2009 TOP CRASH LOCATIONS REPORT

AUGUST 2011

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Massachusetts Department of Transportation
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Deval L. Patrick, Governor
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Frank DePaola, Acting Administrator

massDOT
Massachusetts Department of Transportation
Highway Division

Dear Reader:

Enclosed is MassDOT Highway Division's edition of the 2009 *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, focuses on intersection locations and is based on crashes entered into the Registry of Motor Vehicles' Crash Data System (CDS). The 2009 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 Traffic Engineer.

In an effort to reduce injury and fatal crashes, MassDOT, in cooperation with a variety of public and private safety stakeholders, is in the process of updating the Massachusetts Strategic Highway Safety Plan (SHSP). To view the original SHSP (from 2006), 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 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.

This dataset may be used as a screening tool to evaluate locations and make changes to improve the safety of our roadway system. The 2009 *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. 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.

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,

Frank DePaola, P.E.
Administrator

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 617-973-7000, TDD: 617-973-7306
www.mass.gov/massdot

TOP HIGH CRASH LOCATIONS REPORT

Top 200 Intersection Locations 2007-2009
Top Pedestrian Locations 2002-2009
Top Bicycle Locations 2002-2009

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 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 2007-2009 and also includes the weighted (by crash severity) highest frequency bicycle-motor vehicle and pedestrian-motor vehicle crash locations for 2002-2009.

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 2007 and 2009 is nearly 89%. 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. General 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	2005	2006	2007	2008	2009
Operator	40,098	40,533	34,348	26,715	9,303
Local police	102,698	94,602	95,400	93,649	92,819
Other	353	201	153	198	123
State police	14,935	14,524	14,608	15,822	15,519
TOTAL	158,084	149,860	144,509	136,384	117,764

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.

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.

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). 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 mass.gov/mhd/topcrashclusters. 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 2007 to 2009. 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 eight year period from 2002-2009, 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."

2007-2009 STATEWIDE TOP 200 INTERSECTION 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
1	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY		VARNUM AVENUE		137	281	0	36	101
2	BROCKTON	OCPC	5	PLEASANT STREET	27	WEST STREET		90	242	0	38	52
3	FRAMINGHAM	MAPC	3	HOLLIS STREET	126	WAVERLEY STREET	135	103	235	0	33	70
4	SWANSEA	SRPEDD	5	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	SWANSEA MALL DRIVE		110	230	0	30	80
5	RAYNHAM	SRPEDD	5	ROUTE 44	44	ORCHARD STREET		91	227	0	34	57
6	MILTON	MAPC	6	RANDOLPH AVENUE		CHICKATAWBUT ROAD		75	223	0	37	38
7	LOWELL	NMCOG	4	PLAIN STREET		CHELMSFORD STREET	110	125	221	0	24	101
8	FALL RIVER	SRPEDD	5	PLYMOUTH AVENUE	81	RODMAN STREET		111	219	0	27	84
9	LOWELL	NMCOG	4	MIDDLESEX STREET		WOOD STREET		121	217	0	24	97
10	SWANSEA	SRPEDD	5	MARKET STREET	136	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	99	211	0	28	71
11	WEYMOUTH	MAPC	6	MAIN STREET	18	MIDDLE STREET		117	209	0	23	94
12	FALL RIVER	SRPEDD	5	PRESIDENT AVENUE	6	NORTH MAIN STREET		103	207	0	26	77
13	LYNN	MAPC	4	WESTERN AVENUE	107	CHATHAM STREET		85	205	0	30	55
14	WESTFIELD	PVPC	2	NORTH ELM STREET	202	POCHASSIC STREET		112	204	0	23	89
15	LOWELL	NMCOG	4	BRIDGE STREET	38	VETERANS OF FOREIGN WARS HIGHWAY		93	201	0	27	66
16	STOUGHTON	MAPC & OCPC	5	WASHINGTON STREET	138	CENTRAL STREET		112	196	0	21	91
17	WORCESTER	CMRPC	3	BELMONT STREET	9	OAK AVENUE		91	195	0	26	65
17	WORCESTER	CMRPC	3	CHANDLER STREET	122	MURRAY AVENUE		75	195	0	30	45
19	NEW BEDFORD	SRPEDD	5	ALFRED BESSETTE MEMORIAL HIGHWAY	140	KEMPTON STREET	6	75	191	0	29	46
20	WORCESTER	CMRPC	3	HIGHLAND STREET (LINCOLN SQUARE)	9	MAIN STREET		100	188	0	22	78
21	WEYMOUTH	MAPC	6	WASHINGTON STREET	53	MIDDLE STREET		91	183	0	23	68
22	DEDHAM	MAPC	6	WASHINGTON STREET		INCINERATOR ROAD		62	182	0	30	32
23	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	COCHITUATE ROAD	30	69	181	0	28	41
24	LYNN	MAPC	4	WESTERN AVENUE	107	FRANKLIN STREET		86	178	0	23	63
25	BROCKTON	OCPC	5	BELMONT STREET	123	MANLEY STREET		58	174	0	29	29
25	CAMBRIDGE	MAPC	6	MASSACHUSETTS AVENUE	2A	PROSPECT STREET		85	174	1	20	64
27	BOSTON	MAPC	6	MASSACHUSETTS AVENUE		MELNEA CASS BOULEVARD		72	172	0	25	47
27	CHICOPEE	PVPC	2	BROADWAY		CHURCH STREET		76	172	0	24	52
27	SEEKONK	SRPEDD	5	TAUNTON AVENUE	44	FALL RIVER AVENUE	114A	80	172	0	23	57
30	SOMERVILLE	MAPC	4	MYSTIC AVENUE	38	MCGRATH HIGHWAY	28	67	171	0	26	41
30	LYNN	MAPC	4	WESTERN AVENUE	107	WASHINGTON STREET	129	75	171	0	24	51
32	FALL RIVER	SRPEDD	5	PLEASANT STREET		QUARRY STREET		92	168	0	19	73
32	LINCOLN,CONCORD	MAPC	4	CONCORD TURNPIKE (CROSBY'S CORNER)	2	CAMBRIDGE TURNPIKE	2	84	168	0	21	63
34	LOWELL	NMCOG	4	CHURCH STREET	110	APPLETON STREET		83	167	0	21	62
34	WALTHAM	MAPC	4	LEXINGTON STREET		TRAPELO ROAD		91	167	0	19	72
36	NORWOOD	MAPC	5	BLUE STAR MEMORIAL HIGHWAY	1	EVERETT STREET		73	165	0	23	50
37	BOSTON	MAPC	6	MORTON STREET	203	HARVARD STREET		52	164	0	28	24
37	WORCESTER	CMRPC	3	SOUTHBRIDGE STREET		HAMMOND STREET		68	164	0	24	44
37	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	TEMPLE STREET		76	164	0	22	54
37	WEYMOUTH	MAPC	6	MAIN STREET	18	POND STREET		80	164	0	21	59
41	WORCESTER	CMRPC	3	PARK AVENUE	9	PLEASANT STREET		91	163	0	18	73
42	BROCKTON	OCPC	5	BELMONT STREET	123	LINWOOD STREET		62	162	0	25	37
43	MARLBOROUGH	MAPC	3	EAST MAIN STREET	20	CURTIS AVENUE		101	161	0	15	86
44	WORCESTER	CMRPC	3	PARK AVENUE	9	HIGHLAND STREET		83	159	0	19	64
44	SHREWSBURY	CMRPC	3	BOSTON TURNPIKE	9	SOUTH STREET		79	159	0	20	59
46	LOWELL	NMCOG	4	THORNDIKE STREET	3A	HIGHLAND STREET		82	158	0	19	63
46	WORCESTER	CMRPC	3	LINCOLN STREET	70	MARSH AVENUE		78	158	0	20	58
48	MIDDLEBOROUGH	SRPEDD	5	ROUTE 44	44	PLYMPTON STREET	105	72	157	1	19	52
49	WOBURN	MAPC	4	MAIN STREET	38	PLEASANT STREET		92	156	0	16	76
50	BROCKTON	OCPC	5	ASH STREET		WEST ELM STREET		59	155	0	24	35
50	QUINCY	MAPC	6	SOUTHERN ARTERY	3A	MCGRATH HIGHWAY		71	155	0	21	50
52	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY		AIKEN STREET		68	152	0	21	47
53	SUTTON	CMRPC	3	WORCESTER PROVIDENCE TURNPIKE	146	BOSTON ROAD		67	151	0	21	46
54	WORCESTER	CMRPC	3	LINCOLN STREET	70	MELROSE STREET		53	150	1	22	30
55	BOSTON	MAPC	6	DORCHESTER AVENUE		GALLIVAN BOULEVARD	203	49	149	0	25	24
55	QUINCY	MAPC	6	HONORABLE THOMAS S BURGIN PARKWAY		CENTRE STREET		73	149	0	19	54
57	FRAMINGHAM	MAPC	3	COCHITUATE ROAD	30	SPEEN STREET		76	148	0	18	58
58	WORCESTER	CMRPC	3	BELMONT STREET	9	LINCOLN STREET		79	147	0	17	62
58	HOLBROOK	MAPC	5	SOUTH FRANKLIN STREET	37	UNION STREET	139	63	147	0	21	42
58	FALL RIVER	SRPEDD	5	SOUTH MAIN STREET	138	GLOBE STREET		83	147	0	16	67
58	PLAINVILLE	SRPEDD	5	MESSENGER STREET	106	TAUNTON STREET	152	67	147	0	20	47
62	ABINGTON	OCPC	5	BEDFORD STREET	18	RANDOLPH STREET	139	86	146	0	15	71

