

# 2013 TOP CRASH LOCATIONS REPORT



**AUGUST 2015**

**massDOT**  
Massachusetts Department of Transportation  
Leading the Nation in Transportation Excellence



Charles D. Baker, Governor  
Karyn E. Polito, Lieutenant Governor  
Stephanie Pollack, Secretary & CEO  
Thomas J. Tinlin, Acting Administrator



Dear Reader:

Enclosed is MassDOT Highway Division's edition of the 2013 *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 2013 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 2013 *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/StrategicHighwaySafetyPlan.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,

Thomas J. Tinlin,  
Acting Highway Administrator

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# TOP HIGH CRASH LOCATIONS REPORT

Top 200 Intersection Locations 2011-2013

Top Pedestrian Locations 2004-2013

Top Bicycle Locations 2004-2013

## 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). Seven 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 six years ago, the report also included the top bicycle and pedestrian clusters. This year, MassDOT Highway Division prepared a Top High Crash Locations Report which includes the top 200 high crash intersection locations using crash data from 2011-2013 and also includes the weighted (by crash severity) highest frequency bicycle-motor vehicle and pedestrian-motor vehicle crash locations for 2004-2013.

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 2011 and 2013 is over 94%. 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	2013
Local Police	94,602	95,400	93,649	92,832	94,458	104,201	104,316	105,647
Other Police	201	153	198	123	154	129	163	116
State Police	14,524	14,608	15,822	15,519	16,882	16,280	18,160	19,521
Operator	40,533	34,348	26,715	9,302	4,149	22	7	1
TOTAL	149,860	144,509	136,384	117,776	115,643	120,632	122,646	125,285

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 three 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 2011 to 2013. 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 ten year period from 2004-2013, 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.”

2011-2013 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	BROCKTON	OCPC	5	PLEASANT STREET	27	WEST STREET		102	298	0	49	53
2	LOWELL	NMCOG	4	BRIDGE STREET	38	VETERANS OF FOREIGN WARS HIGHWAY		125	285	0	40	85
3	HOLYOKE	PVPC	2	HOLYOKE STREET		HOLYOKE MALL AT INGLESIDE		177	273	0	24	153
4	SWANSEA	SRPEDD	5	MARKET STREET	136	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	121	265	0	36	85
5	WEYMOUTH	MAPC	6	MAIN STREET	18	MIDDLE STREET		111	243	0	33	78
6	FALL RIVER	SRPEDD	5	PLYMOUTH AVENUE	81	RODMAN STREET		111	235	0	31	80
7	MARLBOROUGH	MAPC	3	EAST MAIN STREET	20	CURTIS AVENUE		184	220	0	9	175
8	LOWELL	NMCOG	4	APPLETON STREET	110	CENTRAL STREET		88	216	0	32	56
9	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY	113	VARNUM AVENUE		113	209	0	24	89
10	LOWELL	NMCOG	4	MIDDLESEX STREET		WOOD STREET		108	208	0	25	83
11	SPRINGFIELD	PVPC	2	STATE STREET		SAINT JAMES AVENUE		60	200	0	35	25
12	NEW BEDFORD	SRPEDD	5	ALFRED BESSETTE MEMORIAL HIGHWAY	140	KEMPTON STREET	6	75	195	0	30	45
13	BROCKTON	OCPC	5	ASH STREET		WEST ELM STREET		65	193	0	32	33
14	WEYMOUTH	MAPC	6	MAIN STREET	18	POND STREET (PLEASANT SHOPS PLAZA)		93	185	0	23	70
15	FALL RIVER	SRPEDD	5	BROADWAY	138	BRADFORD AVENUE		91	184	1	21	69
15	CHELSEA	MAPC	6	EVERETT AVENUE		MYSTIC MALL		108	184	0	19	89
17	RAYNHAM	SRPEDD	5	ROUTE 44	44	ORCHARD STREET		83	179	0	24	59
18	WORCESTER	CMRPC	3	CHANDLER STREET	122	MURRAY AVENUE		77	177	0	25	52
19	QUINCY	MAPC	6	SOUTHERN ARTERY	3A	BROAD STREET		83	175	0	23	60
20	WALTHAM	MAPC	4	LEXINGTON STREET		TRAPELO ROAD		106	174	0	17	89
21	PEABODY	MAPC	4	NEWBURYPORT TURNPIKE (JUGHANDLE)	1			76	173	1	22	53
22	WRENTHAM	MAPC	5	SOUTH STREET	1A	PREMIUM OUTLET BOULEVARD		99	171	0	18	81
23	DENNIS	CCC	5	EAST WEST DENNIS ROAD	134	PATRIOT SQUARE (BY ADDRESS)		138	170	0	8	130
24	CHICOPEE	PVPC	2	BROADWAY		EAST MAIN STREET	141	74	166	0	23	51
25	LOWELL	NMCOG	4	PLAIN STREET		CHELMSFORD STREET	110	86	162	0	19	67
25	SPRINGFIELD	PVPC	2	BOSTON ROAD	20	PASCO ROAD		58	162	0	26	32
27	TAUNTON	SRPEDD	5	COUNTY STREET	140	HART STREET		76	160	0	21	55
27	SPRINGFIELD	PVPC	2	BOSTON ROAD	20	PARKER STREET	21	60	160	0	25	35
29	FALL RIVER	SRPEDD	5	SOUTH MAIN STREET		WASHINGTON STREET		83	159	0	19	64
29	BOSTON	MAPC	6	MORTON STREET	203	HARVARD STREET		43	159	0	29	14
31	SOMERVILLE	MAPC	4	MYSTIC AVENUE	38	FELLSWAY	28	65	158	1	21	43
32	MILTON	MAPC	6	RANDOLPH AVENUE	28	CHICKATAW/BUT ROAD		57	157	0	25	32
33	WORCESTER	CMRPC	3	PARK AVENUE	9	MAY STREET		76	156	0	20	56
33	WORCESTER	CMRPC	3	HIGHLAND STREET	9	HARVARD STREET		76	156	0	20	56
35	PEABODY	MAPC	4	ANDOVER STREET	114	NORTHSHORE MALL		107	155	0	12	95
35	WORCESTER	CMRPC	3	MAIN STREET	9	PARK AVENUE	9	63	155	0	23	40
35	SPRINGFIELD	PVPC	2	SAINT JAMES BOULEVARD	20A	SAINT JAMES AVENUE		59	155	0	24	35
38	SPRINGFIELD	PVPC	2	STATE STREET		THOMPSON STREET		49	153	0	26	23
39	LOWELL	NMCOG	4	BRIDGE STREET		FRENCH STREET		76	152	0	19	57
39	SPRINGFIELD	PVPC	2	MILL STREET		LOCUST STREET		56	152	0	24	32
41	HAVERHILL	MVPC	4	LAFAYETTE SQUARE	97	BROADWAY	97	79	151	0	18	61
41	BRAINTREE	MAPC	6	GRANITE STREET	37	COMMON STREET		63	151	0	22	41
43	BELLINGHAM	MAPC	3	HARTFORD AVENUE	126	STALLBROOK MARKETPLACE		124	148	0	6	118
44	CONCORD,LINCOLN	MAPC	4	CONCORD TURNPIKE (CROSBYS CORNER)	2	CAMBRIDGE TURNPIKE	2	74	146	0	18	56
45	WEYMOUTH	MAPC	6	MAIN STREET	18	PARK AVENUE		85	145	0	15	70
46	SPRINGFIELD	PVPC	2	UNION STREET		WALNUT STREET		42	142	0	25	17
46	TEWKSBURY	NMCOG	4	SALEM ROAD		SOUTH STREET		66	142	0	19	47
46	SOMERSET	SRPEDD	5	BRAYTON AVENUE		SLADES FERRY AVENUE		58	142	0	21	37
49	WORCESTER	CMRPC	3	LINCOLN STREET	70	MARSH AVENUE		57	141	0	21	36
50	TAUNTON	SRPEDD	5	CAPE ROAD	44	10-23 CAPE ROAD (BY ADDRESS)		60	140	0	20	40
50	WORCESTER	CMRPC	3	HIGHLAND STREET (LINCOLN SQUARE)	9	MAIN STREET		64	140	0	19	45
52	SPRINGFIELD	PVPC	2	EAST COLUMBUS AVENUE		UNION STREET		51	139	0	22	29
52	FRAMINGHAM	MAPC	3	CONCORD STREET	126	WAVERLEY STREET	135	67	139	0	18	49
52	SPRINGFIELD	PVPC	2	PLAINFIELD STREET	20	WEST STREET	20	51	139	0	22	29

2011-2013 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
55	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	TEMPLE STREET		54	138	0	21	33
56	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	CALIFORNIA AVENUE		65	137	0	18	47
56	FALMOUTH	CCC	5	TEATICKET HIGHWAY	28	MARAVISTA AVENUE		81	137	0	14	67
58	FITCHBURG	MRPC	3	MAIN STREET	2A	NORTH STREET		80	136	0	14	66
59	SWAMPSCOTT	MAPC	4	PARADISE ROAD	1A	SWAMPSCOTT MALL		55	135	0	20	35
60	CHICOPEE	PVPC	2	MEMORIAL DRIVE	33	PENDLETON AVENUE		58	134	0	19	39
60	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY		AIKEN STREET		58	134	0	19	39
60	TEWKSBURY	NMCOG	4	MAIN STREET	38	CLARK ROAD		86	134	0	12	74
60	SPRINGFIELD	PVPC	2	SUMNER AVENUE	83	BELMONT AVENUE	83	62	134	0	18	44
64	SPRINGFIELD	PVPC	2	BOSTON ROAD		COVINGTON STREET		45	133	0	22	23
64	PEMBROKE	MAPC_OCPC	5	CHURCH STREET	139	OLD OAK STREET		57	133	0	19	38
64	WEYMOUTH	MAPC	6	MAIN STREET	18	WINTER STREET		61	133	0	18	43
64	NORTHAMPTON	PVPC	2	MAIN STREET	9	KING STREET	5	64	133	1	15	48
68	SHREWSBURY	CMRPC	3	BOSTON TURNPIKE	9	SOUTH STREET		68	132	0	16	52
68	WORCESTER	CMRPC	3	SOUTHBRIDGE STREET		HAMMOND STREET		56	132	0	19	37
70	BROCKTON	OCPC	5	WARREN AVENUE		FOREST AVENUE		43	131	0	22	21
70	CHELSEA	MAPC	6	REVERE BEACH PARKWAY	16	GARFIELD AVENUE		55	131	0	19	36
72	HAVERHILL	MVPC	4	WASHINGTON STREET	110	RIVER STREET	110	74	130	0	14	60
72	FALL RIVER	SRPEDD	5	BEDFORD STREET		TROY STREET		50	130	0	20	30
74	FAIRHAVEN	SRPEDD	5	ALDEN ROAD		BRIDGE STREET		73	129	0	14	59
74	BROCKTON	OCPC	5	NORTH MAIN STREET		EAST ASHLAND STREET		45	129	0	21	24
74	LOWELL	NMCOG	4	THORNDIKE STREET	3A	HIGHLAND STREET		57	129	0	18	39
77	HOLYOKE	PVPC	2	JACKSON STREET		COMMERCIAL STREET		48	128	0	20	28
77	WILBRAHAM	PVPC	2	BOSTON ROAD	20	STONY HILL ROAD		80	128	0	12	68
77	LYNN	MAPC	4	WESTERN AVENUE	107	FRANKLIN STREET		72	128	0	14	58
77	WEBSTER	CMRPC	3	WORCESTER ROAD	12	EAST MAIN STREET	12	68	128	0	15	53
81	NATICK	MAPC	3	SPEEN STREET		CLOVERLEAF MARKETPLACE SHOPPING CENTER		79	127	0	12	67
81	SPRINGFIELD	PVPC	2	STATE STREET		ORLEANS STREET		39	127	0	22	17
81	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	DINSMORE AVENUE		55	127	0	18	37
84	CAMBRIDGE	MAPC	6	MASSACHUSETTS AVENUE	2A	VASSAR STREET		45	126	1	18	26
84	HOLYOKE	PVPC	2	MAIN STREET	116	CABOT STREET	116	58	126	0	17	41
86	SPRINGFIELD	PVPC	2	SAINT JAMES AVENUE		TAPLEY STREET		52	124	0	18	34
86	MARLBOROUGH	MAPC	3	BOSTON POST ROAD WEST	20	NORTHBORO ROAD EAST (SHOPPING PLAZA)		92	124	0	8	84
86	LOWELL	NMCOG	4	NESMITH STREET	38	ANDOVER STREET	110	56	124	0	17	39
89	WORCESTER	CMRPC	3	MADISON STREET	122	KELLEY SQUARE (BY ADDRESS)		59	123	0	16	43
90	LEOMINSTER	MRPC	3	NORTH MAIN STREET	12	HAMILTON STREET		58	122	0	16	42
90	SPRINGFIELD	PVPC	2	BOSTON ROAD		BAY STREET		41	122	1	18	22
92	BROCKTON	OCPC	5	REYNOLDS HIGHWAY	27	CHRISTYS DRIVE		41	121	0	20	21
92	SPRINGFIELD	PVPC	2	BERKSHIRE AVENUE		COTTAGE STREET		32	121	1	20	11
94	BROCKTON	OCPC	5	CENTRE STREET	123	QUINCY STREET		35	120	1	19	15
94	SPRINGFIELD	PVPC	2	ROOSEVELT AVENUE		PAGE BOULEVARD	20A	36	120	0	21	15
94	SPRINGFIELD	PVPC	2	MAIN STREET		PLAINFIELD STREET	20A	40	120	0	20	20
94	WELLESLEY	MAPC	6	WASHINGTON STREET	16	WORCESTER STREET		80	120	0	10	70
94	WORCESTER	CMRPC	3	SOUTHBRIDGE STREET		MADISON STREET	122	52	120	0	17	35
99	BROCKTON	OCPC	5	NORTH MAIN STREET		HOWARD STREET		47	119	0	18	29
99	SEEKONK	SRPEDD	5	FALL RIVER AVENUE	6	COMMERCE WAY		79	119	0	10	69
101	WESTFORD	NMCOG	3	LITTLETON ROAD	110	BOSTON ROAD		98	118	0	5	93
101	LYNN	MAPC	4	WESTERN AVENUE	107	CHESTNUT STREET	129A	54	118	0	16	38
101	FALL RIVER	SRPEDD	5	CENTRAL STREET		DAVOL STREET		54	118	0	16	38
101	HOLYOKE	PVPC	2	MAPLE STREET		RESNIC BOULEVARD		46	118	0	18	28
105	WORCESTER	CMRPC	3	HIGHLAND STREET	9	LANCASTER STREET		61	117	0	14	47
105	WORCESTER	CMRPC	3	BELMONT STREET	9	EDWARD STREET		61	117	0	14	47
105	QUINCY	MAPC	6	HANCOCK STREET		SAVILLE AVENUE		61	117	0	14	47
108	FALL RIVER	SRPEDD	5	PLEASANT STREET		QUARRY STREET		56	116	0	15	41



