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changes across the region: people, economy and wellbeing

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This study is organized as follows. First section, introduction, is a descriptive text. Sections 2-5 are the heart of this study—they contain graphs and tables with little text that either briefly describe the results or provide notes about the data. The goal of these sections is to provide a “picture” of the quality of life across counties in South Jersey. There are many indicators shown and they capture objective quality of life, even though many indicators are survey-based/self-reported. Section 5 introduces a concept of subjective wellbeing, which is my area of academic research. Section 6 compares this study with 2 other similar studies. Section 7 concludes this study by referring to my current academic research about happiness and place.

1 Introduction

I will focus here on three themes:

- people (demography): migration, aging, population changes and composition of population by age and race, and county-to-county migration
- economy: land use and employment by supersector
- wellbeing: objective wellbeing (public health, economic wellbeing, social issues) and subjective wellbeing (happiness)

The first two themes, people and economy will sketch the overall picture of South Jersey. Also, people and economy are the assets: human capital and physical capital. These two broad issues, people and economy, are divided into specific challenges that I will focus on. For instance, issues discussed include:

- Is South Jersey losing its human capital (educated, young, etc)?
- Where South Jersey human capital is outflowing, and where the inflows of immigrants are coming from?
- Is population the aging? Which groups are aging? And what is the likely population growth over the next several decades?

The third theme, wellbeing, is an outcome of interest, that is, we would like to achieve a greater wellbeing. I will describe wellbeing across the region and suggest several ideas about improving it.

1.1 A Broad Picture

The broad picture emerging from the data is that on many measures Burlington is the leader and Cumberland comes out last. A next step would be to attempt to identify the causal mechanisms—why Burlington is doing better than Cumberland? A proper causal analysis is left for future research—this study focuses on description. Data suggests several obvious possibilities—simply Burlington scores well on both inputs/risk factors and outcomes, while Cumberland lags on both. For instance, single parent households and risky behavior (alcohol and tobacco use) are more prevalent in Cumberland than in Burlington. Accordingly, people are happier in Burlington than in Cumberland.

What can be done to improve quality of life? Working at a university, I may be biased, but maybe getting people in South Jersey more university education could help. If you think that higher education is not a solution, consider the huge gap in education. The proportion of people with higher education in South Jersey is only about half of that in North Jersey, and yet there are huge differences within South Jersey. We will see that Cumberland scores low on most wellbeing outcomes, but it also has the lowest proportion of people with higher education—only 14%, while the top performer in South Jersey, Burlington, has more than twice that many people with higher education: 34%.

1.2 Motivation

Most of the indicators used here were inspired by an approach taken in measuring well-being across countries. One set of such indicators was developed by Organization for Economic Co-operation and Development (<http://www.oecd.org/statistics/howslife.htm>). This approach can be used for counties as well—it is simply about measuring different dimensions of wellbeing. Dimensions of quality of life, as conceptualized by OECD are:

- Income and wealth measure the economic resources that people can use today or in the future to satisfy various human needs and wants and that protect against vulnerabilities and risks of various types.

- Both the availability and quality of jobs are relevant for people's well-being, not only because quality jobs increase people's command over resources but also because these jobs offer the opportunity to fulfill one's own ambitions, to develop skills and abilities, to feel useful to society and to build self-esteem.
- Access to housing and housing quality satisfy people's basic needs. Beyond their intrinsic importance, they are also important determinants of health and subjective well-being, as well as social connections and access to jobs and public services.
- Physical and mental health is important in itself for people's well-being because they allow them to perform a range of personal and social activities that contribute to their well-being.
- Education and skills can be seen as both a basic need and an aspiration of all humans, as well as being instrumental to achieve many other economic and non-economic well-being outcomes.
- Civic engagement matters, as having political voice in the society where people live allows them to have a say in political decisions that affect their lives and to contribute to deliberations that shape the well-being of communities; similarly, good governance is needed to translate people's voice into policies that support their aspirations for a good life.
- Social connections are valuable in themselves as many people report that the most pleasurable activities are performed with others; but they are also instrumental in achieving a number of other important goals such as finding a job, or support in case of need.
- The quality of the natural environment where people live and work is important in its own right but it also matters for people's health and their ability to undertake a number of activities (e.g. raising children, social life, etc.).
- For the same reasons, living in a secure environment, i.e. where the risks of being robbed or assaulted are low, is important to generate well-being.
- Finally, besides objective aspects of living conditions and quality of life, it is crucial to consider how people feel about their life and experience—i.e. their subjective well-being.

1.3 Quality of Life as Used by Counties

Quality of life research is recently becoming popular at the sub-national level. Many counties try to measure it. For instance, Carver County in Minnesota has produced a "Quality of Life Indicators Report."¹ Gwinnett County in Georgia has established "The Quality of Life Unit."² Much of the quality of life discourse, however, appears to be local marketing. Of course, not everything is wrong with marketing, but the proliferation of the concept of quality of life makes it more of a buzzword than objective and grounded in science metric. It appears that many localities overemphasize their strengths and underplay problems. On the other hand, this is understandable—their mission is to market their locality. State of New Jersey markets itself using quality of life jargon as well:³

Living The Good Life

New Jersey is more than just fabulous beaches, scenic state parks, world-class entertainment, major league sports teams and world-class dining. It's a state that millions of people call "home" where they enjoy a quality of life that's second to none - with easy accessibility to the broad range of public and private treasures that make life worth living.

But don't take our word for it, see for yourself.

The above definition needs to be unpacked. It is more marketing than science—of course it does not mention that arguably California and Florida have better beaches and weather. It does not mention, that Americans increasingly chose Sun Belt states as their home, and so forth. In this study, I will use fewer adjectives and more numbers.

New Jersey counties market their quality of life, too—much of it is about nature, and cultural amenities. For instance, see Bergen county's website.⁴ New Jersey counties also stress their comparative advantage, which I think is a great approach, because it is not only marketing (largely misinformation), but also information. For instance, Cumberland advertises "Low

¹ <http://www.co.carver.mn.us/departments/LWS/qol.asp>

² <http://www.gwinnettcountry.com/portal/gwinnett/Departments/Police/QualityofLife>

³ <http://choosenj.com/Quality-of-Life.aspx>

⁴ <http://www.co.bergen.nj.us/index.aspx?NID=174>

Cost of Living” and “Small Town Atmosphere and Casual Living.”⁵ People in small towns are happier than people in large cities (Berry and Okulicz-Kozaryn 2011). But we also know from academic research that people underestimate advantages of smaller places, and they flock to overrated places like NYC or Los Angeles. These places are overrated because people are less happy there than they expect to be. California is a place where many Americans would like to live—they think of sun, beach and lifestyle. And they don’t realize the effect of prohibitively expensive housing and enormous congestion on their wellbeing, and in fact Californians are not very happy as compared to other states (Schkade and Kahneman 1998).

2 Demography

This section begins the descriptive part of this study. The suffix “county” has been dropped from each county’s name—for instance, “Atlantic” refers to Atlantic County.

Here I will focus on two broad issues: socio-demographic composition of counties over time and county-to-county migration. Data come from US Census as supplied by socialexplorer.⁶ The idea is that people vote with their feet—it is a vote against a county if counties lose population, and especially if young and active individuals move out.⁷ Also, the composition of population changes over time—one such important change is population aging.

2.1 Overall Current Demography

Total population change from 2000 to 2010 is shown in figure 1—Cape May is losing population, while other counties are either flat in terms of population growth or they gain little. Ocean gained the most people.

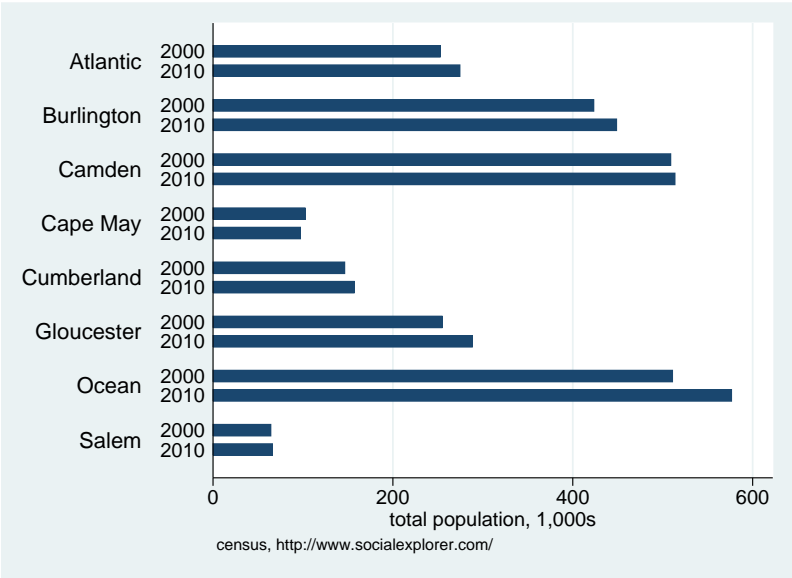


Figure 1: Population growth, 2000 and 2010.

⁵ <http://www.co.cumberland.nj.us/content/171/5366/5361.aspx>

⁶ <http://www.socialexplorer.com/>

⁷ For instance compare to Mississippi: <http://www.economist.com/news/usa/21579025-shocking-rate-depopulation-rural-south-scratches>

Figure 2 shows birth rate—interestingly, citizens of Cumberland have most births, and Burlington is at the bottom of this list. However, as we will see later, Cumberland also has the highest teen birth rate in the region.⁸

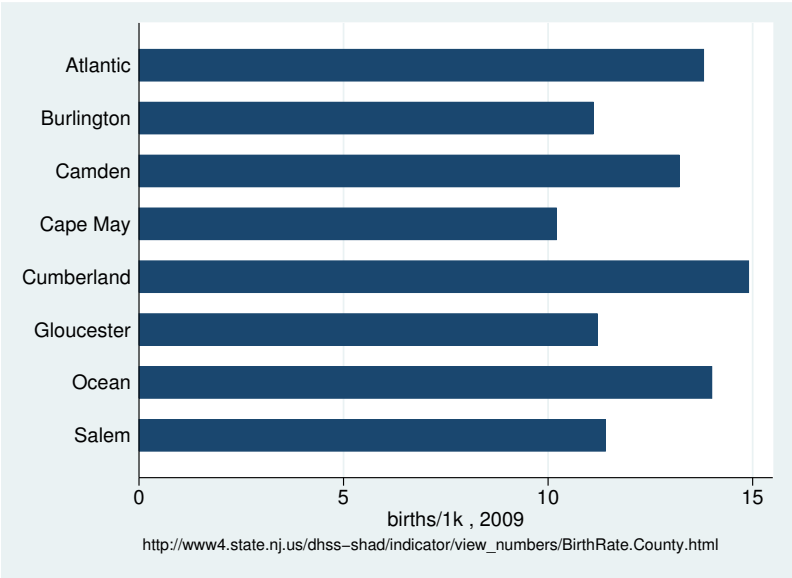


Figure 2: Birth rate, 2009.

In figure 3, Salem, Cape May and Gloucester are most American born and Atlantic is most international. Yet, there are counties with many more immigrants in North Jersey—for instance 40% of Hudson is foreign born, which is twice of NJ average (21%).

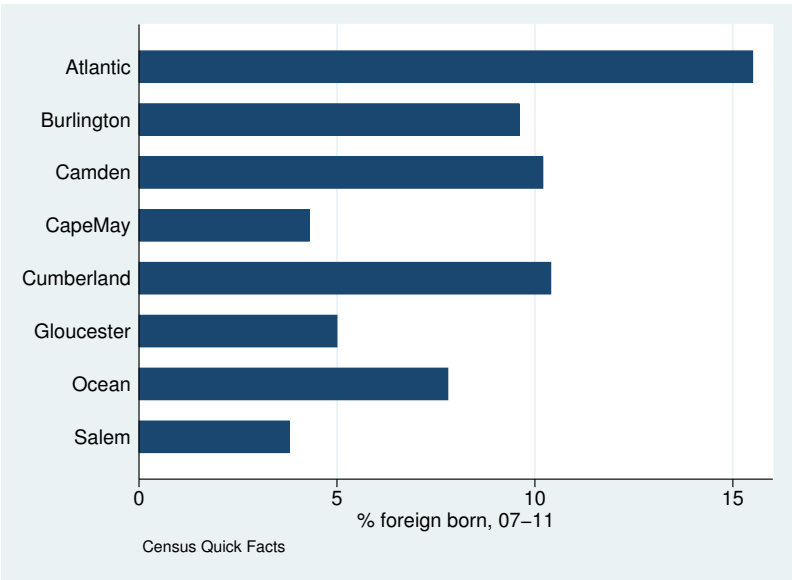


Figure 3: Percent foreign born, 2007-2009.

⁸The graph renders the source url incorrect. The dash is elongated, it should be '-' instead of '–' in the url: http://www4.state.nj.us/dhss-shad/indicator/view_numbers/BirthRate.County.html

Strikingly, every 4th person in Cumberland and in Atlantic does not speak English at home—see figure 4. Salem is the most English-speaking county. Yet, the average for New Jersey is 30% and 58% of Hudson County speak a language other than English at home.

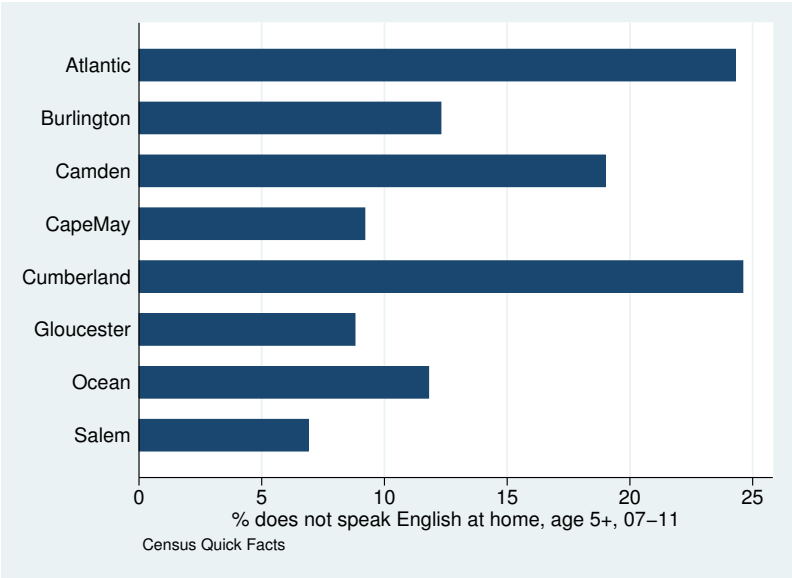


Figure 4: Percent does not speak English at home, age 5+, 2007-2011.

In figure 5, Cumberland has the lowest proportion of its adult population with high school education. Burlington has the highest proportion of high school graduates.

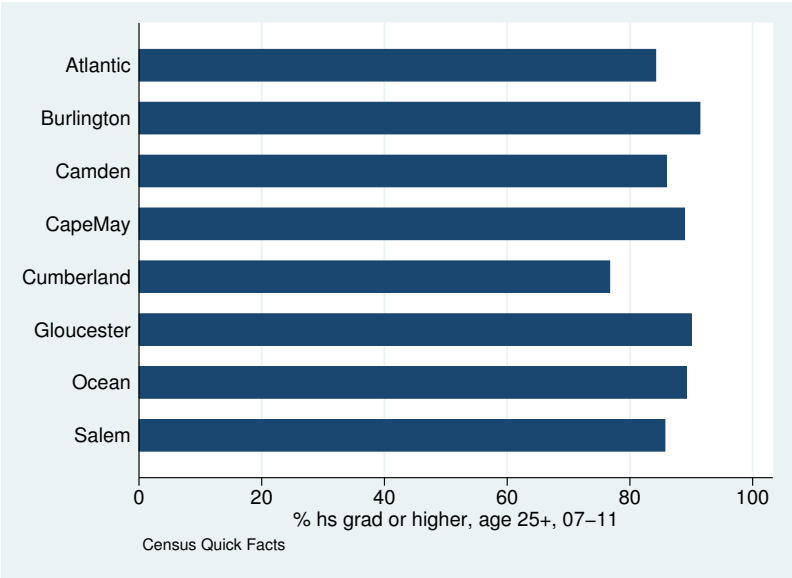


Figure 5: Percent high school graduate or higher, age 25+, 2007-2011.

Figure 6 shows median age—all counties are aging. Aging population may be a problem for the local economy—especially if there are fewer people of working age, and more people who are too old to work. Cape May is aging fastest. On the other hand, aging may be less of a problem or even an advantage if a place is a retirement community—people bring their savings and retirement benefits and support the local economy.

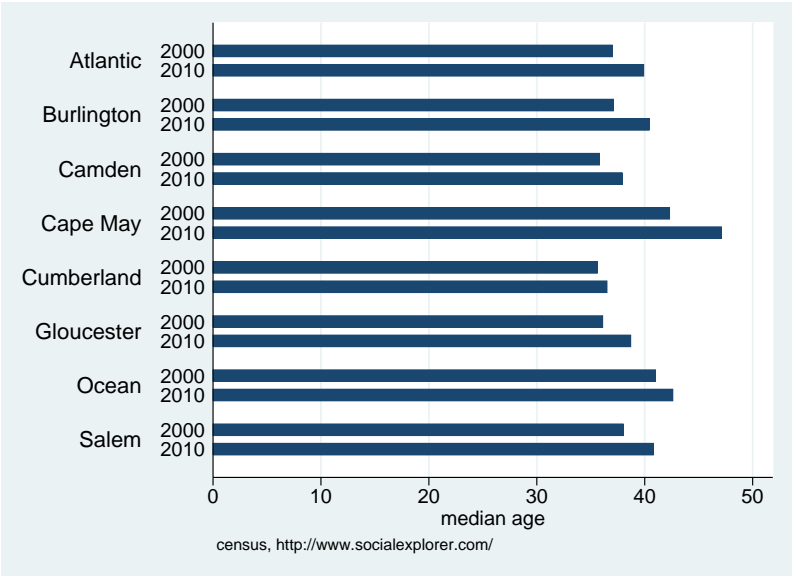


Figure 6: Median age, 2000 and 2010.

Figure 7 shows aging of Whites—Whites are aging more than the general population—all South Jersey counties have White populations older by a few years in 2010 than 2000.