2007-2009 STATEWIDE TOP 200 INTERSECTION 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	WOBURN	MAPC	4	MONTVALE AVENUE		ALBANY STREET		85	145	0	15	70
63	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	CALIFORNIA AVENUE		61	145	0	21	40
65	MANSFIELD	SRPEDD	5	ROUTE 140	140	SCHOOL STREET		68	144	0	19	49
65	WORCESTER	CMRPC	3	BELMONT STREET	9	PLANTATION STREET		72	144	0	18	54
67	QUINCY	MAPC	6	HANCOCK STREET	3A	EAST SQUANTUM STREET		75	143	0	17	58
67	WESTFIELD	PVPC	2	EAST MAIN STREET	20	LITTLE RIVER ROAD	187	55	143	0	22	33
69	SOMERSET	SRPEDD	5	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	LEES RIVER AVENUE		53	141	0	22	31
69	CONCORD	MAPC	4	CONCORD TURNPIKE	2	MAIN STREET	62	61	141	0	20	41
71	NORWOOD	MAPC	5	BLUE STAR MEMORIAL HIGHWAY	1	DEAN STREET		88	140	0	13	75
71	QUINCY	MAPC	6	SOUTHERN ARTERY	3A	CODDINGTON STREET		76	140	0	16	60
71	BRIDGEWATER	OCPC	5	BROAD STREET	18	MAIN STREET	28	76	140	0	16	60
71	HOLYOKE	PVPC	2	MAIN STREET	116	CABOT STREET		51	140	1	20	30
75	BROCKTON	OCPC	5	WEST ELM STREET		NEWBURY STREET		43	139	0	24	19
76	CAMBRIDGE	MAPC	6	MEMORIAL DRIVE	3	RIVER STREET		62	138	0	19	43
77	WEYMOUTH,BRAINTREE	MAPC	6	WASHINGTON STREET	53	COMMERCIAL STREET		84	136	0	13	71
77	CHELSEA	MAPC	6	CENTRAL AVENUE		SHAWMUT STREET		72	136	0	16	56
79	BROCKTON	OCPC	5	PLEASANT STREET	27	NORTH ASH STREET		43	135	0	23	20
80	BRAINTREE	MAPC	6	GRANITE STREET	37	COMMON STREET		62	134	0	18	44
80	WORCESTER	CMRPC	3	PARK AVENUE	9	MAY STREET		78	134	0	14	64
82	FALL RIVER	SRPEDD	5	BEDFORD STREET		TROY STREET		57	133	0	19	38
82	QUINCY	MAPC	6	HONORABLE THOMAS S BURGIN PARKWAY		GRANITE STREET		77	133	0	14	63
84	WORCESTER	CMRPC	3	MAIN STREET		CHANDLER STREET	122	60	132	0	18	42
84	WOBURN	MAPC	4	MISHAWAM ROAD		WOBURN MALL SHOPPING CENTER		60	132	0	18	42
84	WILMINGTON	MAPC	4	MAIN STREET	38	CHURCH STREET	62	52	132	0	20	32
87	NORTHAMPTON	PVPC	2	MAIN STREET	9	KING STREET	5	67	131	0	16	51
87	FRAMINGHAM	MAPC	3	CONCORD STREET	126	HARTFORD STREET		51	131	0	20	31
89	CONCORD	MAPC	4	CONCORD TURNPIKE	2	WALDEN STREET	126	58	130	0	18	40
89	NATICK	MAPC	3	WORCESTER STREET	9	OAK STREET		86	130	0	11	75
91	NATICK	MAPC	3	WEST CENTRAL STREET	135	SPEEN STREET		77	129	0	13	64
91	CHICOPEE	PVPC	2	MEMORIAL DRIVE	33	PENDLETON AVENUE		45	129	0	21	24
93	LYNN	MAPC	4	ESSEX STREET		JOYCE STREET		55	128	1	16	38
94	WORCESTER	CMRPC	3	MAIN STREET		MILL STREET	12	59	127	0	17	42
94	BROCKTON	OCPC	5	NORTH MAIN STREET		HOWARD STREET		55	127	0	18	37
94	BROCKTON	OCPC	5	MAIN STREET		LEGION PARKWAY	123	47	127	0	20	27
97	NEWTON	MAPC	6	COMMONWEALTH AVENUE	30	LEXINGTON STREET		46	126	0	20	26
97	BROCKTON	OCPC	5	COURT STREET	27	MONTELLO STREET	28	54	126	0	18	36
97	WEYMOUTH	MAPC	6	MAIN STREET	18	PARK AVENUE		70	126	0	14	56
100	LEOMINSTER	MRPC	3	NORTH MAIN STREET	12	NELSON STREET		73	125	0	13	60
100	LOWELL	NMCOG	4	WESTFORD STREET	3A	WILDER STREET		61	125	0	16	45
102	WOBURN	MAPC	4	MISHAWUM ROAD		COMMERCE WAY		60	124	0	16	44
103	WORCESTER	CMRPC	3	HIGHLAND STREET	9	HARVARD STREET		67	123	0	14	53
103	SEEKONK	SRPEDD	5	FALL RIVER AVENUE	6	COMMERCE WAY		71	123	0	13	58
105	WORCESTER	CMRPC	3	HARDING STREET	122	HARRISON STREET		46	122	0	19	27
105	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	CALDOR ROAD		58	122	0	16	42
105	WORCESTER	CMRPC	3	EAST CENTRAL STREET		SUMMER STREET		54	122	0	17	37
105	WESTFIELD	PVPC	2	FRANKLIN STREET	20	WASHINGTON STREET		34	122	0	22	12
105	WELLESLEY	MAPC	6	WORCESTER STREET	9	WELLESLEY FIRE STATION HEADQUARTERS (BY PROXIMITY)		86	122	0	9	77
110	BROCKTON	OCPC	5	FOREST AVENUE		BOUVE AVENUE		37	121	0	21	16
110	HOLYOKE	PVPC	2	HOLYOKE STREET		MALL DRIVE		81	121	0	10	71
110	LOWELL	NMCOG	4	CENTRAL STREET		WARREN STREET		61	121	0	15	46
110	MALDEN	MAPC	4	FELLSWAY EAST		HIGHLAND AVENUE		49	121	0	18	31
114	WOBURN	MAPC	4	MONTVALE AVENUE		WASHINGTON STREET		64	120	0	14	50
114	BROCKTON	OCPC	5	CENTRE STREET	123	LYMAN STREET		36	120	0	21	15
114	MENDON	CMRPC	3	MILFORD ROAD	16	MAIN STREET		52	120	0	17	35
117	LINCOLN	MAPC	4	CAMBRIDGE TURNPIKE	2	BEDFORD ROAD		59	119	0	15	44
118	CHELSEA	MAPC	6	EVERETT AVENUE		SPRUCE STREET		54	118	0	16	38
118	WORCESTER	CMRPC	3	BELMONT STREET	9	LAKE AVENUE NORTH		50	118	0	17	33
120	PLAINVILLE	SRPEDD	5	WASHINGTON STREET	1	TAUNTON STREET	152	49	117	0	17	32
120	MEDFORD	MAPC	4	MYSTIC VALLEY PARKWAY	16	WINTHROP STREET	38	53	117	0	16	37
120	WORCESTER	CMRPC	3	LINCOLN STREET	70	COUNTRY CLUB BOULEVARD		53	117	0	16	37
120	CHELSEA	MAPC	6	REVERE BEACH PARKWAY	16	GARFIELD AVENUE		61	117	0	14	47
120	WORCESTER	CMRPC	3	MAIN STREET	9	PARK AVENUE		49	117	0	17	32

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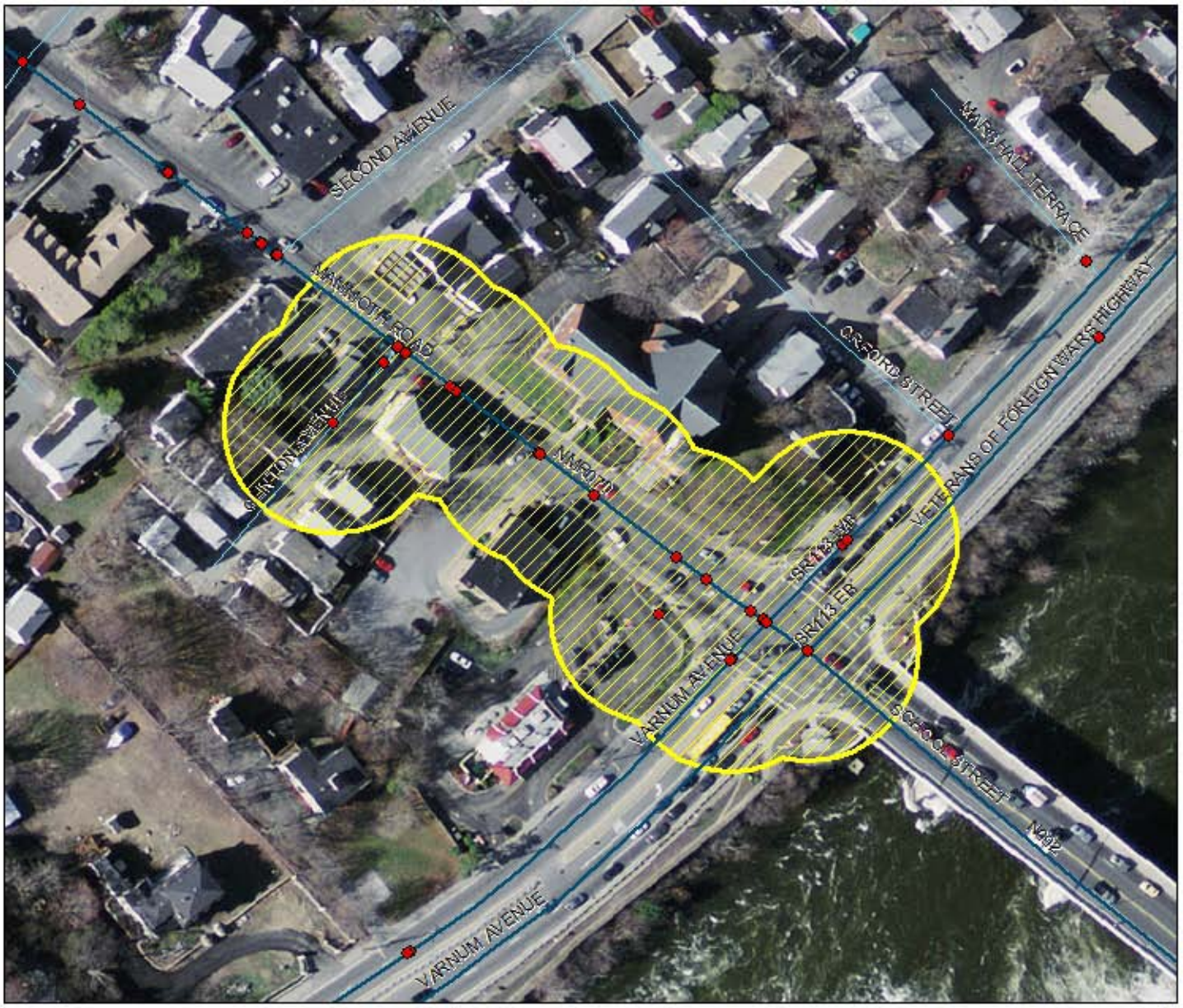
Rank	Town	RPA	MassDOT District	Street 1	Route 1	Street 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes	PDO & Non Reported Crashes
125	SOMERVILLE	MAPC	4	SOMERVILLE AVENUE		BOW STREET		48	116	0	17	31
125	WORCESTER	CMRPC	3	CHANDLER STREET	122	PIEDMONT STREET		40	116	0	19	21
125	FALL RIVER	SRPEDD	5	EASTERN AVENUE	6	BEDFORD STREET		48	116	0	17	31
128	CHELSEA	MAPC	6	REVERE BEACH PARKWAY	16	WASHINGTON AVENUE		63	115	0	13	50
128	MALDEN	MAPC	4	EASTERN AVENUE	60	BROADWAY	99	55	115	0	15	40
128	SALEM	MAPC	4	WASHINGTON STREET		CANAL STREET		63	115	0	13	50
128	LOWELL	NMCOG	4	PAWTUCKET STREET		SCHOOL STREET		59	115	0	14	45
128	BOSTON	MAPC	6	GALLIVAN BOULEVARD	203	GRANITE AVENUE		43	115	0	18	25
128	WHITMAN	OCPC	5	BEDFORD STREET	18	AUBURN STREET	14	51	115	0	16	35
128	ABINGTON	OCPC	5	CENTER AVENUE	123	PLYMOUTH STREET	58	55	115	0	15	40
135	LOWELL	NMCOG	4	MERRIMACK STREET		BRIDGE STREET		70	114	0	11	59
135	FALL RIVER	SRPEDD	5	CENTRAL STREET		DAVOL STREET		46	114	0	17	29
135	WEYMOUTH	MAPC	6	WASHINGTON STREET	53	BROAD STREET		50	114	0	16	34
135	MIDDLEBOROUGH	SRPEDD	5	SOUTH MAIN STREET	105	EAST GROVE STREET	28	62	114	0	13	49
139	FALL RIVER	SRPEDD	5	BROADWAY	138	MIDDLE STREET		45	113	0	17	28
139	WEYMOUTH	MAPC	6	WASHINGTON STREET	53	MAIN STREET	18	61	113	0	13	48
139	PEMBROKE	MAPC & OCPC	5	SCHOOSETT STREET	139	COLUMBIA ROAD	53	45	113	0	17	28
142	WILBRAHAM	PVPC	2	BOSTON ROAD	20	STONY HILL ROAD		64	112	0	12	52
142	NEW BEDFORD	SRPEDD	5	JOHN F KENNEDY HIGHWAY		UNION STREET		39	112	1	16	22
142	TAUNTON	SRPEDD	5	HON. GORDON M OWEN RIVERWAY		WILLIAMS STREET		36	112	0	19	17
142	WESTFIELD	PVPC	2	PLEASANT STREET	202	WEST SILVER STREET		44	112	0	17	27
142	LOWELL	NMCOG	4	RIVERSIDE STREET	113	UNIVERSITY AVENUE		48	112	0	16	32
147	BOSTON	MAPC	6	COLUMBIA ROAD		DORCHESTER AVENUE		43	111	0	17	26
147	WALPOLE	MAPC	5	PROVIDENCE TURNPIKE	1	HIGH PLAIN STREET	27	55	111	0	14	41
147	HAVERHILL	MVPC	4	MAIN STREET	125	WINTER STREET	97	59	111	0	13	46
147	LOWELL	NMCOG	4	SCHOOL STREET		BRANCH STREET		47	111	0	16	31
147	WILMINGTON	MAPC	4	LOWELL STREET	129	WOBURN STREET		47	111	0	16	31
147	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	DINSMORE AVENUE		43	111	0	17	26
153	TAUNTON	SRPEDD	5	MAIN STREET	44	CEDAR STREET		58	110	0	13	45
153	SALEM	MAPC	4	HIGHLAND AVENUE	107	MARLBOROUGH ROAD		46	110	0	16	30
153	MEDFORD	MAPC	4	MAIN STREET		SALEM STREET	60	70	110	0	10	60
153	QUINCY	MAPC	6	HANCOCK STREET		TEMPLE STREET		66	110	0	11	55
153	LYNN	MAPC	4	ESSEX STREET		CHATHAM STREET		54	110	0	14	40
158	HOLYOKE	PVPC	2	CHERRY STREET	202	SOLDIERS HOME ROAD		36	109	1	16	19
158	LEXINGTON	MAPC	4	BEDFORD STREET	4	HARRINGTON ROAD		53	109	0	14	39
158	CHARLTON	CMRPC	3	STURBRIDGE ROAD	20	BROOKFIELD ROAD	31	57	109	0	13	44
158	DEDHAM	MAPC	6	BOSTON PROVIDENCE TURNPIKE	1A	ELM STREET		49	109	0	15	34
158	PITTSFIELD	BRPC	1	SOUTH STREET	7	WEST HOUSATONIC STREET	20	61	109	0	12	49
158	LYNN	MAPC	4	WESTERN AVENUE	107	CHESTNUT STREET	129A	61	109	0	12	49
158	MANSFIELD	SRPEDD	5	CHAUNCY STREET	106	NORTH MAIN STREET		53	109	0	14	39
165	QUINCY	MAPC	6	WASHINGTON STREET	3A	SOUTHERN ARTERY	53	72	108	0	9	63
165	BROCKTON	OCPC	5	OAK STREET		CAMPANELLI INDUSTRIAL DRIVE		36	108	0	18	18
167	BROCKTON	OCPC	5	WARREN AVENUE		LEGION PARKWAY	123	43	107	0	16	27
167	BROCKTON	OCPC	5	CENTRE STREET	123	PLYMOUTH STREET		35	107	0	18	17
167	LAWRENCE	MVPC	4	WINTHROP AVENUE	114	SOUTH UNION STREET		39	107	0	17	22
167	WEYMOUTH	MAPC	6	MAIN STREET	18	WINTER STREET		51	107	0	14	37
167	WEST BRIDGEWATER	OCPC	5	WEST CENTER STREET	106	NORTH MAIN STREET	28	47	107	0	15	32
167	PITTSFIELD	BRPC	1	LINDEN STREET		SEYMOUR STREET		43	107	0	16	27
167	RANDOLPH	MAPC	6	NORTH MAIN STREET	28	WARREN STREET	139	67	107	0	10	57
174	LAWRENCE	MVPC	4	SOUTH BROADWAY	28	ANDOVER STREET		50	106	0	14	36
174	EVERETT	MAPC	4	REVERE BEACH PARKWAY	16	EVERETT AVENUE		46	106	0	15	31
174	REVERE	MAPC	4	REVERE BEACH PARKWAY	16	WINTHROP AVENUE		46	106	0	15	31
174	BRAINTREE	MAPC	6	GRANITE STREET	37	FRANKLIN STREET		38	106	0	17	21
174	FALL RIVER	SRPEDD	5	PRESIDENT AVENUE	6	BOOMER STREET		46	106	0	15	31
179	BELLINGHAM	MAPC	3	HARTFORD AVENUE	126	NORTH MAIN STREET		57	105	0	12	45
179	BROCKTON	OCPC	5	MAIN STREET		NILSSON STREET		33	105	0	18	15
179	WORCESTER	CMRPC	3	SOUTHWEST CUTOFF	20	GREENWOOD STREET		53	105	0	13	40
179	HAVERHILL	MVPC	4	BRIDGE STREET	125	WATER STREET	113	65	105	0	10	55
179	OXFORD	CMRPC	3	MAIN STREET	12	SUTTON AVENUE		61	105	0	11	50
179	LEXINGTON	MAPC	4	BEDFORD STREET	4	HARTWELL AVENUE		45	105	0	15	30
185	SOMERVILLE	MAPC	4	BROADWAY		ALEWIFE BROOK PARKWAY	16	52	104	0	13	39
185	DARTMOUTH	SRPEDD	5	FAUNCE CORNER MALL ROAD		CROSS ROAD		48	104	0	14	34

