

## APPENDIX B

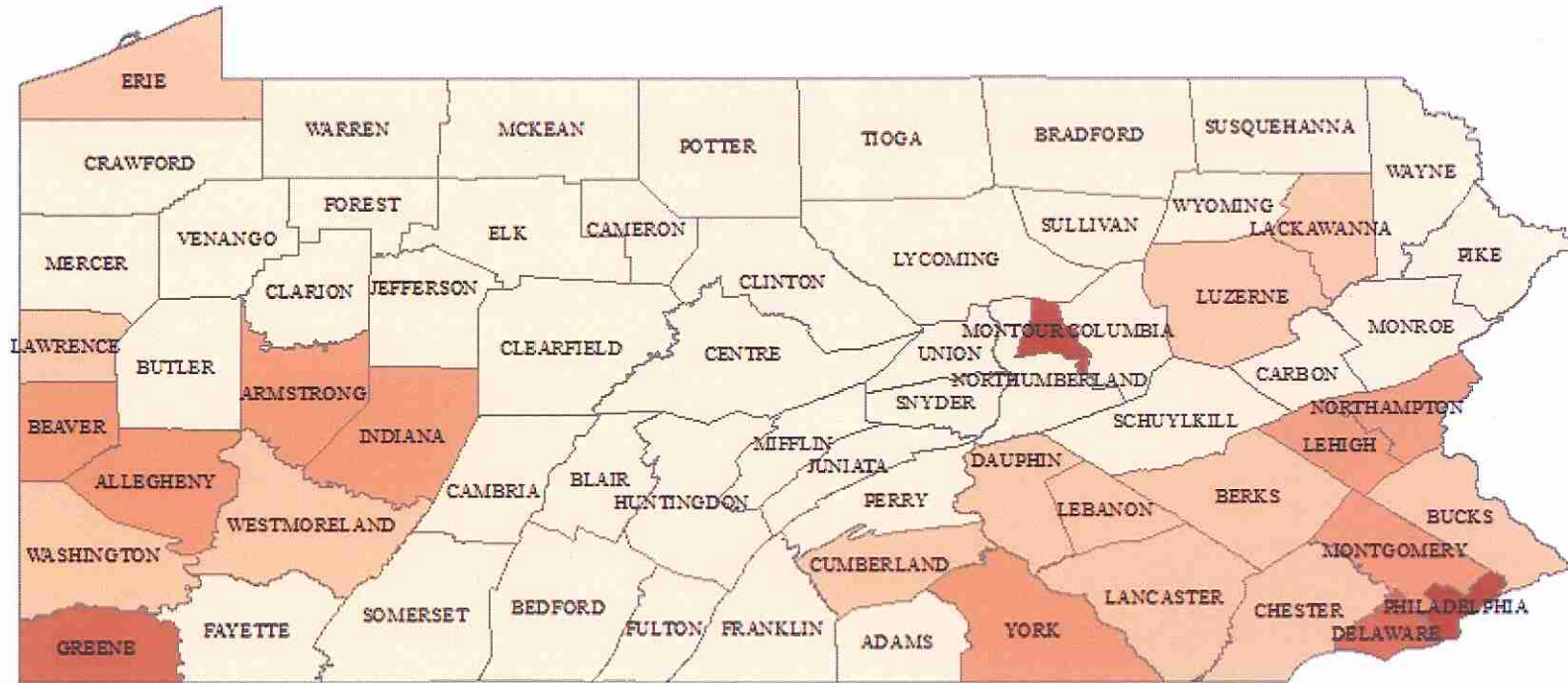
### Supporting Documentation

- Figure B-1: Pennsylvania's 2015 Ozone Design Values
- Figure B-2: NO<sub>x</sub> Emissions Density by County
- Figure B-3: VOC Emissions Density by County
- Figure B-4: Population Density by County
- Figure B-5: Population Growth by County
- Figure B-6: Pennsylvania's Core-Based Statistical Areas
- Figure B-7: Combined Statistical Areas
- Table 2: 2011 Annual Emissions and Emission Densities by County

