

2007 TOP CRASH LOCATIONS REPORT



JULY 2009





**THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF TRANSPORTATION
MASSACHUSETTS HIGHWAY DEPARTMENT**



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Dear Reader:

Enclosed is MassHighway's edition of the 2007 *Top Crash Locations Report*, which may be used to evaluate top crash intersection locations and top crash pedestrian and bicycle locations in order to improve the safety of our roadway system. This report, like last year's report, is a change from previous editions of the top crash locations report in that the focus is on intersection locations and is based on crashes entered into the Registry of Motor Vehicles' Crash Data System (CDS). As with last year's report, the 2007 Report contains the identification of top bicycle-motor vehicle and pedestrian-motor vehicle crash locations, reflecting MassHighway's commitment to a safe multi-modal transportation system. This information is also available by contacting your MassHighway District Office or Regional Planning Agency.

In an effort to reduce injury and fatal crashes, the Massachusetts Highway Department, in cooperation with our public- and private safety sector partners, has prepared the Massachusetts Strategic Highway Safety Plan. To view the Safety Plan, download a copy of the Plan or to learn more about it, go to the MassHighway website:

<http://www.mhd.state.ma.us/default.asp?pgid=content/traffic/shsp&sid=level2>. The Safety Plan identified the Commonwealth'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 data may also be used as a screening tool to evaluate locations and make changes to improve the safety of our roadway system. The 2007 *Top Crash Locations Report* is one of the tools for the statewide Highway Safety Improvement Program to identify safety projects using a data-driven process.

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

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

Sincerely,


Luisa Paiewonsky
Commissioner

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TOP HIGH CRASH LOCATIONS REPORT

Top 200 Intersection Locations 2005-2007

Top Pedestrian Locations 2002-2007

Top Bicycle Locations 2002-2007

Introduction

MassHighway obtains crash data from the Massachusetts Registry of Motor Vehicles (RMV) and uses it for a number of purposes. The primary function, however, is that it provides the foundation for developing safety improvement projects. The Top High Crash Locations Report is one of the tools used in this process. Previously, MassHighway, 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). Two years ago, MassHighway 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 last year, the report also included the top bicycle and pedestrian clusters. This year, MassHighway has also prepared a Top High Crash Locations Report which includes the top 200 high crash intersection locations using crash data from 2005-2007 and also includes the highest frequency bicycle-motor vehicle and pedestrian-motor vehicle crash locations for 2002-2007.

The Registry of Motor Vehicles (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 MassHighway crash data.

To produce this high crash locations listing, MassHighway, 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 2005 and 2007 is nearly 81%. However, the geocoding rate is not uniform for all crashes nor for all types of crash locations. Some crashes may be more difficult to geocode because of multiple intersections between the same roadway names within a community, inconsistencies in roadway names between E911 files and the Road Inventory File or a host of other reasons.

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

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

Methodology – Intersection Locations

The intersection crash cluster analysis method, developed by Geonetics, is a comprehensive method designed to locate crash clusters. At the heart of the method is a 25 meter fixed search distance around each crash. In basic terms, this radius controls how far the application will search for adjacent crashes.

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

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

The module to automatically determine whether the location was an intersection, rotary, interchange or other, has not yet been developed. Therefore, a review of each location was required to make that determination. Generally, a location was determined to be an “intersection” if the cluster did not contain roadways with grade separation (interchange) nor weaving sections (rotaries or ramps). The clusters were reviewed in descending EPDO order until 200 locations were obtained. A sample of the top 2 ranked intersection locations is included in this report to illustrate the concept of the intersection clustering. The actual crash clusters can be viewed on the interactive maps at 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 2005 to 2007. 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 last year, the top locations where reported collisions occurred between pedestrians and motor vehicles and bicycles and motor vehicles have been identified. The crash cluster analysis methodology for both the top pedestrian and the top bicycle crashes is similar to the top intersection location methodology in that it uses a fixed meter search distance (for both pedestrian and bicycle crashes it is 100 meters compared to 25 meters for intersection locations) to merge crash clusters together. Crashes involving collisions between motor vehicles and pedestrians or bicycles were identified by using the non-motorist type code within the CDS database (which may yield different results from using most harmful event, first harmful event, or sequence of events data fields). Furthermore, the methodology uses the Equivalent Property Damage Only (EPDO) weighting to rank the clusters. However, because of the relatively small number of reported pedestrian and bicycle crashes in the crash data file, the clustering analysis used crashes from the six year period from 2002-2007, 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 Section, Massachusetts Highway Department, 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.”

2005-2007 STATEWIDE TOP 200 INTERSECTION CRASH LIST

Rank	Town	RPA	MHD 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	BRIDGE STREET	38	VETERANS OF FOREIGN WARS HIGHWAY		132	326	2	44	86
2	FALL RIVER	SRPEDD	5	PLYMOUTH AVENUE	81	RODMAN STREET		152	280	0	32	120
3	FRAMINGHAM	MAPC	3	HOLLIS STREET	126	WAVERLEY STREET	135	137	278	1	33	103
4	BOSTON	MAPC	4	MASSACHUSETTS AVENUE		MELNEA CASS BOULEVARD		115	260	1	34	80
5	LOWELL	NMCOG	4	MIDDLESEX STREET		WOOD STREET		134	254	0	30	104
6	WOBURN	MAPC	4	MONTVALE AVENUE		WASHINGTON STREET		133	253	0	30	103
7	LYNN	MAPC	4	WESTERN AVENUE	107	FRANKLIN STREET		109	241	0	33	76
8	BROCKTON	OCPC	5	WEST ELM STREET		NEWBURY STREET		64	232	0	42	22
9	BROCKTON	OCPC	5	PLEASANT STREET	27	WEST STREET		96	229	1	31	64
10	LOWELL	NMCOG	4	CHURCH STREET	110	APPLETON STREET		103	227	0	31	72
11	BROCKTON	OCPC	5	BELMONT STREET	123	MANLEY STREET		80	224	0	36	44
12	STOUGHTON	MAPC & OCPC	5	WASHINGTON STREET	138	CENTRAL STREET		134	222	0	22	112
13	WORCESTER	CMRPC	3	BELMONT STREET	9	OAK AVENUE		109	221	0	28	81
14	QUINCY	MAPC	4	HONORABLE THOMAS S BURGIN PARKWAY		GRANITE STREET		107	211	0	26	81
15	WEYMOUTH	MAPC	4	WASHINGTON STREET	53	MIDDLE STREET		110	210	0	25	85
16	BRAINTREE	MAPC	4	GRANITE STREET	37	COMMON STREET		87	207	0	30	57
17	WORCESTER	CMRPC	3	CHANDLER STREET	122	MURRAY AVENUE		93	201	0	27	66
18	PLAINVILLE	SRPEDD	5	WASHINGTON STREET	1	TAUNTON STREET	152	74	198	0	31	43
19	BROCKTON	OCPC	5	ASH STREET		WEST ELM STREET		69	197	0	32	37
20	WORCESTER	CMRPC	3	BELMONT STREET	9	LINCOLN STREET		92	196	0	26	66
21	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	TEMPLE STREET		91	195	0	26	65
22	WORCESTER	CMRPC	3	PARK AVENUE	9	PLEASANT STREET		82	194	0	28	54
23	LOWELL	NMCOG	4	PLAIN STREET		CHELMSFORD STREET	110	95	191	0	24	71
23	WEYMOUTH	MAPC	4	PLEASANT STREET		WASHINGTON STREET	53	103	191	0	22	81
25	RAYNHAM	SRPEDD	5	ROUTE 44	44	ORCHARD STREET		82	190	0	27	55
25	ABINGTON	OCPC	5	BEDFORD STREET	18	RANDOLPH STREET	139	94	190	0	24	70
27	WEYMOUTH	MAPC	4	MAIN STREET	18	MIDDLE STREET		109	189	0	20	89
27	MIDDLEBOROUGH	SRPEDD	5	ROUTE 44	44	PLYMPTON STREET	105	72	189	1	27	44
29	LEOMINSTER	MRPC	3	NORTH MAIN STREET	12	NELSON STREET		96	188	0	23	73
29	NEW BEDFORD	SRPEDD	5	ALFRED BESSETTE MEMORIAL HIGHWAY	140	KEMPTON STREET	6	75	188	1	26	48
31	BROCKTON	OCPC	5	NORTH MAIN STREET		HOWARD STREET		70	186	0	29	41
31	CHICOPEE	PVPC	2	BROADWAY		CHURCH STREET		78	186	0	27	51
31	LEOMINSTER	MRPC	3	MAIN STREET	13	PROSPECT STREET		117	185	0	17	100
33	CHELSEA	MAPC	4	BROADWAY		CONGRESS AVENUE		73	185	0	28	45
35	NORWOOD	MAPC	5	BLUE STAR MEMORIAL HIGHWAY	1	DEAN STREET		92	184	0	23	69
36	WORCESTER	CMRPC	3	CAMBRIDGE STREET		SOUTHBRIDGE STREET		83	183	0	25	58
37	PEMBROKE	MAPC & OCPC	5	SCHOOSETT STREET	139	COLUMBIA ROAD	53	66	182	0	29	37
37	MARLBOROUGH	MAPC	3	EAST MAIN STREET	20	CURTIS AVENUE		106	182	0	19	87
39	NORTHAMPTON	PVPC	2	MAIN STREET	9	KING STREET	5	101	181	0	20	81
40	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY	113	VARNUM AVENUE		100	180	0	20	80
40	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	CALIFORNIA AVENUE		79	180	1	23	55
42	WORCESTER	CMRPC	3	BELMONT STREET	9	PLANTATION STREET		74	174	0	25	49
43	WALTHAM	MAPC	4	LEXINGTON STREET		TRAPELO ROAD		89	173	0	21	68
44	SHREWSBURY	CMRPC	3	BOSTON TURNPIKE	9	SOUTH QUINSIGAMOND AVENUE		112	172	0	15	97
45	LYNN	MAPC	4	WESTERN AVENUE	107	WASHINGTON STREET	129	79	171	0	23	56
46	WILMINGTON	MAPC	4	LOWELL STREET	129	WOBURN STREET		61	169	0	27	34
47	BROCKTON	OCPC	5	COURT STREET	27	MONTELLO STREET	28	68	168	0	25	43
48	SHREWSBURY	CMRPC	3	BOSTON TURNPIKE	9	SOUTH STREET		90	166	0	19	71
49	SWANSEA	SRPEDD	5	MARKET STREET	136	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	89	165	0	19	70
50	FALL RIVER	SRPEDD	5	PRESIDENT AVENUE	6	NORTH MAIN STREET		88	164	0	19	69
50	PLAINVILLE	SRPEDD	5	MESSENGER STREET	106	TAUNTON STREET	152	80	164	0	21	59
52	CONCORD	MAPC	4	CONCORD TURNPIKE	2	MAIN STREET	62	63	163	0	25	38
52	LOWELL	NMCOG	4	PAWTUCKET STREET		SCHOOL STREET		79	163	0	21	58
52	CHELSEA	MAPC	4	REVERE BEACH PARKWAY	16	WASHINGTON AVENUE		79	163	0	21	58
52	WEST BRIDGEWATER	OCPC	5	WEST CENTER STREET	106	NORTH MAIN STREET	28	79	163	0	21	58
56	LOWELL	NMCOG	4	VETERANS OF FOREIGN WARS HIGHWAY		AIKEN STREET		70	162	0	23	47
56	FALL RIVER	SRPEDD	5	SOUTH MAIN STREET	138	GLOBE STREET		78	162	0	21	57
58	BROCKTON	OCPC	5	BELMONT AVENUE		WEST ELM STREET		44	161	1	27	16
59	HOLBROOK	MAPC	5	SOUTH FRANKLIN STREET	37	UNION STREET	139	72	160	0	22	50
59	QUINCY	MAPC	4	SOUTHERN ARTERY	3A	MCGRATH HIGHWAY		72	160	0	22	50
59	LOWELL	NMCOG	4	THORNDIKE STREET	3A	HIGHLAND STREET		75	160	1	19	55
62	WESTFIELD	PVPC	2	FRANKLIN STREET	20	WASHINGTON STREET		67	159	0	23	44