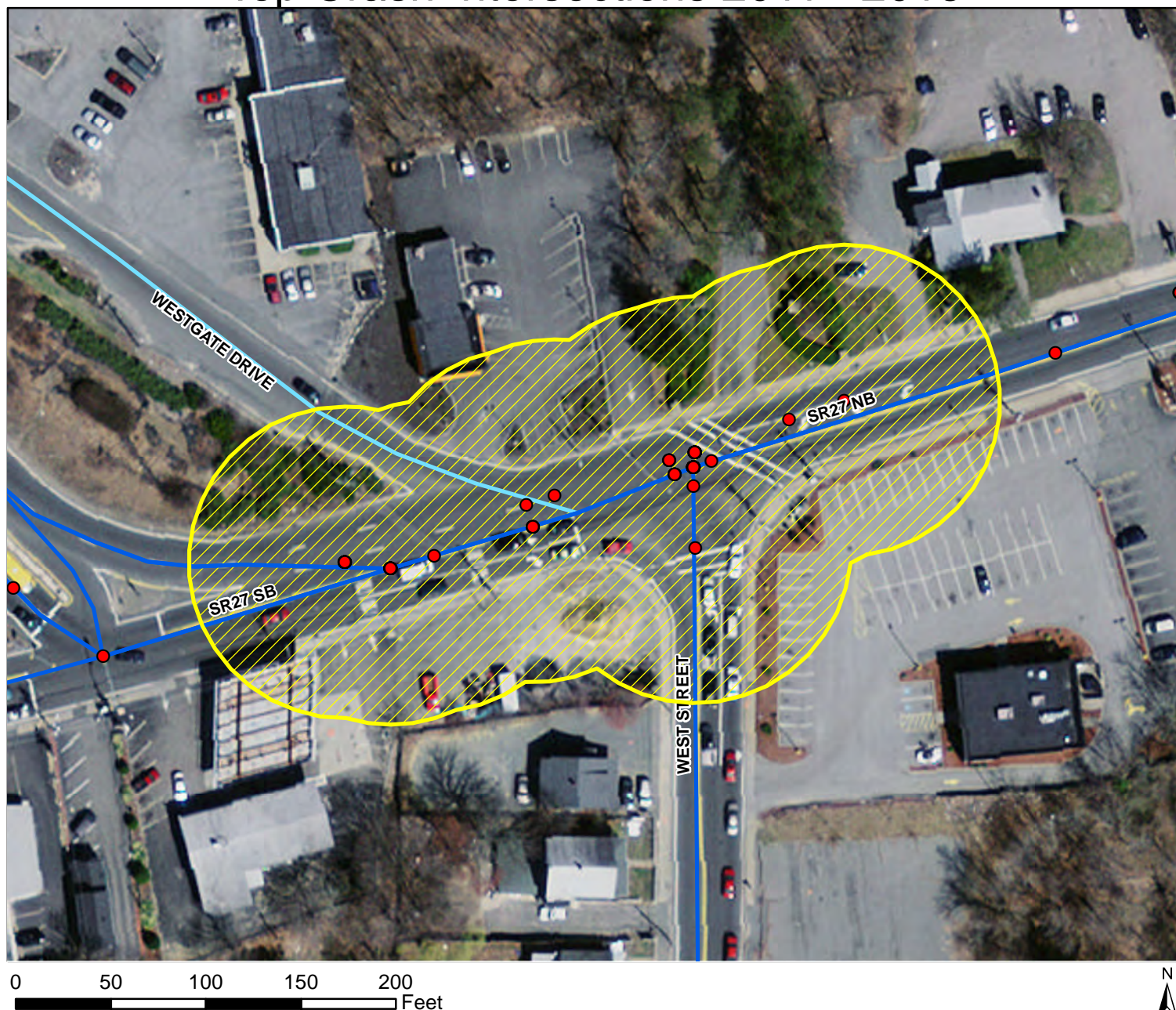
2011-2013 STATEWIDE TOP 200 INTERSECTION CRASH LIST

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
109	LYNN	MAPC	4	LYNNFIELD STREET	129	BROADWAY		79	115	0	9	70
109	HUDSON	MAPC	3	WASHINGTON STREET	85	TECHNOLOGY DRIVE		67	115	0	12	55
111	BROCKTON	OCPC	5	WARREN AVENUE	123	WEST ELM STREET		38	114	0	19	19
111	SPRINGFIELD	PVPC	2	SAINT JAMES AVENUE		CAREW STREET		37	114	1	17	19
113	FITCHBURG	MRPC	3	WATER STREET	12	CENTRAL PLAZA		77	113	0	9	68
113	BROCKTON	OCPC	5	MAIN STREET		LEGION PARKWAY	123	41	113	0	18	23
115	BROCKTON	OCPC	5	OAK STREET		BELAIR STREET		36	112	0	19	17
115	WEYMOUTH	MAPC	6	WASHINGTON STREET	53	MIDDLE STREET		60	112	0	13	47
115	METHUEN	MVPC	4	PLEASANT VALLEY STREET	113	MILK STREET		64	112	0	12	52
115	SPRINGFIELD	PVPC	2	BOSTON ROAD		WILKES STREET		40	112	0	18	22
119	BROCKTON	OCPC	5	PLEASANT STREET	27	WARREN AVENUE		55	111	0	14	41
119	NATICK	MAPC	3	WORCESTER STREET	9	U-TURN NEAR MCDONALDS		67	111	0	11	56
119	SPRINGFIELD	PVPC	2	SUMNER AVENUE	83	BELMONT AVENUE		43	111	0	17	26
119	HOLYOKE	PVPC	2	CHERRY STREET	202	SOLDIERS HOME ROAD		42	111	1	15	26
119	LOWELL	NMCOG	4	PAWTUCKET BOULEVARD	113	ROURKE BRIDGE		63	111	0	12	51
124	SHREWSBURY	CMRPC	3	HARTFORD TURNPIKE	20	GRAFTON STREET		49	110	1	13	35
124	WALTHAM	MAPC	4	MAIN STREET	20	LYMAN STREET		54	110	0	14	40
126	SPRINGFIELD	PVPC	2	MAIN STREET		LOCUST STREET		45	109	0	16	29
126	LOWELL	NMCOG	4	PAWTUCKET STREET		SCHOOL STREET		53	109	0	14	39
126	SPRINGFIELD	PVPC	2	MAPLE STREET		UNION STREET		37	109	0	18	19
126	SPRINGFIELD	PVPC	2	LIBERTY STREET		GENESEE STREET		29	109	0	20	9
130	BARNSTABLE	CCC	5	YARMOUTH ROAD		IYANNOUGH ROAD	28	56	108	0	13	43
130	HAVERHILL	MVPC	4	MAIN STREET	97	BAILEY BOULEVARD		44	108	0	16	28
130	FITCHBURG	MRPC	3	WANOOSNOC ROAD		WATER STREET	12	52	108	0	14	38
130	PEABODY	MAPC	4	ANDOVER STREET	114	ESQUIRE DRIVE		48	108	0	15	33
130	MILFORD	MAPC	3	EAST MAIN STREET	16	QUARRY SQUARE SHOPPING CENTER		80	108	0	7	73
130	SALEM	MAPC	4	NORTH STREET	114	MASON STREET		51	108	1	12	38
130	YARMOUTH	CCC	5	NORTH MAIN STREET		ROUTE 28	28	60	108	0	12	48
137	MIDDLEBOROUGH	SRPEDD	5	SOUTH MAIN STREET	105	EAST GROVE STREET	28	63	107	0	11	52
138	SPRINGFIELD	PVPC	2	BOSTON ROAD	20	LUCERNE ROAD		42	106	0	16	26
138	BROCKTON	OCPC	5	CENTRE STREET	123	PLYMOUTH STREET		42	106	0	16	26
138	BOSTON	MAPC	6	JAMAICAWAY		BYNNER STREET		46	106	0	15	31
138	GRANBY	PVPC	2	WEST STATE STREET	202	PLEASANT STREET		62	106	0	11	51
142	STOUGHTON	MAPC_OCPC	5	WASHINGTON STREET	138	WYMAN STREET		53	105	0	13	40
142	MANSFIELD	SRPEDD	5	CHAUNCEY STREET	106	NORTH MAIN STREET		57	105	0	12	45
142	SUTTON	CMRPC	3	WORCESTER PROVIDENCE TURNPIKE	146	BOSTON ROAD		53	105	0	13	40
145	SWANSEA	SRPEDD	5	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	GARDNERS NECK ROAD		40	104	0	16	24
145	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	COCHITUATE ROAD	30	52	104	0	13	39
145	SPRINGFIELD	PVPC	2	STATE STREET		SPRING STREET		36	104	0	17	19
145	SPRINGFIELD	PVPC	2	SOUTH END BRIDGE	5			52	104	0	13	39
145	WEYMOUTH	MAPC	6	UNION STREET		PLEASANT STREET		68	104	0	9	59
145	LOWELL	NMCOG	4	FATHER MORISSETTE BOULEVARD		CABOT STREET		32	104	0	18	14
151	LYNN	MAPC	4	WESTERN AVENUE	107	EASTERN AVENUE		59	103	0	11	48
151	SPRINGFIELD	PVPC	2	STATE STREET		MAPLE STREET		35	103	0	17	18
151	QUINCY	MAPC	6	HANCOCK STREET	3A	EAST SQUANTUM STREET		59	103	0	11	48
154	HOLYOKE	PVPC	2	WESTFIELD ROAD	202	HOMESTEAD AVENUE	202	54	102	0	12	42
154	BROCKTON	OCPC	5	BELMONT STREET	123	MANLEY STREET		46	102	0	14	32
154	LYNN	MAPC	4	WESTERN AVENUE	107	WASHINGTON STREET	129	50	102	0	13	37
154	BROCKTON	OCPC	5	COURT STREET	27	MONTELLO STREET	28	38	102	0	16	22
154	NATICK	MAPC	3	WORCESTER STREET	9	DEAN ROAD		74	102	0	7	67
154	CAMBRIDGE,ARLINGTON	MAPC	6,4	MASSACHUSETTS AVENUE	2A	ALEWIFE BROOK PARKWAY	3	38	102	0	16	22
154	WEYMOUTH	MAPC	6	PLEASANT STREET		WASHINGTON STREET	53	54	102	0	12	42
154	LOWELL	NMCOG	4	BRIDGE STREET	38	WEST THIRD STREET		58	102	0	11	47
154	ANDOVER	MVPC	4	MAIN STREET	28	ANDOVER VILLAGE SQUARE		66	102	0	9	57

2011-2013 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
154	WORCESTER	CMRPC	3	MAIN STREET		CHANDLER STREET	122	46	102	0	14	32
154	MASHPEE	CCC	5	NATHAN ELLIS HIGHWAY	151	OLD BARNSTABLE ROAD		46	102	0	14	32
165	BROCKTON	OCPC	5	NORTH PEARL STREET	27	OAK STREET		41	101	0	15	26
165	WALPOLE	MAPC	5	WASHINGTON STREET		POLLEY LANE		41	101	0	15	26
165	LEOMINSTER	MRPC	3	MAIN STREET	13	HAMILTON STREET		61	101	0	10	51
168	HAVERHILL	MVPC	4	BRIDGE STREET	125	WATER STREET	113	68	100	0	8	60
168	WESTFIELD	PVPC	2	EAST MAIN STREET	20	LITTLE RIVER ROAD	187	36	100	0	16	20
168	SPRINGFIELD	PVPC	2	ROOSEVELT AVENUE		BAY STREET		36	100	0	16	20
168	MANSFIELD	SRPEDD	5	CHAUNCY STREET	106	COPELAND DRIVE		44	100	0	14	30
168	SOMERVILLE	MAPC	4	BROADWAY		MCGRATH HIGHWAY	28	36	100	0	16	20
168	TAUNTON	SRPEDD	5	BROADWAY	138	WASHINGTON STREET		56	100	0	11	45
174	WESTBOROUGH	CMRPC	3	BOSTON WORCESTER TURNPIKE	9	LYMAN STREET		71	99	0	7	64
174	EVERETT	MAPC	4	REVERE BEACH PARKWAY	16	EVERETT AVENUE		39	99	0	15	24
174	BROCKTON	OCPC	5	BELMONT AVENUE		WEST ELM STREET		31	99	0	17	14
174	NATICK	MAPC	3	WEST CENTRAL STREET	135	SPEEN STREET		47	99	0	13	34
178	FITCHBURG	MRPC	3	WHALON STREET		PIERCE AVENUE		54	98	0	11	43
178	WORCESTER	CMRPC	3	EAST CENTRAL STREET		SUMMER STREET		50	98	0	12	38
178	WORCESTER	CMRPC	3	VERNON STREET	122A	DORCHESTER STREET		38	98	0	15	23
178	SALEM	MAPC	4	HIGHLAND AVENUE	107	MARLBOROUGH ROAD		46	98	0	13	33
178	FRAMINGHAM,NATICK	MAPC	3	WORCESTER ROAD	9	SHOPPERS WORLD		58	98	0	10	48
178	DANVERS	MAPC	4	ANDOVER STREET	114	GARDEN STREET		38	98	0	15	23
178	MIDDLEBOROUGH	SRPEDD	5	ROUTE 44	44	PLYMPTON STREET	105	46	98	0	13	33
178	WATERTOWN	MAPC	6	GALEN STREET	16	WATERTOWN STREET		38	98	0	15	23
178	MILFORD	MAPC	3	CEDAR STREET	85	OLD CEDAR STREET		46	98	0	13	33
178	FRAMINGHAM	MAPC	3	WAVERLEY STREET	135	BEAVER STREET		42	98	0	14	28
188	BROCKTON	OCPC	5	NORTH MONTELLA STREET	28	EAST BATTLES STREET		33	97	0	16	17
188	SEEKONK	SRPEDD	5	FALL RIVER AVENUE	114A	COUNTY STREET		57	97	0	10	47
188	LEOMINSTER	MRPC	3	NORTH MAIN STREET	12	NELSON STREET		65	97	0	8	57
188	CHICOPEE	PVPC	2	MEMORIAL DRIVE	33	CHICOPEE MARKETPLACE		37	97	0	15	22
188	WEST BRIDGEWATER	OCPC	5	WEST CENTER STREET	106	PROSPECT STREET		49	97	0	12	37
193	WILMINGTON	MAPC	4	MAIN STREET	38	RICHMOND STREET	129	60	96	0	9	51
193	HOLYOKE	PVPC	2	LOWER WESTFIELD ROAD		WHITING FARMS ROAD		48	96	0	12	36
193	BROCKTON	OCPC	5	CRESCENT STREET	27	LYMAN STREET		36	96	0	15	21
193	LEXINGTON	MAPC	4	BEDFORD STREET	4	HARRINGTON ROAD		60	96	0	9	51
193	HOLYOKE	PVPC	2	BEECH STREET	202	WEST FRANKLIN STREET		56	96	0	10	46
193	LYNN	MAPC	4	FRANKLIN STREET		HANOVER STREET		40	96	0	14	26
193	FALL RIVER	SRPEDD	5	PLEASANT STREET		QUEQUECHAN STREET		48	96	0	12	36
193	BROCKTON	OCPC	5	PLEASANT STREET	27	NORTH ASH STREET		36	96	0	15	21
193	GARDNER	MRPC	3	PEARSON BOULEVARD		ELM STREET		76	96	0	5	71
202	FALL RIVER	SRPEDD	5	PRESIDENT AVENUE	6	CVS PLAZA		55	95	0	10	45

