

APPENDIX E – ENVIRONMENTAL CONSTRAINTS

Environmental constraints within the Portway Extensions Study Areas were identified from existing published sources including: New Jersey Department of Environmental Protection (NJDEP), United States Geological Survey (USGS), New Jersey Historic Preservation Office (NJHPO), Environmental Data Resources, Inc. (EDR), etc. The types of environmental constraints considered include wetlands and flood prone areas, regulated sites, threatened or endangered species, public land/parkland and known cultural resources/archaeology. This effort was undertaken to identify preliminary key environmental constraints within the Portway Extensions Study Area that could affect or limit proposed concept solutions.










The Paterson Plank Road/Route 3 improvements and the NJTPKE Interchange 12 improvements have been evaluated in a more generic sense by use of available NJDEP digital data. Since these improvements consider existing corridors and roadways and the direct utilization of these existing roadways, the environmental constraints adjacent to or across these corridors will be less restrictive. Therefore, a more generic depiction of the existing environmental conditions has been provided.

1. Wetlands and Floodprone Areas

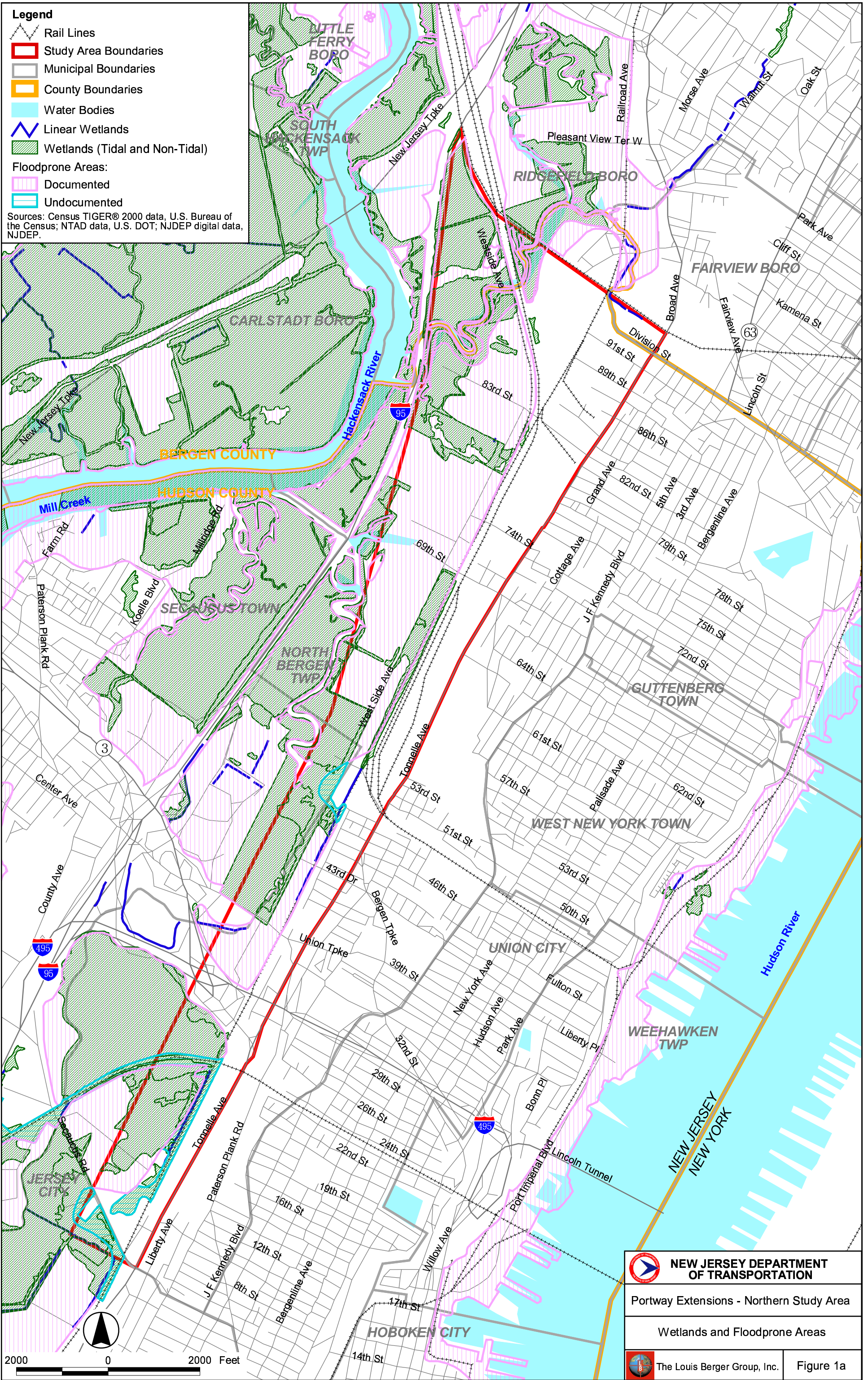
The wetland data utilized for the Portway Extensions Study Areas were published in 1999 and are based upon the 1986 *Wetlands of Bergen County, New Jersey*; 1986 *Wetlands of Essex County, New Jersey*; 1986 *Wetlands of Hudson County, New Jersey*; 1986 *Wetlands of Middlesex County, New Jersey*; and 1986 *Wetlands of Union County, New Jersey* coverages from the NJDEP GIS database. The wetland data contain all the natural and disturbed wetland categories of both the tidal and non-tidal wetlands for New Jersey counties, while the linear wetland data are a derivative of the New Jersey Freshwater Wetlands Mapping Program. Although open water areas are also considered wetlands, they are categorized separately. The floodprone areas data are comprised of USGS documented and undocumented floodprone areas from flood maps primarily in urban and developing areas in the state of New Jersey.



The wetland and floodprone areas in the Portway Extensions Study Areas are presented in Figures 1a through 1f. As depicted in Figures 1a through 1f, extensive wetland and documented floodprone areas have been identified throughout the Study Areas. The Northern Study Area (Figure 1a), portions of which are adjacent to the Hackensack River, contains a significant number of wetland areas. Documented floodprone areas also cover most of this Study Area, while linear wetlands are situated adjacent to segments of the rail line that runs through the approximate center of the Study Area. Figure 1b depicts wetlands and floodprone areas in the two areas within the Central Study Area, which traverse portions of the Hackensack River and Newark Bay. Several wetlands, as well as documented and undocumented floodprone areas, are found throughout this area.

Legend

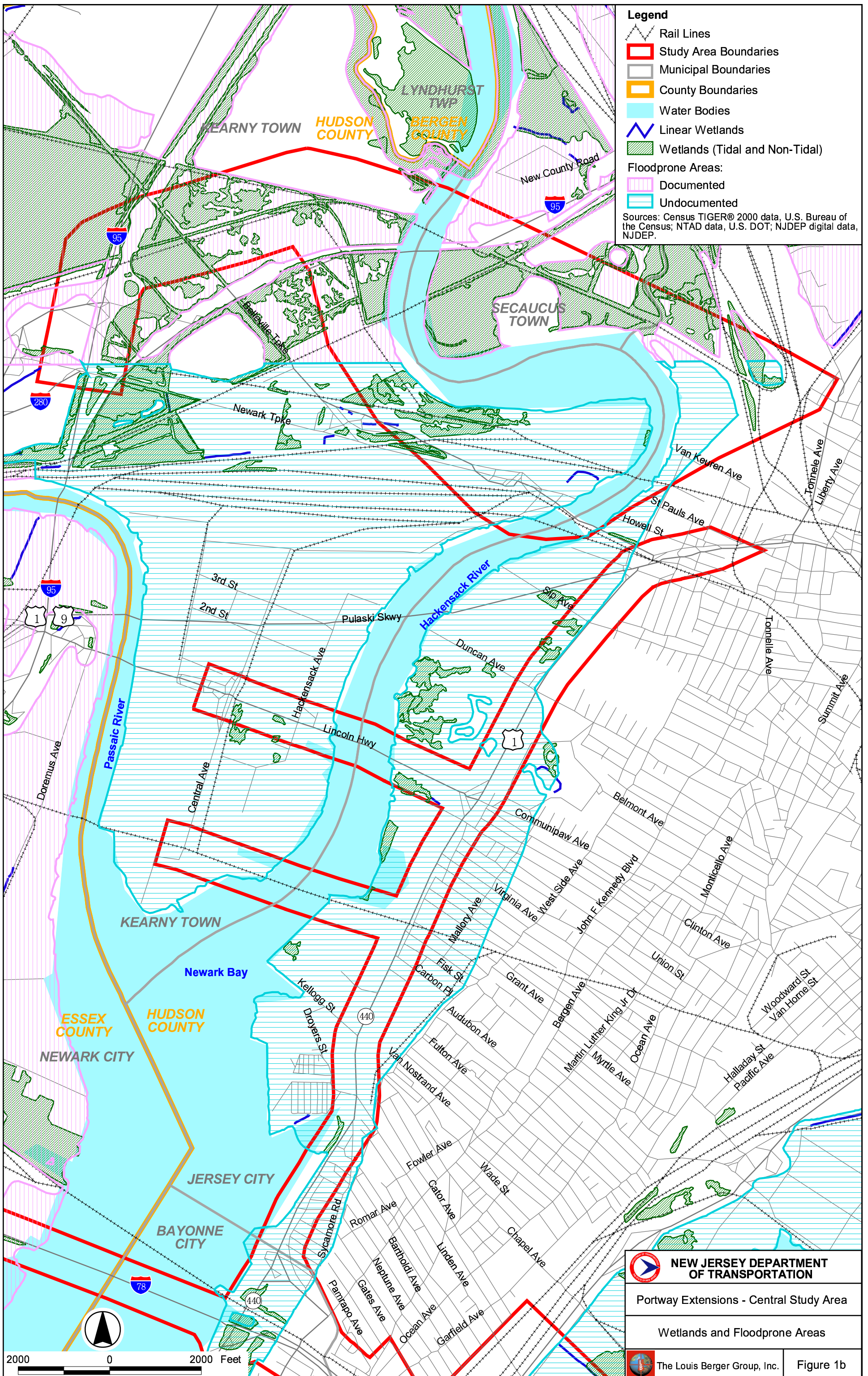
-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries
-  Water Bodies
-  Linear Wetlands
-  Wetlands (Tidal and Non-Tidal)
- Floodprone Areas:**
-  Documented
-  Undocumented

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.



 NEW JERSEY DEPARTMENT OF TRANSPORTATION	
Portway Extensions - Northern Study Area	
Wetlands and Floodprone Areas	
 The Louis Berger Group, Inc.	Figure 1a

2000 0 2000 Feet



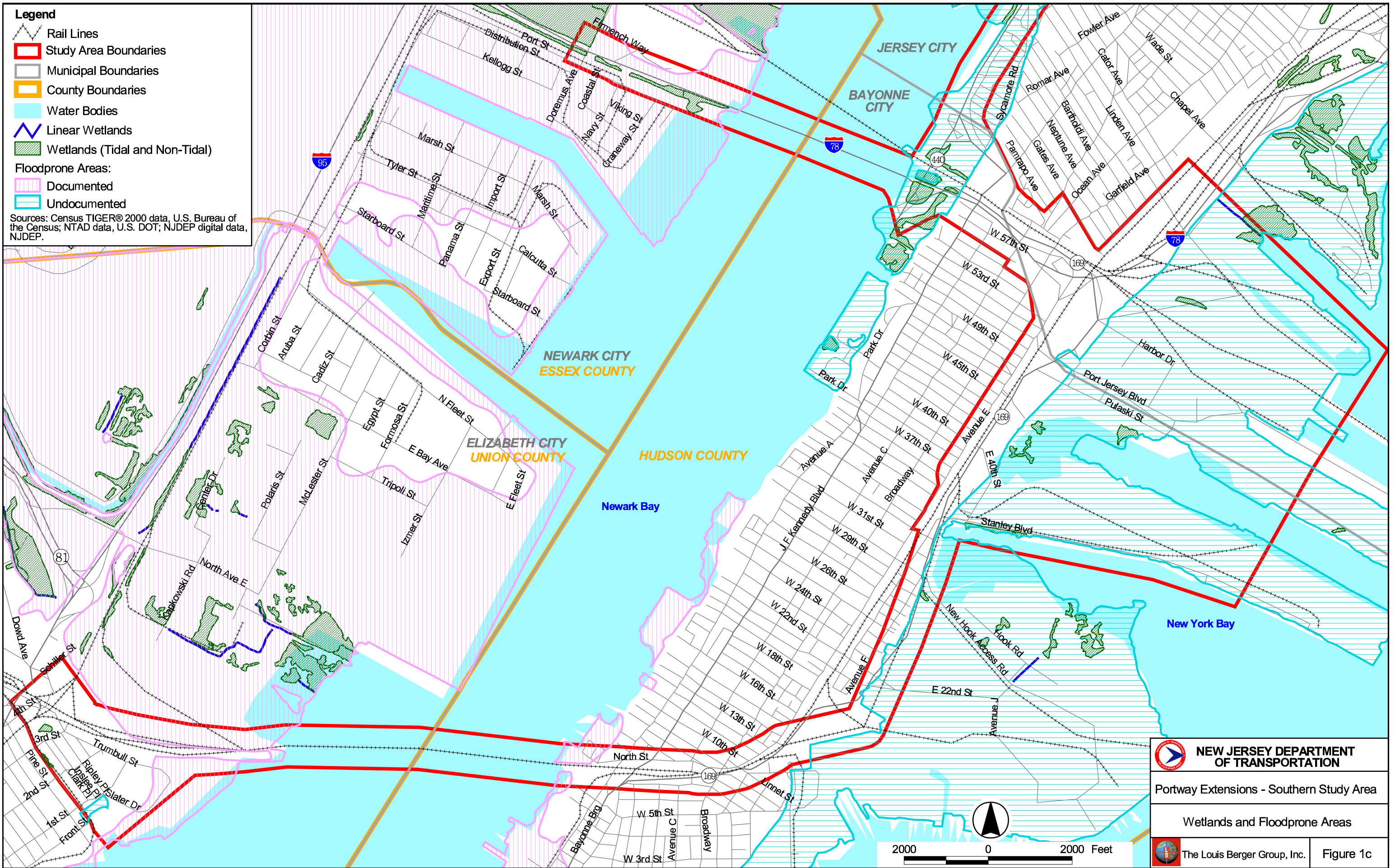
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- Rail Lines
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries
- Water Bodies
- Linear Wetlands
- Wetlands (Tidal and Non-Tidal)

Floodprone Areas:

- Documented
- Undocumented

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.










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Portway Extensions - Southern Study Area



Wetlands and Floodprone Areas

The Louis Berger Group, Inc. Figure 1c

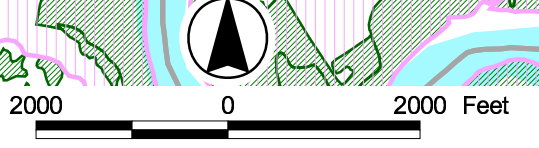
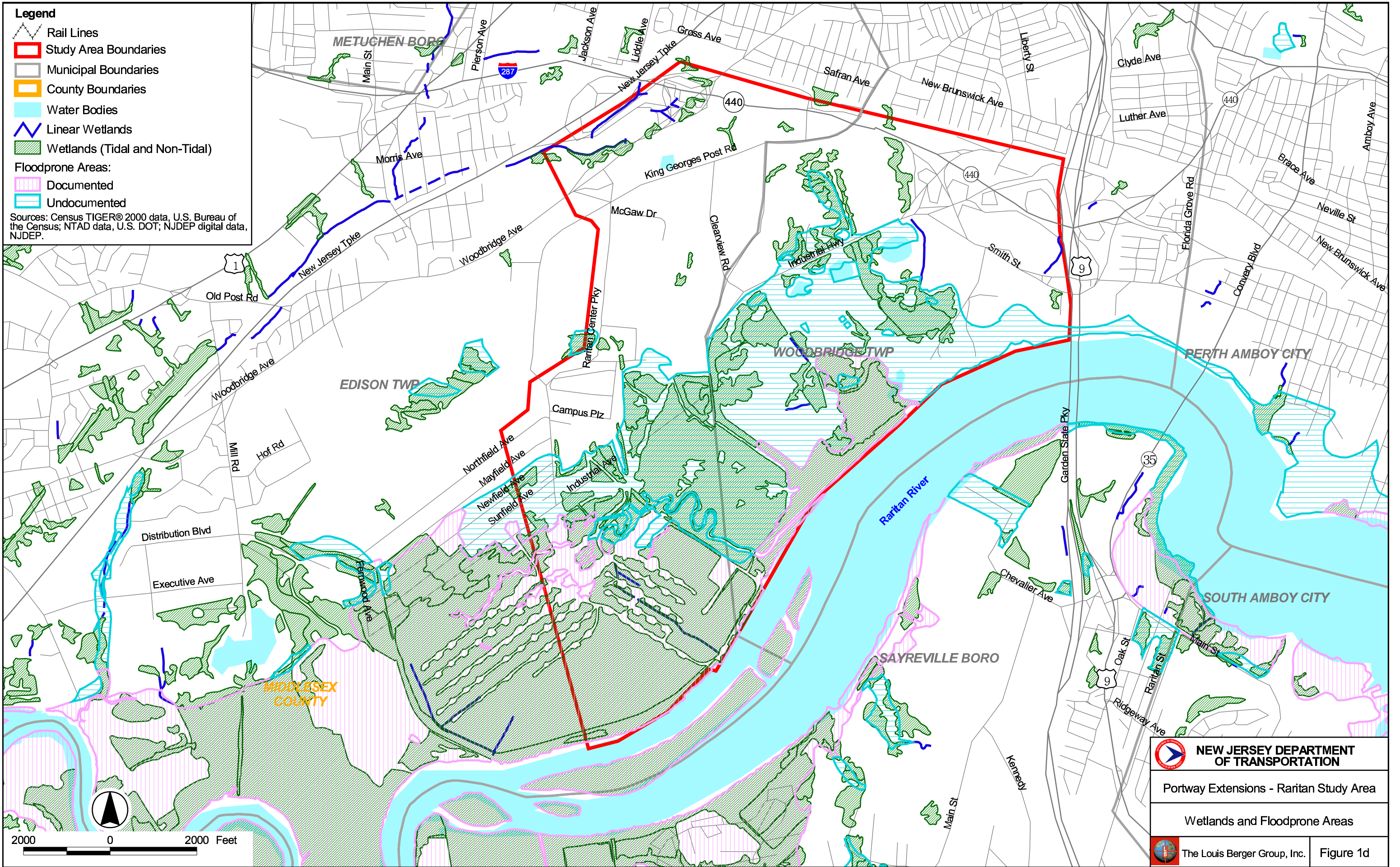
Legend


-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries
-  Water Bodies
-  Linear Wetlands
-  Wetlands (Tidal and Non-Tidal)

Floodprone Areas:

-  Documented
-  Undocumented


Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

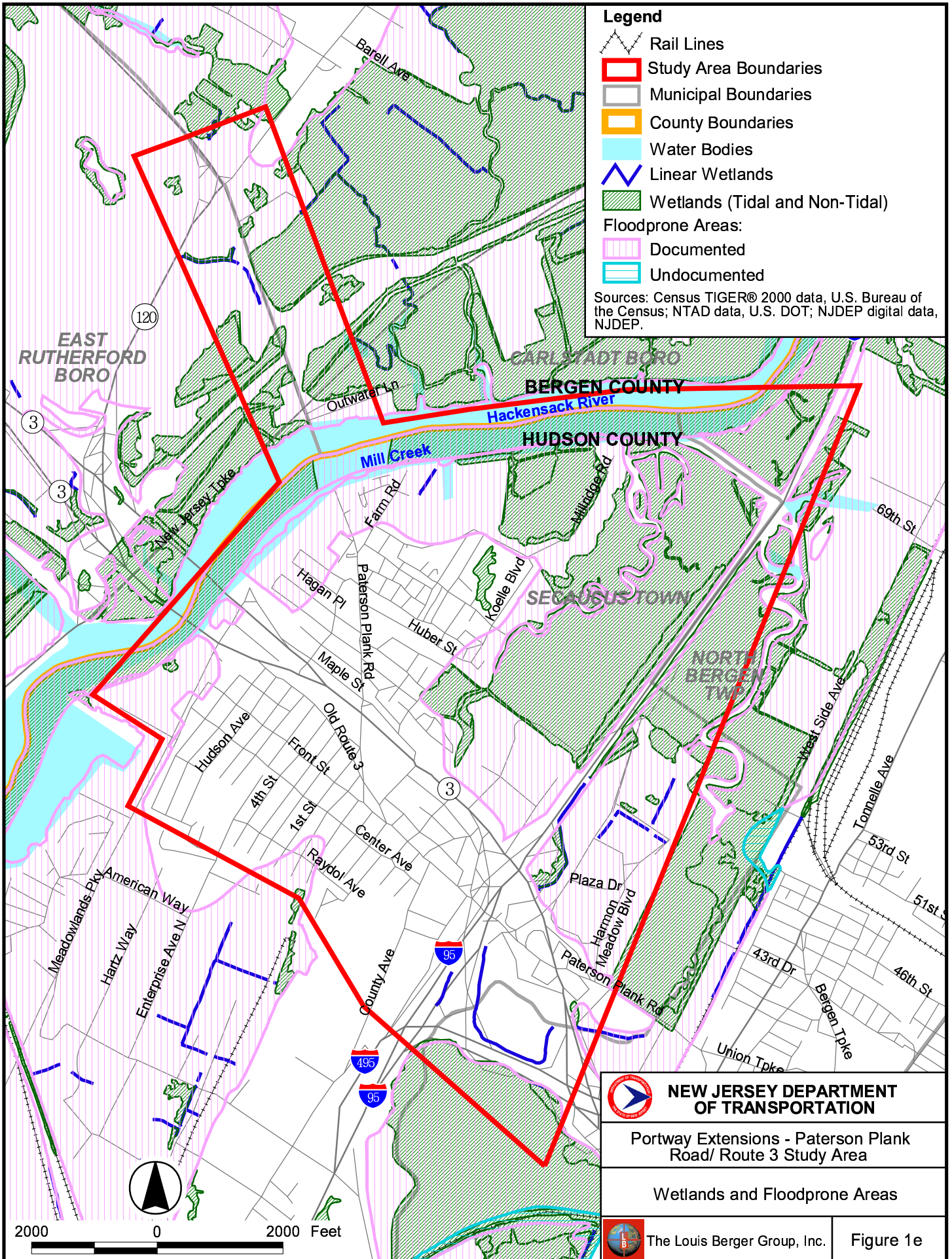


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Portway Extensions - Raritan Study Area

Wetlands and Floodprone Areas

 The Louis Berger Group, Inc. Figure 1d



Legend

- Rail Lines
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries
- Water Bodies
- Linear Wetlands
- Wetlands (Tidal and Non-Tidal)
- Floodprone Areas:**
- Documented
- Undocumented

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

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Portway Extensions - Paterson Plank Road/ Route 3 Study Area

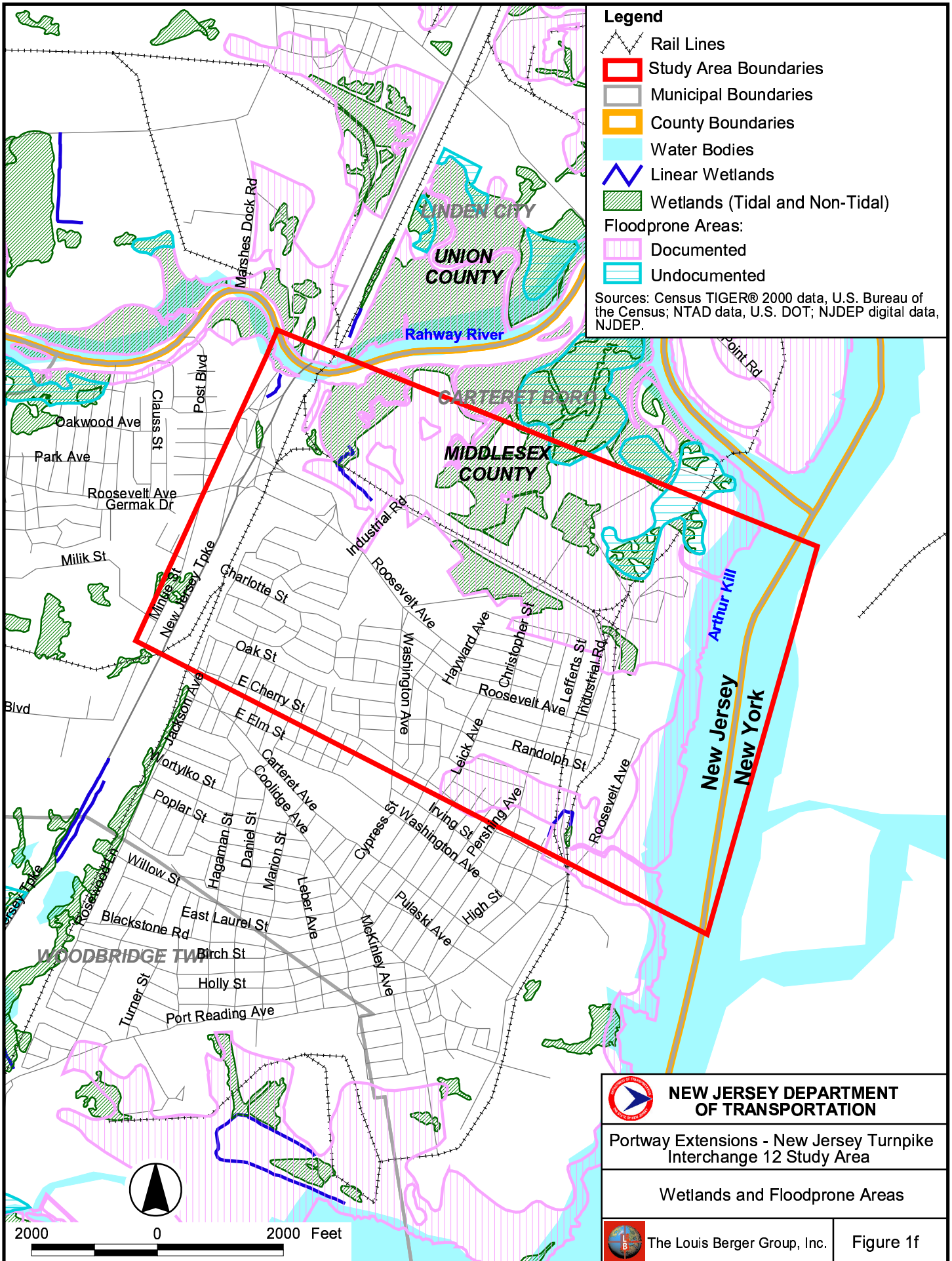
Wetlands and Floodprone Areas

The Louis Berger Group, Inc.