2005-2007 STATEWIDE TOP 200 INTERSECTION CRASH LIST

Rank	Town	RPA	MHD District	Street 1	Route 1	Street 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes	PDO & Non Reported Crashes
63	PITTSFIELD	BRPC	1	LINDEN STREET		SEYMOUR STREET		54	158	0	26	28
63	WELLESLEY	MAPC	4	WORCESTER STREET	9	WELLESLEY FIRE STATION HEADQUARTERS (BY PROXIMITY)		110	158	0	12	98
65	WORCESTER	CMRPC	3	PARK AVENUE	9	MAY STREET		77	157	0	20	57
65	LYNN	MAPC	4	ESSEX STREET		JOYCE STREET		65	157	0	23	42
65	HAVERHILL	MVPC	4	MAIN STREET	97	BAILEY BOULEVARD		73	157	0	21	52
68	HAVERHILL	MVPC	4	BRIDGE STREET	125	WATER STREET	113	80	156	0	19	61
68	BROCKTON	OCPC	5	BELMONT STREET	123	LINWOOD STREET		56	156	0	25	31
70	MALDEN	MAPC	4	EASTERN AVENUE	60	MAPLEWOOD STREET		59	155	0	24	35
71	BOSTON	MAPC	4	COLUMBIA ROAD		DORCHESTER AVENUE		57	154	1	22	34
72	NATICK	MAPC	3	WEST CENTRAL STREET	135	SPEEN STREET		101	153	0	13	88
72	MALDEN	MAPC	4	EASTERN AVENUE	60	BROADWAY	99	73	153	0	20	53
74	LYNN	MAPC	4	WESTERN AVENUE	107	CHATHAM STREET		64	152	0	22	42
75	CAMBRIDGE	MAPC	4	MEMORIAL DRIVE	3	RIVER STREET		66	150	0	21	45
75	WESTBOROUGH	CMRPC	3	BOSTON WORCESTER TURNPIKE	9	LYMAN STREET		78	150	0	18	60
75	BOSTON	MAPC	4	COLUMBIA ROAD		MASSACHUSETTS AVENUE		58	150	0	23	35
78	LYNN	MAPC	4	WESTERN AVENUE	107	CENTRE STREET		67	147	0	20	47
79	MIDDLEBOROUGH	SRPEDD	5	SOUTH MAIN STREET	105	EAST GROVE STREET	28	86	146	0	15	71
79	FRAMINGHAM	MAPC	3	CONCORD STREET	126	HARTFORD STREET		62	146	0	21	41
79	LUDLOW	PVPC	2	CENTER STREET	21	CHERRY STREET		70	146	0	19	51
82	MALDEN	MAPC	4	CENTRE STREET	60	COMMERCIAL STREET		53	145	0	23	30
82	BROCKTON	OCPC	5	NORTH MAIN STREET		EAST ASHLAND STREET		57	145	0	22	35
82	SWANSEA	SRPEDD	5	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	SWANSEA MALL DRIVE		73	145	0	18	55
82	ATTLEBORO	SRPEDD	5	WASHINGTON STREET	1	MAY STREET		69	145	0	19	50
82	WEYMOUTH	MAPC	4	UNION STREET		PLEASANT STREET		101	145	0	11	90
82	WORCESTER	CMRPC	3	BELMONT STREET	9	LAKE AVENUE NORTH		65	145	0	20	45
88	BOSTON	MAPC	4	DORCHESTER AVENUE		GALLIVAN BOULEVARD	203	52	144	0	23	29
88	WESTFIELD	PVPC	2	NORTH ELM STREET	202	POCHASSIC STREET		88	144	0	14	74
88	BURLINGTON	MAPC	4	CAMBRIDGE STREET	3A	WINN STREET		84	144	0	15	69
91	FALL RIVER	SRPEDD	5	BROADWAY	138	BRADFORD AVENUE		75	143	0	17	58
91	WORCESTER	CMRPC	3	HIGHLAND STREET	9	MAIN STREET		71	143	0	18	53
91	LOWELL	NMCOG	4	CHELMSFORD STREET	110	INDUSTRIAL AVENUE		71	143	0	18	53
94	WORCESTER	CMRPC	3	HIGHLAND STREET	9	LANCASTER STREET		54	142	0	22	32
94	HOLYOKE	PVPC	2	MAIN STREET		JACKSON STREET		54	142	0	22	32
94	HAVERHILL	MVPC	4	MAIN STREET	125	WINTER STREET	97	78	142	0	16	62
94	CAMBRIDGE	MAPC	4	MASSACHUSETTS AVENUE	2A	BROOKLINE STREET		70	142	0	18	52
94	QUINCY	MAPC	4	WASHINGTON STREET	3A	SOUTHERN ARTERY	53	82	142	0	15	67
94	WORCESTER	CMRPC	3	PARK AVENUE	9	HIGHLAND STREET		78	142	0	16	62
94	BROOKLINE	MAPC	4	BOYLSTON STREET	9	CHESTNUT HILL AVENUE		54	142	0	22	32
101	HOPKINTON	MAPC	3	WEST MAIN STREET		LUMBER STREET		73	141	0	17	56
102	BOSTON	MAPC	4	BLUE HILL AVENUE	28	MORTON STREET	203	56	140	0	21	35
103	WORCESTER	CMRPC	3	PARK AVENUE	9	WEST OBERLIN STREET		67	139	0	18	49
104	HAVERHILL	MVPC	4	LAFAYETTE SQUARE	97	BROADWAY		82	138	0	14	68
105	NORTH ATTLEBOROUGH	SRPEDD	5	EAST WASHINGTON STREET	1	CHESTNUT STREET		52	137	1	19	32
105	BOSTON	MAPC	4	MORTON STREET	203	GALLIVAN BOULEVARD		45	137	0	23	22
105	WEYMOUTH,BRAINTREE	MAPC	4	WASHINGTON STREET	53	COMMERCIAL STREET		85	137	0	13	72
105	WHITMAN	OCPC	5	BEDFORD STREET	18	AUBURN STREET	14	49	137	1	17	42
109	WESTFIELD	PVPC	2	NORTH ELM STREET	202	LOCKHOUSE ROAD		44	136	0	23	21
109	SOMERVILLE	MAPC	4	BROADWAY		ALEWIFE BROOK PARKWAY	16	72	136	0	16	56
111	NORTH ANDOVER	MVPC	4	CHICKERING ROAD	125	MASSACHUSETTS AVENUE		59	135	0	19	40
111	LYNN	MAPC	4	ESSEX STREET		CHATHAM STREET		71	135	0	16	55
113	BROCKTON	OCPC	5	PLEASANT STREET	27	WARREN AVENUE		54	134	0	20	34
114	PEABODY	MAPC	4	PULASKI STREET	114	ANDOVER STREET	114	61	133	0	18	43
114	TAUNTON	SRPEDD	5	BROADWAY	138	WASHINGTON STREET		53	133	0	20	33
116	FRAMINGHAM	MAPC	3	WAVERLEY STREET	135	BEAVER STREET		76	132	0	14	62
116	BROCKTON	OCPC	5	MAIN STREET		LEGION PARKWAY	123	52	132	0	20	32
116	WORCESTER	CMRPC	3	SOUTHBRIDGE STREET		HAMMOND STREET		56	132	0	19	37
119	WATERTOWN	MAPC	4	GALEN STREET	16	WATERTOWN STREET		54	131	1	17	36
119	WESTFIELD	PVPC	2	EAST MAIN STREET	20	LITTLE RIVER ROAD	187	51	131	0	20	31
119	BOSTON	MAPC	4	MORTON STREET	203	HARVARD STREET		51	131	0	20	31
119	WORCESTER	CMRPC	3	PARK AVENUE	9	PARKER STREET		63	131	0	17	46
119	CHELSEA	MAPC	4	REVERE BEACH PARKWAY	16	GARFIELD AVENUE		55	131	0	19	36
124	LOWELL	NMCOG	4	WESTFORD STREET	3A	WILDER STREET		58	130	0	18	40

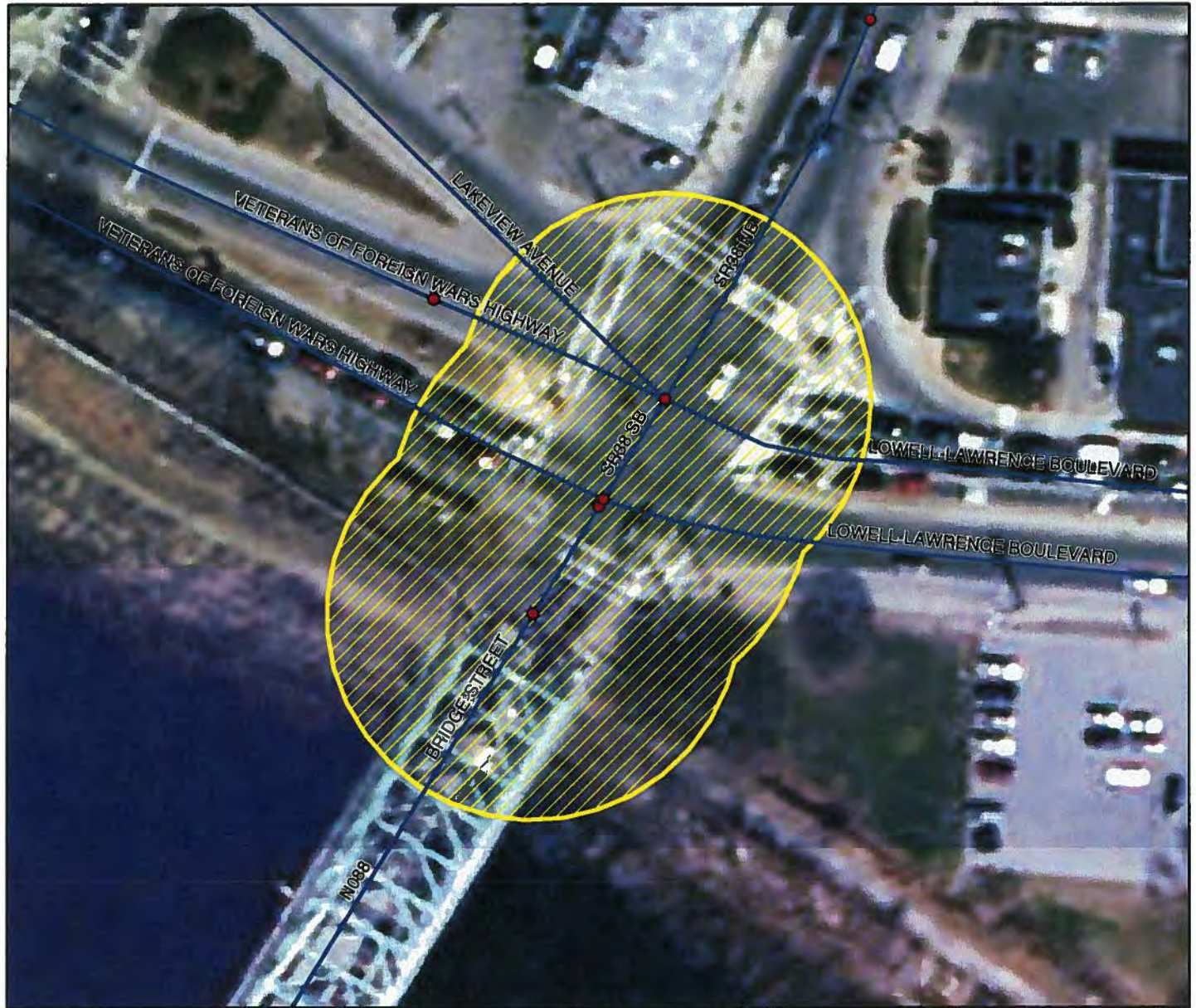
2005-2007 STATEWIDE TOP 200 INTERSECTION CRASH LIST

Rank	Town	RPA	MHD District	Street 1	Route 1	Street 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes	PDO & Non Reported Crashes
124	WORCESTER	CMRPC	3	LINCOLN STREET	70	COUNTRY CLUB BOULEVARD		42	130	0	22	20
124	BRIDGEWATER	OCPC	5	BROAD STREET	18	MAIN STREET	28	78	130	0	13	65
124	ABINGTON	OCPC	5	BROCKTON AVENUE	123	BEDFORD STREET	18	58	130	0	18	40
124	BROCKTON	OCPC	5	PLEASANT STREET	27	NORTH ASH STREET		38	130	0	23	15
124	BOSTON	MAPC	4	GALLIVAN BOULEVARD	203	GRANITE AVENUE		46	130	0	21	25
130	WORCESTER	CMRPC	3	PARK AVENUE	9	CHANDLER STREET	122	69	129	0	15	54
131	LOWELL	NMCOG	4	SCHOOL STREET		BRANCH STREET		56	128	0	18	38
131	BOSTON	MAPC	4	WASHINGTON STREET		WEST ROXBURY PARKWAY		44	128	0	21	23
131	BROOKLINE	MAPC	4	BOYLSTON STREET	9	RESERVOIR ROAD		52	128	0	19	33
134	CAMBRIDGE	MAPC	4	MASSACHUSETTS AVENUE	2A	ALEWIFE BROOK PARKWAY	3	55	127	0	18	37
134	DEDHAM	MAPC	4	WASHINGTON STREET		INCINERATOR ROAD		43	127	0	21	22
136	HOLYOKE	PVPC	2	MAPLE STREET		RESNIC BOULEVARD		54	126	0	18	36
136	EASTON	OCPC	5	FOUNDRY STREET	106	TURNPIKE STREET	138	50	126	0	19	31
136	FRAMINGHAM	MAPC	3	WORCESTER ROAD	9	DINSMORE AVENUE		46	126	0	20	26
136	BROOKLINE	MAPC	4	BEACON STREET		SAINT PAUL STREET		58	126	0	17	41
140	WESTFORD	NMCOG	3	LITTLETON ROAD	110	BOSTON ROAD		93	125	0	8	85
140	NATICK	MAPC	3	WORCESTER STREET	9	OAK STREET		76	125	1	10	65
140	MEDFORD	MAPC	4	MAIN STREET		SALEM STREET	60	73	125	0	13	60
143	EASTON	OCPC	5	DEPOT STREET	123	FOUNDRY STREET	106	56	124	0	17	39
143	BROCKTON	OCPC	5	CENTRE STREET	123	LYMAN STREET		44	124	0	20	24
143	SOMERSET	SRPEDD	5	GRAND ARMY OF THE REPUBLIC HIGHWAY	6	LEES RIVER AVENUE		28	124	0	21	19
143	OXFORD	CMRPC	3	SOUTHBRIDGE ROAD	20	LEICESTER ROAD	56	56	124	0	17	39
143	MANSFIELD	SRPEDD	5	ROUTE 140	140	SCHOOL STREET		68	124	0	14	54
143	CHELSEA	MAPC	4	EVERETT AVENUE		SPRUCE STREET		52	124	0	18	34
143	NORWOOD	MAPC	5	BLUE STAR MEMORIAL HIGHWAY	1	EVERETT STREET		56	124	0	17	39
143	WEYMOUTH	MAPC	4	WASHINGTON STREET	53	MAIN STREET	18	72	124	0	13	59
151	WOBURN	MAPC	4	MAIN STREET	38	PLEASANT STREET		71	123	0	13	58
151	LYNN	MAPC	4	WESTERN AVENUE	107	PARK STREET		55	123	0	17	38
151	BOSTON	MAPC	4	COMMONWEALTH AVENUE	30	ALLSTON STREET		47	123	0	19	28
151	NATICK	MAPC	3	SPEEN STREET		FLUTIE PASS		79	123	0	11	68
155	QUINCY	MAPC	4	SOUTHERN ARTERY	3A	CODDINGTON STREET		66	122	0	14	52
155	MENDON	CMRPC	3	MILFORD ROAD	16	MAIN STREET		54	122	0	17	37
155	STONEHAM	MAPC	4	MAIN STREET	28	NORTH BORDER ROAD		58	122	0	16	42
155	BROCKTON	OCPC	5	NORTH MAIN STREET		AMES STREET		38	122	0	21	17
155	TAUNTON	SRPEDD	5	COUNTY STREET	140	HART STREET		58	122	0	16	42
155	BROCKTON	OCPC	5	CRESCENT STREET	27	LYMAN STREET		46	122	0	19	27
161	WILBRAHAM	PVPC	2	BOSTON ROAD	20	STONY HILL ROAD		69	121	0	13	56
161	LYNN	MAPC	4	CHESTNUT STREET		UNION STREET		57	121	0	16	41
161	WORCESTER	CMRPC	3	MAIN STREET		MILL STREET	12	61	121	0	15	46
161	CHELSEA	MAPC	4	BROADWAY		WEBSTER AVENUE		49	121	0	18	31
161	NORTH ANDOVER	MVPC	4	TURNPIKE STREET	114	ANDOVER STREET	125	49	121	0	18	31
161	RANDOLPH	MAPC	4	NORTH MAIN STREET	28	RUSS STREET		49	121	0	18	31
167	EVERETT	MAPC	4	REVERE BEACH PARKWAY	16	EVERETT AVENUE		52	120	0	17	35
167	WEYMOUTH	MAPC	4	MAIN STREET	18	POND STREET		64	120	0	14	50
167	RANDOLPH	MAPC	4	NORTH MAIN STREET	28	WARREN STREET	139	64	120	0	14	50
167	WORCESTER	CMRPC	3	PARK AVENUE	9	MILL STREET	12	56	120	0	16	40
167	BROCKTON	OCPC	5	MONTELLO STREET	28	GROVE STREET		32	120	0	22	10
172	DARTMOUTH	SRPEDD	5	STATE ROAD	6	HATHAWAY ROAD		55	119	0	16	39
172	WORCESTER	CMRPC	3	BELMONT STREET	9	ALVARADO AVENUE		51	119	0	17	34
174	STONEHAM	MAPC	4	MAIN STREET	28	NORTH STREET		46	118	0	18	28
174	LOWELL	NMCOG	4	RIVERSIDE STREET	113	UNIVERSITY AVENUE		54	118	0	16	38
174	WESTFIELD	PVPC	2	PLEASANT STREET	202	WEST SILVER STREET		42	118	0	19	23
174	SWAMPSCOTT	MAPC	4	PARADISE ROAD	1A	SWAMPSCOTT MALL		42	118	0	19	23
174	MALDEN	MAPC	4	BROADWAY	99	SALEM STREET		50	118	0	17	33
179	WEYMOUTH	MAPC	4	MAIN STREET	18	COLUMBIAN STREET		65	117	0	13	52
180	WORCESTER	CMRPC	3	EAST CENTRAL STREET		SUMMER STREET		48	116	0	17	31
180	SALEM	MAPC	4	WASHINGTON STREET		CANAL STREET		64	116	0	13	51
180	FITCHBURG	MRPC	3	JOHN FITCH HIGHWAY		SUMMER STREET		40	116	0	19	21
180	TAUNTON	SRPEDD	5	BROADWAY	138	EAST BRITANNIA STREET		43	116	1	16	26
180	WORCESTER	CMRPC	3	STAFFORD STREET		CURTIS PARKWAY		52	116	0	16	36
185	LOWELL	NMCOG	4	CHELMSFORD STREET	110	LIBERTY STREET		59	115	0	14	45
185	WALPOLE	MAPC	5	PROVIDENCE TURNPIKE	1	CONEY STREET		55	115	0	15	40

