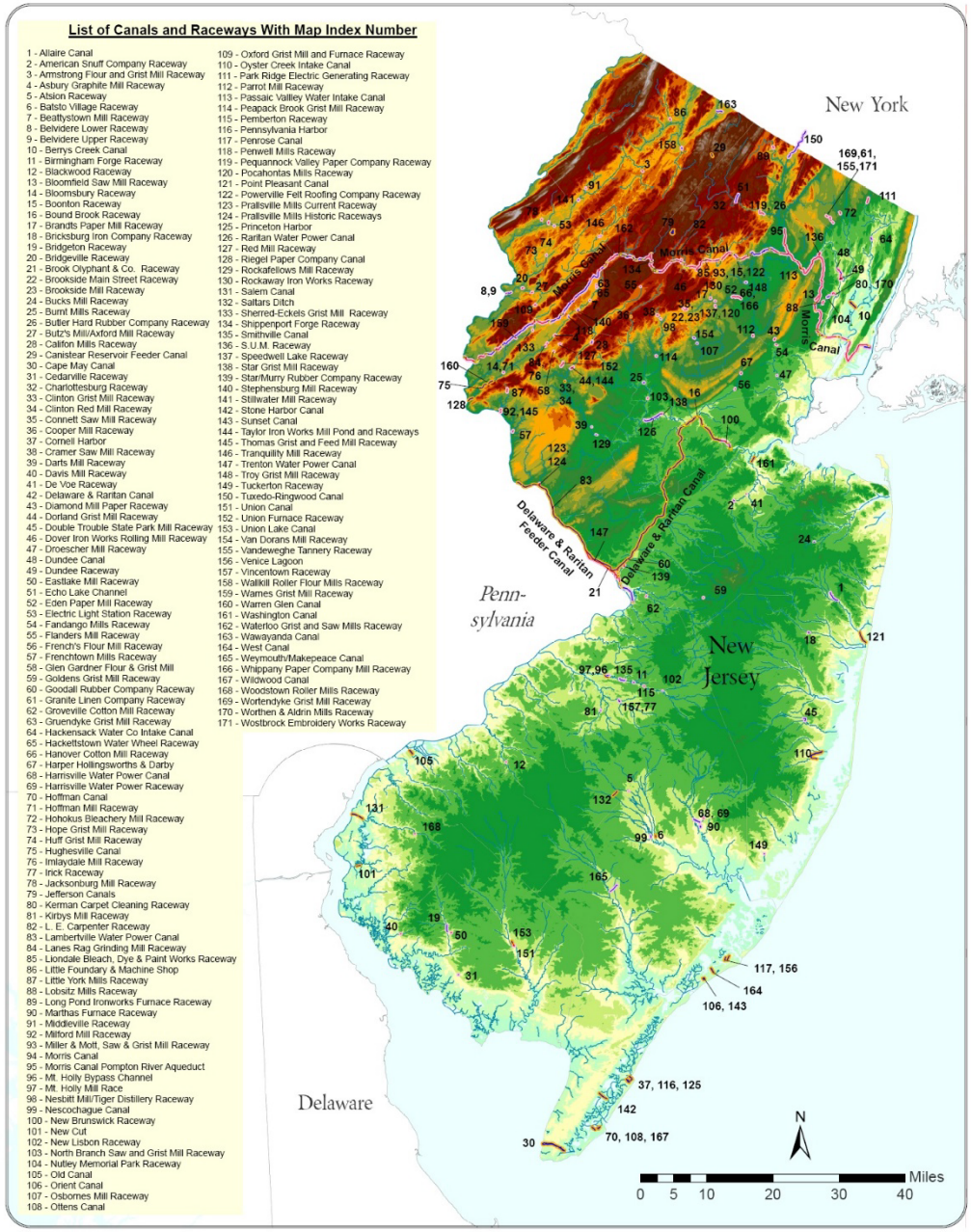
22nd Annual Mapping Contest Maps

Analytical Presentation

Canals and Water Raceways of New Jersey



List of Canals and Raceways With Map Index Number

1 - Allaire Canal
2 - American Snuff Company Raceway
3 - Armstrong Flour and Grist Mill Raceway
4 - Asbury Graphite Mill Raceway
5 - Atsion Raceway
6 - Batsto Village Raceway
7 - Beattystown Mill Raceway
8 - Belvidere Lower Raceway
9 - Belvidere Upper Raceway
10 - Berrys Creek Canal
11 - Birmingham Forge Raceway
12 - Blackwood Raceway
13 - Bloomfield Saw Mill Raceway
14 - Bloomsbury Raceway
15 - Boonton Raceway
16 - Bound Brook Raceway
17 - Brandts Paper Mill Raceway
18 - Bricksburg Iron Company Raceway
19 - Bridgeton Raceway
20 - Bridgeville Raceway
21 - Brook Olyphant & Co. Raceway
22 - Brookside Main Street Raceway
23 - Brookside Mill Raceway
24 - Bucks Mill Raceway
25 - Burnt Mills Raceway
26 - Butler Hard Rubber Company Raceway
27 - Butz's Mill/Axford Mill Raceway
28 - Califon Mills Raceway
29 - Canistear Reservoir Feeder Canal
30 - Cape May Canal
31 - Cedarville Raceway
32 - Charlottesburg Raceway
33 - Clinton Grist Mill Raceway
34 - Clinton Red Mill Raceway
35 - Connett Saw Mill Raceway
36 - Cooper Mill Raceway
37 - Cornell Harbor
38 - Cramer Saw Mill Raceway
39 - Darts Mill Raceway
40 - Davis Mill Raceway
41 - De Voe Raceway
42 - Delaware & Raritan Canal
43 - Diamond Mill Paper Raceway
44 - Dorland Grist Mill Raceway
45 - Double Trouble State Park Mill Raceway
46 - Dover Iron Works Rolling Mill Raceway
47 - Droescher Mill Raceway
48 - Dundee Canal
49 - Dundee Raceway
50 - Eastlake Mill Raceway
51 - Echo Lake Channel
52 - Eden Paper Mill Raceway
53 - Electric Light Station Raceway
54 - Fandango Mills Raceway
55 - Flanders Mill Raceway
56 - French's Flour Mill Raceway
57 - Frenchtown Mills Raceway
58 - Glen Gardner Flour & Grist Mill
59 - Goldens Grist Mill Raceway
60 - Goodall Rubber Company Raceway
61 - Granite Linen Company Raceway
62 - Groveville Cotton Mill Raceway
63 - Gruendyke Grist Mill Raceway
64 - Hackensack Water Co Intake Canal
65 - Hackettstown Water Wheel Raceway
66 - Hanover Cotton Mill Raceway
67 - Harper Hollingsworths & Darby
68 - Harrisville Water Power Canal
69 - Harrisville Water Power Raceway
70 - Hoffman Canal
71 - Hoffman Mill Raceway
72 - Hohokus Bleachery Mill Raceway
73 - Hope Grist Mill Raceway
74 - Huff Grist Mill Raceway
75 - Hughesville Canal
76 - Imlaydale Mill Raceway
77 - Irick Raceway
78 - Jacksonburg Mill Raceway
79 - Jefferson Canals
80 - Kerman Carpet Cleaning Raceway
81 - Kirbys Mill Raceway
82 - L. E. Carpenter Raceway
83 - Lambertville Water Power Canal
84 - Lanes Rag Grinding Mill Raceway
85 - Londale Bleach, Dye & Paint Works Raceway
86 - Little Foundary & Machine Shop
87 - Little York Mills Raceway
88 - Lobsitz Mills Raceway
89 - Long Pond Ironworks Furnace Raceway
90 - Marthas Furnace Raceway
91 - Middleville Raceway
92 - Milford Mill Raceway
93 - Miller & Molt, Saw & Grist Mill Raceway
94 - Morris Canal
95 - Morris Canal Pompton River Aqueduct
96 - Mt. Holly Bypass Channel
97 - Mt. Holly Mill Race
98 - Nesbitt Mill/Tiger Distillery Raceway
99 - Nescochague Canal
100 - New Brunswick Raceway
101 - New Cut
102 - New Lisbon Raceway
103 - North Branch Saw and Grist Mill Raceway
104 - Nutley Memorial Park Raceway
105 - Old Canal
106 - Orient Canal
107 - Osbornes Mill Raceway
108 - Ottens Canal
109 - Oxford Grist Mill and Furnace Raceway
110 - Oyster Creek Intake Canal
111 - Park Ridge Electric Generating Raceway
112 - Parrot Mill Raceway
113 - Passaic Valley Water Intake Canal
114 - Peapack Brook Grist Mill Raceway
115 - Pemberton Raceway
116 - Pennsylvania Harbor
117 - Penrose Canal
118 - Penwell Mills Raceway
119 - Pequannock Valley Paper Company Raceway
120 - Pocahontas Mills Raceway
121 - Point Pleasant Canal
122 - Powerville Felt Roofing Company Raceway
123 - Prallsville Mills Current Raceway
124 - Prallsville Mills Historic Raceways
125 - Princeton Harbor
126 - Raritan Water Power Canal
127 - Red Mill Raceway
128 - Riegel Paper Company Canal
129 - Rockafellows Mill Raceway
130 - Rockaway Iron Works Raceway
131 - Salem Canal
132 - Saltars Ditch
133 - Sherred-Eckels Grist Mill Raceway
134 - Shippenport Forge Raceway
135 - Smithville Canal
136 - S.U.M. Raceway
137 - Speedwell Lake Raceway
138 - Star Grist Mill Raceway
139 - Starr/Murry Rubber Company Raceway
140 - Stephensburg Mill Raceway
141 - Stillwater Mill Raceway
142 - Stone Harbor Canal
143 - Sunset Canal
144 - Taylor Iron Works Mill Pond and Raceways
145 - Thomas Grist and Feed Mill Raceway
146 - Tranquility Mill Raceway
147 - Trenton Water Power Canal
148 - Troy Grist Mill Raceway
149 - Tuckerton Raceway
150 - Tuxedo-Ringwood Canal
151 - Union Canal
152 - Union Furnace Raceway
153 - Union Lake Canal
154 - Van Dorans Mill Raceway
155 - Vandeweghe Tannery Raceway
156 - Venice Lagoon
157 - Vincentown Raceway
158 - Wallkill Roller Flour Mills Raceway
159 - Wames Grist Mill Raceway
160 - Warren Glen Canal
161 - Washington Canal
162 - Waterloo Grist and Saw Mills Raceway
163 - Wawayanda Canal
164 - West Canal
165 - Weymouth/Makepeace Canal
166 - Whippany Paper Company Mill Raceway
167 - Wildwood Canal
168 - Woodstown Roller Mills Raceway
169 - Wortendyke Grist Mill Raceway
170 - Worthen & Aldrin Mills Raceway
171 - Wostbrock Embroidery Works Raceway

Map Explanation

New Jersey's canals and water raceways played a significant role in development of the State over the last 300 years. This map shows locations of current and historic canals and raceways that were built primarily for transport, water power, and water supply. It does not include dewatering canals and ditches. It also excludes channelized streams except where these are an integral part of a longer canal.

Where possible, these have been mapped based on site visits or aerial photos. The location of some abandoned and filled canals and raceways are approximated from historic maps and photographs and can not be guaranteed to be accurate. At this scale some of the canals and raceways plot on top of each other.

Some of the canals and raceways are located on private property with no public access. Others allow public access (on the canal itself or on bordering pathways) for recreational purposes. The user of this product is responsible for determining if a canal or raceway is safe and open to the public.

Canals and raceways shown as 'Active' are still in use for their original purpose. They are labeled 'Inactive' if now used solely for recreation.

The Delaware & Raritan (D&R) Canal's primary use has changed from transportation to water supply but is considered active. In Trenton the D&R Canal passes under US Route 1 in a pair of mile-long box culverts.

The D&R and Morris Canals are labeled directly on the map due to their length.

A GIS coverage of the Canals and Water Raceways of New Jersey is available as Digital Geodata Series DGS08-1 at www.njgeology.org.

Map Legend

State boundary
County boundary
River or stream

Canal and Raceway Status

Active
Inactive, but holds some water
Inactive, dry or filled in
Lock on D&R or Morris Canals
Inclined plane on Morris Canal

Elevation (feet)

1 - 5	800 - 900
5 - 10	900 - 1,000
10 - 25	1,000 - 1,100
25 - 50	1,100 - 1,200
50 - 100	1,200 - 1,300
100 - 200	1,300 - 1,400
200 - 300	1,400 - 1,500
300 - 400	1,500 - 1,600
400 - 500	1,600 - 1,700
500 - 600	1,700 - 1,800
600 - 700	1,800 - 1,810
700 - 800	

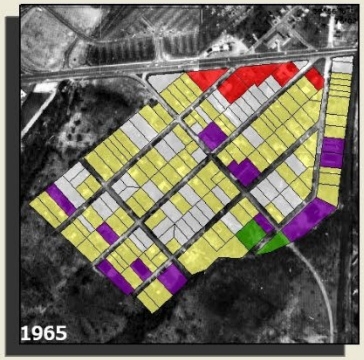
Let's protect our earth

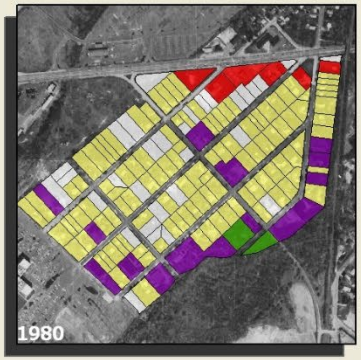
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

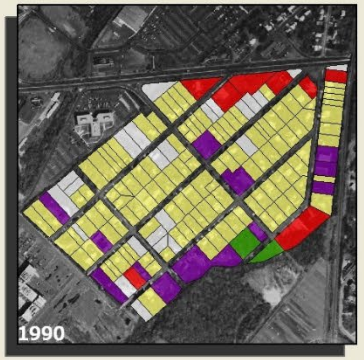
Coverage generated by Ted Pallis and Katie L. Murphy
Cartography by Jeffrey L. Hoffman
New Jersey Geological Survey
New Jersey Department of Environmental Protection
April 2009

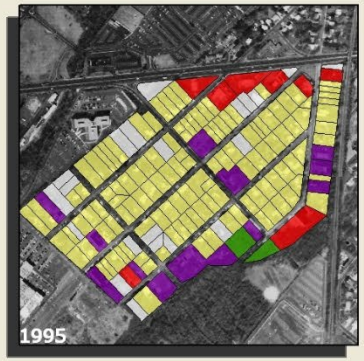
NEW JERSEY GEOLOGICAL SURVEY 1835

KENILWORTH NEIGHBORHOOD STUDY



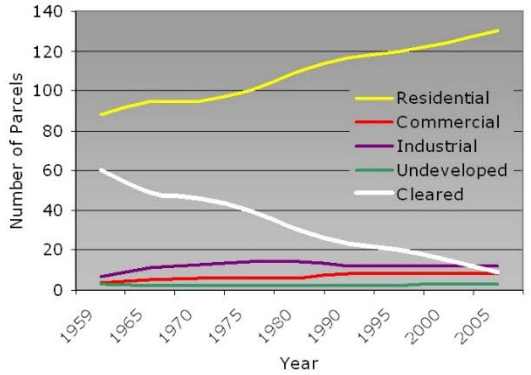






AERIAL PHOTO HISTORY

Land Use Change, 1959 - 2005



Number of Parcels by Use

Land Use	1959	1965	1970	1975	1980	1990	1995	2000	2005	Δ Parcels
Residential	88	95	95	100	110	117	120	124	131	43
Commercial	4	5	6	6	6	8	8	8	8	4
Industrial	7	11	13	14	14	12	12	12	12	5
Undeveloped	3	2	2	2	2	2	2	3	3	0
Cleared	61	50	47	41	31	24	21	16	9	-52

This land use review was undertaken in response to neighborhood concerns regarding recent zoning changes (2004) and seemingly incompatible land uses in the Kenilworth neighborhood. Prior to 2004 the area of the neighborhood south of Birch Street, as well as the parcels on the east side of Kenilworth Avenue south of Route 38, were zoned Industrial. The 2004 Master Plan rezoned these areas to R2 to be consistent with the surrounding zoning and neighborhood character. In order to understand the impact and validity of the zoning change we have examined the historical land use of the Kenilworth neighborhood and surrounding uses that impact the character of the neighborhood. It is important to note that the historical land uses were determined using historical aerial photos and it is possible that not every parcel was defined correctly. Land uses were determined by building massing and overall site activity such as the presence of parking lots or vehicles. The 2005 land use layer was verified by a windshield survey of the area and is therefore actually reflective of current land use.

