

LOCATIONS OF TOXIC FACILITIES AND MINORITY POPULATIONS OF NEW ENGLAND

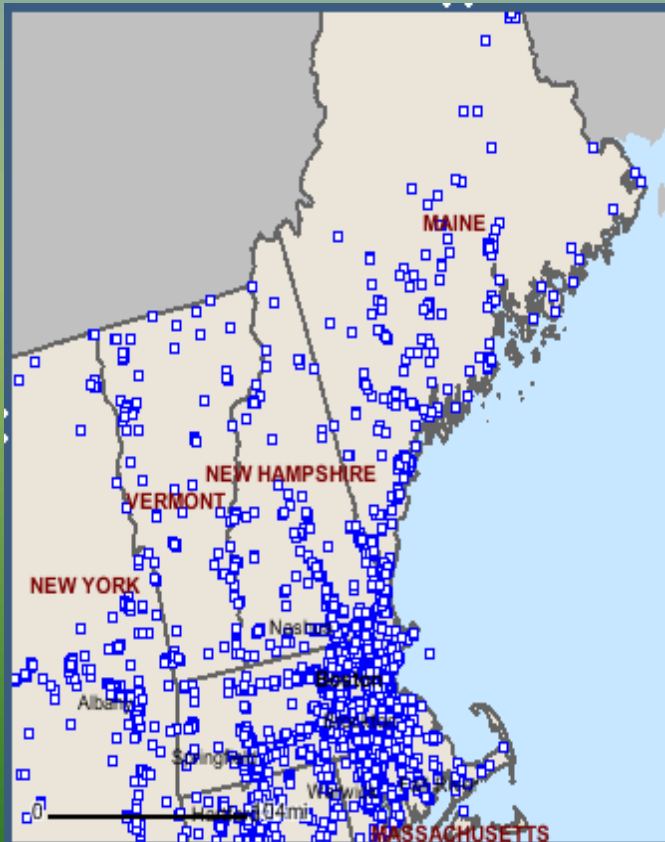


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IMPORTANCE OF TOPIC



- **1. To answer the question of a dense number of TRI facilities in the southern New England area.**
- **2. To determine the location of these facilities pertaining to minority citizens**

Courtesy of ToxMap

BACKGROUND

- TRI sites are Toxic Release Inventory locations that emit some of the 650 chemicals listed by the EPA
- New England area chosen due to location proximity to Salem State College as well as 3,600 TRI sites located here (out of 51,000) despite the small total area



Photo by Joe Dana

INVESTIGATION

The relevance of this topic began in the investigation of three questions:

- **1. A disproportionate number of TRI facilities in counties with higher numbers of minorities**
- **2. Economic levels lower in counties with higher numbers of TRI facilities**
- **3. 3,600 TRI sites located in New England, of 51,000 nationwide (7%)**



Photo by Joe Dana

PROCESS:

	A	B	C	D	E
1	county	state	TRI sites	income	
2	Addison	VT	3	46677	
3	Bennington	VT	14	41411	
4	Caledonia	VT	6	36986	
5	Chittenden	VT	17	52483	
6	Essex	VT	3	32427	
7	Franklin	VT	16	45145	
8	Grand Isle	VT	0	48907	
9	Lamoille	VT	0	42986	
10	Orange	VT	4	43333	
11	Orleans	VT	5	34962	
12	Rutland	VT	11	39607	
13	Washington	VT	4	45738	
14	Windham	VT	11	41271	