2005-2007 STATEWIDE TOP 200 INTERSECTION CRASH LIST

Rank	Town	RPA	MHD District	Street 1	Route 1	Street 2	Route 2	Total Crashes	EPDO Crashes	Fatal Crashes	Injury Crashes	PDO & Non Reported Crashes
185	FRAMINGHAM	MAPC	3	MOUNT WAYTE AVENUE		FRANKLIN STREET		63	115	0	13	50
185	EVERETT	MAPC	4	BROADWAY	99	BEACHAM STREET		43	115	0	18	25
189	BOSTON	MAPC	4	AMERICAN LEGION HIGHWAY		CUMMINS HIGHWAY		38	114	0	19	19
189	WEYMOUTH	MAPC	4	MAIN STREET	18	POND STREET	58	42	114	0	18	24
189	CHICOPEE	PVPC	2	MEMORIAL DRIVE	33	PENDLETON AVENUE		50	114	0	16	34
189	LEXINGTON	MAPC	4	BEDFORD STREET	4	HARRINGTON ROAD		66	114	0	12	54
189	LOWELL	NMCOG	4	NESMITH STREET	38	ANDOVER STREET	110	62	114	0	13	49
189	FITCHBURG	MRPC	3	LUNENBURG STREET	2A	JOHN FITCH HIGHWAY		58	114	0	14	44
195	WATERTOWN	MAPC	4	MAIN STREET	20	MOUNT AUBURN STREET	16	77	113	0	9	68
196	LYNN	MAPC	4	ESSEX STREET		FAYETTE STREET		52	112	0	15	37
196	DARTMOUTH	SRPEDD	5	FAUNCE CORNER MALL ROAD		CROSS ROAD		56	112	0	14	42
196	LOWELL	NMCOG	4	CHURCH STREET	110	LAWRENCE STREET		64	112	0	12	52
196	LOWELL	NMCOG	4	BROADWAY		FLETCHER STREET		44	112	0	17	27
196	WORCESTER	CMRPC	3	LINCOLN STREET	70	MARSH AVENUE		60	112	0	13	47
201	CONCORD	MAPC	4	CONCORD TURNPIKE	2	WALDEN STREET	126	55	111	0	14	41
201	EVERETT	MAPC	4	REVERE BEACH PARKWAY	16	SECOND STREET		38	111	1	16	21
201	AGAWAM,SPRINGFIELD	PVPC	2	SOUTH END BRIDGE	5			47	111	0	16	31
201	FAIRHAVEN	SRPEDD	5	ALDEN ROAD		BRIDGE STREET		47	111	0	16	31
201	WORCESTER	CMRPC	3	PARK AVENUE	9	MAYWOOD STREET		43	111	0	17	26

Top Crash Intersections 2005-2007



0 56.25 112.5 168.75 225 Feet



RANK

1

LOWELL

BRIDGE STREET ROUTE 38
VETERANS OF FOREIGN WARS HIGHWAY

MHD District 4

RPA NMCOG

EPDO 326

Number of Fatal Crashes 2

Number of Injury Crashes 44

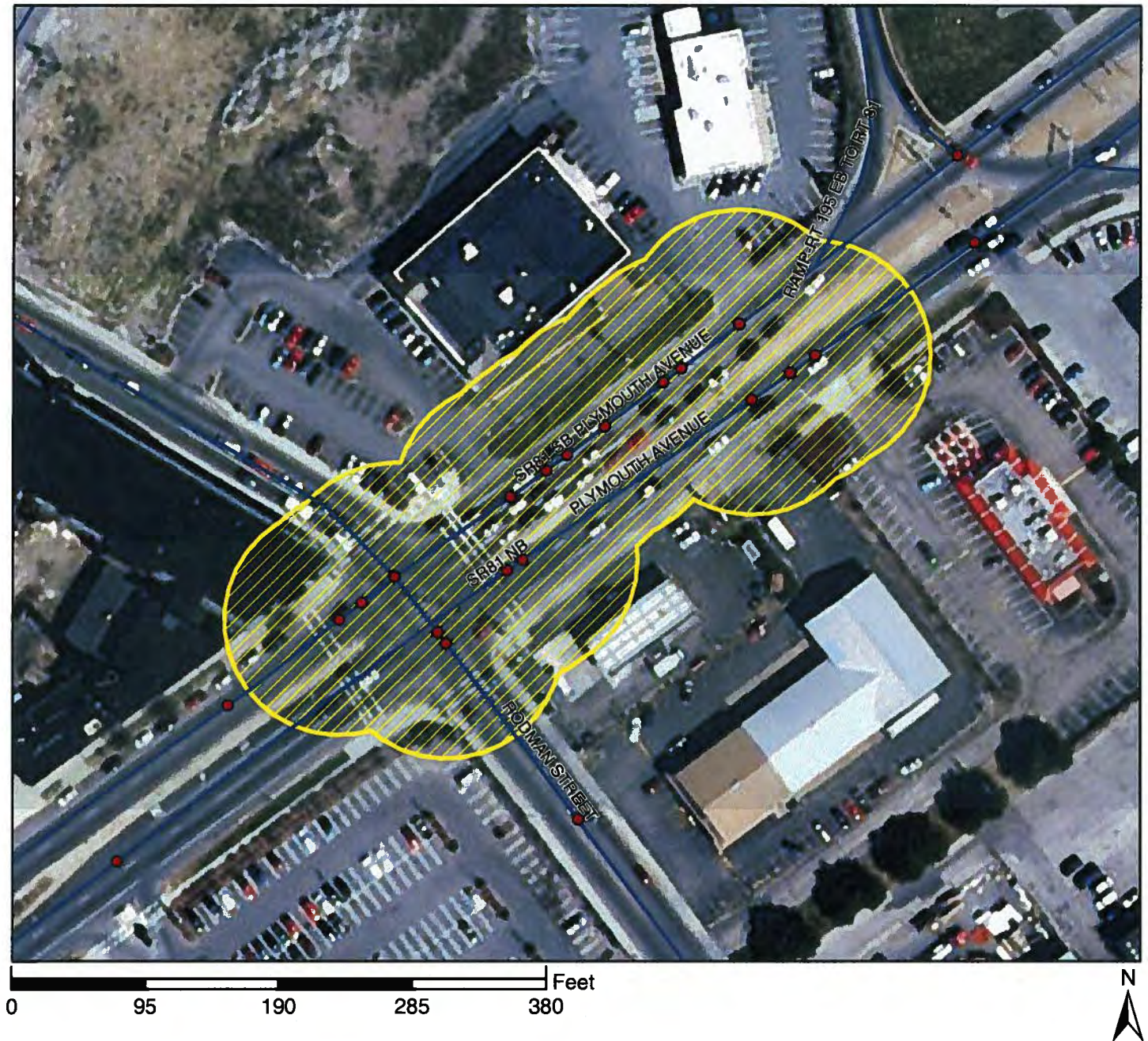
Number of Non-Injury Crashes 86

Total Crashes 132

Legend

- Crash Locations 2005-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Crash Intersections

Top Crash Intersections 2005-2007



RANK
2

FALL RIVER

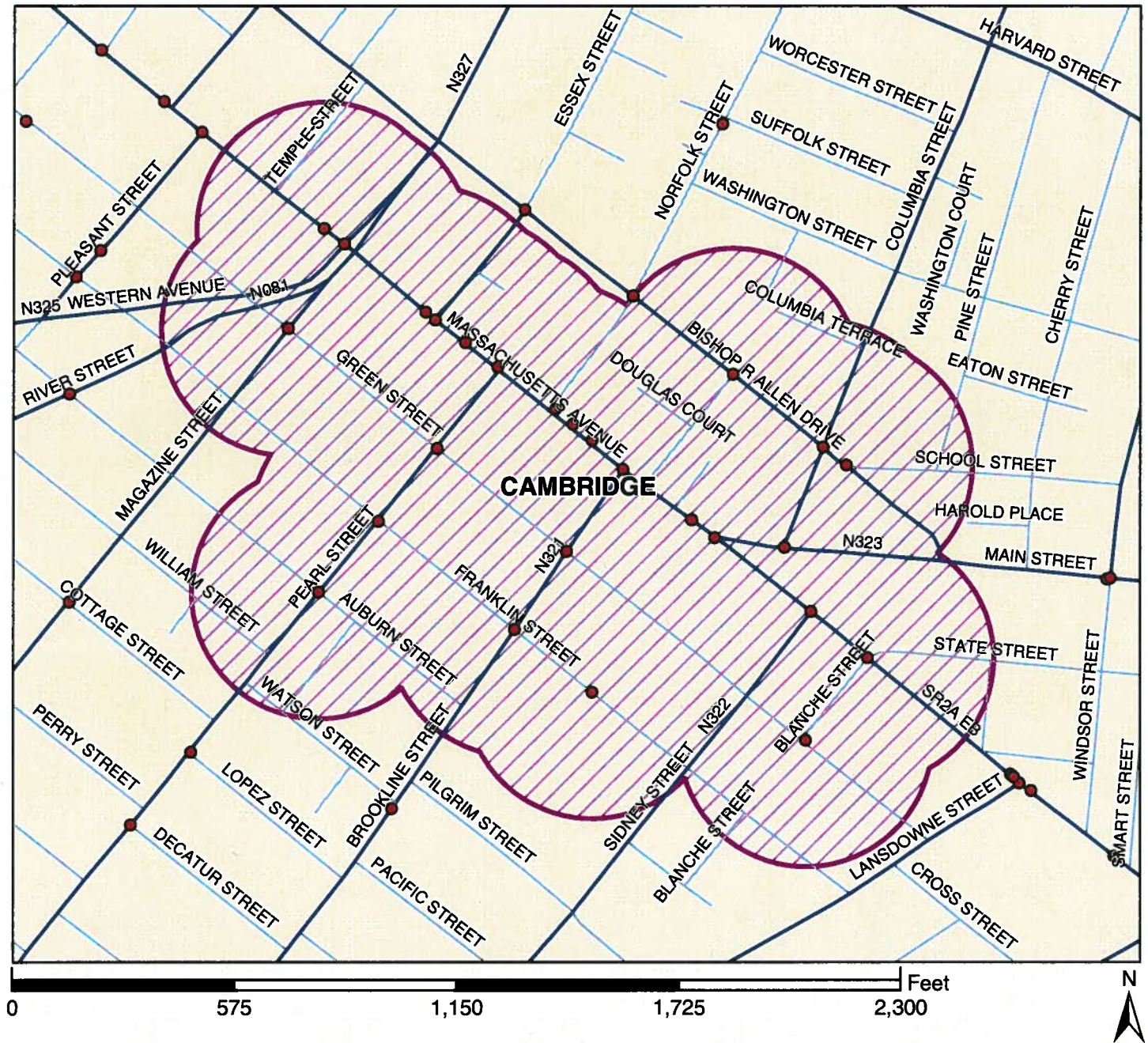
PLYMOUTH AVENUE ROUTE 81
RODMAN STREET

MHD District 5
RPA SRPEDD
EPDO 280
Number of Fatal Crashes 0
Number of Injury Crashes 32
Number of Non-Injury Crashes 120
Total Crashes 152

Legend

- Crash Locations 2005-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Crash Intersections

