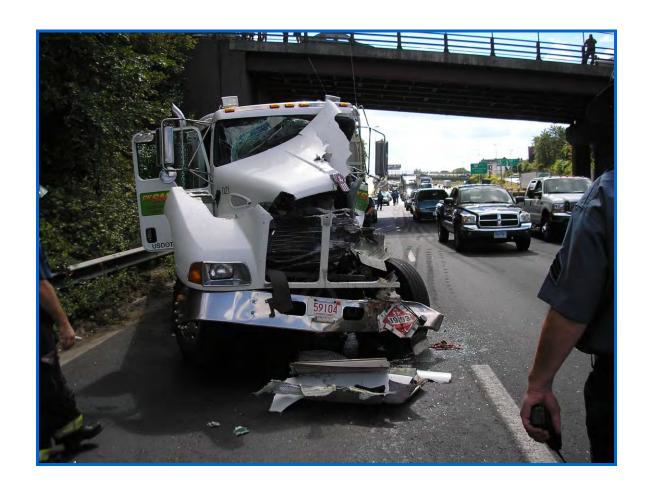
2012 TOP CRASH LOCATIONS REPORT



SEPTEMBER 2014







Dear Reader:

Enclosed is MassDOT Highway Division's edition of the 2012 *Top Crash Locations Report*, which may be used for a first brush tool 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, focuses on intersection locations and is based on crashes entered into the Registry of Motor Vehicles' Crash Data System (CDS). The 2012 Report also contains the identification of top bicycle-motor vehicle and pedestrian-motor vehicle crash locations. This information can be found at http://services.massdot.state.ma.us/maptemplate/TopCrashLocations/ or by contacting your Regional Planning Agency and MassDOT Highway District Traffic Engineer.

This dataset may be used as a first brush screening tool to evaluate locations and make changes to improve the safety of our roadway system. The 2012 *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 done. Furthermore, not all crashes submitted to the Registry of Motor Vehicles get entered into the crash system. Improving the crash reporting system and the quality of the data will help to focus resources where they are most needed.

In an effort to reduce injury and fatal crashes, MassDOT, in cooperation with a variety of public and private stakeholders, has recently updated the Massachusetts Strategic Highway Safety Plan (SHSP). To view the new updated 2013 SHSP, download a copy of the plan or to learn more about it, go to the MassDOT Highway Division Traffic Engineering and Safety website

(http://www.massdot.state.ma.us/highway/Departments/TrafficandSafetyEngineering/HighwaySafety/S trategicHighwaySafetyPlan.aspx). The Safety Plan identifies the State's key safety needs and 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.

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 (857) 368-9655.

Sincerely,

Frank DePaola, P.E. Administrator

TOP HIGH CRASH LOCATIONS REPORT

Top 200 Intersection Locations 2010-2012
Top Pedestrian Locations 2002-2012
Top Bicycle Locations 2002-2012

Introduction

MassDOT Highway Division obtains crash data from the MassDOT Registry of Motor Vehicles (RMV) Division and uses it for a number of purposes. The primary function is to provide a 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 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). Six years ago, MassDOT Highway Division developed a new report type where the locations identified were crash clusters at intersections (no grade separated locations, no locations with weaving sections and no intersections that are part of a rotary or interchange system). Beginning five 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 2010-2012 and also includes the weighted (by crash severity) highest frequency bicycle-motor vehicle and pedestrian-motor vehicle crash locations for 2002-2012.

The RMV obtains crash data from State and local police. 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, Inc., 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 2010 and 2012 is over 93%. However, the geocoding rate is not uniform for all crashes or 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, mis-entry of location information on the crash report form or a host of other reasons.

The number of crashes contained within the RMV crash system has changed dramatically due to a shift in data entry. Generally the crash system is comprised of crash reports from police and operators (drivers). The number of operator reports entered into the statewide crash system has declined dramatically. The table below illustrates the change in data entry at the RMV.

Reporting Entity	2006	2007	2008	2009	2010	2011	2012
Local police	94,602	95,400	93,649	92,832	94,458	104,201	104315
Other police	201	153	198	123	154	129	163
State police	14,524	14,608	15,822	15,519	16,882	16,280	18160
Operator	40,533	34,348	26,715	9,302	4,149	22	7
TOTAL	149,860	144,509	136,384	117,776	115,643	120,632	122,645

Furthermore, the reporting levels of some communities have changed dramatically between the old reporting format (pre-2002) and the new format and as communities move from submitting on paper to submitting electronically (details on reporting level by community are available upon request). Obviously, these reporting changes significantly impact the results of the Top High Crash Locations Report.

Crashes reported as occurring in off-street parking lots, garages, shopping center parking lots, etc. are generally excluded if submitted as paper reports to RMV. However, if submitted electronically there is currently no systematic process for excluding them from being entered, automatically geocoded and therefore included in the crash clusters. As a result, several locations may have been identified as top crash locations even though the majority of crashes occurred on private property (As an example, our number one top crash location is at the Holyoke Mall in Holyoke and most of the crashes are on private ways. This was identified after an exhaustive review of the actual crash reports). Therefore, it is critical that this list only be used as a first brush approach. More detailed analysis of the specific crashes would be required.

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 for MassDOT, is a comprehensive method designed to locate crash clusters. At the heart of the method is a 25 meter (82 ft.) 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 so it is critical to view these spatially.

The module to automatically determine whether the location was an intersection, rotary, interchange or other type of facility 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). Intersections located at the ends of off-ramps or traffic circles/rotaries were generally not included. 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. A shapefile of the crash clusters is available upon request. The actual crash clusters can also be viewed on the interactive maps at http://services.massdot.state.ma.us/maptemplate/TopCrashLocations

The above method was used to develop the top 200 intersection crash locations for crashes occurring during the three year period from 2010 to 2012. 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 (328 ft.) 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 <u>eleven year</u> period from 2002-2012, 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 http://services.massdot.state.ma.us/maptemplate/TopCrashLocations

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 (857) 368-9655.

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 relating to this section, 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."