Figure 1e

2000 0 2000 Feet





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Portway Extensions - New Jersey Turnpike Interchange 12 Study Area

Wetlands and Floodprone Areas



The Louis Berger Group, Inc.

Figure 1f



2000 0 2000 Feet

The Southern Study Area, as represented in Figure 1c, includes portions of Newark Bay and New York Bay. Small wetland areas and pocket wetlands have been identified in this area to the west of Newark Bay and to the east of State Route 169. Documented and undocumented floodprone areas cover a significant amount of this area. Figure 1d depicts the wetlands and floodprone areas in the vicinity of the Raritan Study Area. Much of the Raritan Study Area is comprised of linear and polygonal wetlands, as well as documented and undocumented floodprone areas. Figures 1e and 1f depict the documented and undocumented wetland and floodprone areas for the Paterson Plank Road and Interchange 12 Study Areas, respectively. Most of the wetland areas that have been identified within the various Study Areas are tidally influenced.

2. Regulated Sites, Facilities and Known Contaminated Sites

The following presents the findings of a Hazardous Waste Screening Study (Screening Study) for the Study Areas. The purpose of the Screening Study was to identify the presence of any federally- or state-listed site within the Study Areas that could have the potential to adversely constrain proposed transportation improvements due to contamination by either hazardous substances or petroleum products; or through the use, storage or disposal of such substances.

The Screening Study was conducted in a manner consistent with the level of care and skill exercised by environmental professionals currently practicing under similar conditions, and was based on information made available to the representatives of The Louis Berger Group, Inc. (Berger), which conducted the screening. Such a review cannot be expected to reveal all hazardous materials or conditions that might be present within the corridor; the possibility exists that some hazardous materials or conditions might exist and not be detected because they are beyond the scope of this study. Additional information that was not made available at the time of this report's preparation may result in the modification of the information presented herein.

Methodology

For the purpose of the Screening Study, a 500-foot study corridor was utilized for most of the Study Areas. This corridor was modified in certain circumstances (e.g., extending the project area boundary to logical boundaries, natural or manmade, such as Cromakill Creek and Tonnelle Avenue in North Bergen). A search was conducted of federal and New Jersey regulatory agency databases for listed sites located within the Study Areas.

The databases discussed in this section were provided by Environmental Data Resources, Inc. of Southport, Connecticut, a commercial database search firm. To supplement the information obtained from the databases, Berger staff also utilized information from reports previously prepared by Berger for several projects that are located in Hudson County.

a. Federal Regulatory Agency Databases

Federal regulatory agency databases reviewed included the following:

- National Priorities List (NPL)
- Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List
- Resource Conservation and Recovery Information System (RCRIS) List
- Material Licensing Tracking System

1. National Priorities List

The U.S. Environmental Protection Agency's (U.S. EPA) *NPL (or Superfund) List* is a federal listing of uncontrolled or abandoned hazardous waste sites. The list is created from the CERCLIS database (see below) and is primarily based upon a score that each site or facility receives from the U.S. EPA's Hazardous Ranking System. After a site or facility has been identified as a CERCLIS site, the U.S. EPA conducts an assessment of the property. The ranking score associated with the degree of contamination found is one of the determinations made as to whether the site is placed on the NPL. These sites are then prioritized for possible long-term remedial action and are referred to the state for further action under the corresponding state programs.

2. CERCLIS List

The CERCLIS List is a compilation of records from a nationwide database created to maintain and regulate those facilities or sites that the USEPA has investigated or will investigate for suspected or uncontrolled releases of hazardous substances, contaminants or pollutants as reported by states, municipalities, private companies and private citizens under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or the Superfund Program). Once a site is placed on the CERCLIS list, it may be subjected to several additional levels of evaluation to determine the severity of the contamination. These levels of evaluation range from discovery and preliminary assessment to site inspection, and possibly to the Hazard Ranking System. Such a determination could ultimately place the site under consideration for inclusion on the NPL. It should be noted that inclusion on the CERCLIS list does not necessarily confirm the presence of an environmental problem or a public health threat.

3. Resource Conservation and Recovery Information System - Treatment, Storage, or Disposal Facilities (RCRIS-TSD)/RCRIS Corrective Action Activity (CORRACTS)

The Resource Conservation and Recovery Act (RCRA) program identifies and tracks hazardous wastes from the point of generation to the point of disposal. The RCRIS database tracks those facilities that treat, store and/or dispose of hazardous materials as defined by RCRA (referred to as TSD facilities). The RCRIS CORRACTS database identifies TSD facilities that have conducted, or are currently conducting, corrective action(s) as regulated under RCRA.

4. Resource Conservation and Recovery Information System Generators/Transporters (RCRIS Gen/Trans)

This list includes any operation that generates or transports hazardous waste and that must obtain a hazardous waste generator identification number or transporter permit. Inclusion on the RCRIS database is not necessarily indicative of contamination; rather, it indicates only the presence of potential sources of contamination.

5. Material Licensing Tracking System (MLTS)

This list is maintained by the Nuclear Regulatory Commission (NRC) and contains information on approximately 8,100 sites that possess or use radioactive materials and are subject to NRC licensing requirements.

b. New Jersey Regulatory Agency Databases

New Jersey regulatory agency databases reviewed included the following:

- State Hazardous Waste Sites (Known Contaminated Sites List)
- Hudson County Chromate Chemical Production Waste Sites List
- Solid Waste Facilities Databases
- Regulated Underground Storage Tank Contamination Report
- List of Major Facilities

1. State Hazardous Waste Sites

The *State Hazardous Waste Sites (SHWS) List* in New Jersey includes sites under the purview of the Department of Environmental Protection's (DEP's) Site Remediation Program that have contamination present at levels greater than the applicable cleanup criteria for soil and/or groundwater standards. This report includes sites being remediated under all the

various regulatory programs administered by the Site Remediation Program such as: the federal Superfund Program, RCRA, New Jersey's Industrial Site Recovery Act (ISRA), the state's Underground Storage of Hazardous Substances Act, the Spill Compensation and Control Act, the Solid Waste Management Act and the Water Pollution Control Act.

2. Hudson County Chromate Chemical Production Waste Sites List

The Hudson County Chromate Chemical Production Waste Sites List is an inventory of sites located throughout Jersey City, Bayonne, Kearny, Newark and Secaucus in Hudson and Essex Counties. NJDEP has identified over 160 sites that are contaminated with chromite ore processing residue, also known as chromate waste. The chromate waste was used as fill in preparation for building foundations, construction of tank berms, roadway construction, filling of wetlands, sewer construction and other construction and development projects. Chromate contamination has been found in a variety of places including the walls and floors of buildings, interior and exterior building surfaces, surfaces of driveways and parking lots and in the surface and subsurface of unpaved areas.

3. Solid Waste Facilities Databases

The state's solid waste databases are comprised of the *Landfill Location Database* and the *Transfer Station/Intermodal Container/Material Recovery Facility Database*.

4. Regulated Underground Storage Tank Contamination Report

New Jersey's *Regulated Underground Storage Tank Contamination Report* contains an inventory of reported leaking underground storage tank (LUST) incidents.

5. List of Major Facilities

New Jersey's *Major Facilities List* is an inventory of all "major facilities" as defined by the New Jersey Spill Compensation and Control Act and therefore subject to the requirements of the Act. These facilities are defined as those located on one or more contiguous or adjacent properties owned or operated by the same person, having a total combined storage capacity of 20,000 gallons or more for non-petroleum hazardous substances or 200,000 gallons or more of hazardous substances of all kinds.

c. Existing Conditions within the Study Areas






Three hundred three regulated sites contained in the above-mentioned databases are located on 197 properties within the study area. These 303 sites are located in 9 municipalities, as summarized in Table E-1 below.

Table E-1
Regulated Sites by Municipality

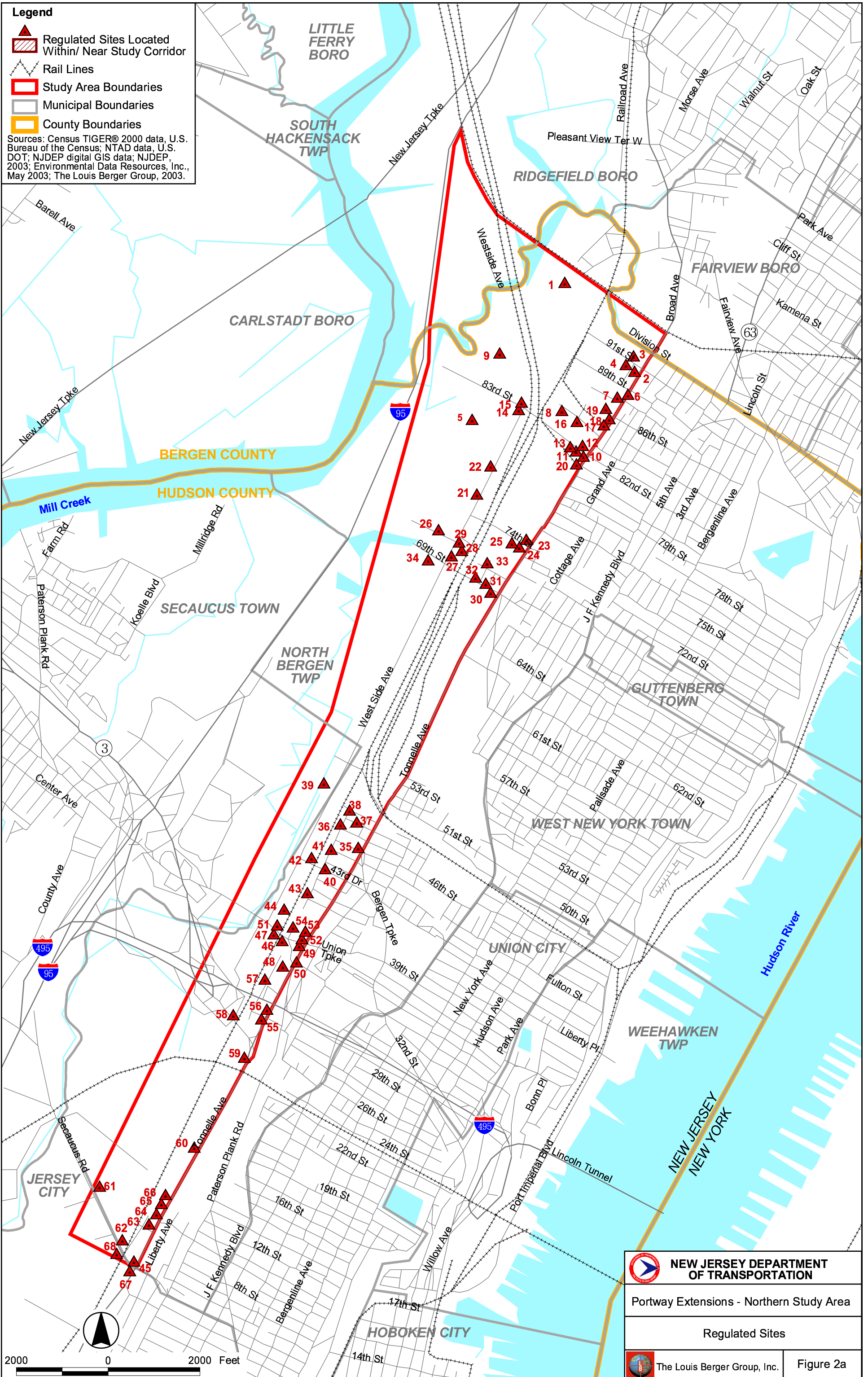
Municipality	Regulated Sites
North Bergen	110
Secaucus	1
Kearny	26
Jersey City	59
Newark	1
Bayonne	28
Elizabeth	17
Edison	42
Woodbridge	19



The regulated sites within the Study Areas are identified in Figures 2a through 2d (Regulated Sites) and are listed in Table E-2. Of these sites, 1 is an NPL site, 4 are CERCLIS sites, 132 are RCRIS listings, 1 is a MLTS facility, 55 are sites under the purview of New Jersey's Site Remediation Program (SHWS sites), 14 are chromate waste sites, 11 are solid waste facilities, 80 are LUST sites and 5 are defined as major facilities.

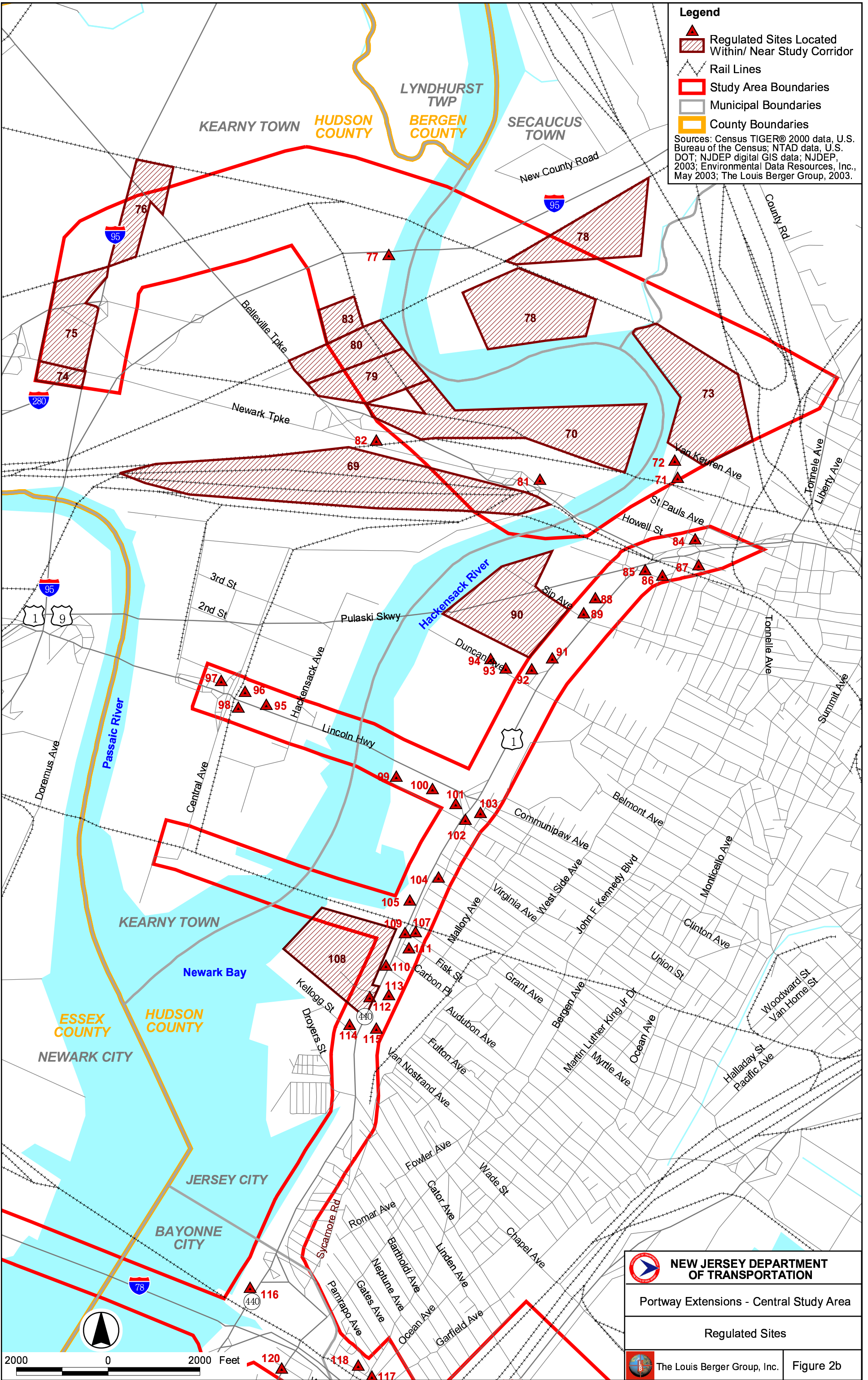
Legend

-  Regulated Sites Located Within/ Near Study Corridor
-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital GIS data; NJDEP, 2003; Environmental Data Resources, Inc., May 2003; The Louis Berger Group, 2003.




 NEW JERSEY DEPARTMENT OF TRANSPORTATION	
Portway Extensions - Northern Study Area	
Regulated Sites	
 The Louis Berger Group, Inc.	Figure 2a



Legend


- ▲ Regulated Sites Located Within/ Near Study Corridor
- ▨ Rail Lines
- ▭ Study Area Boundaries
- ▭ Municipal Boundaries
- ▭ County Boundaries

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital GIS data; NJDEP, 2003; Environmental Data Resources, Inc., May 2003; The Louis Berger Group, 2003.

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Portway Extensions - Central Study Area

Regulated Sites

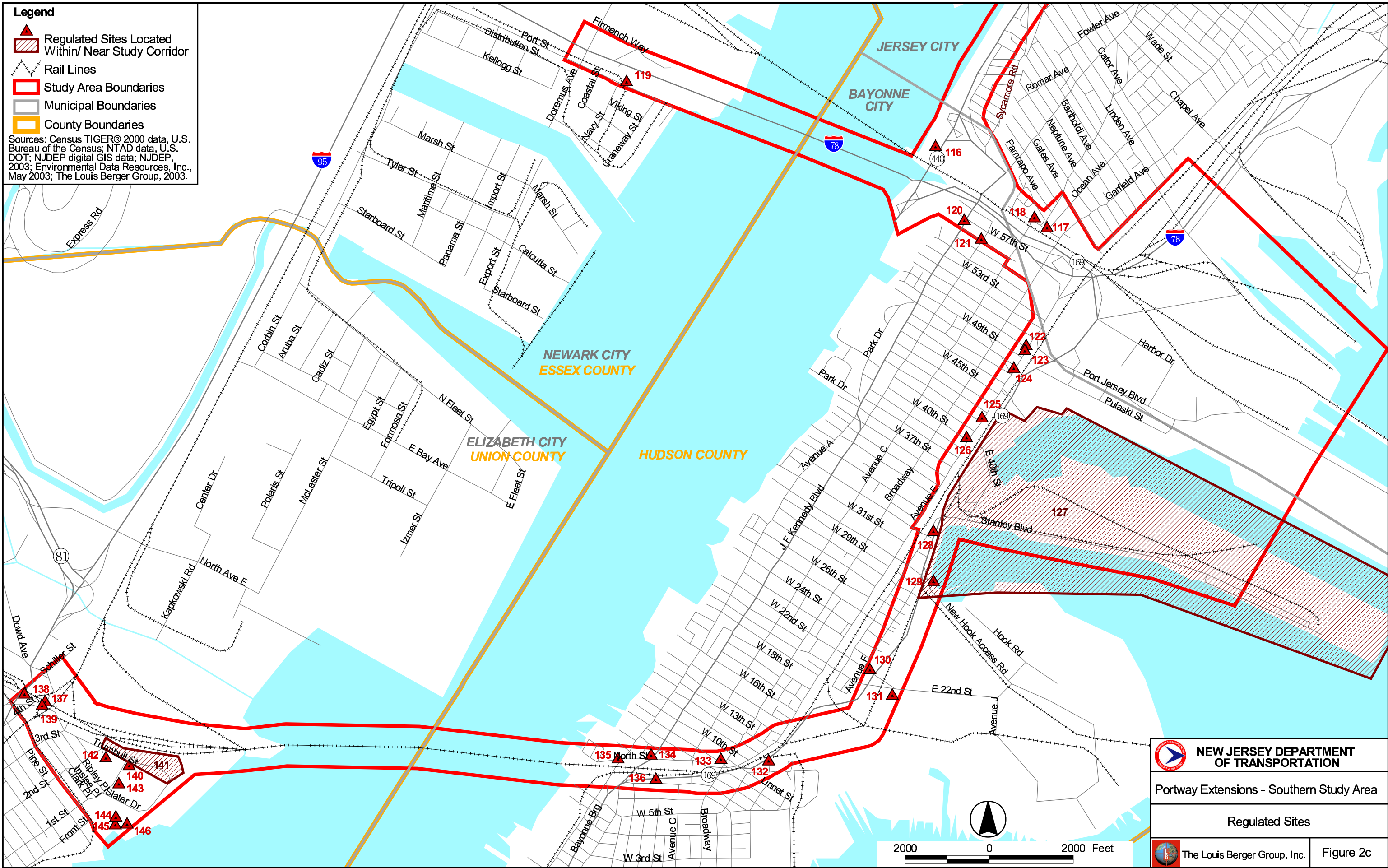
 The Louis Berger Group, Inc. **Figure 2b**


2000 0 2000 Feet

Legend

-  Regulated Sites Located Within/ Near Study Corridor
-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries


Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital GIS data; NJDEP, 2003; Environmental Data Resources, Inc., May 2003; The Louis Berger Group, 2003.