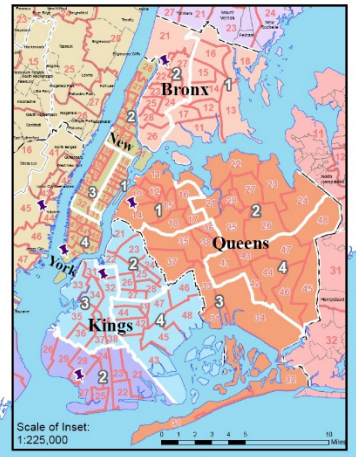
Percentage of Land Uses in Kenilworth Area, 1959-2005

Land Use	1959	1965	1970	1975	1980	1990	1995	2000	2005
Residential	54%	58%	58%	61%	67%	72%	74%	76%	80%
Commercial	2%	3%	4%	4%	4%	5%	5%	5%	5%
Industrial	4%	7%	8%	9%	9%	7%	7%	7%	7%
Undeveloped	2%	1%	1%	1%	1%	1%	1%	2%	2%
Cleared	37%	31%	29%	25%	19%	15%	13%	10%	6%

The tables and chart show the graphical representation of the change in land uses in the Kenilworth Neighborhood since 1959. As the data shows, the neighborhood has been predominantly residential since 1959 while it has maintained, and marginally increased, in the number of industrial and commercial parcels. Since 1959, growth in this neighborhood has been largely residential.

New York Regional Census Center
2010 Decennial Census
2009 Address Canvassing Geography

United States Census 2010



ADDRESS CANVASSING is the first major operational mobilization of the 2010 Census. The Census Bureau conducts Address Canvassing to update our address and map database to ensure that it is accurate and current. The Census Bureau will use the updated addresses from Address Canvassing to deliver questionaires in the mail or by enumerator to every address in the New York region. The region was divided into 9 Early Local Census Office (ELCO) areas to conduct the Address Canvassing Operation.

In order to update the address list, the listers will verify, correct, add and delete address records in each census block within their assignment area (AA), while also updating map features (streets, street names, etc.) on the handheld electronic map. Each AA is a grouping of 2010 collection blocks with an optimal housing unit (HU) count of 305. AAs are grouped into Crew Leader Districts (CLD) consisting of approximately 110 AA per CLD. Approximately 8 CLD comprise a Field Operations Supervisor District (FOSD). The FOSD are organizational subdivisions of the ELCO, the number per ELCO being a function of HU density.

METHODOLGY:
Address Canvassing delineations were done using Geographic Area Analysis and Delineation System Software (GAADS) within ArcGIS v 9.2. ELCOs were first created using county boundaries (when possible). Batch delineations of AAs were created by the Geography Division at Census Bureau HQ, and adjusted at the NYRCC to conform to the realities of local geography. These adjusted AAs were then combined into CLD & FOSD using the criteria outlined above. CLD were delineated to avoid crossing major rivers, railroads and highways where there was no linkage to other parts of the CLD.

The resulting operations map reflects an approximation of relative housing unit density for collection purposes.

NOTE: Early Local Census Office (ELCO), Field Operations Supervisor District (FOSD), and Crew Leader District (CLD) delineations compiled by Jon Martin, David Carlson, Web Adams, Bill Huffmans, and John Baker of the NYRCC.
Map compiled and produced by Web Adams, U.S. Census Bureau - NYRCC. Source: U.S. Census Bureau.

LEGEND

3 Field Operations Supervisor Districts (FOSD) — 21 Crew Leader Districts (CLD) — Union County Boundaries — Bloomfield Minor Civil Divisions (MCD) — Oakmont Village Boundaries (NY only)

Early Local Census Office Areas:

- 2214 - Hudson County North — 720 Monroe St. Hoboken, NJ
- 2217 - Morris/Sussex/Somerset/Warren — 1026 Route 518, Rocky Hill, NJ
- 2221 - Bronx Southeast — 400 East Fordham Rd., Bronx, NY
- 2226 - Brooklyn Northwest — 10 Metrotech Center, Brooklyn, NY
- 2227 - Brooklyn South — 2444 86th St. Brooklyn, NY
- 2229 - Nassau County Southwest — 401 Franklin Ave., Garden City, NY
- 2233 - New York West — 130 William St., New York, NY
- 2235 - Queens Northwest — 45-18 Court Sq., Long Island City, NY
- 2242 - Westchester County South — 108 Corporate Park Dr., Harrison, NY

Trends of Aquatic Pesticide Usage and Aquatic Vegetation Distribution Throughout New Jersey (2005-2007)

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Abstract

One of the stated purposes of the New Jersey Department of Environmental Protection's (NJDEP) Aquatic Pesticide Use Permit Program is to identify and control what pesticides are applied to the waterbodies of the state. Aquatic pesticide data from 2005 through 2007 was analyzed in an attempt to identify spatial and temporal trends in the usage of specific active ingredients (AI) and the occurrence and distribution of specific nuisance vegetation, including several invasive species. The most heavily used AI in all years (2005 through 2007) was copper sulfate, representing approximately 79% of the total pounds of AI applied. Significant differences in pesticide usage were observed between watershed management areas (WMA). Glyphosate usage was clustered along the coastal southern areas of the state, primarily for *Phragmites australis* control. The most targeted invasive species in NJ were *Myriophyllum spicatum*, *P. australis*, and *Potamogeton crispus*. Occurrences of *Hydrilla sp.* and *Trapa natans* have also been noted over the past few years. This type of data will allow the NJDEP to identify specific areas of impact and concern where the Department may direct resources in order to provide more efficient management plans and alternative management techniques, education for the public on nuisance aquatic vegetation, and more effective invasive species control. All data is based on permitted sites only.

Methods

•All licensed applicators are required to submit records of actual treatment (RAT) after each treatment season, which are compiled and entered into a database by the Department.

•The Pesticide Control Program (PCP) computes the total amount of each aquatic pesticide used during the aquatic permit season, which runs from April to October, and analyzes usage by county, WMA, etc.

Results

•Pesticide use was highest in the northern areas of the state, specifically WMA 02, 03, and 05 (Figure 3).

•Several factors influence these results including greater abundance of waterbodies in these regions and the Pinelands National reserve in the southeastern portion of the state (Figure 1).

•Highest overall usage seen in WMA 02 (~80,000 lbs A.I.). Highest overall usage seen in southern NJ was WMA 13 (~15,000 lbs A.I.).

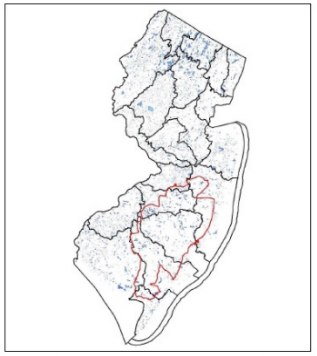
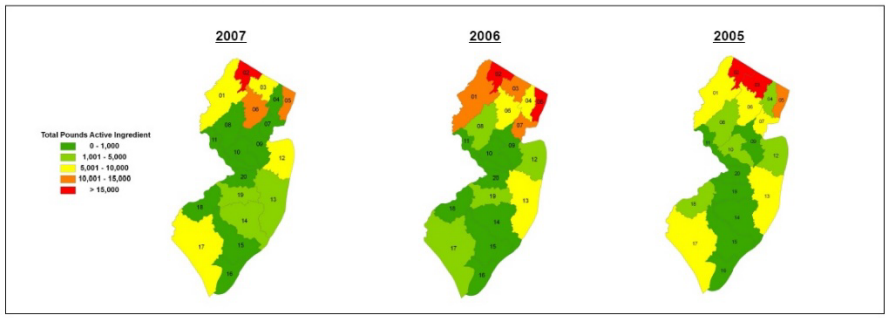


Figure 1. Waterbodies of New Jersey with the boundary of the state designated Pinelands Conservation Area

Figure 2. Aquatic Pesticide Permit Sites for 2007

Figure 3. Total pounds of A.I. applied by WMA from 2005 through 2007.



Results (continued)

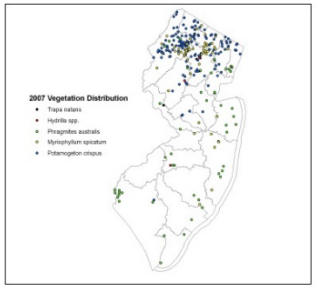


Figure 4. Distribution of invasive species during the 2007 treatment season.

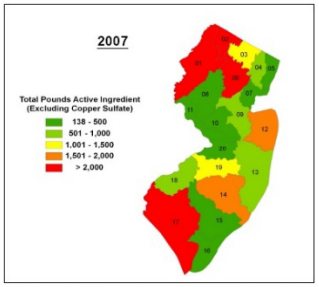


Figure 5. Total pounds A.I. (excluding Copper Sulfate) applied during 2007 by WMA

•The highest occurring invasive species over the three year period were *P. crispus* (150 sites), *M. spicatum* (71 sites), and *P. australis* (55 sites). Other invasives of concern include *Hydrilla* sp. (3 sites, only one positively identified as *Hydrilla verticillata*) and *T. natans* (2 sites).

•Generally, the number of sites impacted by these species increased over the three year study period. Many records only identify target vegetation to Genus level, so the distribution of these species may be more widespread than currently known.

•Copper sulfate used significantly more than any other pesticide, accounting for over 79 percent of total pounds of A.I. applied. Other heavily used pesticides included Copper (23,315 lbs AI [7.2%]), Diquat-dibromide (17,436 lbs AI ; [5.4%]), and Glyphosate (12,268 lbs AI [3.8%]). Figure 5 illustrates pesticide usage other than copper sulfate over the three year period.

Summary Database

▪Summary data allows the PCP to track usage over time, identify and concentrate on susceptible areas/watersheds (Figure 6).

▪PCP to make summary data available on NJDEP interactive mapping applications.

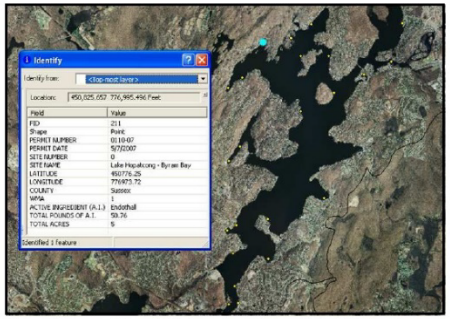


Figure 6. Summary data available for each permit issued by the PCP for a given year.

Discussion

•Invasive species treatments made up a significant portion of the overall macrophyte treatment over the three year period, and accounted for most of the use of some specific active ingredients (ex. Glyphosate for *P. australis* control).

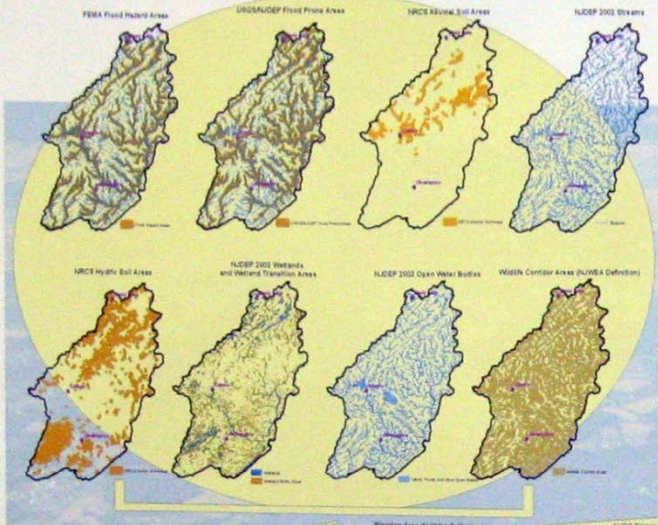
•Several northern WMA's may be more susceptible to both acute and chronic environmental impacts due to the relatively large amount of pesticide usage observed during the study period.

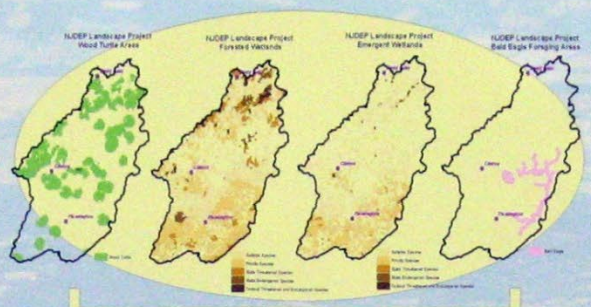
Conclusions

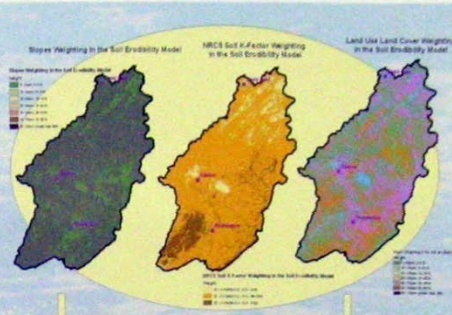
•Future work will include focusing on potentially highly impacted sites to survey actual plant locations within the waterbody, and georeference these areas in order to track the growth of target species and success of pesticide treatments.

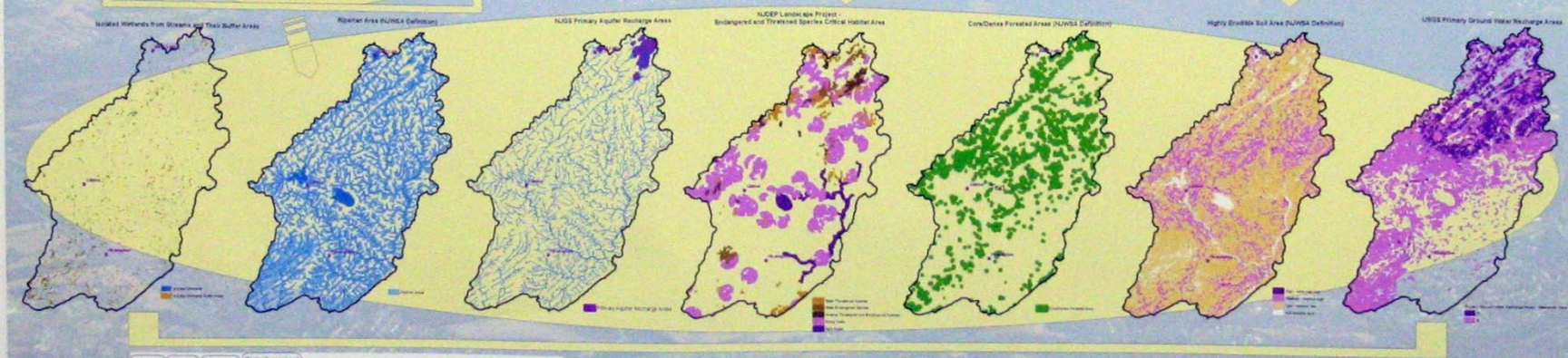
•Overall, this data will allow the NJDEP to identify specific areas of impact and concern where the Department may direct resources, educate the public about the impacts of invasive vegetation, track the growth of high interest species, and provide a baseline dataset of aquatic plant communities in the state.