# Top Crash Intersections 2011 - 2013



**RANK**  
**1**

## BROCKTON

### PLEASANT STREET ROUTE 27 WEST STREET

MassDOT District 5

RPA OCPC

EPDO 298

Number of Fatal Crashes 0

Number of Injury Crashes 49

Number of Non-Injury Crashes 53

Total Crashes 102

### Legend

- Crash Locations 2011-2013
- ▬ All Functional Classification Except Local Roads
- ▬ Local Roads
- ▨ Top Crash Intersections



# Top Crash Intersections 2011 - 2013



USGS, MassGIS

**RANK**  
**2**

## LOWELL

**BRIDGE STREET      ROUTE 38**  
**VETERANS OF FOREIGN WARS HIGHWAY**

MassDOT District 4

RPA NMCOG

EPDO      285

Number of Fatal Crashes      0

Number of Injury Crashes      40

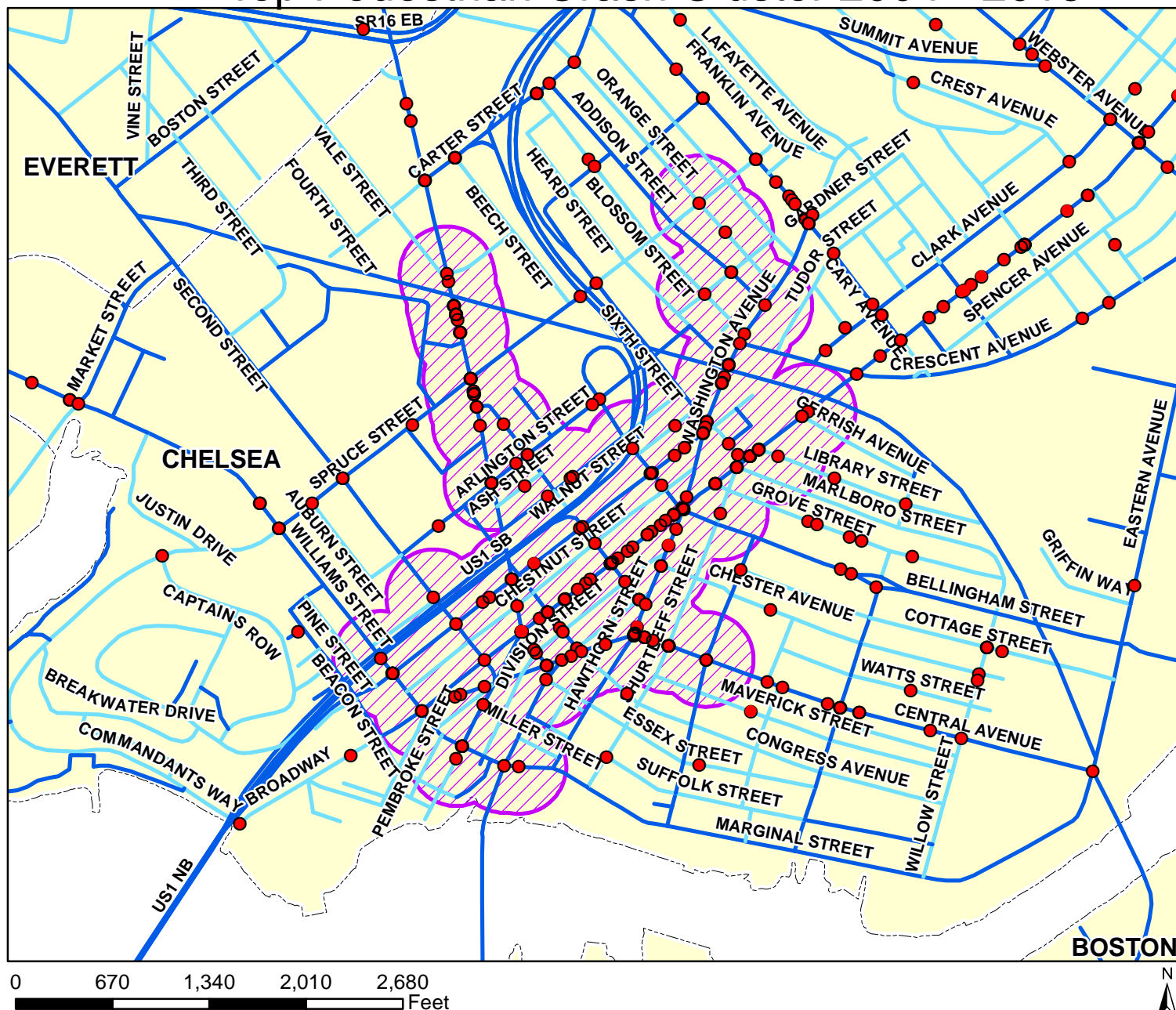
Number of Non-Injury Crashes      85

Total Crashes      125

### Legend

- Crash Locations 2011-2013
- ▬ All Functional Classification Except Local Roads
- ▬ Local Roads
- Top Crash Intersections