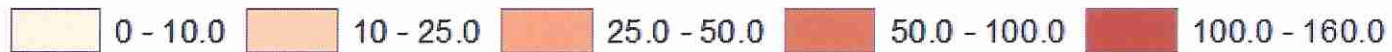


# Figure B-2: NOx Emissions Density by County

Emissions Based on 2011 NEI Data

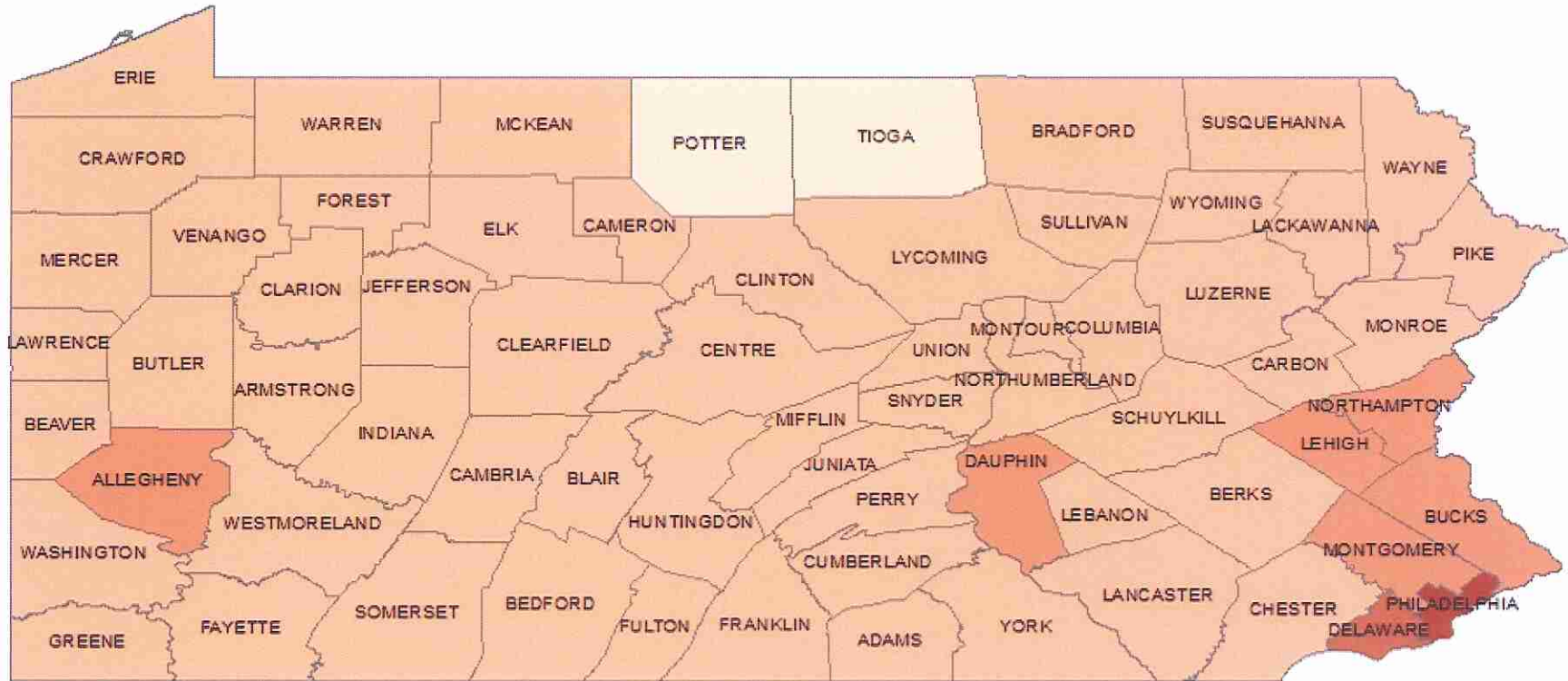


**NOx Emissions Density (tons per year per square mile)**



# Figure B-3: VOC Emission Density by County

Emissions Based on 2011 NEI Data

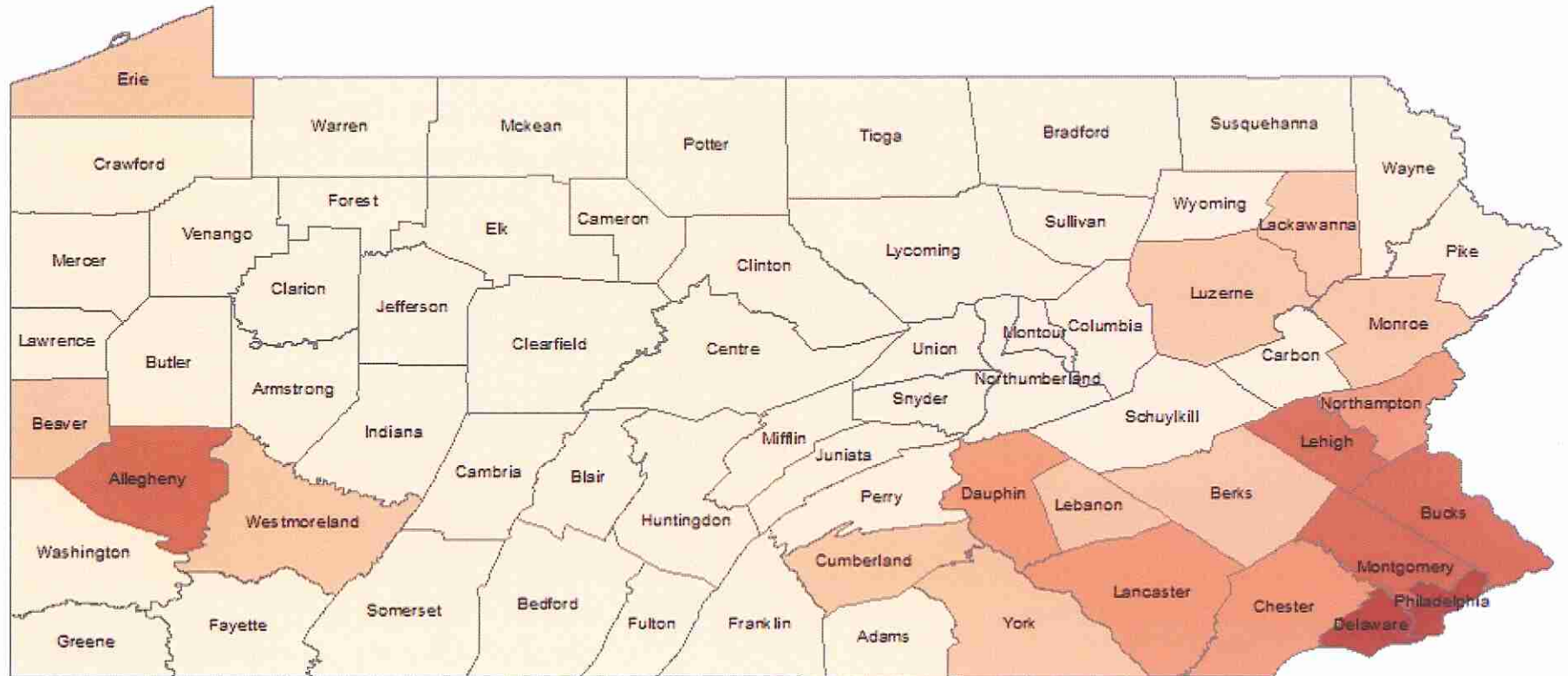


VOC Emissions Density (tons per year per square mile)

