST_WILKINSON BV	No	26	X									
2035	CANTERWOOD DR_ELGYWOOD LN	No	11					X					
1130	CAPPS HILL MINE RD_PEACHTREE RD	No	11			X							
5716	CARMEL COMMONS BV_CARMEL RD	No	23					X					
719	CARMEL RD_COLONY RD	Yes	28			X							
4155	CARMEL RD_HILLINGDON RD_WILD PARTRIDGE RD	No	10					X					
2451	CARMEL RD_JOHNSTON RD	Yes	51	X		X							
649	CASTLETON RD_N SHARON AMITY RD	No	17			X							

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants				2013 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	X-4	P-4	Alcohol	
379	CEDAR CREEK LN_JOHNSTON RD_MCMULLEN CREEK PY	Yes	32	X		X							
625	CENTRAL AV_CLEMENT AV	No	18			X							
444	CENTRAL AV_E 7TH ST	Yes	76	X									
890	CENTRAL AV_EASTWAY DR	Yes	165							X	X		16
305	CENTRAL AV_HAWTHORNE LN	Yes	26			X							
5416	CENTRAL AV_LAMAR AV	No	12			X							
288	CENTRAL AV_LANDIS AV	No	11			X							
13	CENTRAL AV_N SHARON AMITY RD	Yes	157							X	X		24
7879	CENTRAL AV_PECAN AV	Yes	28			X							
398	CENTRAL AV_THE PLAZA	Yes	34			X							
221	CENTRAL AV_TIPPAH PARK CT	No	15			X							
1361	CENTRAL AV_WEMBLEY DR	No	24						X				
47	CHALLIS FARM RD_PINEVILLE-MATTHEWS RD	No	12			X							
306	CHARLESTON DR_E INDEPENDENCE BV	No	23			X							
194	CHARLOTTETOWNE AV_E 4TH ST	Yes	54			X							
1353	CHARLOTTETOWNE AV_E 7TH ST_E INDEPENDENCE BV	Yes	86	X		X							20
855	CHARLOTTETOWNE AV_E JOHN BELK RA_KENILWORTH AV	Yes	128	X									35
588	CHARLOTTETOWNE AV_ELIZABETH AV	Yes	28						X				
40961	CHARLOTTETOWNE AV_METROPOLITAN AV	Yes	50			X			X				
344	CHEROKEE RD_PROVIDENCE RD	Yes	63	X									
1703	CHIPPENDALE RD_MONROE RD	No	15			X							
2338	CHOYCE AV_NATIONS FORD RD_REGENCY EXECUTIVE PY	No	14			X							
2079	CHRISTENBURY RD_W SUGAR CREEK RD	No	10			X							
1823	CINDERELLA RD_W SUGAR CREEK RD	No	21			X							
10826	CINDY LN_LAKE RD_NEVIN RD	No	16			X							
5434	CINDY LN_STATESVILLE RD	Yes	25			X	X						
