Traffic Crash Data for 2011

CHARLOTTE

Department of Transportation

Engineering & Operations Division

July 17, 2012

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 2011. The data presented in this report does not include collisions that occurred on the Interstate highways (I-77, I-85, I-485, and I-277) 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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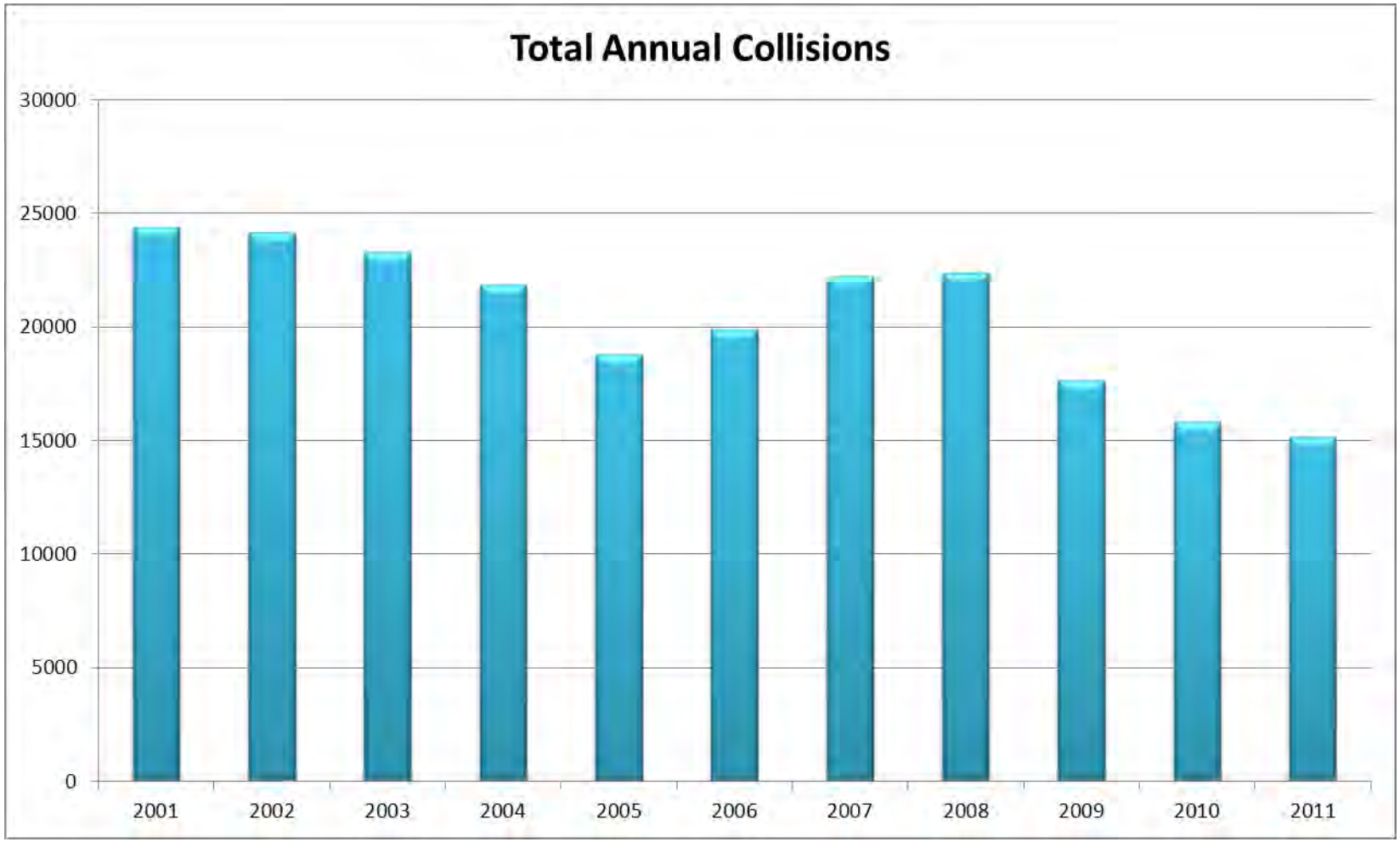
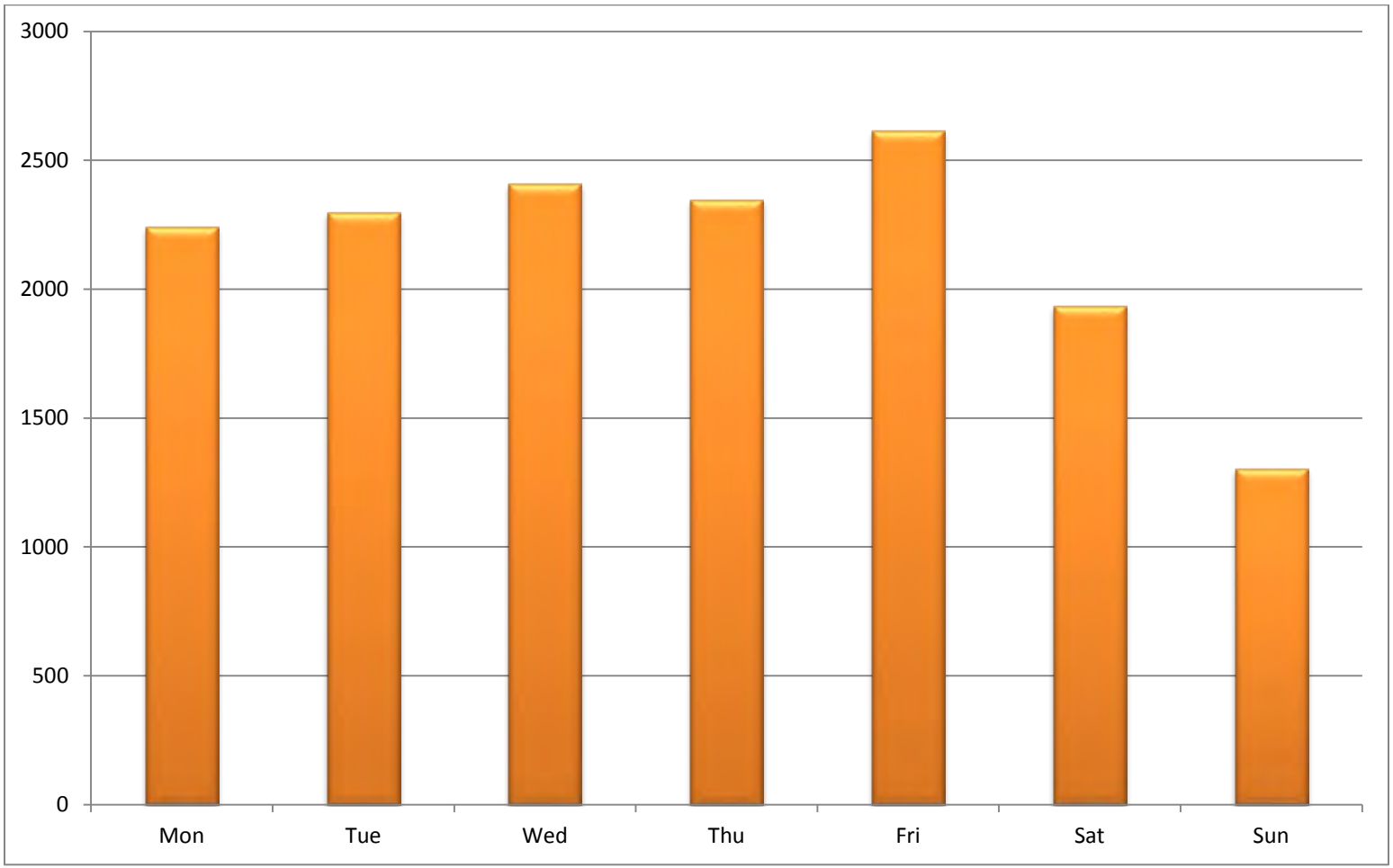
2011 Crash Summary
Collisions by Year



