Mapping for Sociologists:

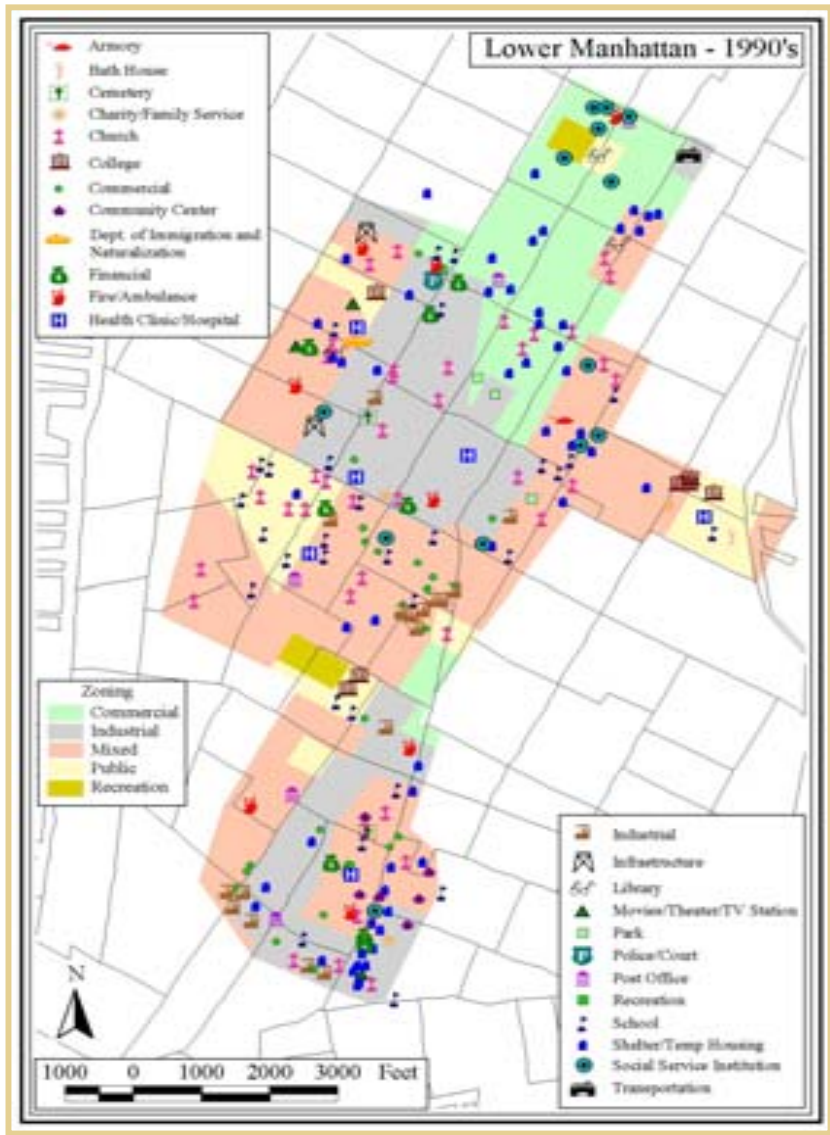
Some Great Maps and How to Use Them

John R. Logan and Deirdre Oakley

Lewis Mumford Center

Why Use Maps?

Atlanta
Ga.
SCALE
MARIETTA RD.
To Rome, Ga & Chattanooga, Tenn.
MARIETTA ST.
PEACHTREE ST.
PONCE DE LEON ST.
To Athens & Augusta
GROTON AVE.
Option to Stone Mountain
EDGEWOOD AVE.
WHITEHALL ST.
PARK ST.
LEE ST.
STEWART AVE.
To Montgomery, Ala.
To Macon for Milledgeville & Savannah
Atlanta University
Spelman Seminary
State Capitol
Oakland Cemetery
Soldier's Home
Copyright
THE AUTOMOBILE BLUE BOOK PUB. CO.


Lower Manhattan - 1990's
Armory
Bath House
Cemetery
Charity/Family Service
Church
College
Commercial
Community Center
Dept. of Immigration and Naturalization
Financial
Fire/Ambulance
Health Clinic/Hospital
Zoning
Commercial
Industrial
Mixed
Public
Recreation
Industrial
Infrastructure
Library
Movies/Theater/TV Station
Park
Police/Court
Post Office
Recreation
School
Shelter/Temp Housing
Social Service Institution
Transportation
N
1000 0 1000 2000 3000 Feet

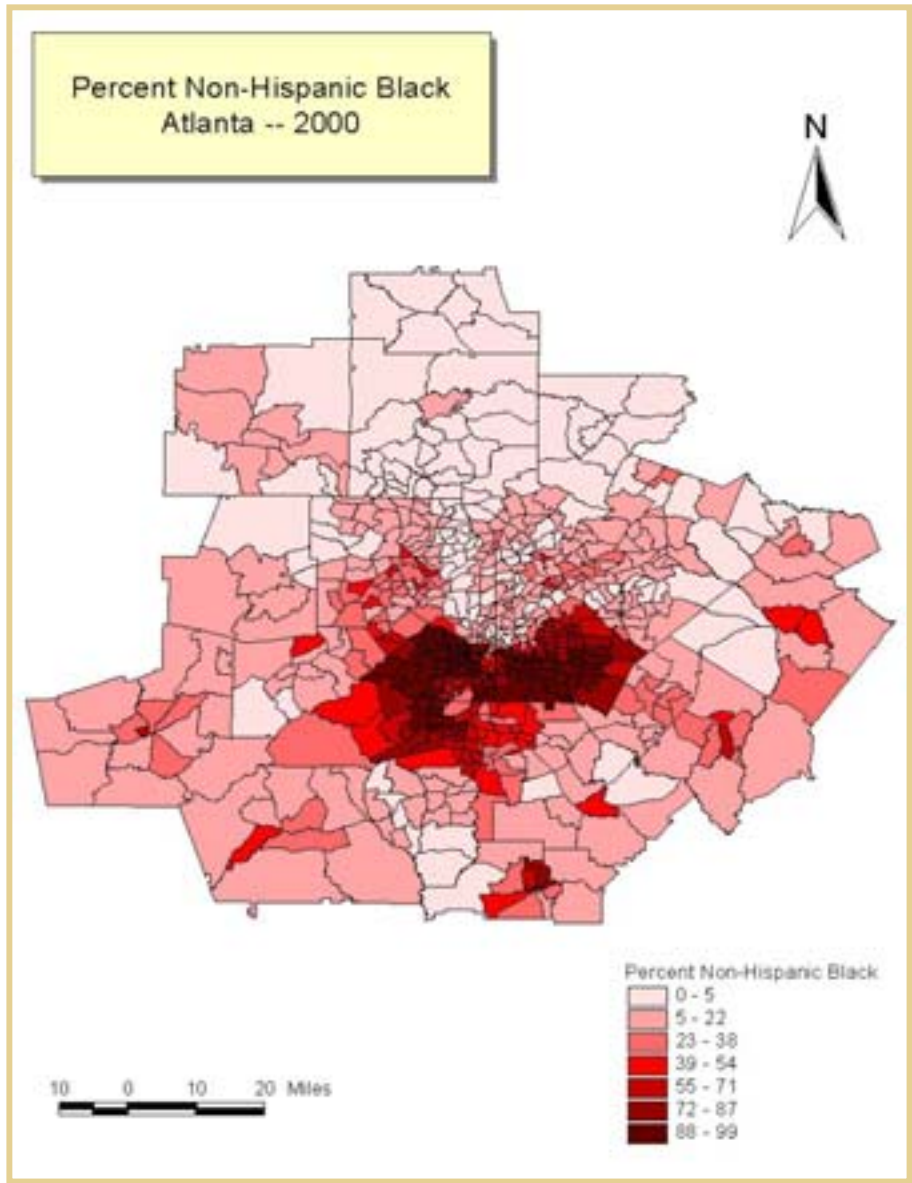
Census 2000 – Atlanta, GA

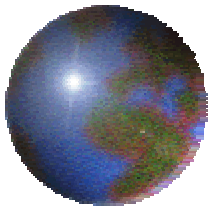
Entire Metropolitan Area

- *Index of Dissimilarity (D)*
  - White with Black = 65.6
- *Isolation Indices (P*)*
  - White with White = 76.4
  - Black with Black = 62.6

City Only

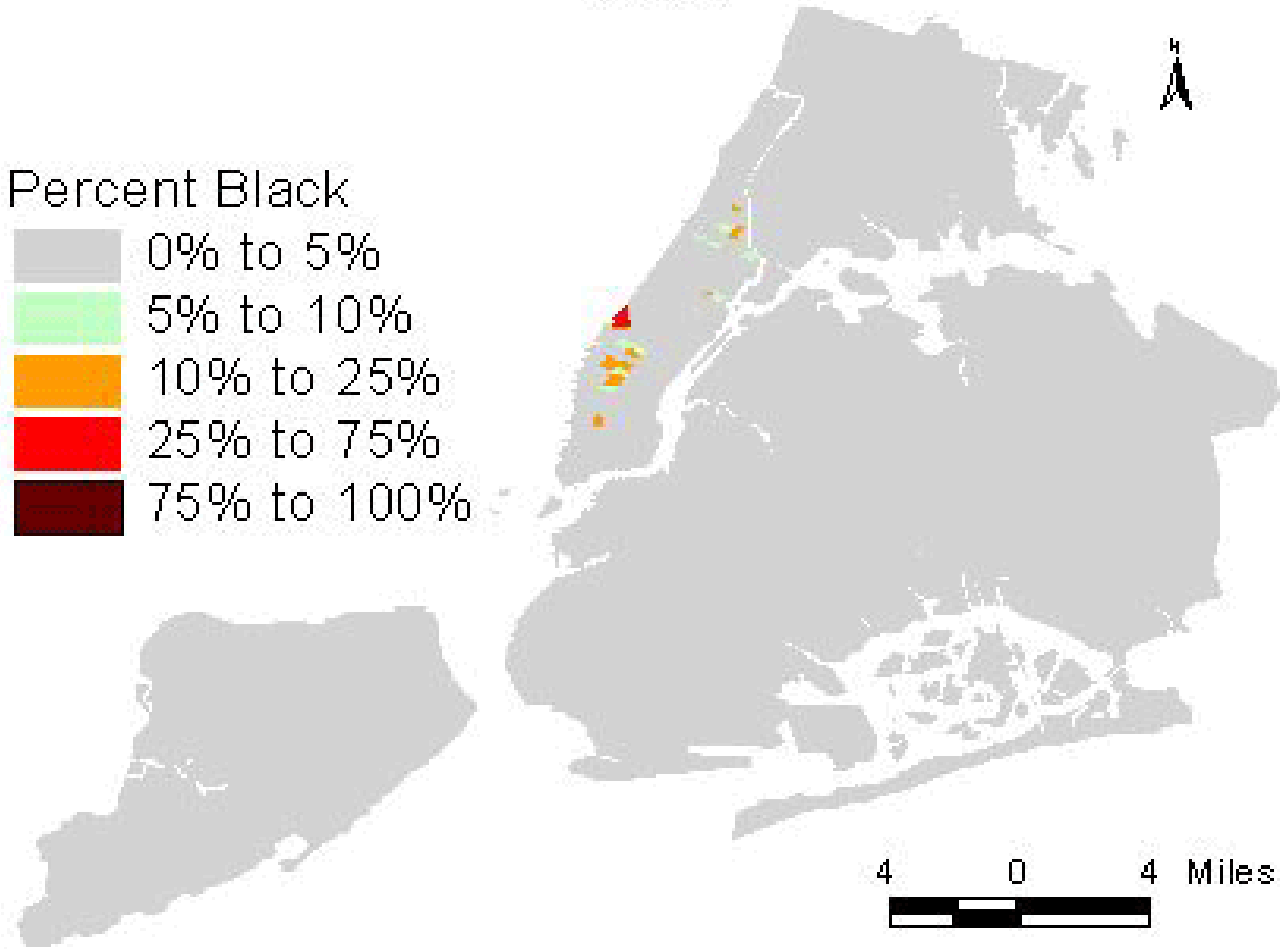
- *Index of Dissimilarity (D)*
  - White with Black = 81.6
- *Isolation Indices (P*)*
  - White with White = 72.7
  - Black with Black = 86.2


Percent Non-Hispanic Black
Atlanta -- 2000
N
Percent Non-Hispanic Black
0 - 5
5 - 22
23 - 38
39 - 54
55 - 71
72 - 87
88 - 99
10 0 10 20 Miles

