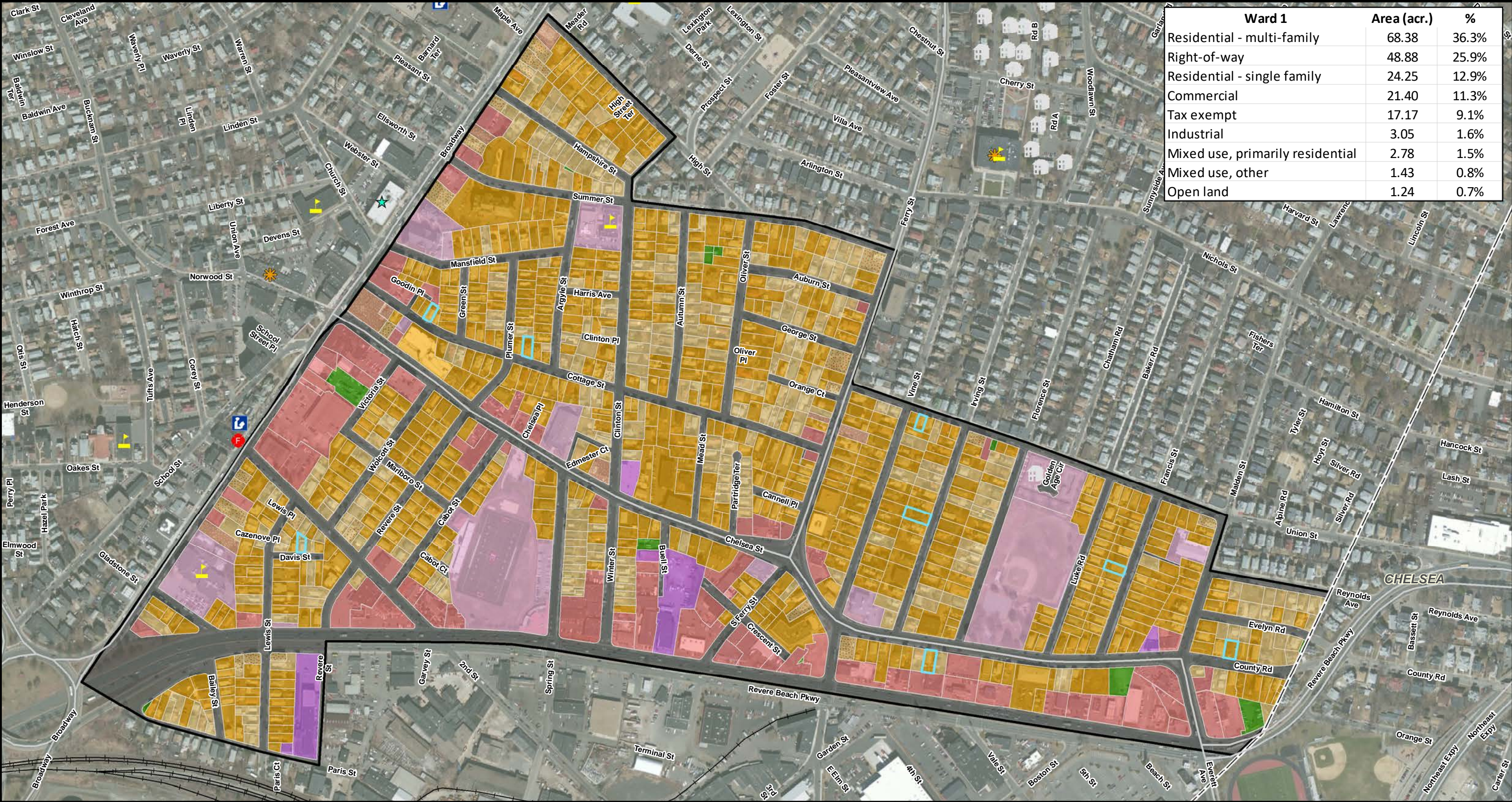


## LAND USE MAPS





**Legend**

- Everett Boundary
- Ward Boundary
- Childcare/Daycare Centers
- Parcel Boundaries
- Fire Station
- Housing Authority

**Land Use (2016)**

- Commercial
- Industrial
- Mixed use, primarily residential
- Mixed use, other

**Land Use (2016)**

- Open land
- Residential - single family
- Residential - multi-family
- Tax exempt
- Right-of-way
- Unknown

**Land Use (2016)**

- School
- MBTA Bus Route

**WARD 1**

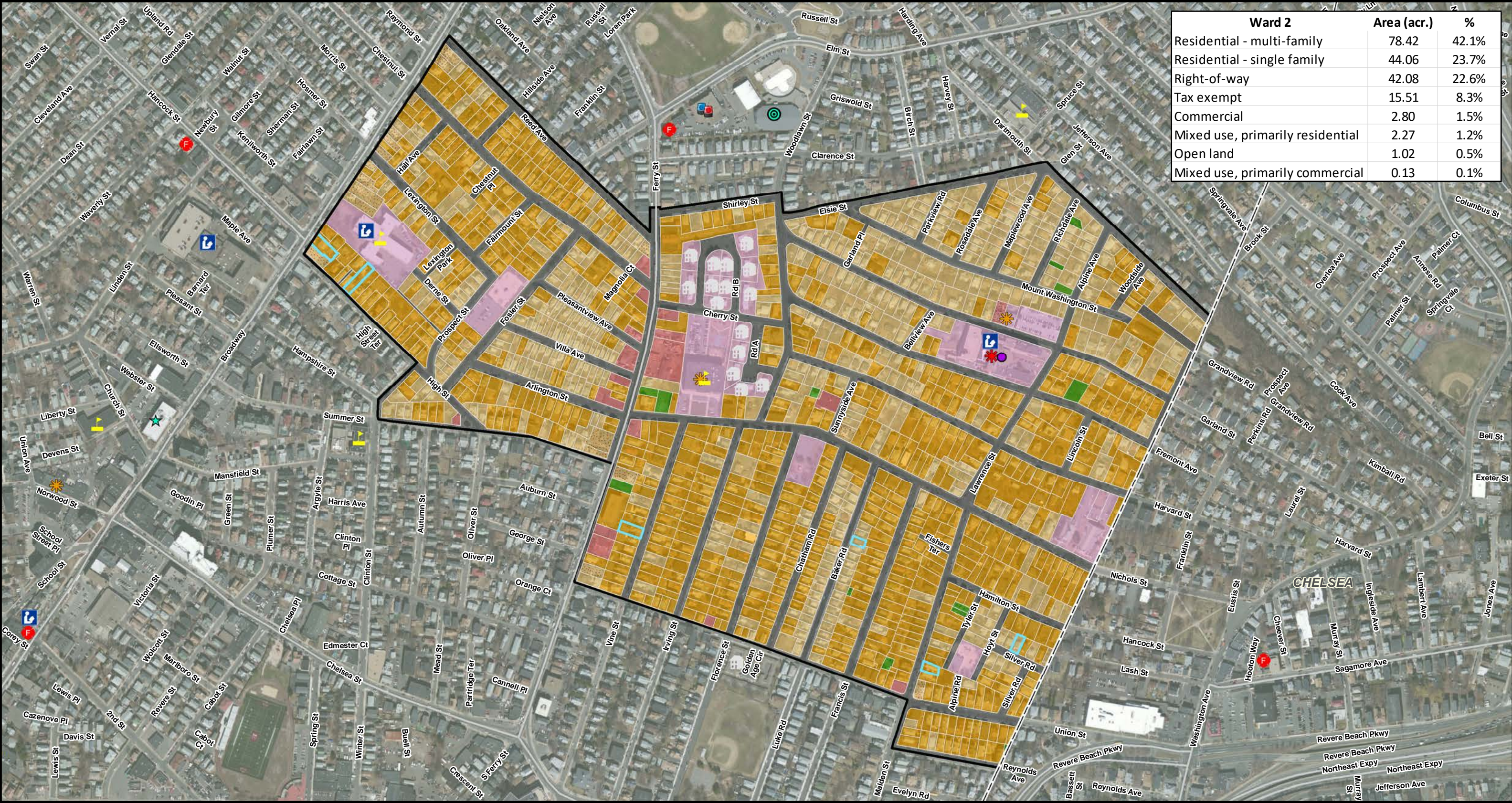
**Land Use (2016) Map**

Everett, MA

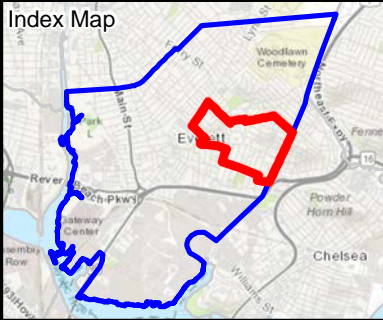
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus





Ward 2	Area (acr.)	%
Residential - multi-family	78.42	42.1%
Residential - single family	44.06	23.7%
Right-of-way	42.08	22.6%
Tax exempt	15.51	8.3%
Commercial	2.80	1.5%
Mixed use, primarily residential	2.27	1.2%
Open land	1.02	0.5%
Mixed use, primarily commercial	0.13	0.1%



**Legend**

- Everett Boundary
- Ward Boundary
- Childcare/Daycare Centers
- Parcel Boundaries
- Housing Authority
- Nursing Home/Longterm Care
- Library
- School
- Acute Care Hospital
- Community Health Center
- MBTA Bus Route

**Land Use (2016)**

- Commercial
- Mixed use, primarily commercial
- Mixed use, primarily residential
- Open land
- Residential - single family
- Residential - multi-family
- Tax exempt
- Right-of-way
- Unknown

0 225 450  
Feet

1 inch = 450 feet

N

**WARD 2**

**Land Use (2016) Map**

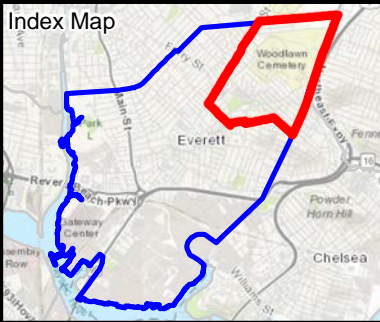
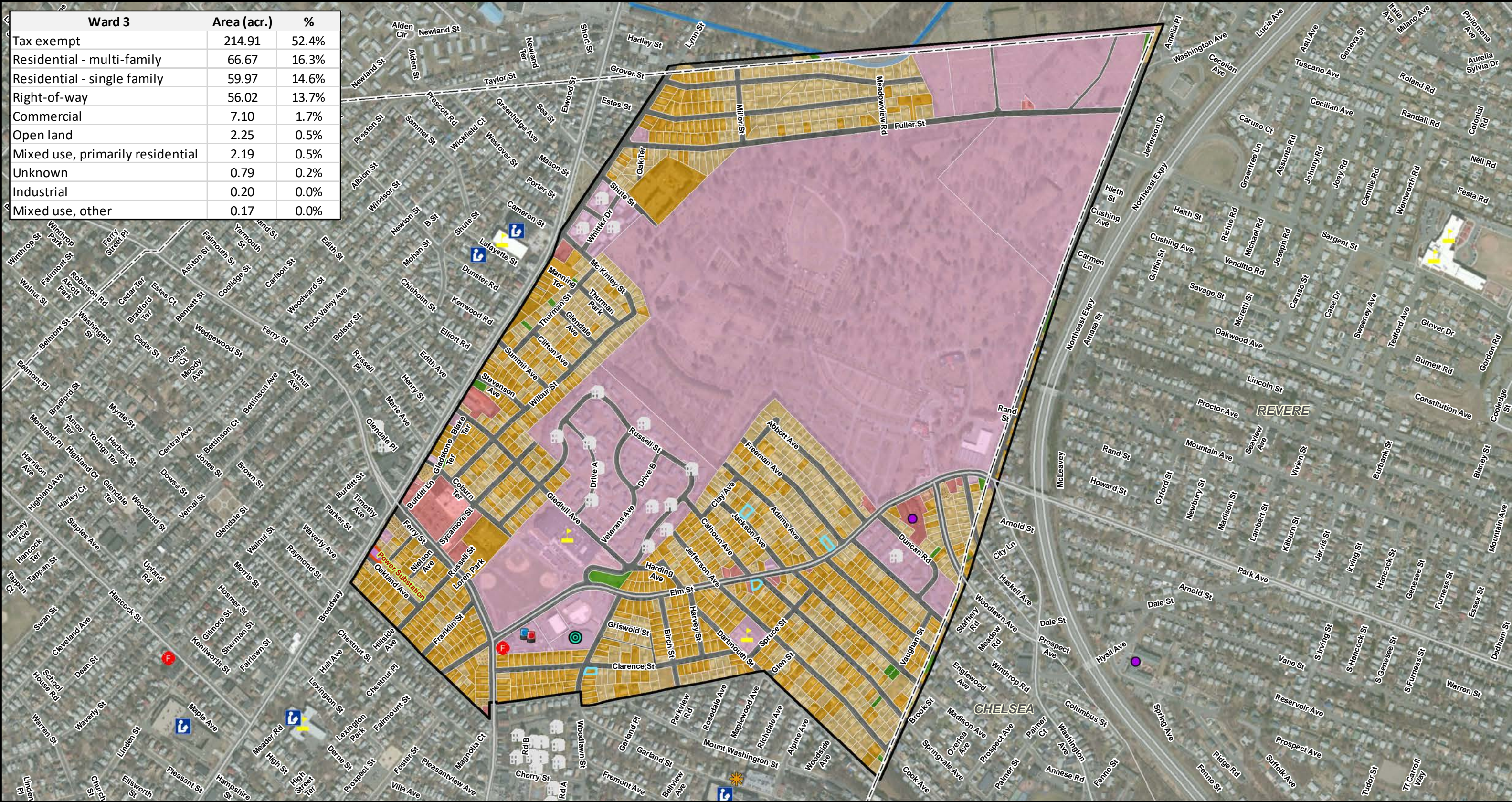
Everett, MA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus



Ward 3	Area (acr.)	%
Tax exempt	214.91	52.4%
Residential - multi-family	66.67	16.3%
Residential - single family	59.97	14.6%
Right-of-way	56.02	13.7%
Commercial	7.10	1.7%
Open land	2.25	0.5%
Mixed use, primarily residential	2.19	0.5%
Unknown	0.79	0.2%
Industrial	0.20	0.0%
Mixed use, other	0.17	0.0%



**Legend**

- Everett Boundary
- Ward Boundary
- Utility Parcels
- Childcare/Daycare Centers
- Parcel Boundaries
- MADEP Waterbody
- Fire Station
- Housing Authority
- Police Station
- Nursing Home/Longterm Care
- School
- Ice Rink
- MBTA Bus Route
- Land Use (2016)**
  - Commercial
  - Industrial
  - Mixed use, primarily residential
  - Mixed use, other
  - Open land
  - Residential - single family
  - Residential - multi-family
  - Tax exempt
  - Right-of-way
  - Unknown

0 325 650  
Feet

1 inch = 650 feet

N

**WARD 3**

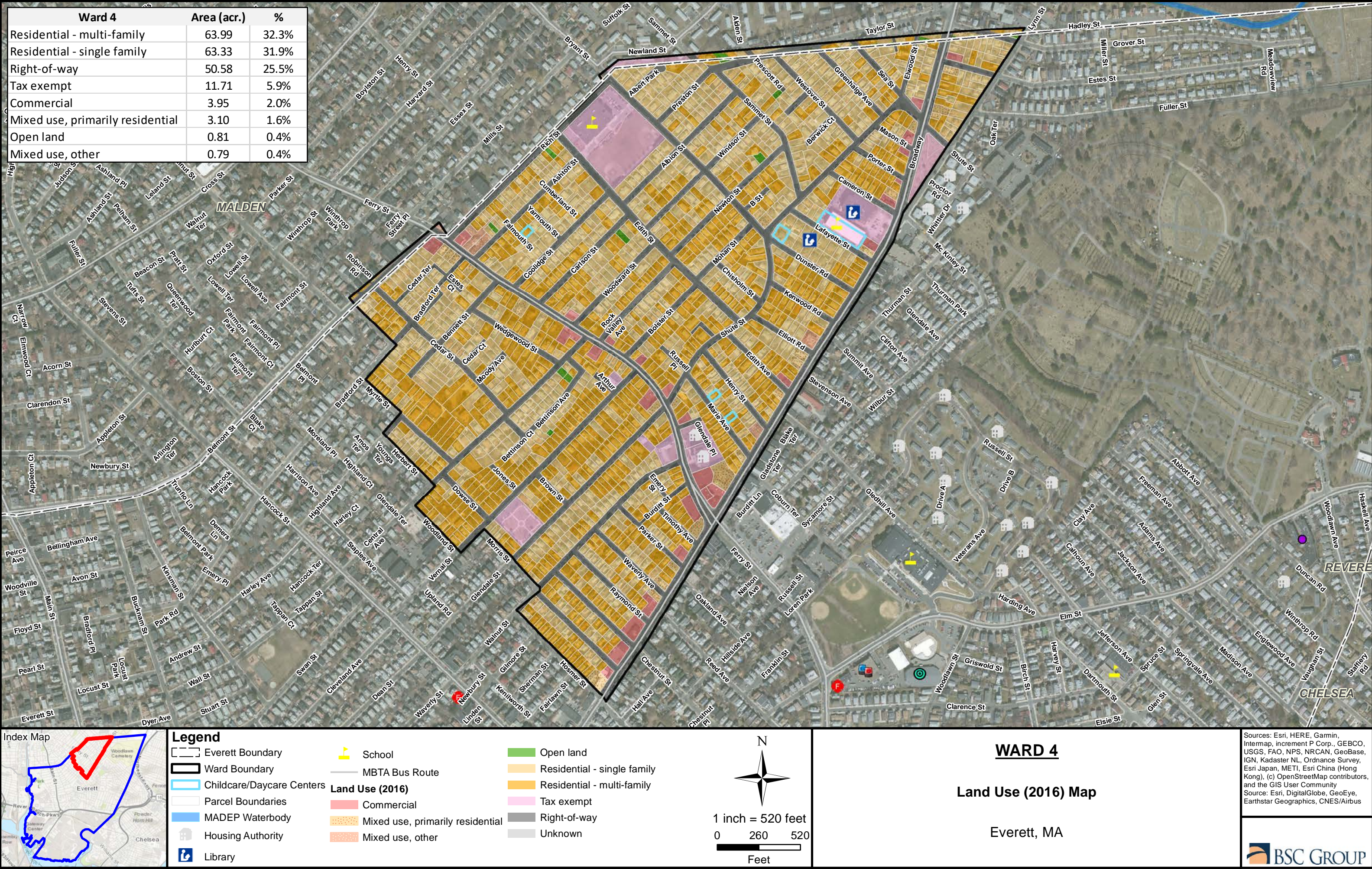
**Land Use (2016) Map**

Everett, MA

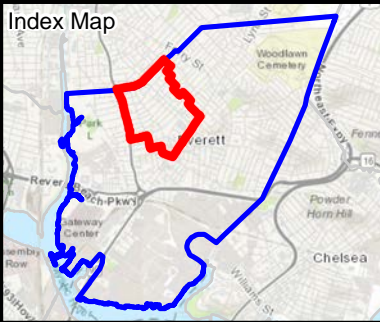
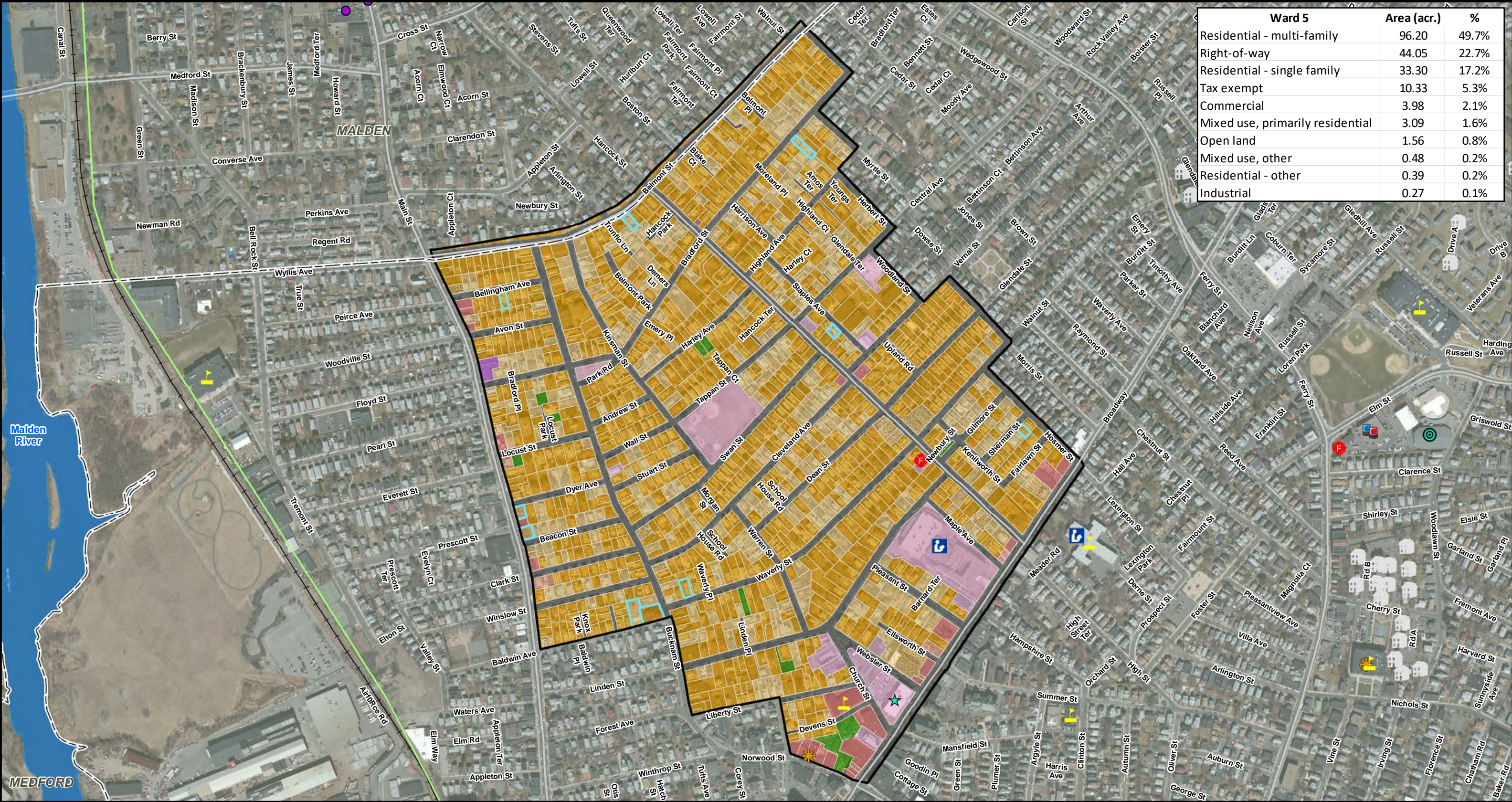
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus









**Legend**

- Everett Boundary
- Ward Boundary
- Childcare/Daycare Centers
- Parcel Boundaries
- MADEP Waterbody
- Fire Station
- Library
- Everett City Hall
- School
- Community Health Center
- DCR Biketrail
- MBTA Bus Route
- Rail Line

**Land Use (2016)**

- Commercial
- Industrial
- Mixed use, primarily residential
- Mixed use, other
- Open land
- Residential - single family
- Residential - multi-family
- Residential - other
- Tax exempt
- Right-of-way
- Unknown