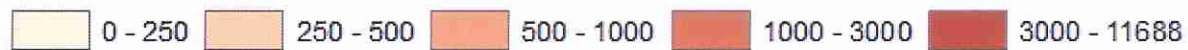


# Fig B-4: Population Density by County

Population Based on 2015 US Census Estimates

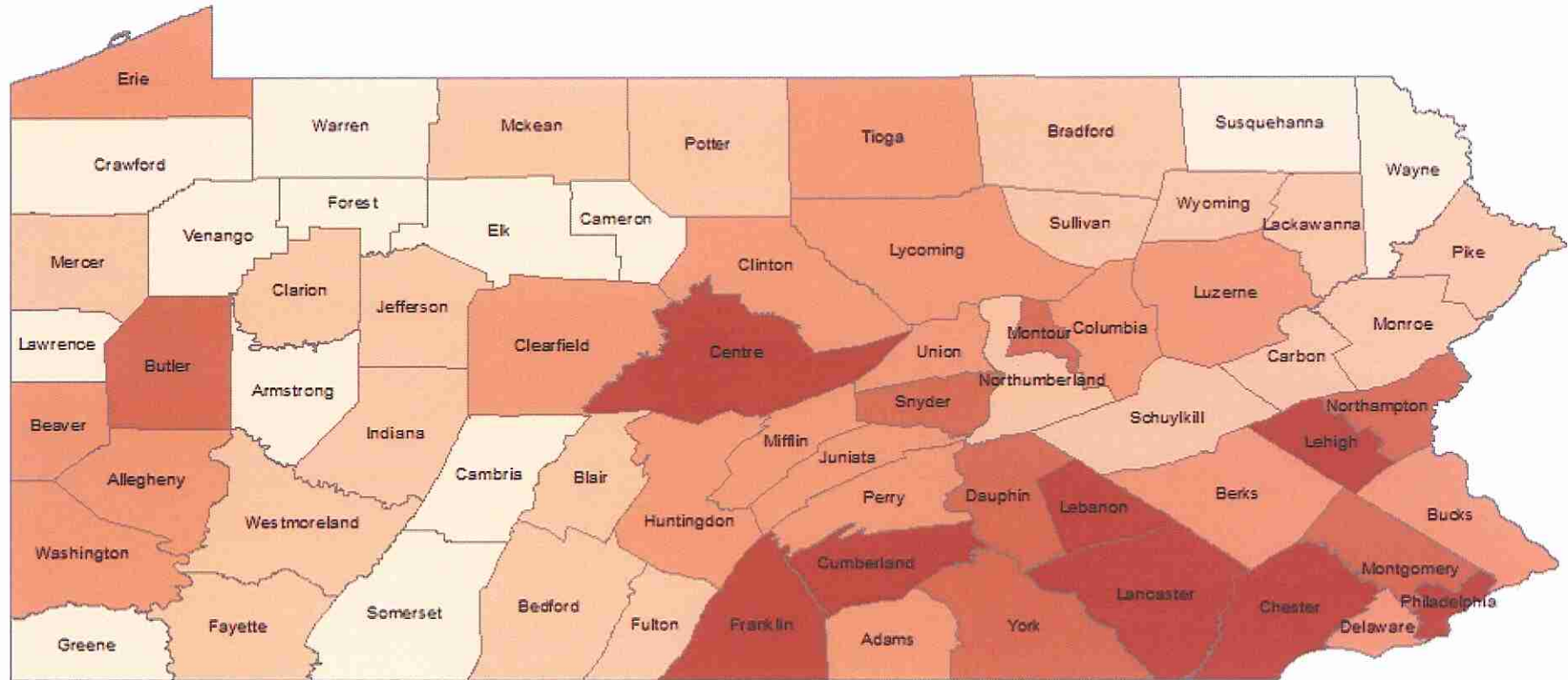