				2010-2012 STATEW DE TOP 200	INTERS	ECTION CRASH LIST						
Rank	Town	RPA	MassDOT District	treet 1	Route 1	reet 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes	a Nori Reported
				<u> </u>	œ	ισ σ	œ					
1	HOLYOKE	PVPC	2	HOLYOKE STREET	27	HOLYOKE MALL AT INGLESIDE		235	367	0		02
3	BROCKTON	OCPC NMCOG	5 4	PLEASANT STREET	27 113	WEST STREET		107 154	283 278	0		3 23
4	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY BRIDGE STREET	38	VARNUM AVENUE VETERANS OF FOREIGN WARS HIGHWAY	-	130	274	0		23)4
5	WEYMOUTH	MAPC	6	MAIN STREET	18	MIDDLE STREET	_	127	247	0		97
6	FALL RIVER	SRPEDD	5	PLYMOUTH AVENUE	81	RODMAN STREET	1	108	228	0		78
7	MARLBOROUGH	MAPC	3	EAST MAIN STREET	20	CURTIS AVENUE		172	220	0		60
8	BROCKTON	OCPC	5	ASH STREET		WEST ELM STREET		70	214	0		34
9	LOWELL	NMCOG	4	MIDDLESEX STREET		WOOD STREET		112	212	0		37
10	CONCORD,LINCOLN	MAPC	4	CONCORD TURNPIKE (CROSBYS CORNER)	2	CAMBRIDGE TURNPIKE	2	89	205	0		50
11	RAYNHAM	SRPEDD	5	ROUTE 44	44	ORCHARD STREET		84	200	0		55
12	LOWELL	NMCOG	4	CHURCH STREET	110	APPLETON STREET		75	199	0		14
13	WEYMOUTH	MAPC	6	MAIN STREET	18	POND STREET (PLEASANT SHOPS PLAZA)		98	186	0		7 6
14	SOMERVILLE	MAPC	4	MYSTIC AVENUE	38	FELLSWAY	28	77	183	2	22 5	3
14	LOWELL	NMCOG	4	THORNDIKE STREET	3A	HIGHLAND STREET		87	183	0	24 6	53
16	WORCESTER	CMRPC	3	CHANDLER STREET	122	MURRAY AVENUE		81	181	0		6
17	MILTON	MAPC	6	RANDOLPH AVENUE		CHICKATAWBUT ROAD		60	176	0		31
18	NEW BEDFORD	SRPEDD	5	ALFRED BESSETTE MEMORIAL HIGHWAY	140	KEMPTON STREET	6	63	175	0		35
19	SWANSEA	SRPEDD	5	MARKET STREET	136	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	80	172	0		7
20	LOWELL	NMCOG	4	PLAIN STREET		CHELMSFORD STREET	110	96	168	0		78
21	WALTHAM	MAPC	4	LEXINGTON STREET		TRAPELO ROAD	_	99	167	0		32
22	BELLINGHAM	MAPC	3	HARTFORD AVENUE	126	STALLBROOK MARKETPLACE		127	167	0		17
22	NATICK	MAPC	3	WORCESTER STREET	9	OLD NORTH MAIN STREET		123	167	0		12
24	CHICOPEE	PVPC	2	BROADWAY	_	EAST MAIN STREET	141	78	166	0		6
25 26	WORCESTER	CMRPC CCC	3 5	HIGHLAND STREET	9 134	HARVARD STREET		72	164	0		19
25	DENNIS TAUNTON	SRPEDD	5	EAST WEST DENNIS ROAD COUNTY STREET	140	PATRIOT SQUARE (BY ADDRESS) HART STREET	-	125 76	161 160	0		16 55
28	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	DINSMORE AVENUE		69	157	0		17
29	WEYMOUTH	MAPC	6	MAIN STREET	18	PARK AVENUE		86	154	0		i) i9
30	AGAWAM	PVPC	2	SOUTH END BRIDGE	5	TANKAVENOE	1	69	153	0		18
31	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY		AIKEN STREET		60	152	0		37
32	QUINCY	MAPC	6	SOUTHERN ARTERY	3A	MCGRATH HIGHWAY		71	151	0		51
33	BOSTON	MAPC	6	MORTON STREET	203	HARVARD STREET		49	149	0		24
34	FALMOUTH	CCC	5	TEATICKET HIGHWAY	28	MARAVISTA AVENUE	Ì	87	147	0		72
34	WELLESLEY	MAPC	6	WASHINGTON STREET	16	WORCESTER STREET		99	147	0	12 8	37
34	WRENTHAM	MAPC	5	SOUTH STREET	1A	PREMIUM OUTLET BOULEVARD		79	147	0	17 6	52
37	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	TEMPLE STREET		61	145	0		10
38	WESTFIELD	PVPC	2	EAST MAIN STREET	20	LITTLE RIVER ROAD	187	52	144	0		9
39	WORCESTER	CMRPC	3	LINCOLN STREET	70	MARSH AVENUE		55	139	0		34
39	MILFORD	MAPC	3	MEDWAY ROAD	109	KMART SHOPPING PLAZA		99	139	0		39
39	WELLESLEY	MAPC	6	WORCESTER STREET (WELLESLEY FIRE STATION HEADQUARTER	9	WASHINGTON STREET (BY PROXIMITY)	+	95	139	0		34
39	LYNN	MAPC	4	WESTERN AVENUE	107	CHESTNUT STREET	129A	67	139	0		19
39	PEABODY	MAPC	4	NEWBURYPORT TURNPIKE (JUGHANDLE)	1		1	63	139	0		14
44	HAVERHILL	MVPC	4	LAFAYETTE SQUARE	97	BROADWAY	-	78	138	0		3
45	CHICOPEE	PVPC	2	MEMORIAL DRIVE	33	PENDLETON AVENUE	425	52	136	0		31
45	FRAMINGHAM	MAPC	3	CONCORD STREET	126	WAVERLEY STREET	135	64	136	0		16
45 4E	WORCESTER	CMRPC SRPEDD	3	MAIN STREET		MILL STREET	12	55 52	136	1		86
45 49	FALL RIVER BROCKTON	OCPC	5 5	BEDFORD STREET NORTH MAIN STREET		TROY STREET HOWARD STREET	+	55	136 135	0		81 85
49	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	CALIFORNIA AVENUE		62	135	1		15 15
51	WORCESTER	CMRPC	3	PARK AVENUE	9	PLEASANT STREET		65	133	0		18 18
51	LYNN	MAPC	4	WESTERN AVENUE	107	FRANKLIN STREET	1	73	133	0		8
53	HAVERHILL	MVPC	4	BRIDGE STREET	125	WATER STREET	113	84	132	0		72
53	CHELSEA	MAPC	6	REVERE BEACH PARKWAY	16	GARFIELD AVENUE	113	60	132	0		12

				2010-2012 STATEW DE TOP 200	0 INTERS	ECTION CRASH LIST					
Rank	Town	RPA	MassDOT District	reet 1	Route 1	freet 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes PDO & Non Reported Crashes
Ra	2	7	ž	St.	Ro	\$ to	8	P	岀	Fa	ie 9
53	BROCKTON	OCPC	5	WARREN AVENUE		FOREST AVENUE		44	132	0	22 22
53	WORCESTER	CMRPC	3	HIGHLAND STREET	9	LANCASTER STREET		72	132	0	15 57
57	BROCKTON	OCPC	5	MAIN STREET		LEGION PARKWAY	123	47	131	0	21 26
57	SWAMPSCOTT	MAPC	4	PARADISE ROAD	1A	SWAMPSCOTT MALL		51	131	0	20 31
59	WILBRAHAM	PVPC	2	BOSTON ROAD	20	STONY HILL ROAD		78	130	0	13 65
59	TEWKSBURY	NMCOG	4	SALEM ROAD		SOUTH STREET		62	130	0	17 45
59	WORCESTER	CMRPC	3	SOUTHBRIDGE STREET		HAMMOND STREET		62	130	0	17 45
59	SPRINGFIELD	PVPC	2	STATE STREET		SAINT JAMES AVENUE		38	130	0	23 15
63	WEYMOUTH	MAPC	6	MAIN STREET	18	WINTER STREET		65	129	0	16 49
64	LYNN	MAPC	4	WESTERN AVENUE	107	BAYVIEW AVENUE		64	128	0	16 48
64	WALPOLE	MAPC	5	PROVIDENCE TURNPIKE	1	HIGH PLAIN STREET	27	56	128	0	18 38
66 67	LOWELL	NMCOG SRPEDD	4	FATHER MORISSETTE BOULEVARD	_	CABOT STREET		40 83	124	0	21 19
67	SEEKONK SUTTON	CMRPC	5 3	FALL RIVER AVENUE WORCESTER PROVIDENCE TURNPIKE	6 146	COMMERCE WAY BOSTON ROAD		59	123 123	0	10 73 16 43
69	FALL RIVER	SRPEDD	5	SOUTH MAIN STREET	140	WASHINGTON STREET		70	122	0	13 57
69	BROCKTON	OCPC	5	CENTRE STREET	123	QUINCY STREET		37	122	1	19 17
71	BROCKTON	OCPC	5	WEST ELM STREET	123	NEWBURY STREET		41	121	0	20 21
71	BROCKTON	OCPC	5	CENTRE STREET	123	PLYMOUTH STREET		41	121	0	20 21
73	NATICK	MAPC	3	SPEEN STREET	123	CLOVERLEAF MARKETPLACE SHOPPING CENTER		80	120	0	10 70
74	SHREWSBURY	CMRPC	3	BOSTON TURNPIKE	9	SOUTH STREET		71	119	0	12 59
74	LOWELL	NMCOG	4	NESMITH STREET	38	ANDOVER STREET	110	47	119	0	18 29
74	CAMBRIDGE	MAPC	6	MASSACHUSETTS AVENUE	2A	VASSAR STREET		42	119	1	17 24
77	PEABODY	MAPC	4	ANDOVER STREET		NORTHSHORE MALL		78	118	0	10 68
77	BROCKTON	OCPC	5	BELMONT STREET	123	MANLEY STREET		46	118	0	18 28
77	WORCESTER	CMRPC	3	MAIN STREET	9	PARK AVENUE		50	118	0	17 33
77	WEYMOUTH	MAPC	6	WASHINGTON STREET	53	MAIN STREET	18	78	118	0	10 68
81	BROCKTON	OCPC	5	WARREN AVENUE	123	WEST ELM STREET		37	117	0	20 17
82	WORCESTER	CMRPC	3	GRAFTON STREET	122	PLANTATION STREET		44	116	0	18 26
82	WEYMOUTH	MAPC	6	WASHINGTON STREET	53	MIDDLE STREET		64	116	0	13 51
82	MILFORD	MAPC	3	EAST MAIN STREET	16	QUARRY SQUARE SHOPPING CENTER		76	116	0	10 66
85	WORCESTER	CMRPC	3	PARK AVENUE	9	MAY STREET		51	115	0	16 35
85	WOBURN	MAPC	4	MONTVALE AVENUE		ALBANY STREET		63	115	0	13 50
85	BRAINTREE	MAPC	6	GRANITE STREET	37	COMMON STREET		51	115	0	16 35
85 89	FALL RIVER ATTLEBORO	SRPEDD SRPEDD	5	PRESIDENT AVENUE HIGHLAND AVENUE	6 123	CVS PLAZA WASHINGTON STREET	1	63 70	115 114	0	13 50 11 59
90	WORCESTER	CMRPC	3	PROVIDENCE STREET	123 122A	MILLBURY STREET	1	49	114	0	16 33
90	WALPOLE	MAPC	5	WASHINGTON STREET	1224	POLLEY LANE	+	41	113	0	18 23
92	NORTHAMPTON	PVPC	2	MAIN STREET	9	STRONG AVENUE	1	64	112	0	12 52
92	FRAMINGHAM	MAPC	3	WAVERLEY STREET	135	BEAVER STREET	1	52	112	0	15 37
92	BROCKTON	OCPC	5	PLEASANT STREET	27	NORTH ASH STREET	1	36	112	0	19 17
95	QUINCY	MAPC	6	HANCOCK STREET	3A	EAST SQUANTUM STREET	1	59	111	0	13 46
96	QUINCY	MAPC	6	SCHOOL STREET		HANCOCK STREET		54	110	0	14 40
96	CHELSEA	MAPC	6	EVERETT AVENUE		MYSTIC MALL		66	110	0	11 55
96	GARDNER	MRPC	3	PEARSON BOULEVARD		ELM STREET		86	110	0	6 80
99	TAUNTON	SRPEDD	5	HON. GORDON M OWEN RIVERWAY		WILLIAMS STREET		45	109	0	16 29
100	HOLYOKE	PVPC	2	BEECH STREET	202	WEST FRANKLIN STREET		52	108	0	14 38
100	WEYMOUTH	MAPC	6	UNION STREET		PLEASANT STREET		72	108	0	9 63
100	BROCKTON	OCPC	5	PLEASANT STREET	27	WARREN AVENUE		48	108	0	15 33
100	BRAINTREE	MAPC	6	GRANITE STREET	37	FRANKLIN STREET		40	108	0	17 23
100	LYNN	MAPC	4	LYNNFIELD STREET	129	BROADWAY	1	72	108	0	9 63
100	SPRINGFIELD	PVPC	2	MILL STREET	1	LOCUST STREET	 	40	108	0	17 23
100	SPRINGFIELD	PVPC	2	SAINT JAMES BOULEVARD	20A	SAINT JAMES AVENUE	-	40	108	0	17 23
107	LOWELL	NMCOG	4	PAWTUCKET BOULEVARD	113	ROURKE BRIDGE	-	55	107	0	13 42
107	LYNN	MAPC	4	BROADWAY		EUCLID AVENUE	1	47	107	0	15 32