Top Bicycle Crash Cluster 2002-2007



RANK
1

CAMBRIDGE

RPA MAPC

EPDO 181

Number of Fatal Bicycle Crashes 1

Number of Injury Bicycle Crashes 31

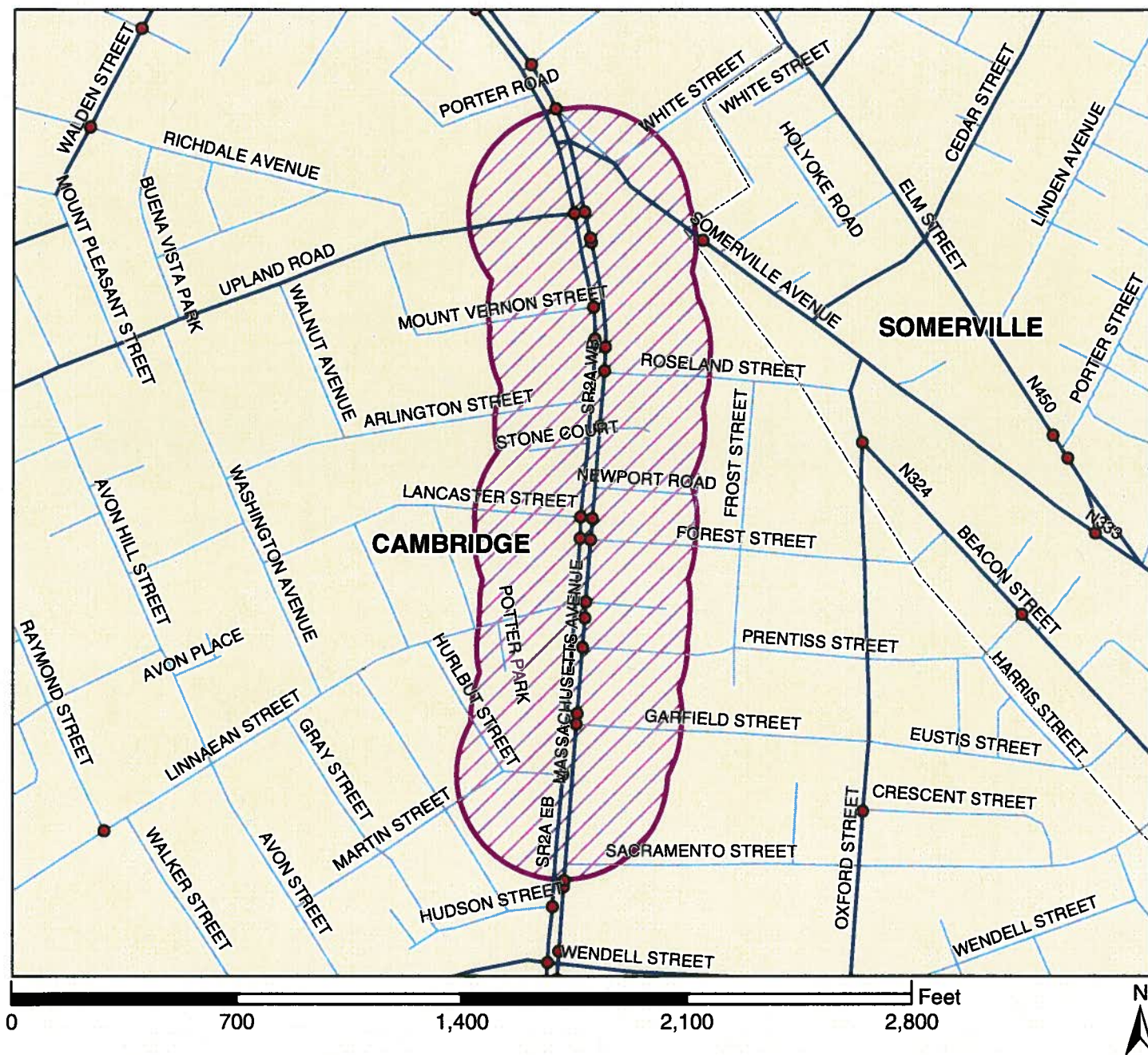
Number of Non-Injury Bicycle Crashes 16

Total Bicycle Crashes 48

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
2

CAMBRIDGE, SOMERVILLE

RPA MAPC

EPDO 98

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 18

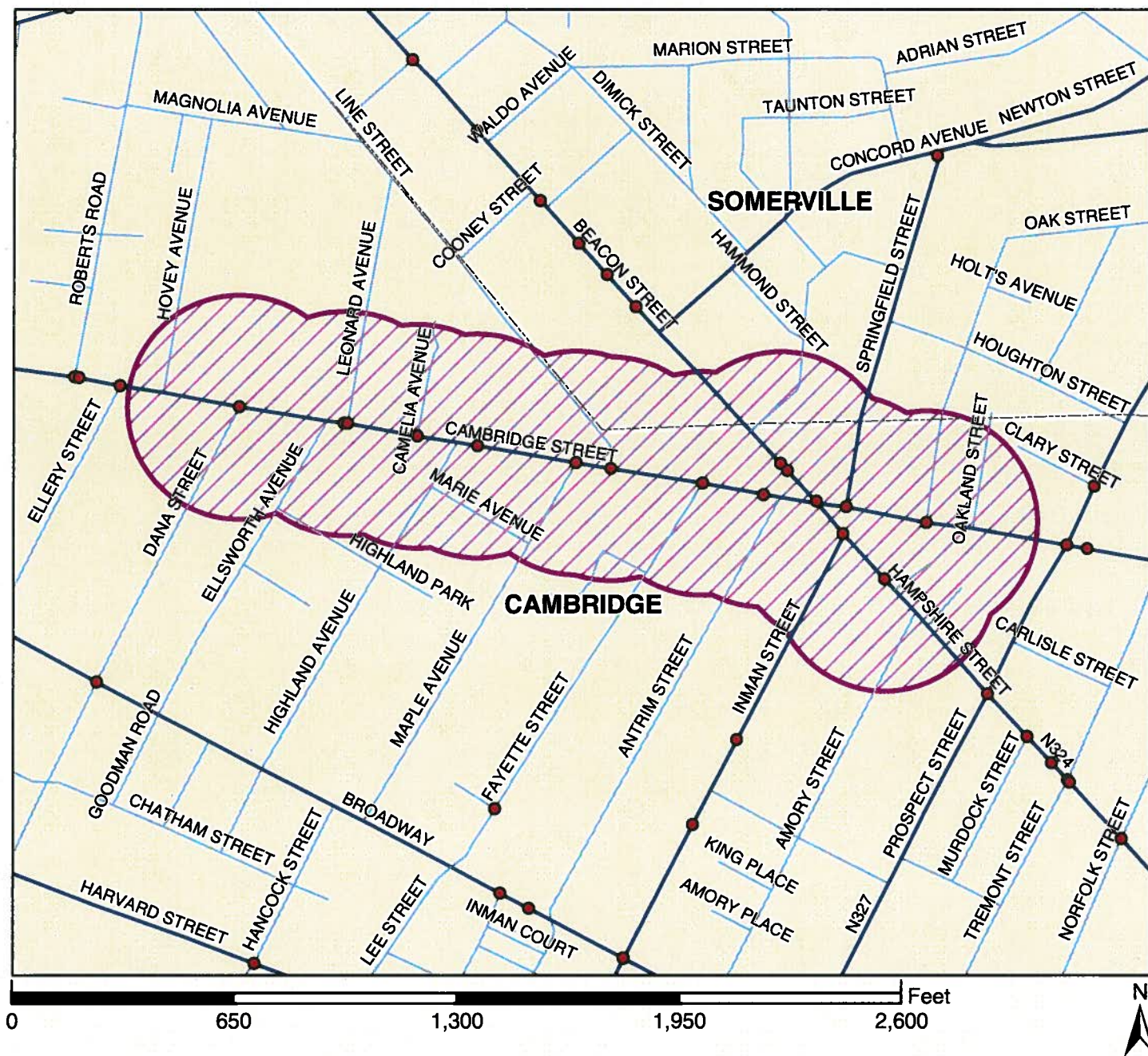
Number of Non-Injury Bicycle Crashes 8

Total Bicycle Crashes 26

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
3

CAMBRIDGE, SOMERVILLE

RPA MAPC

EPDO 67

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 12

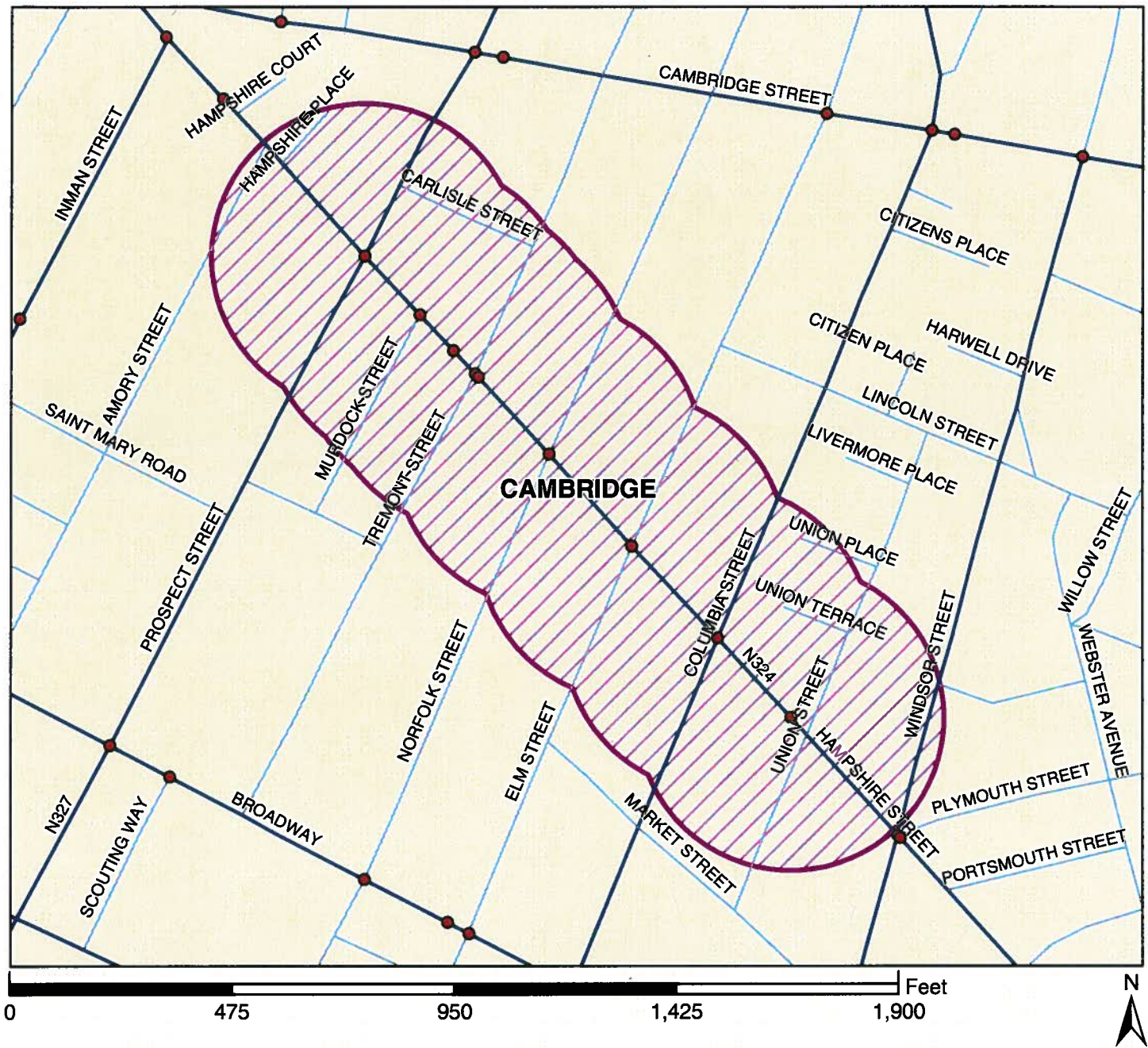
Number of Non-Injury Bicycle Crashes 7

Total Bicycle Crashes 19

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
4

CAMBRIDGE

RPA MAPC

EPDO 59

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 11

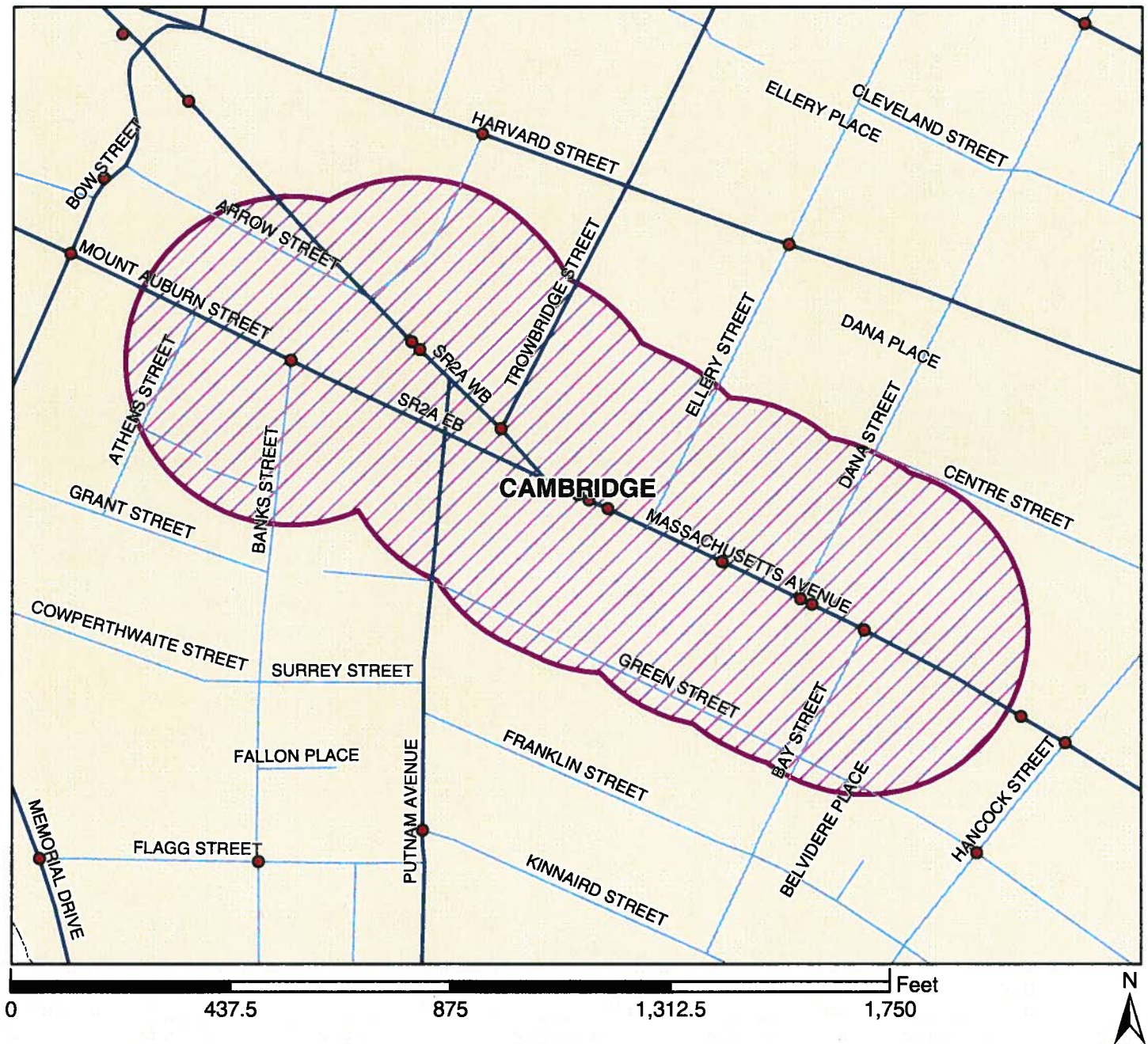
Number of Non-Injury Bicycle Crashes 4

Total Bicycle Crashes 15

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
4

CAMBRIDGE

RPA MAPC

EPDO 59

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 11

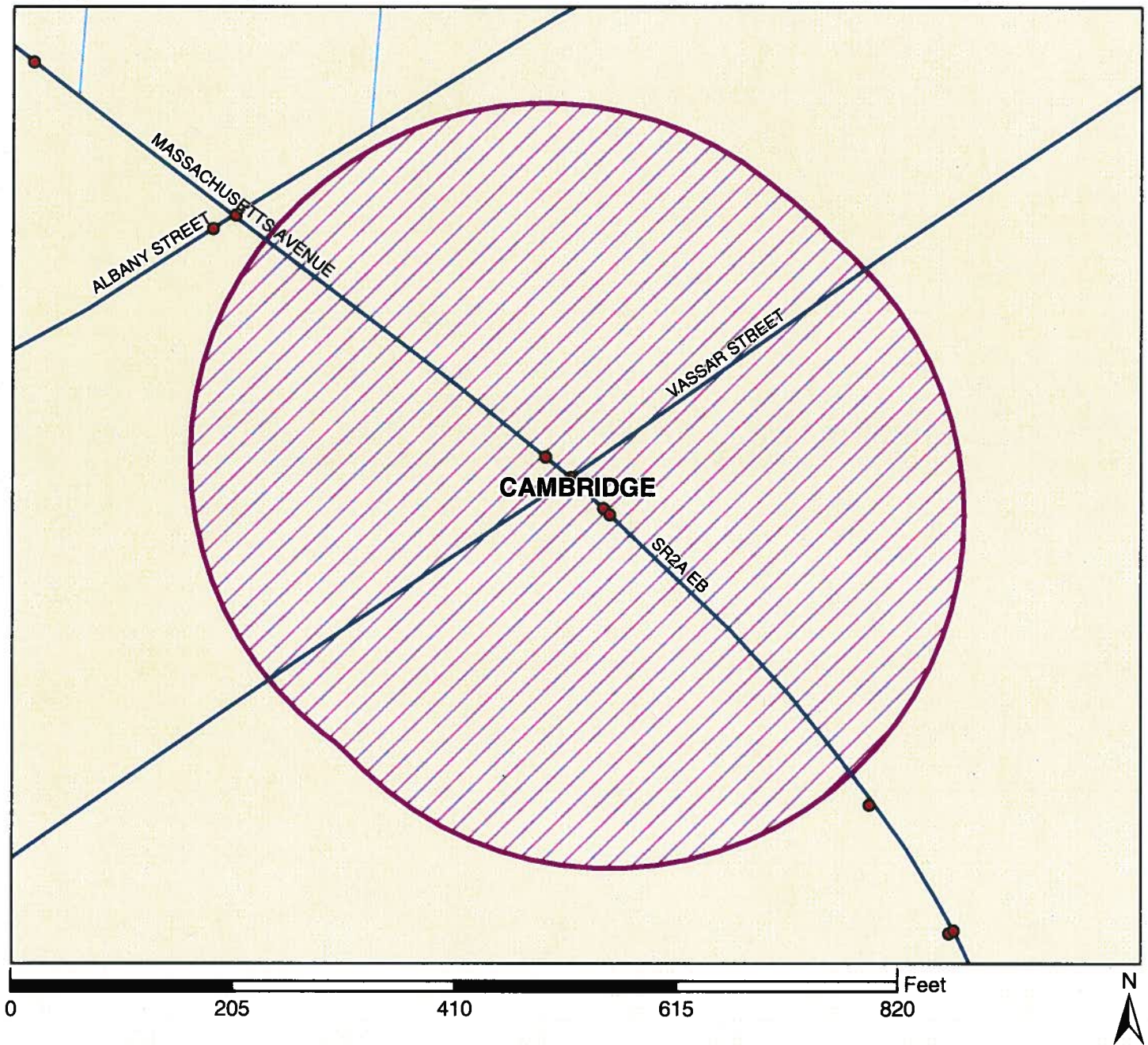