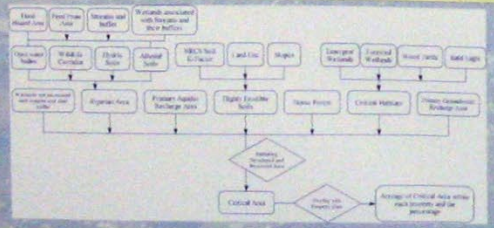
Identification of Potential Properties for Open Space Preservation based on Valuable Critical Environmental Resources

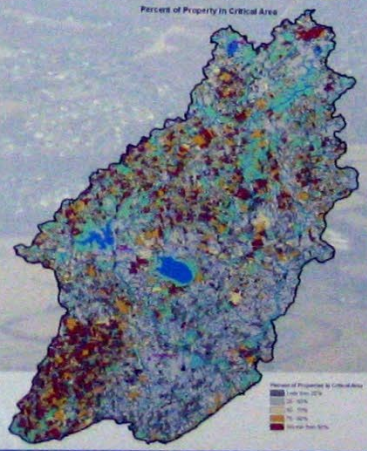










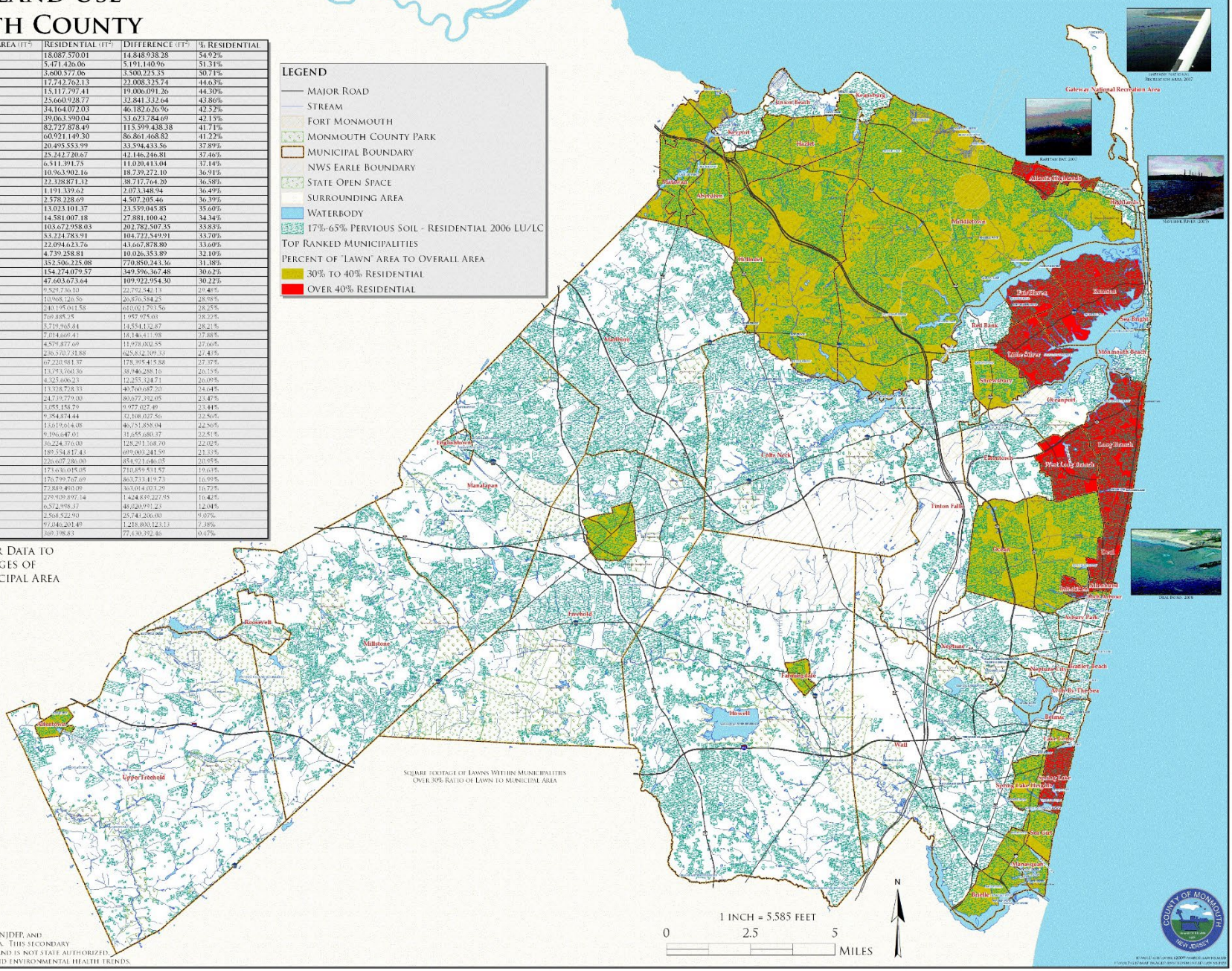


Data Integration

Residential Land Use In Monmouth County

Rank	Municipality	Municipal Area (ft²)	Residential (ft²)	Difference (ft²)	% Residential
1	DEAL BORO	32.936,508.29	18.087.570.01	14.848.938.28	54.92%
2	INTERLAKEN	10.662,567.02	5,471,426.06	5.191,140.96	51.31%
3	ALLENHURST	7.100,802.42	3,600,577.06	3.500,225.35	50.71%
4	SPRING LAKE	39.751,087.87	17,742,762.13	22.008,325.74	44.63%
5	ATLANTIC HIGHLANDS	34.123,888.67	15,117,797.41	19.006,091.26	44.30%
6	FAIR HAVEN	58,502,261.40	25,660,928.77	32,841,332.64	43.86%
7	WEST LONG BRANCH	80,346,098.99	34,164,072.03	46,182,026.96	42.52%
8	LITTLE SILVER	92,687,374.73	39,063,590.04	53,623,784.69	42.15%
9	RUMSON	198,327,316.87	82,727,878.49	115,599,438.38	41.71%
10	LONG BRANCH	147,782,618.13	60,921,149.30	86,861,468.82	41.22%
11	FREEHOLD BORO	54,089,987.55	20,495,553.99	33,594,433.56	37.89%
12	MATAWAN	67,388,967.48	25,242,720.67	42,146,246.81	37.46%
13	ALLENTOWN	17,531,804.79	6,511,391.75	11,020,413.04	37.14%
14	SEA GIRT	29,703,174.26	10,963,902.16	18,739,272.10	36.91%
15	SHREWSBURY BORO	61,046,635.52	22,328,871.32	38,717,764.20	36.58%
16	LOCH ARBOUR	3,264,688.56	1,191,339.62	2,073,348.94	36.49%
17	LAKE COMO	7,085,434.15	2,578,228.69	4,507,205.46	36.39%
18	SPRING LAKE HEIGHTS	36,582,147.22	13,023,101.37	23,559,045.85	35.60%
19	MANASQUAN	42,462,107.60	14,581,007.18	27,881,100.42	34.34%
20	OCEAN	306,455,465.38	103,672,958.03	202,782,507.35	33.83%
21	HAZLET	157,947,333.81	53,234,783.91	104,712,549.91	33.70%
22	BRIELLE	65,762,302.56	22,094,623.76	43,667,878.80	33.60%
23	FARMINGDALE	14,765,612.70	4,739,258.81	10,026,353.89	32.10%
24	MIDDLETOWN	1,123,356,468.44	352,506,225.08	770,850,243.36	31.38%
25	HOLMDEL	503,870,447.05	154,274,079.57	349,596,367.48	30.62%
26	ABERDEEN	157,526,627.95	47,603,673.64	109,922,954.30	30.22%
27	KEANSBURG	32,322,278.23	9,529,736.10	22,792,542.13	29.48%
28	BELMAR	37,844,770.81	10,968,126.56	26,876,584.25	28.98%
29	MARLBORO	850,216,815.14	240,195,015.58	610,021,793.56	28.25%
30	SHREWSBURY TWP.	2,727,861.28	769,885.25	1,957,975.03	28.22%
31	HIGHLANDS	20,274,098.71	5,719,965.84	14,554,132.87	28.21%
32	NEPTUNE CITY	25,161,081.40	7,014,669.41	18,146,411.98	27.88%
33	ENGLISHTOWN	16,557,880.24	4,579,877.69	11,978,002.55	27.66%
34	MANALAPAN	862,402,841.22	236,370,731.88	626,032,109.33	27.41%
35	NEPTUNE TWP.	245,616,397.25	67,220,981.37	178,395,415.88	27.37%
36	UNION BEACH	52,740,048.53	13,753,360.36	38,986,688.16	26.75%
37	BRADLEY BEACH	16,580,930.94	4,325,606.23	12,255,324.71	26.09%
38	MONMOUTH BEACH	54,089,415.53	13,328,728.33	40,760,687.20	24.64%
39	OCEANPORT	105,417,171.05	24,739,779.00	80,677,392.05	23.47%
40	AVON BY THE SEA	13,032,186.27	3,055,158.79	9,977,027.49	23.44%
41	ASBURY PARK	41,462,902.00	9,354,874.44	32,108,027.56	22.56%
42	RED BANK	60,371,472.11	13,619,614.08	46,751,858.04	22.56%
43	KEYPORT	40,852,327.38	9,196,647.01	31,655,680.37	22.51%
44	EATONTOWN	164,515,544.70	36,224,376.00	128,291,168.70	22.02%
45	COLTS NECK	888,558,039.02	189,554,817.43	699,003,241.59	21.33%
46	FREEHOLD TWP.	1,081,528,932.05	226,607,286.00	854,921,646.05	20.95%
47	WALL	884,495,546.61	173,636,015.05	710,859,531.57	19.63%
48	MILLSTONE	1,040,533,187.42	176,799,767.69	863,733,419.73	16.99%
49	TINTON FALLS	435,901,513.38	72,888,490.09	363,014,023.29	16.72%
50	HOWELL	1,704,749,125.09	279,909,897.14	1,424,839,227.95	16.42%
51	ROOSEVELT	54,591,989.60	6,572,998.37	48,020,991.23	12.04%
52	SEA BRIGHT	28,311,728.90	2,568,522.90	25,741,206.00	9.07%
53	UPPER FREEHOLD	1,315,840,324.62	97,040,201.49	1,218,800,123.13	7.38%
54	GATEWAY NAT'L REC. AREA	77,799,791.29	369,398.83	77,430,392.46	0.47%

Using Land Use & Land Cover Data to Determine Relative Percentages of "Lawn" Area to Overall Municipal Area



Monmouth County Health Department
Mike Stephens, 4/30/2009

This map was developed in part using MCHD, NJDEP, and Monmouth County Office of GIS digital data. This secondary product has not been verified by the NJDEP and is not state authorized. This map was prepared to recognize public and environmental health trends.

NJTPA County Transportation Profiles:

Passaic County

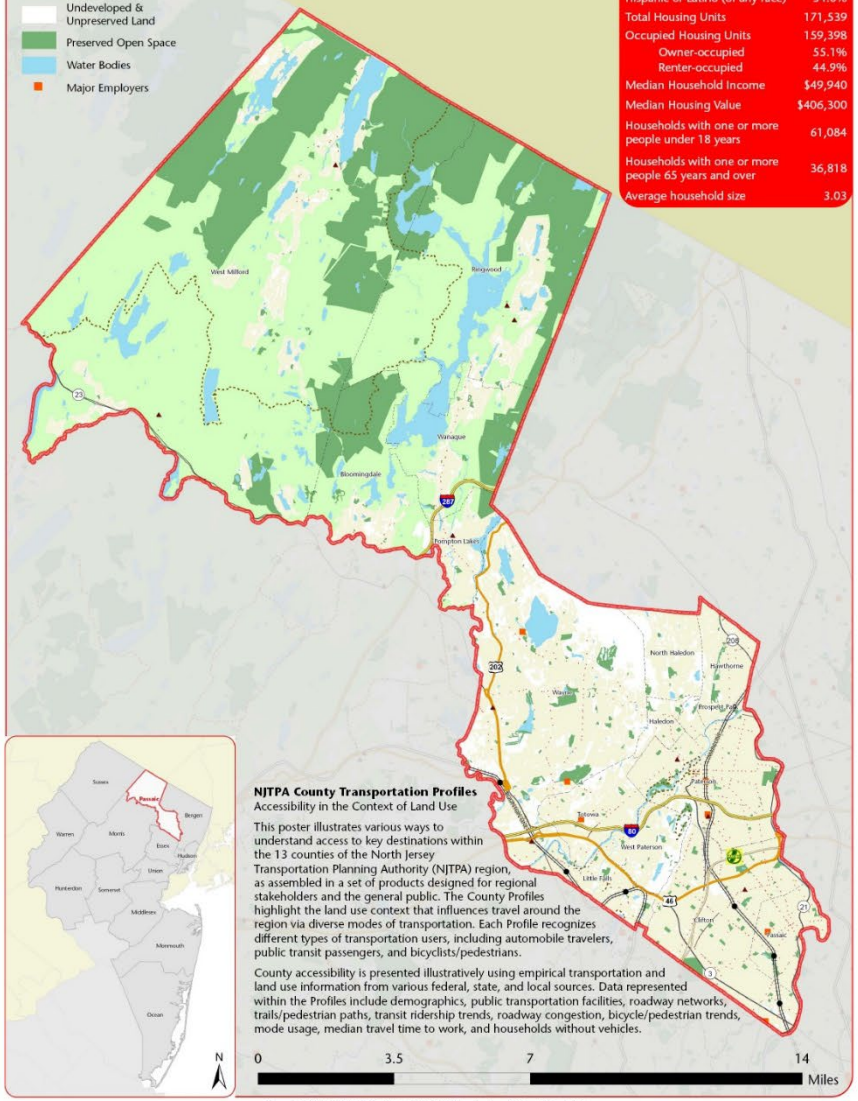
Transportation and Land Use[1]

Walking and Biking Paths
- Bike/Pedestrian Path

Public Transportation
- NJ Transit Rail Lines
- NJ Transit Rail Stations
- Park and Rides
- Bus Stops

Roadway Network
- Interstate
- US Highway
- State Highway
- Parkway

Land Use
- Highlands Protection and Conservation Zones
- Developed Land
- Undeveloped & Unpreserved Land
- Preserved Open Space
- Water Bodies
- Major Employers



Passaic County Demographics[2]

	Estimate
Total population	497,093
Median age (years)	36.0
Race	
White	59.0%
Black or African American	12.1%
Asian	4.6%
Other	24.3%
Hispanic or Latino (of any race)	34.0%
Total Housing Units	171,539
Occupied Housing Units	159,398
Owner-occupied	55.1%
Renter-occupied	44.9%
Median Household Income	$49,940
Median Housing Value	$406,300
Households with one or more people under 18 years	61,084
Households with one or more people 65 years and over	36,818
Average household size	3.03

NJTPA County Transportation Profiles
Accessibility in the Context of Land Use

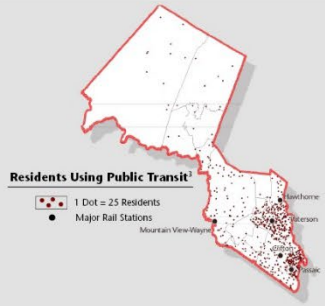
This poster illustrates various ways to understand access to key destinations within the 13 counties of the North Jersey Transportation Planning Authority (NJTPA) region, as assembled in a set of products designed for regional stakeholders and the general public. The County Profiles highlight the land use context that influences travel around the region via diverse modes of transportation. Each Profile recognizes different types of transportation users, including automobile travelers, public transit passengers, and bicyclists/pedestrians.

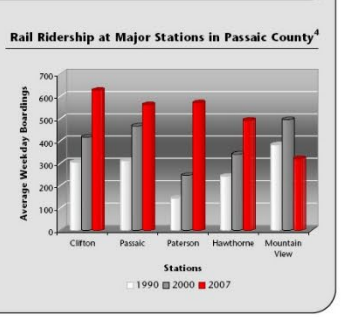
County accessibility is presented illustratively using empirical transportation and land use information from various federal, state, and local sources. Data represented within the Profiles include demographics, public transportation facilities, roadway networks, trails/pedestrian paths, transit ridership trends, roadway congestion, bicycle/pedestrian trends, mode usage, median travel time to work, and households without vehicles.

Sources: 1 – InfoUSA, ESRI (2006); NJDOT, (2006); and NJTPA (2002). 2 – American Community Survey, US Census (2006).

Public Transportation

- Total Rail Ridership for Passaic County:
  1990 — 1,793
  2000 — 2,548
  2007 — 3,289
- Bus routes in NJ Transit's Bergen, Passaic, Hudson and Newark Division had more than 700,000 in 2007, up 2.3% from the preceding year.
- Over 25 Bus Lines
- 10 Park & Rides
- 8 Train Stations
- Rail Lines: Main/Bergen and Boonton

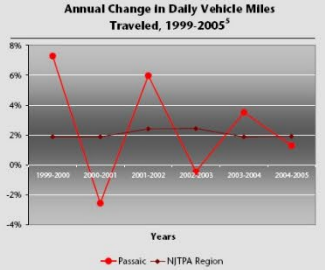




Automobile Travel

- Daily Vehicle Miles in 2005 for:
  Passaic County — 7.7 million
  NJTPA Region — 144.8 million
  Statewide — 203.1 million
- Over 50 Miles of Highway: almost every interstate, federal and state highway in NJ is available for travel in Passaic
- Average Travel Time to Work in 2006 (in minutes) for:
  Passaic County — 26.6 (+/- 0.7)
  NJTPA Region — 31.0 (+/- 0.6)
  Statewide — 29.1 (+/- 0.2)

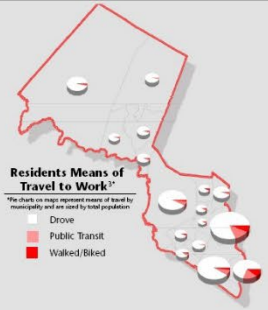
(Margin of Error shown in parenthesis)

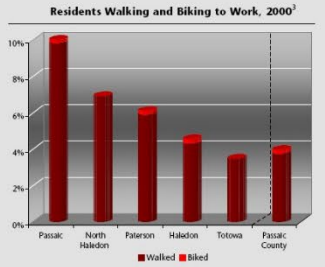


Walking and Biking

- Trails fall under the varied jurisdiction of Port Authority NJ & NY, State, County and several different municipalities
- Over 60 miles of designated paths
- Households without Vehicles in 2005 for:
  Passaic Co. — 23,356 (+/- 2,089)
  NJTPA — 285,738 (+/- 7,429)
  Statewide — 358,636 (+/- 9,258)

(Margin of Error shown in parenthesis)