2007-2009 STATEWIDE TOP 200 INTERSECTION 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	LOWELL	NMCOG	4	BROADWAY		FLETCHER STREET		52	104	0	13	39
185	ABINGTON	OCPC	5	BROCKTON AVENUE	123	BEDFORD STREET	18	44	104	0	15	29
185	HOLYOKE	PVPC	2	LOWER WESTFIELD ROAD		WHITING FARMS ROAD		52	104	0	13	39
185	LYNN	MAPC	4	CENTRAL AVENUE		WASHINGTON STREET		56	104	0	12	44
185	BOSTON	MAPC	6	BLUE HILL AVENUE	28	MORTON STREET	203	36	104	0	17	19
185	WESTBOROUGH	CMRPC	3	BOSTON WORCESTER TURNPIKE	9	LYMAN STREET		64	104	0	10	54
193	WEYMOUTH	MAPC	6	UNION STREET		PLEASANT STREET		71	103	0	8	63
193	WATERTOWN	MAPC	6	MAIN STREET	20	MOUNT AUBURN STREET	16	55	103	0	12	43
195	RANDOLPH	MAPC	6	NORTH MAIN STREET	28	UNION STREET	139	58	102	0	11	47
195	LYNN	MAPC	4	WESTERN AVENUE	107	PARK STREET		46	102	0	14	32
195	WALTHAM	MAPC	4	LEXINGTON STREET		TOTTEN POND ROAD		66	102	0	9	57
195	BROCKTON	OCPC	5	BELMONT STREET	123	BELMONT AVENUE		29	102	1	16	12
195	LAWRENCE	MVPC	4	ANDOVER STREET		PARKER STREET	114	41	102	1	13	27
195	WEYMOUTH	MAPC	6	PLEASANT STREET		WASHINGTON STREET	53	62	102	0	10	52
195	BROCKTON	OCPC	5	NORTH MAIN STREET		EAST ASHLAND STREET		38	102	0	16	22
195	SOUTHBOROUGH	MAPC	3	TURNPIKE ROAD	9	OAK HILL ROAD		53	102	1	10	42
195	HOLYOKE	PVPC	2	WESTFIELD ROAD	202	HOMESTEAD AVENUE		50	102	0	13	37
195	RAYNHAM	SRPEDD	5	BROADWAY	138	CARVER STREET		42	102	0	15	27
205	MALDEN	MAPC	4	EASTERN AVENUE	60	MAPLEWOOD STREET		41	101	0	15	26
205	HAVERHILL	MVPC	4	MAIN STREET	97	BAILEY BOULEVARD		53	101	0	12	41
205	STONEHAM	MAPC	4	MAIN STREET	28	NORTH BORDER ROAD		45	101	0	14	31
205	TAUNTON	SRPEDD	5	COUNTY STREET	140	HART STREET		45	101	0	14	31

Top Crash Intersections 2007-2009



RANK
1

LOWELL

VETERANS OF FOREIGN WARS HIGHWAY
VARNUM AVENUE

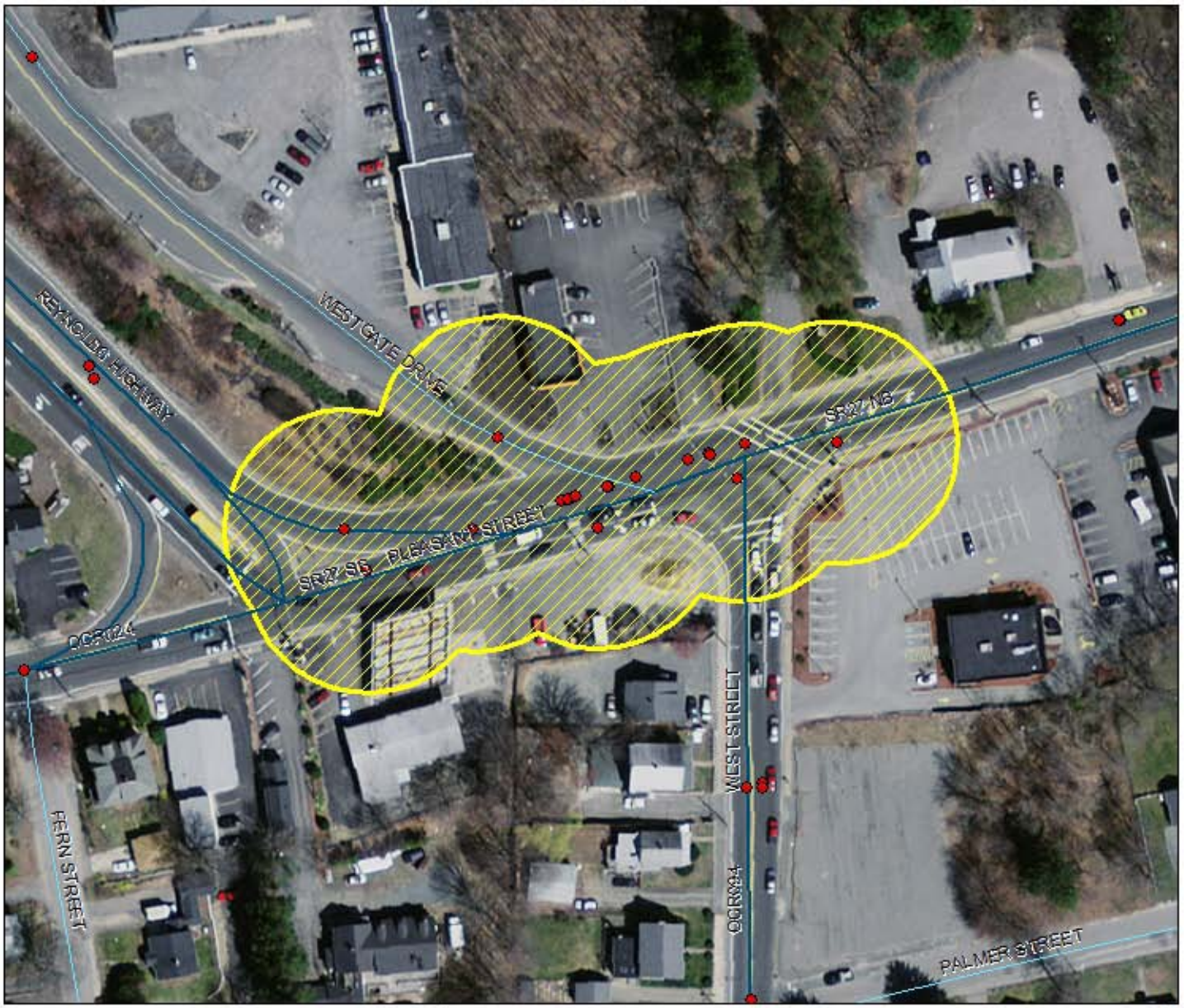
MassDOT District 4
RPA NMCOG
EPDO 281
Number of Fatal Crashes 0
Number of Injury Crashes 36
Number of Non-Injury Crashes 101
Total Crashes 137

Legend

- Crash Locations 2007-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Crash Intersections

massDOT
Massachusetts Department of Transportation

Top Crash Intersections 2007-2009



RANK 2

BROCKTON

PLEASANT STREET ROUTE 27
WEST STREET

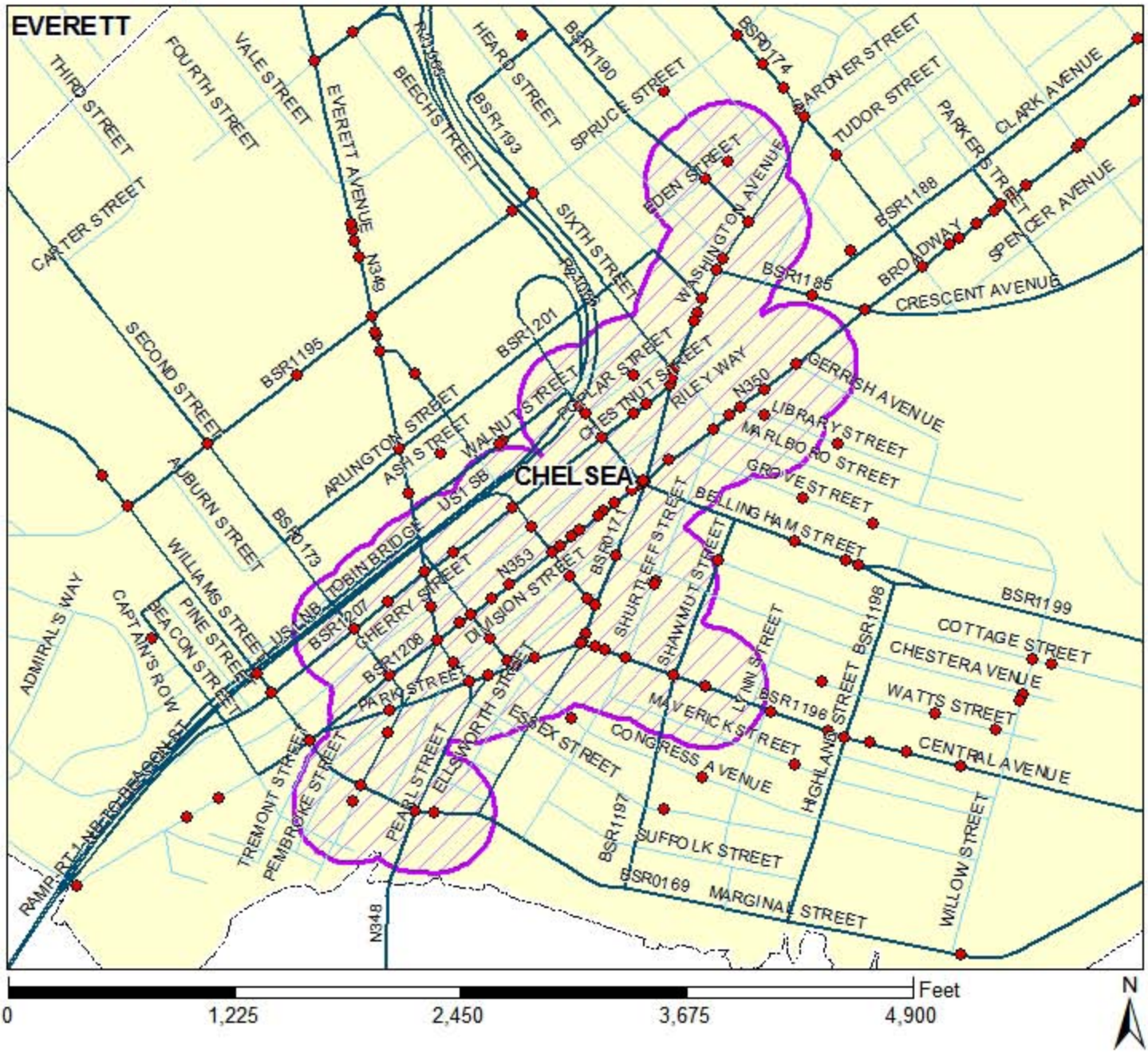
MassDOT District 5
RPA OCPC
EPDO 242
Number of Fatal Crashes 0
Number of Injury Crashes 38
Number of Non-Injury Crashes 52
Total Crashes 90