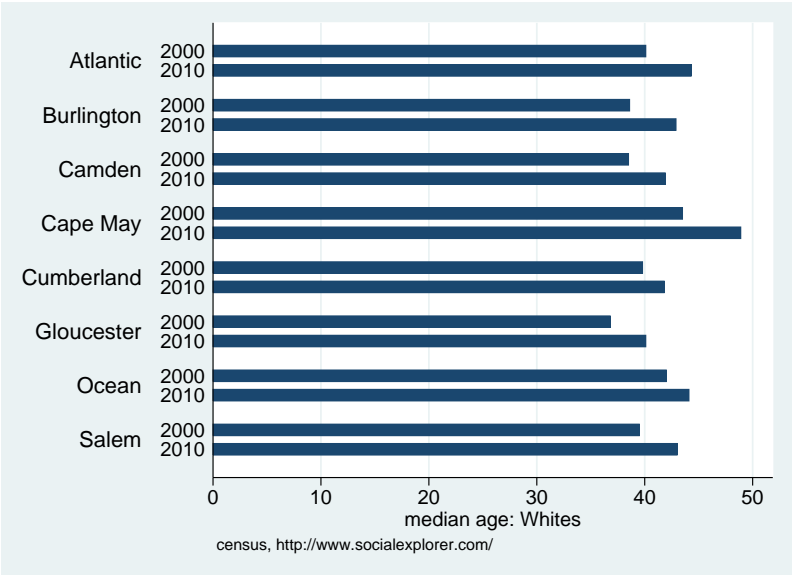


Figure 7: Median age of Whites, 2000 and 2010.

There is obviously much truth in the truism that young people are the future. Accordingly, often it is a vote against a locality when many young people move out—often it indicates lack of opportunity. Figure 8 shows population under 20—Camden and Cape May are losing their population of under 20. Ocean has more young people.

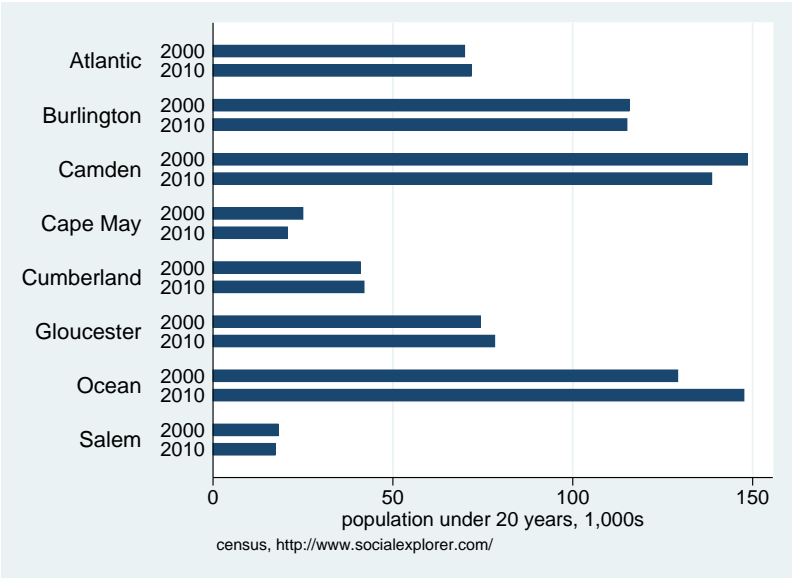


Figure 8: Young population (< 20), 2000 and 2010.

How about the elderly? Figure 9 shows population older than 65. Few counties are adding older populations; and no county has fewer old people. Both, fewer young people and more old people may be problem in South Jersey if the trend continues.

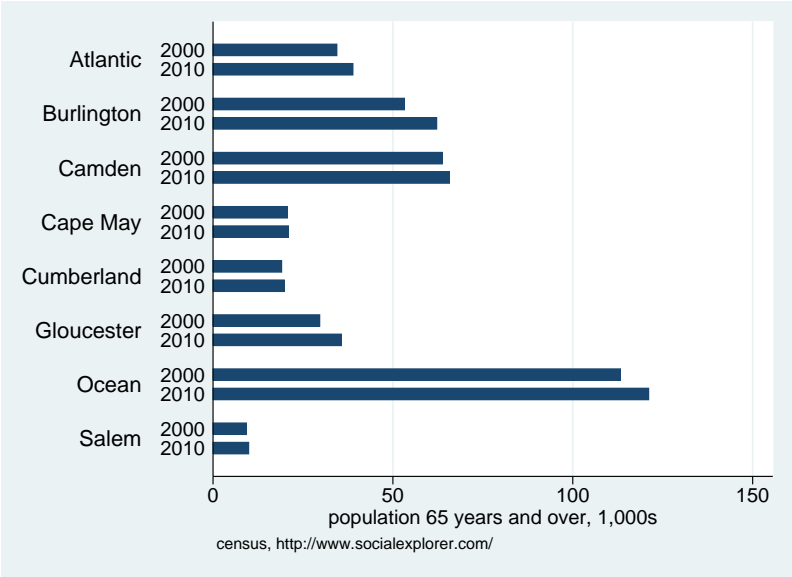


Figure 9: Elderly (> 65), 2000 and 2010.

How is population changing by race/ethnicity? Figure 10 shows the numbers for Whites. The White population is decreasing in Camden, and increasing in Gloucester and Ocean.

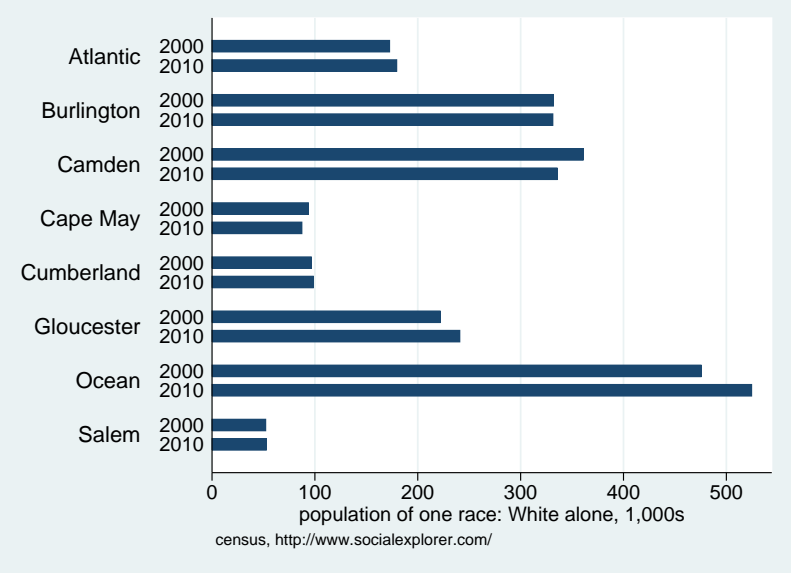


Figure 10: Number of Whites, 2000 and 2010.

Figure 11 shows population change for Blacks. Burlington and Camden are increasing its Black population.

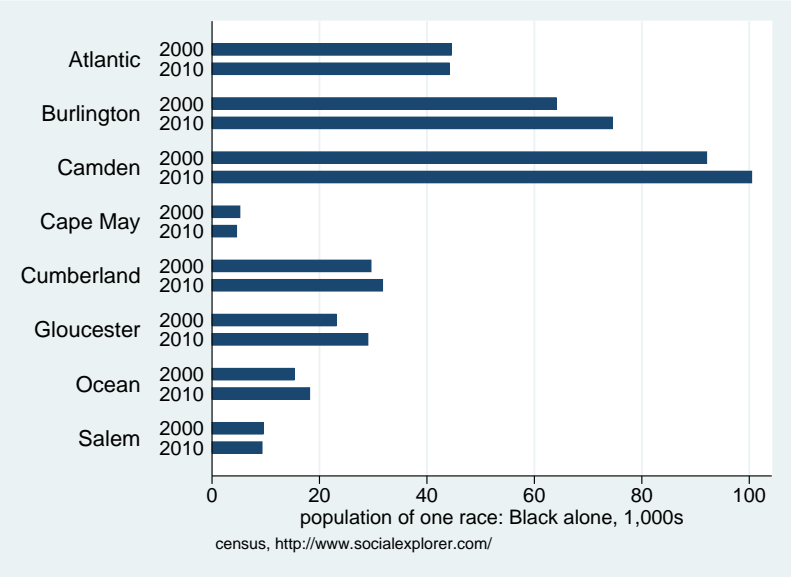


Figure 11: Number of Blacks, 2000 and 2010.

2.2 Population Projections

New Jersey produces population estimates/projection for counties for the years 2015, 2020, 2025, 2030.⁹ Graphs below also include census values for the years 2000 and 2010 to show the overall trend.

Figure 12 shows projections of total population by county. According to those projections, Burlington will add the highest absolute number of people—it would add 50,000 people between 2010 and 2030. But all counties will grow substantially except Camden and Salem, where growth will be slower, and especially Cape May, where there will be virtually no growth. Cumberland, despite lagging in most indicators, will grow, too. A very similar picture is painted in figure 13, which shows growth of civilian labor force.

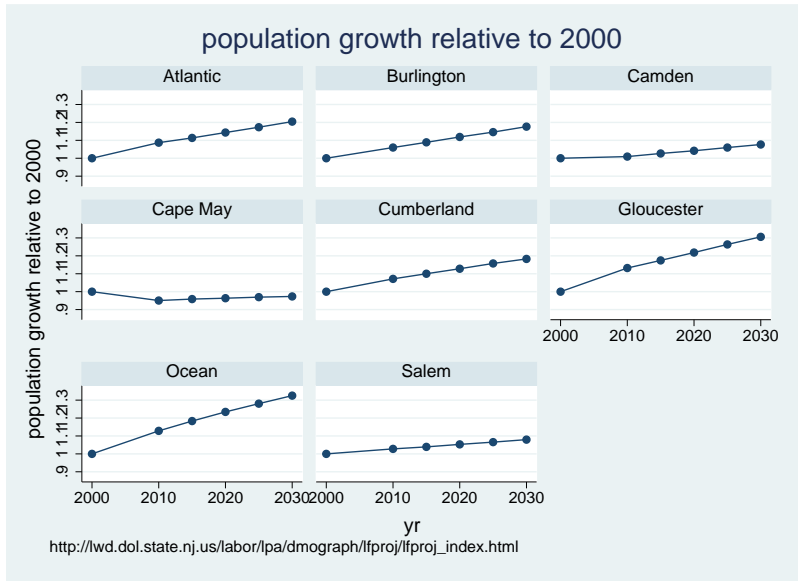


Figure 12: Total population growth.

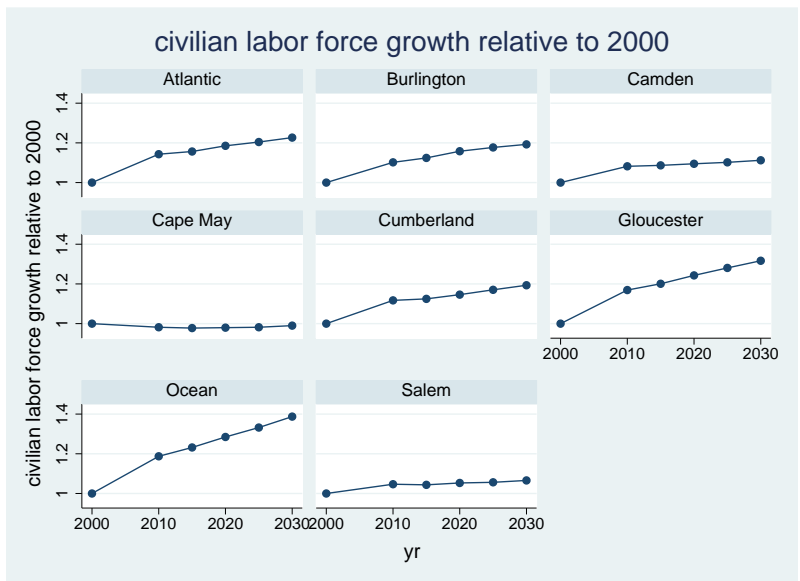


Figure 13: Civilian population growth.

⁹http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfproj/lfproj_index.html

2.3 IRS Migration

This section presents county-to-county migration flows from 2009 to 2010. Each panel in the table is for a county defined in the first six rows of that panel. And the "popin" column specifies population inflow into that county from other places. The last column "popout" lists population outflow from this county to other places. In other words, a county (Atlantic in first panel) is a DESTINATION for INFLOW and ORIGIN for OUTFLOW. An interesting pattern in this section is that while most migration happens within the state—there are some remote areas with few hundred people migrating every year—e.g. Florida and California.

	couin	sain	popin		couout	saout	popout
1.	Atlantic County Tot Mig-US & For	NJ	11,166	Atlantic County Tot Mig-US & For	NJ	12,658	
2.	Atlantic County Tot Mig-US	NJ	10,968	Atlantic County Tot Mig-US	NJ	12,517	
3.	Atlantic County Tot Mig-Same St	NJ	5,942	Atlantic County Tot Mig-Same St	NJ	5,586	
4.	Atlantic County Tot Mig-Diff St	NJ	5,026	Atlantic County Tot Mig-Diff St	NJ	6,931	
5.	Atlantic County Tot Mig-Foreign	NJ	198	Atlantic County Tot Mig-Foreign	NJ	141	
6.	Atlantic County Non-Migrants	NJ	339,420	Atlantic County Non-Migrants	NJ	339,420	
7.	Cape May County	NJ	1,257	Cumberland County	NJ	1,123	
8.	Camden County	NJ	1,026	Camden County	NJ	1,022	
9.	Cumberland County	NJ	1,048	Cape May County	NJ	1,003	
10.	Ocean County	NJ	610	Philadelphia County	PA	529	
11.	Gloucester County	NJ	514	Gloucester County	NJ	580	
12.	Burlington County	NJ	455	Ocean County	NJ	539	
13.	Philadelphia County	PA	445	Burlington County	NJ	381	
14.	Middlesex County	NJ	167	Palm Beach County	FL	207	
15.	Monmouth County	NJ	133	Montgomery County	PA	192	
16.	Delaware County	PA	143	Clark County	NV	159	
17.	Montgomery County	PA	141	Broward County	FL	168	
18.	Essex County	NJ	121	Kings County	NY	152	
19.	Queens County	NY	133	Middlesex County	NJ	135	
20.	Kings County	NY	110	New York County	NY	107	
21.	Bucks County	PA	126	Miami Dade County	FL	105	
22.	Bergen County	NJ	102	Monmouth County	NJ	106	
23.	Broward County	FL	110	Lee County	FL	104	
24.	New York County	NY	108	Orange County	FL	112	
25.	.	.	.	Other Flows - Diff State	DS	3,012	
26.	.	.	.	Other Flows - Northeast	DS	541	
27.	.	.	.	Other Flows - Midwest	DS	399	
28.	.	.	.	Other Flows - South	DS	1,703	
29.	.	.	.	Other Flows - West	DS	369	
30.	Burlington Coun Tot Mig-US & For	NJ	26,046	Burlington Coun Tot Mig-US & For	NJ	26,230	
31.	Burlington Coun Tot Mig-US	NJ	25,396	Burlington Coun Tot Mig-US	NJ	25,543	
32.	Burlington Coun Tot Mig-Same St	NJ	13,692	Burlington Coun Tot Mig-Same St	NJ	11,724	
33.	Burlington Coun Tot Mig-Diff St	NJ	11,704	Burlington Coun Tot Mig-Diff St	NJ	13,819	
34.	Burlington Coun Tot Mig-Foreign	NJ	650	Burlington Coun Tot Mig-Foreign	NJ	687	
35.	Burlington Coun Non-Migrants	NJ	539,291	Burlington Coun Non-Migrants	NJ	539,291	
36.	Camden County	NJ	5,477	Camden County	NJ	4,938	
37.	Mercer County	NJ	2,858	Mercer County	NJ	1,849	
38.	Philadelphia County	PA	1,471	Philadelphia County	PA	1,426	
39.	Middlesex County	NJ	985	Gloucester County	NJ	975	
40.	Gloucester County	NJ	847	Ocean County	NJ	844	
41.	Ocean County	NJ	892	Bucks County	PA	749	
42.	Bucks County	PA	791	Middlesex County	NJ	663	
43.	Foreign - APO/FPO ZIPs	FR	542	Atlantic County	NJ	455	
44.	Atlantic County	NJ	381	Foreign - APO/FPO ZIPs	FR	505	
45.	Monmouth County	NJ	381	Monmouth County	NJ	390	
46.	Montgomery County	PA	361	Montgomery County	PA	318	
47.	Essex County	NJ	380	New York County	NY	212	
48.	Hudson County	NJ	290	New Castle County	DE	237	
49.	Kings County	NY	259	Cape May County	NJ	228	
50.	Union County	NJ	237	Essex County	NJ	239	
51.	Delaware County	PA	204	Hudson County	NJ	197	
52.	New York County	NY	183	Delaware County	PA	211	
53.	Somerset County	NJ	196	Union County	NJ	207	
54.	Bergen County	NJ	141	Chester County	PA	193	
55.	New Castle County	DE	142	Kings County	NY	159	
56.	Queens County	NY	153	Hillsborough County	FL	151	
57.	Cape May County	NJ	112	Somerset County	NJ	158	
58.	Chester County	PA	113	Queens County	NY	140	
59.	Morris County	NJ	123	Los Angeles County	CA	117	
60.	Bronx County	NY	133	Palm Beach County	FL	112	
61.	Cumberland County	NJ	100	Bergen County	NJ	129	
62.	.	.	.	Maricopa County	AZ	131	
63.	.	.	.	Bexar County	TX	150	
64.	.	.	.	Kent County	DE	125	
65.	.	.	.	Fairfax County	VA	120	
66.	Honolulu County	HI	113	Honolulu County	HI	122	
67.	.	.	.	St Clair County	IL	110	
68.	.	.	.	Other Flows - Diff State	DS	5,099	
69.	.	.	.	Other Flows - Northeast	DS	926	

70.	.	.	.	Other Flows - Midwest	DS	873	
71.	.	.	.	Other Flows - South	DS	2,658	
72.	.	.	.	Other Flows - West	DS	642	
73.	.	.	.	Foreign - Other flows	FR	124	

