### **2008 TOP CRASH LOCATIONS REPORT**



**MARCH 2010** 







#### Dear Reader:

Enclosed is MassDOT Highway Division's edition of the 2008 *Top Crash Locations Report*, which may be used to evaluate top crash intersection locations and top crash pedestrian and bicycle locations in order to improve the safety of our roadway system. This report, like last year's report, is a change from previous editions of the top crash locations report in that the focus is on intersection locations and is based on crashes entered into the Registry of Motor Vehicles' Crash Data System (CDS). The 2008 Report contains the identification of top bicycle-motor vehicle and pedestrian-motor vehicle crash locations. This information is also available by contacting your Regional Planning Agency and MassDOT Highway District.

In an effort to reduce injury and fatal crashes, the Massachusetts Highway Department, in cooperation with a variety of public and private safety stakeholders, has prepared the Massachusetts Strategic Highway Safety Plan (SHSP). To view the SHSP, download a copy of the Plan or to learn more about it, go to the MassDOT Highway Division Traffic Engineering and Safety website. The Safety Plan identified the State's key safety needs can be used to guide investment decisions to achieve significant reductions in highway fatalities and serious injuries on all public roads based upon a data-driven process.

This dataset may be used as a screening tool to evaluate locations and make changes to improve the safety of our roadway system. The 2008 *Top Crash Locations Report* is one of the tools for the statewide Highway Safety Improvement Program (HSIP) to identify safety projects using a data-driven process.

Please note that this report is based only on crash records that have been entered into the statewide crash system and have been geocoded to a specific location. Although Massachusetts General Laws Chapter 90 § 26 and 29 require drivers and police departments to file crash reports that exceed specific thresholds, this is not always the case. Improving the crash reporting system and the quality of the data will help to focus resources where they are most needed.

I am convinced that we can make great strides in improving safety on Massachusetts roadways for all users. If you have questions, please contact Neil Boudreau, State Traffic Engineer at (617) 973-8211.

Sincerely,

Luisa Paiewonsky

Division Administrator

#### TOP HIGH CRASH LOCATIONS REPORT

Top 200 Intersection Locations 2006-2008
Top Pedestrian Locations 2002-2008
Top Bicycle Locations 2002-2008

#### Introduction

MassDOT Highway Division obtains crash data from the MassDOT Registry of Motor Vehicles (RMV) and uses it for a number of purposes. The primary function, however, is that it provides the foundation for developing safety improvement projects. The Top High Crash Locations Report is one of the tools used in this process. Previously, MassDOT Highway Division, with the assistance from Central Transportation Planning Staff (CTPS), produced a Top 1000 Highway Crash Locations Report which included all types of locations (interchanges, intersections and rotaries). Three years ago, MassDOT Highway Division developed a new report type where the locations identified were crash clusters at intersections (no grade separated locations and no locations with weaving sections). Beginning two years ago, the report also included the top bicycle and pedestrian clusters. This year, MassDOT Highway Division has also prepared a Top High Crash Locations Report which includes the top 200 high crash intersection locations using crash data from 2006-2008 and also includes the weighted (by crash severity) highest frequency bicycle-motor vehicle and pedestrian-motor vehicle crash locations for 2002-2008.

The RMV obtains crash data from State and local police reports and from motor vehicle operators (motorists) who are involved in crashes. The RMV Crash Records Section collects, enters and maintains crash data records, which are the source of the MassDOT Highway Division crash data.

To produce this high crash locations listing, MassDOT Highway Division, with the assistance of Geonetics, has developed an automated procedure for processing, standardizing, matching and aggregating the crash data by geographical location using Geographic Information System (GIS) tools and procedures.

Generally, the geocoding rate (the rate at which crashes can be located to a specific geographical point) for crashes between 2006 and 2008 is nearly 85%. However, the geocoding rate is not uniform for all crashes nor for all types of crash locations. Some crashes may be more difficult to geocode because of multiple intersections between the same roadway names within a community, misentry of location information on the crash report form or a host of other reasons.

Furthermore, the reporting levels of some communities have changed dramatically between the old reporting format (pre-2002) and the new format. As an example, one community has dropped reporting levels by nearly a factor of 10, while another community has dramatically increased their reporting levels so that they are now reporting nearly 10 times the number of crashes. Obviously, these reporting changes significantly impact the results of the Top High Crash Locations Report.

Due to the many difficulties in obtaining precise, useable crash location data and many issues involved in variations in crash reporting rates by some jurisdictions, this report should be used as a general purpose screening tool rather than as a precise listing of crash frequencies by individual locations. Furthermore, because of the spatial nature of the crash clusters, it is imperative to view the crash clusters spatially and not just rely on the tabular naming convention to understand the crash cluster locations.

#### **Methodology – Intersection Locations**

The intersection crash cluster analysis method, developed by Geonetics, is a comprehensive method designed to locate crash clusters. At the heart of the method is a 25 meter fixed search distance around

each crash. In basic terms, this radius controls how far the application will search for adjacent crashes. Using a 25 meter radius, the analysis method found nearby crashes and merged their areas together, thus creating clusters. If two distinct clusters are found to share a common crash, the two clusters are merged into a single cluster. This method of search-and-merge results in a set of many distinct clusters of different sizes and shapes. The application then stores these clusters to the GIS output file, along with the count of crashes within the cluster. The clusters were then ranked by the number of Equivalent Property Damage Only (EPDO) crashes contained within their boundaries. As in previous Top Crash Lists, fatal crashes are weighted by 10, injury crashes are weighted by 5 and property damage only or non-reported is weighted by 1. These are the same weights that were used to generate the previous Top 1000 High Crash Locations Report using crash data from the previous crash system.

The crashes were then named based on the highest functional classification roadway within the cluster, followed by the roadway with the second highest functional classification. In instances where there were two roadways with the identical classification, the first street name selected was the street with the longest segment contained within the cluster. Some cluster naming was modified to insert the name of a private way or site drive, rather than leaving it as unnamed. Note that the area encompassing the crash cluster may cover a larger area than just the intersection.

The module to automatically determine whether the location was an intersection, rotary, interchange or other, has not yet been developed. Therefore, a review of each location was required to make that determination. Generally, a location was determined to be an "intersection" if the cluster did not contain roadways with grade separation (interchange) nor weaving sections (rotaries or ramps). The clusters were reviewed in descending EPDO order until 200 locations were obtained. A sample of the top 2 ranked intersection locations is included in this report to illustrate the concept of the intersection clustering. The actual crash clusters can be viewed on the interactive maps at <a href="mass.gov/mhd/topcrashclusters">mass.gov/mhd/topcrashclusters</a>. Furthermore, a shape file of the top crash intersection locations is available upon request.

The above method was used to develop the top 200 intersection crash locations for crashes occurring during the three year period from 2006 to 2008. As with previous editions, the crash location analysis has been scored over a three-year period. By using crash experience over the three-year period, anomalies in the individual years of data tend to be reduced.

#### Methodology - Pedestrian and Bicycle Locations

Similar to previous years, the top locations where reported collisions occurred between pedestrians and motor vehicles and bicycles and motor vehicles have been identified. The crash cluster analysis methodology for both the top pedestrian and the top bicycle crashes is similar to the top intersection location methodology in that it uses a fixed meter search distance (for both pedestrian and bicycle crashes it is 100 meters compared to 25 meters for intersection locations) to merge crash clusters together. Crashes involving collisions between motor vehicles and pedestrians or bicycles were identified by using the non-motorist type code within the CDS database (which may yield different results from using most harmful event, first harmful event, or sequence of events data fields). Furthermore, the methodology uses the Equivalent Property Damage Only (EPDO) weighting to rank the clusters. However, because of the relatively small number of reported pedestrian and bicycle crashes in the crash data file, the clustering analysis used crashes from the seven year period from 2002-2008, instead of the three year analysis for intersection locations. Additionally, due to the larger geographic area encompassed by both the pedestrian and the bicycle crash clusters, it was difficult to name them so they were left unnamed but can be viewed spatially. The top 10 ranked pedestrian crash locations and the top 10 bicycle crash locations are included in this report. The actual crash clusters can be viewed on the interactive maps at mass.gov/mhd/topcrashclusters.

For further information, please contact Neil Boudreau, State Traffic Engineer, Traffic Engineering and Safety Section, MassDOT Highway Division, 10 Park Plaza, Room 7210, Boston, MA 02116, phone (617) 973-8211.

### **NOTICE**

It should be noted that the Top 200 High Crash Intersection Locations Report was compiled under the authority of United States Code Title 23, Section 148, Highway Safety Improvement Program, sponsored by the Federal Highway Administration. The compilation of such information is, therefore, subject to the limitations of Section 148 (g) (4) which states:

"Discovery and admission into evidence of certain reports, surveys, and information - Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose directly relating to paragraph (1) or subsection (c)(1)(D), or published by the Secretary in accordance with paragraph (3), shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in such reports, surveys, schedules, lists, or other data."