Population Density (Persons per Square Mile)



# Figure B-5: Population Growth by County

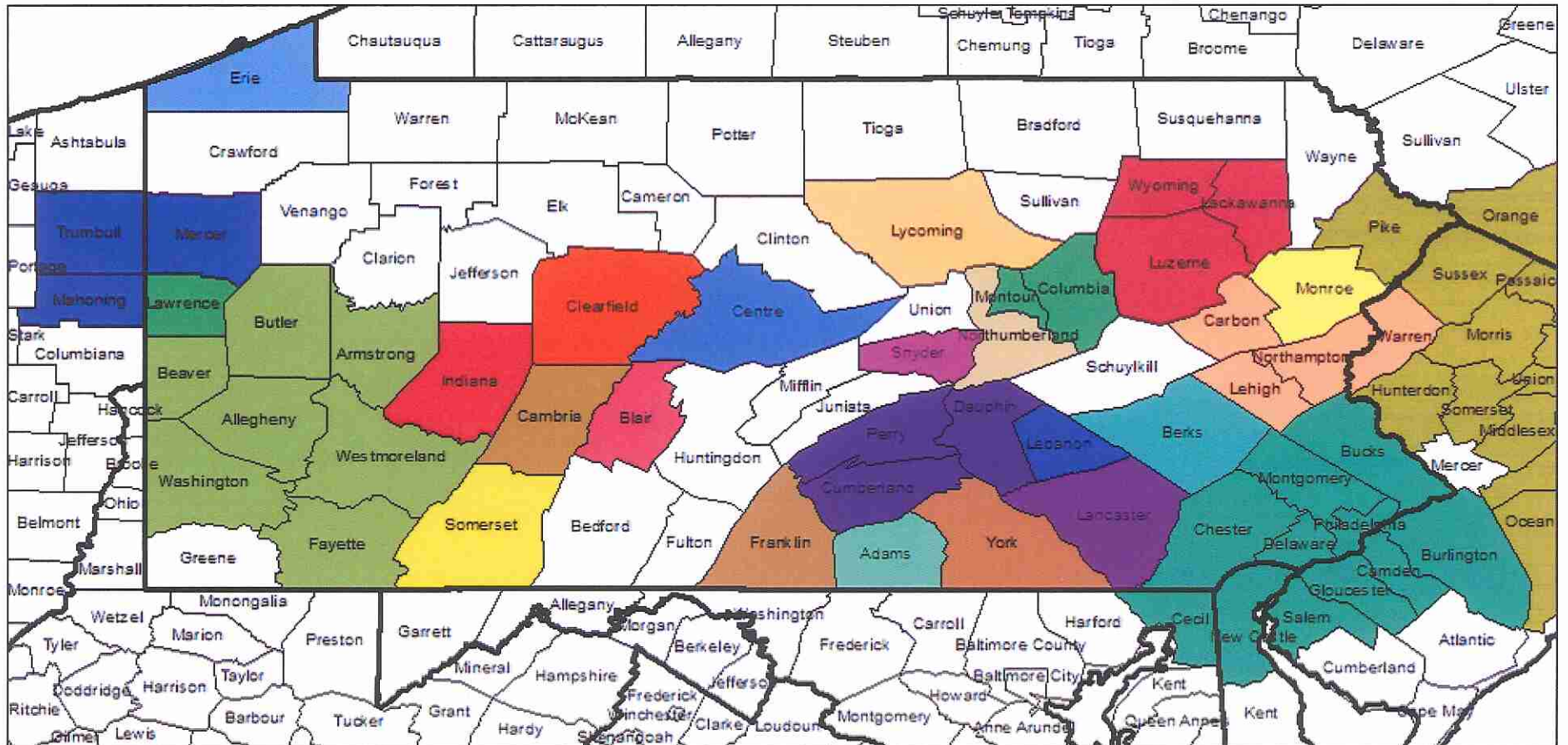
Population Trends Based on 2010 and 2015 US Census Results