				2010-2012 STATEW DE TOP 200) INTERS	ECTION CRASH LIST						
			District					hes	Crashes	hes	shes	& Non Reported Crashes
			DOT	-	-	N	7	Crash	Cra	Crashes	Crash	28
Rank	Town	RPA	MassDOT	Street	Route	Street 2	Route	Total	EPDO	Fatal	Injury	PDO
109	NATICK	MAPC	3	WORCESTER STREET	9	DEAN ROAD		70	106	0	9	61
109	FALL RIVER	SRPEDD	5	CENTRAL STREET		DAVOL STREET		46	106	0	15	31
109	QUINCY	MAPC	6	HONORABLE THOMAS S BURGIN PARKWAY		GRANITE STREET		66	106	0	10	56
109	FALL RIVER	SRPEDD	5	BROADWAY	138	COLUMBIA STREET		58	106	0	12	46
113 113	SALEM LEOMINSTER	MAPC MRPC	3	WASHINGTON STREET NORTH MAIN STREET	12	CANAL STREET HAMILTON STREET		49 53	105 105	0	14 13	35 40
113	HOLYOKE	PVPC	2	MAIN STREET	116	CABOT STREET		53	105	0	13	40
113	LYNN	MAPC	4	WESTERN AVENUE	107	PARK STREET		45	105	0	15	30
117	PEMBROKE	MAPC_OCPC	5	CHURCH STREET	139	OLD OAK STREET		52	104	0	13	39
117	WORCESTER	CMRPC	3	HIGHLAND STREET (LINCOLN SQUARE)	9	MAIN STREET		48	104	0	14	34
117 117	CAMBRIDGE ARLINGTON	MAPC	6 4 5	MASSACHUSETTS AVENUE	2A 44	ALEWIFE BROOK PARKWAY	3	40	104	0	16	24 34
117	TAUNTON BROCKTON	SRPEDD OCPC	5	CAPE ROAD NORTH MAIN STREET	44	10-23 CAPE ROAD (BY ADDRESS) EAST ASHLAND STREET		48 36	104 104	0	14 17	19
117	FRAMINGHAM,NATICK	MAPC	3	WORCESTER ROAD	9	SHOPPERS WORLD		60	104	0	11	49
117	DANVERS	MAPC	4	ANDOVER STREET	114	GARDEN STREET		40	104	0	16	24
117	BOSTON	MAPC	6	MASSACHUSETTS AVENUE		MELNEA CASS BOULEVARD		35	104	1	15	19
117	LAWRENCE	MVPC	4	BROADWAY	28	HAVERHILL STREET	110	44	104	0	15	29
126 126	MANSFIELD TAUNTON	SRPEDD SRPEDD	5 5	ROUTE 140 BROADWAY	140 138	CHAUNCY STREET WASHINGTON STREET		43 59	103 103	0	15 11	28 48
126	HOLBROOK	MAPC	5	WEYMOUTH STREET	138	PINE STREET		35	103	0	17	18
126	HOLYOKE	PVPC	2	JACKSON STREET		COMMERCIAL STREET		43	103	0	15	28
126	NORTHAMPTON	PVPC	2	MAIN STREET	9	KING STREET	5	50	103	1	11	38
131	WATERTOWN	MAPC	6	GALEN STREET	16	WATERTOWN STREET		38	102	0	16	22
131	WORCESTER	CMRPC	3	MADISON STREET	122	KELLEY SQUARE (BY ADDRESS)		42	102	0	15	27
131	SPRINGFIELD	PVPC	2	PLAINFIELD STREET	20	WEST STREET	20	34 50	102	0	17 13	17 37
131 131	LOWELL HAVERHILL	NMCOG MVPC	4	BRIDGE STREET MAIN STREET	125	FRENCH STREET WINTER STREET	97	54	102 102	0	12	42
131	METHUEN	MVPC	4	PLEASANT VALLEY STREET	113	MILK STREET	37	54	102	0	12	42
137	SPRINGFIELD	PVPC	2	STATE STREET		THOMPSON STREET		33	101	0	17	16
137	BROCKTON	OCPC	5	OAK STREET		BELAIR STREET		33	101	0	17	16
137	LOWELL	NMCOG	4	BRIDGE STREET	38	WEST THIRD STREET		53	101	0	12	41
137 141	WALTHAM DEDHAM	MAPC MAPC	4 6	LEXINGTON STREET BOSTON PROVIDENCE TURNPIKE		BEAVER STREET LEGACY PLACE		41 52	101 100	0	15 12	26 40
141	BELLINGHAM	MAPC	3	HARTFORD AVENUE	126	CROSSROADS PLAZA		64	100	0	9	55
141	MANSFIELD	SRPEDD	5	ROUTE 140	140	SCHOOL STREET		56	100	0	11	45
141	FITCHBURG	MRPC	3	WATER STREET	12	CENTRAL PLAZA		64	100	0	9	55
145	HOLYOKE	PVPC	2	LOWER WESTFIELD ROAD		WHITING FARMS ROAD	1	51	99	0	12	39
145	SPRINGFIELD	PVPC	2	STATE STREET	10	ORLEANS STREET	+	31	99	0	17	14
145 145	WELLESLEY, NEWTON SPRINGFIELD	MAPC PVPC	6	WASHINGTON STREET BOSTON ROAD	16 20	RIVER STREET PARKER STREET	21	67 39	99 99	0	8 15	59 24
145	BROCKTON	OCPC	5	NORTH MONTELLO STREET	28	EAST ASHLAND STREET	- 21	35	99	0	16	19
145	WHITMAN	OCPC	5	BEDFORD STREET	18	TEMPLE STREET	27	67	99	0	8	59
145	ARLINGTON	MAPC	4	MASSACHUSETTS AVENUE	3	MYSTIC STREET	3	59	99	0	10	49
145	BROCKTON	OCPC	5	BELMONT STREET	123	LINWOOD STREET	1	43	99	0	14	29
153 153	HOLYOKE MANSFIELD	PVPC SRPEDD	2 5	CHERRY STREET CHAUNCY STREET	202 106	SOLDIERS HOME ROAD NORTH MAIN STREET	+	46 54	98 98	0	13 11	33 43
153	BOSTON	SRPEDD MAPC	6	CHAUNCY STREET CHARLESGATE WEST	100	COMMONWEALTH AVENUE	2	34	98	0	11	43 18
153	SPRINGFIELD	PVPC	2	ROOSEVELT AVENUE		PAGE BOULEVARD	20A	30	98	0	17	13
153	WEYMOUTH	MAPC	6	PLEASANT STREET		WASHINGTON STREET	53	54	98	0	11	43
153	SALEM	MAPC	4	HIGHLAND AVENUE	107	MARLBOROUGH ROAD		46	98	0	13	33
159	SOMERSET	SRPEDD	5	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	LEES RIVER AVENUE	-	41	97	0	14	27
159 159	WALTHAM BROCKTON	MAPC OCPC	4 5	RIVER STREET EAST BATTLES STREET		SEYON STREET NORTH MAIN STREET	1	41 33	97 97	0	14 16	27 17
159	HOLYOKE	PVPC	2	WESTFIELD ROAD	202	HOMESTEAD AVENUE	+	53	97	0	11	42
100							1					