2006-2008 STATEWIDE TOP 200 INTERSECTION CRASH LIST

				2006-2008 STATEWIDE TOP 200	INTERS	ECTION CRASH LIST						
Rank	Town	RPA	MassDOT District	Street 1	Route 1	Street 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes	PDO & Non Reported Crashes
				·			I.E.					
1	FALL RIVER	SRPEDD	5	PLYMOUTH AVENUE	81	RODMAN STREET		155	279	0	31	124
2	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY	113	VARNUM AVENUE		127	251	0	31	96
3	WESTFIELD	PVPC	2	NORTH ELM STREET	202	POCHASSIC STREET		130	250	0	30	100
4	LOWELL	NMCOG MAPC	6	MIDDLESEX STREET MASSACHUSETTS AVENUE		WOOD STREET MELNEA CASS BOULEVARD		132 107	244	1	28	104
5 6	BOSTON LOWELL	NMCOG	4	BRIDGE STREET	38	VETERANS OF FOREIGN WARS HIGHWAY		111	240	0	31	75 79
7	RAYNHAM	SRPEDD	5	ROUTE 44	44	ORCHARD STREET	1	94	239 230	0	32 34	60
8	WORCESTER	CMRPC	3	HIGHLAND STREET (LINCOLN SQUARE)	9	MAIN STREET		124	228	0	26	98
9	BROCKTON	OCPC	5	PLEASANT STREET	27	WEST STREET		95	215	0	30	65
10	QUINCY	MAPC	6	HONORABLE THOMAS S BURGIN PARKWAY		GRANITE STREET		111	211	0	25	86
10	LOWELL	NMCOG	4	CHURCH STREET	110	APPLETON STREET		99	211	0	28	71
12	WEYMOUTH	MAPC	6	WASHINGTON STREET	53	MIDDLE STREET		102	210	0	27	75
13	BROCKTON	OCPC	5	WEST ELM STREET		NEWBURY STREET		57	209	0	38	19
13	FRAMINGHAM	MAPC	3	HOLLIS STREET	126	WAVERLEY STREET	135	105	209	0	26	79
15	BROCKTON	OCPC	5	BELMONT STREET	123	MANLEY STREET		67	207	0	35	32
16	NEW BEDFORD	SRPEDD	5	ALFRED BESSETTE MEMORIAL HIGHWAY	140	KEMPTON STREET	6	82	206	0	31	51
17	WEYMOUTH	MAPC	6	MAIN STREET	18	MIDDLE STREET		132	204	0	18	114
17	PLAINVILLE	SRPEDD	5	MESSENGER STREET	106	TAUNTON STREET	152	92	204	0	28	64
19	WORCESTER	CMRPC	3	BELMONT STREET	9	OAK AVENUE		99	203	0	26	73
19	NORWOOD	MAPC	5	BLUE STAR MEMORIAL HIGHWAY	1	EVERETT STREET		87	203	0	29	58
21	CHICOPEE	PVPC	2	BROADWAY		CHURCH STREET	141	85	201	0	29	56
22	SWANSEA	SRPEDD	5	MARKET STREET	136	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	104	200	0	24	80
23	LYNN	MAPC	4	WESTERN AVENUE	107	FRANKLIN STREET		95	199	0	26	69
24	FRAMINGHAM	MAPC OCPC	3	CONCORD STREET	126	HARTFORD STREET	120	82	198	0	29	53
24 26	ABINGTON MIDDLEBOROUGH	SRPEDD	5 5	BEDFORD STREET ROUTE 44	18 44	RANDOLPH STREET PLYMPTON STREET	139 105	102 82	198 191	1	24 25	78 56
26	PEMBROKE	MAPC & OCPC	5	SCHOOSETT STREET	139	COLUMBIA ROAD	53	71	191	0	30	41
28	LYNN	MAPC	4	WESTERN AVENUE	107	WASHINGTON STREET	129	82	190	0	27	55
29	SHREWSBURY	CMRPC	3	BOSTON TURNPIKE	9	SOUTH QUINSIGAMOND AVENUE	120	109	189	0	20	89
30	LYNN	MAPC	4	WESTERN AVENUE	107	CHATHAM STREET		83	187	0	26	57
31	WORCESTER	CMRPC	3	PARK AVENUE	9	MAY STREET		98	186	0	22	76
31	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	CALIFORNIA AVENUE		78	186	0	27	51
33	WALTHAM	MAPC	4	LEXINGTON STREET		TRAPELO ROAD		97	185	0	22	75
34	SWANSEA	SRPEDD	5	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	SWANSEA MALL DRIVE		92	184	0	23	69
34	BOSTON	MAPC	6	MORTON STREET	203	HARVARD STREET		68	184	0	29	39
36	STOUGHTON	MAPC & OCPC	5	WASHINGTON STREET	138	CENTRAL STREET		100	180	0	20	80
37	PLAINVILLE	SRPEDD	5	WASHINGTON STREET	1	TAUNTON STREET	152	71	179	0	27	44
37	NORWOOD	MAPC	5	BLUE STAR MEMORIAL HIGHWAY	1	DEAN STREET		103	179	0	19	84
39	FALL RIVER	SRPEDD	5	SOUTH MAIN STREET	138	GLOBE STREET	ļ	90	178	0	22	68
39 41	WORCESTER	CMRPC MAPC	3	BELMONT STREET	9	LINCOLN STREET	30	90	178 177	0	22	68
41	FRAMINGHAM WOBURN	MAPC	3 4	WORCESTER ROAD MAIN STREET	38	COCHITUATE ROAD PLEASANT STREET	30	69 107	177	0	17	42 90
42	FRAMINGHAM	MAPC	3	WORCESTER ROAD	38 9	TEMPLE STREET	1	86	175	0	22	64
44	DEDHAM	MAPC	6	WASHINGTON STREET	- 3	INCINERATOR ROAD	<b>†</b>	61	173	0	28	33
45	BROCKTON	OCPC	5	ASH STREET		WEST ELM STREET	<b>†</b>	66	170	0	26	40
45	MILTON	MAPC	6	RANDOLPH AVENUE	28	CHICKATAWBUT ROAD	<b>†</b>	66	170	0	26	40
47	MIDDLEBOROUGH	SRPEDD	5	SOUTH MAIN STREET	105	EAST GROVE STREET	28	89	169	0	20	69
47	WORCESTER	CMRPC	3	CHANDLER STREET	122	MURRAY AVENUE	T	73	169	0	24	49
49	HOLBROOK	MAPC	5	SOUTH FRANKLIN STREET	37	UNION STREET	139	76	168	0	23	53
49	QUINCY	MAPC	6	HONORABLE THOMAS S BURGIN PARKWAY		CENTRE STREET		76	168	0	23	53
49	FALL RIVER	SRPEDD	5	PRESIDENT AVENUE	6	NORTH MAIN STREET		88	168	0	20	68
52	WELLESLEY	MAPC	6	WORCESTER STREET (WELLESLEY FIRE STATION HEADQ	9	WASHINGTON STREET (BY PROXIMITY)	16	115	167	0	13	102
52	WEYMOUTH	MAPC	6	PLEASANT STREET		WASHINGTON STREET	53	91	167	0	19	72
54	QUINCY	MAPC	6	SOUTHERN ARTERY	3A	MCGRATH HIGHWAY	ļ	78	166	0	22	56
54	WORCESTER	CMRPC	3	SOUTHBRIDGE STREET		HAMMOND STREET	<del>                                     </del>	66	166	0	25	41
54	MARLBOROUGH	MAPC	3	EAST MAIN STREET	20	CURTIS AVENUE	407	102	166	0	16	86
57	WESTFIELD	PVPC	2	EAST MAIN STREET	20	LITTLE RIVER ROAD	187	61	165	0	26	35
57 57	WOBURN	MAPC	4 6	MONTVALE AVENUE	37	ALBANY STREET	<del>                                     </del>	93	165	0	18 22	75 55
60	BRAINTREE LEOMINSTER	MAPC MRPC	3	GRANITE STREET NORTH MAIN STREET	12	COMMON STREET NELSON STREET	1	77 86	165 162	0	19	67
60	QUINCY	MAPC	6	HANCOCK STREET	3A	EAST SQUANTUM STREET	<b>†</b>	78	162	0	21	57
62	SHREWSBURY	CMRPC	3	BOSTON TURNPIKE	9	SOUTH STREET	<b>†</b>	80	160	0	20	60
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3/12/2010 Page 1 of 4