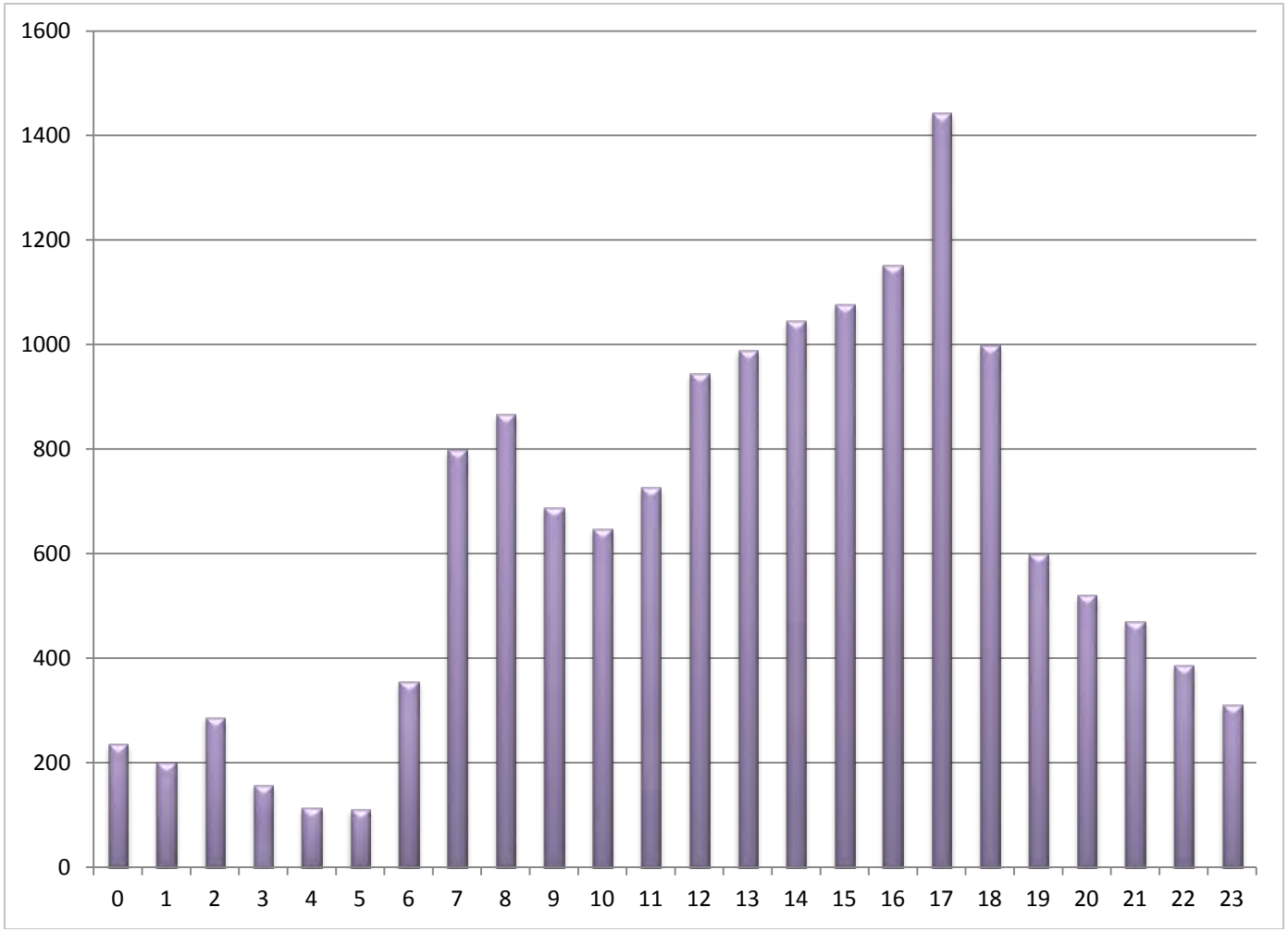
2011 Crash Summary
Collisions by Month

Month of Year	Total Number of Crashes	Percent of Total
January	1,094	7.22%
February	1,131	7.47%
March	1,401	9.25%
April	1,422	9.39%
May	1,484	9.80%
June	1,300	8.58%
July	1,168	7.71%
August	1,238	8.17%
September	1,482	9.78%
October	1,602	10.58%
November	879	5.80%
December	946	6.25%
TOTAL	**15,147**	**100%**

2011 Crash Summary
Collisions by Day of Week



2011 Crash Summary
Collisions by Hour of the Day (24 Hour Clock)



2011 Crash Summary
Collisions by Environmental Factors

Road Condition

Type of Condition	Total Number of Crashes	Percent of Total
Dry	12,538	82.78%
Wet	2,391	15.79%
Ice	80	0.53%
Snow	47	0.31%
Unknown	29	0.19%
Slush	9	0.06%
Other	5	0.03%
Sand	3	0.02%
Fuel	1	0.01%
Total	**15,147**	**100%**

Ambient Light

Type of Condition	Total Number of Crashes	Percent of Total
Daylight	10,805	71.33%
Dark - lighted roadway	2,906	19.19%
Dark - roadway not lighted	636	4.20%
Dawn	322	2.13%
Dusk	293	1.93%
Dark - unknown lighting	100	0.66%
Unknown	79	0.52%
Other	6	0.03%
Total	**15,147**	**100.00%**

2011 Crash Summary
Collision Severity and Outcome

Injury Type	Total Collisions	Percent of Total Collisions
Fatality	38	0.25%
Injury	5,625	37.16%
Property Damage Only	9,480	62.59%
Total	**15,147**	**100%**

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

2011 Crash Summary
Collisions by Motorist Contributing Circumstances

Contributing Circumstances	Total Collisions	Percent of Total Collisions
Inattention	3467	22.89%
Failure to reduce speed	2501	16.51%
Failed to yield right of way	1977	13.05%
Unable to determine	1009	6.66%
No contributing circumstance indicated	941	6.21%
Followed too closely	673	4.44%
Disregarded traffic signals	544	3.59%
Improper lane change	512	3.38%
Unknown	489	3.23%
Improper turn	488	3.22%
Other*	353	2.33%
Exceeded safe speed for conditions	261	1.72%
Alcohol use	255	1.68%
Improper backing	177	1.17%
Overcorrected/oversteered	160	1.06%
Crossed centerline/going wrong way	148	0.98%
Operated vehicle in erratic, reckless, careless, negligent or aggressive manner	147	0.97%
Swerved or avoided due to wind, slippery surface, vehicle, object, non-motorist	140	0.92%
Disregarded stop sign	126	0.83%
Exceeded authorized speed limit	114	0.75%
Visibility obstructed	107	0.71%
Other improper passing	102	0.67%
Operated defective equipment	82	0.54%
Driver distracted by other inside the vehicle	54	0.36%
Use of improper lane	52	0.34%
Disregarded road markings	41	0.27%
Disregarded other traffic signs	38	0.25%
Driver distracted by electronic communication device (cell phone, texting, etc.)	38	0.25%
Driver distracted by external distraction (outside the vehicle	35	0.23%
Improper parking	22	0.15%
Driver distracted	21	0.14%
Driver distracted by other electronic device (navigation device, DVD player, etc.)	21	0.14%
Disregarded yield sign	17	0.11%
Drug use	14	0.09%
Improper or no signal	10	0.07%
Right turn on red	9	0.06%
Passed stopped school bus	1	0.01%
Passed on hill	1	0.01%
TOTAL	**15147**	**100%**

Collision Rates by Volume

Year	VMT	Total Crashes	Crashes Per Million Vehicle Miles	Fatal Crashes	Fatalities Per Million Vehicle Miles
2001	17,035,215	24,407	1,433	45	2.64
2002	17,699,261	24,137	1,364	48	2.71
2003	18,583,633	23,302	1,254	53	2.85
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

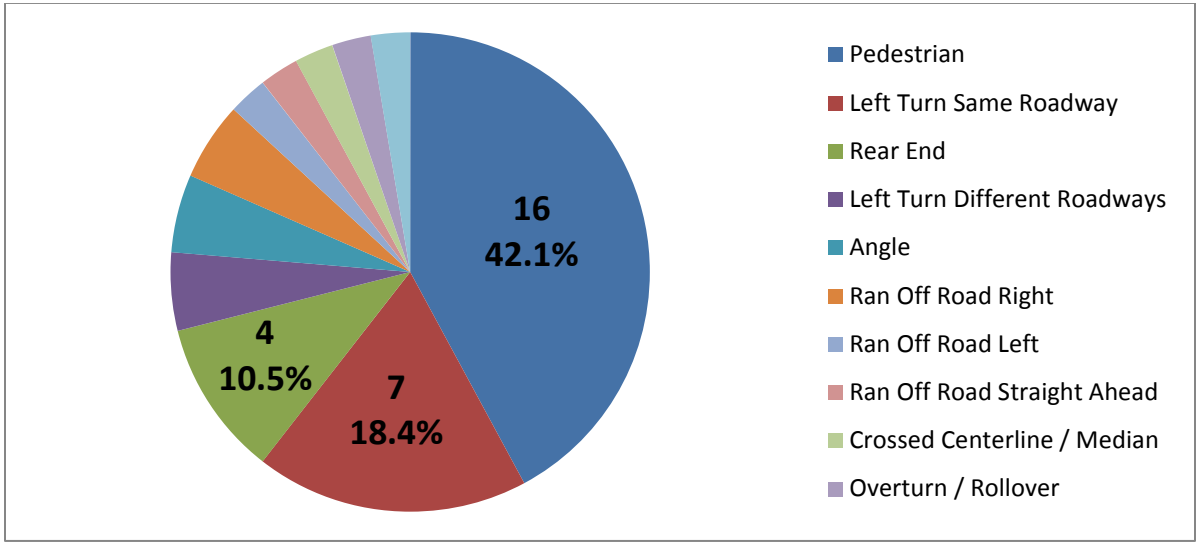
Pedestrian & Bicycle Collisions by Population

Year	Population	Pedestrian Crashes	Pedestrian Crashes Per 10,000 Persons	Bicycle Crashes	Bike Crashes Per 10,000 Persons
2002	579,684	234	4.04	98	1.69
2003	594,176	271	4.56	71	1.19
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

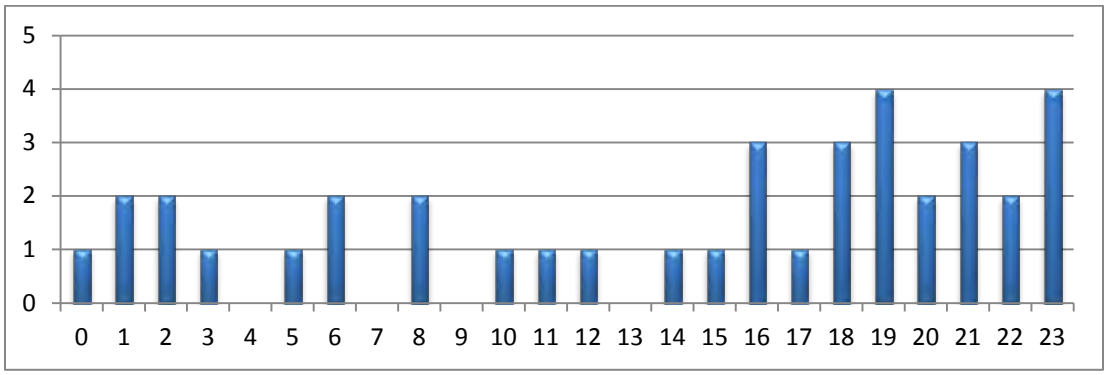
2011 Crash Summary

Fatal Collision Summary – 39 Fatalities in 38 Fatal Crashes

Fatal Crash Types



Fatal Crashes by Time of Day (24 Hour Clock)



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 2012 HAL is based on data collected during the 2011 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 (2011).

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 2006, 2007, and 2008 data was a crash rate of 1.30. The cutoff for 2009 data was a crash rate of 1.20. The cutoff for 2010 and 2011 data is 1.10.