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Portway Extensions - Southern Study Area

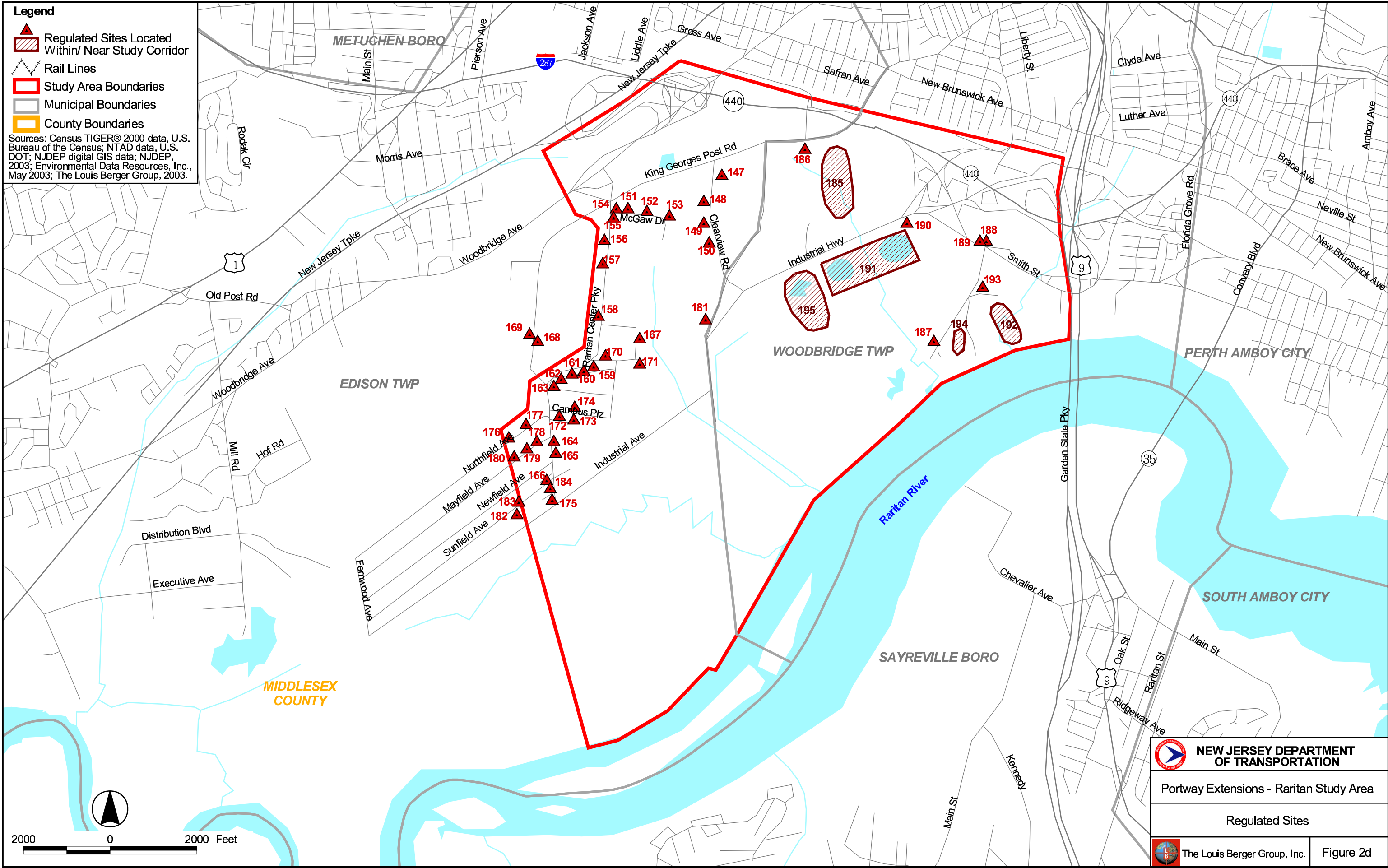
Regulated Sites



 The Louis Berger Group, Inc. **Figure 2c**

Legend

-  Regulated Sites Located Within/ Near Study Corridor
-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital GIS data; NJDEP, 2003; Environmental Data Resources, Inc., May 2003; The Louis Berger Group, 2003.



	NEW JERSEY DEPARTMENT OF TRANSPORTATION
Portway Extensions - Raritan Study Area	
Regulated Sites	
	The Louis Berger Group, Inc. Figure 2d

**TABLE E-2
REGULATED SITES
LOCATED IN THE STUDY AREA**

Map No.	Name	Location	NPL	CERCLIS	RCRIS	MLTS	SHWS	CHROMI	SWF/LF	LUST	MF
North Bergen											
1	Shopwell Distribution Center	2220 91 st Street			X						
1	Owens-Illinois Plant No. 11	2220 91 st Street			X						
2	Star Hartz, Ltd.	2075 91 st Street, Block A-1, Lot A-1			X						
3	International Distribution Centers, Inc.	2100 91 st Street			X					X	
3	Ryder Truck Rental, Inc.	2100 91 st Street, SE Section			X						
4	Kraft Food Service	2101 91 st Street								X	
4	McDonnell Douglas Truck Services	2101 91 st Street			X						
5	Hartz Mountain Industries	2400 83 rd Street			X						
6	Eckert Johnson Corporation	8825 Tonnelle Avenue			X						
7	APA Transport Corporation	2100 88 th Street			X		X			X	
8	W.R. Grace & Co.	2133 85 th Street			X						X
9	Federal Storage Warehouses	2500 83 rd Street					X			X	
10	Aries Corporation	2029 83 rd Street			X						
11	Bonanno Colonial	2101 83 rd Street			X						
12	AABE Meadowlands, Inc.	2102 83 rd Street			X						
13	Robert F. Orr	2111 83 rd Street			X						
14	Coastal Storage	West Side Avenue and 83 rd Street					X				
15	CSX/SeaLand Intermodal	2200 83 rd Street			X		X				
16	Staped Realty Corporation	2033-2045 85 th Street					X				
17	Hudson County Vocational School	8511 Tonnelle Avenue								X	
18	Consolidated Bleaching, Inc.	8555 Tonnelle Avenue			X						
19	Five Star Aluminum	2012 86 th Street			X					X	
20	Danara International, Ltd.	8101 Tonnelle Avenue			X						
20	Artko Wrecking Company, Inc.	8101 Tonnelle Avenue			X						
21	Production Arts	7777 Westside Avenue			X						
22	Kraftsman Group	7900 Westside Avenue			X		X				
23	Sponge Clean Products	2201 74 th Street			X		X				
24	Sears Logistic Service, Inc.	2220 74 th Street								X	
25	Mundet Cleanup	2245 74 th Street			X						
26	Starlight Trading	2500 71 st Street			X						
27	Liz Claiborne, Inc.	1 Claiborne Avenue			X						
28	Calvin Klein	7300 Westside Avenue			X						
29	Starlight Trading	7311 Westside Avenue								X	
30	Pathmark/Mack Affiliates	2115 69 th Street			X					X	
31	F&T Trucking Company, Inc.	6900 Nolan Avenue					X			X	
32	Ampesil Distributors	2200 69 th Street								X	
33	IMS Trading Company	7001 Roustein Avenue			X						
34	Caldor Inc. (Former)	6801 Westside Avenue								X	

TABLE E-2 (CONTINUED)
REGULATED SITES
LOCATED IN THE STUDY AREA

Map No.	Name	Location	NPL	CERCLIS	RCRIS	MLTS	SHWS	CHROMI	SWF/LF	LUST	MF
34	Hartz Mountain Industries, Inc.	6801 Westside Avenue			X					X	
35	Electronic Component Metals, Inc.	2025 46 th Street			X						
36	P&N/SJG Transfer Station & Materials Recovery Facility	4711 Dell Avenue			X				X	X	
37	Interstate Grocery Distribution Systems	2200 48 th Street					X			X	
38	American Air Compressor Corporation	Dell Avenue & 48 th Street			X		X				
39	Hickory Industries, Inc.	4900 Westside Avenue					X				
40	Rollins Truck Leasing	2201 43 rd Street			X					X	
41	Gerson Industries	4501 Dell Avenue								X	
42	North Bergen MUA	4306 Westside Avenue			X					X	
43	Lewisohn Sales Company	4001 Dell Avenue					X			X	
44	Coldform, Inc.	3850 Westside Avenue			X						
45	Fasolino Foods	4301-4315 Tonnelle Avenue			X					X	
45	Levolor Lorentzen, Inc.	4301-4315 Tonnelle Avenue			X						
46	Triangle Automotive	3426 Paterson Plank Road			X						
47	Putnam Fuels, Inc.	3445 Paterson Plank Road			X		X			X	
47	Alexanders Pallet Limited	3445 Paterson Plank Road							X		
48	Burlington Industries, Inc.	3440 Paterson Plank Road			X		X				
48	Routes 1&9, Section 7E	Tonnelle Avenue & Paterson Plank Rd.					X				
49	Sunoco Station	3422 Tonnelle Avenue			X						
49	Former Mobil Station	3422 Tonnelle Avenue					X			X	
50	Former Omar Gas Station	3411 Tonnelle Avenue					X			X	
51	Former Frias Tire & Mechanic	3510 Paterson Plank Road								X	
52	Dicari Paint & Auto Body Shop	3701 Tonnelle Avenue			X						
53	J.H. Haar & Sons, Inc.	3726 Tonnelle Avenue								X	
54	Naval Base Tavern	3701 Dell Avenue								X	
55	Hertz Penske Truck Leasing, Inc.	2801 Tonnelle Avenue			X						
56	Penske Truck Leasing Company, LP	2723 Tonnelle Avenue			X					X	
57	Any Prints, Inc.	3260 Dell Avenue			X						
58	North Bergen Gas Station No. 685	2800 Route 3 West								X	
59	Getty Station No. 56897	2501 Tonnelle Avenue			X					X	
60	Devon Tape Corporation	1511 Tonnelle Avenue			X		X				
61	NJ Bell Telephone Company	2700 Secaucus Road			X						
62	Pitman Company	515 Secaucus Road			X						
63	Glenco Transportation	900 Dell Avenue					X			X	
64	Mesco Realty/Service Station	1008 Tonnelle Avenue			X					X	
65	Giant International Trucks	1101 Tonnelle Avenue			X						
65	A-1 Delivery Service	1101 Tonnelle Avenue								X	
66	APA Transport	1207 Tonnelle Avenue			X		X			X	
67	Former NAS International	Tonnelle Avenue & Secaucus Road								X	
68		370 Secaucus Road					X				

**TABLE E-2 (CONTINUED)
REGULATED SITES
LOCATED IN THE STUDY AREA**

Map No.	Name	Location	NPL	CERCLIS	RCRIS	MLTS	SHWS	CHROME	SWF/LF	LUST	MF
Kearny											
69	Conrail Meadows Yard	Fish House Road								X	
70	Koppers Company – Seaboard Plant	Fish House Road & Harrison Turnpike		X	X						
71	Vineland Construction Company	135 Duffield Avenue								X	
72	Harvey – Jersey City	160 Duffield Avenue			X						
73	PSE&G Hudson Generating Station	Duffield & Van Keuran Avenues			X					X	X
74	Former MSLA 1-D Landfill	Newark-Jersey City Turnpike							X		
75	Former MSLA A1 Landfill	Route 280 & New Jersey Turnpike							X		
76	Kearny Drum Dump Nos. 1 & 4	Belleville Turnpike					X				
77	Chromate Site No. 131	Belleville Turnpike						X			
79	Former Standard Chlorine & Chemical	1015-1035 Belleville Turnpike					X	X			
80	Former Diamond Shamrock Corporation	Belleville Turnpike					X	X			
81	Chromate Site No. 145	2 Fish House Road						X			
82	Chromate Site No. 195	Belleville Turnpike & NJ Transit Road						X			
83	Janatex Company (Chromate Site No. 50)	993 Belleville Turnpike									
Secaucus											
78	Former Malanka Landfill	Foot of County Road							X		
Kearny											
95	Abandoned Warehouse/Talbot Hall	Hackensack Avenue & Lincoln Hwy.								X	
95	Coca-Cola USA	Hackensack Avenue & Lincoln Hwy.			X						
96	South Fire Station	81 Lincoln Highway								X	
97	T & R Oil, Inc. (Chromate Site No. 60)	61 Lincoln Highway					X	X		X	
97	T & R Tullo Truck Stop (Exxon Station)	61 Lincoln Highway									
97	Chemical Land Holdings, Inc.	61 Lincoln Highway			X						
98	Sarcona Trucking Company	100 Central Avenue			X						
Jersey City											
84	Exxon Station (Chromate Site No. 17)	103 Howell Street (Charlotte Circle)			X		X	X		X	
85	York Sheet Metal & Roofing Supply	191 Broadway					X			X	
86	Tabco, Inc.	171 Broadway			X						
87	Samson Stone Company	1000 Newark Avenue								X	
88	Recycling Specialists, Inc. (Chromate Site No. 99)	375 Routes 1&9			X		X	X			
89	ABF Freight System, Inc.	Route 1 & Sip Avenue			X						
89	Edlin, Ltd.	Route 1 & Sip Avenue			X						
89	Former Carolina Freight Yard	Route 1 & Sip Avenue								X	
90	PJP Landfill	400 Sip Avenue	X	X					X		
91	Jiffy Lube No. 1125	221 Routes 1&9								X	
92	Chrome Site No. 101	Route 1 & Stockton Avenue					X	X			
93	Plymouth Rock Transportation	400 Duncan Avenue			X					X	
94	Duncan Avenue Truck Stop	376 Duncan Avenue			X		X			X	

**TABLE E-2 (CONTINUED)
REGULATED SITES
LOCATED IN THE STUDY AREA**

Map No.	Name	Location	NPL	CERCLIS	RCRIS	MLTS	SHWS	CHROMI	SWF/LF	LUST	MF
99	Clendenny Outfall (Chromate Site No. 68)	Foot of Clendenny Avenue					X	X			
100	Colony Restaurant & Diner (Chromate Site No. 70)	Communipaw Avenue					X	X			
101	Chromate Site No. 71	Communipaw Avenue off of Route 1&9					X				
102	J & S Ford, Inc.	315 Clendenny Avenue			X					X	
103	Jersey City Auto Body	21 Marcy Avenue			X						
104	Dye Specialties, Inc.	3 Bennett Street			X						
105	DiFeo Body Shop	599 Route 440			X						
	J & S Ford, Inc.	599 Route 440					X			X	
106	Alpha Metals, Inc.	600 Route 440			X						
107	Alpha Metals, Inc.	250 Culver Avenue			X						
108	Jersey City Sewerage Authority	555 Route 440			X					X	
109	NJ Transit Area 3	Route 440 & Culver Avenue					X			X	
110	Jersey City Department of Public Works	575 Route 440					X			X	
111	Bob Ciasulli Toyota	10 Water Street								X	
112	Jersey City Incinerator Authority	507 Route 440			X				X	X	
113	Former Reyerson Steel (Chromate Site No. 117)	440 Route 440			X		X				
114	Roosevelt Lanes (Chromate Site No. 124)	427 Route 440					X	X			
115	Clean Machine Car Wash	425 Route 440					X			X	
117	Hall Salvage, Inc.	1 Ocean Avenue								X	
118	NJ Transit Bus Terminal	119 Meritt Street								X	
Newark											
119	CF Motor Freight	300 Port Street								X	
Bayonne											
116	Shell Service Station	1505 JFK Boulevard & Route 440			X						
120	Engine Co. 6/Ladder Co. 3, Bayonne Fire Department	57 th Street & Avenue B								X	
121	Former Service Station	1144 Avenue C								X	
122	Texaco Station No. 13005-10	800 Avenue E @ 50 th Street								X	
123	Stratford Industries, Inc.	795 Avenue E			X						
124	Exxon Station No. 3-2519	764 Avenue E			X					X	
125	Doolan's Auto Service	676 Avenue E								X	
126	Shell Service Station	640-650 Avenue E @ 40 th Street			X		X			X	
127	United States Army	Military Ocean Terminal – Foot of East 32 nd Street			X					X	
128	Former Bayonne Bus Garage	77 East 32 nd Street								X	
129	Route 169 – Section 1G	Route 169 & 30 th Street					X				
130	Kenrich Chemical (Chromate Site No. 152)	140 East 22 nd Street			X		X	X			

**TABLE E-2 (CONTINUED)
REGULATED SITES
LOCATED IN THE STUDY AREA**

Map No.	Name	Location	NPL	CERCLIS	RCRIS	MLTS	SHWS	CHROMI	SWF/LF	LUST	MF
131	White Chemical Corporation	Hook Road and East 22 nd Street			X		X				
132	PSE&G Former Hobart Avenue Gas Works	Oak Avenue & Oak Court West		X	X						
133		17 West 9 th Street					X				
134	Shulman Oil Company	256 Kennedy Boulevard			X						
135	Demolition Site	North Street & Avenue A								X	
136	Ideal Aluminum Products, Inc.	100 West 7 th Street			X		X			X	
Elizabeth											
137	Tyco Plastics	100 Dowd Avenue & Trumbull Street			X						
138	Brady Marine Repair	399-419 Trumbull Street								X	
138	Etal Associates	419 Trumbull Street								X	
139	Former Eastern Tea Company	400 Trumbull Street					X			X	
140	Papetti Hygrade Egg Products	100 Trumbull Street			X						
141	Guilden Development Company, Inc.	107 Trumbull Street			X						
141	Topco, Inc.	107 Trumbull Street			X						
141	General Film Products, Inc.	107 Trumbull Street			X						
141	Columbus Manufacturing Corporation	107 Trumbull Street			X						
141	Vangarde Finishing Company	107 Trumbull Street			X						
142	Elizabeth Board of Education	130 Trumbull Street			X						
143	Olympia Trails Bus Company	349 First Street			X						
144	J. Rabinowitz & Sons, Inc.	1 Slater Drive			X						
145	Kristen Distributing Company	2 Slater Drive			X					X	
146	Consolidated Plastics, Inc.	28-36 Slater Drive					X				
Edison											
147	Raritan Periodicals Sales	125 Clearview Avenue					X			X	
148	Sanofi Beaute, Inc.	200 Clearview Avenue			X						
149	Federal Express	305 Clearview Avenue			X					X	
150	Macy's Raritan Distribution Center	401 Clearview Avenue								X	
151	American Standard	100 McGraw Drive			X						
152	Bamboo Abbott	120 McGraw Drive			X						
153	Micro Generation	300 McGraw Drive			X						
154	Federal Express	80 Raritan Center Parkway			X						
155	Allegiance Corporation	100 Raritan Center Parkway			X						
156	Jacobson Warehouse Company, Inc.	175 Raritan Center Parkway			X						X
157	Applause, Inc.	180 Raritan Center Parkway			X						
158	Turner Spares, Ltd.	195 Raritan Center Parkway			X						
159	Wakefern Food Corporation	230 Raritan Center Parkway			X						
160	New England Critical Care, Inc.	234 Raritan Center Parkway			X						
161	TRM Copy Centers Corporation	254 Raritan Center Parkway			X						
162	Environmental Testing & Certification	284 Raritan Center Parkway									
163	KEW Corporation	304 Raritan Center Parkway					X				
164	PSE&G Fleet Maintenance Center	350 Raritan Center Parkway			X						
165	Habisit Belting, Inc.	400 Raritan Center Parkway			X						

**TABLE E-2 (CONTINUED)
REGULATED SITES
LOCATED IN THE STUDY AREA**

Map No.	Name	Location	NPL	CERCLIS	RCRIS	MLTS	SHWS	CHROME	SWF/LF	LUST	MF
166	Petroleum Chemical Technology	455 Raritan Center Parkway					X				
167	Universal General Sheet Metal	30 Parkway Place			X					X	
168	Quanterra	165 Fieldcrest Avenue			X						
169	International Technology	167 Fieldcrest Avenue				X					
170	United Parcel Service	1 Clover Place			X					X	
171	Alcoa Recycling	100 Clover Place			X						
172	Sir Speedy No. 7050	28 Campus Drive			X						
173	Chesterton Metropolitan	65 Campus Drive			X						
174	Cambridge Instruments	85 Campus Drive			X						
175	455 Raritan Center Auto	523 Raritan Center Parkway									
176	EDS Corporation	41 Northfield Avenue								X	
177	Chesterton Metropolitan	27 Northfield Avenue			X						
178	Creative Data Services	12 Mayfield Avenue			X						
179	Aeropharm Technology, Inc.	18 Mayfield Avenue			X						
180	Marriott NJ Textiles	65 Mayfield Avenue			X						
181	Metro Warehouse & NTS	100 Industrial Avenue			X						
182	Marine Drive Systems	107 Sunfield Avenue			X						
183	DHL	104 Sunfield Avenue								X	
183	Garden State Buildings (Raritan Center)	104 Sunfield Avenue					X				
184	Federal Storage Warehouses, Inc.	802 Raritan Center Parkway					X				
Woodbridge											
185	Hatco Chemical Corporation	1020 King Georges Post Road		X	X						X
186	Fuji Photo Film USA	1100 King Georges Post Road			X						X
187	Woodbridge Township School District	60 Crows Mill Road			X						
188	Metro Disposal	440 Smith Street			X						
189	Lawn Mate	477 Smith Street								X	
190	Praxair, Inc.	Industrial Avenue			X		X				
191	Cardell, Inc.	1000 Industrial Avenue			X				X		
192	Raritan River Terminals	Bayview Avenue and Crows Mill Road							X		
193	Blandford Land Development Corporation	100 Bayview Avenue							X		
193	A.J. Ross Logistics, Inc.	100 Bayview Avenue			X		X				
194	Carborundum Corporation	End of Crows Mill Road			X						
195	Former Tenneco Landfill	Industrial Avenue							X		
195	Tenneco Polymers	Industrial Avenue & Old Meadow Road			X						

NPL – National Priorities List (Superfund)
RCRIS - Resource Conservation and Recovery Information System
SHWS – State Hazardous Waste Site
CHROME - Hudson County Chromate Chemical Production Waste Sites

SWF/LF – Solid Waste Facility (Landfill or Transfer Station)
LUST - Leaking Underground Storage Tank Incidents
MF – Major Facility
MLTS – Material Licensing Tracking System

Map references correspond to Figure 2.

Source: Environmental Data Resources, Inc., May 2003, New Jersey Department of Environmental Protection, June 2003 and The Louis Berger Group, Inc., June 2003.

1. North Bergen

The Northern Study Area, located in North Bergen, contains 110 regulated sites on 68 properties. These sites include 52 RCRIS listings, 21 SHWS sites, 2 solid waste facilities, 34 LUST sites and 1 major facility (see Figure 2a).

2. Secaucus

The Secaucus portion of the Northern Study Area contains one site, the former Malanka Landfill, which is located at the foot of County Road (see Figure 2a).

3. Kearny

The Central Study Area corridor in Kearny includes 19 properties that contain 1 CERCLIS site, 6 RCRIS sites, 4 SHWS sites, 6 chromate waste sites, 2 solid waste facilities, 6 LUST sites and 1 major facility (see Figure 2b).

4. Jersey City

Within the Central and Southern Study Areas, in Jersey City, there are 30 properties which contain 1 NPL site, 1 CERCLIS site, 16 RCRIS sites, 15 SHWS sites, 7 chromate waste sites, 2 solid waste facilities and 17 LUST sites (see Figures 2b and 2c).

5. Newark

Within the Southern Study Area in Newark, 1 LUST site has been identified (see Figure 2c).

6. Bayonne

In Bayonne, in the Southern and Central Study Areas, 18 sites have been identified within the two Study Areas. These sites include 1 CERCLIS site, 10 RCRIS sites, 6 SHWS sites, 1 chromate waste site and 10 LUST sites (see Figures 2b and 2c).

7. Elizabeth

In the Southern Study Area, which includes Elizabeth, 11 RCRIS sites, 2 SHWS sites and 4 LUST sites located on 11 properties have been identified (see Figure 2c).

8. Edison

In the Raritan Study Area, which includes Edison, 28 RCRIS sites, 1 MLTS site, 5 SHWS sites, 7 LUST sites and 1 major facility located on 38 properties have been identified (see Figure 2d).

9. Woodbridge

In the Study Area which includes Woodbridge, 1 CERCLIS site, 9 RCRIS sites, 2 SHWS sites, 4 SWF/LF sites, 1 LUST site and 2 major facilities located on 11 properties have been identified (see Figure 2d).