				2010-2012 STATEW DE TOP 200	INTERS	ECTION CRASH LIST						
			District						S 60	0	S	Reported Crashes
			ĕ					Crashes	EPDO Crashe	Crashes	Crashes	Non
			MassDOT	-	←	N	7	Sras	ö	Sras	Cra	ĕ ≪
녿	Town	∢	Jssi	Street	Route	treet 2	Route	Total (8	Fatal (Injury	
Rank	Το	RPA	₩ W	Str	8	Str	8	Tol	毌	Fai	ij	PDO
159	STOUGHTON	MAPC_OCPC	5	CANTON STREET	27	SCHOOL STREET		48	97	1	10	37
159	CHICOPEE	PVPC	2	MEMORIAL DRIVE	33	CHICOPEE MARKETPLACE		41	97	0	14	27
159	RANDOLPH	MAPC	6	NORTH MAIN STREET	28	WARREN STREET	139	49	97	0	12	37
166	WORCESTER	CMRPC	3	GRAFTON STREET	122	HAMILTON STREET		40	96	0	14	26
166	BOSTON	MAPC	6	DUDLEY STREET		HARRISON AVENUE		32	96	0	16	16
166	ABINGTON	OCPC	5	BEDFORD STREET	18	RANDOLPH STREET	139	52	96	0	11	41
166 166	WEYMOUTH	MAPC CMRPC	6	MAIN STREET	18 9	COLUMBIAN STREET		48 60	96 96	0	12 9	36 51
166	SHREWSBURY BROCKTON	OCPC	5	BOSTON TURNPIKE NORTH MONTELLO STREET	28	SOUTH QUINSIGAMOND AVENUE LIVINGSTON ROAD	1	32	96	0	16	16
166	WORCESTER	CMRPC	3	GOLD STAR BOULEVARD	12	MILLBROOK STREET	1	44	96	0	13	31
173	HAVERHILL	MVPC	4	WASHINGTON STREET	110	RIVER STREET	110	59	95	0	9	50
173	BROCKTON	OCPC	5	REYNOLDS HIGHWAY	27	CHRISTYS DRIVE	110	31	95	0	16	15
173	MARLBOROUGH	MAPC	3	BOSTON POST ROAD WEST	20	NORTHBORO ROAD EAST		79	95	0	4	75
173	WORCESTER	CMRPC	3	PARK AVENUE	9	HIGHLAND STREET		51	95	0	11	40
173	FAIRHAVEN	SRPEDD	5	ALDEN ROAD		BRIDGE STREET		55	95	0	10	45
173	SPRINGFIELD	PVPC	2	SAINT JAMES AVENUE		TAPLEY STREET		39	95	0	14	25
173	LOWELL	NMCOG	4	WESTFORD STREET	3A	WILDER STREET		43	95	0	13	30
173	NORTHBOROUGH	CMRPC	3	WEST MAIN STREET	20	SOUTH STREET	135	83	95	0	3	80
173	CHELSEA	MAPC	6	REVERE BEACH PARKWAY	16	WASHINGTON AVENUE		37	95	2	10	25
182	WALTHAM	MAPC	4	MAIN STREET	20	MOODY STREET		46	94	0	12	34
182	SALEM	MAPC	4	NORTH STREET	114	MASON STREET		42	94	0	13	29
182	MIDDLEBOROUGH	SRPEDD	5	ROUTE 44	44	PLYMPTON STREET	105	42	94	0	13	29
182	NATICK	MAPC	3	WORCESTER STREET	9	OAK STREET		66	94	0	7	59
182	SOMERSET	SRPEDD	5	BRAYTON AVENUE		SLADES FERRY AVENUE		42	94	0	13	29
182	FALL RIVER	SRPEDD	5	ROBESON STREET		PINE STREET		46	94	0	12	34
182	LYNN	MAPC	4	WESTERN AVENUE	107	EASTERN AVENUE		58	94	0	9	49
189	NEWTON	MAPC	6	WASHINGTON STREET	16	NEWTON-WELLESLEY HOSPITAL		41	93	0	13	28
189 189	MIDDLEBOROUGH WESTFORD	SRPEDD NMCOG	5	SOUTH MAIN STREET LITTLETON ROAD	105 110	PROSPECT STREET BOSTON ROAD		37 73	93 93	0	14 5	23 68
189	SEEKONK	SRPEDD	5	FALL RIVER AVENUE	110 114A	COUNTY STREET	1	53	93	0	10	43
189	BOSTON	MAPC	6	COLUMBIA ROAD	114A	BUTTONWOOD STREET	1	29	93	0	16	13
189	ACTON	MAPC	3	MASSACHUSETTS AVENUE	2	TAYLOR ROAD	1	37	93	0	14	23
189	BROCKTON	OCPC	5	COURT STREET	27	MONTELLO STREET	28	37	93	0	14	23
196	LOWELL	NMCOG	4	PAWTUCKET STREET		SCHOOL STREET		39	92	1	11	27
196	WESTBOROUGH	CMRPC	3	BOSTON WORCESTER TURNPIKE	9	LYMAN STREET	1	64	92	0	7	57
196	HAVERHILL	MVPC	4	MAIN STREET	97	BAILEY BOULEVARD		40	92	0	13	27
196	WORCESTER	CMRPC	3	PLEASANT STREET		IRVING STREET		40	92	0	13	27
196	LOWELL	NMCOG	4	SCHOOL STREET		BRANCH STREET		36	92	0	14	22
196	SEEKONK	SRPEDD	5	TAUNTON AVENUE	44	FALL RIVER AVENUE	114A	56	92	0	9	47
196	BROCKTON	OCPC	5	NORTH PEARL STREET	27	OAK STREET		36	92	0	14	22
196	LEOMINSTER	MRPC	3	NORTH MAIN STREET	12	NELSON STREET		64	92	0	7	57
196	WALPOLE	MAPC	5	PROVIDENCE TURNPIKE	1	CONEY STREET		48	92	0	11	37
196	BROCKTON	OCPC	5	CRESCENT STREET	27	LYMAN STREET	ļ	32	92	0	15	17
196	SHREWSBURY	CMRPC	3	HARTFORD TURNPIKE	20	GRAFTON STREET		47	92	1	9	37

Top Crash Intersections 2010-2012



HOLYOKE

HOLYOKE STREET HOLYOKE MALL AT INGLESIDE

MassDOT District 2
RPA PVPC
EPDO 367
Number of Fatal Crashes 0
Number of Injury Crashes 33
Number of Non-Injury Crashes 202
Total Crashes 235

RANK

1

Legend

Crash Locations 2010-2012

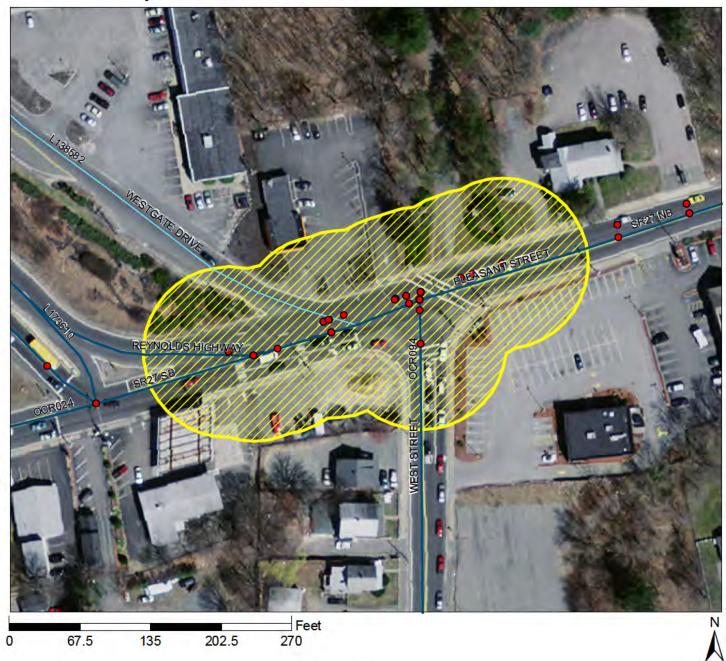
/ Local Roads

All Functional Classification Except Local Roads

Top Crash Intersections



Top Crash Intersections 2010-2012



BROCKTON

PLEASANT STREET ROUTE 27 WEST STREET

MassDOT District 5
RPA OCPC
EPDO 283
Number of Fatal Crashes 0
Number of Injury Crashes 44
Number of Non-Injury Crashes 63
Total Crashes 107