				2006-2008 STATEWIDE TOP 200	INTERS	ECTION CRASH LIST						
Rank	Town	RPA	MassDOT District	Street 1	Route 1	Street 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes	PDO & Non Reported Crashes
63	BOSTON	MAPC	6	COLUMBIA ROAD	<u> </u>	DORCHESTER AVENUE	<u> </u>	50	159	1	25	24
64	BROCKTON	OCPC	5	BELMONT STREET	123	LINWOOD STREET		54	158	0	26	28
65	LOWELL	NMCOG	4	THORNDIKE STREET	3A	HIGHLAND STREET		73	157	0	21	52
66	WORCESTER	CMRPC	3	BELMONT STREET	9	PLANTATION STREET		71	155	0	21	50
66	MALDEN	MAPC	4	EASTERN AVENUE	60	MAPLEWOOD STREET		59	155	0	24	35
66	WEST BRIDGEWATER	OCPC	5	WEST CENTER STREET	106	NORTH MAIN STREET	28	71	155	0	21	50
69	CONCORD	MAPC	4	CONCORD TURNPIKE	2	WALDEN STREET	126	70	154	0	21	49
70 70	CAMBRIDGE CHELSEA	MAPC MAPC	6	MEMORIAL DRIVE REVERE BEACH PARKWAY	3 16	RIVER STREET GARFIELD AVENUE		73 65	153 153	0	20 22	53 43
72	BROCKTON	OCPC	5	NORTH MAIN STREET	10	HOWARD STREET	+	60	152	0	23	37
72	CONCORD	MAPC	4	CONCORD TURNPIKE	2	MAIN STREET	62	64	152	0	22	42
72	FALL RIVER	SRPEDD	5	BROADWAY	138	BRADFORD AVENUE		80	152	0	18	62
75	LOWELL	NMCOG	4	PLAIN STREET		CHELMSFORD STREET	110	79	151	0	18	61
75	HAVERHILL	MVPC	4	LAYFAYETTE SQUARE	97	BROADWAY	1	91	151	0	15	76
77	MALDEN	MAPC	4	FELLSWAY EAST		HIGHLAND AVENUE	-	54	150	0	24	30
78 78	LOWELL NATICK	NMCOG MAPC	3	VETERANS OF FOREIGN WARS HIGHWAY WEST CENTRAL STREET	135	AIKEN STREET SPEEN STREET		69 93	149 149	0	20 14	49 79
80	WESTBOROUGH	CMRPC	3	BOSTON WORCESTER TURNPIKE	9	LYMAN STREET		84	148	0	16	68
80	WORCESTER	CMRPC	3	PARK AVENUE	9	PLEASANT STREET		72	148	0	19	53
82	BROCKTON	OCPC	5	COURT STREET	27	MONTELLO STREET	28	63	147	0	21	42
83	BOSTON	MAPC	6	DORCHESTER AVENUE		GALLIVAN BOULEVARD	203	50	146	0	24	26
83	LYNN	MAPC	4	LYNNFIELD STREET	129	BROADWAY		86	146	0	15	71
85	MALDEN	MAPC	4	CENTRE STREET	60	COMMERCIAL STREET	ļ	49	145	0	24	25
86 86	WILMINGTON BROCKTON	MAPC OCPC	4 5	LOWELL STREET MAIN STREET	129	WOBURN STREET LEGION PARKWAY	123	59 51	143 143	0	21 23	38 28
88	CHELSEA	MAPC	6	BROADWAY		CONGRESS AVENUE	123	58	143	0	21	37
88	CHELSEA	MAPC	6	REVERE BEACH PARKWAY	16	WASHINGTON AVENUE		70	142	0	18	52
90	SOMERSET	SRPEDD	5	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	LEES RIVER AVENUE		45	141	0	24	21
91	LINCOLN,CONCORD	MAPC	4	CONCORD TURNPIKE (CROSBY'S CORNER)	2	CAMBRIDGE TURNPIKE	2	68	140	0	18	50
91	BOSTON	MAPC	6	BLUE HILL AVENUE	28	MORTON STREET	203	56	140	0	21	35
93	WEYMOUTH	MAPC	6	UNION STREET	70	PLEASANT STREET		95	139	0	11	84
93 95	WORCESTER QUINCY	CMRPC MAPC	3 6	LINCOLN STREET SOUTHERN ARTERY	70 3A	MELROSE STREET CODDINGTON STREET		50 70	139 138	0	20 17	29 53
95	WEYMOUTH	MAPC	6	MAIN STREET	18	PARK AVENUE	1	74	138	0	16	58
95	BOSTON	MAPC	6	GALLIVAN BOULEVARD	203	GRANITE AVENUE		46	138	0	23	23
95	WOBURN	MAPC	4	MONTVALE AVENUE		WASHINGTON STREET		74	138	0	16	58
95	SOMERVILLE	MAPC	6	BROADWAY		ALEWIFE BROOK PARKWAY	16	74	138	0	16	58
95	WORCESTER	CMRPC	3	LINCOLN STREET	70	MARSH AVENUE	1	74	138	0	16	58
95 102	LOWELL MALDEN	NMCOG MAPC	4	PAWTUCKET STREET EASTERN AVENUE	60	SCHOOL STREET BROADWAY	99	66 65	138 137	0	18 18	48 47
102	NATICK	MAPC	3	WORCESTER STREET	9	OAK STREET	33	88	136	0	12	76
103	EASTON	OCPC	5	DEPOT STREET	123	FOUNDRY STREET	106	68	136	0	17	51
105	LYNN	MAPC	4	ESSEX STREET		JOYCE STREET		58	135	1	17	40
105	MANSFIELD	SRPEDD	5	ROUTE 140	140	SCHOOL STREET		67	135	0	17	50
105	WORCESTER	CMRPC	3	PARK AVENUE	9	HIGHLAND STREET	+	71	135	0	16	55
108 108	NORTH ANDOVER PITTSFIELD	MVPC BRPC	4	CHICKERING ROAD LINDEN STREET	125	MASSACHUSETTS AVENUE SEYMOUR STREET	1	57 45	133 133	0	19 22	38 23
108	BROCKTON	OCPC	5	FOREST AVENUE	-	BOUVE AVENUE	+	45	133	0	23	23 18
111	BROCKTON	OCPC	5	PLEASANT STREET	27	NORTH ASH STREET	1	40	132	0	23	17
112	MEDFORD	MAPC	4	MYSTIC VALLEY PARKWAY	16	WINTHROP STREET	38	59	131	0	18	41
112	WORCESTER	CMRPC	3	MAIN STREET		CHANDLER STREET	122	63	131	0	17	46
112	WORCESTER	CMRPC	3	CHANDLER STREET	122	PIEDMONT STREET		43	131	0	22	21
112	WILBRAHAM	PVPC	2	BOSTON ROAD	20	STONY HILL ROAD	+	71	131	0	15	56
116 116	FRAMINGHAM WHITMAN	MAPC OCPC	3 5	CONCORD STREET BEDFORD STREET	126 18	LINCOLN STREET AUBURN STREET	14	74 58	130 130	0	14 18	60 40
118	WORCESTER	CMRPC	3	MAIN STREET	10	MILL STREET	12	65	129	0	16	49
118	LEOMINSTER	MRPC	3	MAIN STREET	13	HAMILTON STREET	12	85	129	0	11	74
118	WALPOLE	MAPC	5	PROVIDENCE TURNPIKE	1	HIGH PLAIN STREET	27	69	129	0	15	54
118	WORCESTER	CMRPC	3	STAFFORD STREET		CURTIS PARKWAY		57	129	0	18	39
122	NATICK	MAPC	3	WORCESTER STREET	9	DEAN ROAD		76	128	0	13	63
122	LYNN	MAPC	4	ESSEX STREET		CHATHAM STREET	+	68	128	0	15	53
122	LOWELL	NMCOG	4	SCHOOL STREET	1	BRANCH STREET	1	52	128	0	19	33