Most of the Raritan Study Area is located on land that was once part of the U.S. Army's Raritan Arsenal. The former Raritan Arsenal site, located on the banks of the Raritan River, consisted of approximately 3,200 acres and was actively operated by the U.S. Army between 1917 and 1963. Operations at the site consisted of the receipt, storage, shipment and/or decommissioning of ordnance, arms and machinery. During this period, some waste materials, including ordnance and chemical agents (mustard gas, red nitric acid, and miscellaneous chemicals), were reportedly buried on-site. It has also been reported that explosive materials were destroyed by surface burning or burning in chamber pits. Accidental explosions in magazine buildings and outdoor storage areas reportedly scattered explosive materials over large areas, and forced ordnance fragments into the ground. Studies by the Army and U.S. EPA have found volatile organic compounds, metals, pesticides and other contaminants in groundwater and surface water and soils at the site. The site was decommissioned by the Army in 1963, at which time the Army conducted decontamination operations at the site as part of the phase-out process under the direction of personnel from the Letterkenny Army Depot (LEAD) and the Army Material Command Safety Office. LEAD designated 17 areas as potentially contaminated with ordnance and/or chemicals. Subsequently, the Army recommended that each area be designated as "unrestricted use", "surface use only", or "non-use" as deemed appropriate. Areas designated as "surface use only" and "non-use" included pits possibly holding potassium cyanide and mustard gas containers, and areas which potentially contained live ordnance.

3. Threatened or Endangered Species

The *Natural Heritage Priority Sites* database identifies habitats for rare plant and animal species and natural communities in the state. This database contains some of the best and most viable occurrences of endangered and threatened species and natural communities. Figures 3a through 3f depict the natural heritage priority sites that have been identified within and in the vicinity of the Portway Extensions Study Areas. These figures also depict protected open space, open space recreation areas and parks which are discussed in the following section. As depicted in Figure 3b, a small area of the Kearny Marsh Natural

Heritage Priority Site is located in the northwestern corner of the Central Study Area. Also, the Globex Terminal Site is situated adjacent to New York Bay and approximately 2,000 feet east of the Southern Study Area boundary (see Figure 3c).

The Hackensack Meadowlands District boundaries were obtained from the New Jersey Meadowlands Commission. The western half of the Northern Study Area and the northernmost portion of the Central Study Area lie within this district, which generally delineates the Hackensack Meadowlands habitat complex (see Figures 3a and 3b). This complex encompasses the remaining wetlands and open space habitats that support significant concentrations of waterfowl, wading birds, shorebirds, raptors, anadromous fish, and estuarine fish. This wetland area is the largest remaining brackish wetland complex in the New York - New Jersey Harbor Estuary (approximately 3,400 hectares). These expansive marshlands support seasonal or year-round populations of 88 species of special emphasis or listed species, incorporating 29 species of fish and 55 species of birds, and include several federally and state-listed species.

4. Public Land/Parkland

Figures 3a through 3f also depict the region's open space and parkland resources for the various Study Areas. The base mapping was prepared from NJDEP's *Protected Open Space and Recreation Areas in New Jersey* database, comprised of state owned protected open space and recreation areas. The NJDEP database was supplemented by county, municipal and privately owned open space and recreation area data including parks, golf courses and cemeteries from existing Bergen, Essex, Hudson, Middlesex and Union County maps (Hagstrom Map Company, Inc.®, 2000).









Public recreational lands and parkland are environmental constraints because they are potentially protected Section 4(f) resources under the United States Department of Transportation Act (USDOT) of 1966, as amended 49 U.S.C., 303 and 23 U.S.C. 138. A Section 4(f) evaluation is required for any federally funded transportation project that uses property from a publicly owned park, recreation area, wildlife and waterfowl; or land from an historic site or National, State, or local significance as determined by the officials with jurisdiction over the park, recreation areas, refuge, or site. The Secretary of Transportation may approve a transportation program or project requiring the use of Section 4(f) land only if:

- there is no prudent or feasible alternative to using that land; and
- the project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuges or historic site resulting from the use.

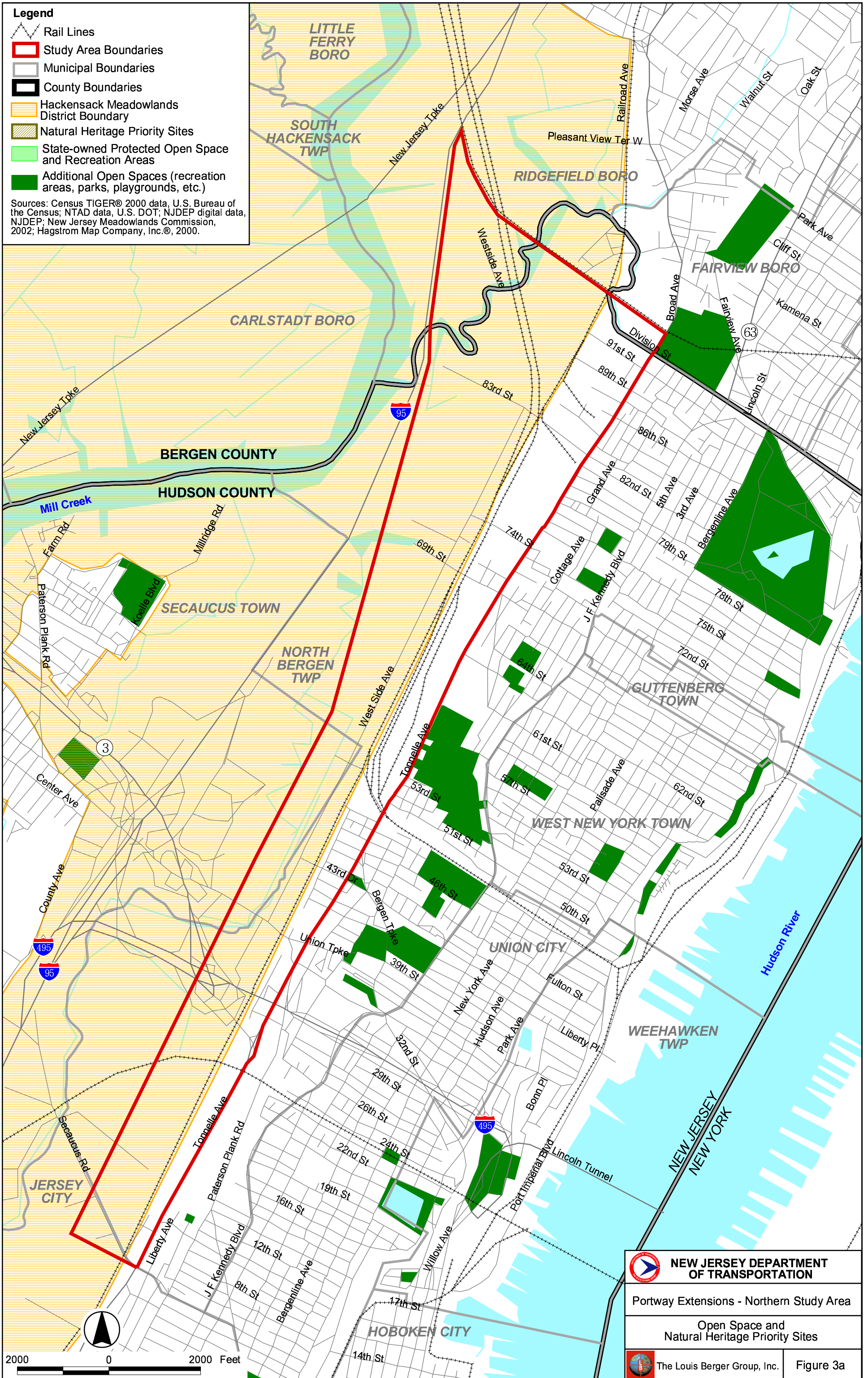
As shown in Figure 3a, while the area surrounding the Northern Study Area contains many open space resources, the Study Area itself does not contain any public land or parkland.



The Central Study Area, however, contains several greenspace/recreational resources, as illustrated in Figure 3b, including one which is a state-owned and protected open space and recreation area (Saw Mill Creek). These recreational areas are located immediately adjacent to U.S. Route 1 and State Route 440, two important and heavily travelled truck corridors which extend through the Central Study Area. Figures 3c and 3d identify small areas of open space within the boundaries of the Southern and Raritan Study Areas. As depicted in Figures 3b-3d, many of the parks and open space areas are located along or in close proximity to existing major commuter and truck travel routes.

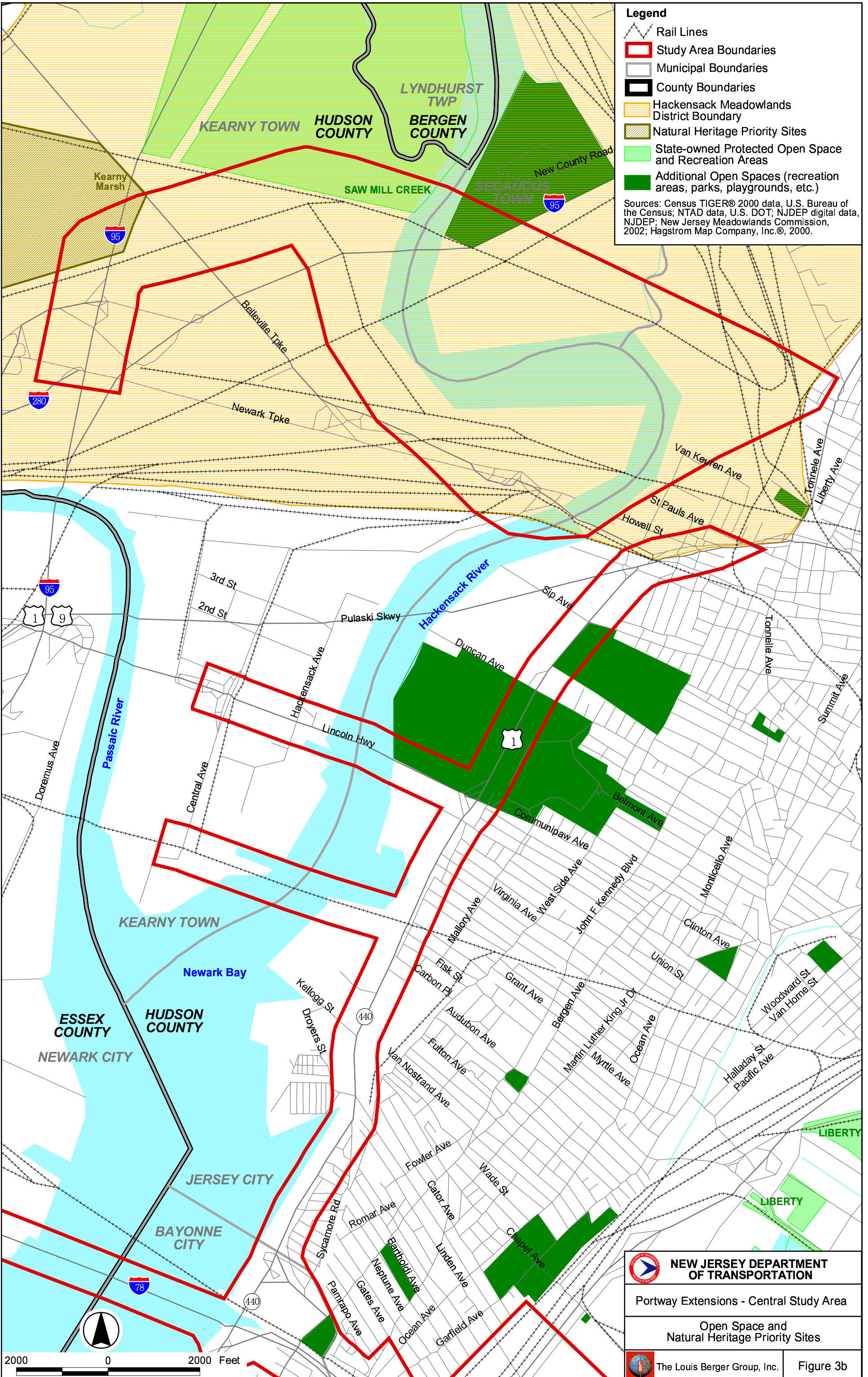
Legend

-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries
-  Hackensack Meadows District Boundary
-  Natural Heritage Priority Sites
-  State-owned Protected Open Space and Recreation Areas
-  Additional Open Spaces (recreation areas, parks, playgrounds, etc.)

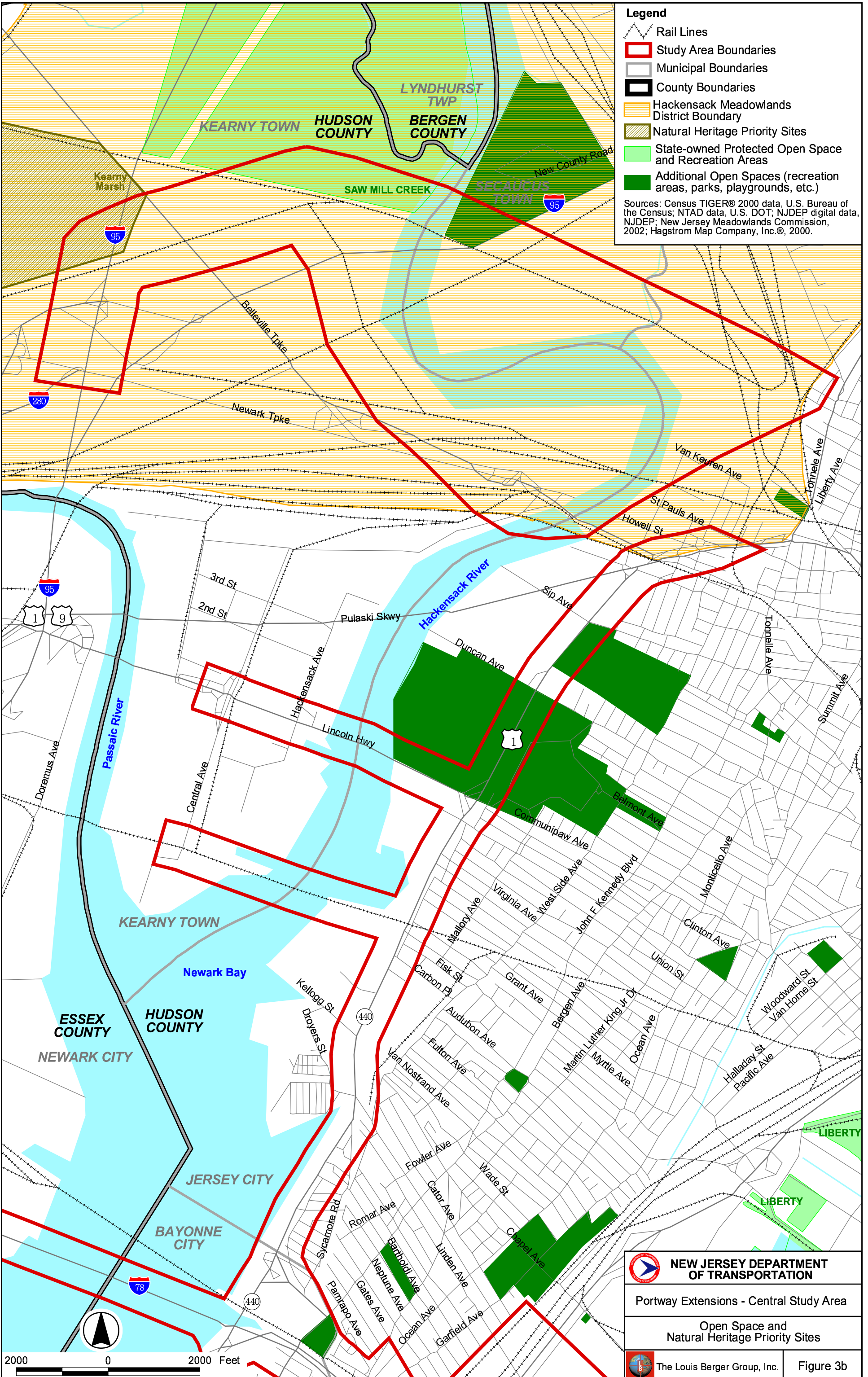
Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP; New Jersey Meadows Commission, 2002; Hagstrom Map Company, Inc.®, 2000.










 NEW JERSEY DEPARTMENT OF TRANSPORTATION	
Portway Extensions - Northern Study Area	
Open Space and Natural Heritage Priority Sites	
 The Louis Berger Group, Inc.	Figure 3a



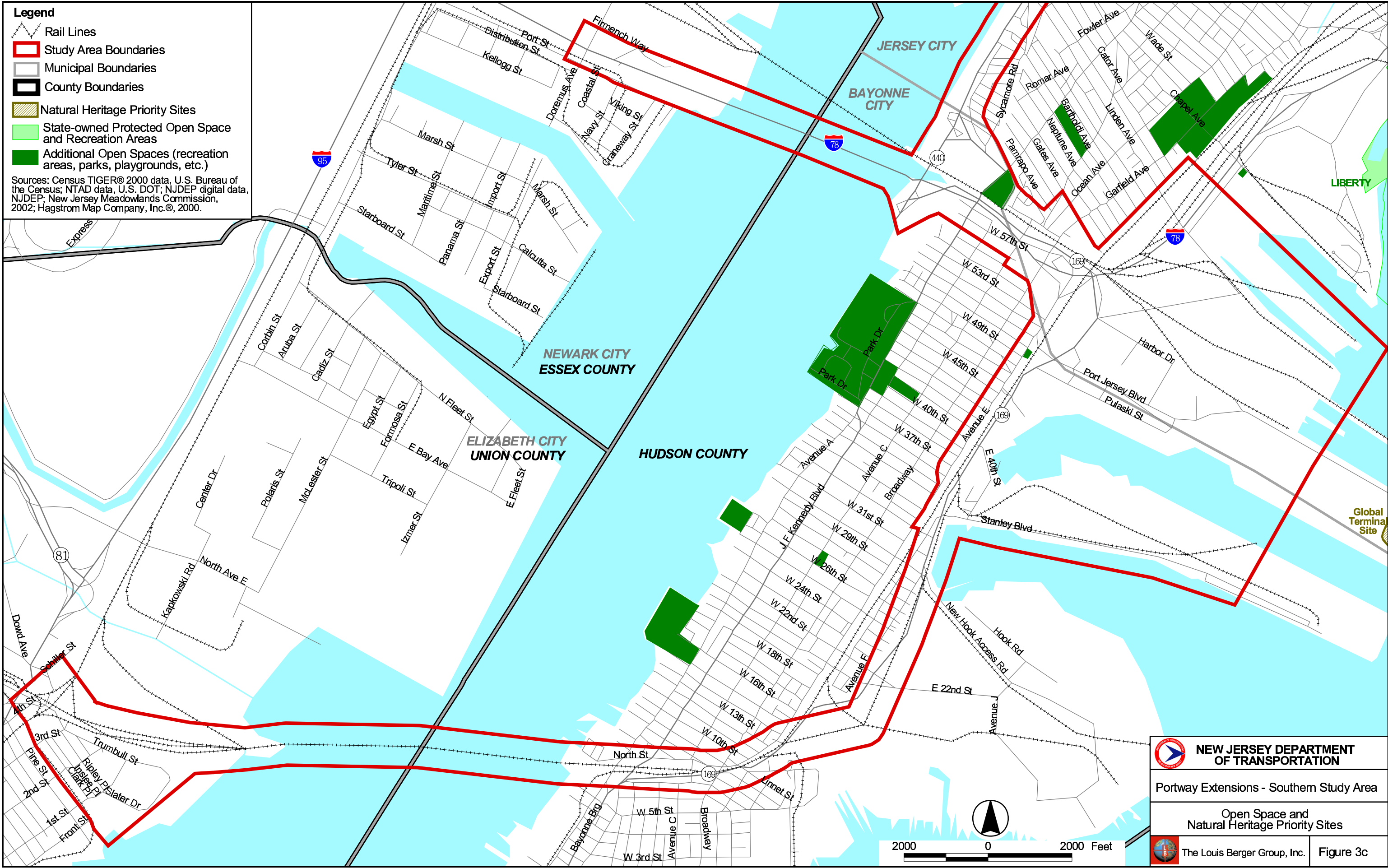
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Legend

-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries
-  Natural Heritage Priority Sites
-  State-owned Protected Open Space and Recreation Areas
-  Additional Open Spaces (recreation areas, parks, playgrounds, etc.)

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP; New Jersey Meadowlands Commission, 2002; Hagstrom Map Company, Inc.®, 2000.

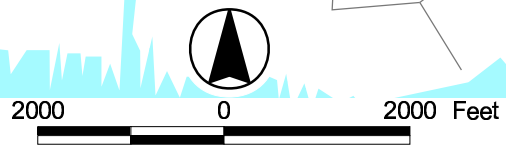


 **NEW JERSEY DEPARTMENT OF TRANSPORTATION**








Portway Extensions - Southern Study Area

Open Space and Natural Heritage Priority Sites

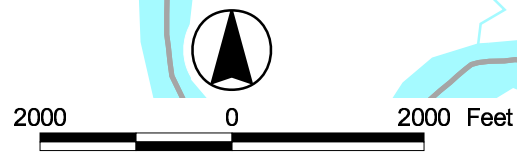
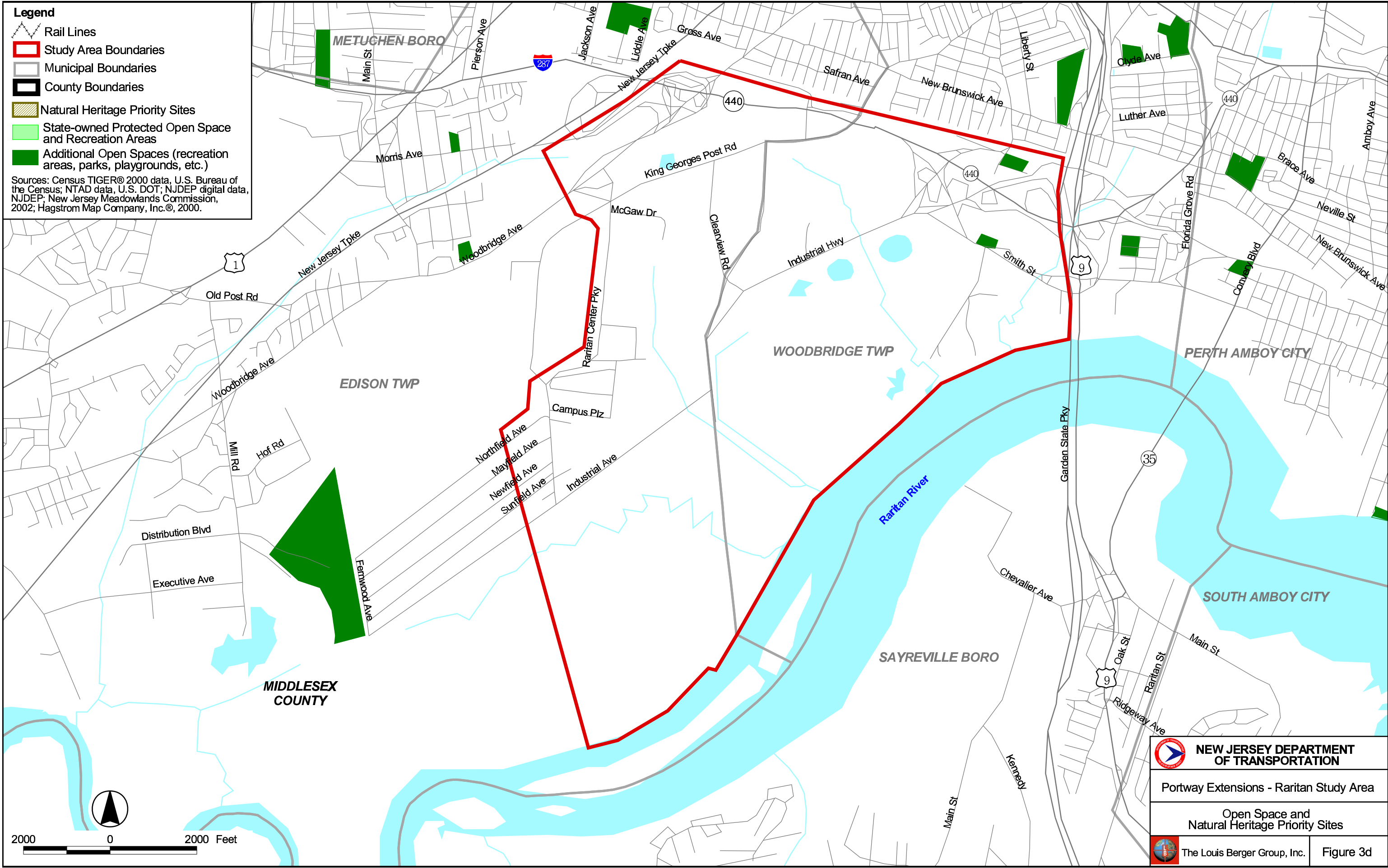
 The Louis Berger Group, Inc. Figure 3c