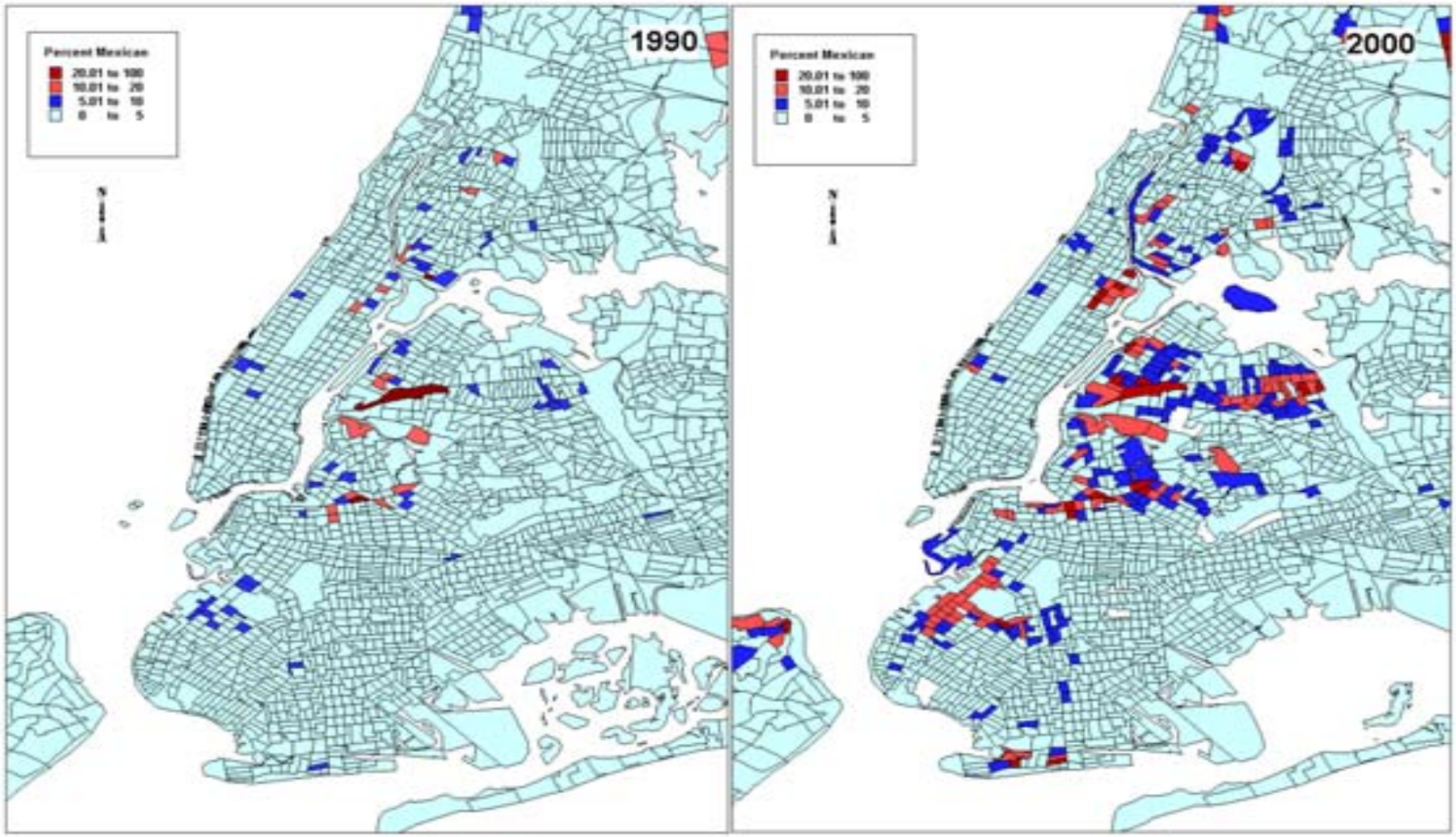


Showing Change Over Time

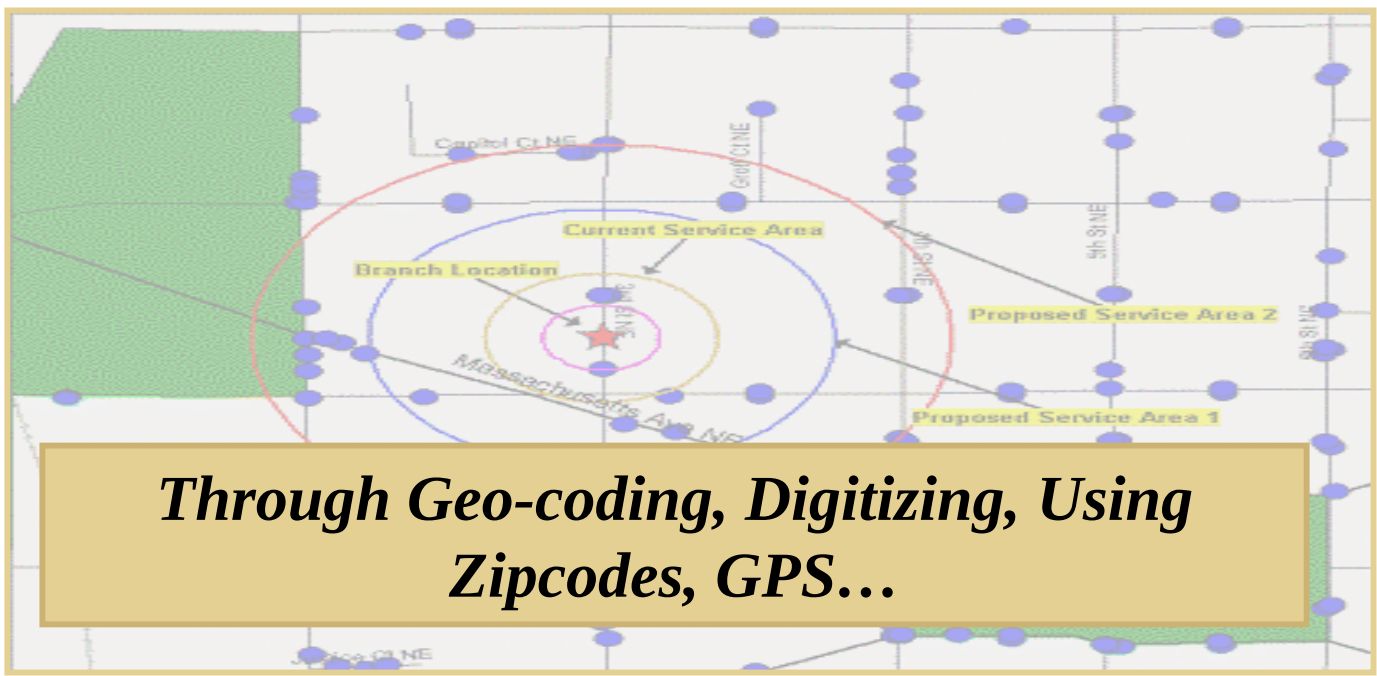
Black Neighborhoods in New York City
1900



Mexican Population Increase in New York City



Using Unique Data Sources



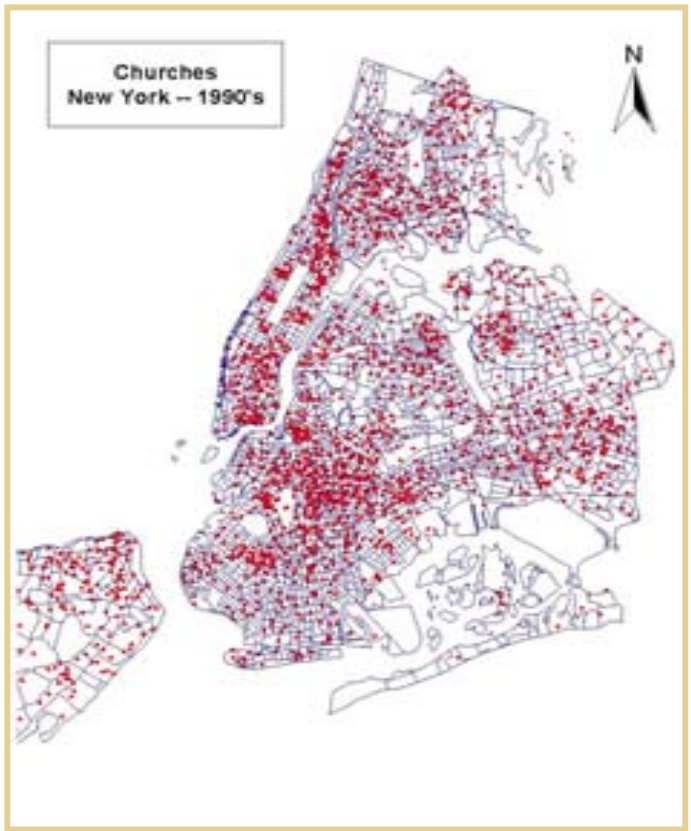
Through Geo-coding, Digitizing, Using Zipcodes, GPS…

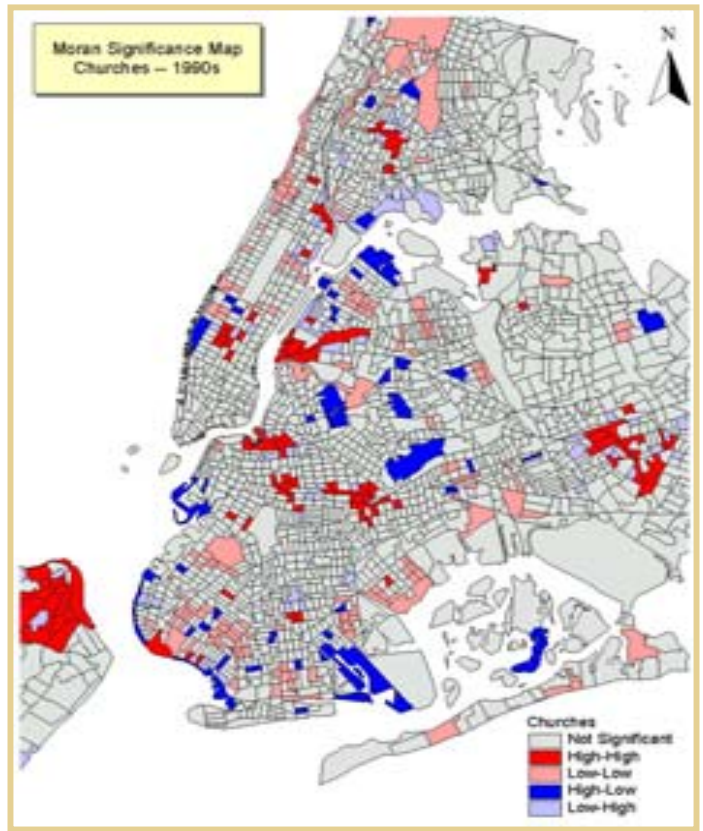
This spreadsheet has a lot of information, but …

Location of factories in Brooklyn, 1917								
Type of factory	**Greenpoint**	**Wmsburg**	**Bushwick**	**Bed Stuy**	**Downtown**	**East NY**	**Brownsville**	**Crown Hts**
Oil and Chemical	22	18	1	2	12		1	
Tailoring and Millinery	32	96	69	15	15	4	76	1
Glass, Brick, Tile	8	6	2	2	6	1		
Food	16	20	7	7	24	2	1	8
Flax, Hemp and Jute	2				1			
Metal, Machinery	33	8	6	2	31	2		2
Printing	10	3	4	1	14			1
Boots and Shoes	8	2		3	14			3

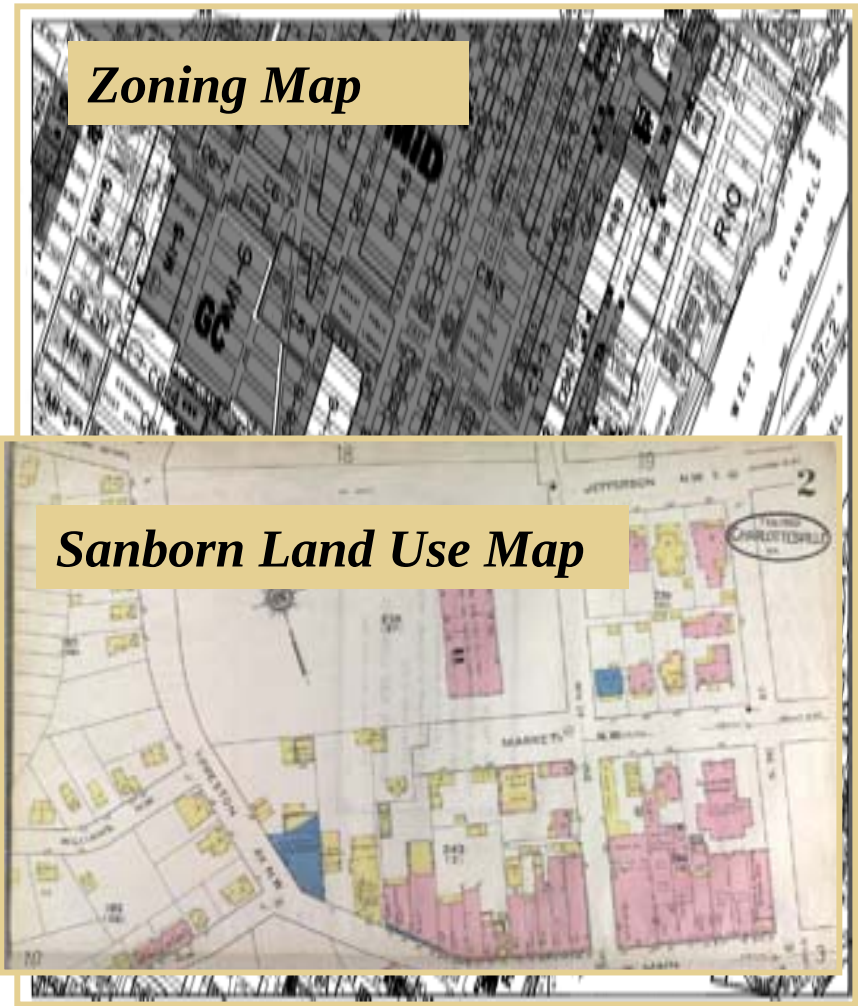
… you learn more from the map

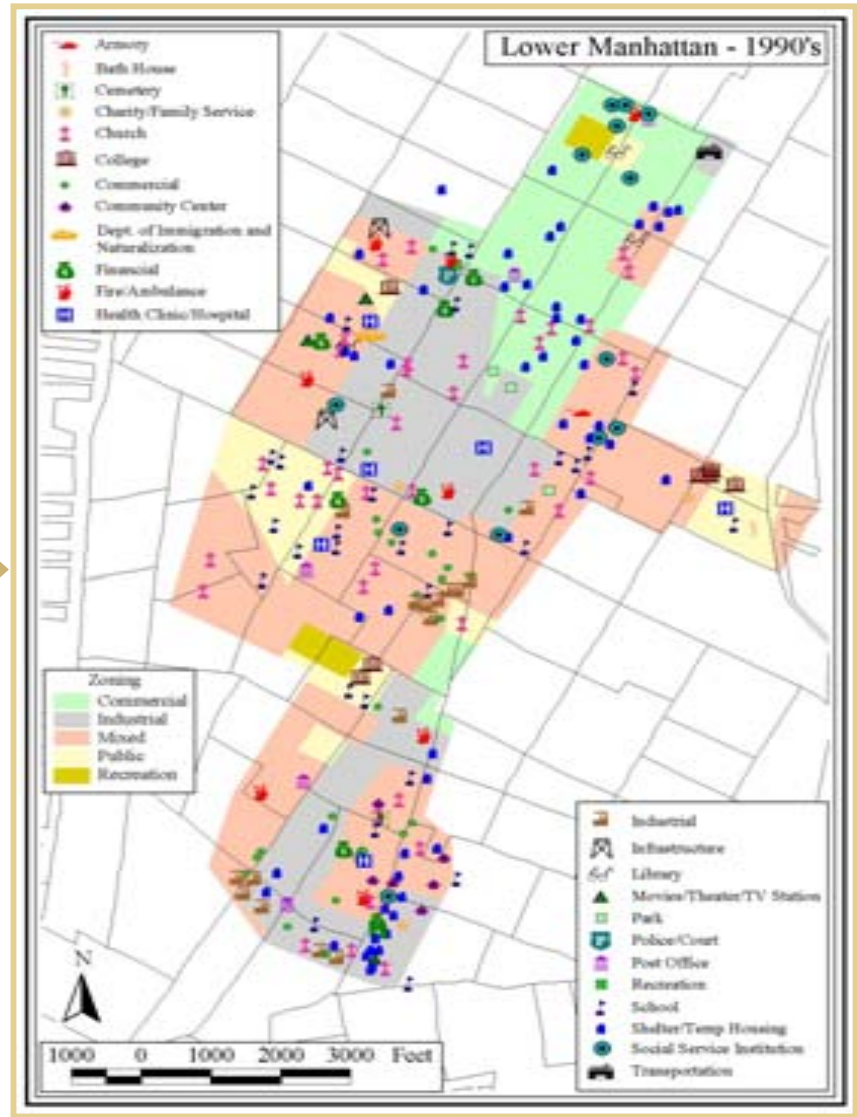
Geocoding


Churches
New York -- 1990's
N

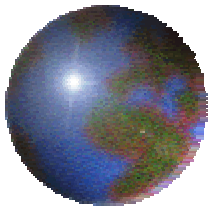

Moran Significance Map
Churches -- 1990s
N
Churches
Not Significant
High-High
Low-Low
High-Low
Low-High