RANK

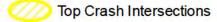
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Legend

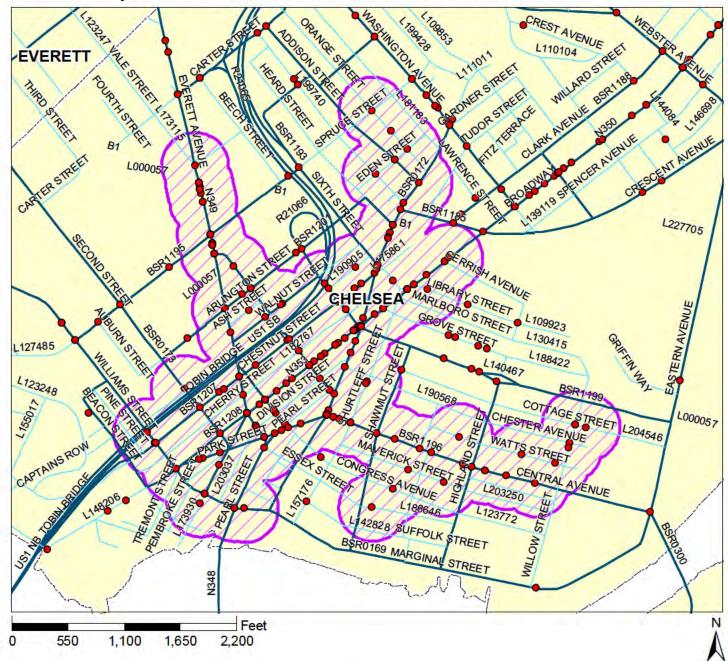
Crash Locations 2010-2012

✓ Local Roads

✓ All Functional Classification Except Local Roads







RANK 1

CHELSEA

RPA MAPC
EPDO 1017

Number of Fatal Pedestrian Crashes 1

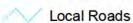
Number of Injury Pedestrian Crashes 189

Number of Non-Injury Pedestrian Crashes 62

Total Pedestrian Crashes 252

Legend

Pedestrian Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





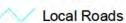
RANK

FALL RIVER

RPA SRPEDD
EPDO 595
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 111
Number of Non-Injury Pedestrian Crashes 40
Total Pedestrian Crashes 151

Legend

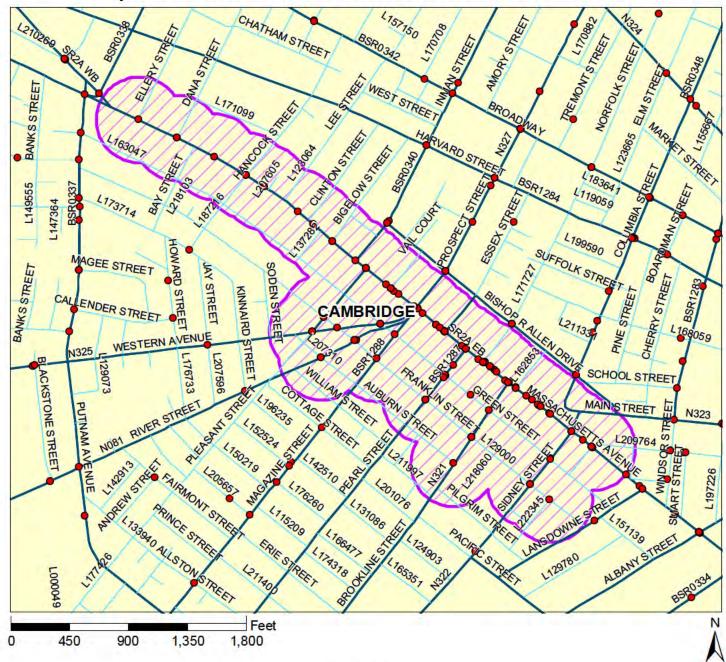
Pedestrian Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK 3

CAMBRIDGE

RPA MAPC EPDO 473 Number of Fa

Number of Fatal Pedestrian Crashes 4
Number of Injury Pedestrian Crashes 73
Number of Non-Injury Pedestrian Crashes 68
Total Pedestrian Crashes 145

Legend

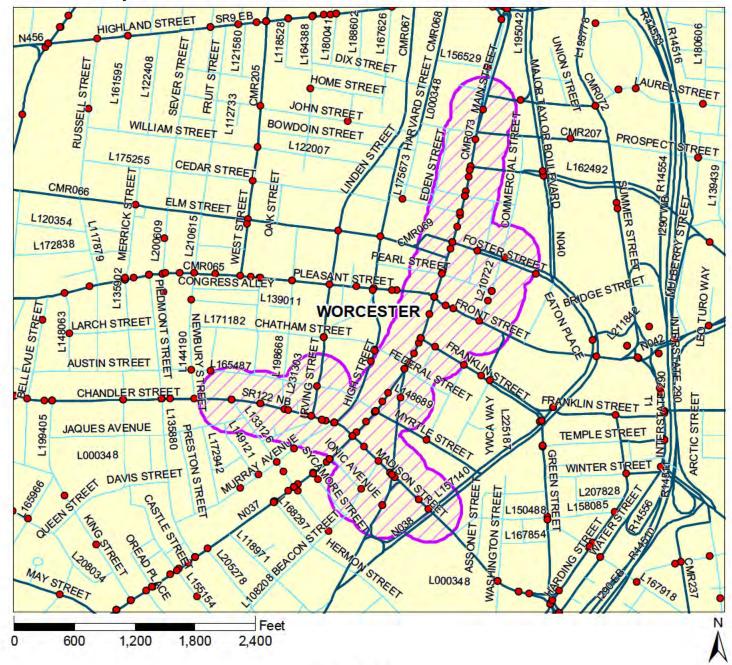
Pedestrian Crash Locations 2002-2012

Local Roads

✓ All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK

28

WORCESTER

RPA CMRPC FPDO 453 Number of Fatal Pedestrian Crashes 0 Number of Injury Pedestrian Crashes Number of Non-Injury Pedestrian Crashes Total Pedestrian Crashes