1168	CIRCLE AV_HERMITAGE CT_PROVIDENCE RD	No	11			X							
1232	CITISIDE DR_EASTWAY DR	No	31	X									
55155	CITY BV_IKEA BV	Yes	15			X							
23293	CITY BV_NEAL RD	No	10			X							
5956	CITY VIEW DR_E INDEPENDENCE BV	No	36			X							
4196	CLANTON RD_DONALD ROSS RD_WEST BV	Yes	43			X							
1471	CLANTON RD_N I-77 EXIT 7 RA	Yes	30	X		X							
37512	CLANTON RD_SOUTH BV	Yes	29				X						
1086	CLARK BV_N TRYON ST	No	35	X		X							
2419	CLAUDE FREEMAN DR_W MALLARD CREEK CHURCH RD	Yes	48			X							
1697	CLEMENT AV_E 7TH ST	No	16			X							
11012	COLE DR_GLENVILLE AV_SHAMROCK DR	No	14			X							
974	COLLEGE-TRYON ST_N TRYON ST	No	14			X							
9188	COLLINS-AIKMAN DR_MCCULLOUGH DR	No	14			X							
701	COLONY RD_ROXBOROUGH RD_SHARON TOWNSHIP LN	Yes	10			X							
831	COLONY RD_SHARON VIEW RD	Yes	22			X							
2156	CONLAN CR_JOHN J DELANEY DR	No	53	X									23
1503	CORONADO DR_N SHARON AMITY RD	No	12			X							
1020	COTTONWOOD ST_N GRAHAM ST_REAGAN DR	Yes	41	X									
10734	COULOAK DR_MT HOLLY-HUNTERSVILLE RD	No	26	X		X							
421	COVECREEK DR_THE PLAZA	No	18			X							
499	COVEDALE DR_MONROE RD	No	30	X		X							
1889	CRAIG AV_N SHARON AMITY RD	No	17			X							
1919	CREEKRIDGE RD_VILLAGE LAKE DR	No	16			X							
340	DALTON AV_N GRAHAM ST	Yes	37	X			X						
699	DALTON AV_N TRYON ST	Yes	30			X							
4390	DANBY RD_LANCASTER HY	No	18					X					
2325	DAVID COX RD_LAKEVIEW RD_OLD STATESVILLE RD	No	42	X		X							
8309	DAVIDSON-CONCORD RD_RAMAH CHURCH RD	No	14			X							
5119	DELTA CROSSING LN_E W T HARRIS BV	No	10			X							
1412	DENNING PL_E W T HARRIS BV	No	16			X							
1409	DENON HILLS DR_E W T HARRIS BV_WATERFORD BRANCH DR	No	12			X							
993	DILWORTH RD_E MOREHEAD ST_S MCDOWELL ST	Yes	30			X							
443	DOGWOOD PL_HICKORY GROVE RD	No	14			X							
784	DONALD ROSS RD_WILKINSON BV	No	38			X							
5128	DOUG MAYES PL_J W CLAY BV	No	25			X							26
1096	DOWNS RD_E WESTINGHOUSE BV	Yes	29			X							