74.	Camden County Tot Mig-US & For	NJ	24,427	Camden County Tot Mig-US & For	NJ	28,532	
75.	Camden County Tot Mig-US	NJ	24,206	Camden County Tot Mig-US	NJ	28,198	
76.	Camden County Tot Mig-Same St	NJ	13,540	Camden County Tot Mig-Same St	NJ	15,197	
77.	Camden County Tot Mig-Diff St	NJ	10,666	Camden County Tot Mig-Diff St	NJ	13,001	
78.	Camden County Tot Mig-Foreign	NJ	221	Camden County Tot Mig-Foreign	NJ	334	
79.	Camden County Non-Migrants	NJ	602,556	Camden County Non-Migrants	NJ	602,556	
80.	Burlington County	NJ	4,938	Burlington County	NJ	5,477	
81.	Gloucester County	NJ	4,791	Gloucester County	NJ	5,652	
82.	Philadelphia County	PA	2,918	Philadelphia County	PA	2,741	
83.	Atlantic County	NJ	1,022	Atlantic County	NJ	1,026	
84.	Montgomery County	PA	402	Montgomery County	PA	440	
85.	Delaware County	PA	369	Cumberland County	NJ	411	
86.	Middlesex County	NJ	387	Delaware County	PA	375	
87.	Cumberland County	NJ	373	Bucks County	PA	361	
88.	Bucks County	PA	324	Middlesex County	NJ	379	
89.	Salem County	NJ	286	New Castle County	DE	377	
90.	Mercer County	NJ	288	Cape May County	NJ	335	
91.	New Castle County	DE	246	Mercer County	NJ	343	
92.	Ocean County	NJ	212	New York County	NY	265	
93.	Essex County	NJ	188	Ocean County	NJ	291	
94.	Cape May County	NJ	174	Salem County	NJ	313	
95.	Kings County	NY	197	Hudson County	NJ	180	
96.	Bergen County	NJ	185	Chester County	PA	186	
97.	New York County	NY	152	Monmouth County	NJ	170	
98.	Queens County	NY	187	Kings County	NY	138	
99.	Hudson County	NJ	159	Essex County	NJ	135	
100.	Chester County	PA	147	Palm Beach County	FL	135	
101.	Monmouth County	NJ	118	Foreign - Puerto Rico	FR	138	
102.	.	.	.	Maricopa County	AZ	114	
103.	Union County	NJ	111	Queens County	NY	108	
104.	.	.	.	Foreign - APO/FPO ZIPs	FR	113	
105.	.	.	.	Broward County	FL	105	
106.	.	.	.	Montgomery County	MD	108	
107.	.	.	.	Bergen County	NJ	100	
108.	.	.	.	Kent County	DE	104	
109.	.	.	.	Harris County	TX	108	
110.	.	.	.	Other Flows - Diff State	DS	3,912	
111.	.	.	.	Other Flows - Northeast	DS	847	
112.	.	.	.	Other Flows - Midwest	DS	594	
113.	.	.	.	Other Flows - South	DS	2,001	
114.	.	.	.	Other Flows - West	DS	470	

115.	Cape May County Tot Mig-US & For	NJ	5,785	Cape May County Tot Mig-US & For	NJ	5,442	
116.	Cape May County Tot Mig-US	NJ	5,657	Cape May County Tot Mig-US	NJ	5,375	
117.	Cape May County Tot Mig-Same St	NJ	2,679	Cape May County Tot Mig-Same St	NJ	2,443	
118.	Cape May County Tot Mig-Diff St	NJ	2,978	Cape May County Tot Mig-Diff St	NJ	2,932	
119.	Cape May County Non-Migrants	NJ	114,463	Cape May County Non-Migrants	NJ	114,463	
120.	Atlantic County	NJ	1,003	Atlantic County	NJ	1,257	
121.	Philadelphia County	PA	389	Philadelphia County	PA	297	
122.	Camden County	NJ	335	Cumberland County	NJ	332	
123.	Gloucester County	NJ	329	Camden County	NJ	174	
124.	Cumberland County	NJ	266	Gloucester County	NJ	179	
125.	Burlington County	NJ	228	Burlington County	NJ	112	
126.	Delaware County	PA	220	Delaware County	PA	111	
127.	Other Flows - Diff State	DS	1,647	Other Flows - Diff State	DS	1,821	
128.	Other Flows - Northeast	DS	453	Other Flows - Northeast	DS	371	
129.	Other Flows - Midwest	DS	152	Other Flows - Midwest	DS	126	
130.	Other Flows - South	DS	742	Other Flows - South	DS	1,069	
131.	Other Flows - West	DS	300	Other Flows - West	DS	255	

132.	Cumberland Coun Tot Mig-US & For	NJ	5,792	Cumberland Coun Tot Mig-US & For	NJ	6,393	
133.	Cumberland Coun Tot Mig-US	NJ	5,671	Cumberland Coun Tot Mig-US	NJ	6,256	
134.	Cumberland Coun Tot Mig-Same St	NJ	3,704	Cumberland Coun Tot Mig-Same St	NJ	3,530	
135.	Cumberland Coun Tot Mig-Diff St	NJ	1,967	Cumberland Coun Tot Mig-Diff St	NJ	2,276	
136.	Cumberland Coun Tot Mig-Foreign	NJ	121	Cumberland Coun Tot Mig-Foreign	NJ	137	
137.	Cumberland Coun Non-Migrants	NJ	177,500	Cumberland Coun Non-Migrants	NJ	177,500	
138.	Atlantic County	NJ	1,123	Atlantic County	NJ	1,048	
139.	Gloucester County	NJ	714	Gloucester County	NJ	796	
140.	Salem County	NJ	626	Salem County	NJ	612	
141.	Camden County	NJ	411	Camden County	NJ	373	
142.	Cape May County	NJ	332	Cape May County	NJ	266	
143.	Philadelphia County	PA	168	Philadelphia County	PA	171	
144.	.	.	.	New Castle County	DE	122	
145.	.	.	.	Burlington County	NJ	100	
146.	Foreign - Other flows	FR	121	Other Flows - Same State	SS	106	
147.	.	.	.	Other Flows - Diff State	DS	1,923	
148.	.	.	.	Other Flows - Northeast	DS	435	
149.	.	.	.	Other Flows - Midwest	DS	172	
150.	.	.	.	Other Flows - South	DS	1,130	
151.	.	.	.	Other Flows - West	DS	186	

152.	Gloucester Coun Tot Mig-US & For	NJ	14,863	Gloucester Coun Tot Mig-US & For	NJ	14,917
153.	Gloucester Coun Tot Mig-US	NJ	14,783	Gloucester Coun Tot Mig-US	NJ	14,805
154.	Gloucester Coun Tot Mig-Same St	NJ	10,008	Gloucester Coun Tot Mig-Same St	NJ	8,833
155.	Gloucester Coun Tot Mig-Diff St	NJ	4,775	Gloucester Coun Tot Mig-Diff St	NJ	5,972
156.			.	Gloucester Coun Tot Mig-Foreign	NJ	112
157.	Gloucester Coun Non-Migrants	NJ	346,708	Gloucester Coun Non-Migrants	NJ	346,708
158.	Camden County	NJ	5,652	Camden County	NJ	4,791
159.	Philadelphia County	PA	1,164	Philadelphia County	PA	887
160.	Burlington County	NJ	975	Burlington County	NJ	847
161.	Salem County	NJ	884	Salem County	NJ	955
162.	Cumberland County	NJ	796	Cumberland County	NJ	714
163.	Atlantic County	NJ	580	Atlantic County	NJ	514
164.	Delaware County	PA	372	Cape May County	NJ	329
165.	New Castle County	DE	176	Delaware County	PA	328
166.	Cape May County	NJ	179	New Castle County	DE	301
167.	Montgomery County	PA	165	Montgomery County	PA	192
168.	Middlesex County	NJ	156	Ocean County	NJ	130
169.	Bucks County	PA	152	Middlesex County	NJ	111
170.	Ocean County	NJ	127	Chester County	PA	106
171.	Chester County	PA	112	Broward County	FL	103
172.	Monmouth County	NJ	129	Bucks County	PA	103
173.			.	Other Flows - Diff State	DS	2,720
174.			.	Other Flows - Northeast	DS	566
175.			.	Other Flows - Midwest	DS	271
176.			.	Other Flows - South	DS	1,546
177.			.	Other Flows - West	DS	337
178.	Ocean County Tot Mig-US & For	NJ	25,594	Ocean County Tot Mig-US & For	NJ	22,135
179.	Ocean County Tot Mig-US	NJ	25,176	Ocean County Tot Mig-US	NJ	21,901
180.	Ocean County Tot Mig-Same St	NJ	16,347	Ocean County Tot Mig-Same St	NJ	10,811
181.	Ocean County Tot Mig-Diff St	NJ	8,829	Ocean County Tot Mig-Diff St	NJ	11,090
182.	Ocean County Tot Mig-Foreign	NJ	418	Ocean County Tot Mig-Foreign	NJ	234
183.	Ocean County Non-Migrants	NJ	675,701	Ocean County Non-Migrants	NJ	675,701
184.	Monmouth County	NJ	6,051	Monmouth County	NJ	4,471
185.	Middlesex County	NJ	2,053	Middlesex County	NJ	1,145
186.	Bergen County	NJ	1,137	Burlington County	NJ	892
187.	Union County	NJ	1,048	Atlantic County	NJ	610
188.	Burlington County	NJ	844	Hudson County	NJ	442
189.	Essex County	NJ	771	Mercer County	NJ	467
190.	Hudson County	NJ	752	Morris County	NJ	400
191.	Mercer County	NJ	603	Bergen County	NJ	399
192.	Kings County	NY	813	Union County	NJ	412
193.	Morris County	NJ	592	Essex County	NJ	322
194.	Atlantic County	NJ	539	Somerset County	NJ	256
195.	Somerset County	NJ	511	Philadelphia County	PA	257
196.	Richmond County	NY	587	Passaic County	NJ	281
197.	Passaic County	NJ	512	New York County	NY	225
198.	Camden County	NJ	291	Kings County	NY	273
199.	Queens County	NY	268	Camden County	NJ	212
200.	Bucks County	PA	249	Palm Beach County	FL	221
201.	New York County	NY	208	Broward County	FL	189
202.	Philadelphia County	PA	204	Lee County	FL	185
203.	Hunterdon County	NJ	159	Bucks County	PA	164
204.	Sussex County	NJ	141	Harford County	MD	203
205.	Palm Beach County	FL	132	Maricopa County	AZ	161
206.	Gloucester County	NJ	130	Queens County	NY	148
207.	Broward County	FL	109	Richmond County	NY	144
208.	Rockland County	NY	137	Gloucester County	NJ	127
209.	Maricopa County	AZ	112	Horry County	SC	140
210.	Foreign - APO/FPO ZIPs	FR	123	San Diego County	CA	109
211.	Los Angeles County	CA	115	Pinellas County	FL	114
212.	San Diego County	CA	105	Brevard County	FL	119
213.	Suffolk County	NY	104	Montgomery County	PA	122
214.			.	Hillsborough County	FL	123
215.	Nassau County	NY	101	Cecil County	MD	135
216.			.	Collier County	FL	111
217.	Bronx County	NY	103	Sarasota County	FL	110
218.			.	Cook County	IL	129
219.			.	Other Flows - Diff State	DS	3,895
220.			.	Other Flows - Northeast	DS	903
221.			.	Other Flows - Midwest	DS	467
222.			.	Other Flows - South	DS	1,958
223.			.	Other Flows - West	DS	567
224.			.	Foreign - Other flows	FR	135
225.	Salem County Tot Mig-US & For	NJ	3,556	Salem County Tot Mig-US & For	NJ	3,972
226.	Salem County Tot Mig-US	NJ	3,524	Salem County Tot Mig-US	NJ	3,938
227.	Salem County Tot Mig-Same St	NJ	2,205	Salem County Tot Mig-Same St	NJ	2,097
228.	Salem County Tot Mig-Diff St	NJ	1,319	Salem County Tot Mig-Diff St	NJ	1,841
229.	Salem County Non-Migrants	NJ	79,552	Salem County Non-Migrants	NJ	79,552
230.	Gloucester County	NJ	955	Gloucester County	NJ	884
231.	Cumberland County	NJ	612	Cumberland County	NJ	626
232.	Camden County	NJ	313	New Castle County	DE	441
233.	New Castle County	DE	309	Camden County	NJ	286

234.	Delaware County	PA	117	Philadelphia County	PA	112
235.			.	Other Flows - Same State	SS	102
236.			.	Other Flows - Diff State	DS	1,053
237.			.	Other Flows - Northeast	DS	236
238.			.	Other Flows - South	DS	653

239.	Hudson County	NJ	114			.
240.	Foreign - Puerto Rico	FR	130			.
241.	Other Flows - Diff State	DS	2,581			.
242.	Other Flows - Northeast	DS	597			.
243.	Other Flows - Midwest	DS	317			.
244.	Other Flows - South	DS	1,327			.
245.	Other Flows - West	DS	340			.

246.	Other Flows - Diff State	DS	4,334			.
247.	Other Flows - Northeast	DS	698			.
248.	Other Flows - Midwest	DS	878			.
249.	Other Flows - South	DS	2,143			.
250.	Other Flows - West	DS	615			.

251.	Foreign - Puerto Rico	FR	101			.
252.	Other Flows - Diff State	DS	3,132			.
253.	Other Flows - Northeast	DS	632			.
254.	Other Flows - Midwest	DS	525			.
255.	Other Flows - South	DS	1,548			.
256.	Other Flows - West	DS	427			.

257.	Cape May County Tot Mig-Foreign	NJ	128			.
258.	Montgomery County	PA	190			.
259.	Bucks County	PA	151			.

260.	Other Flows - Diff State	DS	1,392			.
261.	Other Flows - Northeast	DS	357			.
262.	Other Flows - Midwest	DS	131			.
263.	Other Flows - South	DS	734			.
264.	Other Flows - West	DS	170			.

265.	Mercer County	NJ	100			.
266.	Other Flows - Diff State	DS	2,282			.
267.	Other Flows - Northeast	DS	489			.
268.	Other Flows - Midwest	DS	259			.
269.	Other Flows - South	DS	1,241			.
270.	Other Flows - West	DS	293			.

271.	Other Flows - Diff State	DS	3,318			.
272.	Other Flows - Northeast	DS	814			.
273.	Other Flows - Midwest	DS	453			.
274.	Other Flows - South	DS	1,619			.
275.	Other Flows - West	DS	432			.
276.	Foreign - Other flows	FR	295			.

277.	Other Flows - Same State	SS	124			.
278.	Other Flows - Diff State	DS	768			.
279.	Other Flows - Northeast	DS	180			.
280.	Other Flows - South	DS	419			.

2.3.1 Strengths and Limitations

The county-to-county migration data may be the largest dataset tracking movement of both households and people from county to county, including family incomes. However, the source and design of this dataset present some limitations. As mentioned, those who are not required to file United States Federal income tax returns are not included in this file, and so the data under-represent the poor and the elderly. Also excluded is the small percentage of tax returns filed after late September of the filing year. Most taxpayers whose returns are filed after this date have been granted an extension to file by the IRS. These taxpayers are likely to have complex returns that report relatively high income, and so the migration data set may under-represent the very wealthy, as well.

3 Economy

3.1 Land Use

Arguably, people are most important, but people live on land, and it is important how this land is used. Salem has the most Agricultural land (figure 14). More than 50% of Camden is urban (figure 15).

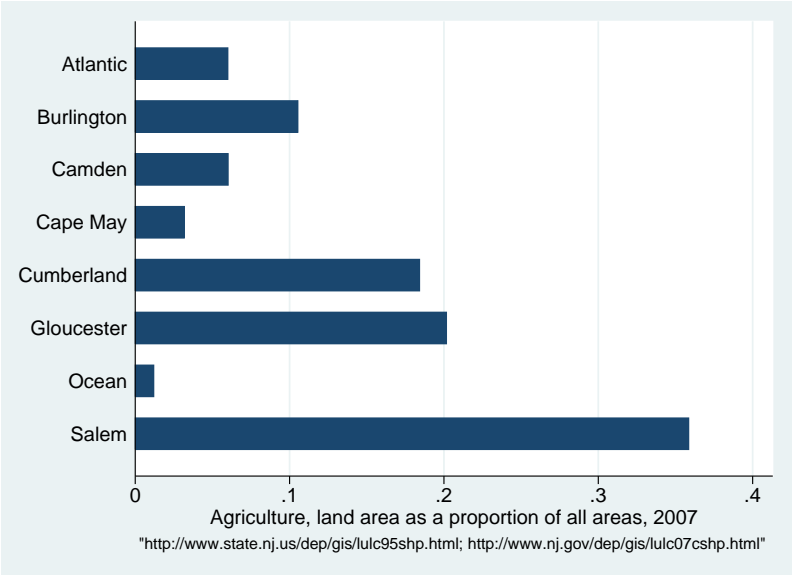


Figure 14

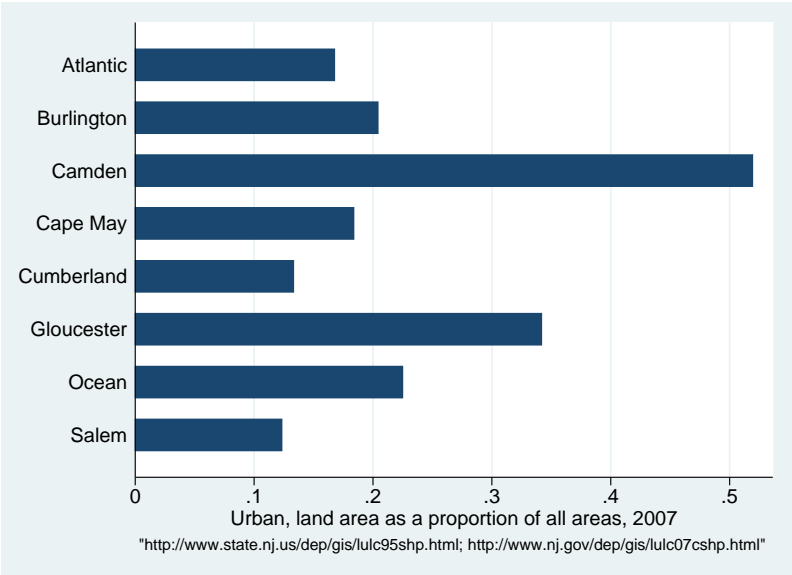


Figure 15

Atlantic, Cumberland and Salem persist in Agriculture (figure 16).

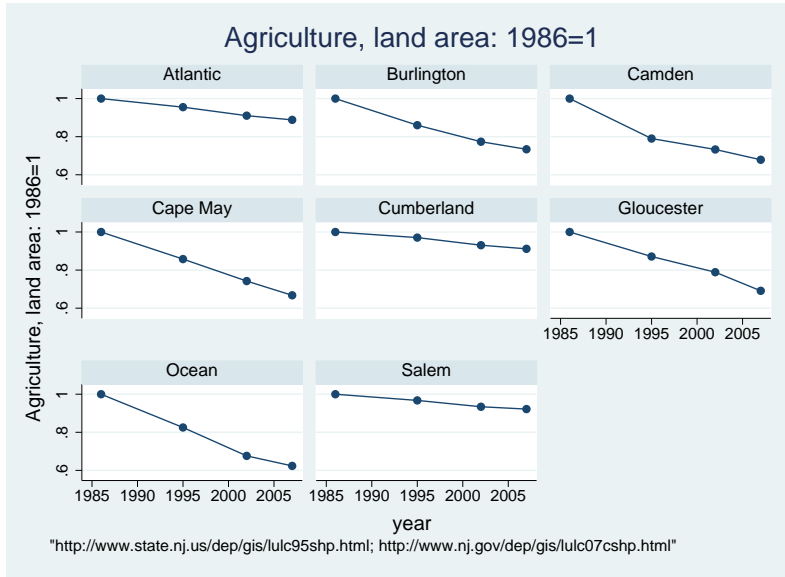


Figure 16

Most urban Camden is not urbanizing any further (figure 17).