113

Legend

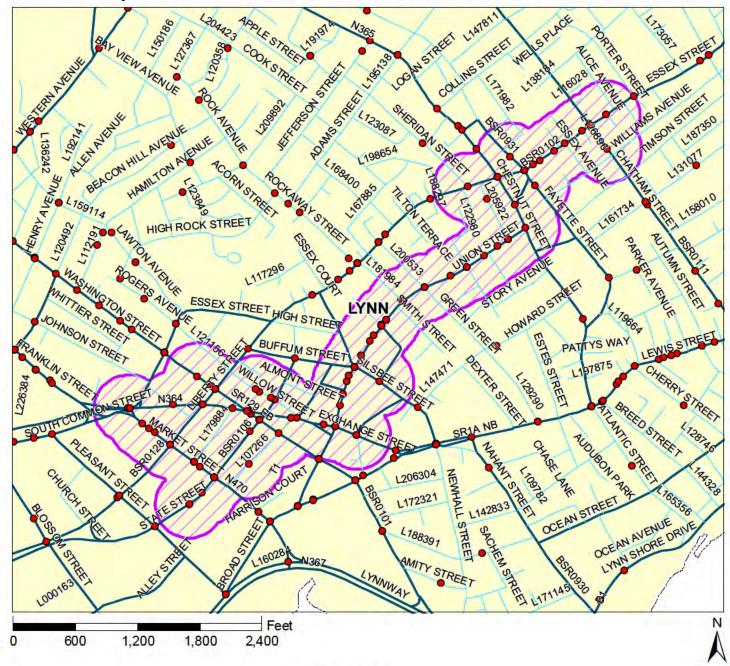
Pedestrian Crash Locations 2002-2012

Local Roads

All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK 5

LYNN

RPA MAPC
EPDO 447

Number of Fatal Pedestrian Crashes 0

Number of Injury Pedestrian Crashes 80

Number of Non-Injury Pedestrian Crashes 47

Total Pedestrian Crashes 127

Legend

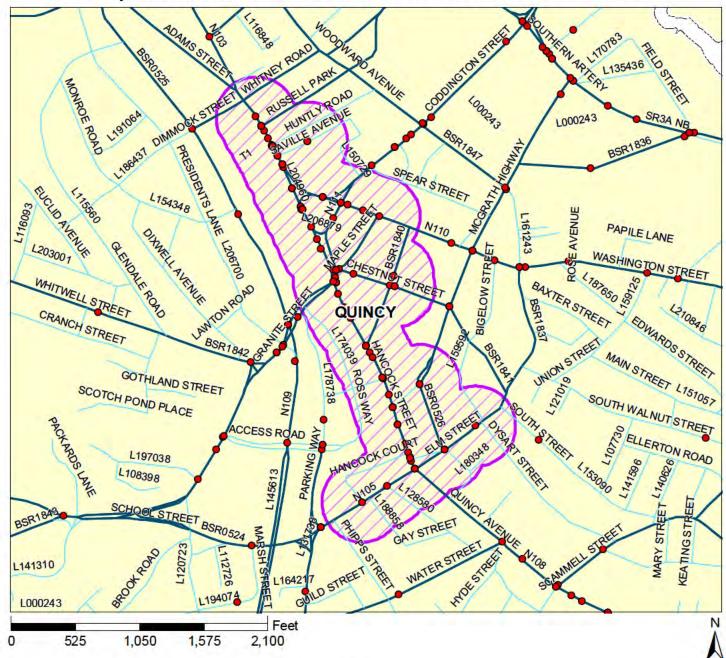
Pedestrian Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK 6

35

QUINCY

RPA MAPC
EPDO 350

Number of Fatal Pedestrian Crashes 1

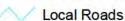
Number of Injury Pedestrian Crashes 65

Number of Non-Injury Pedestrian Crashes

Total Pedestrian Crashes 97

Legend

Pedestrian Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK 7

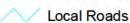
BOSTON

RPA MAPC EPDO 308

Number of Fatal Pedestrian Crashes 3
Number of Injury Pedestrian Crashes 50
Number of Non-Injury Pedestrian Crashes 28
Total Pedestrian Crashes 81

Legend

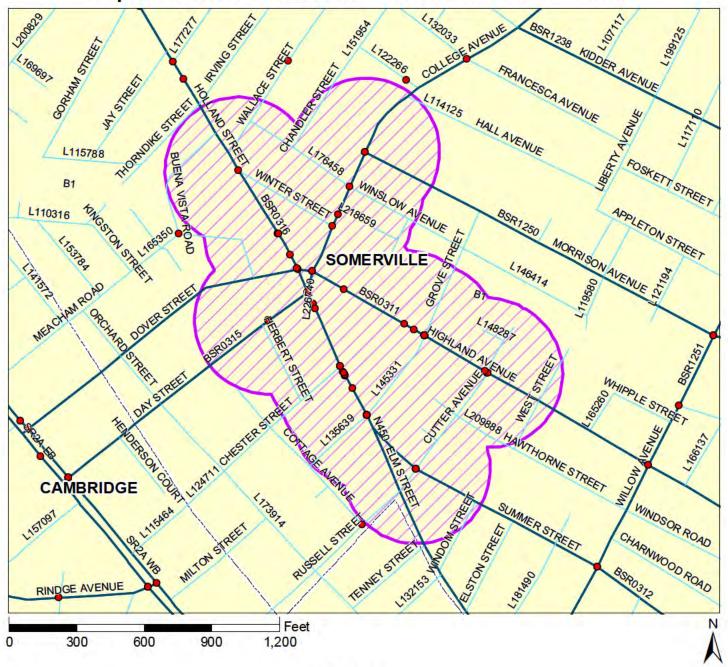
Pedestrian Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK 8

SOMERVILLE, CAMBRIDGE

RPA MAPC
EPDO 280

Number of Fatal Pedestrian Crashes 1

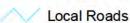
Number of Injury Pedestrian Crashes 52

Number of Non-Injury Pedestrian Crashes 10

Total Pedestrian Crashes 63

Legend

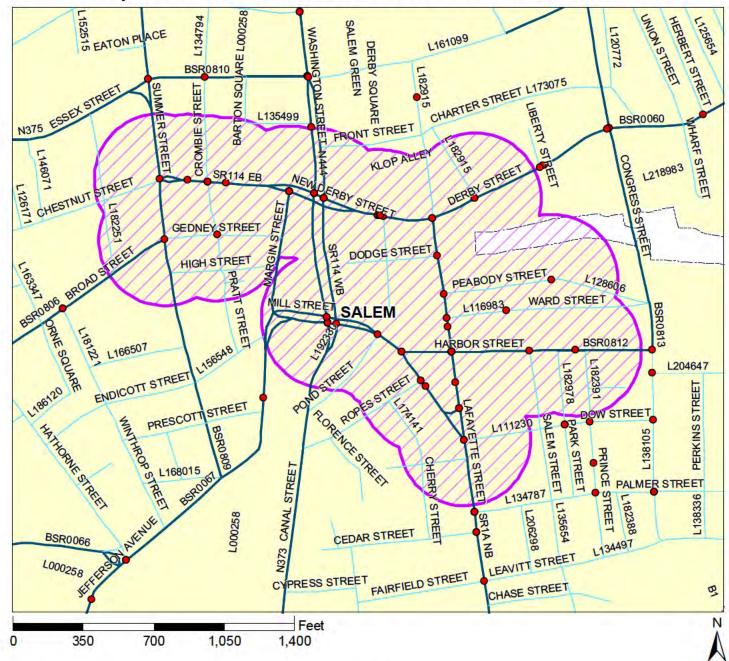
Pedestrian Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK 9

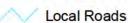
SALEM

RPA MAPC EPDO 257

Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 48
Number of Non-Injury Pedestrian Crashes 17
Total Pedestrian Crashes 65

Legend

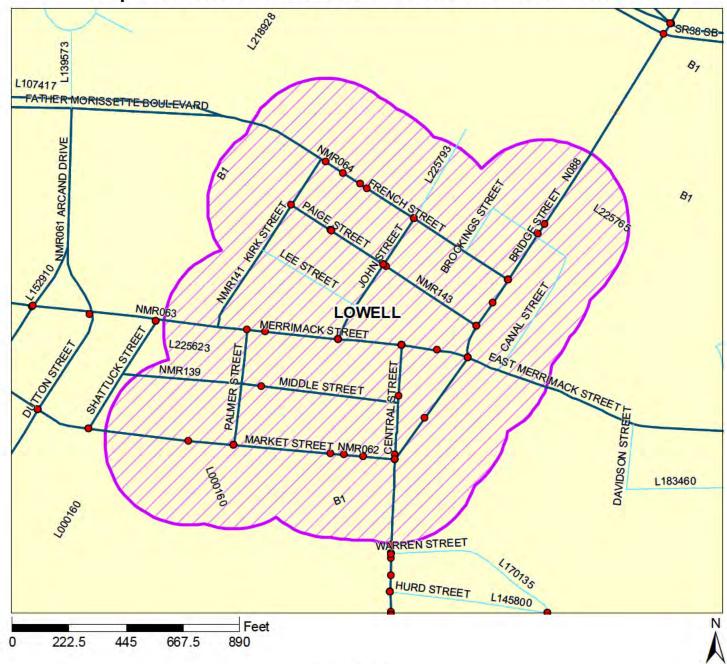
Pedestrian Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK 10