0 260 520  
Feet 1 inch = 520 feet

N

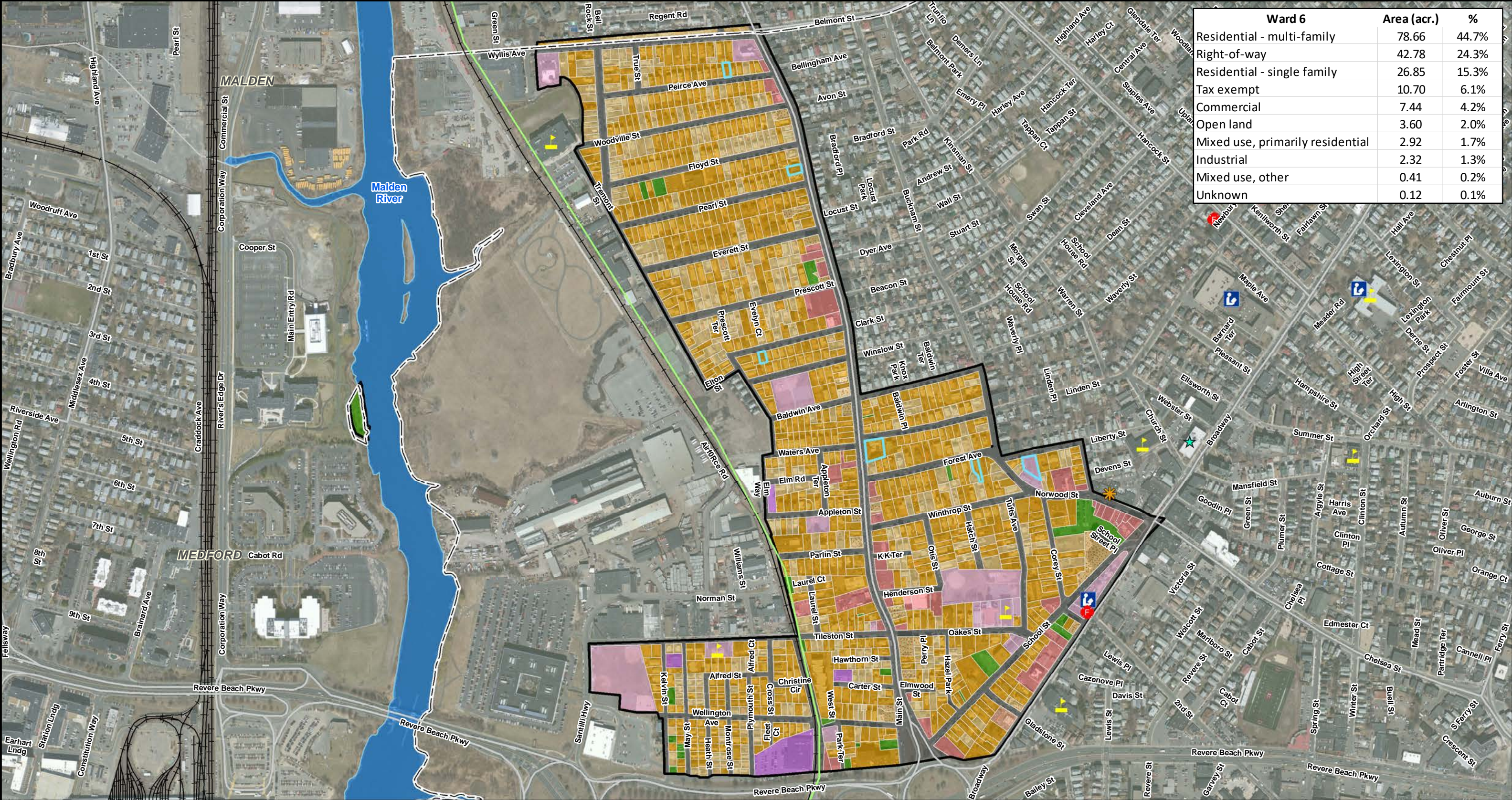
**WARD 5**

**Land Use (2016) Map**

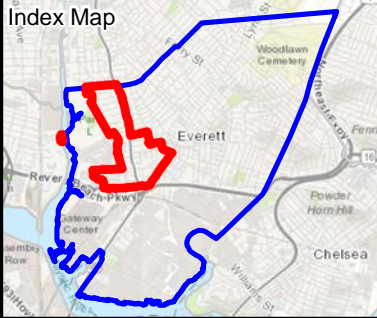
Everett, MA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community  
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus





Ward 6	Area (acr.)	%
Residential - multi-family	78.66	44.7%
Right-of-way	42.78	24.3%
Residential - single family	26.85	15.3%
Tax exempt	10.70	6.1%
Commercial	7.44	4.2%
Open land	3.60	2.0%
Mixed use, primarily residential	2.92	1.7%
Industrial	2.32	1.3%
Mixed use, other	0.41	0.2%
Unknown	0.12	0.1%



**Legend**

- Everett Boundary
- Ward Boundary
- Childcare/Daycare Centers
- Parcel Boundaries
- MADEP Waterbody
- Fire Station
- Library
- School
- Community Health Center
- DCR Biketrail
- MBTA Bus Route
- Rail Line

**Land Use (2016)**

- Commercial
- Industrial
- Mixed use, primarily residential
- Mixed use, other
- Open land
- Residential - single family
- Residential - multi-family
- Residential - other
- Tax exempt
- Right-of-way
- Unknown

0 280 560 Feet

1 inch = 560 feet

**WARD 6**

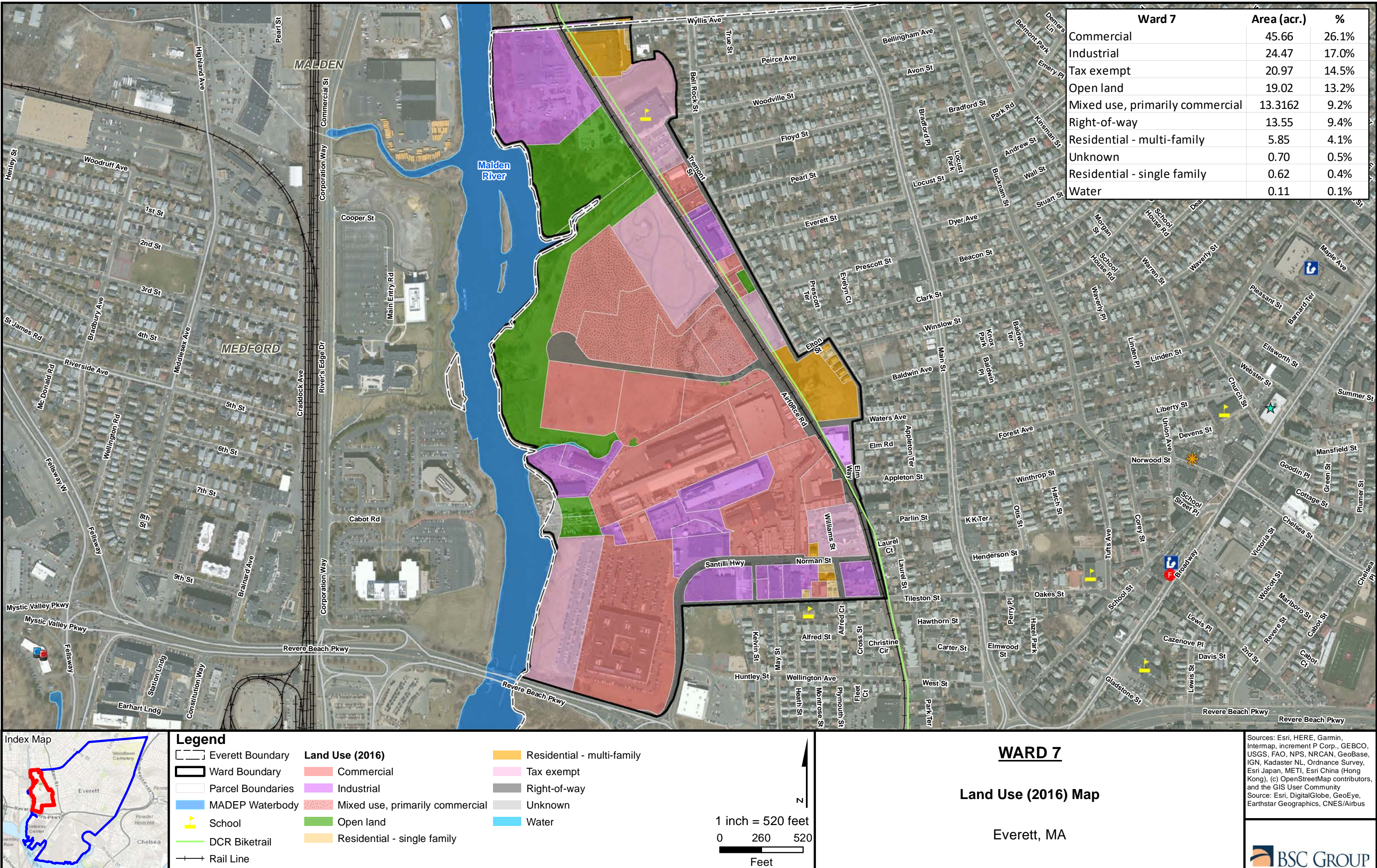
**Land Use (2016) Map**

Everett, MA

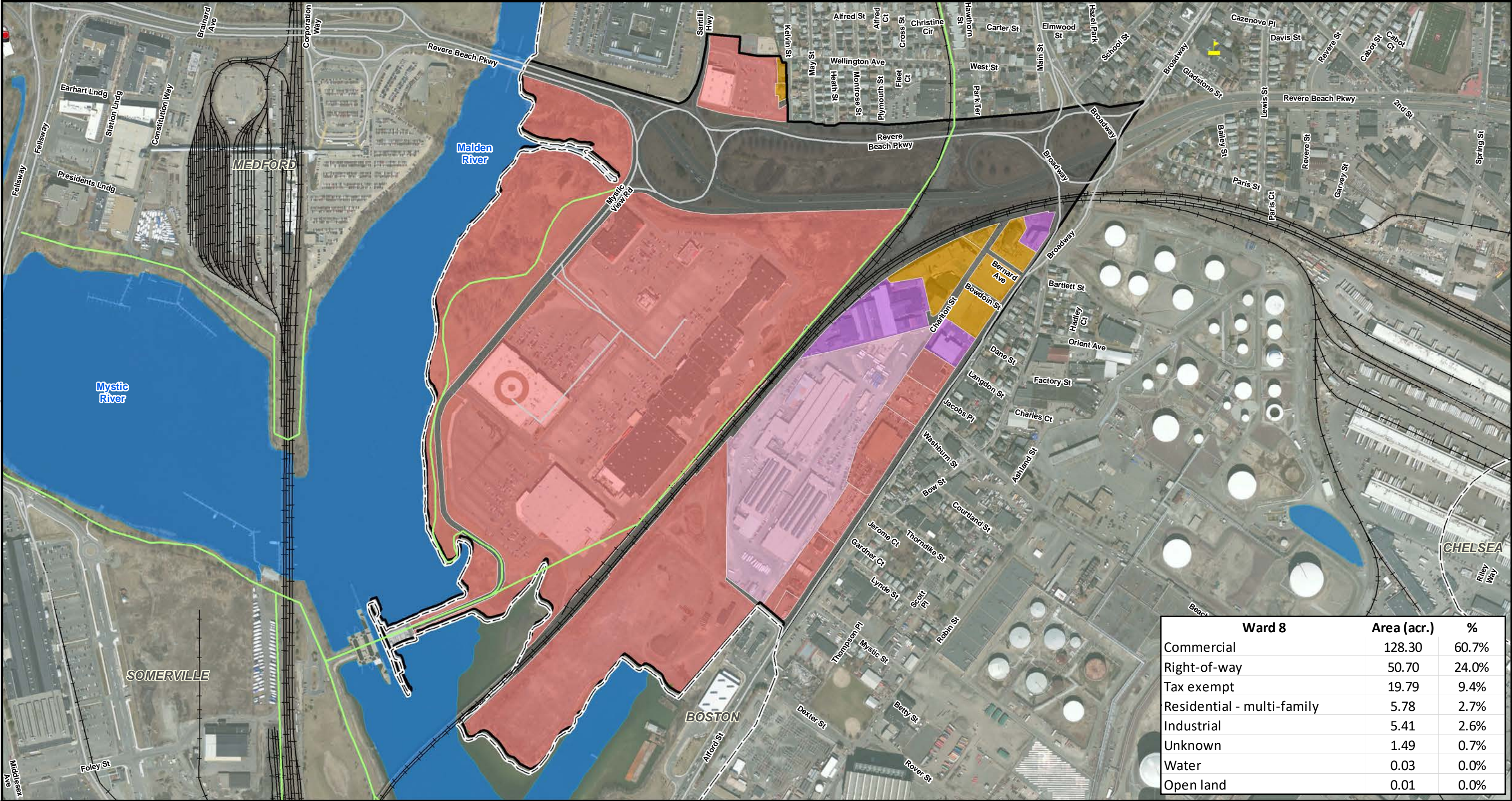
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus

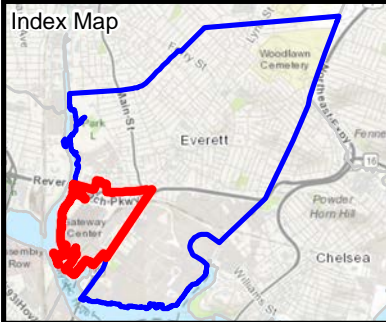








Ward 8	Area (acr.)	%
Commercial	128.30	60.7%
Right-of-way	50.70	24.0%
Tax exempt	19.79	9.4%
Residential - multi-family	5.78	2.7%
Industrial	5.41	2.6%
Unknown	1.49	0.7%
Water	0.03	0.0%
Open land	0.01	0.0%