# Top Pedestrian Crash Cluster 2004 - 2013



## RANK 1

### CHELSEA

MassDOT District 6

RPA MAPC

EPDO 949

Number of Fatal Crashes 1

Number of Injury Crashes 176

Number of Non-Injury Crashes 59

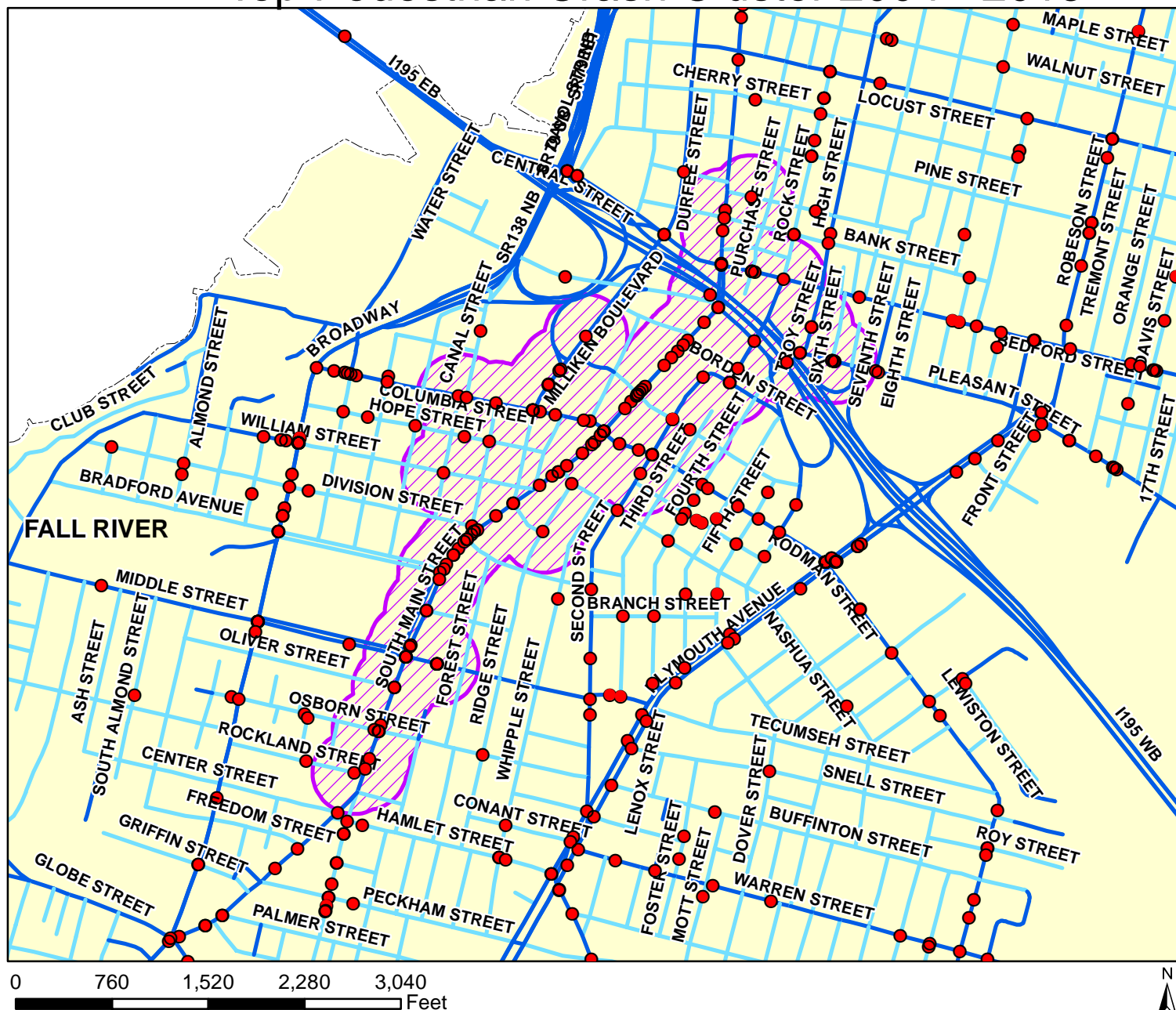
Total Crashes 236

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary



# Top Pedestrian Crash Cluster 2004 - 2013



**RANK**  
**2**

## FALL RIVER

MassDOT District 5

RPA SRPEDD

EPDO 553

Number of Fatal Crashes 0

Number of Injury Crashes 105

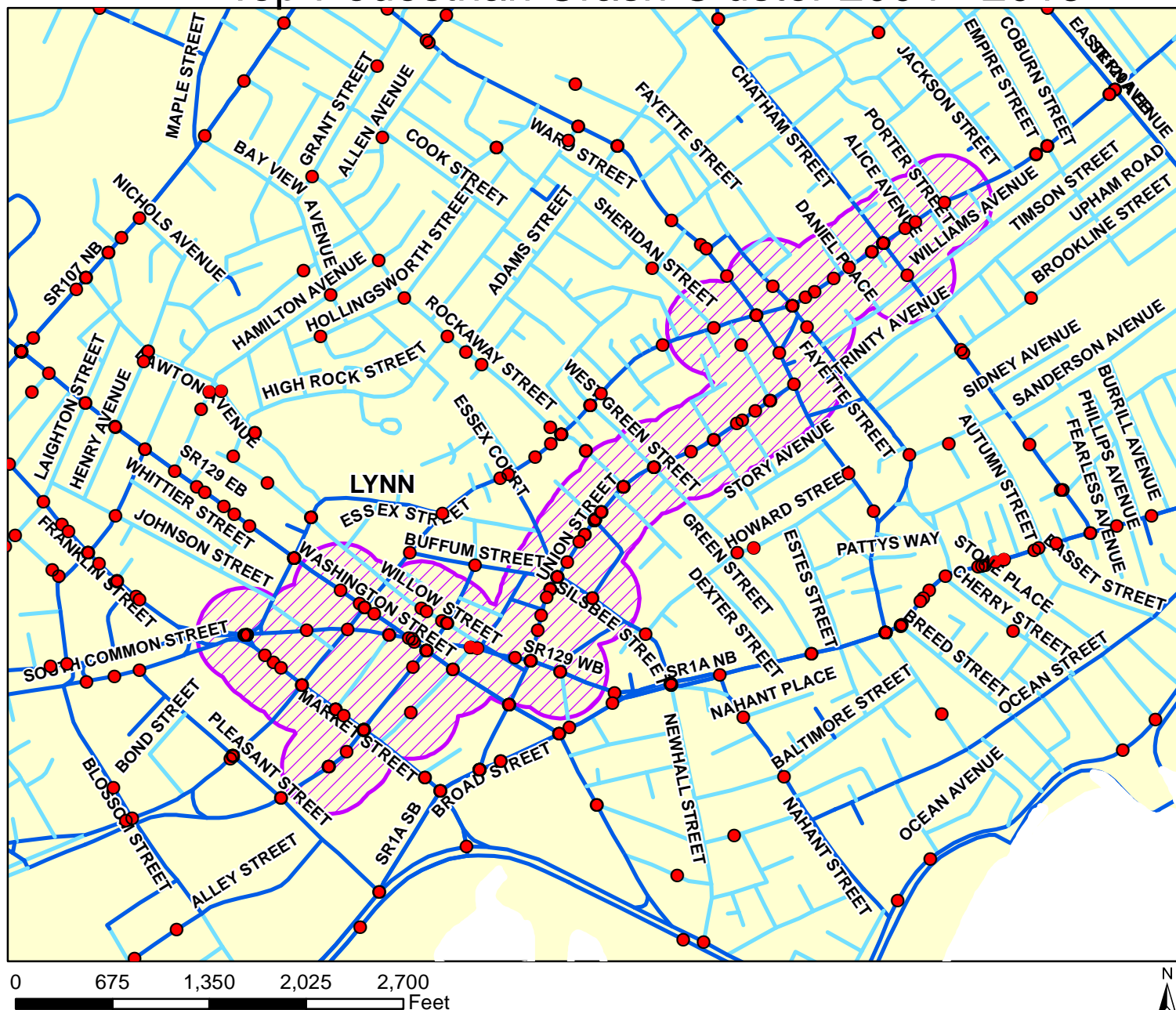
Number of Non-Injury Crashes 28

Total Crashes 133

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary

# Top Pedestrian Crash Cluster 2004 - 2013



**RANK**  
**3**

## LYNN

MassDOT District 4

RPA MAPC

EPDO 525

Number of Fatal Crashes 1

Number of Injury Crashes 93

Number of Non-Injury Crashes 50

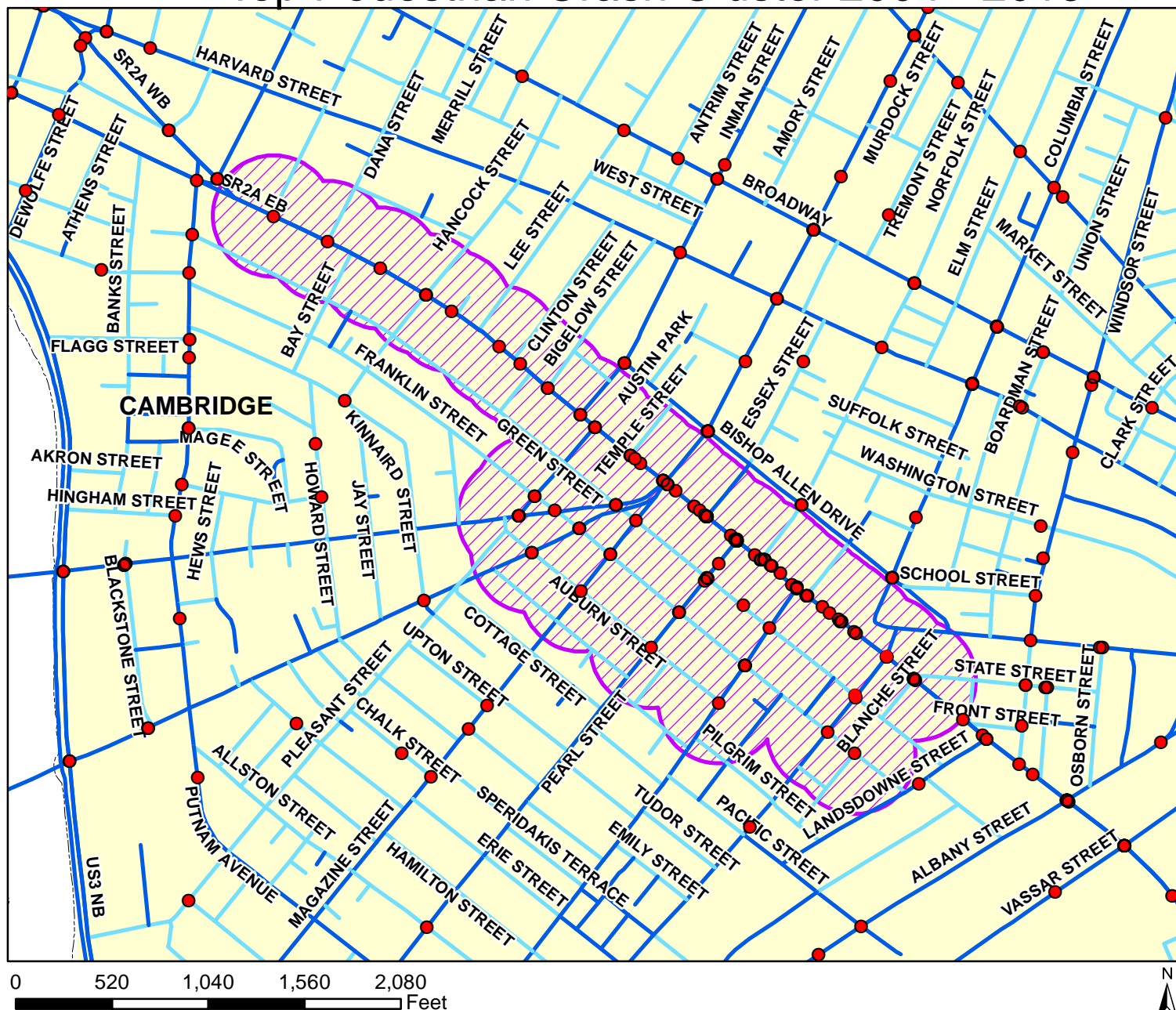
Total Crashes 144

## Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary



# Top Pedestrian Crash Cluster 2004 - 2013



**RANK**  
**4**

## CAMBRIDGE

MassDOT District 6

RPA MAPC

EPDO 476

Number of Fatal Crashes 4

Number of Injury Crashes 75

Number of Non-Injury Crashes 61