Population Growth (% Change: 2010 to 2015)



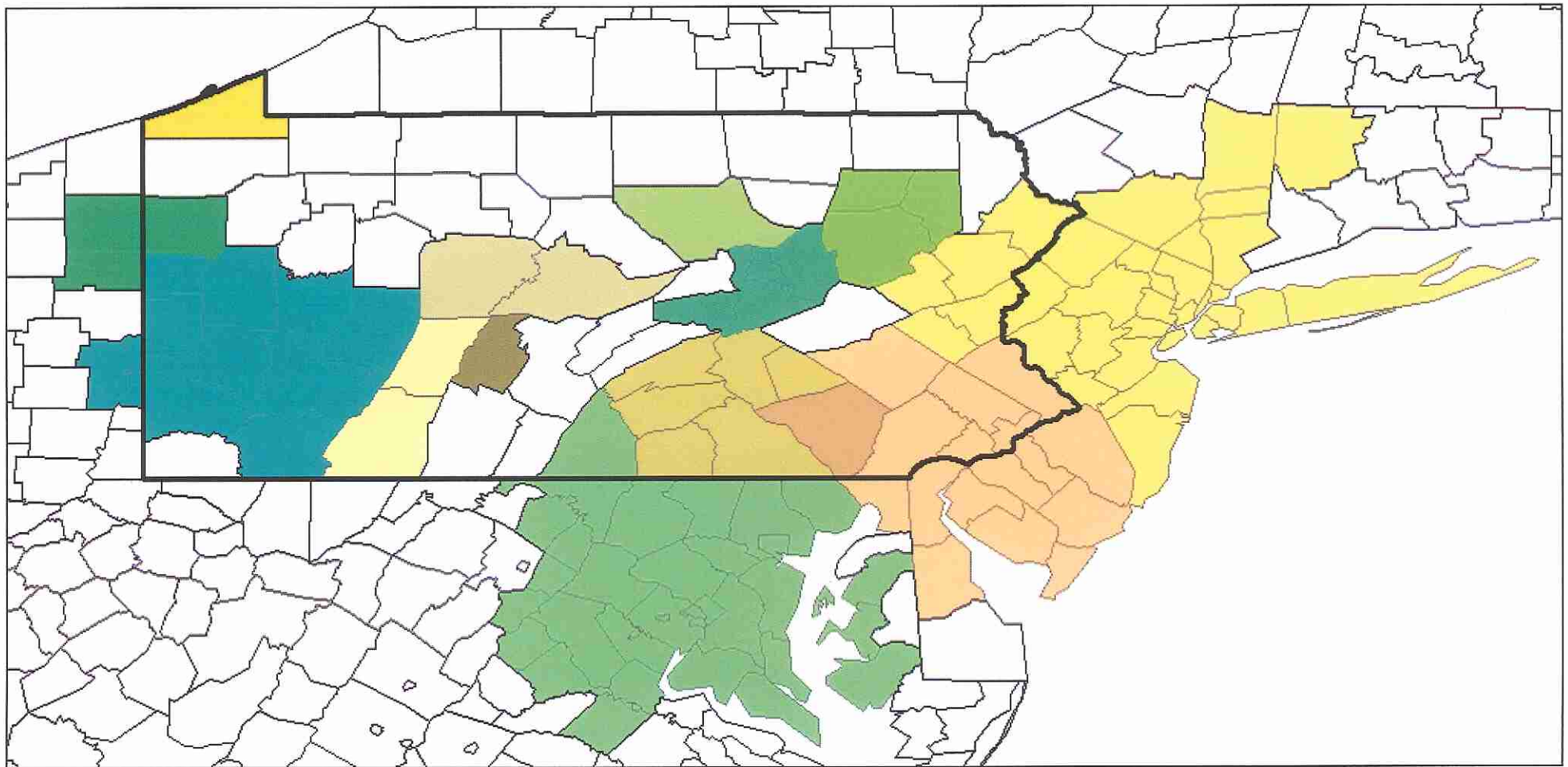
# Figure B-6: Pennsylvania's Core-Based Statistical Areas