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

ID	Location	Collisions 2009	Collisions 2010	Collisions 2011	3 Years Total	Avg. Daily Traffic	Crash Rate	Rank	Prior Year Rank	Notes
13108	E MARTIN LUTHER KING JR BV & S DAVIDSON ST	23	6	1	30	6,200	4.42	1	1	Recent CDOT signalization project
9902	CAMBRIDGE COMMONS DR & HARRISBURG RD	20	18	16	54	15,000	3.29	2	2	NCDOT spot safety project/ proposed Fall 2012
10100	ASHLEY RD & FREEDOM DR & TUCKASEEGEE RD	20	38	33	91	28,700	2.90	3	20	
12618	E 5TH ST & N CALDWELL ST	16	10	11	37	14,800	2.28	4	3	
4698	LAWING RD & MIRANDA RD & OAKDALE RD & SUNSET RD	5	9	4	18	7,300	2.25	5	8	
8847	E SUGAR CREEK RD & N TRYON ST & W SUGAR CREEK RD	54	47	23	124	57,300	1.98	6	6	
8181	FREEDOM DR & TODDVILLE RD	11	11	9	31	14,600	1.94	7	49	
13600	3RD-4TH CONNECTOR ST & E 4TH ST & N KINGS DR & S KINGS DR	28	36	30	94	45,400	1.89	8	14	
11956	E 9TH ST & N COLLEGE ST	4	7	6	17	8,400	1.85	9	10	
12038	E 8TH ST & N COLLEGE ST	2	10	6	18	8,900	1.85	10	16	Estimated ADT
4866	E MALLARD CREEK CHURCH RD & N TRYON ST & W MALLARD CREEK CHURCH RD	30	33	26	89	47,300	1.72	11	12	
50041	CHARLOTTETOWNE AV & METROPOLITAN AV	15	17	7	39	21,300	1.67	12	18	
24904	PINEVILLE-MATTHEWS RD & PROVIDENCE RD	46	35	45	126	71,300	1.61	13	25	
13667	E 7TH ST & HAWTHORNE LN	9	15	24	48	27,200	1.61	14	75	
13420	E BLAND ST & S TRYON ST & W BLAND ST	12	2	13	27	15,300	1.61	15	55	
13763	CENTRAL AV & EASTWAY DR	31	36	34	101	58,200	1.58	16	24	
12721	S CHURCH ST & W HILL ST & W JOHN BELK RA	7	4	9	20	11,800	1.55	17	Not Ranked	Estimated ADT
13343	E 7TH ST & E INDEPENDENCE BV	15	22	17	54	32,000	1.54	18	21	
11237	N I-77 EXIT 10B RA & W TRADE ST	12	9	10	31	18,500	1.53	19	46	
11262	EASTWAY DR & FRONTENAC AV & SHAMROCK DR	33	30	22	85	51,000	1.52	20	40	
7380	REAGAN DR & W SUGAR CREEK RD	28	18	26	72	43,500	1.51	21	52	
11979	E 12TH ST & E BROOKSHIRE FR RA & N CALDWELL ST	18	14	10	42	25,500	1.50	22	13	
4061	DAVID COX RD & LAKEVIEW RD & OLD STATESVILLE RD	12	7	7	26	16,000	1.48	23	35	Estimated ADT
13912	CHARLOTTETOWNE AV & E JOHN BELK RA & KENILWORTH AV	25	17	28	70	43,400	1.47	24	43	
15253	ALBEMARLE RD & E W T HARRIS BV	68	42	40	150	93,200	1.47	25	22	
10622	MULBERRY CHURCH RD & QUEEN CITY DR	11	13	6	30	18,800	1.46	26	23	
5919	GIBBON RD & NEVIN RD	7	10	8	25	15,700	1.45	27	61	
27388	CONLAN CR & JOHN J DELANEY DR	8	9	14	31	19,800	1.43	28	4	
8515	ATANDO AV & STATESVILLE AV	14	24	16	54	34,500	1.43	29	94	
11232	BARRINGTON DR & MILTON RD	10	8	3	21	13,500	1.42	30	19	Estimated ADT
12775	E 4TH ST & S CALDWELL ST	9	15	9	33	21,500	1.40	31	Not Ranked	
12413	E 6TH ST & N BREVARD ST	5	4	6	15	9,800	1.40	32	50	
23328	SLEDGE RD & STEELE CREEK RD	13	12	4	29	19,000	1.39	33	17	Estimated ADT
14442	CENTRAL AV & N SHARON AMITY RD	36	27	31	94	62,000	1.38	34	36	
16506	ELLINGTON ST & N WENDOVER RD	13	8	12	33	21,800	1.38	35	Not Ranked	Left turn restriction installed 2012
14431	N COLONIAL AV & RANDOLPH RD & S COLONIAL AV	10	18	13	41	27,500	1.36	36	38	
21549	S TRYON ST & SANDY PORTER RD	18	29	21	68	45,700	1.36	37	11	
12135	E 7TH ST & N COLLEGE ST	8	10	5	23	15,600	1.35	38	34	Recent CDOT signalization project
3146	MALLARD CREEK RD & ODELL SCHOOL RD	7	8	3	18	12,300	1.34	39	15	Estimated ADT
17273	BILLY GRAHAM PY & S TRYON ST & W WOODLAWN RD	21	20	38	79	54,000	1.34	40	Not Ranked	
20422	S TRYON ST & W ARROWOOD RD	27	27	20	74	50,600	1.34	41	72	
17450	NATIONS FORD RD & S TRYON ST & YORKMONT RD	15	21	8	44	30,100	1.33	42	90	
13531	REMOUNT RD & WEST BV	15	13	8	36	24,800	1.33	43	68	
15195	ALBEMARLE RD & FARM POND LN	35	25	25	85	58,800	1.32	44	45	
11311	MILTON RD & N SHARON AMITY RD	16	10	19	45	31,400	1.31	45	70	
51371	N TRYON ST_UNIVERSITY POINTE BV	9	26	15	50	35,200	1.30	46	Not Ranked	Estimated ADT

ID	Location	Collisions 2009	Collisions 2010	Collisions 2011	3 Years Total	Avg. Daily Traffic	Crash Rate	Rank	Prior Year Rank	Notes
12809	E 7TH ST & N MCDOWELL ST	17	14	7	38	26,800	1.29	47	33	
7195	REAGAN DR & TOM HUNTER RD	6	1	6	13	9,200	1.29	48	Not Ranked	
30018	BERKELEY PLACE DR & W MALLARD CREEK CHURCH RD	13	11	13	37	26,300	1.28	49	73	
4973	MALLARD CREEK RD & W W T HARRIS BV	27	29	30	86	61,200	1.28	50	Not Ranked	Estimated ADT
998	CAROWINDS BV & CATAWBA TRACE & CHOATE CR	16	20	5	41	29,400	1.27	51	30	
15201	ALBEMARLE RD & LAWYERS RD	25	20	28	73	52,800	1.26	52	64	
5266	DOUG MAYES PL & J W CLAY BV	4	7	5	16	11,700	1.25	53	Not Ranked	Estimated ADT
5704	E W T HARRIS BV & N TRYON ST & W W T HARRIS BV	44	42	23	109	79,800	1.25	54	37	Estimated ADT
13158	E JOHN BELK RA_S CALDWELL ST	10	13	14	37	27,200	1.24	55	Not Ranked	
14078	EAST BV & SOUTH BV	21	23	18	62	45,600	1.24	56	47	
15882	EAST BV & QUEENS RD WEST & S KINGS DR	17	9	6	32	23,800	1.23	57	26	
11972	N POPLAR ST & W 5TH ST	4	8	1	13	9,700	1.22	58	29	
12958	E 3RD ST & S DAVIDSON ST	10	6	3	19	14,200	1.22	59	96	
12695	E TRADE ST & N CALDWELL ST & S CALDWELL ST	11	9	7	27	20,200	1.22	60	74	
12611	S CHURCH ST & W STONEWALL ST	7	9	3	19	14,300	1.21	61	44	
12265	S CHURCH ST & W 4TH ST	10	3	9	22	16,600	1.21	62	Not Ranked	
14091	E 7TH ST & N CASWELL RD & PECAN AV	15	16	10	41	31,000	1.21	63	65	
13960	CENTRAL AV & KILBORNE DR & NORLAND RD	10	18	14	42	31,900	1.20	64	53	
17151	E INDEPENDENCE BV & IDLEWILD RD	41	35	28	104	79,400	1.20	65	39	
12068	N POPLAR ST & S POPLAR ST & W TRADE ST	9	4	7	20	15,300	1.19	66	Not Ranked	
7280	N I-85 EXIT 41 RA & W SUGAR CREEK RD	17	16	19	52	39,900	1.19	67	Not Ranked	
15287	ALBEMARLE RD & N SHARON AMITY RD	36	27	24	87	67,200	1.18	68	42	
18776	SOUTH BV & TYVOLA RD	28	29	29	86	67,500	1.16	69	88	
4332	S I-85 RA & W MALLARD CREEK CHURCH RD	21	18	21	60	47,200	1.16	70	Not Ranked	
7094	EQUIPMENT DR & W SUGAR CREEK RD	4	9	9	22	17,500	1.15	71	Not Ranked	Estimated ADT
10162	E SUGAR CREEK RD & THE PLAZA	17	18	18	53	42,200	1.15	72	71	
12110	S MINT ST & W 4TH ST	7	0	4	11	8,800	1.14	73	Not Ranked	
12779	E TRADE ST & N DAVIDSON ST & S DAVIDSON ST	11	5	7	23	18,500	1.14	74	83	
11876	N GRAHAM ST & S GRAHAM ST & W TRADE ST	14	13	7	34	27,400	1.13	75	Not Ranked	
9440	BRADFORD DR & EDGEWOOD RD & FREEDOM DR	15	6	10	31	25,000	1.13	76	Not Ranked	Estimated ADT
12170	S POPLAR ST & W 4TH ST	5	3	5	13	10,500	1.13	77	Not Ranked	
12891	E HILL ST & S COLLEGE ST	3	4	11	18	14,600	1.13	78	Not Ranked	Estimated ADT
11783	N GRAHAM ST & W 5TH ST	17	6	3	26	21,100	1.13	79	54	
14183	OLD STEELE CREEK RD & WEST BV	12	3	11	26	21,200	1.12	80	Not Ranked	
12076	N CHURCH ST & W 5TH ST	5	3	10	18	14,700	1.12	81	Not Ranked	
11639	PARKWOOD AV & PEGRAM ST	9	3	10	22	18,000	1.12	82	84	Estimated ADT
9791	MATHESON AV & N TRYON ST & W 30TH ST	19	14	12	45	37,000	1.11	83	Not Ranked	
21296	E ARROWOOD RD & ENGLAND ST & OLD PINEVILLE RD	9	3	14	26	21,400	1.11	84	Not Ranked	
4175	LAKEVIEW RD & STATESVILLE RD	4	8	5	17	14,000	1.11	85	Not Ranked	Estimated ADT
28255	ARDREY KELL RD & REA RD	15	14	21	50	41,400	1.10	86	Not Ranked	
5672	BEATTIES FORD RD & SUNSET RD	16	16	15	47	39,000	1.10	87	41	