Geo-coding & Digitizing

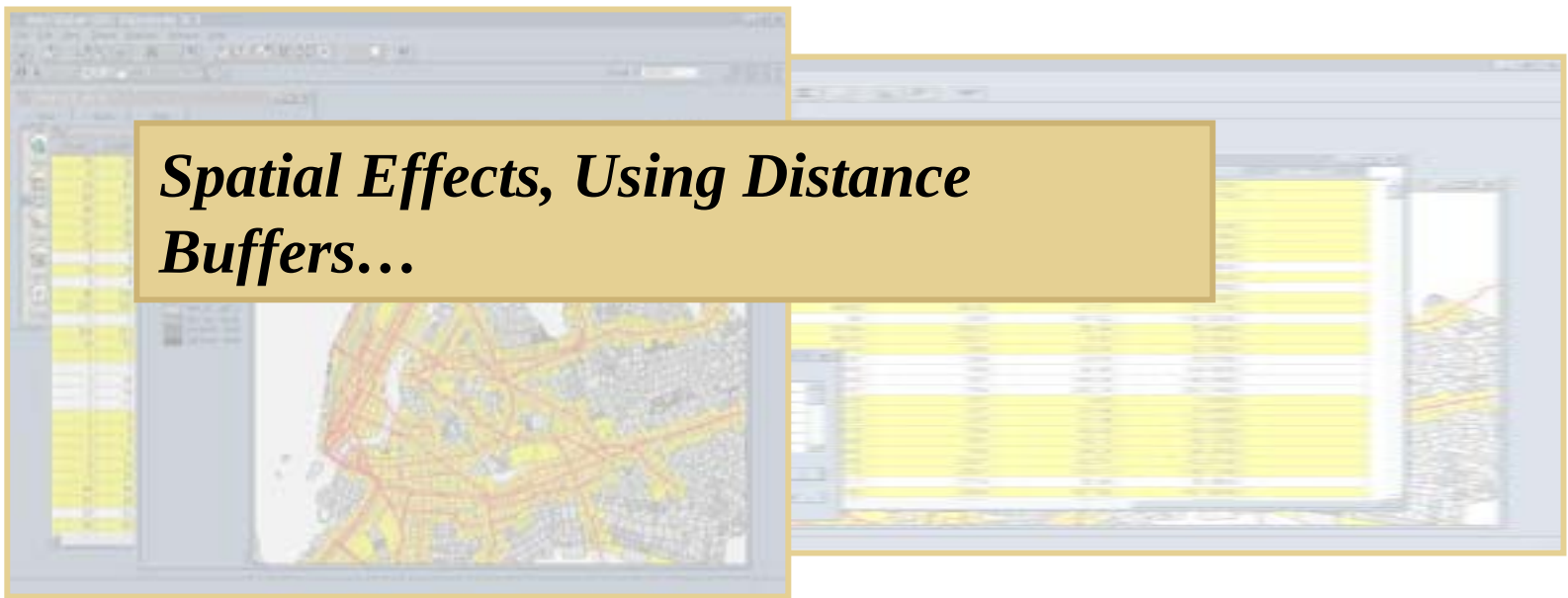




Geo-referencing with GPS Devices



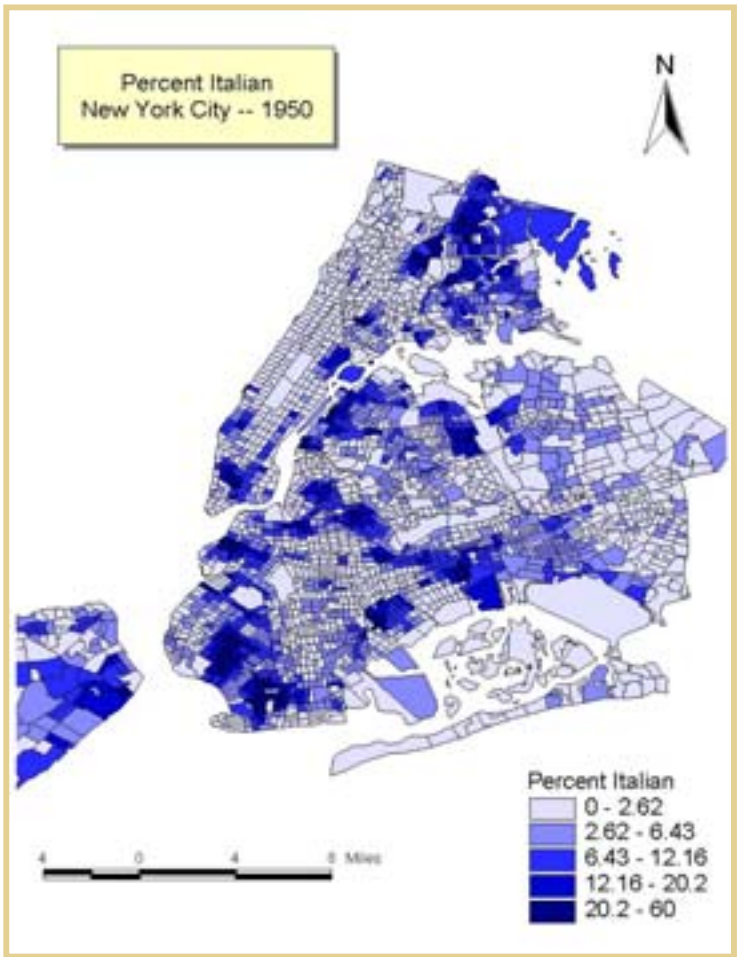
Analyzing Data with Maps

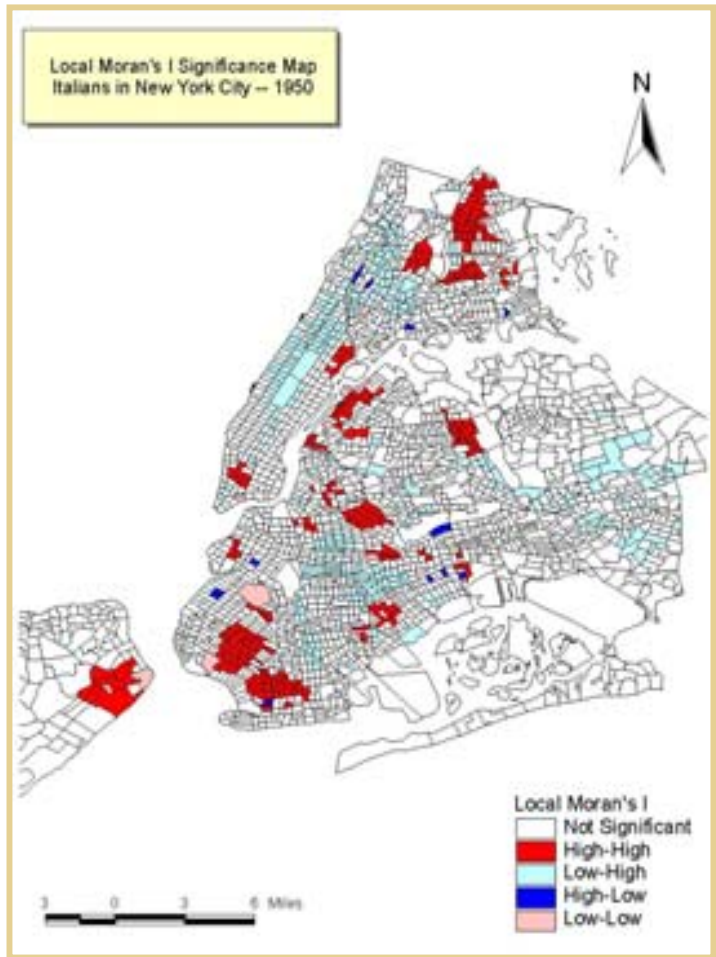


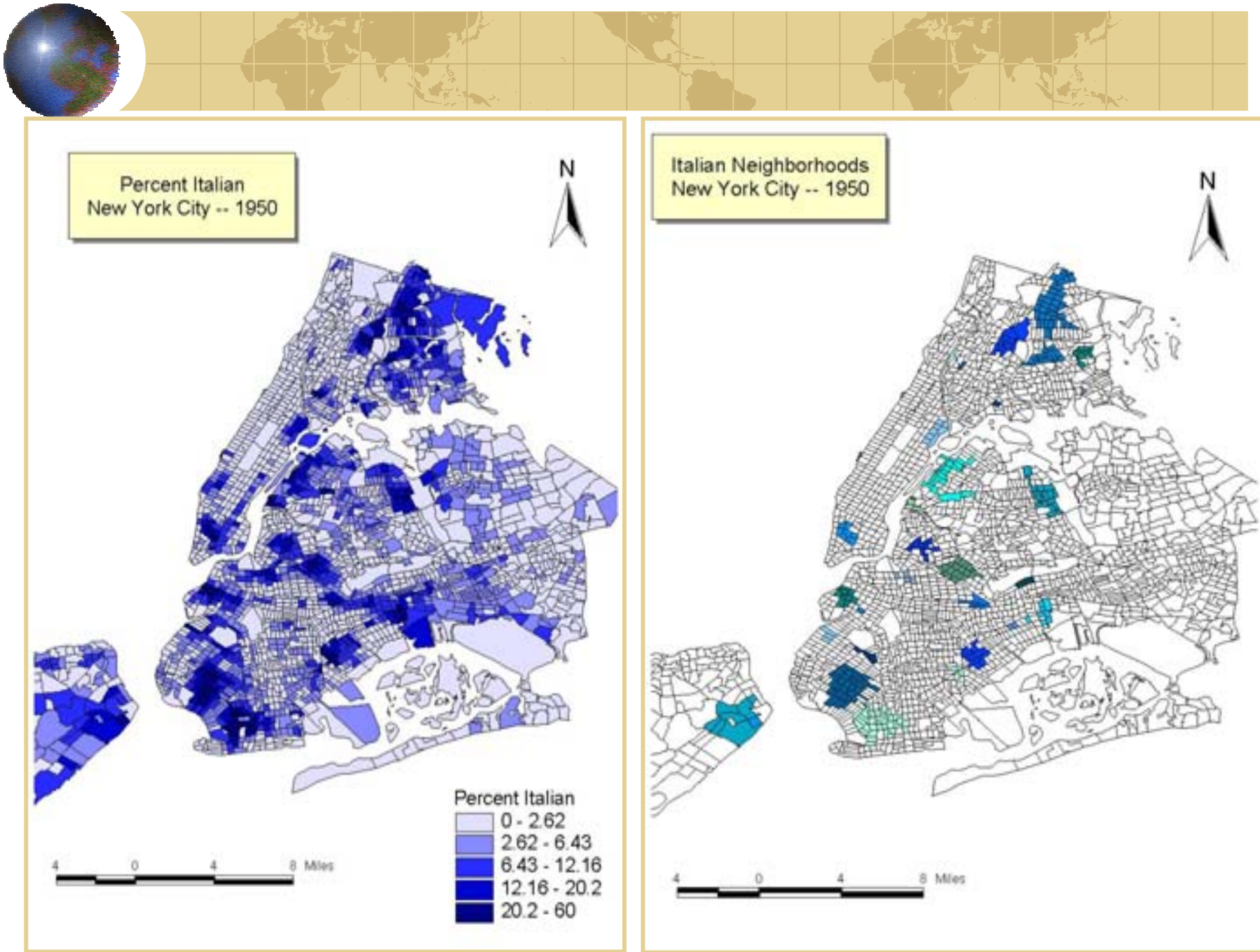
Spatial Effects, Using Distance Buffers…