- |                                   |                         |   |                                   |
|-----------------------------------|-------------------------|---|-----------------------------------|
| Allentown-Bethlehem-Easton, PA-NJ | Gettysburg, PA          | New York-Newark-Jersey City, NY-NJ-PA       | State College, PA                 |
| Altoona, PA                       | Harrisburg-Carlisle, PA | Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | Sunbury, PA                       |
| Bloomsburg-Berwick, PA            | Indiana, PA             | Pittsburgh, PA                              | Williamsport, PA                  |
| Chambersburg-Waynesboro, PA       | Johnstown, PA           | Reading, PA                                 | York-Hanover, PA                  |
| DuBois, PA                        | Lancaster, PA           | Scranton-Wilkes-Barre-Hazleton, PA          | Youngstown-Warren-Boardman, OH-PA |
| East Stroudsburg, PA              | Lebanon, PA             | Selinsgrove, PA                             |                                   |
| Erie, PA                          | New Castle, PA          | Somerset, PA                                |                                   |

# Figure B-7: Combined Statistical Areas

Office of Management and Budget, 2010



- |                                |  |  |
|--------------------------------|--|--|
| Altoona, PA                    | Lancaster, PA                            | State College-DuBois, PA                       |
| Bloomsburg-Berwick-Sunbury, PA | New York-Newark, NY-NJ-CT-PA             | Washington-Baltimore-Arlington, DC-MD-VA-WV-PA |
| Erie-Meadville, PA             | Philadelphia-Reading-Camden, PA-NJ-DE-MD | Williamsport-Lock Haven, PA                    |
| Harrisburg-York-Lebanon, PA    | Pittsburgh-New Castle-Weirton, PA-OH-WV  | Youngstown-Warren, OH-PA                       |
| Johnstown-Somerset, PA         | Scranton--Wilkes-Barre--Hazleton, PA     |  |