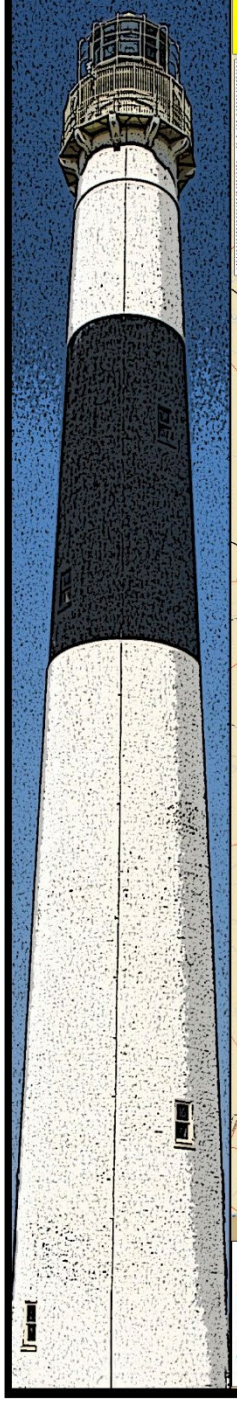


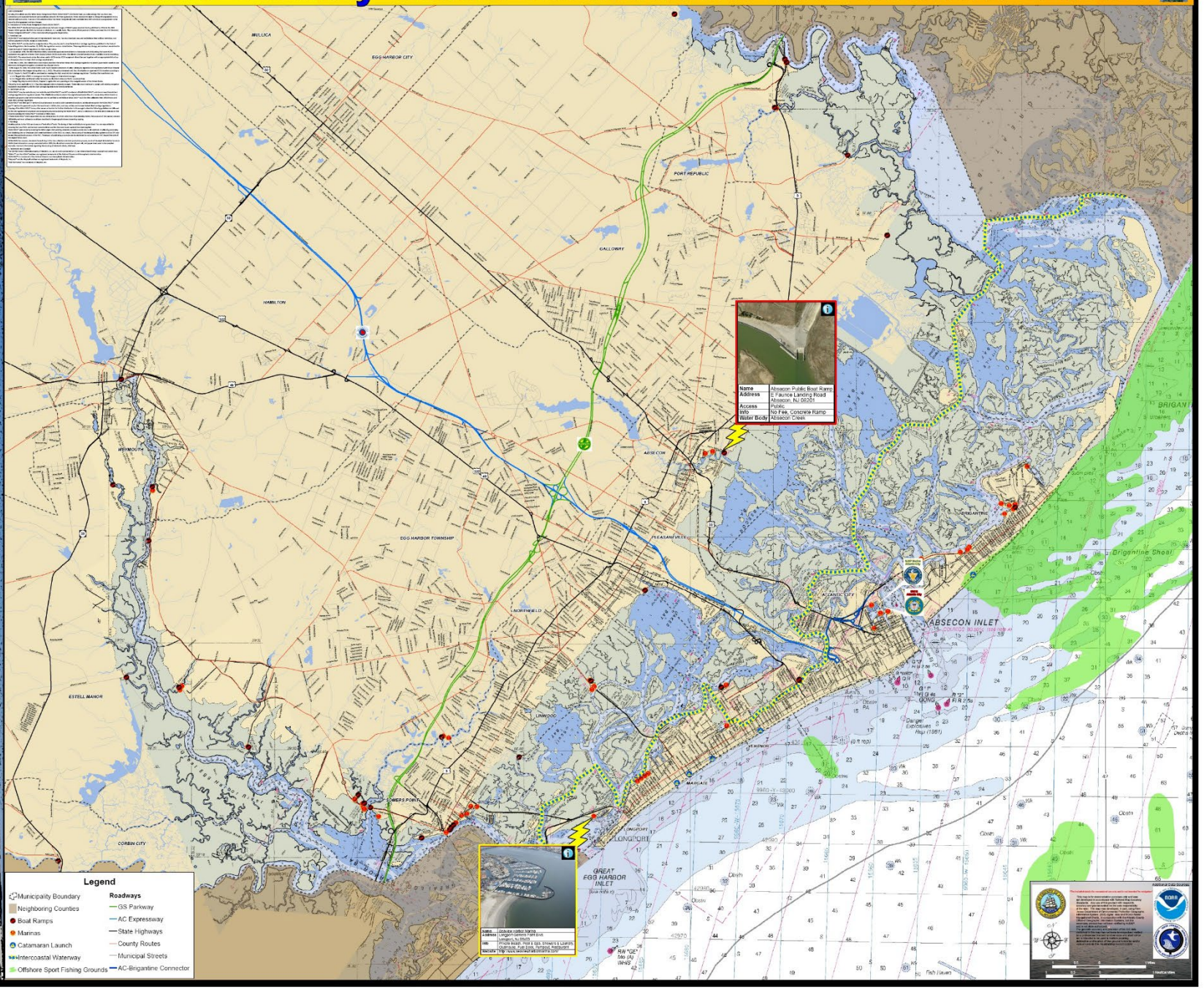


Sources: 3 – US Census (2000); 4 – NJ Transit (2007); 5 – NJDOT (2006)

Bergen
Essex
Hudson
Hunterdon
Middlesex
Monmouth
Morris
Ocean
Passaic
Sussex
Union
Warren

Atlantic County Water Recreation Information Guide





Tracking our Nation's Symbol

Bald Eagle (Haliaeetus leucocephalus) data management
NJDEP Fish and Wildlife Endangered and Nongame Species Program

Bald Eagle status in NJ

- 1970 1 active nest
- DDT banned in US in 1972
- Listed in NJ as State Endangered 1974
- Listed Federally as Endangered 1978, Threatened in 1995
- 1982 - 1989 ENSP artificial fostering using Canadian eagle chicks
- 2007 removed from Federal list
- 2008 Season, 69 pairs with territories, 63 active, produced 85 young and banded 25

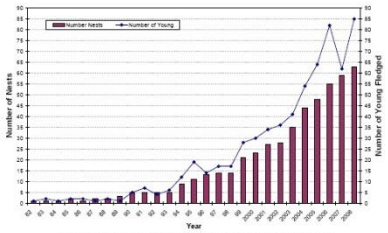


Figure 1. The number of active bald eagle nests and young produced in New Jersey, 1982-2008

Mid-winter Eagle Survey

- Started in 1978, nation wide 2 day survey
- 264 individuals counted in 2008

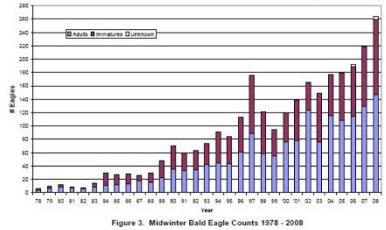


Figure 3. Midwinter Bald Eagle Counts 1978 - 2008

Bald Eagle Nest Locations
ACTIVE
- No
- Yes
- Forage Model
- EMERGENT
- WATER
- NJ County

Nests Monitored

- Volunteers monitor each nest location
- Observe nests from >1000 ft and generate weekly report
- Chicks banded at 5-8 weeks old
- Measurements and blood taken
- USFWS band and NJ specific color band (Green)

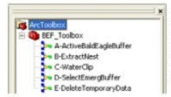
GPS Nest Locations

From September through December ENSP GIS staff visits new nesting locations from the previous nesting season

- GPS nest location using Trimble Geo XT
- Take measurements and observations of tree, nest and nest site
- Judge whether or not tree is climbable for banding
- Install a predator guard if needed

Forage Model

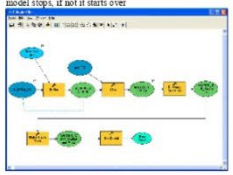
Bald Eagle Foraging Area: All known bald eagle nests are recorded using Global Positioning System (GPS) equipment. To run the model, all water polygons from the NJDEP LU/LC as well as water bodies from surrounding states (New York, Pennsylvania, Delaware) having an area equal to or greater than 8 hectares are combined to make one water body feature class. ENSP decided to include surrounding states LU/LC data to better represent the eagles foraging resources, independent of state boundaries. A radius around the nest site is incrementally increased, 10 feet at a time, until an area of 660 hectares of open water has been identified. All emergent wetland patches (including NY, PA and DE LU/LC) within 90 meters of the identified water are selected. The emergent wetland patches are combined with the identified open water. A 90-meter buffer is applied to the combined water/emergent wetland layer to protect perching sites.



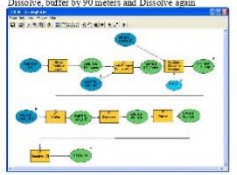
A - ActiveBaldEagleBuffer
Extracts the active nests and buffer by X ft in order to start model as if it is totally surrounded by water to account for 660 hectares of water

B - ExtractNest
Extract 1 nest and name file using unique Nest ID to run remainder of model

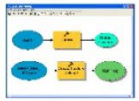
C - WaterClip
Buffer nest by 10ft, clip water body, calculate hectares, get sum of hectares, make table and if hectares is reached model stops, if not it starts over



D - SelectEmergBuffer Select Landscape Project emergent wetlands within 90 meters of clipped water body Union water body and selected emergent wetlands Dissolve, buffer by 90 meters and Dissolve again



E - DeleteTemporaryData
Delete temporary data (10ft buffers, Union and Dissolve files), entire Feature Dataset
Recreate empty Feature Dataset for next model run



A - ActiveBaldEagleBuffer & B-ExtractNest

C - WaterClip - 10ft buffers

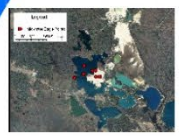
C - WaterClip - water clip 660 hectares

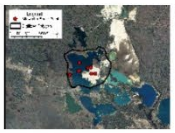
D - SelectEmergBuffer - select emergent patches

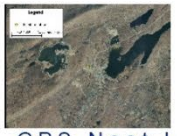
D - SelectEmergBuffer - union and dissolve water and emergent

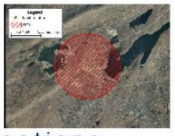
D - SelectEmergBuffer - buffer by 90 m

Biotics data warehouse

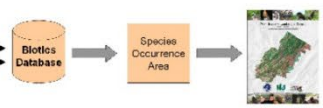








Midwinter Eagle Survey Points/Polygons
The midwinter eagle data is collected by volunteers who conduct surveys in January. They record the locations eagles are seen on topographic maps along with information such as age class, activity, habitat, date and time. These points are digitized by ENSP staff and the data is entered into an Access database. An ENSP biologist then digitizes polygons around the observed points to capture the habitat being used. These polygons are then brought into our Biotics database.



Nest locations are also brought into our Biotics database. Depending on how the point was acquired the nests are given an uncertainty buffer of at least 6 meters.
These source features are exported from Biotics (and in some cases given a buffer to represent the habitat used) and used to generate Species Occurrence Areas (SOAs). For bald eagles, the midwinter polygons receive no buffer and are the SOA, while nests receive a 1 km buffer in order to create the SOA.
These Species Occurrence Areas are the basis of the Landscape Project and are used to classify habitat patches in the Landscape Project.

GPS Nest Locations

Nests Monitored

Mid-winter Survey

Forage Model

January February March April May June July August September October November December

Fish and Wildlife

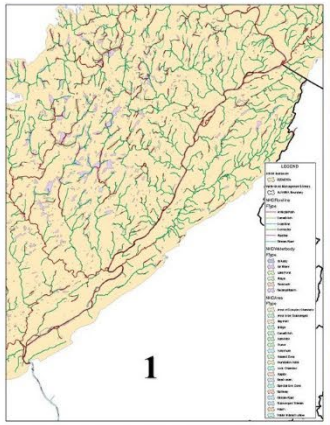
Conserve Wildlife Foundation of New Jersey

Conserve Wildlife

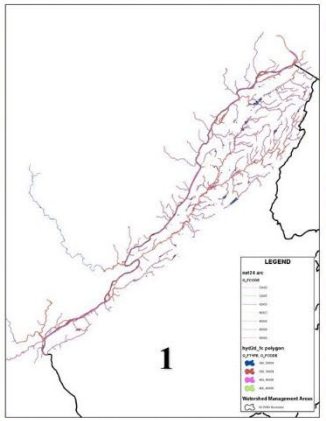
New Jersey

National Hydrography Dataset Conflation Project

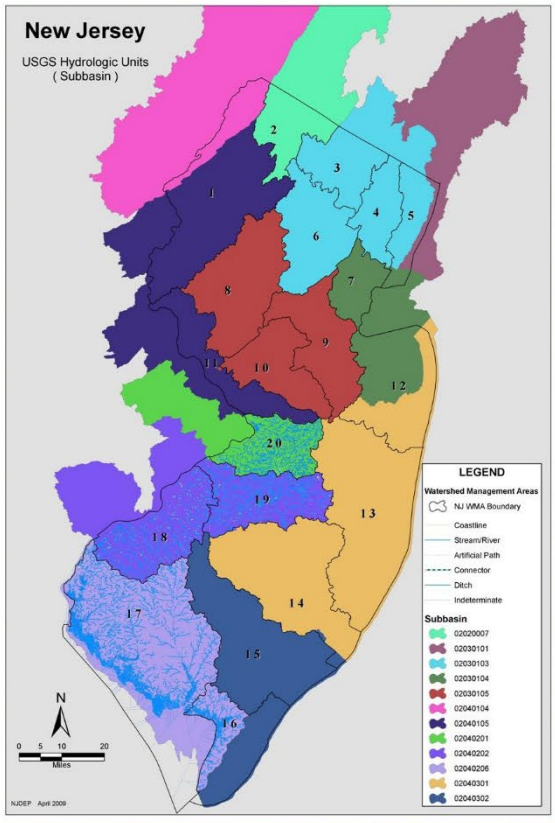
Source Data
USGS – NHD 1:24,000



Target Data
NJ –1:2,400

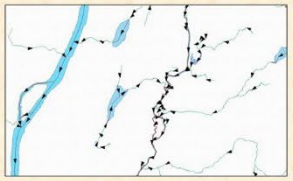


Watershed Boundary dataset



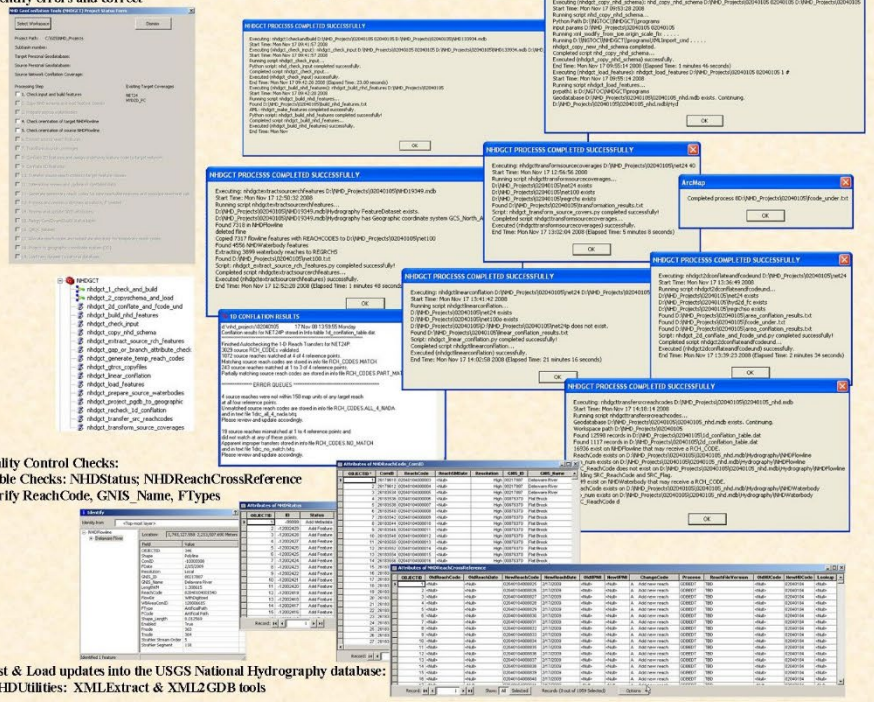
Steps of Conflation

1- Prepare NJ Target data for tools:
Convert data to coverage format (net24, hyd2d_fc, huc_edit, nhdpt)
Project coverages to Albers USGS;
Crosswalk Flowline & Waterbody FType and FCode; Major, Minor
Verify Flow direction with NHD Flow Check tool



2 - Prepare NHD Source data for NHDGCT tool:
Download USGS NHD GDB;
Create Subset of NHD for NJ data coverage area

3 - Process data using NHD GeoConflation Tools:
Identify errors and correct



4 - Quality Control Checks:
Table Checks: NHDStatus; NHDReachCrossReference
Verify ReachCode, GNIS_Name, FTypes

5 – Test & Load updates into the USGS National Hydrography database:
NHDUtilities: XMLExtract & XML2GDB tools

In September 2008, the New Jersey Department of Environmental Protection became Stewards of the USGS National Hydrography Dataset (NHD). This responsibility involves working with USGS to maintain and update hydrographic features in a national database which will become the basis for current USGS and EPA water quality monitoring and reporting efforts.

In January 2009 DEP began the nations first statewide effort to update the database with Local resolution (1:2,400) scale data. The NHD structure will allow all users of the data to reference any water body, stream segment or monitoring station within the national system.

NJDEP will also be the first state to incorporate newly delineated and EPA approved HUC 12 watershed boundaries.

Data Sources: 2002 Statewide Land Use/Land Cover (LU/LC) and Hydrography data sets
USGS High Resolution NHD 1:24,000 database (1:24,000)

Funding for this project was provided by a US Geological Survey and US Environmental Protection Agency

Project Team: Craig Coutros, Seth Heckman, John Tylawski, Lawrence Thornton

Map Compilation by Craig Coutros, GIS Specialist
NJ Department of Environmental Protection, Office of Information Resources Management, Bureau of Geographic Information Systems, April 2009.