ID	Location	Collisions 2009	Collisions 2010	Collisions 2011	3 Years Total	ADT	Crash Rate	Rank	Prior Year Rank	Notes
13600	3RD-4TH CONNECTOR ST & E 4TH ST & N KINGS DR & S KINGS DR	28	36	30	94	45,400	1.89	8	14	
15253	ALBEMARLE RD & E W T HARRIS BV	68	42	40	150	93,200	1.47	25	22	
15195	ALBEMARLE RD & FARM POND LN	35	25	25	85	58,800	1.32	44	45	
15201	ALBEMARLE RD & LAWYERS RD	25	20	28	73	52,800	1.26	52	64	
15287	ALBEMARLE RD & N SHARON AMITY RD	36	27	24	87	67,200	1.18	68	42	
28255	ARDREY KELL RD & REA RD	15	14	21	50	41,400	1.10	86	Not Ranked	
10100	ASHLEY RD & FREEDOM DR & TUCKASEEGEE RD	20	38	33	91	28,700	2.90	3	20	
8515	ATANDO AV & STATESVILLE AV	14	24	16	54	34,500	1.43	29	94	
11232	BARRINGTON DR & MILTON RD	10	8	3	21	13,500	1.42	30	19	Estimated ADT
5672	BEATTIES FORD RD & SUNSET RD	16	16	15	47	39,000	1.10	87	41	
30018	BERKELEY PLACE DR & W MALLARD CREEK CHURCH RD	13	11	13	37	26,300	1.28	49	73	
17273	BILLY GRAHAM PY & S TRYON ST & W WOODLAWN RD	21	20	38	79	54,000	1.34	40	Not Ranked	
9440	BRADFORD DR & EDGEWOOD RD & FREEDOM DR	15	6	10	31	25,000	1.13	76	Not Ranked	Estimated ADT
9902	CAMBRIDGE COMMONS DR & HARRISBURG RD	20	18	16	54	15,000	3.29	2	2	NCDOT spot safety project/proposed Fall 2012
998	CAROWINDS BV & CATAWBA TRACE & CHOATE CR	16	20	5	41	29,400	1.27	51	30	
13763	CENTRAL AV & EASTWAY DR	31	36	34	101	58,200	1.58	16	24	
13960	CENTRAL AV & KILBORNE DR & NORLAND RD	10	18	14	42	31,900	1.20	64	53	
14442	CENTRAL AV & N SHARON AMITY RD	36	27	31	94	62,000	1.38	34	36	
13912	CHARLOTTETOWNE AV & E JOHN BELK RA & KENILWORTH AV	25	17	28	70	43,400	1.47	24	43	
50041	CHARLOTTETOWNE AV & METROPOLITAN AV	15	17	7	39	21,300	1.67	12	18	
27388	CONLAN CR & JOHN J DELANEY DR	8	9	14	31	19,800	1.43	28	4	
4061	DAVID COX RD & LAKEVIEW RD & OLD STATESVILLE RD	12	7	7	26	16,000	1.48	23	35	Estimated ADT
5266	DOUG MAYES PL & J W CLAY BV	4	7	5	16	11,700	1.25	53	Not Ranked	Estimated ADT
11979	E 12TH ST & E BROOKSHIRE FR RA & N CALDWELL ST	18	14	10	42	25,500	1.50	22	13	
12958	E 3RD ST & S DAVIDSON ST	10	6	3	19	14,200	1.22	59	96	
12775	E 4TH ST & S CALDWELL ST	9	15	9	33	21,500	1.40	31	Not Ranked	
12618	E 5TH ST & N CALDWELL ST	16	10	11	37	14,800	2.28	4	3	
12413	E 6TH ST & N BREVARD ST	5	4	6	15	9,800	1.40	32	50	
13343	E 7TH ST & E INDEPENDENCE BV	15	22	17	54	32,000	1.54	18	21	
13667	E 7TH ST & HAWTHORNE LN	9	15	24	48	27,200	1.61	14	75	
14091	E 7TH ST & N CASWELL RD & PECAN AV	15	16	10	41	31,000	1.21	63	65	
12135	E 7TH ST & N COLLEGE ST	8	10	5	23	15,600	1.35	38	34	
12809	E 7TH ST & N MCDOWELL ST	17	14	7	38	26,800	1.29	47	33	
12038	E 8TH ST & N COLLEGE ST	2	10	6	18	8,900	1.85	10	16	Estimated ADT
11956	E 9TH ST & N COLLEGE ST	4	7	6	17	8,400	1.85	9	10	
21296	E ARROWOOD RD & ENGLAND ST & OLD PINEVILLE RD	9	3	14	26	21,400	1.11	84	Not Ranked	
13420	E BLAND ST & S TRYON ST & W BLAND ST	12	2	13	27	15,300	1.61	15	55	
12891	E HILL ST & S COLLEGE ST	3	4	11	18	14,600	1.13	78	Not Ranked	Estimated ADT
17151	E INDEPENDENCE BV & IDLEWILD RD	41	35	28	104	79,400	1.20	65	39	
13158	E JOHN BELK RA_S CALDWELL ST	10	13	14	37	27,200	1.24	55	Not Ranked	
4866	E MALLARD CREEK CHURCH RD & N TRYON ST & W MALLARD CREEK CHURCH RD	30	33	26	89	47,300	1.72	11	12	
13108	E MARTIN LUTHER KING JR BV & S DAVIDSON ST	23	6	1	30	6,200	4.42	1	1	Recent CDOT signalization project
8847	E SUGAR CREEK RD & N TRYON ST & W SUGAR CREEK RD	54	47	23	124	57,300	1.98	6	6	
10162	E SUGAR CREEK RD & THE PLAZA	17	18	18	53	42,200	1.15	72	71	
12695	E TRADE ST & N CALDWELL ST & S CALDWELL ST	11	9	7	27	20,200	1.22	60	74	
12779	E TRADE ST & N DAVIDSON ST & S DAVIDSON ST	11	5	7	23	18,500	1.14	74	83	

ID	Location	Collisions 2009	Collisions 2010	Collisions 2011	3 Years Total	ADT	Crash Rate	Rank	Prior Year Rank	Notes
5704	E W T HARRIS BV & N TRYON ST & W W T HARRIS BV	44	42	23	109	79,800	1.25	54	37	Estimated ADT
15882	EAST BV & QUEENS RD WEST & S KINGS DR	17	9	6	32	23,800	1.23	57	26	
14078	EAST BV & SOUTH BV	21	23	18	62	45,600	1.24	56	47	
11262	EASTWAY DR & FRONTENAC AV & SHAMROCK DR	33	30	22	85	51,000	1.52	20	40	
16506	ELLINGTON ST & N WENDOVER RD	13	8	12	33	21,800	1.38	35	Not Ranked	Left turn restriction installed 2012
7094	EQUIPMENT DR & W SUGAR CREEK RD	4	9	9	22	17,500	1.15	71	Not Ranked	Estimated ADT
8181	FREEDOM DR & TODDVILLE RD	11	11	9	31	14,600	1.94	7	49	
5919	GIBBON RD & NEVIN RD	7	10	8	25	15,700	1.45	27	61	
4175	LAKEVIEW RD & STATESVILLE RD	4	8	5	17	14,000	1.11	85	Not Ranked	Estimated ADT
4698	LAWING RD & MIRANDA RD & OAKDALE RD & SUNSET RD	5	9	4	18	7,300	2.25	5	8	
3146	MALLARD CREEK RD & ODELL SCHOOL RD	7	8	3	18	12,300	1.34	39	15	Estimated ADT
4973	MALLARD CREEK RD & W W T HARRIS BV	27	29	30	86	61,200	1.28	50	Not Ranked	Estimated ADT
9791	MATHESON AV & N TRYON ST & W 30TH ST	19	14	12	45	37,000	1.11	83	Not Ranked	
11311	MILTON RD & N SHARON AMITY RD	16	10	19	45	31,400	1.31	45	70	
10622	MULBERRY CHURCH RD & QUEEN CITY DR	11	13	6	30	18,800	1.46	26	23	
12076	N CHURCH ST & W 5TH ST	5	3	10	18	14,700	1.12	81	Not Ranked	
14431	N COLONIAL AV & RANDOLPH RD & S COLONIAL AV	10	18	13	41	27,500	1.36	36	38	
11876	N GRAHAM ST & S GRAHAM ST & W TRADE ST	14	13	7	34	27,400	1.13	75	Not Ranked	
11783	N GRAHAM ST & W 5TH ST	17	6	3	26	21,100	1.13	79	54	
11237	N I-77 EXIT 10B RA & W TRADE ST	12	9	10	31	18,500	1.53	19	46	
7280	N I-85 EXIT 41 RA & W SUGAR CREEK RD	17	16	19	52	39,900	1.19	67	Not Ranked	
12068	N POPLAR ST & S POPLAR ST & W TRADE ST	9	4	7	20	15,300	1.19	66	Not Ranked	
11972	N POPLAR ST & W 5TH ST	4	8	1	13	9,700	1.22	58	29	
51371	N TRYON ST_UNIVERSITY POINTE BV	9	26	15	50	35,200	1.30	46	Not Ranked	Estimated ADT
17450	NATIONS FORD RD & S TRYON ST & YORKMONT RD	15	21	8	44	30,100	1.33	42	90	
14183	OLD STEELE CREEK RD & WEST BV	12	3	11	26	21,200	1.12	80	Not Ranked	
11639	PARKWOOD AV & PEGRAM ST	9	3	10	22	18,000	1.12	82	84	Estimated ADT
24904	PINEVILLE-MATTHEWS RD & PROVIDENCE RD	46	35	45	126	71,300	1.61	13	25	
7195	REAGAN DR & TOM HUNTER RD	6	1	6	13	9,200	1.29	48	Not Ranked	
7380	REAGAN DR & W SUGAR CREEK RD	28	18	26	72	43,500	1.51	21	52	
13531	REMOUNT RD & WEST BV	15	13	8	36	24,800	1.33	43	68	
12265	S CHURCH ST & W 4TH ST	10	3	9	22	16,600	1.21	62	Not Ranked	
12721	S CHURCH ST & W HILL ST & W JOHN BELK RA	7	4	9	20	11,800	1.55	17	Not Ranked	Estimated ADT
12611	S CHURCH ST & W STONEWALL ST	7	9	3	19	14,300	1.21	61	44	
4332	S I-85 RA & W MALLARD CREEK CHURCH RD	21	18	21	60	47,200	1.16	70	Not Ranked	
12110	S MINT ST & W 4TH ST	7	0	4	11	8,800	1.14	73	Not Ranked	
12170	S POPLAR ST & W 4TH ST	5	3	5	13	10,500	1.13	77	Not Ranked	
21549	S TRYON ST & SANDY PORTER RD	18	29	21	68	45,700	1.36	37	11	
20422	S TRYON ST & W ARROWOOD RD	27	27	20	74	50,600	1.34	41	72	
23328	SLEDGE RD & STEELE CREEK RD	13	12	4	29	19,000	1.39	33	17	Estimated ADT
18776	SOUTH BV & TYVOLA RD	28	29	29	86	67,500	1.16	69	88	