Legend

- Crash Locations 2007-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Crash Intersections

massDOT
Massachusetts Department of Transportation

Top Pedestrian Crash Cluster 2002-2009



RANK
1

CHELSEA

RPA MAPC
EPDO 518
Number of Fatal Pedestrian Crashes 1
Number of Injury Pedestrian Crashes 95
Number of Non-Injury Pedestrian Crashes 33
Total Pedestrian Crashes 129

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009

RANK
2

FALL RIVER

RPA SRPEDD
EPDO 346
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 64
Number of Non-Injury Pedestrian Crashes 26
Total Pedestrian Crashes 90

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009

RANK
3

CAMBRIDGE

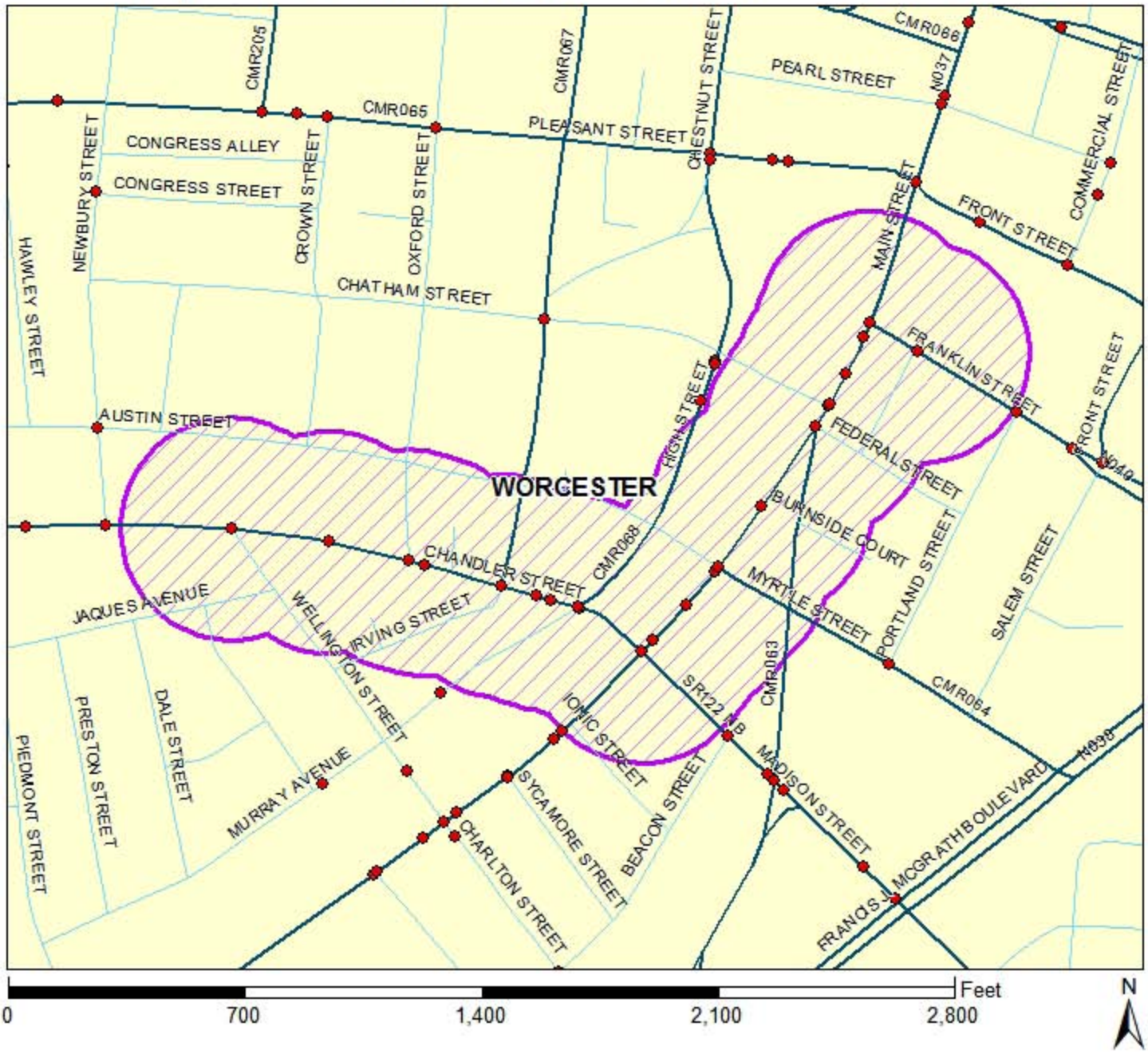
RPA MAPC
EPDO 284
Number of Fatal Pedestrian Crashes 2
Number of Injury Pedestrian Crashes 43
Number of Non-Injury Pedestrian Crashes 49
Total Pedestrian Crashes 94

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009



RANK
4

WORCESTER

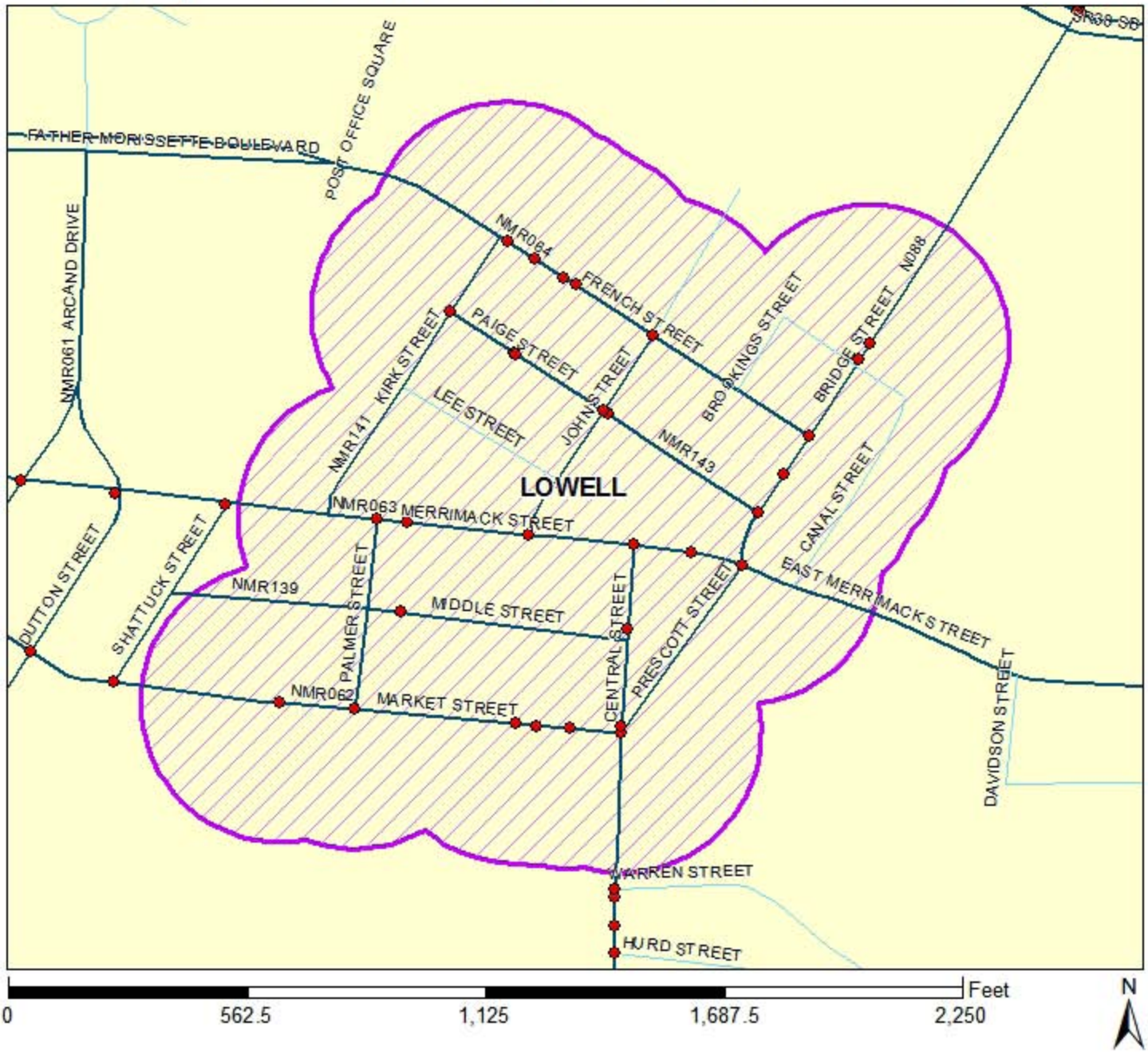
RPA CMRPC
EPDO 187
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 36
Number of Non-Injury Pedestrian Crashes 7
Total Pedestrian Crashes 43

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009



RANK
5

LOWELL

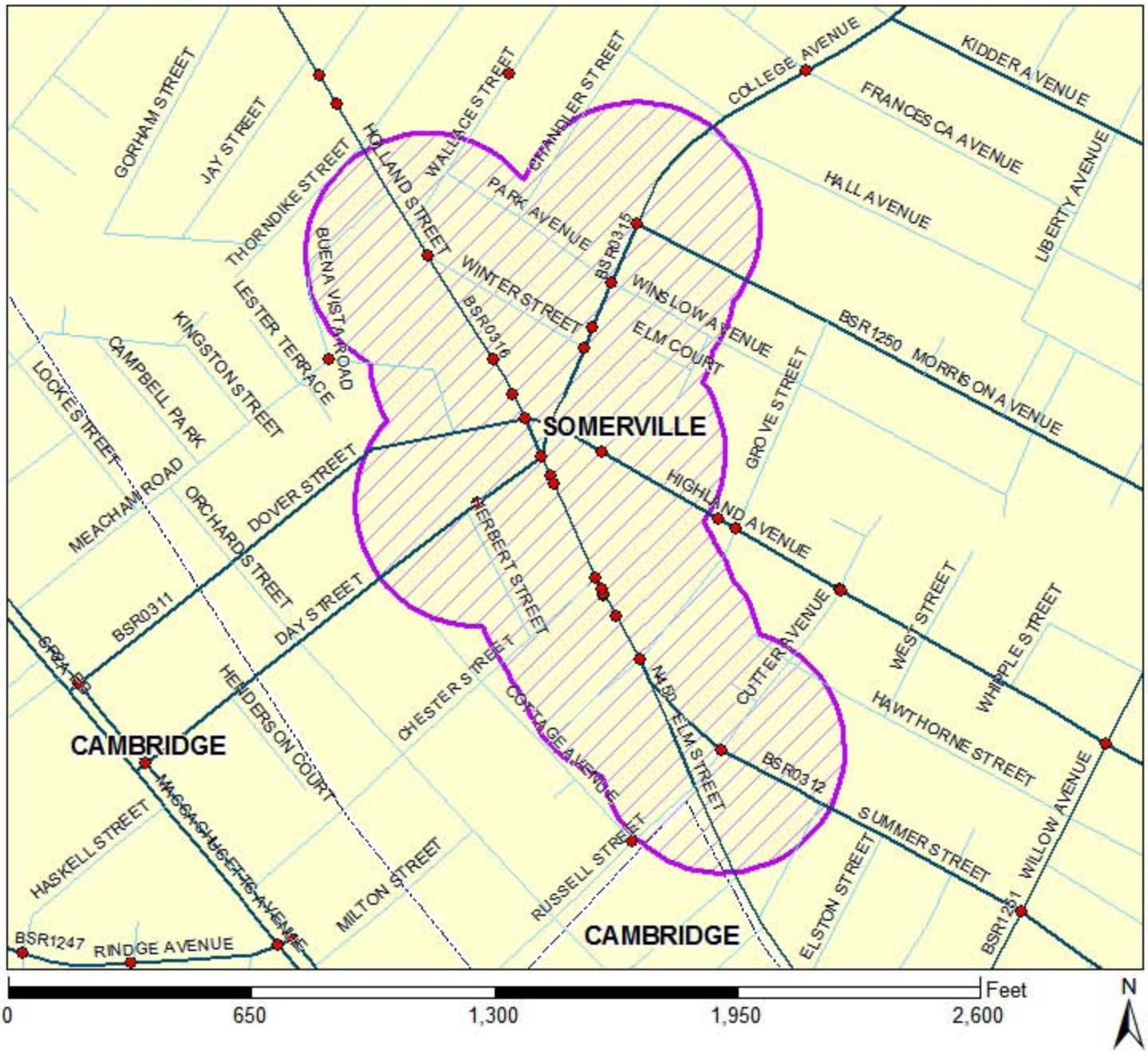
RPA NMCOG
EPDO 179
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 32
Number of Non-Injury Pedestrian Crashes 19
Total Pedestrian Crashes 51