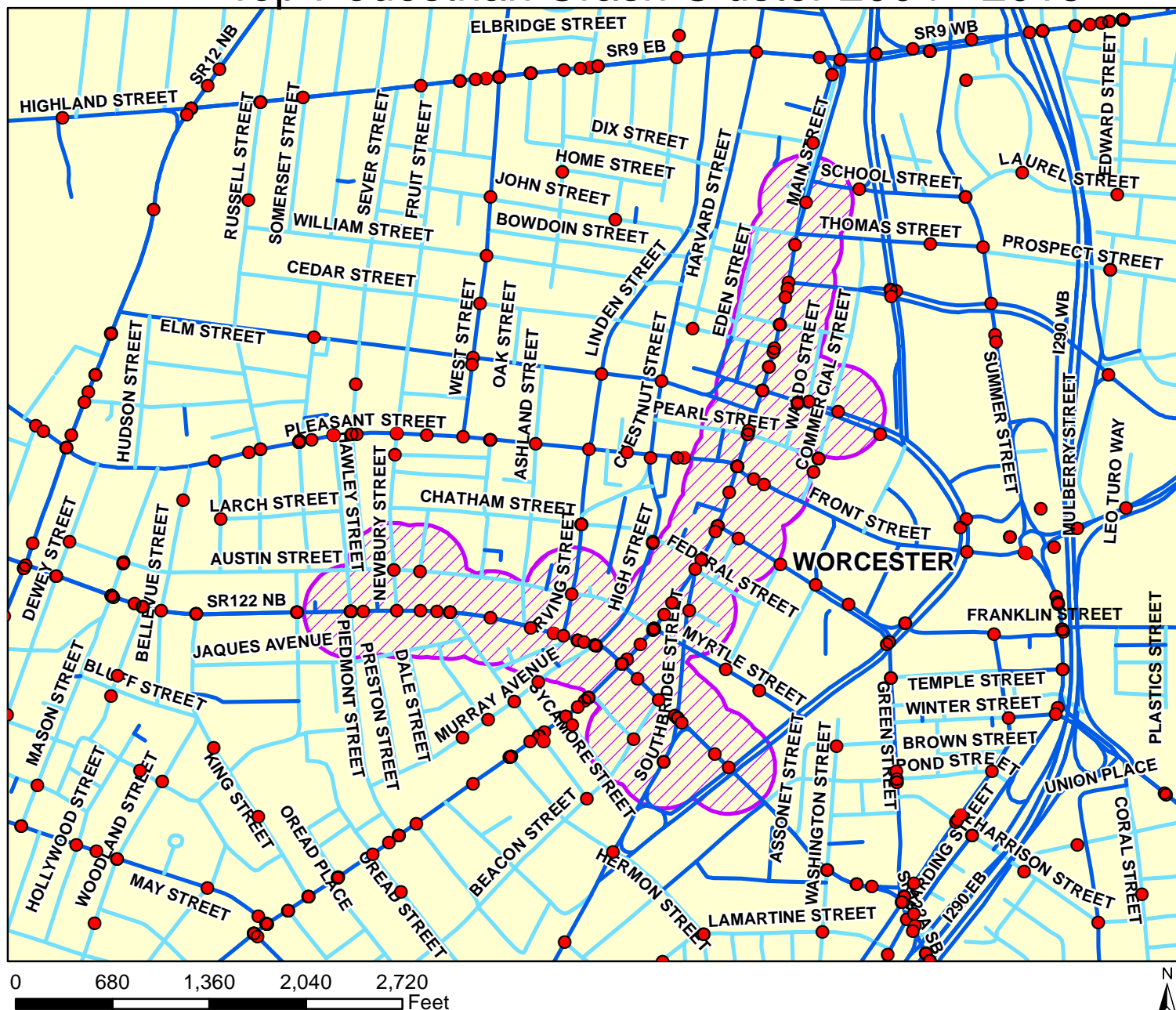
Total Crashes 140

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary



# Top Pedestrian Crash Cluster 2004 - 2013



**RANK**  
**5**

## WORCESTER

MassDOT District 3

RPA CMRPC

EPDO 441

Number of Fatal Crashes 1

Number of Injury Crashes 80

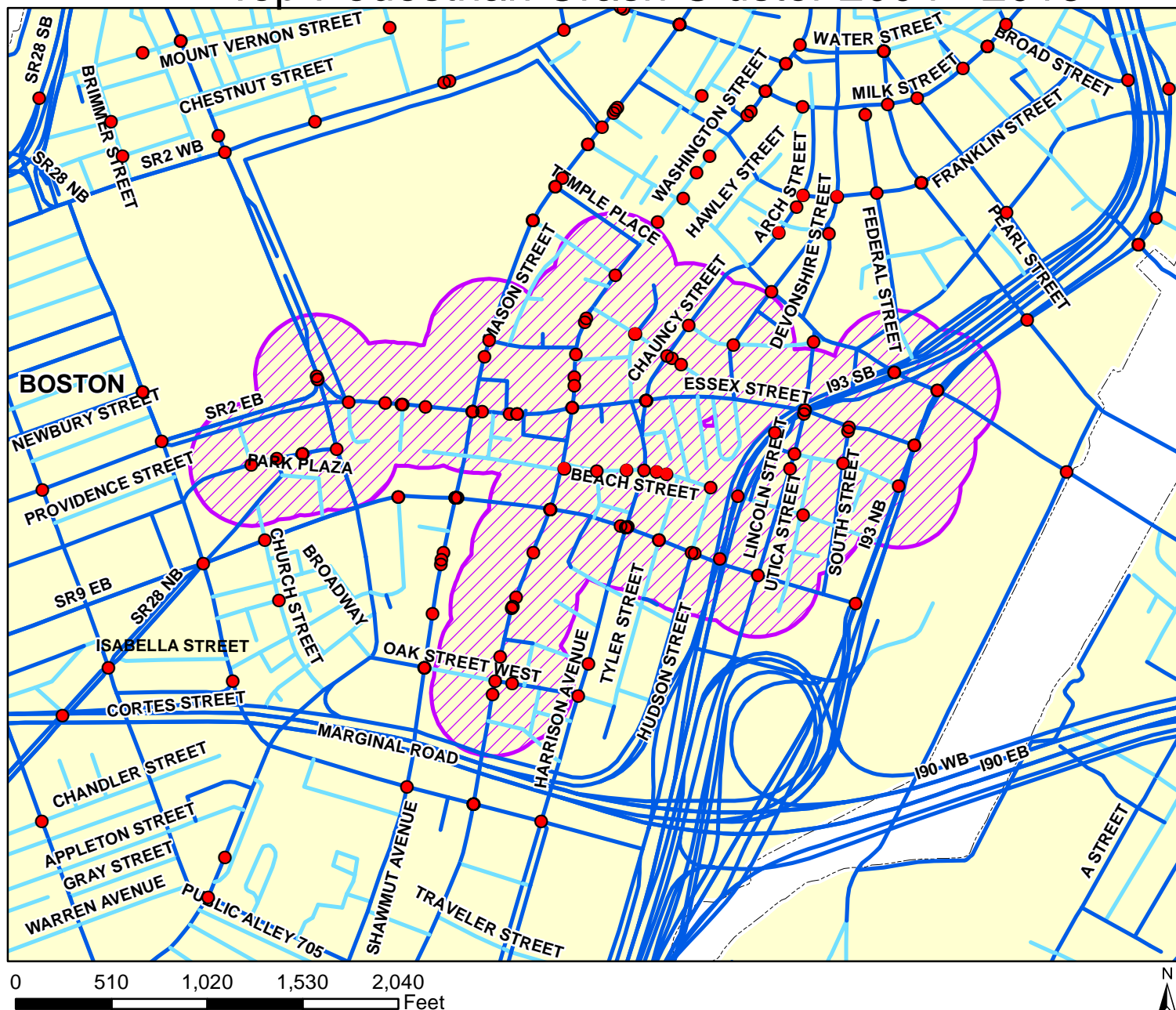
Number of Non-Injury Crashes 31

Total Crashes 112

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary

# Top Pedestrian Crash Cluster 2004 - 2013



**RANK**  
**6**

## BOSTON

MassDOT District 6

RPA MAPC

EPDO 343

Number of Fatal Crashes 1

Number of Injury Crashes 60

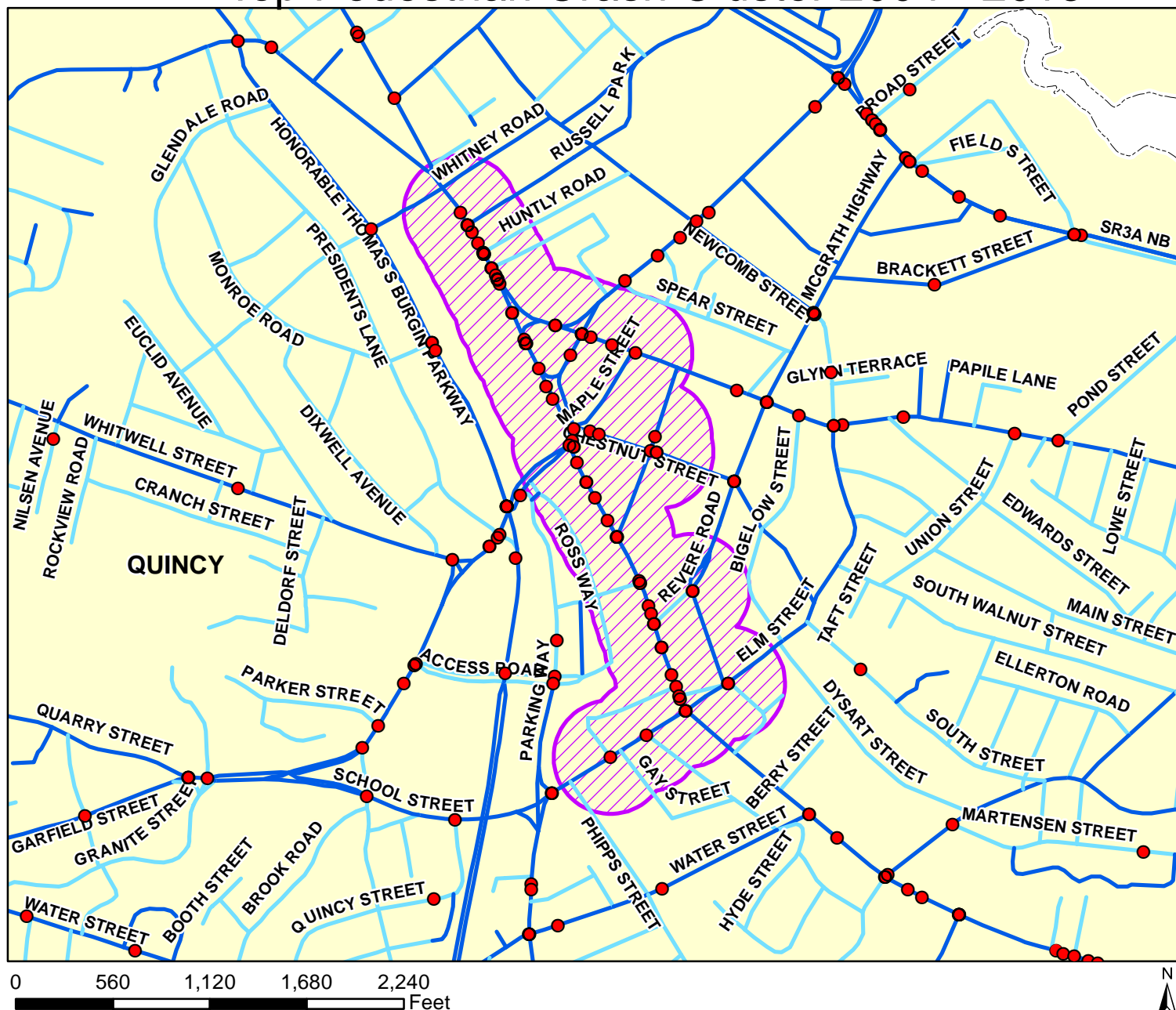
Number of Non-Injury Crashes 33

Total Crashes 94

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

# Top Pedestrian Crash Cluster 2004 - 2013



**RANK**  
**7**

## QUINCY

MassDOT District 6

RPA MAPC

EPDO 329

Number of Fatal Crashes 1

Number of Injury Crashes 58

Number of Non-Injury Crashes 29

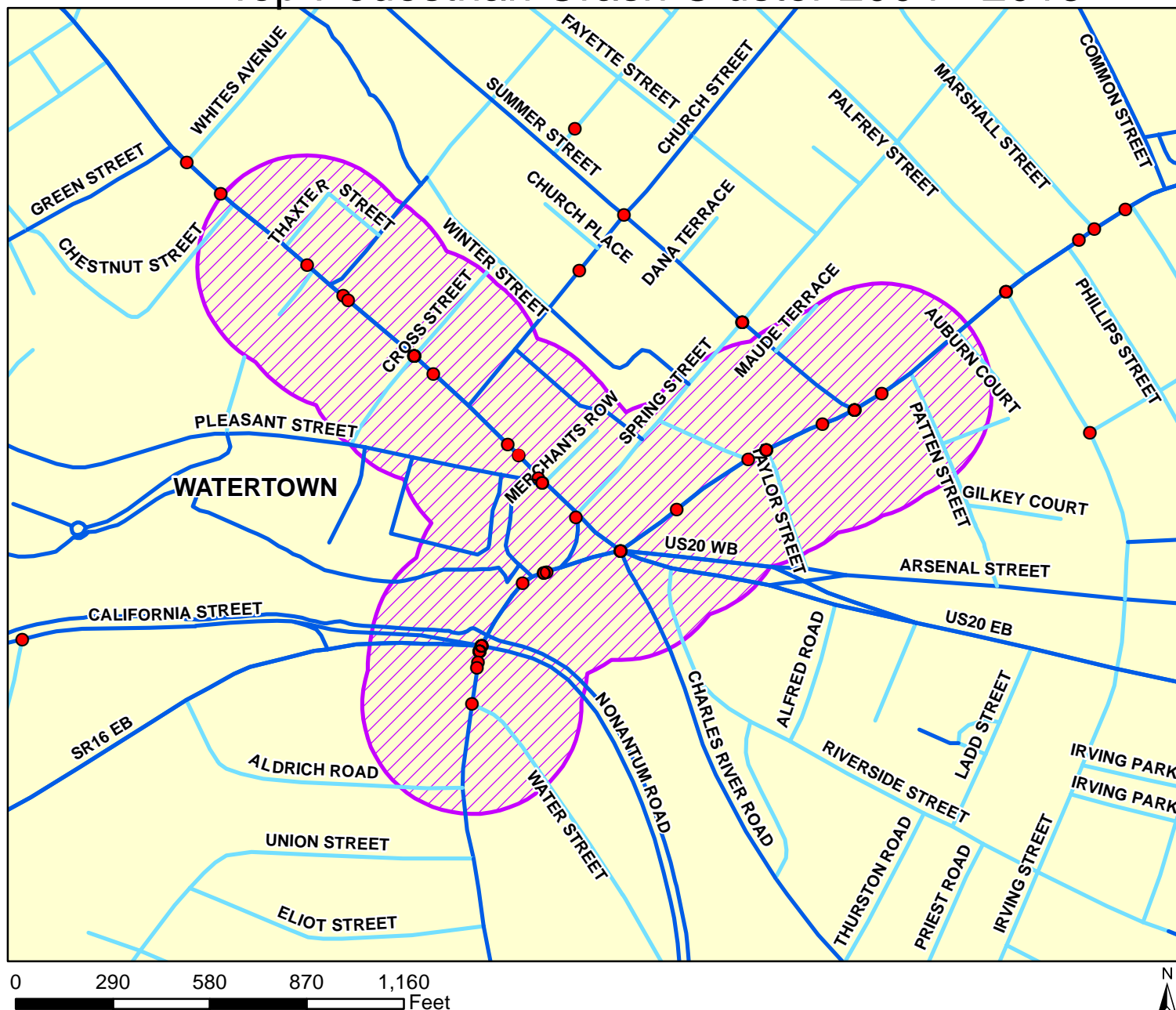
Total Crashes 88

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary



# Top Pedestrian Crash Cluster 2004 - 2013



**RANK**  
**8**

## WATERTOWN

MassDOT District 6