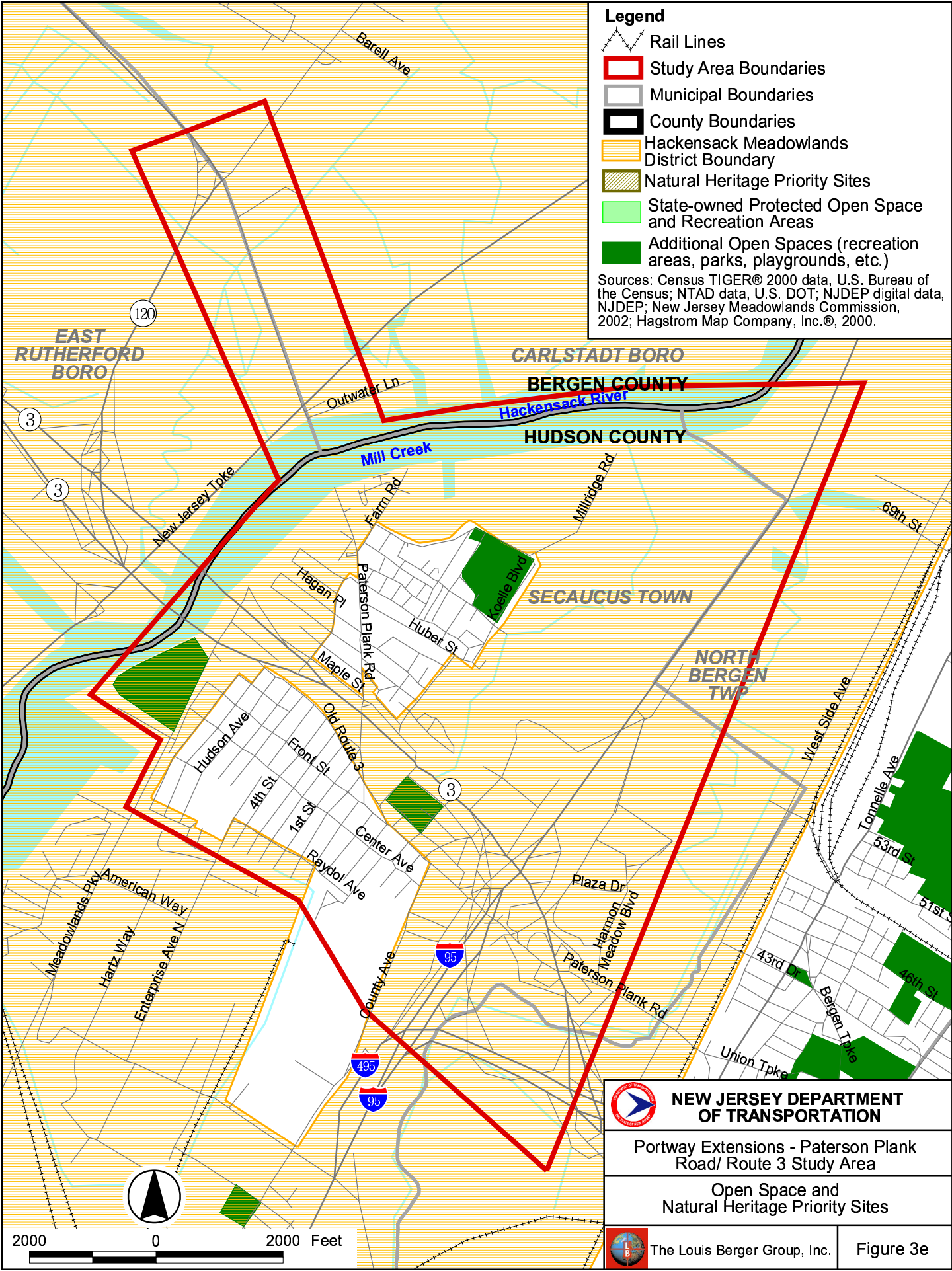
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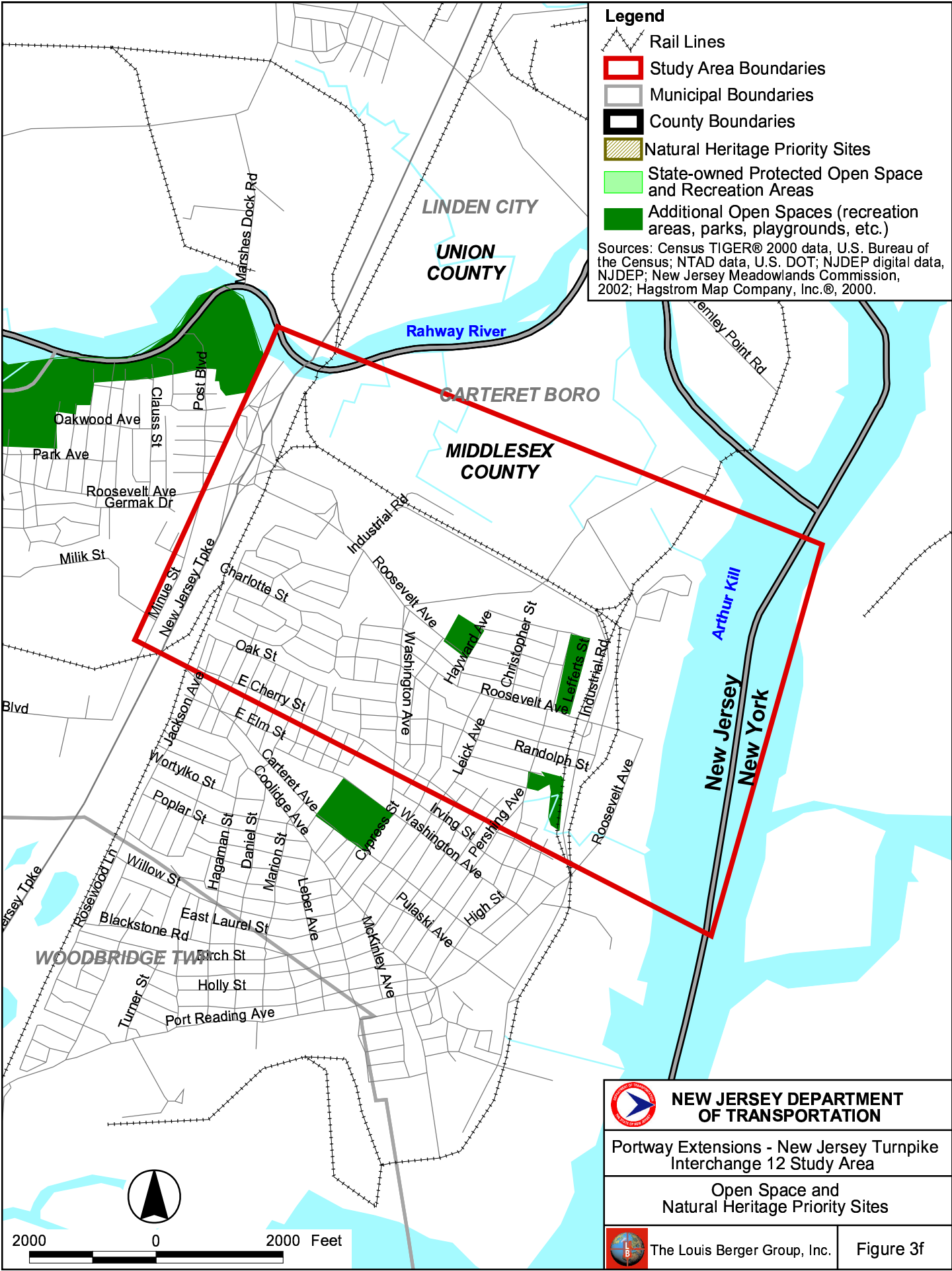
-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries
-  Natural Heritage Priority Sites
-  State-owned Protected Open Space and Recreation Areas
-  Additional Open Spaces (recreation areas, parks, playgrounds, etc.)

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP; New Jersey Meadowlands Commission, 2002; Hagstrom Map Company, Inc.®, 2000.










	NEW JERSEY DEPARTMENT OF TRANSPORTATION
Portway Extensions - Raritan Study Area	
Open Space and Natural Heritage Priority Sites	
	The Louis Berger Group, Inc. Figure 3d







Legend

-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries
-  Natural Heritage Priority Sites
-  State-owned Protected Open Space and Recreation Areas
-  Additional Open Spaces (recreation areas, parks, playgrounds, etc.)

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP; New Jersey Meadowlands Commission, 2002; Hagstrom Map Company, Inc.®, 2000.

	NEW JERSEY DEPARTMENT OF TRANSPORTATION
Portway Extensions - New Jersey Turnpike Interchange 12 Study Area	
Open Space and Natural Heritage Priority Sites	
	The Louis Berger Group, Inc.
Figure 3f	

2000 0 2000 Feet



5. Cultural Resources (Archaeology and Historic Architecture)

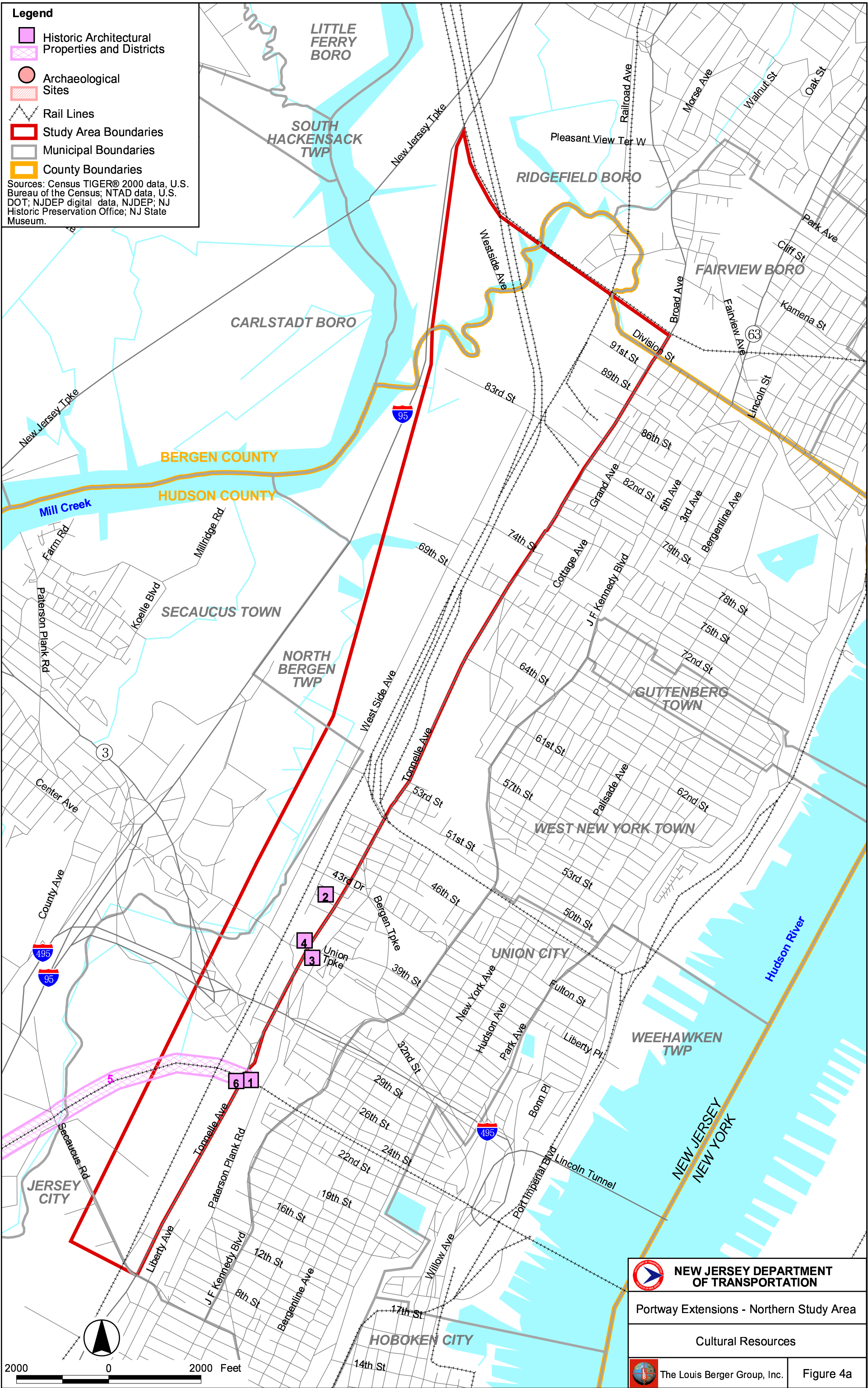
Documented archaeological sites and extant historic buildings and structures in the Study Areas were identified through a review of inventories on file at the New Jersey Historic Preservation Office (NJHPO) and the New Jersey State Museum (NJSM). At the NJHPO, the following files were reviewed: (1) properties listed in the National Register of Historic Places (NR); (2) properties listed in the State Register of Historic Places (SR); (3) properties identified by the State Historic Preservation Officer (SHPO) during project reviews as potentially eligible for the NR, but not formally listed (SHPO Opinions and Determinations of Eligibility [DOE]); and (4) the 1970s-era county architectural surveys for the relevant counties. The NJSM reviewed its archaeological site files and provided information on sites in and adjacent to the Study Areas in response to written requests by Berger Cultural Resources staff.

The review of cultural resources information identified 49 buildings, structures, districts, and sites situated in or adjacent to the Study Areas. Figures 4a through c depict the locations of the inventoried historic sites and archaeological resources, while Tables E-3 and E-4 provide a brief listing and description of the inventoried historic districts and sites and archaeological sites within the Northern, Central, and Southern Study Areas. Six of the historic districts and features are linear transportation corridors whose boundaries extend for considerable distances beyond the limits of the Study Areas. Linear historic districts include the Pennsylvania Railroad New York Extension Historic District (No. 5); the Central Railroad of New Jersey Linear Historic District (No. 10); the Erie Marion Mainline Historic District (No. 14); the Old Main DL&W Railroad Historic District (No. 15); the Morris Canal (No. 21); and the U.S. Routes 1 & 9 Historic District (No. 38).

In all, the Northern Study Area contained six inventoried historic architectural resources and no archaeological sites. The Central Study Area contained eight inventoried historic resources and no archaeological sites. The Southern Study Area had 29 inventoried historic resources and seven archaeological sites within its boundaries or adjacent to them. No inventoried historic architectural resources and no archaeological sites are recorded for the Raritan Study Area; it is unknown whether a cultural resources inventory of this former U.S. Army depot, whose boundaries were largely coterminous with the Raritan Study Area, was ever performed.

All of the included historic architectural properties and districts are listed in or have been determined to be eligible for listing in the NR, and as such, they may be protected as Section 4(f) resources. Historic districts generally include both contributing and non-contributing properties. Depending upon the characteristics of a particular project and the distinctive features of a specific historic district, project development may be possible within districts, so long as steps are taken to avoid, minimize, or mitigate effects on contributing properties. In contrast to the architectural resources, none of the seven archaeological sites

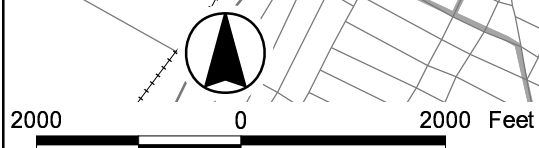
has been evaluated using the NR criteria. For planning purposes, however, all of these sites should be considered to be possible Section 4(f) resources requiring further detailed evaluation. As project planning continues, additional cultural resources investigations may be required to refine information in existing inventories, to determine NR eligibility of unevaluated archaeological and other resources, and to assess project effects on specific resources.



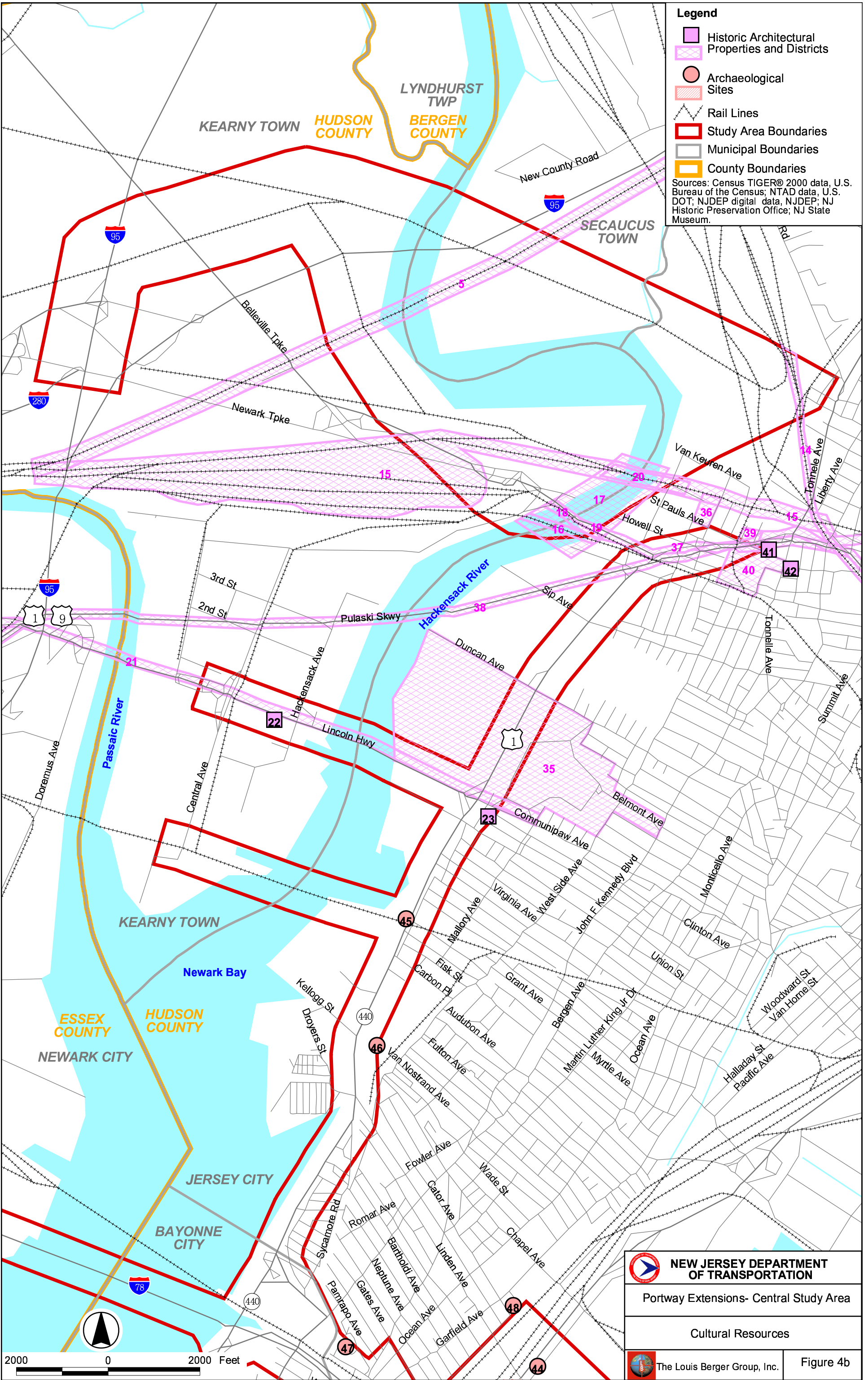
Legend

- Historic Architectural Properties and Districts
- Archaeological Sites
- Rail Lines
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP; NJ Historic Preservation Office; NJ State Museum.



NEW JERSEY DEPARTMENT OF TRANSPORTATION	
Portway Extensions - Northern Study Area	
Cultural Resources	
The Louis Berger Group, Inc.	Figure 4a



Legend

- Historic Architectural Properties and Districts
- Archaeological Sites
- Rail Lines
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP; NJ Historic Preservation Office; NJ State Museum.

NEW JERSEY DEPARTMENT OF TRANSPORTATION







Portway Extensions- Central Study Area

Cultural Resources

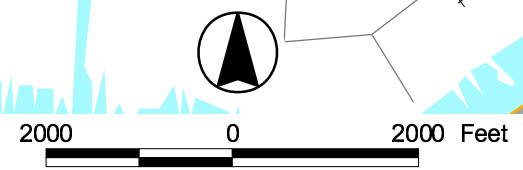
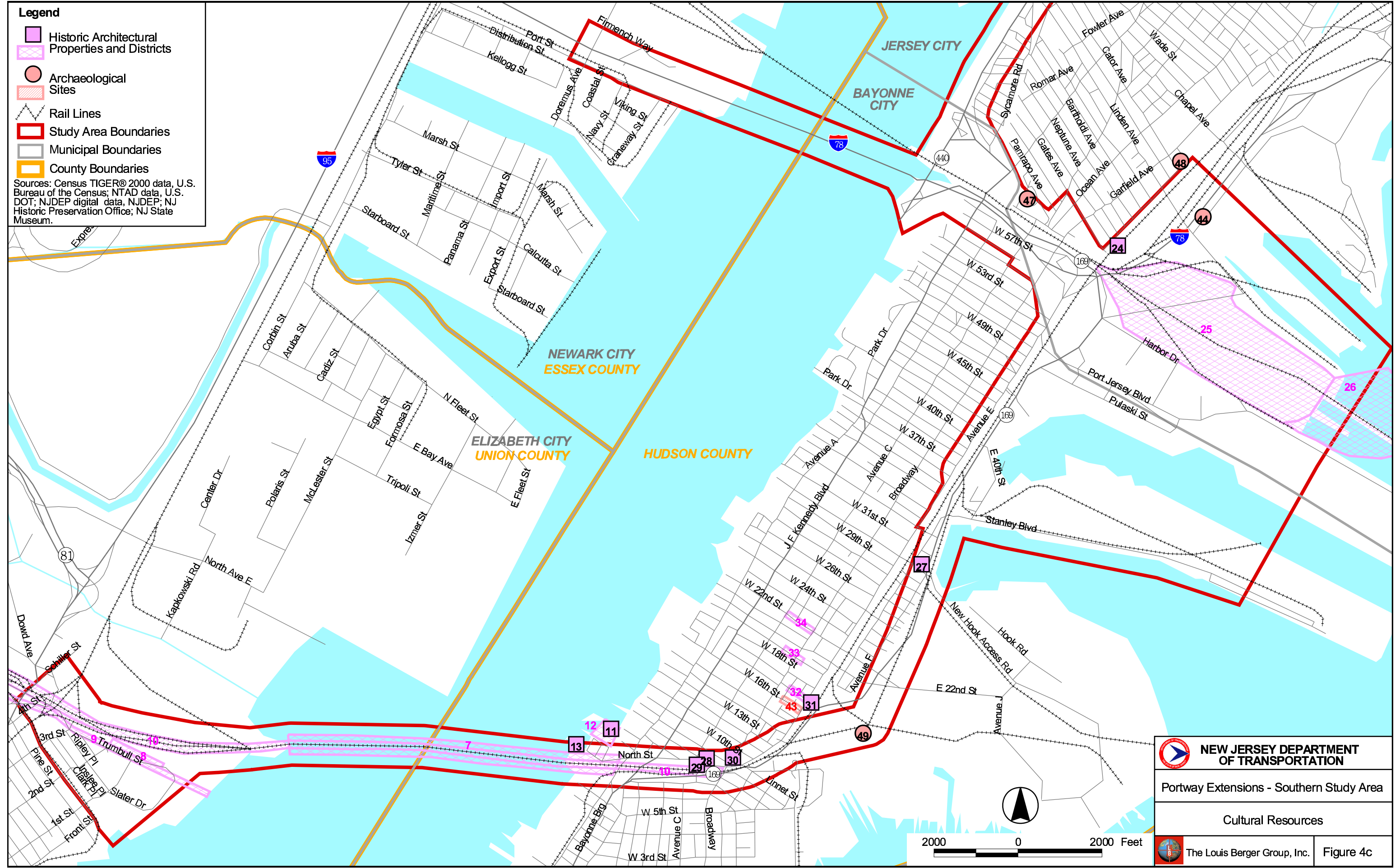
The Louis Berger Group, Inc. Figure 4b


2000 0 2000 Feet

Legend

-  Historic Architectural Properties and Districts
-  Archaeological Sites
-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries


Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP; NJ Historic Preservation Office; NJ State Museum.