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009



RANK
6

SOMERVILLE,CAMBRIDGE

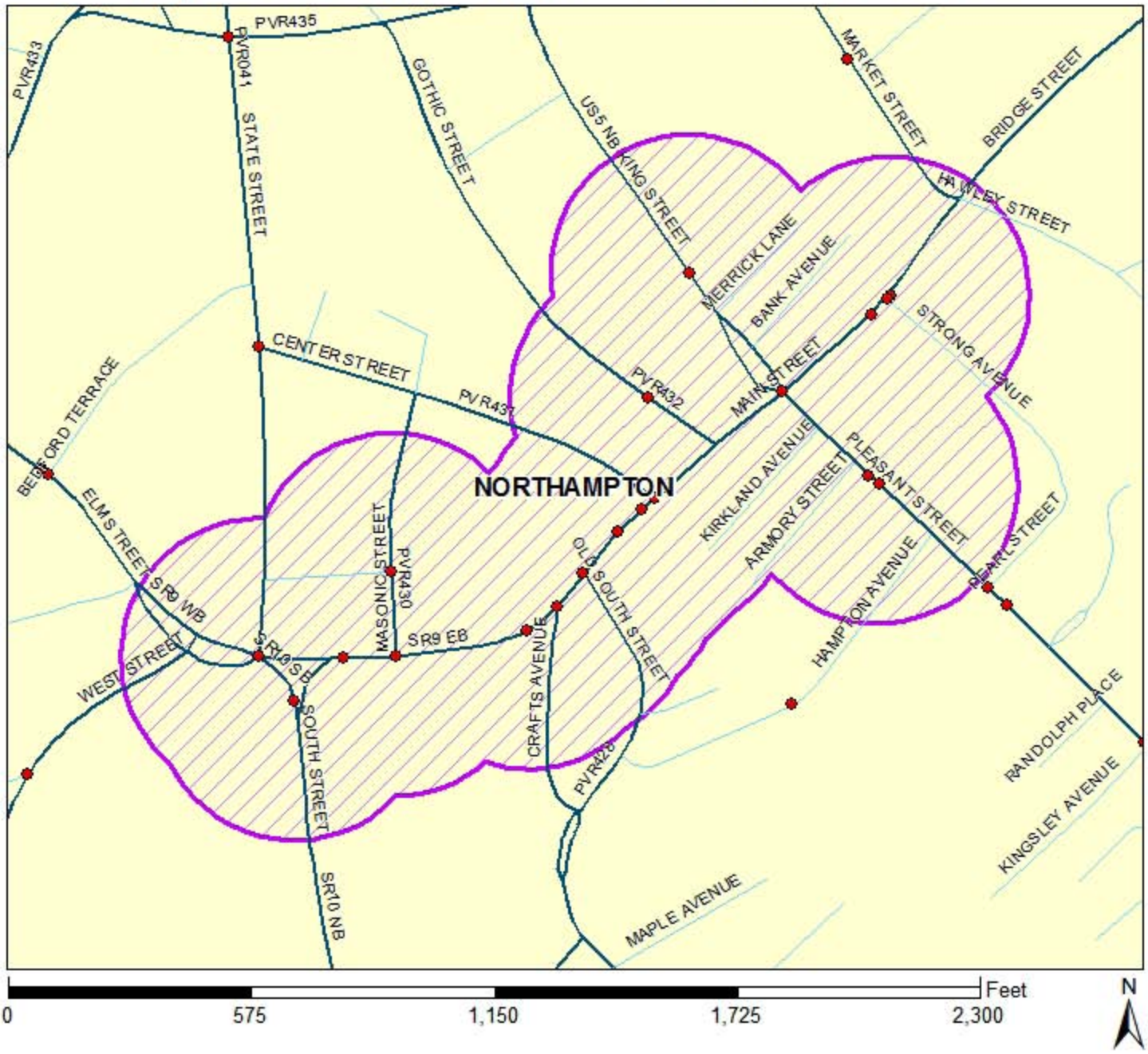
RPA MAPC
EPDO 175
Number of Fatal Pedestrian Crashes 1
Number of Injury Pedestrian Crashes 32
Number of Non-Injury Pedestrian Crashes 5
Total Pedestrian Crashes 38

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009



RANK
7

NORTHAMPTON

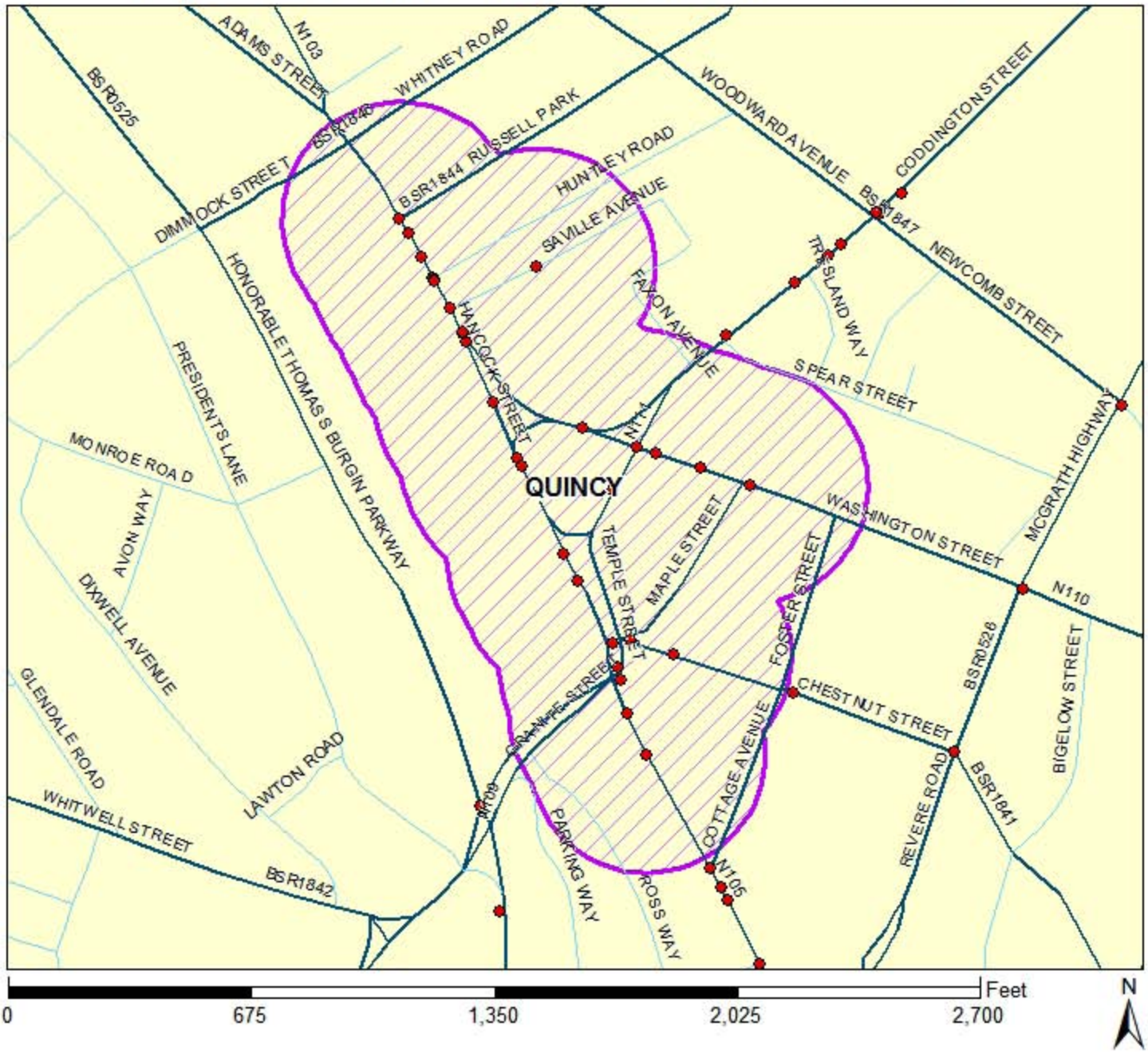
RPA PVPC
EPDO 152
Number of Fatal Pedestrian Crashes 1
Number of Injury Pedestrian Crashes 28
Number of Non-Injury Pedestrian Crashes 2
Total Pedestrian Crashes 31

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009



RANK
8

QUINCY

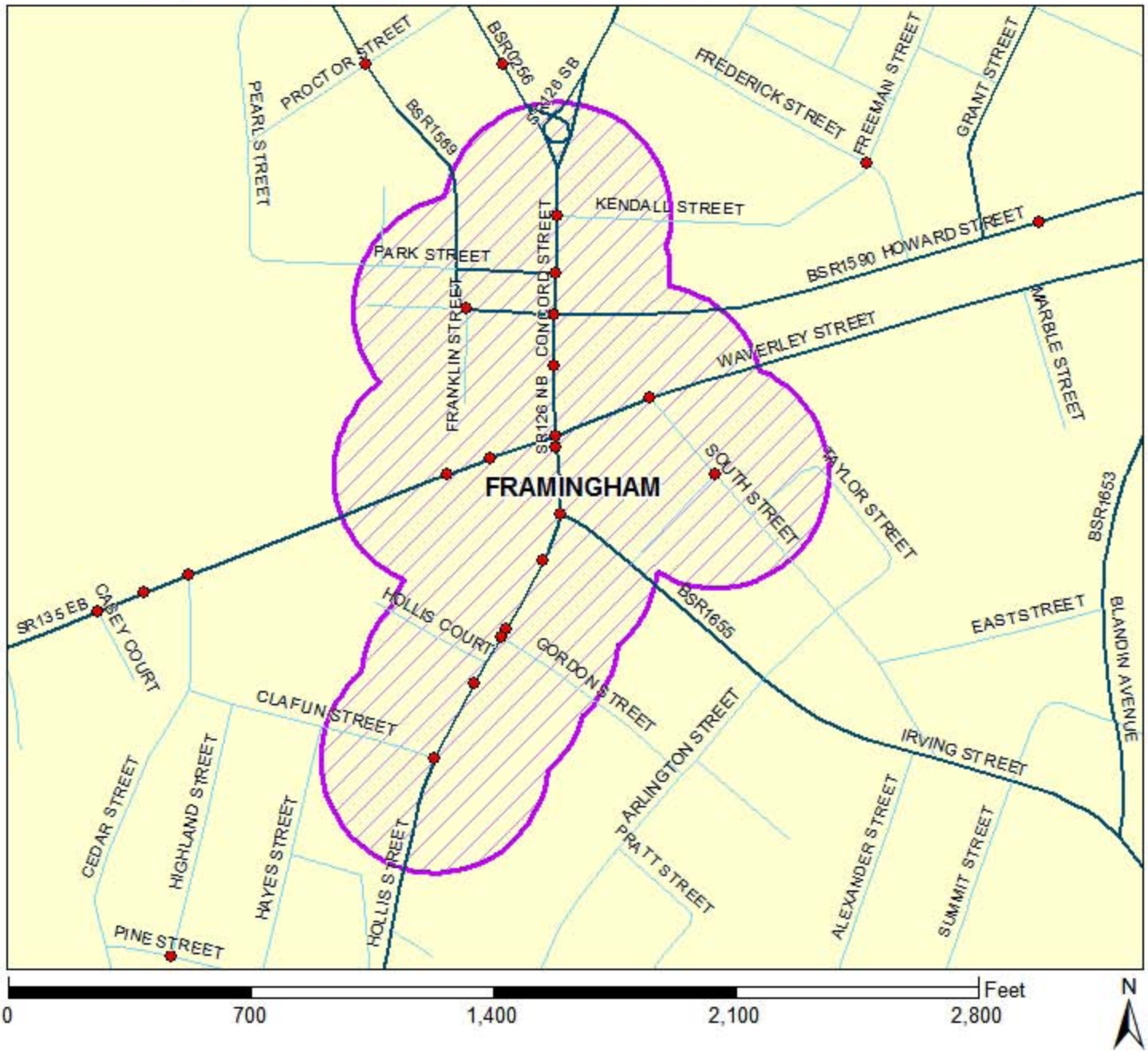
RPA MAPC
EPDO 150
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 26
Number of Non-Injury Pedestrian Crashes 20
Total Pedestrian Crashes 46

