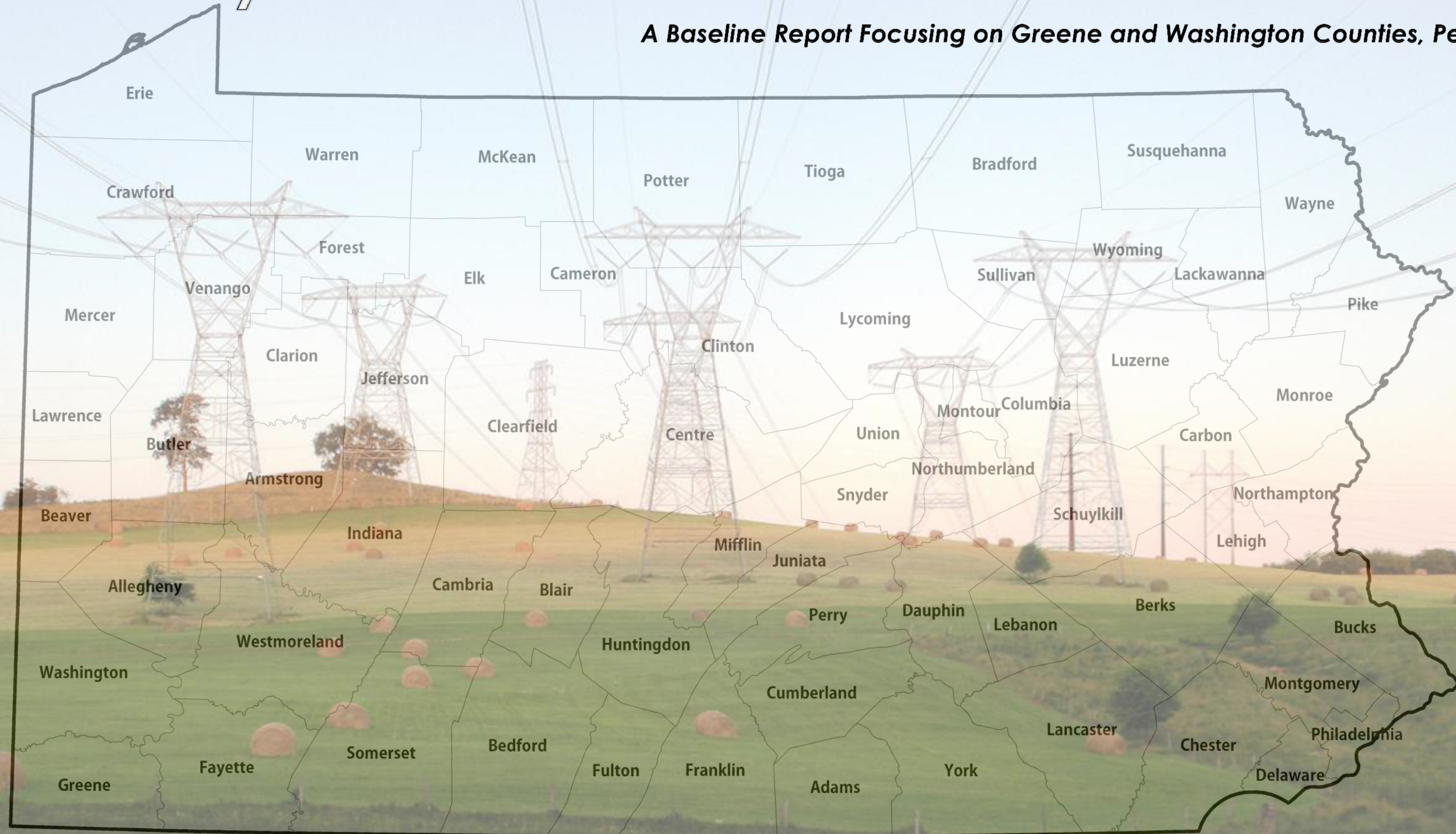# Community Indicators of Environmental Justice:

A Baseline Report Focusing on Greene and Washington Counties, Pennsylvania

CENTER FOR COALFIELD JUSTICE

Part 3 of the *Landscape Today Initiative* and Funded by a Grant from The Colcom Foundation

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Characterizing Environmental Justice with Community Indicators

Characterizing communities is not a very simple task. What makes a community? Is it geography? Culture? Commerce? What constitutes a 'community' depends on the context. For example, in biology a community is a group of interactive living organisms sharing a populated environment. Socially, a community can be defined as a social unit of any size that shares common values. Politically, a community can be defined by the administrative boundaries that are accepted by residents on both sides and serve to organize the activities within those boundaries.

Political, or administrative, boundaries are useful when examining local conditions like economic activity, public health, and environmental health. Environmental Justice (EJ) has various meanings in relation to public policy, science, and philosophy (see pages 5, 6, & 7). However, EJ is also a *movement* – a social movement that advocates for identifying and mitigating for the uneven spatial distribution of burdens to those local communities that provide wealth to others in society yet receive far less in return. How do we know when a community is carrying more of the burden than others? One way is by looking at and comparing targeted social, economic and environmental statistics. Those communities that produce wealth by means of resource extraction from the earth yet do not share in the wealth that those resources produce can be labeled as Places of Injustice. Put another way, some places experience more environmental impact from private wealth production without sharing in the relative societal wealth. Environmental Justice can manifest itself on the landscape as Environmental Classism or Environmental Racism.

We recognize that natural resources are unevenly distributed across the planet. However, we believe that those communities that produce more (much more) than they consume should be rewarded for the production and compensated for the environmental impacts they endure.

Photo 1: The Keystone Generating Station, Shelocta, PA, Armstrong County.

Natural resource wealth redistribution is prevalent in the USA and, like other forms of wealth redistribution, should be recognized as equally unjust to the communities that produce such wealth.

Photo 2: Shale Drilling Pad Site, Crabtree, PA, Westmoreland County.

This report uses the county as the organizing unit to identify 'community'. We acknowledge that not everyone within a county shares the same economic, health, and environmental conditions, but the county unit does provide a very good unit of measurement to characterize and compare one county to another, or one county to the average of all other counties.

Pennsylvania consists of sixty-seven counties, each with various levels of budgetary discretion, regulation, and enforcement. The Center for Coalfield Justice (CCJ) intends for this visual report, with simple yet sound statistical analysis, to be a valuable tool in assisting decision-makers, local and state officials, and all concerned citizens to understand their own communities. This report does highlight the conditions of Greene and Washington Counties. However, the information in these pages can be used to identify and characterize any of the Commonwealth of Pennsylvania's sixty-seven counties.

CCJ believes that Environmental Justice can and should be identified in more ways than the merely poverty and race, as the PA DEP and the Federal Government do. There are many other Community Indicators that can be used to characterize EJ. That is why the indicators used in this report include a selection of various demographic, social, economic, and landscape data. The indicator data were chosen by CCJ staff members and the consultant in order to represent a cross-sectional perspective of the counties of the Commonwealth.

Thank you,

-The Center for Coalfield Justice

Community Indicators

Community indicators are measurements that provide information about past and current trends and assist planners and community leaders in making decisions that affect future outcomes. They can incorporate citizen involvement and participation. In essence, indicators are measurements that reflect the interplay between social, environmental, and economic factors affecting a region's or community's well-being.

"Community indicators are bits of information that, when combined, generate a picture of what is happening in a local system. They provide insight into the overall direction of a community: whether it is improving, declining, or staying the same, or is some mix of all three (Andrews 1996; Redefining Progress 1997). A combination of indicators can therefore provide a measuring system to provide information about past trends, current realities, and future direction in order to aid decision making (Hart 2003; Oleari 2000). In this sense, community indicators can also be thought of as grades on a report card that rates community well-being."

-Rhonda Phillips, "Community Indicators", American Planning Association, Planning Advisory Service Report Number 517, Chicago. 2003.

Policy makers have long used sets of information to aid in the decision making process, just as Community activists have used data to mobilize opinions so as to influence change. But as mentioned above, what today are called community indicators did not enter into use until around 1910 when the Russell Sage Foundation employed "over two thousand local surveys taken on education, recreation, public health, crime, and general social conditions" to assess social conditions (Cobb and Rixford 1998, 7). The first survey was conducted in Pittsburgh, Pennsylvania. Many of the surveys used by the Sage Foundation were conducted by nonprofit organizations, such as chambers of commerce and citizen committees. These surveys yielded social trends indicators and were popular until the Great Depression and World War II, when economic measures such as the gross domestic product or gross national product indicators took greater precedence.

In the late 1980s and early 1990s, advocates for indicator systems turned their attention to quality-of-life and overall community measures, incorporating concepts of well-being from economic, social, and environmental perspectives (Sawicki and Flynn 1996). During the 1990s, the emergence of the sustainability movement gave community indicators a new role in planning, policy, and citizen participation. The ideas behind and applications of community sustainability have been called a

Photo 3: The Homer City Generating Station (background), Homer City High School Football Practice (foreground) Homer City, PA, Indiana County.

"virtual social movement," one that citizens and other stakeholders, private foundations, public agencies, and nonprofit national and international organizations have eagerly embraced (Innes and Booher 2000).

Andrews, J. H. 1996. "Planning Practice: Going by the Numbers." *Planning*, September, 14–18.

Redefining Progress, Tyler Norris Associates, and Sustainable Seattle. 1997. *The Community Indicators Handbook*. San Francisco: Redefining Progress.

Hart, Maureen. 2003. "What Is an Indicator of Sustainability?" [Accessed August 26]. Available at www.sustainablemeasures.com/Indicators/WhatIs.html.

Oleari, K. 2000. "Making Your Job Easier: Using Whole-System Approaches to Involve the Community in Sustainable Planning and Development." *Public Management* 82, no. 12: 12–16.

Cobb, Clifford, and Craig Rixford. 1998. *Lessons Learned From the History of Social Indicators*. San Francisco: Redefining Progress.

Sawicki, David S., and Patrice Flynn. 1996. "Neighborhood Indicators: A Review of the Literature and an Assessment of Conceptual and Methodological Issues." *Journal of the American Planning Association* 62, no. 2: 165–183.

Innes, Judith E., and Booher, D. E. 2000. "Indicators for Sustainable Communities: A Strategy for Building on Complexity Theory and Distributed Intelligence." *Planning Theory and Practice* 1, no. 2: 173–186.

The Origins of Environmental Justice

The following text is an excerpt from, "Not in My Backyard: Executive Order 12,898 and Title VI as Tools for Achieving Environmental Justice. U.S. Commission on Civil Rights. 2003

Environmental justice is the "fair treatment of people of all races, income, and cultures with respect to the development, implementation and enforcement of environmental laws, regulations, and policies, and their meaningful involvement in the decision-making processes of the government."[1] The first environmental justice cases were brought in 1979 in Texas and in 1982 in North Carolina. In 1979, residents of Northwood Manor in East Houston alleged that the decision to place a garbage dump in their neighborhood was racially motivated in violation of their civil rights under § 1983 of the Civil Rights Act.[2] The district court in *Bean v. Southwestern Waste Management Corporation* found that the placement of the dump would irreparably harm the community.

The court specifically found that the landfill would "affect the entire nature of the community, its land values, its tax base, its aesthetics, the health and safety of its inhabitants, and the operation of Smiley High School, located only 1700 feet from the site."[3] Unable to establish intentional discrimination with sufficiently particularized statistical data showing a pattern or practice of placing waste facilities in communities of color, and unable to provide the court sufficiently detailed factual information on the siting decision, the residents were not granted relief and the plant was built.[4] The case, however, launched the use of the courts as a tool for the new movement and highlighted the need for data collection and access to information by communities challenging environmental decisions.

Photo 4: The Hatfield's Ferry Power Station) Monongahela Township, PA, Greene County.

[1] Christine Todd Whitman, administrator, U.S. Environmental Protection Agency, memorandum to Assistant Administrators et al., "EPA's Commitment to Environmental Justice," Aug. 9, 2001. *See also* Linda J. Fisher, deputy administrator, U.S. Environmental Protection Agency, testimony before the U.S. Commission on Civil Rights, hearing, Washington, DC, Feb. 8, 2002, official transcript, p. 46 (hereafter cited as February Hearing Transcript) (environmental justice goes beyond Title VI and includes how agencies interact with all communities to ensure that no community becomes an "environmental dumping ground" due to lack of resources to defend its environmental health): Barry Hill, director, Office of Environmental Justice, U.S. Environmental Protection Agency, Testimony, February Hearing Transcript, pp. 54–55 (involves ensuring the fair treatment of all people, including minority populations and low-income populations): National Environmental Policy Commission, *Report to the Congressional Black Caucus and Congressional Black Caucus Foundation Environmental Braintrust*, Sept. 28, 2001, p. 11; Louisiana Advisory Committee to the U.S. Commission on Civil Rights, *The Battle for Environmental Justice in Louisiana: Government, Industry, and the People*, September 1993, pp. 1, 3 (environmental justice is the "attainment of environmental rights for all and the end of environmental racism" or racial discrimination in environmental policy-making and unequal enforcement of environmental laws and regulations).

[2] *See* Bean v. Southwestern Waste Mgmt. Corp., 482 F. Supp. 673 (S.D. Tex. 1979), *aff'd*, 782 F.2d 1038 (5th Cir. 1986).

[3] 482 F. Supp. at 677.

[4] *Id*. The court noted that census tract information, historical information on the placement of facilities, the number of permits granted and denied, the reasons for granting or denying permits, demographics shifts, and other information are important in establishing environmental justice violations. Much of this information was unavailable to the residents in *Bean. Id.* at 680.

Environmental Justice (EJ) is... "disproportionately high and adverse human health or environmental effects on minority populations and low-income populations"

- William J. Clinton, "Federal Actions To Address Environmental Justice in Minority and Low – Income Populations" in Executive Order 12898 of February 11, 1994.

"The *fair treatment* and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. *Fair treatment means* that no group of people, including racial, ethnic, or socioeconomic group *should bear a disproportionate share of the negative environmental consequences* resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies *(emphasis added w/ italics)*."

- US EPA, "Guidance for Incorporation Environmental Justice Concerns in EPA's NEPA Compliance Analyses", 1998.

Environmental Justice and Society

Environmental Justice (EJ) is based on the principle that all people have a right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment. EJ is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits.

http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-ej.html

The following section is an excerpt from, "Not in My Backyard: Executive Order 12,898 and Title VI as Tools for Achieving Environmental Justice. U.S. Commission on Civil Rights. 2003

ENVIRONMENTAL JUSTICE AND ECONOMIC OPPORTUNITY

Despite the demonstrated health risks, locating waste and toxic facilities in minority and low-income neighborhoods is viewed, by some, as a welcome means of providing these communities economic opportunities.[5] Supporters of the economic benefit theory point to the experiences of Select Steel and Shintech, Inc., as examples. Both facilities relocated from minority communities after environmental justice challenges were raised. Select Steel promised to provide jobs in the economically disadvantaged community of Genesee County, Michigan. Community members, however, were concerned about the adverse health effects created by the Select Steel facility. Their protests, and challenges to the granting of a permit to Select Steel, forced the facility to relocate.