2006-2008 STATEWIDE TOP 200 INTERSECTION CRASH LIST

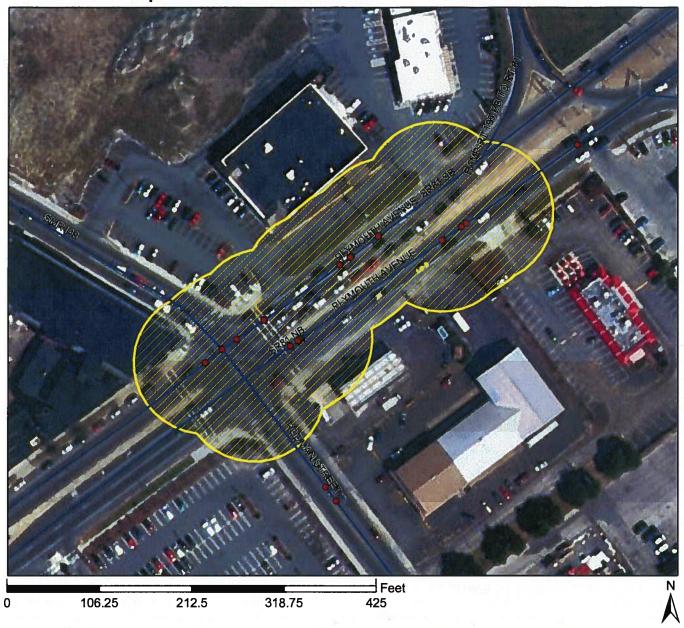
				2006-2008 STATEWIDE TOP 200	INTERS	ECTION CRASH LIST						
												Reported Crashes
			OT District					Crashes	Crashes	Crashes	Crashes	Non Reporte
Rank	Town	RPA	MassDOT	treet 1	Route 1	treet 2	Route 2	Total Cr	EPDO C	Fatal Cr		PDO & I
				₩.5000.001			22					
122 126	MENDON WEYMOUTH,BRAINTREE	CMRPC MAPC	3 6	MILFORD ROAD WASHINGTON STREET	16 53	MAIN STREET COMMERCIAL STREET		56 83	128 127	0		38 72
126	SALEM	MAPC	4	WASHINGTON STREET	- 55	CANAL STREET		67	127	0		52
126	HAVERHILL	MVPC	4	BRIDGE STREET	125	WATER STREET	113	71	127	0		57
129	SEEKONK	SRPEDD	5	TAUNTON AVENUE	44	FALL RIVER AVENUE	114A	58	126	0		41
130 131	QUINCY WESTFIELD	MAPC PVPC	6	WASHINGTON STREET FRANKLIN STREET	3A 20	SOUTHERN ARTERY WASHINGTON STREET	53	81 40	125 124	0		70 19
132	TAUNTON	SRPEDD	5	BROADWAY	138	WASHINGTON STREET WASHINGTON STREET		47	123	0		28
133	HAVERHILL	MVPC	4	MAIN STREET	125	WINTER STREET	97	62	122	0		47
133	BROCKTON	OCPC	5	NORTH MONTELLO STREET	28	AMES STREET		38	122	0		17
133	FRAMINGHAM	MAPC	3	COCHITUATE ROAD	30	SPEEN STREET		70	122	0		57
136 136	TAUNTON NEWTON	SRPEDD MAPC	5 6	BROADWAY BOYLSTON STREET	138 9	EAST BRITANNIA STREET WOODWARD STREET		41 49	121 121	0		21 31
136	RAYNHAM	SRPEDD	5	BROADWAY	138	CARVER STREET		49	121	0		31
139	LYNN	MAPC	4	ESSEX STREET		CHESTNUT STREET		47	120	1		30
139	BROCKTON	OCPC	5	WARREN AVENUE	123	WEST ELM STREET		36	120	0		15
139	LOWELL	NMCOG	4	CENTRAL STREET		WARREN STREET	4.0	60	120	0		45
139 139	WATERTOWN LOWELL	MAPC NMCOG	6	MAIN STREET CHELMSFORD STREET	20 110	MOUNT AUBURN STREET INDUSTRIAL AVENUE	16	72 60	120 120	0		60 45
139	WORCESTER	CMRPC	3	BELMONT STREET	9	LAKE AVENUE NORTH		56	120	0		40
145	WORCESTER	CMRPC	3	CAMBRIDGE STREET	Ŭ	SOUTHBRIDGE STREET		63	119	0		49
145	BROCKTON	OCPC	5	CENTRE STREET	123	PLYMOUTH STREET		35	119	0	21	14
145	ABINGTON	OCPC	5	BROCKTON AVENUE	123	BEDFORD STREET	18	47	119	0		29
145	LAWRENCE	MVPC	4	WINTHROP AVENUE	114	SOUTH UNION STREET		42	119	1		24
149 149	AGAWAM,SPRINGFIELD NORTH ATTLEBOROUGH	PVPC SRPEDD	5	SOUTH END BRIDGE EAST WASHINGTON STREET	5 1	CHESTNUT STREET		50 50	118 118	0		33
149	BURLINGTON	MAPC	4	CAMBRIDGE STREET	3A	WINN STREET		70	118	0		58
149	CHELSEA	MAPC	6	EVERETT AVENUE		SPRUCE STREET		54	118	0		38
153	HOLYOKE	PVPC	2	MAIN STREET		JACKSON STREET		49	117	0	17	32
153	FALL RIVER	SRPEDD MVPC	5	CENTRAL STREET	07	DAVOL STREET		41	117	0		22
153 153	HAVERHILL TAUNTON	SRPEDD	5	MAIN STREET COUNTY STREET	97 140	BAILEY BOULEVARD HART STREET		57 53	117 117	0		42 37
153	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	DINSMORE AVENUE		41	117	0		22
153	LYNN	MAPC	4	CHESTNUT STREET		UNION STREET		53	117	0		37
159	TEWKSBURY	NMCOG	4	SALEM ROAD		SOUTH STREET		48	116	0		31
160	FITCHBURG	MRPC	3	LUNENBURG STREET	2A	JOHN FITCH HIGHWAY		55	115	0		40
160 160	BOSTON MEDFORD	MAPC MAPC	6	MORTON STREET MAIN STREET	203	GALLIVAN BOULEVARD SALEM STREET	60	39 75	115 115	0		20 65
163	RANDOLPH	MAPC	6	NORTH MAIN STREET	28	UNION STREET	139	70	114	0		59
163	LOWELL	NMCOG	4	WESTFORD STREET	3A	WILDER STREET		54	114	0	15	39
163	WESTFORD	NMCOG	3	LITTLETON ROAD	110	BOSTON ROAD		82	114	0		74
163	HOPKINTON	MAPC	3	WEST MAIN STREET	9	LUMBER STREET	100	58	114	0		44
163 163	WORCESTER BEVERLY	CMRPC MAPC	3 4	PARK AVENUE DODGE STREET	9 1A	CHANDLER STREET CABOT STREET	122 97	58 50	114 114	0		34
163	BROCKTON	OCPC	5	CENTRE STREET	123	LYMAN STREET	31	38	114	0		19
170	BOSTON	MAPC	6	JAMAICAWAY		PERKINS STREET		45	113	0		28
170	BROCKTON	OCPC	5	BELMONT AVENUE		WEST ELM STREET		32	113	1		13
170	WOBURN	MAPC	4	MISHAWUM ROAD		COMMERCE WAY	<u> </u>	61	113	0		48
170 170	STONEHAM LEXINGTON	MAPC MAPC	4	MAIN STREET BEDFORD STREET	28 4	NORTH STREET HARTWELL AVENUE	-	49 53	113 113	0		33 38
170	EVERETT	MAPC	4	REVERE BEACH PARKWAY	16	EVERETT AVENUE	1	49	113	0		33
170	CHELSEA	MAPC	6	BROADWAY		WEBSTER AVENUE		49	113	0	16	33
170	NORTH ANDOVER	MVPC	4	TURNPIKE STREET	114	ANDOVER STREET	125	49	113	0		33
178	TAUNTON	SRPEDD	5	DEAN STREET	44	LONGMEADOW ROAD	<u> </u>	36	112	0		17
178 178	LINCOLN WESTFIELD	MAPC PVPC	2	CAMBRIDGE TURNPIKE PLEASANT STREET	202	BEDFORD ROAD WEST SILVER STREET	1	52 44	112 112	0		37 27
178	HOLYOKE	PVPC	2	MAIN STREET	116	CABOT STREET	1	44	112	0		27
178	WEYMOUTH	MAPC	6	MAIN STREET	18	POND STREET	<u> </u>	52	112	0	15	37
178	DEDHAM	MAPC	6	WASHINGTON STREET		LOWER EAST STREET		52	112	0		37
178	BROCKTON	OCPC	5	BELMONT STREET	123	VA HOSPITAL	<u> </u>	44	112	0		27
185 185	CAMBRIDGE LOWELL	MAPC NMCOG	6	PROSPECT STREET BROADWAY	-	CAMBRIDGE STREET SCHOOL STREET	<del>                                     </del>	63 55	111 111	0		51 41
100	LOWELL	INIVICUG	4	DIVOUDINAT	L	JOHOOL STREET	<u> </u>	ນວ	1111	U	14	+1

2006-2008 STATEWIDE TOP 200 INTERSECTION CRASH LIST	Г

				2006-2008 STATEWIDE TOP 200	INTLING	ECTION CRASH LIST						
Rank	Town	RPA	MassDOT District	Street 1	Route 1	Street 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes	PDO & Non Reported Crashes
185	WESTFIELD	PVPC	2	NORTH ELM STREET	202	LOCKHOUSE ROAD		39	111	0	18	21
185	STONEHAM	MAPC	4	MAIN STREET	28	NORTH BORDER ROAD		51	111	0	15	36
185	WORCESTER	CMRPC	3	PARK AVENUE	9	MAYWOOD STREET		43	111	0	17	26
185	DEDHAM	MAPC	6	BOSTON PROVIDENCE TURNPIKE	1A	ELM STREET		43	111	0	17	26
185	LAWRENCE	MVPC	4	ANDOVER STREET		PARKER STREET	114	50	111	1	13	36
185	BRAINTREE	MAPC	6	GRANITE STREET	37	FRANKLIN STREET		51	111	0	15	36
185	DARTMOUTH	SRPEDD	5	STATE ROAD	6	SLOCUM ROAD		39	111	0	18	21
185	HOLYOKE	PVPC	2	MAPLE STREET		RESNIC BOULEVARD		51	111	0	15	36
195	BROOKLINE	MAPC	6	BOYLSTON STREET	9	CHESTNUT HILL AVENUE		46	110	0	16	30
195	LYNN	MAPC	4	WESTERN AVENUE	107	CHESTNUT STREET	129A	66	110	0	11	55
195	FRAMINGHAM	MAPC	3	CONCORD STREET	126	UNION AVENUE		54	110	0	14	40
195	BROCKTON	OCPC	5	NORTH PEARL STREET	27	OAK STREET		42	110	0	17	25
199	LOWELL	NMCOG	4	RIVERSIDE STREET	113	UNIVERSITY AVENUE		45	109	0	16	29
199	CHICOPEE	PVPC	2	MEMORIAL DRIVE	33	PENDLETON AVENUE		45	109	0	16	29
199	CAMBRIDGE	MAPC	6	MASSACHUSETTS AVENUE	2A	ALEWIFE BROOK PARKWAY	3	49	109	0	15	34
199	WORCESTER	CMRPC	3	CHANDLER STREET	122	MASON STREET		45	109	0	16	29
199	WORCESTER	CMRPC	3	EAST CENTRAL STREET		SUMMER STREET		53	109	0	14	39
199	LYNN	MAPC	4	LYNNWAY		BROAD STREET	1A	61	109	0	12	49
205	LYNN	MAPC	4	WESTERN AVENUE	107	MARKET SQUARE		52	108	0	14	38
205	EASTON	OCPC	5	FOUNDRY STREET	106	TURNPIKE STREET	138	48	108	0	15	33
205	LOWELL	NMCOG	4	MERRIMACK STREET		BRIDGE STREET		68	108	0	10	58
205	NEW BEDFORD	SRPEDD	5	ASHLEY BOULEVARD	18	COGGESHALL STREET		44	108	0	16	28

3/12/2010 Page 4 of 4

### Top Crash Intersections 2006-2008



### **FALL RIVER**

PLYMOUTH AVENUE **RODMAN STREET** 

**ROUTE 81** 

MassDOT District 5 RPA SRPEDD **EPDO 279** Number of Fatal Crashes 0

Number of Injury Crashes 31 Number of Non-Injury Crashes 124 **Total Crashes 155** 