Assessing Spatial Effects

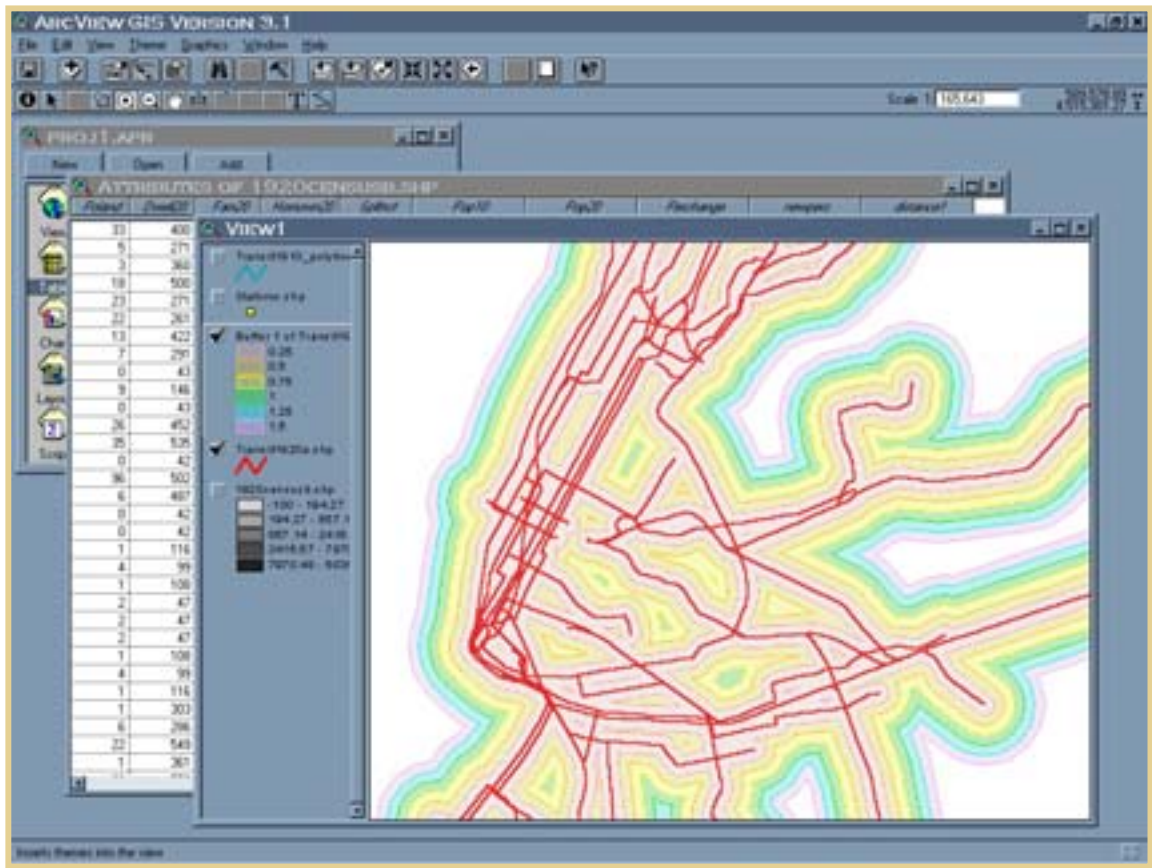
Ethnic Neighborhood Identification

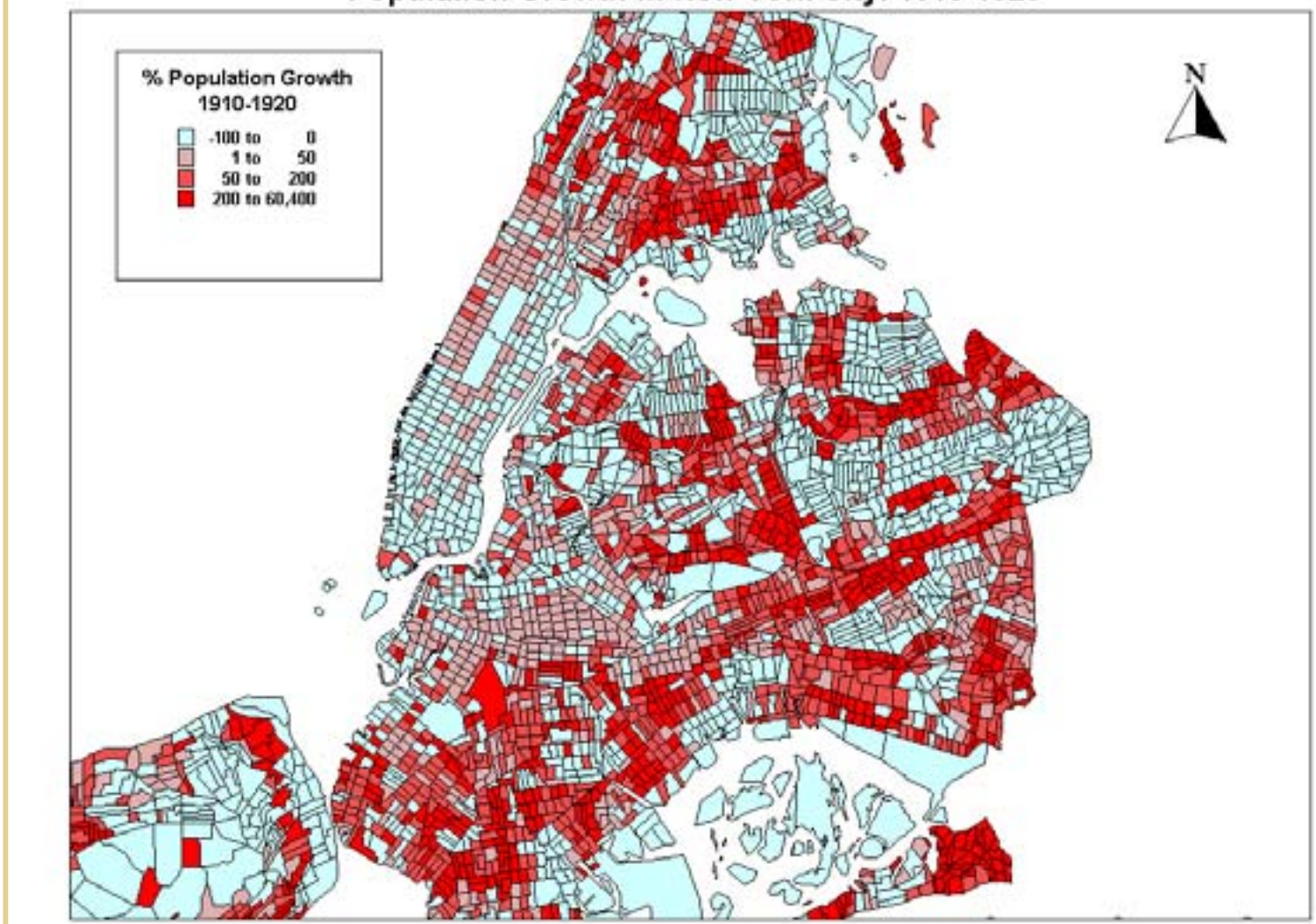


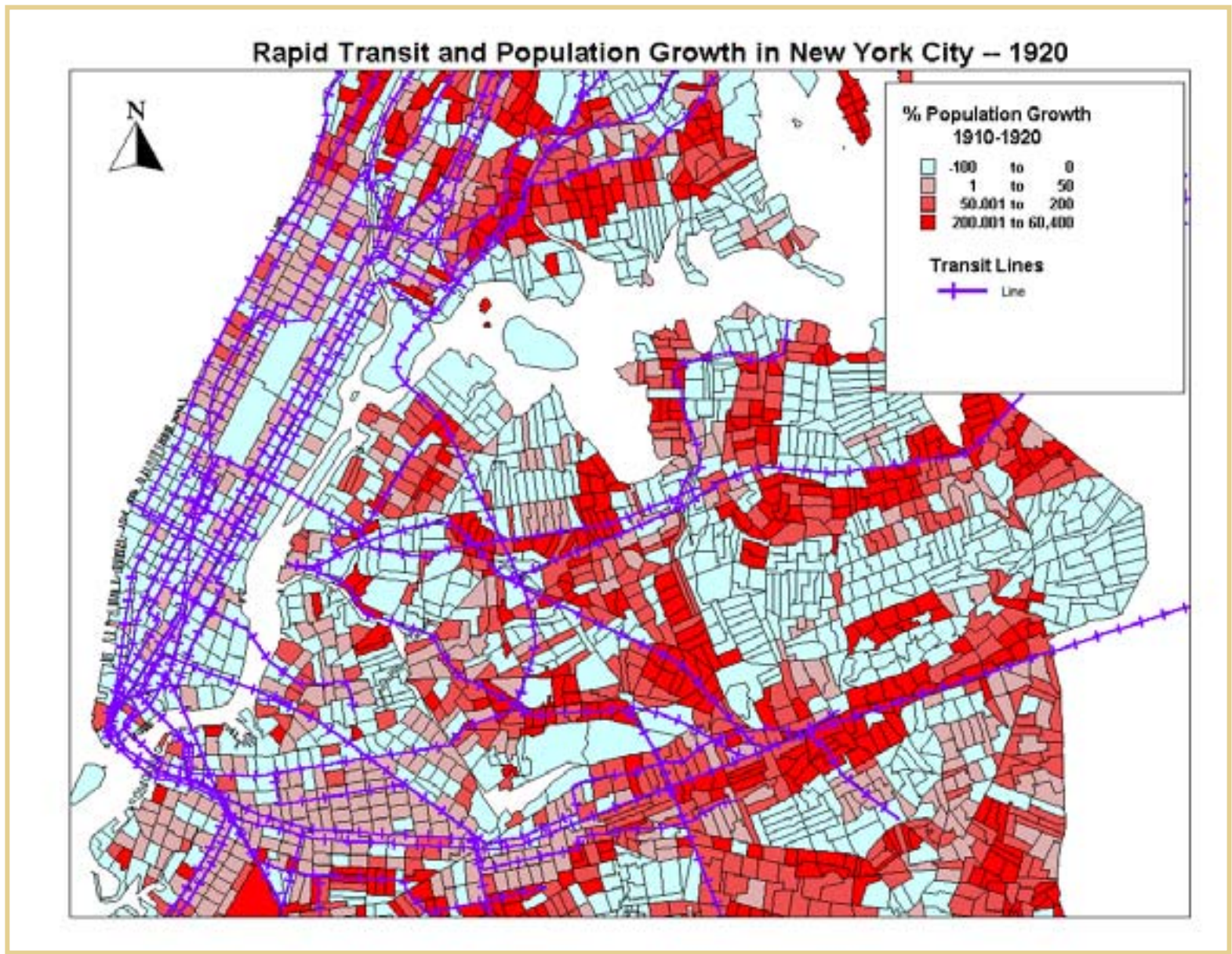



Percent Italian
New York City -- 1950
N
Percent Italian
0 - 2.62
2.62 - 6.43
6.43 - 12.16
12.16 - 20.2
20.2 - 60
4 0 4 8 Miles
Italian Neighborhoods
New York City -- 1950
N
4 0 4 8 Miles