Instructional Presentation

NJ DEP Green Commute Initiative

Potential Car Pools: Employees by Zip Code

Legend

NJ DEP Trenton

Employees per Zip Code

- 1-2
- 3-7
- 8-14
- 15-22
- 23-36
- NJ Counties

Best Area for New Car Pools: Commuters per Zip Code

TOWN	ZIP Code	Number of Employees
Falls	19067	36
Hamilton	08690	33
Lawrenceville	08648	30
Burlington	08016	29
Ewing	08618	29
Bordentown	08505	28
Hamilton	08619	26
Hamilton	08610	22
Hopewell	08534	20
Langhorne	19047	20
Ewing	08628	18
Hamilton	08620	14
Mount Laurel	08054	14
City of Lambertville	08530	13
East Windsor	08520	13
Eastampton	08060	13
Browns Mill, NJ	08015	12
Delanco	08075	12
New Egypt	08533	12
Allentown	08501	11
Ewing	08638	11
Levittown	19056	11
Princeton Jct	08550	11
Franklin Township, Somerset Cou	08540	10
Hamilton	08691	10
Jackson	08527	10
Newtown	18940	10
Plainsboro	08536	10
Willingboro	08046	10
Delaware Township	08559	9
Evesham	08053	9
Flemington	08822	9
Moorestown	08057	9
Mercer County	08611	8
Metuchen	08840	8
Moorestown	08057	8
Fairless Hills, PA	19030	7
Lumberton	08048	7
Bay Head	08742	6
Bayville	08721	6
Columbus	08022	6
Wallington, pa	19054	6
Hainesport	08036	6
Holland	18966	6
Hopewell	08560	6
Medford	08055	6

Data Source:
Survey of Employees, NJDEP, 2008
NJDEP GIS Data
LSNJ Zip Code Boundary Layer
Cartography: P. Caris, L. Thornton

Map produced by
NJDEP
Office of Information Resources Management
Bureau of Geographic Information Systems
October 1, 2008

N

0 10 20 40 Miles

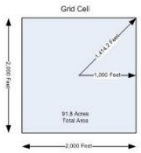
Analysis based on commuting to the DEP Trenton Campus

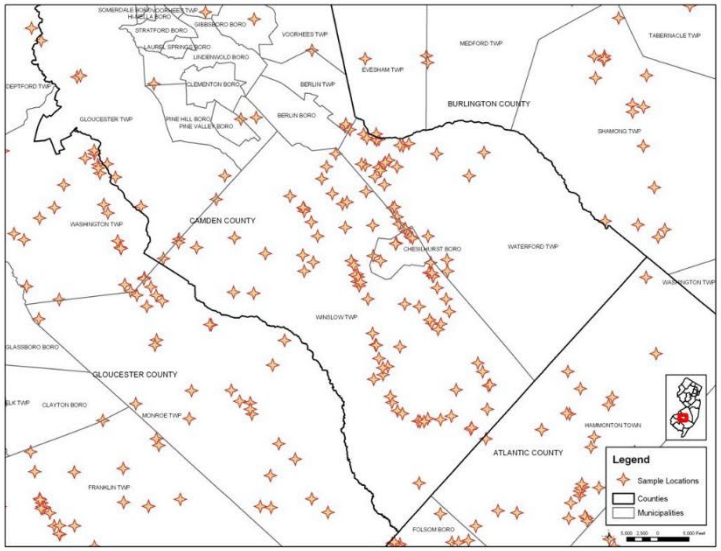
NJDEP Mapping Contest
April 30, 2009

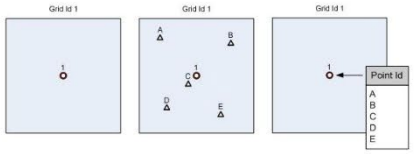
Generalize Coordinates of Sensitive Sample Locations

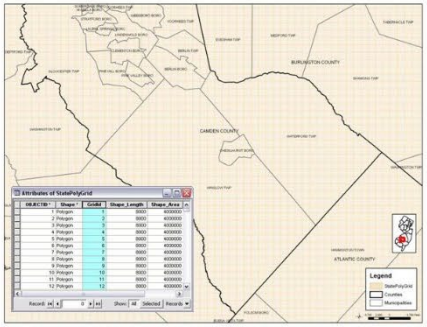
Many sensitive locations have been mapped to a high degree of accuracy which creates difficulty with sharing associated data, like sampling results, for the location. This issue is often raised when dealing with drinking water assets, what was needed was a method to obscure the location without removing the usefulness of the data. The process described in the following was created to provide access to sampling data locations while maintaining the level of anonymity for the sensitive location. This method uses the center point mapping coordinates of a 2,000 foot by 2,000 foot square cell to represent all locations which occur within the cell. Each location is therefore generalized to within plus or minus 1,414.2 feet of the original location. The cell contains 91.8 acres and will therefore encompass many properties not allowing the identity of any individual lot.

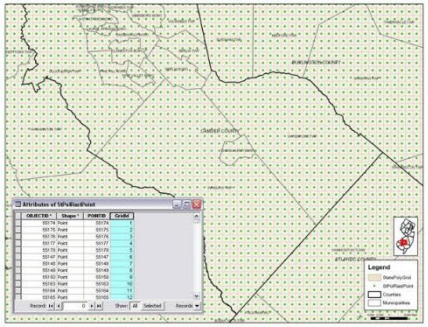
A polygon feature data set containing 2,000 foot by 2,000 foot cells (55,178 total cells) was generated using Geographic Information Systems (GIS) software for the limits of the New Jersey state boundary. A unique identifier was assigned to each cell (Grid Id). A point feature data set to represent the center of each cell was created by converting the polygon feature to a raster dataset. The raster data set was then converted to a point feature class. The Grid Id for each cell is assigned to each representative center point. The original coordinates were then mapped to identify and assign the Grid Id for the cell the site is located in. Once this process was completed, sampling results can be related to the grid center point and mapped using its coordinates.



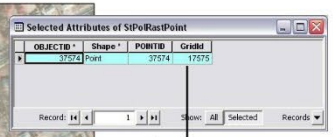


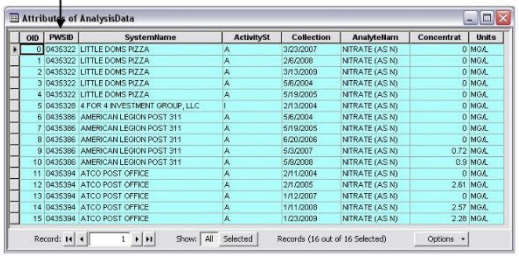






This provides the ability to map sample results using the coordinates of the center point of the 91.8 acre cell instead of the original location. This is accomplished by relating three tables as shown. The parent table contains the original submission identifier as well as the associated grid identifier. The two child tables provide the coordinates of the center point and sampling results from the submission. The provided coordinates are in the New Jersey State Plane Coordinate System (in US survey feet) referenced to the NAD83 horizontal geodetic datum. All sensitive data elements are removed from the results table. By producing the grid cells with grid ids for the limits of the entire state future updates can be provided referencing the same historical center points. Thus any future corrections to mapping coordinates or sampling results as well as future sampling results can be associated referencing the same geographic area. This method also allows for error checking of suspicious data. A user of the generalized data can query the Department to check the original data since the submission identifier remains intact.





Ed Apalinski, 4/2009

Map Projections: NJ State Plane NAD83, US Feet

njdep department of environmental protection
Division of Water Supply

Most Unique

STATUS OF LiDAR IN NEW JERSEY
April 2009

Remaing Square Miles In New Jersey

Atlantic County	395
Ocean County	371
Monmouth Co.	280
TOTAL	1,046 Sq Miles

Del. River Portions of Warren and Sussex
FEMA Funded Mass Points in 2008
USGS will create 3m DEM

Highlands
Data Collected 2006/07
2ft Contours
5ft. Gridded DEM

Metro N. Jersey
By US NGA 2006/07
DEMs on NED

Hunterdon and Middlesex
Flown 2006
Bare Earth on CLICK

Somerset
Collected 2007
1m DEM

L. Monmouth 380 sq miles

Mercer County
Scheduled for 2009

Ocean
371 sq miles

Upland Areas Atlantic, Ocean,
and Lower Monmouth
Not Scheduled

Gloucester County
Flown 2008

Camden, Burlington
Flown Leaf-on 2004
DEMs on NED
Bare Earth on CLICK

Coastal Ocean, Atlantic
Scheduled for 2009/10
FEMA

Salem County
Scheduled for 2009
EPA/NJDEP/USGS

Text

Atlantic 395 sq miles

Cape May, Cumberland
Coastal Salem, Winter 2008
2m DEM

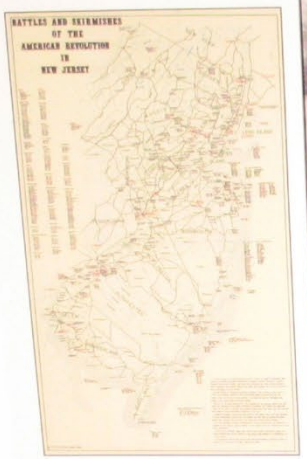
Legend

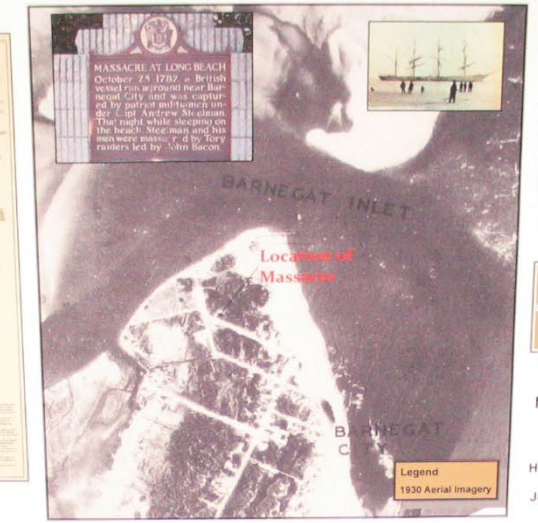
- Lower Monmouth
- Highlands
- Cape May, Cumberland, Coastal Salem
- Salem, Mercer, Coastal Ocean &Atl.
- Hunterdon_Middlesex
- NGA
- Ocean and Atlantic Co. Uplands
- Somerset County
- Gloucester County
- Burlington and Camden
- Sussex and Warren

N
W E
S

Cartography by: Lawrence L. Thornton, MS GISP
Vice Chair, GIC Roundtable
Data: Roger Barlow, USGS
New Jersey State Liaison
4/13/2009

October 25, 1782,
3D View of The Massacre At
Long Beach Island, Ocean County, NJ





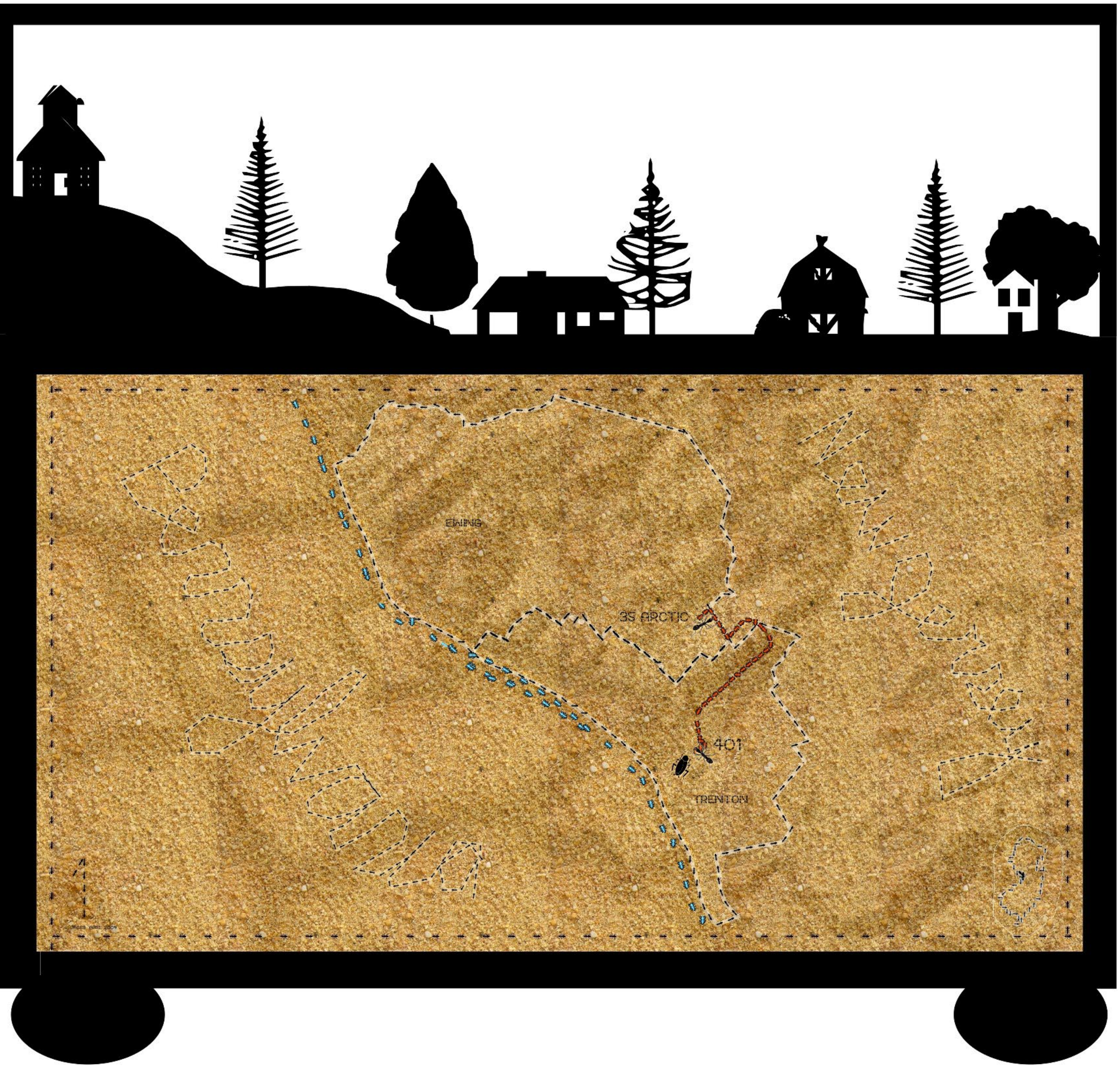
Night Sky At LBI

Color Scheme:
Patriot Militiamen
Captain Andrew Steelman
British Troops
Tory Raiders

NOT TO SCALE

Creators:
Gene P. Fowler
Henry J. Kindervatter
Mary F. Stahl
Joseph Stefanoni, III

NJDEP GIS Ant Farm



VOICES

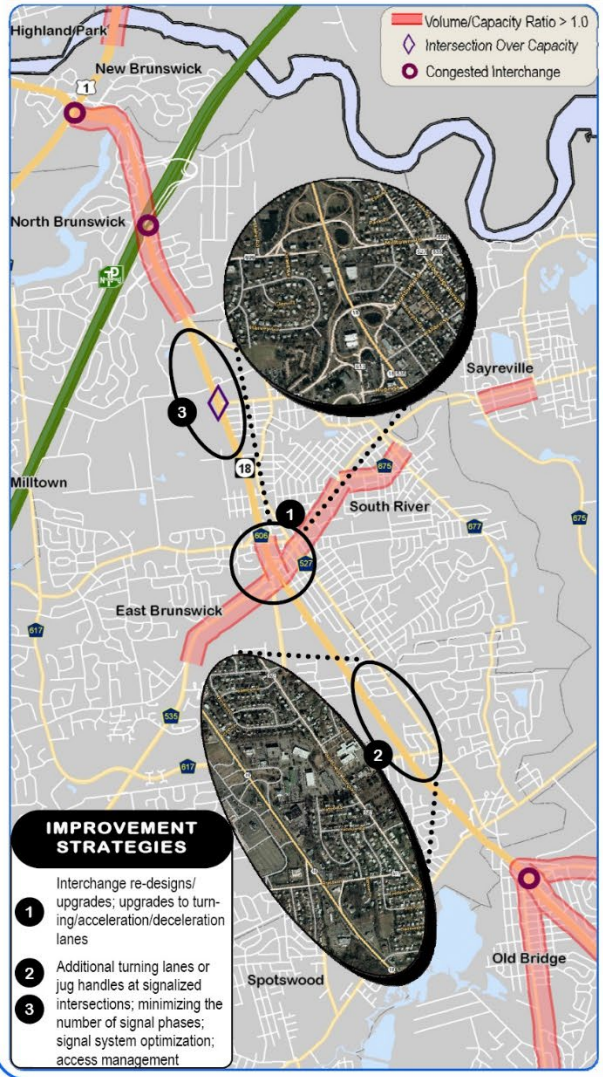
Stony Brook-Millstone Watershed

Small Format

NJTPA
Strategy Refinement

Concept Report Summary
Comprehensive Roadway Improvement Strategies
ROUTE 18 in EAST BRUNSWICK