**Legend**

- Everett Boundary
- Ward Boundary
- Parcel Boundaries
- MADEP Waterbody

- DCR Biketrail
- MBTA Bus Route
- Rail Line

**Land Use (2016)**

- Commercial
- Industrial
- Open land
- Residential - multi-family

- Tax exempt
- Right-of-way
- Unknown
- Water

N

1 inch = 520 feet

0 260 520 Feet

**WARD 8**

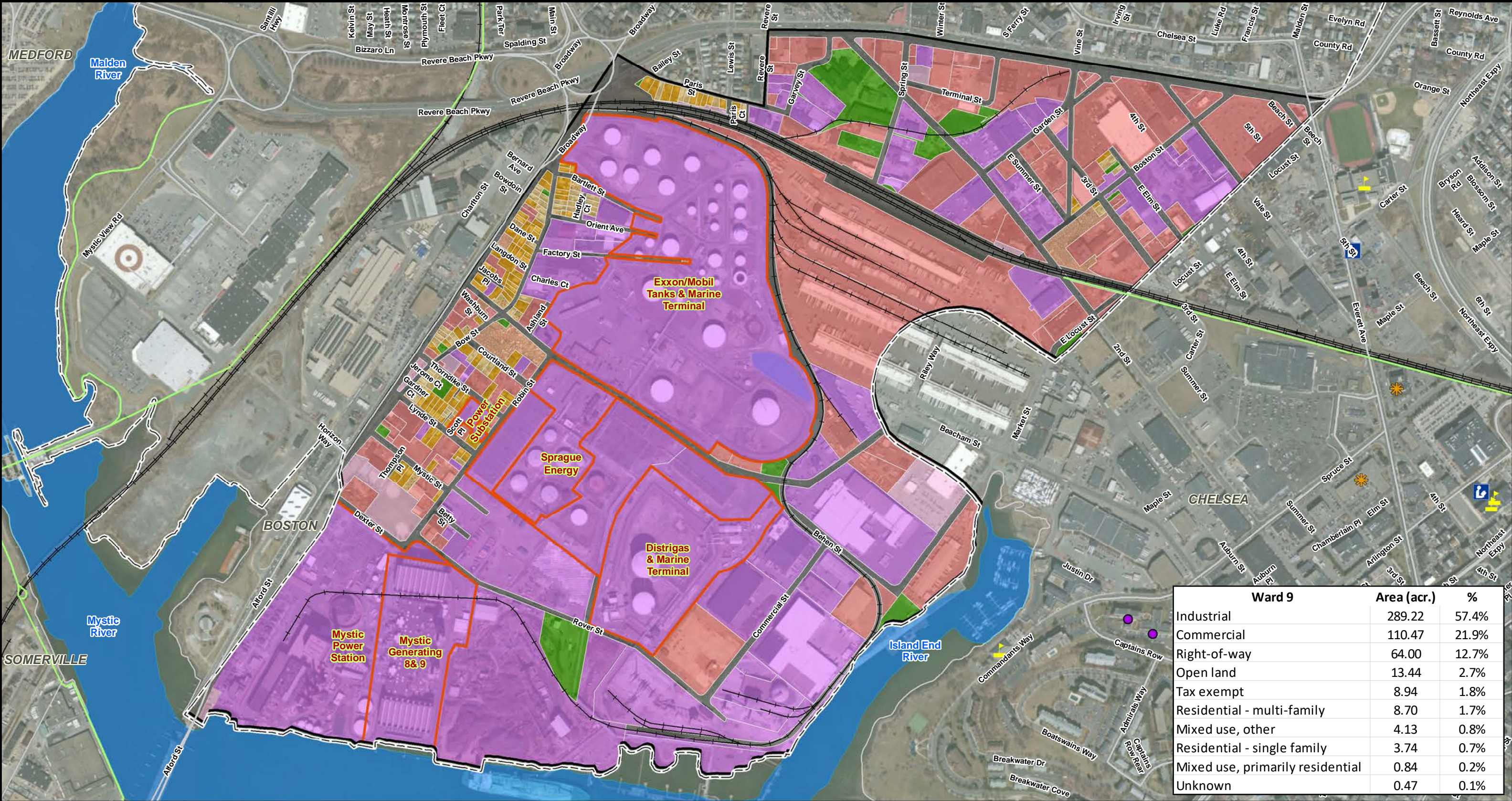
**Land Use (2016) Map**

Everett, MA

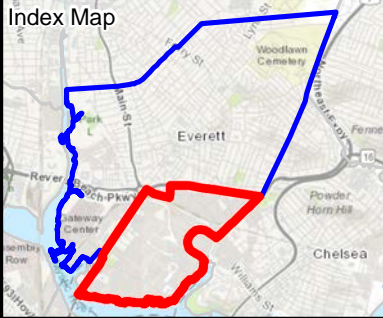
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community  
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus







Ward 9	Area (acr.)	%
Industrial	289.22	57.4%
Commercial	110.47	21.9%
Right-of-way	64.00	12.7%
Open land	13.44	2.7%
Tax exempt	8.94	1.8%
Residential - multi-family	8.70	1.7%
Mixed use, other	4.13	0.8%
Residential - single family	3.74	0.7%
Mixed use, primarily residential	0.84	0.2%
Unknown	0.47	0.1%



**Legend**

- Everett Boundary
- Ward Boundary
- Utility Parcels
- Parcel Boundaries
- MADEP Waterbody
- DCR Biketrail
- MBTA Bus Route
- Rail Line

**Land Use (2016)**

- Commercial
- Industrial
- Mixed use, primarily residential
- Mixed use, other
- Open land
- Residential - single family
- Residential - multi-family
- Tax exempt
- Right-of-way
- Unknown

**Scale**

0 325 650 Feet

1 inch = 650 feet

**WARD 9**

**Land Use (2016) Map**

Everett, MA

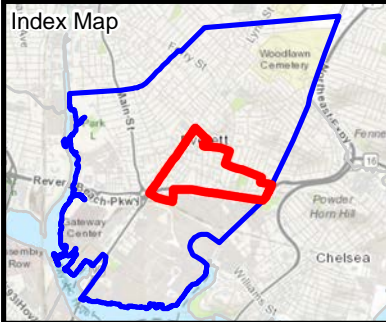
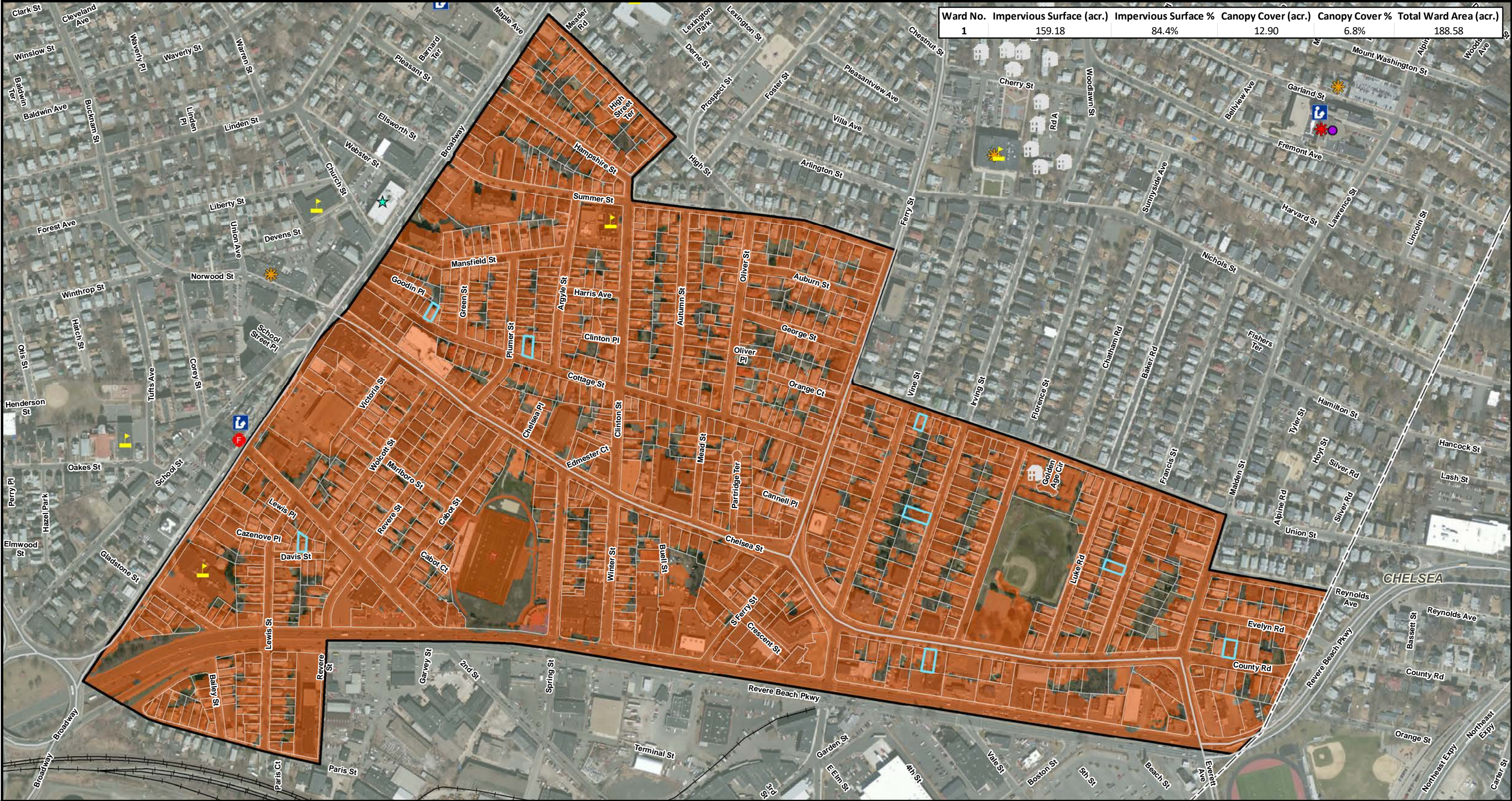
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus



## IMPERVIOUS COVER MAPS





**Legend**

- Everett Boundary
- Ward Boundary
- Childcare/Daycare Centers
- Parcel Boundaries
- Impervious Surface
- Fire Station
- Housing Authority
- School
- MBTA Bus Route

N

1 inch = 400 feet

0 200 400

Feet

**WARD 1**

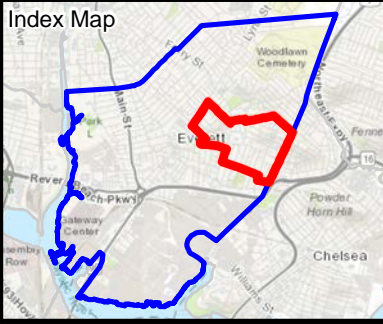
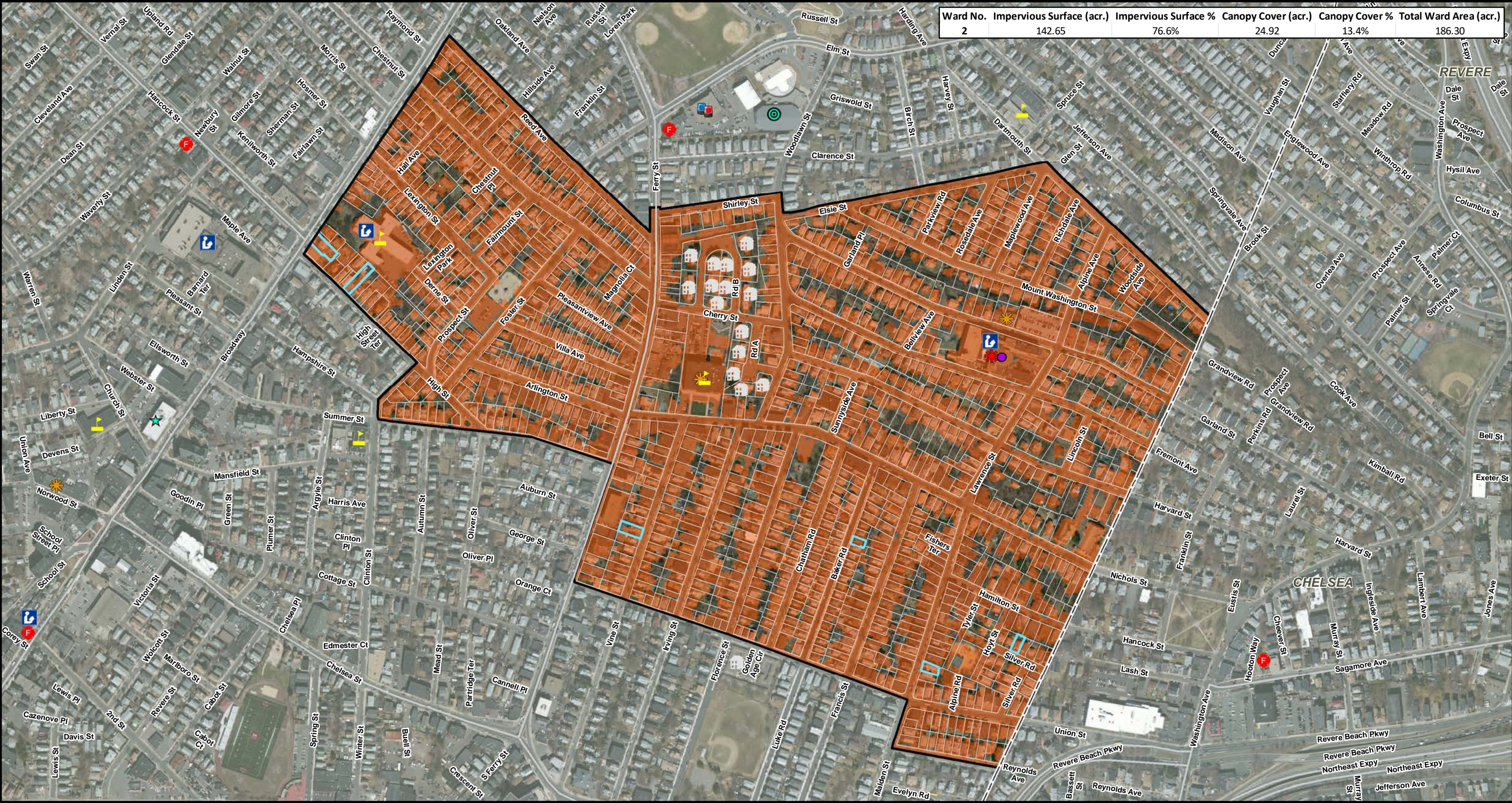
**Impervious Cover (2016) Map**