 **NEW JERSEY DEPARTMENT OF TRANSPORTATION**

Portway Extensions - Southern Study Area

Cultural Resources

 The Louis Berger Group, Inc. Figure 4c

**TABLE E-3
INVENTORIED HISTORIC ARCHITECTURAL
PROPERTIES AND DISTRICTS
IN THE PORTWAYS EXTENSION PROJECT STUDY CORRIDORS
AND VICINITY**

Property No.	Property Name	Status
1	North River Tunnel East and West Portal	SHPO opinion 11/12/98
2	Pels Factory / Book Mart Press	SHPO opinion 7/29/95
3	Sturges-Gualteri House	SHPO opinion 7/24/95
4	D'Icari Auto Body	SHPO opinion 7/24/95
5	Pennsylvania Railroad New York Extension Historic District	SHPO opinion 2/6/97 (rescinded 11/11/98)
6	Substation #3 (Amtrak Substation #42) 2308 Tonelle Avenue	SHPO opinion 8/22/89
7	Newark Bay Bridge (demolished)	SHPO opinion 3/19/96
8	Singer Factory Historic District	SR 12/15/86; DOE 11/7/88; SHPO opinion 6/28/83
9	Trumbull Street Sewer	SHPO opinion 9/10/99
10	Central Railroad of N.J. Linear Historic District	SHPO opinion 6/1/91 - boundaries revised 2/17/95
11	Converted Covered Barge (Vessel 21)	SHPO opinion 1/7/98
12	Electro Dynamic Motor Company Historic District	SHPO opinion 2/17/95
13	Floating Concrete Plant on Deck Scow (Vessel 22)	SHPO opinion 1/7/98
14	Erie Marion Mainline Historic District	SHPO opinion 3/10/99
15	Old Main DL & W Railroad Historic District	SHPO opinion 9/24/96
16	Pennsylvania Railroad (now PATH) Bridge over Hackensack River	SHPO opinion 5/3/02
17	Hackensack River Lift Bridge Historic District	SHPO opinion 5/3/02

Source: The Louis Berger Group, Inc., September 2003.

TABLE E-3 (CONTINUED)
INVENTORIED HISTORIC ARCHITECTURAL
PROPERTIES AND DISTRICTS
IN THE PORTWAYS EXTENSION PROJECT STUDY CORRIDORS
AND VICINITY

Property No.	Property Name	Status
18	Wittpen Bridge	SHPO opinion 2/7/01
19	The Pennsylvania Railroad Harsimus Branch (now Conrail CSX) Bridge over Hackensack River	SHPO opinion 5/3/02
20	Lower Hackensack Drawbridge	SHPO opinion 9/18/96
21	Morris Canal	NR 10/1/74; SR 11/26/73
22	Talbot Hall Federal Shipbuilding Corp.	SHPO opinion 2/14/96
23	Jersey City Motor Vehicle Inspection Station	SHPO opinion 6/9/98
24	Gates Avenue Bridge	SHPO opinion 12/9/94
25	Greenville Yard Historic District	SHPO opinion 8/21/98
26	Greenville Yard Piers	DOE 9/8/81; SHPO comments 9/21/83
27	Public School 5	SHPO opinion 2/28/91
28	Mechanics Trust Co. Building	SHPO opinion 12/9/94
29	Central Railroad of New Jersey Passenger Depot (demolished)	SHPO Opinion 9/11/75
30	Bayonne Trust Company	SHPO opinion 12/9/94
31	Maidenform Brassiere Company Factory Building.	SHPO opinion 12/9/94
32	East 17 th Street Apartment Buildings, including George Goldman Apartment Building	SHPO opinions 12/9/94 and 9/30/91
33	East 19 th Street Streetscape	SHPO opinion 12/9/94
34	Mount Carmel Historic District	SHPO opinion 2/28/91

Source: The Louis Berger Group, Inc., September 2003.

TABLE E-3 (CONTINUED)
INVENTORIED HISTORIC ARCHITECTURAL
PROPERTIES AND DISTRICTS
IN THE PORTWAYS EXTENSION PROJECT STUDY CORRIDORS
AND VICINITY

Property No.	Property Name	Status
35	Lincoln Park	SHPO opinion 8/9/84
36	People's Gas Light Company / PSE&G Marion Office Historic District	SHPO opinion 3/10/99
37	Jersey City Water Works Pipeline	SHPO opinion 5/7/99
38	U.S. Routes 1 & 9 Historic District	SHPO opinion 3/22/92
39	Covert-Larch Historic District	SHPO opinion 3/10/99
40	P. Lorillard Company / American Can Company Historic District	SHPO opinion 3/10/99
41	261-267 Van Wagenen Avenue	SHPO opinion 3/10/99
42	St. Ann's Polish Roman Catholic Church Historic District	SHPO opinion 3/10/99

Source: The Louis Berger Group, Inc., September 2003.

**TABLE E-4
INVENTORIED ARCHAEOLOGICAL SITES
IN THE PORTWAYS EXTENSION PROJECT STUDY CORRIDORS
AND VICINITY**

Property No.	Site Name	NJSM Site Number	Description
43	Constable Hook-1	28-Hd-1	Prehistoric, camp site reported by Leslie Spier in the 1930s.
44	Greenville	28-Hd-3	Prehistoric, potsherds recovered during the 1930s.
45	Jersey City	28-Hd-9	Prehistoric, described as a village or camp site based on excavations conducted by Dr. William L. Pyle in 1936.
46	Jersey City	28-Hd-10	Prehistoric, projectile points recovered by Dr. William L. Pyle in 1936.
47	Jersey City	28-Hd-12	Prehistoric
48	Jersey City	28-Hd-17	Prehistoric
49	Constable Hook-2	28-Hd-26	Prehistoric, village site with shell mounds and projectile points, tools, potsherds and faunal remains.

Source: The Louis Berger Group, Inc., September 2003.

Environmental Justice

Executive Order 12898 (E.O. 12898), directs federal agencies to develop a strategy to address environmental justice concerns in its programs, policies and regulations. The objective of this order is to prevent disproportionately high and adverse impacts to minority and low-income populations with respect to human health and the environment. Federal review criteria have been established by the United States Department of Transportation (USDOT) to address environmental justice concerns. Four broad objectives have been set forth for the implementation of E.O. 12898:

- Improve the environment and public health and safety in the transportation of people and goods, and the development and maintenance of transportation systems and services;
- Harmonize transportation policies and investments with environmental concerns, reflecting an appropriate consideration of economic and social interests;
- Consider the interests, issues and contributions of affected communities, disclose appropriate information and give communities an opportunity to be involved in decision-making; and
- Integrate the provisions of the order into existing DOT programs, policies, activities, regulations and guidance to the greatest extent possible.

1. Minority Populations

This Environmental Justice Analysis utilizes the definitions set forth by federal law and the Federal Highway Administration (FHWA) for the identification of minority communities within the Study Areas. As defined by Title VI of the Civil Rights Act of 1964 and by the FHWA Order on Environmental Justice (December 1998), minority populations include the persons in the following ethnic groups:

- Black (origins in any of the black racial groups of Africa);
- Hispanic (Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- Asian American (origins in any of the original peoples of the Far East, Southeast Asia, the Pacific Islands, of the Indian subcontinent);
- American Indian and Alaskan Native (origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).

Census 2000 data were used to calculate a regional threshold for the five counties that comprise the Portway Extensions Study Areas: Bergen, Essex, Hudson, Middlesex and Union. With the new Census 2000 race/ethnicity classification scheme, White Non-Hispanics are the only non-minorities; all other categories are deemed minority (such as Black Non-Hispanics, White Hispanics, any person of two or more races, etc.). The overall minority percent for the five-county region was calculated as 46.7%. If the minority population of a block group meets or exceeds this threshold by exhibiting a minority population of 46.7% or more of the total block group population (based upon 2000 U.S. Census data), then the block group qualifies as a minority community.

2. Low-Income Populations

This analysis used U.S. Census Bureau thresholds for poverty levels to identify low-income communities. The U.S. Census Bureau updates these thresholds every year. The 2000 Census utilizes 1999 data to establish the poverty thresholds, which are dependent upon family size. In 1999, the poverty threshold for a family of four was a weighted average income of \$17,029. For a family of two, the poverty threshold was set at \$10,869. This evaluation uses the percentage of persons living below the poverty level as an indicator of low-income areas.

Based upon Census 2000 data for the five-county area, the regional threshold for persons living below the poverty level was calculated to be 10.0%. If 10.0% or more of a block group's total population was at or below the poverty threshold as set forth by the 2000 U.S. Census, then the block group has reached or exceeded the threshold and qualifies as a low-income community.

3. Portway Extensions Study Areas

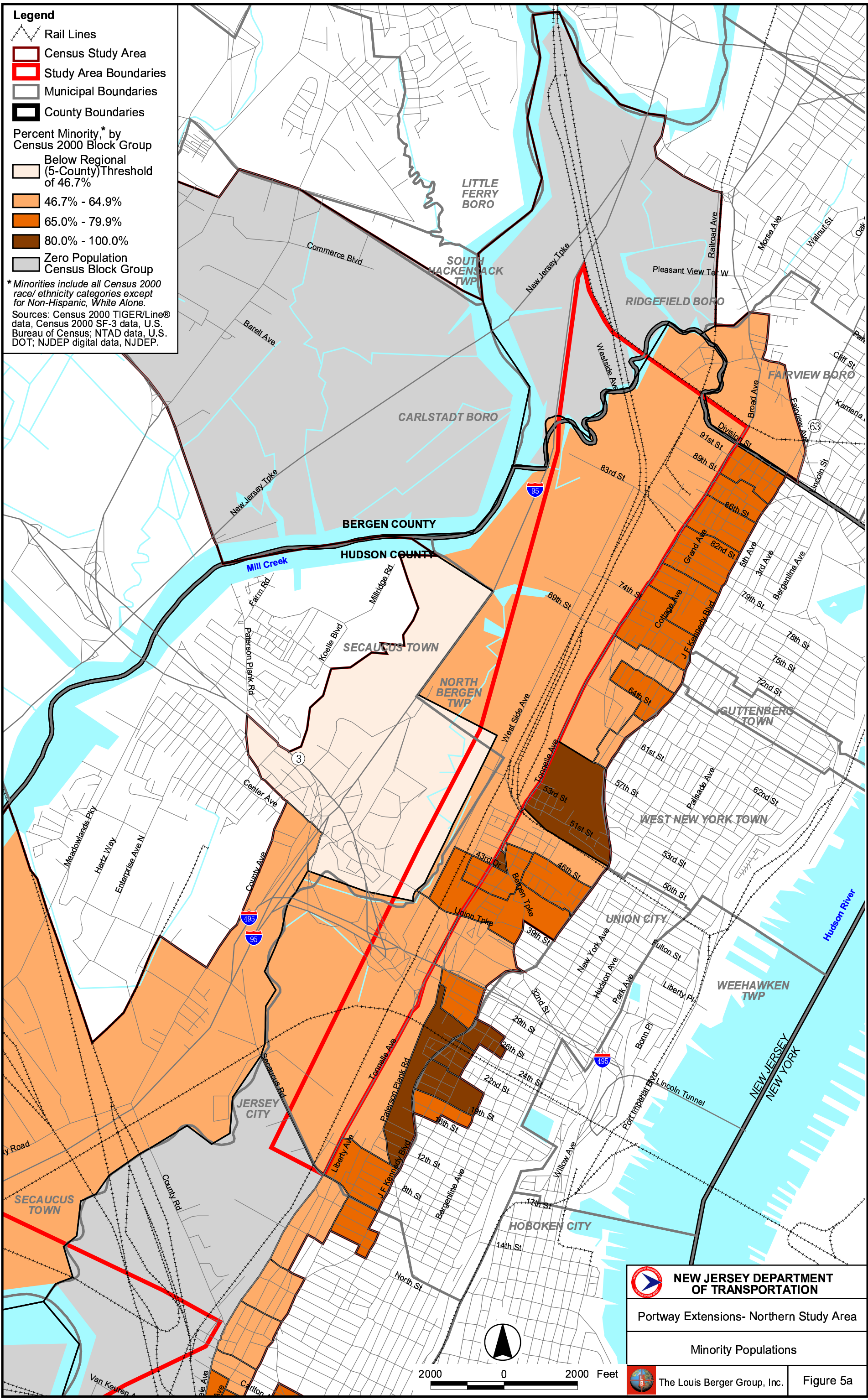
Figures 5a through 5f and 6a through 6f depict the minority populations and low-income population areas within the Study Areas. The areas were developed by selecting Census 2000 block groups that intersect the various Study Areas. The Environmental Justice Study Area (or Census Study Area as identified on the figures) is comprised of 158 block groups.

Minority Populations






As illustrated in Figures 5a through 5f, each of the Portway Extensions Study Areas traverses several minority communities. The Raritan Study Area is a slight exception in that it only includes one block group that exhibits a percent minority greater than the regional threshold.

Low-Income Populations






Figures 6a through 6f illustrate a similar, although somewhat less pronounced, distribution of low-income communities. Each of the Study Areas is comprised of block groups that can be classified as low-income communities.



Legend

-  Rail Lines
-  Census Study Area
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries

Percent Minority,* by Census 2000 Block Group

-  Below Regional (5-County) Threshold of 46.7%
-  46.7% - 64.9%
-  65.0% - 79.9%
-  80.0% - 100.0%
-  Zero Population Census Block Group


* Minorities include all Census 2000 race/ethnicity categories except for Non-Hispanic, White Alone.

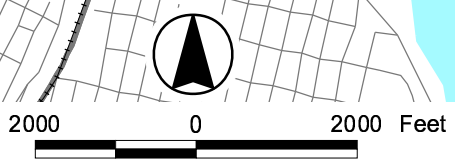
Sources: Census 2000 TIGER/Line® data, Census 2000 SF-3 data, U.S. Bureau of Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

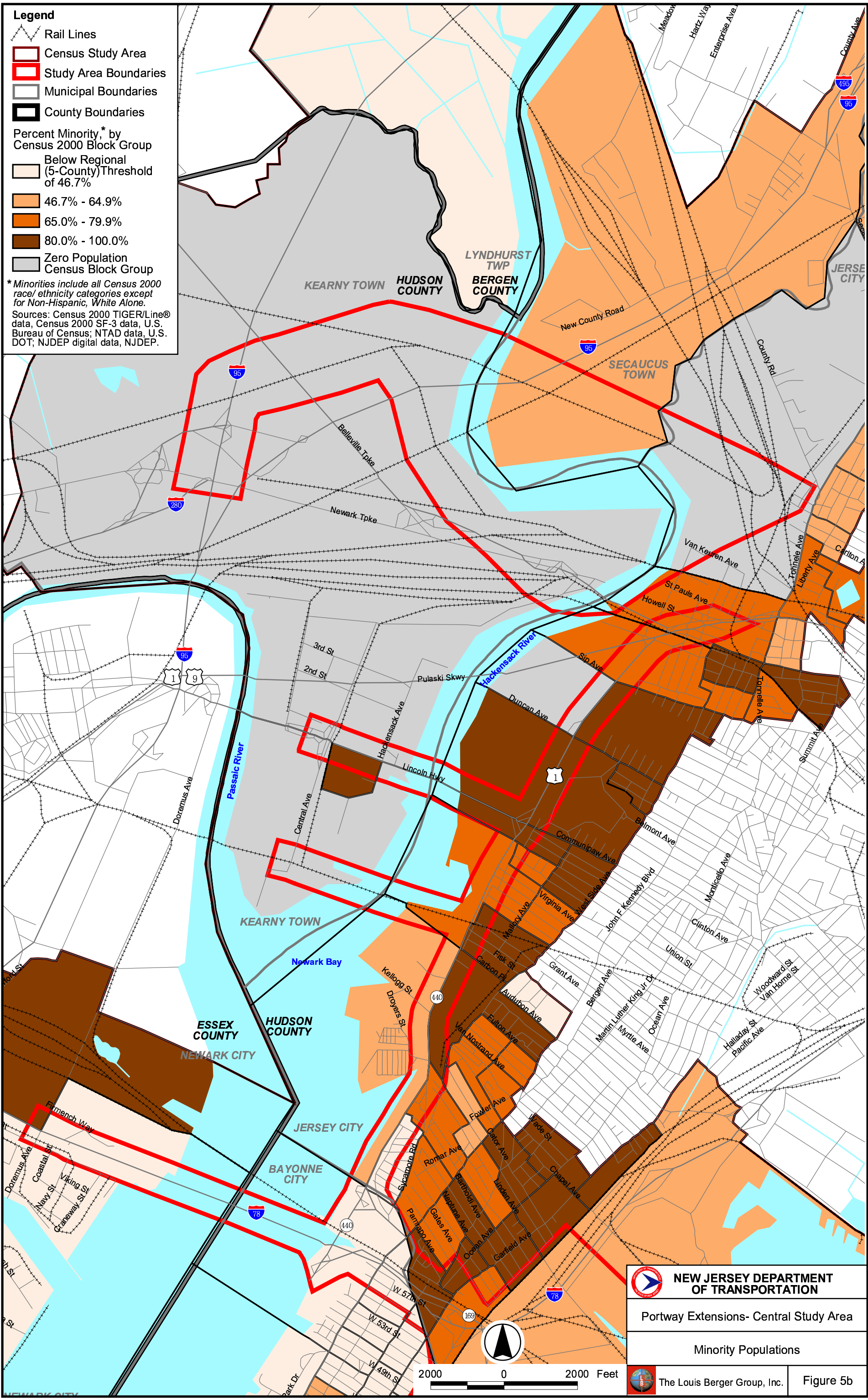
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Portway Extensions- Northern Study Area

Minority Populations

 The Louis Berger Group, Inc. **Figure 5a**





Legend

- Rail Lines
- Census Study Area
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

Percent Minority,* by Census 2000 Block Group

- Below Regional (5-County) Threshold of 46.7%
- 46.7% - 64.9%
- 65.0% - 79.9%
- 80.0% - 100.0%
- Zero Population Census Block Group

* Minorities include all Census 2000 race/ethnicity categories except for Non-Hispanic, White Alone.

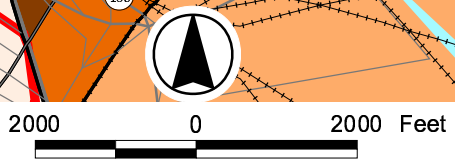
Sources: Census 2000 TIGER/Line® data, Census 2000 SF-3 data, U.S. Bureau of Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

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Portway Extensions- Central Study Area

Minority Populations






The Louis Berger Group, Inc. **Figure 5b**



Legend

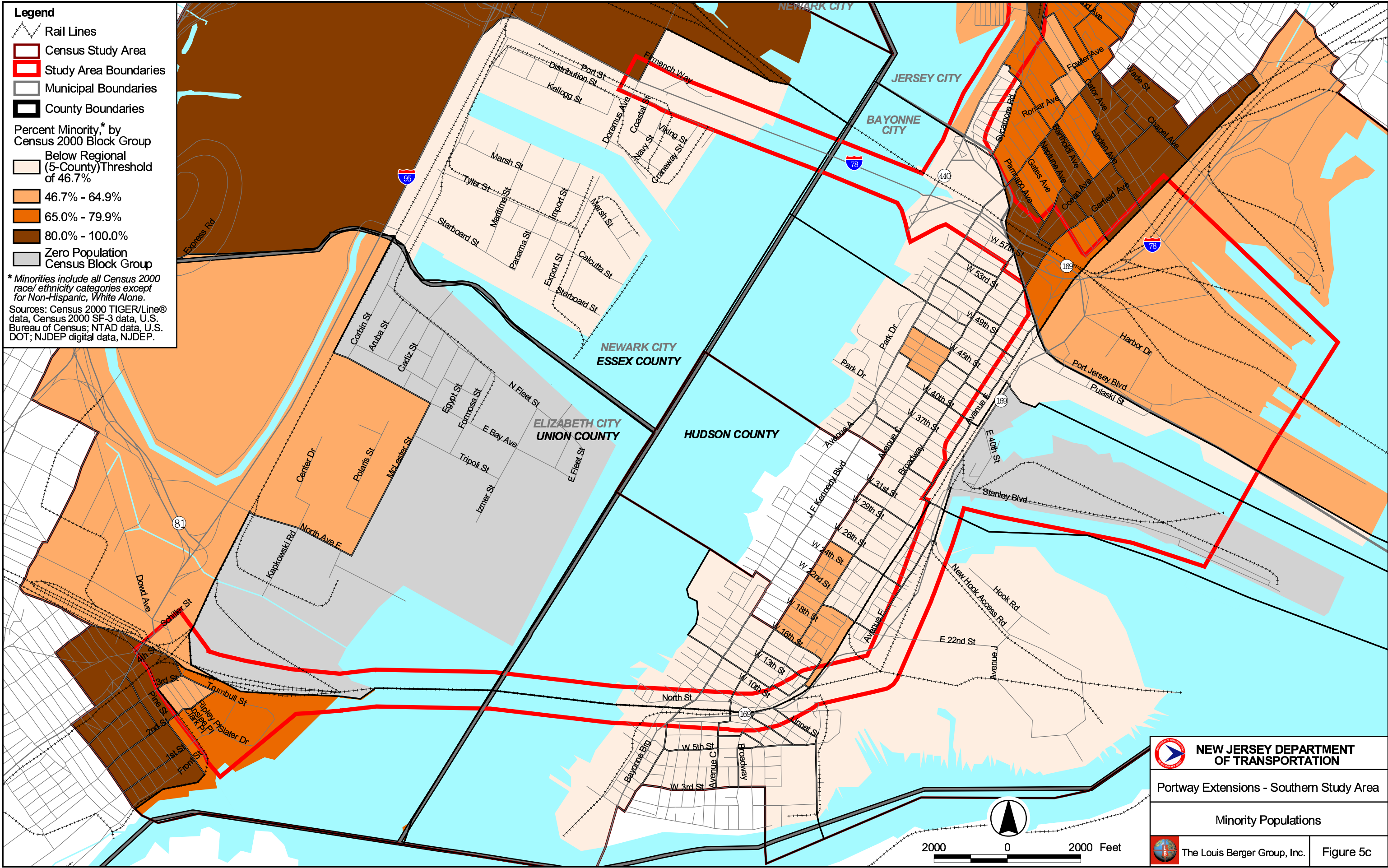
-  Rail Lines
-  Census Study Area
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries


Percent Minority,* by Census 2000 Block Group

-  Below Regional (5-County) Threshold of 46.7%
-  46.7% - 64.9%
-  65.0% - 79.9%
-  80.0% - 100.0%
-  Zero Population Census Block Group

* Minorities include all Census 2000 race/ethnicity categories except for Non-Hispanic, White Alone.