RPA MAPC

EPDO 206

Number of Fatal Crashes 0

Number of Injury Crashes 40

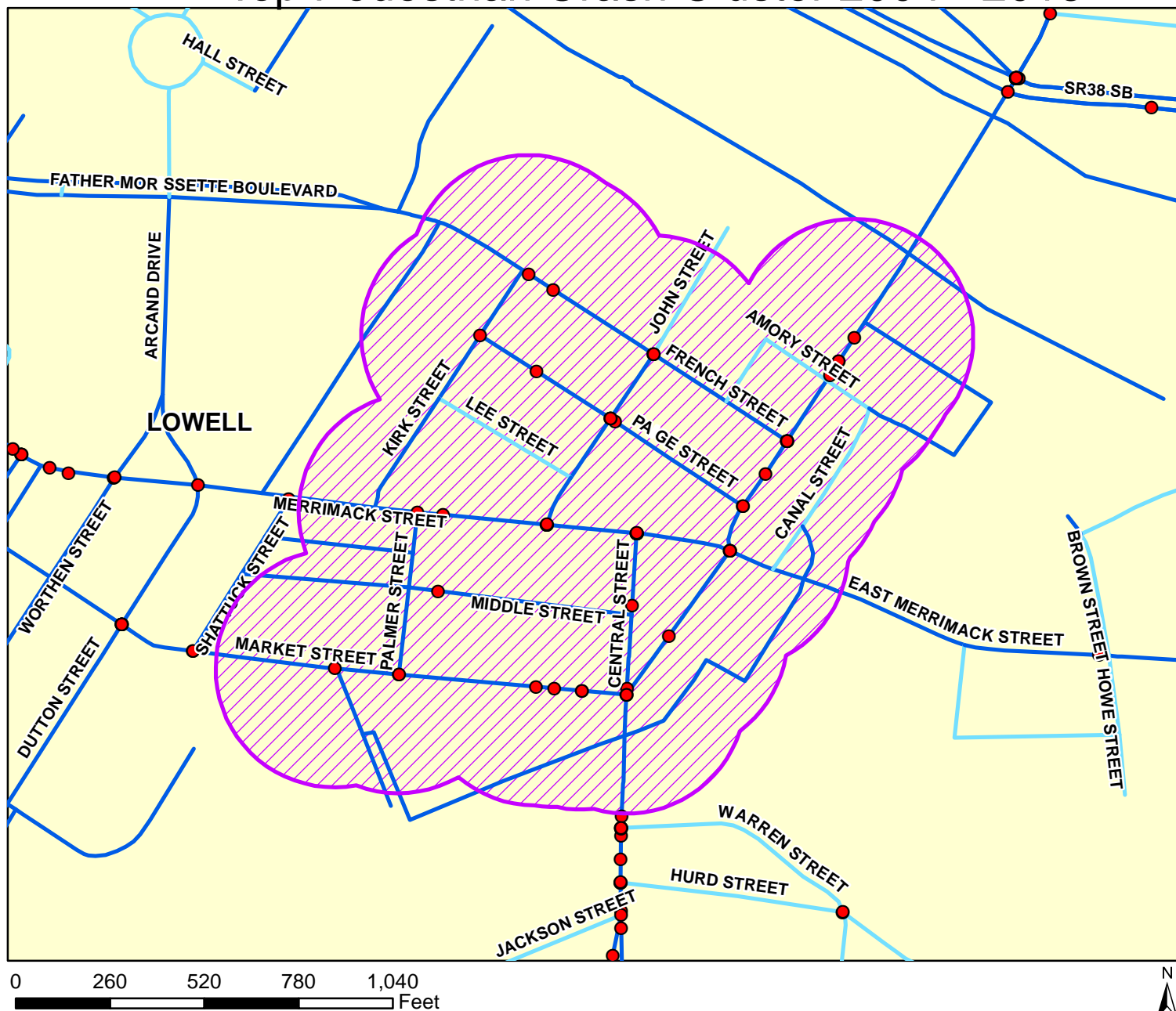
Number of Non-Injury Crashes 6

Total Crashes 46

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

# Top Pedestrian Crash Cluster 2004 - 2013



**RANK**  
9

## LOWELL

MassDOT District 4

RPA NMCOG

EPDO 205

Number of Fatal Crashes 0

Number of Injury Crashes 37

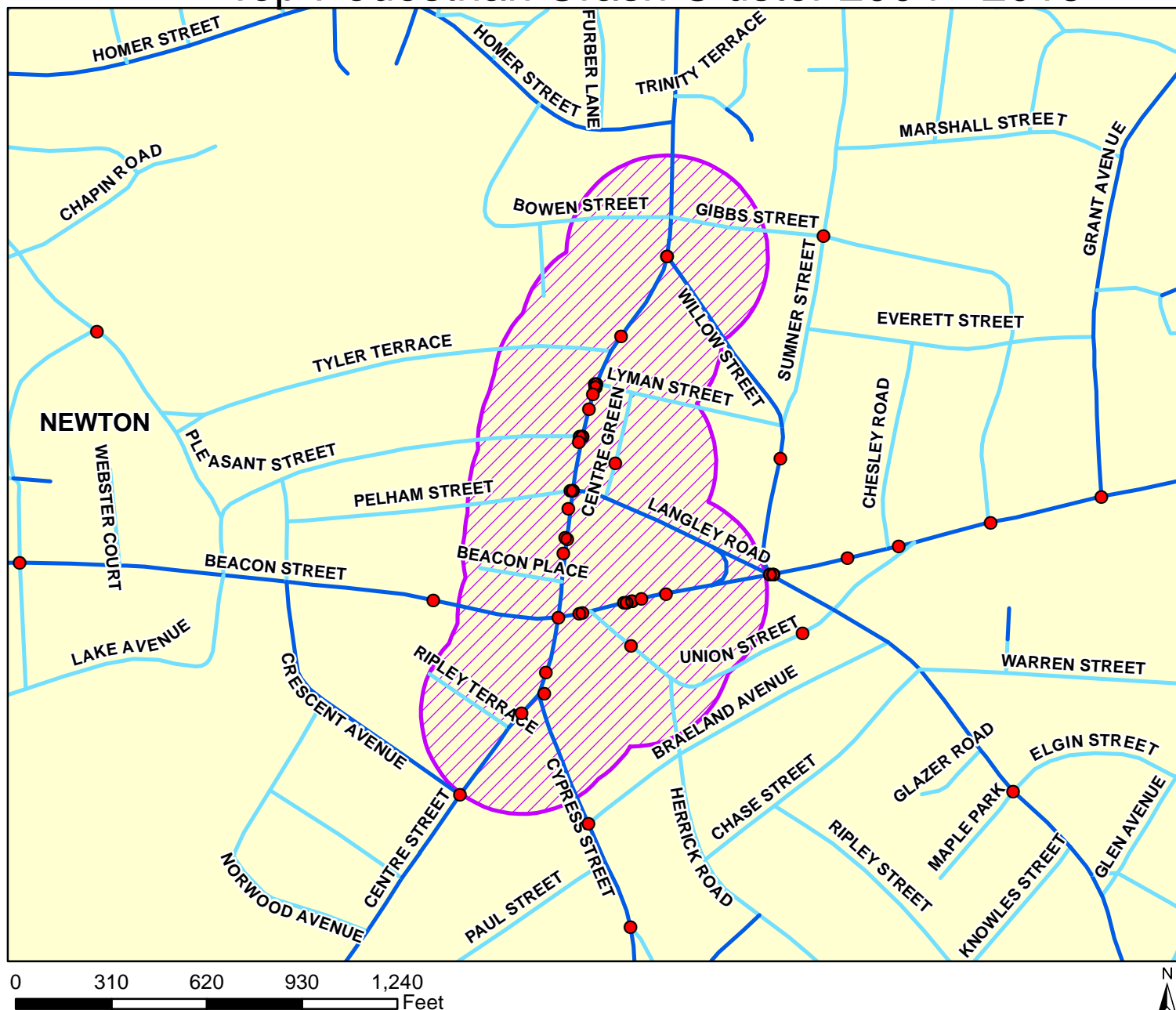
Number of Non-Injury Crashes 20

Total Crashes 57

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

# Top Pedestrian Crash Cluster 2004 - 2013



**RANK  
10**

## NEWTON

MassDOT District 6

RPA MAPC

EPDO 199

Number of Fatal Crashes 1

Number of Injury Crashes 37

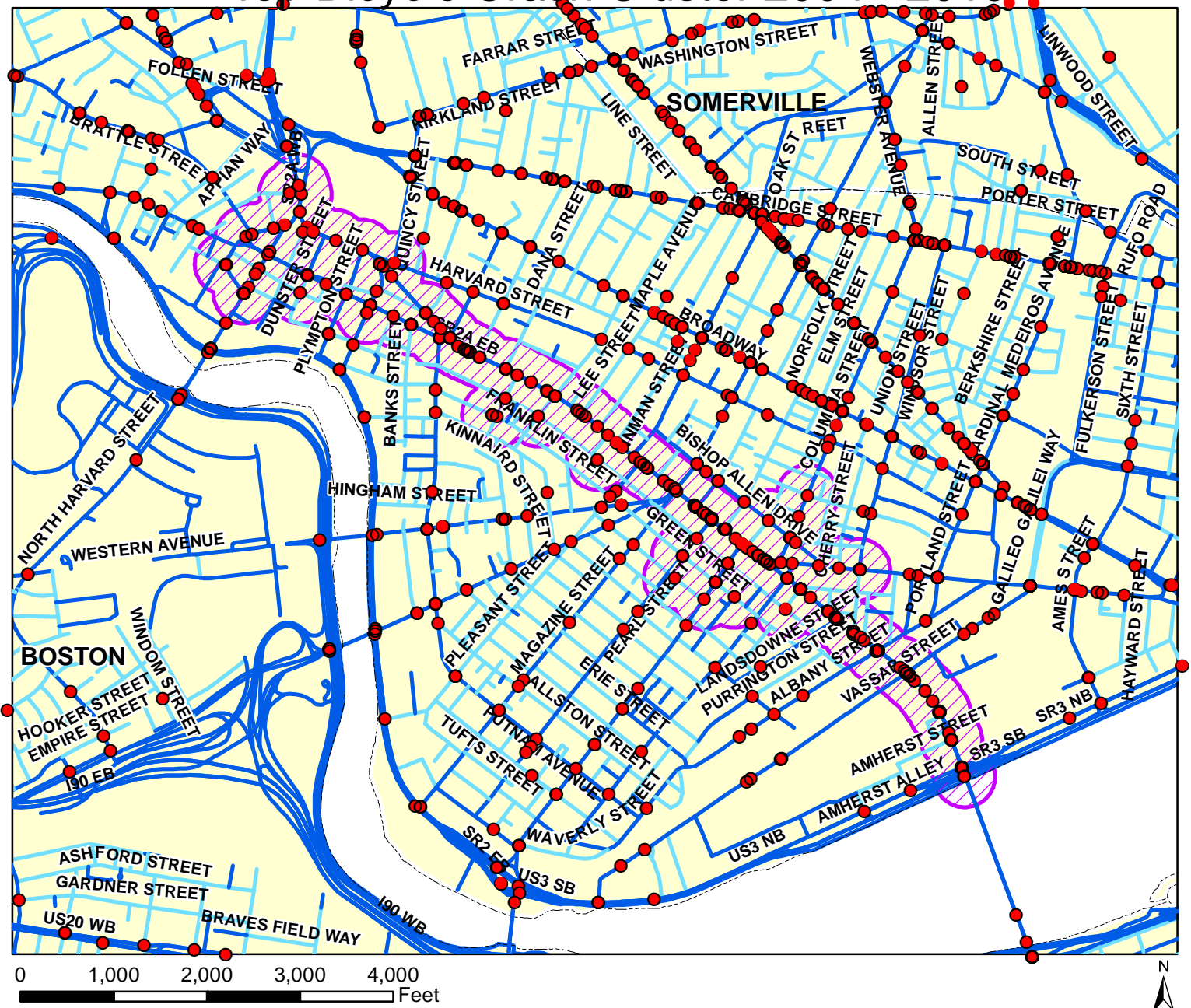
Number of Non-Injury Crashes 4

Total Crashes 42

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
1

## CAMBRIDGE

MassDOT District 6

RPA MAPC

EPDO 1122

Number of Fatal Crashes 1

Number of Injury Crashes 195

Number of Non-Injury Crashes 137

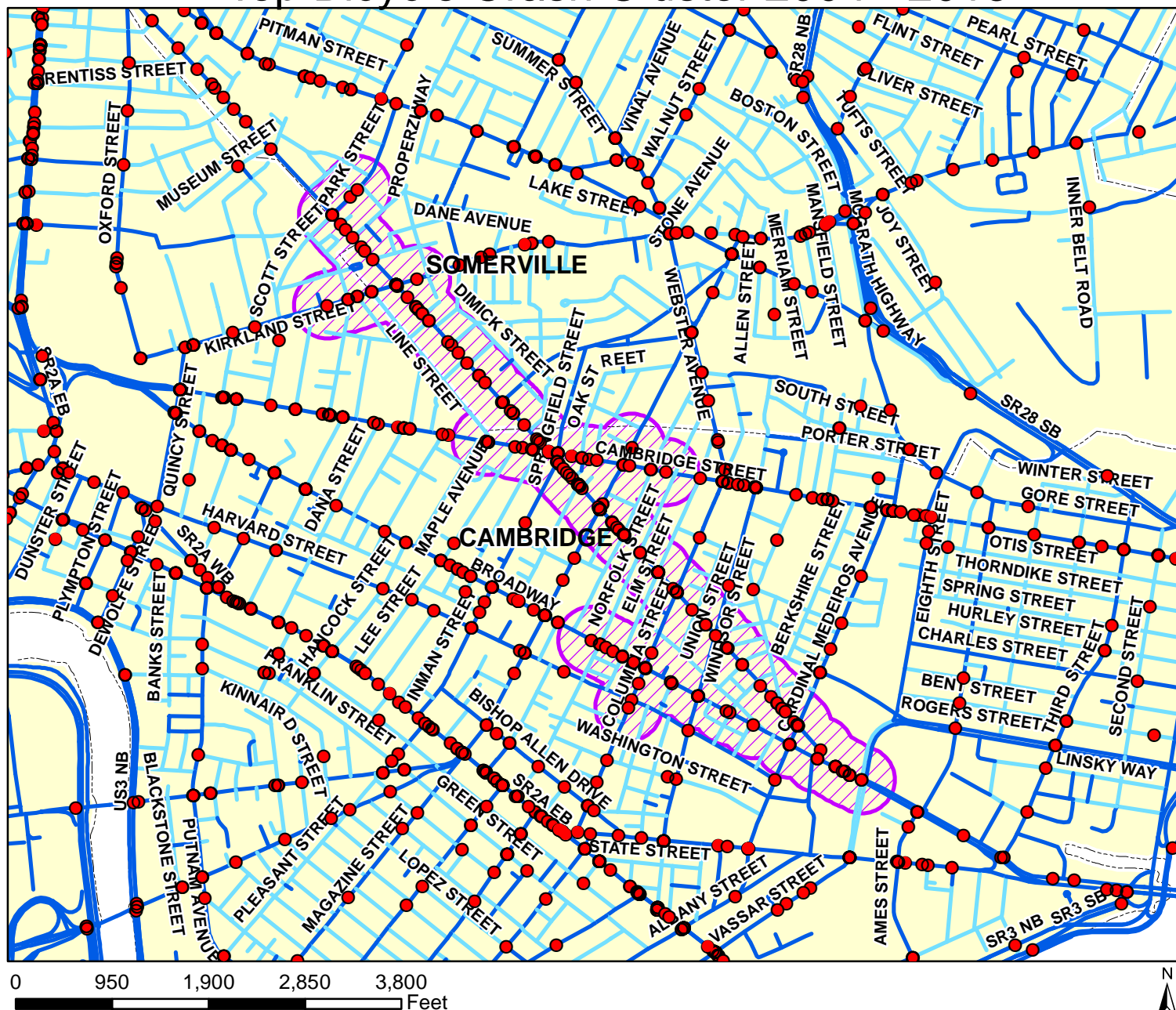
Total Crashes 333

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- ▨ Top Bicycle Crash Cluster
- Municipal Boundary



# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
**2**

## CAMBRIDGE, SOMERVILLE

MassDOT District 6,4

RPA MAPC

EPDO 887

Number of Fatal Crashes 0

Number of Injury Crashes 159

Number of Non-Injury Crashes 92

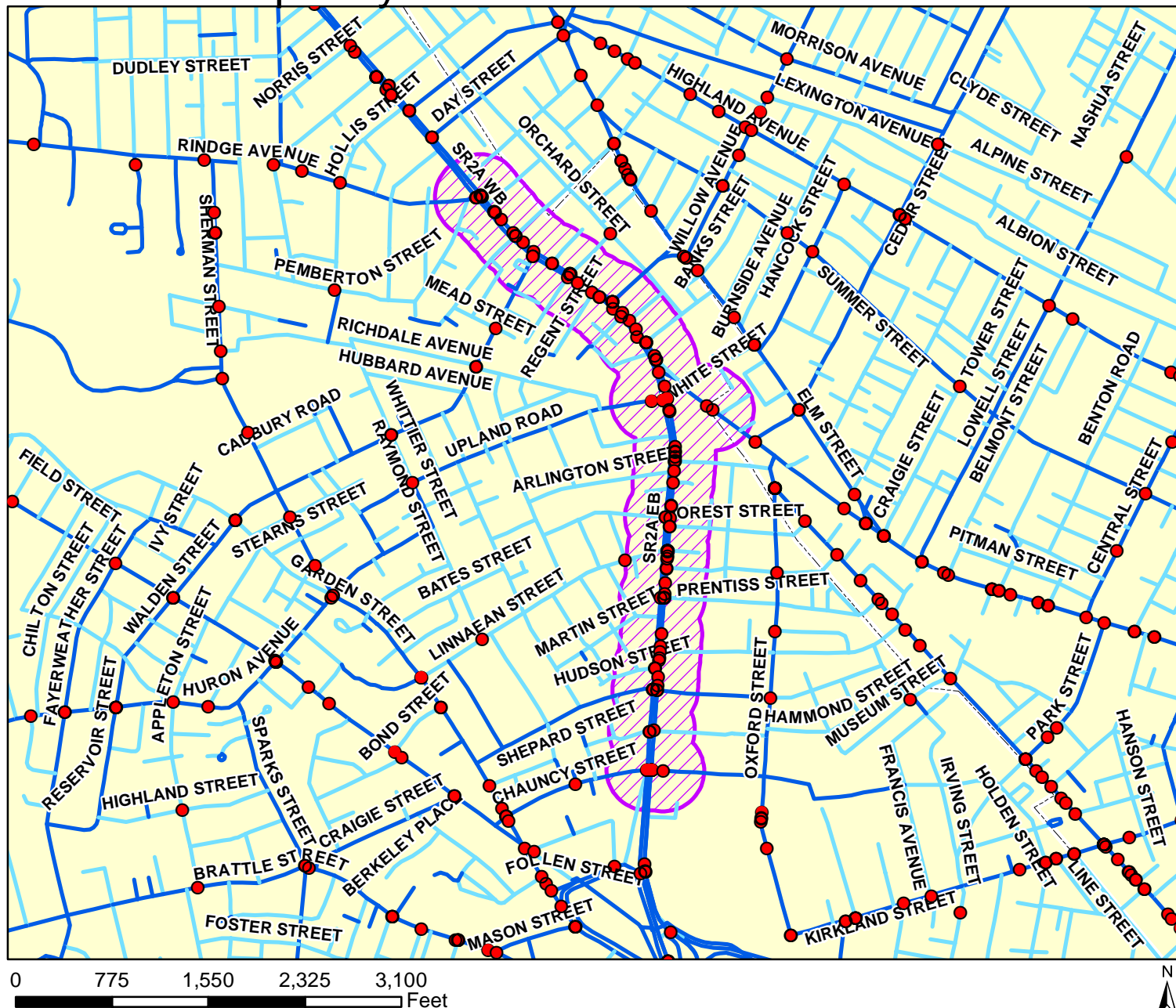
Total Crashes 251

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary



# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
**3**

## CAMBRIDGE, SOMERVILLE

MassDOT District 6,4

RPA MAPC

EPDO 527

Number of Fatal Crashes 0

Number of Injury Crashes 96

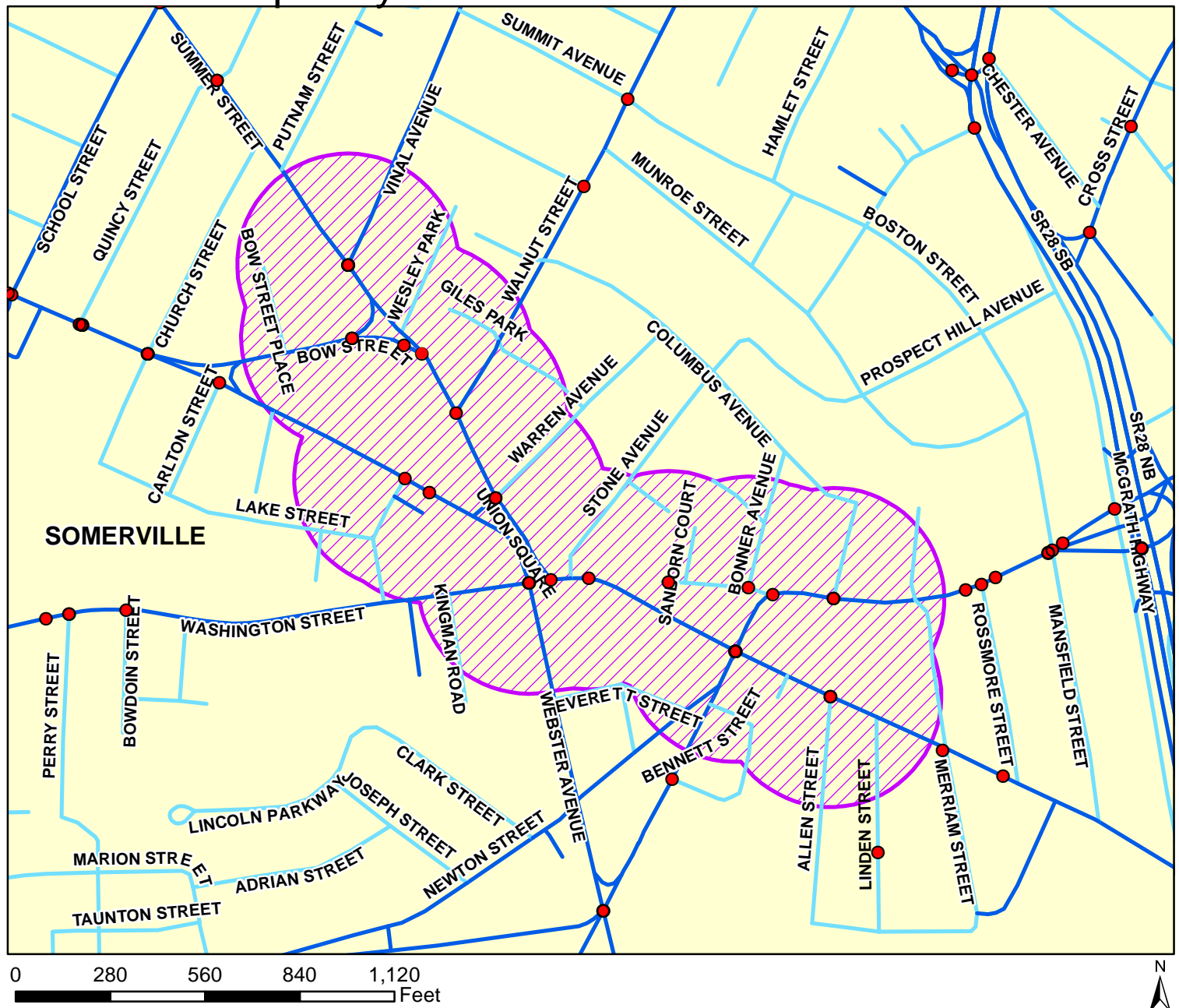
Number of Non-Injury Crashes 47

Total Crashes 143

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
4

## SOMERVILLE

MassDOT District 4

RPA MAPC

EPDO 138

Number of Fatal Crashes 0

Number of Injury Crashes 26

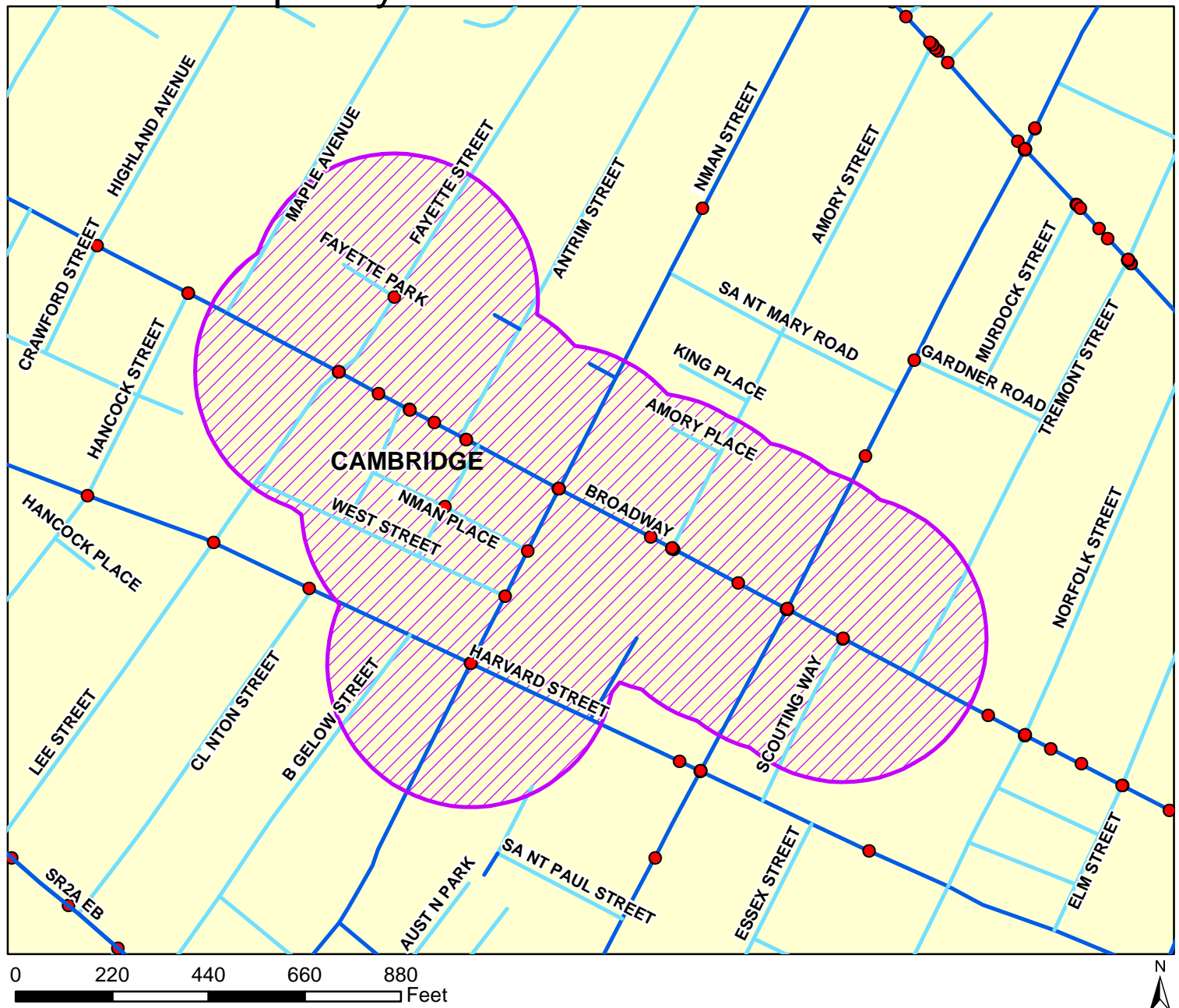
Number of Non-Injury Crashes 8

Total Crashes 34

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
**5**

## CAMBRIDGE

MassDOT District 6

RPA MAPC

EPDO 132

Number of Fatal Crashes 0

Number of Injury Crashes 23

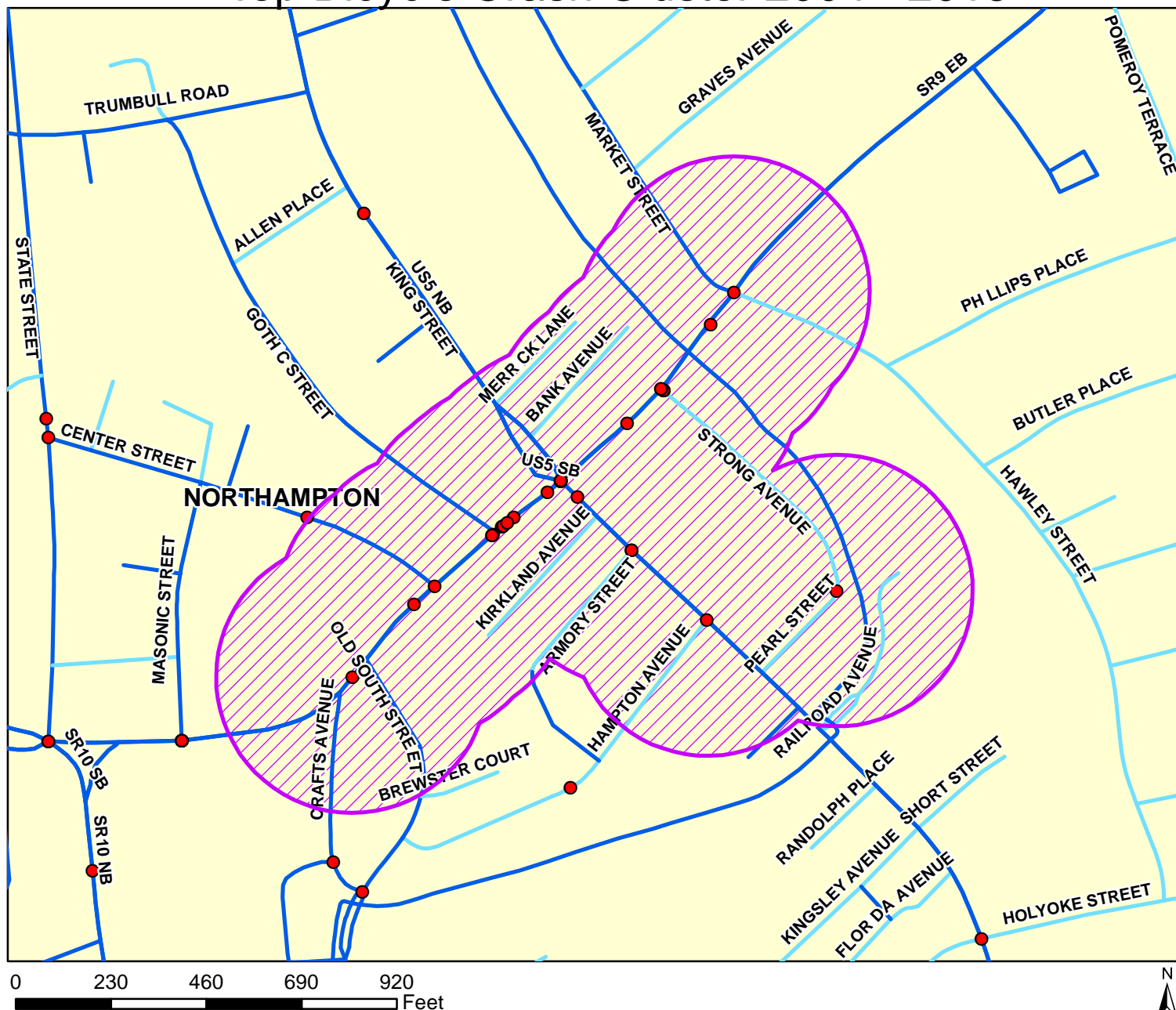
Number of Non-Injury Crashes 17

Total Crashes 40

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
**6**

## NORTHAMPTON

MassDOT District 2

RPA PVPC

EPDO 121

Number of Fatal Crashes 1

Number of Injury Crashes 21

Number of Non-Injury Crashes 6