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants				2013 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	X-4	P-4	Alcohol	
599	DREXMORE AV_E WOODLAWN RD	No	14			X							
26708	DRIWOOD CT_PROSPERITY CHURCH RD	No	26	X									
654	DUNN AV_MONROE RD	Yes	20			X							
1808	E 11TH ST_E BROOKSHIRE FR RA_N DAVIDSON ST	Yes	45	X		X							46
163	E 11TH ST_N COLLEGE ST	Yes	51	X		X							
787	E 11TH ST_N TRYON_W 11TH ST	Yes	49						X				
247	E 12TH ST_N COLLEGE ST	Yes	22			X							37
517	E 18TH ST_N DAVIDSON ST	No	22			X							
1506	E 28TH ST_N TRYON ST_W 28TH ST	Yes	37			X							
1375	E 34TH ST_THE PLAZA	No	20			X							
2391	E 35TH ST_N DAVIDSON ST	No	11				X						
738	E 35TH ST_THE PLAZA	No	14			X							
1976	E 36TH ST_HOLT ST	No	10			X							
916	E 36TH ST_THE PLAZA	Yes	39			X							
1194	E 3RD ST_E JOHN BELK RA	Yes	40	X		X							
1082	E 3RD ST_PROVIDENCE RD_S CALDWELL RD	Yes	41	X									
418	E 3RD ST_QUEENS RD	Yes	31	X		X							
1927	E 3RD ST_S CALDWELL ST	Yes	43	X									41
270	E 3RD ST_S KINGS DR	Yes	68	X		X							
207	E 3RD ST_S MCDOWELL ST	Yes	54			X			X		X		
820	E 3RD ST_S TORRENCE ST	No	34	X									
999	E 4TH ST_E JOHN BELK RA	Yes	50	X		X							
1089	E 4TH ST_E JOHN BELK RA	Yes	27	X		X							
1485	E 4TH ST_HAWTHORNE LN_QUEENS RD	Yes	49			X							
4272	E 4TH ST_N TORRENCE ST	No	21					X					
1545	E 4TH ST_S CALDWELL ST	Yes	46	X									38
698	E 4TH ST_S COLLEGE ST	Yes	30						X				
41	E 4TH ST_S DAVIDSON ST	Yes	13			X							
1088	E 4TH ST_S MCDOWELL ST	Yes	62			X					X		
2024	E 4TH ST_S TORRENCE ST	No	20					X					
1276	E 4TH ST_S TRYON ST_W 4TH ST	Yes	56						X		X		
79	E 5TH ST_N CALDWELL ST	Yes	62	X		X							11
107	E 5TH ST_N COLLEGE ST	Yes	26	X									
620	E 5TH ST_N MCDOWELL ST	Yes	27			X							
1102	E 5TH ST_N TRYON ST	Yes	24								X		
2382	E 6TH ST_N BREVARD ST	Yes	29	X				X					
1714	E 6TH ST_N COLLEGE ST	Yes	34								X		
508	E 6TH ST_N MCDOWELL ST	Yes	36	X		X							65
170	E 7TH ST_HAWTHORNE LN	Yes	84	X		X							7
26	E 7TH ST_N LAUREL AV	No	15			X							
1015	E 7TH ST_N MCDOWELL ST	Yes	62			X							
731	E 7TH ST_N TRYON ST_W 7TH ST	Yes	25	X							X		
2301	E 7TH ST_RIDGEWAY AV	Yes	17			X							
1728	E 8TH ST_N COLLEGE ST	No	34	X									2
27	E 8TH ST_N TRYON ST_W 8TH ST	Yes	10			X							
4525	E 9TH ST_N BREVARD ST	Yes	13			X							
670	E 9TH ST_N COLLEGE ST	Yes	31	X		X							3
1008	E 9TH ST_N TRYON ST_W 9TH ST	No	31	X									
7	E ARROWHEAD DR_N TRYON ST_W ARROWHEAD DR	No	33	X		X					X		
4148	E ARROWOOD RD_ENGLAND ST_OLD PINEVILLE RD	Yes	40			X							
834	E ARROWOOD RD_GRAND METIS DR	No	11			X							
274	E ARROWOOD RD_NATIONS FORD RD_W ARROWOOD RD	Yes	55			X							
1059	E CARSON BV_S TRYON ST_W CARSON BV	Yes	14			X							
1549	E HEBRON ST_NATIONS FORD RD_W HEBRON ST	Yes	23			X							
450	E HEBRON ST_SOUTH BV	Yes	43			X							
8318	E HILL ST_S COLLEGE ST	No	29	X									36
2032	E HILL ST_S TRYON ST_W HILL ST	No	14					X					
1563	E INDEPENDENCE BV_EASTWAY DR RA_N WENDOVER RD RA	No	25			X							
14186	E INDEPENDENCE BV_HAWTHORNE LN	No	20			X							
1076	E INDEPENDENCE BV_SHARON FOREST DR	No	29	X		X							
1062	E INDEPENDENCE BV_VILLAGE LAKE DR	Yes	81			X							
901	E INDEPENDENCE BV_WALLACE RD	No	34	X		X							
226	E INDEPENDENCE BV_WOODLAND DR	No	16			X							