Sources: Census 2000 TIGER/Line® data, Census 2000 SF-3 data, U.S. Bureau of Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

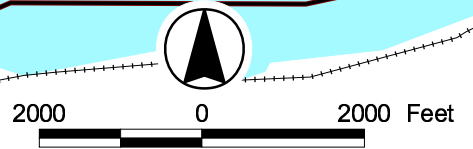


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Portway Extensions - Southern Study Area

Minority Populations

 The Louis Berger Group, Inc. Figure 5c



Legend

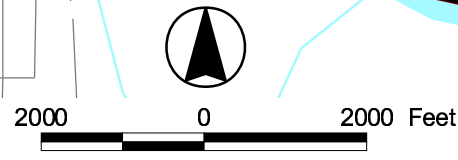
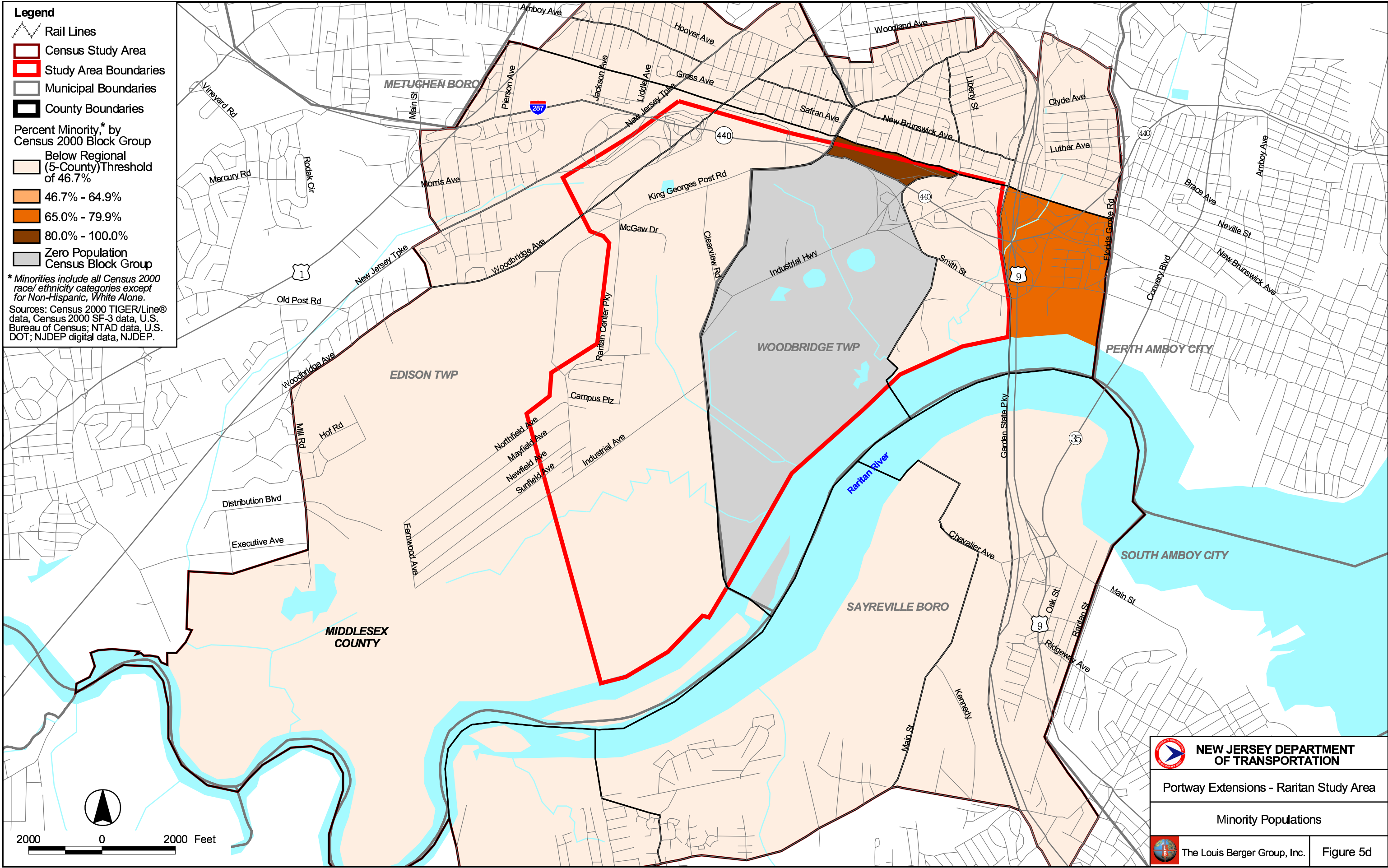
- Rail Lines
- Census Study Area
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

Percent Minority,* by Census 2000 Block Group (5-County) Threshold of 46.7%

- 46.7% - 64.9%
- 65.0% - 79.9%
- 80.0% - 100.0%
- Zero Population Census Block Group











* Minorities include all Census 2000 race/ethnicity categories except for Non-Hispanic, White Alone.

Sources: Census 2000 TIGER/Line® data, Census 2000 SF-3 data, U.S. Bureau of Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

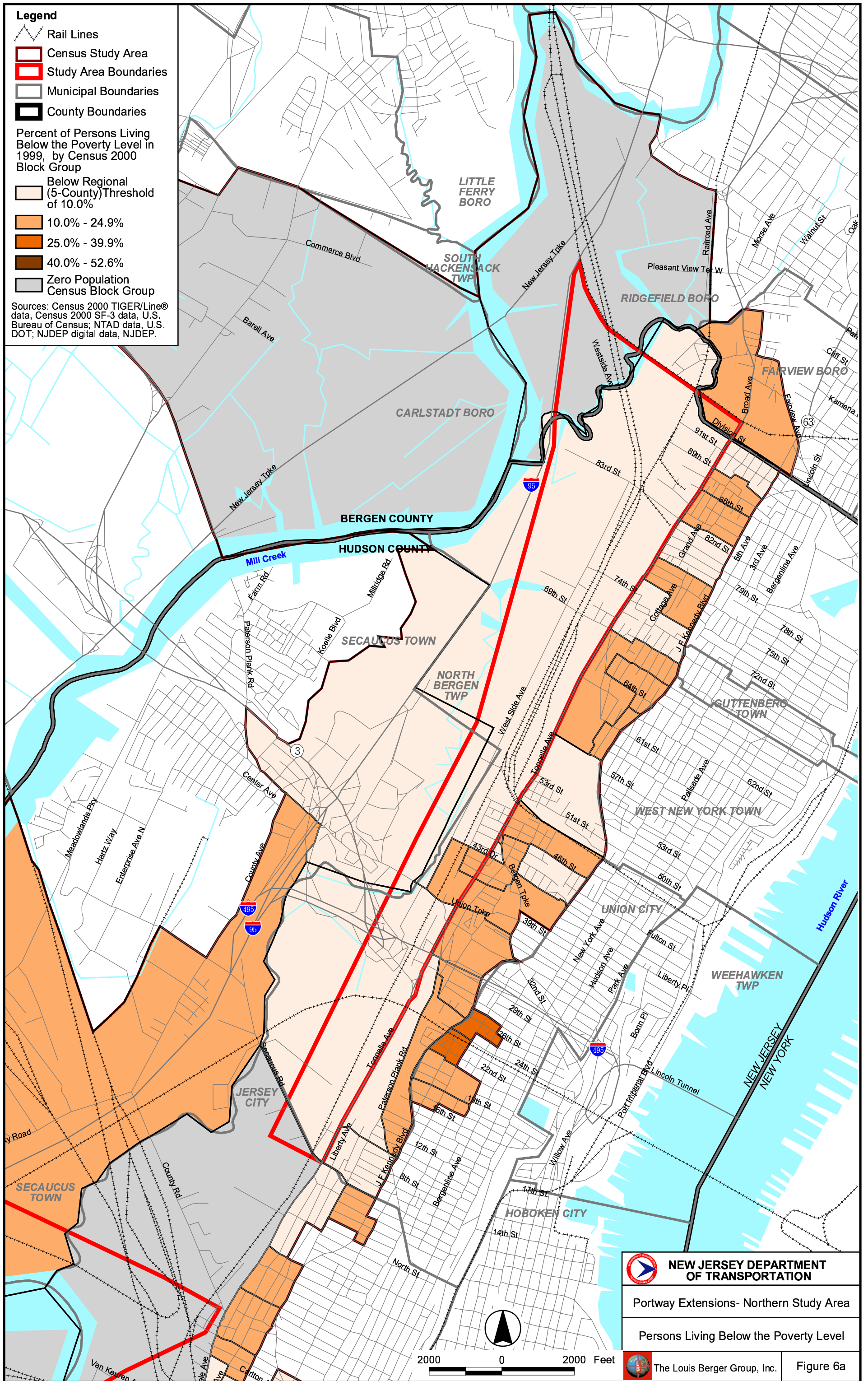


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Portway Extensions - Raritan Study Area	
Minority Populations	
The Louis Berger Group, Inc.	Figure 5d

Legend

-  Rail Lines
 -  Census Study Area
 -  Study Area Boundaries
 -  Municipal Boundaries
 -  County Boundaries
- Percent of Persons Living Below the Poverty Level in 1999, by Census 2000 Block Group
-  Below Regional (5-County) Threshold of 10.0%
 -  10.0% - 24.9%
 -  25.0% - 39.9%
 -  40.0% - 52.6%
 -  Zero Population Census Block Group

Sources: Census 2000 TIGER/Line® data, Census 2000 SF-3 data, U.S. Bureau of Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.



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Portway Extensions- Northern Study Area

Persons Living Below the Poverty Level


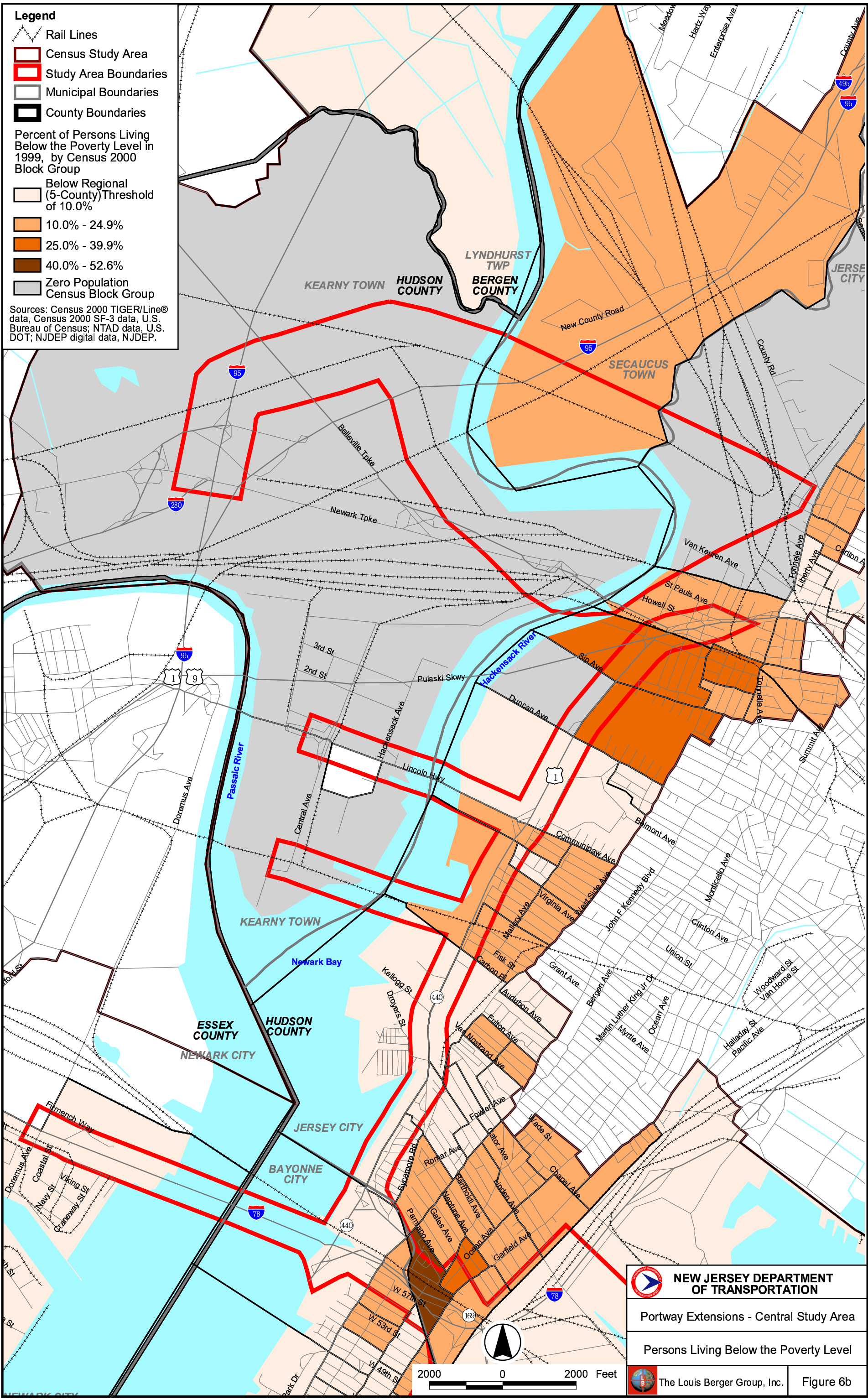
 The Louis Berger Group, Inc.

Figure 6a



Legend

- Rail Lines
- Census Study Area
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

Percent of Persons Living Below the Poverty Level in 1999, by Census 2000 Block Group

- Below Regional (5-County) Threshold of 10.0%
- 10.0% - 24.9%
- 25.0% - 39.9%
- 40.0% - 52.6%
- Zero Population Census Block Group

Sources: Census 2000 TIGER/Line® data, Census 2000 SF-3 data, U.S. Bureau of Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

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Portway Extensions - Central Study Area

Persons Living Below the Poverty Level

The Louis Berger Group, Inc. **Figure 6b**

2000 0 2000 Feet

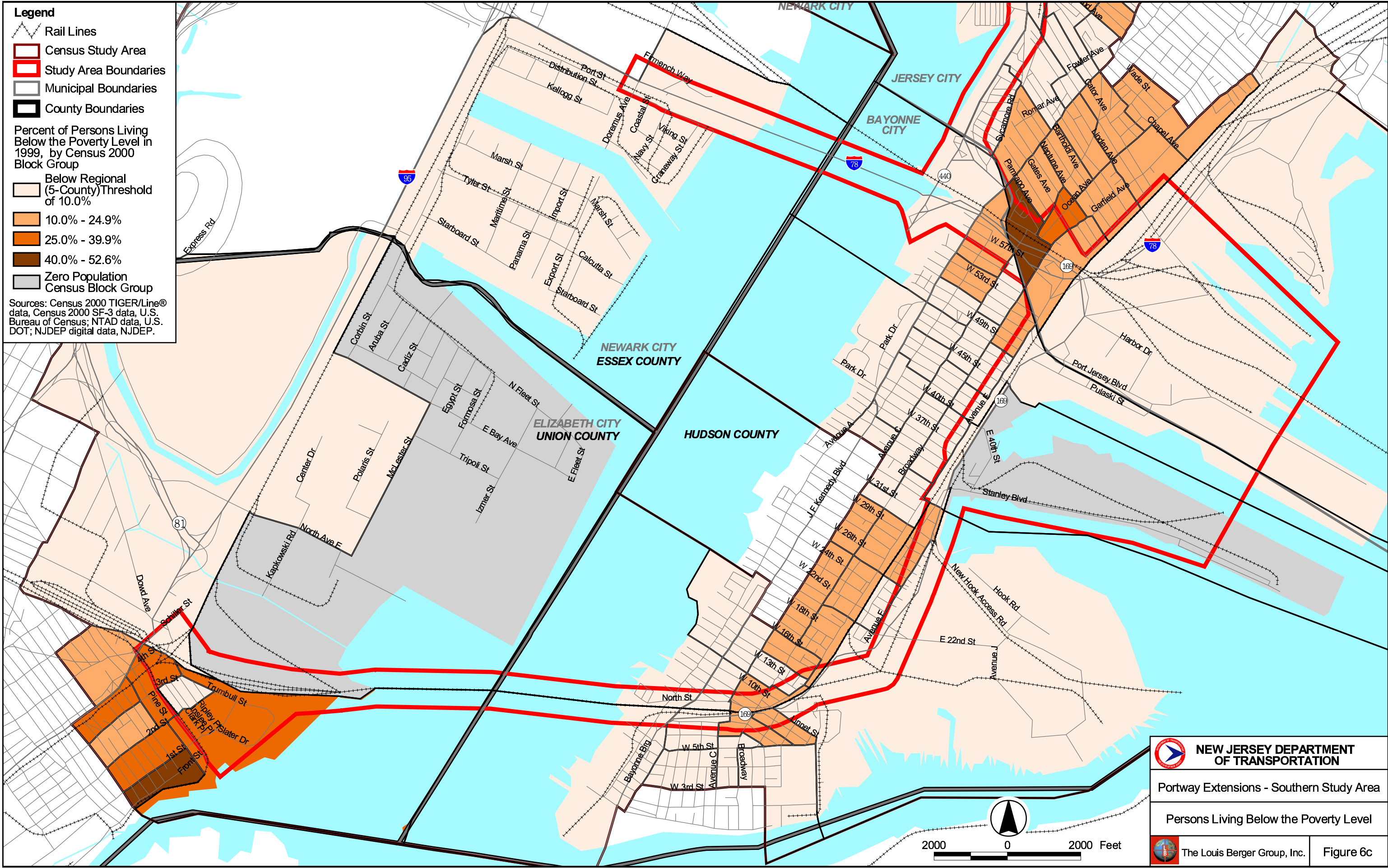
Legend

- Rail Lines
- Census Study Area
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

Percent of Persons Living Below the Poverty Level in 1999, by Census 2000 Block Group

- Below Regional (5-County) Threshold of 10.0%
- 10.0% - 24.9%
- 25.0% - 39.9%
- 40.0% - 52.6%
- Zero Population Census Block Group

Sources: Census 2000 TIGER/Line® data, Census 2000 SF-3 data, U.S. Bureau of Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.



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Portway Extensions - Southern Study Area

Persons Living Below the Poverty Level

The Louis Berger Group, Inc. **Figure 6c**

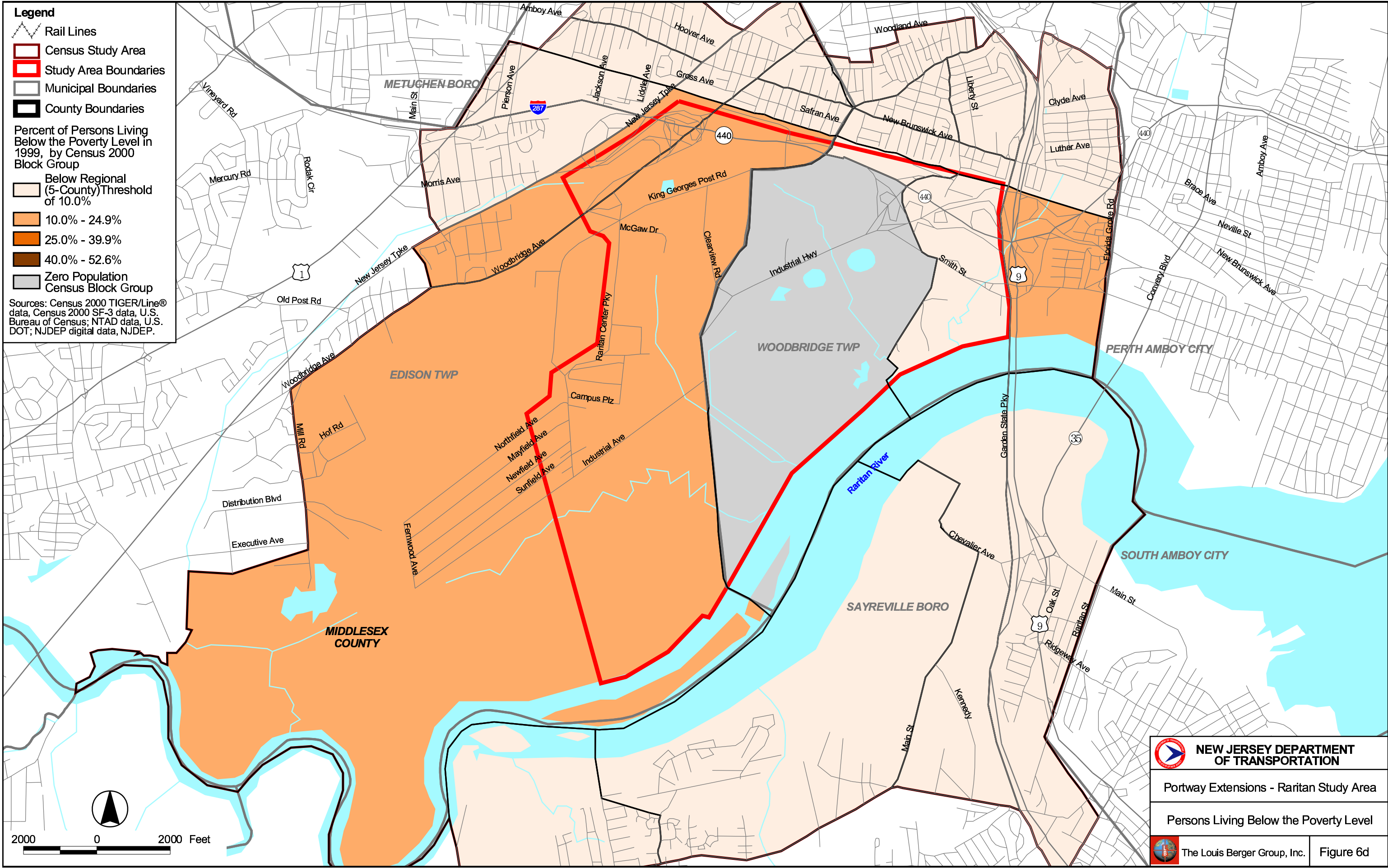
Legend

- Rail Lines
- Census Study Area
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

Percent of Persons Living Below the Poverty Level in 1999, by Census 2000 Block Group

- Below Regional (5-County) Threshold of 10.0%
- 10.0% - 24.9%
- 25.0% - 39.9%
- 40.0% - 52.6%
- Zero Population Census Block Group

Sources: Census 2000 TIGER/Line® data, Census 2000 SF-3 data, U.S. Bureau of Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.



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Portway Extensions - Raritan Study Area

Persons Living Below the Poverty Level

The Louis Berger Group, Inc. Figure 6d

Land Use

Land use data for the Study Areas was developed based upon an update of the 1986 land use/land coverage (NJDEP digital data) from the New Jersey Department of Environmental Protection. Generalized land use patterns within and adjacent to the Study Areas are provided in Figures 7a through 7f. In the Northern Study Area, a predominance of the land use is industrial with pockets of land developed as commercial or as utility services. Small pockets of undeveloped and residential areas are also present. There are no properties dedicated to agricultural use in this Study Area (see Figure 7a).

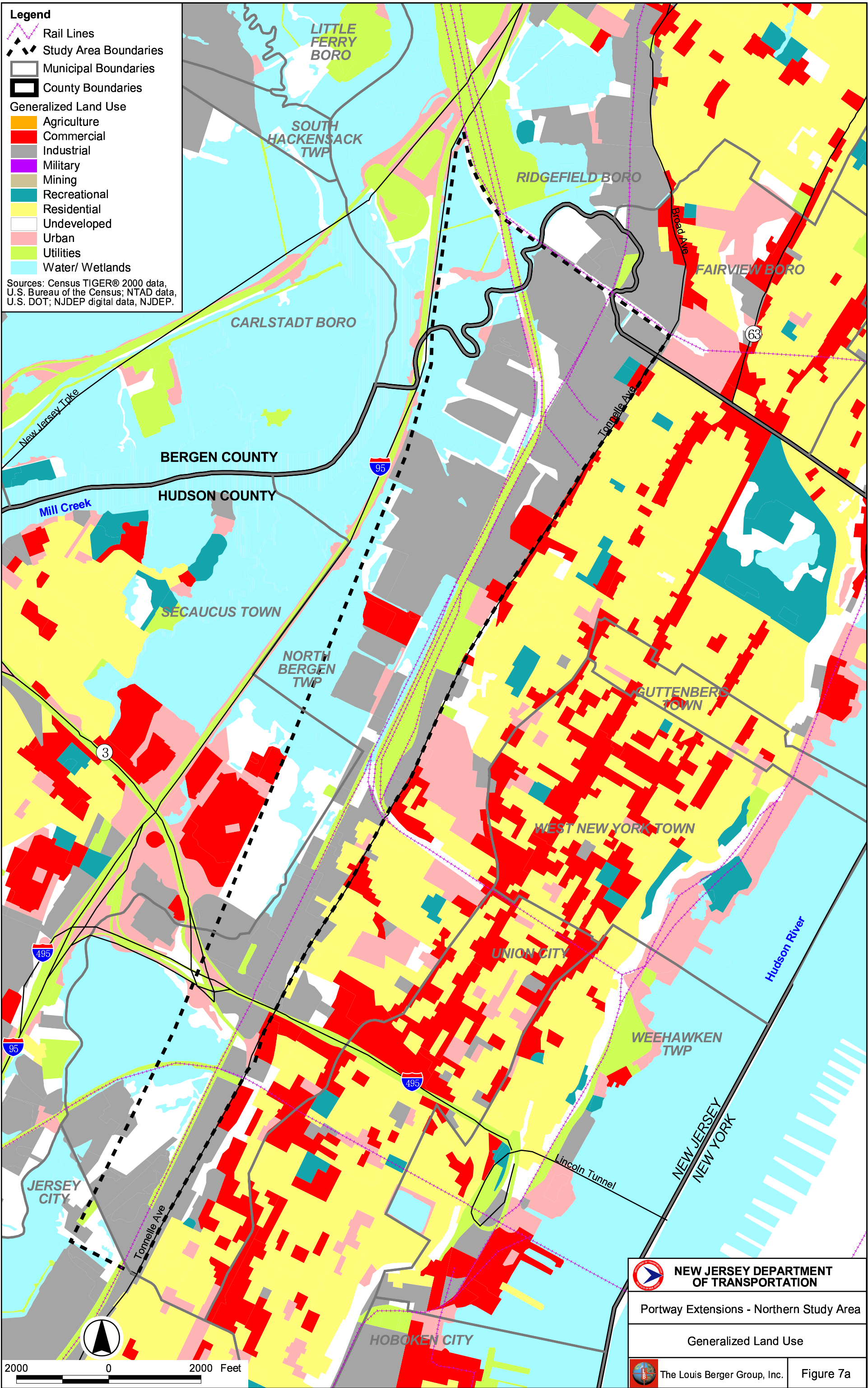
In the Central Study Area, land use is somewhat diverse being comprised of a mix of industrial and commercial developments with vast areas developed for utility purposes. Residential development comprises a small percentage of the overall land area within this Study Area while open water and wetlands comprise a large percentage of the overall area. There are no properties dedicated to agricultural use in this Study Area (see Figure 7b).