#### Legend

**RANK** 

Crash Locations 2006-2008

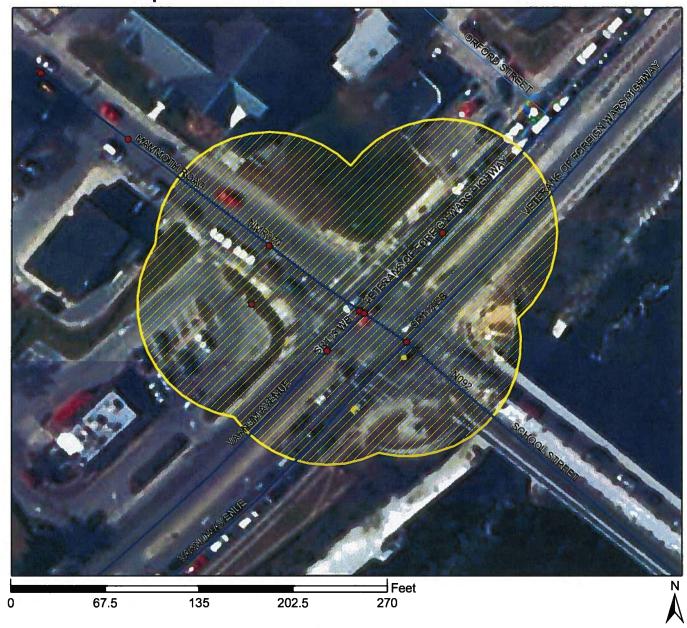


All Functional Classification Except Local Roads





## Top Crash Intersections 2006-2008



### LOWELL

RANK

VETERANS OF FOREIGN WARS HIGHWAY ROUTE 113 VARNUM AVENUE

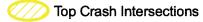
MassDOT District 4
RPA NMCOG
EPDO 251
Number of Fatal Crashes 0
Number of Injury Crashes 31
Number of Non-Injury Crashes 96
Total Crashes 127

#### Legend

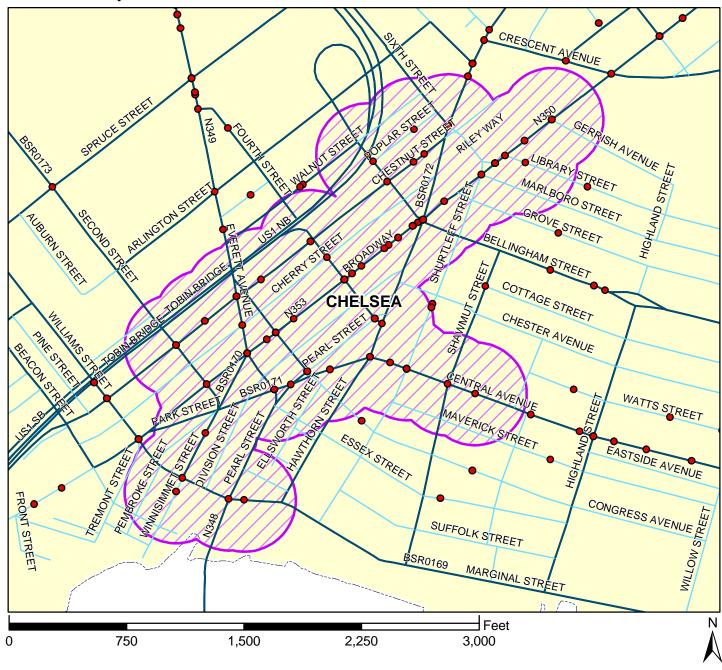
Crash Locations 2006-2008



All Functional Classification Except Local Roads







## RANK

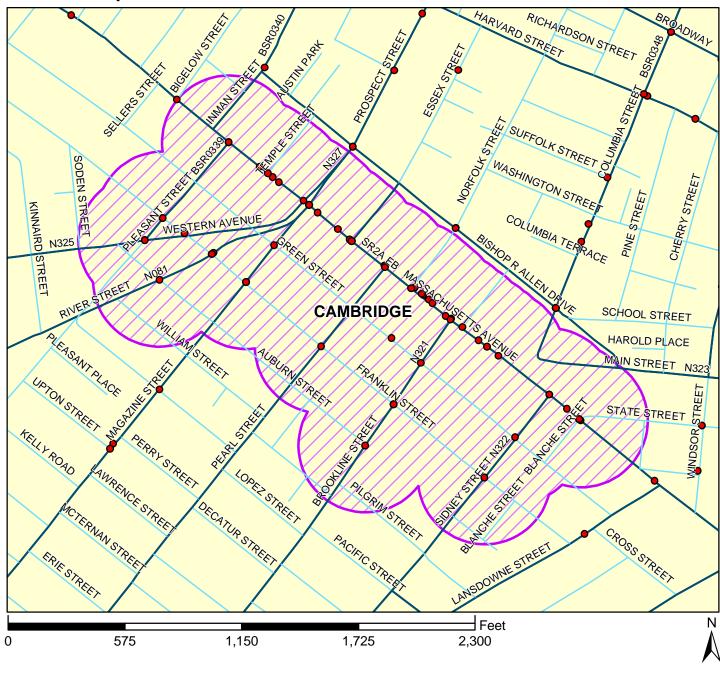
### **CHELSEA**

RPA MAPC EPDO 382 Number of Fatal Pedestrian Crashes 1 Number of Injury Pedestrian Crashes 69 Number of Non-Injury Pedestrian Crashes 27

**Total Pedestrian Crashes 97** 

- Pedestrian Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary





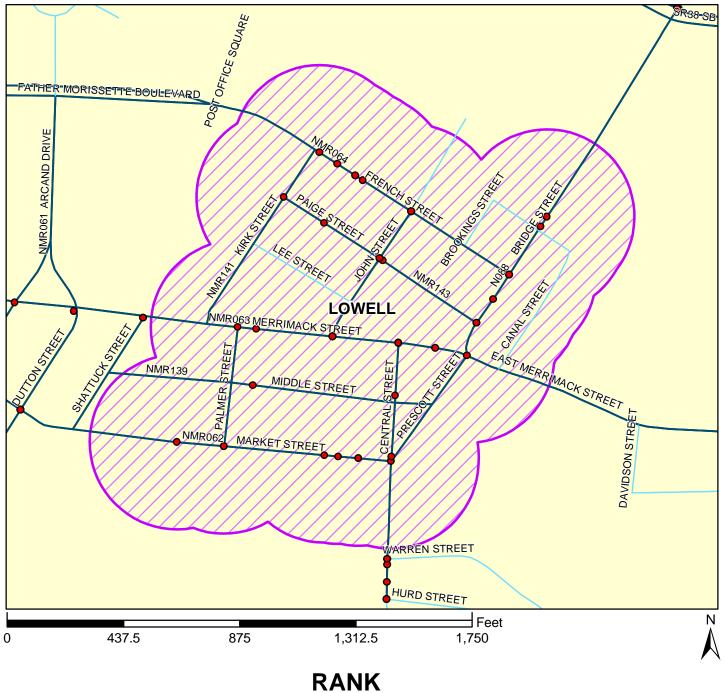
## RANK

### **CAMBRIDGE**

RPA MAPC EPDO 250 Number of Fatal Pedestrian Crashes 2 Number of Injury Pedestrian Crashes 38 Number of Non-Injury Pedestrian Crashes 40 Total Pedestrian Crashes 80

- Pedestrian Crash Locations 2002-2008
- // Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
  - Municipal Boundary





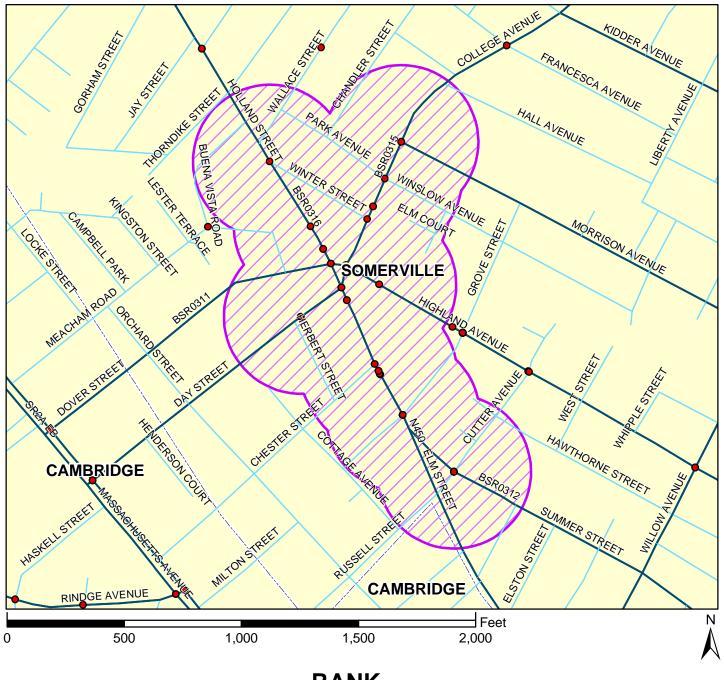
# 3

### **LOWELL**

**RPA NMCOG EPDO 167** Number of Fatal Pedestrian Crashes 0 Number of Injury Pedestrian Crashes 30 Number of Non-Injury Pedestrian Crashes 17 **Total Pedestrian Crashes 47** 

- Pedestrian Crash Locations 2002-2008
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- **Municipal Boundary**





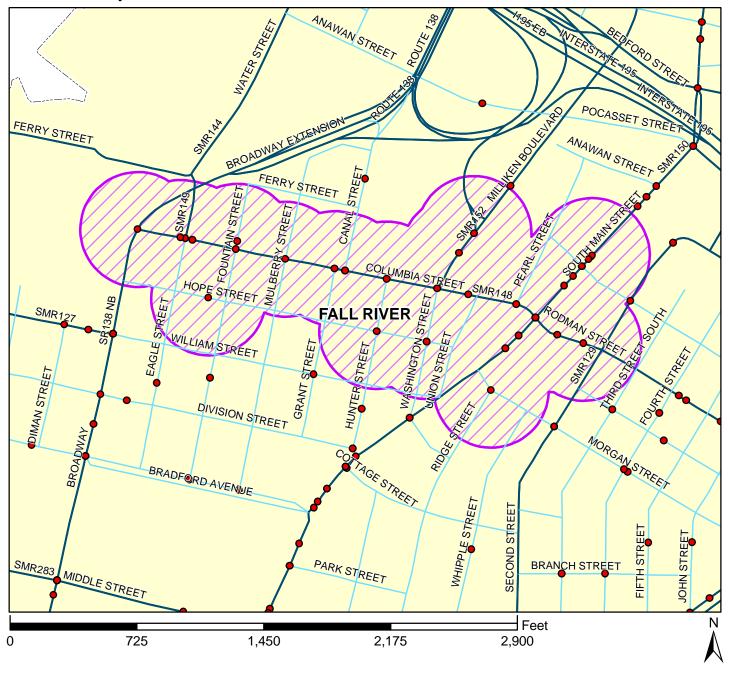
### RANK 4

### **SOMERVILLE, CAMBRIDGE**

RPA MAPC
EPDO 155
Number of Fatal Pedestrian Crashes 1
Number of Injury Pedestrian Crashes 28
Number of Non-Injury Pedestrian Crashes 5
Total Pedestrian Crashes 34