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009



RANK
9

FRAMINGHAM

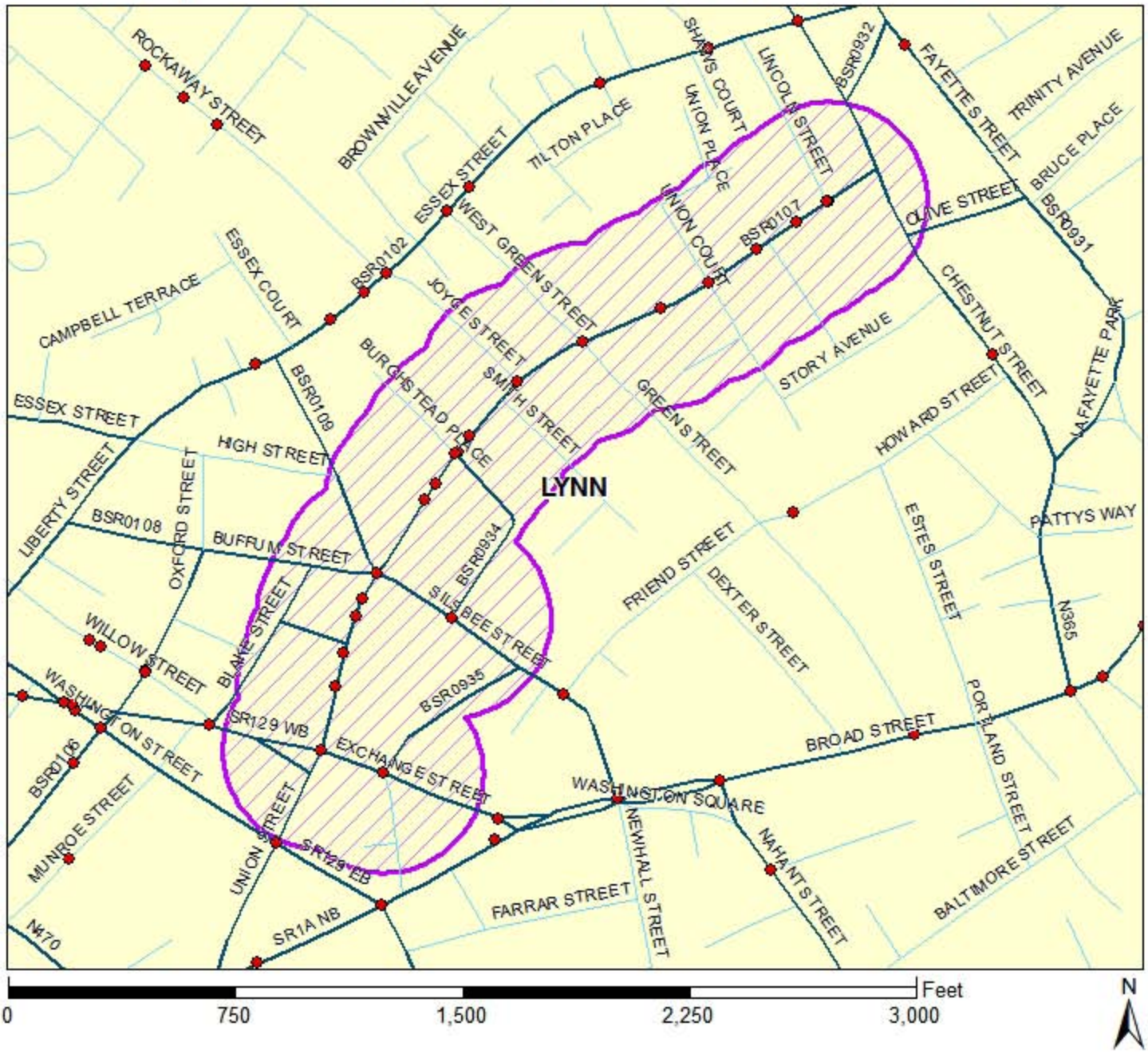
RPA MAPC
EPDO 144
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 28
Number of Non-Injury Pedestrian Crashes 4
Total Pedestrian Crashes 32

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Pedestrian Crash Cluster 2002-2009



RANK
10

LYNN

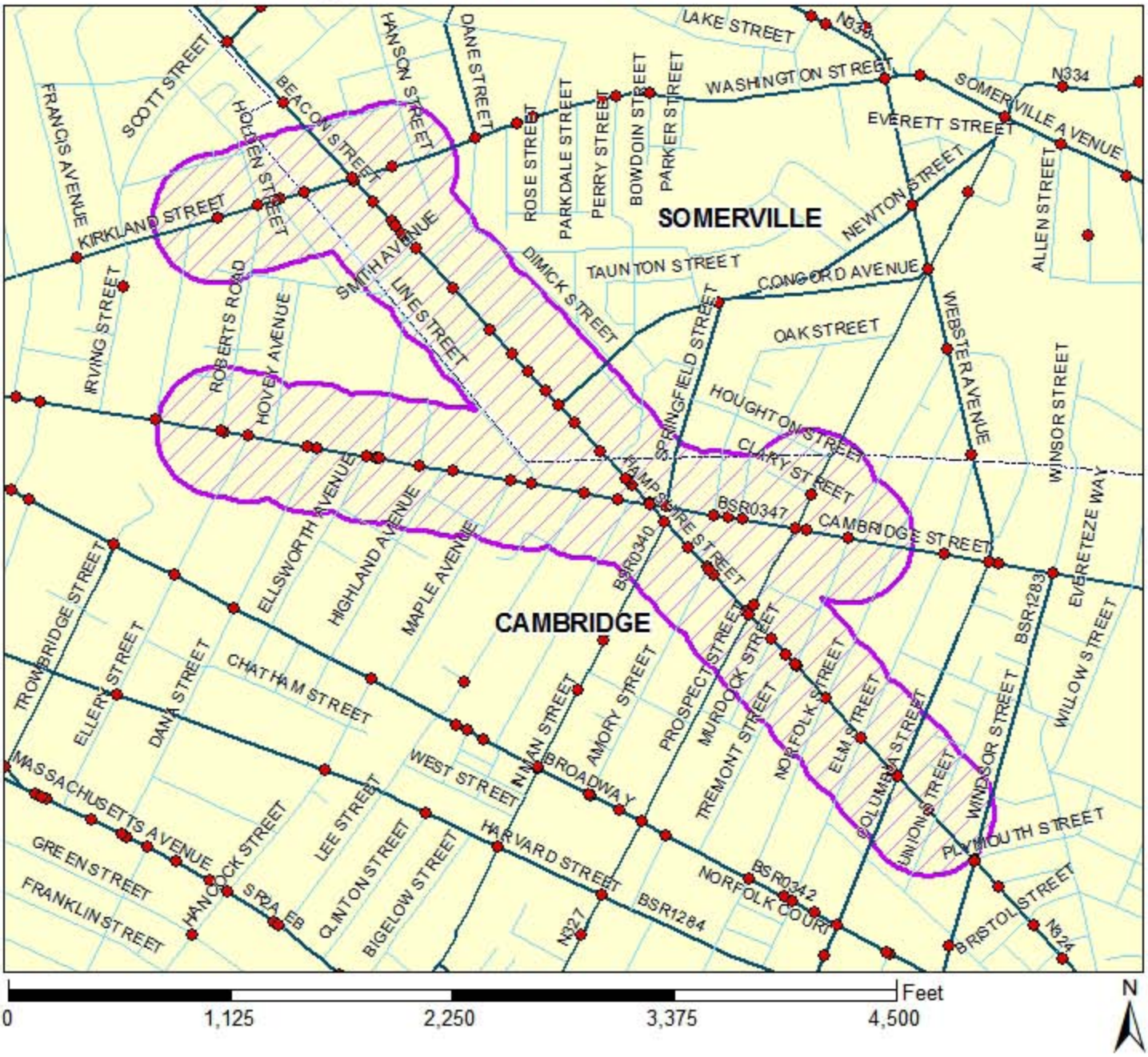
RPA MAPC
EPDO 123
Number of Fatal Pedestrian Crashes 0
Number of Injury Pedestrian Crashes 23
Number of Non-Injury Pedestrian Crashes 8
Total Pedestrian Crashes 31

Legend

- Pedestrian Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
1

CAMBRIDGE,SOMERVILLE

RPA MAPC
EPDO 390
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 71
Number of Non-Injury Bicycle Crashes 35
Total Bicycle Crashes 106

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009

RANK
2

CAMBRIDGE

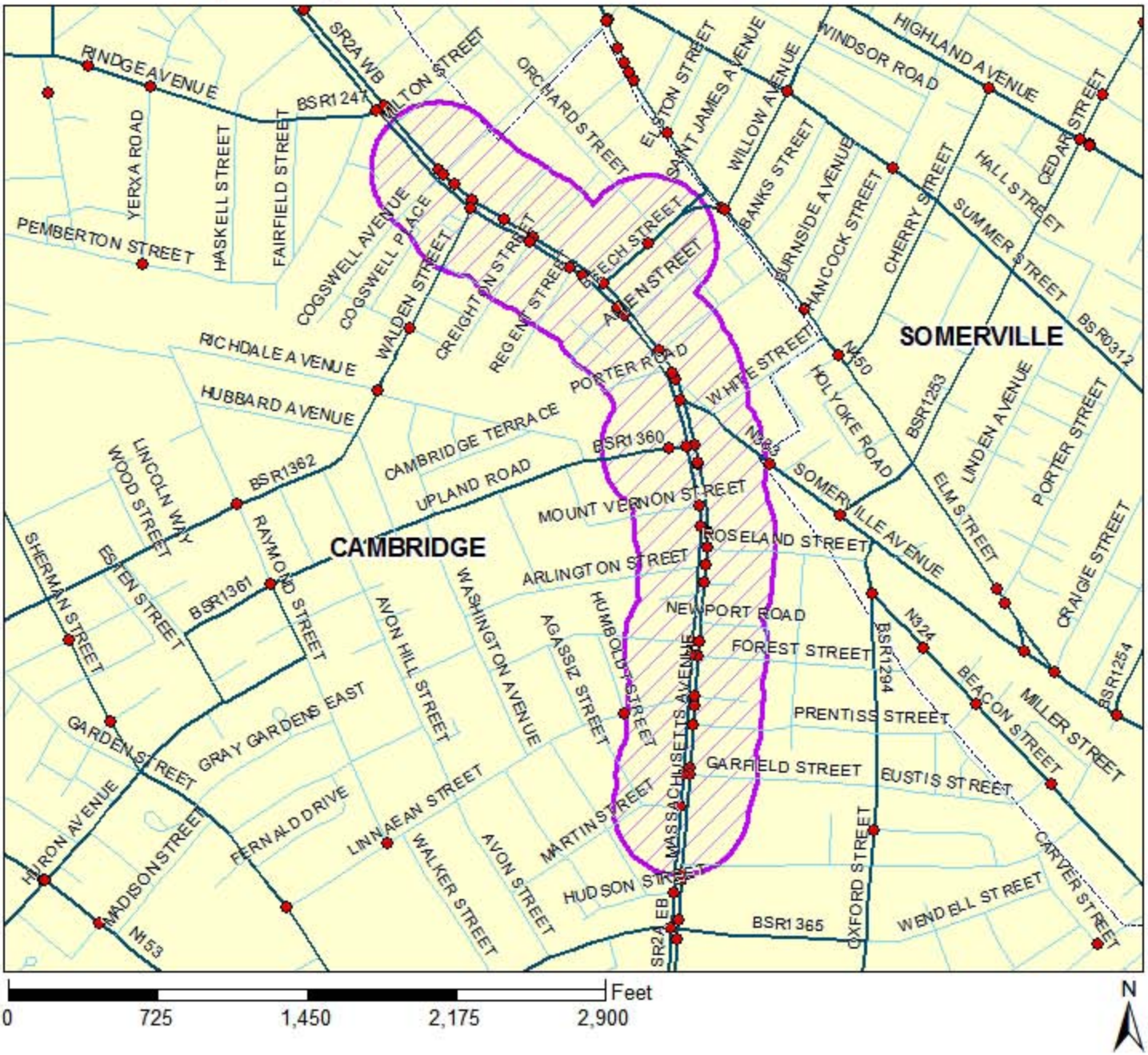
RPA MAPC
EPDO 276
Number of Fatal Bicycle Crashes 1
Number of Injury Bicycle Crashes 47
Number of Non-Injury Bicycle Crashes 31
Total Bicycle Crashes 79