2010 Intersection Safety Warrant List

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					2011 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	Bike Chronic	Ped Chronic	Bike	Alcohol	
667	3RD-4TH CONNECTOR ST & CHARLOTTETOWNE AV & E 3RD ST	Yes	87	X		X								
22716	ALBEMARLE RD & CENTRAL AV	Yes	59			X								
21	ALBEMARLE RD & COPPER CREEK CT & LAKE FOREST RD EAST	Yes	46			X								
161	ALBEMARLE RD & E W T HARRIS BV	Yes	274						X					22
722	ALBEMARLE RD & FARM POND LN	Yes	166								X			45
5565	ALBEMARLE RD & GREENBROOK DR	No	27			X								
7975	ALBEMARLE RD & OLDE SAVANNAH RD	No	13			X								
1488	ALBEMARLE RD & REDDMAN RD	Yes	97							X				
577	ALBEMARLE RD & REGAL OAKS DR	Yes	112							X	X			
326	ALBEMARLE RD & WINTERHAVEN DR	Yes	101			X								
503	ALLEGHANY ST & CRISMAN ST	No	14					X						
423	ALLEGHANY ST & FREEDOM DR	Yes	52			X								
1070	ALLEGHANY ST & WILKINSON BV	No	32	X										
1629	ALLEN A BROWN RD & BROWNE RD & DEARMON RD	No	20			X								
10848	ALLENBROOK DR & FREEDOM DR	No	10			X								
909	ALLISTER DR & E W T HARRIS BV	No	23			X								
981	AMITY POINTE RD & N SHARON AMITY RD	No	16			X								
9190	ANN MARIE DR & NATIONS FORD RD	No	10			X								
1359	ARBORETUM DR & PINEVILLE-MATTHEWS RD	No	33	X										
311	ARBOR WAY & FAIRVIEW RD	No	11			X								
5293	ARCHDALE DR & CHERRYCREST LN	No	25			X								
1202	ARCHDALE DR & MONTPELIER RD	No	10			X		X						
4105	ARDSLEY RD & QUEENS RD & QUEENS RD WEST	No	21					X						
4543	ARLINGTON AV & S CALDWELL ST & SOUTH BV	No	24						X					
345	ARNOLD DR & CENTRAL AV	No	12			X								
1533	ASHLEY RD & JOY ST	No	16			X								
923	ASHLEY RD & TUCKASEEGEE RD	Yes	45	X		X								20
5549	ASHMORE DR & E INDEPENDENCE BV	No	36				X							
1489	ATANDO AV & STATESVILLE AV	Yes	70			X								29
5175	ATMORE ST & E SUGAR CREEK RD	No	33			X								
4108	AUDREY ST & EASTWAY DR	No	25			X								
114	AUSTIN DR & N TRYON ST	No	45	X										
5199	BALLANTYNE COMMONS PY & DURANT BV & JOHN J DELANEY DR	No	35			X								
825	BALLANTYNE COMMONS PY & JOHN J DELANEY DR	No	52	X										
5715	BALLANTYNE CROSSING AV & JOHNSTON RD	No	27	X		X								
2356	BANNER ELK DR & SUNSET RD	No	44	X										
4432	BANNINGTON RD & PINEVILLE-MATTHEWS RD	No	26	X										
4071	BARAWAY DR & E W T HARRIS BV	No	12			X								
2073	BARCLAY DOWNS DR & BULFINCH RD	No	25			X		X						
381	BARRINGER DR & REMOUNT RD	Yes	23			X								
990	BARRINGER DR & S I-77 RA & WEST BV	Yes	15			X								
1156	BARRINGER DR & WEST BV	No	13			X								
495	BARRINGTON DR & MILTON RD	No	40	X		X		X						30
165	BARTON CREEK DR & N TRYON ST	No	35	X		X								
832	BAXTER ST & S KINGS DR	Yes	15								X			
700	BAYBROOK LN & PINEVILLE-MATTHEWS RD	No	34			X								
1281	BEAL ST & N WENDOVER RD	No	30	X										
4242	BEARWOOD AV & E SUGAR CREEK RD	No	11			X								
5611	BEATTIES FORD RD & BOOKER AV & OAKLAWN AV	Yes	46	X										
20	BEATTIES FORD RD & CATHERINE SIMMONS AV	No	45	X		X								
1490	BEATTIES FORD RD & CELIA AV	No	18			X								
1994	BEATTIES FORD RD & CINDY LN & GRIERS GROVE RD	Yes	42	X										
1211	BEATTIES FORD RD & FRENCH ST	Yes	44	X		X								
853	BEATTIES FORD RD & GILBERT ST & MONTANA DR	Yes	47	X										
2127	BEATTIES FORD RD & KELLER AV	No	28	X		X			X					
1741	BEATTIES FORD RD & LASALLE ST	Yes	86								X			57
23114	BEATTIES FORD RD & MONTGOMERY GARDENS DR	No	10			X								
1098	BEATTIES FORD RD & MT HOLLY-HUNTERSVILLE RD	Yes	21			X								
250	BEATTIES FORD RD & N I-85 EXIT 37 RA	Yes	61	X										
677	BEATTIES FORD RD & ROZZELLES FERRY RD & W 5TH ST & W TRADE ST	Yes	37			X								
8263	BEATTIES FORD RD & RUSSELL AV	No	17			X								
5325	BEATTIES FORD RD & S I-85 EXIT 37 RA & SIR BAILEY DR	Yes	39			X								

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants					2011 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	Bike Chronic	Ped Chronic	Bike	Alcohol	
382	BEATTIES FORD RD & SUNSET RD	Yes	116	X										87
243	BEATTIES FORD RD & TATE ST	No	20			X								
2164	BELMONT AV & N CALDWELL ST & PARKWOOD AV	No	13			X								
254	BELMONT AV & N DAVIDSON ST	No	29			X		X						
1282	BELMONT AV & SEIGLE AV	No	17					X						
907	BELVEDERE AV & THE PLAZA	Yes	25			X								
656	BENNETT ST & N TRYON ST	No	54	X		X								
1542	BENTLEY PL & EASTWAY DR	No	38			X								
2048	BERKELEY PLACE DR & W MALLARD CREEK CHURCH RD	No	42				X							49
4606	BERRYHILL RD & THRIFT RD & TUCKASEEGEE RD	Yes	20			X								
1885	BEVINGTON PL & REA RD	Yes	32	X										
1681	BILLINGSLEY RD & CONSERVANCY LN & RANDOLPH RD	Yes	34			X								
737	BILLY GRAHAM PY & MORRIS FIELD DR	Yes	83			X								
23007	BILLY GRAHAM PY & N I-85 EXIT 33 RA	No	23					X						
8074	BILLY GRAHAM PY & WESTMONT DR	Yes	22			X								
25483	BLAKENEY GREENS BV & REA RD	Yes	31	X		X								
1240	BLUE HERON DR & PINEVILLE-MATTHEWS RD	No	24			X								
802	BONLYN DR & E W T HARRIS BV	No	29				X							
1216	BONNIE CONE LN & E MALLARD CREEK CHURCH RD & MARY ALEXANDER RD	Yes	25	X										
1241	BOYER ST & OLD DOWD RD	No	38	X				X						
1653	BRIAR CREEK RD & CENTRAL AV	Yes	33			X								
7856	BRIAR CREEK RD & E INDEPENDENCE BV	No	14				X							
12343	BRICE ST & RUSH AV	No	3							X				
1762	BROOK RD & CLEMSON AV & THE PLAZA	Yes	26	X		X								
1751	BROOKSHIRE BV & HOVIS RD	No	16			X								
479	BROOKSHIRE BV & OAKDALE RD	No	58	X										
2109	BROOKSHIRE BV & OLD PLANK RD	No	17			X		X						
2146	BROOKSHIRE BV & PLEASANT GROVE RD	Yes	19			X								
383	BROWNE RD & EASTFIELD RD	No	46	X										
10625	BROWNE RD & HAMPTON PLACE DR	No	12			X								
1126	BROWN-GRIER RD & SANDY PORTER RD & W ARROWOOD RD	Yes	39	X										
232	BUICK DR & CONFERENCE DR & E INDEPENDENCE BV	Yes	103						X					
2241	BUSINESS CENTER DR & LITTLE ROCK RD & QUEEN CITY DR	No	24			X								
562	CALIBRE CROSSING DR & CROSS POINT CR & E INDEPENDENCE BV	No	29	X		X								
4253	CAMBRIDGE COMMONS DR & HARRISBURG RD	No	68	X		X	X							2
387	CAMP GREENE ST & FREEDOM DR	Yes	62			X								
501	CAMP GREENE ST & WILKINSON BV	No	26	X										
331	CAMP STEWART RD & HARRISBURG RD	No	27	X										
2035	CANTERWOOD DR & ELGYWOOD LN	No	13			X		X						
5716	CARMEL COMMONS BV & CARMEL RD	No	20					X						
2451	CARMEL RD & JOHNSTON RD	Yes	73	X										
362	CAROWINDS BV & CATAWBA TRACE & CHOATE CR	Yes	70	X		X								51
890	CENTRAL AV & EASTWAY DR	Yes	187								X			16
305	CENTRAL AV & HAWTHORNE LN	Yes	42			X								
2018	CENTRAL AV & IRIS DR	No	10			X								
288	CENTRAL AV & LANDIS AV	No	11			X								
579	CENTRAL AV & MORNINGSIDE DR	Yes	33			X								
13	CENTRAL AV & N SHARON AMITY RD	Yes	191							X	X			34
1528	CENTRAL AV & PIEDMONT ST	No	10			X								
398	CENTRAL AV & THE PLAZA	Yes	40			X								
47	CHALLIS FARM RD & PINEVILLE-MATTHEWS RD	No	12			X								
642	CHANCELLOR PARK DR & E W T HARRIS BV	No	80					X						
306	CHARLESTON DR & E INDEPENDENCE BV	No	22			X								
194	CHARLOTTETOWNE AV & E 4TH ST	Yes	71	X		X								
588	CHARLOTTETOWNE AV & ELIZABETH AV	Yes	36						X					
40961	CHARLOTTETOWNE AV & METROPOLITAN AV	Yes	36	X	X	X								12
2297	CHASTAIN PARC DR & MT HOLLY-HUNTERSVILLE RD & PUMP STATION RD	No	11			X								
344	CHEROKEE RD & PROVIDENCE RD	Yes	68	X										
1025	CHEROKEE RD & PROVIDENCE RD	No	14			X								
1703	CHIPPENDALE RD & MONROE RD	No	21			X								
2338	CHOYCE AV & NATIONS FORD RD & REGENCY EXECUTIVE PY	No	16			X								
2079	CHRISTENBURY RD & W SUGAR CREEK RD	No	10			X								