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants				2013 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	X-4	P-4	Alcohol	
32861	E JOHN BELK RA_S CALDWELL ST	Yes	55	X		X	X						19
23228	E MALLARD CREEK CHURCH RD_JOHN KIRK DR	No	29	X		X							
23692	E MALLARD CREEK CHURCH RD_UNIVERSITY CITY BV	No	87			X							
7927	E MARTIN LUTHER KING JR BV_S DAVIDSON ST	Yes	52			X							58
1242	E MARTIN LUTHER KING JR BV_S TRYON ST_W MARTIN LUTHER KING JR BV	Yes	14			X							
769	E MCCULLOUGH DR_MCCULLOUGH DR_N TRYON ST	Yes	54			X			X				
4045	E MOREHEAD ST_S TRYON ST_W MOREHEAD ST	Yes	70	X									
2107	E STONEWALL ST_S COLLEGE ST	Yes	39								X		
1695	E STONEWALL ST_S MCDOWELL ST	Yes	42	X									
81	E STONEWALL ST_S TRYON ST	No	36	X									
58	E SUGAR CREEK RD_EASTWAY DR_PURSER DR	Yes	57			X							
801	E SUGAR CREEK RD_GREENSBORO ST	No	28			X							
117	E SUGAR CREEK RD_THE PLAZA	Yes	96			X							39
1053	E TRADE ST_ELIZABETH AV_N MCDOWELL ST_S MCDOWELL ST	Yes	52	X		X							
2433	E TRADE ST_N CALDWELL ST_S CALDWELL ST	Yes	50	X		X							34
828	E TRADE ST_N COLLEGE ST	Yes	72								X		29
498	E TRADE ST_N DAVIDSON ST_S DAVIDSON ST	Yes	37	X		X							49
540	E TRADE ST_N TRYON ST_S TRYON ST_W TRADE ST	Yes	35						X				
609	E W T HARRIS BV_GRIER RD	Yes	101			X							
641	E W T HARRIS BV_IDLEWILD RD NORTH	Yes	32			X							
1178	E W T HARRIS BV_KIMMERLY GLEN LN_SUSAN DR	No	29			X							
8362	E W T HARRIS BV_NINA DR	No	13			X							
683	E W T HARRIS BV_ROCKY RIVER RD	Yes	61			X							
366	E W T HARRIS BV_ROSE HEATHER CT_UNIVERSITY RIDGE DR	No	50			X							
2049	E W T HARRIS BV_SNOW LN	No	27			X							
1303	E WESTINGHOUSE BV_NATIONS FORD RD_WESTINGHOUSE BV	Yes	27	X		X							
316	E WOODLAWN RD_MURRAYHILL RD	No	23			X							
691	E WOODLAWN RD_OLD PINEVILLE RD	Yes	55			X							
712	E WOODLAWN RD_RUNNYMEDE LN_SELWYN AV	Yes	51			X							
734	E WOODLAWN RD_SCALEYBARK RD	Yes	38			X							
197	EAST BV_KENILWORTH AV	Yes	46	X									
5108	EAST BV_PARK RD	No	14			X							
1198	EASTFIELD RD_OLD STATESVILLE RD	No	32			X							
2311	EASTWAY CROSSING DR_EASTWAY DR	Yes	28	X			X						
616	EASTWAY DR _THE PLAZA	Yes	113								X		
7930	EASTWAY DR_FINCHLEY DR	No	16			X							
746	EASTWAY DR_FRONTENAC AV_SHAMROCK DR	Yes	134			X						X	56
619	EASTWAY DR_KILBORNE DR	Yes	53			X							
604	EASTWAY DR_MICHIGAN AV	No	21			X							
525	EASTWAY DR_PEACE ST	No	14			X							
5055	EASTWAY DR_SANDHURST DR	No	11			X							
841	EASTWAY DR_WOODLAND DR	Yes	41			X							
537	EATON RD_MONROE RD	No	12			X							
2431	ECHO FOREST DR_PINEVILLE-MATTHEWS RD	Yes	27			X							
1113	EDGEWATER DR_SOUTH BV	No	21			X							
5466	EDGEWOOD RD_QUEEN CITY DR_TUCKASEEGEE RD	Yes	25			X							
446	ELIZABETH AV_N KINGS DR	Yes	47			X					X		
210	ELLINGTON ST_N WENDOVER RD	No	41	X		X							
1484	ELM LN_PINEVILLE-MATTHEWS RD	Yes	47	X									
1631	ELMIN ST_MORNING DR_WEST BV	No	13			X							
315	ENFIELD RD_KILBORNE DR	No	7					X					
4235	EPRI DR_W W T HARRIS BV_WACHOVIA DR	Yes	38					X					
1989	EQUIPMENT DR_W SUGAR CREEK RD	No	31	X		X							
6272	ERWIN RD_S TRYON ST	Yes	33			X							
908	ERWIN RD_STEELE CREEK RD	No	31			X							
2148	EXIT 61 JOHNSTON RD INNER RA_JOHNSTON RD	Yes	54			X							
12770	FAIRES FARM RD_KATHERINE KIKER RD	No	12			X		X					
2094	FAIRVIEW RD_PARK RD	Yes	32			X		X					
23470	FAIRVIEW RD_SOUTH PARK DR	No	30	X				X					
1917	FAIRVIEW RD_VALENCIA TR	No	10			X							
17699	FALLS BRANCH LN_MT HOLLY-HUNTERSVILLE RD	No	10			X							
4173	FERNCLIFF RD_SHARON RD	No	17			X							
9566	FIELDRIDGE RD_I-485 RA_WILKINSON BV	Yes	27			X							