Potential Projects for Advancement



NJDOT Study (cost ~$500,000)

Purpose and Need Statement and Feasibility Assessment including, but not limited to:

- Investigate interchange improvements
- Investigate signal timing and phasing adjustments
- Complete a signal optimization analysis
- Investigate Access Management
- Improve pedestrian crossings, sidewalks and access to land uses and transit
- Add incident detection/response systems and expand Emergency Service Patrol onto Route 18
- Coordinate with NJ Transit on breakout to investigate signal pre-emption, bus queue jumps, and dedicated bus shoulder lanes

NJDOT Quick Fix Projects (~$50,000)

- Investigate and advance potential breakout projects for individual intersections identified in the Route 18 Pedestrian Crossing Study completed by Middlesex County in 2005
- Pipeline 3 and 4 short term improvements including sidewalks, crosswalks, drainage improvements, and pedestrian signals

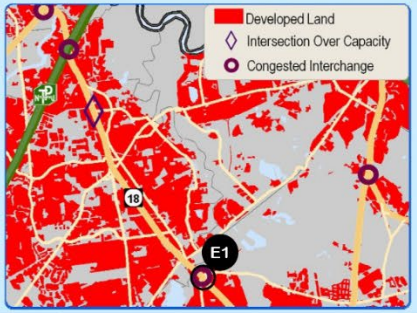
East Brunswick Township Code Update (~$80,000)

Develop a zoning code to require or provide incentives for:

- the consolidation of driveways and parking along Route 18
- Improving the pedestrian environment in commercial areas along Route 18

CORRIDOR PROFILE
Background Data

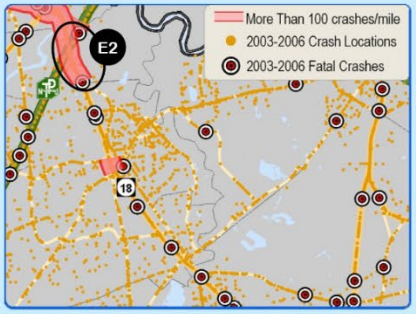
CONGESTION CONDITIONS



- Highly congested:
  - ⇒ AADT 57,000-100,000
  - ⇒ Peak hr V/C ratio average 0.9, max > 1.2
  - ⇒ Peak hr Delay times > 1 min/mi
- Dense development with numerous driveways accessing retail, office, and residential parcels.
- 3 Congested Interchanges, 2 congested intersections (NJDOT)

E1 Existing FY 2009 TIP project:
Interchange of CRs 516/527 – Interchange improvements include the elimination of geometric design deficiencies at the existing interchange to improve safety and operations. (DBNUM 9394)

SAFETY ISSUES



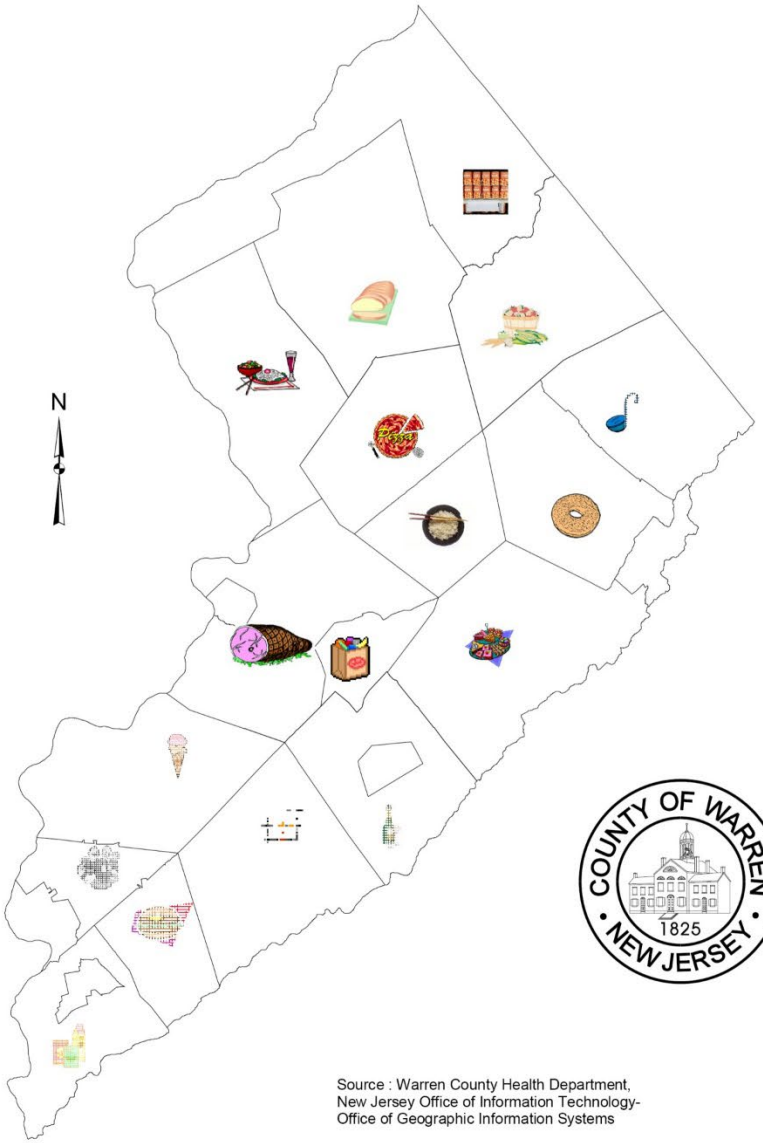
- Average of 80 crashes/mi, 3 segments > 100/mi; 4 fatalities (2007)
- Two segments of Route 18 were in the top 15% of roads in the NJTPA region for crashes per lane mile.
- Hazardous, inconvenient pedestrian environment that discourages transit use

E2 Existing FY 2009 PDWP project:
Route 18 – Route 1 to Edgeboro Road – This project involves a study of possible operational improvements on Route 18 and ramp improvements at the Route 1/Route 18 interchange and improvements to signalized intersections. (DBNUM X221B)

ENVIRONMENTAL FACTORS

- SDRP Planning Areas 1 & 2 (Metropolitan & Suburban)
- Significant Environmental Justice Populations
  - ⇒ New Brunswick (83%)
  - ⇒ Highland Park (36%)
  - ⇒ Sayreville (31%)
  - ⇒ Old Bridge (29%)
  - ⇒ East Brunswick (27%)
- Minor environmental issues
  (Potential impacts to wetlands, flooding & water quality)
- Road closures on Route 18 due to flooding

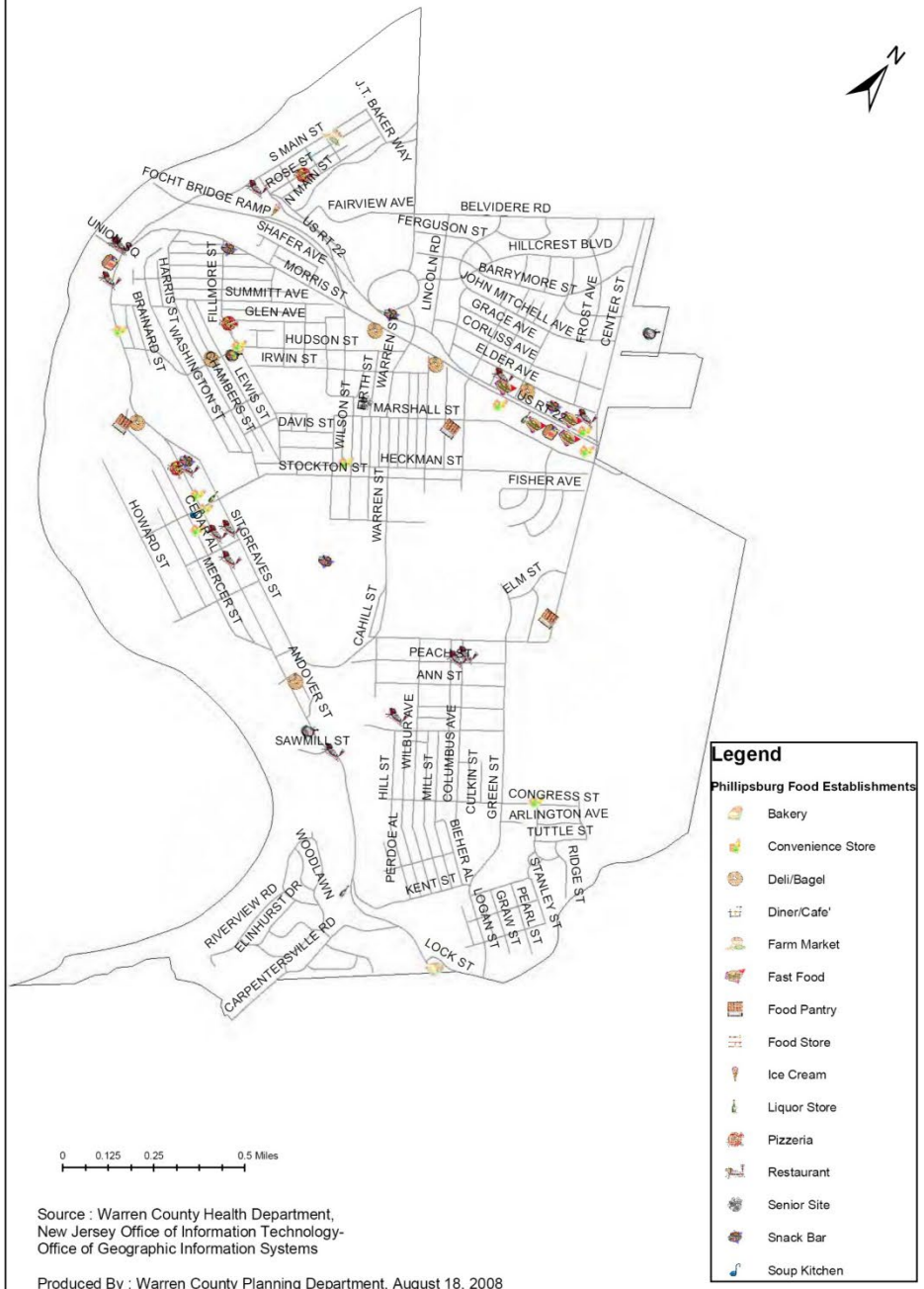
Warren County Food Establishment



Source : Warren County Health Department,
New Jersey Office of Information Technology-
Office of Geographic Information Systems

Produced By : Warren County Planning Department, August 18, 2008

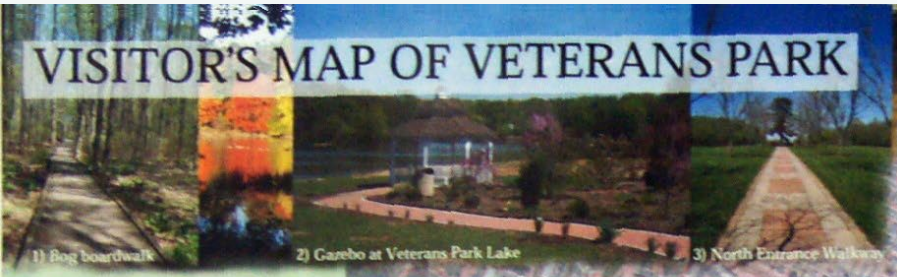
Town of Phillipsburg



Source : Warren County Health Department,
New Jersey Office of Information Technology-
Office of Geographic Information Systems

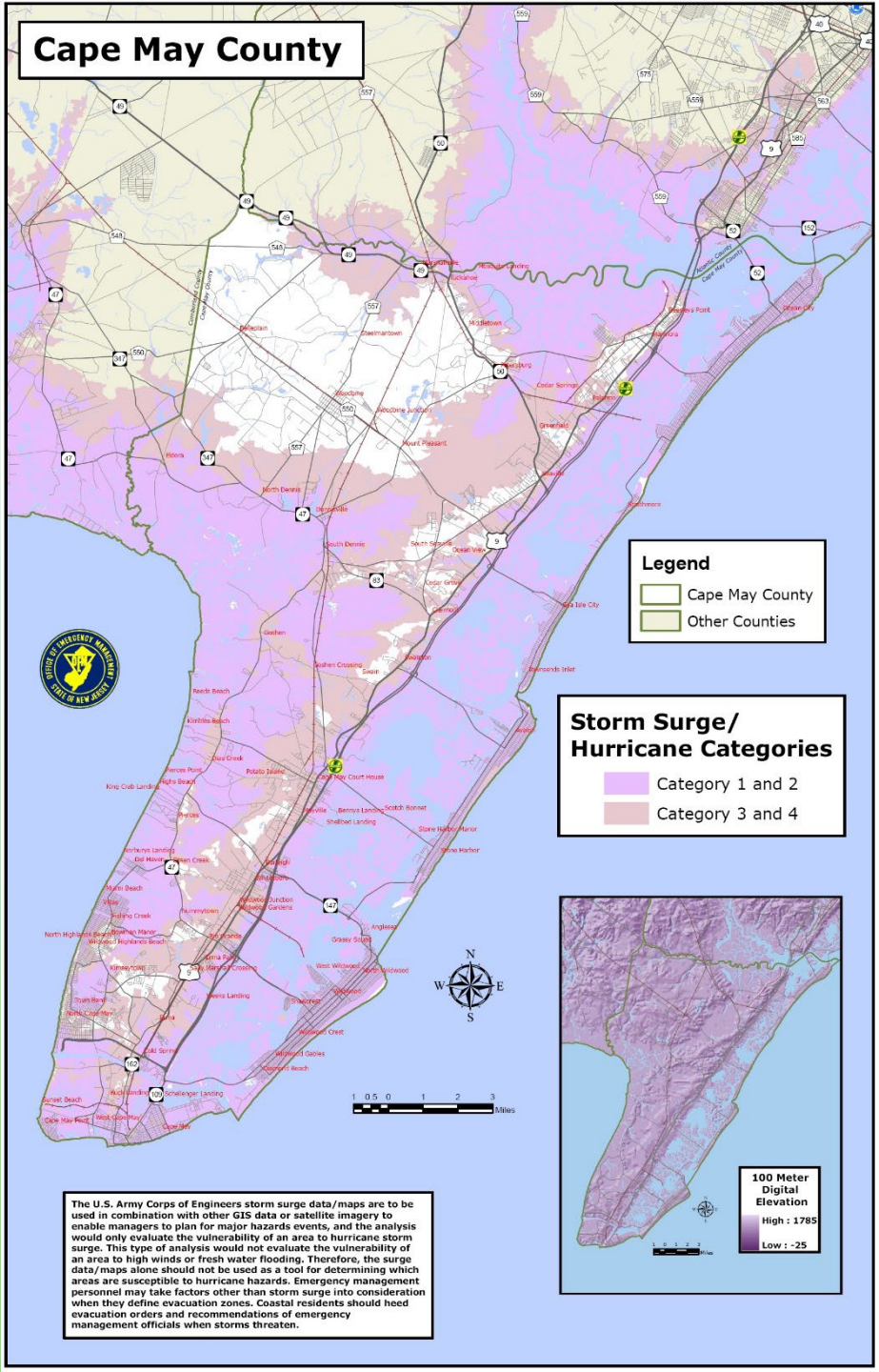
Produced By : Warren County Planning Department, August 18, 2008