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
3

CAMBRIDGE,SOMERVILLE

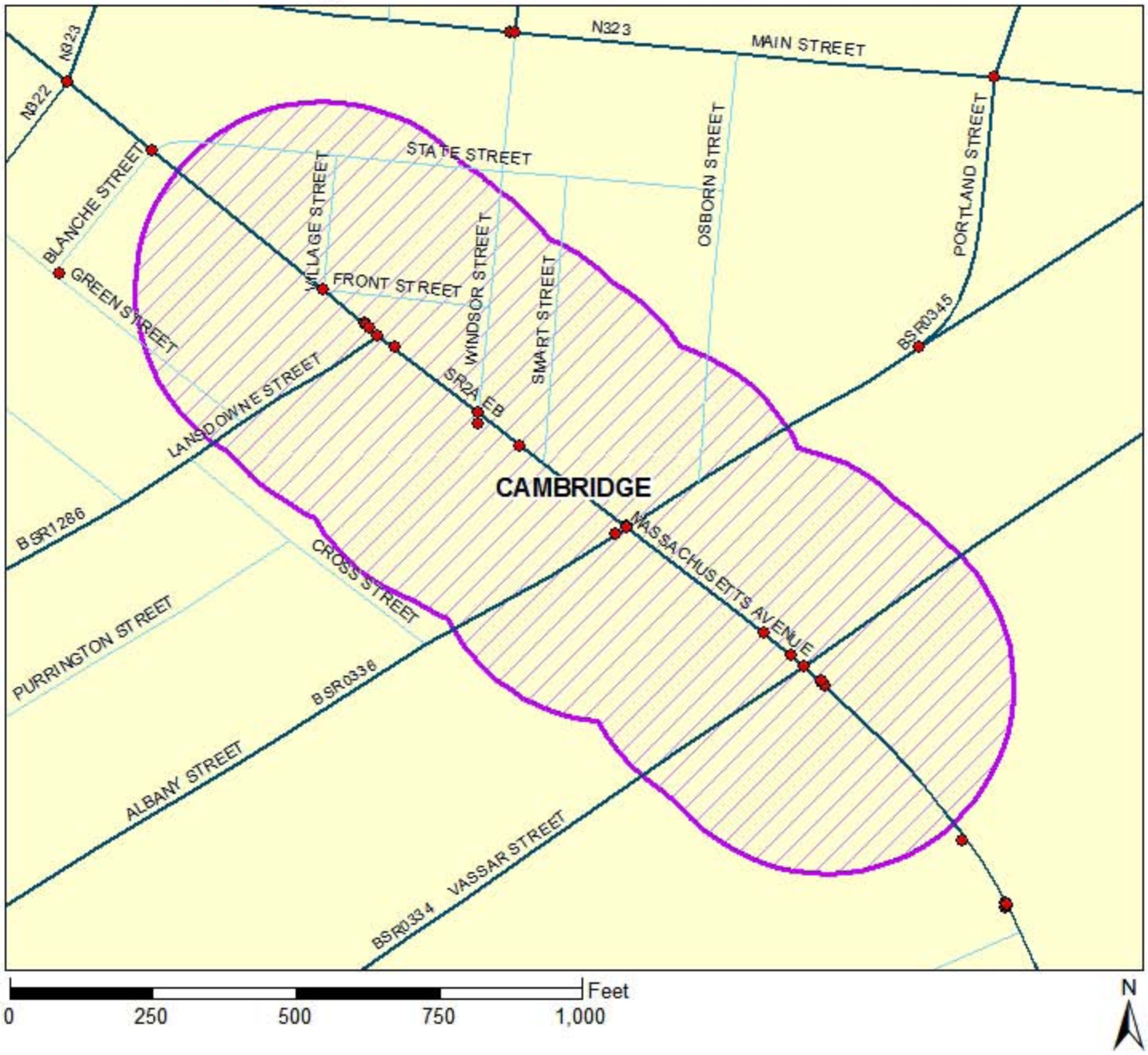
RPA MAPC
EPDO 242
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 45
Number of Non-Injury Bicycle Crashes 17
Total Bicycle Crashes 62

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
4

CAMBRIDGE

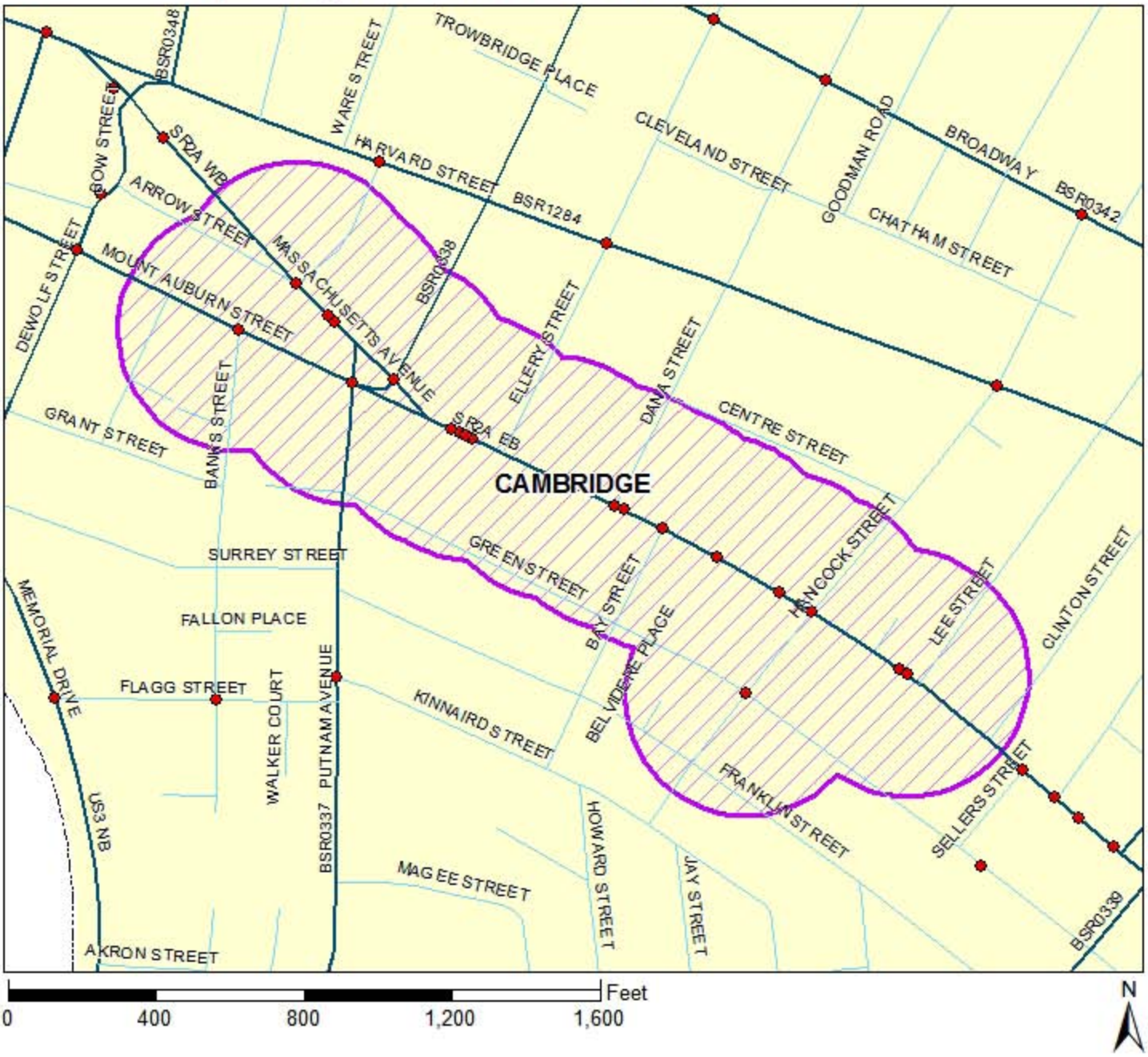
RPA MAPC
EPDO 157
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 28
Number of Non-Injury Bicycle Crashes 17
Total Bicycle Crashes 45

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
5

CAMBRIDGE

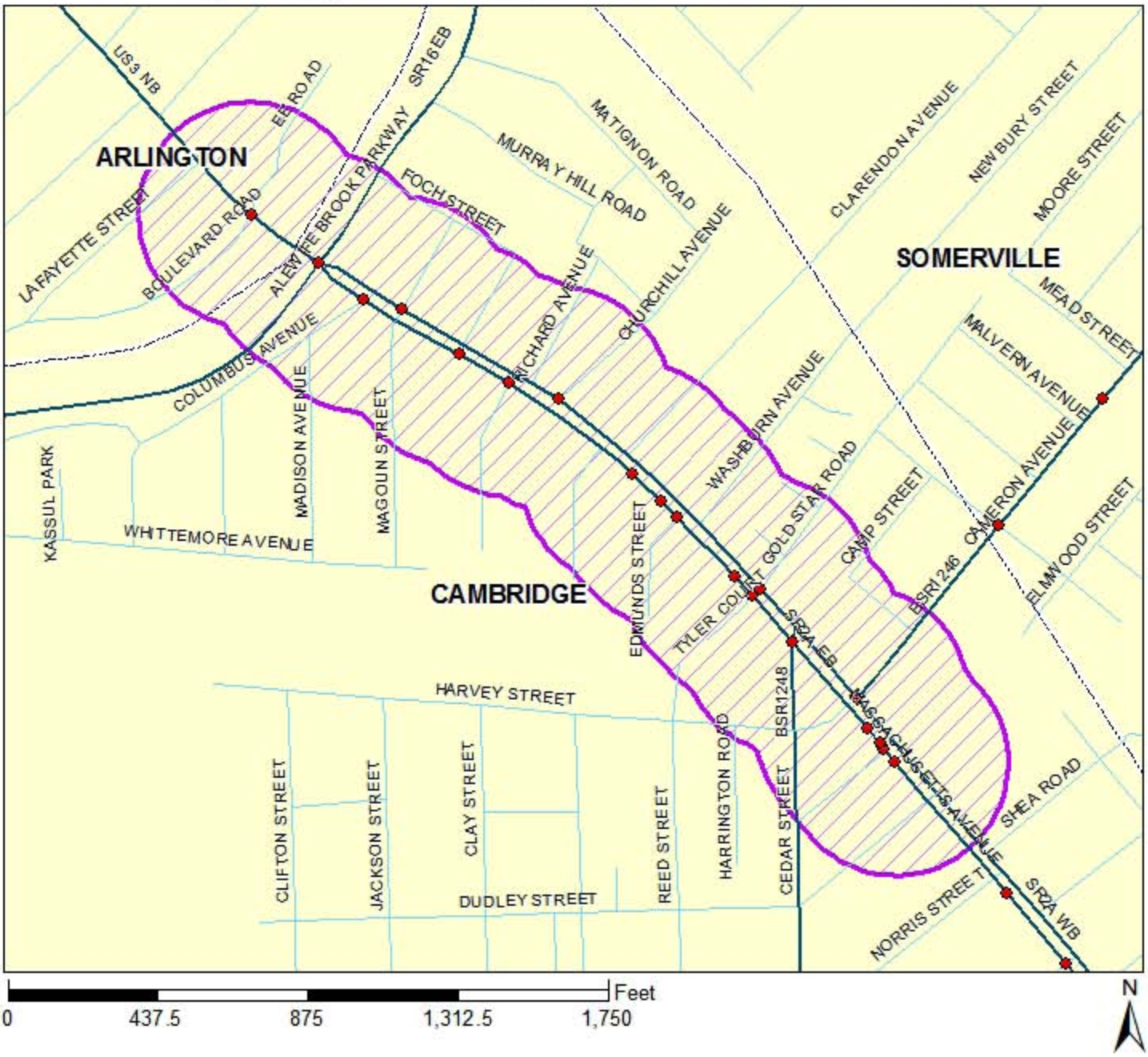
RPA MAPC
EPDO 110
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 20
Number of Non-Injury Bicycle Crashes 10
Total Bicycle Crashes 30

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
6

CAMBRIDGE,ARLINGTON

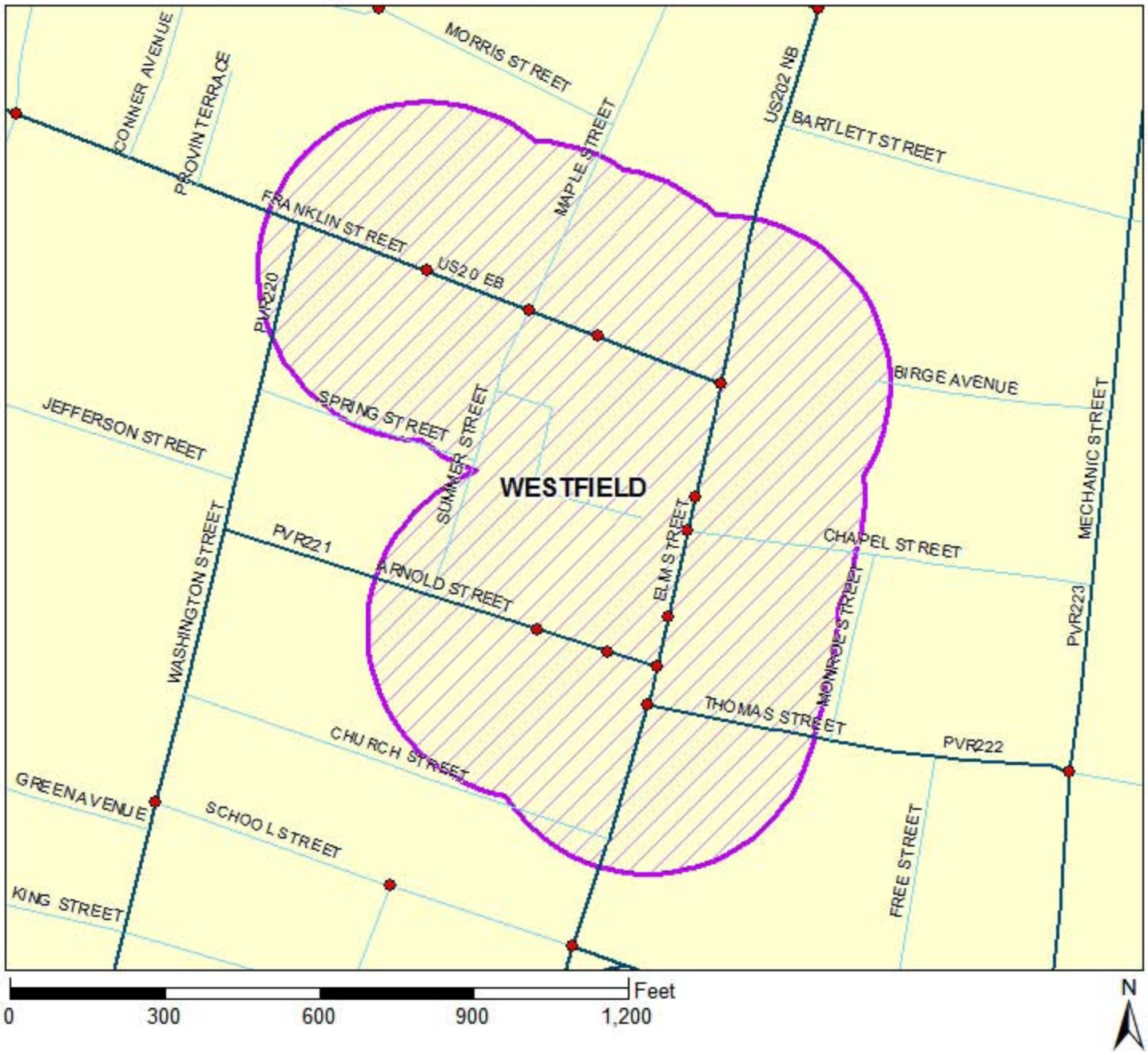
RPA MAPC
EPDO 108
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 20
Number of Non-Injury Bicycle Crashes 8
Total Bicycle Crashes 28