LOWELL

RPA NMCOG
EPDO 237

Number of Fatal Pedestrian Crashes 0

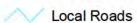
Number of Injury Pedestrian Crashes 43

Number of Non-Injury Pedestrian Crashes 22

Total Pedestrian Crashes 65

Legend

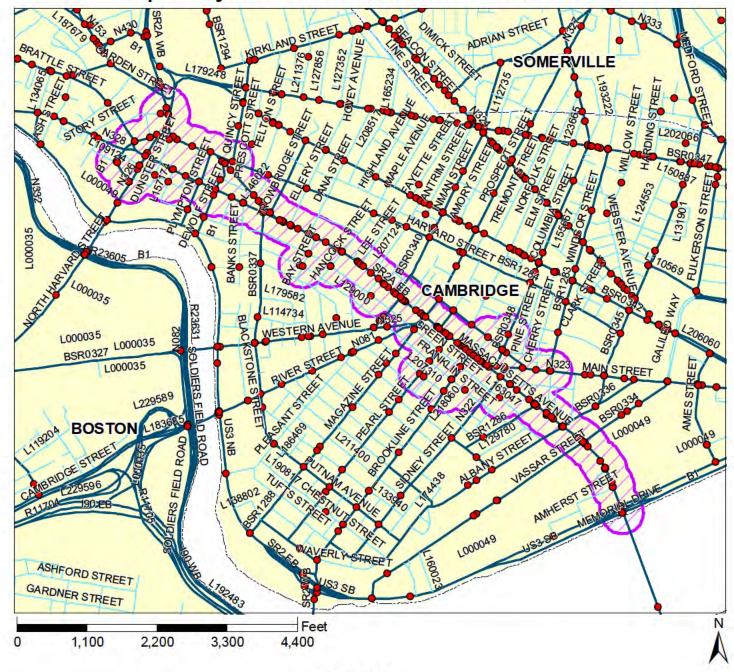
Pedestrian Crash Locations 2002-2012



All Functional Classification Except Local Roads

Top Pedestrian Crash Cluster





RANK

1

CAMBRIDGE

RPA MAPC
EPDO 1167

Number of Fatal Bicycle Crashes 2

Number of Injury Bicycle Crashes 203

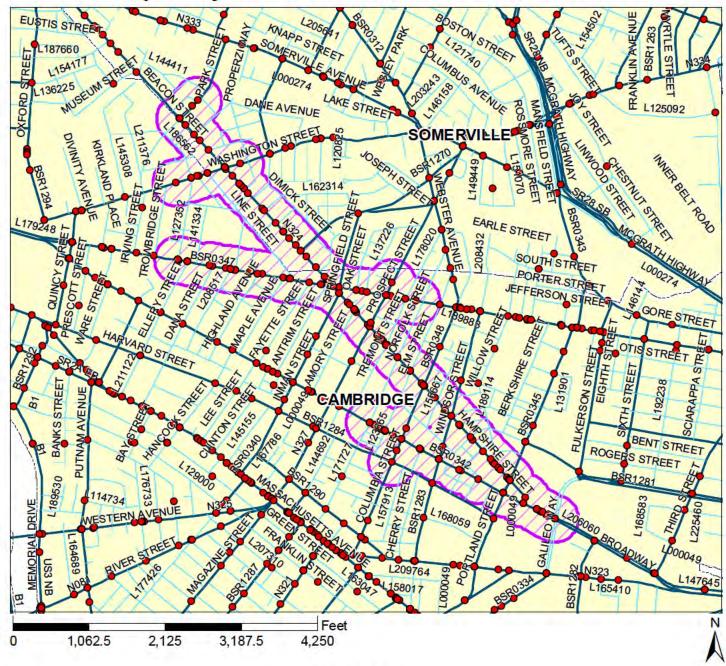
Number of Non-Injury Bicycle Crashes 132

Total Bicycle Crashes 337

Legend

- Bicycle Crash Locations 2002-2012
- ✓ Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





RANK

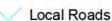
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CAMBRIDGE, SOMERVILLE

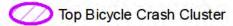
RPA MAPC
EPDO 923
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 166
Number of Non-Injury Bicycle Crashes 93
Total Bicycle Crashes 259

Legend

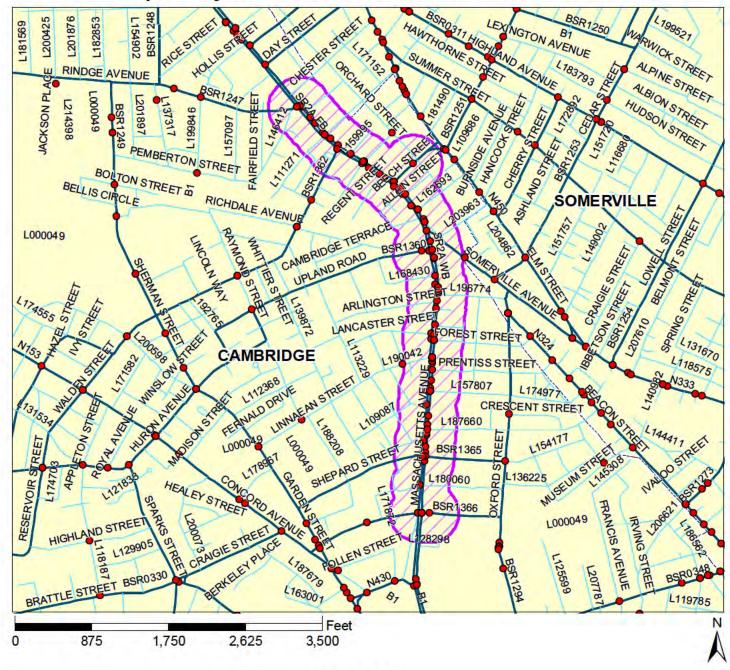
Bicycle Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads







RANK

CAMBRIDGE, SOMERVILLE

RPA MAPC
EPDO 500

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 91

Number of Non-Injury Bicycle Crashes 45

Total Bicycle Crashes 136

Legend

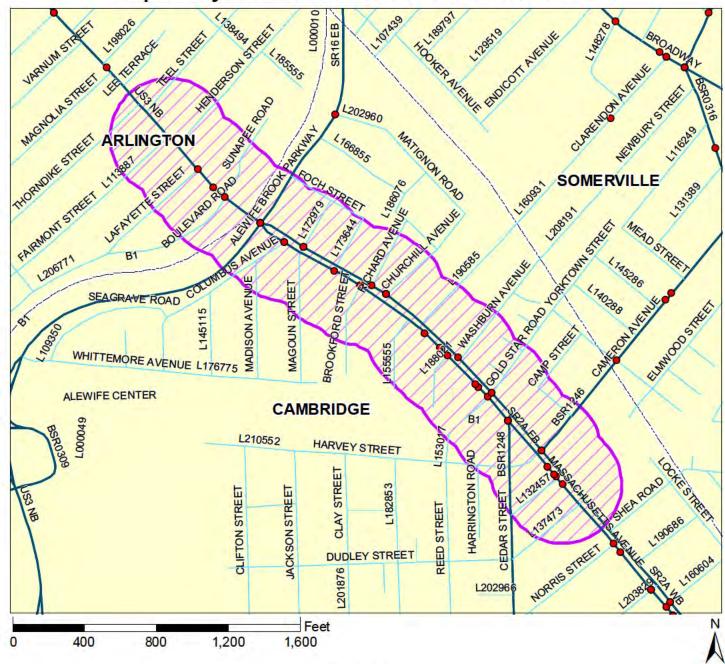
Bicycle Crash Locations 2002-2012

/ Local Roads

✓ All Functional Classification Except Local Roads

Top Bicycle Crash Cluster





RANK

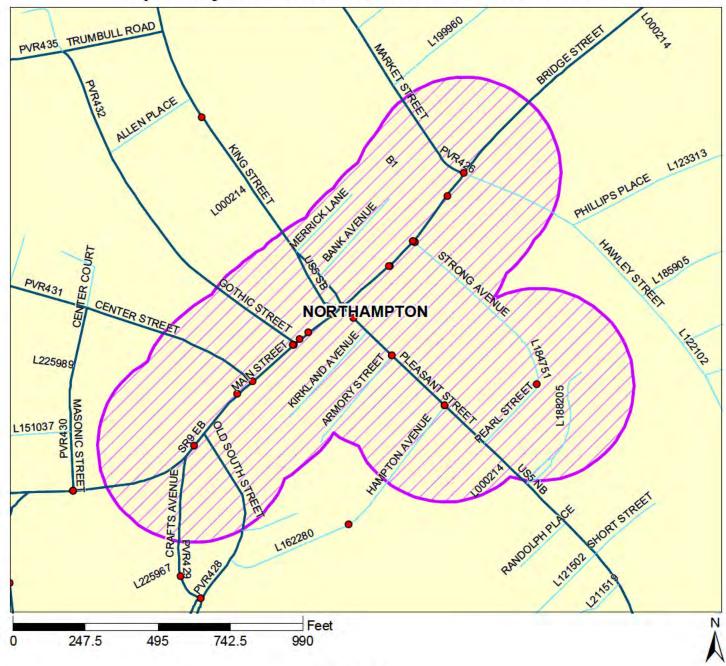
CAMBRIDGE, ARLINGTON

RPA MAPC
EPDO 150
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 28
Number of Non-Injury Bicycle Crashes 10
Total Bicycle Crashes 38

Legend

- Bicycle Crash Locations 2002-2012
- ✓ Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