Many community and environmental advocates disagree that jobs are being created for the communities exposed to the greatest health risks.[6] Chemical plants and other facilities, they note, do not hire local residents.. There are many cases that document the lack of jobs available when these types of facilities move into an area. [7, 8, 9] Additionally, the data reflects that when better paying, skilled jobs are created they often require skills not present in the workers from the immediate community.

For the jobs that are created, local residents are not given the right of

Photo 5: Electricity Transmission Towers, German Township, Fayette County.

Currently there is no presumption of adverse health risk from multiple exposures, and no policy on cumulative risk assessment that considers the roles of social, economic, and behavioral factors when assessing rate.

Photo 6: Natural Gas Transmission Pipeline, Dunbar Township, PA, Fayette County.

first refusal or guaranteed access to training to prepare them for available jobs. [10] In fact, EPA lacks legal authority to ensure that members of affected communities qualify for jobs created by a siting or permitting decision, and does not have authority to condition approval of state programs on their hiring practices. [11] EPA does not maintain records of which state regulatory bodies condition permits on specific hiring practices, or the reasons for such conditions if they are imposed by the states. [12]

5 John K. Carlisle, *Economic Opportunity and Social Issues Trump Environment as Top Concerns for Poor and Minorities* (National Center for Public Policy Research, September 2000).

6 Peggy Shepard, executive director, West Harlem Environmental Action, Inc., Testimony, January Hearing Transcript, p. 149 ("communities that bear the brunt of these facilities are not getting the jobs" and continue to experience high unemployment rates).

7 Luke Cole, director, California Rural Legal Assistance Foundation, Testimony, February Hearing Transcript, p. 30.

8 Elizabeth Teel, deputy director, Environmental Law Clinic, Tulane Law School, "Environmental Justice in Louisiana," written statement delivered to the U.S. Commission on Civil Rights, Washington, DC, Jan. 11, 2002, p. 13.

9 *See* U.S. Census Bureau ,2000 Census.

10 Elizabeth Teel Testimony, deputy director, Environmental Law Clinic, Tulane Law School, Testimony, January Hearing Transcript, p. 118 (people in these communities do not have the skill levels required to work in the facilities).

11 EPA, Response to Interrogatory Question 43. *See also* Peggy Shepard, executive director, West Harlem Environmental Action, Inc., Testimony, January Hearing Transcript, p. 149 (companies do not ensure local residents employment at neighboring plants or facilities).

12 EPA, Response to Interrogatory Question 43.

ENVIRONMENTAL JUSTICE AS SOCIAL JUSTICE

Clearly, class and race play significant roles in environmental decision-making; moreover, communities of low-income and color are disproportionately affected by siting decisions and the permitting of facilities. Siting and permitting decisions are not, however, the sole sources of environmental concerns in these communities. Exposure to poor air quality, impaired drinking and surface waters, diesel emissions, noise, odor, and other pollutants also diminishes the health of these communities.

Low-income and minority communities are most often exposed to multiple pollutants from multiple sources; however, there has been insufficient data collection and scientific research identifying the health risks created by these multiple exposures. Additionally, there is no presumption of adverse health risk from multiple exposures, and no policy on cumulative risk assessment that considers the roles of social, economic, and behavioral factors when assessing risk.

Manifesting Environmental Justice

Environmental Justice Areas of Concern are expanding in the Commonwealth (see Figures 1, 2 and 3, right). The Commonwealth of Pennsylvania's Department of Environmental Protection (PADEP) identifies Environmental Justice areas this way:

> **An EJ area is any census tract where 20 percent or more individuals live in poverty, and/or 30 percent or more of the population is minority (based on the most current census tract data from the U.S. Census Bureau and the federal guidelines for poverty).**
>
> **- PA Department of Environmental Protection. http://www.portal.state.pa.us/portal/server.pt/community/pa_environmental_justice_areas/20991**

In 2005, 666 census tracts met the PADEP definition of an EJ areas (Fig.1) for a combined 898 square miles . By 2010, the census tracts meeting the PA DEP definition of an EJ area (Fig. 2) had increased to 851 (a 22% increase) and then accounted for 2,379 square miles (a 62% increase).

This expansion of EJ areas from 2005 to 2010 in the Commonwealth of Pennsylvania then represented a combined increase of 1,481 square miles, which is approximately 5% of Pennsylvania's total land area (Fig. 3).

Methods of this Report

All indicators were compiled from various sources and analyzed and displayed using a Geographic Information System (GIS). Z scores were compiled for each indicator. A 'Z Score' is the number standard deviations an observation is above or below the mean (average). Standard deviation shows how much variation exists from the average. Positive Z scores represent values above the mean, and negative scores represent values below the mean.

Fig.1 – PA DEP Environmental Justice Areas (2005)
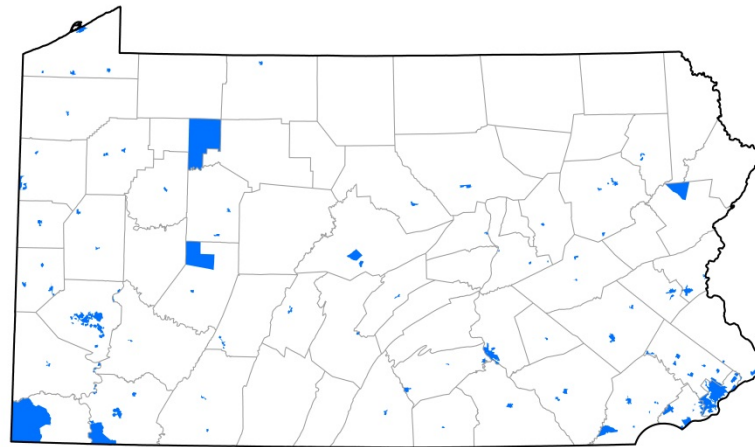
Fig.2 – PA DEP Environmental Justice Areas (2010)
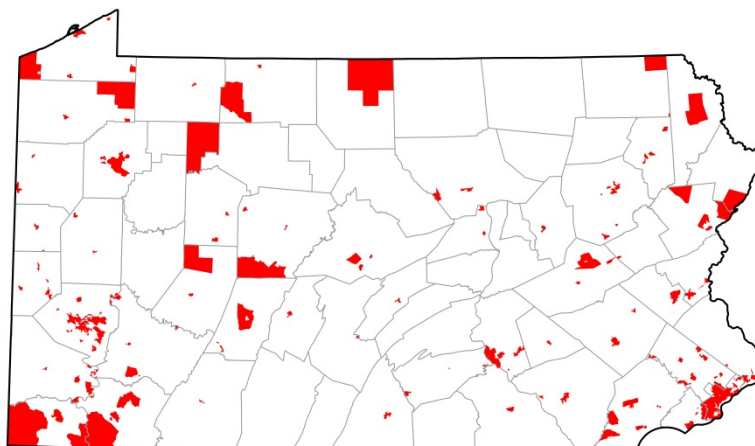
Fig.3 – Increases (red) in EJ areas from 2005 & 2010
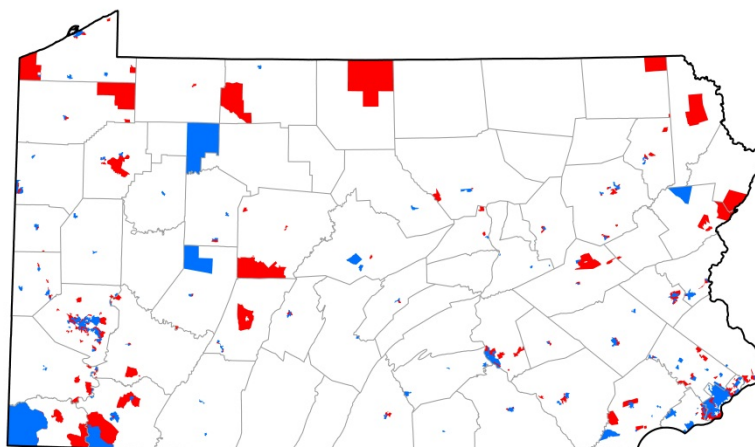
Data Source: PA Department of Environmental Protection

Z scores are calculated as follows:

$$Z = \frac{\text{(County Value) - (Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Using the Z Scores on each page you can:

- Identify a particular County as above or below the mean (+ or -)
- Determine how far away from the average a county is (standard deviation labeled as 'Z Score'), and
- See where a particular county ranks among the 67 Counties of Pennsylvania (Labeled as 'Z Score Rank')
- Identify counties that may have cumulative and/or multiple high scores, representing poor economic conditions or environmental impacts.

> **'Cumulative and/or multiple exposures' mean exposure to one or more chemical, biological, physical or radiological agents across environmental media (e.g., air, water, soil) from single or multiple sources, over time in one or more locations, that have the potential for deleterious effects to the environment and/or human health.**
>
> **-Council on Environmental Quality, "Environmental Justice Guidance Under the National Environmental Policy Act". 1997.**

In each table on the pages that follow, some indicators were ranked with an inverse Z score by multiplying the score by -1. This was necessary because most indicator scores that are positive indicate a less-desirable ranking. However, some less-desirable scores were ranked with a negative score. Those indicators that were reverse-coded were: population growth, birth rates, RNI, homeownership, housing value, voter participation, federal expenditures, and per student spending. This necessary for calculating the composite scores.

Data that are two standard deviations below the mean will have a Z-score of -2, data that are two standard deviations above the mean will have a z-score of +2. Data beyond two standard deviations away from the mean will have z-scores beyond -2 or 2. <u>**Data beyond two standard deviations away from the mean are considered unusual data.**</u>

CCJ's Environmental Justice recommendations for *Action*

Environmental Justice Is Achieved When All People Can Realize Their Highest Potential, Without Interruption By Environmental Inequity. Environmental Justice is supported by decent paying and secure jobs; quality schools and recreation opportunities; decent housing and adequate health care; democratic decision making about permitting, regulating, and enforcement; and finally, personal empowerment. We believe that every community in Pennsylvania has the potential to generate healthy jobs, reduce and prevent industrial pollution, develop affordable housing, preserve local resources, and conduct community-led planning to sustain a vibrant future. This vision can become a reality by identifying the communities most burdened by environmental injustices and creating policy that follows community priorities.

The Information In This Report Brings Into Focus A Clear Contradiction. With its resource rich earth and productive labor, Greene and Washington County continuously offer a bounty of coal and natural gas to meet the energy needs of this nation and other countries. But, in Washington and Greene Counties the rate of poverty is high; home ownership and recreational opportunities are decreasing; child abuse, crime, school dropout rates, and the number of vacant homes are increasing; and problematic air and water quality contribute to a decrease in property value and ill health of local residents.

By Documenting Disparities And Highlighting The Conditions Of Those Most Affected, We Hope To Offer A New Forward-looking Approach. This approach takes into account cumulative exposure and social vulnerability, and a new set of policies that stress prevention rather than mitigation, inter-agency coordination, and enhance the participation of community members in decision-making processes. After all, Greene and Washington Counties - with their beautiful natural resources and hard-working people - deserve protection from harm and damage, assurance that an environmental of quality will be preserved for future generations, and diverse economic opportunity.

THREE PRINCIPLES FOR **ACTION**:

✓ **_Strive for Environmental Justice_**. *Actions should reduce cumulative impacts on the most affected and vulnerable communities.*

✓ **_Action should reduce risk_**. *The burden of proof should be on those proposing the activity. Regulatory agencies should utilize a precautionary, not reactive, approach in decision-making.*

✓ **_Residents speak for themselves_**. *Agencies must engage with residents of affected communities when making decisions about those residents' natural environment.*

Moving Forward:

Change Happens When We Work Together:

The Pennsylvania Department of Environmental Protection should focus on mechanisms to effectively incorporate Environmental Justice concerns into their decision-making. While these concerns may not provide the level of specificity to serve as the sole basis for permitting decisions (for example, it may not be a formal assessment of impacts), the profile of a community characterized has having high cumulative environmental impacts and high social vulnerability ought to raise the bar for permitting additional environmental hazards.

The Pennsylvania Department of Environmental Protection should expand the definition of what constitutes an Environmental Justice Area beyond just race and income/poverty.

Public agencies should actively engage with residents and advocates representing the most affected communities and document local conditions. This will allow community members and advocates to better understand the impacts they face, to work effectively with public agencies, and to develop innovative solutions for preventing or mitigating impacts.

Public agencies should produce an annual report card to track process towards improving conditions for the most vulnerable and most affected communities. This report card should also identify areas needing special consideration and resources. Finally, this report card should identify promising practices to adapt to other areas of the state.

Public agencies should work in a mutually beneficial partnership, not conflict, with community-based organizations and residents by creating programs like training for residents in specific monitoring techniques.

Public agencies should identify "Cumulative Environmental Action Zones" in order to prioritize support for specific areas within the region most burdened by environmental impacts and with the fewest social and economic resources to mitigate these impacts. Such support could include enhanced pollution abatement and mitigation funding, additional environmental and health monitoring, and special consideration in permitting decisions and enforcement actions.

To ensure that any action steps taken by public agencies match the lived realities of residents, the data and assumptions relied on in permitting, regulating, and enforcement must be publically available. Furthermore, agencies must provide meaningful opportunity for residents of affected communities to actually inform some of the specific indicators used in decision-making and contribute their knowledge of environmental impacts as they experience them.

Investments in regulatory and academic science would pay great dividends in creating better-informed and more democratic public policy. Financial and institutional support for programs developed through collaboration between academic researches, community organizations, and public agencies focused on a specific area and/or environmental health issue could help inform the implementation and methodology of actions for real-time improvement.

Public agencies should invest in a biennial "Cumulative Environmental Assessment" in order to understand and, most importantly, to inform action on behalf of communities.

Coal Mining in Pennsylvania

Coal mining in Pennsylvania is found in the bituminous coal fields of the western part of the Commonwealth, and in the anthracite coal fields of the eastern and north eastern parts of the Commonwealth.

The purple area on Figure 4 (right) shows the extent of the Appalachian Bituminous Coal Region and the light pink shows the extent of the Pennsylvania Anthracite Coal Region. Within the Bituminous Coal Region, the previously mined Pittsburgh Coal Seam is shown as light orange, mostly in the counties of Allegheny, Fayette, Greene, Washington and Westmoreland. Within the Pittsburgh Coal Seam, the light yellow region shows where the Pittsburgh Coal Seam has not yet been mined and is economically practical to do so.

Using the latest coal mining operations permit data published by the PA DEP, Figure 4a (below) shows the density of permits issued per ten square miles. The majority of the coal mining operations in the Commonwealth are in the Bituminous coal regions, particularly in Butler, Clarion and Jefferson Counties.

NOTE – this analysis only shows how many permits are issued per 10 square miles – it does not take into account the *size* of individual coal mining operations. For example, the size of the operating longwall mines are not represented.

Figure 4 - Coal Mining in Pennsylvania
June, 2013
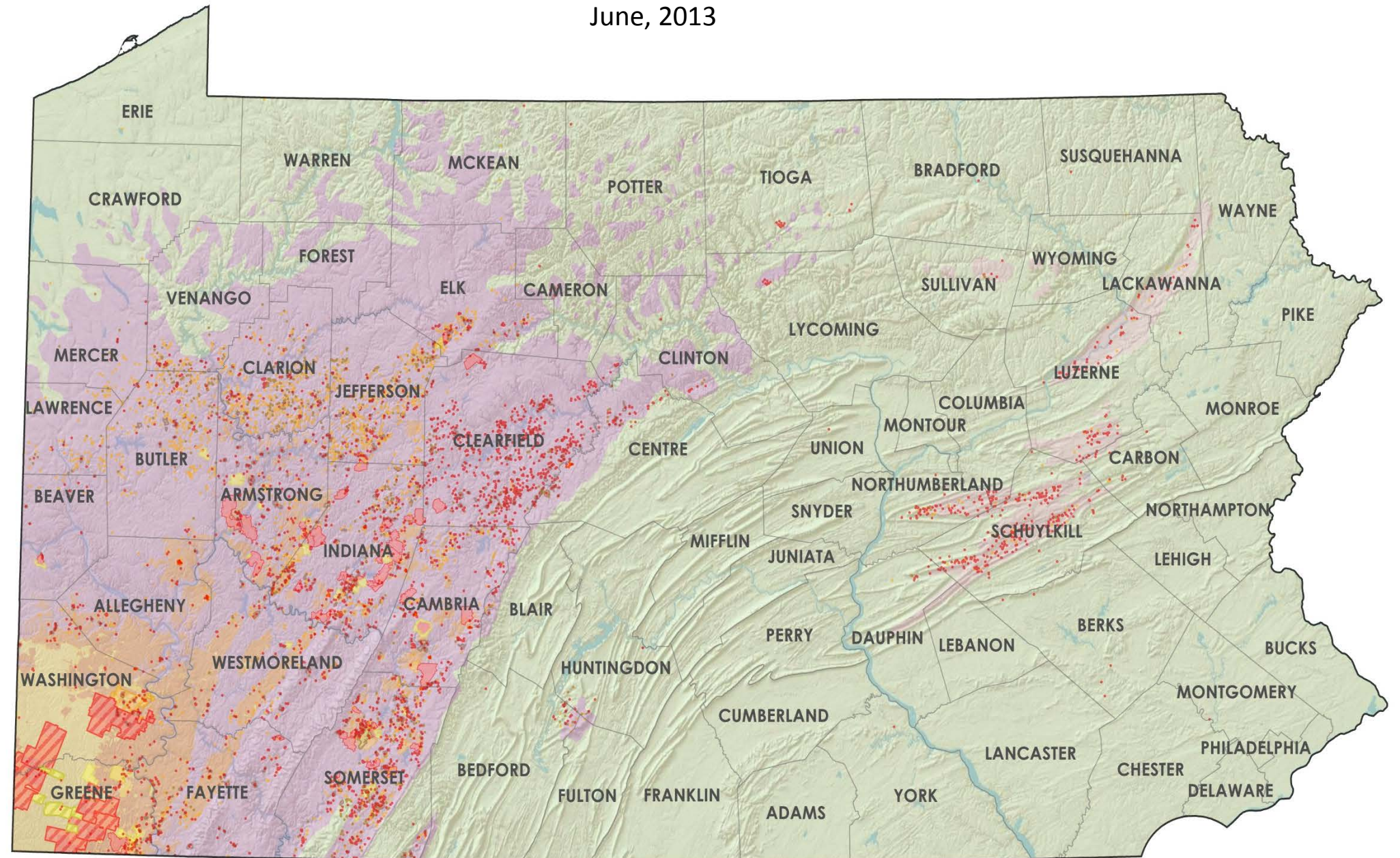
Fig.4a – Point Density of Coal Mining Permits per 10 Sq. Miles

	1 – 2
	2 – 3
	3 – 4
	4 – 5
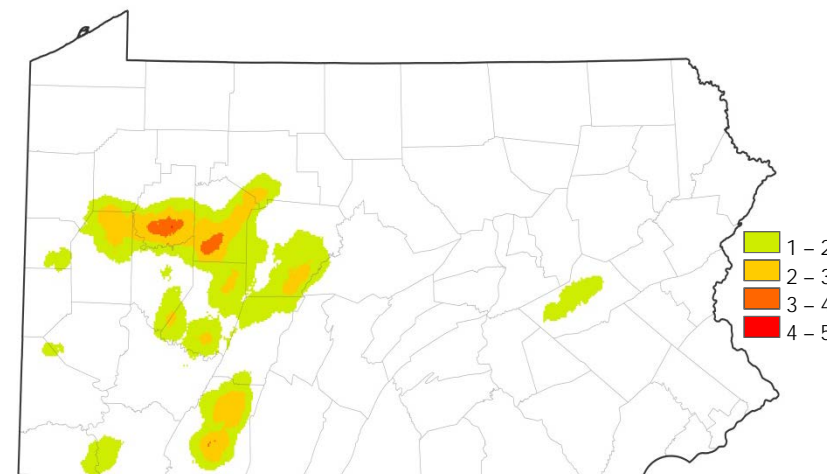
Key:

Coal Regions
- Appalachian Bituminous
- Pennsylvania Anthracite

Coal Mining Operations (2013_04)
- Abandoned
- Active
- Inactive

Underground Mining Permits (2013_06)
- Longwall, Active
- Longwall, Final
- Longwall, Pending
- Room and Pillar, Active
- Room and Pillar, Final
- Room and Pillar, Pending
- Mined-Out (Legacy)
- Recoverable Pittsburgh Seam

Shale Drilling in Pennsylvania

Shale drilling in Pennsylvania is currently found in the Marcellus Shale Formations found between 1,000 and 7,000 feet beneath the western, north central, and north east part of the Commonwealth and in the Utica Shale Formations of the eastern and north eastern parts of the Commonwealth. The Utica is typically 2,000 to12,000 feet below sea level.

The purple cross-hatched area on Figure 5 (right) shows the extent of the Marcellus Shale Formation and the solid gold shows the extent of the Utica Formation. Other shale formations are also being explored for development that are above the Marcellus, below the Utica, and in between. The Marcellus Shale Formation lies beneath 52 of the 67 Counties of Pennsylvania. The Utica Shale Formation lies beneath 51 of the 67 Counties of Pennsylvania.

Using the latest unconventional (shale) gas well permit data published by the PA DEP, Figure 5a (below) shows the density of permits issued per ten square miles. There are two major clusters of Shale Drilling Activity in the Commonwealth, each with several minor clusters within them. Cluster 1 is in the north eastern part of the Commonwealth centered in Bradford and Susquehanna Counties and Cluster 2 is in the south western part of the Commonwealth centered in Greene and Washington Counties.

Figure 5 - Shale Drilling in Pennsylvania
July, 2013
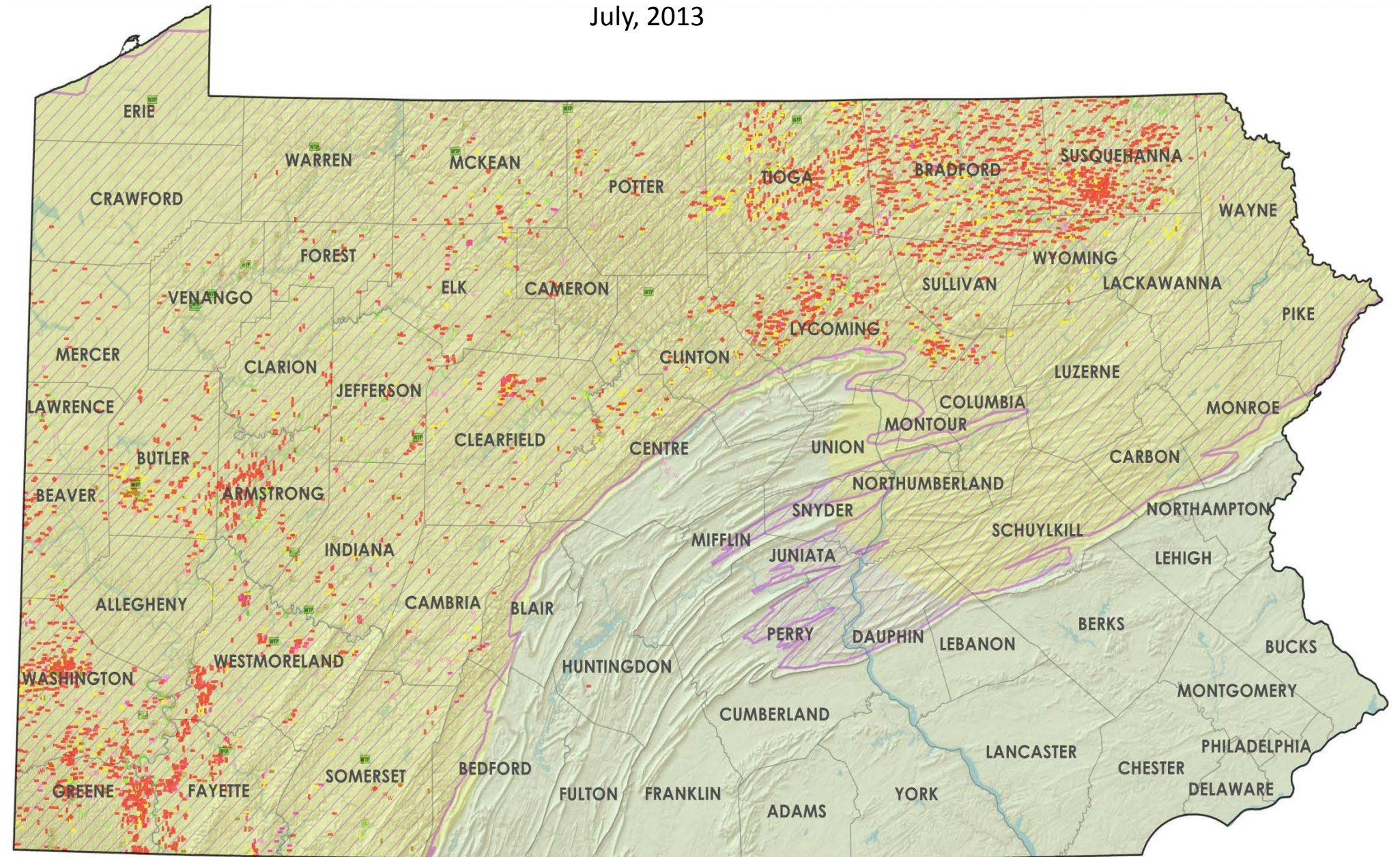
Fig.5a – Point Density of Shale Permits per 10 Sq. Miles

>1 – 2
+2 – 3
+3 – 4
+4 – 5 or more
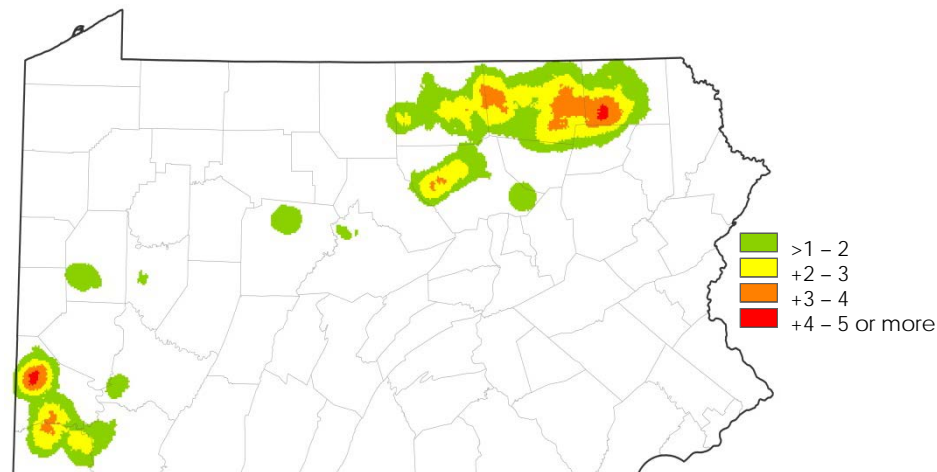
Key:

Shale Formations
- Marcellus
- Utica

Shale Drilling Water Sources
- W Ground Water Withdrawal
- W Interconnection
- W Surface Water Withdrawal

Shale Drilling Water Disposal
- Discharge Point
- Treatment Plant

Shale Drilling Permits (2013_07)
- Deviated Well, Active
- Horizontal Well, Active
- Horizontal Well, Not Drilled
- Horizontal Well, Plugged Well
- Horizontal Well, Regulatory Inactive
- Vertical Well, Active
- Vertical Well, Not Drilled
- Vertical Well, Plugged Well
- Vertical Well, Regulatory Inactive

Population - Growth (2000 - 2010)

Population (2000)

Population (2010)

% Change (2000-2010)

Z Score of % Change (2000-2010)

Z Score

- ◼ < -1.5 Std. Dev.
- ◼ -1.5 - -0.50 Std. Dev.
- ◼ -0.50 - 0.50 Std. Dev.
- ◼ 0.50 - 1.5 Std. Dev.
- ◼ > 1.5 Std. Dev.
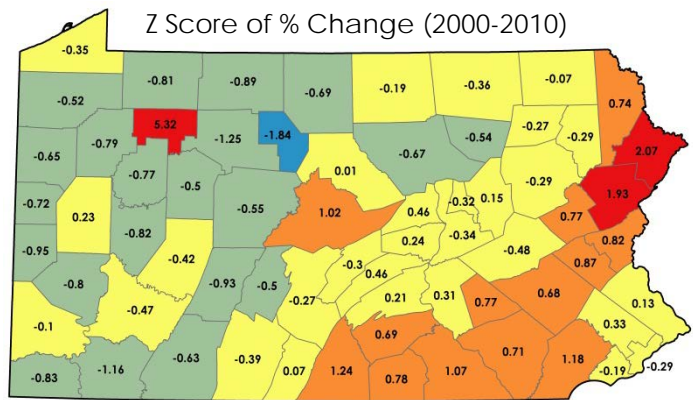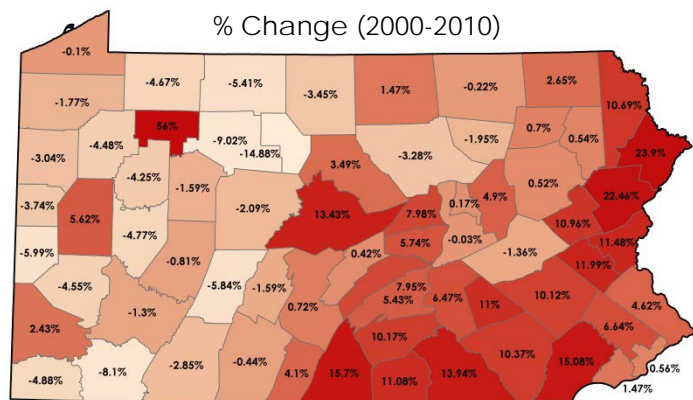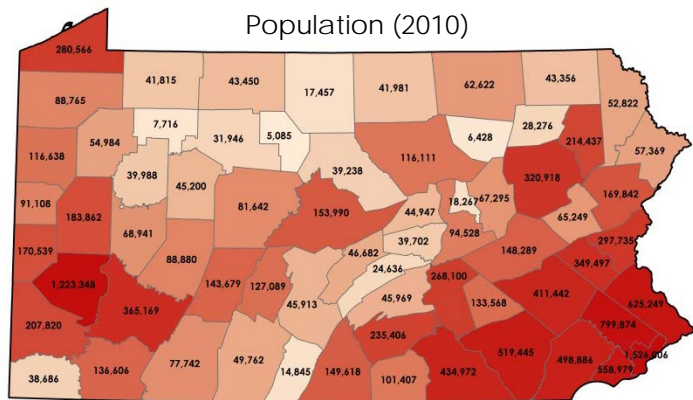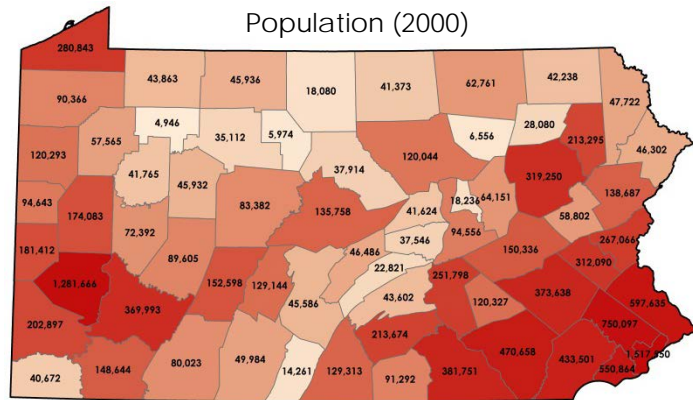
Greene County has experienced the 7th largest population loss in PA from 2000 – 2010 (-4.9%). Washington County has had a population gain of 2.4% during the same time.

Rapid or severe changes in population growth rate may result in potential impacts to existing community or public services and infrastructure.

Changes in growth rate may include: (1) an relative increase in low-income or minority population(s) in an area (2) high or low birth rates, and (3) cumulative impacts due to multiple sources of population increases or decreases.

*Please note the growth rate of Forest County. This growth is almost entirely due to the opening of the State Correctional Institution – Forest (SCI – Forest). SCI – Forest opened in 2004 to hold Maximum-Security male inmates. The prison population should be considered residents of the county, as they too could be subject to environmental risks.

This Z score in the table is multiplied by -1 because the category Z score summary scores require positive values to indicate less-desirable conditions. In this instance, population growth is more desirable than decline. The Z score map (left) shows original Z scores.

Data Sources: Pennsylvania State Data Center. http://pasdc.hbg.psu.edu/

$$Z = \frac{\text{(County Value)} - \text{(Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.

County	Pop. 1950	Pop. 1990	Pop. 2000	Pop. 2010	% Change Pop. 2000-10 (loss-gain)	Z-score Pop. Growth	Rank
Cameron County	7,023	5,913	5,974	5,085	-14.88%	1.84	1
Elk County	34,503	34,878	35,112	31,946	-9.02%	1.25	2
Fayette County	189,899	145,351	148,644	136,606	-8.10%	1.16	3
Beaver County	175,192	186,093	181,412	170,539	-5.99%	0.95	4
Cambria County	209,541	163,029	152,598	143,679	-5.84%	0.93	5
McKean County	56,607	47,131	45,936	43,450	-5.41%	0.89	6
Greene County	45,394	39,550	40,672	38,686	-4.88%	0.83	7
Armstrong County	80,842	73,478	72,392	68,941	-4.77%	0.82	8
Warren County	42,698	45,050	43,863	41,815	-4.67%	0.81	9
Allegheny County	1,515,237	1,336,449	1,281,666	1,223,348	-4.55%	0.8	10
Venango County	65,328	59,381	57,565	54,984	-4.48%	0.79	11
Clarion County	38,344	41,699	41,765	39,988	-4.25%	0.77	12
Lawrence County	105,120	96,246	94,643	91,108	-3.74%	0.72	13
Potter County	16,810	16,717	18,080	17,457	-3.45%	0.69	14
Lycoming County	101,249	118,710	120,044	116,111	-3.28%	0.67	15
Mercer County	111,954	121,003	120,293	116,638	-3.04%	0.65	16
Somerset County	81,813	78,218	80,023	77,742	-2.85%	0.63	17
Clearfield County	85,957	78,097	83,382	81,642	-2.09%	0.55	18
Sullivan County	6,745	6,104	6,556	6,428	-1.95%	0.54	19
Crawford County	78,948	86,169	90,366	88,765	-1.77%	0.52	20
Jefferson County	49,147	46,083	45,932	45,200	-1.59%	0.5	21
Blair County	139,514	130,542	129,144	127,089	-1.59%	0.5	22
Schuylkill County	200,577	152,585	150,336	148,289	-1.36%	0.48	23
Westmoreland County	313,179	370,321	369,993	365,169	-1.30%	0.47	24
Indiana County	77,106	89,994	89,605	88,880	-0.81%	0.42	25
Bedford County	40,775	47,919	49,984	49,762	-0.44%	0.39	26
Bradford County	51,722	60,967	62,761	62,622	-0.22%	0.36	27
Erie County	219,388	275,572	280,843	280,566	-0.10%	0.35	28
Northumberland County	117,115	96,771	94,556	94,528	-0.03%	0.34	29
Montour County	16,001	17,735	18,236	18,267	0.17%	0.32	30
Mifflin County	43,691	46,197	46,486	46,682	0.42%	0.3	31
Luzerne County	392,241	328,149	319,250	320,918	0.52%	0.29	32
Lackawanna County	257,396	219,039	213,295	214,437	0.54%	0.29	33
Philadelphia County	2,071,605	1,585,577	1,517,550	1,526,006	0.56%	0.29	34
Wyoming County	16,766	28,076	28,080	28,276	0.70%	0.27	35
Huntingdon County	40,872	44,164	45,586	45,913	0.72%	0.27	36
Tioga County	35,474	41,126	41,373	41,981	1.47%	0.19	37
Delaware County	414,234	547,651	550,864	558,979	1.47%	0.19	38
Washington County	209,628	204,584	202,897	207,820	2.43%	0.1	39
Susquehanna County	31,970	40,380	42,238	43,356	2.65%	0.07	40
Clinton County	36,532	37,182	37,914	39,238	3.49%	-0.01	41
Fulton County	10,387	13,837	14,261	14,845	4.10%	-0.07	42
Bucks County	144,620	541,174	597,635	625,249	4.62%	-0.13	43
Columbia County	53,460	63,202	64,151	67,295	4.90%	-0.15	44
Perry County	24,782	41,172	43,602	45,969	5.43%	-0.21	45
Butler County	97,320	152,013	174,083	183,862	5.62%	-0.23	46
Snyder County	22,912	36,680	37,546	39,702	5.74%	-0.24	47
Dauphin County	197,784	237,813	251,798	268,100	6.47%	-0.31	48
Montgomery County	353,068	678,111	750,097	799,874	6.64%	-0.33	49
Juniata County	15,243	20,625	22,821	24,636	7.95%	-0.46	50
Union County	23,150	36,176	41,624	44,947	7.98%	-0.46	51
Berks County	255,740	336,523	373,638	411,442	10.12%	-0.68	52
Cumberland County	94,457	195,257	213,674	235,406	10.17%	-0.69	53
Lancaster County	234,717	422,822	470,658	519,445	10.37%	-0.71	54
Wayne County	28,478	39,944	47,722	52,822	10.69%	-0.74	55
Carbon County	57,558	56,846	58,802	65,249	10.96%	-0.77	56
Lebanon County	81,683	113,744	120,327	133,568	11.00%	-0.77	57
Adams County	44,197	78,274	91,292	101,407	11.08%	-0.78	58
Northampton County	185,243	247,105	267,066	297,735	11.48%	-0.82	59
Lehigh County	198,207	291,130	312,090	349,497	11.99%	-0.87	60
Centre County	65,922	123,786	135,758	153,990	13.43%	-1.02	61
York County	202,737	339,574	381,751	434,972	13.94%	-1.07	62
Chester County	159,141	376,396	433,501	498,886	15.08%	-1.18	63
Franklin County	75,927	121,082	129,313	149,618	15.70%	-1.24	64
Monroe County	33,773	95,709	138,687	169,842	22.46%	-1.93	65
Pike County	8,425	27,966	46,302	57,369	23.90%	-2.07	66
*Forest County	4,944	4,802	4,946	7,716	56.00%	-5.32	67

Mean

Population - Birth Rates

Live Births Per 1,000 (2011)
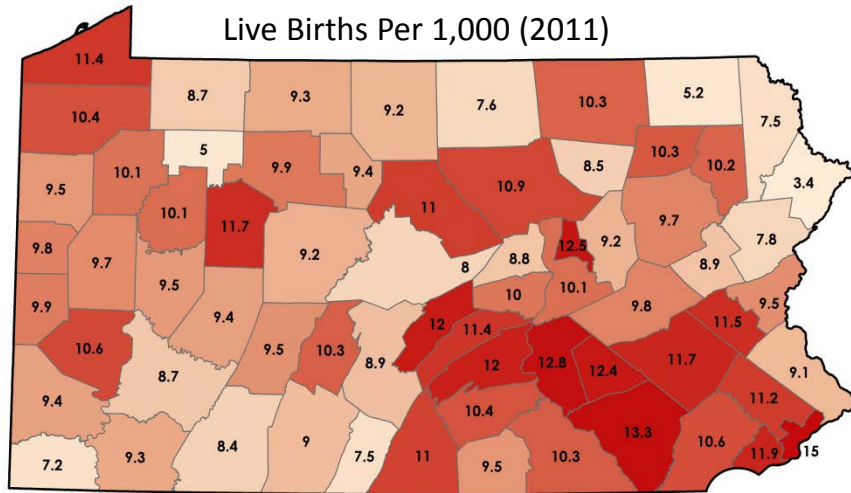
Greene County has experienced the 6th largest birth rate decrease in PA from 1991 – 2011 (-5.7%).
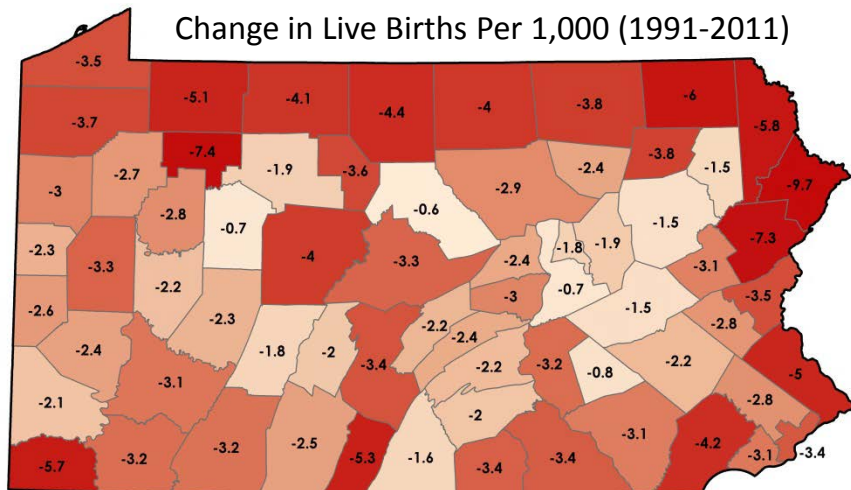
The birth rate is the total number of births per 1,000 of a population each year. The rate of births in a population is calculated in several ways: live births from a universal registration system for births, deaths, and marriages; population counts from a census, and estimation through specialized demographic techniques.

When the crude death rate is subtracted from the crude birth rate, the result is the rate of natural increase (RNI) (See pages 12 and 13).

The average change in birth rates for all 67 PA Counties during this period was -3.2%

Change in Live Births Per 1,000 (1991-2011)

Z Score Change in Live Births Per 1,000
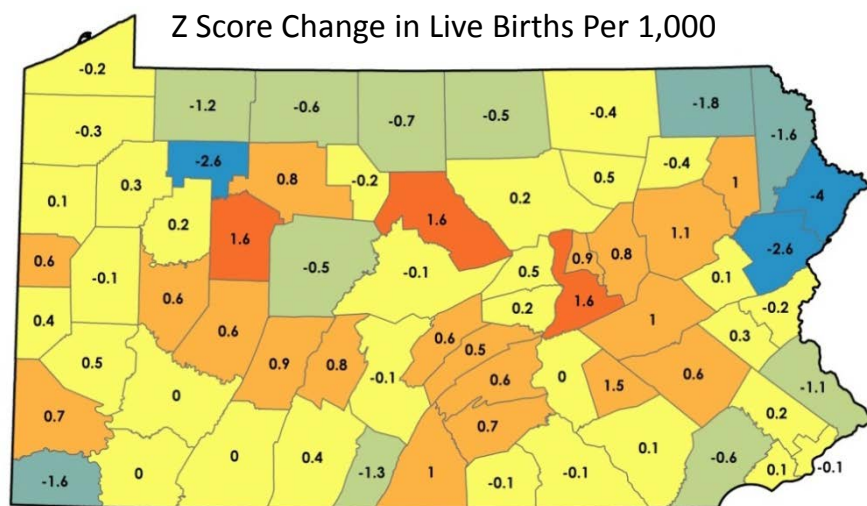
Z Score

◼	< -2.5 Std. Dev.
◼	-2.5 - -1.5 Std. Dev.
◼	-1.5 - -0.50 Std. Dev.
◼	-0.50 - 0.50 Std. Dev.
◼	0.50 - 1.5 Std. Dev.
◼	1.5 - 1.6 Std. Dev.

This Z score in the table is multiplied by -1 because the category Z score summary scores require positive values to indicate less-desirable conditions. In this instance, rising birth rates are more desirable than declining rates. However, birth rates are not used in determining summary scores. The Z score map (left) shows original Z scores.

Data Sources: PA Dept. of Health, State Center for Health Statistics and Research. Marriage statistics are shown y occurrences and actual state or county of residence of either party. http://www.dsf.health.state.pa.us/health/cwp/view.asp?a=175&Q=228721

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Birth Rate Per 1,000 (1991)	Birth Rate Per 1,000 (2011)	Change Births (91-11)	Z Score Change Births	Z Score Rank
Pike County	13.1	3.4	-9.7	4.05	1
Forest County	12.4	5.0	-7.4	2.62	2
Monroe County	15.1	7.8	-7.3	2.56	3
Susquehanna County	11.2	5.2	-6.0	1.78	4
Wayne County	13.3	7.5	-5.8	1.64	5
Greene County	12.9	7.2	-5.7	1.56	6
Fulton County	12.8	7.5	-5.3	1.3	7
Warren County	13.7	8.7	-5.1	1.18	8
Bucks County	14.2	9.1	-5.0	1.13	9
Potter County	13.5	9.2	-4.4	0.72	10
Chester County	14.7	10.6	-4.2	0.6	11
McKean County	13.4	9.3	-4.1	0.58	12
Tioga County	11.6	7.6	-4.0	0.5	13
Clearfield County	13.2	9.2	-4.0	0.5	14
Bradford County	14.1	10.3	-3.8	0.39	15
Wyoming County	14.1	10.3	-3.8	0.36	16
Crawford County	14.1	10.4	-3.7	0.31	17
Cameron County	13.0	9.4	-3.6	0.23	18
Northampton County	13.0	9.5	-3.5	0.19	19
Erie County	14.9	11.4	-3.5	0.17	20
Huntingdon County	12.3	8.9	-3.4	0.14	21
Philadelphia County	18.4	15.0	-3.4	0.14	22
York County	13.7	10.3	-3.4	0.12	23
Adams County	12.9	9.5	-3.4	0.12	24
Butler County	13.0	9.7	-3.3	0.09	25
Centre County	11.3	8.0	-3.3	0.08	26
Dauphin County	16.0	12.8	-3.2	0.02	27
Fayette County	12.5	9.3	-3.2	0.01	28
Somerset County	11.6	8.4	-3.2	-0.03	29
Westmoreland County	11.9	8.7	-3.1	-0.04	30
Delaware County	15.0	11.9	-3.1	-0.07	31
Lancaster County	16.4	13.3	-3.1	-0.08	32
Carbon County	11.9	8.9	-3.1	-0.08	33
Mercer County	12.5	9.5	-3.0	-0.14	34
Snyder County	13.0	10.0	-3.0	-0.16	35
Lycoming County	13.8	10.9	-2.9	-0.19	36
Clarion County	13.0	10.1	-2.8	-0.24	37
Montgomery County	14.0	11.2	-2.8	-0.24	38
Lehigh County	14.3	11.5	-2.8	-0.28	39
Venango County	12.8	10.1	-2.7	-0.3	40
Beaver County	12.5	9.9	-2.6	-0.39	41
Bedford County	11.5	9.0	-2.5	-0.44	42
Allegheny County	13.0	10.6	-2.4	-0.5	43
Sullivan County	10.9	8.5	-2.4	-0.51	44
Union County	11.2	8.8	-2.4	-0.51	45
Juniata County	13.8	11.4	-2.4	-0.52	46
Lawrence County	12.1	9.8	-2.3	-0.57	47
Indiana County	11.7	9.4	-2.3	-0.58	48
Mifflin County	14.2	12.0	-2.2	-0.61	49
Berks County	13.9	11.7	-2.2	-0.62	50
Perry County	14.2	12.0	-2.2	-0.63	51
Armstrong County	11.7	9.5	-2.2	-0.63	52
Washington County	11.5	9.4	-2.1	-0.68	53
Cumberland County	12.4	10.4	-2.0	-0.74	54
Blair County	12.3	10.3	-2.0	-0.77	55
Columbia County	11.1	9.2	-1.9	-0.82	56
Elk County	11.8	9.9	-1.9	-0.83	57
Montour County	14.2	12.5	-1.8	-0.9	58
Cambria County	11.3	9.5	-1.8	-0.9	59
Franklin County	12.6	11.0	-1.6	-1.01	60
Lackawanna County	11.8	10.2	-1.5	-1.04	61
Schuylkill County	11.3	9.8	-1.5	-1.05	62
Luzerne County	11.2	9.7	-1.5	-1.07	63
Lebanon County	13.1	12.4	-0.8	-1.52	64
Northumberland County	10.8	10.1	-0.7	-1.59	65
Jefferson County	12.3	11.7	-0.7	-1.59	66
Clinton County	11.7	11.0	-0.6	-1.6	67

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Population - Mortality

Deaths Per 1000 (2011)

Greene County's mortality rate has remained the same between 1991 – 2011 (11.2%). Washington County's mortality rate rose slightly (0.4%) during the same period.

Mortality rate is a measure of the number of deaths (in general, or due to a specific cause) in a population, scaled to the size of that population, per unit of time.

Mortality rate is typically expressed in units of deaths per 1,000 individuals per year; thus, a mortality rate of 9.5 (out of 1,000) in a population of 1,000 would mean 9.5 deaths per year in that entire population, or 0.95% out of the total.

It is distinct from morbidity rate, which refers to the number of individuals in poor health during a given time period.

Change in Deaths Per 1000

Z Score Change in Deaths Per 1000

Z Score

|	
	< -2.5 Std. Dev.
	-2.5 - -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.5 Std. Dev.
	> 2.5 Std. Dev.

$$Z = \frac{(\text{County Value}) - (\text{Average of All Counties})}{(\text{Standard Deviation of All Counties})}$$

Data beyond two standard deviations away from the mean is considered unusual data.

Data Sources: PA Dept. of Health, State Center for Health Statistics and Research.
http://www.dsf.health.state.pa.us/health/cwp/view.asp?a=175&Q=228721

PA Counties	Death Rate Per 1,000 (1991)	Death Rate Per 1,000 (2011)	Change Deaths (91-11)	Z Score Change Deaths	Z Score Rank
Sullivan County	14.1	19.0	4.9	3.88	1
Cameron County	9.2	13.2	4.0	3.06	2
Bedford County	8.1	11.3	3.2	2.38	3
Venango County	10.5	12.9	2.4	1.62	4
Somerset County	9.7	12.0	2.3	1.58	5
Elk County	10.3	12.3	2.0	1.30	6
Lycoming County	9.1	10.7	1.6	0.93	7
Montour County	11.2	12.8	1.6	0.93	8
Beaver County	10.5	12.1	1.6	0.87	9
Lebanon County	9.2	10.7	1.5	0.84	10
Westmoreland County	10.6	12.1	1.5	0.81	11
Columbia County	9.1	10.5	1.4	0.73	12
Warren County	10.8	12.1	1.4	0.71	13
Wyoming County	8.2	9.5	1.3	0.61	14
Bucks County	7.3	8.5	1.2	0.55	15
Potter County	10.2	11.4	1.2	0.53	16
Bradford County	9.5	10.6	1.2	0.52	17
Butler County	8.9	10.0	1.0	0.41	18
Cumberland County	8.3	9.3	1.0	0.38	19
Perry County	8.4	9.4	1.0	0.33	20
Tioga County	9.4	10.3	0.9	0.24	21
Erie County	9.1	10.0	0.8	0.21	22
Fayette County	12.2	13.0	0.8	0.20	23
Indiana County	9.2	10.0	0.8	0.19	24
Wayne County	10.4	11.2	0.8	0.18	25
Cambria County	11.9	12.6	0.7	0.12	26
Clearfield County	10.6	11.3	0.7	0.09	27
Adams County	8.6	9.2	0.6	0.03	28
Mercer County	10.9	11.4	0.6	-0.03	29
Mifflin County	10.4	10.9	0.6	-0.04	30
Armstrong County	11.5	12.0	0.5	-0.05	31
Jefferson County	11.3	11.8	0.5	-0.05	32
Lawrence County	11.8	12.4	0.5	-0.07	33
Clarion County	9.8	10.3	0.5	-0.08	34
Northampton County	8.6	9.1	0.5	-0.10	35
Northumberland County	12.5	12.9	0.5	-0.11	36
Susquehanna County	10.8	11.2	0.5	-0.12	37
Blair County	11.7	12.1	0.5	-0.13	38
York County	8.2	8.6	0.5	-0.13	39
Washington County	11.6	12.0	0.4	-0.15	40
Huntingdon County	9.3	9.7	0.4	-0.17	41
Carbon County	12.2	12.5	0.4	-0.22	42
Centre County	5.7	6.1	0.3	-0.24	43
Fulton County	7.2	7.5	0.3	-0.28	44
Crawford County	10.6	10.8	0.3	-0.31	45
Lancaster County	8.4	8.6	0.2	-0.40	46
Chester County	7.1	7.3	0.1	-0.42	47
Schuylkill County	13.0	13.1	0.1	-0.44	48
Franklin County	9.1	9.2	0.1	-0.45	49
Allegheny County	11.1	11.2	0.1	-0.46	50
Montgomery County	8.9	8.9	0.0	-0.53	51
Greene County	11.2	11.2	0.0	-0.53	52
McKean County	12.0	12.0	0.0	-0.57	53
Lehigh County	9.3	9.2	-0.1	-0.67	54
Dauphin County	9.6	9.4	-0.2	-0.71	55
Delaware County	9.9	9.6	-0.3	-0.83	56
Luzerne County	12.7	12.4	-0.4	-0.87	57
Union County	8.8	8.4	-0.4	-0.90	58
Lackawanna County	12.8	12.5	-0.4	-0.90	59
Snyder County	8.3	7.9	-0.5	-0.97	60
Clinton County	11.1	10.5	-0.5	-1.03	61
Juniata County	9.5	8.9	-0.6	-1.13	62
Pike County	8.1	7.4	-0.7	-1.19	63
Forest County	14.3	13.3	-1.0	-1.41	64
Berks County	9.9	8.9	-1.1	-1.51	65
Monroe County	8.4	7.1	-1.2	-1.66	66
Philadelphia County	12.1	9.4	-2.7	-3.00	67

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Population – Rate of Natural Increase (RNI)

RNI (2011)

RNI (2011) Z Score

Greene County had the 4th lowest RNI in 2011 (-4.1%). Washington County also experienced a negative rate (-2.6%). The PA average, by county, was -1.05.
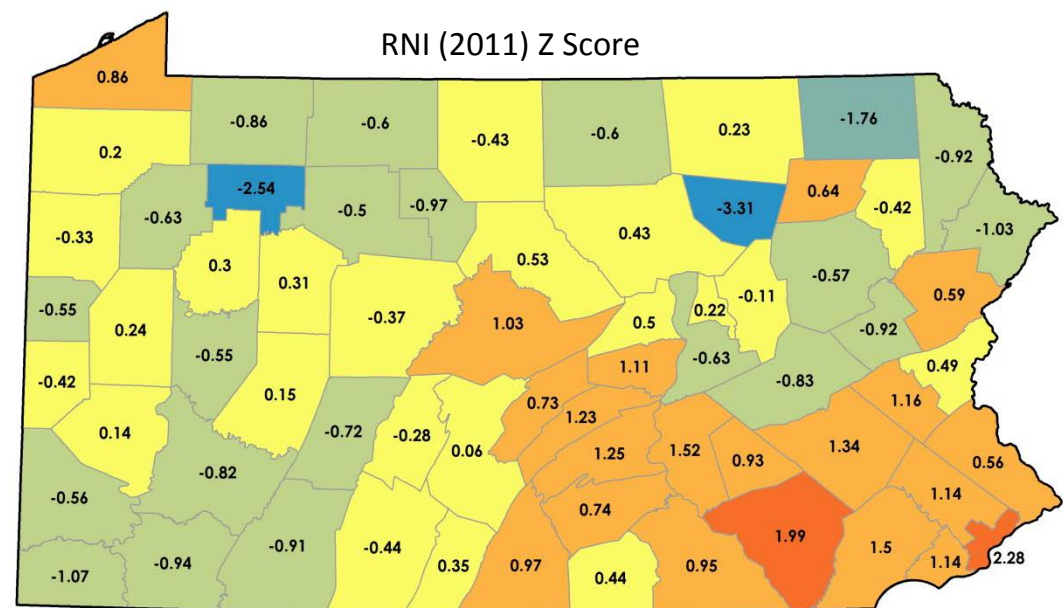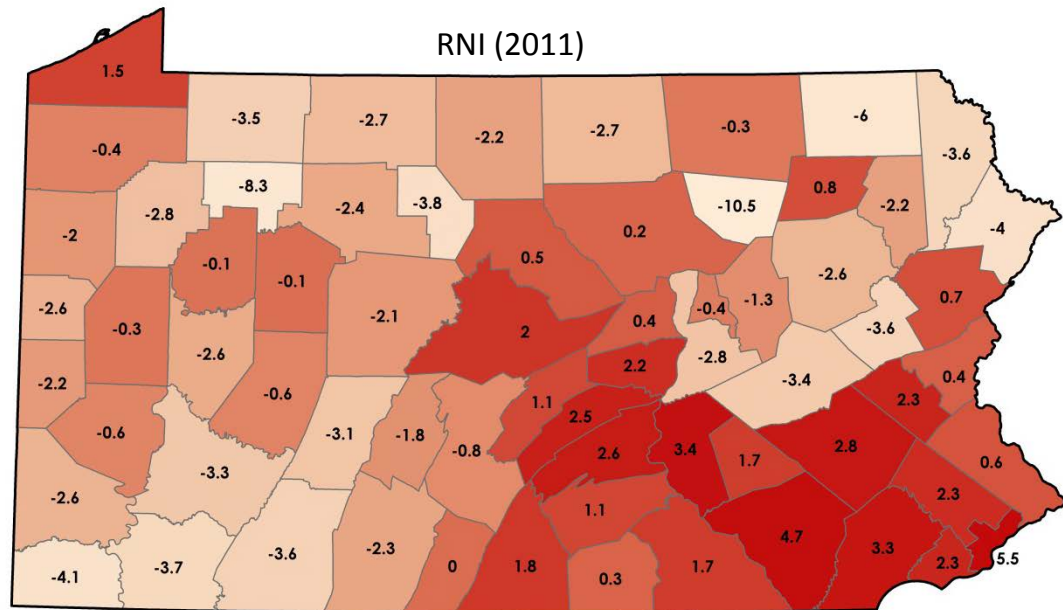
The Rate of Natural Increase (RNI) is simply determined by taking the crude birth rate minus the crude death rate of a population. Used in demographics to better understand the developmental transitions of a population.

Populations in developed countries, like the USA, usually have negative / neutral or low natural increase rate.

However, populations that are farthest away from the mean may indicate other influences, such as immigration (increasing population) or a declining base (low births and high deaths).

Z Score

Color	Range
	< -2.5 Std. Dev.
	-2.5 - -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.3 Std. Dev.

This Z score in the table is multiplied by -1 because the category Z score summary scores require positive values to indicate less-desirable conditions. In this instance, rising RNI is more desirable than declining RNI. The Z score map (left) shows original Z scores.

Data Sources: PA Dept. of Health, State Center for Health Statistics and Research.
http://www.dsf.health.state.pa.us/health/cwp/view.asp?a=175&Q=228721
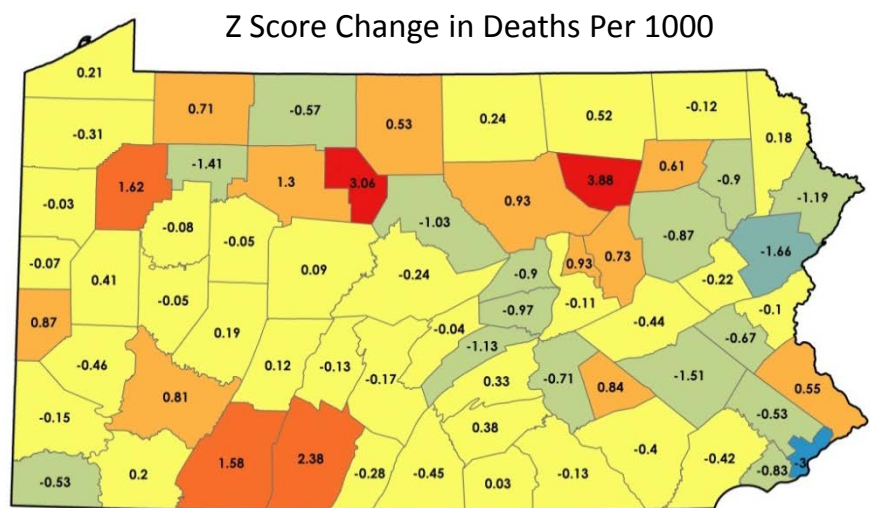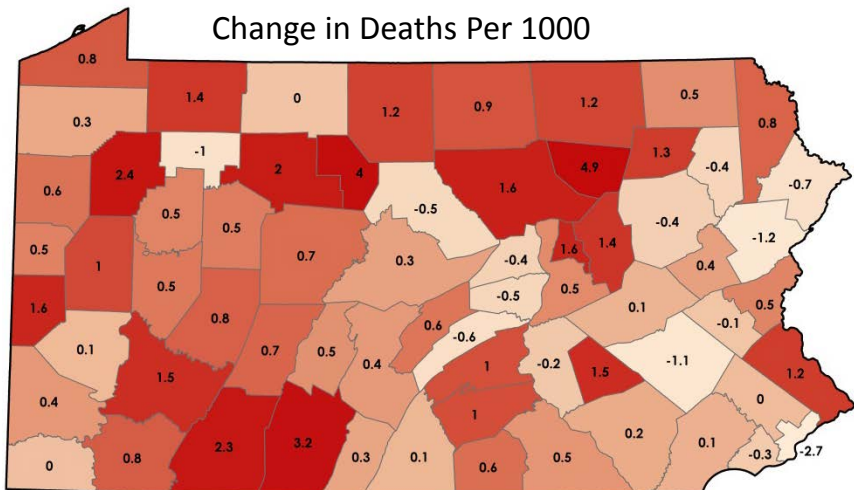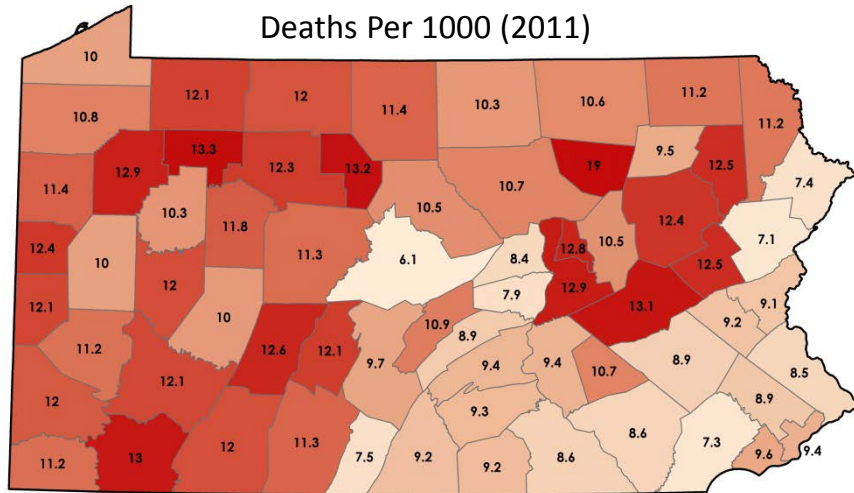
$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Birth Rate Per 1,000 (2011)	Death Rate Per 1,000 (2011)	RNI	Z Score RNI	Z Score Rank
Sullivan County	8.5	19.0	-10.5	3.31	1
Forest County	5.0	13.2	-8.3	2.54	2
Susquehanna County	5.2	11.3	-6.0	1.76	3
Greene County	7.2	12.9	-4.1	1.07	4
Pike County	3.4	12.0	-4.0	1.03	5
Cameron County	9.4	12.3	-3.8	0.97	6
Fayette County	9.3	10.7	-3.7	0.94	7
Wayne County	7.5	12.8	-3.6	0.92	8
Carbon County	8.9	12.1	-3.6	0.92	9
Somerset County	8.4	10.7	-3.6	0.91	10
Warren County	8.7	12.1	-3.5	0.86	11
Schuylkill County	9.8	10.5	-3.4	0.83	12
Westmoreland County	8.7	12.1	-3.3	0.82	13
Cambria County	9.5	9.5	-3.1	0.72	14
Northumberland County	10.1	8.5	-2.8	0.63	15
Venango County	10.1	11.4	-2.8	0.63	16
McKean County	9.3	10.6	-2.7	0.6	17
Tioga County	7.6	10.0	-2.7	0.6	18
Luzerne County	9.7	9.3	-2.6	0.57	19
Washington County	9.4	9.4	-2.6	0.56	20
Lawrence County	9.8	10.3	-2.6	0.55	21
Armstrong County	9.5	10.0	-2.6	0.55	22
Elk County	9.9	13.0	-2.4	0.5	23
Bedford County	9.0	10.0	-2.3	0.44	24
Potter County	9.2	11.2	-2.2	0.43	25
Lackawanna County	10.2	12.6	-2.2	0.42	26
Beaver County	9.9	11.3	-2.2	0.42	27
Clearfield County	9.2	9.2	-2.1	0.37	28
Mercer County	9.5	11.4	-2.0	0.33	29
Blair County	10.3	10.9	-1.8	0.28	30
Columbia County	9.2	12.0	-1.3	0.11	31
Huntingdon County	8.9	11.8	-0.8	-0.06	32
Allegheny County	10.6	12.4	-0.6	-0.14	33
Indiana County	9.4	10.3	-0.6	-0.15	34
Crawford County	10.4	9.1	-0.4	-0.2	35
Montour County	12.5	12.9	-0.4	-0.22	36
Bradford County	10.3	11.2	-0.3	-0.23	37
Butler County	9.7	12.1	-0.3	-0.24	38
Clarion County	10.1	8.6	-0.1	-0.3	39
Jefferson County	11.7	12.0	-0.1	-0.31	40
Fulton County	7.5	9.7	0.0	-0.35	41
Lycoming County	10.9	12.5	0.2	-0.43	42
Adams County	9.5	6.1	0.3	-0.44	43
Northampton County	9.5	7.5	0.4	-0.49	44
Union County	8.8	10.8	0.4	-0.5	45
Clinton County	11.0	8.6	0.5	-0.53	46
Bucks County	9.1	7.3	0.6	-0.56	47
Monroe County	7.8	13.1	0.7	-0.59	48
Wyoming County	10.3	9.2	0.8	-0.64	49
Mifflin County	12.0	11.2	1.1	-0.73	50
Cumberland County	10.4	8.9	1.1	-0.74	51
Erie County	11.4	11.2	1.5	-0.86	52
Lebanon County	12.4	12.0	1.7	-0.93	53
York County	10.3	9.2	1.7	-0.95	54
Franklin County	11.0	9.4	1.8	-0.97	55
Centre County	8.0	9.6	2.0	-1.03	56
Snyder County	10.0	12.4	2.2	-1.11	57
Montgomery County	11.2	8.4	2.3	-1.14	58
Delaware County	11.9	12.5	2.3	-1.14	59
Lehigh County	11.5	7.9	2.3	-1.16	60
Juniata County	11.4	10.5	2.5	-1.23	61
Perry County	12.0	8.9	2.6	-1.25	62
Berks County	11.7	7.4	2.8	-1.34	63
Chester County	10.6	13.3	3.3	-1.5	64
Dauphin County	12.8	8.9	3.4	-1.52	65
Lancaster County	13.3	7.1	4.7	-1.99	66
Philadelphia County	15.0	9.4	5.5	-2.28	67

Mean

Dependent Population – (under 18 and over 65 years of age)

% Population <18 Years of Age

% Population 65+ Years of Age

% Dependent

Z Score of % Dependent Pop.

Z Score
- ☐ < -2.5 Std. Dev.
- ☐ -2.5 - -1.5 Std. Dev.
- ☐ -1.5 - -0.50 Std. Dev.
- ☐ -0.50 - 0.50 Std. Dev.
- ☐ 0.50 - 1.5 Std. Dev.
- ☐ 1.5 - 1.6 Std. Dev.

Data Sources: 2007-11 American Community Survey, U.S. Census Bureau.
http://www.census.gov/acs/www/

$$Z = \frac{\text{(County Value)} - \text{(Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.

Greene and Washington Counties have a relatively small dependent population (35% and 38%, respectively) when compared to the PA average of 40%. Greene is almost statistically unusual.

Dependent populations are usually calculated as those individuals in a population that are either under the ages of 18 or over the age of 65. These are generally the ages of populations out of the work-force.

Older or younger populations may be more susceptible to risks, when taking into account special health concerns of the elderly and potential for greater exposure in younger populations (e.g., ingestion of soil). In addition, children's immature bodily defense systems may make them more susceptible to toxic effects.

For these reasons, dependent populations are also sometimes considered populations most threatened by environmental impacts.

PA Counties	% <18	% 65+	% Dependent	Z score Dep. Pop	Z Score Rank
Potter County	22.35%	19.49%	41.84%	0.78	1
Mifflin County	23.10%	18.51%	41.62%	0.69	2
Juniata County	24.00%	16.78%	40.78%	0.33	3
Cameron County	19.37%	21.36%	40.73%	0.31	4
Bedford County	21.58%	19.04%	40.62%	0.26	5
Bradford County	22.74%	17.81%	40.54%	0.23	6
Franklin County	23.89%	16.49%	40.38%	0.16	7
Fulton County	23.11%	17.14%	40.25%	0.11	8
Sullivan County	15.96%	24.22%	40.18%	0.08	9
Mercer County	21.63%	18.48%	40.11%	0.05	10
Lebanon County	23.03%	17.02%	40.05%	0.02	11
Lawrence County	21.24%	18.80%	40.04%	0.02	12
Jefferson County	21.59%	18.26%	39.85%	-0.06	13
Lancaster County	24.84%	14.97%	39.81%	-0.08	14
Elk County	20.82%	18.99%	39.81%	-0.08	15
Montour County	21.21%	18.59%	39.79%	-0.09	16
Warren County	20.85%	18.75%	39.60%	-0.17	17
Pike County	23.28%	16.22%	39.50%	-0.21	18
Venango County	21.52%	17.98%	39.50%	-0.21	19
Susquehanna County	21.14%	18.09%	39.24%	-0.32	20
Northumberland County	20.57%	18.53%	39.10%	-0.38	21
Beaver County	20.45%	18.56%	39.02%	-0.42	22
Crawford County	22.43%	16.57%	39.01%	-0.42	23
Armstrong County	20.58%	18.40%	38.98%	-0.43	24
Blair County	21.15%	17.73%	38.87%	-0.48	25
Westmoreland County	19.88%	18.86%	38.75%	-0.53	26
Carbon County	20.75%	17.85%	38.60%	-0.60	27
Cambria County	19.65%	18.84%	38.49%	-0.64	28
Tioga County	20.46%	18.01%	38.47%	-0.65	29
Lehigh County	23.66%	14.77%	38.42%	-0.67	30
Berks County	23.85%	14.48%	38.33%	-0.71	31
Fayette County	20.26%	17.99%	38.26%	-0.74	32
Lackawanna County	20.49%	17.67%	38.17%	-0.78	33
Schuylkill County	20.05%	18.09%	38.15%	-0.79	34
Luzerne County	20.19%	17.95%	38.14%	-0.79	35
McKean County	21.06%	16.99%	38.04%	-0.83	36
Washington County	**20.54%**	**17.50%**	**38.04%**	**-0.83**	**37**
Montgomery County	22.94%	15.09%	38.03%	-0.84	38
Somerset County	19.46%	18.56%	38.03%	-0.84	39
Wayne County	19.01%	18.98%	38.00%	-0.85	40
Snyder County	22.40%	15.48%	37.88%	-0.90	41
Adams County	22.13%	15.73%	37.86%	-0.91	42
Wyoming County	21.75%	16.01%	37.76%	-0.95	43
Chester County	24.87%	12.80%	37.67%	-0.99	44
Delaware County	23.33%	14.26%	37.59%	-1.02	45
Butler County	22.44%	15.15%	37.59%	-1.02	46
Northampton County	21.89%	15.65%	37.54%	-1.04	47
Bucks County	22.95%	14.59%	37.54%	-1.04	48
York County	23.45%	14.04%	37.49%	-1.07	49
Clearfield County	19.96%	17.46%	37.42%	-1.09	50
Lycoming County	20.85%	16.46%	37.31%	-1.14	51
Erie County	22.74%	14.55%	37.29%	-1.15	52
Perry County	23.29%	13.69%	36.98%	-1.28	53
Dauphin County	23.21%	13.74%	36.95%	-1.30	54
Clinton County	20.69%	16.18%	36.87%	-1.33	55
Monroe County	23.89%	12.78%	36.67%	-1.42	56
Allegheny County	19.75%	16.76%	36.52%	-1.48	57
Huntingdon County	20.13%	16.24%	36.38%	-1.54	58
Cumberland County	20.69%	15.61%	36.30%	-1.57	59
Clarion County	19.39%	16.42%	35.81%	-1.78	60
Greene County	**19.85%**	**15.33%**	**35.18%**	**-2.05**	**61**
Columbia County	18.66%	16.07%	34.72%	-2.24	62
Philadelphia County	22.53%	12.14%	34.68%	-2.26	63
Indiana County	18.95%	15.69%	34.64%	-2.28	64
Union County	18.49%	14.80%	33.29%	-2.85	65
Forest County	12.40%	18.38%	30.78%	-3.92	66
Centre County	15.92%	11.28%	27.20%	-5.44	67

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Land Area & Population Density

Area in Square Miles (2010)

Population per Square Mile (2010)

Z Score Population per Sq. Mi. (Pop. Density)

Z Score

🟦	< 0.50 Std. Dev.
🟨	0.50 - 1.5 Std. Dev.
🟥	> 1.5 Std. Dev.
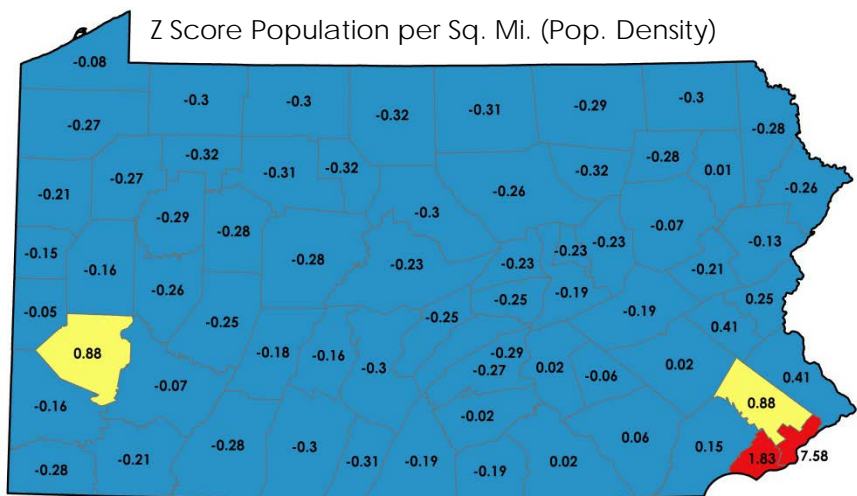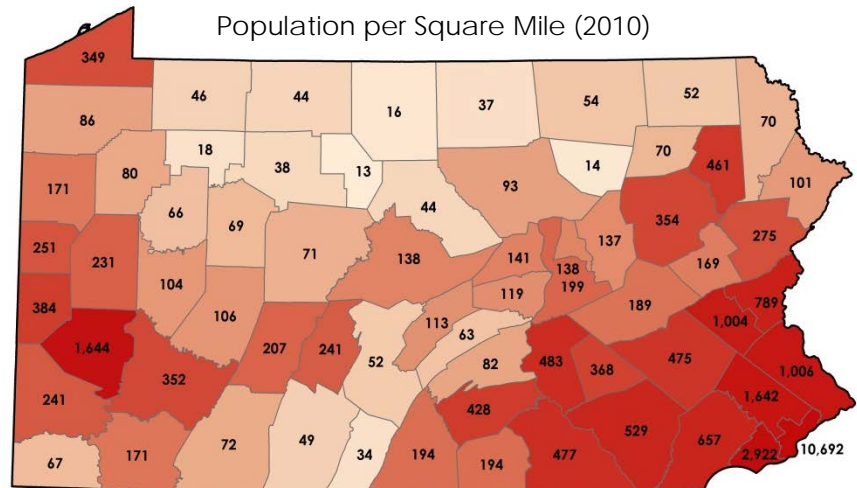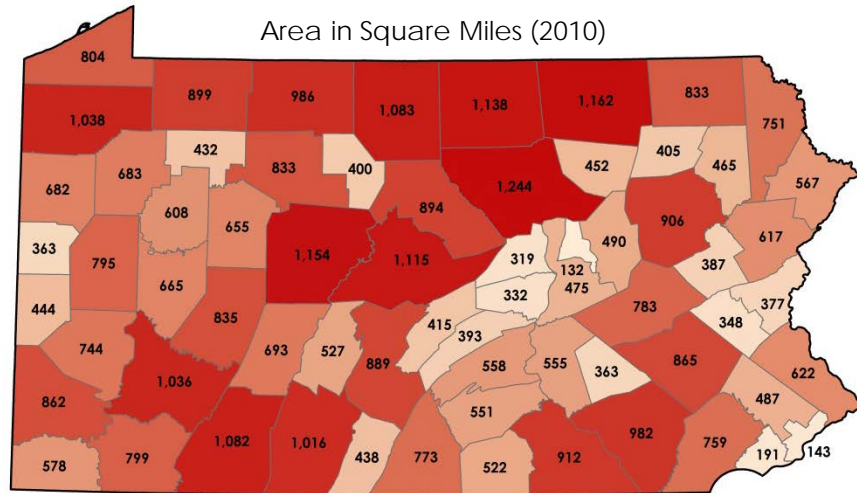
Washington County had the 22nd highest population density (241 per sq. mile) amongst the 67 PA Counties. **Greene County** had the 51st highest population density (67 per sq. mile).

High population density may promote a synergistic effect between industrial pollutants and typical urban pollutants (e.g., ground level ozone), especially if industry is located in close proximity (5 miles or less) to high density populations.

Low population density may lead the environmental impact analyst to underestimate the actual environmental harm to the affected population when conducting a risk assessment.

County land area varies widely within Pennsylvania. Lycoming County is the largest county at 1,244 square miles. Montour County is the smallest county, measuring 132 square miles. The average county size in Pennsylvania is 676 square miles and the median county land area size is 665 square miles.

PA Counties	Area in Sq. Mi.	Population 2010	Population per Sq. Mi.	Z Score Density	Z Score Rank
Philadelphia County	143	1,526,006	10,692	7.58	1
Delaware County	191	558,979	2,922	1.83	2
Allegheny County	744	1,223,348	1,644	0.88	3
Montgomery County	487	799,874	1,642	0.88	4
Bucks County	622	625,249	1,006	0.41	5
Lehigh County	348	349,497	1,004	0.41	6
Northampton County	377	297,735	789	0.25	7
Chester County	759	498,886	657	0.15	8
Lancaster County	982	519,445	529	0.06	9
Dauphin County	555	268,100	483	0.02	10
York County	912	434,972	477	0.02	11
Berks County	865	411,442	475	0.02	12
Lackawanna County	465	214,437	461	0.01	13
Cumberland County	551	235,406	428	-0.02	14
Beaver County	444	170,539	384	-0.05	15
Lebanon County	363	133,568	368	-0.06	16
Luzerne County	906	320,918	354	-0.07	17
Westmoreland County	1036	365,169	352	-0.07	18
Erie County	804	280,566	349	-0.08	19
Monroe County	617	169,842	275	-0.13	20
Lawrence County	363	91,108	251	-0.15	21
Washington County	**862**	**207,820**	**241**	**-0.16**	**22**
Blair County	527	127,089	241	-0.16	23
Butler County	795	183,862	231	-0.16	24
Cambria County	693	143,679	207	-0.18	25
Northumberland County	475	94,528	199	-0.19	26
Adams County	522	101,407	194	-0.19	27
Franklin County	773	149,618	194	-0.19	28
Schuylkill County	783	148,289	189	-0.19	29
Fayette County	799	136,606	171	-0.21	30
Mercer County	682	116,638	171	-0.21	31
Carbon County	387	65,249	169	-0.21	32
Union County	319	44,947	141	-0.23	33
Centre County	1115	153,990	138	-0.23	34
Montour County	132	18,267	138	-0.23	35
Columbia County	490	67,295	137	-0.23	36
Snyder County	332	39,702	119	-0.25	37
Mifflin County	415	46,682	113	-0.25	38
Indiana County	835	88,880	106	-0.25	39
Armstrong County	665	68,941	104	-0.26	40
Pike County	567	57,369	101	-0.26	41
Lycoming County	1244	116,111	93	-0.26	42
Crawford County	1038	88,765	86	-0.27	43
Perry County	558	45,969	82	-0.27	44
Venango County	683	54,984	80	-0.27	45
Somerset County	1082	77,742	72	-0.28	46
Clearfield County	1154	81,642	71	-0.28	47
Wayne County	751	52,822	70	-0.28	48
Wyoming County	405	28,276	70	-0.28	49
Jefferson County	655	45,200	69	-0.28	50
Greene County	**578**	**38,686**	**67**	**-0.28**	**51**
Clarion County	608	39,988	66	-0.29	52
Juniata County	393	24,636	63	-0.29	53
Bradford County	1162	62,622	54	-0.29	54
Susquehanna County	833	43,356	52	-0.30	55
Huntingdon County	889	45,913	52	-0.30	56
Bedford County	1016	49,762	49	-0.30	57
Warren County	899	41,815	46	-0.30	58
McKean County	986	43,450	44	-0.30	59
Clinton County	894	39,238	44	-0.30	60
Elk County	833	31,946	38	-0.31	61
Tioga County	1138	41,981	37	-0.31	62
Fulton County	438	14,845	34	-0.31	63
Forest County	432	7,716	18	-0.32	64
Potter County	1083	17,457	16	-0.32	65
Sullivan County	452	6,428	14	-0.32	66
Cameron County	400	5,085	13	-0.32	67

Mean (at Lackawanna County row)
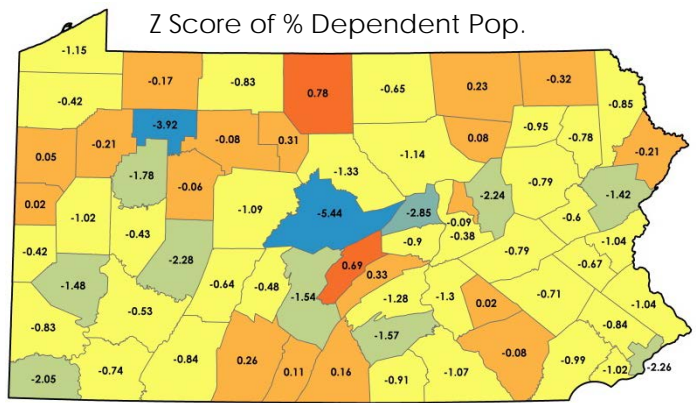
Data Sources: Pennsylvania State Data Center. http://pasdc.hbg.psu.edu/
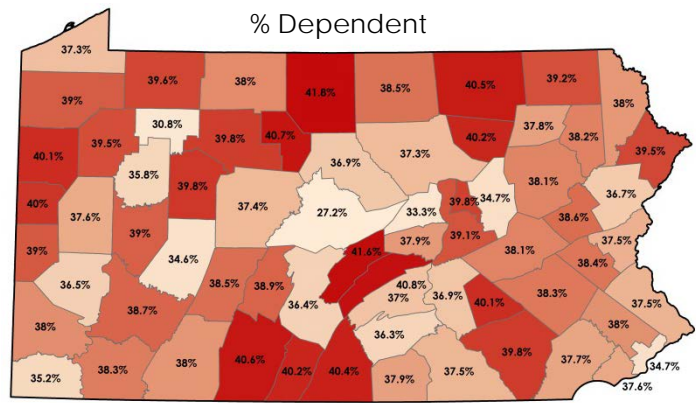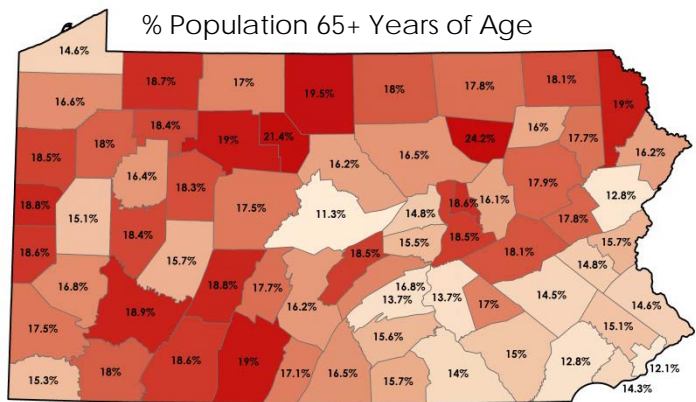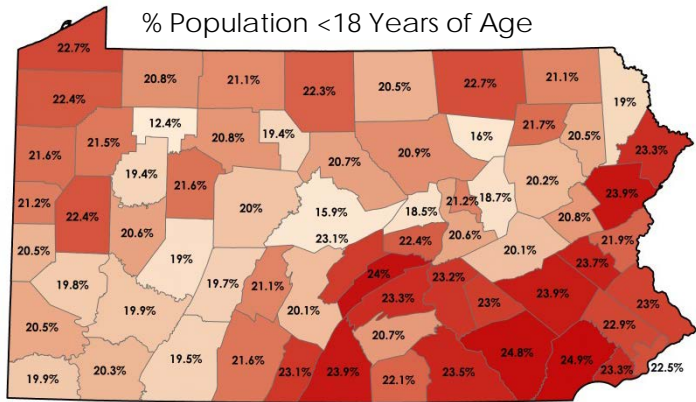
$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

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Population - Race

% White

% Minority (Non-White)

Z Score of % Minority

Z Score

- ▨ < -0.50 Std. Dev.
- ▨ -0.50 - 0.50 Std. Dev.
- ▨ 0.50 - 1.5 Std. Dev.
- ▨ 1.5 - 2.5 Std. Dev.
- ▨ > 2.5 Std. Dev.
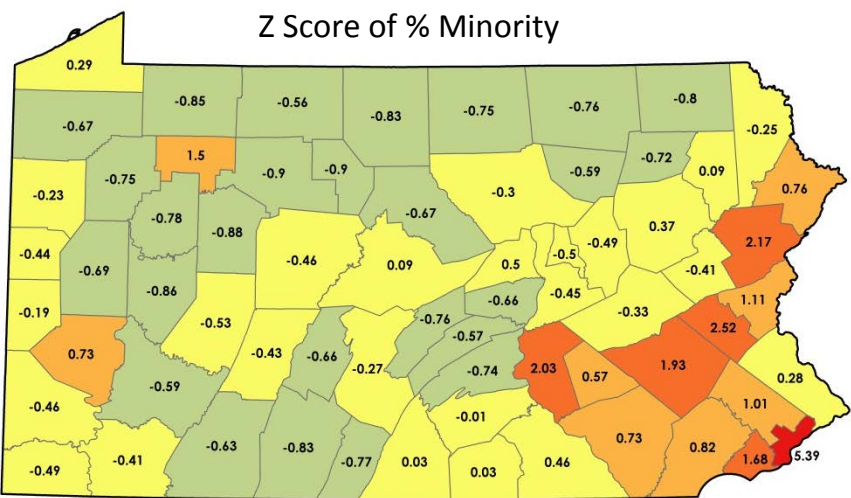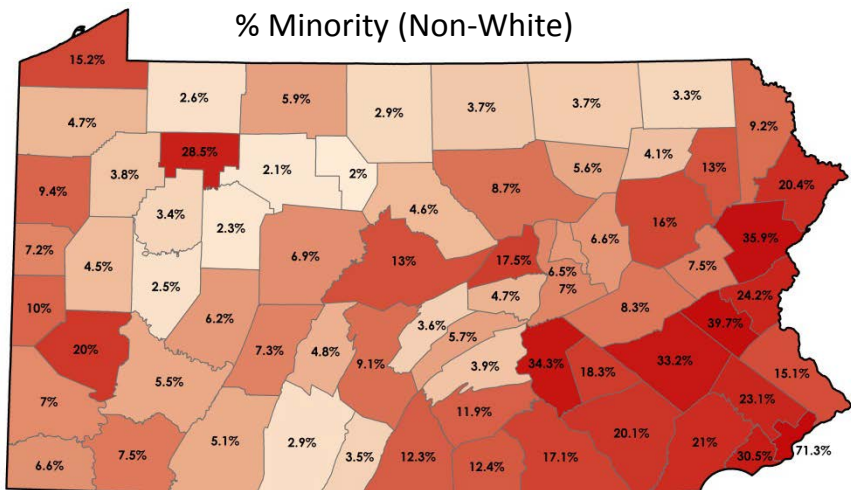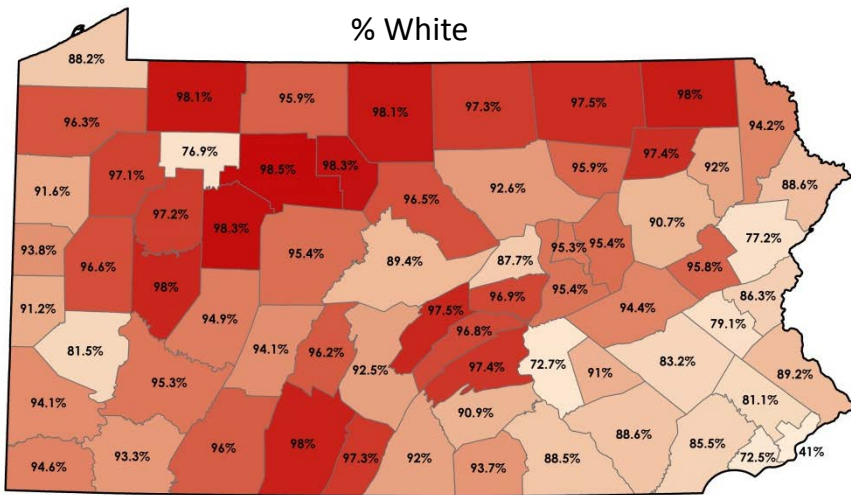
The populations of Greene and Washington Counties are both composed of less than 7% racial minorities.