- Pedestrian Crash Locations 2002-2008
- // Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary





# 5

### **FALL RIVER**

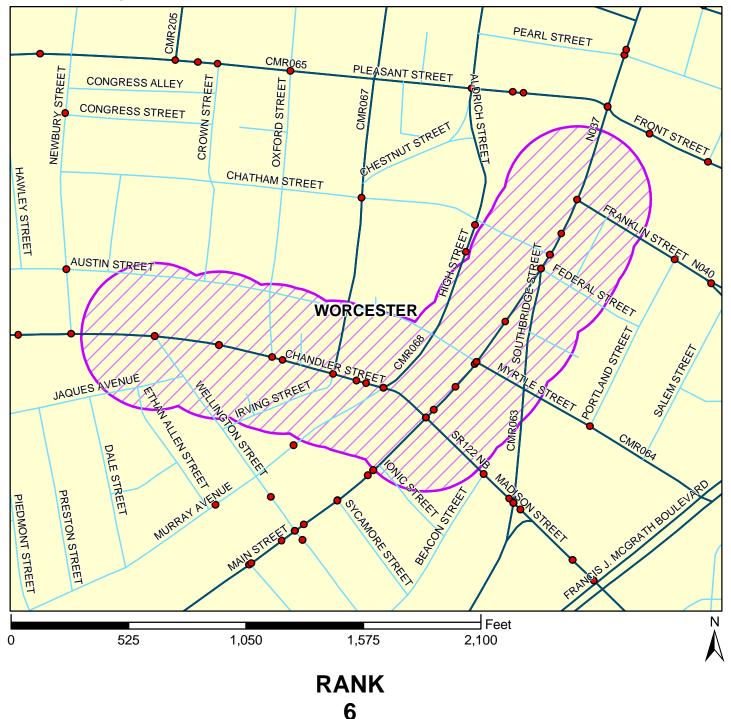
RPA SRPEDD EPDO 145 Number of Fatal Pedestrian Crashes 0 Number of Injury Pedestrian Crashes 27 Number of Non-Injury Pedestrian Crashes 10 Total Pedestrian Crashes 37

#### Legend

**RANK** 

- Pedestrian Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary



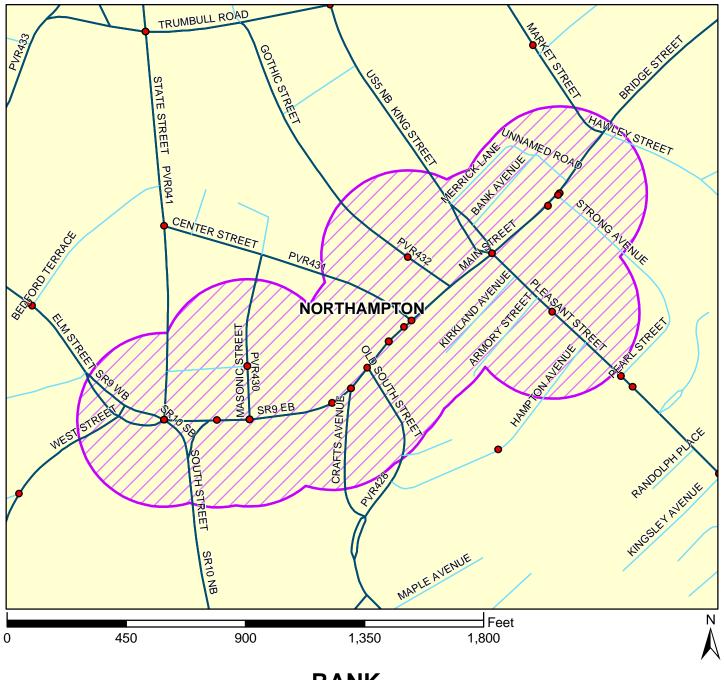


### WORCESTER

RPA CMRPC EPDO 141 Number of Fatal Pedestrian Crashes 0 Number of Injury Pedestrian Crashes 27 Number of Non-Injury Pedestrian Crashes 6 Total Pedestrian Crashes 33

- Pedestrian Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary





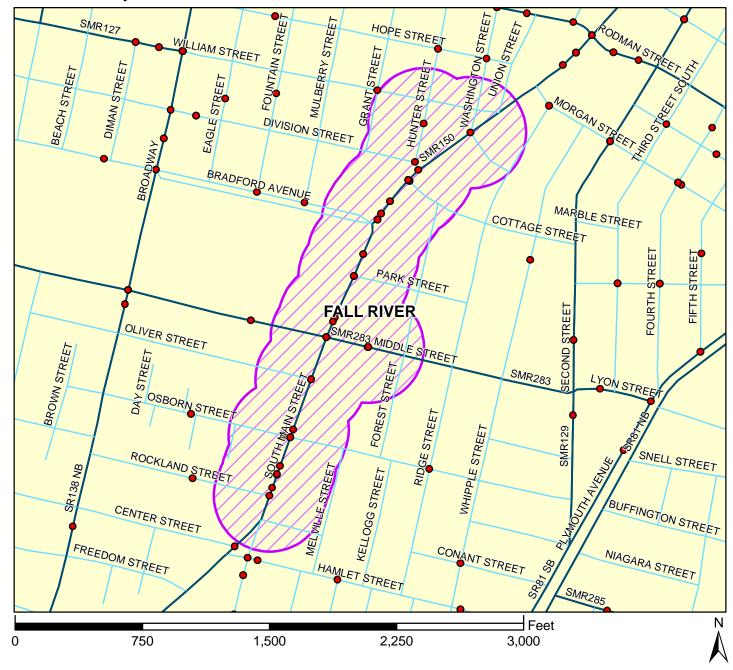
### RANK 7

### **NORTHAMPTON**

RPA PVPC
EPDO 136
Number of Fatal Pedestrian Crashes 1
Number of Injury Pedestrian Crashes 25
Number of Non-Injury Pedestrian Crashes 1
Total Pedestrian Crashes 27

- Pedestrian Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
  - Municipal Boundary





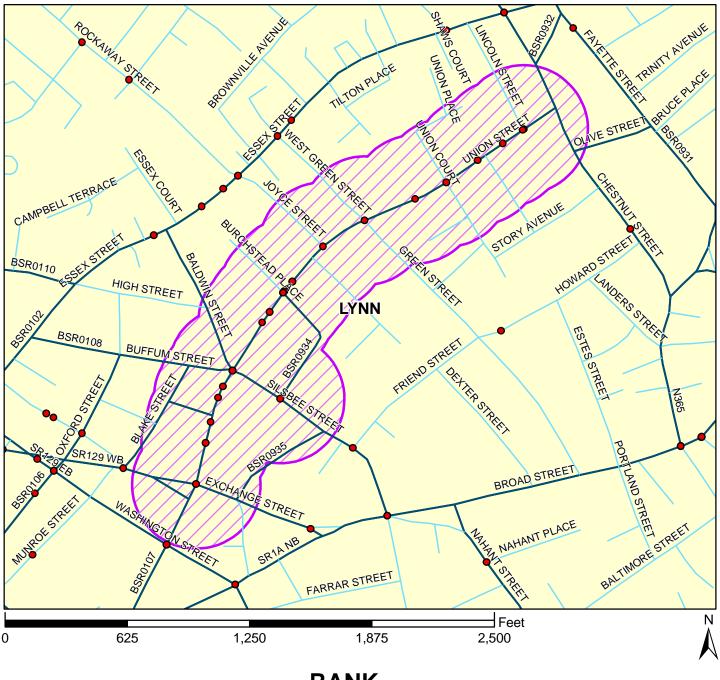
### RANK 8

### **FALL RIVER**

RPA SRPEDD
EPDO 135
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 25
Number of Non-Injury Pedestrian Crashes 10
Total Pedestrian Crashes 35

- Pedestrian Crash Locations 2002-2008
- // Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary





### RANK 9

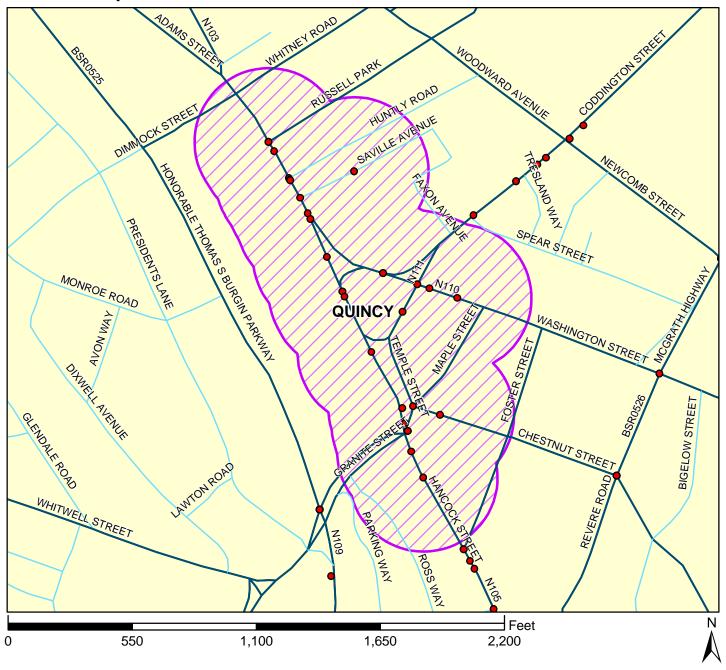
### **LYNN**

RPA MAPC EPDO 112 Number of Fatal Pe

Number of Fatal Pedestrian Crashes 0 Number of Injury Pedestrian Crashes 21 Number of Non-Injury Pedestrian Crashes 7 Total Pedestrian Crashes 28