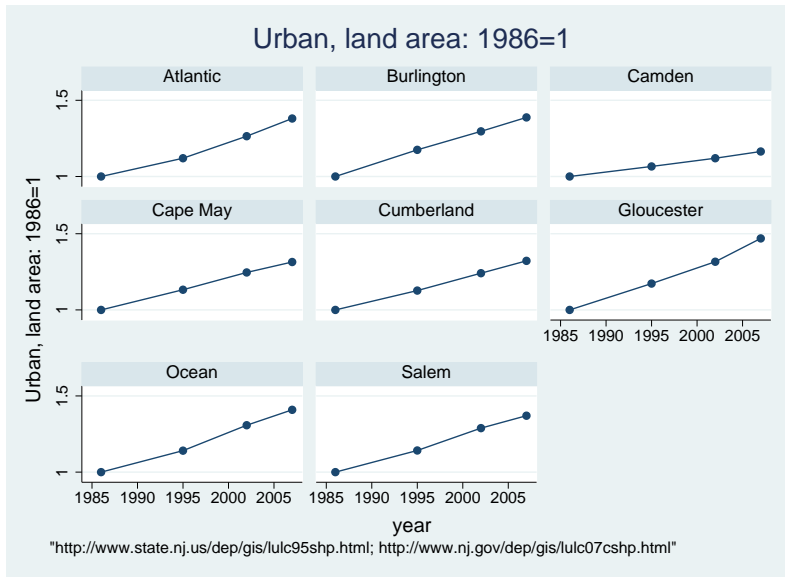


Figure 17

There is more Barren land in Gloucester (figure 18).

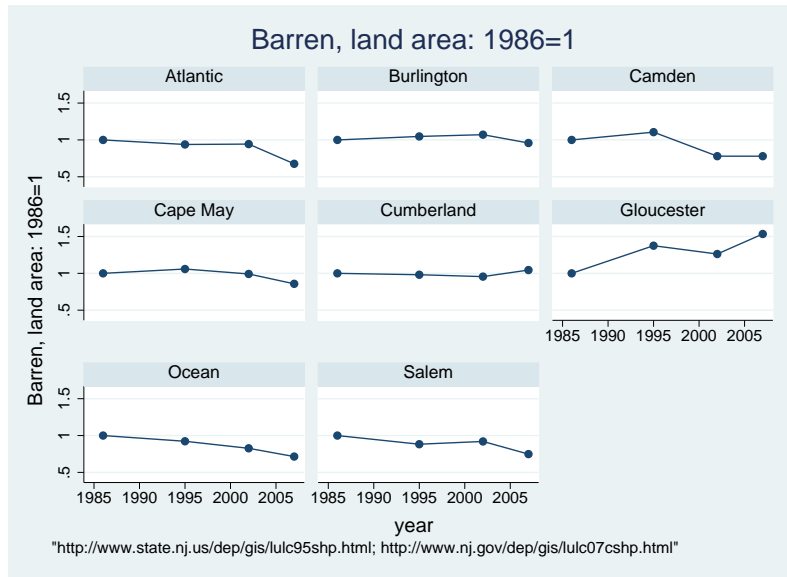


Figure 18

Salem, Burlington and Cumberland protect their Forest land (figure 19).

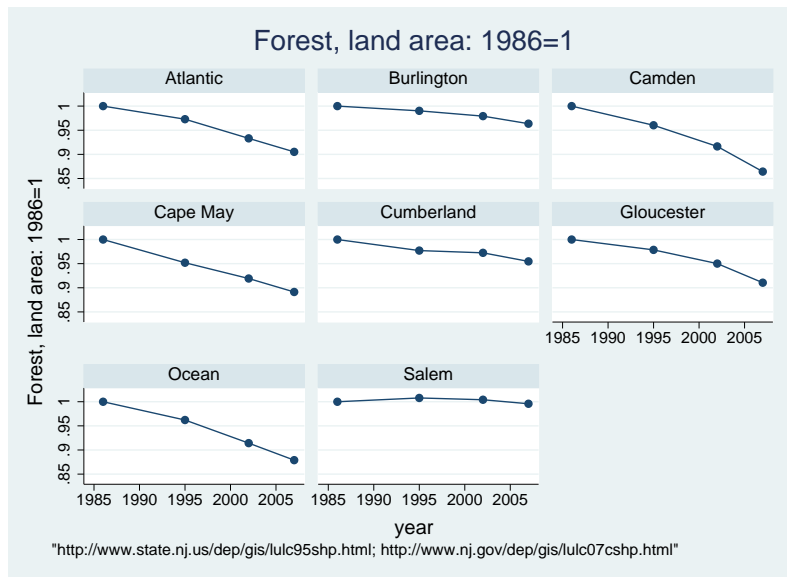


Figure 19

3.1.1 Land Use Definitions

The following text in this section comes from the New Jersey Bureau of Geographic Information Systems.¹⁰

GENERAL CATEGORY DESCRIPTIONS

The six categories included here represent the six general categories that are part of the Anderson classification system, and which are represented in the New Jersey landscape. These are, in numerical order, URBAN LAND

¹⁰<http://www.state.nj.us/dep/gis/categories.htm>.

(1000), AGRICULTURE (2000), FOREST (4000), and BARREN LAND (7000). Below is a brief description of each of these general categories. Refer to the following two documents for a complete list of the specific codes used in this study, and for a full description of each of them.

<http://www.state.nj.us/dep/gis/digidownload/metadata/lulc95/codelist.html>.

<http://www.state.nj.us/dep/gis/digidownload/metadata/lulc95/anderson.html>.

URBAN LAND

The URBAN LAND category includes most of what normally would be considered developed land. Residential areas, commercial areas, services and institutions, industrial areas, and those developed for transportation and utilities are the primary land uses included in the URBAN category. In addition, there are several open land categories that are included here. Developed recreation areas, whether they be part of a park, educational facility, or private concern such as a golf course, are included in the URBAN series. Lastly, there is also a code used to identify other undeveloped open space in urban areas. Included in this last category would be such areas as large landscaped lawns in corporate business and service centers, parks and residential areas. These areas do not have buildings and pavement characteristic of more highly developed categories, but are given an URBAN code to distinguish them from undeveloped open areas that exist outside an urban setting. The impact of these areas on environmental quality can be suspected to be different than undeveloped areas outside of an urban setting.

Business parks, large educational institutions, golf courses, transportation right of ways, among other urban categories, often include sections that while not having typical wetlands vegetation, do show obvious signs of soil saturation, and which extend over areas that do have hydric soils. Again, these areas are considered wetlands from a regulatory perspective, even though viewing these areas from the ground or from an aerial photo, you might be inclined to put them in the urban category. The numbers given for the URBAN values below do not include any of these disturbed wetlands areas. Since the full data set allows users to select categories in any of a number of ways, these areas can be included in URBAN calculations if need be. They have not, however, been included in the URBAN numbers shown below.

AGRICULTURE

Included are all land areas associated with agricultural production. Most of this land would be used in the active cultivation of crops, both row and field crops. Also included, however, is pastureland and grazing land associated with horse or cattle raising operations, orchards, vineyards, nurseries and other horticultural areas, and confined feeding operations. In addition, other land used in support of the agricultural activities, such as the farmsteads, associated barns, stables, and corrals, among others, are also included.

As with the URBAN category, there are also AGRICULTURAL land that are considered WETLANDS for regulatory purposes. These areas are generally under active cultivation, and so do not support typical wetland vegetation. But these areas do exist on saturated, hydric soils, and are absent the wetland vegetation only because of the active cultivation. The acreage of these AGRICULTURAL wetlands are included in the general category of WETLANDS, and not in the category of AGRICULTURE. As with the URBAN wetlands, users of the full data sets can reselect out these AGRICULTURAL wetlands individually and include them in other general categories if need be.

FORESTS

Included is all upland areas covered by woody vegetation. The vegetation may be primarily deciduous, coniferous or a mixture of both, and include scrub/shrub and brush areas as well as mature tree stands of various densities. Also included in this category, with a separate code, are early stage forest successional stands, commonly referred to as old fields. These do not normally have a significant amount of mature trees on them, but are placed in this category because of their potential development to FORESTS. The 14 specific upland FOREST types can be identified and analyzed individually, or grouped into several more general FOREST categories.

Not included in the FOREST category, are forested wetlands. New Jersey has many types of deciduous, coniferous and mixed species forests that exist on saturated, hydric soils. These forested lands are considered

WETLANDS, both in the specific numeric land use/land cover codes that are given to them, as well as the general category into which these areas are placed. Since these forested wetlands also have specific codes identifying the forested wetland type, they can be isolated and analyzed with the other forest categories if need be.

BARREN LAND

The BARREN LAND category includes a wide variety of specific types, but all are characterized by a general lack of any significant vegetative cover. Included are both naturally occurring barren areas, such as beaches and rock outcrops, as well as artificially created barren areas, where vegetation has been artificially removed. Cleared but undeveloped urban lands, transitional areas, mines, dumps and quarries are also included in the general category of BARREN LAND. Each of these types can be isolated by their specific numeric code if need be, although the acreage values given below for BARREN LAND do include both the naturally occurring and artificially created barren areas.

One type of area within the 7000 series, however, which is not included in the figures, is that identified with the code 7430. This is another class of disturbed wetlands that may be found in a wide variety of disturbed or developed situations. As with the other altered wetlands, these areas show signs of obvious soil saturation. But alterations have led to the removal of any natural wetland vegetation, and grading or other surface modifications may have also occurred. These areas are regulated under the NJ Freshwater Wetlands Regulatory Program, and so are included in the acreage figures as WETLANDS. They can be isolated and analyzed separately using the specific numeric code, if need be.

3.2 Detailed Employment (Census of Employment and Wages)

Data come from Census of Employment and Wages. The industries are defined at the Bureau of Labor Statistics website.¹¹ Data are reported by employers and hence are about employment in the area, not about workers living in the area (<http://www.bls.gov/cew>). Figure 20 shows an overview of results—it focuses on cross-sectional comparisons in the most current available year, 2011. Further graphs show over time changes for each county. Note, in few cases the annual average employment was missing—in that case the trend was extrapolated from the non-missing years over the missing years.

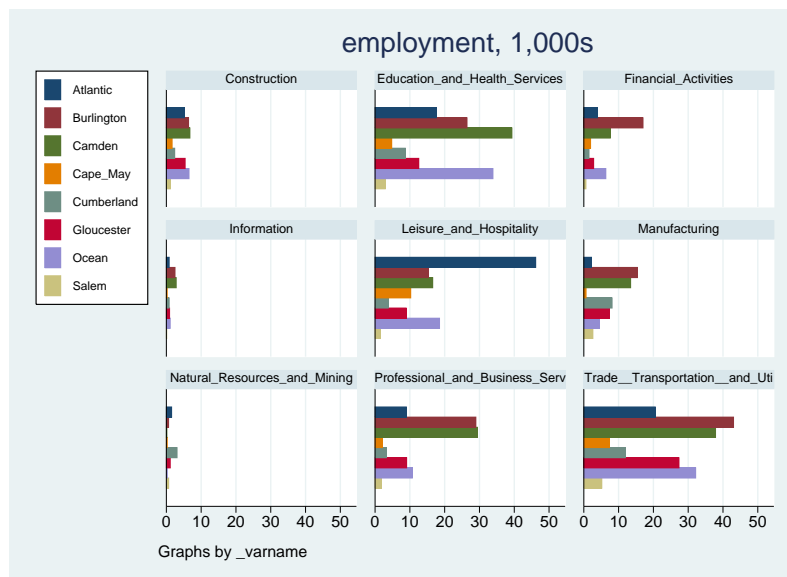


Figure 20: A comparison of employment across all sectors.

Following figures will show changes over time in employment by sector—for ease of comparison, each county is suffixed with total population in 2012, rounded to nearest 50 thousand—the goal is to aid with comparisons on per capita basis—again, bear in mind that the values shown in graphs are absolute numbers, that is, unadjusted for size of a county.

¹¹ http://www.bls.gov/iag/tgs/iag_index_naics.htm; <ftp://ftp.bls.gov/pub/special.requests/cew/DOCUMENT/industry.map>

Figure 21 shows goods producing sector. There is not much change over time, except that Burlington and Camden had largest decline in employment in this sector.

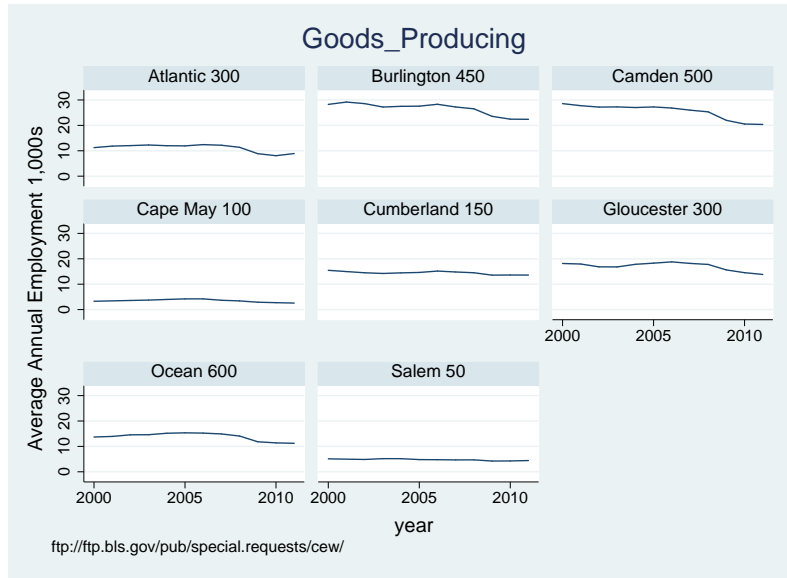


Figure 21: Employment over time and by county.

Natural Resources and Mining are shown in figure 22—what is really striking here is that Cumberland which is one of the smallest counties in terms of population has the highest Natural Resources and Mining employment and it is growing. It warrants further investigation, what is responsible for this growth. One of the explanations is that there is still a lot of mining activity in Cumberland.¹²

Atlantic also has large population working in this sector. Other counties have declining employment.

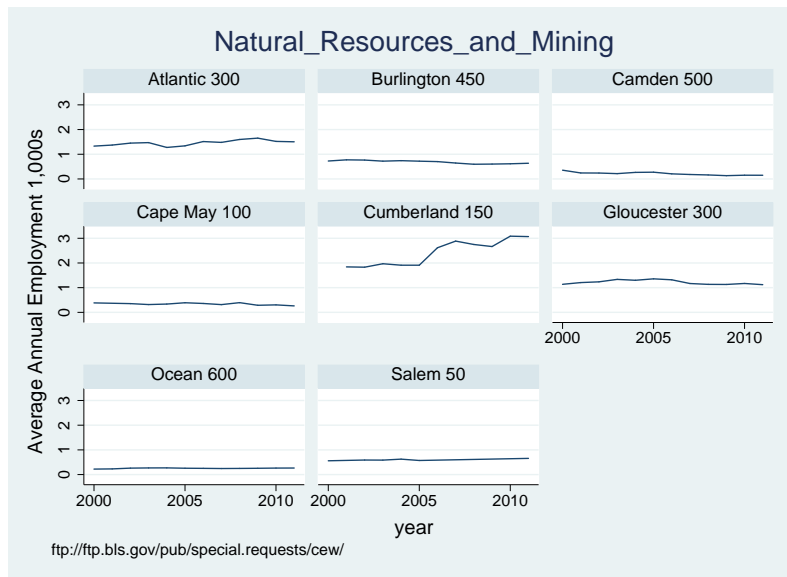


Figure 22: Employment over time and by county.

¹²I am grateful for pointing that out to me to a participant of "The Forum About South Jersey Changes Across the Region: People, Economy and Well Being."

Figure 23 shows an information sector that is declining in all counties; there was recent big decline in Camden.

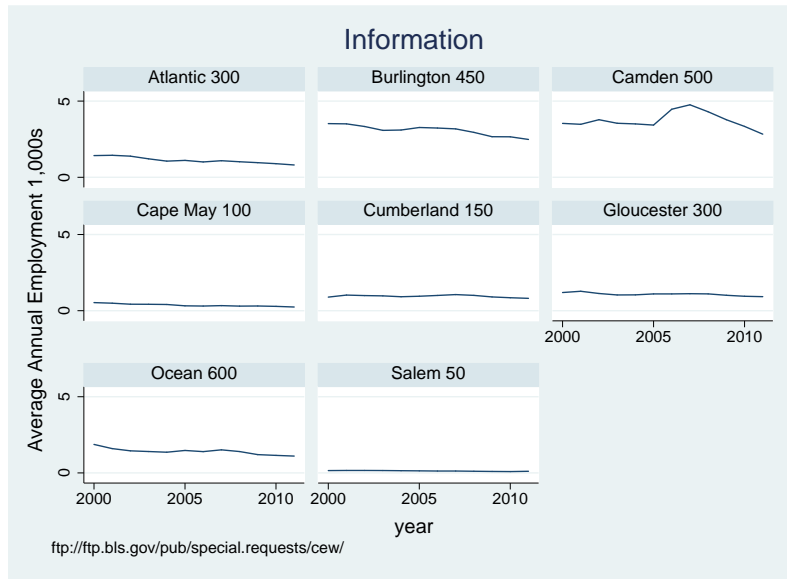


Figure 23: Employment over time and by county.

Figure 24 shows construction—it is understandable that it's declining—there was a housing bubble bust in 2008.

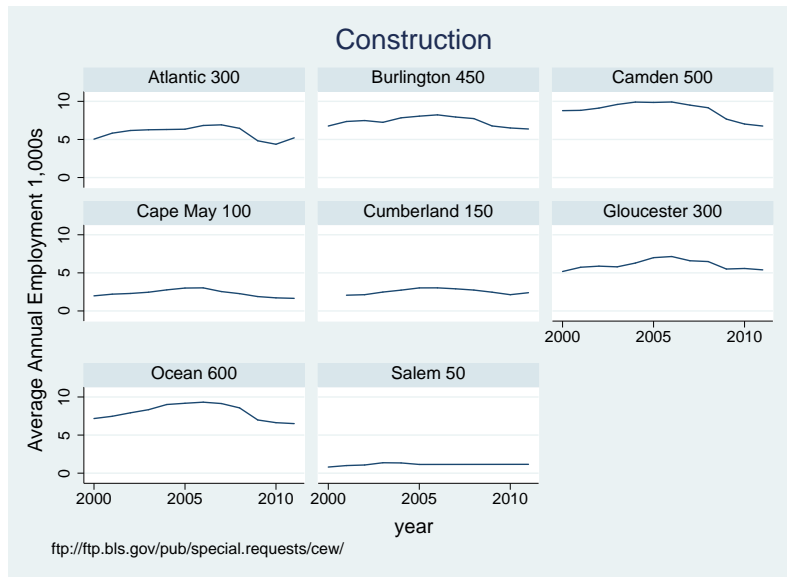


Figure 24: Employment over time and by county.