In the Southern Study Area, land use is comprised primarily of large-scale commercial transportation services and utilities, industrial warehousing and operations and marine terminal operations. Small pockets of residential and commercial development are also present primarily along the existing road corridors. There are no properties dedicated to agricultural use in this Study Area (see Figure 7c).

In the Raritan Study Area, land use is comprised primarily of industrial warehousing and trucking operations and related transportation services. Although some undeveloped parcels are present, a large portion of the Study Area is undeveloped wetlands and open water. There are no properties dedicated to agricultural use in this Study Area (see Figure 7d).

In the Paterson Plank Road/Route 3 Study Area, land use is composed primarily of large areas of residential development, while commercial development is focused adjacent to the major travel corridors. The area also has pockets of industrial use and areas dedicated to recreation and open space. A large portion of the Study Area is comprised of wetlands within the Hackensack Meadowlands. There are no properties dedicated to agricultural use in this Study Area (see Figure 7e).

In the Interchange 12 Study Area, land use is primarily comprised of large tracts of residential and industrial development. Approximately 50 percent of the Study Area is comprised of residential development, while the balance of the Study Area is comprised of industry, transportation, utility service facilities, wetlands and open water. There are no properties dedicated to agricultural use in this Study Area (see Figure 7f).



Legend

- Rail Lines
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

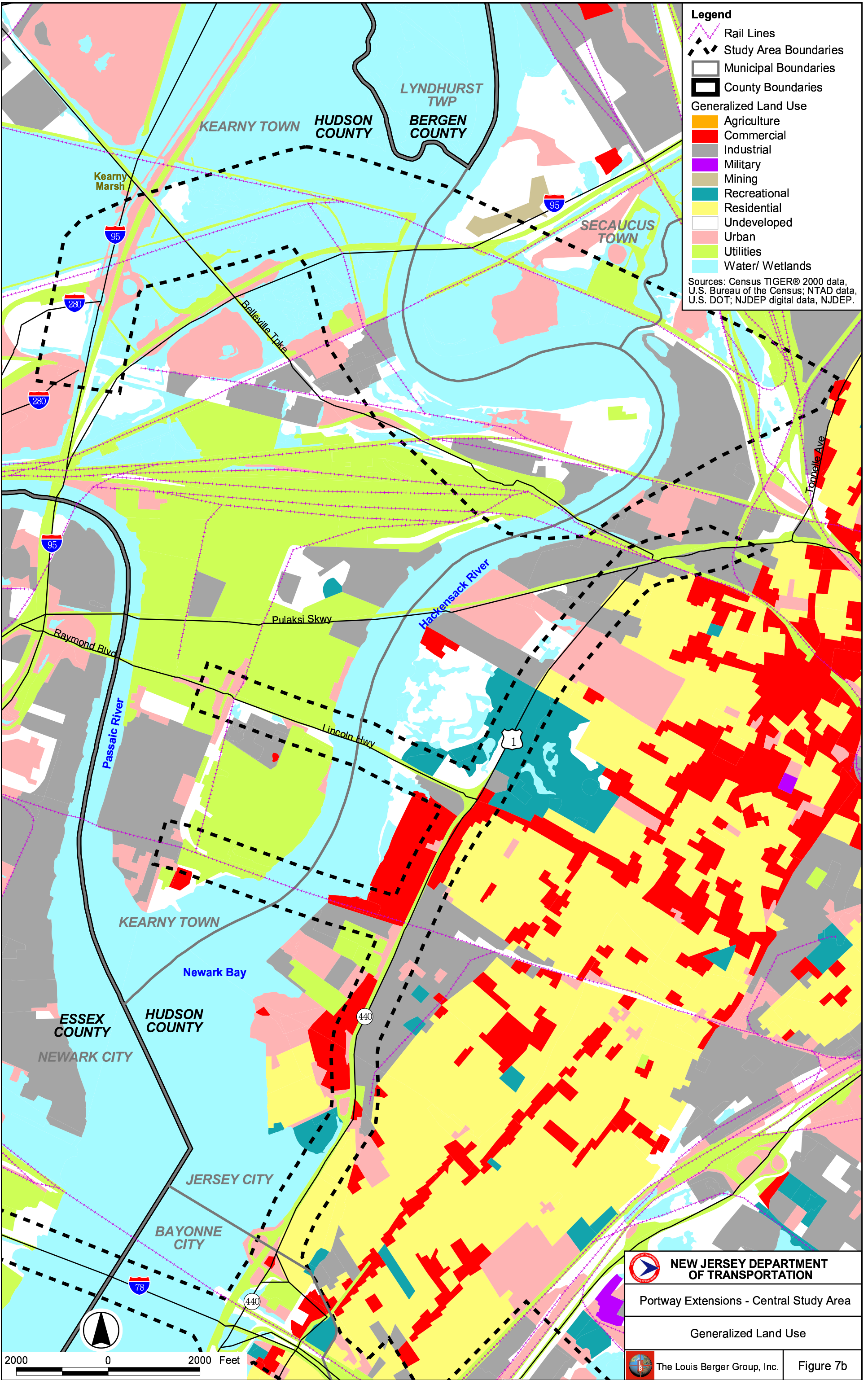
Generalized Land Use

- Agriculture
- Commercial
- Industrial
- Military
- Mining
- Recreational
- Residential
- Undeveloped
- Urban
- Utilities
- Water/ Wetlands

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

2000 0 2000 Feet

	NEW JERSEY DEPARTMENT OF TRANSPORTATION
	Portway Extensions - Northern Study Area
Generalized Land Use	
	Figure 7a



2000 0 2000 Feet

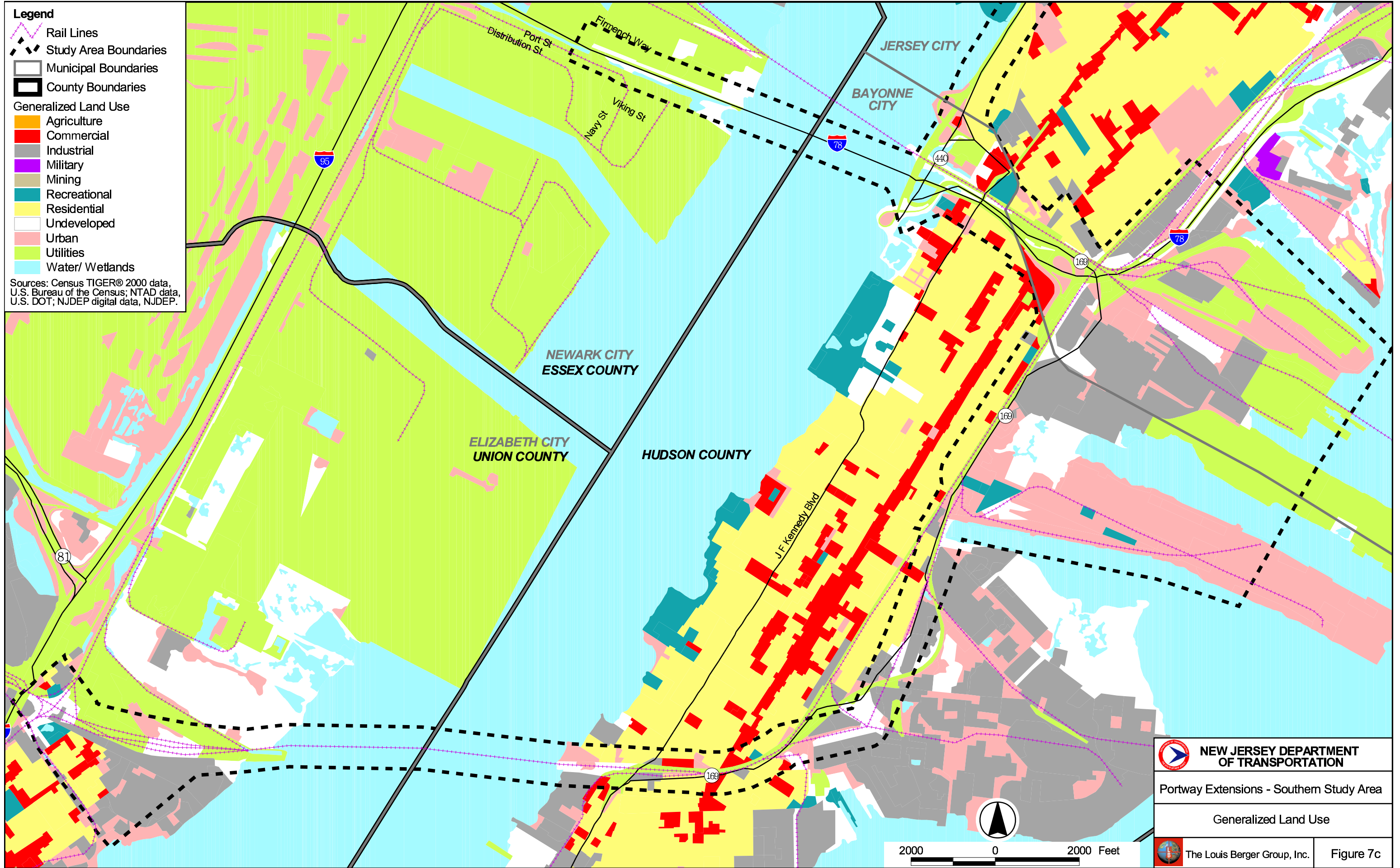
Legend

- Rail Lines
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries

Generalized Land Use

- Agriculture
- Commercial
- Industrial
- Military
- Mining
- Recreational
- Residential
- Undeveloped
- Urban
- Utilities
- Water/ Wetlands

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.







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Portway Extensions - Southern Study Area












Generalized Land Use

The Louis Berger Group, Inc. **Figure 7c**

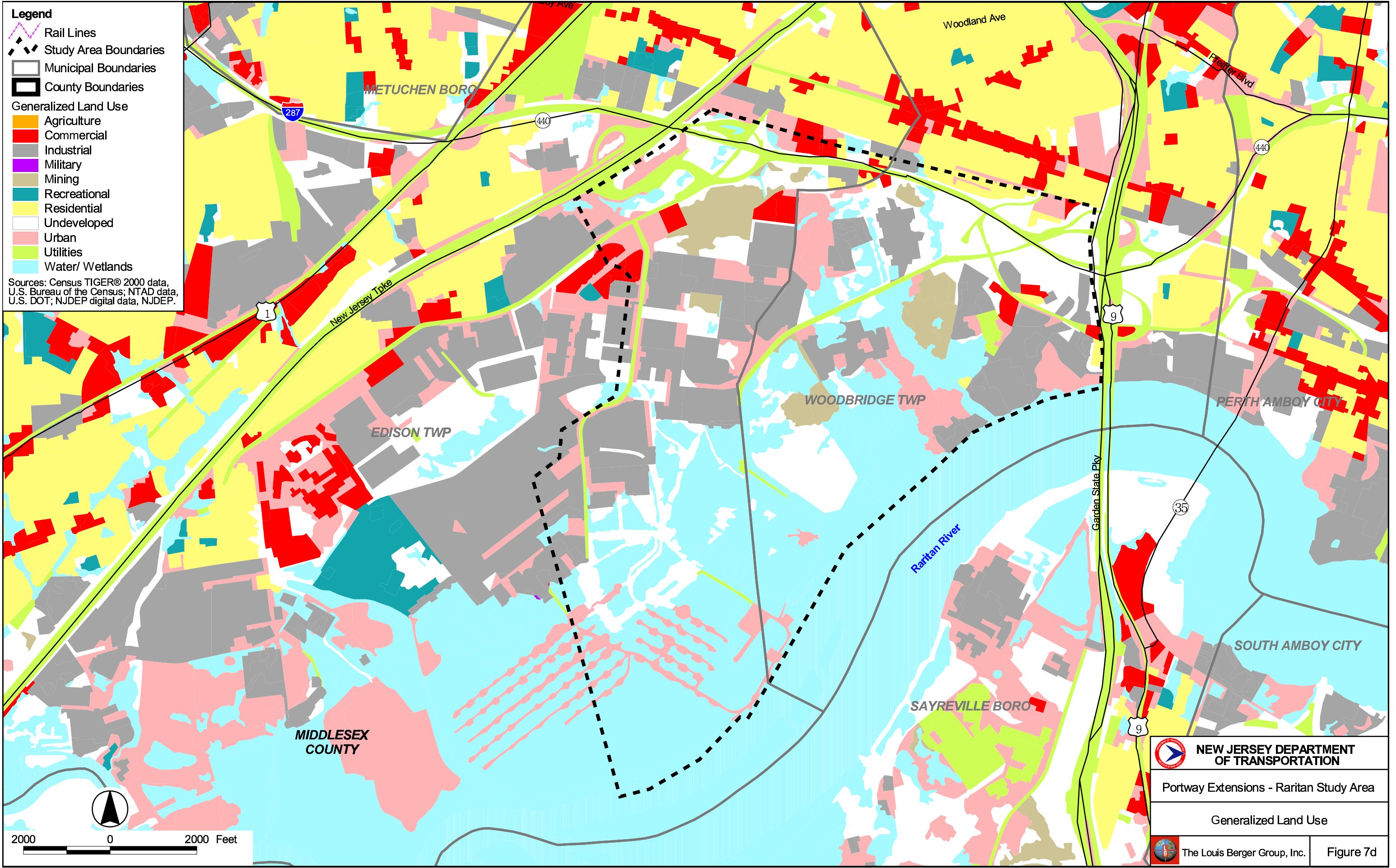
Legend


-  Rail Lines
-  Study Area Boundaries
-  Municipal Boundaries
-  County Boundaries

Generalized Land Use

-  Agriculture
-  Commercial
-  Industrial
-  Military
-  Mining
-  Recreational
-  Residential
-  Undeveloped
-  Urban
-  Utilities
-  Water/ Wetlands


Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

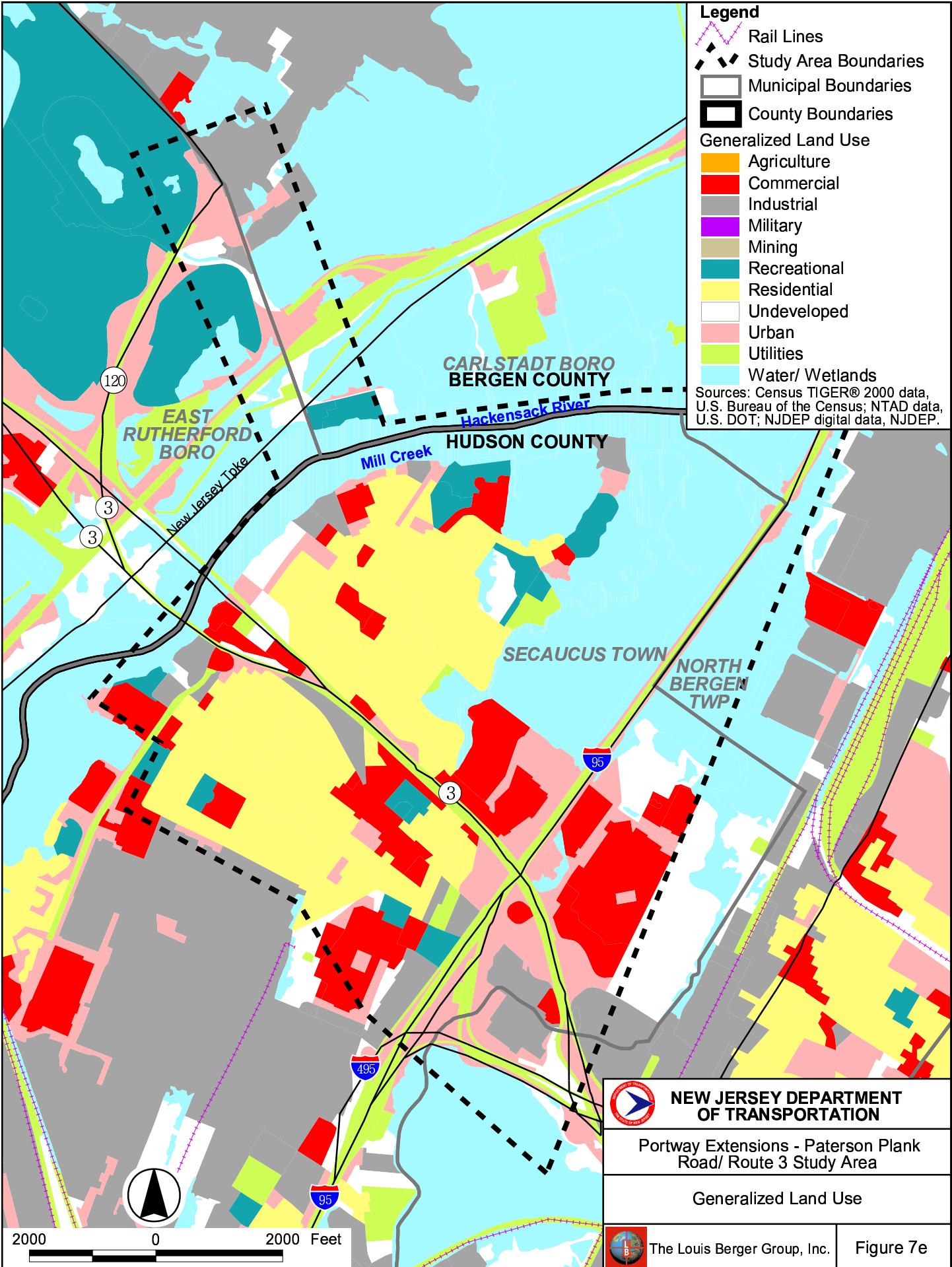


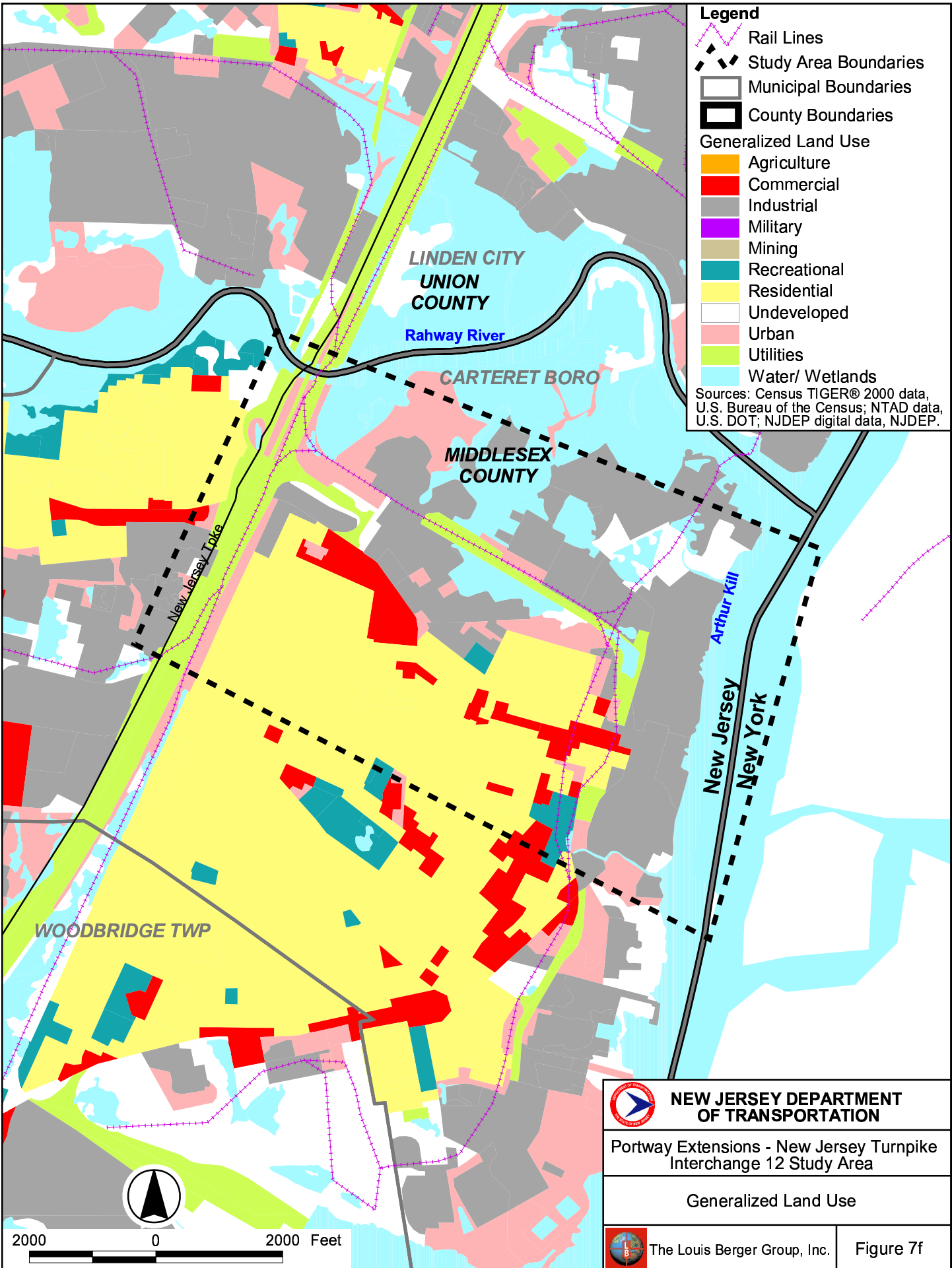
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Portway Extensions - Raritan Study Area

Generalized Land Use

 The Louis Berger Group, Inc. **Figure 7d**





Legend

- Rail Lines
- Study Area Boundaries
- Municipal Boundaries
- County Boundaries
- Generalized Land Use**
- Agriculture
- Commercial
- Industrial
- Military
- Mining
- Recreational
- Residential
- Undeveloped
- Urban
- Utilities
- Water/ Wetlands

Sources: Census TIGER® 2000 data, U.S. Bureau of the Census; NTAD data, U.S. DOT; NJDEP digital data, NJDEP.

 **NEW JERSEY DEPARTMENT OF TRANSPORTATION**

Portway Extensions - New Jersey Turnpike Interchange 12 Study Area

Generalized Land Use

 The Louis Berger Group, Inc.

Figure 7f

2000 0 2000 Feet