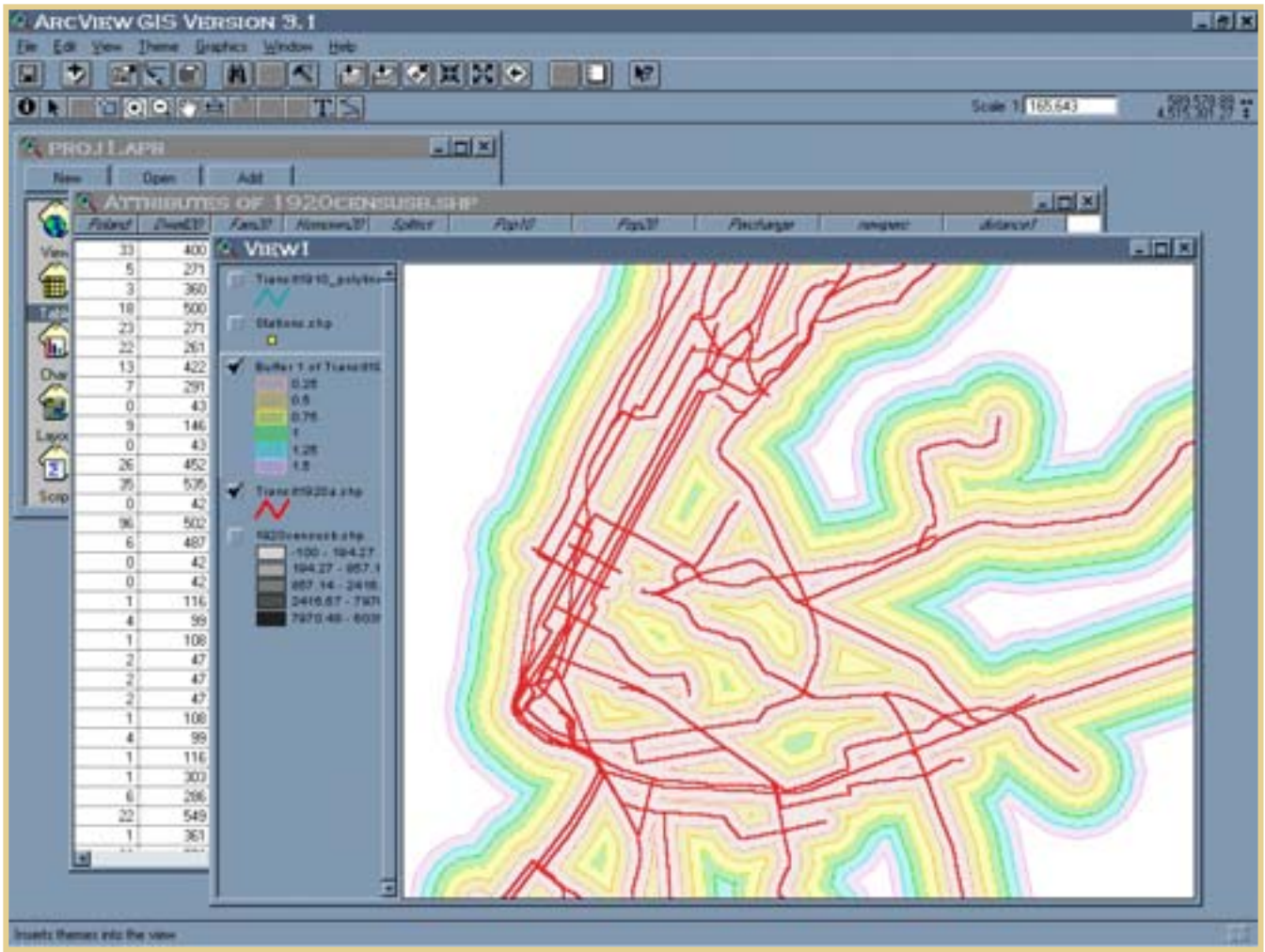
Using Distance as a Variable



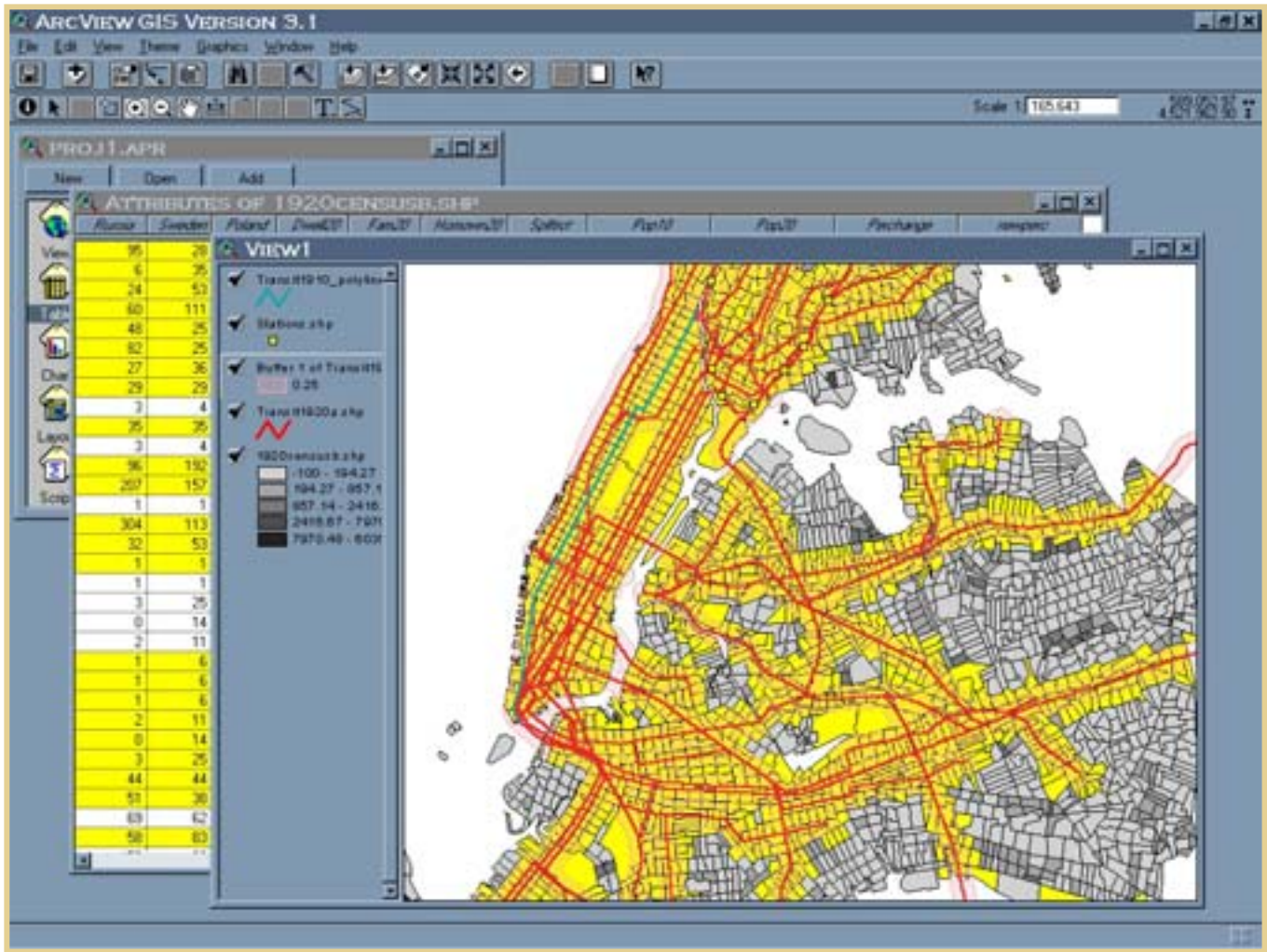

Population Growth in New York City: 1910-1920
% Population Growth
1910-1920
-100 to 0
1 to 50
50 to 200
200 to 60,400
N


Rapid Transit and Population Growth in New York City -- 1920
N
% Population Growth
1910-1920
-100 to 0
1 to 50
50.001 to 200
200.001 to 60,400
Transit Lines
Line