Everett, MA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus





**Legend**

- Everett Boundary
- Ward Boundary
- Childcare/Daycare Centers
- Parcel Boundaries
- Impervious Surface
- Housing Authority
- Nursing Home/Longterm Care
- Library
- School
- Acute Care Hospital
- Community Health Center
- MBTA Bus Route

N

1 inch = 450 feet

0 225 450

Feet

**WARD 2**

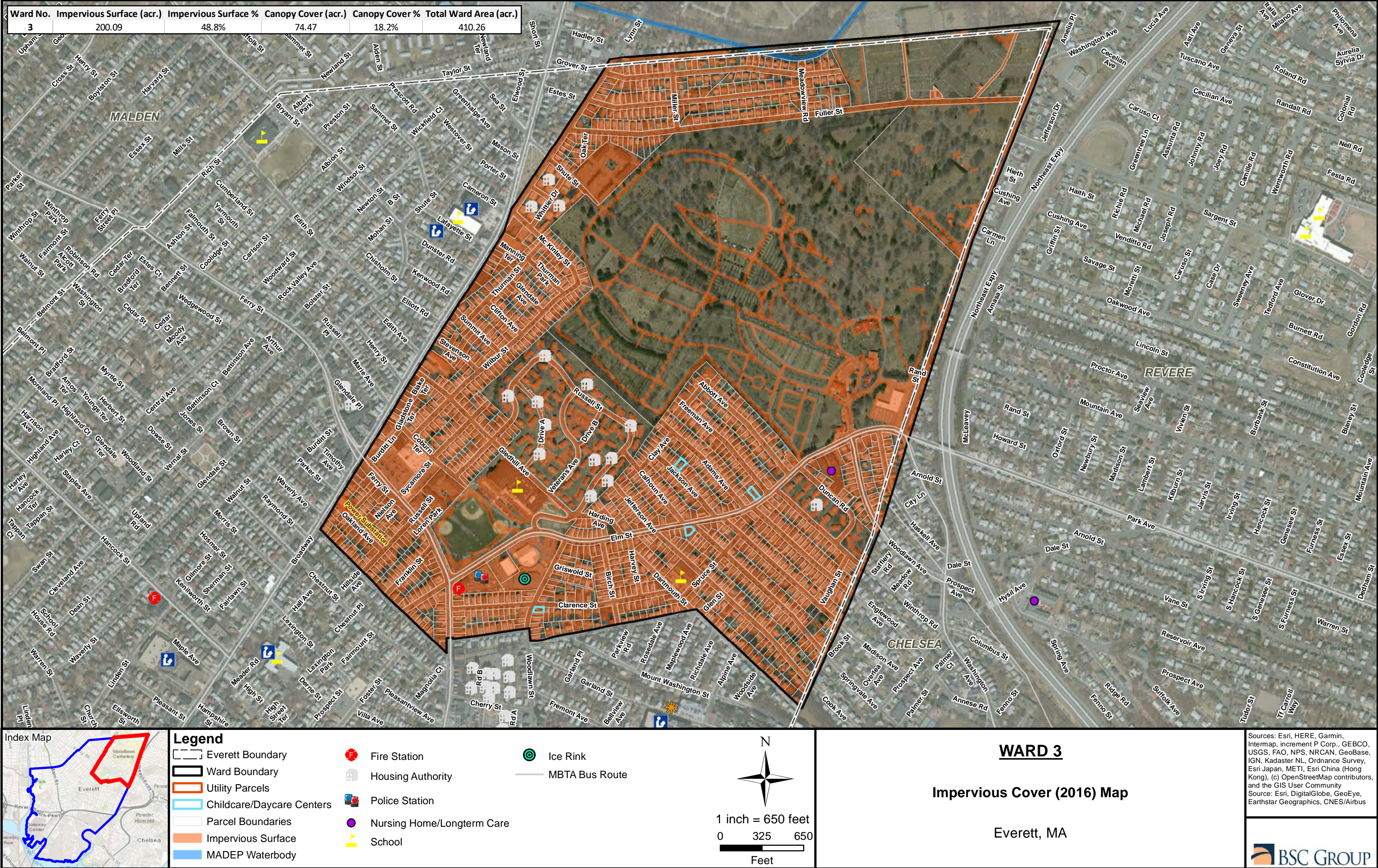
**Impervious Cover (2016) Map**

Everett, MA

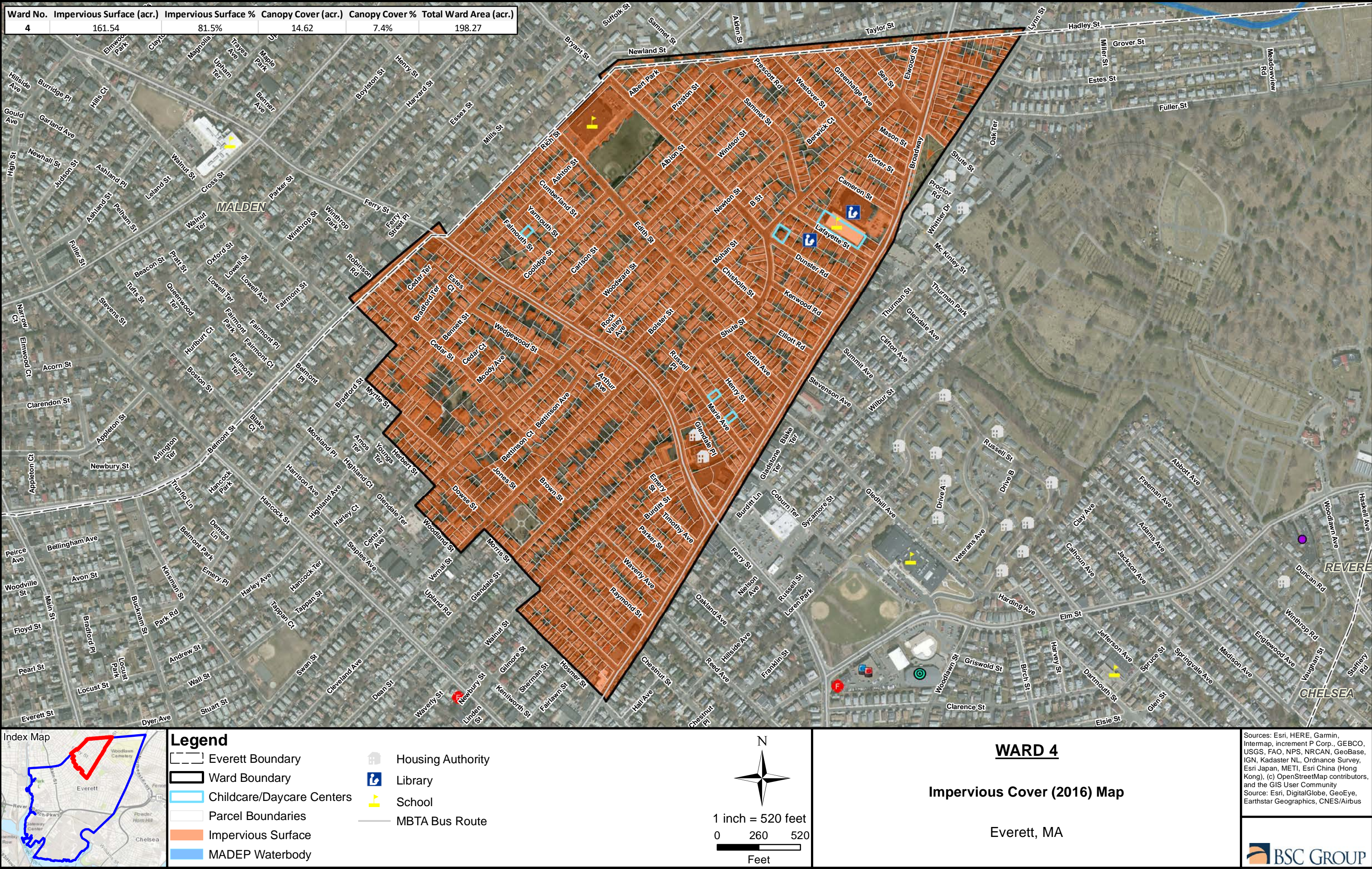
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus

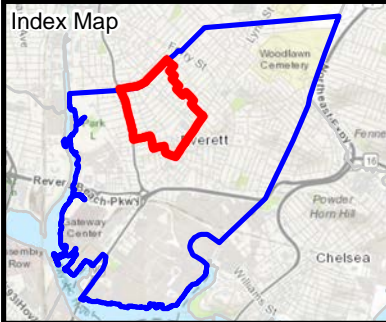
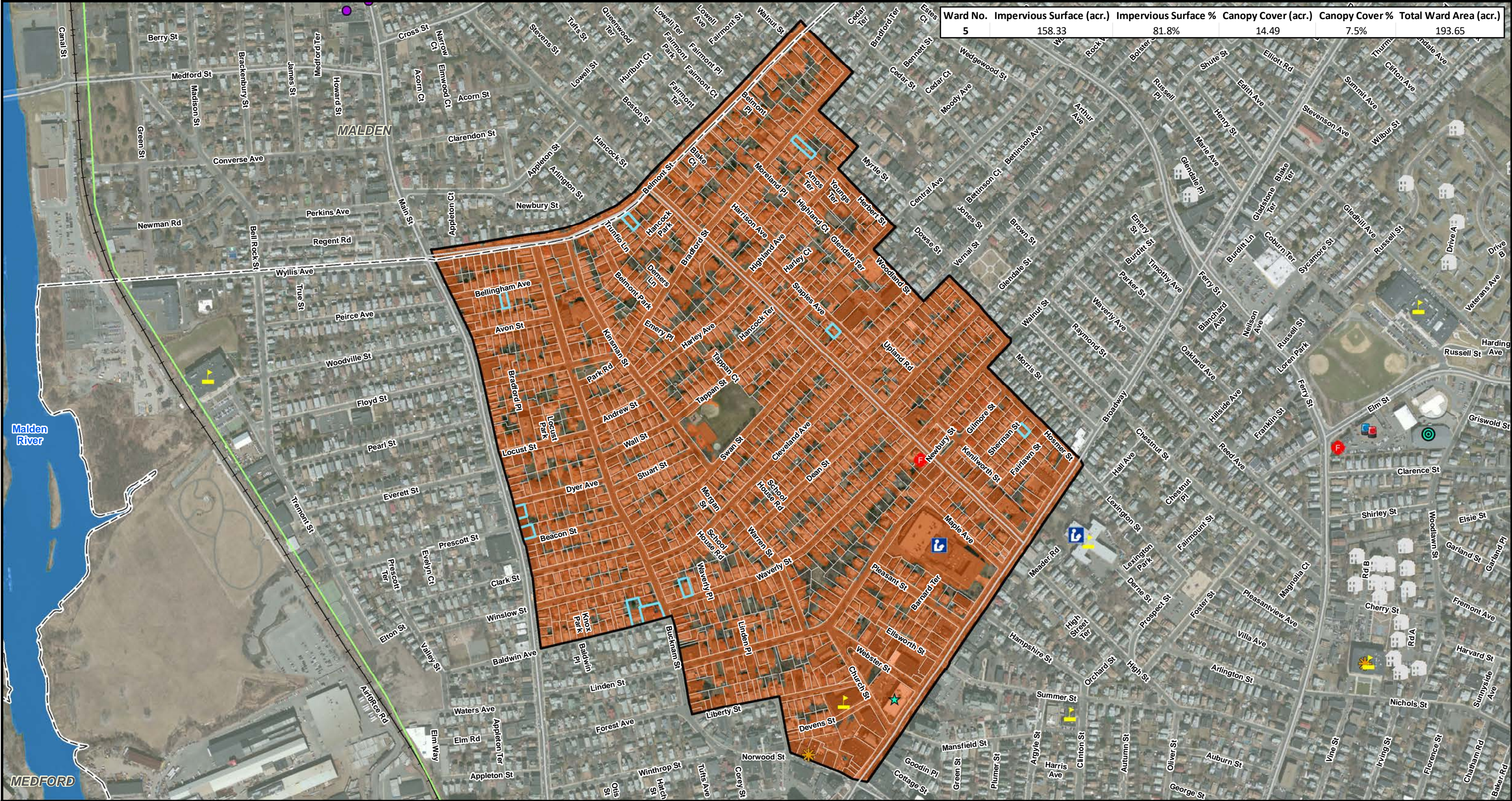