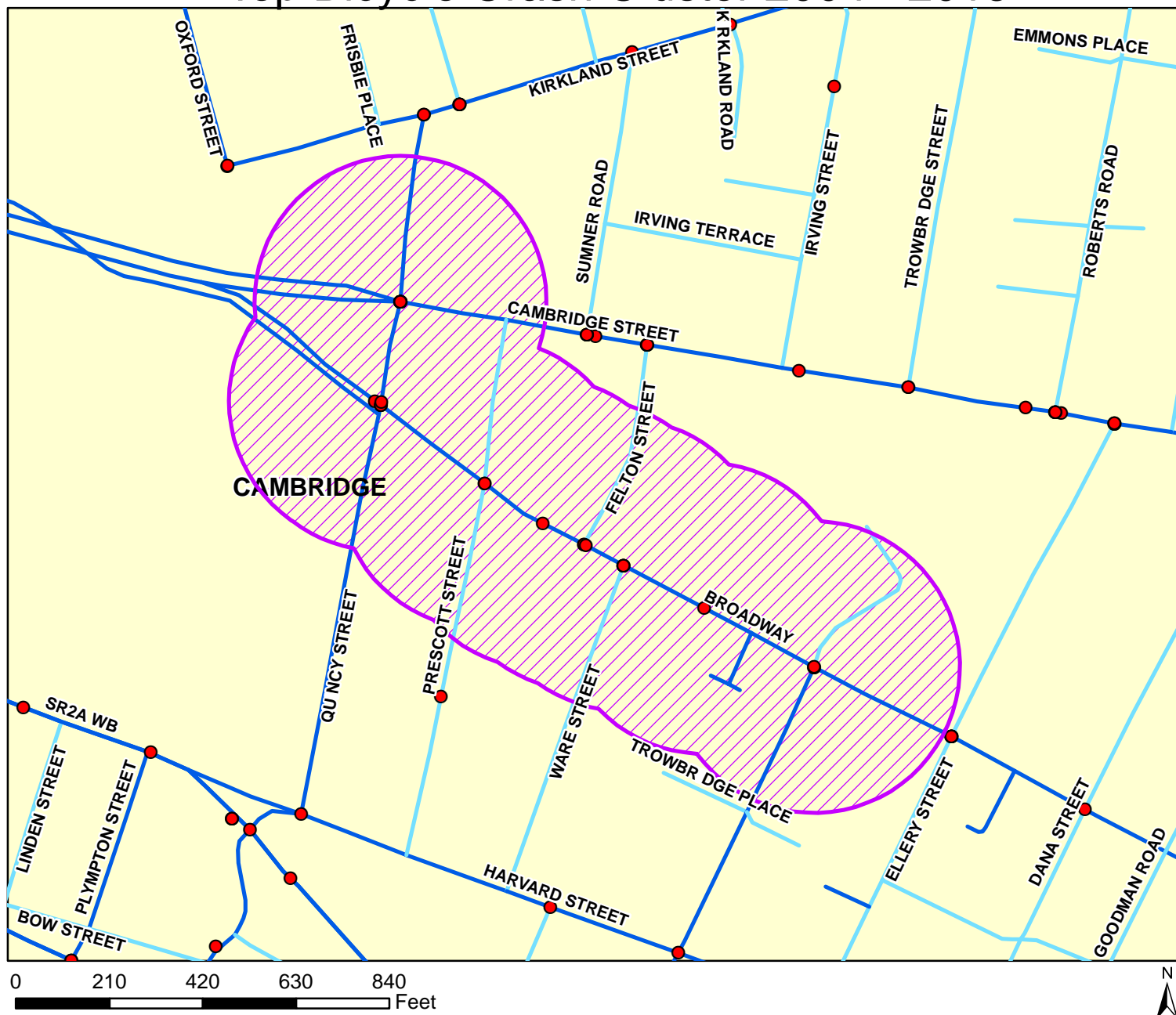
Total Crashes 28

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary



# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
**7**

## CAMBRIDGE

MassDOT District 6

RPA MAPC

EPDO 111

Number of Fatal Crashes 0

Number of Injury Crashes 20

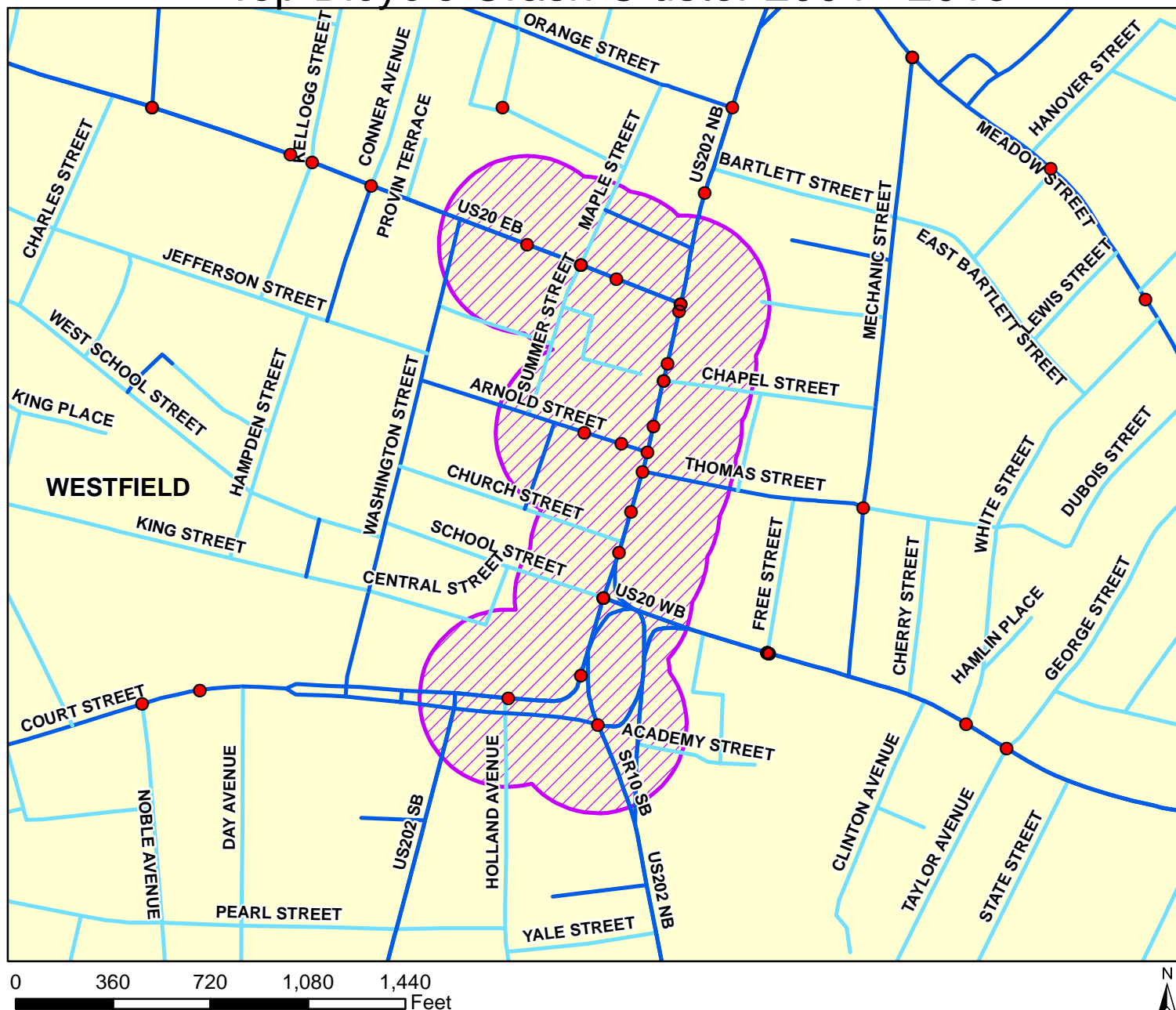
Number of Non-Injury Crashes 11

Total Crashes 31

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
**8**

## WESTFIELD

MassDOT District 2

RPA PVPC

EPDO 104

Number of Fatal Crashes 0

Number of Injury Crashes 20

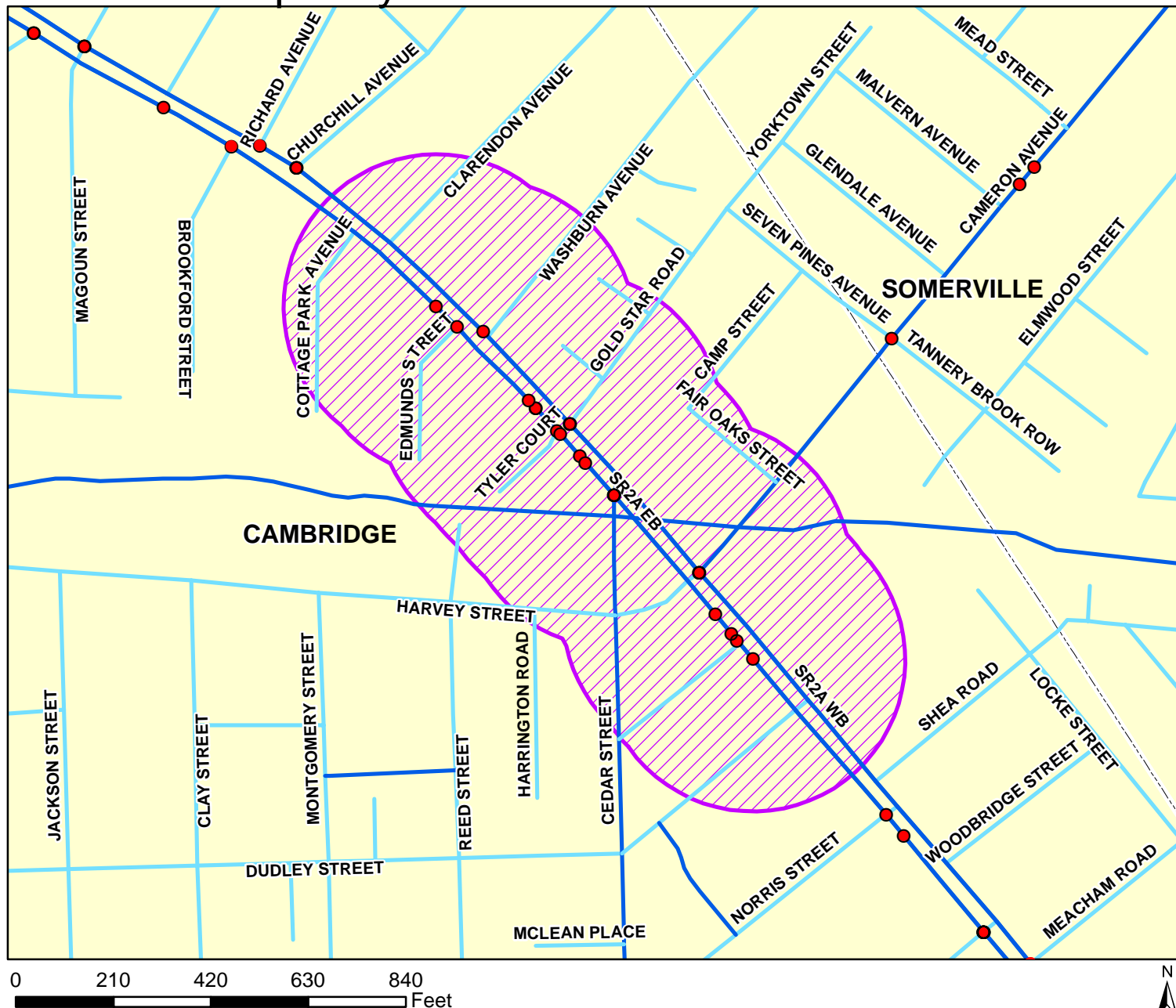
Number of Non-Injury Crashes 4

Total Crashes 24

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
**8**

## CAMBRIDGE

MassDOT District 6

RPA MAPC

EPDO 104

Number of Fatal Crashes 0

Number of Injury Crashes 20

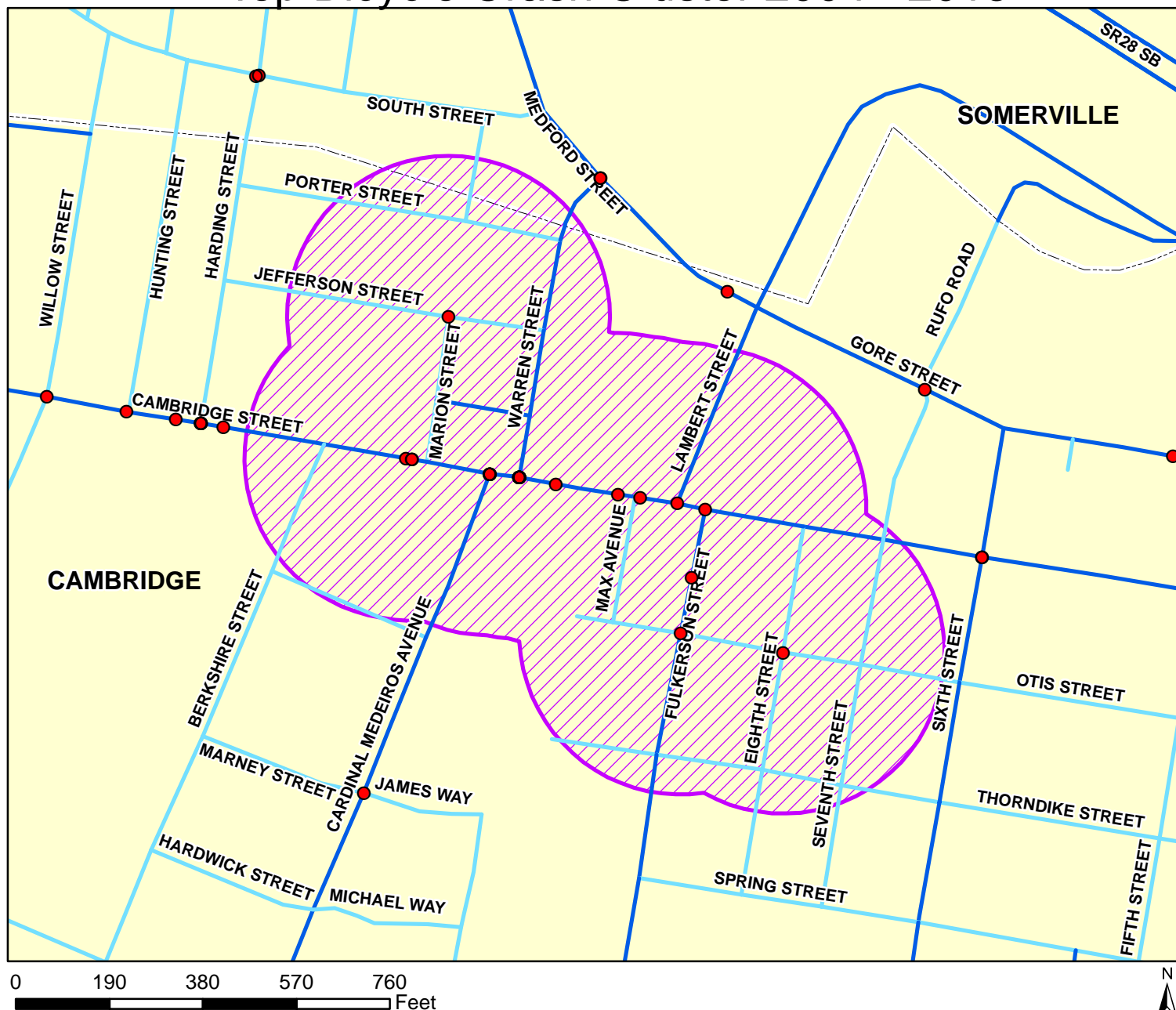
Number of Non-Injury Crashes 4

Total Crashes 24

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

# Top Bicycle Crash Cluster 2004 - 2013



**RANK**  
**10**

## CAMBRIDGE, SOMERVILLE

MassDOT District 6,4

RPA MAPC

EPDO 96

Number of Fatal Crashes 0

Number of Injury Crashes 17

Number of Non-Injury Crashes 11

Total Crashes 28

### Legend

- Crash Locations 2004-2013
- All Functional Classification Except Local Roads
- Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary