2014 Hudson County
CEDS Performance Measures
Community Indicator Report

Prepared by:
Hudson County Division of Planning
For the Hudson County Planning Board and the
Hudson County Comprehensive Economic Development "CEDS" Committee
June 2014

Foreword

As the most densely and diversely populated county in the State of New Jersey, Hudson County is a study of contrasts. It is an urban county in a mostly suburban state. Gleaming office towers of the new economy stand side-by-side with hundred-year-old warehouses and factories of a bygone era. Recently constructed million dollar townhouses and condominiums can be found on the same block as affordable housing, "railroad apartments," and former "cold water flats." A twenty-first century light rail system winds its way through a street grid originally laid out by the first Dutch colonists. New parks and open spaces are sprouting up from former industrial sites which sat vacant for years, but are now being cleaned up and reused for public benefit.

Hudson County has a rich history as a "gateway community" for generations of immigrants who passed through Ellis Island on their way to find the "American Dream." Many others migrated from the Deep South and other parts of the United States seeking freedom and opportunity. Today, immigrants from every corner of the globe are still attracted to Hudson County, along with many young professionals and "empty nesters" that are now migrating from the suburbs. Despite recent economic turbulence many want to take advantage of the area's finance and technology sectors; others are interested in small business opportunities or semi-skilled jobs. Most are attracted to the strong ethnic networks, vibrant cultural amenities, bustling social scenes, and the county's close proximity to New York City.

Long before many other cities in the Garden State began benefiting from government strategies and market forces for urban revitalization, local officials, community leaders and developers in Hudson County were well underway to redeveloping the dilapidated waterfronts and rehabilitating blighted neighborhoods. From construction of the "gold coast" and expansion of ferry operations, to the decline of the manufacturing sector and the contraction of community hospitals, Hudson County has experienced a profound "sea change" over the last two decades.

What is Sustainable Development?

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The United Nations World Commission on Environment and Development
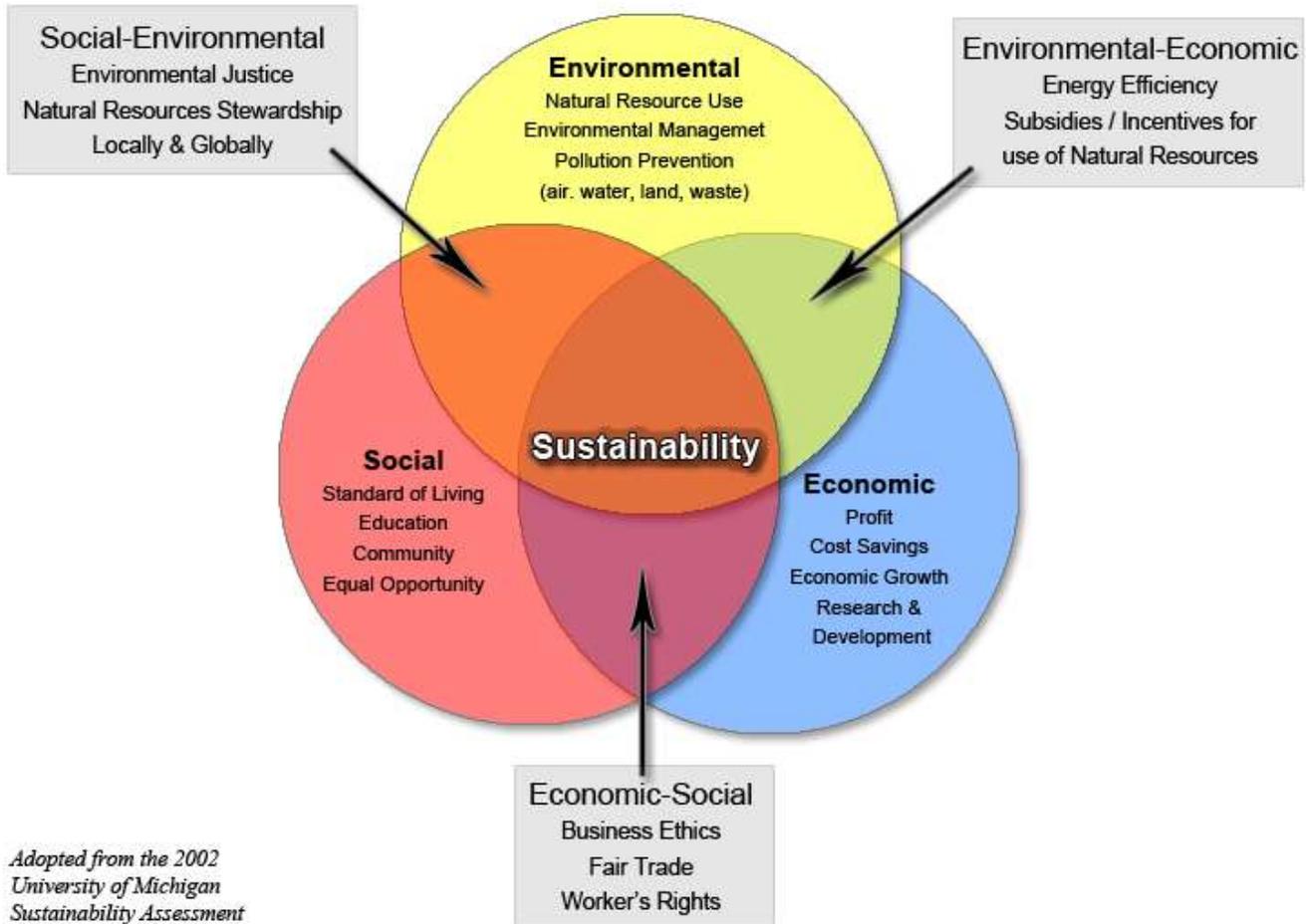
(The Bruntland Commission)

Source: N.J. Department of Environmental Protection (http://www.state.nj.us/dep/dsr/sustainable-state/what-is.htm)

Now is a good time to pause and take stock of the trends which have affected Hudson County and its residents over the last decade. The Hudson County Comprehensive Economic Development Strategy's "CEDS" Performance Measures examines measurable benchmarks related to economic, social and environmental factors which affect Hudson County's quality of life and community wellbeing. The World Commission on Environment and Development (the Brundtland Commission), the U.S. President's Council on Sustainable Development, and New Jersey's Sustainable State Institute all encourage communities to examine indicators as benchmarks to affect future outcomes. In this instance, indicators may be used by local officials and residents to make more informed decisions about issues affecting their communities.

This report aggregates measurable data on a regional basis covering all twelve municipalities in Hudson County. The document looks at over two dozen factors which affect the local quality of life, including: housing and development data as well as crime, education, employment, health, parks, recycling, taxes and even voting. This report may be used to educate the general public in its day-

to-day decision making as well as inform and guide local leaders in their official deliberations. Perhaps this endeavor may even lead to a more just, healthy, efficient and sustainable community for all of Hudson County.

The Three Spheres of Sustainability

Social-Environmental
Environmental Justice
Natural Resources Stewardship
Locally & Globally

Environmental
Natural Resource Use
Environmental Managemet
Pollution Prevention
(air. water, land, waste)

Environmental-Economic
Energy Efficiency
Subsidies / Incentives for
use of Natural Resources

Sustainability

Social
Standard of Living
Education
Community
Equal Opportunity

Economic
Profit
Cost Savings
Economic Growth
Research &
Development

*Adopted from the 2002
University of Michigan
Sustainability Assessment*

Economic-Social
Business Ethics
Fair Trade
Worker's Rights

Source: http://www.vanderbilt.edu/sustainvu/sustainability.php

A. Hudson County Planning Board Applications

What is this?
In New Jersey, county planning boards have jurisdiction over development projects which affect county roads or drainage facilities. County planning boards have the right to review site plans and subdivisions for development projects, and approve those applications which comply with County Land Development Regulations.
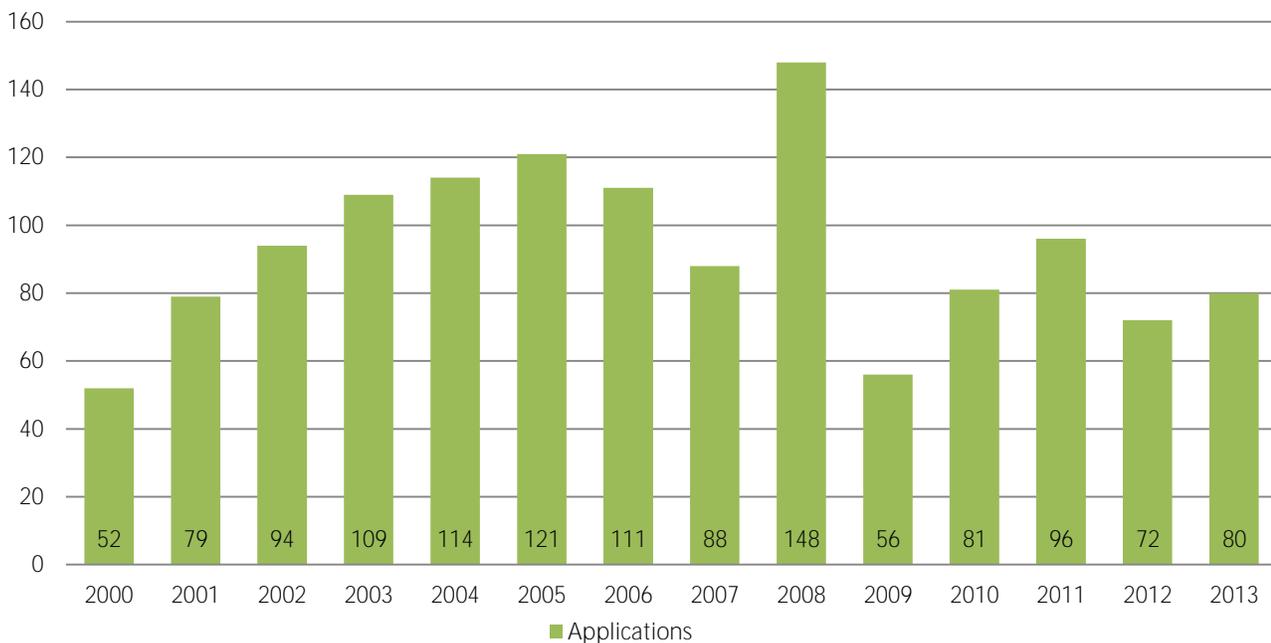
Why is this important?
While not all development projects need the approval of the county planning board, the application data provide a "snapshot" about development trends and the state of the local economy. General goals of the Hudson County CEDS Plan include: "Create a diversified economy;" "Provide a variety of housing types" and "Improve all aspects of the transportation system".
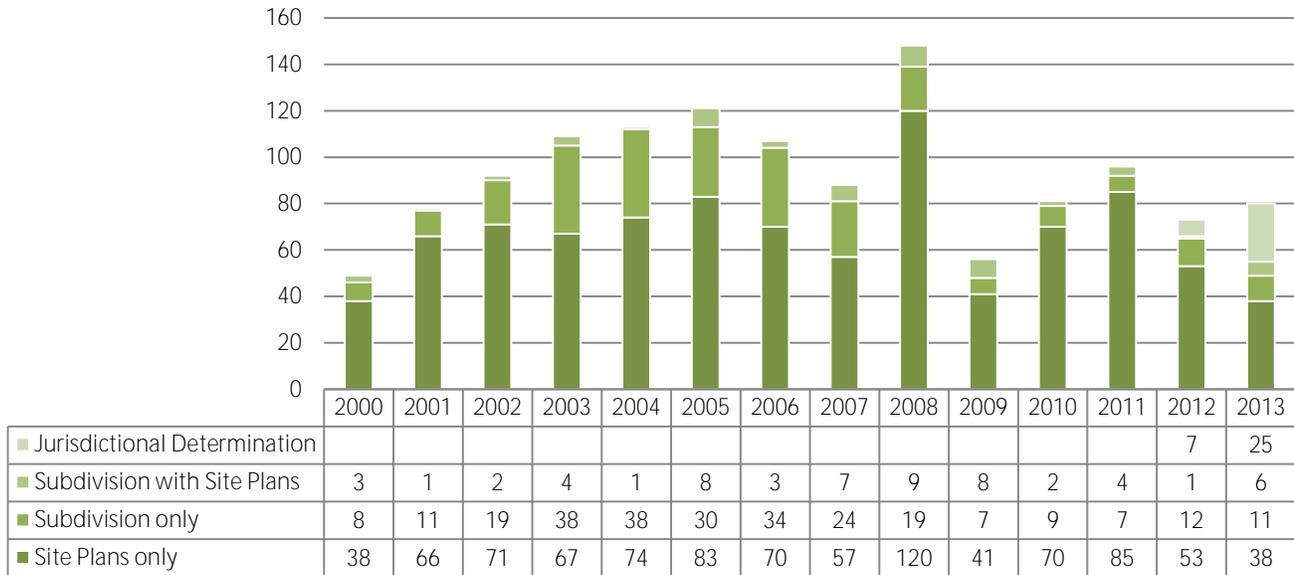
How are we doing?
County Planning Board data suggest that Hudson County remains a strong and viable real estate market for housing and commercial development. However, while Hudson County has a relatively robust transit network, it is severely challenged by traffic congestion. In addition, recent development patterns have added significant amounts of impervious coverage. Impervious coverage often contributes to increased flooding, stormwater run-off, degraded water quality, non-point source pollution and the "urban heat island affect." Hudson County must address future development trends through the implementation of traffic control measures and low-impact development strategies for stormwater run-off.

1. Total Number of Applications Received by HCPB

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Applications	52	79	94	109	114	121	111	88	148	56	81	96	72	80

Source: Hudson County Division of Planning

2.　HCPB: Applications by type

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Jurisdictional Determination													7	25
Subdivision with Site Plans	3	1	2	4	1	8	3	7	9	8	2	4	1	6
Subdivision only	8	11	19	38	38	30	34	24	19	7	9	7	12	11
Site Plans only	38	66	71	67	74	83	70	57	120	41	70	85	53	38

Source: Hudson County Division of Planning

3.　HCPB: Applications by Outcome

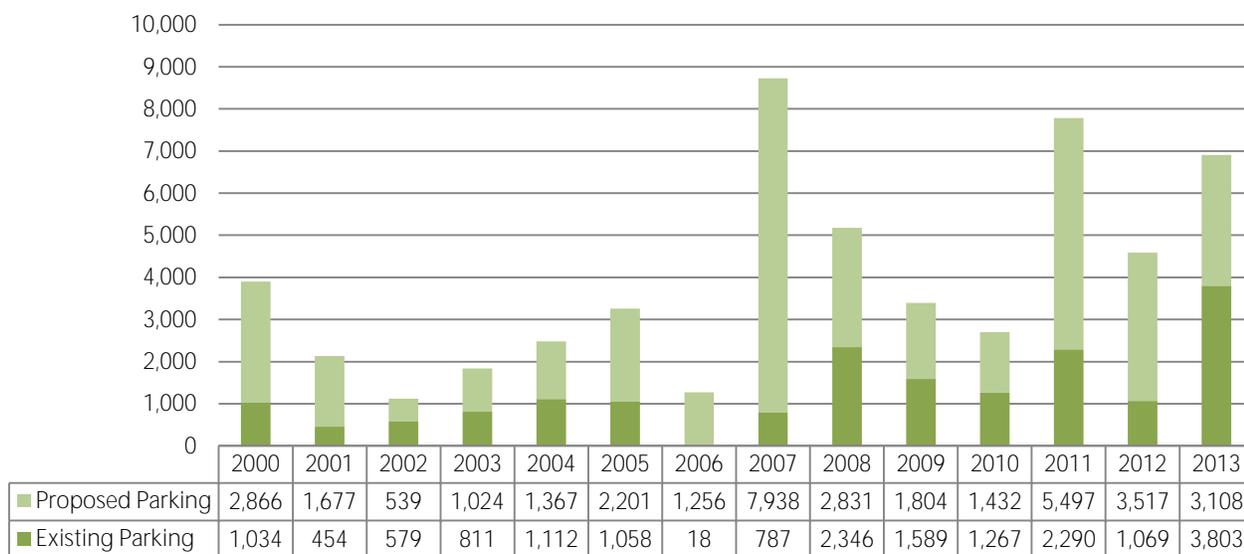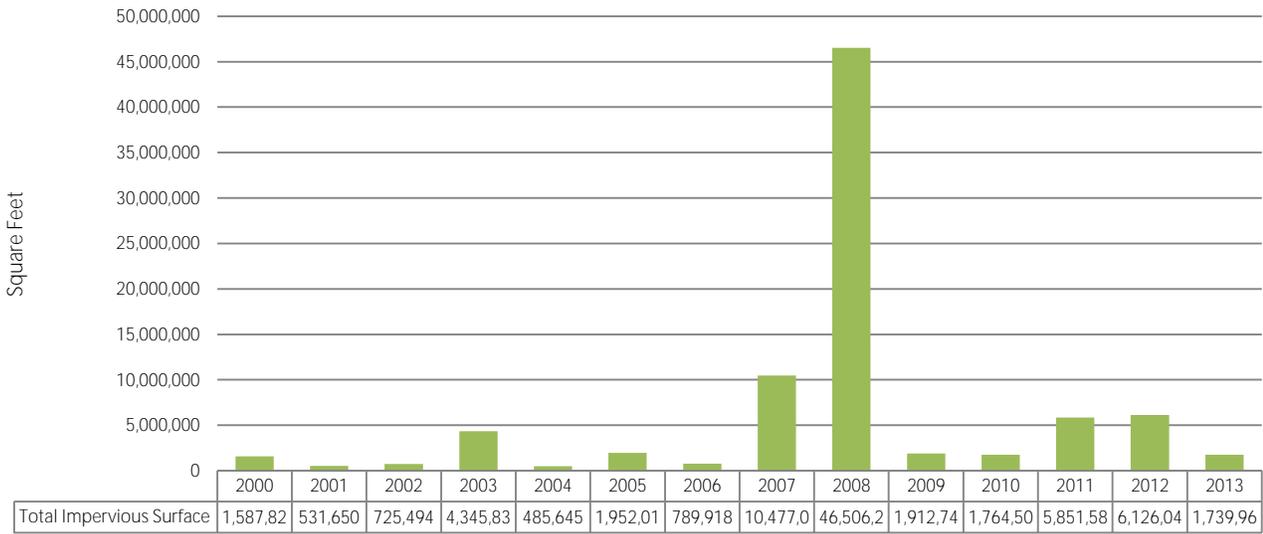|	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Denied, Dismissed or Withdrawn	18	7	11	28	17	2	7	5	18	3	3	13	7	4
Exempt	21	47	55	46	46	59	43	34	76	26	37	41	31	22
Approved or Conditionally Approved	13	25	28	35	50	49	60	49	54	29	41	45	34	54
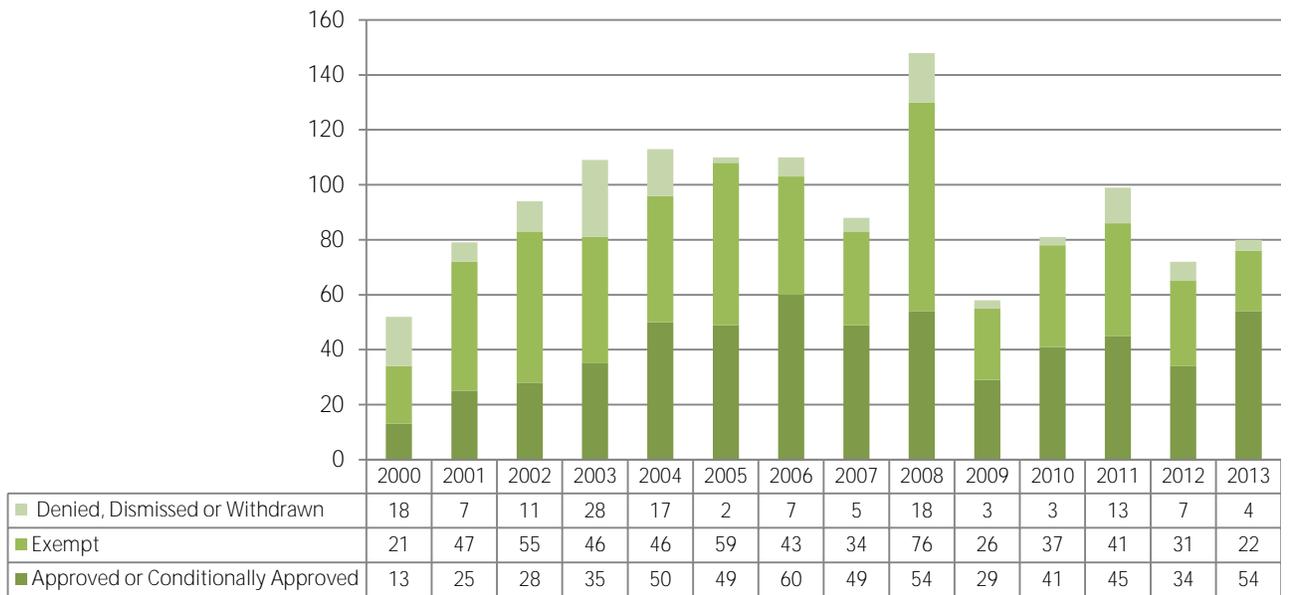
Source: Hudson County Division of Planning

4.   HCPB: Total Number of Housing Units Approved
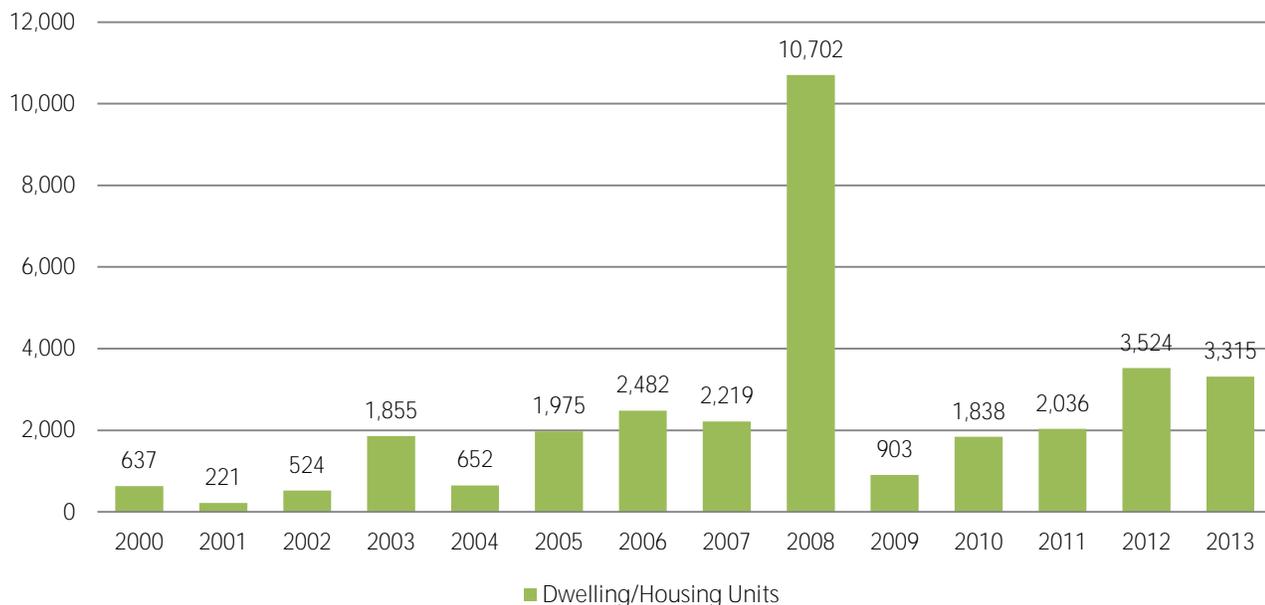
Source: Hudson County Division of Planning

5.   HCPB: Total Off-Street Parking Spaces Approved

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Proposed Parking	2,866	1,677	539	1,024	1,367	2,201	1,256	7,938	2,831	1,804	1,432	5,497	3,517	3,108
Existing Parking	1,034	454	579	811	1,112	1,058	18	787	2,346	1,589	1,267	2,290	1,069	3,803

Source: Hudson County Division of Planning

6.   HCPB: Total Impervious Coverage Approved

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Impervious Surface	1,587,82	531,650	725,494	4,345,83	485,645	1,952,01	789,918	10,477,0	46,506,2	1,912,74	1,764,50	5,851,58	6,126,04	1,739,96

Source: Hudson County Division of Planning

7.   HCPB: Total Telecommunication Applications

■ Telecommunications Antennas
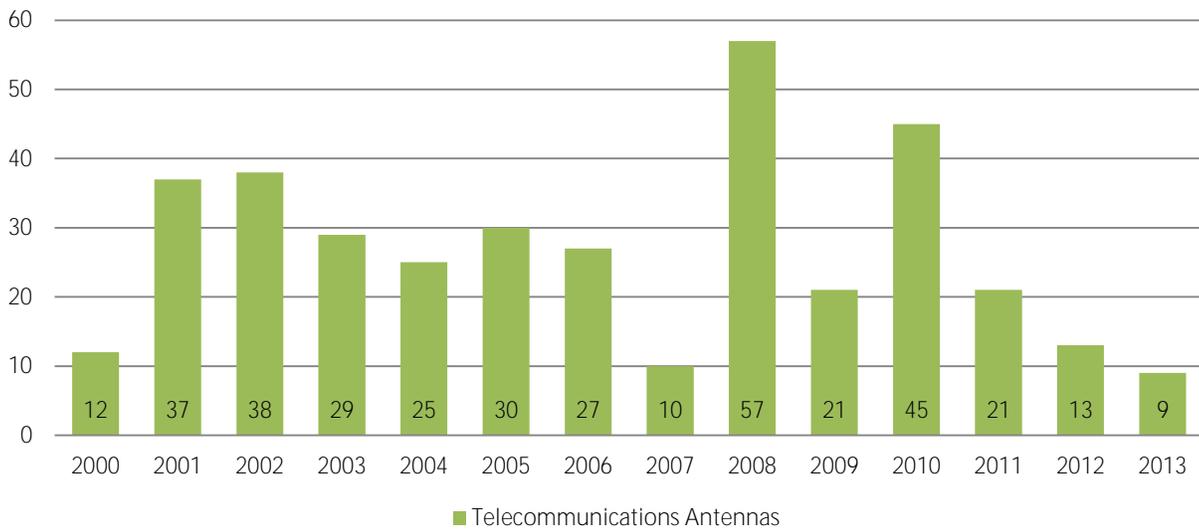
Source: Hudson County Division of Planning

Photo: Commercial office towers located along downtown Jersey City's waterfront

B. Economic Indicators

Goal: A General Goal of the 2010 Hudson County CEDS Plan is to "Create a diversified economy to maintain full employment and continue economic growth."

What indicators are included?

8. Employment Figures
9. Unemployment figures
10. Total private payroll figures
11. Building permits for housing
12. Residential Home Values and Sales Prices
13. Equalized valuation figures
14. Foreclosure figures
15. Bankruptcy figures

8. Employment Figures

What is this?

Employment figures include the total number of fulltime workers in the local economy. Employment is perhaps the most important economic indicator in a developed economy. While the notion of full employment is difficult to achieve in economic terms, a specific economic goal of the 2010 Hudson County CEDS Plan is to "develop an equitable distribution of jobs, support services, and facilities consistent with the needs of the population."
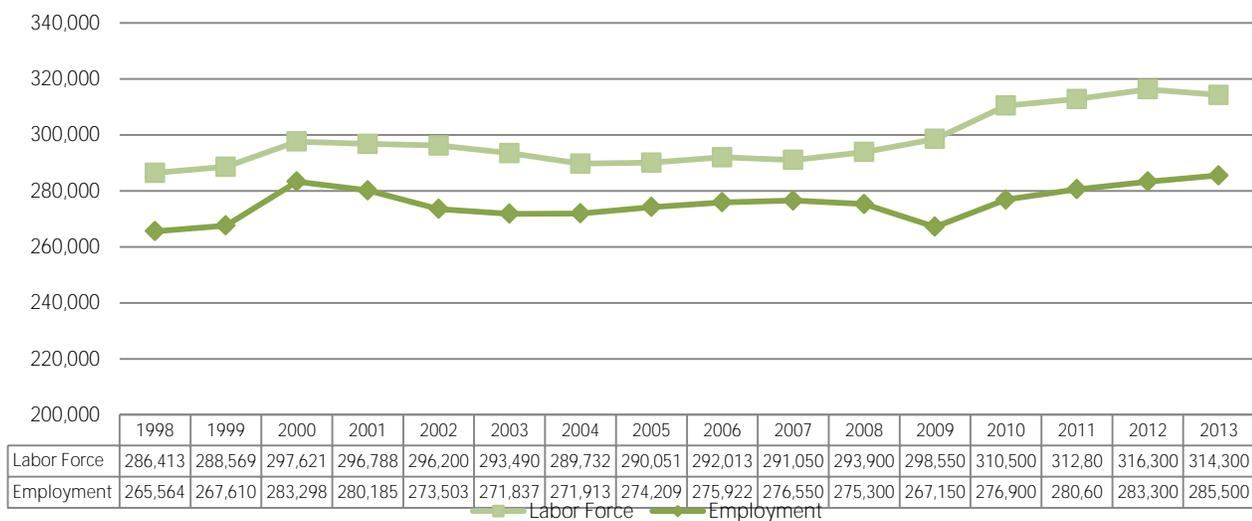
Why is this important?

Employment information is an excellent indicator of a community's economic health and well-being. It is important to have a large employment base and wide array of jobs locally so individuals and families can meet the basic necessities of food, shelter, clothing and other essentials.

How are we doing?

Mixed - While Hudson County's employment figures have fluctuated over the last decade, the long term trend shows virtually no growth. The total number of jobs went from 265,564 in 1998, to 285,500 in 2013. However, Hudson County's employment has increased every year since it hit a low point in 2009. Besides the growth in the unemployment rate, there is wide concern that residents do not have the essential skills necessary for new jobs, and that those jobs do not pay a living wage.

Special Note: At the time of this report the United States economy was undergoing an historic and unprecedented adjustment and dislocation. Economic indicators often take many months or several quarters to demonstrate a shift or trend. The following charts and graphs use only data and figures which were available at the time of publication.

Hudson County Labor Force and Employment Figures

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Labor Force	286,413	288,569	297,621	296,788	296,200	293,490	289,732	290,051	292,013	291,050	293,900	298,550	310,500	312,80	316,300	314,300
Employment	265,564	267,610	283,298	280,185	273,503	271,837	271,913	274,209	275,922	276,550	275,300	267,150	276,900	280,60	283,300	285,500

Labor Force ——— Employment

Source: The New Jersey Department of Labor and Workforce Development (http://www.nj.gov/labor/index.html)
2010 Benchmarking Report- Estimate

9. Unemployment Figures

What is this?

The unemployment rate is comprised of the total number of people actively seeking work in relation to the total civilian labor force. Two major economic goals of the Hudson County CEDS Plan are: "to develop a diversified economy to maintain full employment;" and "to develop an equitable distribution of jobs across the county that includes support services and facilities consistent with the needs of the population." The 2010 Hudson County Comprehensive Economic Development Strategy "CEDS" has a workforce development objective to "promote training opportunities and programs for the unemployed, the under employed and entry level workers."
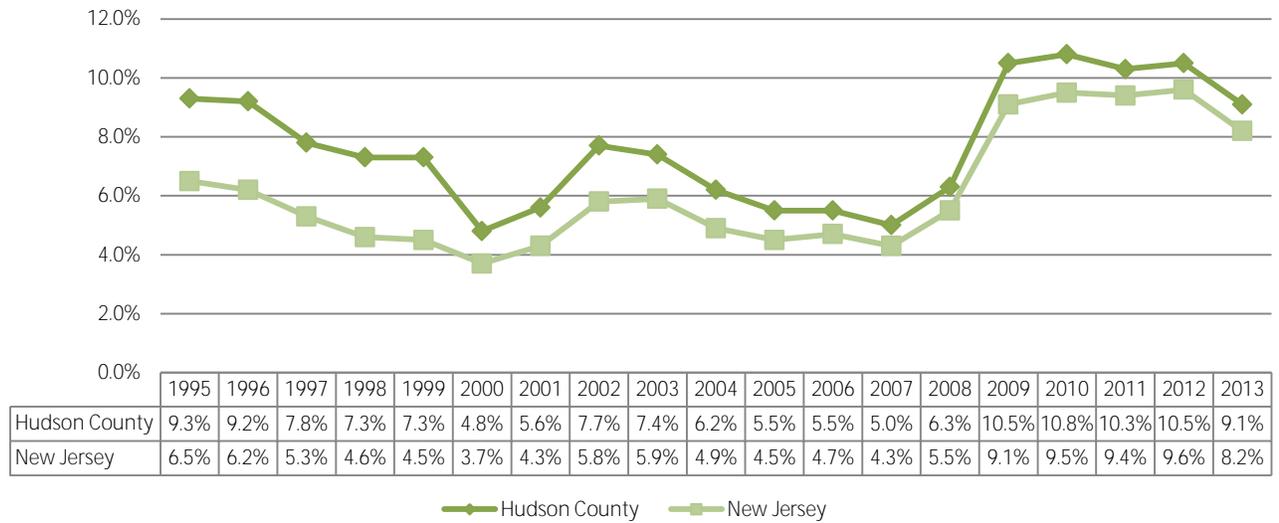
Why is this important?

A high unemployment has a negative effect on the local economy and quality of life. Areas with high unemployment may also experience higher rates of poverty, crime and social dysfunction.

How are we doing?

Mixed - Hudson County's average annual adjusted unemployment rate more than doubled from 5.00% when the "Great Recession" began in 2007 to 10.5% in 2012. Hudson County's unemployment rate consistently stayed above the state and national averages. However, the Hudson County and New Jersey unemployment rates both fell by over 1 percentage point during 2013, which is a promising indicator of economic recovery.

Annual Averages for 1990-2013					New Jersey
	Hudson County				
	Labor Force	Employment	Unemployment	Unemployment Rate	Unemployment Rate
1990	287,582	266,619	20,963	7.3%	5.1%
1991	286,565	261,560	24,915	8.7%	6.8%
1992	282,508	250,780	31,728	11.2%	8.5%
1993	280,036	251,951	28,085	10.0%	7.6%
1994	284,671	258,102	26,569	9.3%	6.8%
1995	288,210	261,316	26,894	9.3%	6.5%
1996	291,503	264,596	26,907	9.2%	6.2%
1997	290,795	268,032	22,763	7.8%	5.3%
1998	286,413	265,564	20,849	7.3%	4.6%
1999	288,569	267,610	20,959	7.3%	4.5%
2000	297,621	283,298	14,323	4.8%	3.7%
2001	296,788	280,185	16,603	5.6%	4.3%
2002	296,200	273,503	22,697	7.7%	5.8%
2003	293,490	271,837	21,653	7.4%	5.9%
2004	289,732	271,913	17,819	6.2%	4.9%
2005	290,051	274,209	15,842	5.5%	4.5%
2006	292,013	275,922	16,091	5.5%	4.7%
2007	290,405	275,953	14,452	5.0%	4.2%
2008	293,900	275,300	18,650	6.3%	5.5%
2009	298,550	267,150	31,450	10.5%	9.1%
2010	297,650	265,600	32,100	10.8%	9.6%
2011	300,017	268,767	31,233	10.4%	9.4%
2012	316,300	283,300	33,100	10.5%	9.5%
2013	314,300	285,500	28,700	9.1%	8.2%

Unemployment Figures for Hudson County and the State of New Jersey

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Hudson County	9.3%	9.2%	7.8%	7.3%	7.3%	4.8%	5.6%	7.7%	7.4%	6.2%	5.5%	5.5%	5.0%	6.3%	10.5%	10.8%	10.3%	10.5%	9.1%
New Jersey	6.5%	6.2%	5.3%	4.6%	4.5%	3.7%	4.3%	5.8%	5.9%	4.9%	4.5%	4.7%	4.3%	5.5%	9.1%	9.5%	9.4%	9.6%	8.2%

━◆━ Hudson County   ━■━ New Jersey

Source: The New Jersey Department of Labor and Workforce Development (http://www.nj.gov/labor/index.html)
*Note: Data is not seasonally adjusted.
Source: The New Jersey Department of Labor and Workforce Development
(http://lwd.dol.state.nj.us/labor/lpa/employ/uirate/lfest_index.html)

10. Per Capita Personal Income (PCPI)

What is this?
Many readers think of personal income as wages earned from jobs. Wages are actually only one portion of total income, although on average they are a significant majority. Personal income is the sum of net earnings*, rental income, personal dividend income, personal interest income, and personal current transfer (government) receipts.
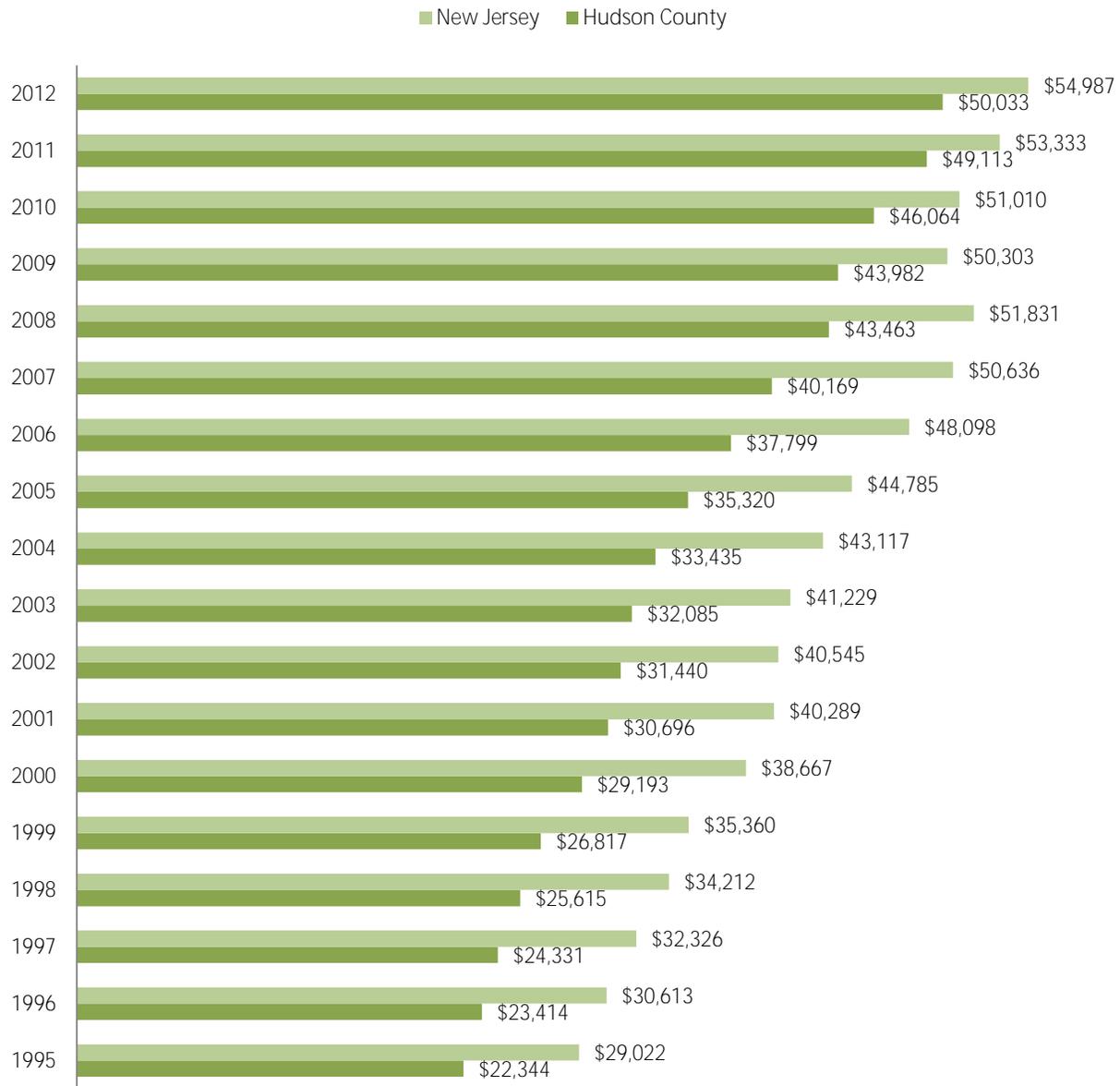
Why is this important?
Population is the denominator ("per capita", or per person). As one tends to view PCPI for its quantitative significance, there are underlying characteristics that can impact the level or change in PCPI and these characteristics are not always solely economic. For example, two counties with similar population levels, similar industry and occupational compositions and similar employment rates could show sizable differences in PCPI if one of the counties has a significantly higher percentage of young children. How is this possible? These children seldom report significant wages, but they are nevertheless part of the population component factored into PCPI. Another example is that a county's employers may pay lower than average wages yet the county could have a surprisingly high PCPI because a significant number of its residents commute to work in nearby, higher-paying counties. These are simplified examples that show how qualitative, demographic issues can affect this measure of economic health.

How are we doing?
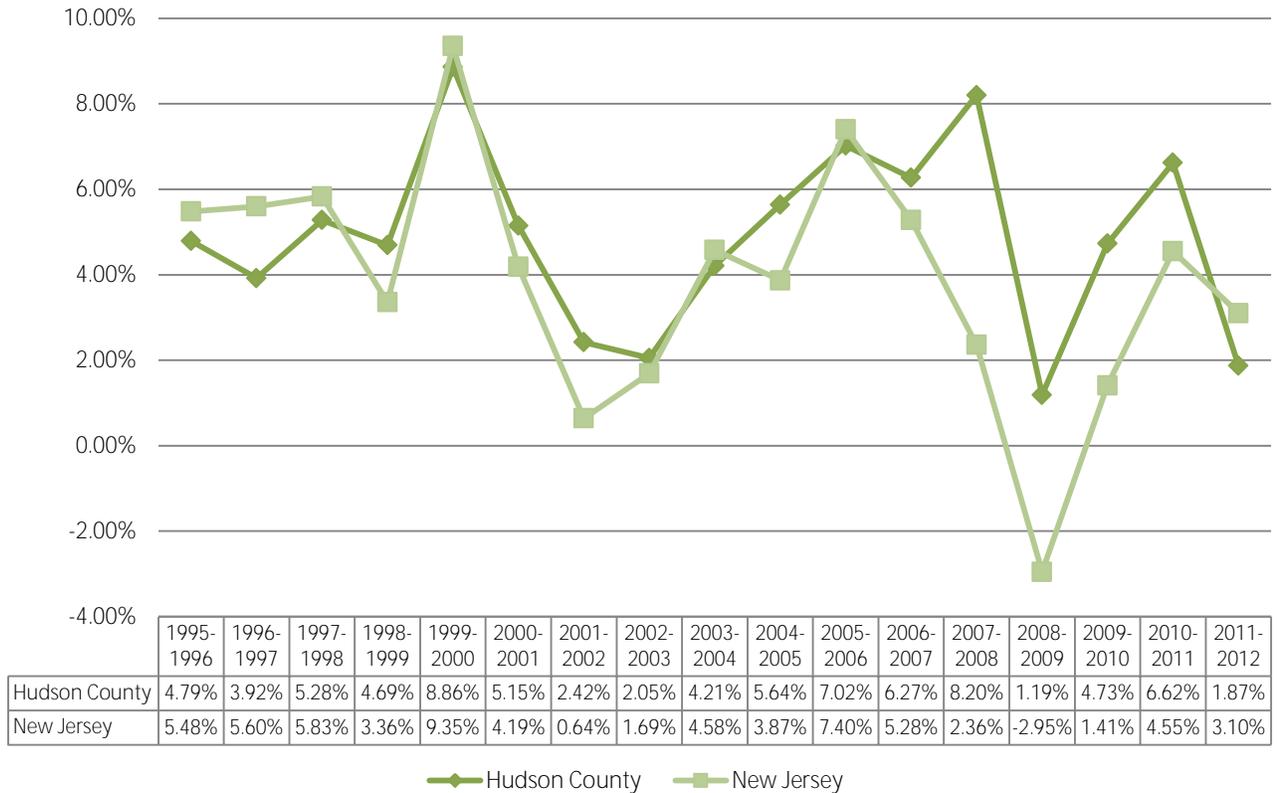Improving - **Hudson County'**s personal income per capita has been steadily increasing between 1995 and 2012. The personal income per capita has risen from $22,344 to $50,033. However, **Hudson County's levels continue to be below the state level.** While **Hudson County's percentage of** th**e state's total personal income** before 2007 remained steady at about 5%, in the past 5 years it has been increasing and reached 6.7% in 2012.

Personal Income Per Capita

■ New Jersey ■ Hudson County

Year	New Jersey	Hudson County
2012	$54,987	$50,033
2011	$53,333	$49,113
2010	$51,010	$46,064
2009	$50,303	$43,982
2008	$51,831	$43,463
2007	$50,636	$40,169
2006	$48,098	$37,799
2005	$44,785	$35,320
2004	$43,117	$33,435
2003	$41,229	$32,085
2002	$40,545	$31,440
2001	$40,289	$30,696
2000	$38,667	$29,193
1999	$35,360	$26,817
1998	$34,212	$25,615
1997	$32,326	$24,331
1996	$30,613	$23,414
1995	$29,022	$22,344

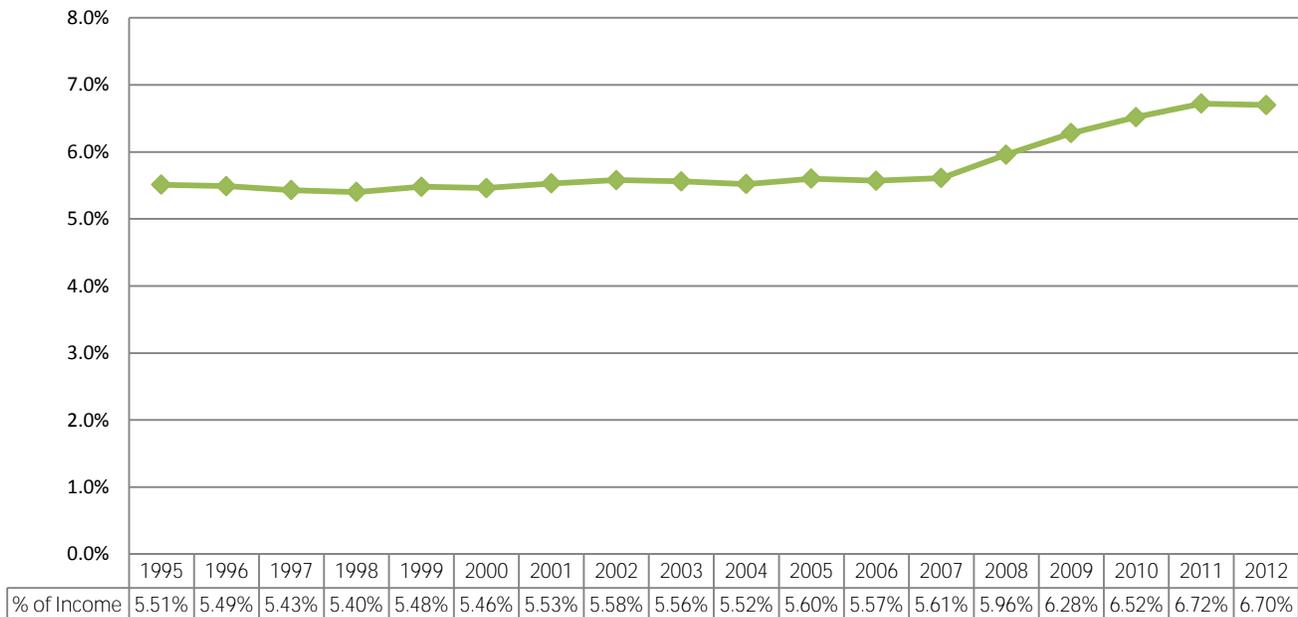*Source: CA1-3 Personal income summary. U.S. Bureau of Economic Analysis*

Percentage Change of Per Capita Personal Income from Previous Year

	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Hudson County	4.79%	3.92%	5.28%	4.69%	8.86%	5.15%	2.42%	2.05%	4.21%	5.64%	7.02%	6.27%	8.20%	1.19%	4.73%	6.62%	1.87%
New Jersey	5.48%	5.60%	5.83%	3.36%	9.35%	4.19%	0.64%	1.69%	4.58%	3.87%	7.40%	5.28%	2.36%	-2.95%	1.41%	4.55%	3.10%

‑‑‑◆‑‑‑ Hudson County   ‑‑‑■‑‑‑ New Jersey

Source: CA1-3 Personal income summary. U.S. Bureau of Economic Analysis

Hudson County's Percentage of State's Total Personal Income

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
% of Income	5.51%	5.49%	5.43%	5.40%	5.48%	5.46%	5.53%	5.58%	5.56%	5.52%	5.60%	5.57%	5.61%	5.96%	6.28%	6.52%	6.72%	6.70%

Source: CA1-3 Personal income summary. U.S. Bureau of Economic Analysis
Note: All state and local area dollar estimates are in current dollars (not adjusted for inflation).

11. Building Permits for New Housing Units

What is this?

Building permits are issued by local construction code officials after developers receive all necessary approvals and financing. The 2010 Hudson County CEDS Plan contains goals and objectives related to residential construction and rehabilitation including: "Foster the cleanup and reuse of contaminated sites as an integral part of both economic and community development;" and "Support efforts to provide a variety of housing types for households of all income levels."
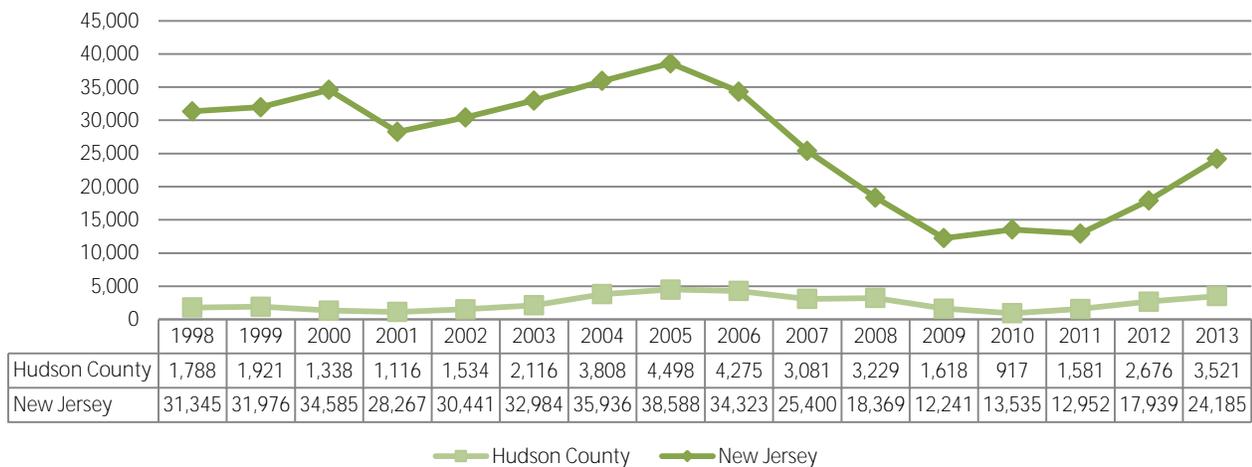
Why is this important?

The number of building permits is an indicator of the local economy and housing market. It also is related to the attractiveness of a community and is a sign of a healthy construction industry.

How are we doing?

<u>Mixed</u> – Incredibly, the smallest county in the State of New Jersey outpaced all other counties in residential construction for four consecutive years from 2005 through 2008. In fact, Hudson County's housing market remains relatively strong in relation to the state's overall housing market. The economic recession, foreclosure crisis and contraction of credit beginning in 2009 have been severely impacted by the national and regional economies. However, following a low in 2010, building permits for new housing units have increased every year.

Building Permits for New Housing Units in Hudson County & State of NJ

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Hudson County	1,788	1,921	1,338	1,116	1,534	2,116	3,808	4,498	4,275	3,081	3,229	1,618	917	1,581	2,676	3,521
New Jersey	31,345	31,976	34,585	28,267	30,441	32,984	35,936	38,588	34,323	25,400	18,369	12,241	13,535	12,952	17,939	24,185

Source: New Jersey Department of Labor and Workforce Development
http://lwd.dol.state.nj.us/labor/lpa/industry/bp/bp_index.html

Photo: High rise housing developments along Hoboken's northern waterfront.

Hudson County Approved Housing Units by Number and Value
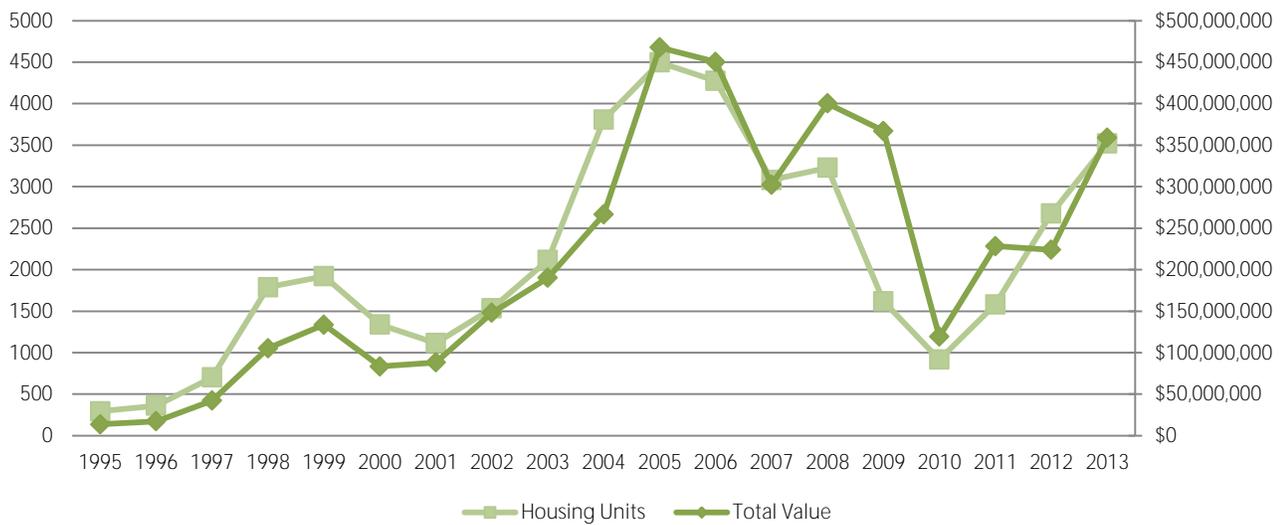
Source: New Jersey Department of Labor and Workforce Development
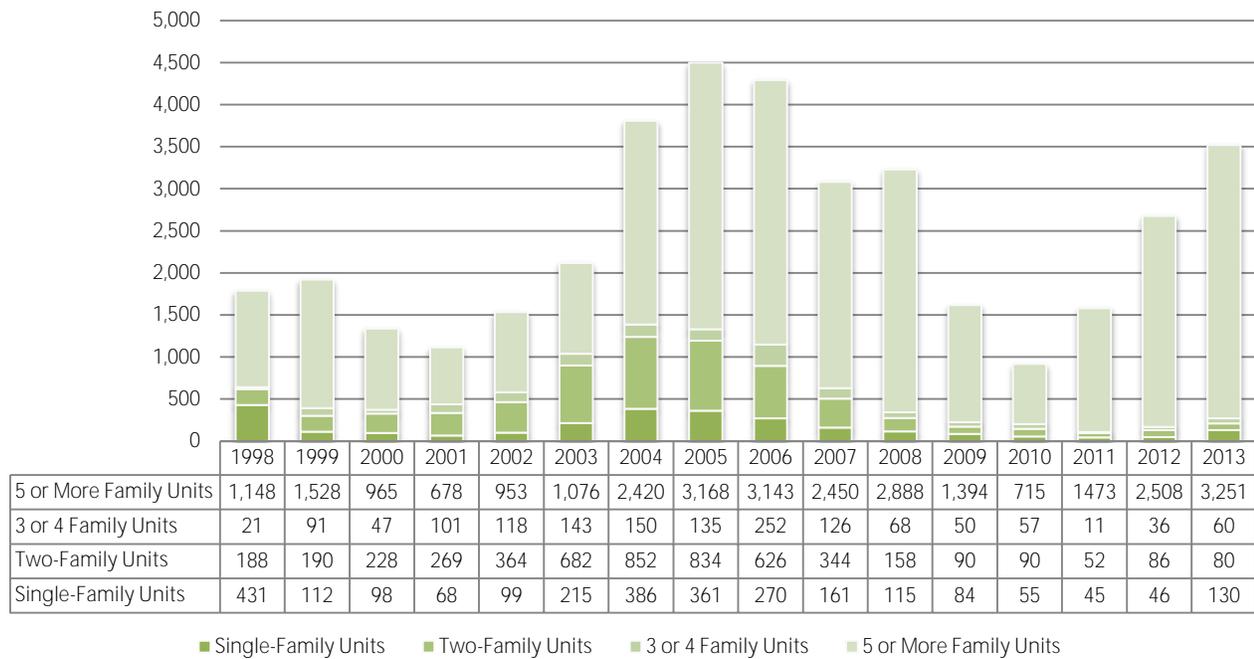*http://lwd.dol.state.nj.us/labor/lpa/industry/bp/bp_index.html*

Photo: Mid-rise housing located along West New York's waterfront (foreground). Guttenberg's Galaxy Towers in background.

Residential Housing Units Authorized by Building Permits: 1990 through 2011

Year	Hudson County Units	Hudson County Total Value	New Jersey Units
1990	486	$30,070,285	17,524
1991	260	$14,429,309	14,856
1992	259	$9,426,976	19,072
1993	440	$20,305,145	25,188
1994	464	$26,111,041	25,388
1995	294	$13,551,677	21,521
1996	360	$17,184,603	24,173
1997	702	$42,226,124	28,018
1998	1,788	$105,149,673	31,345
1999	1,921	$133,605,080	31,976
2000	1,338	$83,480,940	34,585
2001	1,116	$88,256,414	28,267
2002	1,534	$148,089,645	30,441
2003	2,116	$190,118,395	32,984
2004	3,808	$266,557,070	35,936
2005	4,498	$467,822,421	38,588
2006	4,275	$450,371,017	34,323
2007	3,081	$302,280,333	25,400
2008	3,229	$400,355,073	18,369
2009	1,618	$367,161,204	12,421
2010	917	$119,189,541	13,535
2011	1,581	$228,318,206	12,952
2012	2,676	$223,866,519	17,939
2013	3,521	$359,072,930	24,185

Source: N.J. Department of Labor and Workforce Development http://lwd.dol.state.nj.us/labor/lpa/industry/bp/bp_index.html

Building Permits for New Housing Issued in Hudson County by Type

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
5 or More Family Units	1,148	1,528	965	678	953	1,076	2,420	3,168	3,143	2,450	2,888	1,394	715	1473	2,508	3,251
3 or 4 Family Units	21	91	47	101	118	143	150	135	252	126	68	50	57	11	36	60
Two-Family Units	188	190	228	269	364	682	852	834	626	344	158	90	90	52	86	80
Single-Family Units	431	112	98	68	99	215	386	361	270	161	115	84	55	45	46	130

■ Single-Family Units   ■ Two-Family Units   ■ 3 or 4 Family Units   ■ 5 or More Family Units

Source: New Jersey Department of Labor and Workforce Development
http://lwd.dol.state.nj.us/labor/lpa/industry/bp/bp_index.html

12. Residential Home Values and Sales Prices

What is this?

The New Jersey Department of the Treasury maintains realty transfer tax information for each municipality and county in the State of New Jersey. The 2010 Hudson County CEDS Plan contains **several goals related to housing including:** "Support efforts to provide a variety of housing types for **households of all income levels;**" "Foster the clea**nup and reuse of contaminated sites as an integral part of both economic and community development.**"

Why is this important?

The average residential sales price is an important indicator to demonstrate home value as a **function of a community's desirability** as well as whether local residents can afford to buy a house and raise a family in a neighborhood where they already live.

How are we doing?

<u>Mixed</u> – **Between 1994 and 2005, Hudson County's average residential sales price was below that** for the State of New Jersey. However, between 2006 and 2011**, Hudson County's average home** prices surpassed the state average, indicating that home values were strong for existing homeowners. However, as the least affluent county in the State of New Jersey, affordability is a serious problem especially for young and working families. **In 2012, the County's average home** price fluctuated below the state average, before rising above it again in 2013 as the state average slightly declined.

Average Residential Sales Price

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Hudson County	$212,474	$232,264	$271,221	$333,508	$391,657	$421,618	$421,132	$380,598	$356,051	$356,399	$351,511	$386,834
New Jersey	$233,791	$268,325	$303,447	$344,986	$384,015	$390,557	$396,569	$359,270	$348,897	$348,863	$386,497	$384,000

■ Hudson County ■ New Jersey

Source: N.J. Department of Treasury (http://www.state.nj.us/treasury/taxation/lpt/class2avgsales.shtml)

13. Equalized Valuation Data

What is this?

Equalized valuations are estimates of the value of all real property across multiple jurisdictions within a district, county or state. While all municipalities adhere to standard appraisal principles, each community administers its tax rolls independently of one another. Equalized valuations are used to apportion taxes among communities for regional school districts, county government, or for state aide. A goal of the 2010 Hudson County CEDS Plan is "to strengthen the tax base of the County." Specific economic goals also include: "Create a diversified economy to maintain full employment and continue economic growth;" "Retain and expand existing businesses and attract new ones;" "Assist in the development of Quality of Life factors that make Hudson County a more attractive place for businesses and people to live and work."

Why is this important?

Equalized valuations demonstrate the value of real-estate among municipalities. As the ratable base grows, more property owners contribute to local taxes which should positively impact the local tax rate. A growing ratable base may be the sign of increasing property values and a strong local economy.

How are we doing?

Mixed – Since 1990, Hudson County's tax base has more than doubled largely due to new developments and increasing property values. However, 2008 represented a high point for the local property tax base, which then declined to below 2007 levels and has fluctuated in the past 5 years.

Hudson County's Equalized Valuation
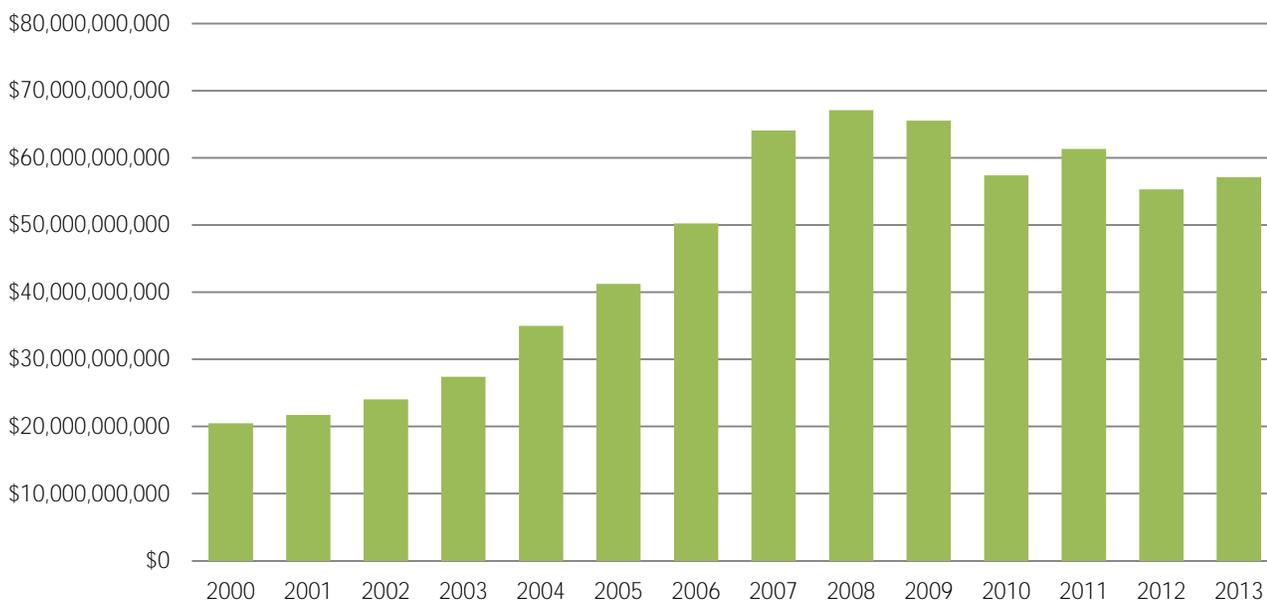
Source: N.J. Department of Treasury, Division of Taxation (http://www.state.nj.us/treasury/taxation/lpt/lptvalue.shtml)

Hudson County's Equalized Valuation and Percentage Change from Previous Year

Year	Equalized Valuation	Percentage Change from Previous Year
1991	$25,223,226,420	—
1992	$24,111,240,857	-4.41%
1993	$23,237,495,608	-3.62%
1994	$22,468,540,050	-3.31%
1995	$21,086,979,964	-6.15%
1996	$20,609,726,728	-2.26%
1997	$19,171,871,371	-6.98%
1998	$19,800,000,000	3.28%
1999	$19,500,000,000	-1.52%
2000	$20,500,000,000	5.13%
2001	$21,700,000,000	5.85%
2002	$24,033,341,356	10.75%
2003	$27,411,812,341	14.06%
2004	$34,969,430,919	27.57%
2005	$41,242,905,413	17.94%
2006	$50,249,347,791	21.84%
2007	$64,070,898,191	27.51%
2008	$67,077,100,450	4.69%
2009	$65,528,173,563	-2.31%
2010	$61,380,374,337	-6.33%
2011	$61,316,837,959	-0.10%
2012	$55,287,442,128	-9.83%
2013	$57,117,827,264	3.31%

14. Foreclosure Data

What is this?

A foreclosure is a legal process by which a mortgagee's right to redeem a mortgage is taken away. This usually occurs when an individual fails to make the specified mortgage payments.

The 2010 Hudson County CEDS Plan contains goals related to homeownership including: "support efforts to provide a variety of housing types for households of all income levels."
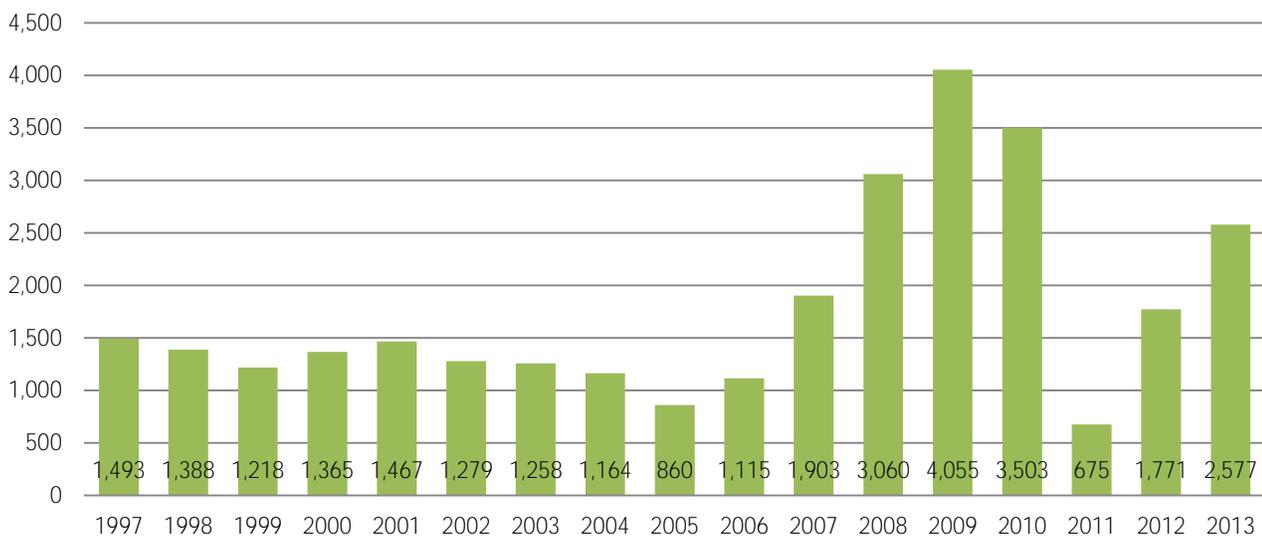
Why is this important?

This statistic is important because residents need to be able to afford housing within a community. A high number of foreclosures may be indicative of the fact that residents' incomes are not high enough to support the price of housing in a community. Foreclosures may also be an indication of the local economy and in light of the recent national mortgage crisis, it is in all likelihood an indication of the overall U.S. economy.

How are we doing?

Mixed - The annual number of foreclosures in Hudson County, while fluctuating, remained relatively constant for a decade before the mortgage crisis occurred in 2008. Hudson County was not immune from the national mortgage crisis, with the annual number of foreclosures more than doubling between 1997 and 2010. 2011 saw a decline in county foreclosures, though that number more than doubled in 2012, and increased again in 2013.

Total Foreclosures in Hudson County

Year	Foreclosures
1997	1,493
1998	1,388
1999	1,218
2000	1,365
2001	1,467
2002	1,279
2003	1,258
2004	1,164
2005	860
2006	1,115
2007	1,903
2008	3,060
2009	4,055
2010	3,503
2011	675
2012	1,771
2013	2,577

Source: New Jersey Administrative Office of the Courts, Civil Practice Division, NJ Department of Banking & Insurance

15. Bankruptcy Data

What is this?

A bankruptcy is a legal process to assure equal opportunity amongst creditors of a company or individual declared in bankruptcy. Many times, unemployment, unexpected medical expenses, or divorce cause people to file for bankruptcy in an attempt to seek protection from their creditors. Bankruptcies are divided into two categories: business and non-business. Under each of these categories, one could file for a Chapter 7, Chapter 11, Chapter 12, or Chapter 13 bankruptcy. A Chapter 7 bankruptcy provides for "'liquidation,' i.e., the sale of a debtor's nonexempt property and the distribution of the proceeds to creditors" *(United States Bankruptcy Court)*. Chapter 11 deals with reorganizing businesses. This category is designed to allow a business to continue operating while paying its debts over time. Individuals and those owning business can also seek protection through chapter 11. Chapter 12 is concerned with "adjustments of debt of a 'family farmer'" *(United States Bankruptcy Court)*. Since Hudson County has no farms, this chapter is not used. Finally, Chapter 13 of the Bankruptcy Code provides for modifications of debts of an individual with normal income and allows an individual to retain possession of property while paying the debts over a period of time.
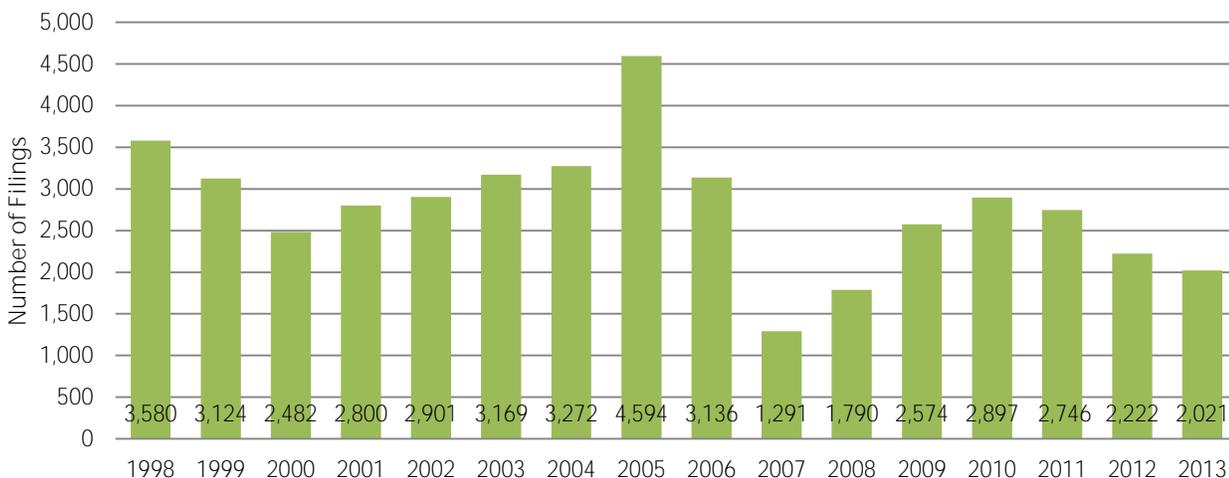
Why this important?

Bankruptcy data and figures are important because they are an indication of the economic status of the residents and businesses in a community. A large number of bankruptcies in an area could be a sign of a faltering economy or economic downturn.
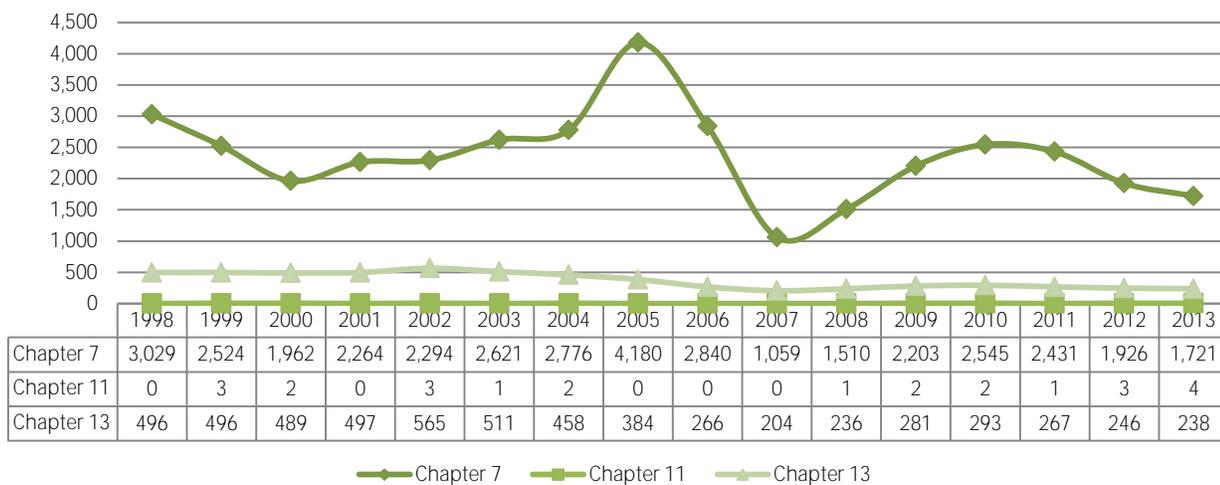
How are we doing?

<u>Improving</u> – While the year 2005 represented a high point for bankruptcies locally, the total number of filings, while fluctuating after 2005, has consistently decreased since 2010.

Bankruptcies

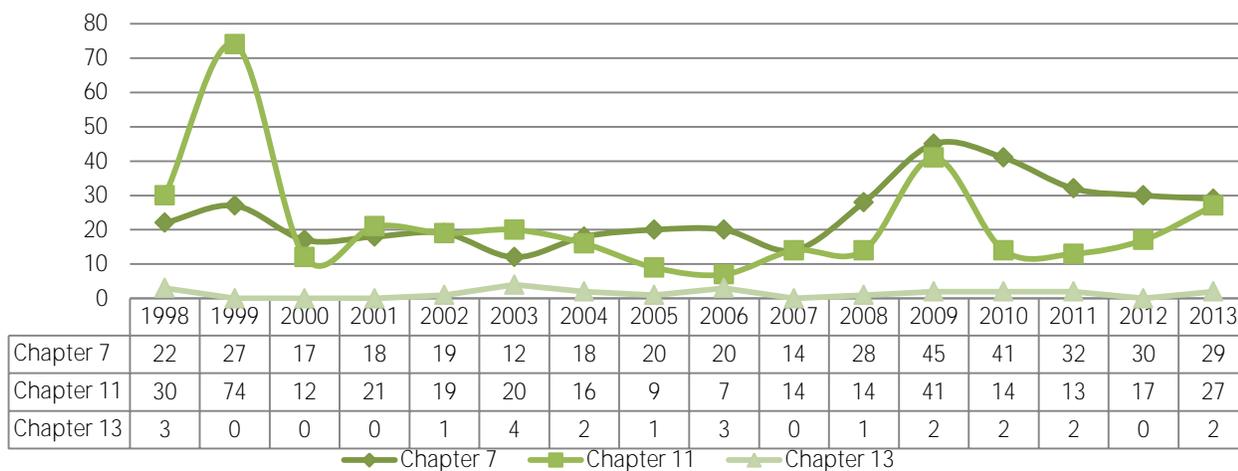| Year	Number of Filings
1998	3,580
1999	3,124
2000	2,482
2001	2,800
2002	2,901
2003	3,169
2004	3,272
2005	4,594
2006	3,136
2007	1,291
2008	1,790
2009	2,574
2010	2,897
2011	2,746
2012	2,222
2013	2,021

Source: Administrative Office of the US Courts PACER Service Center
For 12 Month period ending December 31

Total Non-Business Filings by Type

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Chapter 7	3,029	2,524	1,962	2,264	2,294	2,621	2,776	4,180	2,840	1,059	1,510	2,203	2,545	2,431	1,926	1,721
Chapter 11	0	3	2	0	3	1	2	0	0	0	1	2	2	1	3	4
Chapter 13	496	496	489	497	565	511	458	384	266	204	236	281	293	267	246	238

◆ Chapter 7 ■ Chapter 11 ▲ Chapter 13

Source: Administrative Office of the US Courts PACER Service Center
(http://pacer.uspci.uscourts.gov/cgi-bin/statistics.pl?puid=01143221161&rpt_type=f5a)
For 12 Month period ending December 31

Total Business Filings by Type

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Chapter 7	22	27	17	18	19	12	18	20	20	14	28	45	41	32	30	29
Chapter 11	30	74	12	21	19	20	16	9	7	14	14	41	14	13	17	27
Chapter 13	3	0	0	0	1	4	2	1	3	0	1	2	2	2	0	2

◆ Chapter 7 ■ Chapter 11 ▲ Chapter 13

Source: Administrative Office of the US Courts PACER Service Center
(http://pacer.uspci.uscourts.gov/cgi-bin/statistics.pl?puid=01143221161&rpt_type=f5a)
For 12 Month period ending December 31

C. Social Indicators

Goal: A general goal of the 2010 **Hudson County CEDS Plan is to** "Assist in the development of Quality of Life factors that make Hudson County a more attractive place for businesses and people to **live and work."** This goal may be applied to a variety of social issues affecting the community and its residents.

What indicators are included?
16. Birth and Death Rates
17. Crime Rates
18. High School Graduation and Dropout Rates
19. Homeless Counts
20. Infant Mortality
21. Marriage and Divorce Rates
22. Mortality Rates
23. Public Assistance Participation
24. School Free Lunch & Free Milk Program Data
25. Teenage Pregnancy Data
26. Transportation - Vehicle Miles Travelled
27. Transportation - Motor Vehicle Accidents
28. Transportation - Hudson Bergen Light Rail Ridership
29. Transportation - PATH Ridership
30. Voter Registration and General Election Turnout Data

16. Birth & Death Rates

What is this?

Birth and death records are often administered or maintained by local and county officials. A **general goal of the CEDS Plan is to "improve the quality of life" in the community by creating an** atmosphere in which residents have hope and can build a better future.
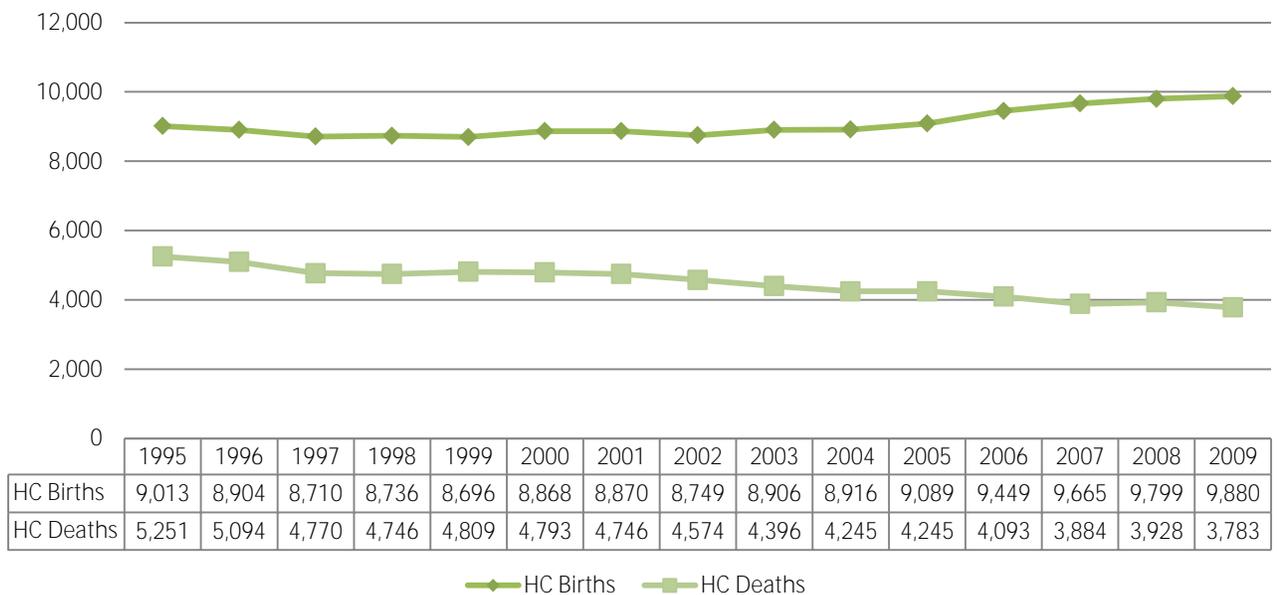
Why is this important?

The number of births in a community is one indicator of a community's growth and well-being. **The number of births may also demonstrate a family's confidence in the community and outloo**k on the future. Deaths are a part of the life cycle, however, in a growing and vibrant community, it is important that the number of births exceed the number of deaths.

How are we doing?

<u>Steady</u> – The number of births remained significantly higher than the number of deaths during the entire 15 year period. However, the number of births has declined since 1990. This trend is similar to birth rates experienced at the state and national levels. Families are having fewer children. The number of deaths has also significantly declined. This is probably due in part to modern medicine and longer life expectancy. It may also be attributable to the migration of retirees from older cities to the suburbs, shore areas, and warmer climates.

Hudson County Natural Population Growth

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
HC Births	9,013	8,904	8,710	8,736	8,696	8,868	8,870	8,749	8,906	8,916	9,089	9,449	9,665	9,799	9,880
HC Deaths	5,251	5,094	4,770	4,746	4,809	4,793	4,746	4,574	4,396	4,245	4,245	4,093	3,884	3,928	3,783

HC Births   HC Deaths

Source: New Jersey Department of Health
(http://www4.state.nj.us/dhss-shad/query/result/mort/MortStateICD10/Count.html)

17. Crime Rates

What is this?

The New Jersey State Police prepares the Uniform Crime Report for the State of New Jersey. The report tracks violent and non-violent crime in all counties and municipalities in the state. Violent crimes include murder, rape, robbery, and aggravated assault. Non-violent crimes include burglary, larceny-theft, and motor vehicle theft.
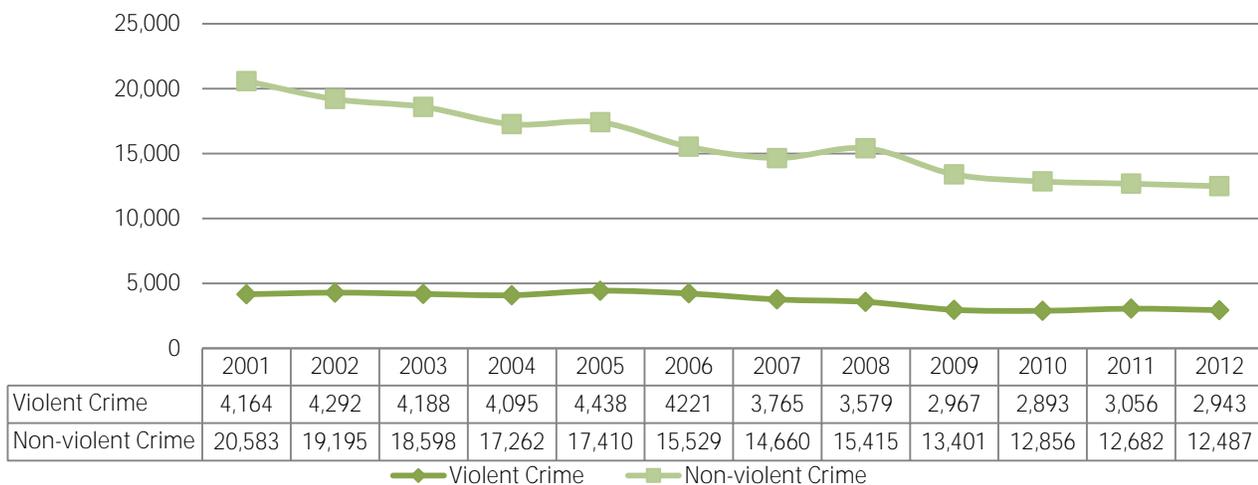
Why is this important?

The primary goal of all government is to protect the health, safety and welfare of its citizens. Crime is anathema to any civil society. Crime data and statistics are an important quality-of-life indicator to **demonstrate a community's physical, social and economic health** and well-being.
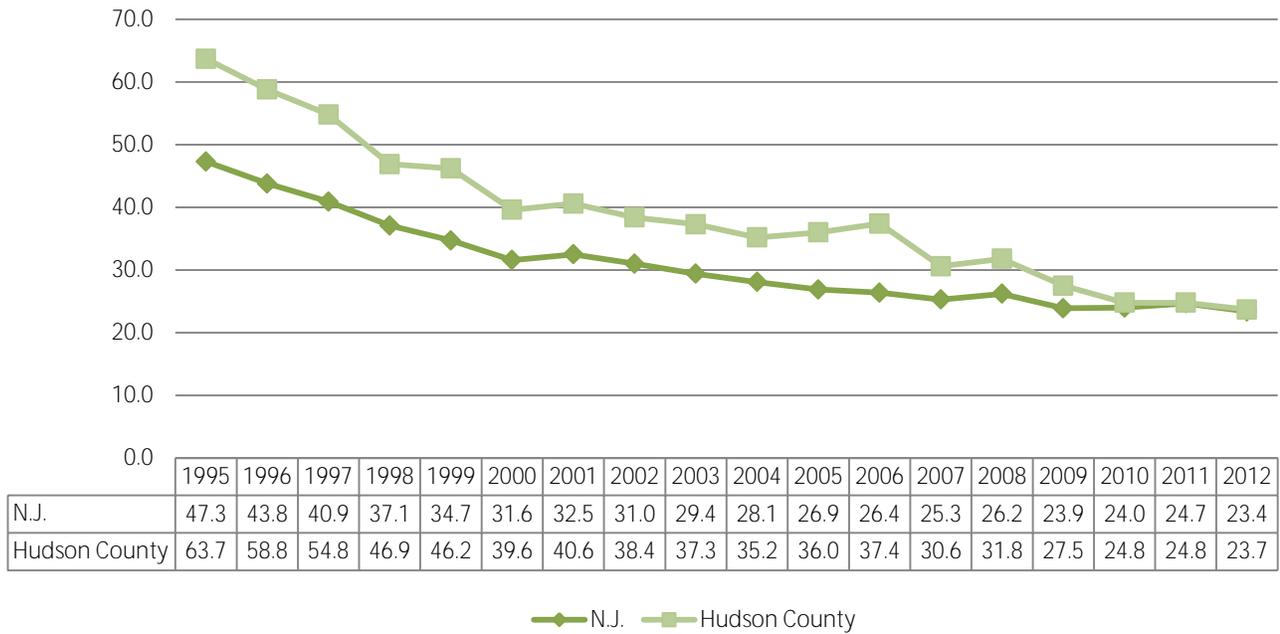
How are we doing?

<u>Improving</u> – While no amount of crime is "acceptable," the overall incidence of crime as well both the violent and non-violent crime rates have significantly decreased since 1990. This may be attributable to better policing and investigative measures, mandatory minimum sentencing, and a stronger local economy. **In 2010 and 2011, the county's non**-violent crime rates were below the state average. **However, this information is tempered by the fact that Hudson County's violent** crime rates remain above those for the State of New Jersey.

Total Incidence of Crime in Hudson County

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Violent Crime	4,164	4,292	4,188	4,095	4,438	4221	3,765	3,579	2,967	2,893	3,056	2,943
Non-violent Crime	20,583	19,195	18,598	17,262	17,410	15,529	14,660	15,415	13,401	12,856	12,682	12,487

Violent Crime ◆ Non-violent Crime ▪

Source: New Jersey State Police (http://www.state.nj.us/njsp/info/stats.html)

Overall Crime Rate Per 1,000
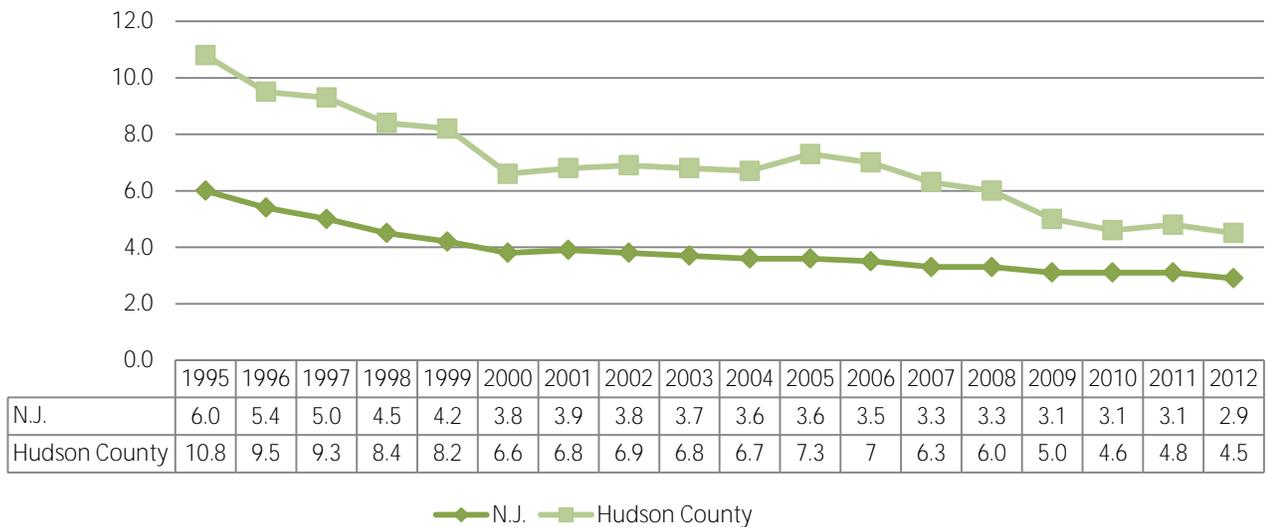
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
N.J.	47.3	43.8	40.9	37.1	34.7	31.6	32.5	31.0	29.4	28.1	26.9	26.4	25.3	26.2	23.9	24.0	24.7	23.4
Hudson County	63.7	58.8	54.8	46.9	46.2	39.6	40.6	38.4	37.3	35.2	36.0	37.4	30.6	31.8	27.5	24.8	24.8	23.7

◆ N.J. ■ Hudson County

Source: New Jersey State Police (http://www.state.nj.us/njsp/info/stats.html)

Violent Crime Rate Per 1,000

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
N.J.	6.0	5.4	5.0	4.5	4.2	3.8	3.9	3.8	3.7	3.6	3.6	3.5	3.3	3.3	3.1	3.1	3.1	2.9
Hudson County	10.8	9.5	9.3	8.4	8.2	6.6	6.8	6.9	6.8	6.7	7.3	7	6.3	6.0	5.0	4.6	4.8	4.5

◆ N.J. ■ Hudson County

Source: New Jersey State Police (http://www.njsp.org/info/ucr2011/)

Non-Violent Crime Rate Per 1,000
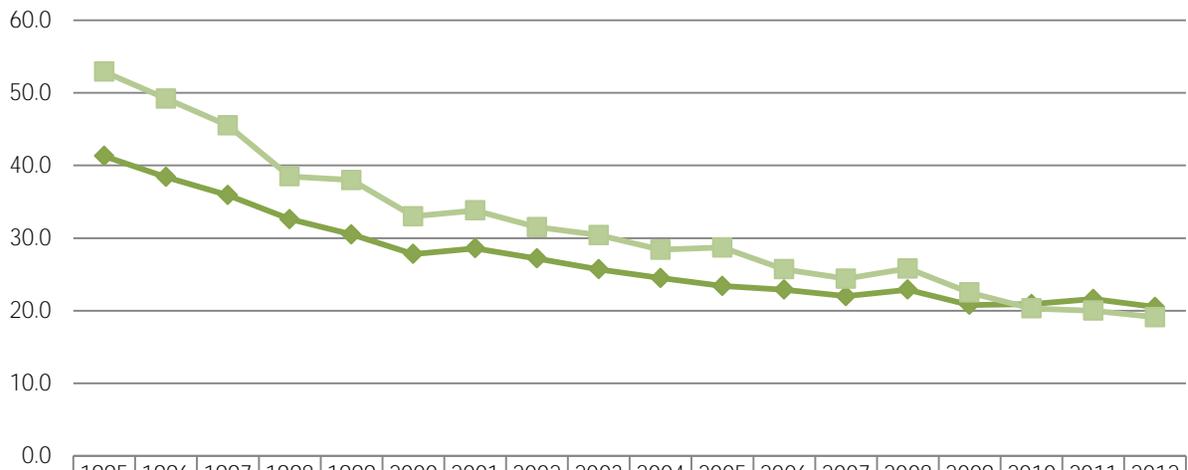
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
N.J.	41.3	38.4	35.9	32.6	30.5	27.8	28.6	27.2	25.7	24.5	23.4	22.9	22.0	22.9	20.8	20.9	21.6	20.5
Hudson County	52.9	49.2	45.5	38.5	38.0	33.0	33.8	31.5	30.4	28.4	28.7	25.7	24.4	25.8	22.5	20.3	20.0	19.1

◆ N.J.   ■ Hudson County

Source: New Jersey State Police (http://www.state.nj.us/njsp/info/stats.html)

18. High School Graduation and Dropout Rates

What is this?
The graduation data and rate measures the total number of high schools students who are graduating from local public high schools in Hudson County on an annual basis. Conversely, the drop-out rate reflects the number of local students in public high schools who stopped attending high school.
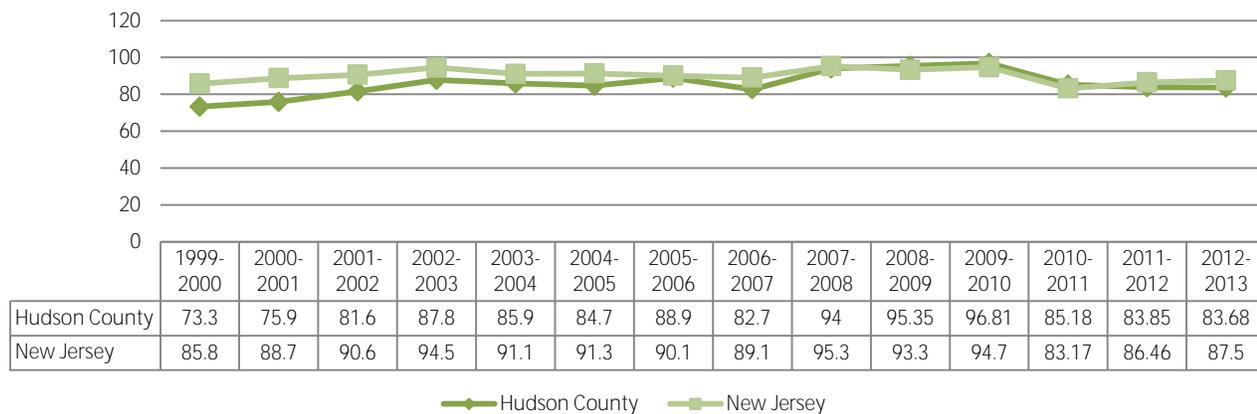
Why is this important?
These rates reflect the challenges and difficulties facing urban school systems as well as the socio-economic climate of the community. Students who receive their high school diploma are more likely to attend college or technical training, pursue a military career or find work. A high drop-out rate is likely to have a negative impact on the local economy and community well-being because high school drop-outs are less likely to find work which pays a living wage.
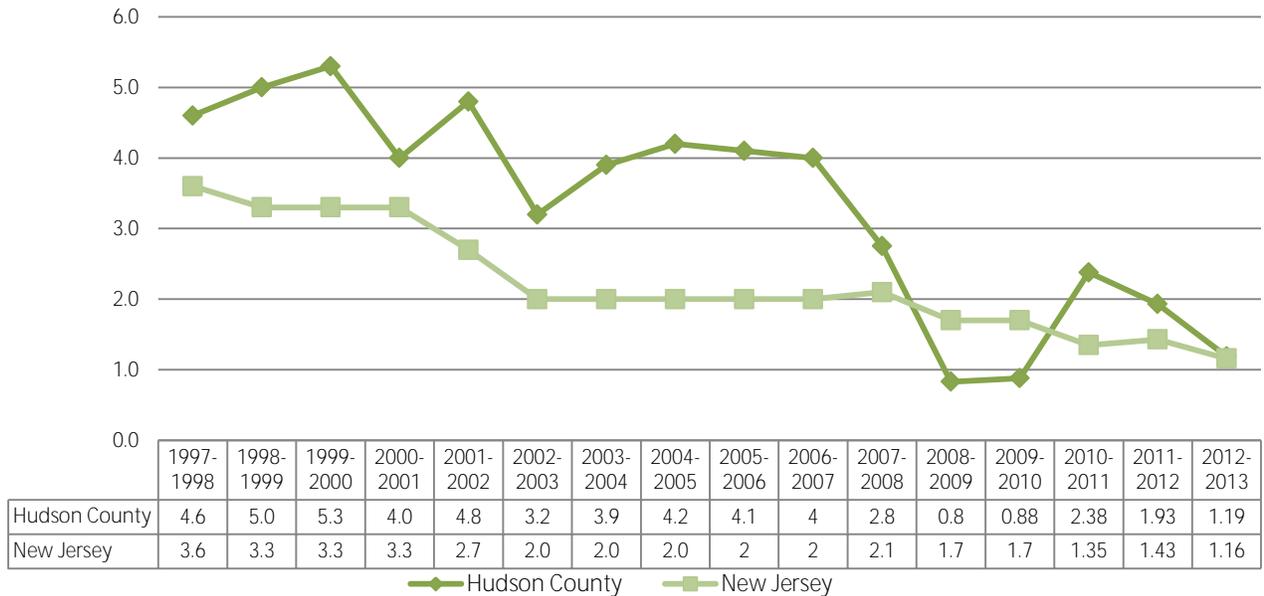
How are we doing?
Mixed – The graduation rates among Hudson County public high schools have increased over the last decade. In fact, the county rate from 2008 to 2010 surpassed the state graduation rate. However, in the past three years, the data has shown a decline, and Hudson County has once again fallen below the state's average graduation rate. The county's drop-out rates have dropped significantly since 1990 from 6.2 to 0.88 in 2010. In 2009 and 2010, the county high school dropout rate was below the state dropout rate.

High School Graduation Rates

	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Hudson County	73.3	75.9	81.6	87.8	85.9	84.7	88.9	82.7	94	95.35	96.81	85.18	83.85	83.68
New Jersey	85.8	88.7	90.6	94.5	91.1	91.3	90.1	89.1	95.3	93.3	94.7	83.17	86.46	87.5

Source: New Jersey Department of Education (http://www.state.nj.us/education/data/)

High School Dropout Rates

	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Hudson County	4.6	5.0	5.3	4.0	4.8	3.2	3.9	4.2	4.1	4	2.8	0.8	0.88	2.38	1.93	1.19
New Jersey	3.6	3.3	3.3	3.3	2.7	2.0	2.0	2.0	2	2	2.1	1.7	1.7	1.35	1.43	1.16

→ Hudson County   → New Jersey

Source: New Jersey Department of Education (http://www.state.nj.us/education/data/)

Aggregated Number of High School Graduates and Dropouts for Hudson County and State of New Jersey

School Year	Hudson County H.S. Graduates	Hudson County Dropouts	New Jersey H.S. Graduates	New Jersey Dropouts
1997-1998	3,691	1,144	68,148	14,688
1998-1999	3,717	1,136	67,369	13,150
1999-2000	4,116	1,227	74,419	13,433
2000-2001	4,049	973	76,129	12,639
2001-2002	4,145	903	78,012	11,596
2002-2003	4,459	932	81,389	9,708
2003-2004	4,570	997	83,632	10,112
2004-2005	4,479	958	86,445	8,802
2005-2006	4,757	832	89,858	9,009
2006-2007	4,686	800	92,601	9,054
2007-2008	4,658	568	94,808	8,025
2008-2009	4,487	539	95,311	8,180
2009-2010	4,535	456	94,979	9,283
2010-2011		697		9,354
2011-2012	4,855	601	93,818	9,283
2012-2013	4,885	351	95,091	7,161

Source: New Jersey Department of Education (http://www.state.nj.us/education/data/)

19. Homeless Counts

What is this?

The U.S. Department of Housing and Urban Development (HUD) sponsors a "Point in Time" Count on a bi-annual basis. Over the past five years Hudson County has made a commitment to perform the count annually along with many other counties in the State of New Jersey. Data collection is achieved by surveying unsheltered homeless, and using data provided through the NJ Homeless Management Information System (HMIS) on sheltered homeless. This survey contains a number of questions that allow the county to collect detailed information from each person on length of homelessness, race, last permanent residence, and other sub-population determinates.

Why is this important?

Homelessness is a significant problem facing many communities across the country. The indicator is influenced by a number of factors from the adequate delivery of health and social service programs to the availability of affordable housing. Numbers counted during the 2007 Point in Time Count were analyzed to determine the goal number of affordable units to be developed as part of *"Keys to Ending Homelessness: Hudson County's Ten Year Plan to End Chronic Homelessness."* The subpopulation data is helpful to identifying the types of specialized housing that is needed for the homeless.

How are we doing?

Improving – The total number of homeless counted in the Point-In-Time Homeless County in Hudson County has been generally declining since 2010, with 958 less homeless persons counted in the 2014 count than in the 2010 count, with the exception of a high count of 2,087 in 2012. The number of unsheltered homeless has declined in each of the last three counts, however, the number of chronically homeless has been increasing every year since 2011. Please note, that non-profit providers in the community believe that these numbers continue to be an undercount as it is not likely that volunteers were able to find all unsheltered homeless persons on the night of the count.

The 2013 "Point in Time" Count attributes an increase in the number of homeless to the effects of Superstorm Sandy. In the 2013 count, 37 individuals and 3 families reported that their homelessness was cause by natural disaster, and 27 of these households were living in a hotel paid for by FEMA. Only 4 individuals in 2012 stated that their homelessness was caused by a natural disaster. A major goal of Hudson County's recovery efforts from Superstorm Sandy is to replace housing lost due to the effects of the storm.
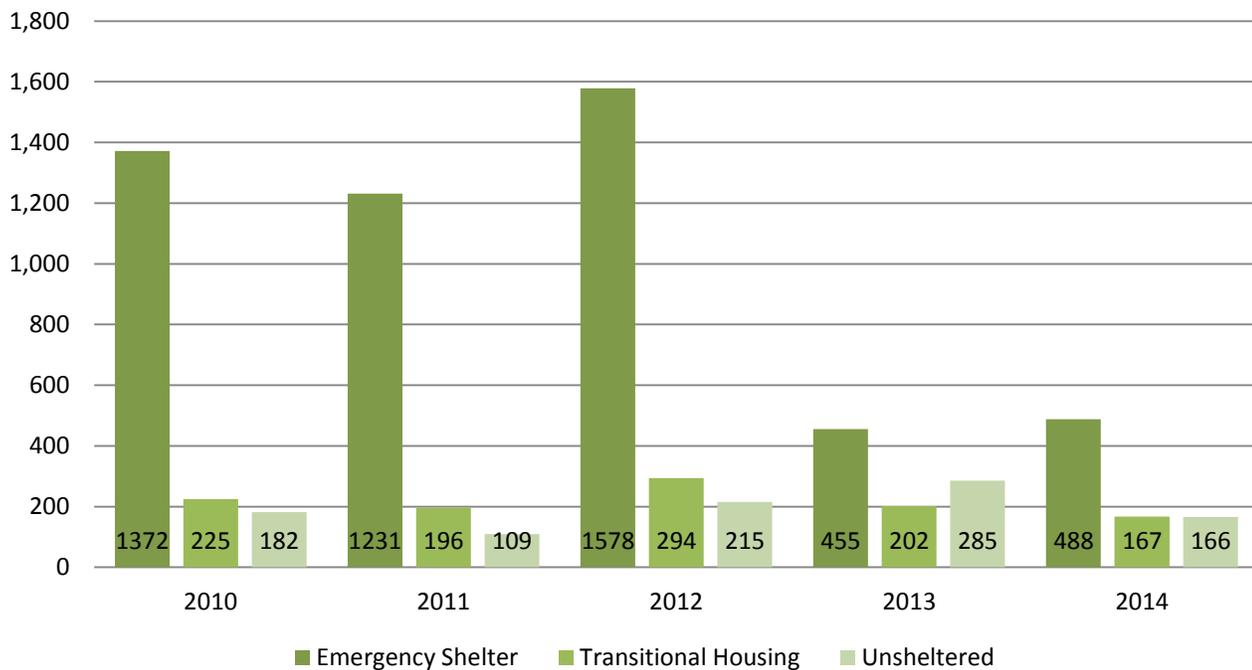
The winter of 2013 to 2014 was particularly cold, setting record low temperatures in parts of New Jersey. On the night of January 28, 2014, the temperature was low enough in New Jersey for a "Code Blue" warning to be issued, which requires emergency warming stations or shelters to be set up for unsheltered homeless. As a result, because many homeless people during the 2014"Point In Time" had access to an emergency shelter that night, the numbers of unsheltered homeless for the 2014 count may not accurately represent the average number of homeless in Hudson County on any given night during the year.
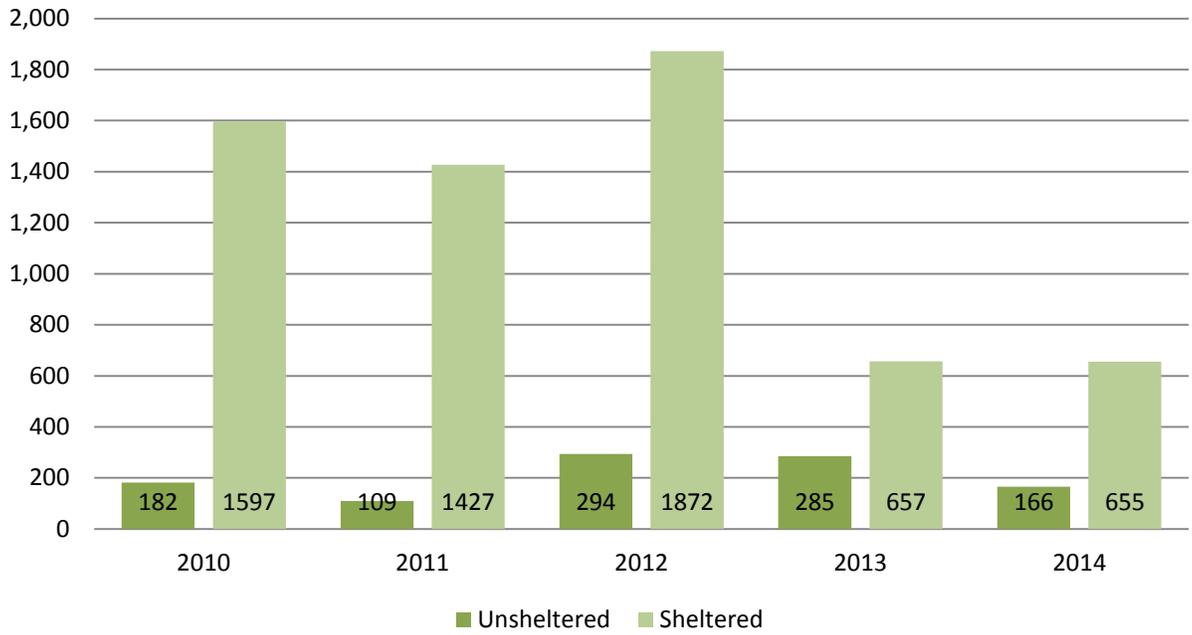
Total Homeless Counted

	2010	2011	2012	2013	2014
Total Homeless	1,779	1,536	2,087	942	821
Chronically Homeless	74	52	111	145	155
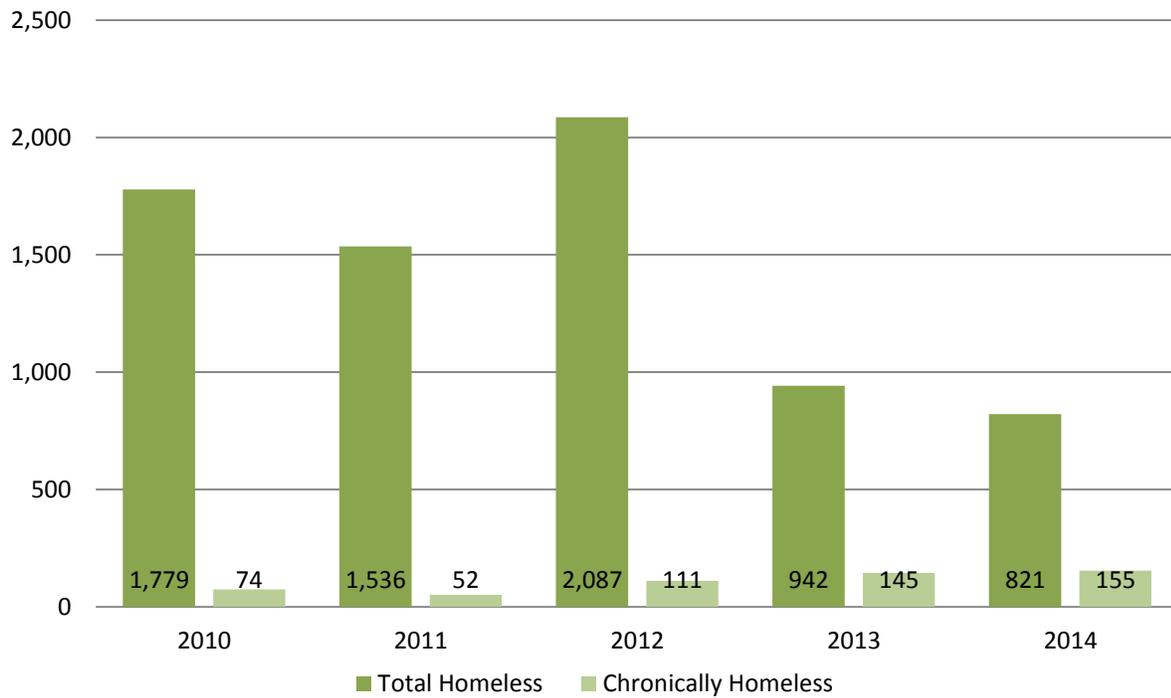
Source: Monarch Housing Associates Hudson County 2014 Point-In-Time Count of the Homeless

Homeless Housing Situation

	2010	2011	2012	2013	2014
Emergency Shelter	1372	1231	1578	455	488
Transitional Housing	225	196	294	202	167
Unsheltered	182	109	215	285	166

Unsheltered Homeless

	2010	2011	2012	2013	2014
Unsheltered	182	109	294	285	166
Sheltered	1597	1427	1872	657	655

■ Unsheltered   ■ Sheltered

20. Infant Mortality Rate

What is this?

The infant mortality rate is calculated by dividing the number of infants born by the number that **expire, and multiplying that number by 100. The term "infant" is divided into four categories based** on the age of the individual upon death: infant, neonatal, postnatal, and fetal. A child is considered to be an infant within their first year of life. Neonatal encompasses the first 27 days of life, whereas postnatal consists of children ages 28 days to one year old. Fetal is used in reference to babies that are yet to be born. The three main reasons for infant deaths are birth defects, complications in the perinatal period, and SIDS (sudden infant death syndrome).

Why is this important?

Infant mortality is a basic indicator used to gage the health, well-being and economic status of a developed and developing countries. It also reflects the level of mortality, health status, and health care of a population, and the effectiveness of preventive care and the attention paid to maternal and child health.

How are we doing?

<u>Improving</u> – The infant mortality rate for Hudson County decreased between 1993 and 2005. Despite an increase in deaths in 2008, the rate of infant mortality in the County has been lower than the state average since 2004. The most recent data available shows that the rate is declining again.

Hudson County Infant and Fetal Deaths
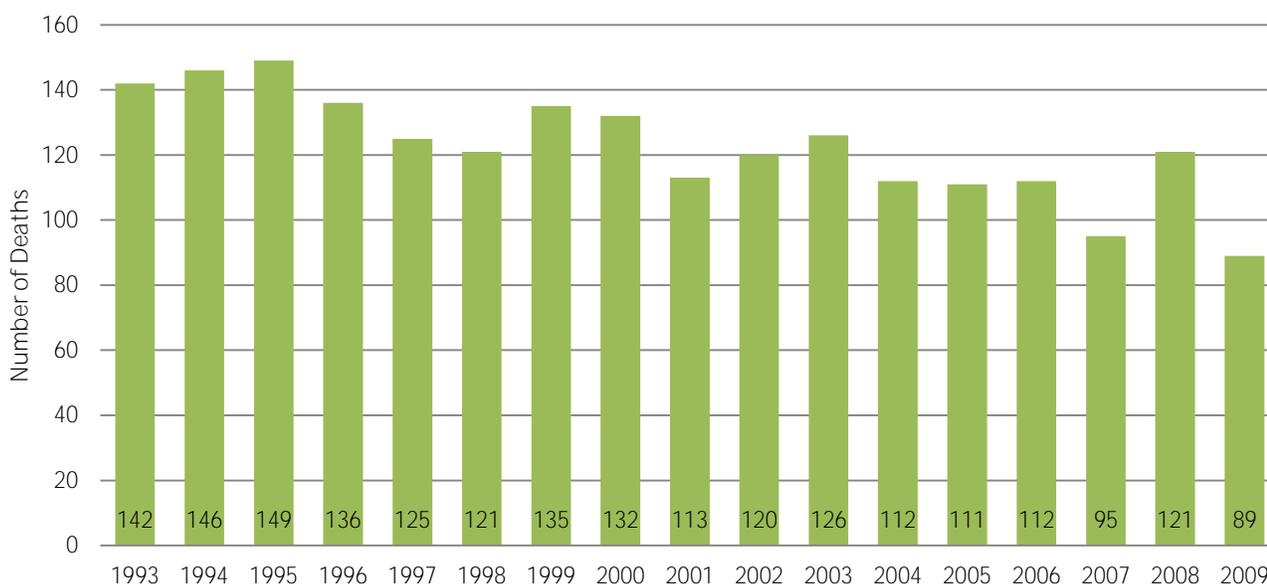
Source: New Jersey Department of Health and Senior Services, New Jersey State Health Assessment Data Query System
http://www4.state.nj.us/dhss-shad/query

Infant Mortality

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005***	2006***	2007	2008	2009
NJ Infant	8.9	8.8	8.4	8.4	7.8	6.7	6.9	6.4	6.4	6.8	6.3	6.4	5.7	5.7	5.7	5.23	5.3	5.1	5.3	5.5
NJ Fetal	7.6	7.5	6.8	6.5	6.3	2.5	6.5	6.5	6.6	7.3	6.6	7.0	6.8	6.4	6.4	6.1	6.6	6.8	6.3	6.7
HC Infant	10.9	9.8	9.0	8.4	9.6	9.1	9.4	8.4	8.0	6.8	7.9	7.0	7.3	7.4	6.2	5.8	4.9	4.0	5.4	5.3
HC Fetal	0.0	0.0	0.0	0.0	0.0	0.0	5.8	5.8	5.8	8.7	6.9	5.7	6.2	6.7	6.5	7.8	9.2	5.8	7.1	6.6

NJ Infant — NJ Fetal — HC Infant — HC Fetal
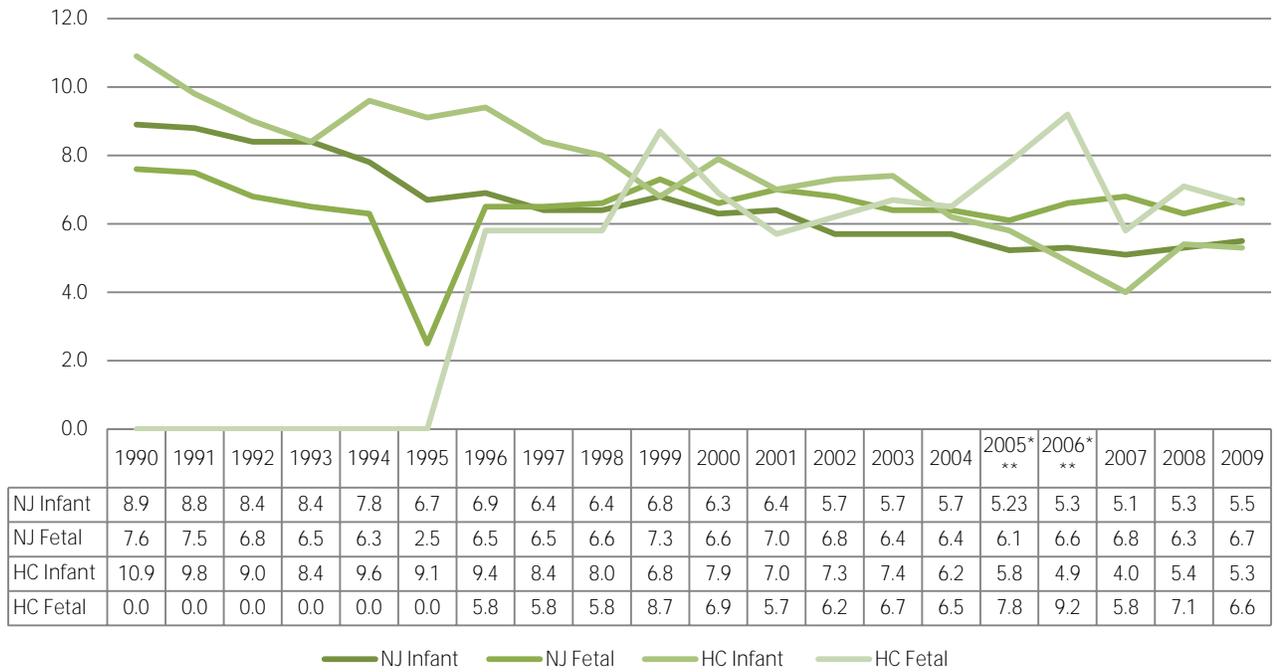
*** Includes data for municipalities: Bay, Hob, NB, Weeh, UC, WNY, Sec, JC (Hudson Perinatal Consortium, Inc) Data unavailable for Hudson County 1990-1995
Source: New Jersey Department of Health and Senior Services, New Jersey State Health Assessment Data Query System; (http://njshad.doh.state.nj.us/welcome.html)

21. Marriage and Divorce Records

What is this?
Marriage and divorce records are vital records administered and managed by state, county and local officials on community by community basis.
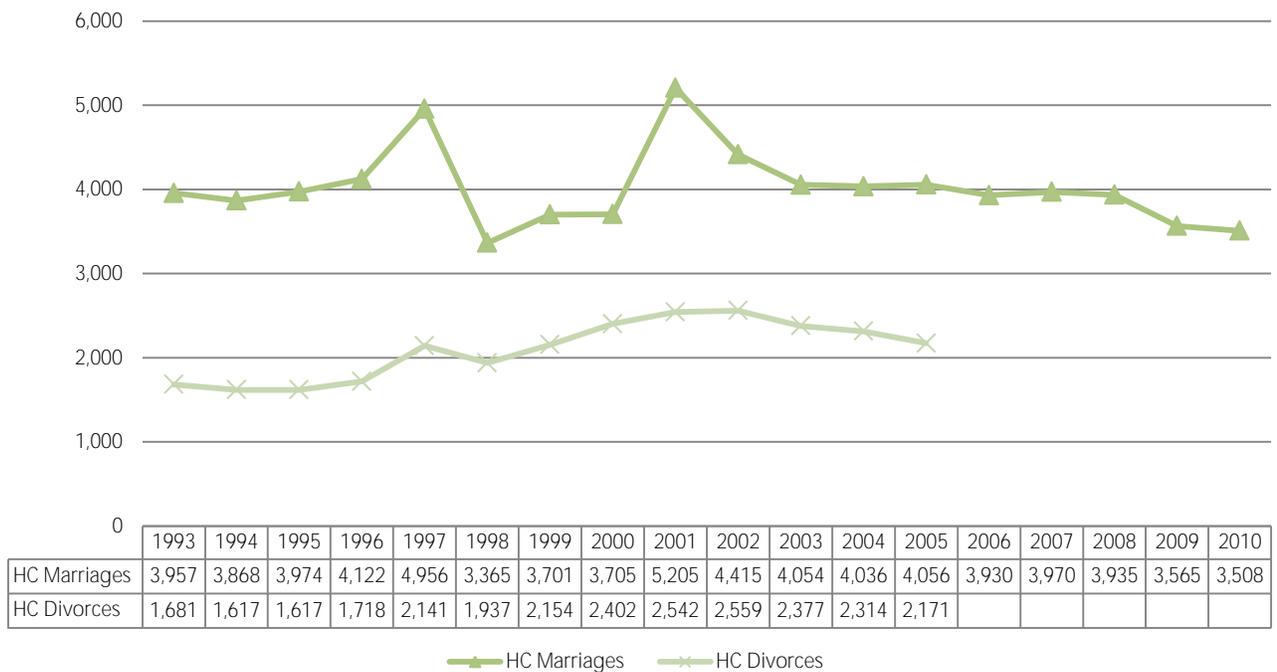
Why is this important?
Vital statistics for marriage and divorce may be used to demonstrate whether a community is growing or declining. Marriage is most-often a pre-curser to the creation of a new household or family unit.

How are we doing?
Mixed - The number of marriages in Hudson County declined slightly between 1993 and 2005 (the most recent figures available). Statewide, the number of marriages also decreased over the same period. The number of divorces in both Hudson County and the State of New Jersey increased between 1993 and 2005. It is important to note that there are nearly twice as many marriages annually in Hudson County then divorces.

Marriages and Divorces in Hudson County

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
HC Marriages	3,957	3,868	3,974	4,122	4,956	3,365	3,701	3,705	5,205	4,415	4,054	4,036	4,056	3,930	3,970	3,935	3,565	3,508
HC Divorces	1,681	1,617	1,617	1,718	2,141	1,937	2,154	2,402	2,542	2,559	2,377	2,314	2,171					

HC Marriages   HC Divorces

Data unavailable for divorces after 2005
Source: New Jersey Department of Health and Senior Services (http://www.state.nj.us/health/chs/hlthstat.htm)

22. Mortality Rates

What is this?

Mortality rates indicate the leading causes of death among county residents or decedents. Mortality figures are aggregated for the six leading causes of death between 1990 and 2005. The mortality rate is an age-adjusted figure based upon the cause of death information and in relation to the overall population size of the county. A mortality rate allows comparisons to be made between jurisdictions of various size populations.
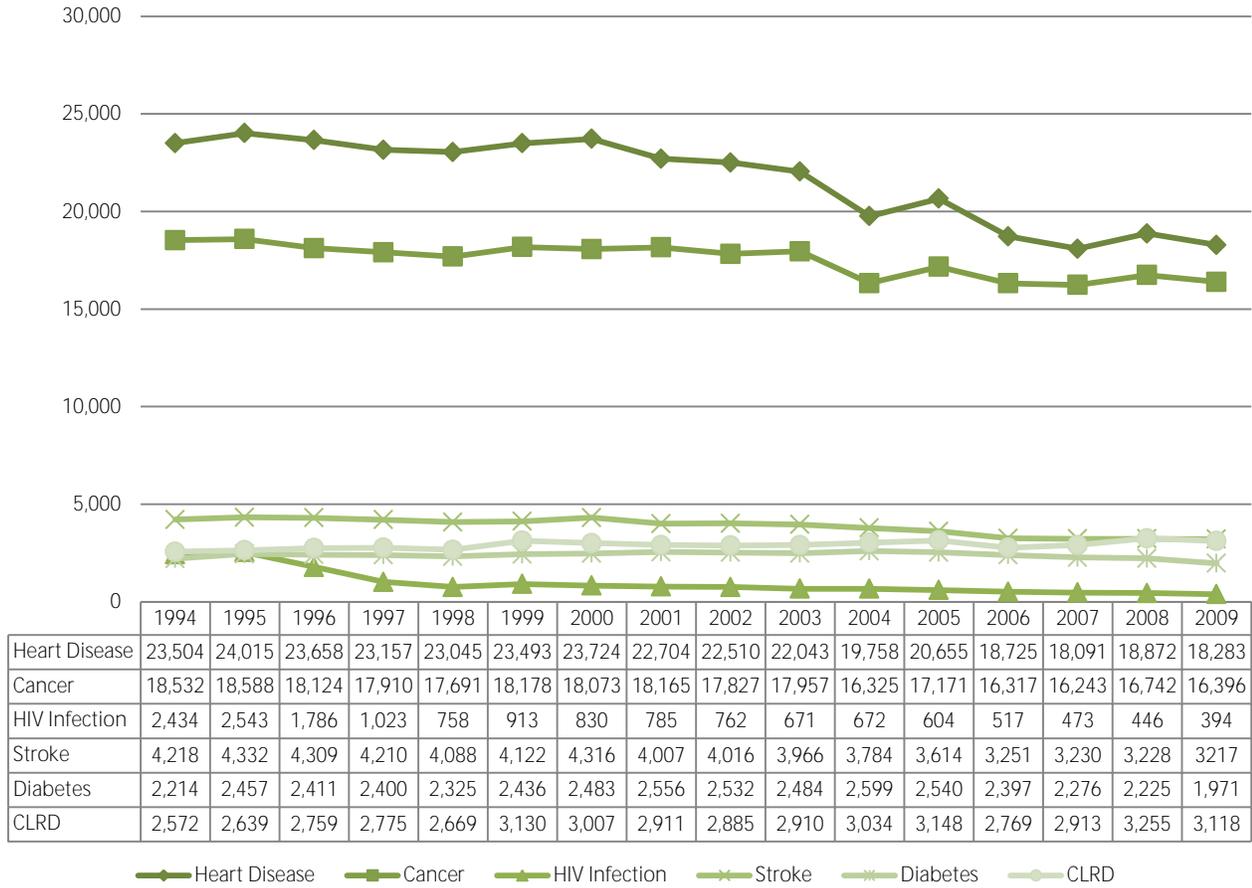
Why is this important?

Examining the leading causes of death in Hudson County over a decade or more can establish whether modern medicine, diet and exercise have contributed to life expectancy for county **residents. In addition, by comparing Hudson County's mortality rates with those of the State of New Jersey, one can surmise whether there is a disparity between the state's most urbanized and least** affluent county and state as a whole. **A general goal of the 2010 Hudson County CEDS Plan is "to improve the overall quality of life…"**
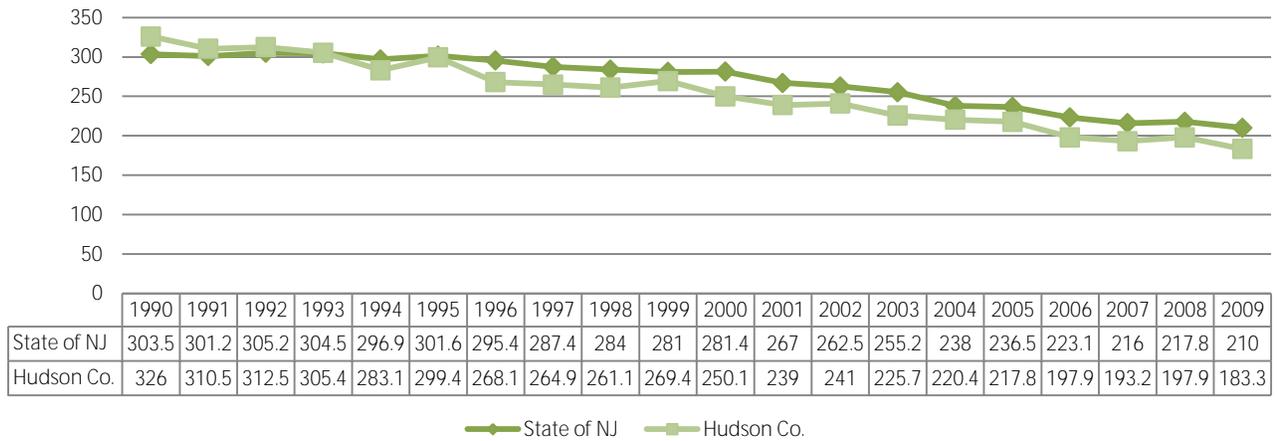
How are we doing?

Improving – Between 1990 and 2007 (the most recent figures available) the top three leading causes of death in Hudson County (heart disease, cancer and HIV) all experienced a significant **decline. In fact, with the exception of diabetes and HIV, Hudson County's mortality rates are all** lower than the rates for the State of New Jersey. One reason may be that many older adults move out of Hudson County to the suburbs, shore or warmer climates for retirement. It is important to note the significant decline in HIV related deaths in both Hudson County and the state between 1990 and 2007. This may be attributable to medicine and public health education as well as a decline in risky behavior.
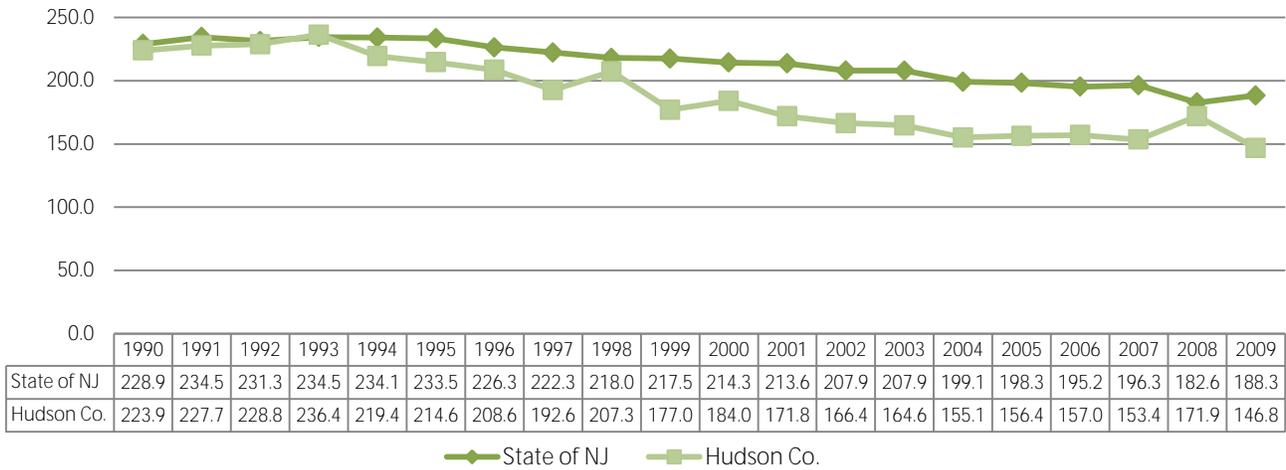
Leading Causes of Death in New Jersey

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Heart Disease	23,504	24,015	23,658	23,157	23,045	23,493	23,724	22,704	22,510	22,043	19,758	20,655	18,725	18,091	18,872	18,283
Cancer	18,532	18,588	18,124	17,910	17,691	18,178	18,073	18,165	17,827	17,957	16,325	17,171	16,317	16,243	16,742	16,396
HIV Infection	2,434	2,543	1,786	1,023	758	913	830	785	762	671	672	604	517	473	446	394
Stroke	4,218	4,332	4,309	4,210	4,088	4,122	4,316	4,007	4,016	3,966	3,784	3,614	3,251	3,230	3,228	3217
Diabetes	2,214	2,457	2,411	2,400	2,325	2,436	2,483	2,556	2,532	2,484	2,599	2,540	2,397	2,276	2,225	1,971
CLRD	2,572	2,639	2,759	2,775	2,669	3,130	3,007	2,911	2,885	2,910	3,034	3,148	2,769	2,913	3,255	3,118

Legend: Heart Disease, Cancer, HIV Infection, Stroke, Diabetes, CLRD

Source: New Jersey Department of Health and Senior Services (http://www4.state.nj.us/dhss-shad/query/result/mort/MortStateICD10/Count.html)

Heart Disease Mortality Rate

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
State of NJ	303.5	301.2	305.2	304.5	296.9	301.6	295.4	287.4	284	281	281.4	267	262.5	255.2	238	236.5	223.1	216	217.8	210
Hudson Co.	326	310.5	312.5	305.4	283.1	299.4	268.1	264.9	261.1	269.4	250.1	239	241	225.7	220.4	217.8	197.9	193.2	197.9	183.3

Legend: State of NJ, Hudson Co.

Source: New Jersey Department of Health and Senior Services

Cancer Mortality Rate

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
State of NJ	228.9	234.5	231.3	234.5	234.1	233.5	226.3	222.3	218.0	217.5	214.3	213.6	207.9	207.9	199.1	198.3	195.2	196.3	182.6	188.3
Hudson Co.	223.9	227.7	228.8	236.4	219.4	214.6	208.6	192.6	207.3	177.0	184.0	171.8	166.4	164.6	155.1	156.4	157.0	153.4	171.9	146.8

— State of NJ   — Hudson Co.

Source: New Jersey Department of Health and Senior Services

HIV Mortality Rate

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
State of NJ	21.1	24.7	26.3	29.1	30.7	31.9	22.3	12.7	9.3	10.9	9.8	9.2	8.9	7.8	7.8	6.9	6.1	5.7	5.2	4.5
Hudson Co.	53	60.3	58.3	67.1	67.6	74.1	46.2	29.6	19.7	19.4	17.9	15.3	19.3	14	13.4	10.3	9.1	10.4	9.3	8.9

— State of NJ   — Hudson Co.
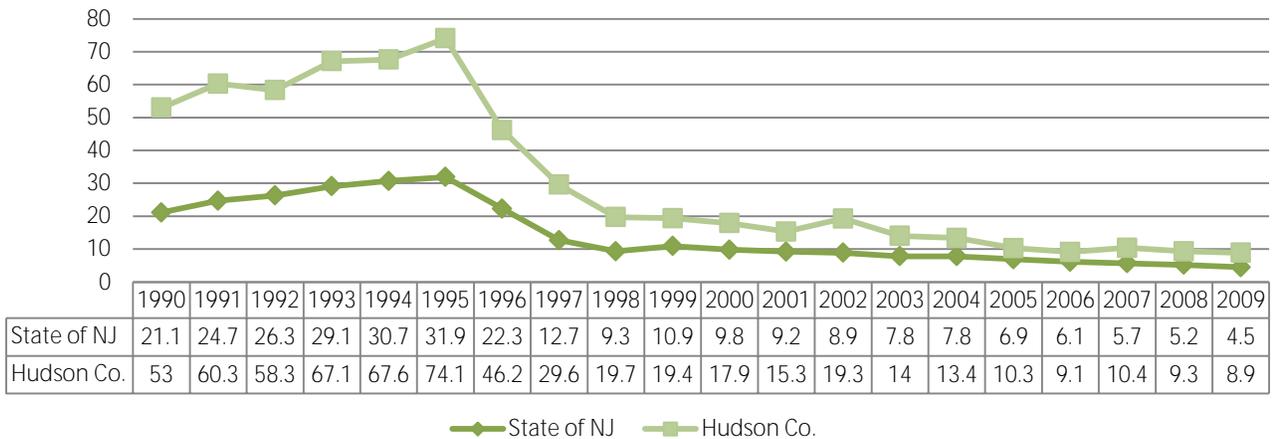
Source: New Jersey Department of Health and Senior Services

Diabetes Mortality Rate

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	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
State of NJ	26.9	25.4	27.3	27.5	28	30.9	30.1	29.8	28.7	29.1	29.4	30.1	29.5	28.8	30.1	29.2	28.4	26.8	25.7	22.6
Hudson Co.	36.2	30.1	28.6	33.9	31.1	33	37.7	34.6	35.2	33.3	33.8	33.6	32.1	36.2	32.9	35	34.8	29.4	33.8	26.8
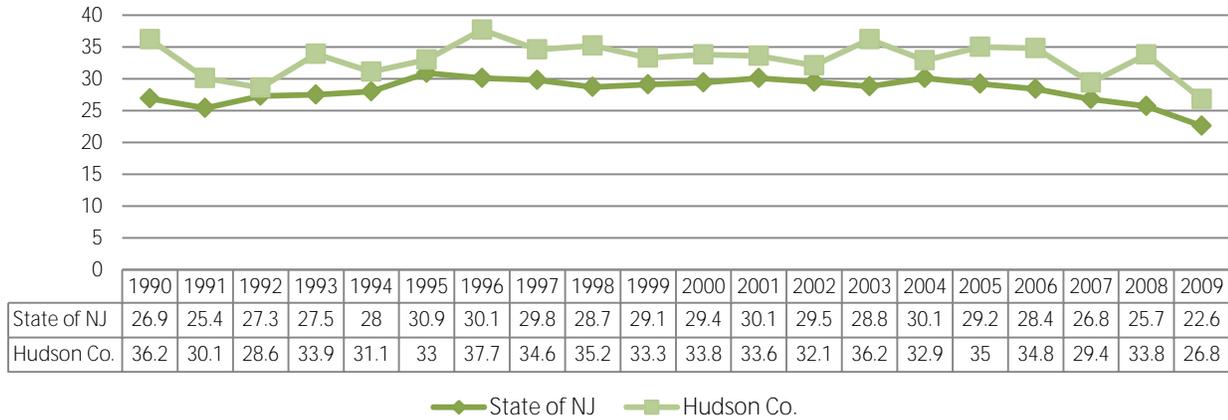
Source: New Jersey Department of Health and Senior Services

CLRD Mortality Rate

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
State of NJ	29.9	30.2	30.2	33.5	32.5	33.1	34.5	34.4	33.3	37.4	35.7	34.2	33.6	33.7	35.1	36.1	32.8	34.4	37.6	35.8
Hudson Co.	29.3	32.2	34.4	32.3	28.4	29.8	30.1	29.8	30	31.8	26.1	29.7	24.8	24.9	28.8	30.5	30.9	26.8	29	28.6

Source: New Jersey Department of Health and Senior Services

Stroke Mortality Rate

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
State of NJ	51.6	52.2	50.4	51.2	53.3	54.4	53.8	52.2	50.4	49.3	51.2	47.1	46.8	45.9	43.8	41.3	38.2	38.6	37.3	36.9
Hudson Co.	46.5	47.5	43.8	49.4	52.4	51.7	48.8	46.2	41.3	34.4	39.1	38.3	35.4	36.2	35.7	37.5	36.5	35.1	29.7	29.7

Source: New Jersey Department of Health and Senior Services

23. Public Assistance Program Participation

What is this?

Public assistance programs in Hudson County are funded by the state and federal governments and administered by the Hudson County Division of Family Services. The objective of public assistance programs is to provide temporary assistance to families or individuals in need. Public assistance is **divided into three categories: Work First New Jersey "WFNJ" or Temporary Assistance to Needy Families "TANF," the Food Stamp program, and General Assistance "GA."**

Why is this important?

Public assistance statistics are a useful indicator to measure the economic and social health of a community. **This information can be used to help gauge a community's standard of living. It can also be a major indicator of employment, progress, and family income in a community.**

How are we doing?

<u>Mixed</u> – Public assistance statistics show that the number of families that participate in the WFNJ/TANF program in both New Jersey and Hudson County significantly decreased between 2000 and 2014. However, the number of households authorized to participate in the Food Stamp Program has been increasing since 2000. The number of individuals collecting General Assistance has increased to a high for Hudson County in 2011, but has been decreasing every year since. These mixed figures may be more related to lifetime limits on some public assistance programs put in place last decade than economic need by needy families in the community.

Number of Applications and Terminations by County and Number of Eligible Families Receiving Work First New Jersey/Temporary Assistance to Needy Families
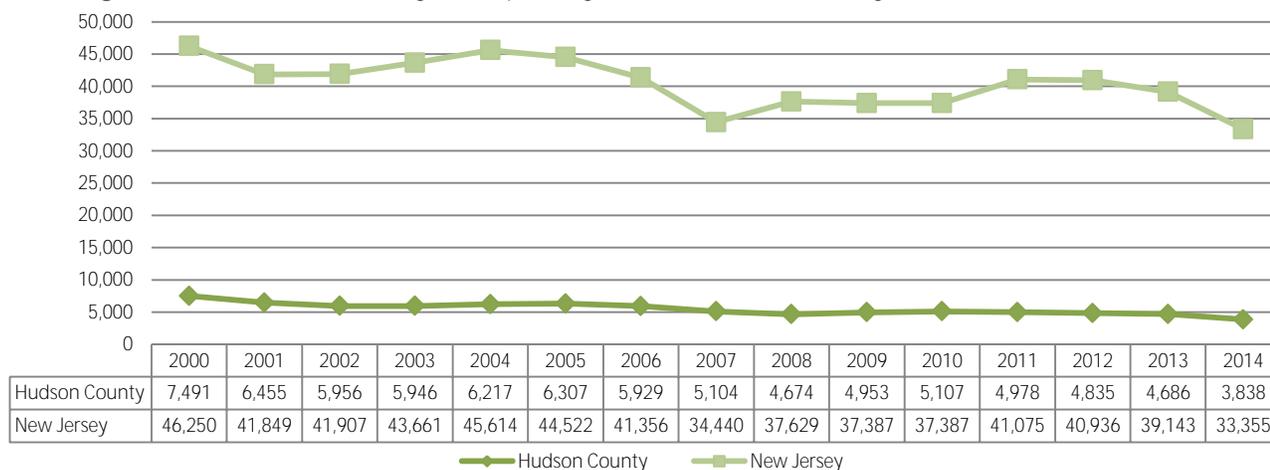
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Hudson County	7,491	6,455	5,956	5,946	6,217	6,307	5,929	5,104	4,674	4,953	5,107	4,978	4,835	4,686	3,838
New Jersey	46,250	41,849	41,907	43,661	45,614	44,522	41,356	34,440	37,629	37,387	37,387	41,075	40,936	39,143	33,355

2012-2014 data is only the month of January. The data used for all years are not the yearly averages. These are the numbers for a specific month from each year, used to give an approximate estimate of the number of people helped each month.
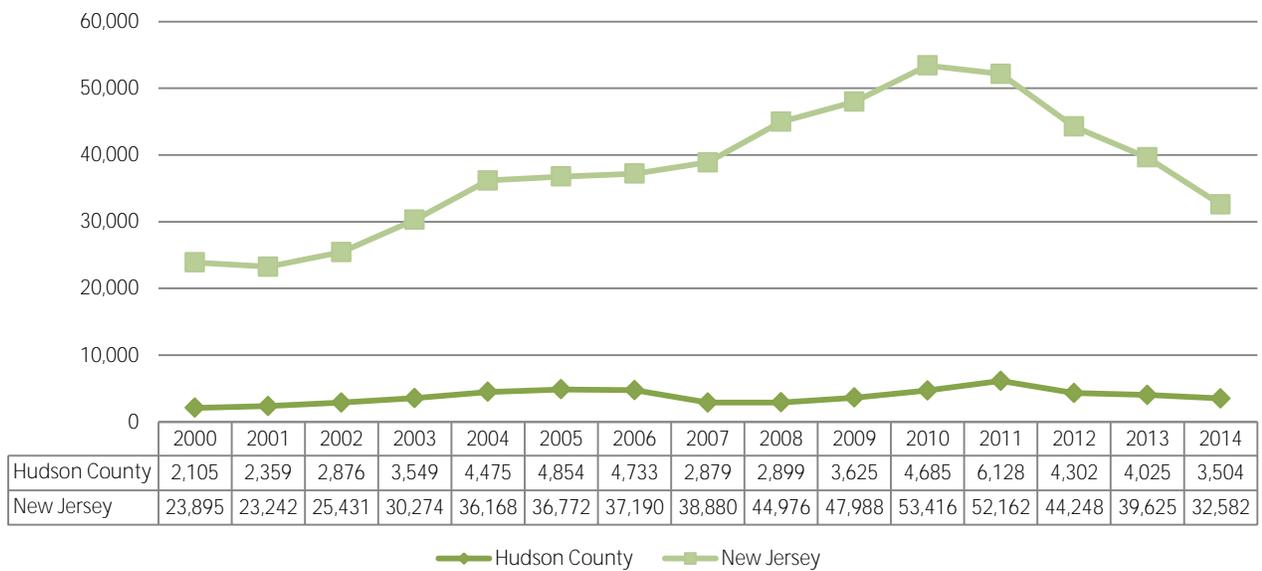*Source: Hudson County Division of Social Services, NJ Department of Human Services: Division of Family Development*

Number of People Authorized to Participate in the Food Stamp Program
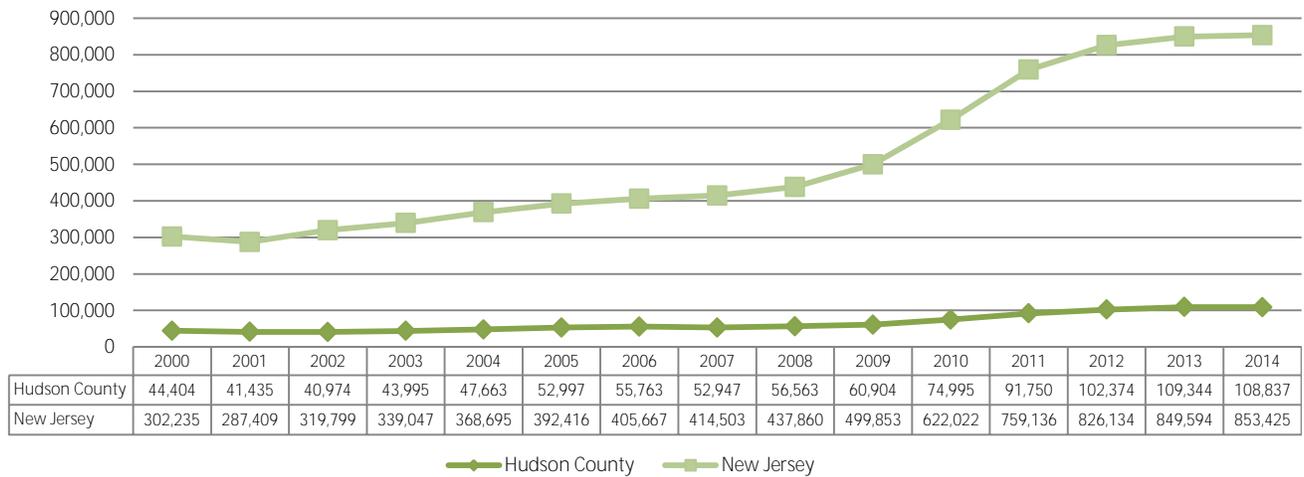
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Hudson County	44,404	41,435	40,974	43,995	47,663	52,997	55,763	52,947	56,563	60,904	74,995	91,750	102,374	109,344	108,837
New Jersey	302,235	287,409	319,799	339,047	368,695	392,416	405,667	414,503	437,860	499,853	622,022	759,136	826,134	849,594	853,425

2012-2014 data is only the month of January. The data used for all years are not the yearly averages. These are the numbers for a specific month from each year, used to give an approximate estimate of the number of people helped each month.
Source: Hudson County Division of Social Services, NJ Department of Human Services: Division of Family Development

Number of People Aided by General Assistance

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Hudson County	2,105	2,359	2,876	3,549	4,475	4,854	4,733	2,879	2,899	3,625	4,685	6,128	4,302	4,025	3,504
New Jersey	23,895	23,242	25,431	30,274	36,168	36,772	37,190	38,880	44,976	47,988	53,416	52,162	44,248	39,625	32,582

2012-2014 data is only the month of January. The data used for all years are not the yearly averages. These are the numbers for a specific month from each year, used to give an approximate estimate of the number of people helped each month.
Source: Hudson County Division of Social Services, NJ Department of Human Services: Division of Family Development

24. School Free lunch/Free milk Program Data

What is this?
The United States established the National School Lunch Program under the National School Lunch Act of 1946. It is a federal program that is designed to award funding to school districts according to the number of students who qualify for the program. In 1998, Congress expanded the National School Lunch Program to include reimbursement for snacks served to children in after-school educational and enrichment programs to include children through 18 years of age.

In order to be eligible for free lunch, a child's combined family income must be below 130% of the poverty level. If the income falls between 130% and 185%, then the child is eligible for reduced lunch at a cost of 40 cents per meal.

Why is this important?
The data is important because it demonstrates how many children or families live in poverty or close to the poverty level in a community. In addition, federal free-lunch data is used as one of the main poverty indicators for school districts and is linked to many other local, state, and federal funding streams.

How are we doing?
Declining – While the number of students who are eligible for free lunch in Hudson County has fluctuated over the decade between 1997 and 2007, they have been increasing every year since 2007. This data demonstrates that the number of children and families living in poverty or near poverty has actually increased over the last decade.

Number of Students Eligible for Free Lunch

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New Jersey	300,540	298,474	294,583	288,214	297,627	285,570	284,950	294,150	295,974	295,971	299,436	305,038	329,638	358,912	373,337	399,102	428,447
Hudson County	43,446	42,883	43,109	41,248	42,594	41,364	42,594	43,186	44,205	44,215	42,416	43,016	44,822	44,825	46,490	48,481	50,807

■ Hudson County ■ New Jersey

Source: New Jersey Department of Education, (http://www.nj.gov/njded/data/)
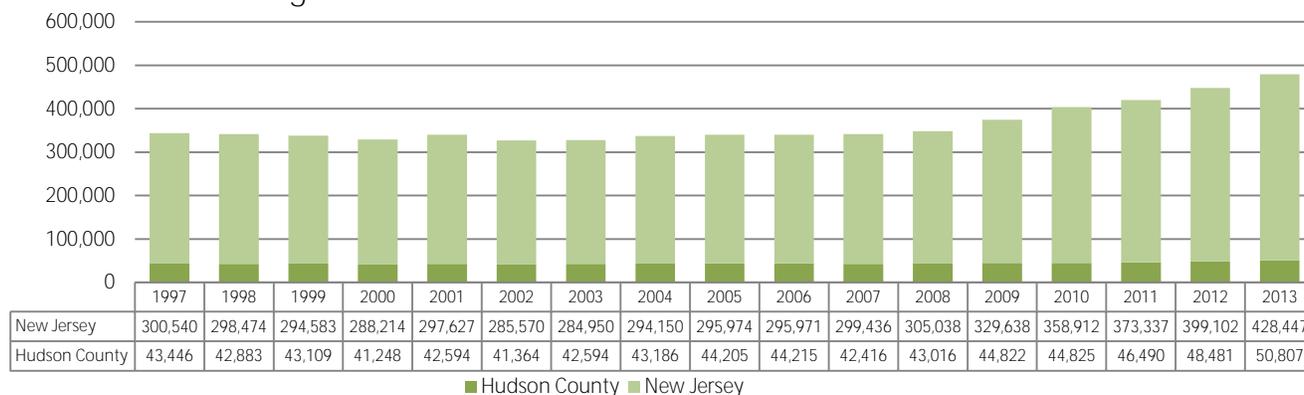
25. Teenage Pregnancy Data

What is this?

Teenage Pregnancy is a pregnancy that occurs when a female is still an adolescent. Adolescence is defined as the phase in life when an individual has reached puberty and through age 19.

Why is this important?

This is an important issue because "teen pregnancy is closely linked to a host of other critical social issues — welfare dependency and overall child well-being, out-of-wedlock births, responsible fatherhood, and workforce development in particular."[1] Statistics show that once a teenager has a child, their future prospects may decline. Many don't graduate from high school and only 1.5% earn a college degree by the age of 30.[2]

How are we doing?

Improving – The number of teenage pregnancies has declined for both Hudson County and the State of New Jersey. Teenage pregnancy fell from over one thousand per year in the early 1990s to just over 300 in 2012 (the most recent figures available). This is probably attributable to better education and methods of prevention.

Hudson County Teenage Pregnancies Among 15-19 Year-olds

Year	Value
1990	1041
1991	1090
1992	983
1993	974
1994	1091
1995	980
1996	950
1997	954
1998	976
1999	889
2000	844
2001	714
2002	698
2003	662
2004	660
2005	428
2006	285
2007	340
2008	283
2009	600
2010	451
2011	267
2012	304

Note: 2005-2012 data is from ACS 1-year estimates that tend to have a high margin of error
Source: New Jersey Department of Health and Senior Services, (http://www.state.nj.us/health/index.shtml), United States Census Bureau American Community Survey

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[1] Teenpregnancy.org; http://www.teenpregnancy.org/resources/data/pdf/notjust.pdf
[2] Teenpregnancy.org; http://www.teenpregnancy.org/whycare/sowhat.asp

26. Transportation – Traffic

What is this?

The New Jersey Department of Transportation maintains records and makes estimates about the **total amount of daily traffic on New Jersey's public roadway system down to the county level. New** Jersey's official estimate of vehicle miles traveled (VMT) is a product of the Highway Performance Monitoring System (HPMS) Program. VMT is a measurement of the amount of traffic on a given mile of roadway. The total amount of vehicle miles travelled (VMT) is essentially an estimate of the daily amount of traffic encountered on all public roadways. It is one aggregated measure of traffic congestion.

Why is this important?

Traffic Congestion has many negative consequences including delays (i.e. the "opportunity cost" for wasted time and productivity of local residents and businesses), wasted fuel spent idling, wear and tear on vehicles, frustrated motorists, and degradation of local air quality (i.e. air pollution). A **general goal of the 2010 Hudson County CEDS Plan is to** "Improve all aspects of the transportation **system to facilitate the flow of goods and people;" "Invest in infrastructure systems and technology to continue economic growth, new development, redevelopment, and the quality of life."**

How are we doing?

Declining -   Hudson County is following state and national trends in traffic congestion. Between 1990 and 2007, the average vehicle miles travelled in Hudson County increased by more than 750,000 miles per year but a decrease in vehicle miles travelled was seen by both the County and State in 2008 and the number of VMT has more or less been stable since then.

Traffic – Total Vehicle Miles Travelled (VMT)

Source: New Jersey Department of Transportation (http://www.state.nj.us/transportation/refdata/roadway/vmt.shtm)
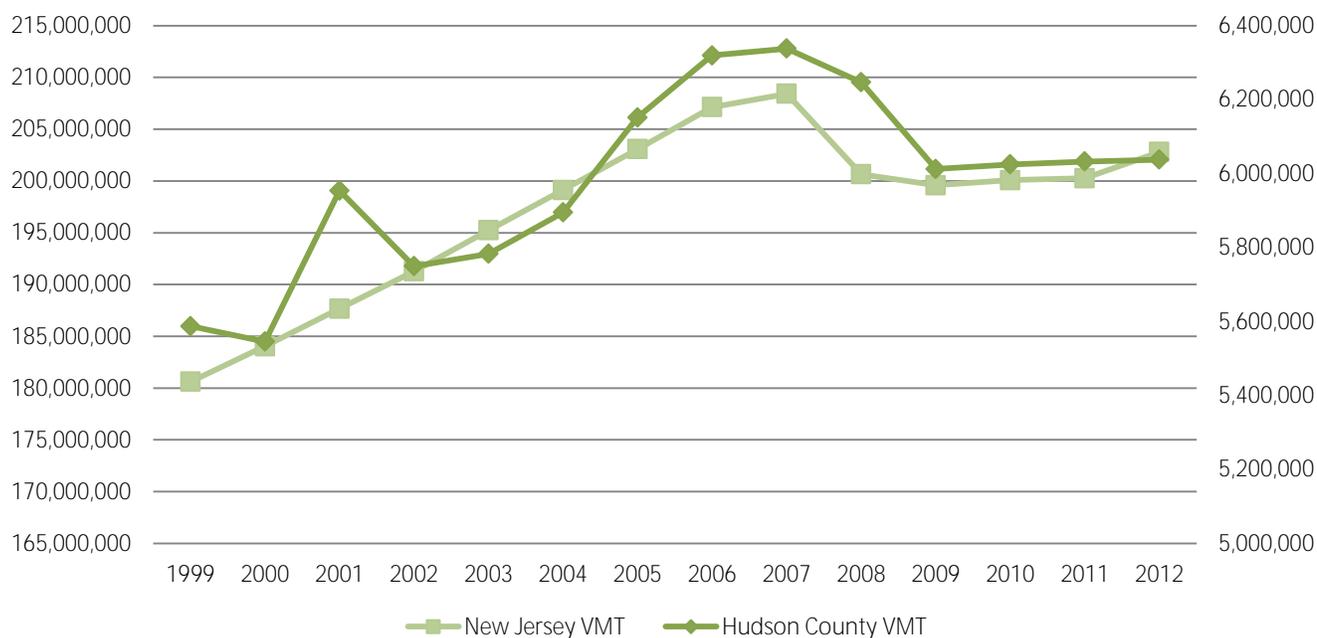
Photo: Traffic entering and exiting the Lincoln Tunnel located in Weehawken.

Bayonne Bridge Total Annual Trips, Southbound Only (in thousands)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Truck	243.0	281.9	319.3	357.2	316.8	366.3	392.9	409.7	371.2	341.1	316.0	327.0	306.0	285.0	258.1
Bus	35.7	31.3	32.8	37.0	35.0	40.3	43.9	38.9	35.2	39.3	35.0	31.0	26.0	24.0	22.2
Auto	2,776.1	2,970.1	3,204.0	3,443.0	3,333.6	3,408.8	3,412.7	3,764.8	3,578.9	3,366.1	3,162.0	3,186.0	3,205.0	3,189.0	3,160.1

■ Auto ■ Bus ■ Truck
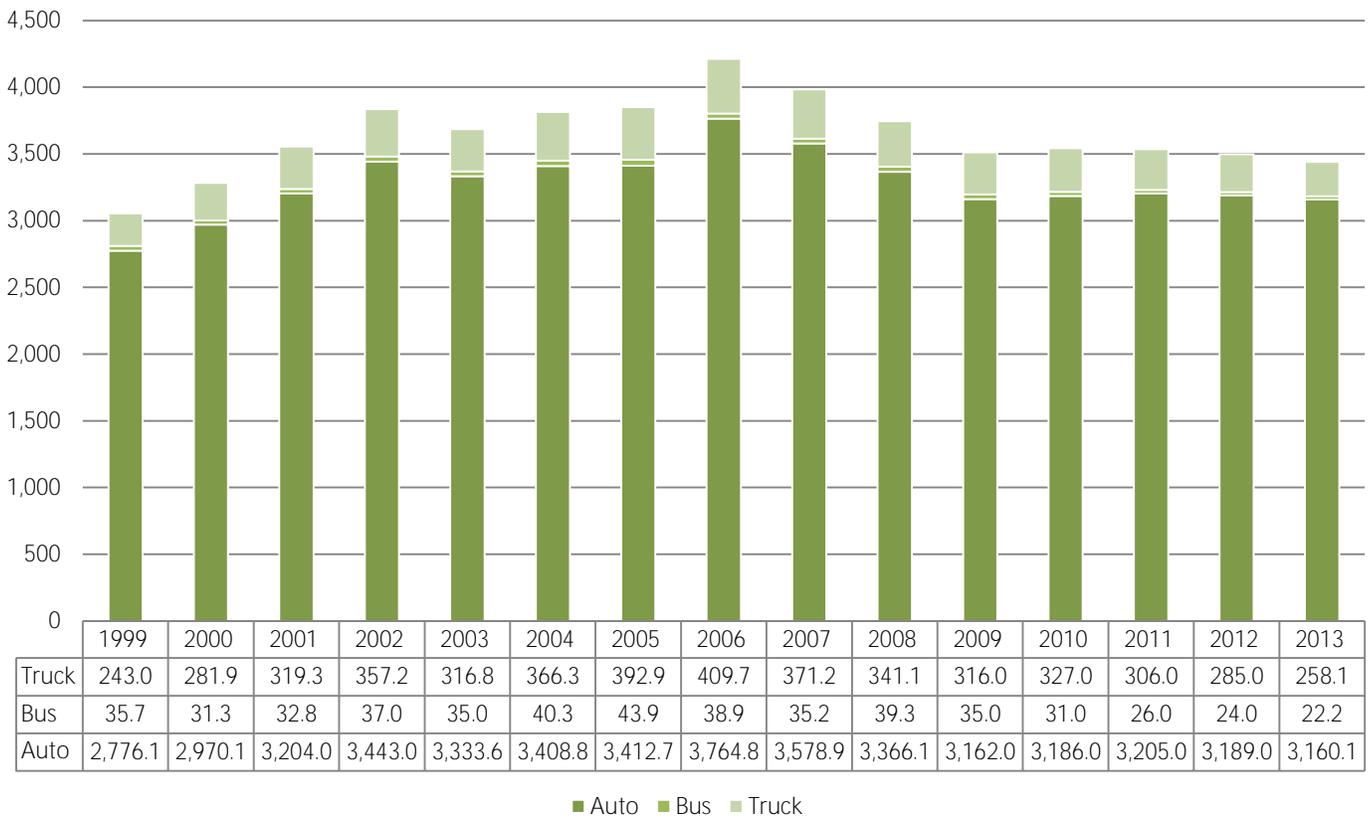
Source: Port Authority of New York & New Jersey

Holland Tunnel Total Annual Trips, Eastbound Only (in thousands)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Truck	1,064.6	1,055.4	704.2	324.0	544.1	388.9	100.6	94.6	97.7	96.9	86.0	312.0	354.0	395.0	427.4
Bus	118.7	114.6	137.9	213.4	231.7	220.6	237.9	244.0	245.0	252.7	254.0	265.0	268.0	234.0	219.6
Auto	16,225.0	16,627.5	13,774.1	15,227.3	15,790.1	16,353.4	16,643.0	17,026.2	17,018.9	16,520.9	16,269.0	16,460.0	15,968.0	15,489.0	15,510.6

■ Auto ■ Bus ■ Truck
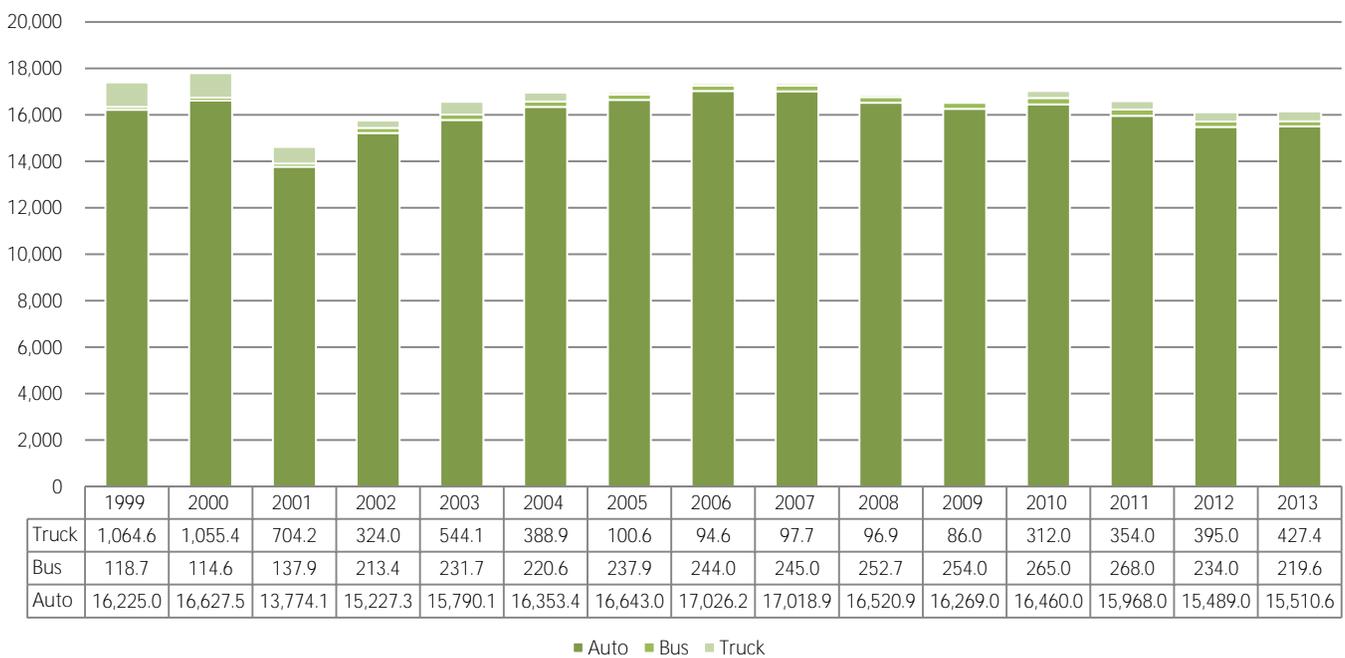
Source: Port Authority of New York & New Jersey

Lincoln Tunnel Total Annual Trips, Eastbound Only (in thousands)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Truck	888.1	954.5	971.4	1,139.4	985.3	1,141.1	1,380.6	1,383.0	1,440.3	1,413.2	1,241.0	1,041.0	1,029.0	1,000.0	1,038.0
Bus	1,984.0	1,922.4	1,991.5	2,042.1	1,972.7	2,051.5	2,061.7	2,069.4	2,091.1	2,121.9	2,128.0	2,139.0	2,156.0	2,106.0	2,127.8
Auto	18,604.4	19,127.6	18,023.9	17,750.0	18,120.5	18,540.9	18,352.0	18,480.5	19,323.9	17,402.	16,879.	17,034.	16,644.	15,909.0	15,580.1

■ Auto   ■ Bus   ■ Truck

Source: Port Authority of New York & New Jersey

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27. Transportation – Motor Vehicle Accidents

What is this?

The New Jersey State Police maintains information and statistics on motor vehicle accidents including the location of crashes as well as the number of injuries and/or fatalities. Goals of the 2010 **Hudson County CEDS Plan include "Facilitate the flow of goods and people;" "Invest in** infrastructure systems and technology to continue economic growth, new development, redevelopment, and the **quality of life."**

Why is this important?

A primary goal of all government is to protect the health, safety and well-being of its citizens. This is achieved by providing a safe and efficient roadway network and transportation system. It is also dependent upon vigorous enforcement of motor vehicle laws by state and local authorities.

How are we doing?

Improving –   According to the measurements below, the number of motor vehicle fatalities in Hudson County is generally decreasing. There may be multiple reasons for improvement including better design and maintenance of local roads and highways, stricter enforcement of motor vehicle laws, and generally safer vehicles. The chart and graph below shows motor vehicle accidents involving fatalities which, while fluctuating between 1998 and 2013, showed an overall decline.

Motor Vehicle Fatalities in Hudson County and Statewide

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Hudson County	32	35	35	25	23	28	19	37	30	26	27	22	25	25	25	15
New Jersey	741	725	723	740	771	735	723	748	770	724	590	584	556	627	589	545

━◆━ Hudson County   ━■━ New Jersey

Source: New Jersey State Police (http://www.njsp.org/info/stats.html)

28. Transportation – Pedestrian Fatalities

What is this?

The New Jersey State Police maintains information and statistics on pedestrian fatalities for the state and by county. A general goal of the 2010 Hudson County CEDS Plan is to "Improve the quality of life". Another goal is to improve Hudson County's overall transportation system.

Why is this important?

A primary goal of all government is to protect the health, safety and well-being of its citizens. This is achieved by providing a safe and efficient roadway network and transportation system. It is also dependent upon vigorous enforcement of motor vehicle laws by state and local authorities.

How are we doing?

Improving – While pedestrian fatalities have fluctuated over the past decade, the County experienced a steady decline since 2010. The 2013 numbers are the lowest, and in comparison with the state's 20 other counties—whose total fatalities average to 6.3—it is comparable. In order to ensure a continued decline in pedestrian fatalities, local officials and the general public must work toward improving awareness of pedestrians, enforcement of traffic laws, as well as better design of pedestrian facilities.

Pedestrian Fatalities in Hudson County and Statewide

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
State of NJ	177	157	155	191	148	167	171	178	162	138	157	141	143	163	133
Hudson Co.	19	10	10	9	15	5	13	5	11	6	12	14	11	9	6

State of NJ   Hudson Co.

Source: New Jersey State Police (http://www.njsp.org/info/stats.html)
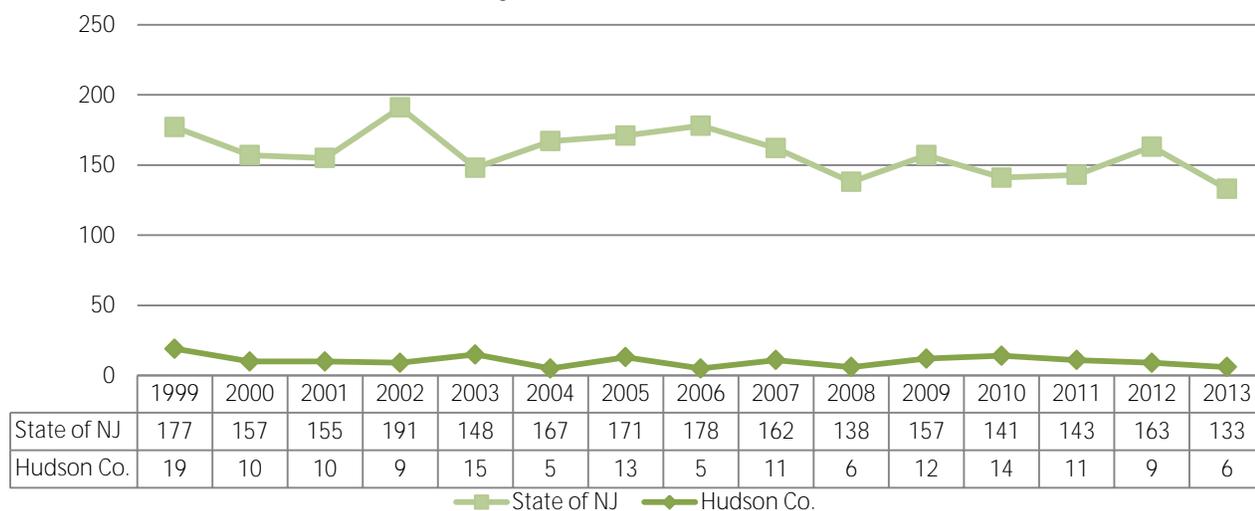
29. Transportation – Mass Transit Ridership

What is this?

Since N.J. Transit opened the Hudson Bergen Light Rail system to the general public on April 22, 2000 detailed statistics have been kept on ridership. A general goal of the Hudson County CEDS **Plan is to** "Improve all aspects of the transportation system to facilitate the flow of goods and **people."**

Why is this important?

Mass transit provides a safe, reliable and efficient means of transportation which generally reduces traffic congestion and improves air pollution. Mass transit also improves access and mobility in congested urban areas where parking and automobile use may not be feasible.

How are we doing?

Improving –   Since the Hudson Bergen Light Rail Transit system began operations in 2000 the ridership has grown exponentially. The system serves tens of thousands of residents and workers on a daily basis, has mitigated traffic congestion along the Hudson River waterfront, and has generally helped spur economic development in Hudson County.

Hudson Bergen Light Rail – Average Daily Ridership
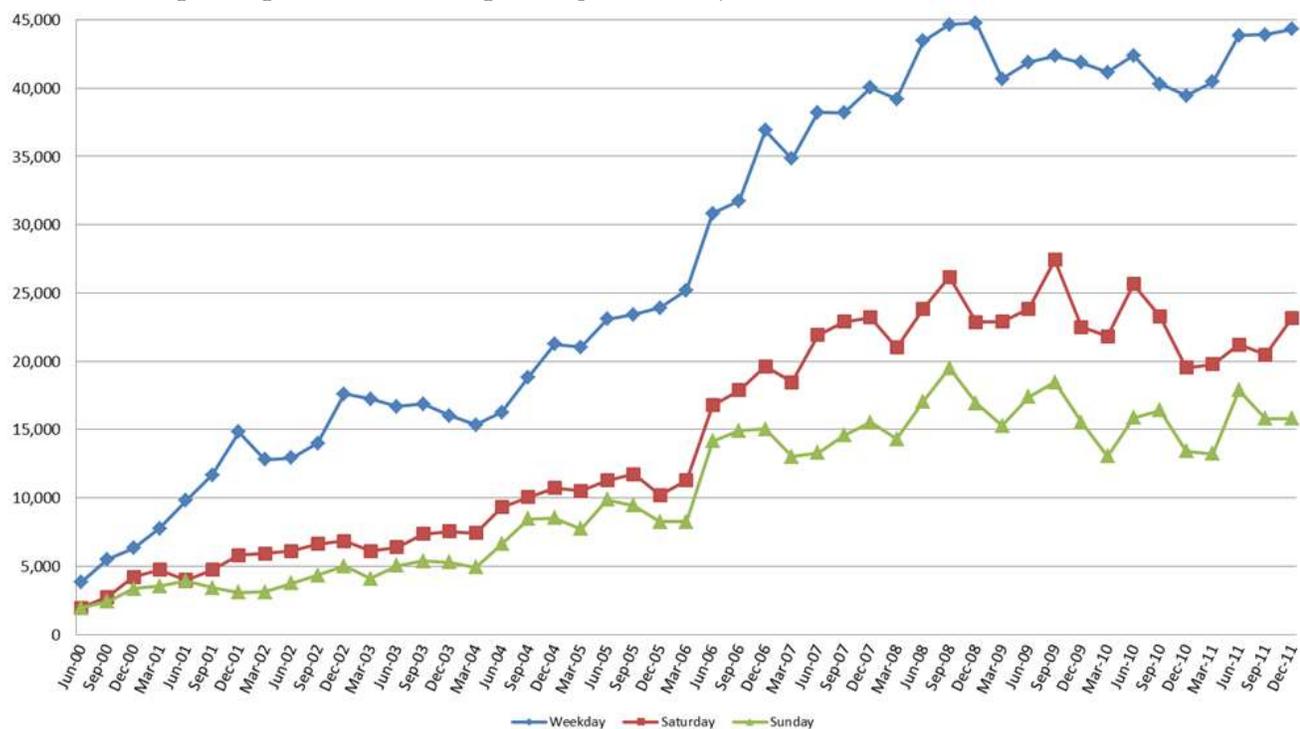
Source: New Jersey Transit Corp.

Hudson Bergen Light Rail – Average Annual Ridership

Year	Annual Ridership
2000	5,204
2001	11,008
2002	14,327
2003	16,698
2004	17,926
2005	22,856
2006	31,163
2007	37,813
2008	43,015
2009	41,694
2010	40,825
2011	43,128
2012	43,950
2013	42,350
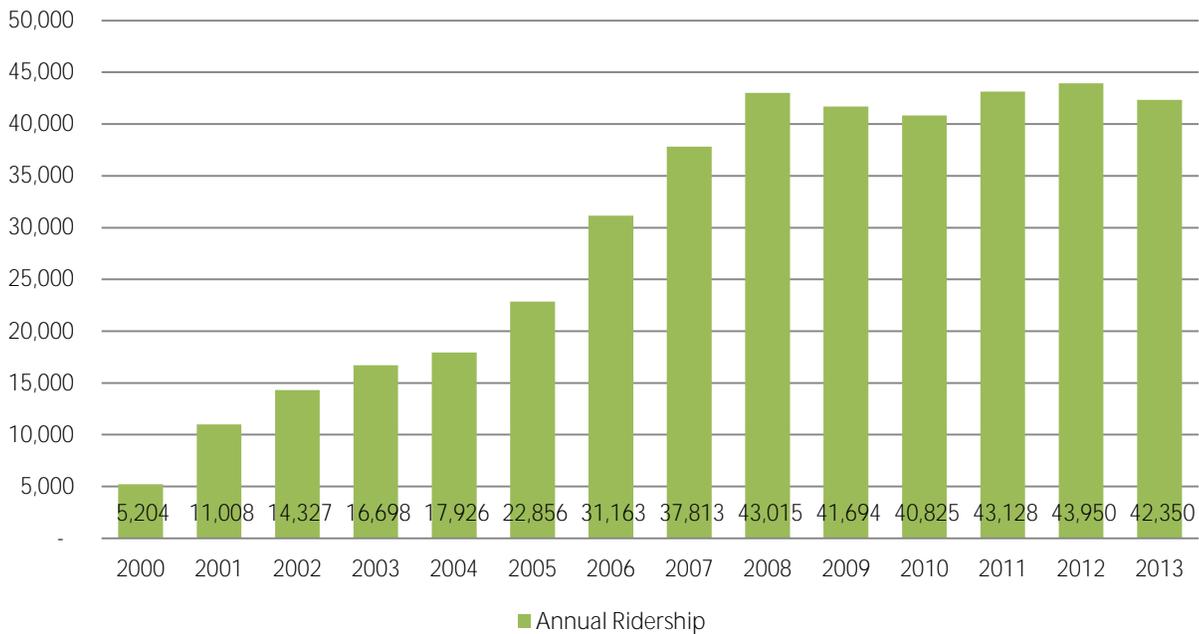
Source: New Jersey Transit Corp.

Light Rail ridership has increased by 6.3% above the 1st quarter of last year. However, total ridership is down 0.2% over the last 12 months. Service was extended in January to the new 8th Street station in Bayonne. The overall impact of the 8th street opening has been positive, as 1st quarter weekday boardings at 4 Bayonne HBLR stations were up by 10% from last year.
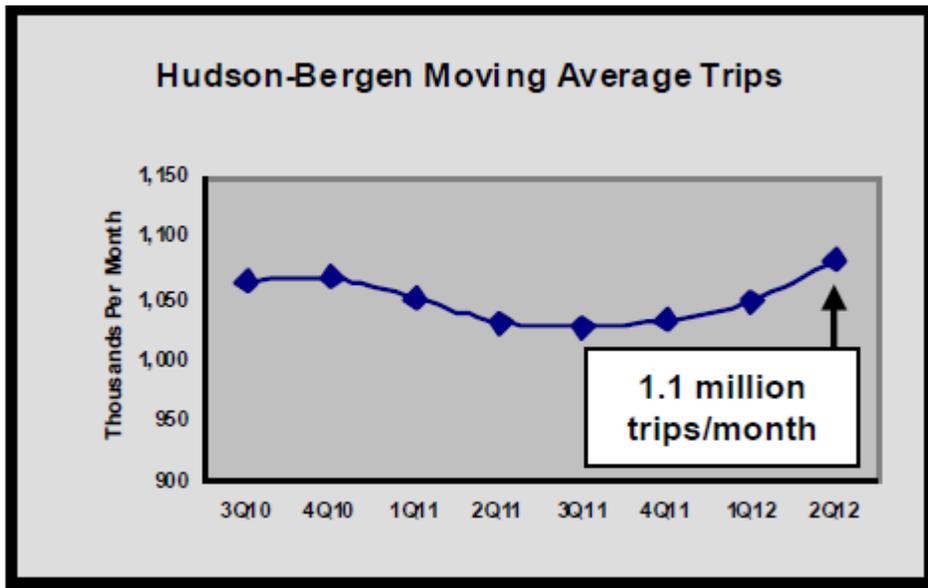
Source: New Jersey Transit Corp.
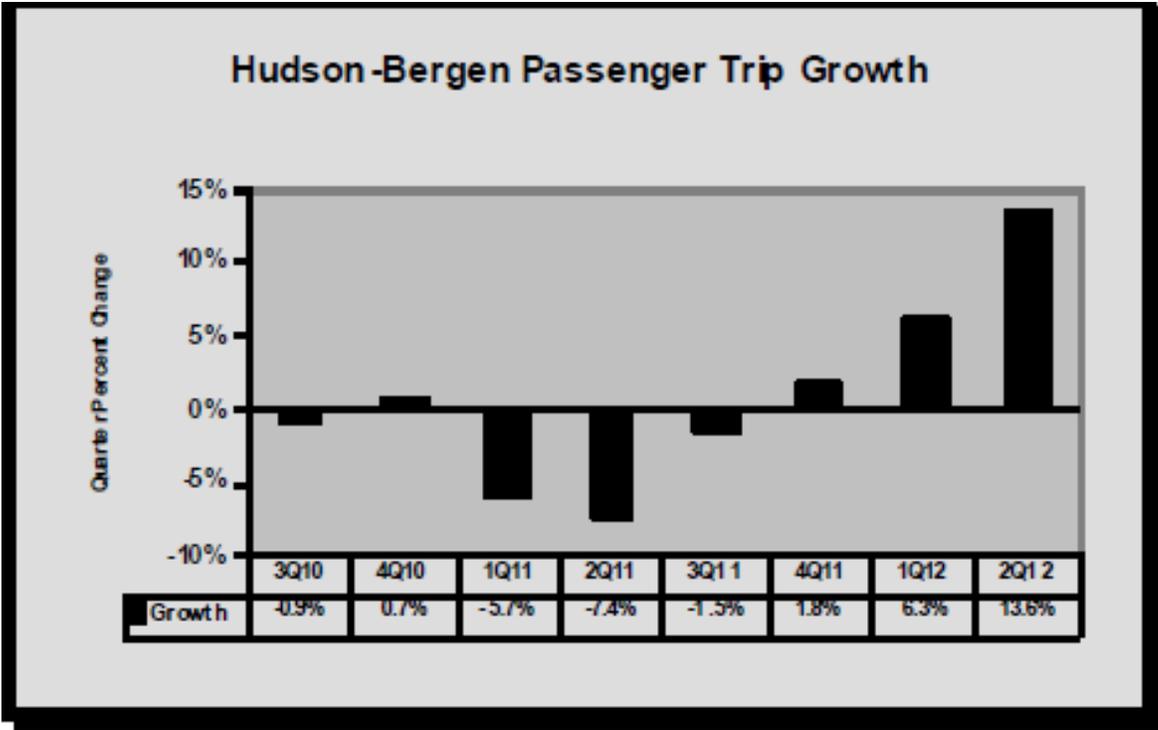
Source: New Jersey Transit Corp.

Hudson Bergen Light Rail – Average Weekday Ridership

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
North Bergen	0	0	0	0	0	608	873	995	1,071	1,019	1,015	1,081	1,076
Union City	0	0	0	0	0	1,413	2,125	2,641	2,872	2,899	2,831	3,069	2,886
Weehawken	0	0	0	0	305	908	1439	1674	1718	1650	1622	1754	1,679
Hoboken	0	0	1931	2391	4526	5955	7599	8428	9181	8738	8528	8,519	8,109
Jersey City	5966	11227	12758	11790	13560	14098	19576	22232	23540	23050	22397	24043	23,268
Bayonne	1384	1823	1711	1919	2659	2868	3788	4130	4618	4544	4607	5,484	5,332

Source: New Jersey Transit Corp.

Photo: The Hudson Bergen Light Rail near Exchange Place in Jersey City.

Port Authority Trans-Hudson (PATH) – Average Weekday Trips by Hudson County Station

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
HOBOKEN	36,791	34,637	24,782	21,919	24,935	26,105	27,670	28,357	28,959	27,688	27,491	28,374	24,232	24,502
PAVONIA	12,841	14,574	14,118	12,475	13,216	13,844	15,056	16,318	17,413	17,353	17,910	18,523	18,653	19,146
EXCHANGE PL	14,661	10,923	0	6,066	10,756	12,537	15,512	17,593	18,154	16,911	17,208	17,539	15,629	16,085
GROVE ST.	12,417	14,559	16,466	12,273	10,429	10,266	11,473	12,070	13,849	14,096	14,652	15,578	15,677	16,136
JOURNAL SQ	26,877	25,719	20,579	20,604	21,655	20,464	23,671	25,822	26,869	25,831	26,240	27,017	26,199	26,006
HARRISON	6,148	5,867	4,706	4,532	5,216	5,301	6,216	6,511	6,412	6,083	6,409	6,965	6,912	7,069

■ HARRISON ■ JOURNAL SQ ■ GROVE ST. ■ EXCHANGE PL ■ PAVONIA ■ HOBOKEN

Source: The Port Authority of New York and New Jersey, PATH Corp.

Port Authority Trans-Hudson (PATH) – Annual Ridership by County Station

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
HOBOKEN	10,389,21	9,784,074	7,272,241	6,517,632	7,426,916	7,538,511	8,094,339	8,316,973	8,540,466	8,206,242	8,244,679	8,494,892	7,279,87	7,350,930
PAVONIA	3,991,739	4,407,555	4,246,388	3,800,403	4,066,254	4,249,703	4,581,347	4,970,068	5,303,357	5,271,075	5,459,508	5,652,292	5,682,53	5,778,859
EXCHANGE PL	3,918,940	2,878,023	0	823,760	2,921,090	3,415,970	4,225,116	4,801,775	4,987,698	4,652,912	4,752,008	4,854,277	4,351,42	4,399,150
GROVE ST.	3,722,082	4,262,681	4,711,087	3,625,073	3,160,823	3,089,563	3,453,467	3,648,152	4,209,812	4,279,500	4,483,255	4,761,931	4,829,72	4,939,914
JOURNAL SQ	8,176,691	7,775,364	6,262,289	6,319,128	6,680,820	6,216,700	7,264,560	7,961,260	8,298,916	8,003,138	8,175,046	8,390,654	8,150,02	8,036,265
HARRISON	1,758,006	1,680,313	1,369,842	1,307,753	1,514,284	1,497,617	1,796,489	1,892,927	1,872,037	1,773,669	1,919,128	2,070,783	2,063,61	2,086,898

■ HARRISON ■ JOURNAL SQ ■ GROVE ST. ■ EXCHANGE PL ■ PAVONIA ■ HOBOKEN

Source: The Port Authority of New York and New Jersey, PATH Corp.

New York Interstate Bus Routes
1st Quarter Fiscal Year 2012
14.0 million passenger trips
+0.1% ridership increase

Bergen-Passaic-Hudson Routes
10.2 million passenger trips
(- 0.2%) ridership decrease

GWB Bridge Routes
0.8 million passenger trips
+3.3% ridership increase

Essex-Union-No. Middlesex Routes
1.7 million passenger trips
+2.4% ridership increase

New York City

Lower Manhattan Routes
>0.1 million passenger trips
(- 8.7%) ridership decrease

So. Middlesex-Monmouth-Ocean Routes
1.3 million passenger trips
(- 2.5%) ridership decrease

Hudson County Intrastate Bus Routes
1st Quarter Fiscal Year 2012
2.6 million passenger trips
+1.7% ridership increase

GREEN = ridership increase
RED = ridership decrease

Route data are combined where two or more routes operate over a segment and are indicated as ===.
Does not represent exact routings between nodes.
Additional service in other route groups may operate between some nodes shown.

Hackensack

83

North Bergen

84,86

Secaucus

85

89

329

Harmon Cove

Union City

83, 84, 85, 86

JERSEY CITY

85, 87

Hoboken

Newark

86

Newport

43

80, 81, 82

6, 80, 81, 87

Exchange Place

Greenville

81

Bayonne
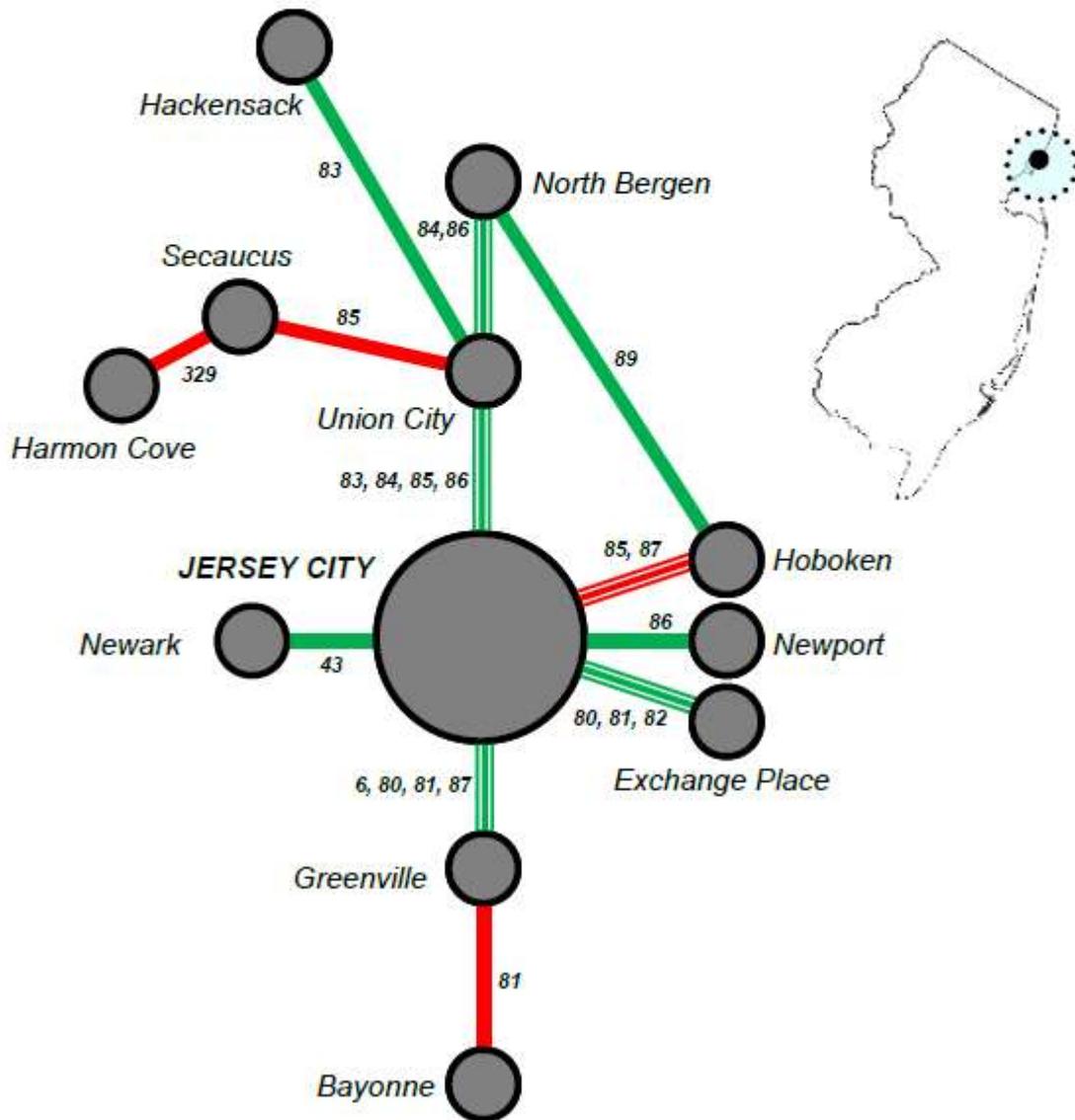
Source: New Jersey Transit Corp.

30. Transportation – Commuter Trends

What is this?

The U.S. Census Bureau includes questions in its annual American Community Survey regarding commuting patterns for individuals ages 16 and above. Commuting statistics look at methods of getting to work and do not include leisure or other travel.

Why is this important?

Commuter trends statistics are heavily considered in local as well as regional transportation planning efforts. This data provides guidance for general improvements, plans for expansion, and investments in transportation infrastructure. Hudson County's proximity to New York City and Newark makes commuting data particularly significant, as they indicate whether or not the number of Hudson County residents making outside-of-county commutes is increasing, potentially allowing for planning efforts with other local government bodies.

How are we doing?

Steady - The number of Hudson County workers employed both inside and outside of the county has remained relatively constant since 2005, with slight growth in both figures. The 2012 ACS data demonstrate that over 75% of the country's commuters drove to work alone[3]. The County, in comparison, has consistently had less than half of its residents commuting to work alone.

Hudson County Workers Employed Outside of County
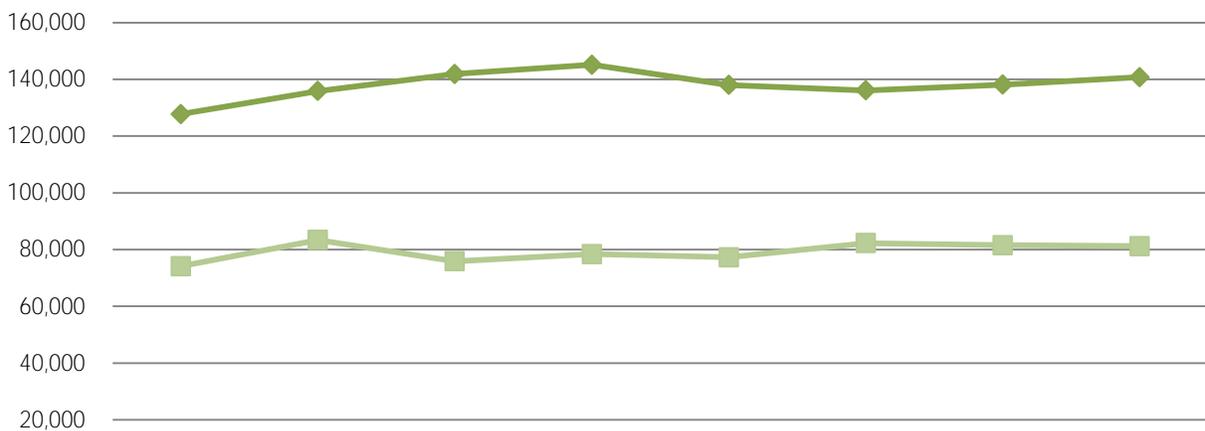
	2005	2006	2007	2008	2009	2010	2011	2012
Inside County	127,745	135,902	141,874	145,149	138,008	136,085	138,105	140,766
Outside County	74,172	83,400	75,894	78,389	77,281	82,297	81,550	81,235

—◆—Inside County   —■—Outside County

Source: U.S. Census Bureau

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[3] U.S. Census Bureau. *Commuting in the United States: 2009.* September 2011.Web. http://www.census.gov/prod/2011pubs/ acs-15.pdf. Accessed 10 July 2013.

Commuting Patterns among County Residents

Year	Car, truck, or van (drove alone)	Car, truck, or van (carpooled)	Public transportation (excluding taxicab)
2005*	117,929	25,032	105,827
2006*	122,356	22,667	109,394
2007	119,798	27,860	114,693
2008	124,289	28,427	117,556
2009	122,851	23,698	114,383
2010	121,367	25,051	122,988
2011	121,795	25,463	128,003
2012	128,757	22,537	129,548

■ Car, truck, or van (drove alone)   ■ Car, truck, or van (carpooled)   ■ Public transportation (excluding taxicab)

Source: United States Census Bureau American Community Survey
before 2007, all numbers ate from annual ACS Datasets, i.e., not estimates based on intervals

31. Voter Registration & General Election Turnout

What is this?
Voter registration is the total number of registered voters within a community. Voter turnout is the total number of ballots cast in a general election.

Why is this important?
Voting is the right of all citizens in a democracy. Voter turnout is one measurement of civic involvement and may be used to gauge local interest and participation in community events.

How are we doing?
Mixed – Hudson County's voter turnout for the 2012 general election was the largest since the 2008 election. Almost 200,000 citizens in Hudson County cast votes in November 2012, almost as high as the number of voters who cast ballots in 2008, both presidential election years, which draw greater voter turnouts than other years. As the number of registered voters increases (from 226,000 in 1990 to 351,620 in 2013), the percentage of those who cast ballots has remained on par with that of other general election years. In the 2013 general election, voter turnout in both Hudson County and New Jersey was typical of non-presidential election years, despite the fact that New Jersey's governor was up for election. However, turnout for the general election in 2013 may have been affected by the unusual special election three weeks before the general election to fill the vacancy left by the death of Senator Frank Lautenberg.

Hudson County Voter Registration and General Election Turnout

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Registered Voters	277,048	279,129	284,024	267,819	304,424	308,903	289,037	310,131	351,491	307,442	311,481	317,264	341,253	351,620
Ballots Cast	172,831	126,646	105,583	74,841	192,176	117,651	120,081	59,913	200,264	120,017	96,134	64,668	199,061	106,018
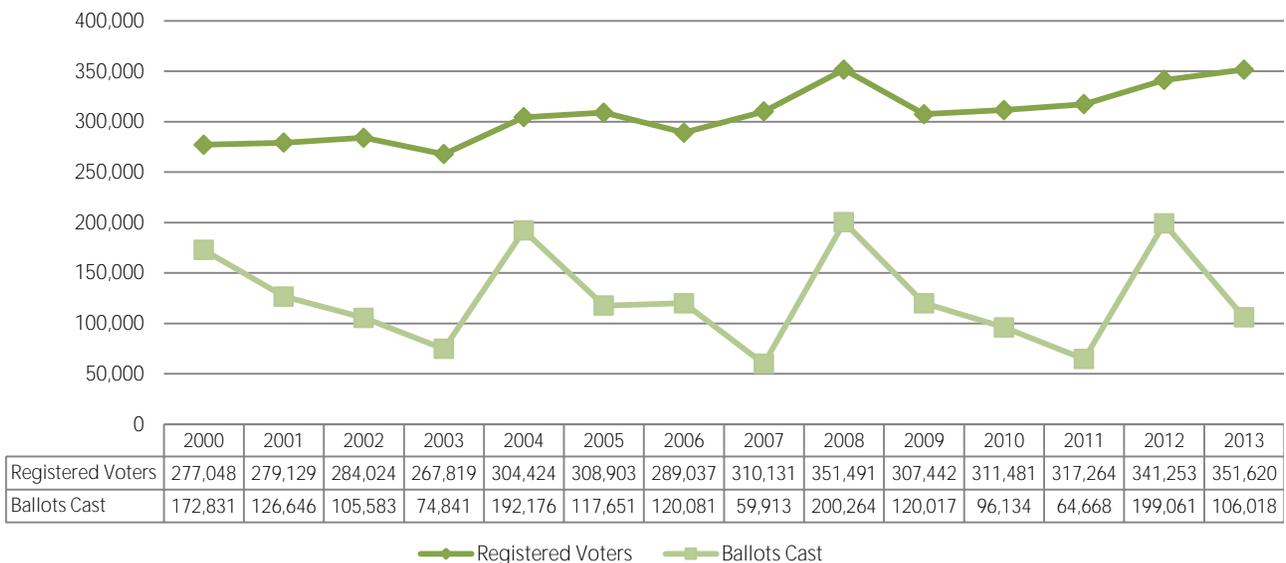
Source: Hudson County Clerk (Statements of Canvass 1990-2011) (http://www.hudsoncountyclerk.org/default.htm), New Jersey Division of Elections,(http://www.state.nj.us/oag/elections/)

General Election Voter Turnout Rates in Hudson County and Statewide

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Hudson County	62	45	37	28	63	39	23	19	57	39	31	20	58	30
State of NJ	70	49	46	34	73	49	42	32	73	45	42	27	67	40

■ Hudson County ◆ State of NJ
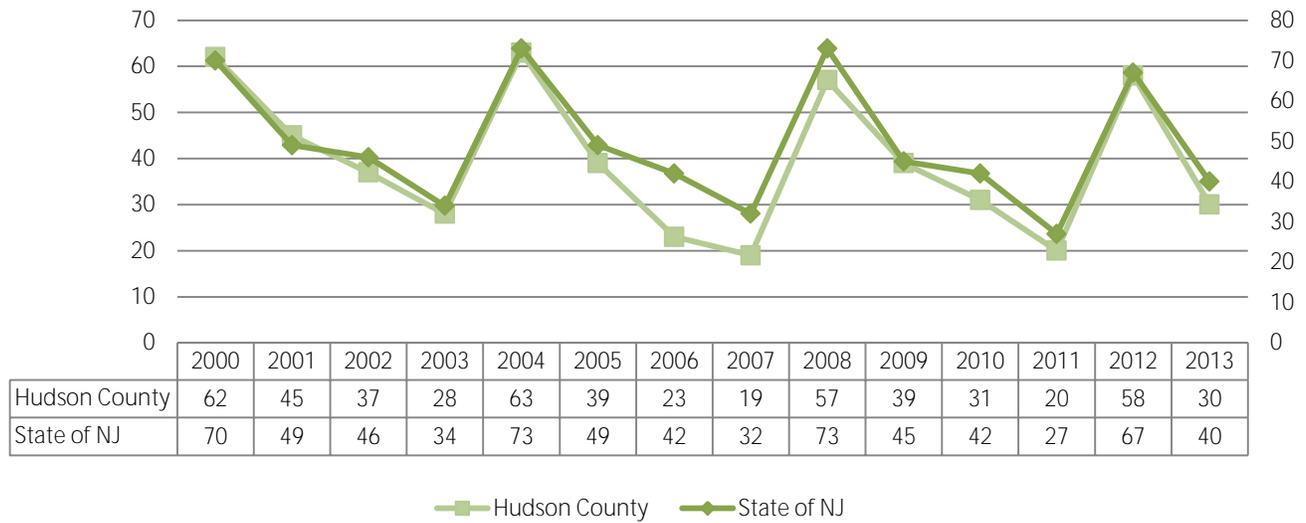
Source: New Jersey Division of Elections,(http://www.state.nj.us/oag/elections/)

Hudson County Voter Participation				State of New Jersey
Year	Registered Voters	Ballots Cast	Turnout Percentage	Turnout Percentage
1990	226,074	103,922	46	54
1991	218,563	96,952	44	51
1992	237,996	187,944	79	83
1993	231,453	139,673	60	65
1994	224,192	107,613	48	55
1995	224,417	93,587	39	38
1996	253,532	170,915	42	72
1997	262,998	137,195	52	56
1998	268,125	93,534	35	72
1999	256,732	64,421	25	31
2000	277,048	172,831	62	70
2001	279,129	126,646	45	49
2002	284,024	105,583	37	46
2003	267,819	74,841	28	34
2004	304,424	192,176	63	73
2005	308,903	117,651	39	49
2006	289,037	120,081	23	42
2007	310,131	59,913	19	32
2008	351,491	200,264	57	73
2009	307,442	120,017	39	45
2010	311,481	96,134	31	42
2011	317,264	64,668	20	27
2012	241,253	199,061	58	67
2013	351,620	106,018	30	40

Source: - New Jersey Division of Elections,(http://www.state.nj.us/oag/elections/)

Photo: The Hackensack River between Jersey City and Kearny.

D. Environmental Indicators

Goal: To renovate, safeguard, and make use of our natural resources in a manner that will guarantee enduring benefits for our generation and all those that follow.

What indicators are included?
32. Air Quality Data
33. Brownfield Data
34. Land Use and Land Cover Data
35. Parks & Open Space Data
36. Recycling Data
37. Solid Waste Data
38. Water Quality Data
39. Climate Change
40. Greenhouse Gas Emissions

32. Air Quality Data

What is this?

The Clean Air Act, which was last amended in 1990, requires the U.S. Environmental Protection Agency "EPA" to set National Ambient Air Quality Standards "NAAQS" for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards. *Primary standards* set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. *Secondary standards* set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. The NAAQS established limitations on major air pollutants including: Ozone (O_3), Particulate Matter (PM_{10} and $PM_{2.5}$), Carbon Monoxide (CO), Sulfur Dioxide (SO_2), Nitrogen Oxides (NO_X), and Lead (Pb).

Why is this important?

The quality of the air directly impacts the health of our residents. These toxic air pollutants can cause serious health effects such as "damage to the immune system, […] neurological, reproductive (e.g., reduced fertility), developmental, respiratory and other health problems."[4]
Each pollutant is different and has different effects on the human body. In reference to 'ozone,' what is considered to be harmful is called ground-level ozone, as opposed to the naturally occurring ozone that protects us from ultraviolet rays. While ground-level ozone does not come directly from car exhaust or smokestacks, it does come from the volatile organic compounds (VOCs) that "come from vehicle and industrial exhaust as well as evaporation of gasoline, solvents and paints, and many other sources."[5] Ozone tends to affect the lungs and air passages, and can cause burning, coughing, and pain.

How are we doing?

Improving – The following charts and graphs show that air pollution has decreased in Hudson County since the enactment of the Clean Air Act of 1970 and the establishment of the National Ambient Air Quality Standards. The number of "good" air quality days has increased and the number of "unhealthy" air quality days has decreased. In addition, the annual averages for ozone, carbon monoxide, sulfur dioxide and nitrogen dioxide have all stayed below unhealthy levels.

The challenge facing Hudson County, the State of New Jersey and the nation will be to reduce emissions from carbon dioxide and other greenhouse gases which are emitted through a variety of sources from energy generation, to industrial sources, to transportation.

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[4] United States Environmental Protection Agency, *"About Air Toxics, Health and Ecological Effects"*, http://www.epa.gov/air/toxicair/newtoxics.html
[5] New Jersey Department of Environmental Protection, "Pollutants and their Health Effects," http://www.state.nj.us/dep/airmon/heappage.htm

Photo: *PSEG's Hudson Generating Station, on the banks of the Hackensack River in Jersey City, is a coal fired power plant which provides electricity to Hudson County and the region.*

Air Quality Days in Hudson County

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Very Unhealthy	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Unhealthy	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Unsafe for Sensitive Groups	7%	3%	2%	5%	4%	5%	7%	1%	2%	2%	1%	0%
Moderate	31%	34%	31%	33%	43%	50%	58%	42%	37%	40%	34%	27%
Good	62%	62%	67%	62%	52%	45%	35%	58%	61%	58%	65%	73%

■ Good ■ Moderate ■ Unsafe for Sensitive Groups ■ Unhealthy ■ Very Unhealthy

67

33. Brownfield Remediation

What is this?

The U.S. Environmental Protection Agency "EPA" defines a Brownfield site as a "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."[6] "Generally, brownfields are properties that are abandoned or underutilized because of either *real or perceived* contamination."[7]

Why is this important?

Brownfield clean-up and remediation is instrumental to the redevelopment and revitalization of urban communities. A general goal of the 2010 Hudson County CEDS Plan is to "Foster the cleanup and reuse of contaminated sites as an integral part of both economic and community development."

How are we doing?

Improving – Despite the fact that Hudson County had the third largest number of "Known Contaminated Sites" in the state, data show the number of brownfields receiving a "No Further Action" letter almost tripled since the early 1990. A "No Further Action" letter states that the site has been cleared of contaminants "in accordance with applicable remediation regulations."[8]

Brownfield Remediation "NFA" Letters Issued in Hudson County

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
NFA Letters	64	72	149	133	132	108	119	91	101	116	109	72	101	120	143	173	221	239	287	219	204	236	252	218

NFA Letters

Source: New Jersey Department of Environmental Protection, 'DEP Data Miner 2' (http://www.nj.gov/dep/opra/online.html)

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[6] NJ EPA, http://www.epa.gov/brownfields/glossary.htm
[7] http://www.nj.gov/dep/srp/brownfields/faq/#whatis_bf
[8] New Jersey Department of Environmental Protection, http://www.nj.gov/dep/srp/regs/techrule/def_nfa.htm

Photo: The former Honeywell site along Newark Bay in Jersey City is being remediated to become a mixed-use redevelopment project with residential units and commercial space.

Photo: Harrison's 275 acre redevelopment area along the Passaic River features former brownfields sites which are in the process of being remediated and turned into a mixed-use development including residential housing, commercial and even a 25,000 seat professional soccer stadium.

34. Land Use/Land Cover Data

What is this?

The New Jersey Department of Environmental Protection maintains land use and land cover calculations for the state. The land use and land cover are calculated using aerial orthographic **photos which are analyzed using a sophisticated geographic information system "GIS" computer** program. The Department determines several types of land cover for the entire state and tracks change as the state becomes more developed and urbanized.

Why is this important?

It is important to track land use and land cover to determine trends in real estate development as well as open space preservation and environmental conservation. Land use and land cover is an important environmental indicator to demonstrate how much land is urbanized and developed.

How are we doing?

Mixed - The data confirm that Hudson County is the most developed and urbanized county in the State of New Jersey. In fact, commercial and residential development is making Hudson County even more urbanized claiming over 400 acres of developed space since 1995. Conversely, Hudson County has lost over 1,600 acres of forested areas and wetlands. Barren land, currently vacant, likely includes former brownfield sites being cleared and remediated for redevelopment, and over time the amount of barren land will probably decrease and urban land will increase as redevelopment occurs.

Land Use in Hudson County (Acres)
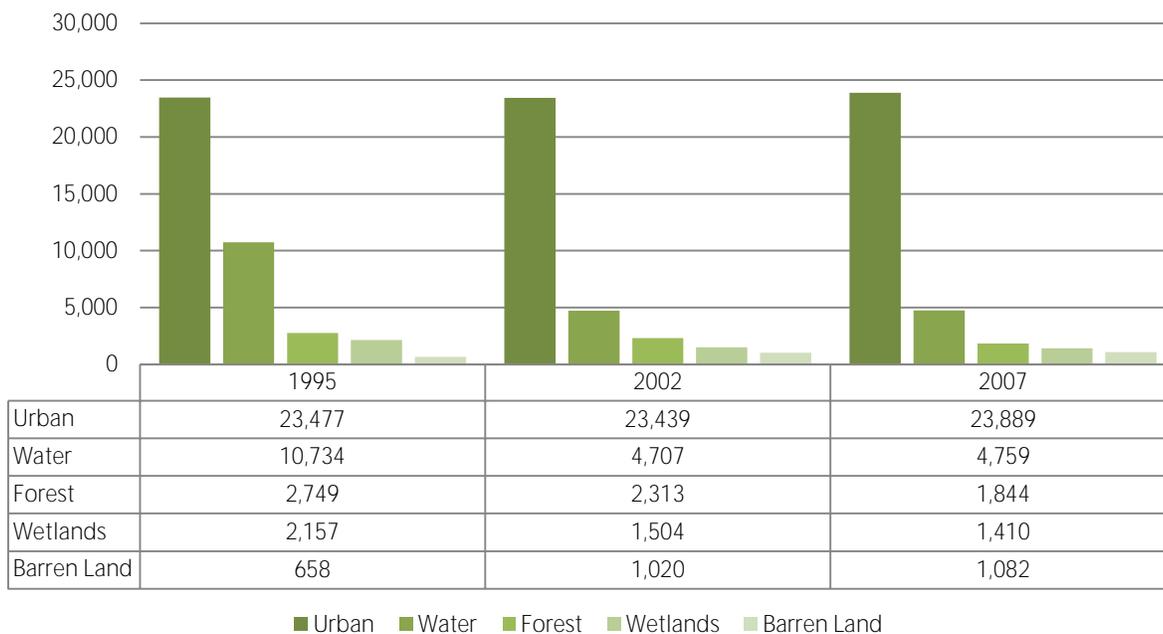
	1995	2002	2007
Urban	23,477	23,439	23,889
Water	10,734	4,707	4,759
Forest	2,749	2,313	1,844
Wetlands	2,157	1,504	1,410
Barren Land	658	1,020	1,082

■ Urban ■ Water ■ Forest ■ Wetlands ■ Barren Land

Source: N.J. Department of Environmental Protection, Office of Information Resources Management (OIRM), Bureau of Geographic Information Systems (BGIS)

Change in Land Use in Hudson County 1995-2007 (Acres)

	Urban	Water	Forest	Wetlands	Barren Land
1995	23,477	10,734	2,749	2,157	658
2002	23,439	4,707	2,313	1,504	1,020
2007	23,889	4,759	1,844	1,410	1,082
Change 95-07	412	-5,975	-905	-747	424

■ 1995   ■ 2002   ■ 2007   ■ Change 95-07

Source: N.J. Department of Environmental Protection, Office of Information Resources Management (OIRM), Bureau of Geographic Information Systems (BGIS)

Photo: Development along the Penhorn Creek has turned wetlands into trucking terminals.

Photo: Development has eliminated swaths of wetlands in the Hackensack River watershed.

35. Parks & Open Space Data

What is this?

The New Jersey Department of Environmental Protection, Green Acres program maintains a list preserved parks, playgrounds, forests, and conservation areas which are deed-restricted and held in public trust for the benefit and enjoyment of the residents of the State of New Jersey.

Why is this important?

Open Space is important because it helps create a balance between the urban environment and nature. Parks and playgrounds provide needed recreational opportunities for inner city residents. Open Space also improves the air and water quality. Land that is left in its natural state acts as a filter for pollutants in rain and flood waters. Plants and animals that may be native to an area will be able to continue their way of life in areas designated as Open Space.

How are we doing?

Mixed - The number of acres of parks and open space in Hudson County has significantly increased since the creation of the Green Acres program in 1962. In addition, the county, along with one **municipality had approved an "Open Space Trust Fund" for the expansion of parks and open** space, rehabilitation of existing parks and playgrounds and the preservation of historic sites. Hudson County continues to add more parks and open space, primarily through municipal governments, and non-profits and other organizations. However, neither the county nor its constituent municipalities meet state or national guidelines for parks and open space.

Acres of Parks and Open Space in Hudson County

	1964	1971	1982	1988	1994	2007	2013
Other				284	284	15	138
Federal	19	19	19	19	45	45	58
Municipal	598	463	630	240	240	605	760
County	625	611	616	612	612	659	659
State	12	287	1076	1600	1688	1732	2090

■ State ■ County ■ Municipal ■ Federal ■ Other
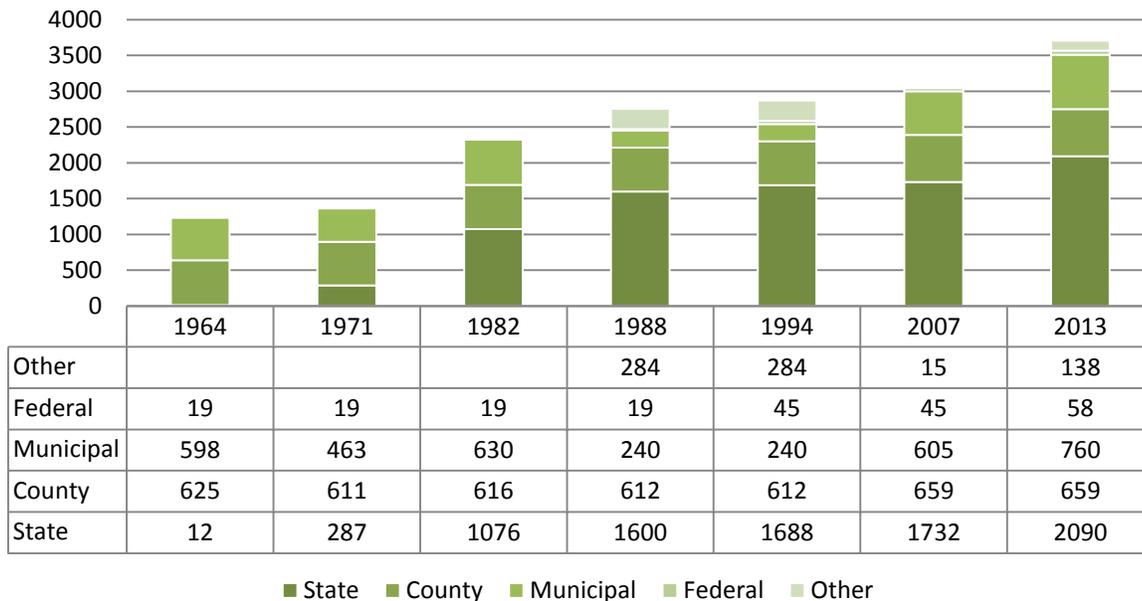
Source: New Jersey Department of Environmental Protection, "Statewide Comprehensive Outdoor Recreation Plan" (1965, 1973, 1984, 1988, 1994, 2007, 2013 draft).

Photo: The 13 acre former Reservoir No. 3 in Jersey City's Heights neighborhood has been preserved for future park space.

Photo: Bayonne's 32 acre Richard Rutkowski Park on Newark Bay has been preserved as a municipal park.

36. Recycling Data

What is this?

New Jersey State law requires that all counties and municipalities recycle at least 50% of municipal **household garbage (type 10) and 60% of all solid waste including (type 13) "bulky waste" and (type 27)** non-hazardous manufacturing and industrial waste.

Why is this important?

The amount of natural resources is finite, while America's appetite for both durable and disposable goods has been increasing exponentially. Recycling is important because it is a safe way to decrease the amount of solid waste that accumulates in landfills or gets burned in incinerators.

How are we doing?

Mixed: Disappointingly low percentages of waste recycled in the county during 2009 and 2010 were followed in 2011 by what appears to be a continuation of the pre-2008 trend of improvement on par with the state average.

Percentage of Waste Stream Recycled in Hudson County and New Jersey

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Hudson County	52%	46%	57%	44%	49%	47%	44%	45%	47%	51%	51%	59%	57%	63%	51%	54%	59%
New Jersey	60%	61%	61%	56%	55%	53%	54%	54%	52%	55%	53%	55%	57%	59%	57%	61%	60%

◆ Hudson County ▪ New Jersey

Source: New Jersey Department of Environmental Protection (http://www.nj.gov/dep/dshw/recycling/stats.htm)
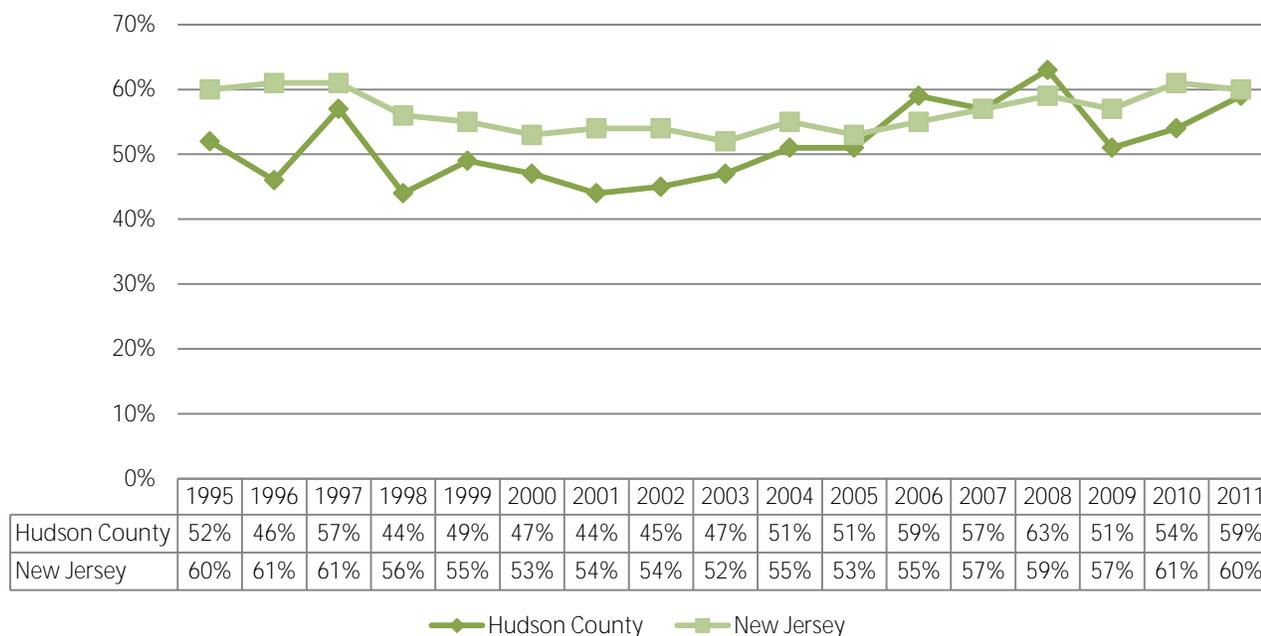
37. Solid Waste Data

What is this?

Solid waste is any material that is abandoned by being disposed of, burned or incinerated, recycled **or considered "waste-like." Solid waste does not necessarily have to be in a "solid" form; it can be** semi-solid, liquid, or a container holding gaseous material. Solid waste is divided into many different categories. The categories include Type 10, Type 13, and Type27. Type 10 consists of municipal or household waste. This includes residential waste, commercial waste, and waste from institutions such as schools, hospitals, or other public buildings. Type 13 waste is made up of bulky waste; this includes tires, automobiles, furniture, appliances, etc. Construction and demolition debris is also included in this category. Type 27 waste is comprised of dry industrial waste. This includes manufacturing, industrial, and research/development wastes. Non-hazardous oil spill cleanup waste, dry non-hazardous pesticides, dry non-hazardous chemical waste, and residue from the operations of a scrap metal shredding facility are also included. [9]

Why is this important?

This is important because all of this solid waste has to go somewhere. Even though there are no landfills in Hudson County, we must still be mindful that the negative effects of large amounts of waste affect us all. Solid waste can affect the soil and groundwater. That is why it is important that we as a community try to reduce the amount of solid waste that we produce, because reduction **"prevents emissions of many greenhouse gases, reduces pollutants, saves energy, conserves resources, and reduces the need for new landfills and combustors."**[10]

How are we doing?

Mixed – There appears to be a marginal decrease in Municipal Solid Waste(MSW) tonnage from an overall high in 2006, but as of 2010 MSW tonnage had not dropped substantially below 2000 levels. Bulky waste tonnage levels remain erratic but appear to be in general decreasing since a high in 2008.

Disposal of Hudson County Waste by Type
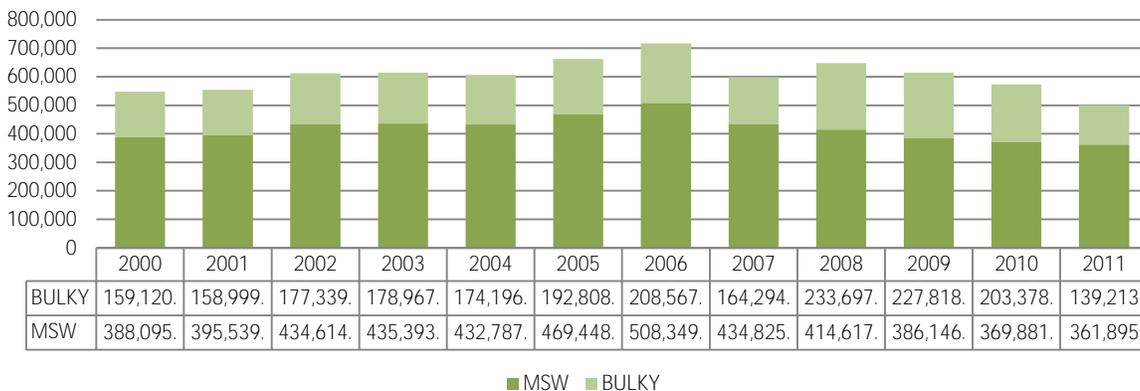
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BULKY	159,120.	158,999.	177,339.	178,967.	174,196.	192,808.	208,567.	164,294.	233,697.	227,818.	203,378.	139,213
MSW	388,095.	395,539.	434,614.	435,393.	432,787.	469,448.	508,349.	434,825.	414,617.	386,146.	369,881.	361,895

■ MSW ■ BULKY

Source: New Jersey Department of Environmental Protection (http://www.nj.gov/dep/dshw/recycling/stats.htm)

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[9] New Jersey Department of Environmental Protection (http://www.nj.gov/dep/dshw/lrm/type.htm)
[10] United States Environmental protection Agency (http://www.epa.gov/epaoswer/non-hw/muncpl/facts.htm)

38. Water Quality Data (waiting on email back for data tables)

What is this?

Water quality is a term used to describe the biological, chemical and physical characteristics of water and its general composition. The Federal Clean Water Act establishes water quality standards and a basic structure to regulate discharges of pollutants into the water. The legislation signaled a new way of dealing with the nation's water pollution by prohibiting the discharge of pollutants unless the discharger first obtains a valid permit from the government. [11]

The Passaic Valley Sewerage Commission is one of ten sewerage agencies that make up the New Jersey Harbor Dischargers Group (NJHDG). In 1992, the ten agencies collaborated and jointly funded and performed various water quality studies in the region. In 2000, the Passaic Valley Sewerage Commission initiated a long-term monitoring program of the Passaic River and Newark Bay. The **NJHDG decided to expand upon PVSC's monitoring programs to cover all of the NJ Harbor Waters.**[12]

The NJHDG has gathered five years of high quality data by sampling the waters of the Passaic River, Hackensack River, Newark Bay, Arthur Kill and the New Jersey side of the Hudson River. The NJHDG monitors eleven locations that border Hudson County. Below are three water quality parameters that are tested at each station weekly from May through September, and twice per month from October through April.

The NJ Department of Environmental Protection (DEP) classifies state waterbodies in terms of Surface Water Quality Standards. The waterbodies that surround Hudson County are classified by the NJHDG Long-Term Water Quality Monitoring Program as FW2-NT (non-trout fresh water), SE1, SE2 and SE3 (saline estuary water Classes).[13]

Why is this important?

During the 1970's and 1980's it became clear that over 50 percent of the nation's pollution was coming from nonpoint sources of stormwater run-off. Under Section 319 of the 1987 Amendments to the Clean Water Act, Congress directed states to create measures to implement programs targeting these nonpoint sources. New Jersey was granted funds through section 319(h) from the US Environmental Protection Agency (EPA) for its approved Nonpoint Source Assessment Report and Nonpoint Source Management Program. These funds are used to implement programs and projects designed to reduce nonpoint source pollution and manage water quality.[14]

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[11]Clean Water Act- effects, important, system, source, marine
http://www.waterencyclopedia.com/Ce-Cr/Clean-Water-Act.html#ixzz0n5HyX05Z
[12] " The New Jersey Harbor Dischargers Group 2006 Water Quality Report" Passaic Valley Sewerage Commissioners http://pvsc.com/
[13] ibid
[14] NJDEP. Division of Watershed Management- NonPoint Source Pollution
http://www.state.nj.us/dep/watershedmgt/nps_program.htm

How are we doing?

Mixed- Local surface water quality in the Hackensack River, Hudson River, Kill Van Kull, Newark Bay and Passaic River has been historically poor in Hudson County due to anthropogenic and natural factors. Urban runoff and continued construction along the waterfronts also contributes to the poor water quality.[15] The waterways have improved in quality over recent years through upgrades made in sewage treatment facilities, increased conservation efforts and recreational uses along the rivers as well as the remediation of superfund sites.

Source: The New Jersey Harbor Dischargers Group 2006 Water Quality Report

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[15] Hudson County Master Plan 2002. Heyer, Gruel & Associates PA, New Brunswick, NJ p. X-5

Fecal Coliform Bacteria

Fecal coliform bacteria are a group of micro-organisms that live in the large intestines of warm blooded animals to aid in the digestion of food. High presence of fecal coliform bacteria in surface waters is a sign of contamination and of poor water quality.[16]

Fecal coliform standards are based on monthly geometric mean values for a minimum of five samples in thirty days. The NJHDG Long-Term Water Quality Monitoring Program calculated the summer seasonal geometric means (from May 15-September 15). This timeframe was used to coincide with the beach bathing season, when it is mandatory to ensure the protection of human health.[17]

The highest fecal coliform numbers were seen at the Rutgers Street Station (Belleville, NJ) in the Passaic River. Discharges of stormwater runoff may account for the high fecal coliform concentrations at this site.

The fecal coliform patterns were generally consistent except in the Hackensack River in 2006 when they spiked. The fecal coliform levels have decreased from the 2006 numbers observed in all the water bodies surrounding Hudson County.
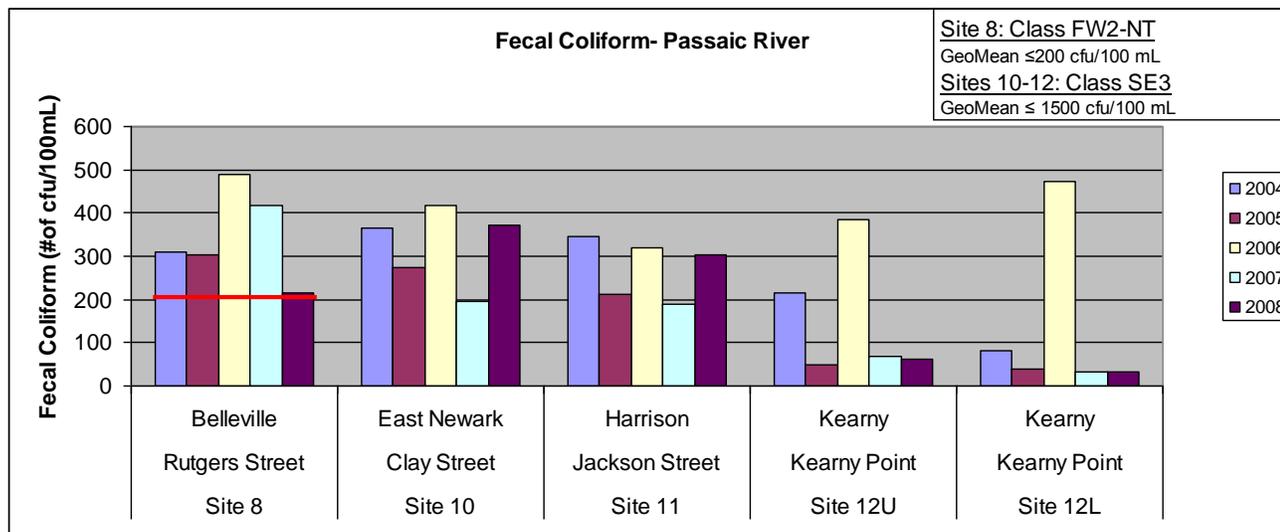
Source: Passaic Valley Sewerage Commissioners

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[16] " The New Jersey Harbor Dischargers Group 2008 Water Quality Report" Passaic Valley Sewerage Commissioners
http://www.nj.gov/pvsc/pdf/2008_NJHDG_WQ_Report.pdf
[17] ibid
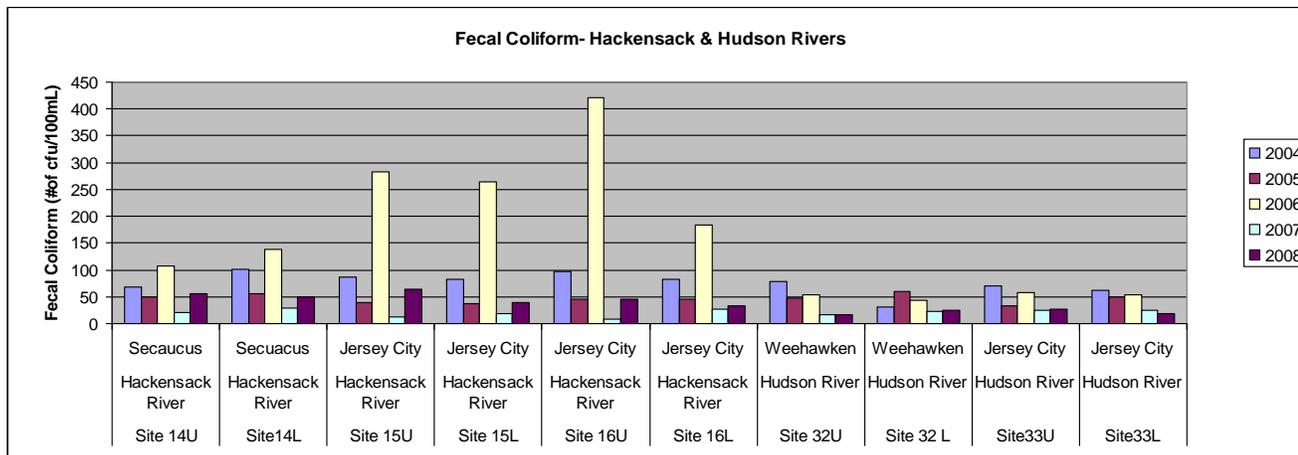
Fecal Coliform- Hackensack & Hudson Rivers

Source: Passaic Valley Sewerage Commissioners

Fecal Coliform- Newark Bay & Arthur Kill
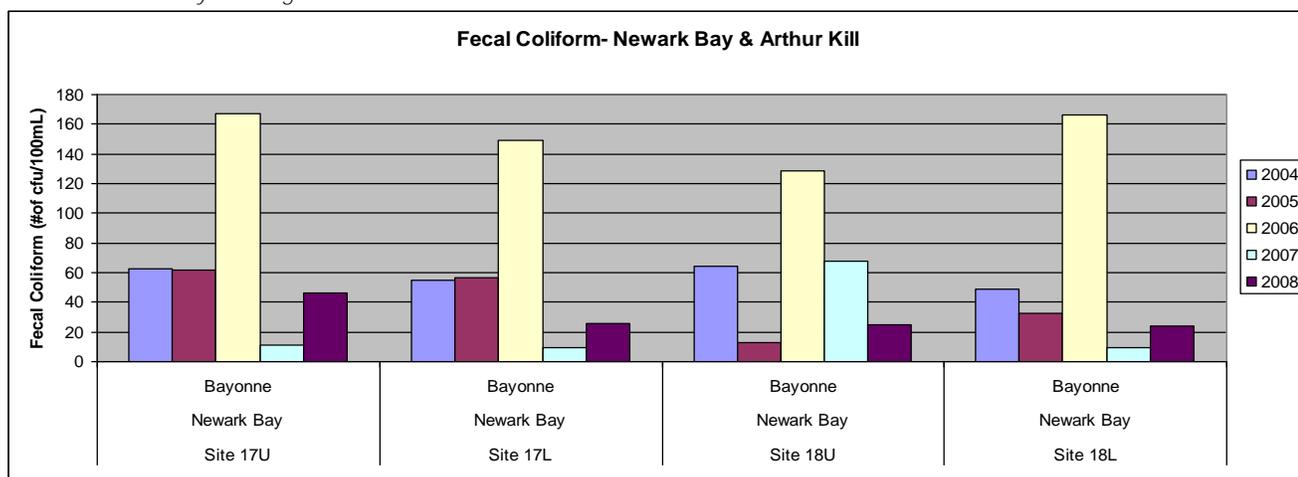
Source: Passaic Valley Sewerage Commissioners

Dissolved Oxygen

Sufficient levels of oxygen in the water are necessary for the survival of aerobic aquatic species. Aquatic life generally requires concentrations above 3.0 mg/L to survive, and some species become stressed when "DO" levels drop below 5.0 mg/L.[18]

All "DO" measurements were taken during daylight hours, when "DO" levels are expected to be highest as a result of photosynthesis in algae and other aquatic plants. Calculations were averaged from May 15th to September 15th since "DO" levels are expected to be lowest in the warm summer months.[19]

The tables below illustrate the "never less than" percentage of Dissolved Oxygen for each waterbody class. SE1 Shellfish Waters were compared to the "never <5.0 mg/L" standard, FW2-NT, SE2 waterbodies were compared to the "never <4.0 mg/L" standard, and SE3 waterbodies were compared to the "never <3.0 mg/L" standard. The "DO" measurements that violated the "never less

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[18] " The New Jersey Harbor Dischargers Group 2006 Water Quality Report" Passaic Valley Sewerage Commissioners http://pvsc.com/
[19] ibid

than" standards were calculated on an annual basis.[20] The Hackensack River was found to have the highest percentages of values lower than their corresponding "never less than" standards. The Newark Bay site did not have any samples that were below the standard.
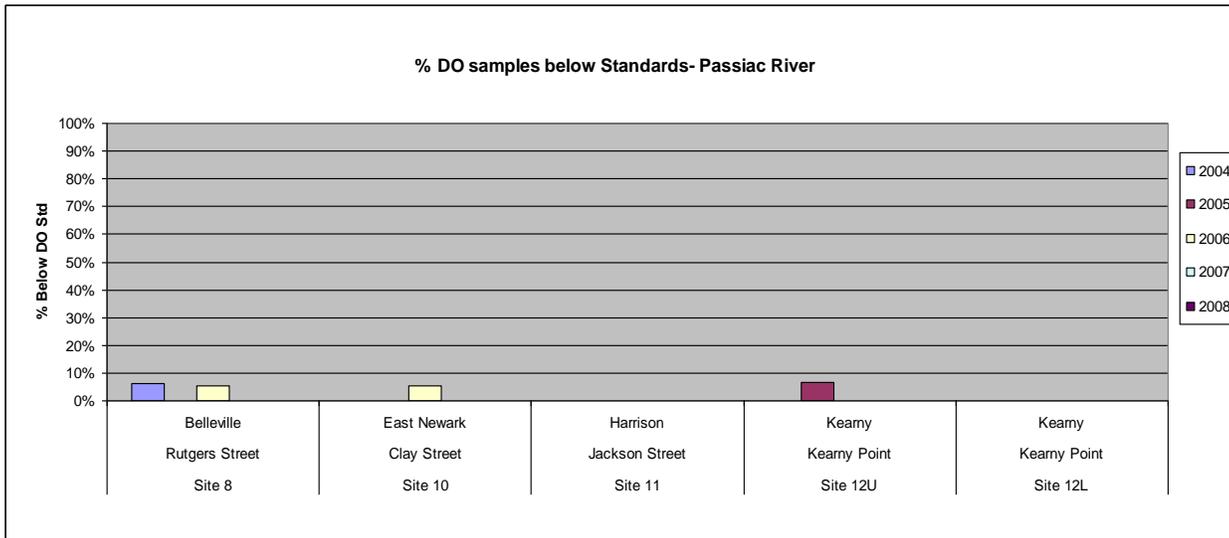
% DO samples below Standards- Passiac River

Source: Passaic Valley Sewerage Commissioners

Sites 14-15, 32-33: Class SE2
never <4.0 mg/L
Site 16: Class SE3
never <3.0 mg/L

% DO samples below Standards- Hackensack & Hudson Rivers
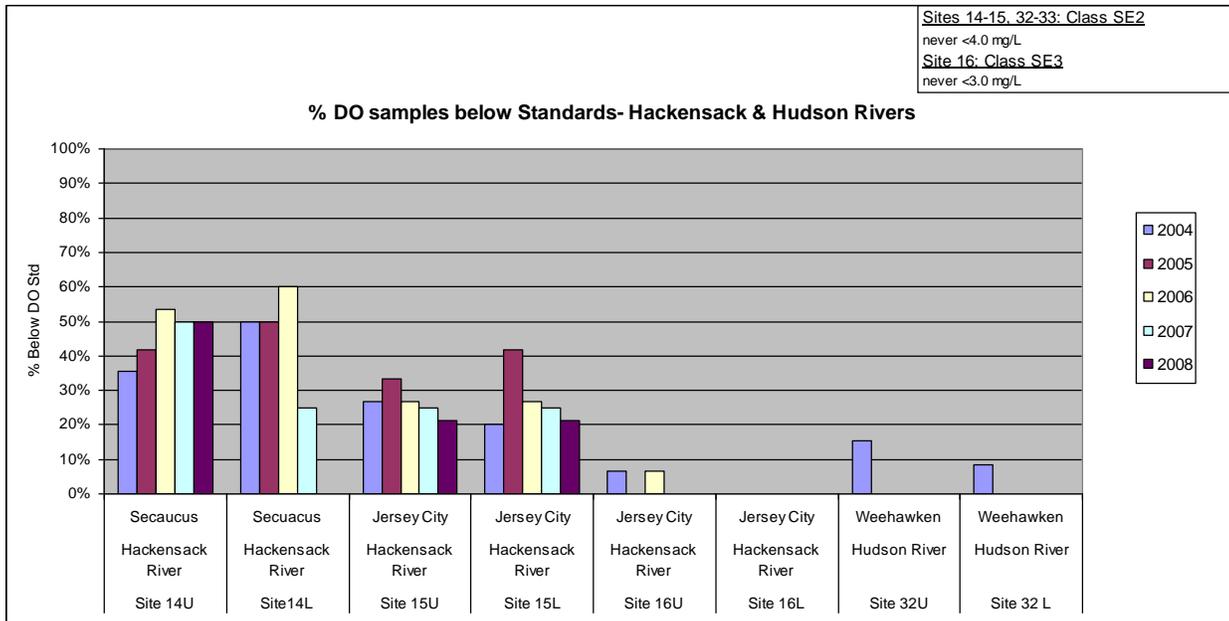
Source: Passaic Valley Sewerage Commissioners

Nitrogen

Nitrogen is a nutrient found in surface waters. Nitrates (NO3) stimulate plant growth and are essential to the health of an aquatic system. However, excessive concentrations of nitrogen compounds will lead to excessive algae and plant growth which will consume much of the available dissolved oxygen leading to eutrophication and a decline in water quality. The susceptibility of estuaries and coastal waters to eutrophication depends on temperature, availability of phosphorus

[20] ibid

and silica for algae production, and the rate of water exchange with the open ocean. [21] "The symptoms of eutrophication include blooms of algae (both toxic and non-toxic), declines in the health of fish and shellfish, loss of seagrass beds and coral reefs, and ecological changes in food webs."[22] Nitrogen plays a significant role in the adverse impact of water quality. Scientists estimate that 10 to 45 percent of the nitrogen produced by various human activities is transported via the atmosphere to the estuaries coastal ecosystems. [23]

"Nitrogen contamination may come from a variety of sources: municipal sewage, animal manure, atmospheric deposition, biological N fixation, soil organic N, and/or nitrogen fertilizers[24]. The level of contamination in specific waters will depend upon the amount of contamination from all sources and characteristics of the receiving waters.

There are no surface water quality standards for total nitrogen at this time. Samples were taken between May 15th and September 15th for total nitrogen. The nitrogen levels have decreased over the past five years in all of the waterbodies. Since there are no surface water qualities standards for total nitrogen it is impossible to conclude whether reduced levels of total nitrogen will negatively impact the waterbodies.

Total Nitrogen - Passiac River

	Belleville Rutgers Street Site 8	East Newark Clay Street Site 10	Harrison Jackson Street Site 11	Kearny Kearny Point Site 12U	Kearny Kearny Point Site 12L
2004	3.93	3.597	3.572	2.94	2.859
2005	4.08	4.135	3.265	2.49	1.975
2006	3.16	3.097	2.863	2.39	2.054
2007	3.38	2.97	2.575	1.94	1.785
2008	3.23	3.095	2.738	2.106	1.425

Site
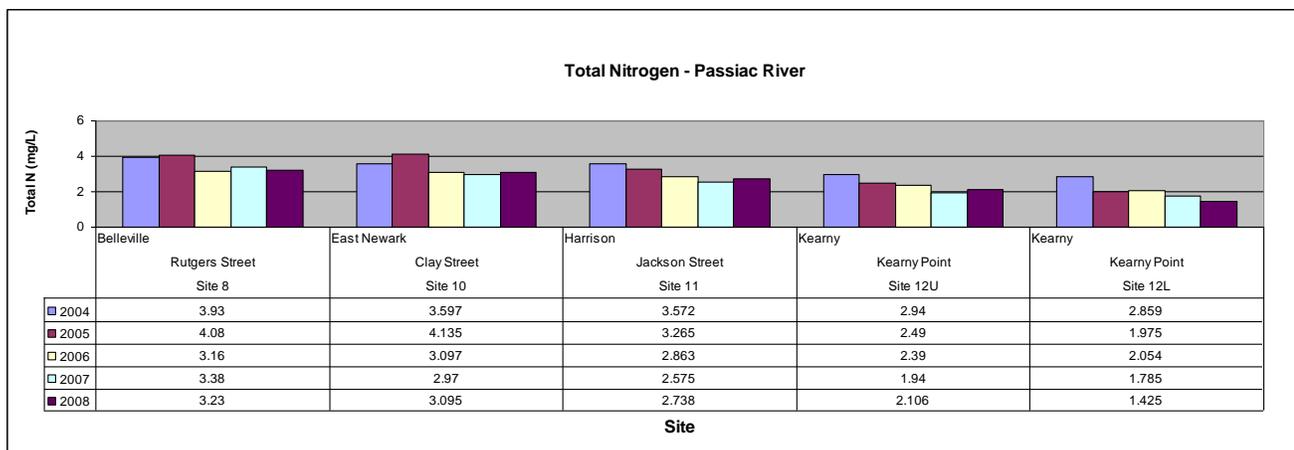
Source: Passaic Valley Sewerage Commissioners

[21] " The New Jersey Harbor Dischargers Group 2006 Water Quality Report" Passaic Valley Sewerage Commissioners http://pvsc.com/
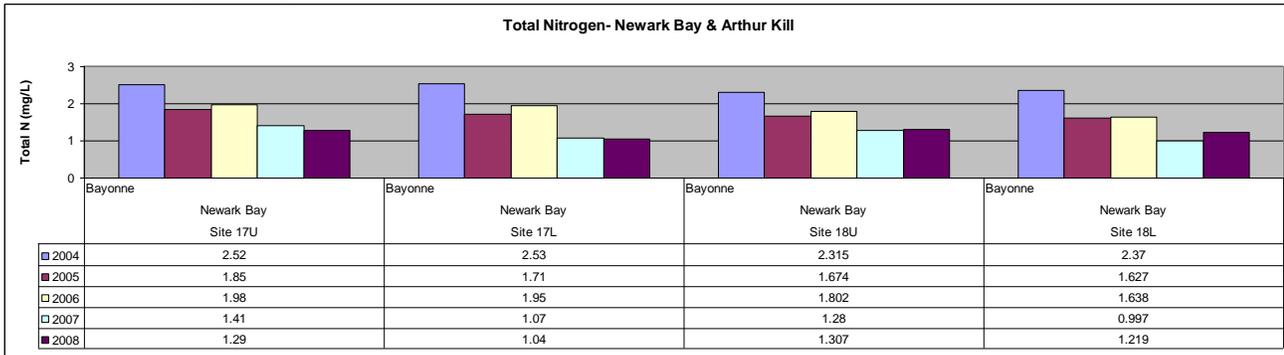
[22] "Effects of Acid Rain - Surface Waters and Aquatic Animals" U.S. Environmental Protection Agency
 http://www.epa.gov/acidrain/effects/surface_water.html
[23] ibid
[24]Mslaac, Gregory. "Surface Water Pollution by Nitrogen Fertilizers" University of Illinois at Urbana-Champaign
http://www.idswater.com/Common/Paper/Paper_101/Surface%20Water%20Pollution%20by%20Nitrogen%20Fertilizers1.htm

Total Nitrogen- Hackensack & Hudson Rivers

	Secaucus Hackensack River Site 14U	Secuacus Hackensack River Site14L	Jersey City Hackensack River Site 15U	Jersey City Hackensack River Site 15L	Jersey City Hackensack River Site 16U	Jersey City Hackensack River Site 16L	Weehawken Hudson River Site 32U	Weehawken Hudson River Site 32 L	Jersey City Hudson River Site33U	Jersey City Hudson River Site33L
2004	4.01	3.92	3.289	3.14	3.165	2.827	2.203	2.07	1.82	1.794
2005	3.8	3.48	2.586	2.53	2.426	2.198	1.511	1.64	1.55	1.599
2006	3.52	3.41	2.481	2.42	2.168	1.901	1.477	1.67	1.51	1.36
2007	2.57	2.5	1.848	1.46	1.36	1.133	1.631	1.27	1.23	1.05
2008	3.63	3.7	2.055	1.86	1.841	1.229	1.55	1.23	1.51	1.469

Source: Passaic Valley Sewerage Commissioners

Total Nitrogen- Newark Bay & Arthur Kill

	Bayonne Newark Bay Site 17U	Bayonne Newark Bay Site 17L	Bayonne Newark Bay Site 18U	Bayonne Newark Bay Site 18L
2004	2.52	2.53	2.315	2.37
2005	1.85	1.71	1.674	1.627
2006	1.98	1.95	1.802	1.638
2007	1.41	1.07	1.28	0.997
2008	1.29	1.04	1.307	1.219

Source: Passaic Valley Sewerage Commissioners

39. Climate Change

What is this?

Climate change refers to the long-term changes in weather trends for either a specific region or the entire globe. Currently, information about weather is measured at stations spread throughout cities and states. Historical weather information is most readily available at airports and major urban centers, in this case Newark Liberty International Airport, bordering Hudson County to the Southwest. Since climate change affects at a regional scale this historic weather data is applicable as an indicator for Hudson County, as well.

Two of the most often used indicators for changing weather patterns are measuring the temperature and precipitation patterns for an area over an extended period of time. Annual heating degree and cooling degree days provide an indication of how hot or cold a year was compared to certain base temperature, in this case 65°F. Heating degree days indicates how many and how extreme cold days in the year were. This is calculated based off of how many days and how much you would need to heat a building to reach the base temperature. Therefore, a 64° F day adds 1 **heating degree day to a year's total and a 60°F day adds 5 heating degree days to a year's total (from** the base of 65°F). Cooling degree days reflect the same information but in response to hot days in a year. Precipitation data indicates the total amount of rainfall measured in a given year.

Why is this important?

Climate change is important because weather events and changing weather patterns have major impacts on nearly every facet of human life. Additionally, scientific evidence suggests that human processes, such as the emission of certain gasses from the industrial sector, are impacting the global climate. While the specific impacts of climate change remain highly contested, increased temperatures have been linked to sea level rise and more extreme weather events. This is especially impactful for Hudson County, as it is a coastal community which would be extremely susceptible to flooding and destruction from an environmental event or sea level rise. Additionally, higher temperatures increase summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat related illness and mortality. While factors that can cause climate change are not contained within Hudson County, there is a great deal the County could do to limit its contribution to climate change.
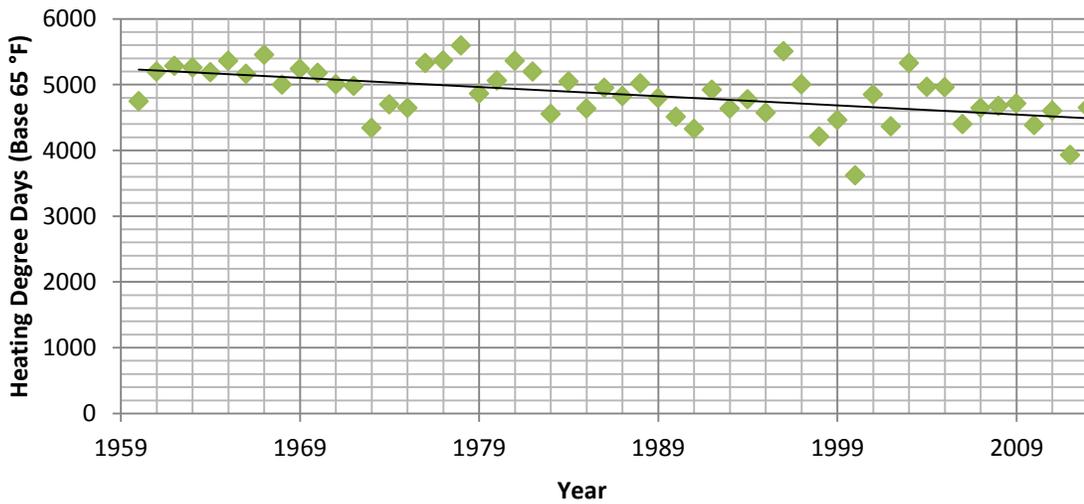
How are we doing?

<u>Declining-</u> The information from 1960-2012 indicates that the Hudson County area is becoming hotter and experiencing more rainfall over the course of the year. 2010 actually represents the hottest year on record and overall Hudson County has more hot days and less cold days in a given year. Compar**ing 2010 and 1960, Hudson County had 54% more cooling degree days ("hot days"), 9% less heating degree days ("cold days"), and 4 more inches of rainfall. While these trends are not** unique to Hudson County, the high level of development and urban environment exacerbate these effects. Because of these qualities, Hudson County experiences a great deal of the heat island effect, by which dark impermeable surfaces radiate the sun and restrict evaporation, causing these environments to become hotter.
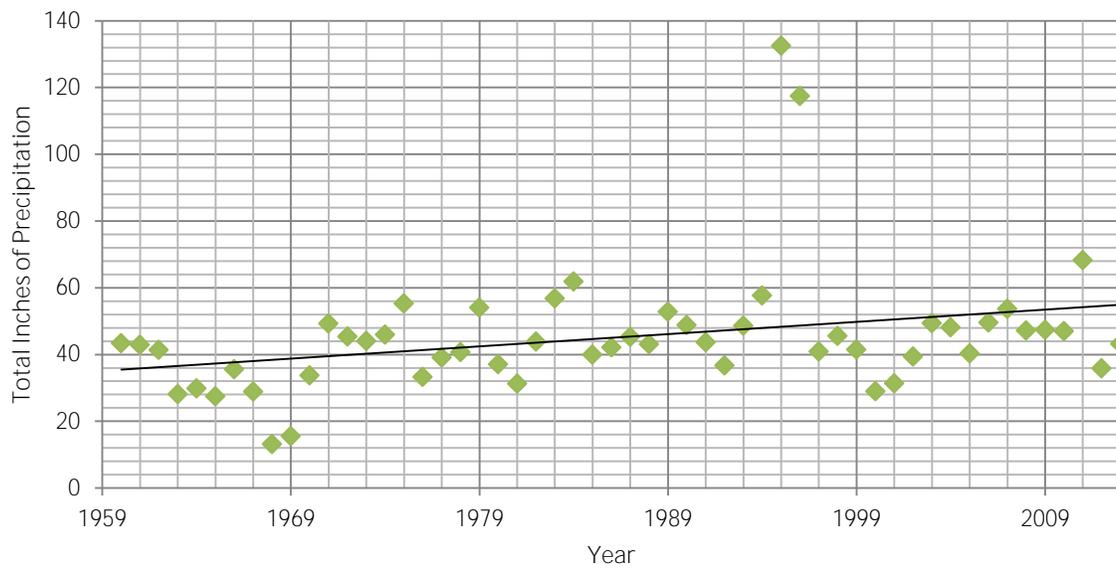
Annual Hot Days

Annual Cold Days

Annual Precipitation
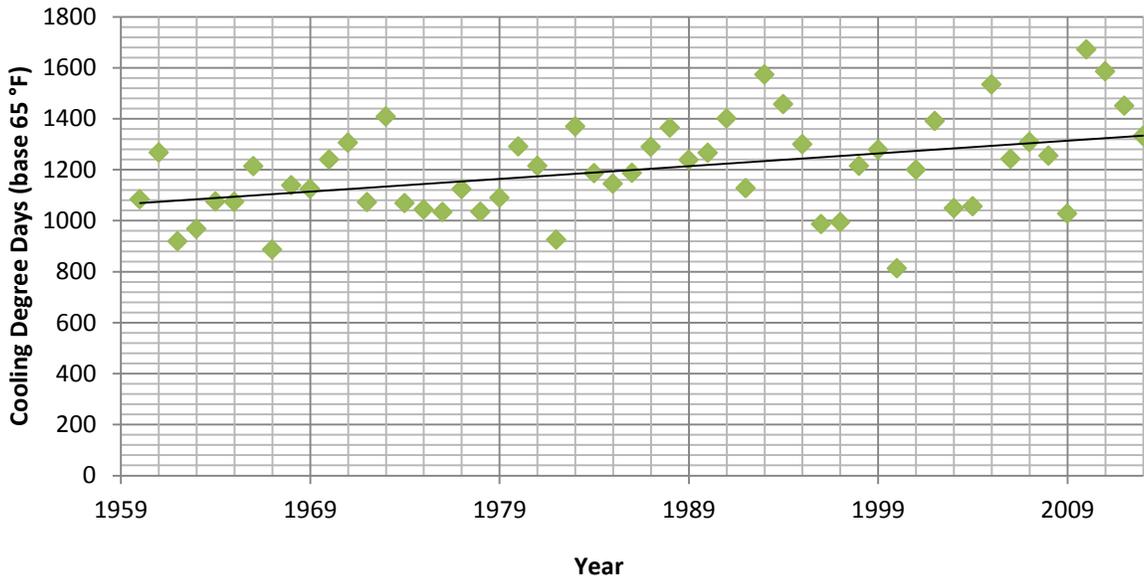
Source: www.wunderground.com

40. Greenhouse Gas Emissions

What is this?

A greenhouse gas (GHG) is an atmospheric gas that traps heat in the atmosphere, which is the fundamental cause of the greenhouse effect. The primary greenhouse gases that are emitted into the atmosphere through human activities are Carbon Dioxide, Methane, Nitrous Oxide and Fluorinated Gases. The greenhouse gases in the atmosphere make the Earth warmer than it otherwise would be.[25] The following description of the primary greenhouse gases is taken from the **US Environmental Protection Agency's website:**[26]

- Carbon Dioxide (CO2): Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is also **removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of** the biological carbon cycle.
- Methane (CH4): Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- Nitrous Oxide (N2O): Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- Fluorinated Gases: Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances (i.e., CFCs, HCFCs, and halons). These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes referred to as High Global Warming Potential gases **("High GWP gases").**

Why is this important?

Greenhouse gas emissions are rising, which in turn increases the global temperature. Rising temperatures are expected to have adverse impacts on human health and the environment in New Jersey such as decreased air quality standards. Sea level rise due to climate change is a major concern for New Jersey. Higher sea levels will likely increase storm-related flooding in coastal areas. Warmer temperatures affect the water cycle which in turn leads to habitat loss, agriculture problems and the extinction of threatened species.

The North Jersey Transportation Planning Authority (NJTPA) is developing a Greenhouse Gas Management System Tool to act as a regional greenhouse gas inventory. Users will be able to query the database and develop municipal and county-level carbon footprints for use in GHG mitigation planning exercises. The inventory and forecast covers a 2006 base year and forecast years of 2020, 2035 and 2050.[27]
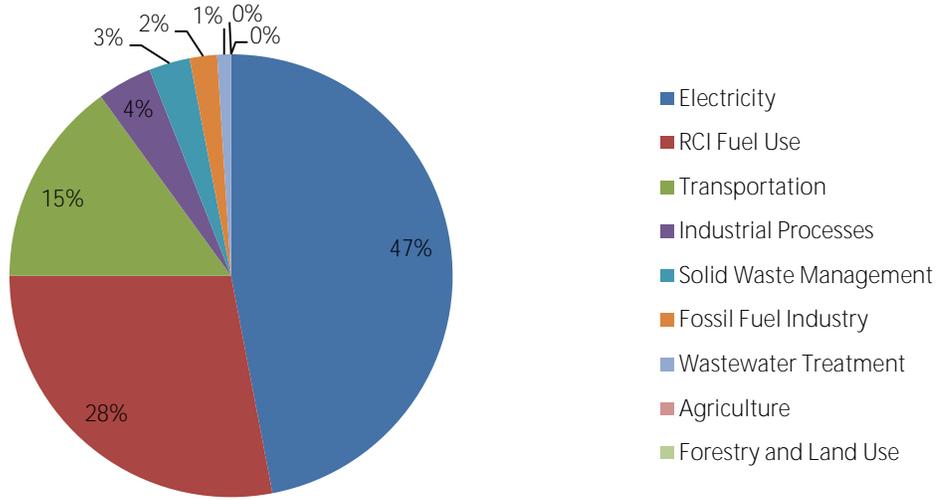
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[25] NOAA (National Atmospheric and Oceanic Administration). 2007. Global Warming.
Available on-line at http://lwf.ncdc.noaa.gov/oa/climate/globalwarming.html#QI
[26] US EPA. 2011. Climate Change- Greenhouse Gas Emissions. http://www.epa.gov/climatechange/emissions/index.html#ggo
[27] Region-wide Greenhouse Gas Emissions Inventory Project.
http://www.njtpa.org/plan/Element/Climate/RegionalGreenhouseGasInventory.aspx

Hudson County Direct Emissions by Sector, 2006

Legend:
- Electricity
- RCI Fuel Use
- Transportation
- Industrial Processes
- Solid Waste Management
- Fossil Fuel Industry
- Wastewater Treatment
- Agriculture
- Forestry and Land Use

Pie chart labels: 47%, 28%, 15%, 4%, 3%, 2%, 1%, 0%, 0%

Sector	tC02e*
Agriculture	0.00
Electricity	2,821,763.30
Forestry and Land Use	-5,034.12
Fossil Fuel Industry	108,370.32
Industrial Processes	240,262.93
RCI Fuel Use	1,658,282.58
Solid Waste Management	181,256.64
Transportation	936,552.30
Wastewater Treatment	57,030.01
Total	5,998,483.96

*tC02e: Tonnes of C02 equivalent.

Hudson County Direct Emissions by Sector, 2020

Legend:
- Electricity
- RCI Fuel Use
- Transportation
- Industrial Processes
- Fossil Fuel Industry
- Solid Waste Management
- Wastewater Treatment
- Agriculture
- Forestry and Land Use

Pie chart labels: 50%, 27%, 15%, 4%, 2%, 1%, 1%, 0%, 0%
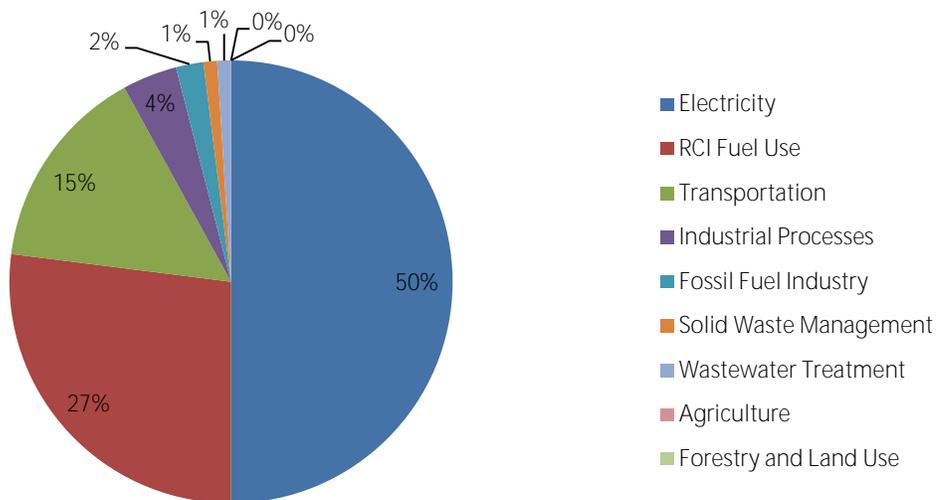
How are we doing?

<u>Mixed-</u> In 2006, the largest emission of greenhouse gases was from the consumption of electricity. **New Jersey has begun a major effort to reduce GHG emissions as expressed in Governor Corzine's** Executive Order No. 54 and the New Jersey Global Warming Response Act.
These directives establish a limit for 2020 emissions equal to 1990 levels and a limit for 2050 emissions of 80% below the 2006 level.[28]**A goal of New Jersey's Energy Master Plan is to reduce** projected energy use by relying more on renewable energy sources.

The planting of shade trees and the increase in pervious coverage on-site reduces GHG emissions, **hence the negative number of tCO2e in the forestry and land use sector in the chart above.** "Trees sequester CO_2 from the atmosphere during photosynthesis to form carbohydrates that are used in plant structure/function and return oxygen back to the atmosphere as a byproduct. About half of the greenhouse effect is caused by CO_2. Trees therefore act as a carbon sink by removing the carbon and storing it as cellulose in their trunk, branches, leaves and roots while releasing oxygen back into **the air.**"[29]

As of 2011, Hudson County is creating an urban forestry plan that will go into more detail about the benefits of shade trees in reducing greenhouse gas emissions.

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[28] NJ DEP. Environmental Trends Report, NJDEP, Division of Science, Research & Technology, http://www.nj.gov/dep/dsr/trends2005/pdfs/ghg.pdf
[29]Benefits of Trees in Urban Areas. http://www.coloradotrees.org/benefits.htm

Hudson County's Community Indicators Summary

Sector	Indicator	Trend
$	8. Employment	Mixed
$	9. Unemployment	Mixed
$	10. Per Capita Personal Income (PCPI)	Improving
$	11. Building Permits.	Mixed
$	12. Residential Home Value and Sales Prices	Mixed
$	13. Equalized Valuations	Mixed
$	14. Foreclosures	Mixed
$	15. Bankruptcies	Improving
👥	16. Birth & Death Rates	Steady
👥	17. Crime Rates	Improving
👥	18. High School Graduation & Dropout Rates	Mixed
👥	19. Homeless Counts	Improving
👥	20. Infant Mortality Rate	Improving
👥	21. Marriage & Divorce Records	Mixed
👥	22. Mortality Rates.	Improving
👥	23. Public Assistance Program Participation	Mixed
👥	24. School Free Lunch/Free Milk Program Data	Declining
👥	25. Teenage Pregnancy Data	Improving
👥	26. Traffic (Vehicle Miles Travelled)	Declining
👥	27. Motor Vehicle Accidents	Improving
👥	28. Pedestrian Fatalities	Improving
👥	29. Mass Transit Ridership	Improving
👥	30. Commuter Trends	Steady
👥	31. Voter Registration and Turnout	Mixed
❈	32. Air Quality Data	Improving
❈	33. Brownfield Remediation Data	Improving
❈	34. Land Use & Land Cover Data	Mixed
❈	35. Parks & Open Space Data	Mixed
❈	36. Recycling Data	Mixed
❈	37. Solid Waste Data	Mixed
❈	38. Water Quality Data	Mixed
❈	39. Climate Change Data	Declining
❈	40. Greenhouse Gas Emission	Mixed