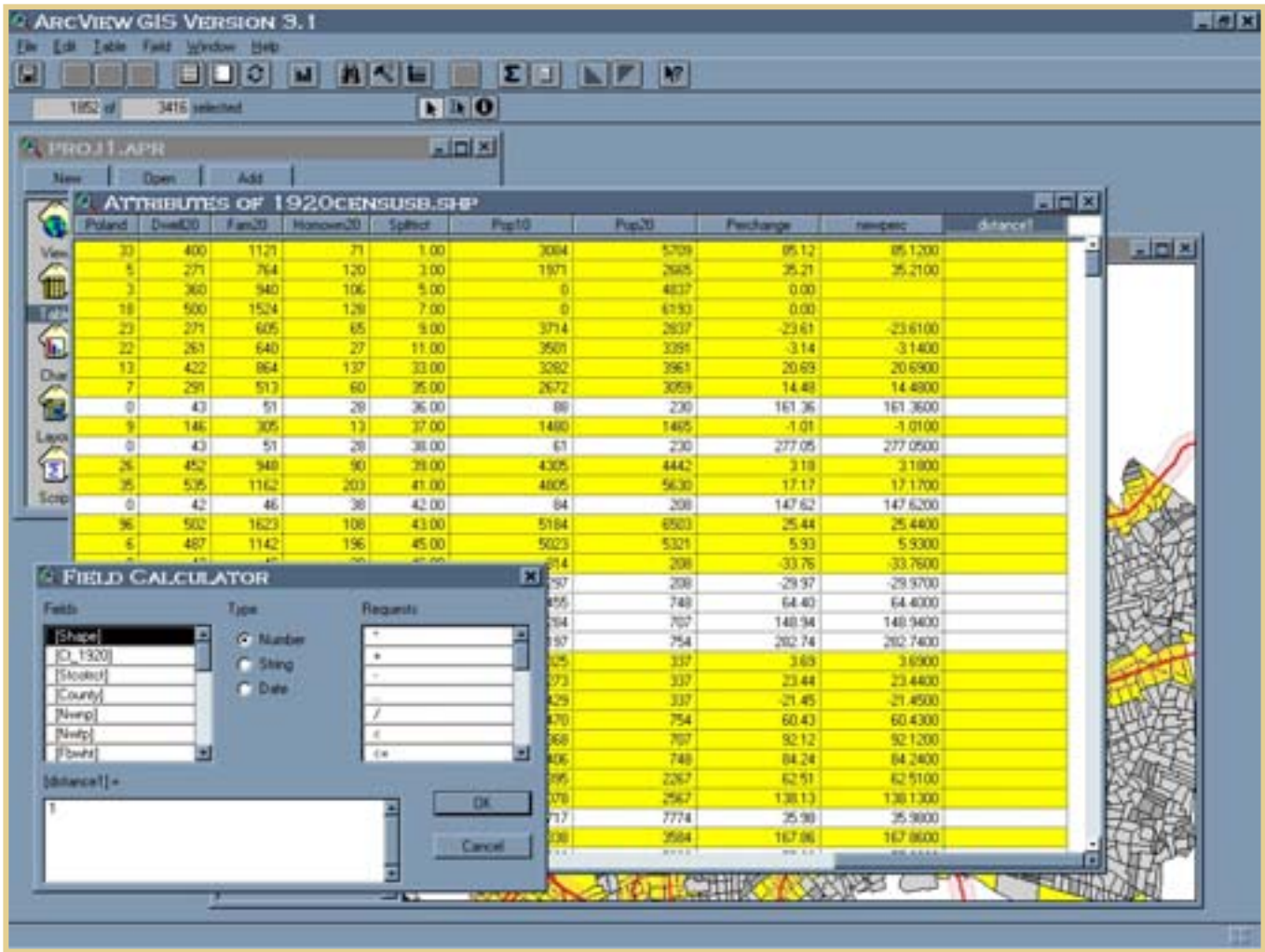
Creating Distance Buffers



Selecting Tracts Based on Buffer Distance



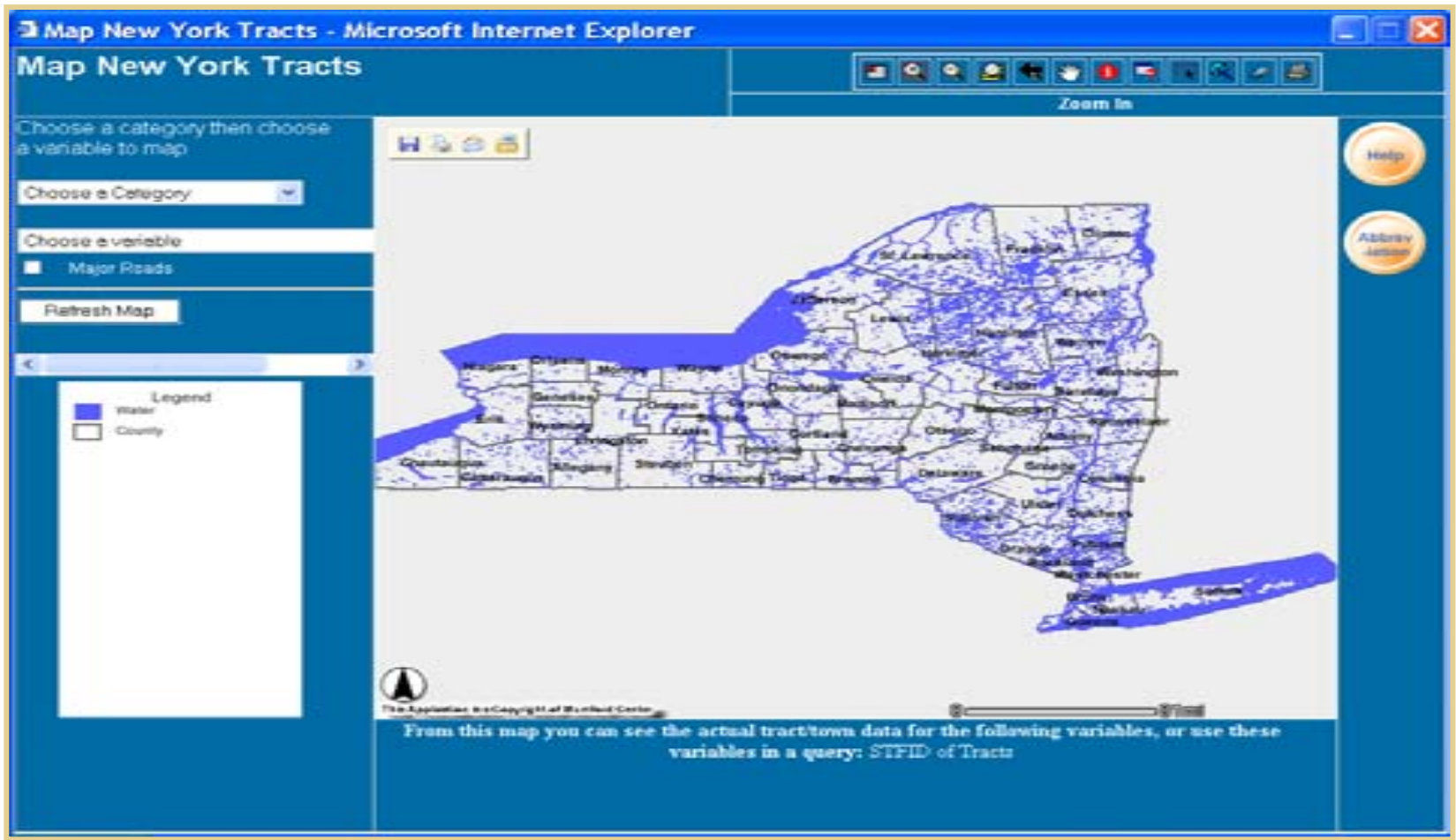
Creating Dummy Variables



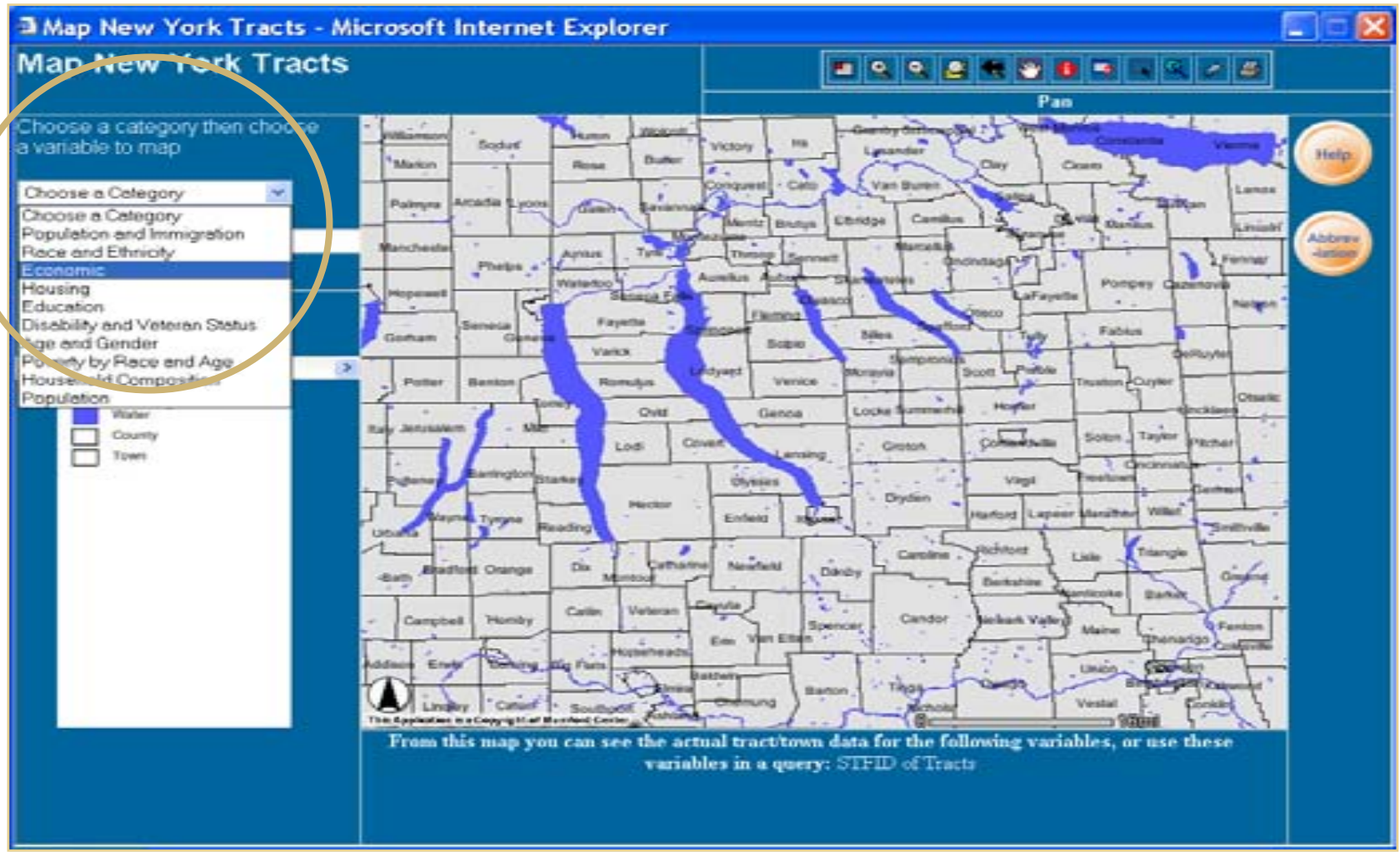
Using Web-based GIS

Map NY –

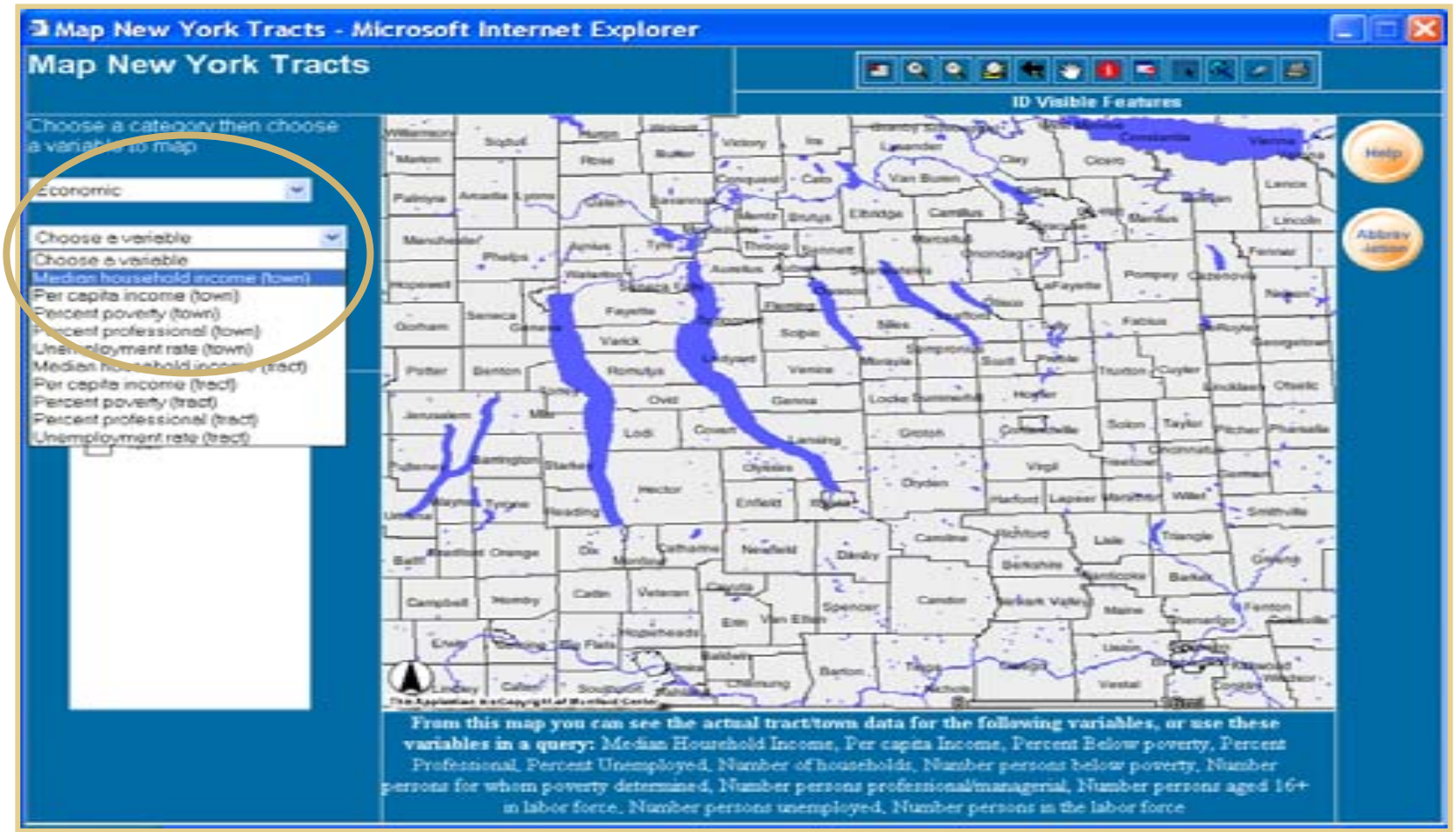
www.albany.edu/mumford/mapny



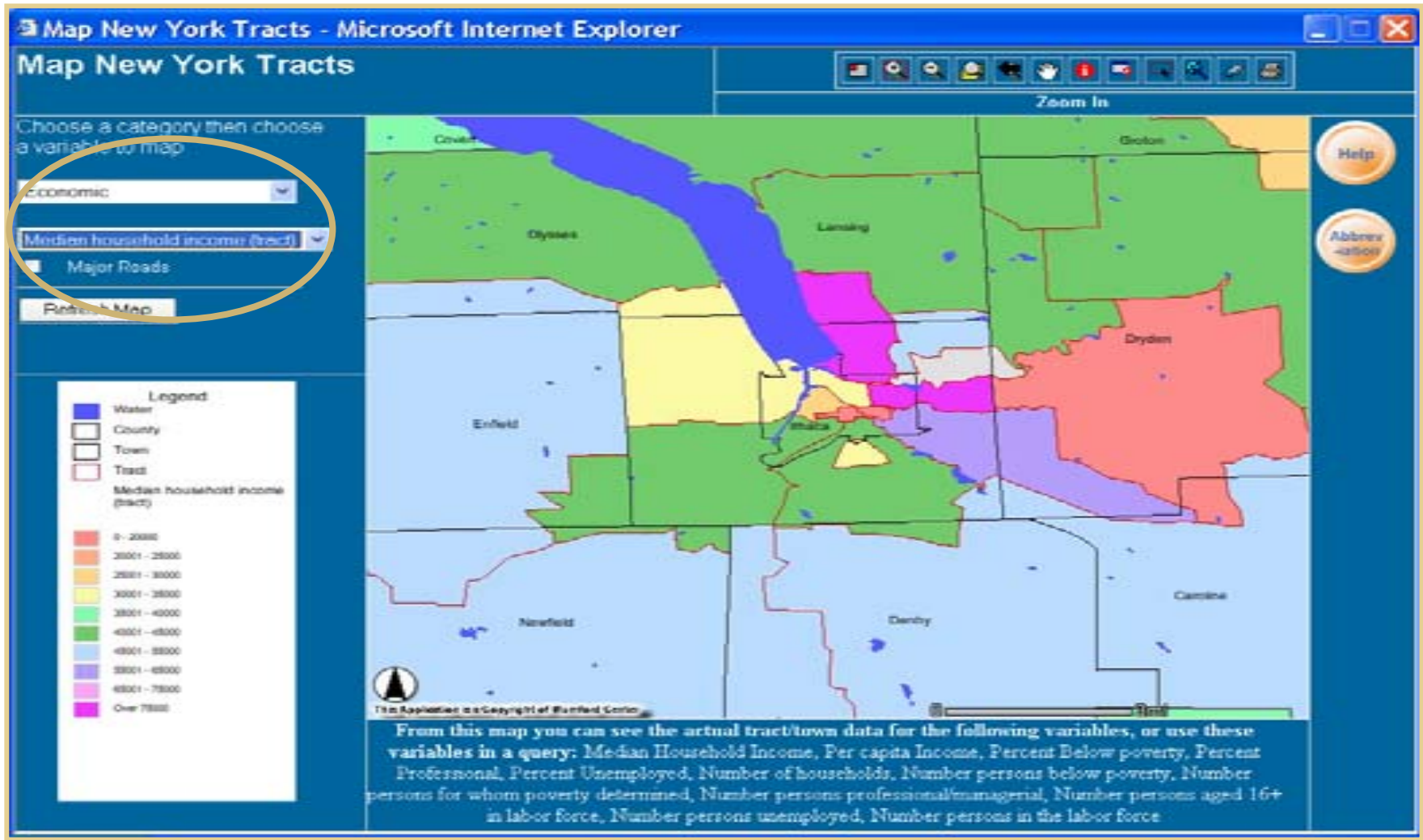
Choose a Category



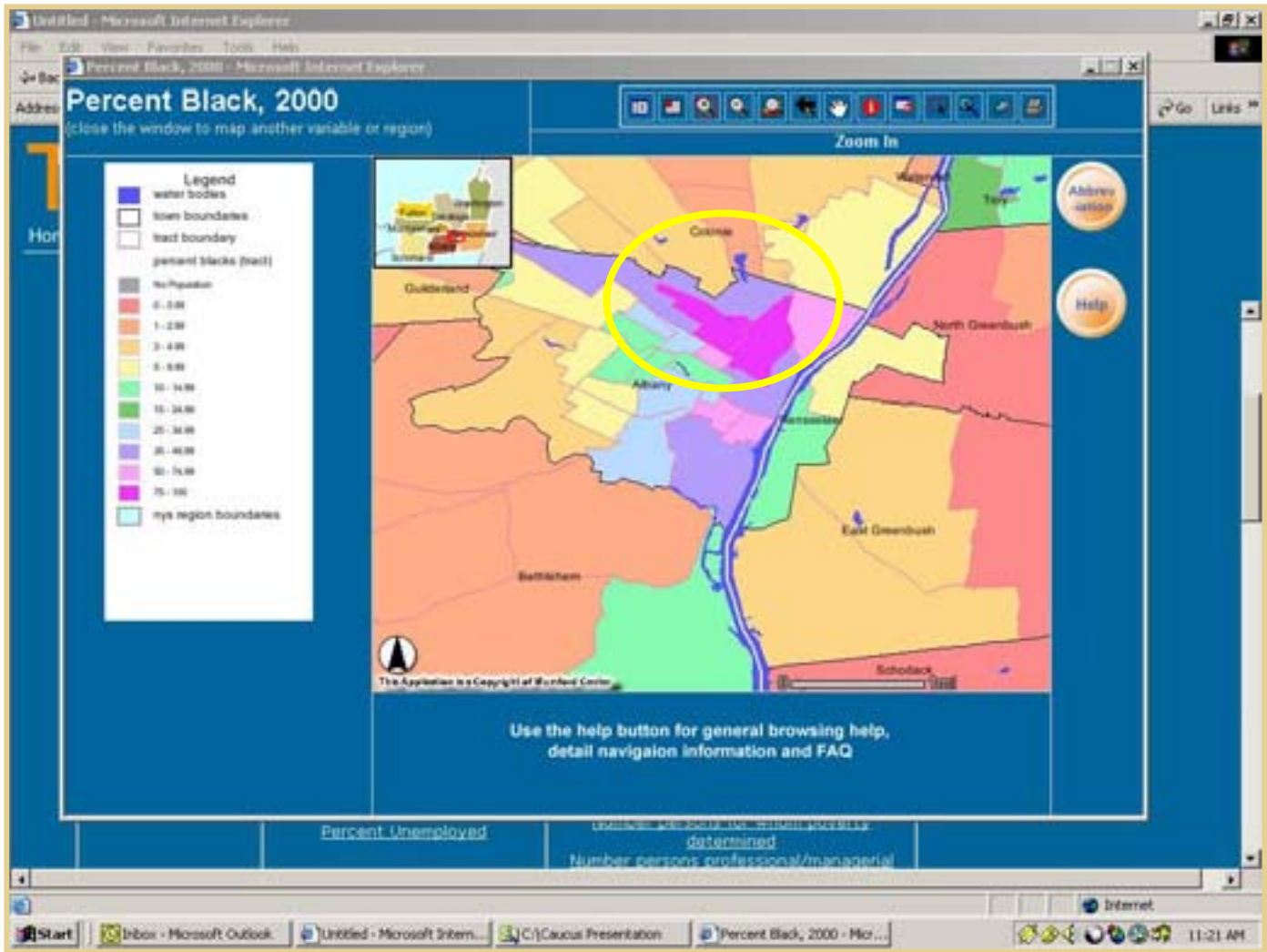
Select a Variable



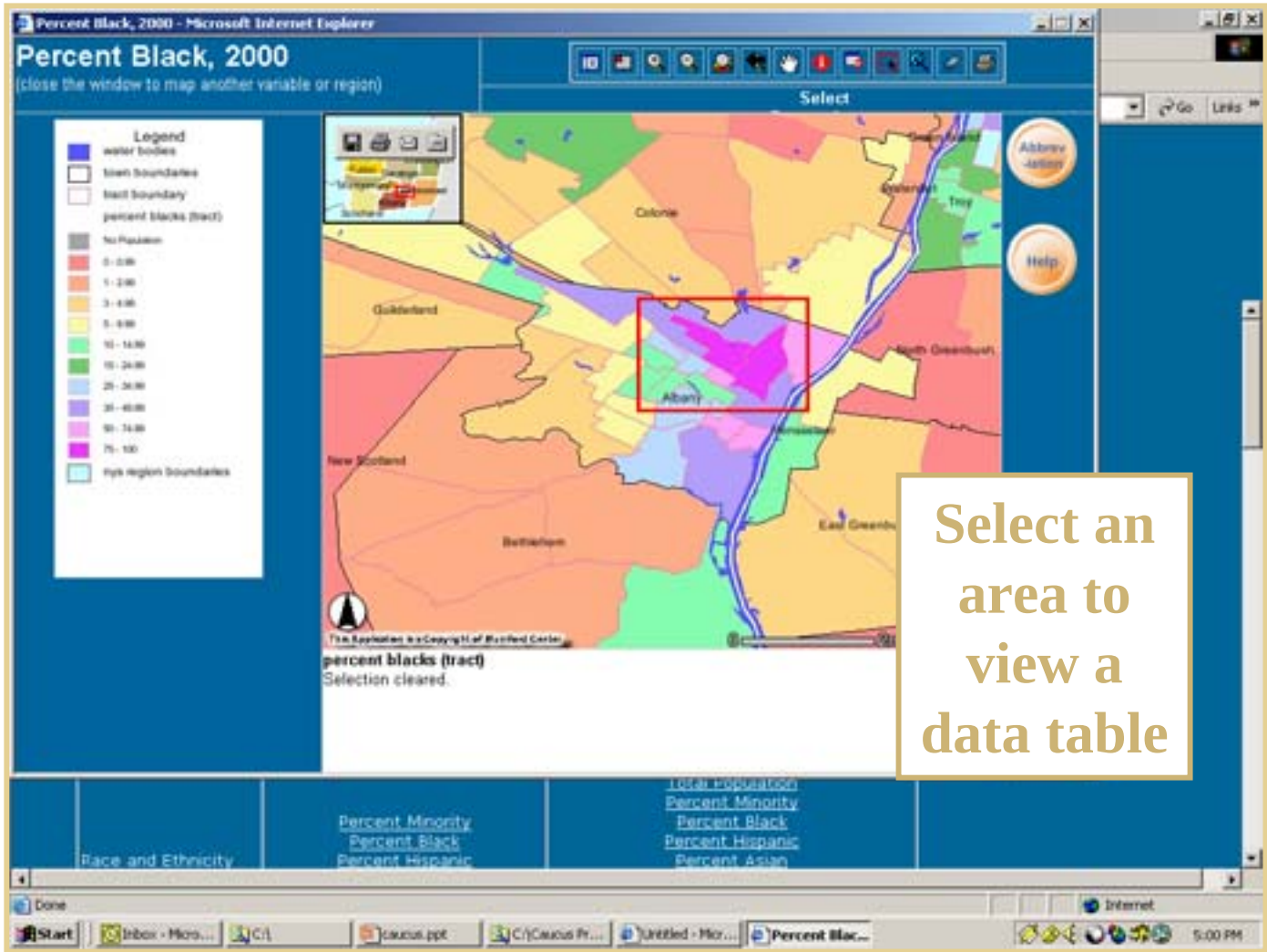
Census Tract Level



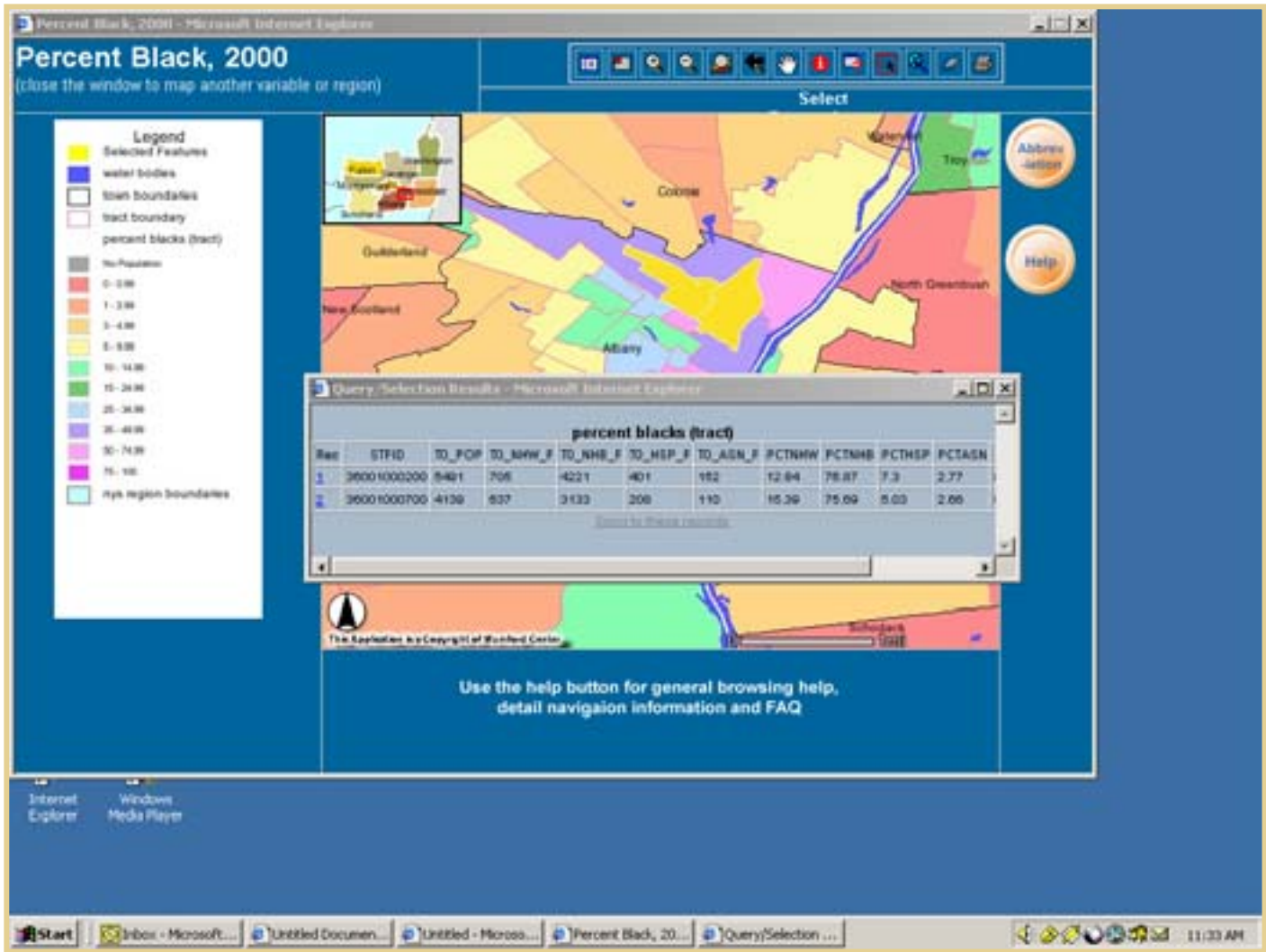
Zoom to Tract Level