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				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	X-4	P-4	Alcohol	
1456	FINCHLEY DR_SHAMROCK DR	No	16			X							
5682	FLINTRIDGE DR_IDLEWILD RD	No	10			X							
1058	FRAZIER AV_W TRADE ST	No	18			X							
487	FREEDOM DR_OLD MT HOLLY RD	Yes	11			X							
4286	FREEDOM DR_PACIFIC ST	No	27	X		X							
180	FREEDOM DR_S I-85 HY_S I-85 RA	Yes	28			X		X					
199	FREEDOM DR_THRIFTWOOD DR	No	25			X							
25	GALLERIA BV_MONROE RD	Yes	31			X							
2074	GALLERIA BV_SARDIS RD NORTH	Yes	30	X									
22674	GALLERIA VILLAGE DR_SARDIS RD NORTH	No	18					X					
1244	GIBBON RD_NEVIN RD	Yes	41	X									28
546	GIBBON RD_OLD STATESVILLE RD	Yes	37			X							
233	GREENWICH RD_RANDOLPH RD	Yes	13			X							
720	GREYSON RIDGE DR_HIGH RIDGE RD_PROVIDENCE RD	Yes	37			X							
1514	GRIER RD_ROCKY RIVER RD	Yes	12			X							
2231	GROVER RD_SOUTH BV	Yes	73	X		X							
7953	HAMILTON RD_STEELE CREEK RD	Yes	35	X			X						
1283	HARGROVE AV_MIDLAND AV_WILKINSON BV	No	31	X		X							
2374	HARRI ANN DR_LAWYERS RD	No	20			X							
869	HARRILL ST_PARKWOOD AV	No	12			X							
1457	HARRIS HOUSTON RD_UNIVERSITY CITY BV	No	26			X							
952	HAWTHORNE LN_PARK DR	No	13			X							
953	HAWTHORNE LN_PARKWOOD AV	Yes	29			X	X		X				
956	HEATHWAY DR_N TRYON ST	No	30	X		X							
1612	HENDERSON CR_OLD STATESVILLE RD	No	12			X							
5061	HICKORY GROVE RD_HIGHLAND AV_PENCE RD	No	15			X							
2220	HICKORY GROVE RD_LAWRENCE ORR RD	No	14			X							
160	HIDDEN VALLEY RD_W SUGAR CREEK RD	Yes	49			X							
203	HILLSIDE AV_PARK RD	Yes	21			X							
1416	HOLT ST_MATHESON AV	No	10			X							
8090	HUNTING RIDGE LN_IDLEWILD RD	No	11			X							
1845	HUNTSMOOR DR_NATIONS FORD RD	No	10			X							
5474	I-485 RA _UNIVERSITY CITY BV	Yes	33			X							
550	I-485 RA_N TRYON ST	Yes	39			X							
2306	I-485 RA_N TRYON ST	Yes	13			X							
57318	I-485 RA_OLD STATESVILLE RD	No	22			X							
1319	I-485 RA_REA RD	Yes	30		X								
899	I-485 RA_S TRYON ST	Yes	98	X		X							
8034	I-485 RA_S TRYON ST	Yes	31			X							
18749	I-485 RA_SOUTH BV	Yes	14			X							
19	I-485 RA_W ARROWOOD RD	Yes	11			X							
1499	IBM DR_NEAL RD_VINOY VIEW DR	Yes	18			X							
743	IDEAL WY_REMOUNT RD_SOUTH BV	Yes	38			X							
90	IDLEWILD RD NORTH_LAWYERS RD	No	15			X							
54813	INSTITUTE CR_N TRYON ST	Yes	28		X	X	X						
353	JOSH BIRMINGHAM PY_OLD DOWD RD	Yes	45			X							
1968	KILBORNE DR_SUDBURY RD	No	12			X							
355	KIMMERLY GLEN LN_N SHARON AMITY RD	No	18			X							
757	LAKE RD_MILHAVEN LN_STATESVILLE RD	No	11			X							
2344	LAKEVIEW RD_STATESVILLE RD	No	28	X				X					63
2248	LAMBETH DR_N TRYON ST	No	22			X							
80	LASALLE ST_S I-77 EXIT 12 RA	Yes	20			X							
1599	LATROBE DR_N WENDOVER RD	Yes	35			X							
1064	LAWING RD_MIRANDA RD_OAKDALE RD_SUNSET RD	No	26	X		X		X					4
759	LAWYERS RD_SPICEWOOD DR	No	12			X							
583	LAWYERS RD_SPLIT OAK DR	No	10			X							
985	LEAKE ST_WEST BV	No	14			X							
9271	LEGRANGER RD_W MALLARD CREEK CHURCH RD	No	13			X							
7881	LINDA VISTA LN_SUNSET RD	No	15			X							
5161	LITTLE ROCK RD_SCOTT FUTRELL DR	Yes	29			X							
1326	LITTLE ROCK RD_TUCKASEEGEE RD	Yes	19			X							
426	LITTLE ROCK RD_WILKINSON BV	Yes	54			X							
1717	LUCENA ST_MORETZ AV	No	12					X					