- Pedestrian Crash Locations 2002-2008
- / Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary





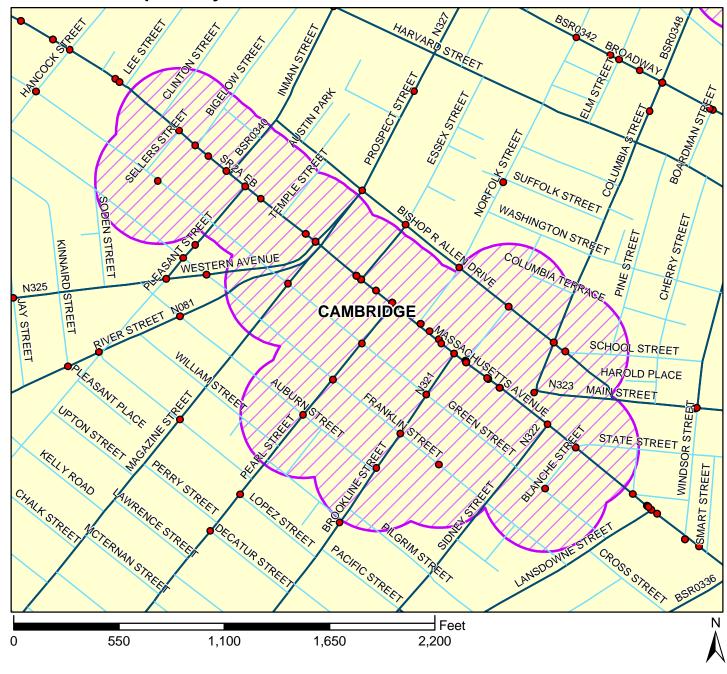
### RANK 10

### **QUINCY**

RPA MAPC
EPDO 111
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 19
Number of Non-Injury Pedestrian Crashes 16
Total Pedestrian Crashes 35

- Pedestrian Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary





### RANK

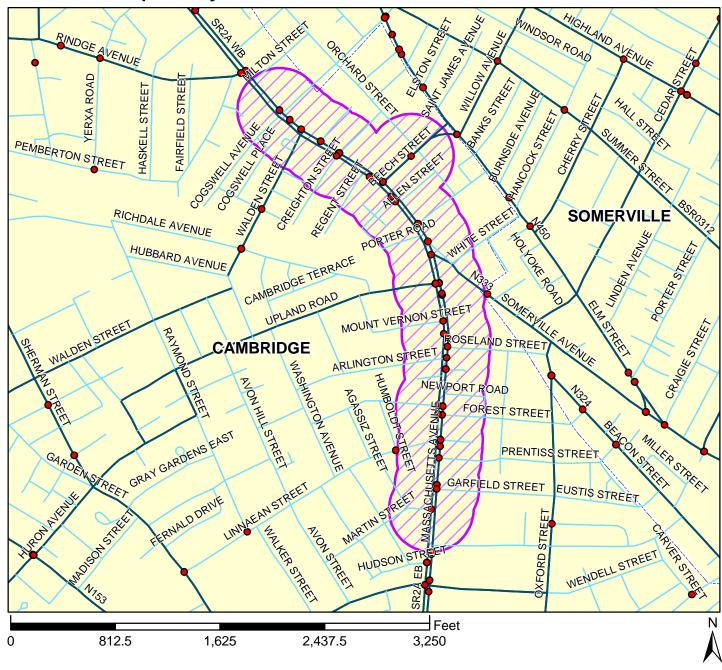
1

### **CAMBRIDGE**

RPA MAPC EPDO 239 Number of Fatal Bicycle Crashes 1 Number of Injury Bicycle Crashes 41 Number of Non-Injury Bicycle Crashes 24 Total Bicycle Crashes 66

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





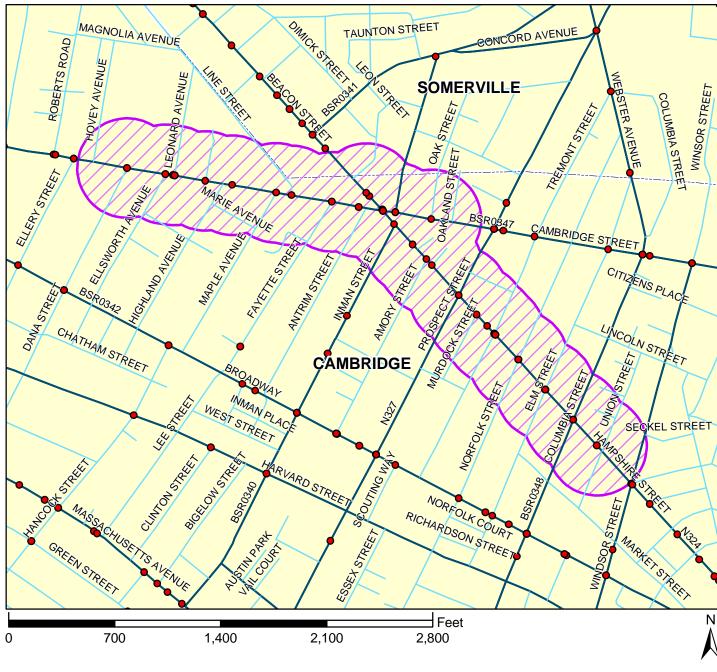
### RANK 2

### **CAMBRIDGE, SOMERVILLE**

RPA MAPC EPDO 202 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 38 Number of Non-Injury Bicycle Crashes 12 Total Bicycle Crashes 50

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





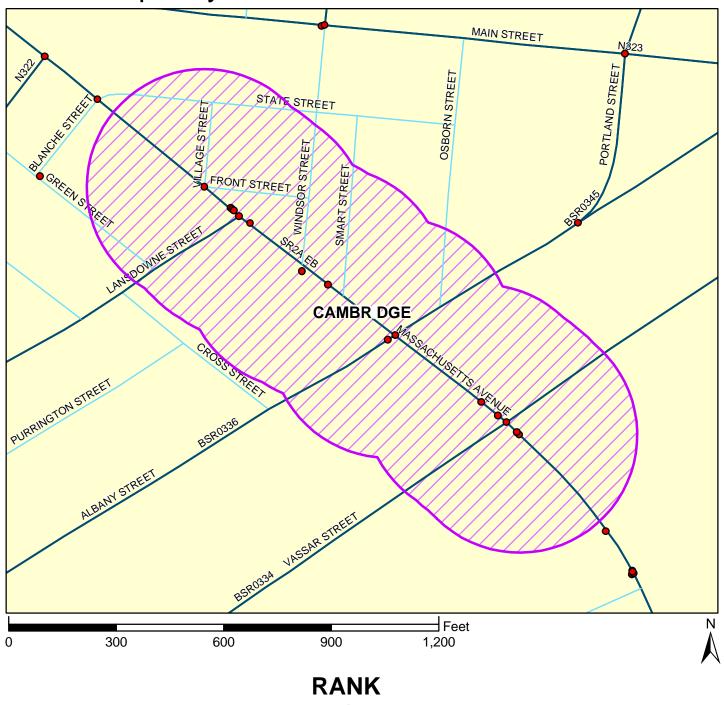
### RANK 3

### **CAMBRIDGE, SOMERVILLE**

RPA MAPC EPDO 162 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 29 Number of Non-Injury Bicycle Crashes 17 Total Bicycle Crashes 46

- Bicycle Crash Locations 2002-2008
- // Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary



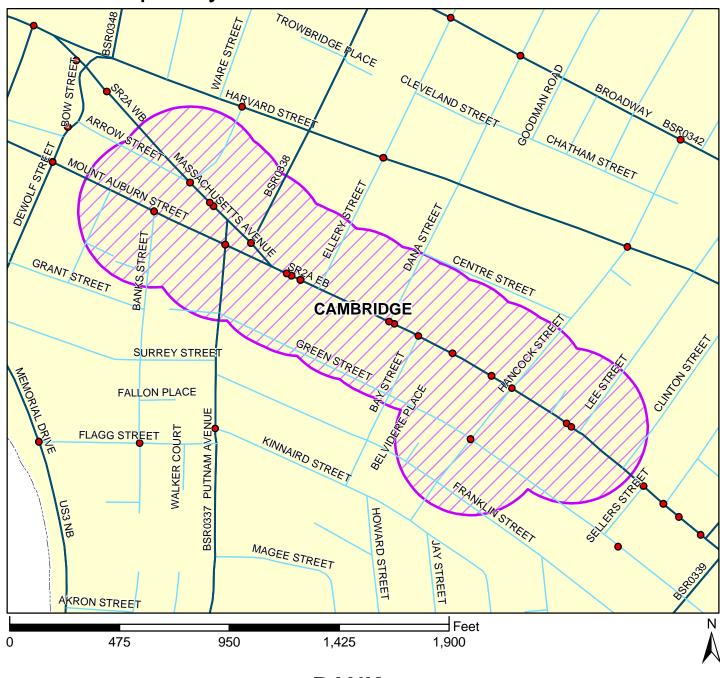


### **CAMBRIDGE**

RPA MAPC EPDO 111 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 19 Number of Non-Injury Bicycle Crashes 16 Total Bicycle Crashes 35