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants					2011 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	Bike Chronic	Ped Chronic	Bike	Alcohol	
1823	CINDERELLA RD & W SUGAR CREEK RD	No	31	X		X								
1232	CITISIDE DR & EASTWAY DR & WELDON AV	No	33	X										
5956	CITY VIEW DR & E INDEPENDENCE BV	No	44	X		X								
4196	CLANTON RD & DONALD ROSS RD & WEST BV	Yes	37			X								
1471	CLANTON RD & N I-77 EXIT 7 RA	Yes	25			X								
5442	CLANTON RD & ST VARDELL LN	No	20			X								
1086	CLARK BV & N TRYON ST	No	36	X	X	X	X							
2419	CLAUDE FREEMAN DR & W MALLARD CREEK CHURCH RD	Yes	43			X								
1553	CLEARMONT AV & N SHARON AMITY RD & SPANISH QUARTER CR	No	37			X								
11012	COLE DR & GLENVILLE AV & SHAMROCK DR	No	13			X								
831	COLONY RD & SHARON VIEW RD	Yes	31	X		X								
790	COLVILLE RD & N LAUREL AV & RANDOLPH RD & S LAUREL AV	Yes	30	X										
2131	CONCORDIA AV & N GRAHAM ST	No	10			X								
2156	CONLAN CR & JOHN J DELANEY DR	No	52	X										28
24	CONWAY AV & SCALEYBARK RD	No	13					X						
1503	CORONADO DR & N SHARON AMITY RD	No	10			X								
5051	COTILLION AV & SHARON RD	No	10			X								
1020	COTTONWOOD ST & N GRAHAM ST & REAGAN DR	Yes	44	X										
10734	COULOAK DR & MT HOLLY-HUNTERSVILLE RD	No	30	X			X	X						
421	COVECREEK DR & THE PLAZA	No	24	X		X								
499	COVEDALE DR & MONROE RD	No	32	X		X								
1889	CRAIG AV & N SHARON AMITY RD	No	16			X								
1689	CRAIGWOOD DR & HICKORY GROVE RD	No	10			X								
1919	CREEKRIDGE RD & VILLAGE LAKE DR	No	13			X								
490	CROWNPOINT EXECUTIVE DR & KREFELD DR & SARDIS RD NORTH	Yes	16			X								
2325	DAVID COX RD & LAKEVIEW RD & OLD STATESVILLE RD	No	50	X										23
5144	DILWORTH RD EAST & EAST BV	Yes	31	X										
1527	DINADAN DR & NATIONS FORD RD	No	15			X								
443	DOGWOOD PL & HICKORY GROVE RD	No	15			X								
5128	DOUG MAYES PL & J W CLAY BV	No	26	X										53
1096	DOWNS RD & E WESTINGHOUSE BV	Yes	27			X								
654	DUNN AV & MONROE RD	Yes	20			X								
1808	E 11TH ST & E BROOKSHIRE FR RA & N DAVIDSON ST	Yes	37	X										
163	E 11TH ST & N COLLEGE ST	Yes	59	X										69
787	E 11TH ST & N TRYON ST & W 11TH ST	Yes	40	X		X								
1057	E 12TH ST & E BROOKSHIRE FR RA & N CALDWELL ST	Yes	78	X										22
18	E 12TH ST & N BREVARD ST	Yes	18			X								
247	E 12TH ST & N COLLEGE ST	Yes	39			X								
517	E 18TH ST & N DAVIDSON ST	No	17			X								
1506	E 28TH ST & N TRYON ST & W 28TH ST	Yes	36			X								
916	E 36TH ST & THE PLAZA	Yes	36			X								
1194	E 3RD ST & E JOHN BELK RA	Yes	39			X			X					
1082	E 3RD ST & PROVIDENCE RD & S CASWELL RD	Yes	50	X										
1927	E 3RD ST & S CALDWELL ST	Yes	48	X										
393	E 3RD ST & S COLLEGE ST	Yes	30								X			
1333	E 3RD ST & S DAVIDSON ST	Yes	37	X										59
270	E 3RD ST & S KINGS DR	Yes	73	X										
207	E 3RD ST & S MCDOWELL ST	Yes	63	X							X			
820	E 3RD ST & S TORRENCE ST	No	35	X										
819	E 3RD ST & S TRYON ST & W 3RD ST	Yes	63						X					
999	E 4TH ST & E JOHN BELK RA	Yes	43	X		X								
1485	E 4TH ST & HAWTHORNE LN & QUEENS RD	Yes	46	X		X								
1545	E 4TH ST & S CALDWELL ST	Yes	40	X										31
698	E 4TH ST & S COLLEGE ST	Yes	41	X										
41	E 4TH ST & S DAVIDSON ST	Yes	17								X			
1088	E 4TH ST & S MCDOWELL ST	Yes	59						X		X			
1276	E 4TH ST & S TRYON ST & W 4TH ST	Yes	51								X			
79	E 5TH ST & N CALDWELL ST	Yes	52	X		X								4
5172	E 5TH ST & N DAVIDSON ST	Yes	26	X		X								
620	E 5TH ST & N MCDOWELL ST	Yes	30	X										
1102	E 5TH ST & N TRYON ST & W 5TH ST	Yes	35								X			
2382	E 6TH ST & N BREVARD ST	Yes	35	X										32

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants					2011 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	Bike Chronic	Ped Chronic	Bike	Alcohol	
1714	E 6TH ST & N COLLEGE ST	Yes	40								X			
508	E 6TH ST & N MCDOWELL ST	Yes	37			X								
1353	E 7TH ST & E INDEPENDENCE BV	Yes	97	X										18
1641	E 7TH ST & N BREVARD ST	Yes	43	X										
1015	E 7TH ST & N MCDOWELL ST	Yes	74	X		X								
731	E 7TH ST & N TRYON ST & W 7TH ST	Yes	35								X			
1486	E 8TH ST & HAWTHORNE LN	No	10			X								
1728	E 8TH ST & N COLLEGE ST	No	35	X										10
4525	E 9TH ST & N BREVARD ST	Yes	13			X								
670	E 9TH ST & N COLLEGE ST	Yes	44			X		X						9
7	E ARROWHEAD DR & N TRYON ST & W ARROWHEAD DR	No	47			X								
587	E BLAND ST & S TRYON ST & W BLAND ST	Yes	33	X										15
1059	E CARSON BV & S TRYON ST & W CARSON BV	Yes	14			X								
1549	E HEBRON ST & NATIONS FORD RD & W HEBRON ST	Yes	29	X										
450	E HEBRON ST & SOUTH BV	Yes	64			X								
2032	E HILL ST & S TRYON ST & W HILL ST	No	16			X		X						
8267	E INDEPENDENCE BV & EASTWAY DR RA	No	20			X								
14186	E INDEPENDENCE BV & HAWTHORNE LN	No	18			X								
455	E INDEPENDENCE BV & IDLEWILD RD	Yes	227							X				65
5422	E INDEPENDENCE BV & N WENDOVER RD RA	No	34				X							
1076	E INDEPENDENCE BV & SHARON FOREST DR	No	40			X								
901	E INDEPENDENCE BV & WALLACE RD	No	54			X								
23228	E MALLARD CREEK CHURCH RD & JOHN KIRK DR	No	23				X							
23692	E MALLARD CREEK CHURCH RD & UNIVERSITY CITY BV	No	83				X							
7927	E MARTIN LUTHER KING JR BV & S DAVIDSON ST	Yes	56	X		X		X						1
1242	E MARTIN LUTHER KING JR BV & S TRYON ST & W MARTIN LUTHER KING JR BV	Yes	13								X			
23137	E MCCULLOUGH DR & E W T HARRIS BV	No	35				X							
769	E MCCULLOUGH DR & MCCULLOUGH DR & N TRYON ST	Yes	66			X								
6050	E MOREHEAD ST & MYRTLE AV & ROYAL CT	No	14			X								
2107	E STONEWALL ST & S COLLEGE ST	Yes	56								X			
1695	E STONEWALL ST & S MCDOWELL ST	Yes	48			X								
58	E SUGAR CREEK RD & EASTWAY DR & PURSER DR	Yes	44			X								
801	E SUGAR CREEK RD & GREENSBORO ST	No	35			X								
1018	E SUGAR CREEK RD & N DAVIDSON ST	No	55			X								
1091	E SUGAR CREEK RD & REDWOOD AV	No	10			X								
117	E SUGAR CREEK RD & THE PLAZA	Yes	107			X								72
1053	E TRADE ST & ELIZABETH AV & N MCDOWELL ST & S MCDOWELL ST	Yes	64	X		X								
2433	E TRADE ST & N CALDWELL ST & S CALDWELL ST	Yes	51	X										60
828	E TRADE ST & N COLLEGE ST & S COLLEGE ST	Yes	79						X		X			
498	E TRADE ST & N DAVIDSON ST & S DAVIDSON ST	Yes	37	X		X								74
328	E TREMONT AV & SOUTH BV	Yes	46							X				
641	E W T HARRIS BV & IDLEWILD RD NORTH	Yes	29			X								
1178	E W T HARRIS BV & KIMMERLY GLEN LN & SUSAN DR	No	40	X										
8362	E W T HARRIS BV & NINA DR	No	11			X								
5944	E W T HARRIS BV & OLD CONCORD RD	No	35				X							
366	E W T HARRIS BV & ROSE HEATHER CT & UNIVERSITY RIDGE DR	No	40				X							
2049	E W T HARRIS BV & SNOW LN	No	26			X								
7952	E W T HARRIS BV & UNIVERSITY CITY BV	No	45				X							
1303	E WESTINGHOUSE BV & NATIONS FORD RD & WESTINGHOUSE BV	Yes	31	X		X								
316	E WOODLAWN RD & MURRAYHILL RD	No	35			X								
712	E WOODLAWN RD & RUNNYMEDE LN & SELWYN AV	Yes	51	X										
734	E WOODLAWN RD & SCALEYBARK RD	Yes	39			X								
9077	EAGLES LANDING DR & FREEDOM DR	No	11			X								
5385	EAST BARDEN RD & PROVIDENCE RD	No	14			X								
4325	EAST BV & FLORAL AV	No	10			X								
197	EAST BV & KENILWORTH AV	Yes	58	X										
5108	EAST BV & PARK RD	No	15					X						
255	EAST BV & SOUTH BV	Yes	102								X			56
19811	EASTFIELD RD & HIGHLAND CREEK PY	No	10			X								
576	EASTFIELD RD & PROSPERITY CHURCH RD	No	29			X								
746	EASTWAY DR & FRONTENAC AV & SHAMROCK DR	Yes	149								X			20
1200	EASTWAY DR & MEDFORD DR	No	30			X								