Figure 25 shows the leisure and hospitality—it was highest in Atlantic, where it has been declining recently. Somewhat unexpectedly, it is quite low in Ocean, which also has many shore destinations like Atlantic. The limitation on this metric for Ocean is that it does not have casinos like Atlantic does.

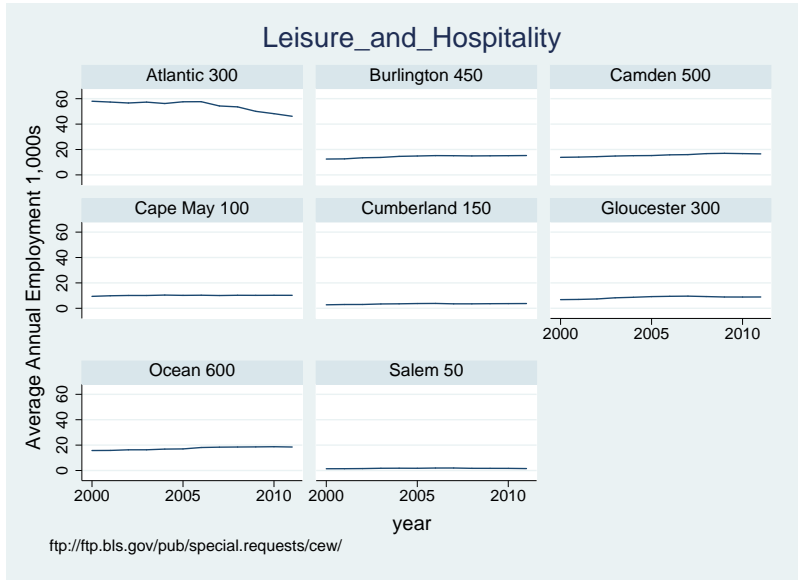


Figure 25: Employment over time and by county.

Figure 26 shows so called Eds and Meds, that is education and medical sectors. Employment is steadily growing in most counties, and is highest in Camden and Ocean.

A word of caution is in order, however. Eds and meds will probably grow in the US but not necessarily locally—they both already are getting outsourced and probably will even more so—eds through online courses; meds—major meds clusters are sucking patients from elsewhere.¹³

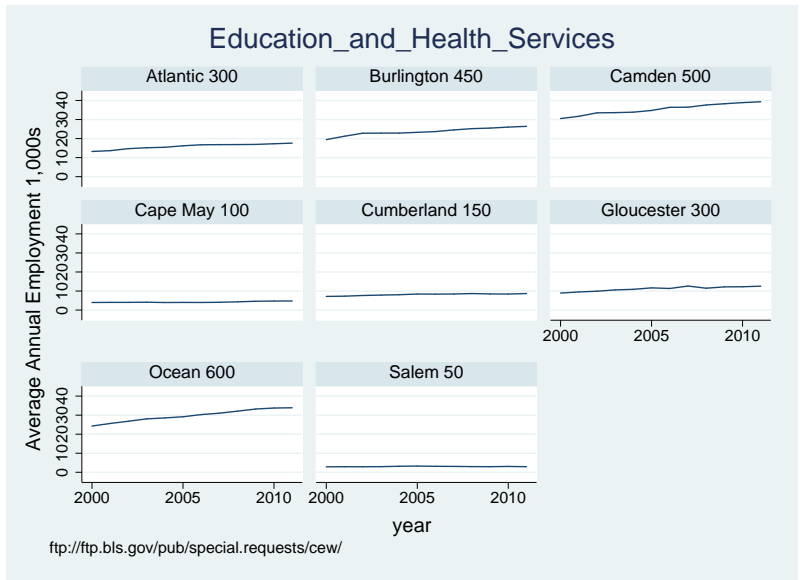


Figure 26

¹³For more elaboration of this idea see <http://www.nytimes.com/2013/10/25/opinion/the-bad-news-for-local-job-markets.html?hp&r=1&>.

Figure 27 shows Trade, Transportation, and Utilities.

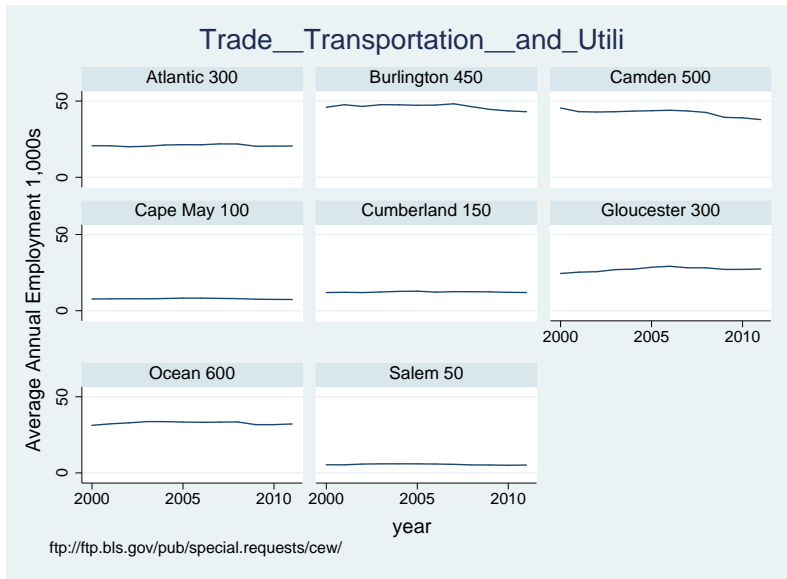


Figure 27

Burlington has more people working in Financial Activities more than any other county in figure 28.

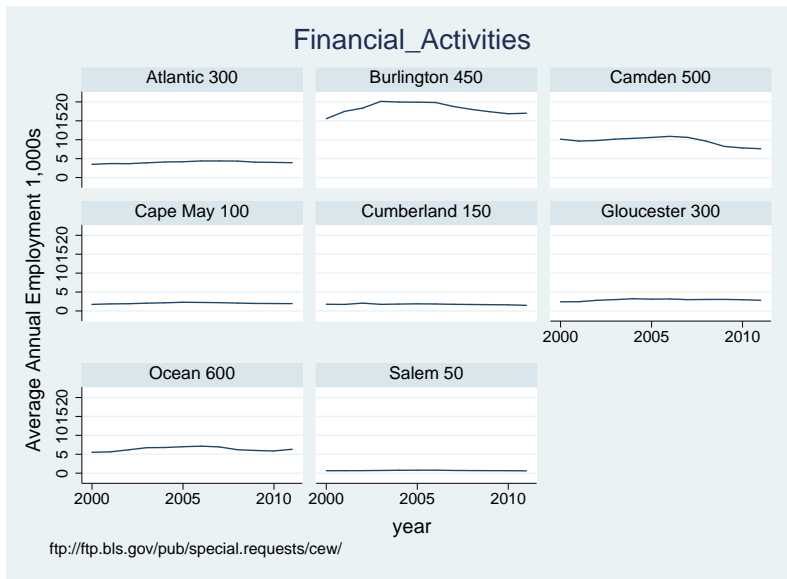


Figure 28

Burlington and Camden both have many people working in Professional and Business Services in figure 29. These two counties' advantage maybe due to their proximity to Philadelphia.

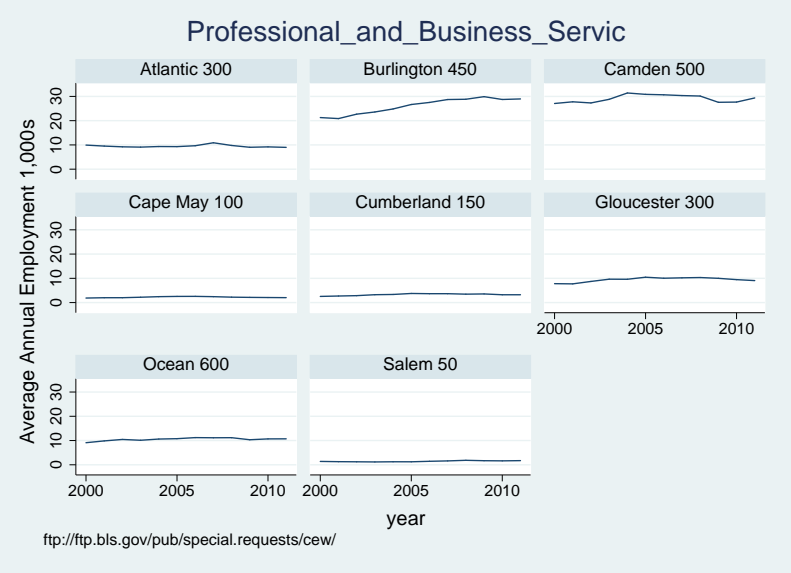


Figure 29

3.3 Creative Class

There is a creative class thesis (Florida 2008)—localities need to attract creative people, for instance, engineers, architects, artists. For a place to compete in today’s economy it needs a critical mass of people in the creative class, which correlates with innovation and hence economic development. The creative class thesis may be particularly relevant to rural communities, which tend to lose much of their talent when young adults leave. Much of South Jersey is quite rural, and it appears, it is losing its young population—hence, creative class thesis should be relevant here. Below I will use a dataset developed by the USDA Economic Research Service.¹⁴ Values assigned to counties indicate a county’s share of population employed in occupations that require “thinking creatively.” A definition of creative occupations comes from O*NET.¹⁵ This measures people who live in the area, not who work in the area as in the case of census of employment and wages.

Figure 30 shows results—as usual Burlington leads the pack and Cumberland closes the ranking. Also, note there is a lot of variation—Burlington is twice as creative as Cumberland. There are many artists in Cumberland, but it may be more problematic to count them and measure their occupation as creative.¹⁶

Creativity is key for business. There are academic writings about importance of creativity (e.g. Christensen 1997), but importantly it is difficult to overestimate it in practice as well. For instance, I recently attended a talk by a business person, who quite persuasively claimed that the only two things that matter in business these days are creativity/innovation and marketing and everything else, e.g. production or logistics, is secondary.

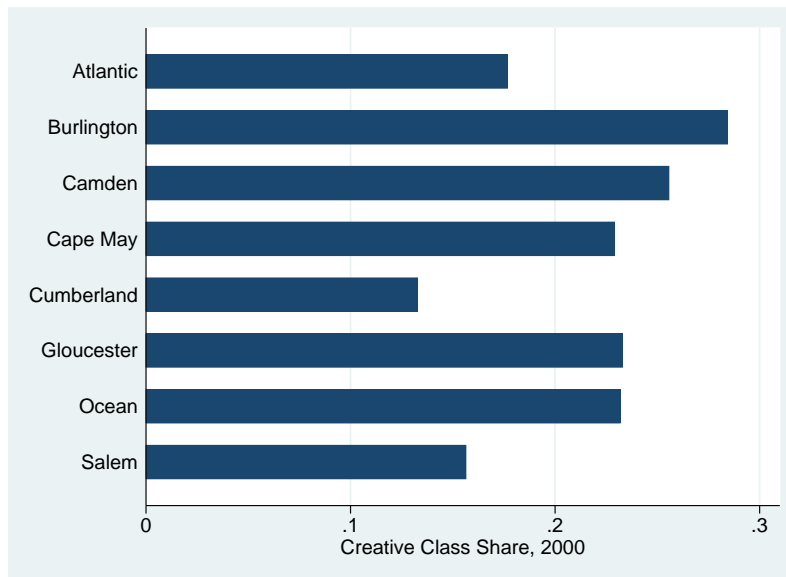


Figure 30: Creative class, 2000

¹⁴<http://www.ers.usda.gov/data-products/creative-class-county-codes.aspx>

¹⁵ <http://www.onetonline.org/find/descriptor/result/4.A.2.b.2?s=1&a=1>

¹⁶I am grateful for pointing that out to me to a participant of “The Forum About South Jersey Changes Across the Region: People, Economy and Well Being.”

4 Objective Wellbeing

4.1 Public Health

Here I will focus on risk factors by county and over time. These risk factors include smoking, drinking, obesity, and lack of access to healthcare. Data come from the County Health Rankings.¹⁷

What always strikes me when I drive in poor areas is the number of liquor stores and stores selling (and advertising) cigarettes, and also sight of people smoking—it appears that it is easily noticeable defining feature of areas that are in decline. And there appear to be large differences across localities in terms of the above. Also, data show a lot of variability. In figure 31, Cumberland smokes most and Burlington smokes least. In figure 32, Cape May is wettest, Gloucester and Burlington are driest.

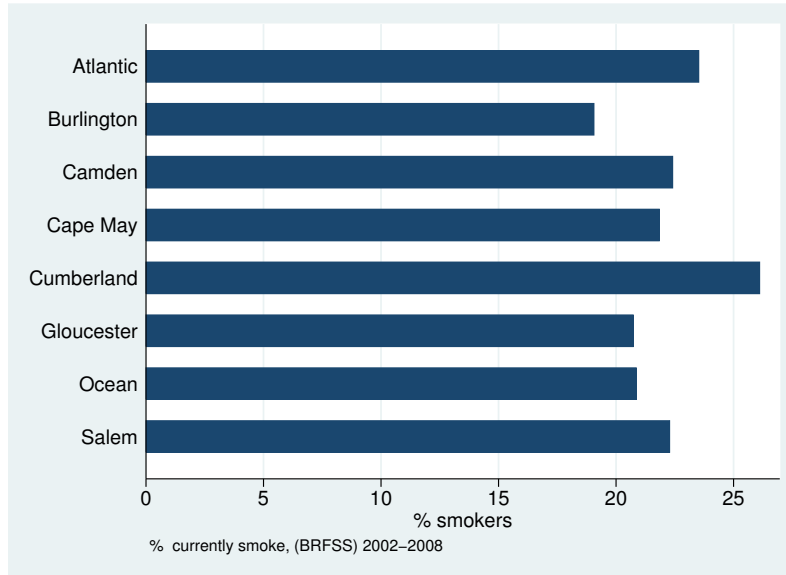


Figure 31: Smoking, average for 2002-2008.

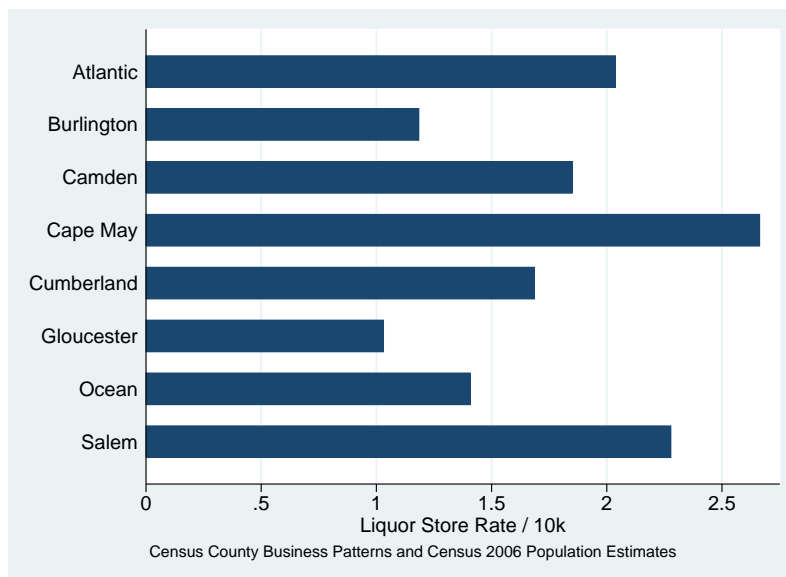


Figure 32: Liquor stores/10,000 people, 2006.

¹⁷<http://www.countyhealthrankings.org>

In terms of binge drinking, figure 33, there are three leaders: Atlantic, Cumberland, and Camden.

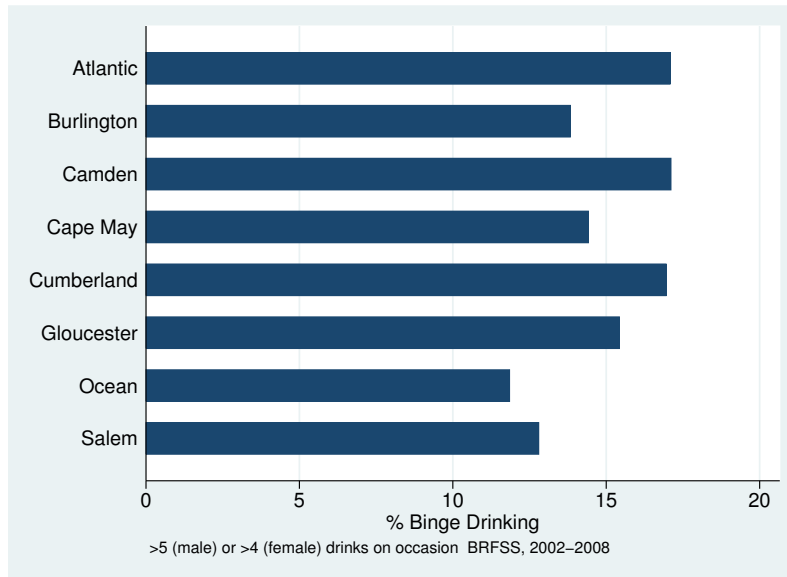


Figure 33: Binge drinking, average for 2002-2008.

Figure 34 shows percent of zip codes with healthy food outlets. A striking difference emerges in this figure—Cumberland has much less access to healthy food than other counties. Healthy food is defined as:¹⁸**1) NAICS 445110** Supermarkets and Other Grocery (except Convenience) Stores. This industry comprises establishments generally known as supermarkets and grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included in this industry are delicatessen-type establishments primarily engaged in retailing a general line of food. **2) NAICS 445230** Fruit and Vegetable Markets. This industry comprises establishments primarily engaged in retailing fresh fruits and vegetables.