VISITOR'S MAP OF VETERANS PARK

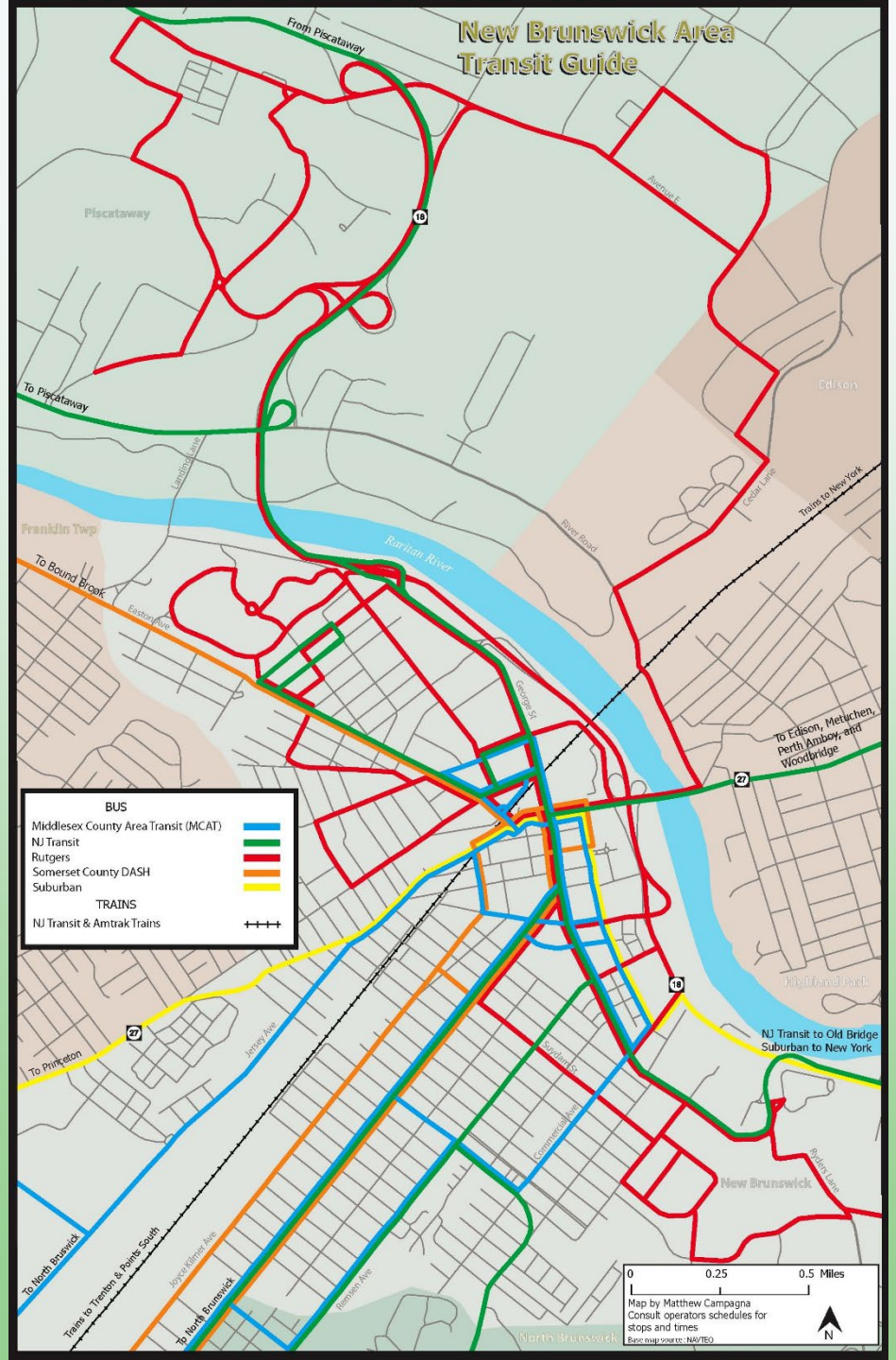


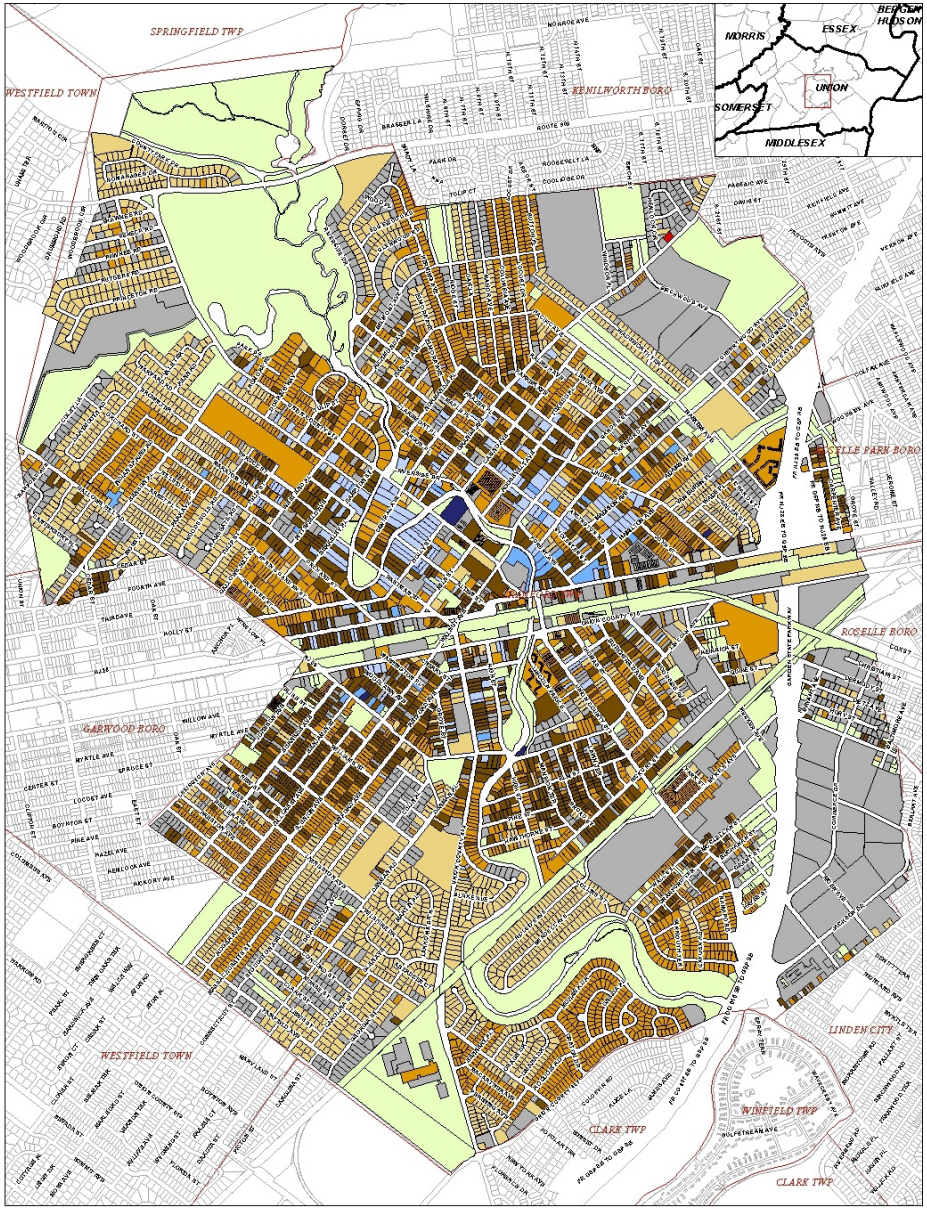
Welcome to Veterans Park located in Hamilton Township, NJ. This is a multiuse park consisting of approximatey 450 acres, originally part of the John Abbott II Farm. Tours of the farm house (circa 1730) and a Civil War and Native American Museum provide insight to the area's rich history. The park was created in 1977 and provides tennis, dog park, soccer, baseball, skate park, rollerhockey, volleyball, chess tables, bocce, and shuffleboard facilities at the South Entrance. The West Entrance provides access to the lake and to the Bog Boardwalk. The North Entrance leads to the playground, picnic area and sculptures. Several memorials are located at the East Entrance. Veterans Park is administered by the Hamilton Township Department of Parks and Recreation. Additional information can be found in the Maintenance/Security Office at the South Entrance during weekday office hours. The park is open only during daylight hours. This map shows the various walking and bike paths. Enjoy the park!

Cape May County



The U.S. Army Corps of Engineers storm surge data/maps are to be used in combination with other GIS data or satellite imagery to enable managers to plan for major hazards events, and the analysis would only evaluate the vulnerability of an area to hurricane storm surge. This type of analysis would not evaluate the vulnerability of an area to high winds or fresh water flooding. Therefore, the surge data/maps alone should not be used as a tool for determining which areas are susceptible to hurricane hazards. Emergency management personnel may take factors other than storm surge into consideration when they define evacuation zones. Coastal residents should heed evacuation orders and recommendations of emergency management officials when storms threaten.


New Brunswick Area
Transit Guide
From Piscataway
To Piscataway
Piscataway
Franklin Twp
Edison
Raritan River
To Bound Brook
Trains to New York
To Edison, Metuchen, Perth Amboy, and Woodbridge
To Princeton
NJ Transit to Old Bridge
Suburban to New York
To North Brunswick
Trains to Trenton & Points South
New Brunswick
Highland Park
BUS
Middlesex County Area Transit (MCAT)
NJ Transit
Rutgers
Somerset County DASH
Suburban
TRAINS
NJ Transit & Amtrak Trains
0
0.25
0.5 Miles
Map by Matthew Campagna
Consult operators schedules for stops and times
Base map source: NAVTEQ
N



Cranford Parcels by Year Built

Cranford Township, Union County, NJ

Data Source: NJ Tax Records Search website
(http://tax1.co.monmouth.nj.us/cgi-bin/prc6.cgi?&ms_user=monm&passwd=data)
Parcels: Union County Parcels, hosted at NJDEP
Road Names: NJDOT Roadway Network, hosted at NJDEP
Drawn: 3/25/09, by KEC

Legend

No Data
1700 - 1799
1800 - 1824
1825 - 1849
1850 - 1874
1875 - 1899
1900 - 1924
1925 - 1949
1950 - 1958
1959 - 2006
Union Parcels
Municipalities

1:15,500

0 0.125 0.25 0.5 0.75 1 Miles

Anna Kitces is Retiring tomorrow after 30+ yrs w/ DEP

!!

Legend

Counties

Municipalities

She is relocating 24,000 ft. wnw

to Yardley, PA.

Retirement Party details to follow...
(Email me for details)

N

Software Integration

STONY BROOK - MILLSTONE WATERSHED

INVENTORY AND ANALYSIS

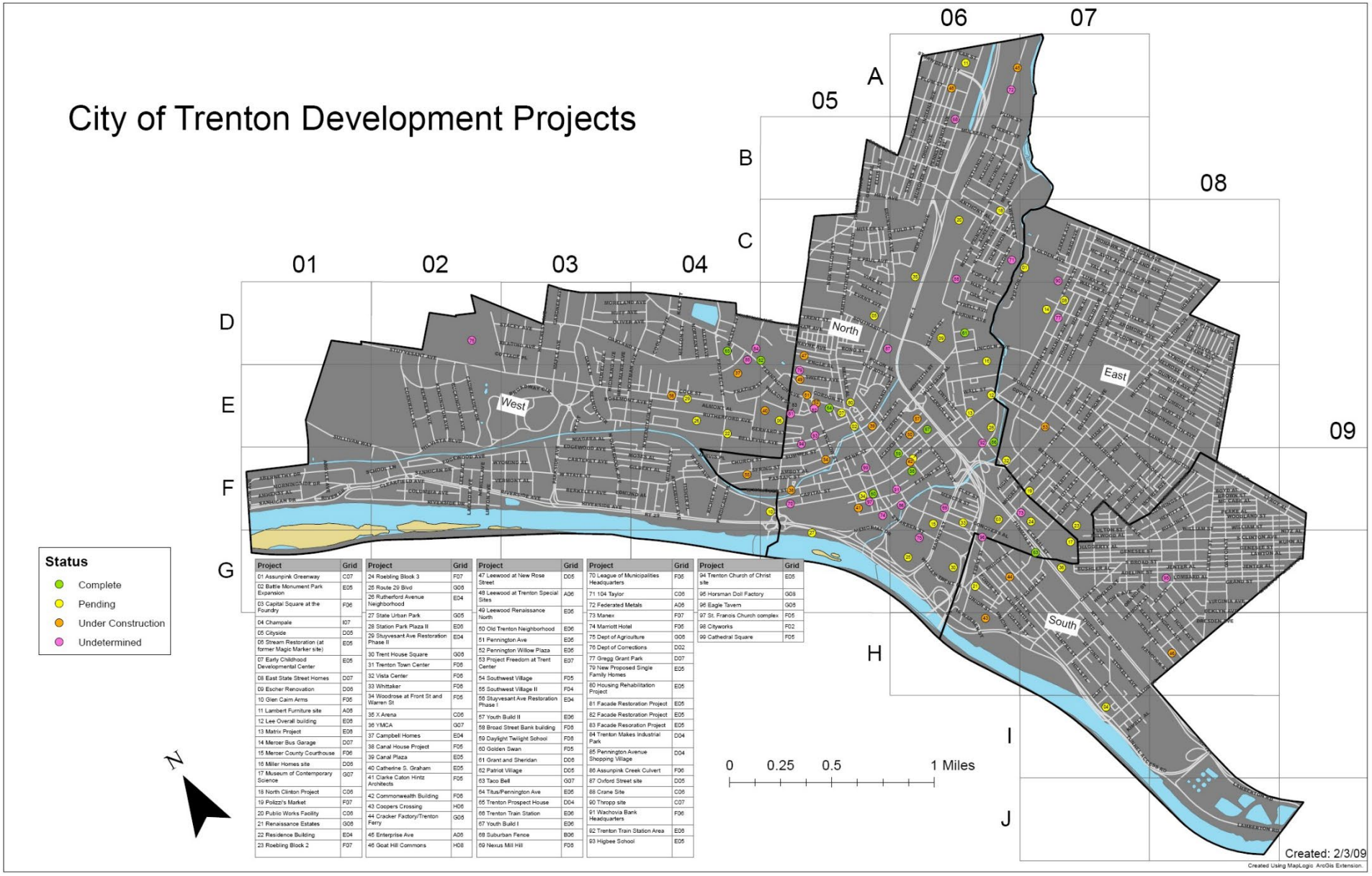
RUTGERS LANDSCAPE ARCHITECTURE '09

TWENTY ONE FEET

SEVEN FEET

ETHNICITY
FAMILY
EDUCATION
ECONOMICS
COMMUTE
MAJOR EMPLOYERS
CENTERS
SUBWATERSHEDS
TOPOGRAPHY
SOIL TYPES
WATERSHED EVENTS
WORLD EVENTS
DROUGHT REGIONS
WILD LIFE
FOREST
SURFACE WATER
GEOLOGY
SLOPE
PRIORITY SITES
WETLANDS
GRASSLANDS
ROADWAYS
LANDUSE TYPES
CHANGE: 1986 - 2002
KNOWN CONTAMINATED SITES
REMEDIATION LEVELS
SUPERFUND SITES
WATER QUALITY
AGRICULTURAL LAND
RECREATIONAL LAND
NATURAL PRESERVATION
LOW URBAN DENSITY
WORD OF MOUTH

City of Trenton Development Projects



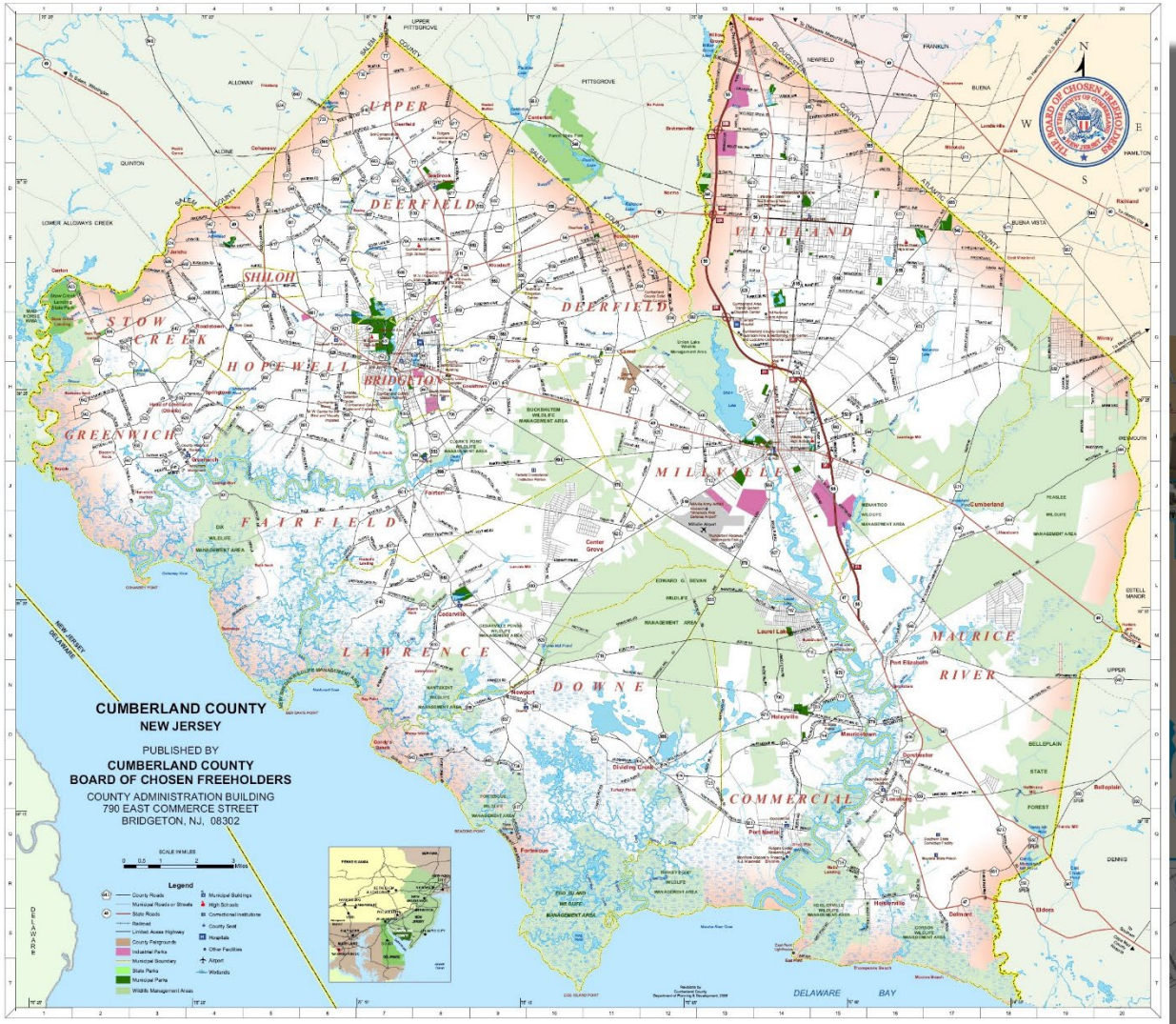
Project	Grid
01 Assunpink Greenway	C07
02 Battle Monument Park Expansion	E05
03 Capital Square at the Foundry	F06
04 Champale	I07
05 Cityside	D05
06 Stream Restoration (at former Magic Marker site)	E05
07 Early Childhood Developmental Center	E05
08 East State Street Homes	D07
09 Escher Renovation	D05
10 Glen Cairn Arms	F05
11 Lambert Furniture site	A06
12 Lee Overall building	E06
13 Matrix Project	E06
14 Mercer Bus Garage	D07
15 Mercer County Courthouse	F06
16 Miller Homes site	D06
17 Museum of Contemporary Science	G07
18 North Clinton Project	C06
19 Polizzi's Market	F07
20 Public Works Facility	C06
21 Renaissance Estates	G06
22 Residence Building	E04
23 Roebling Block 2	F07