Table 2. 2011 Annual Emissions and Emission Densities by County

COUNTY	VOC EMISSIONS (tons per year)	NO <sub>x</sub> EMISSIONS (tons per year)	LAND AREA (square miles)	NO <sub>x</sub> Emissions Density (tons per square mile per year)	VOC Emissions Density (tons per square mile per year)
Adams	9654.48	3345.34	518.67	6.45	18.61
Allegheny	29972.96	35455.11	730.08	48.56	41.05
Armstrong	9429.85	29517.69	653.20	45.19	14.44
Beaver	8556.56	21166.68	434.71	48.69	19.68
Bedford	14678.76	2841.60	1012.30	2.81	14.50
Berks	20059.17	14403.92	856.51	16.82	23.42
Blair	10715.38	4851.27	525.80	9.23	20.38
Bradford	12338.87	5310.53	1147.40	4.63	10.75
Bucks	20381.56	12925.42	604.31	21.39	33.73
Butler	13233.76	6617.13	788.60	8.39	16.78
Cambria	10147.11	6243.75	688.35	9.07	14.74
Cameron	7082.60	380.33	396.23	0.96	17.87
Carbon	8631.36	2817.42	381.46	7.39	22.63
Centre	19058.50	6743.25	1109.92	6.08	17.17
Chester	17579.34	12031.82	750.51	16.03	23.42
Clarion	8413.73	4001.87	600.83	6.66	14.00
Clearfield	15158.80	9789.46	1144.72	8.55	13.24
Clinton	15890.55	3381.46	887.98	3.81	17.90
Columbia	8245.08	2747.46	483.11	5.69	17.07
Crawford	11818.85	6058.58	1012.30	5.98	11.68
Cumberland	13561.34	13243.86	545.46	24.28	24.86
Dauphin	15609.40	9715.01	525.05	18.50	29.73
Delaware	13451.12	17306.44	183.84	94.14	73.17
Elk	9365.78	3206.12	827.36	3.88	11.32
Erie	15001.84	11373.23	799.15	14.23	18.77
Fayette	12430.46	5775.22	790.34	7.31	15.73
Forest	7784.27	912.56	427.19	2.14	18.22
Franklin	11984.25	4970.71	772.22	6.44	15.52
Fulton	8138.25	1174.52	437.55	2.68	18.60
Greene	7893.87	30873.94	575.95	53.61	13.71
Huntingdon	14216.07	2287.11	874.64	2.61	16.25
Indiana	11466.01	36017.65	827.03	43.55	13.86
Jefferson	8427.49	5591.84	652.43	8.57	12.92
Juniata	7238.10	1847.57	391.35	4.72	18.50
Lackawanna	10584.77	5839.90	459.08	12.72	23.06
Lancaster	23579.50	13810.48	943.81	14.63	24.98
Lawrence	6238.99	4423.39	358.18	12.35	17.42

Table 2. 2011 Annual Emissions and Emission Densities by County

<b>Lebanon</b>	8156.48	5116.34	361.83	14.14	22.54
<b>Lehigh</b>	12764.82	8694.80	345.17	25.19	36.98
<b>Luzerne</b>	19325.78	9134.50	890.33	10.26	21.71
<b>Lycoming</b>	18582.84	5458.60	1228.59	4.44	15.13
<b>McKean</b>	9841.46	4090.39	979.20	4.18	10.05
<b>Mercer</b>	10789.76	6398.93	672.58	9.51	16.04
<b>Mifflin</b>	8489.99	2061.74	411.03	5.02	20.66
<b>Monroe</b>	13244.53	5236.00	608.29	8.61	21.77
<b>Montgomery</b>	22710.07	16546.00	483.04	34.25	47.01
<b>Montour</b>	3244.87	13952.98	130.24	107.13	24.91
<b>Northampton</b>	10741.36	14071.76	369.67	38.07	29.06
<b>Northumberland</b>	8202.80	3582.07	458.37	7.81	17.90
<b>Perry</b>	9887.61	2454.40	551.45	4.45	17.93
<b>Philadelphia</b>	22045.18	21064.62	134.10	157.08	164.39
<b>Pike</b>	11826.15	2225.94	544.96	4.08	21.70
<b>Potter</b>	8875.26	1883.71	1081.32	1.74	8.21
<b>Schuylkill</b>	16405.10	5967.22	778.63	7.66	21.07
<b>Snyder</b>	5924.59	3055.46	328.71	9.30	18.02
<b>Somerset</b>	12642.56	3452.80	1074.37	3.21	11.77
<b>Sullivan</b>	6012.39	610.94	449.94	1.36	13.36
<b>Susquehanna</b>	8432.27	4746.72	823.44	5.76	10.24
<b>Tioga</b>	11209.98	4094.38	1133.79	3.61	9.89
<b>Union</b>	6085.94	1958.20	315.98	6.20	19.26
<b>Venango</b>	10779.01	3885.06	674.28	5.76	15.99
<b>Warren</b>	11475.06	3722.89	884.14	4.21	12.98
<b>Washington</b>	11552.93	10067.33	856.99	11.75	13.48
<b>Wayne</b>	9607.42	1776.37	725.60	2.45	13.24
<b>Westmoreland</b>	17391.75	12939.02	1027.55	12.59	16.93
<b>Wyoming</b>	6177.44	2343.01	397.32	5.90	15.55
<b>York</b>	22085.76	33738.79	904.18	37.31	24.43