Number of Non-Injury Bicycle Crashes 4

Total Bicycle Crashes 15

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
6

CAMBRIDGE

RPA MAPC

EPDO 58

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 11

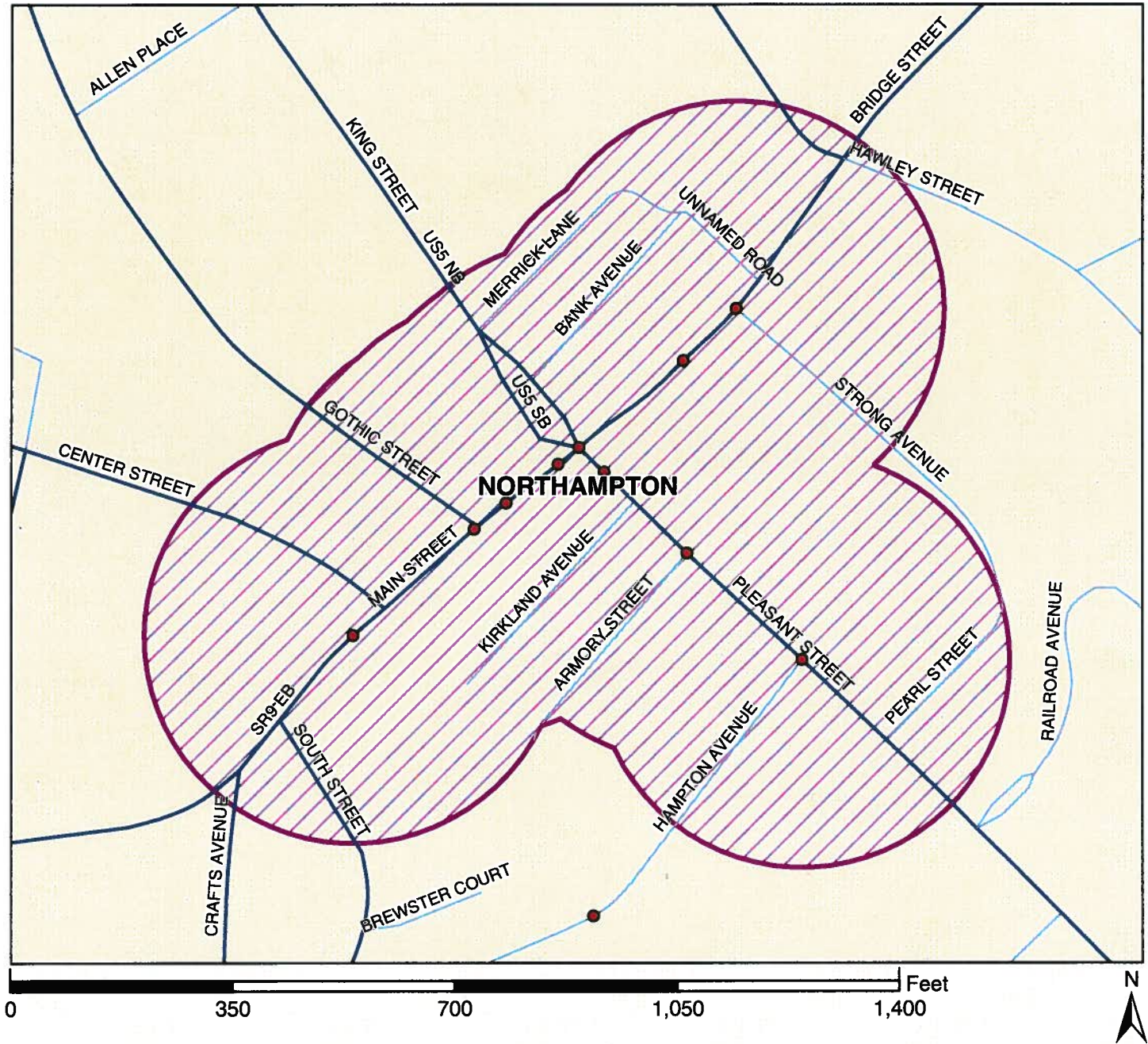
Number of Non-Injury Bicycle Crashes 3

Total Bicycle Crashes 14

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
7

NORTHAMPTON

RPA PVPC

EPDO 52

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 10

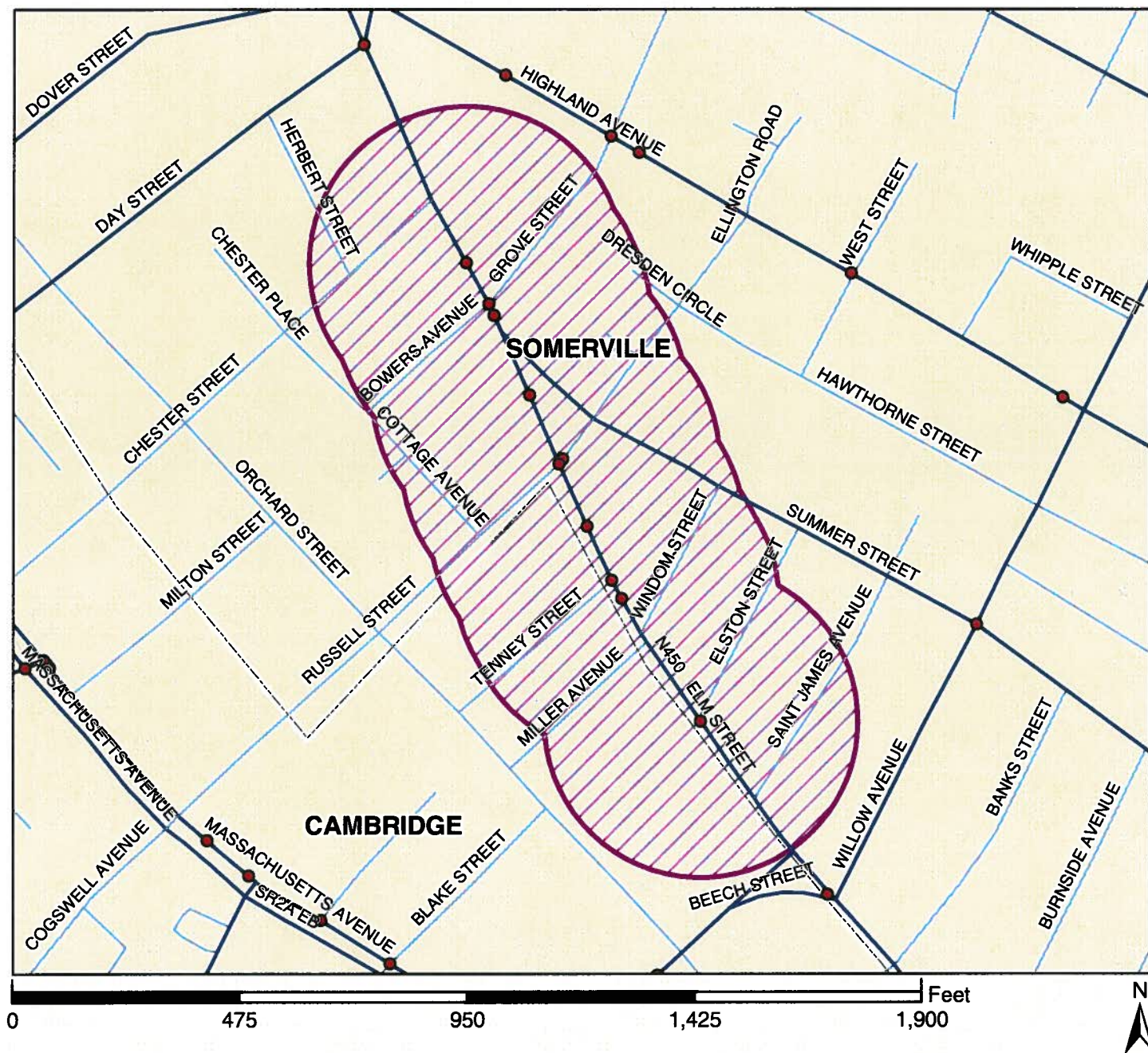
Number of Non-Injury Bicycle Crashes 2

Total Bicycle Crashes 12

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
8

SOMERVILLE, CAMBRIDGE

RPA MAPC

EPDO 46

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 9

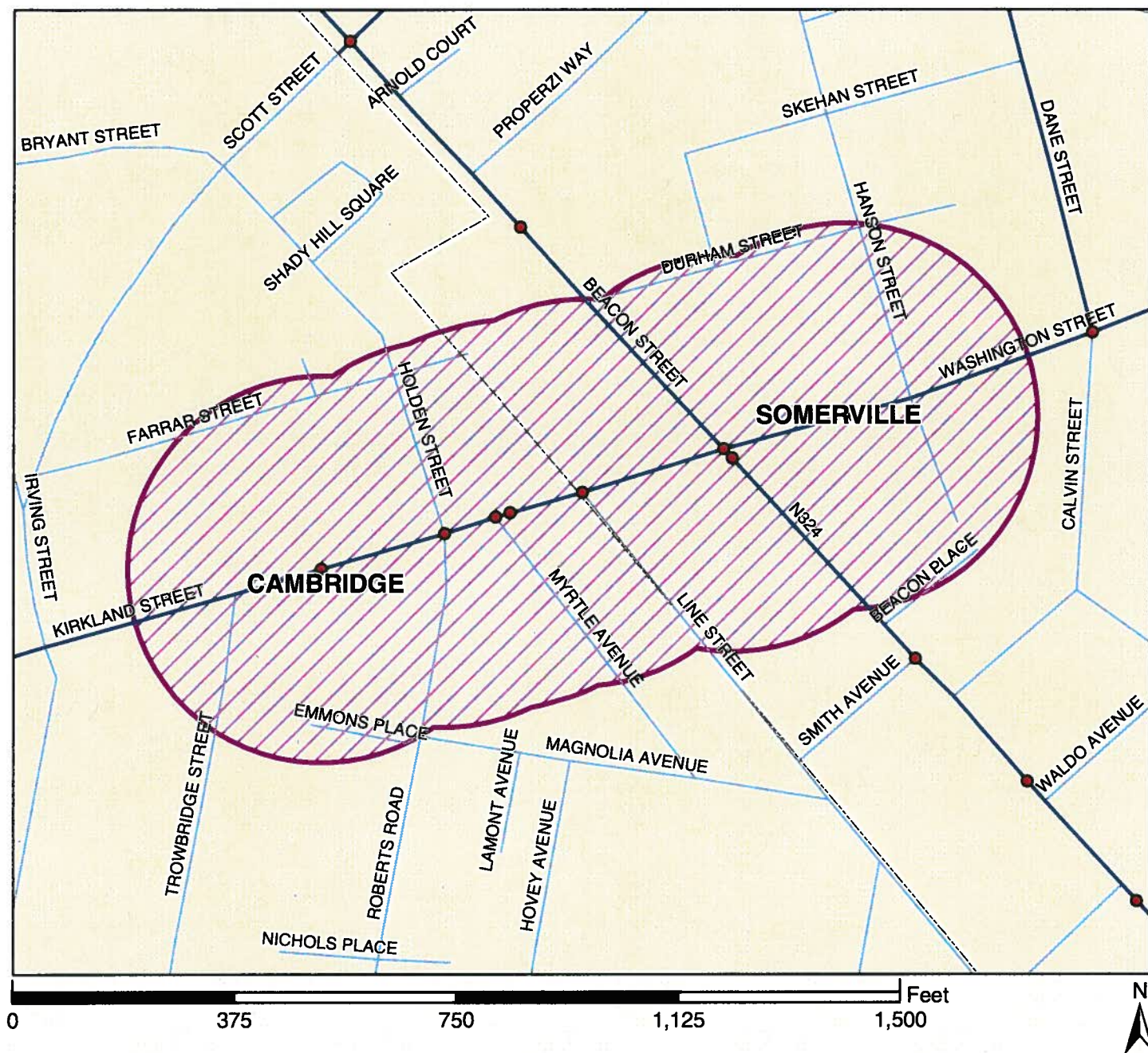
Number of Non-Injury Bicycle Crashes 1

Total Bicycle Crashes 10

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
8

SOMERVILLE, CAMBRIDGE

RPA MAPC

EPDO 46

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 9

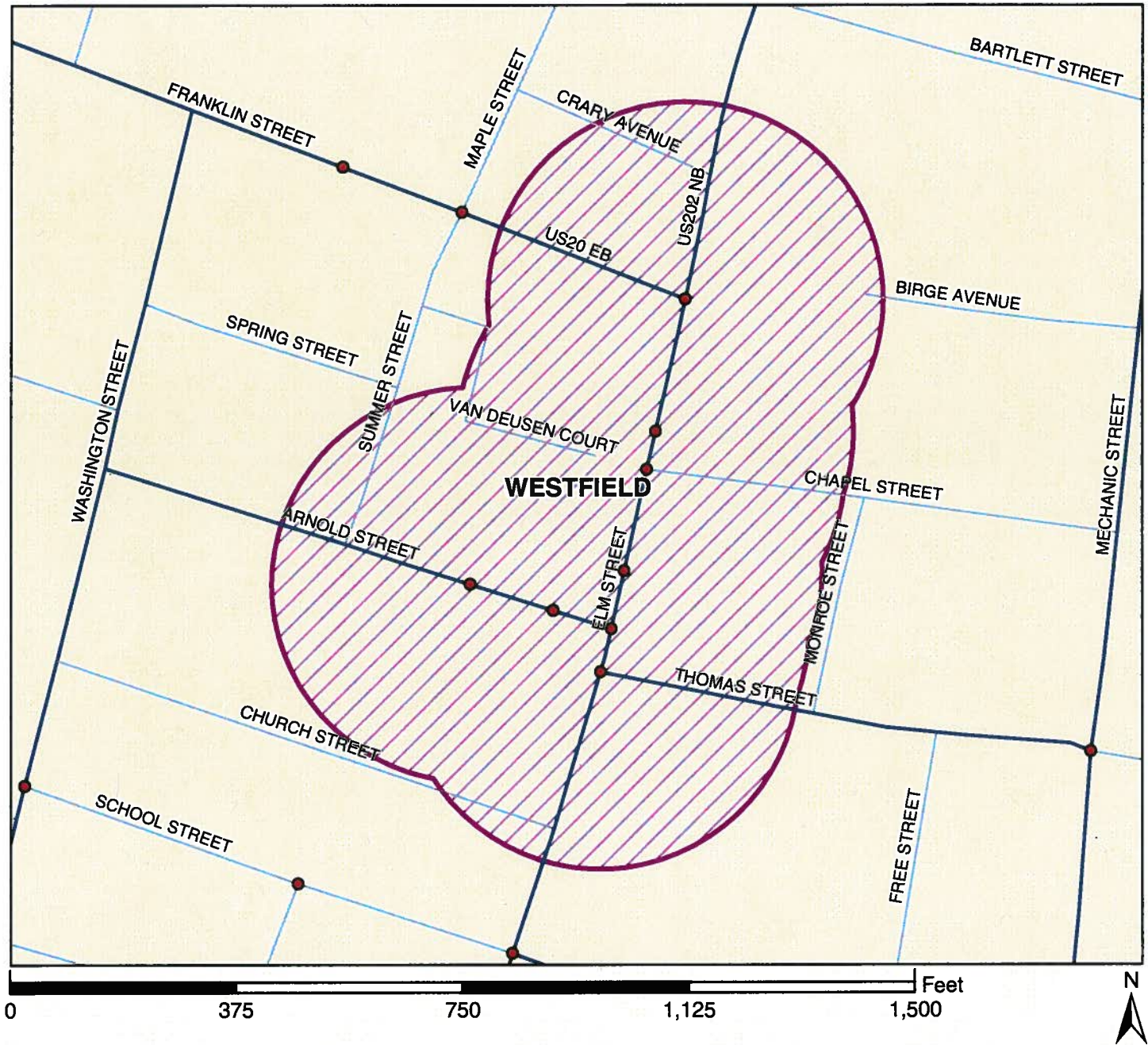
Number of Non-Injury Bicycle Crashes 1

Total Bicycle Crashes 10

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Bicycle Crash Cluster
- Municipal Boundary