Also see the USDA atlas of food deserts for a map of access to healthy food at lower level of aggregation than county.¹⁹

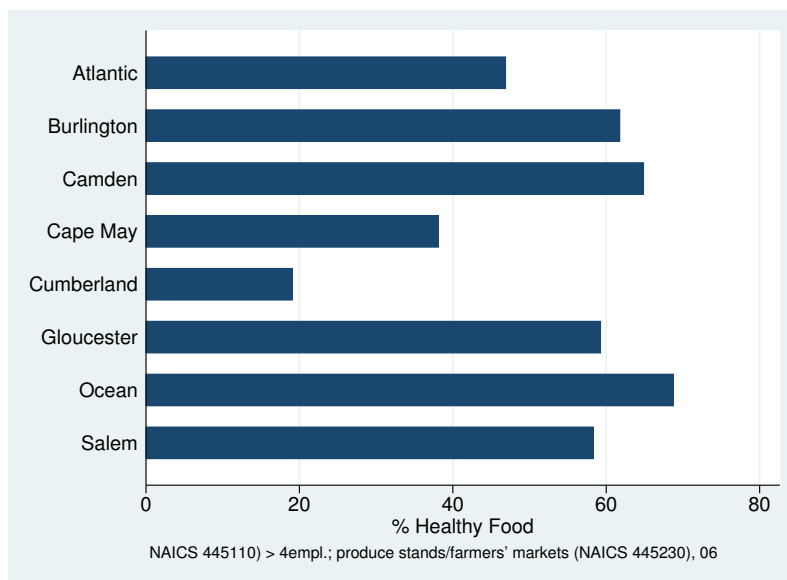


Figure 34: Percent of zip codes with healthy food outlets, 2006

¹⁸<http://www.census.gov/cgi-bin/sssd/naics/naicsrch>

¹⁹The map can be accessed at <http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx>.

Figure 35 shows percent obese. Gloucester has smallest proportion of residents who are obese. Salem closes this ranking.

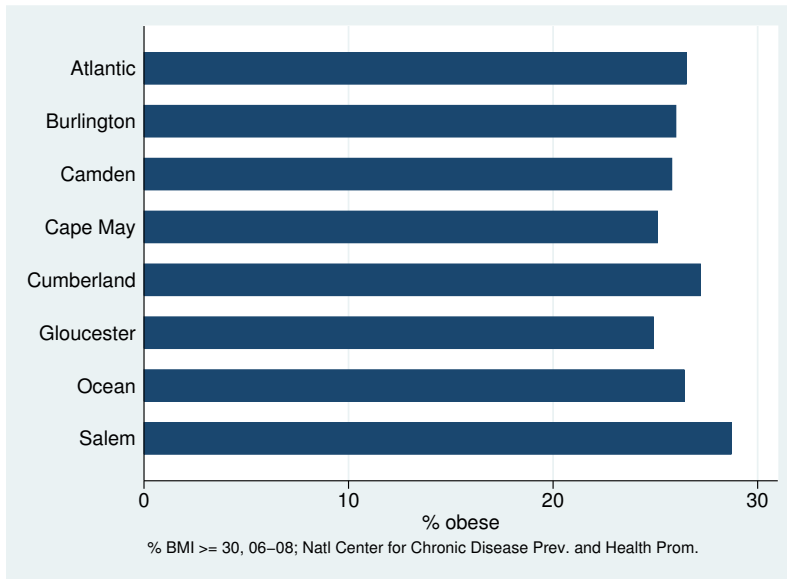


Figure 35: Obesity, average for 2002-2008.

Figure 36 shows mentally unhealthy days: people in Camden have on average a day more of mental unhealthiness per month than in Burlington.

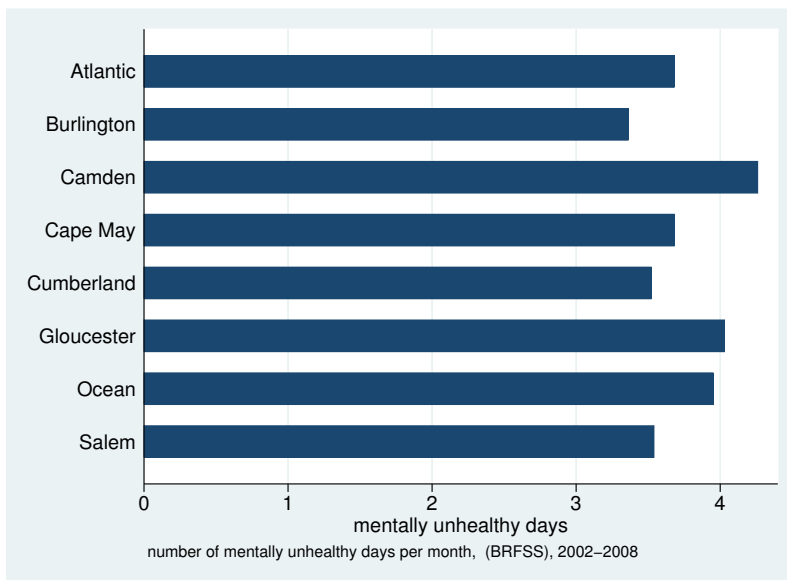


Figure 36: Mentally unhealthy days, average for 2002-2008.

There is a similar pattern in figure 37 with respect to physical health.

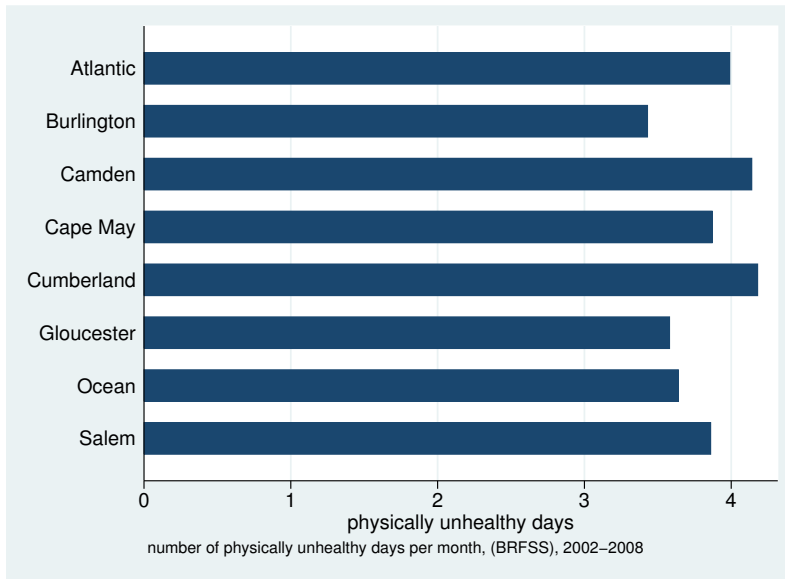


Figure 37: Physically unhealthy days, average for 2002-2008.

Figure 38 shows percent uninsured: there is a lot of variability.

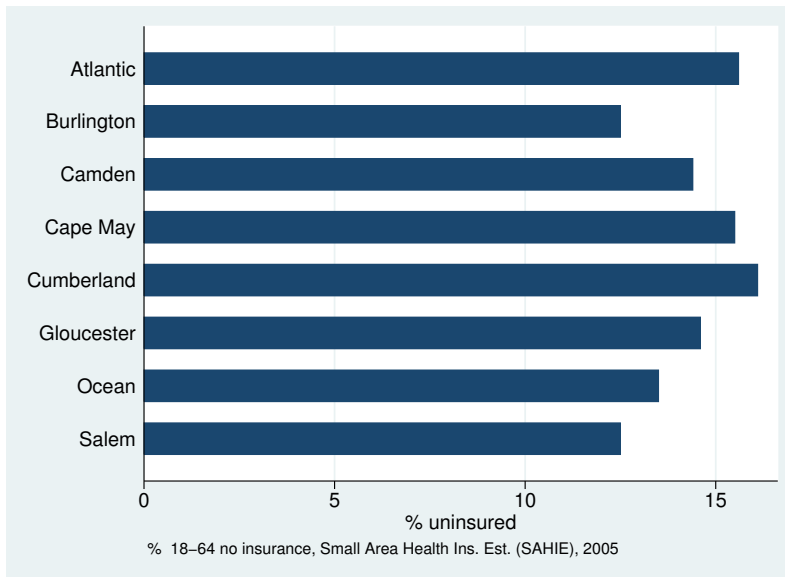


Figure 38: Percent uninsured, 2005.

In terms of PCP (Primary Care Physicians) availability (figure 39), there seem to be two groups. First group has a high rate: Burlington and especially Camden—is it Cooper hospital and the effect of being a Philadelphia suburb? The second group consists all other counties, among which Cape May is the last.

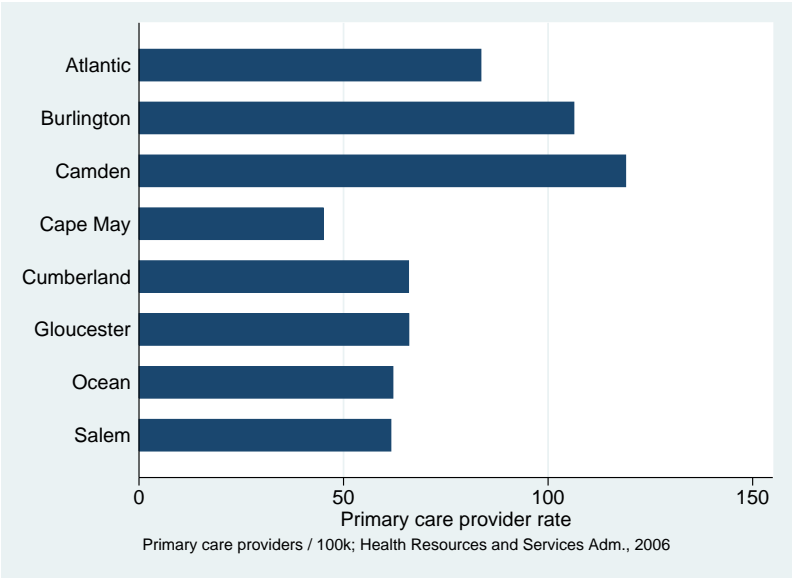


Figure 39: Primary Care Physician Rate per 100k, 2005.

4.2 Economic Wellbeing

There is a lot of variability in terms of the share of population with higher education in figure 40. This variability is even more striking across the state—half of Morris County has at least bachelor’s degree—this is more than 3 times than in Cumberland. Roughly speaking, North Jersey has twice the proportion of people with higher education as compared to South Jersey.

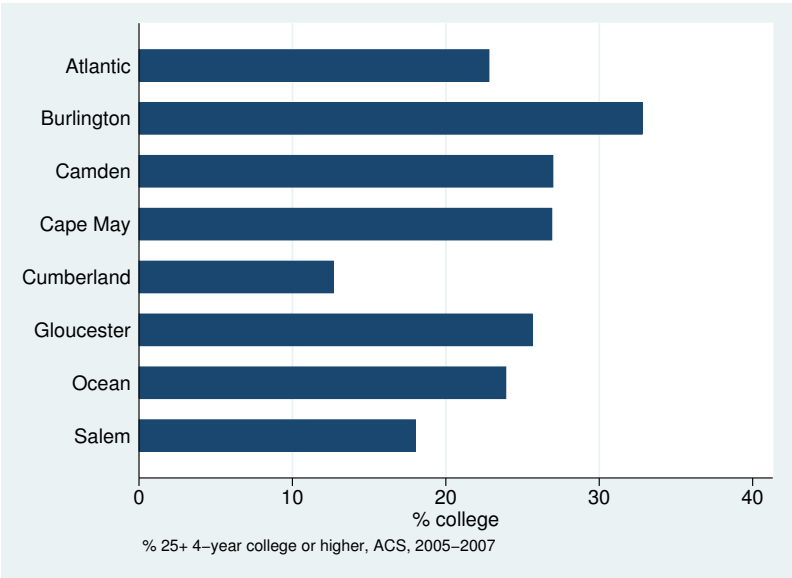


Figure 40: Percent of people with higher education, 2005-2007.

On the other hand, there is not much variation in income inequality in figure 41. South Jersey is quite uniformly poor (as compared to North Jersey). Still, some variation is visible—Burlington is most equal, and Cape May is most unequal.

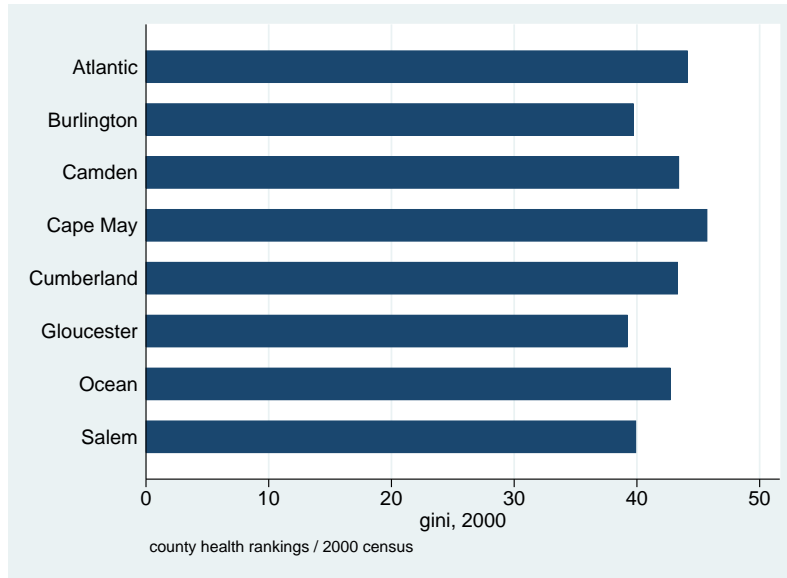


Figure 41: Income inequality.

4.3 Social Issues

Social issues are no less important than economic issues. For instance, social and emotional support is one of the strongest predictors of happiness. Percentage of people without any social and emotional support (figure 42) is highest in Cumberland, and lowest in Cape May.

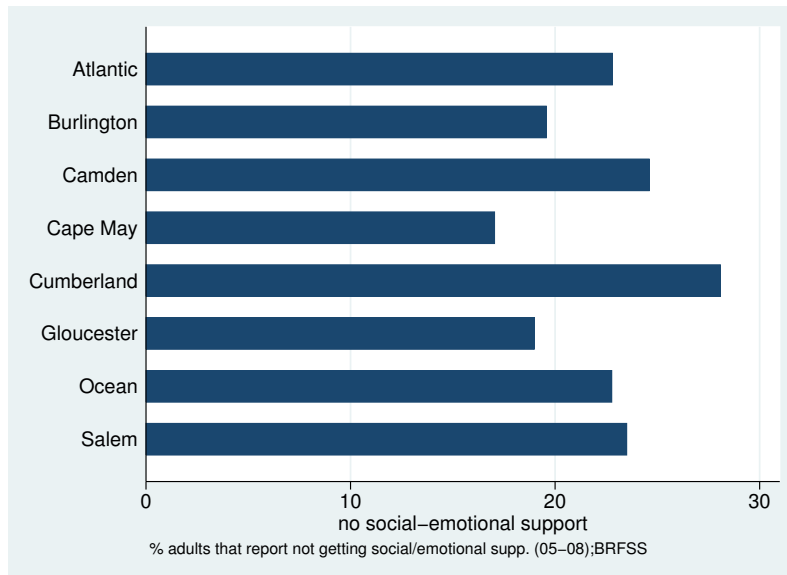


Figure 42: Percent of adults that report not getting social/emotional support, average for 2005-2008.

Cumberland is also a leader in terms of both single parents (figure 43) and teen births (figure 44)—the two are obviously related. Also note, single parenting is a component of a concentrated poverty definition (Jargowsky 1997).

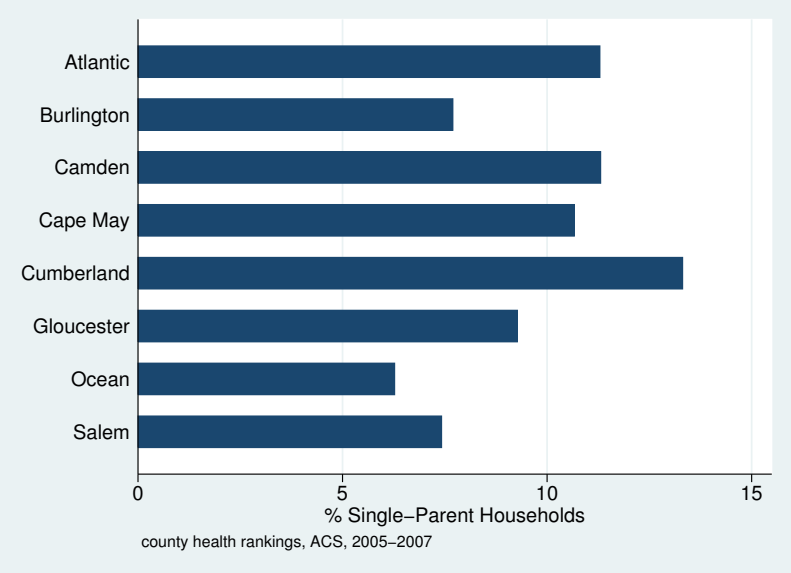


Figure 43: Percent of families that are headed by a single parent, 2005-2007.

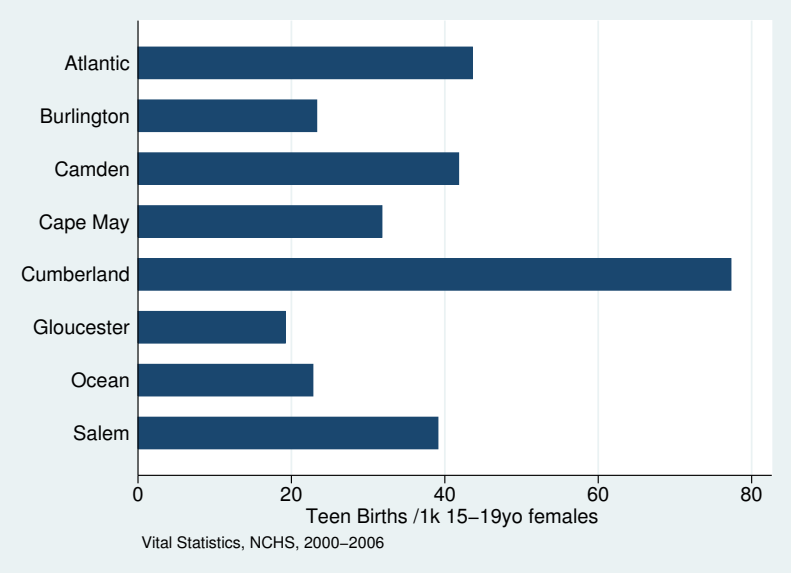


Figure 44: Teen birth rate (per 1,000 females, 15-19), average for 2000-2006.

It is striking how closely single-headed households and teen birth rate are correlated with violent crime rate²⁰ (figure 45). Obviously, there are likely to be causal mechanisms at play here.