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
7

WESTFIELD

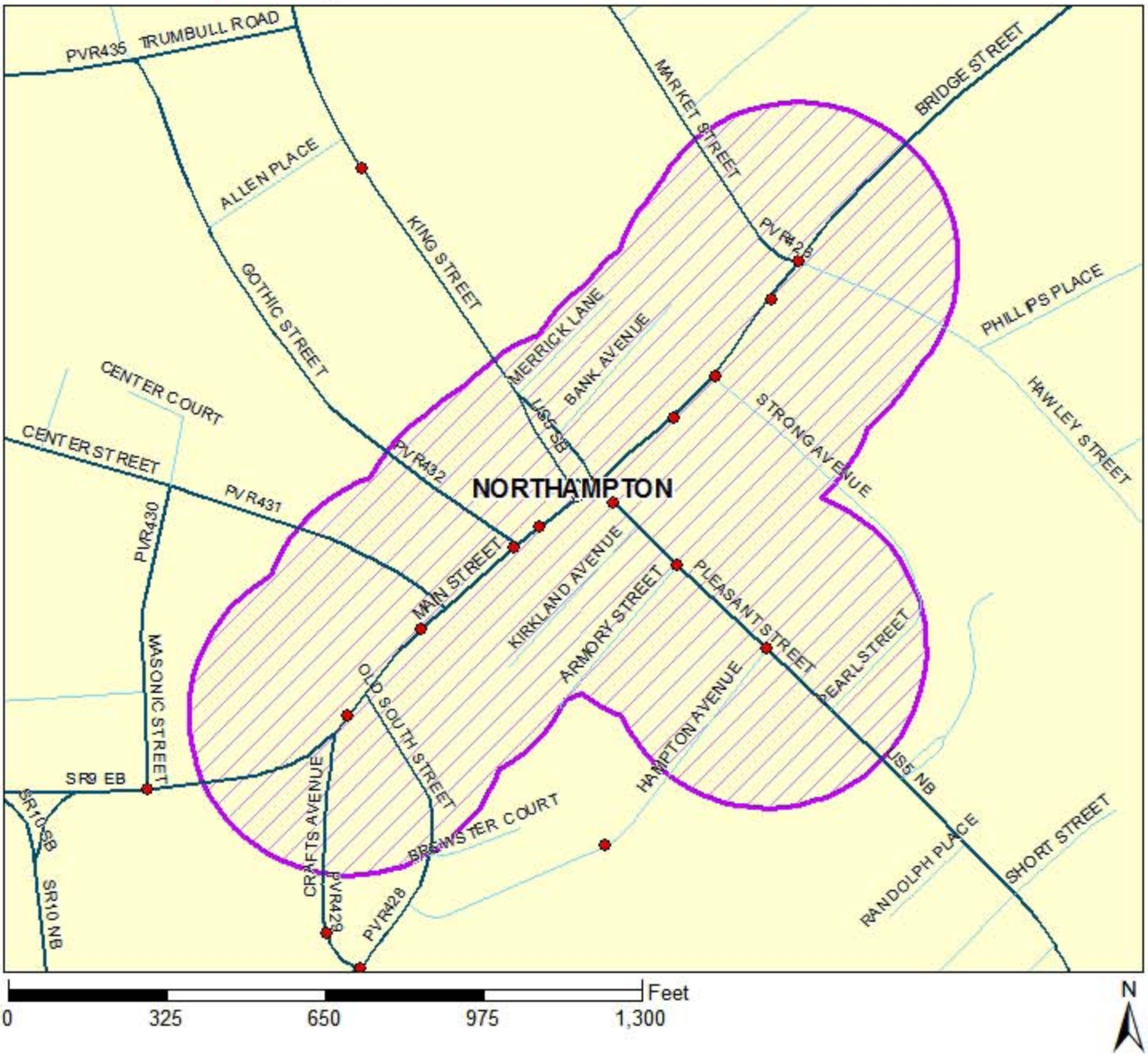
RPA PVPC
EPDO 78
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 15
Number of Non-Injury Bicycle Crashes 3
Total Bicycle Crashes 18

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
8

NORTHAMPTON

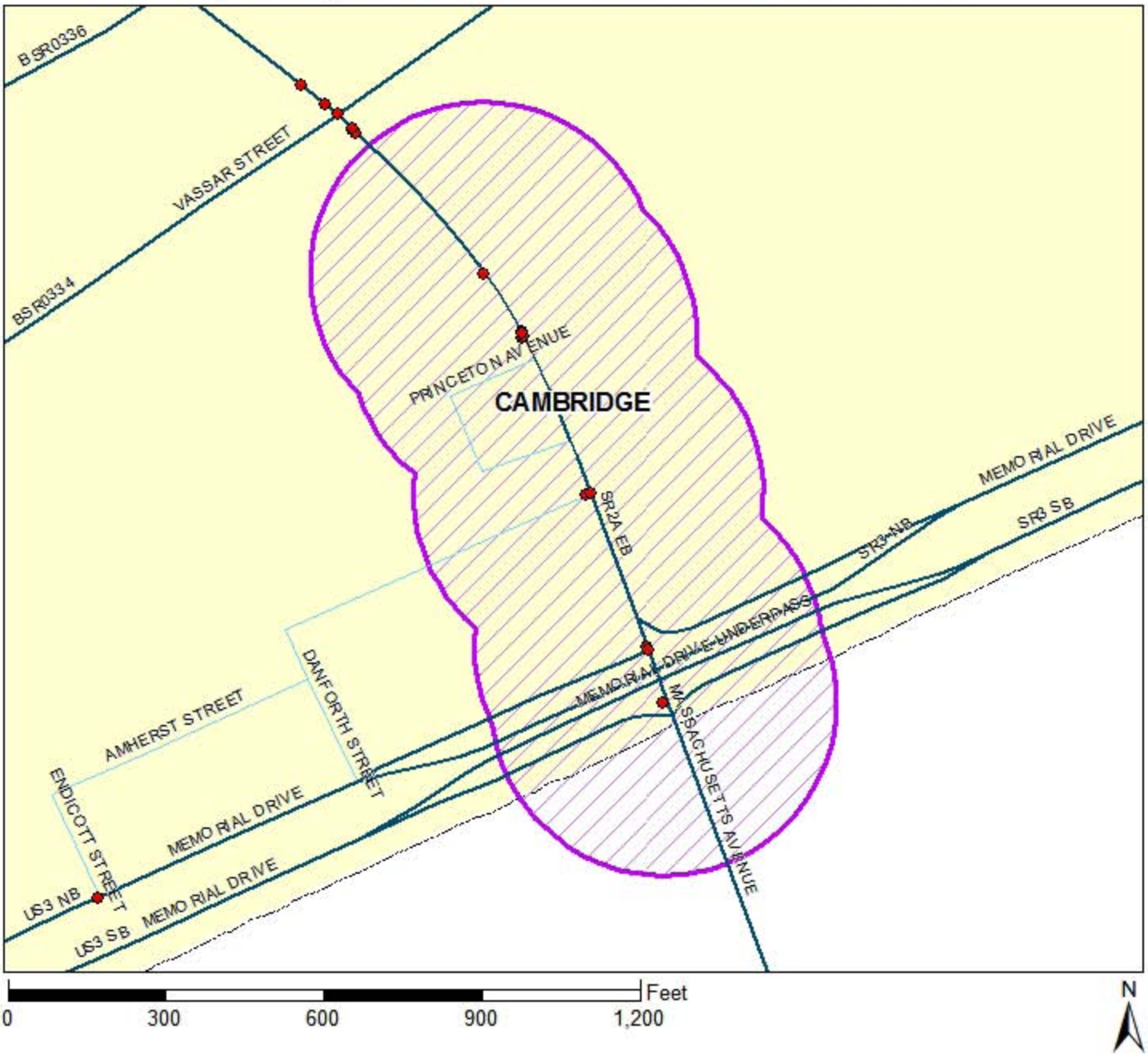
RPA PVPC
EPDO 77
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 15
Number of Non-Injury Bicycle Crashes 2
Total Bicycle Crashes 17

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
9

CAMBRIDGE

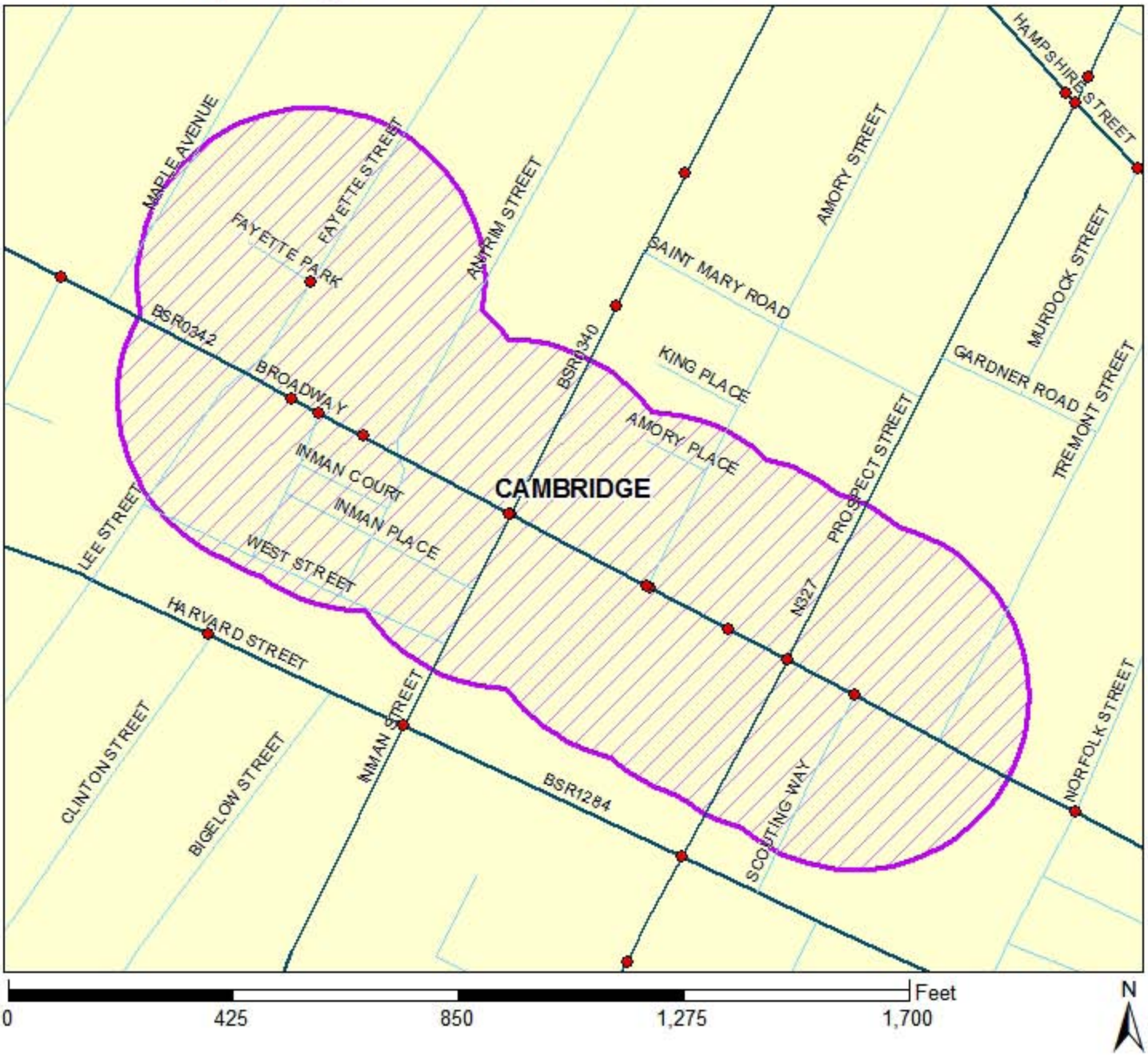
RPA MAPC
EPDO 67
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 12
Number of Non-Injury Bicycle Crashes 7
Total Bicycle Crashes 19

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway

Top Bicycle Crash Cluster 2002-2009



RANK
10

CAMBRIDGE

RPA MAPC
EPDO 62
Number of Fatal Bicycle Crashes 0
Number of Injury Bicycle Crashes 10
Number of Non-Injury Bicycle Crashes 12
Total Bicycle Crashes 22

Legend

- Bicycle Crash Locations 2002-2009
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

massDOT Highway