**Legend**

- Everett Boundary
- Ward Boundary
- Childcare/Daycare Centers
- Parcel Boundaries
- Impervious Surface
- MADEP Waterbody
- Fire Station
- Library
- Everett City Hall
- School
- Community Health Center
- DCR Biketrail
- MBTA Bus Route
- Rail Line

1 inch = 520 feet

0 260 520

Feet

**WARD 5**

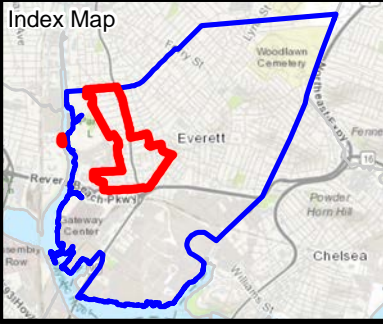
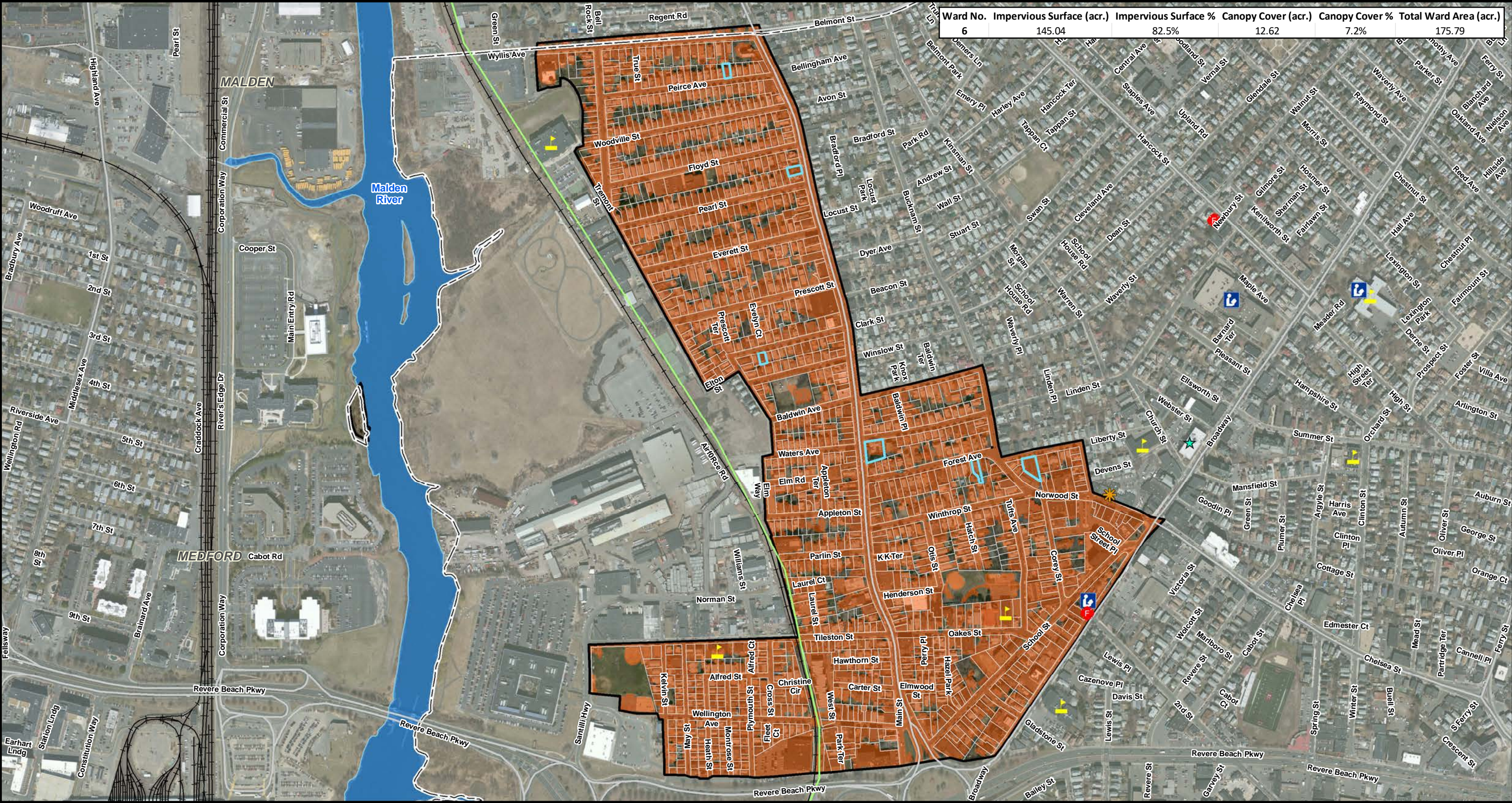
**Impervious Cover (2016) Map**

Everett, MA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus





### Legend

Everett Boundary

Ward Boundary

Childcare/Daycare Centers

Parcel Boundaries

Impervious Surface

MADEP Waterbody

Fire Station

Library

School

Community Health Center

DCR Biketrail

MBTA Bus Route

Rail Line

N

1 inch = 560 feet

0 280 560

Feet

## WARD 6

### Impervious Cover (2016) Map

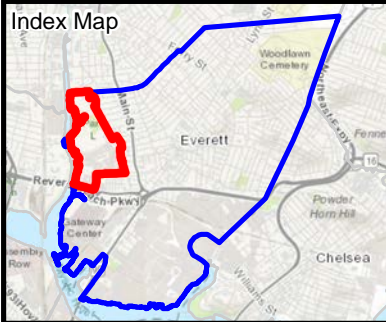
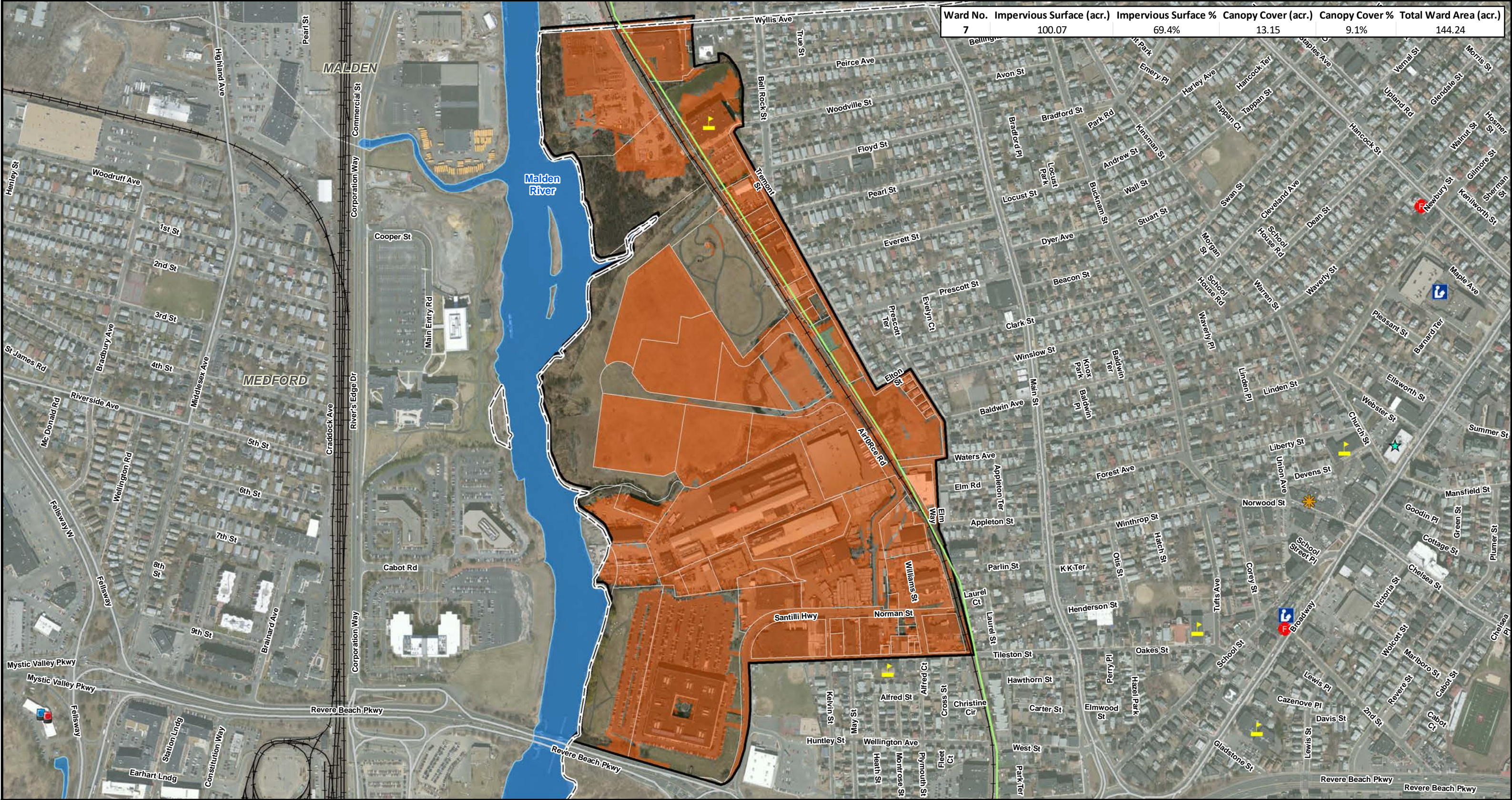
Everett, MA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus

THIS DOCUMENT IS INTENDED FOR GENERAL PLANNING & INFORMATION PURPOSES ONLY. ALL MEASUREMENTS & LOCATIONS ARE APPROXIMATE.