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





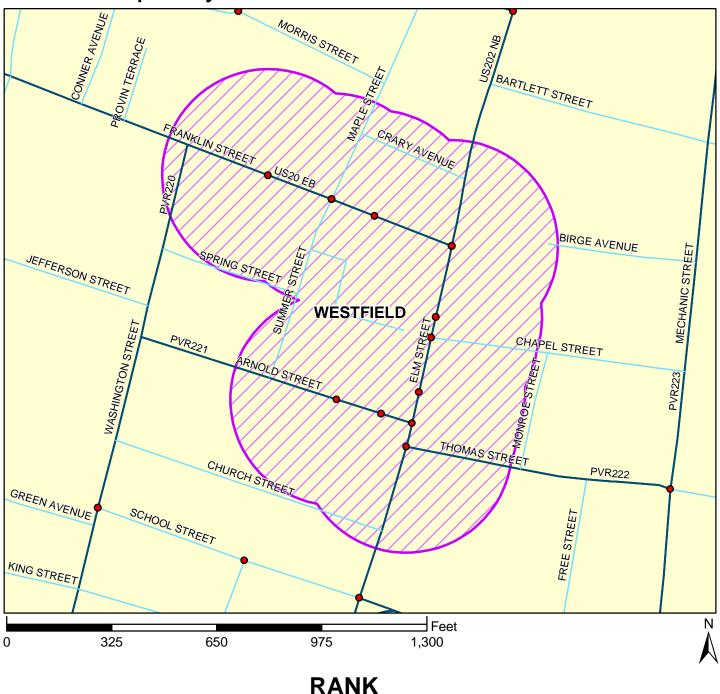
### RANK 5

### **CAMBRIDGE**

RPA MAPC EPDO 89 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 16 Number of Non-Injury Bicycle Crashes 9 Total Bicycle Crashes 25

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





### WESTFIELD

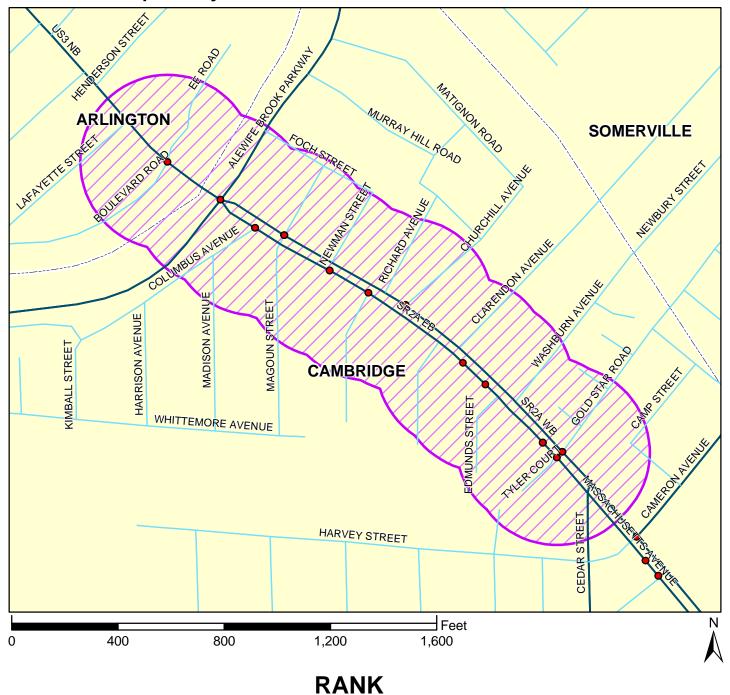
RPA PVPC EPDO 78 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 15 Number of Non-Injury Bicycle Crashes 3 Total Bicycle Crashes 18

#### Legend

6

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary



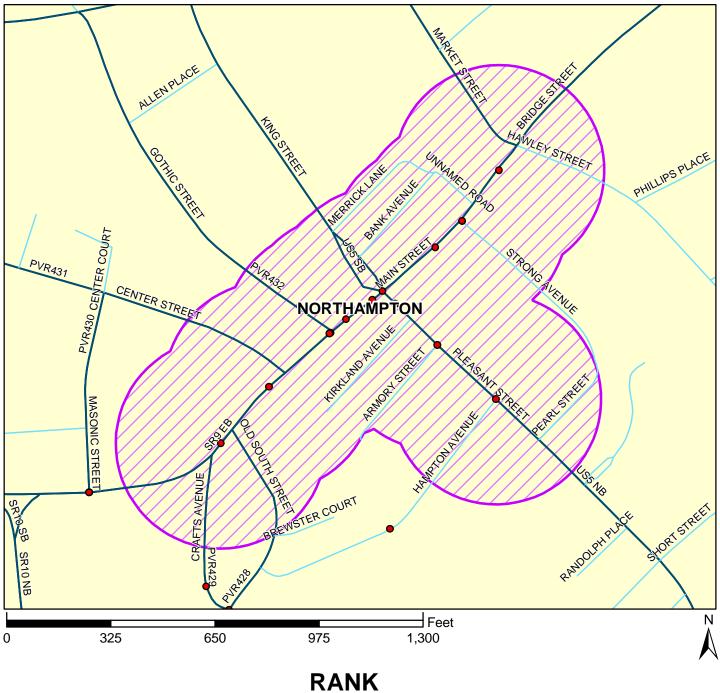


### **CAMBRIDGE, ARLINGTON**

RPA MAPC EPDO 72 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 13 Number of Non-Injury Bicycle Crashes 7 Total Bicycle Crashes 20

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





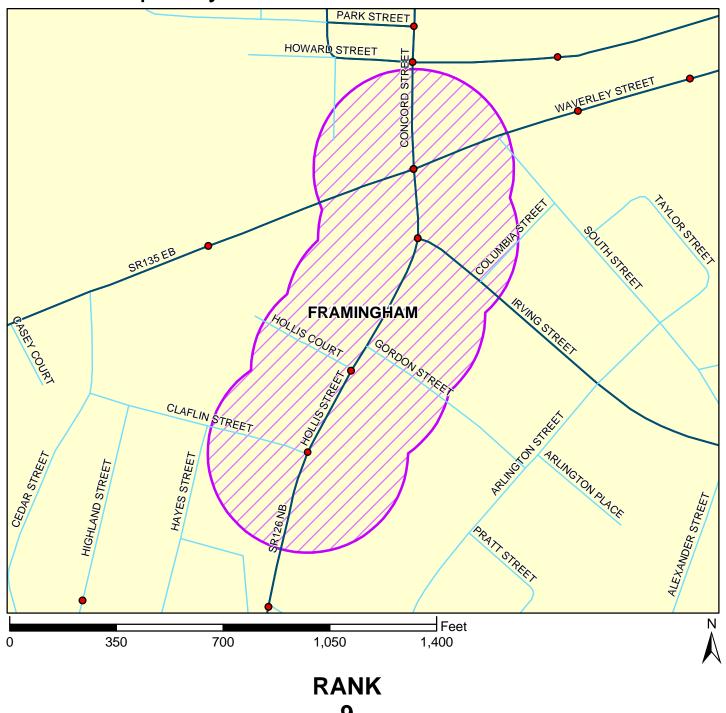
### RANK 8

### **NORTHAMPTON**

RPA PVPC EPDO 67 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 13 Number of Non-Injury Bicycle Crashes 2 Total Bicycle Crashes 15

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary



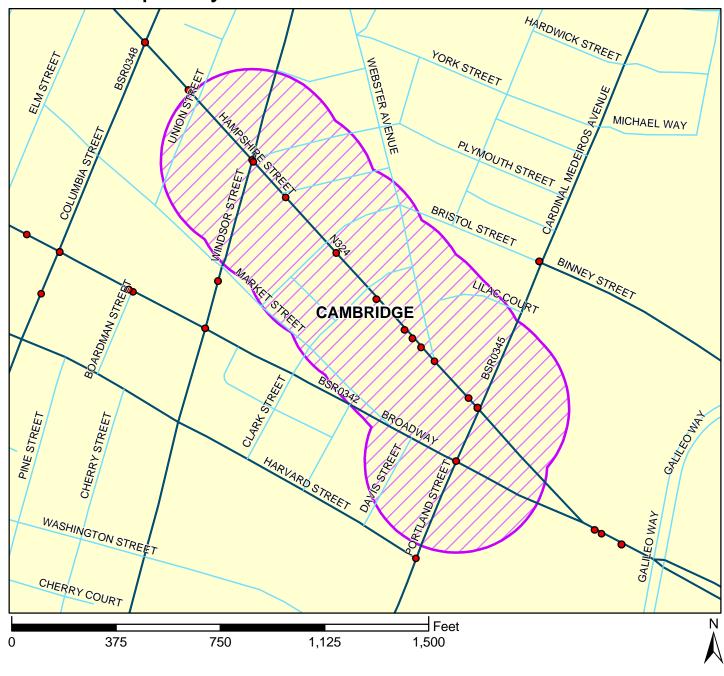


### **FRAMINGHAM**

RPA MAPC EPDO 54 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 10 Number of Non-Injury Bicycle Crashes 4 Total Bicycle Crashes 14

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





### RANK 10

### **CAMBRIDGE**

RPA MAPC EPDO 52 Number of Fatal Bicycle Crashes 0 Number of Injury Bicycle Crashes 9 Number of Non-Injury Bicycle Crashes 7 Total Bicycle Crashes 16

- Bicycle Crash Locations 2002-2008
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