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants					2011 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	Bike Chronic	Ped Chronic	Bike	Alcohol	
616	EASTWAY DR & THE PLAZA	Yes	134						X					93
5466	EDGEWOOD RD & QUEEN CITY DR & TUCKASEEGEE RD	Yes	24								X			
6425	ELGYWOOD LN & TOM HUNTER RD	No	10			X								
446	ELIZABETH AV & N KINGS DR	Yes	45								X			
210	ELLINGTON ST & N WENDOVER RD	No	40	X		X								35
1631	ELMIN ST & MORNING DR & WEST BV	No	10			X								
315	ENFIELD RD & KILBORNE DR	No	11			X								
4235	EPRI DR & W W T HARRIS BV & WACHOVIA DR	Yes	34			X	X	X						
1989	EQUIPMENT DR & W SUGAR CREEK RD	No	39	X		X								71
908	ERWIN RD & STEELE CREEK RD	No	34	X										
2148	EXIT 61 JOHNSTON RD INNER RA & JOHNSTON RD	Yes	38			X								
2279	EXIT 9 WILKINSON BV & TUCKASEEGEE RD & WILKINSON BV	Yes	54			X								
12770	FAIRES FARM RD & KATHERINE KIKER RD	No	11			X		X						
2094	FAIRVIEW RD & PARK RD	Yes	26			X								
23470	FAIRVIEW RD & SOUTH PARK DR	No	32	X										
17699	FALLS BRANCH LN & MT HOLLY-HUNTERSVILLE RD	No	12			X								
1030	FARMHURST DR & FOREST POINT BV & NATIONS FORD RD	Yes	22			X								
1456	FINCHLEY DR & SHAMROCK DR	No	20			X								
5167	FREEDOM DR & PARK FAIRFAX DR	No	11			X								
180	FREEDOM DR & S I-85 HY & S I-85 RA	Yes	20			X								
199	FREEDOM DR & THRIFTWOOD DR	No	25			X								
25	GALLERIA BV & MONROE RD	Yes	32			X								
22674	GALLERIA VILLAGE DR & SARDIS RD NORTH	No	19					X						
1244	GIBBON RD & NEVIN RD	Yes	34	X										27
546	GIBBON RD & OLD STATESVILLE RD	Yes	48	X		X								
1078	GIBBON RD & W SUGAR CREEK RD	No	40	X		X								
1793	GLENDORA DR & MONROE RD	No	13			X								
811	GOVERNOR HUNT RD & MALLARD CREEK RD	Yes	21					X						
233	GREENWICH RD & RANDOLPH RD	Yes	29	X										
720	GREYSON RIDGE DR & HIGH RIDGE RD & PROVIDENCE RD	Yes	40			X								
5280	GRIER RD & NEWELL-HICKORY GROVE RD	No	22			X								
1514	GRIER RD & ROCKY RIVER RD	Yes	10			X								
2231	GROVER RD & SOUTH BV	Yes	58	X		X								
7953	HAMILTON RD & STEELE CREEK RD	Yes	28	X										95
1283	HARGROVE AV & MIDLAND AV & WILKINSON BV	No	27			X								
2374	HARRI ANN DR & LAWYERS RD	No	30	X		X	X							
869	HARRILL ST & PARKWOOD AV	No	16			X								
8151	HARRIS HOUSTON RD & PAVILION BV	No	9				X							
136	HARRISBURG RD & PARKTON RD	No	27	X										
5110	HAWTHORNE LN & KENNON ST	No	15			X								
952	HAWTHORNE LN & PARK DR	No	14			X								
953	HAWTHORNE LN & PARKWOOD AV	Yes	26	X										
1397	HAWTHORNE LN & SUNNYSIDE AV	No	10			X								
956	HEATHWAY DR & N TRYON ST	No	41	X		X		X						
1612	HENDERSON CR & OLD STATESVILLE RD	No	10			X								
5875	HEYWOOD AV & KEMPTON PL	No	11			X								
160	HIDDEN VALLEY RD & W SUGAR CREEK RD	Yes	55			X								
1364	HILO DR & N TRYON ST	No	27			X								
8053	HODGSON RD & RANDOLPH RD & SLOANE SQUARE WY	No	11			X								
1754	HOOD RD & PLAZA RD EXT	Yes	11			X								
7904	HOOD RD & ROBINSON CHURCH RD	No	23			X	X							
1147	HOOD RD & ROCKY RIVER RD	No	18			X								
2144	HUNTER AV & W SUGAR CREEK RD	No	10			X		X						
8090	HUNTING RIDGE LN & IDLEWILD RD	No	12			X								
19207	HUNTINGTON MEADOW LN & STEELE CREEK RD	No	11			X								
1845	HUNTSMOOR DR & NATIONS FORD RD	No	25			X								
5849	I-485 RA & N TRYON ST	Yes	17				X							
550	I-485 RA & N TRYON ST	Yes	31			X								
5591	I-485 RA & N TRYON ST	No	12			X								
2306	I-485 RA & N TRYON ST	Yes	17			X								
1319	I-485 RA & REA RD	Yes	15			X		X						
899	I-485 RA & S TRYON ST	Yes	44	X										

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				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	Bike Chronic	Ped Chronic	Bike	Alcohol	
8034	I-485 RA & S TRYON ST	Yes	23			X								
18749	I-485 RA & SOUTH BV	Yes	18			X								
24973	I-485 RA & STEELE CREEK RD	Yes	38	X										
9248	I-77 RA & WESTINGHOUSE BV	No	41	X										
1110	I-77 TO W W T HARRIS BV RA SB & W W T HARRIS BV & W W T HARRIS BV TO I-77 RA SB	Yes	36				X							
1499	IBM DR & NEAL RD & VINOY VIEW DR	Yes	20			X								
809	IDLEBROOK DR & IDLEWILD RD	No	27	X										
1401	IDLEWILD RD & OAK DR & WYALONG DR	No	13			X								
378	IDLEWILD RD & PINEY GROVE RD	Yes	23			X								
90	IDLEWILD RD NORTH & LAWYERS RD	No	11			X								
817	INWOOD DR & SOUTH BV	No	29			X								
1172	J M KEYNES DR & N TRYON ST & UNIVERSITY HOSPITAL DR	Yes	47			X								
1170	J W CLAY BV & N TRYON ST	Yes	75			X								
521	JOHN J DELANEY DR & JOHNSTON RD	Yes	76				X							
216	JOHN KIRK DR & OLD CONCORD RD	No	12			X								
4426	JOHNSTON RD & WALSH BV	No	39	X										
8035	JOSH BIRMINGHAM PY & OLD DOWD RD	No	26				X							
8140	KEMP ST & N TRYON ST	No	15					X						
1968	KILBORNE DR & SUDBURY RD	No	10			X								
355	KIMMERLY GLEN LN & N SHARON AMITY RD	No	25			X								
1781	KINGMAN DR & S TRYON ST	No	16			X								
757	LAKE RD & MILHAVEN LN & STATESVILLE RD	No	18			X								
2344	LAKEVIEW RD & STATESVILLE RD	No	37			X		X						85
2248	LAMBETH DR & N TRYON ST	No	24			X								
436	LASALLE ST & NEWCASTLE ST & NEWLAND RD	No	31	X										
1064	LAWING RD & MIRANDA RD & OAKDALE RD & SUNSET RD	No	31	X				X						5
985	LEAKE ST & WEST BV	No	23			X								
9271	LEGRANGER RD & W MALLARD CREEK CHURCH RD	No	10			X								
9044	LILAC RD & PARK RD	No	11			X								
5161	LITTLE ROCK RD & SCOTT FUTRELL DR	Yes	33			X	X							
1326	LITTLE ROCK RD & TUCKASEEGEE RD	Yes	25			X								
2005	LONGLEAF DR & SOUTH BV	No	43				X							
1717	LUCENA ST & MORETZ AV	No	15					X						
533	LUMARKA DR & MONROE RD & THERMAL RD	Yes	33			X								
645	MALLARD CREEK RD & MEDICAL PLAZA DR	No	22					X						
325	MALLARD CREEK RD & ODELL SCHOOL RD	No	45	X										39
1690	MALLARD CREEK RD & OLD MALLARD CREEK RD	Yes	30			X								
1953	MALLARD CREEK RD & POLK AND WHITE RD	No	12			X								
1588	MALLARD CREEK RD & RIDGE RD	No	36			X								
23876	MALLARD GLEN DR & W MALLARD CREEK CHURCH RD	No	18				X							
111	MARVIN RD & N WENDOVER RD	Yes	30	X		X								
755	MCDANIEL LN & OLD CONCORD RD	No	16			X								
590	MCLEAN RD & MEADOW VISTA RD & OLD CONCORD RD	Yes	42	X										
5284	MCMAHAN DR & PINEVILLE-MATTHEWS RD	No	27	X										
15036	METROMONT INDUSTRIAL BV & REAMES RD	No	13			X								
1511	MICHAEL BAKER PL & RUNNYMEDE LN	No	20			X								
724	MINERAL SPRINGS RD & N GRAHAM ST & W SUGAR CREEK RD	Yes	81			X								
334	MONROE RD & SHADE VALLEY RD	No	16			X								
89	MONROE RD & WASHBURN AV	Yes	32			X								
5680	MOORES CHAPEL RD & OLD MT HOLLY RD	No	10			X		X						
2038	MORETZ AV & N GRAHAM ST & W 28TH ST	Yes	32	X		X								
10875	MORNINGSTAR PLACE DR & N TRYON ST	No	10			X								
707	MOSS RD & S TRYON ST	Yes	53	X		X								
24083	MOUNT HOLLY RD & MT HOLLY-HUNTERSVILLE RD	Yes	30			X								
372	MULBERRY CHURCH RD & QUEEN CITY DR	Yes	57	X		X								26
5512	MULBERRY CHURCH RD & S I-85 EXIT 33 RA	Yes	11			X								
244	MUSEUM PLAZA & RANDOLPH RD	No	15			X								
5074	N CHURCH ST & S CHURCH ST & W TRADE ST	Yes	49								X			
78	N CHURCH ST & W 5TH ST	Yes	36	X										81
4203	N CHURCH ST & W 6TH ST	Yes	21						X					
1121	N COLONIAL AV & RANDOLPH RD & S COLONIAL AV	No	68	X										36
227	N DAVIDSON ST & PARKWOOD AV	Yes	35	X		X								