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533	LUMARKA DR_MONROE RD_THERMAL RD	Yes	34			X							
4620	MAGNOLIA AV_SOUTH BV	No	10			X							
645	MALLARD CREEK RD_MEDICAL PLAZA DR	No	24					X					
1690	MALLARD CREEK RD_OLD MALLARD CREEK RD	Yes	27			X							
1953	MALLARD CREEK RD_POLK AND WHITE RD	No	12			X							
1588	MALLARD CREEK RD_RIDGE RD	No	25			X							
23876	MALLARD GLEN DR_W MALLARD CREEK CHURCH RD	No	22				X						
1269	MAPLE ST_W SUGAR CREEK RD	No	10			X							
5076	MARKET ST_PLOTT RD_ROBINSON CHURCH RD	No	10			X							
111	MARVIN RD_N WENDOVER RD	Yes	27	X									
11	MATHESON AV_N TRYON ST_W 30TH ST	Yes	68			X							
368	MATHESON AV_THE PLAZA	Yes	73	X									
1395	MCALPINE STATION DR_MONROE RD	Yes	13			X							
5794	MCBRIDE ST_THE PLAZA	Yes	10										
755	MCDANIEL LN_OLD CONCORD RD	No	12			X							
590	MCLEAN RD_MEADOW VISTA RD_OLD CONCORD RD	Yes	38	X		X							
1480	MCMULLEN CREEK PY_PINEVILLE-MATTHEWS RD	No	21			X							
105	MILTON RD_N SHARON AMITY RD	Yes	79			X							18
724	MINERAL SPRINGS RD_N GRAHAM ST_W SUGAR CREEK RD	Yes	69			X							
234	MOCKINGBIRD LN_PARK RD	No	10			X							
4103	MONROE RD_ORCHARD LAKE DR	No	17			X							
334	MONROE RD_SHADE VALLEY RD	No	13			X							
89	MONROE RD_WASHBURN AV	Yes	24			X							
5680	MOORES CHAPEL RD_OLD MT HOLLY RD	No	10			X							
2038	MORETZ AV_N GRAHAM ST_W 28TH ST	Yes	31	X		X							
10875	MORNINGSTAR PLACE DR_N TRYON ST	No	13			X							
24342	MORTONHALL RD_ROCKY RIVER RD	No	16			X							
707	MOSS RD_S TRYON ST	Yes	61			X							
24083	MOUNT HOLLY RD_MT HOLLY-HUNTERSVILLE RD	Yes	34			X							
32599	MOUNT HOLLY RD_N I-485 RA	Yes	22			X							
38097	MOUNT HOLLY RD_S I-485 RA	Yes	30	X		X							
475	MT HOLLY-HUNTERSVILLE RD_NORTHWOODS FOREST DR	No	12			X							
372	MULBERRY CHURCH RD_QUEEN CITY DR	Yes	51	X		X							33
23665	MULBERRY POND DR_TUCKASEEGEE RD	No	10			X		X					
5074	N CHURCH ST_S CHURCH ST_W TRADE ST	Yes	44								X		
78	N CHURCH ST_W 5TH ST	Yes	33	X		X							51
4203	N CHURCH ST_W 6TH ST	Yes	13								X		
5298	N CHURCH ST_W 9TH ST	Yes	16			X							
1121	N COLONIAL AV_RANDOLPH RD_S COLONIAL AV	No	65	X		X							45
227	N DAVIDSON ST_PARKWOOD AV	Yes	33	X		X							
762	N GRAHAM ST _W TRADE ST	Yes	52	X							X		
796	N GRAHAM ST_NORRIS AV	Yes	19			X							
8258	N GRAHAM ST_ONEIDA RD	No	10			X							
36383	N GRAHAM ST_SEABOARD ST	Yes	18				X						
1890	N GRAHAM ST_W 10TH ST	Yes	45	X		X							60
1500	N GRAHAM ST_W 12TH ST	Yes	36				X						
2068	N HOSKINS RD_ROZZELLES FERRY RD_S HOSKINS RD	Yes	36						X				
2020	N I-77 EXIT 10B RA_N I-77 EXIT 10C RA_W 5TH ST	Yes	25			X							
231	N I-77 EXIT 10B RA_W TRADE ST	Yes	50	X									
1453	N I-77 EXIT 16 RA_REAMES RD_SUNSET RD	Yes	68	X		X							
913	N I-77 EXIT 16 RA_SUNSET RD	No	42					X					
8134	N I-77 EXIT 3 RA_W ARROWOOD RD	Yes	20			X							
1462	N I-77 EXIT 8 RA_REMOUNT RD_TOOMEY AV	No	11			X							
265	N I-85 EXIT 39 RA_STATESVILLE AV	Yes	38	X			X						
5145	N I-85 RA_W MALLARD CREEK CHURCH RD	No	53					X					
7812	N I-85 RA_W W T HARRIS BV	Yes	21			X							
922	N IRWIN AV_W 5TH ST	No	25			X		X					
153	N SHARON AMITY RD_SHAMROCK DR	Yes	83			X							
643	N SYCAMORE ST_W 5TH ST	No	20			X		X					
75	N TRYON ST_REAGAN DR	No	29			X							
2364	N TRYON ST_STETSON DR	No	14			X							
52980	N TRYON ST_UNIVERSITY CITY BV	Yes	56		X	X	X						
53893	N TRYON ST_UNIVERSITY POINT BV	No	70				X						12