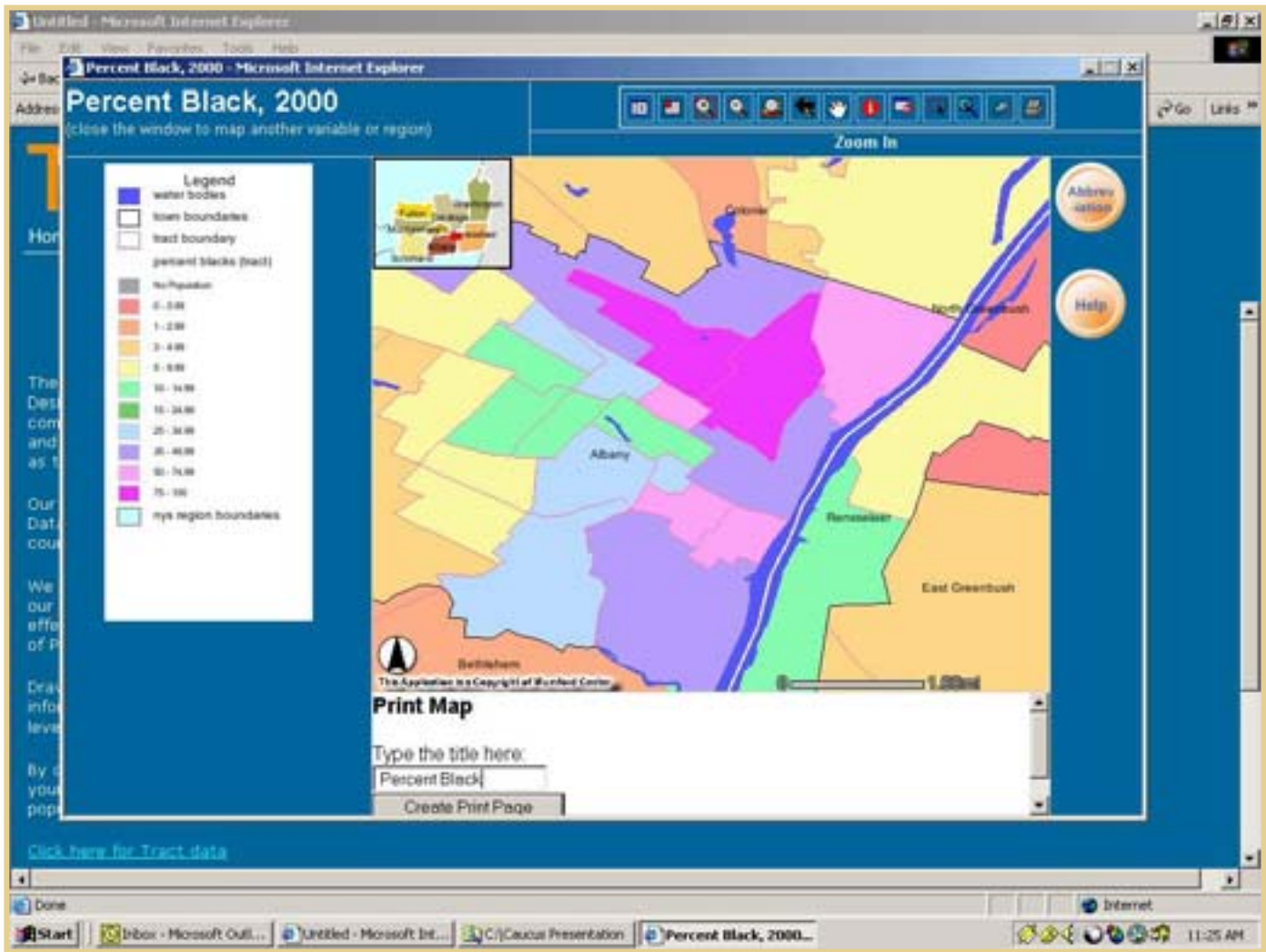
Select and Identify



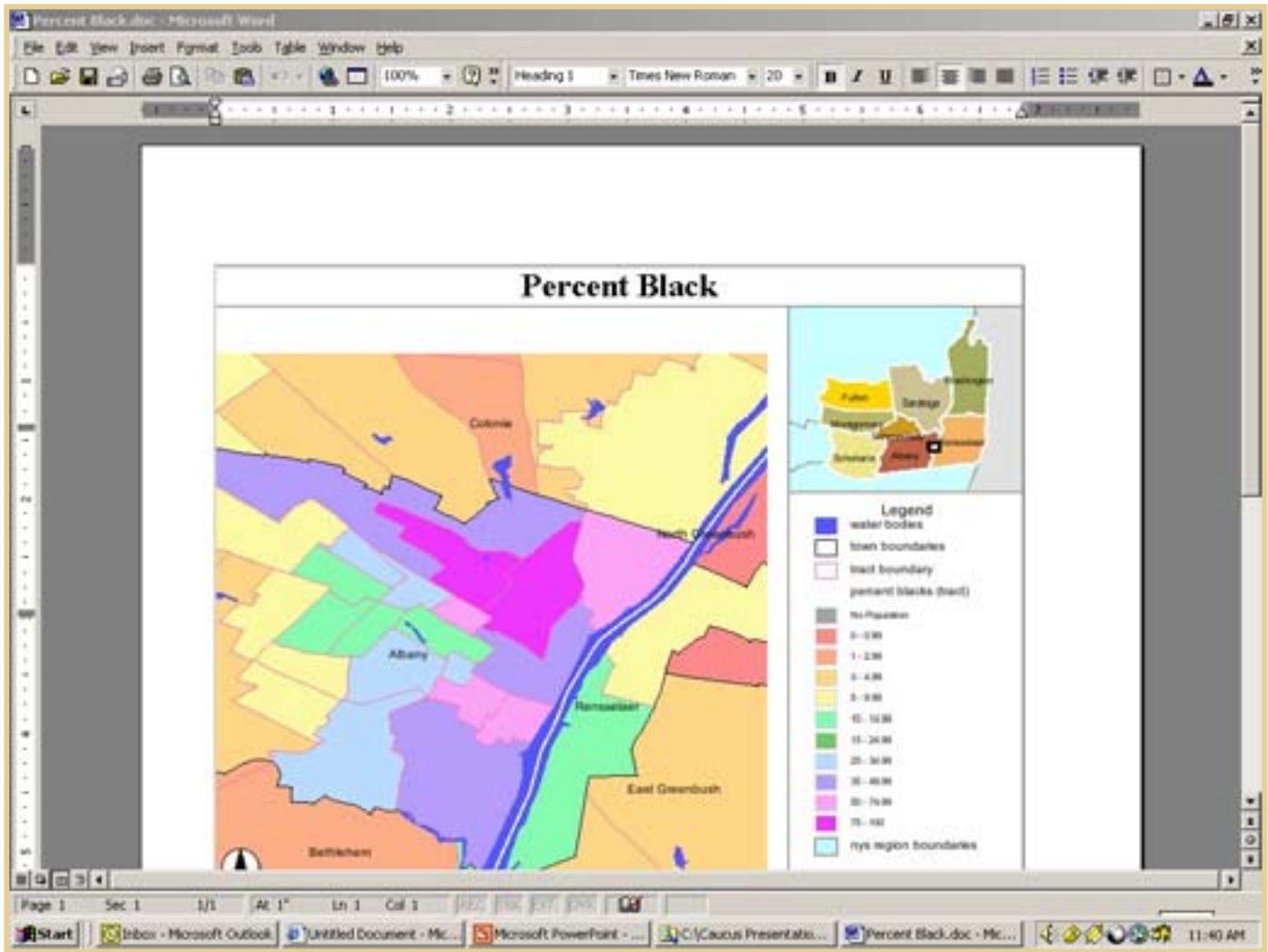
See the Data


Percent Black, 2000
(close the window to map another variable or region)
Select
Legend
Selected Features
water bodies
town boundaries
tract boundary
percent blacks (tract)
Colonie
Guilderland
North Greenbush
Albany
Troy
Abbreviations
Help
percent blacks (tract)
Rec
STFID
TO_POP
TO_NHW_F
TO_NHB_F
TO_HSP_F
TO_ASN_F
PCTNHW
PCTNHB
PCTHSP
PCTASN
Use the help button for general browsing help,
detail navigaion information and FAQ
Internet Explorer
Windows Media Player
Start
11:33 AM