Everett Boundary

Ward Boundary

Parcel Boundaries

Impervious Surface

MADEP Waterbody

School

DCR Biketrail

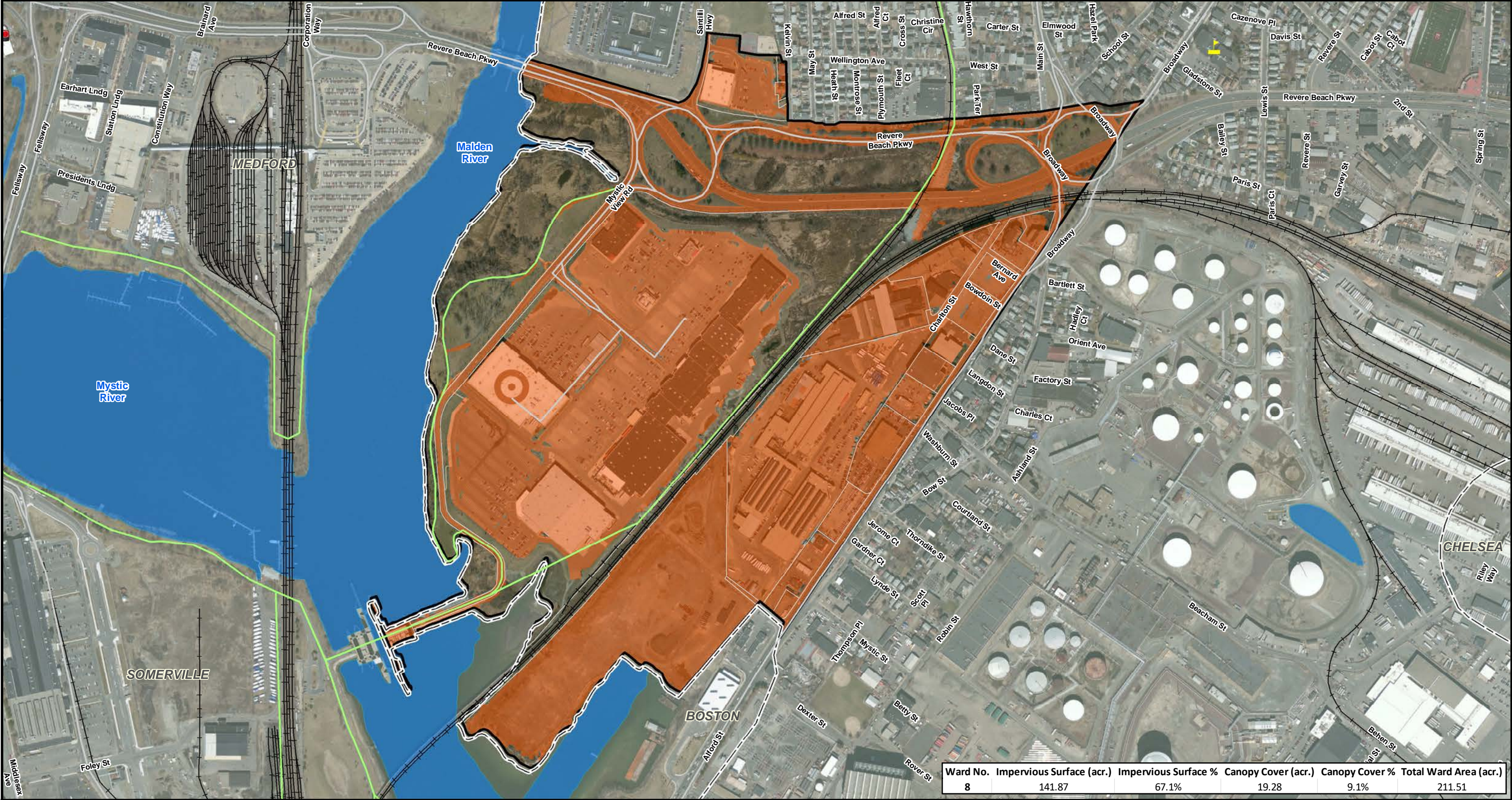
Rail Line

Ward 7

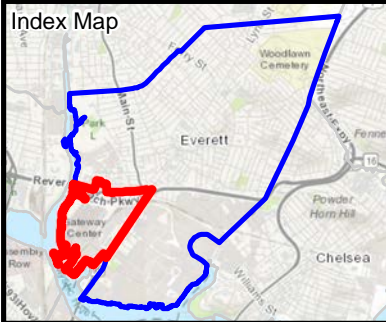
Impervious Cover (2016) Map

Everett, MA

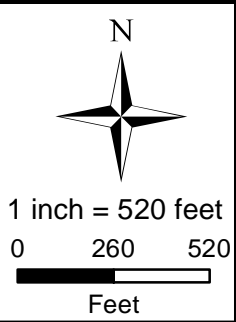




Ward No.	Impervious Surface (acr.)	Impervious Surface %	Canopy Cover (acr.)	Canopy Cover %	Total Ward Area (acr.)
8	141.87	67.1%	19.28	9.1%	211.51



- Legend**
- Everett Boundary
  - Ward Boundary
  - Parcel Boundaries
  - Impervious Surface
  - MADEP Waterbody
  - DCR Biketrail
  - MBTA Bus Route
  - Rail Line



**WARD 8**

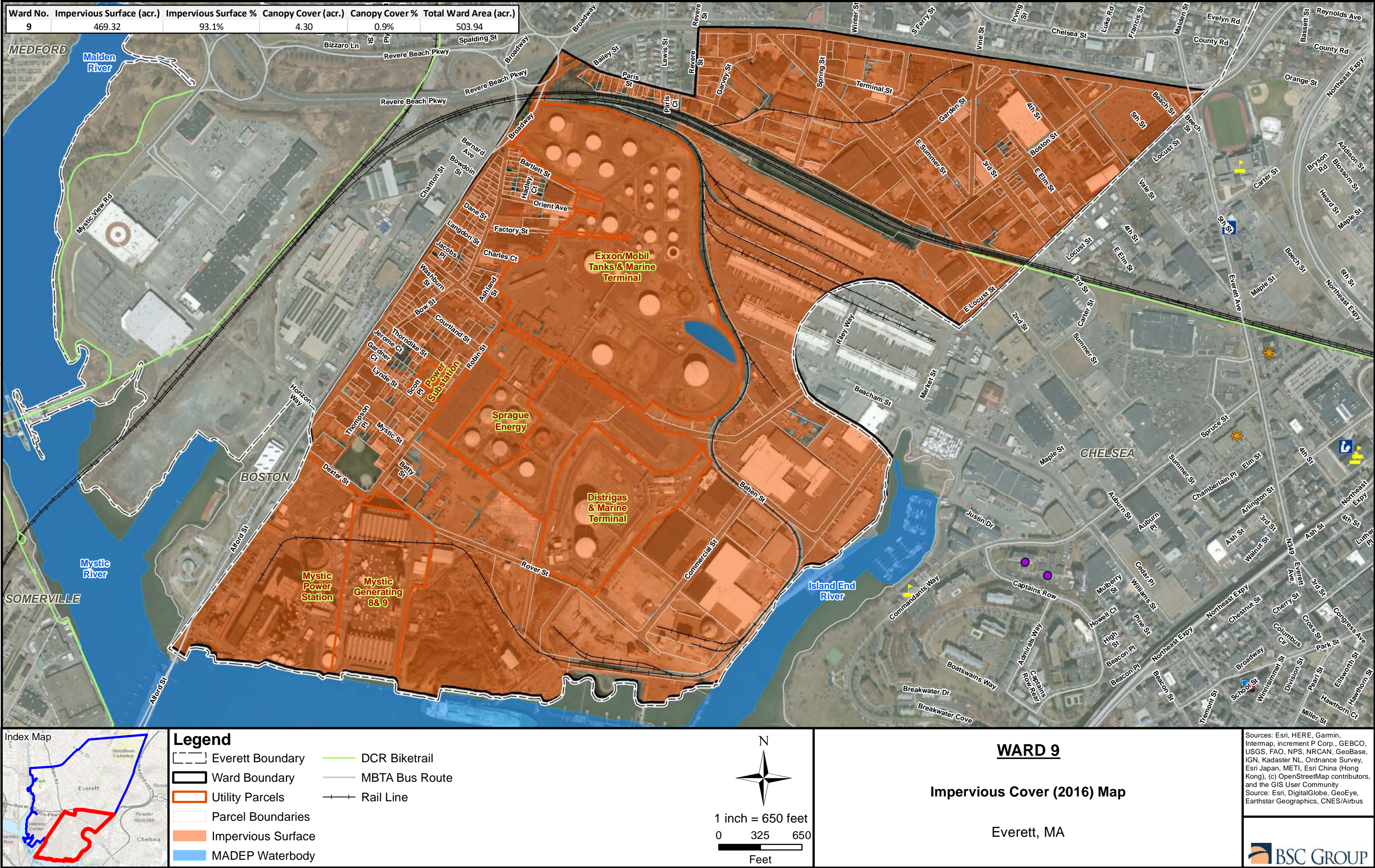
**Impervious Cover (2016) Map**

Everett, MA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus







## **BOSTON HARBOR BASIN CLIMATE PROJECTIONS**



## BOSTON HARBOR BASIN

### MUNICIPALITIES WITHIN BOSTON HARBOR BASIN:

Abington, Arlington, Avon, Belmont, Boston, Braintree, Brockton, Burlington, Cambridge, Canton, Chelsea, Cohasset, Dedham, Dover, Everett, Foxborough, Hingham, Holbrook, Hull, Lexington, Malden, Melrose, Medfield, Medford, Milton, Norwell, Norwood, Quincy, Randolph, Reading, Revere, Rockland, Sharon, Somerville, Stoneham, Stoughton, Wakefield, Walpole, Watertown, Westwood, Weymouth, Wilmington, Winchester, Winthrop, and Woburn



Many municipalities fall within more than one basin, so it is advised to use the climate projections for the basin that contains the majority of the land area of the municipality.



## BOSTON HARBOR BASIN

Boston Harbor Basin		Observed Baseline 1971- 2000 (°F)	Projected Change in 2030s (°F)	Mid-Century Projected Change in 2050s (°F)	Projected Change in 2070s (°F)	End of Century Projected Change in 2090s (°F)
Average Temperature	Annual	50.1	+2.1 to +4.0	+2.7 to +6.1	+3.2 to +8.9	+3.5 to +10.8
	Winter	29.8	+2.2 to +4.6	+2.9 to +6.9	+3.5 to +8.9	+3.9 to +10.3
	Spring	47.7	+1.7 to +3.4	+2.3 to +5.4	+2.6 to +8.0	+3.1 to +9.8
	Summer	70.1	+1.8 to +4.0	+2.3 to +6.5	+2.8 to +9.8	+3.4 to +12.1
	Fall	52.6	+2.0 to +4.7	+3.5 to +6.5	+3.3 to +9.3	+3.8 to +11.6
Maximum Temperature	Annual	59.6	+1.9 to +3.9	+2.6 to +6.0	+2.9 to +8.9	+3.2 to +10.7
	Winter	38.4	+1.9 to +4.3	+2.5 to +6.4	+3.0 to +8.3	+3.4 to +9.6
	Spring	57.5	+1.5 to +3.4	+2.0 to +5.4	+2.6 to +8.2	+3.1 to +9.7
	Summer	80.0	+1.7 to +4.0	+2.2 to +6.4	+2.7 to +9.9	+3.2 to +12.2
	Fall	61.9	+2.1 to +4.5	+3.3 to +6.7	+3.2 to +9.4	+3.6 to +11.8
Minimum Temperature	Annual	40.7	+2.2 to +4.2	+2.9 to +6.2	+3.5 to +8.9	+3.8 to +11.0
	Winter	21.3	+2.5 to +5.0	+3.2 to +7.3	+4.0 to +9.5	+4.3 to +10.9
	Spring	37.8	+1.8 to +3.5	+2.6 to +5.7	+2.6 to +7.8	+3.3 to +9.8
	Summer	60.1	+1.9 to +3.9	+2.4 to +6.8	+2.9 to +9.6	+3.6 to +12.0
	Fall	43.2	+2.0 to +4.8	+3.5 to +6.5	+3.4 to +9.3	+3.9 to +11.4

- The Boston Harbor basin is expected to experience increased average temperatures throughout the 21<sup>st</sup> century. Maximum and minimum temperatures are also expected to increase throughout the end of the century. These increased temperature trends are expected for annual and seasonal projections.
- Seasonally, maximum summer and fall temperatures are expected to see the highest projected increase throughout the 21<sup>st</sup> century.
  - Summer mid-century increase of 2.2 °F to 6.4 °F (3-8% increase); end of century increase of 3.2 °F to 12.2 °F (4-15% increase).
  - Fall mid-century increase of 3.3 °F to 6.7°F (5-11% increase); end of century increase by and 3.6 °F to 11.8 °F (6-19% increase).
- Seasonally, minimum winter and fall temperatures are expected to increase throughout the 21<sup>st</sup> century.
  - Winter mid-century increase of 3.2 °F to 7.3 °F (15-34% increase); end of century increase by 4.3 °F to 10.9 °F (20-51% increase).
  - Fall mid-century of 3.5 °F to 6.5 °F (8-15% increase); end of century increase of 3.9 °F to 11.4 °F (9-26% increase).