ID	Location Name	Signalized	5 Year Collisions Total	Intersection Warrants					Pedestrian and Bike Warrants					2011 HAL Rank
				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	Bike Chronic	Ped Chronic	Bike	Alcohol	
796	N GRAHAM ST & NORRIS AV	Yes	23			X								
8258	N GRAHAM ST & ONEIDA RD	No	14			X								
762	N GRAHAM ST & S GRAHAM ST & W TRADE ST	Yes	52	X							X			75
783	N GRAHAM ST & W 5TH ST	Yes	47	X										79
149	N GRAHAM ST & W 6TH ST	Yes	69	X										28
2020	N I-77 EXIT 10B RA & N I-77 EXIT 10C RA & W 5TH ST	Yes	37	X		X								
1453	N I-77 EXIT 16 RA & REAMES RD & SUNSET RD	Yes	66	X										
913	N I-77 EXIT 16 RA & SUNSET RD	No	43					X						
1268	N I-77 EXIT 3 RA & W ARROWOOD RD	No	9					X						
1386	N I-77 EXIT 5 RA & TYVOLA RD	No	16					X						
1462	N I-77 EXIT 8 RA & REMOUNT RD & TOOMEY AV	No	15			X								
5145	N I-85 RA & W MALLARD CREEK CHURCH RD	No	50					X						
7812	N I-85 RA & W W T HARRIS BV	Yes	14			X								
922	N IRWIN AV & W 5TH ST	No	26	X		X		X						
5767	N MCDOWELL ST & PARKWOOD AV	No	12			X								
4128	N POPLAR ST & W 5TH ST	Yes	31	X		X								58
153	N SHARON AMITY RD & SHAMROCK DR	Yes	92			X								
643	N SYCAMORE ST & W 5TH ST	No	16			X								
5513	N TRYON ST & PAVILION BV	Yes	44			X								
75	N TRYON ST & REAGAN DR	No	47	X		X								
2364	N TRYON ST & STETSON DR	No	27			X								
5483	N TRYON ST & UNIVERSITY CITY BV	No	15				X							
5057	N TRYON ST & UNIVERSITY CITY BV	No	12			X								
53893	N TRYON ST & UNIVERSITY POINTE BV	No	32		X									46
2051	N TRYON ST & W 10TH ST	No	9						X					
4515	N TRYON ST & W 23RD ST	No	10			X								
5600	NATIONS FORD RD & S I-77 EXIT 4 RA	Yes	26	X		X								
5446	NATIONS FORD RD & SHORT HILLS DR	No	13			X								
1650	NEWLAND RD & STATESVILLE AV	No	17			X								
2043	NORTHLAKE CENTRE PY & REAMES RD & W W T HARRIS BV	Yes	33			X								
4053	OAK LEIGH DR & UNIVERSITY CITY BV	No	20			X								
1021	OAKDALE RD & OLD PLANK RD	No	20			X								
5545	OAKDALE RD & PLEASANT GROVE RD & RADIO RD	No	14			X								
904	OLD CONCORD RD & ORR RD	Yes	30			X								
1548	OLD CONCORD RD & SUTHER RD	No	25			X								
36	OLD PINEVILLE RD & SCALEYBARK RD & SOUTH BV	Yes	70			X								
2359	OLD PROVIDENCE RD & PROVIDENCE RD	Yes	30			X								
4578	OLD PROVIDENCE RD & REA RD	No	28	X										
1274	OLD STEELE CREEK RD & W TYVOLA RD	No	11			X								
1449	OLD STEELE CREEK RD & WEST BV	Yes	40	X		X								80
9550	ORCHARD CR & S TRYON ST	No	10			X								
56	PARK CEDAR DR & PINEVILLE-MATTHEWS RD	No	36	X										
4191	PARK RD & PINEVILLE-MATTHEWS RD	Yes	11			X								
2397	PARK RD & SENECA PL	Yes	29	X										
162	PARKWOOD AV & PEGRAM ST	No	60			X								82
1390	PARKWOOD AV & UMSTEAD ST	No	10			X								
6066	PEBBLESTONE DR & VILLAGE LAKE DR	No	18			X								
24965	PERIMETER PY & W W T HARRIS BV	Yes	31				X							
1648	PLANTATION RD & WEDDINGTON RD	No	14			X								
10628	PLAZA WALK DR & THE PLAZA	No	65	X		X								
5226	PROSPERITY CHURCH RD & RIDGE RD	No	19			X								
991	PROVIDENCE COUNTRY CLUB DR & PROVIDENCE RD	Yes	21					X						
6059	PROVIDENCE RD & SHALOM PARK DR	No	10			X								
1046	PROVIDENCE RD & STRAWBERRY HILL DR	No	30			X								
1433	QUEENS RD & S CASWELL RD	No	14					X						
1002	QUEENS RD WEST & WESTFIELD RD	No	25			X								
2050	REA RD & WILLIAMS POND LN	Yes	45				X							
48	REAGAN DR & TOM HUNTER RD	No	25			X								48
593	REID AV & WEST BV	No	12			X								
2446	REMOUNT RD & TOOMEY AV	No	14			X								
847	REMOUNT RD & WEST BV	Yes	66								X			43
23404	RIVERGATE PY & S TRYON ST	No	60	X			X							

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				Frontal Impact	Last Year Increase	Severity	Night	Chronic	Last 3 Years	Bike Chronic	Ped Chronic	Bike	Alcohol	
11442	ROMARE BEARDEN DR & WEST BV	No	10			X								
1191	S CHURCH ST & W HILL ST & W JOHN BELK RA	No	26	X		X		X						17
10	S CHURCH ST & W STONEWALL ST	Yes	44	X		X								61
5467	S I-77 EXIT 10B RA & S I-77 EXIT 10C RA & W 5TH ST	No	16			X		X						
1531	S I-77 EXIT 10B RA & W TRADE ST	No	28	X		X								
936	S I-77 EXIT 3 RA & W ARROWOOD RD	Yes	26			X								
1466	S I-85 RA & W W T HARRIS BV	Yes	20			X								
4189	S MINT ST & S MINT ST & W SUMMIT AV	No	15					X						
222	S MINT ST & W 3RD ST	Yes	18			X		X						
187	S MINT ST & W CARSON BV	Yes	11			X		X						
1186	S MINT ST & W MOREHEAD ST	Yes	39	X										
335	S TRYON ST & STEELE CREEK RD	Yes	70			X	X							
5187	S TRYON ST & TOWNSHIP RD	Yes	37			X								
8317	S TRYON ST & W WOODLAWN RD	Yes	35				X							
166	S TRYON ST & WEST BV	Yes	41	X										
8690	S TRYON ST & YORK CENTER DR & GENERAL DR	No	27	X		X								
147	SAM NEELY RD & STEELE CREEK RD	No	27	X										
53	SAM WILSON RD & WILKINSON BV	Yes	27			X								
1431	SARDIS LN & SARDIS RD	No	13			X								
1685	SARDIS RD & SARDIS RD NORTH	Yes	31	X										
268	SELWYN AV & WELLESLEY AV	No	18							X				
16564	SENATOR ROYALL DR & W MALLARD CREEK CHURCH RD	Yes	40			X	X							
319	SHAMROCK DR & TIPPERARY PL & WILLARD FARROW DR	Yes	22			X								
1108	SHANNONHOUSE DR & THE PLAZA	Yes	23			X								
1502	SHARON RD & SHARON VIEW RD	Yes	28			X								
4349	SHARON RD & SULKIRK RD	No	26			X								
2316	SHOPTON RD & STEELE CREEK RD	Yes	16			X								
5940	SLEDGE RD & STEELE CREEK RD	No	55	X		X	X							33
6394	SOFLEY RD & W SUGAR CREEK RD	No	27	X		X								
73	SOUTH BV & WICKER DR	No	65			X								
360	SOUTH BV & WISTERIA DR	No	76			X								
680	STARHAVEN DR & THE PLAZA	No	10			X								
24417	STEELE CREEK RD & STEELECROFT PY	No	21					X						
544	STEELE CREEK RD & WESTINGHOUSE BV	Yes	37			X								
477	SUTHER RD & UNIVERSITY CITY BV	Yes	47			X								
760	TECHNOLOGY DR & W W T HARRIS BV	Yes	74					X						
4308	TOM HUNTER RD & WHITE PLAINS RD	No	15			X								
440	W TRADE ST & WESLEY HEIGHTS WY	No	24			X								
1576	WEST BV & WILMORE DR	No	12			X								

Appendix

Intersection Safety Warrants Selection Criteria

Revised 7/13/2009

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.