NORTHAMPTON

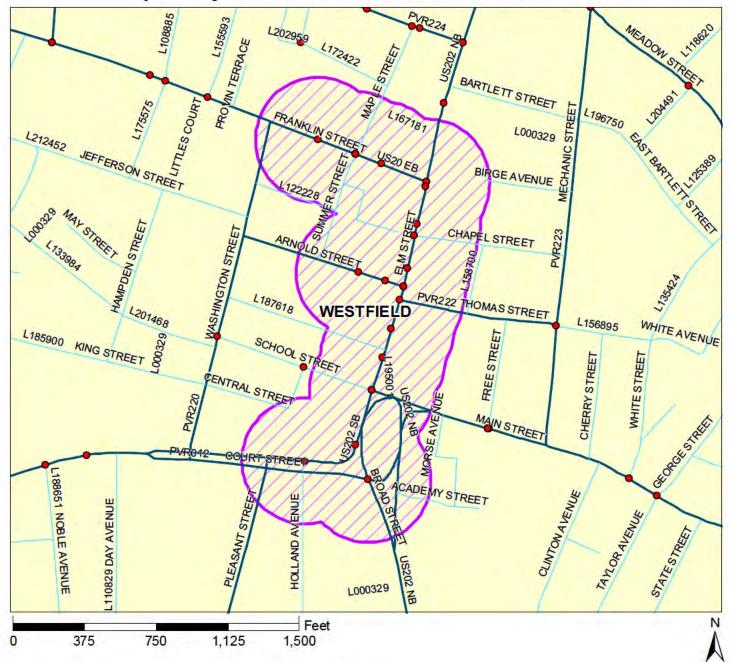
RPA PVPC
EPDO 125
Number of Fatal Bicycle Crashes 1
Number of Injury Bicycle Crashes 22
Number of Non-Injury Bicycle Crashes
Total Bicycle Crashes 28

Legend

RANK

- Bicycle Crash Locations 2002-2012
- // Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





RANK 6

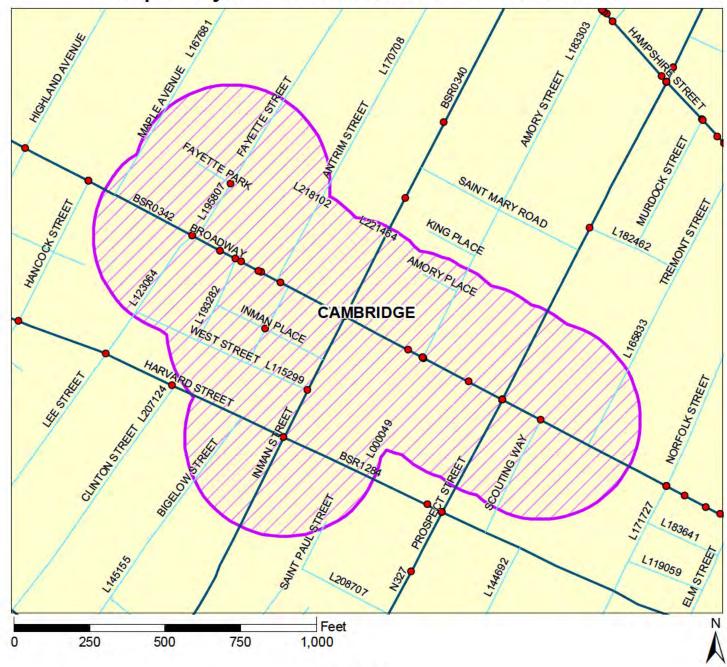
WESTFIELD

RPA PVPC
EPDO 119
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 23
Number of Non-Injury Bicycle Crashes 4
Total Bicycle Crashes 27

Legend

- Bicycle Crash Locations 2002-2012
- △ Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





CAMBRIDGE

RPA MAPC
EPDO 118

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 20

Number of Non-Injury Bicycle Crashes 18

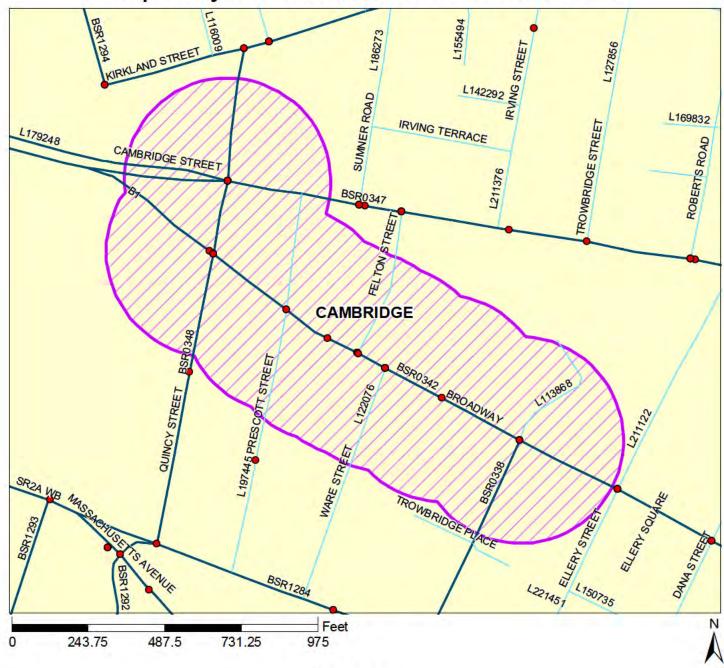
Total Bicycle Crashes 38

Legend

RANK

- Bicycle Crash Locations 2002-2012
- △ Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





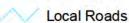
CAMBRIDGE

RPA MAPC
EPDO 102
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 18
Number of Non-Injury Bicycle Crashes 12
Total Bicycle Crashes 30

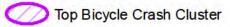
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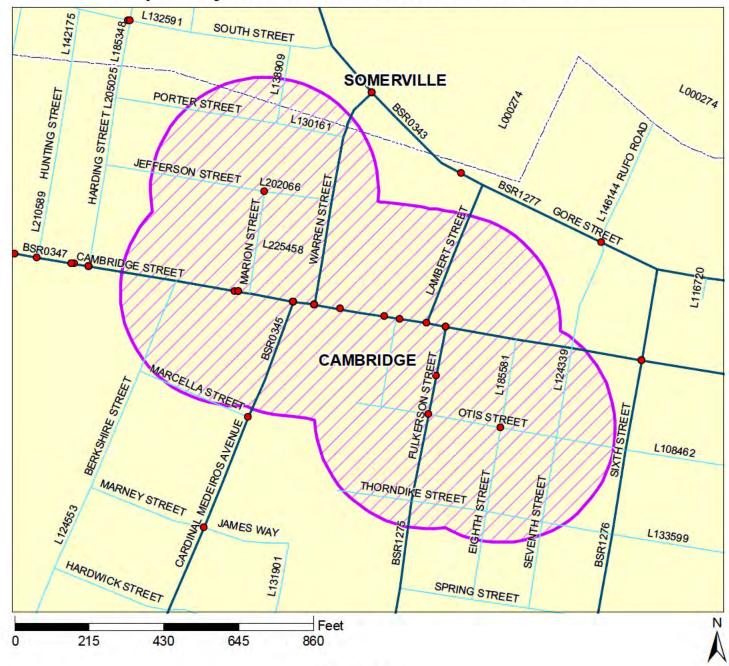
Bicycle Crash Locations 2002-2012



✓ All Functional Classification Except Local Roads







RANK 9

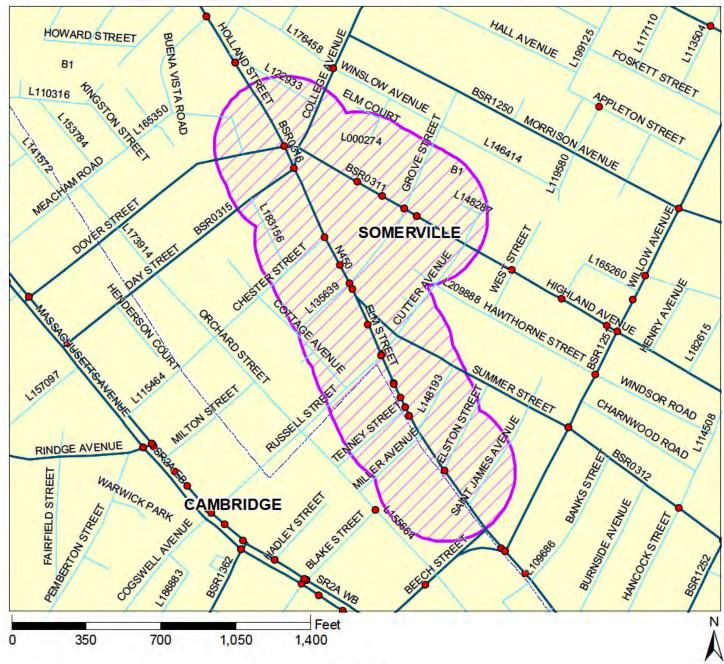
CAMBRIDGE, SOMERVILLE

RPA MAPC
EPDO 96
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 17
Number of Non-Injury Bicycle Crashes 11
Total Bicycle Crashes 28

Legend

- Bicycle Crash Locations 2002-2012
- / Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary





RANK 10

SOMERVILLE, CAMBRIDGE

RPA MAPC
EPDO 87

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 16

Number of Non-Injury Bicycle Crashes 7

Total Bicycle Crashes 23

Legend

- Bicycle Crash Locations 2002-2012
- ✓ Local Roads
- ✓ All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