Top Bicycle Crash Cluster 2002-2007



RANK
10

WESTFIELD

RPA PVPV

EPDO 42

Number of Fatal Bicycle Crashes 0

Number of Injury Bicycle Crashes 8

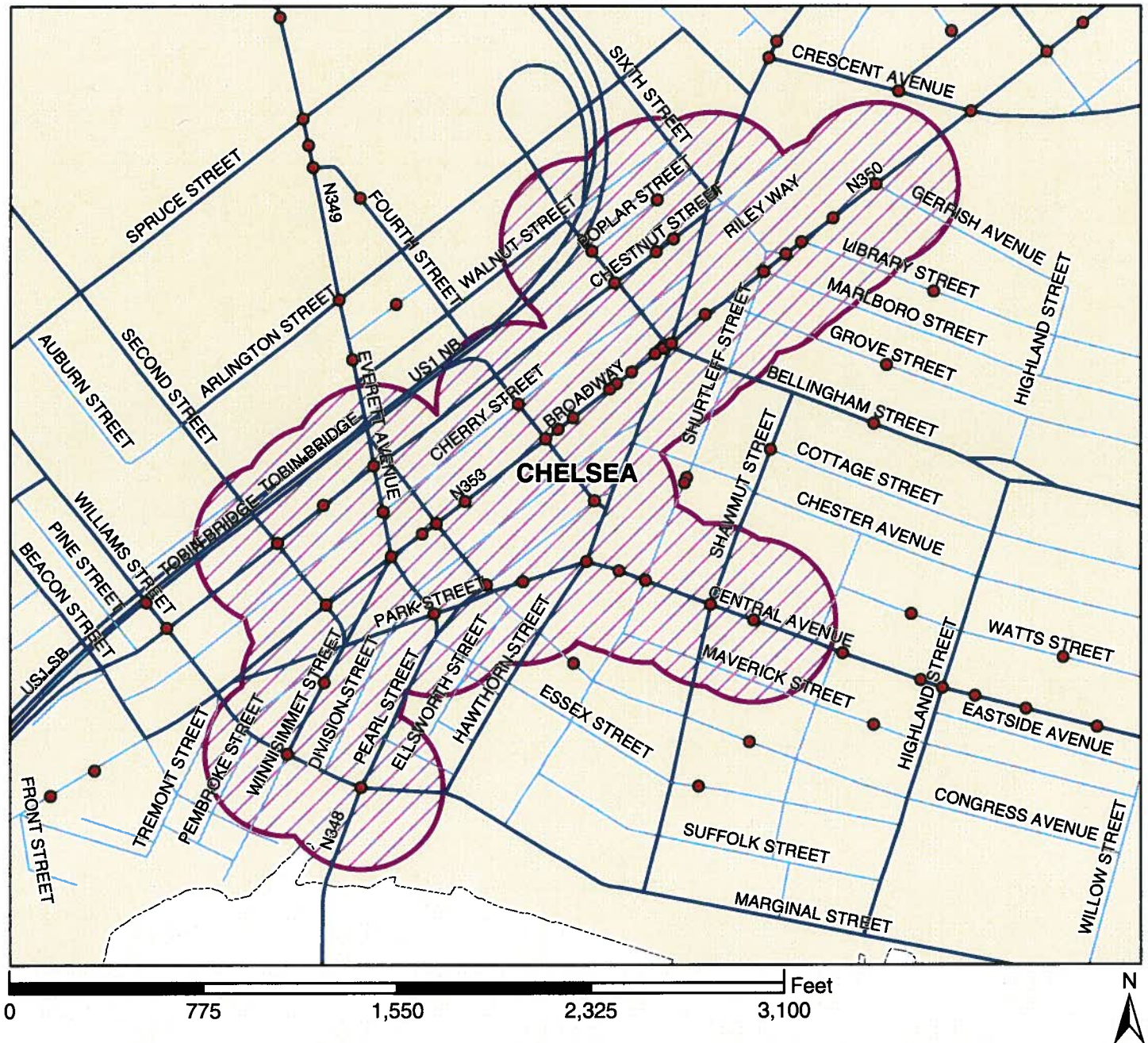
Number of Non-Injury Bicycle Crashes 2

Total Bicycle Crashes 10

Legend

- Bicycle Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Bicycle Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
1

CHELSEA

RPA MAPC
EPDO 320

Number of Fatal Pedestrian Crashes 1

Number of Injury Pedestrian Crashes 58

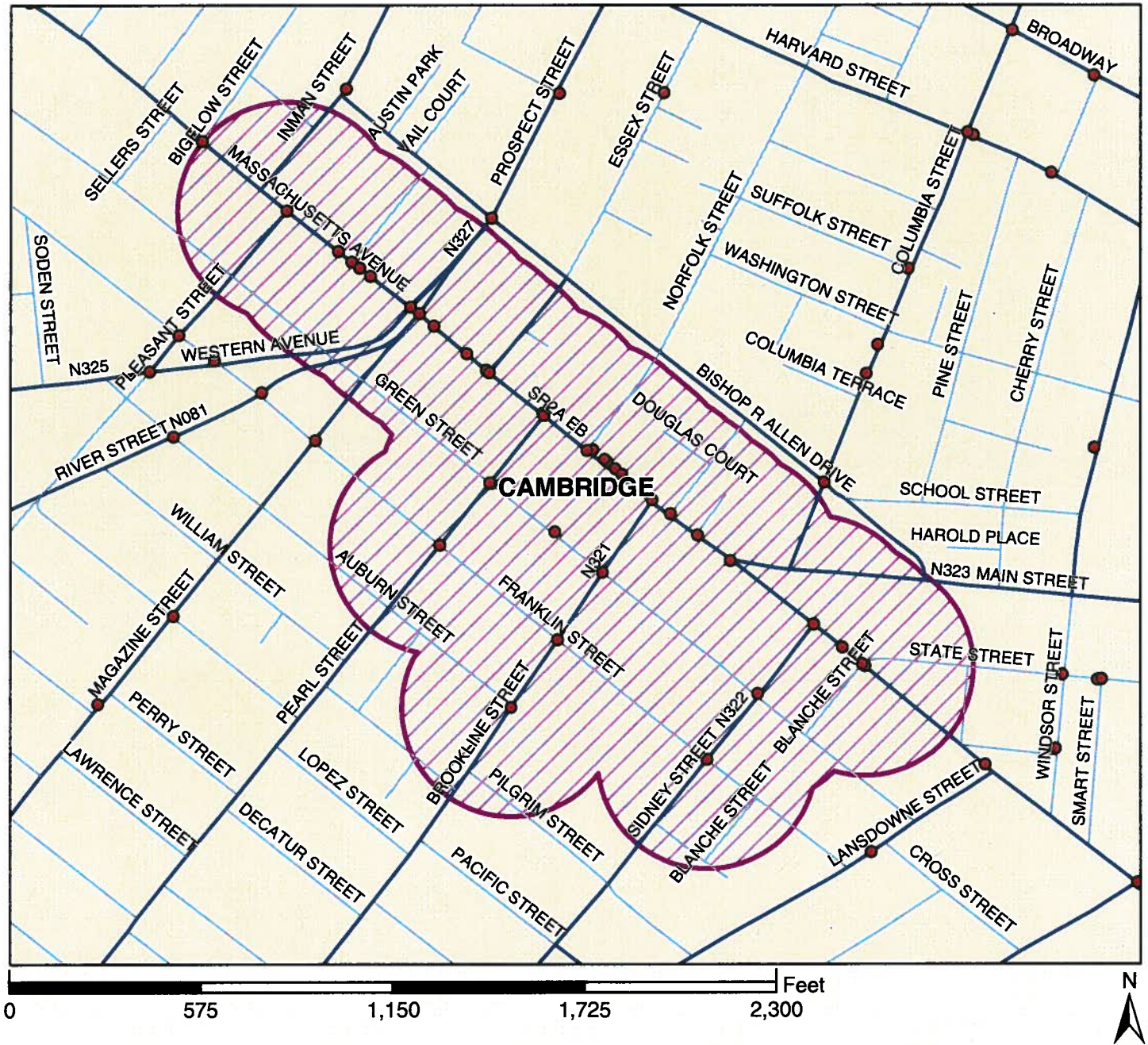
Number of Non-Injury Pedestrian Crashes 20

Total Pedestrian Crashes 79

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
2

CAMBRIDGE

RPA MAPC

EPDO 185

Number of Fatal Pedestrian Crashes 1

Number of Injury Pedestrian Crashes 29

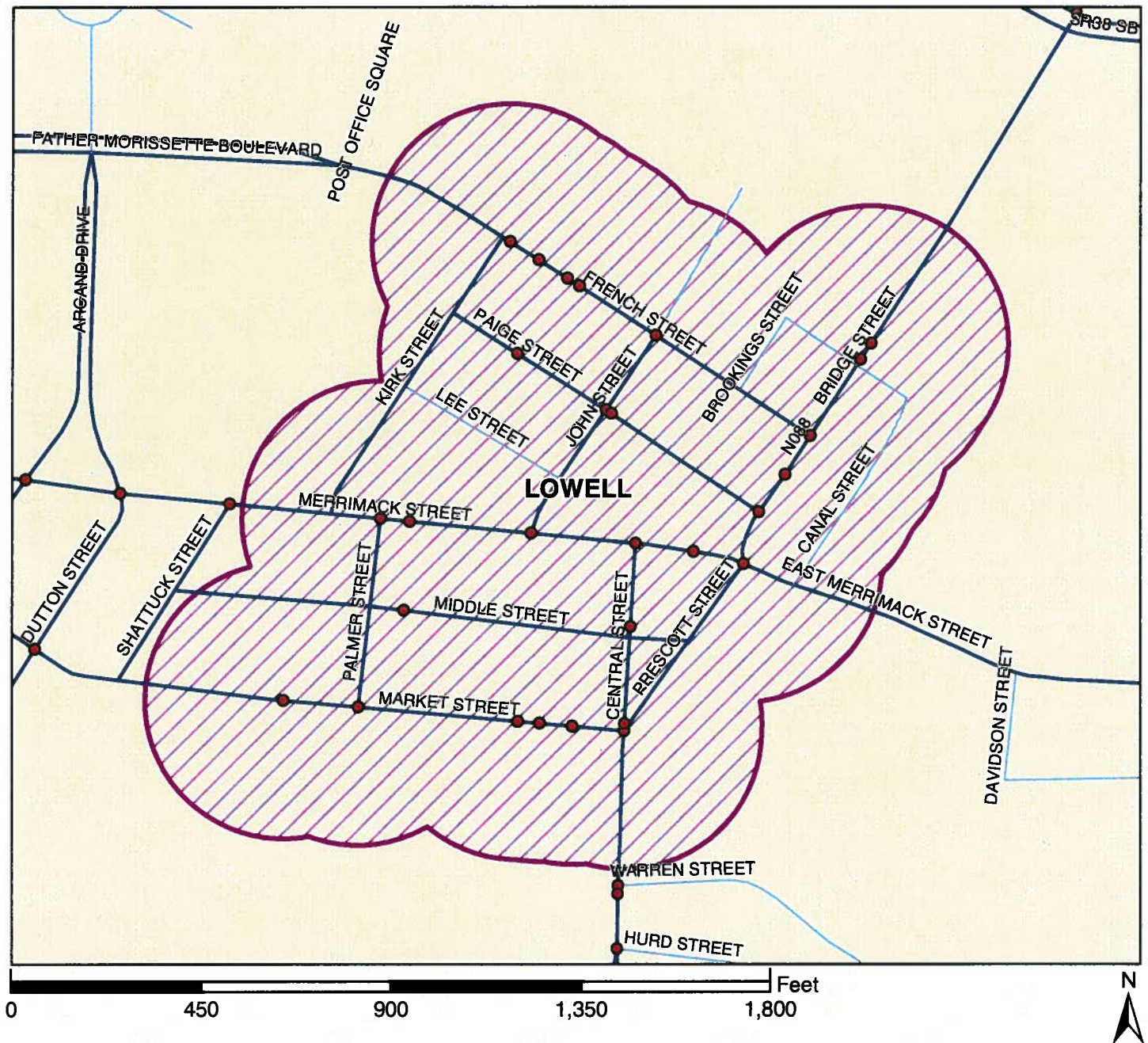
Number of Non-Injury Pedestrian Crashes 30

Total Pedestrian Crashes 60

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
3

LOWELL

RPA NMCOG

EPDO 150

Number of Fatal Pedestrian Crashes 0

Number of Injury Pedestrian Crashes 27

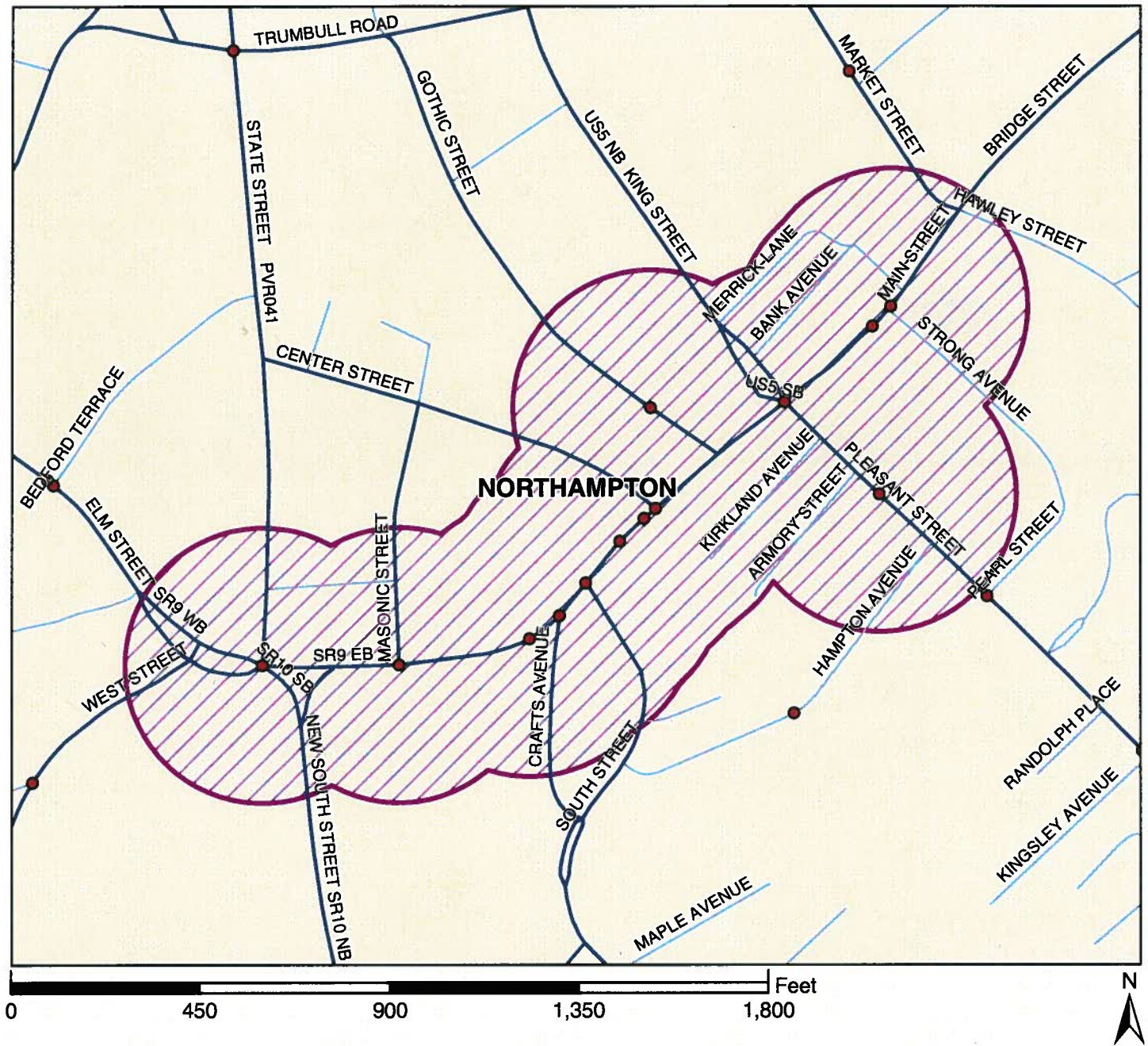
Number of Non-Injury Pedestrian Crashes 15