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants				2013 HAL Rank
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4515	N TRYON ST_W 23RD ST	No	12			X							
5600	NATIONS FORD RD_S I-77 EXIT 4 RA	Yes	27			X							
291	NATIONS FORD RD_TYVOLA RD_W TYVOLA RD	Yes	45	X		X							
1650	NEWLAND RD_STATESVILLE AV	No	16			X							
24917	NORHTLAKE MALLDR_PERIMETER RD	No	29	X				X					
54122	NORTHCREST SHOPPING CENTER DR_W W T HARRIS BV	Yes	11			X							
2043	NORTHLAKE CENTRE PY_REAMES RD_W W T HARRIS BV	Yes	37			X	X						
151	NORTHPARK BV_REAMES RD	No	11			X							
1021	OAKDALE RD_OLD PLANK RD	No	19			X							
1548	OLD CONCORD RD_SUTHER RD	No	26			X							
5679	OLD MT HOLLY RD_ROZZELLES FERRY RD	No	14			X							
36	OLD PINEVILLE RD_SCALEYBARK RD	Yes	54	X									
8514	OLD POTTERS RD_W SUGAR CREEK RD	No	15			X							
4578	OLD PROVIDENCE RD_REA RD	No	26	X									
7918	OLD STATESVILLE RD_REAMES RD	Yes	10			X							
1449	OLD STEELE CREEK RD_WEST BV	Yes	38	X		X							
56	PARK CEDAR DR_PINEVILLE-MATTHEWS RD	No	28	X									
2067	PARK RD_PARK SELWYN OFFICE DR_SELWYN AV	Yes	22			X							
4191	PARK RD_PINEVILLE-MATTHEWS RD	Yes	10			X							
689	PARKWAY AV_TUCKASEEGEE RD	Yes	10			X							
162	PARKWOOD AV_PEGRAM ST	No	39	X		X							
1159	PEBBLESTONE DR_VILLAGE LAKE DR	No	15			X							
6066	PEBBLESTONE DR_VILLAGE LAKE DR	No	20			X							
24965	PERIMETER PY_W W T HARRIS BV	Yes	43				X						
10628	PLAZA WALK DR_THE PLAZA	No	46	X		X							
489	PRINCETON AV_QUEENS RD WEST	No	13			X							
991	PROVIDENCE COUNTRY CLUB DR_PROVIDENCE RD	Yes	16			X							
1645	PROVIDENCE RD_RAINTREE LN	No	14			X							
5281	PROVIDENCE RD_S COLONIAL AV	No	18			X							
1002	QUEENS RD WEST_WESTFIELD RD	No	13					X					
847	REMOUNT RD_WEST BV	Yes	56						X	X	X		
1085	RIVERBIRCH DR_SHARON LAKES RD_SHARON RD WEST	No	49			X							
23404	RIVERGATE PY_S TRYON ST	Yes	80			X	X						62
18487	RIVERPOINTE DR_YORK RD	Yes	12			X							
2183	ROMANY RD_SCOTT AV	No	14			X							
2272	ROZZELLES FERRY RD_S TURNER AV	No	11			X							
1940	RUNNYMEDE LN_SHARON RD	Yes	28			X							
1385	S CHURCH ST_W 3RD ST	Yes	22			X							
1290	S CHURCH ST_W 4TH ST	Yes	35	X		X							
1191	S CHURCH ST_W HILL ST_W JOHN BELK RA	No	32	X			X	X					8
2157	S CHURCH ST_W MOREHEAD ST	No	30	X			X						
10	S CHURCH ST_W STONEWALL ST	Yes	31	X		X							
5467	S I-77 EXIT 10B RA_S I-77 EXIT 10C RA_W 5TH ST	No	15			X		X					
1531	S I-77 EXIT 10B RA_W TRADE ST	No	27	X		X							53
936	S I-77 EXIT 3 RA_W ARROWOOD RD	Yes	26			X							
9532	S I-77 EXIT 5 RA_TYVOLA RD	Yes	14			X							
1466	S I-85 RA_W W T HARRIS BV	Yes	12			X							
187	S MINT ST_W CARSON BV	Yes	10			X		X					
1186	S MINT ST_W MOREHEAD ST	Yes	43	X									
1238	S MINT ST_WEST BV	Yes	19			X							
983	S TRYON ST_SANDY PORTER RD	Yes	111			X							42
370	S TRYON ST_W KINGSTON AV	No	14					X					
166	S TRYON ST_WEST BV	Yes	34	X									
8690	S TRYON ST_YORK CENTER DR_GENERAL DR	No	36	X		X							
147	SAM NEELY RD_STEELE CREEK RD	No	29			X							
53	SAM WILSON RD_WILKINSON BV	Yes	33			X							
1431	SARDIS LN_SARDIS RD	No	12			X							
1685	SARDIS RD_SARDIS RD NORTH	Yes	25			X							
268	SELWYN AV_WELLESLEY AV	No	14			X				X			
16564	SENATOR ROYALL DR_W MALLARD CREEK CHURCH RD	Yes	44			X							
1108	SHANNONHOUSE DR_THE PLAZA	Yes	12			X							
5182	SHARON LAKES RD_WATERFORD LAKES DR	No	10			X							
1502	SHARON RD_SHARON VIEW RD	Yes	24			X							