## BOSTON HARBOR BASIN

Boston Harbor Basin		Observed Baseline 1971- 2000 (Days)	Projected Change in 2030s (Days)	Mid-Century  Projected Change in 2050s (Days)	Projected Change in 2070s (Days)	End of Century  Projected Change in 2090s (Days)
Days with Maximum Temperature Over 90°F	Annual	8	+6 to +16	+8 to +29	+9 to +49	+12 to +67
	Winter	0	+0 to +0	+0 to +0	+0 to +0	+0 to +0
	Spring	1	+<1 <sup>29</sup> to +1	+<1 <sup>29</sup> to +1	+<1 <sup>29</sup> to +2	+<1 <sup>29</sup> to +4
	Summer	7	+5 to +13	+6 to +24	+8 to +40	+10 to +52
	Fall	<1 <sup>29</sup>	+1 to +2	+1 to +5	+1 to +8	+1 to +11
Days with Maximum Temperature Over 95°F	Annual	1	+2 to +7	+2 to +13	+3 to +26	+5 to +41
	Winter	0	+0 to +0	+0 to +0	+0 to +0	+0 to +0
	Spring	<1 <sup>29</sup>	+<1 <sup>29</sup> to +<1 <sup>29</sup>	+<1 <sup>29</sup> to +<1 <sup>29</sup>	+0 to +1	+<1 <sup>29</sup> to +2
	Summer	1	+2 to +6	+2 to +11	+3 to +23	+4 to +36
	Fall	<1 <sup>29</sup>	+<1 <sup>29</sup> to +1	+<1 <sup>29</sup> to +2	+<1 <sup>29</sup> to +4	+<1 <sup>29</sup> to +5
Days with Maximum Temperature Over 100°F	Annual	<1 <sup>29</sup>	+<1 <sup>29</sup> to +1	+<1 <sup>29</sup> to +4	+<1 <sup>29</sup> to +9	+1 to +16
	Winter	0	+0 to +0	+0 to +0	+0 to +0	+0 to +0
	Spring	0	+0 to +<1 <sup>29</sup>	+0 to +<1 <sup>29</sup>	+0 to +<1 <sup>29</sup>	+0 to +<1 <sup>29</sup>
	Summer	<1 <sup>29</sup>	+<1 <sup>29</sup> to +1	+<1 <sup>29</sup> to +4	+<1 <sup>29</sup> to +8	+1 to +14
	Fall	0	+0 to +<1 <sup>29</sup>	+0 to +<1 <sup>29</sup>	+0 to +1	+<1 <sup>29</sup> to +1

- Due to projected increases in average and maximum temperatures throughout the end of the century, the Boston Harbor basin is also expected to experience an increase in days with daily maximum temperatures over 90 °F, 95 °F, and 100 °F.
  - Annually, the Boston Harbor basin is expected to see days with daily maximum temperatures over 90 °F increase by 8 to 29 more days by mid-century, and 12 to 67 more days by the end of the century.
  - Seasonally, summer is expected to see an increase of 6 to 24 more days with daily maximums over 90 °F by mid-century.
  - By end of century, the Boston Harbor basin is expected to have 10 to 52 more days.

<sup>29</sup> Over the observed period, there were some years with at least 1 day with seasonal Tmax over a certain threshold while in all the other years that threshold wasn't crossed seasonally at all.



## BOSTON HARBOR BASIN

Boston Harbor Basin		Observed Baseline 1971- 2000 (Days)	Projected Change in 2030s (Days)	Mid-Century Projected Change in 2050s (Days)	Projected Change in 2070s (Days)	End of Century Projected Change in 2090s (Days)
Days with Minimum Temperature Below 0°F	Annual	3	-1 to -2	-1 to -2	-1 to -2	-1 to -2
	Winter	3	-1 to -2	-1 to -2	-1 to -2	-1 to -2
	Spring	<1 <sup>30</sup>	-0 to +<1 <sup>30</sup>	-0 to -0	-0 to -0	-0 to -0
	Summer	0	-0 to -0	-0 to -0	-0 to -0	-0 to -0
	Fall	0	-0 to -0	-0 to -0	-0 to -0	-0 to -0
Days with Minimum Temperature Below 32°F	Annual	119	-12 to -27	-17 to -42	-21 to -55	-23 to -66
	Winter	76	-4 to -10	-5 to -17	-8 to -26	-9 to -34
	Spring	27	-3 to -10	-6 to -14	-7 to -18	-8 to -20
	Summer	0	-0 to -0	-0 to -0	-0 to -0	-0 to -0
	Fall	16	-4 to -8	-6 to -10	-7 to -13	-6 to -14

- Due to projected increases in average and minimum temperatures throughout the end of the century, the Boston Harbor basin is expected to experience a decrease in days with daily minimum temperatures below 32 °F and 0 °F.
- Seasonally, winter, spring and fall are expected to see the largest decreases in days with daily minimum temperatures below 32 °F.
  - Winter is expected to have 5 to 17 fewer days by mid-century, and 9 to 34 fewer by end of century.
  - Spring is expected to have 6 to 14 fewer days by mid-century, and 8 to 20 fewer by end of century.
  - Fall is expected to have 6 to 10 fewer days by mid-century, and 6 to 14 fewer days by end of century.

<sup>30</sup> Over the observed period, there were some years with at least 1 day with seasonal Tmin under a certain threshold while in all the other years that threshold wasn't crossed seasonally at all.



**BOSTON HARBOR BASIN**

Boston Harbor Basin		Observed Baseline 1971-2000 (Degree- Days)	Projected Change in 2030s (Degree-Days)	Mid-Century  Projected Change in 2050s (Degree-Days)	Projected Change in 2070s (Degree-Days)	End of Century  Projected Change in 2090s (Degree-Days)
Heating Degree-Days (Base 65°F)	Annual	6079	-501 to -1035	-672 to -1473	-798 to -1956	-899 to -2343
	Winter	3182	-191 to -421	-251 to -634	-312 to -806	-359 to -949
	Spring	1623	-132 to -285	-190 to -447	-216 to -630	-278 to -742
	Summer	78	-29 to -49	-34 to -62	-40 to -72	-44 to -75
	Fall	1191	-143 to -331	-248 to -418	-232 to -591	-254 to -669
Cooling Degree-Days (Base 65°F)	Annual	636	+217 to +443	+281 to +764	+327 to +1206	+381 to +1559
	Winter	0	+0. to +4	+0 to +5	-1 to +3	+0 to +5
	Spring	27	+13 to +33	+23 to +64	+26 to +103	+24 to +143
	Summer	544	+136 to +321	+175 to +541	+213 to +828	+261 to +1041
	Fall	60	+37 to +102	+57 to +191	+67 to +289	+94 to +376
Growing Degree-Days (Base 50°F)	Annual	2733	+393 to +798	+538 to +1251	+606 to +1996	+692 to +2508
	Winter	7	+1 to +17	+3 to +20	+7 to +37	+7 to +47
	Spring	327	+77 to +152	+101 to +262	+106 to +408	+122 to +527
	Summer	1847	+164 to +363	+215 to +600	+255 to +899	+312 to +1114
	Fall	547	+109 to +299	+198 to +441	+186 to +655	+236 to +818

- Due to projected increases in average, maximum, and minimum temperatures throughout the end of the century, the Boston Harbor basin is expected to experience a decrease in heating degree-days, and increases in both cooling degree-days and growing degree-days.
- Seasonally, winter historically exhibits the highest number of heating degree-days and is expected to see the largest decrease of any season, but spring and fall are also expected to see significant change.
  - The winter season is expected to see a decrease of 251 to 634 degree-days by mid-century (a decrease of 8-20%), and a decrease of 359 to 949 degree-days by the end of century (a decrease of 11-30%).
  - The spring season is expected to decrease in heating degree-days by 12-28% (190-447 degree-days) by mid-century, and by 17-46% (278-742 degree-days) by the end of century.
  - The fall season is expected to decrease in heating degree-days by 21-35% (248-718 degree-days) by mid-century, and by 21-56% (254-669 degree-days) by the end of century.
- Conversely, due to projected increasing temperatures, summer cooling degree-days are expected to increase by 32-99% (175-541 degree-days) by mid-century, and by 48-191% (261-1041 degree-days) by end of century.



- Seasonally, summer historically exhibits the highest number of growing degree-days and is expected to see the largest decrease of any season, but the shoulder seasons of spring and fall are also expected to see an increase in growing degree-days.
  - The summer season is projected to increase by 12-32% (215-600 degree-days) by mid-century, and by 17-60% (312-1114 degree-days) by end of century.
  - Spring is expected to increase by 31-80% (101-262 degree-days) by mid-century and 37-161% (122.-527 degree-days) by end of century.
  - Fall is expected to increase by 36-81% (198-441 degree-days) by mid-century and 43-149% (236-818 degree-days) by end of century.

### BOSTON HARBOR BASIN

Boston Harbor Basin		Observed Baseline 1971-2000 (Days)	Projected Change in 2030s (Days)	Mid-Century Projected Change in 2050s (Days)	Projected Change in 2070s (Days)	End of Century Projected Change in 2090s (Days)
Days with Precipitation Over 1"	Annual	9	+<1 <sup>31</sup> to +2	+1 to +3	+1 to +3	+1 to +4
	Winter	2	+0 to +1	+<1 <sup>31</sup> to +1	+<1 <sup>31</sup> to +2	+<1 <sup>31</sup> to +2
	Spring	2	+0 to +1	+0 to +1	+<1 <sup>31</sup> to +1	+<1 <sup>31</sup> to +1
	Summer	2	+0 to +1	+0 to +1	+0 to +1	+0 to +1
	Fall	3	+0 to +1	+0 to +1	+0 to +1	+0 to +1
Days with Precipitation Over 2"	Annual	1	+<1 <sup>31</sup> to +1	+<1 <sup>31</sup> to +1	+<1 <sup>31</sup> to +1	+<1 <sup>31</sup> to +1
	Winter	<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+<1 <sup>31</sup> to +<1 <sup>31</sup>
	Spring	<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+<1 <sup>31</sup> to +<1 <sup>31</sup>
	Summer	<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>
	Fall	<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+<1 <sup>31</sup> to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>
Days with Precipitation Over 4"	Annual	<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>
	Winter	0	+0 to +0	+0 to +0	+0 to +0	+0 to +0
	Spring	0	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>
	Summer	<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>
	Fall	<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>	+0 to +<1 <sup>31</sup>

- The projections for expected number of days receiving precipitation over one inch are variable for the Boston Harbor basin, fluctuating between loss and gain of days.
  - Seasonally, the winter season is generally expected to see the highest projected increase.
  - The winter season is expected to see an increase in days with precipitation over one inch of 0-1 days by mid-century, and by 0-2.days by the end of century.
  - The spring season is expected to see an increase in days with precipitation over one inch of 0-1 days) by mid-century, and by 0-1 days) by the end of century.

<sup>31</sup> Over the observed period, there were some years with at least 1 day with seasonal precipitation over a certain threshold while in all the other years that threshold wasn't crossed seasonally at all.



### BOSTON HARBOR BASIN

Boston Harbor Basin		Observed Baseline 1971-2000 (Inches)	Projected Change in 2030s (Inches)	Mid-Century Projected Change in 2050s (Inches)	Projected Change in 2070s (Inches)	End of Century Projected Change in 2090s (Inches)
Total Precipitation	Annual	46.1	+0.0 to +4.7	+0.3 to +6.2	+1.2 to +7.7	+1.1 to +9.0
	Winter	11.8	-0.4 to +1.9	-0.0 to +2.4	+0.4 to +3.0	+0.4 to +4.1
	Spring	11.6	-0.1 to +2.2	+0.0 to +2.2	+0.1 to +2.7	+0.3 to +2.8
	Summer	10.5	-0.5 to +1.6	-0.4 to +1.9	-1.0 to +2.8	-1.7 to +2.2
	Fall	12.2	-0.9 to +1.2	-1.0 to +1.6	-1.7 to +2.1	-1.6 to +1.8

- Similar to projections for number of days receiving precipitation over a specified threshold, seasonal projections for total precipitation are also variable for the Boston Harbor basin.
  - The winter season is expected to experience the greatest change with an increase of 0-20% by mid-century, and 3-34% by end of century.
  - Projections for the summer and fall seasons are more variable, and could see either a drop or increase in total precipitation throughout the 21<sup>st</sup> century.
    - The summer season projections for the Boston Harbor basin could see a decrease of 0.4 to an increase of 1.9 inches by mid-century (decrease of 4% to increase of 18%), and a decrease of 1.7 to an increase of 2.2 inches by the end of the century (decrease of 16% to increase of 21%).
    - The fall season projections for the Boston Harbor basin could see a decrease of 1.0 to an increase of 1.6 inches by mid-century (decrease of 8% to increase of 13%), and a decrease of 1.6 to an increase of 1.8 inches by the end of the century (decrease of 13% to increase of 15%).

Boston Harbor Basin		Observed Baseline 1971-2000 (Days)	Projected Change in 2030s (Days)	Mid-Century Projected Change in 2050s (Days)	Projected Change in 2070s (Days)	End of Century Projected Change in 2090s (Days)
Consecutive Dry Days	Annual	17	-0 to +1	-0 to +2	-1 to +3	-1 to +4
	Winter	11	-1 to +1	-1 to +1	-1 to +2	-1 to +2
	Spring	11	-1 to +1	-1 to +1	-1 to +1	-1 to +1
	Summer	13	-1 to +1	-1 to +2	-1 to +3	-1 to +2
	Fall	13	-0 to +2	-0 to +3	-0 to +3	-0 to +3

- Annual and seasonal projections for consecutive dry days, or for a given period, the largest number of consecutive days with precipitation less than 1 mm (~0.04 inches), are variable throughout the 21<sup>st</sup> century.
  - For all the temporal parameters, the Boston Harbor basin is expected to see a slight decrease to an increase in consecutive dry days throughout this century.
  - Seasonally, the fall and summer seasons are expected to continue to experience the highest number of consecutive dry days.
    - The fall season is expected to experience an increase of 0-3 days in consecutive dry days by the end of the century.