Total Pedestrian Crashes 42

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
4

NORTHAMPTON

RPA PVPC

EPDO 115

Number of Fatal Pedestrian Crashes 1

Number of Injury Pedestrian Crashes 21

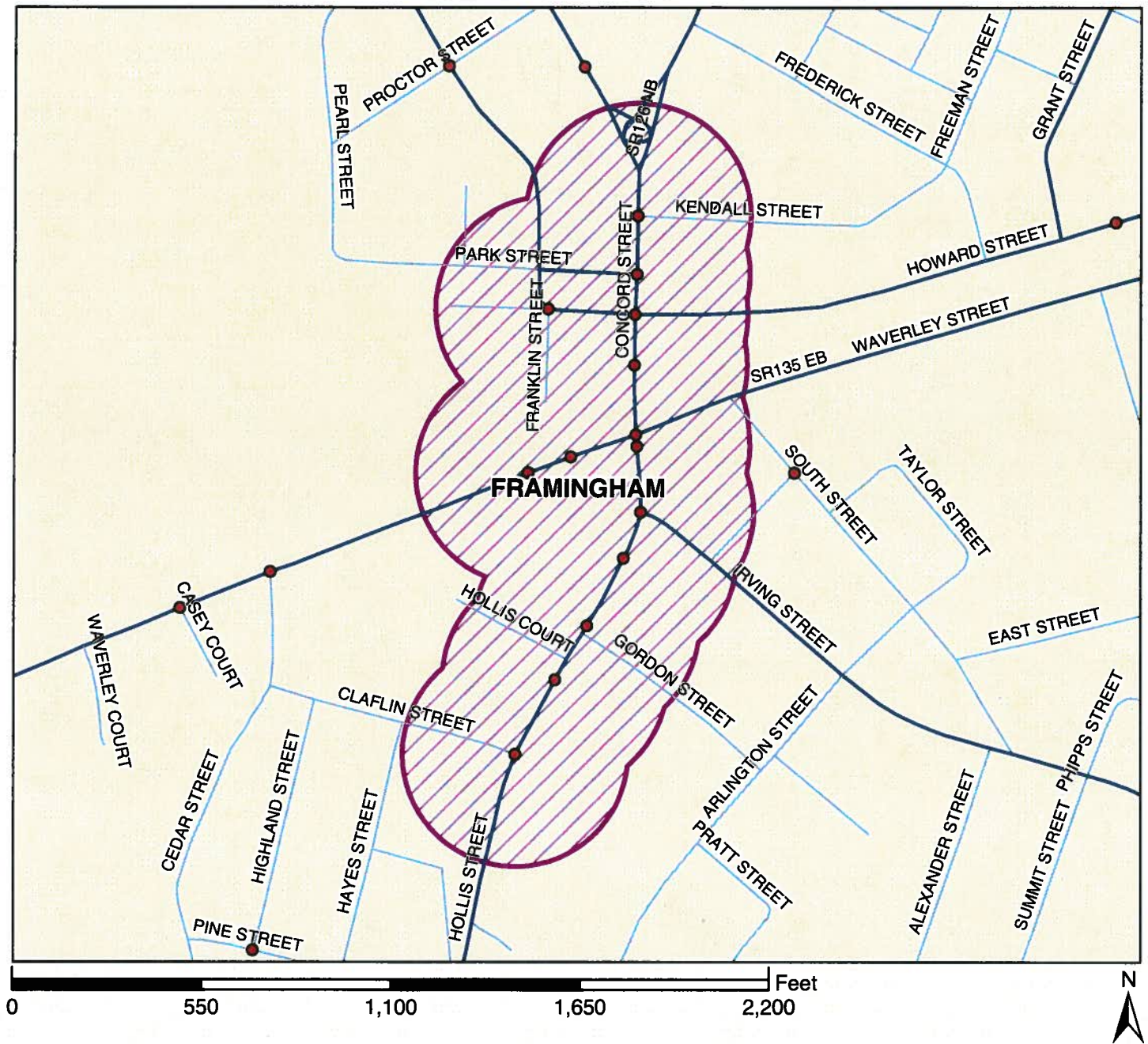
Number of Non-Injury Pedestrian Crashes 0

Total Pedestrian Crashes 22

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
5

FRAMINGHAM

RPA MAPC

EPDO 108

Number of Fatal Pedestrian Crashes 0

Number of Injury Pedestrian Crashes 21

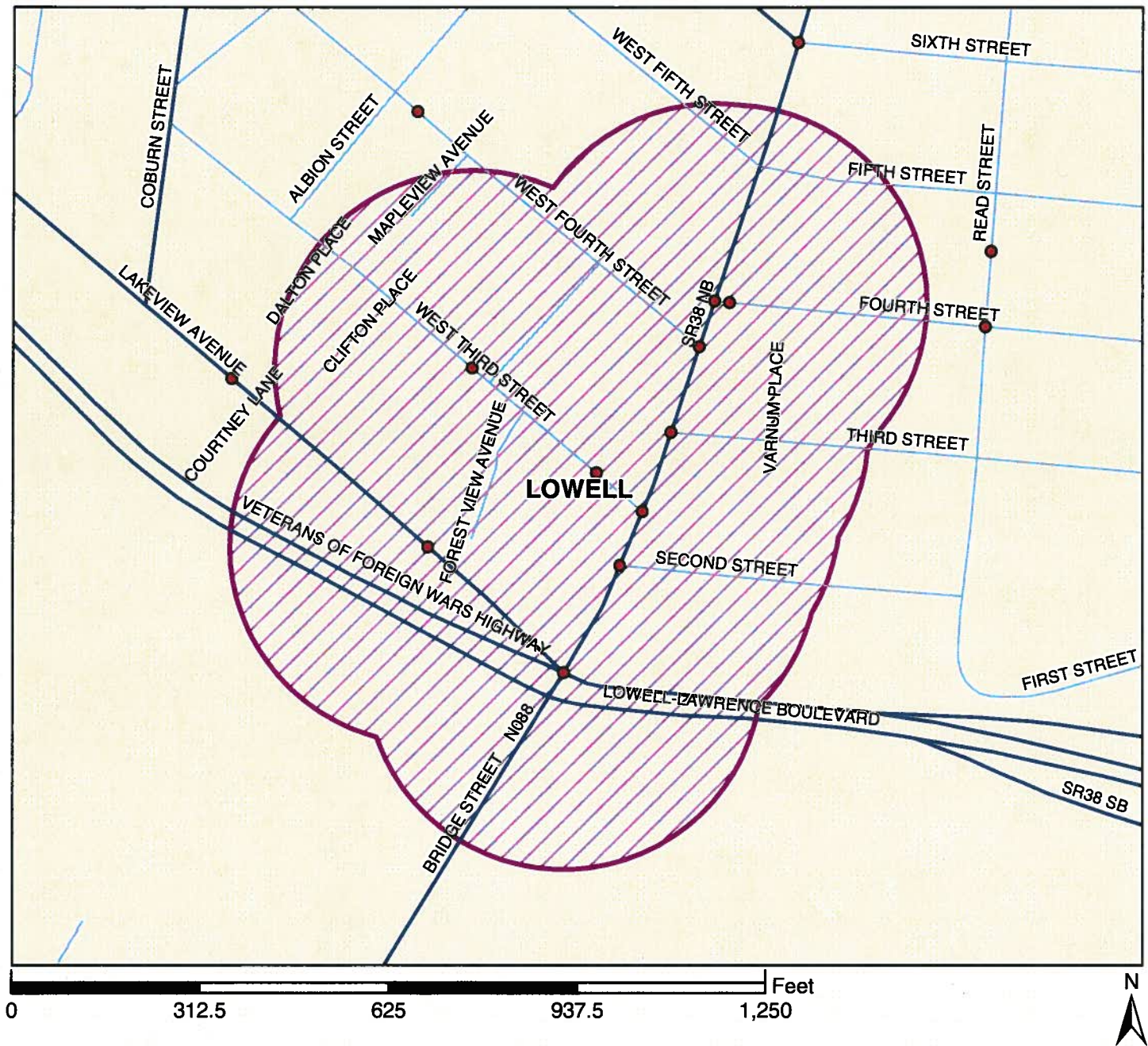
Number of Non-Injury Pedestrian Crashes 3

Total Pedestrian Crashes 24

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
6

LOWELL

RPA MNCOG

EPDO 105

Number of Fatal Pedestrian Crashes 2

Number of Injury Pedestrian Crashes 16

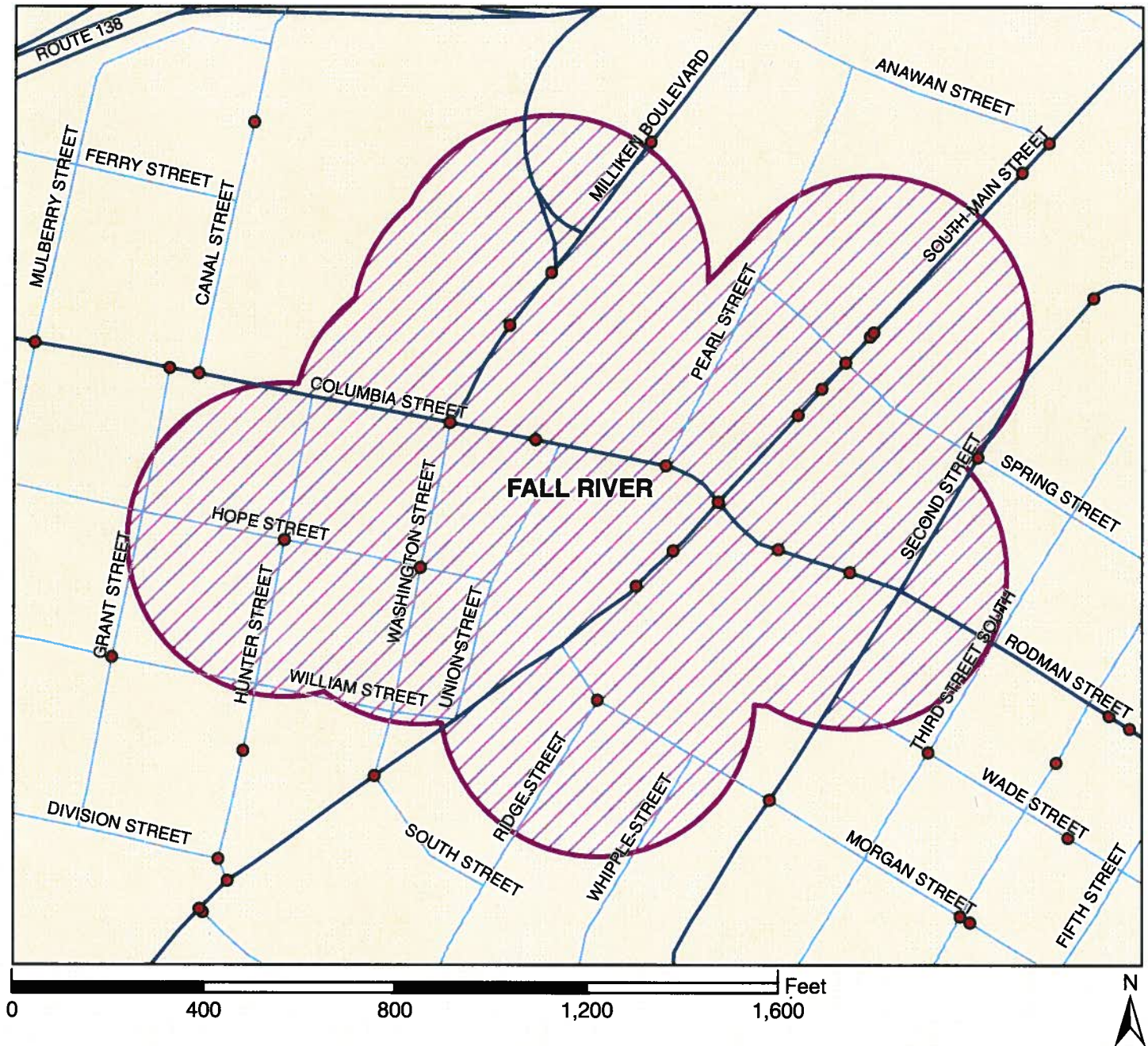
Number of Non-Injury Pedestrian Crashes 5