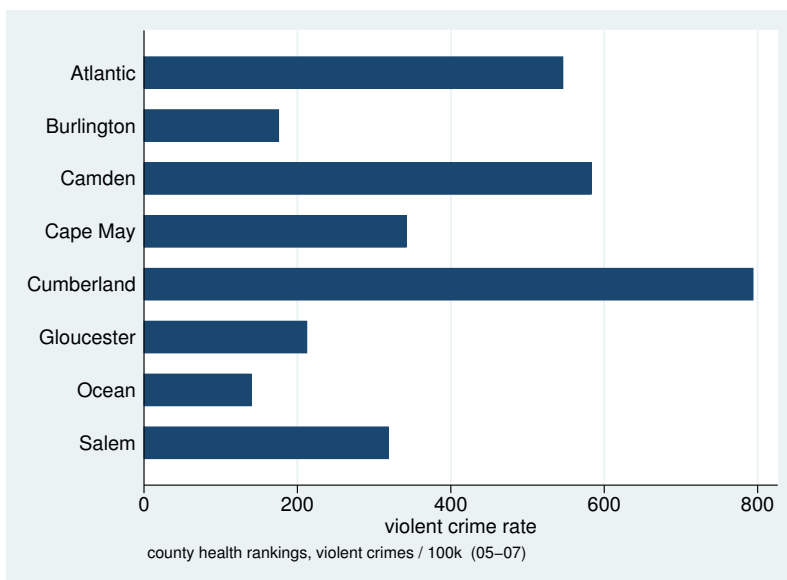


Figure 45: Violent crime rate, average for 2005-2007.

4.4 Nature

The Gloucester County’s Motto is “Close to Everything, Far From It All.”²¹ This depicts well the strength of South Jersey. South Jersey is located in the center of the so called “Bos-Wash Megalopolis”, an urban area stretching from Boston, MA to Washington, DC. Most of South Jersey is urbanizing, yet most of it is still rural, and this is its strength. Appendix on page 45 shows a map of the defining feature of the megalopolis, population density.

Data measuring natural amenities come from USDA research service.²²

²⁰Violent crime is defined as crime that uses force or threat of force.

²¹I am grateful for pointing that out to me to a participant of “The Forum About South Jersey Changes Across the Region: People, Economy and Well Being.”

²²<http://www.ers.usda.gov/publications/aer-agricultural-economic-report/aer781.aspx>; <http://www.ers.usda.gov/data-products/natural-amenities-scale.aspx>

Figures 46 and 47 show how urban as opposed to rural is a county—the higher the value the more rural the county, and the lower the urban influence. Atlantic, Cape May and Cumberland are most rural in South Jersey (according to USDA). Atlantic, Cape May and Cumberland have the lowest urban influence.

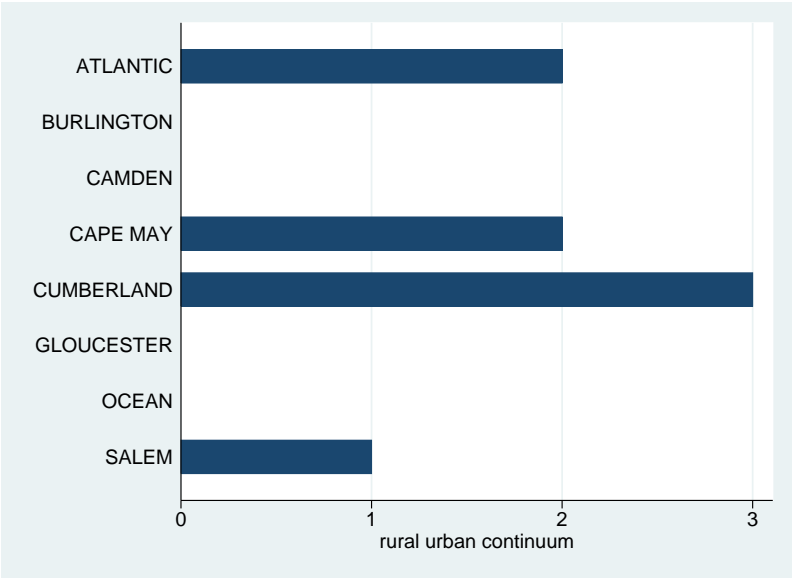


Figure 46: Rural-urban continuum, 1993

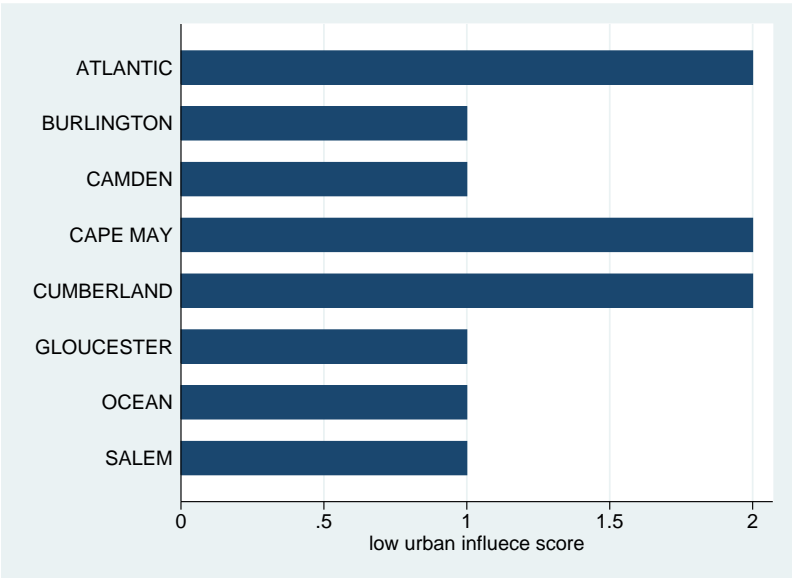


Figure 47: Low urban influence, 1993.

Figure 48 shows USDA natural amenities scale—the higher the value the more amenities there are—for calculation of this index see data source links above. Interestingly, in terms of natural amenities, the usual leader, Burlington, comes out last. The best counties are (in this order) Ocean, Cumberland and Cape May. Note, however, that this definition emphasizes water features (shore line) and elevation (mountains)—it does not encompass one of the New Jersey’s greatest natural resource—the NJ Pine Barrens aka the pinelands. The pineland zone comprises much of Burlington County and offers a wealth of natural recreation opportunities for residents and visitors. One of the valuable features of the pinelands is that, unlike our shoreline, it is accessible to so many middle class people for living close to and within its boundaries.²³

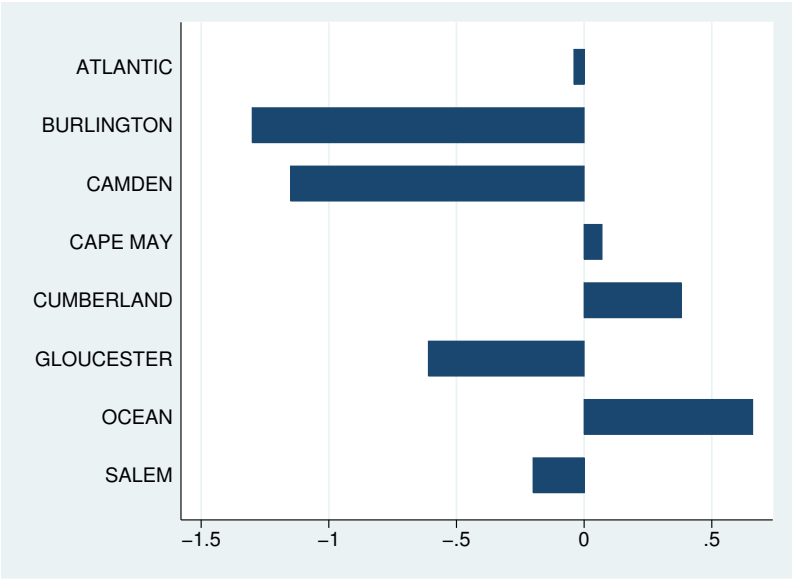


Figure 48: Natural amenities scale, 1993.

5 Subjective Wellbeing (Happiness)

This section presents the last overall measure, happiness. This is a subjective measure and I do not expect the subjective wellbeing to overlap exactly with objective wellbeing (Okulicz-Kozaryn 2011). The happiness measure is calculated from BRFSS data over 2005-10 period.

county	happiness
Atlantic	3.38
Burlington	3.43
Camden	3.37
Cape May	3.46
Cumberland	3.31
Gloucester	3.43
Ocean	3.42
Salem	3.37

Table 1: Happiness, BRFSS 2005-10.

Cape May is happiest, and Cumberland is least happy. From the discussion of the objective quality of life we would expect Cumberland to be the last. But we would also expect Burlington to be at the top, not Cape May—I speculate that Cape May is the leader because of its beautiful nature (despite that it does not rank top on USDA natural amenities scale), and we know that nature makes people happy—it is one of the most consistent findings in the happiness literature recently. Also, high ranking of Burlington may be due to the NJ Pine Barrens, which curiously is not picked by the USDA natural amenities scale, but which arguably should affect happiness.

Finally, this is consistent with a poll conducted by Monmouth University that asked people in New Jersey about their impressions of quality of life.²⁴ Results for South Jersey are quoted in the next section.

²³I am grateful for this point to Cynthia Sosnowski.
²⁴<http://www.monmouth.edu/assets/0/32212254770/32212254991/32212254992/32212254994/32212254995/30064771087/>

6 Other Data

6.1 Monmouth University Poll Ranking

1. Cape May (+30) – Perched on the southern tip of the Jersey Shore, Cape May residents stand out for the high ratings they give to the quality of their local environment (86%) and above average satisfaction with the amount of open space in their area (63%). This is also a county with one of the highest ratings for local traffic conditions (61%) even while it has one of the lowest ratings for public transit access (29%). Cape May residents also give very low ratings to the availability of jobs (10%) and affordable housing (24%) in their area. On the other hand, they are more likely than other New Jerseyans to say that their local services are worth what they pay in taxes, although this sentiment is still expressed by only 45% of the public. Cape May residents consider their neighbors to be among the friendliest in the state, with 50% giving their local area a high rating on the survey's Neighborliness Index compared to just 17% who give a low rating. Also of note, Cape May residents are the least likely to report being lifelong New Jerseyans (32%).
2. Ocean (+23) – Ocean County residents tend to score slightly above average on most Garden State Quality of Life metrics, but give slightly lower than average ratings to the way land has been developed (41%) and the availability of public transportation (32%) in their area. There is also a relatively greater lack of confidence when it comes to their local government (39%). Ocean has a high proportion of lifelong New Jersey residents (58%). Residents of this county are among those most negative about the impact of immigration in New Jersey with 25% who say it has been good for the state compared to 48% who say it has been bad.
3. Atlantic (+16) – Atlantic County residents tend to score near the statewide average on most Garden State Quality of Life Index metrics. However, they are the most likely New Jerseyans to say they want to get out of the state (60%). Atlantic County residents are divided on the value of racial diversity – 31% say it has been good for the state and 27% bad – and are negative on the impact of immigration – 28% good to 39% bad.
4. Burlington (+16) – Burlington is another county where most residents (59%) say they want to leave New Jersey eventually, with only 51% rating the state a positive place to live. On the other hand, Burlington residents tend to be more satisfied than most New Jerseyans with the amount of open space in their area (60%).
5. Salem (+16) – Residents of New Jersey's least populated county are also among the least positive about their state as a place to live (50%) . They do give high ratings, though, to traffic conditions (63%), the amount of open space (61%) and housing affordability (54%) in their area. On the negative side is a lack of public transportation access (28%). Salem residents express ambivalence about the state 's racial diversity – 31% good to 25% bad – and are the most negative county on immigration – 23% good to 51% bad. Salem residents have a higher than average level of interest in following local politics (38%).
6. Camden (+13) – Camden County residents are among the least positive about the state as a place to live (50%). In their own area, few give positive marks to the conditions of local roads (43%) and traffic (26%). Nearly half report getting stuck in weekly traffic jams (46%). On a personal note, more Camden residents express low (34%) rather than high (25%) satisfaction levels with their own lives.
7. Gloucester (+13) – Gloucester joins Cumberland County in having the fewest residents willing to give New Jersey a positive rating as a place to live (47%). However, unlike their neighbors to the south, Gloucester residents are fairly positive about their own hometowns (72%). This matches the large 25 point state-town differential registered by Somerset residents. This low state rating is the main factor that brings down Gloucester's overall Quality of Life Index score. This county's residents are the most ambivalent New Jerseyans when it comes to the impact of diversity on the state – while 26% say it has been good and 21% say it has been bad, most residents take no position on this issue.
8. Cumberland (+5) – Cumberland residents are the least likely to give either the state (47%) or their own hometowns (51%) positive ratings. They are significantly more negative than most other New Jerseyans on race relations (53%), access to health care (51%), availability of cultural activities (44%), crime (41%), the condition of their roads (41%), Monmouth University Polling Institute Garden State Quality of Life: Counties - 10 and the availability of jobs (15%). In an area with a sizable migrant workforce, Cumberland residents tend to be more negative than most on the impact of immigration, with 23% saying it is a good thing to 43% who say it is bad for the state. Most Cumberland residents (58%) are lifelong New Jerseyans. They have above average levels of interest in local politics (39%), although 39% say they have little confidence in their local government and just 24% say that their local services are worth the taxes

they pay. While Cumberland County scores the lowest on the Garden State Quality of Life Index, its residents tend to feel the most empowered – 58% say they personally can make a difference in their community.

6.2 New Jersey Monthly: the Top Towns

The New Jersey Monthly produced a ranking of 514 New Jersey towns. The ranking is called “top towns,” but really is a combination of housing value, property taxes, crime, and test scores—hardly a comprehensive measure to name a city “top.” The top 35 cities all have median housing value above \$300,000, most of them above \$500,000. By contrast, all bottom places have median housing values below \$250,000. This ranking emphasizes wealthy areas, making an assumption that expensive places are good places. To be sure, there is some truth to that—people vote with their feet and are willing to pay extra only if they consider a place to be worth it.

This ranking is also consistent with above sections: Cape May, Burlington and Ocean score well, while Camden and Cumberland lag behind—see figure 49.

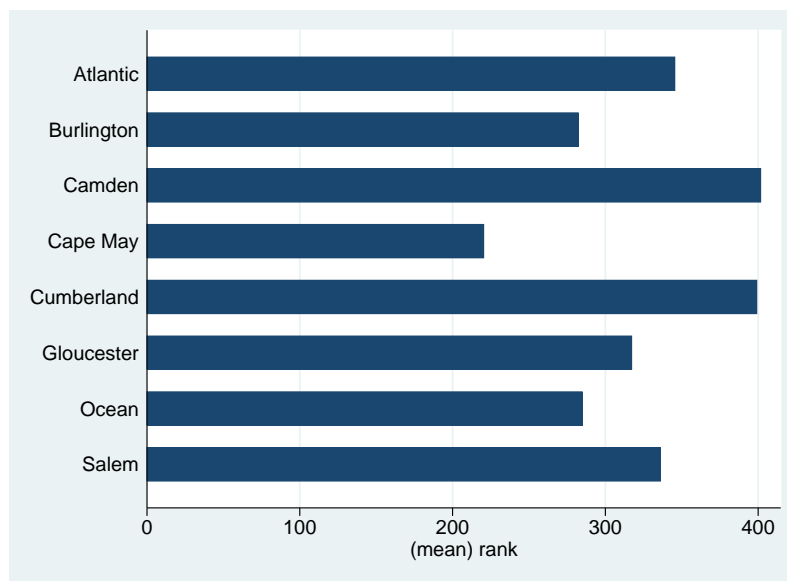


Figure 49: Average rank of towns in a county as classified by New Jersey Monthly.

7 Conclusion and Discussion

In the above I have presented various social indicators to describe and summarize quality of life across South Jersey counties. I have decided to talk about all of them separately instead of producing an overall index or ranking. Such ranking may be useful for the future research if we gather yet more indicators and generate a separate index for each dimension. The overall ranking is not very meaningful—it is difficult to talk about the overall, all-encompassing quality of life. And in fact many of its dimensions may be contradicting—for instance affordability and green space area are likely to correlate negatively with wages and overall economic development. Indices and rankings are also difficult to interpret—what does it really mean that a place ranks at such and such position—it only means as much as the variables that go into an index.

The next step and future research would be not only to add more relevant indicators, but also to focus on policy analysis. The first step is to describe the situation. This was the goal of this study. The next step is to discuss and brainstorm the picture with relevant stakeholders and hypothesize what can be done, i.e. what policies can be implemented to bring about a desired change.

There are many policies that could be implemented, for instance: tax breaks, subsidies and marketing efforts to attract businesses. Public health efforts make sense, too—education at schools to prevent risky behaviors, more and better education for people who already engage in such behavior. Incidentally, people arguably use drugs, alcohol and tobacco to become happy, or to neutralize misery (Linden 2011)—it may be instructive to educate that in the long run it leads to addiction, which in turn leads to lower happiness. In other words, it is a vicious cycle. Same positive effect in our brain (happiness) can be achieved through physical exercise. Indeed, sport promotion may be an effective policy to substitute physical exercise happiness for substance abuse (short run) happiness.

We can also focus on what has been done—if we knew what specific policies have been implemented in the past, then we can use a before-after research design to study an impact. We can also analyze impact as interrupted time series—we can analyze what has happened to a trend in an outcome variable—how it changed as a response to policy implementation. We can also compare across space—how a county compares to similar counties that have not implemented such policy—is a social indicator of interest improving relative to other counties?

7.1 Urban Malaise

Most of my research is about the misery of city life—it is a consistent finding that people are unhappy in cities, and in fact there is a consistent urban-rural happiness gradient. The bottom line is that not only do people prefer to live in less dense areas as shown by Fuguitt and Brown (1990), Fuguitt and Zuiches (1975), but they are also happier there as demonstrated by my research. This is an opportunity for South Jersey that can be fully utilized and can work out to attract people if either: 1.) there are more and/or better jobs in South Jersey; 2.) there is better transportation to where the jobs are, e.g. a fast train to NYC.

Happiness is not the same as objective quality of life (Okulicz-Kozaryn 2011): indeed, great objective quality of life sometimes corresponds with low subjective quality of life, and the other way round. I speculate that much of this paradox is due to the beneficial effect of nature on our wellbeing. Indeed, the happiest county, Cape May, has also arguably the most beautiful nature. And in many cases objective quality of life correlates negatively with presence of nature. Large cities have a lot of amenities, opportunities to offer, yet they lack nature. And they are expensive. People tend to overestimate pecuniary domain (e.g. houses, cars, clothes) and underestimate nonpecuniary domain (e.g. time with friends and family, outdoor activities). That is, people think that consumption of material goods will make them more happy than it actually does.

Why are people less happy in metropolitan areas? It appears that much of this urban-rural happiness gradient is attributable to lack of nature. The next subsection lists some of the theories and observations from academic literature about the beneficial effect of nature.

7.2 Nature

Humans have an innate need to connect with other organisms, not only with other humans as sociologists like to simplify it. Metropolitan areas have more people, but smaller areas have more nature. Suburbs are not a solution either. Suburbs have more nature than cities, but cities have more people than suburbs. Most suburbs, despite the (fake) nature,²⁵ neither look nor feel natural—and in fact cities probably have less asphalt and concrete per capita than suburbs.

Term “biophilia” was coined by Erich Fromm (1964) and popularized by E.O. Wilson (Wilson 1980, 2012): humans have innate/instinctive attraction to nature/other living organisms. And already much earlier Adam Smith observed: “The beauty of the country, besides, the pleasures of a country life, the tranquility of mind which it promises, and wherever the injustice of human laws does not disturb it, the independency which it really affords, have charms that more or less attract everybody” (Smith 1776, :llli). John S. Mill had similar impressions: “Solitude in the presence of mutual beauty and grandeur is the cradle of thoughts and aspirations, which are not only good for life for the individuals, but which society could ill do without” (J.S Mill cited in Pretty 2012). Animals, plants, landscapes, and wilderness benefit our wellbeing (Frumkin 2001). Exposure to nature produces positive emotions and positive affect (Mayer et al. 2009). Nature helps recover from pre-existing stress, immunizes and protects from future problems, helps to concentrate and think more clearly, reduces frustration and increases patience (Pretty 2012). Recently there is added evidence that living close to the coast improves mental and physical health (Wheeler et al. 2012, White et al. 2013a), and even if you stay in an urban area, it helps if it is green (White et al. 2013b).

Animals, plants, landscapes, and wilderness benefit our health (Frumkin 2001). Exposure to nature produces positive emotions and positive affect (Mayer et al. 2009). An excellent overview of benefits coming from contact with nature is a study by Pretty (2012), which is briefly summarized in the following paragraph.

Nature helps us recover from pre-existing stress, immunizes and protects from future problems, helps us concentrate and think more clearly. Again, there are likely to be evolutionary reasons for it—we have lived close to nature for almost all human history—it’s only a few hundred years since industrialization, that we have abandoned nature. Why do we need nature? Nature provides sensory stimulation: colors, sounds, smells, and so forth. Humans have a need for connection (bond) with nature. It is almost spiritual. Physical activity and manual tasks in natural settings (e.g. chopping wood, building a fire) provide enjoyment. Green spaces increase life expectancy and decrease risk of mental health problems. Even window views and gardens have health benefits: fewer illnesses, less frustration and more patience. Pretty (2012) cites Gary Snyder: “nature is not a place to visit, it is home”—and this is the message of his book.

²⁵Fake nature is human created nature: planted and trimmed shrubs, lawns and ponds with fountains. Natural nature is nature without human intervention.

A very similar message is delivered by Tesson (2013), who experienced the happiness of natural setting himself spending several months in Russian taiga. For yet another academic overview on nature benefits for our wellbeing see Maller et al. (2006). There is also an emerging field of ecopsychology that makes a similar point—while the hustle and bustle of a typical city taxes our attention, natural environments restore it (Berman et al. 2008, 2012).

Figure 50 comes from my current research—it clearly demonstrates that people are happier in smaller areas.

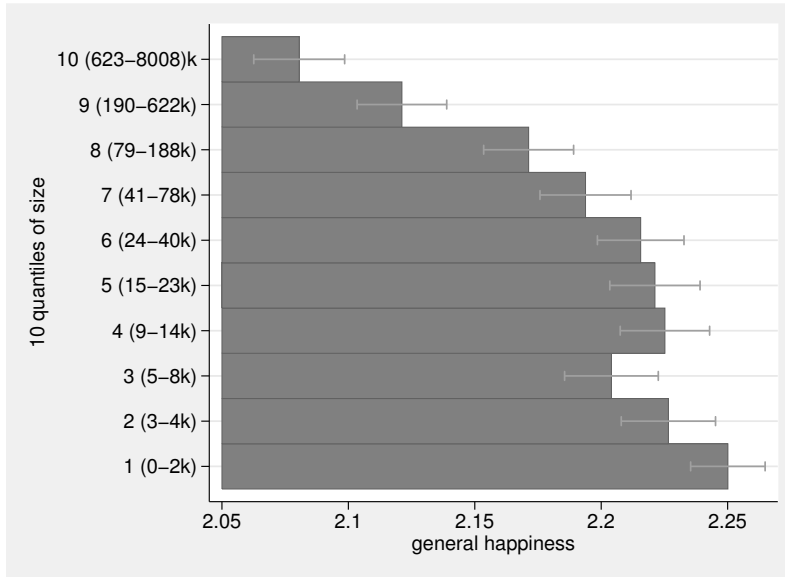


Figure 50: Average happiness by deciles of SIZE. 95% confidence intervals shown. The gradient is smooth (monotonic) except a bump at 3rd decile, for which I do not have an explanation.

7.3 An Opportunity?

Much of this study is pessimistic. I was told that I need to finish with at least one bright spot. This could be affordability of both housing and labor. Another bright spot is the natural amenities. Again, there are obvious differences between South and North Jersey: The North is more expensive, crowded, (potentially) polluted; while the South is quite the opposite: affordable, pristine, spacious, and so forth. However, South Jersey is urbanizing at the same time as discussed earlier. Urbanization is a desirable condition by many standards, and some people even equalize it with progress or development. It is important to keep in mind, however, that the comparative advantage of South Jersey is lack of urbanization. Hence, while we fight the problems that plague South Jersey, such as teenage pregnancy and smoking, we should keep in mind to preserve the advantage of South Jersey, its nature.

There are also differences within South Jersey. The median household income difference between top performer Burlington and most challenged county Cumberland,²⁶ is \$78k vs \$52k or 50%, while in terms of housing it is 266k vs 178k, which is also 50%.²⁷ Hence, affordable housing could be an opportunity for South Jersey and even more for southern part of South Jersey. However, the key for success is jobs or an easy commute to where the jobs are located, say a fast train. From the business perspective, relatively low earnings in South Jersey could be an asset, too—the labor force is affordable in South Jersey (but lacks education). Furthermore low-density living in a natural setting benefits our health (e.g. Berry and Okulicz-Kozaryn 2011). Finally, South Jersey is centrally located in the BosWash Megalopolis.²⁸

²⁶Cumberland scores lowest on most indicators. But that also means that there is biggest room for improvement.

²⁷For more similar comparisons see appendix.

²⁸Megalopolis is a word for large urbanized area. BosWash stretches from Boston to Washington, DC.

8 Appendices

8.1 Census Quick Facts

The table in this section reproduces Census Quick Facts in a manner facilitating comparison. Data come from the US Census²⁹. Several notable differences follow. Let's start with race/ethnicity. Cape May and Ocean have only around 5% Blacks, Gloucester has 10%, while all remaining counties have around 20%. Atlantic has the highest proportion of Asians: 8%, Burlington and Camden have around 5% and all other counties have about 1%. The biggest differences are for Hispanics/Latians, however. Almost a third of Cumberland population is Hispanic/Latino. White proportions differ widely, too. Cape May, Gloucester and Ocean are more than 80% White, While Cumberland is only 50% White. 15% of Atlantic is foreign born, while only about 4% of Cape May and Salem is foreign born. Proportions of Cumberland and Salem residents with Bachelor's degree is only half of that of Burlington. Also see: Appendix: high school dropout rates by county. Interestingly, there are no big differences in average commute time.

²⁹<http://quickfacts.census.gov/qfd/index.html>

Table 2: quick facts

variable	Atlantic	Burlington	Camden	CapeMay	Cumberland	Gloucester	Ocean	Salem
Population, 2012 estimate	275422	451336	513539	96304	157785	289586	580470	65774
Population, 2010 (April 1) estimates base	274549	448731	513666	97265	156898	288288	576565	66083
Population, percent change, April 1, 2010 to July 1, 2012	0.30%	0.60%	Z	-1.00%	0.60%	0.50%	0.70%	-0.50%
Population, 2010	274549	448734	513657	97265	156898	288288	576567	66083
Persons under 5 years, percent, 2012	6.00%	5.50%	6.30%	4.70%	6.80%	5.80%	6.60%	5.80%
Persons under 18 years, percent, 2012	22.70%	22.40%	23.70%	18.20%	23.80%	23.60%	23.20%	22.70%
Persons 65 years and over, percent, 2012	15.00%	14.70%	13.50%	22.80%	13.10%	13.30%	21.50%	16.00%
Female persons, percent, 2012	51.50%	50.80%	51.70%	51.30%	48.30%	51.50%	52.00%	51.20%
White alone, percent, 2012 (a)	71.50%	75.00%	70.70%	91.90%	72.50%	84.50%	93.10%	81.80%
Black or African American alone, percent, 2012 (a)	17.30%	17.30%	21.00%	5.00%	21.80%	10.50%	3.40%	14.70%
American Indian and Alaska Native alone, percent, 2012 (a)	0.70%	0.30%	0.60%	0.30%	1.60%	0.20%	0.30%	0.50%
Asian alone, percent, 2012 (a)	8.00%	4.70%	5.50%	1.00%	1.40%	2.80%	1.90%	1.00%
Native Hawaiian and Other Pacific Islander alone, percent, 2012 (a)	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	Z	Z
Two or More Races, percent, 2012	2.40%	2.60%	2.10%	1.70%	2.60%	1.90%	1.20%	2.00%
Hispanic or Latino, percent, 2012 (b)	17.70%	7.10%	15.10%	6.60%	28.10%	5.20%	8.70%	7.40%
White alone, not Hispanic or Latino, percent, 2012	57.60%	69.90%	59.30%	86.40%	49.10%	80.40%	85.40%	76.00%
Living in same house 1 year & over, percent, 2007-2011	88.80%	90.00%	89.10%	87.80%	86.70%	90.80%	90.80%	91.10%
Foreign born persons, percent, 2007-2011	15.50%	9.60%	10.20%	4.30%	10.40%	5.00%	7.80%	3.80%
Language other than English spoken at home, percent age 5+, 2007-2011	24.30%	12.30%	19.00%	9.20%	24.60%	8.80%	11.80%	6.90%
High school graduate or higher, percent of persons age 25+, 2007-2011	84.20%	91.40%	85.90%	88.90%	76.70%	90.00%	89.20%	85.70%
Bachelor's degree or higher, percent of persons age 25+, 2007-2011	23.20%	33.90%	28.20%	27.10%	14.00%	27.40%	24.50%	18.50%
Veterans, 2007-2011	18190	38221	33105	9720	9101	20670	51964	5252
Mean travel time to work (minutes), workers age 16+, 2007-2011	23.7	28.4	27.5	22.1	23.7	28.1	31.1	28
Housing units, 2011	126782	176098	204923	98017	55921	110814	278862	27464
Homeownership rate, 2007-2011	70.70%	78.40%	68.90%	74.30%	68.40%	80.40%	81.90%	73.00%
Housing units in multi-unit structures, percent, 2007-2011	31.50%	18.70%	26.40%	28.60%	20.00%	17.40%	13.20%	17.70%
Median value of owner-occupied housing units, 2007-2011	\$256,600.00	\$266,200.00	\$224,800.00	\$332,400.00	\$177,800.00	\$236,100.00	\$284,100.00	\$198,800.00
Households, 2007-2011	101418	165727	190337	44788	50868	103548	222863	25004
Persons per household, 2007-2011	2.61	2.63	2.66	2.11	2.84	2.72	2.54	2.59
Per capita money income in the past 12 months (2011 dollars), 2007-2011	\$27,613.00	\$36,101.00	\$30,136.00	\$33,796.00	\$22,636.00	\$32,067.00	\$30,257.00	\$27,941.00
Median household income, 2007-2011	\$55,222.00	\$77,798.00	\$61,824.00	\$55,315.00	\$52,004.00	\$74,830.00	\$60,712.00	\$57,174.00
Persons below poverty level, percent, 2007-2011	12.50%	5.30%	11.80%	9.60%	15.70%	7.30%	9.50%	10.80%
Business QuickFacts	Atlantic	Burlington	Camden	Cape May	Cumberland	Gloucester	Ocean	Salem
Private nonfarm establishments, 2011	County	County	County	County	County	County	County	County
Private nonfarm employment, 2011	6408	10330	11621	3801	2923	5780	11715	1174
Private nonfarm employment, percent change, 2010-2011	-2.20%	0.10%	-0.30%	0.80%	-0.30%	0.10%	-0.50%	0.10%
Nonemployer establishments, 2011	15951	26192	28249	7692	6133	14804	35557	2928
Total number of firms, 2007	21027	34702	38807	11290	8637	20252	45546	4585
Black-owned firms, percent, 2007	7.00%	8.80%	8.60%	1.30%	9.50%	7.60%	2.20%	6.40%
American Indian- and Alaska Native-owned firms, percent, 2007	S	0.40%	0.40%	F	F	S	0.30%	F
Asian-owned firms, percent, 2007	7.40%	4.70%	7.20%	S	3.70%	3.10%	2.50%	S
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	F	F	F	F	F	F	F
Hispanic-owned firms, percent, 2007	S	S	S	S	8.60%	2.20%	3.30%	2.30%
Women-owned firms, percent, 2007	27.80%	27.70%	27.80%	27.00%	21.40%	27.50%	25.60%	25.60%
Manufacturers shipments, 2007 (\$1000)	D	6072287	4150100	D	2591390	15679384	D	1440380
Merchant wholesaler sales, 2007 (\$1000)	1342162	15040891	D	276098	D	8962489	D	D
Retail sales, 2007 (\$1000)	4429395	7005059	5859348	1584880	1952706	4352549	7307436	669436
Retail sales per capita, 2007	\$16,409.00	\$15,695.00	\$11,321.00	\$16,390.00	\$12,566.00	\$15,216.00	\$12,922.00	\$10,146.00
Accommodation and food services sales, 2007 (\$1000)	6093042	656980	678828	516973	155140	379388	703022	82295
Building permits, 2012	441	713	898	491	190	534	1125	61

8.2 High School Dropout Rates by County

These data come from NJ Department of Education. Note that the categories do not add up to total—the following (small n) categories were dropped for parsimony: Native American, Asian, Hawaiian, Two or more races. Camden clearly leads in this statistic. How Burlington compares to Cumberland? Cumberland has relatively more dropouts as compared to Burlington—Burlington's population is about three times bigger.

Table 3: HS dropouts.

County	White Males	White Females	Black Males	Black Females	Hispanic Males	Hispanic Females	Total
ATLANTIC	74	53	97	57	94	54	471

Continued on next page

Table 3 – continued from previous page

County	White Males	White Fe-males	Black Males	Black Fe-males	Hispanic Males	Hispanic Females	Total
BURLINGTON	103	67	121	96	28	19	442
CAMDEN	109	88	308	256	209	184	1190
CAPE MAY	25	18	4	4	3	5	63
CUMBERLAND	57	48	84	55	120	77	453
GLOUCESTER	136	61	47	30	16	12	312
OCEAN	193	140	22	13	55	51	486
SALEM	21	21	22	19	15	5	104

8.3 The Bos-Wash Megalopolis: Population Density Map

The figure comes from <http://en.wikipedia.org/wiki/File:Boswash.png>.

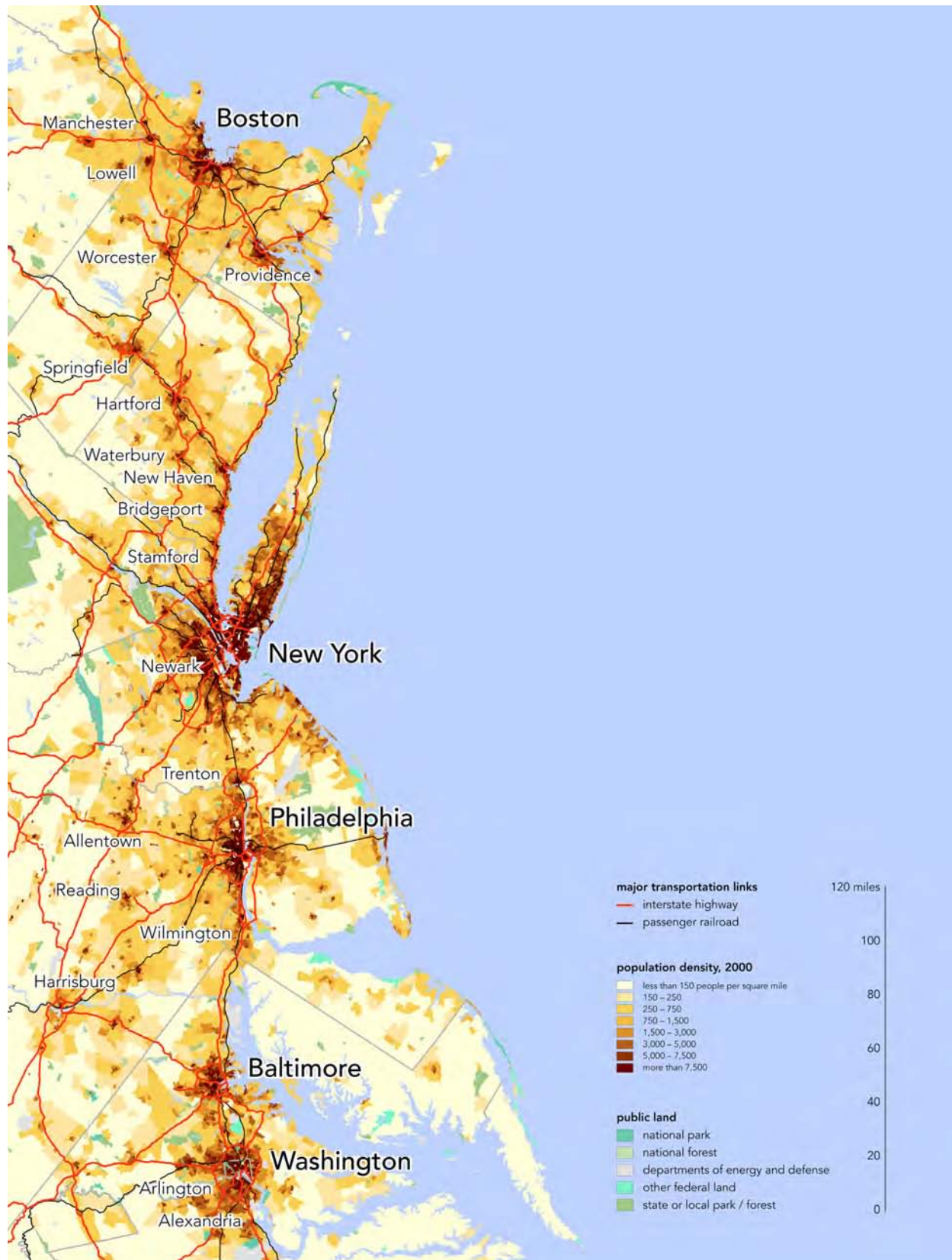


Figure 51: The Bos-Wash Megalopolis.

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