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4349	SHARON RD_SULKIRK RD	No	19			X							
11120	SHOPTON RD WEST_WESTINGHOUSE BV	No	10			X							
14318	SLEDGE RD_WINGET RD	No	12			X							
5177	SOUTH BV_STARMOUNT COVE LN	No	12					X					
360	SOUTH BV_WISTERIA DR	No	43			X							
24417	STEELE CREEK RD_STEELECROFT PY	No	26	X		X		X					
477	SUTHER RD_UNIVERSITY CITY BV	Yes	38			X							
4308	TOM HUNTER RD_WHITE PLAINS RD	No	12			X							
390	TYVOLA RD_WEDGEWOOD DR	Yes	11			X							
2353	W 10TH ST_W BROOKSHIRE RA	No	6					X					
440	W TRADE ST_WESLEY HEIGHTS WY	No	32	X		X							
997	W TYVOLA RD_WEST BV	No	11			X							
474	W TYVOLA RD_YORKMONT RD	Yes	31	X		X							
528	WEYLAND AV_WILKINSON BV	No	30			X							

Appendix

Intersection Safety Warrants Selection Criteria

Warrant I-1: Frontal Impact

Locations with a minimum of 25 total collisions AND a minimum of 50% of all crashes were frontal impact crashes AND a minimum of 25% of the total crashes occurred in the last 2 years. Frontal impact crashes are defined as:

- Angle
- Left Turn (same or different roadways)
- Right Turn (same or different roadways)
- Head On

Warrant I-2: Last Year Increase

Locations with a minimum of 25 total crashes AND a minimum of 38% of the total crashes occurred during the last year.

Warrant I-3: Frequency with a Severity Index Minimum

Tier 1: Locations with a minimum of 25 total crashes AND a minimum severity index of 7.0 AND a minimum of 40% of the collisions involving injury.

Tier 2: Locations with a minimum of 10 total crashes AND a minimum severity index of 8.0 AND a minimum of 50% of the collisions involving injury.

Severity index of a location is equal to the total equivalent property damage only (EPDO) collisions divided by the total number of collisions. EPDO is calculated as follows;

(76.8*(K+A))+ (8.4*(B+C)) + (O+U))

Where
K=Fatal collisions
A=Disabling injury collisions

B=Evident injury collisions
C=Possible injury collisions
O=No injury collisions
U=Unknown injury collisions

Warrant I-4: Night Locations without Streetlights (*Officer indicated*)

Locations with a minimum of 25% of the total crashes occurring in the last 2 years AND locations with a minimum of 12 crash that occurred at night.

Warrant I-5: Chronic Pattern

This warrant only applies to locations that did not meet the conditions of Warrants 1-4

Locations with a minimum of 20 crashes during 10 years, 15% of the total crashes occurring in the last 3 years AND a minimum of 80% of the total crashes were in one of the following pattern categories:

- Rear End (all rear end crash types)
- Crossing (all left turn, angle, and head on crash types)

Warrant P-1: Last 3 Years (Pedestrians)

Locations with a minimum of 4 crashes involving pedestrians reported in the last 10 years AND a minimum of 45% of all crashes involving pedestrians happened in the last 3 years.

Warrant P-2: Darkness with Streetlights (Pedestrians)

Locations with a minimum of 4 crashes involving pedestrians reported in the last 10 years AND a minimum of 55% of all crashes involving pedestrians occurred during darkness with streetlights.

Warrant P-3: Alcohol Involvement (Pedestrians)

Locations with a minimum of 4 crashes involving pedestrians reported in the last 10 years AND a minimum of 30% of all crashes involving pedestrians must have involved alcohol.

Warrant P-4: Chronic Location (Pedestrians)

Locations with a minimum of 6 crashes involving pedestrians reported in the last 10 years.

Warrant X-1: Last 3 Years (Bicyclists)

Locations with a minimum of 3 crashes involving bicyclists reported in the last 10 years AND a minimum of 45% of all crashes involving bicyclists happened in the last 3 years.

Warrant X-2: Darkness with Streetlights (Bicyclists)

Locations with a minimum of 3 crashes involving bicyclists reported in the last 10 years AND a minimum of 55% of all crashes involving bicyclists occurred during darkness with streetlights.

Warrant X-3: Alcohol Involvement (Bicyclists)

Locations with a minimum of 3 crashes involving bicyclists reported in the last 10 years AND a minimum of 30% of all crashes involving bicyclists must have involved alcohol.

Warrant X-4: Chronic Location (Bicyclists)

Locations with a minimum of 4 crashes involving bicyclists reported in the last 10 years.