Total Pedestrian Crashes 23

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
7

FALL RIVER

RPA SRPEDD

EPDO 99

Number of Fatal Pedestrian Crashes 0

Number of Injury Pedestrian Crashes 19

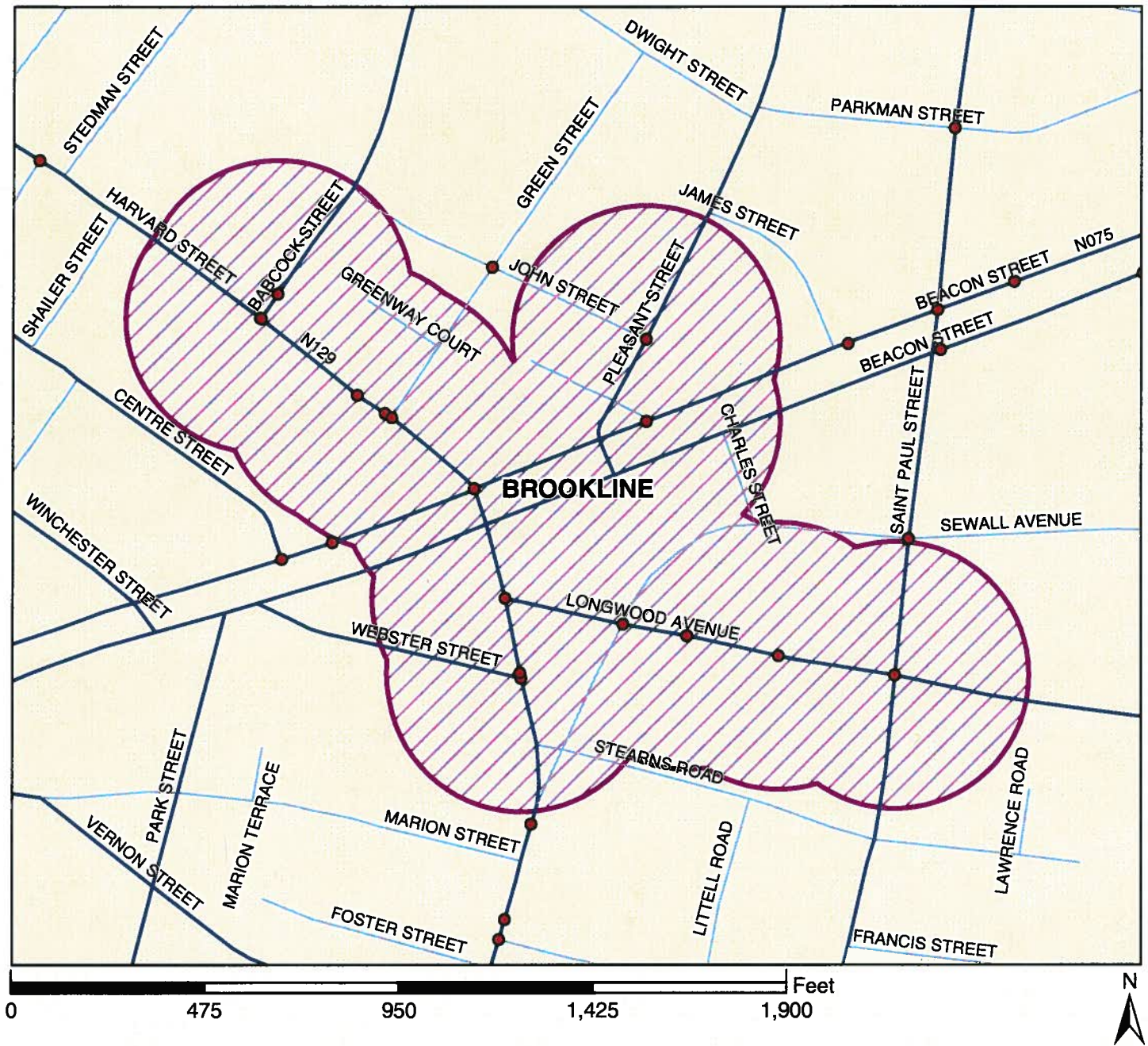
Number of Non-Injury Pedestrian Crashes 4

Total Pedestrian Crashes 23

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
8

BROOKLINE

RPA MAPC

EPDO 96

Number of Fatal Pedestrian Crashes 0

Number of Injury Pedestrian Crashes 17

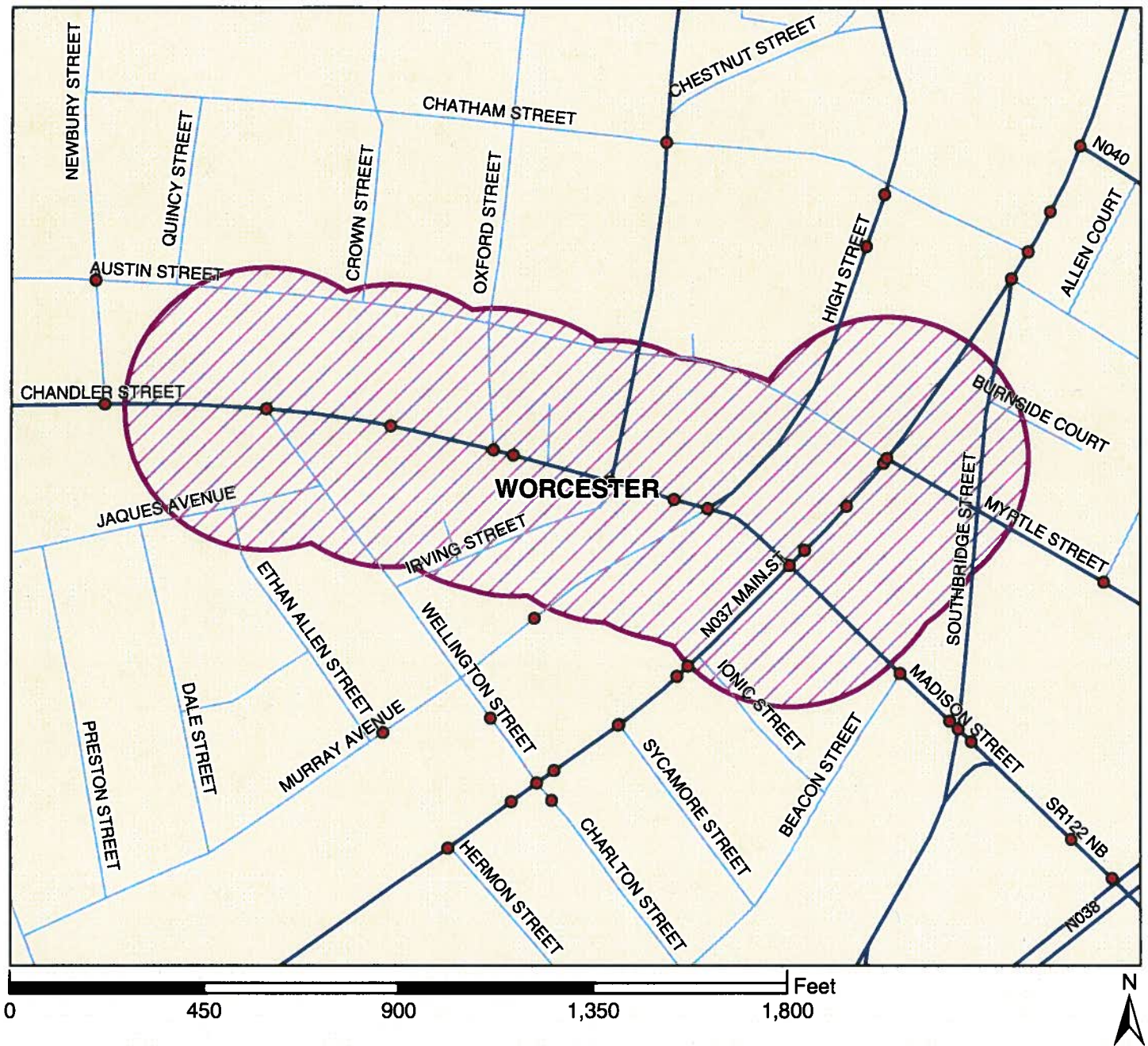
Number of Non-Injury Pedestrian Crashes 11

Total Pedestrian Crashes 28

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
9

WORCESTER

RPA CMRPC

EPDO 89

Number of Fatal Pedestrian Crashes 0

Number of Injury Pedestrian Crashes 17

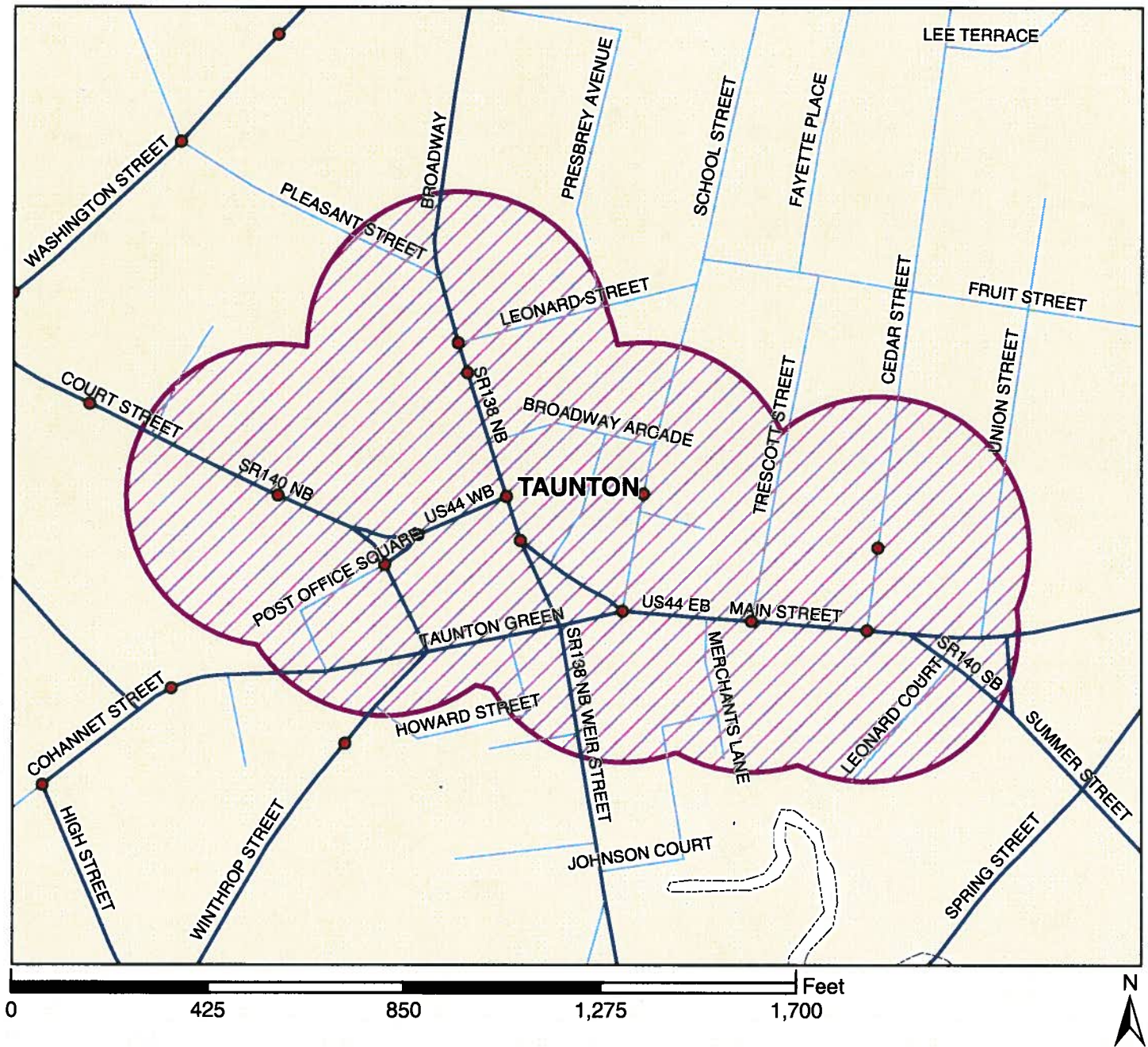
Number of Non-Injury Pedestrian Crashes 4

Total Pedestrian Crashes 21

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



RANK
10

TAUNTON

RPA SRPEDD

EPDO 87

Number of Fatal Pedestrian Crashes 0

Number of Injury Pedestrian Crashes 16

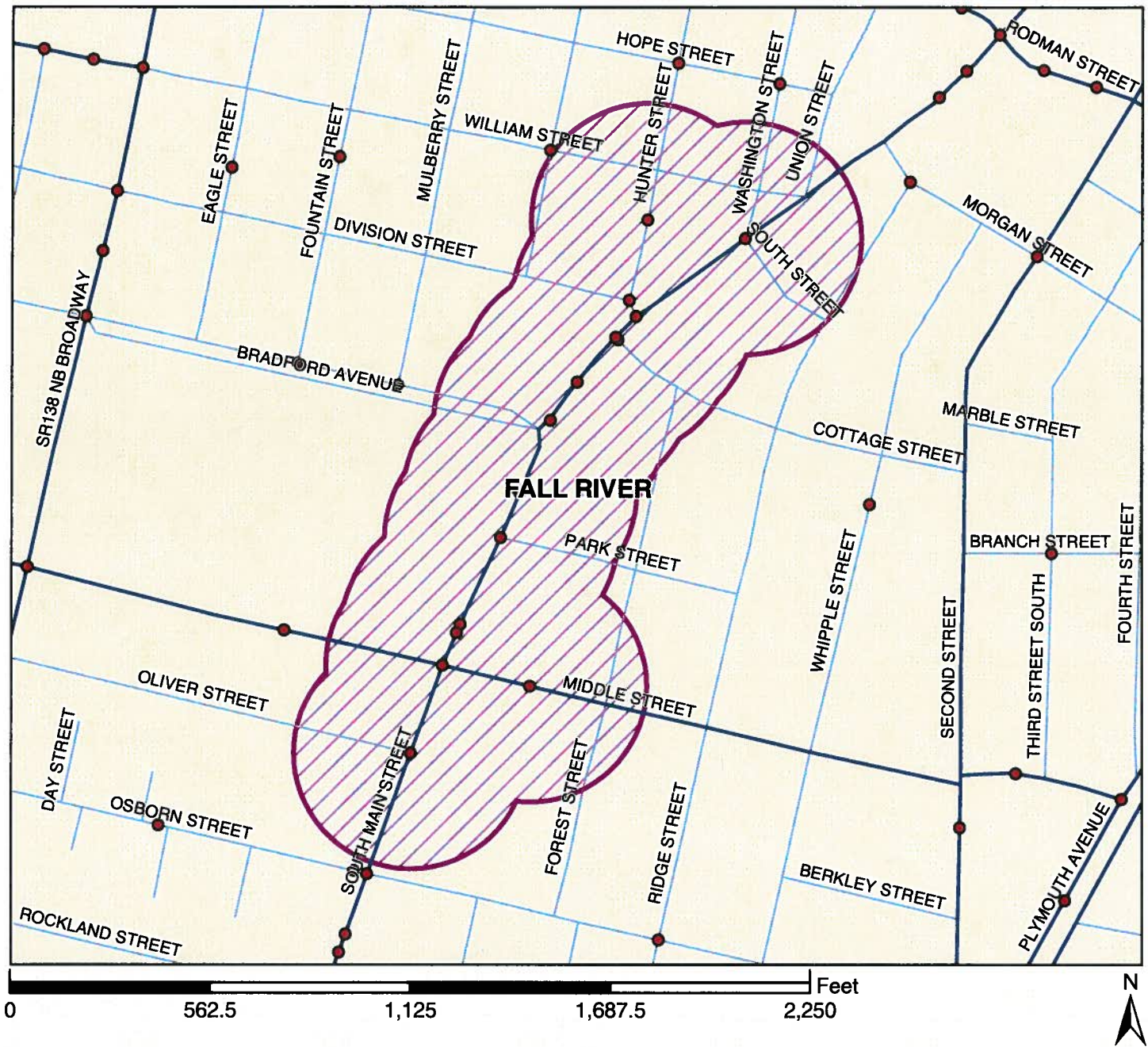
Number of Non-Injury Pedestrian Crashes 7

Total Pedestrian Crashes 23

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- ▨ Top Pedestrian Crash Cluster
- Municipal Boundary

Top Pedestrian Crash Cluster 2002-2007



**RANK
10**

FALL RIVER

RPA SRPEDD

EPDO 87

Number of Fatal Pedestrian Crashes 0

Number of Injury Pedestrian Crashes 16

Number of Non-Injury Pedestrian Crashes 7

Total Pedestrian Crashes 23

Legend

- Pedestrian Crash Locations 2002-2007
- Local Roads
- All Functional Classification Except Local Roads
- Top Pedestrian Crash Cluster
- Municipal Boundary