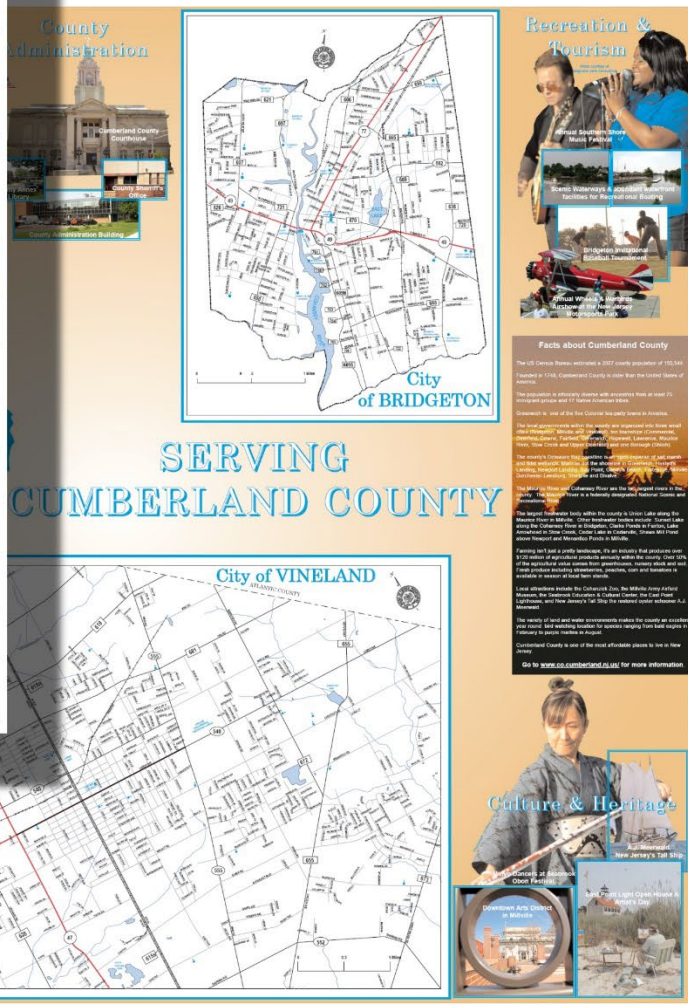
Project	Grid
24 Roebling Block 3	F07
25 Route 29 Blvd	G06
26 Rutherford Avenue Neighborhood	E04
27 State Urban Park	G05
28 Station Park Plaza II	E06
29 Stuyvesant Ave Restoration Phase II	E04
30 Trent House Square	G06
31 Trenton Town Center	F06
32 Vista Center	F06
33 Whittaker	F06
34 Woodrose at Front St and Warren St	F05
35 X Arena	C06
36 YMCA	G07
37 Campbell Homes	E04
38 Canal House Project	F05
39 Canal Plaza	E05
40 Catherine S. Graham	E05
41 Clarke Caton Hintz Architects	F05
42 Commonwealth Building	F06
43 Coopers Crossing	H06
44 Cracker Factory/Trenton Ferry	G06
45 Enterprise Ave	A06
46 Goat Hill Commons	H08

Project	Grid
47 Leewood at New Rose Street	D05
48 Leewood at Trenton Special Sites	A06
49 Leewood Renaissance North	E05
50 Old Trenton Neighborhood	E06
51 Pennington Ave	E06
52 Pennington Willow Plaza	E05
53 Project Freedom at Trent Center	E07
54 Southwest Village	F05
55 Southwest Village II	F04
56 Stuyvesant Ave Restoration Phase I	E04
57 Youth Build II	E06
58 Broad Street Bank building	F06
59 Daylight Twilight School	F06
60 Golden Swan	F05
61 Grant and Sheridan	D06
62 Patriot Village	D05
63 Taco Bell	G07
64 Titus/Pennington Ave	E05
65 Trenton Prospect House	D04
66 Trenton Train Station	E06
67 Youth Build I	E06
68 Suburban Fence	B06
69 Nexus Mill Hill	F06

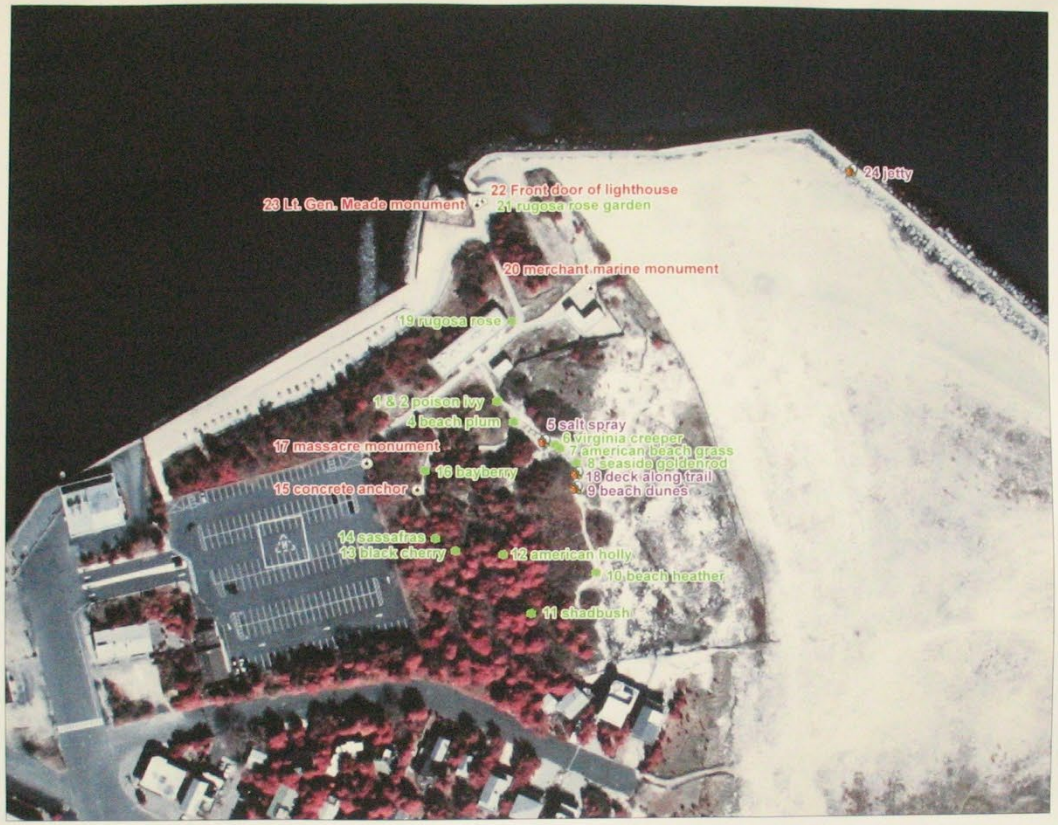
Project	Grid
70 League of Municipalities Headquarters	F05
71 104 Taylor	C06
72 Federated Metals	A06
73 Manex	F07
74 Marriott Hotel	F05
75 Dept of Agriculture	G06
76 Dept of Corrections	D02
77 Gregg Grant Park	D07
79 New Proposed Single Family Homes	E05
80 Housing Rehabilitation Project	E05
81 Facade Restoration Project	E05
82 Facade Restoration Project	E05
83 Facade Resoration Project	E05
84 Trenton Makes Industrial Park	D04
85 Pennington Avenue Shopping Village	D04
86 Assunpink Creek Culvert	F06
87 Oxford Street site	D05
88 Crane Site	C06
90 Throppo site	C07
91 Wachovia Bank Headquarters	F06
92 Trenton Train Station Area	E06
93 Higbee School	E05

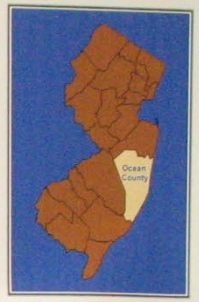
Project	Grid
94 Trenton Church of Christ site	E05
95 Horsman Doll Factory	G08
96 Eagle Tavern	G05
97 St. Francis Church complex	F05
98 Cityworks	F02
99 Cathedral Square	F05

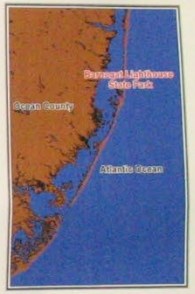

CUMBERLAND COUNTY
NEW JERSEY
PUBLISHED BY
CUMBERLAND COUNTY
BOARD OF CHOSEN FREEHOLDERS
COUNTY ADMINISTRATION BUILDING
790 EAST COMMERCE STREET
BRIDGETON, NJ, 08302
Legend
UPPER DEERFIELD
SHILOH
SLOW CREEK
HOPEWELL
BRIDGETON
GREENWICH
DEERFIELD
VINELAND
MILLVILLE
FAIRFIELD
LAWRENCE
DOWNE
MAURICE RIVER
COMMERCIAL
DELAWARE BAY


County Administration
Cumberland County Courthouse
City of BRIDGETON
Recreation & Tourism
Facts about Cumberland County
SERVING CUMBERLAND COUNTY
City of VINELAND
Education & Health
SJHC Regional Medical Center
Culture & Heritage

Using Global Positioning System (GPS) To Identify Spatial Features And Natural Resources of Barnegat Lighthouse State Park, Long Beach Island, Ocean County, NJ







GPS Data Collected: April 11, 2009

GPS unit:
Trimble Geo XT,
GeoExplorer Series

1 & # 2: Poison Ivy
Northing: 339052.61
Easting: 602873.70

3 & # 4: Beach Plum
Northing: 339024.85
Easting: 602895.95

5: Salt Spray Pruning
Northing: 338998.23
Easting: 602936.28

6: Virginia creeper
Northing: 338993.38
Easting: 602951.09

7: American beach grass
Northing: 338989.19
Easting: 602957.76

8: Seaside goldenrod
Northing: 338969.90
Easting: 602979.71

9: Beach dunes
Northing: 338935.83
Easting: 602979.65

10: Beach heather
Northing: 338822.77
Easting: 603006.10

11: Shadbush
Northing: 338767.79
Easting: 602918.55

12: American holly
Northing: 338846.85
Easting: 602881.28

13: Black cherry
Northing: 338852.02
Easting: 602817.29

14: Sassafras
Northing: 338868.62
Easting: 602790.68

15: Concrete anchor
Northing: 602767.16
Easting: 338933.39

16: Bayberry
Northing: 338958.91
Easting: 602776.70

17: Massacre monument
Northing: 338968.87
Easting: 602699.35

18: Deck Along Trail
Northing: 602980.92
Easting: 338955.50

19: Rugosa rosa
Northing: 339159.21
Easting: 602892.53

20: Merchant Marine Monument
Northing: 339202.70
Easting:602999.35

21: Rugosa rose garden
Northing: 339320.92
Easting: 602854.85

22: Front Door @ Ol' Barney
Northing: 339320.02
Easting: 602852.66

#23: Lt. Gen. Meade Monument
Northing: 339315.36
Easting: 602846.32

24: Jetty
Northing: 339364.78
Easting: 603350.88

Legend

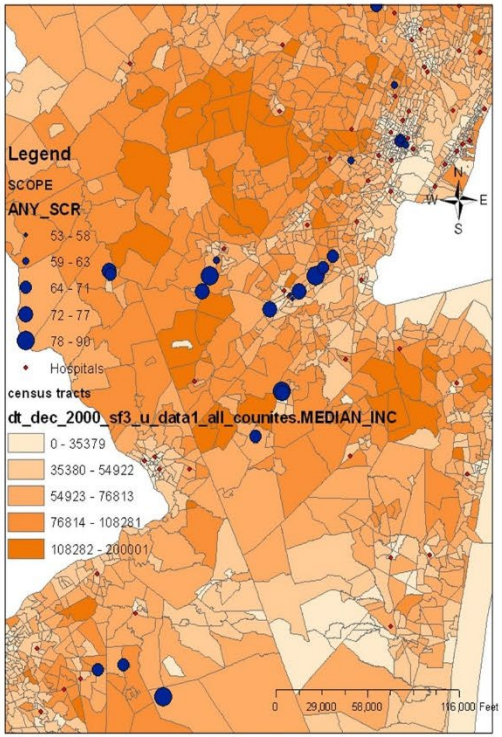
Long Beach Island-Points of Interest

Type

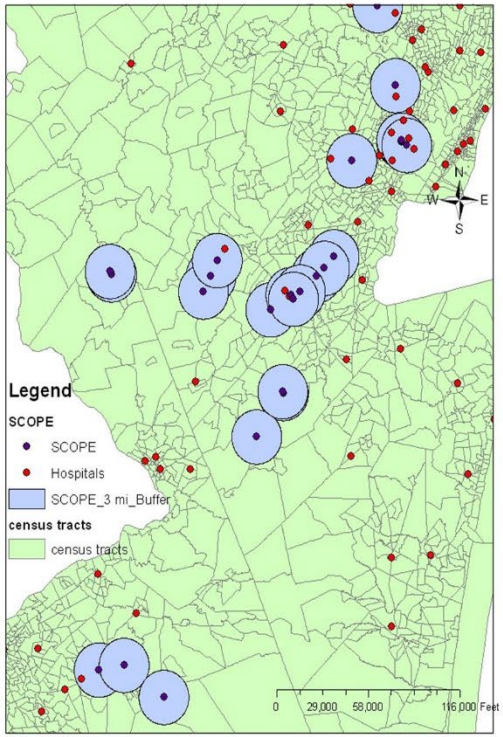
- Beach
- Historic
- Plant

Colorectal Cancer Screening In Primary Care

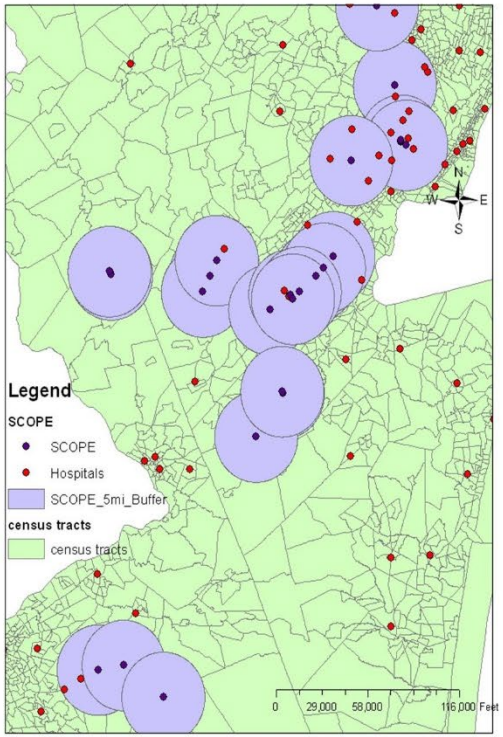
CRC Screening Rates for Select Practices with Median Income by Census Tract



SCOPE Practices with 3 Mile Buffer



SCOPE Practices with 5 Mile Buffer



- Cross-sectional data collected at baseline from a cancer screening intervention study (SCOPE) at UMDNJ
- Data: 25 primary care practices, point shapefile including 81 NJ hospitals, NJDEP roads, NJ census tracts
- Mapped % patients screened for colorectal cancer and used buffers to calculate distance to hospital
- Attribute data imported into SAS for statistical analysis using GEE to examine relationship between colorectal cancer screening and proximity of practice to hospital

	Miles From Practice to Nearest Hospital*			
	0-3 miles	3.1-5 miles	5.1-7 miles	7.1-10 miles
Patients who received CRC screening	66%	87%	71%	80%
Patients who did not receive CRC screening	34%	13%	29%	20%

*p= 0.0403 ; preliminary analyses shows possible difference in colorectal cancer screening rates based on distance from practice to nearest hospital

Produced in ArcView 9.2 by Karissa Hahn, MPH in collaboration with Pamela Ohman-Strickland, PhD

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