**1.) Gather Data
From ToxMap & US Census**

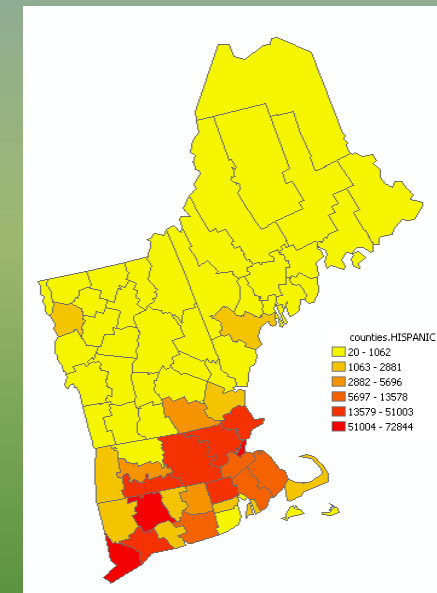
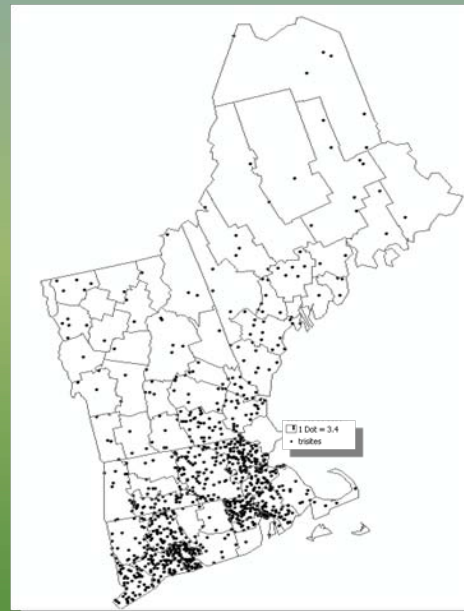
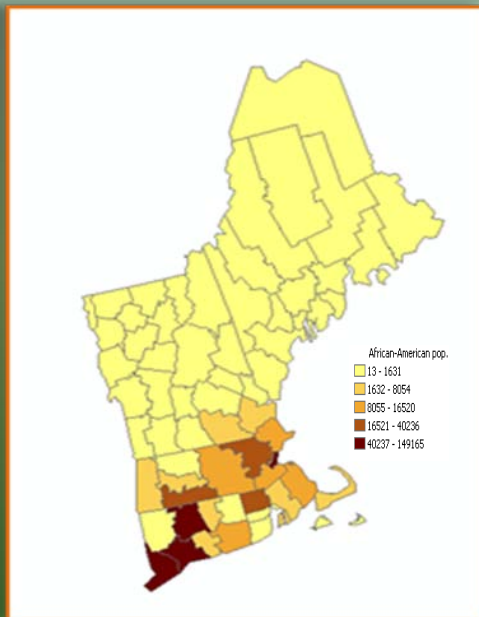
2.) Input into Excel file

**3.) Enter into ArcGIS after
appropriate base map is created**

4.) Overlay/join characteristics

DATA LAYERS TO MAKE CONNECTIONS:

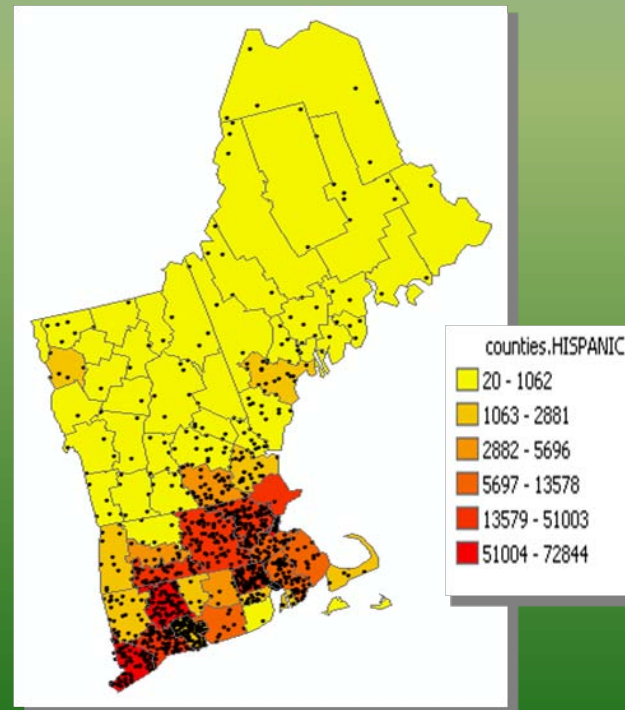
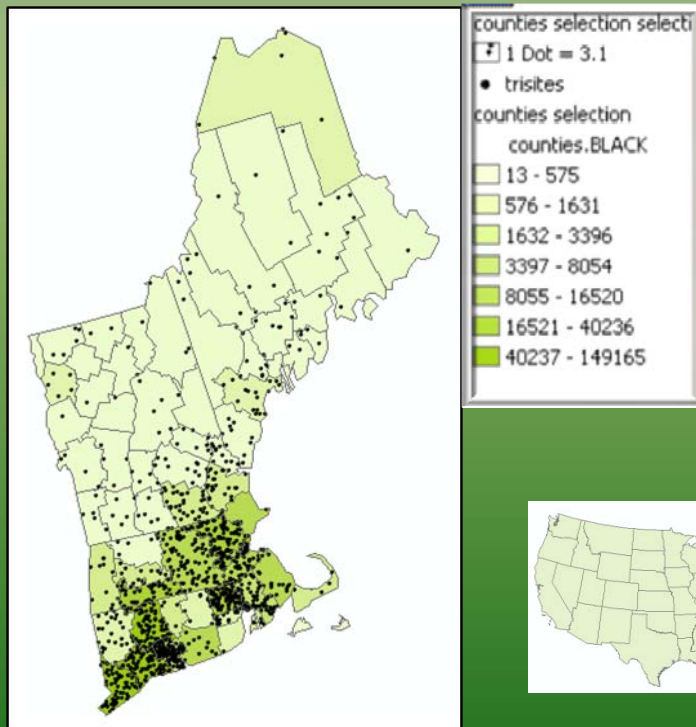
**In this study, I aimed to create
the following data layers:**



**The combination of these maps become
one to create.....**

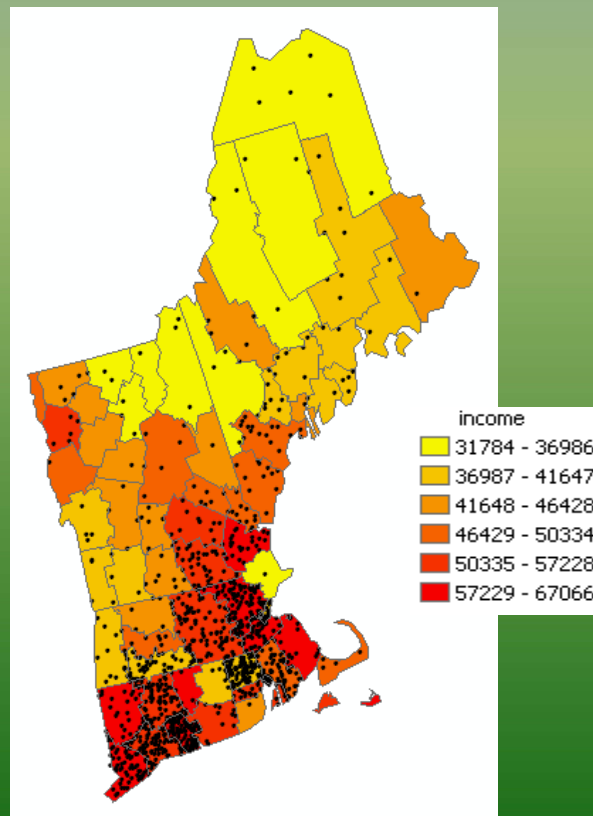
THE MAPS!

One can see the clusters of TRI sites on darker polygons, denoting higher populations of African- Americans & Hispanic Populations



HOUSEHOLD INCOMES AND TRI SITES

A VERY INTERESTING MAP WITH SITES LOCATED IN THE
WEALTHIEST COUNTIES



REMARKS & CHANGES

- It may be appropriate to get more precise data locations to increase accuracy
- To include cancer data sets for a health angle



ACKNOWLEDGEMENTS

- Professor M. Luna
- National Institute of Health:
www.toxmap.nlm.nih.gov/toxmap/main/index.jsp
- US Census: www.census.gov
- ArcGIS 9.2