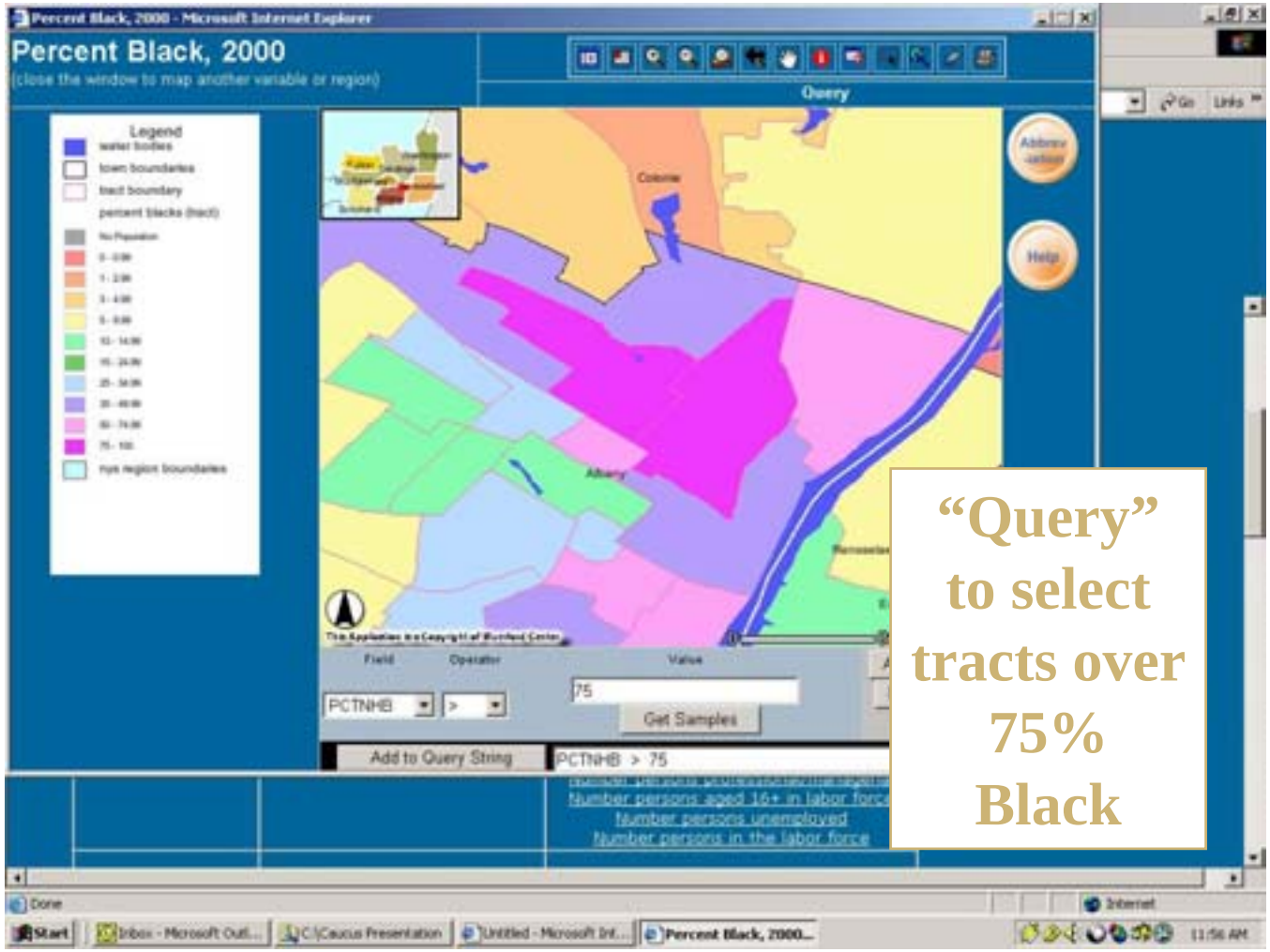
Print the Map



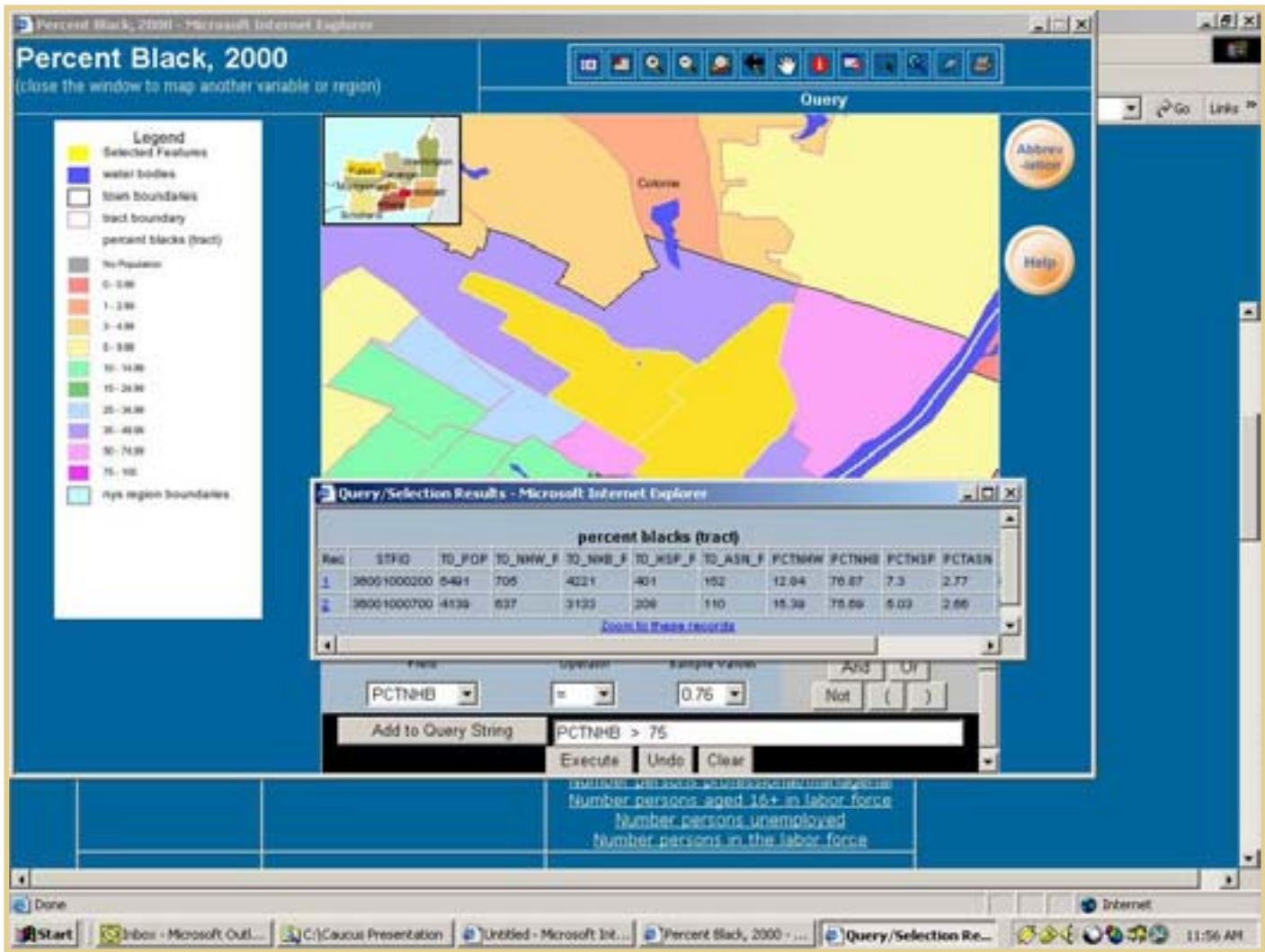
Copy to a Word Document



Query the Data

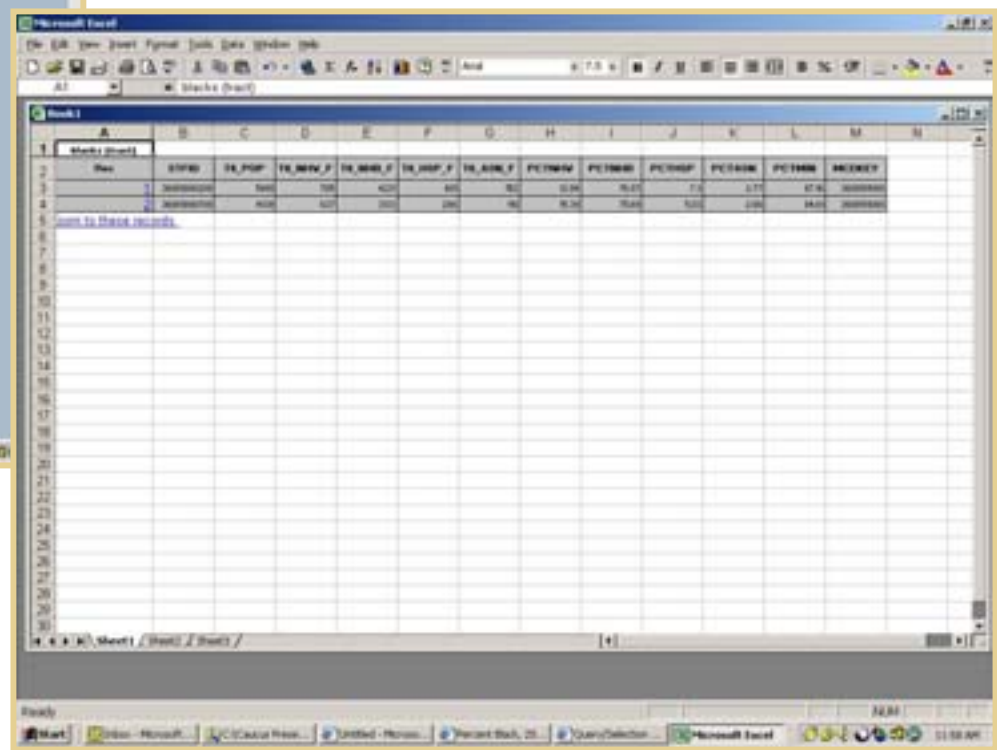


See the Results

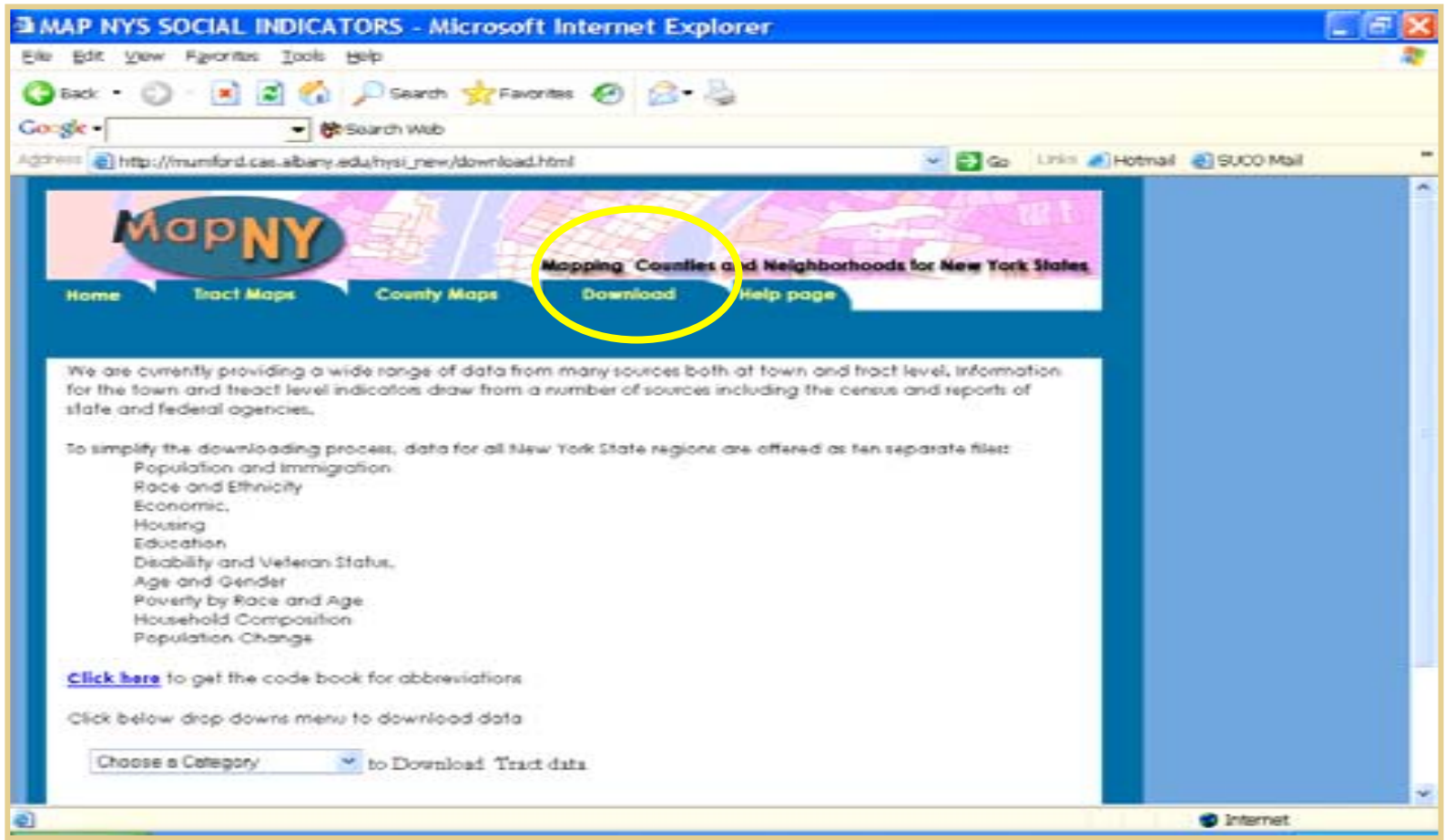


Copy the Data to a Spreadsheet

Use in Reports, Project Proposals and Presentations.



Download the Data



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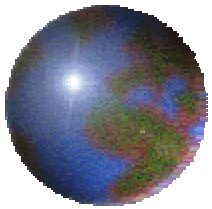
for Comparative Urban and Regional Research



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