Understanding the racial structure of a population is a primary consideration when investigating environmental justice (EJ) concerns. The two fundamental baseline measurements when determining EJ matters is race and poverty / low income.

The data in the table shows the breakdown of race by self identification. The percent minority is the combined values of all races other than White (and includes two or more).

Both Greene and Washington are nearly 95% White. Please note that when adding % White and % Minority, the sum may equal more than 100%. This is due to some identifying as both White and Two or more.

PA Counties	# White 2010	# Af. Am. 2010	# Hispanic / Latino 2010	# Other or 2 or more 2010	% White 2010	% Minority 2010	Z Score Minority	Rank
Philadelphia County	626,221	661,839	187,611	237,946	41.04%	71.26%	5.39	1
Lehigh County	276,286	21,440	65,615	51,771	79.05%	39.72%	2.52	2
Monroe County	131,162	22,348	22,288	16,332	77.23%	35.90%	2.17	3
Dauphin County	194,910	48,386	18,795	24,804	72.70%	34.31%	2.03	4
Berks County	342,148	20,143	67,355	49,151	83.16%	33.21%	1.93	5
Delaware County	405,233	110,260	16,537	43,486	72.50%	30.46%	1.68	6
Forest County	5,937	1,389	418	390	76.94%	28.47%	1.50	7
Northampton County	256,895	14,986	31,179	25,854	86.28%	24.19%	1.11	8
Montgomery County	649,021	69,351	34,233	81,502	81.14%	23.14%	1.01	9
Chester County	426,707	30,623	32,503	41,556	85.53%	20.98%	0.82	10
Pike County	50,856	3,322	5,173	3,191	88.65%	20.37%	0.76	11
Lancaster County	460,171	19,035	44,930	40,239	88.59%	20.06%	0.73	12
Allegheny County	997,295	161,861	19,070	64,192	81.52%	20.04%	0.73	13
Lebanon County	121,566	2,885	12,410	9,117	91.01%	18.28%	0.57	14
Union County	39,414	3,324	2,346	2,209	87.69%	17.53%	0.50	15
York County	385,135	24,344	24,397	25,493	88.54%	17.07%	0.46	16
Luzerne County	290,943	10,767	21,491	19,208	90.66%	16.04%	0.37	17
Erie County	247,569	20,155	9,518	12,842	88.24%	15.15%	0.29	18
Bucks County	557,647	22,376	26,782	45,226	89.19%	15.10%	0.28	19
Centre County	137,625	4,638	3,690	11,727	89.37%	13.02%	0.09	20
Lackawanna County	197,296	5,423	10,682	11,718	92.01%	12.97%	0.09	21
Adams County	94,979	1,561	6,115	4,867	93.66%	12.37%	0.03	22
Franklin County	137,674	4,700	6,438	7,244	92.02%	12.29%	0.03	23
Cumberland County	213,934	7,527	6,448	13,945	90.88%	11.86%	-0.01	24
Beaver County	155,561	10,676	1,998	4,302	91.22%	9.95%	-0.19	25
Mercer County	106,890	6,726	1,248	3,022	91.64%	9.43%	-0.23	26
Wayne County	49,759	1,644	1,816	1,419	94.20%	9.24%	-0.25	27
Huntingdon County	42,470	2,392	727	1,051	92.50%	9.08%	-0.27	28
Lycoming County	107,573	5,203	1,559	3,335	92.65%	8.70%	-0.30	29
Schuylkill County	140,013	3,967	4,080	4,309	94.42%	8.33%	-0.33	30
Fayette County	127,418	6,325	1,049	2,863	93.27%	7.49%	-0.41	31
Carbon County	62,519	976	2,145	1,754	95.82%	7.47%	-0.41	32
Cambria County	135,206	5,222	2,006	3,251	94.10%	7.29%	-0.43	33
Lawrence County	85,484	3,501	931	2,123	93.83%	7.19%	-0.44	34
Northumberland County	90,156	1,921	2,253	2,451	95.37%	7.01%	-0.45	35
Washington County	195,657	6,757	2,366	5,406	94.15%	6.99%	-0.46	36
Clearfield County	77,912	1,862	1,907	1,868	95.43%	6.90%	-0.46	37
Greene County	36,584	1,282	465	820	94.57%	6.64%	-0.49	38
Columbia County	64,227	1,246	1,349	1,822	95.44%	6.56%	-0.50	39
Montour County	17,408	256	324	603	95.30%	6.48%	-0.50	40
Indiana County	84,360	2,434	947	2,086	94.91%	6.15%	-0.53	41
McKean County	41,661	1,046	757	743	95.88%	5.86%	-0.56	42
Juniata County	23,845	151	623	640	96.79%	5.74%	-0.57	43
Sullivan County	6,163	168	92	97	95.88%	5.55%	-0.59	44
Westmoreland County	348,182	8,562	3,179	8,425	95.35%	5.52%	-0.59	45
Somerset County	74,603	1,863	840	1,276	95.96%	5.12%	-0.63	46
Blair County	122,238	2,129	1,230	2,722	96.18%	4.78%	-0.66	47
Snyder County	38,476	428	657	798	96.91%	4.74%	-0.66	48
Crawford County	85,448	1,547	823	1,770	96.26%	4.66%	-0.67	49
Clinton County	37,860	625	437	753	96.49%	4.63%	-0.67	50
Butler County	177,605	2,021	1,941	4,236	96.60%	4.46%	-0.69	51
Wyoming County	27,545	208	437	523	97.41%	4.13%	-0.72	52
Perry County	44,779	296	588	894	97.41%	3.87%	-0.74	53
Venango County	53,390	571	478	1,023	97.10%	3.77%	-0.75	54
Tioga County	40,852	333	437	796	97.31%	3.73%	-0.75	55
Bradford County	61,035	311	702	1,276	97.47%	3.66%	-0.76	56
Mifflin County	45,531	300	534	851	97.53%	3.61%	-0.76	57
Fulton County	14,450	151	123	244	97.34%	3.49%	-0.77	58
Clarion County	38,873	484	245	631	97.21%	3.40%	-0.78	59
Susquehanna County	42,510	156	564	690	98.05%	3.25%	-0.80	60
Potter County	17,128	67	181	262	98.12%	2.92%	-0.83	61
Bedford County	48,782	238	450	742	98.03%	2.87%	-0.83	62
Warren County	41,031	149	305	635	98.13%	2.60%	-0.85	63
Armstrong County	67,565	553	366	823	98.00%	2.53%	-0.86	64
Jefferson County	44,446	157	275	597	98.33%	2.28%	-0.88	65
Elk County	31,469	89	183	388	98.51%	2.07%	-0.90	66
Cameron County	5,000	13	19	72	98.33%	2.05%	-0.90	67

Mean

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

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Substantiate Cases of Abuse per 1,000 Children

Child Abuse per 1,000 Children (2011)

Child Abuse Change from 2009-2011

Z Score of Child Abuse Change from 2009-2011

Greene County ranks 3rd in increase in substantiate child abuse cases with a 1.4% increase between 2009 – 2011, and the 2011 rate of 2.8% was significantly higher than the 1.7% state average.

Child abuse in the United States is defined as the maltreatment as in any act or series of acts of commission or omission by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child.

The Pennsylvania Child Protective Services Law (CPSL) requires that every year the Department of Public Welfare (DPW) report to the Governor and General Assembly on the problem of child abuse in the commonwealth.

This annual report provides information on the efforts to protect and help children in the Commonwealth of Pennsylvania who were reported as victims of suspected abuse and neglect.
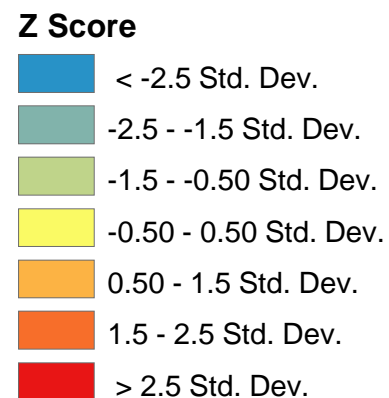
Z Score

Color	Range
	< -2.5 Std. Dev.
	-2.5 - -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.5 Std. Dev.
	> 2.5 Std. Dev.

Data Sources: PA Dept. of Public Welfare. http://www.dpw.state.pa.us/

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Childe Abuse Per 1,000 (2009)	Child Abuse Per 1,000 (2011)	Change Abuse (09-11)	Z Score Change Abuse	Z Score Rank
Potter County	1.3	4.0	2.7	3.54	1
Fulton County	2.1	4.2	2.1	2.72	2
Greene County	1.4	2.8	1.4	1.86	3
Forest County	2.0	3.3	1.3	1.78	4
Fayette County	1.2	1.9	0.6	0.94	5
Bradford County	3.3	3.9	0.6	0.90	6
Lawrence County	1.4	2.0	0.6	0.87	7
Cameron County	2.8	3.2	0.4	0.62	8
Northumberland County	1.5	1.9	0.4	0.60	9
Bedford County	0.8	1.1	0.4	0.60	10
Warren County	2.5	2.9	0.3	0.57	11
Pike County	0.7	1.0	0.3	0.55	12
Mercer County	1.8	2.1	0.3	0.48	13
Juniata County	0.9	1.2	0.3	0.46	14
Wayne County	1.7	1.9	0.2	0.42	15
Berks County	1.2	1.4	0.2	0.41	16
Centre County	0.8	1.0	0.2	0.33	17
Franklin County	1.4	1.5	0.1	0.31	18
Susquehanna County	1.8	1.9	0.1	0.25	19
Perry County	1.4	1.4	0.1	0.21	20
Westmoreland County	1.1	1.2	0.1	0.19	21
Venango County	3.1	3.1	0.0	0.14	22
Butler County	0.9	0.9	0.0	0.11	23
Adams County	2.0	2.0	0.0	0.09	24
Carbon County	1.2	1.2	0.0	0.08	25
Lebanon County	1.5	1.4	0.0	0.06	26
Montgomery County	0.5	0.5	-0.1	0.06	27
Tioga County	1.9	1.9	-0.1	0.06	28
Delaware County	0.6	0.6	-0.1	0.03	29
Beaver County	1.3	1.3	-0.1	0.02	30
Northampton County	1.6	1.5	-0.1	-0.01	31
Snyder County	2.2	2.1	-0.1	-0.02	32
Allegheny County	0.5	0.4	-0.1	-0.02	33
Lancaster County	1.2	1.1	-0.1	-0.05	34
Somerset County	1.5	1.4	-0.1	-0.06	35
Chester County	0.7	0.5	-0.2	-0.10	36
Bucks County	0.7	0.5	-0.2	-0.11	37
Monroe County	1.5	1.3	-0.2	-0.12	38
Columbia County	1.8	1.6	-0.2	-0.13	39
Lackawanna County	1.7	1.5	-0.2	-0.17	40
Clearfield County	2.4	2.1	-0.2	-0.17	41
Blair County	1.7	1.5	-0.2	-0.18	42
Cambria County	1.8	1.5	-0.3	-0.20	43
Crawford County	2.4	2.2	-0.3	-0.21	44
Washington County	1.7	1.4	-0.3	-0.22	45
Huntingdon County	1.4	1.1	-0.3	-0.23	46
York County	1.5	1.2	-0.3	-0.26	47
Lehigh County	1.2	0.9	-0.3	-0.26	48
Armstrong County	2.0	1.7	-0.3	-0.26	49
Philadelphia County	2.5	2.1	-0.4	-0.38	50
Union County	2.0	1.5	-0.5	-0.49	51
Montour County	1.3	0.8	-0.5	-0.50	52
Lycoming County	1.5	1.0	-0.5	-0.53	53
Schuylkill County	2.5	1.9	-0.6	-0.60	54
Erie County	2.1	1.5	-0.6	-0.61	55
Cumberland County	1.8	1.2	-0.6	-0.64	56
Dauphin County	2.1	1.4	-0.6	-0.66	57
Luzerne County	1.9	1.3	-0.6	-0.66	58
Jefferson County	2.0	1.4	-0.7	-0.73	59
Sullivan County	2.6	1.9	-0.7	-0.78	60
Elk County	1.9	1.1	-0.8	-0.85	61
Indiana County	2.1	1.3	-0.8	-0.87	62
Mifflin County	2.3	1.4	-0.9	-0.96	63
Clinton County	2.8	1.6	-1.2	-1.37	64
Clarion County	3.6	2.1	-1.5	-1.81	65
Wyoming County	2.6	0.8	-1.8	-2.12	66
McKean County	5.8	2.4	-3.3	-4.09	67

Mean

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Serious Crimes per 100,000 Residents

Crime Rate per 100,000 Residents (2011)

Crime Rate from Change 2009-2011

Z Score of Crime Rate from Change 2009-2011

Z Score

	Z Score
(blue)	< -2.5 Std. Dev.
(teal)	-2.5 - -1.5 Std. Dev.
(light green)	-1.5 - -0.50 Std. Dev.
(yellow)	-0.50 - 0.50 Std. Dev.
(orange)	0.50 - 1.5 Std. Dev.
(dark orange)	1.5 - 2.5 Std. Dev.
(red)	> 2.5 Std. Dev.

Data Sources: PA State Police, Uniform Crime Report.
http://ucr.psp.state.pa.us/UCR/Reporting/Annual/AnnualSumArrestUI.asp
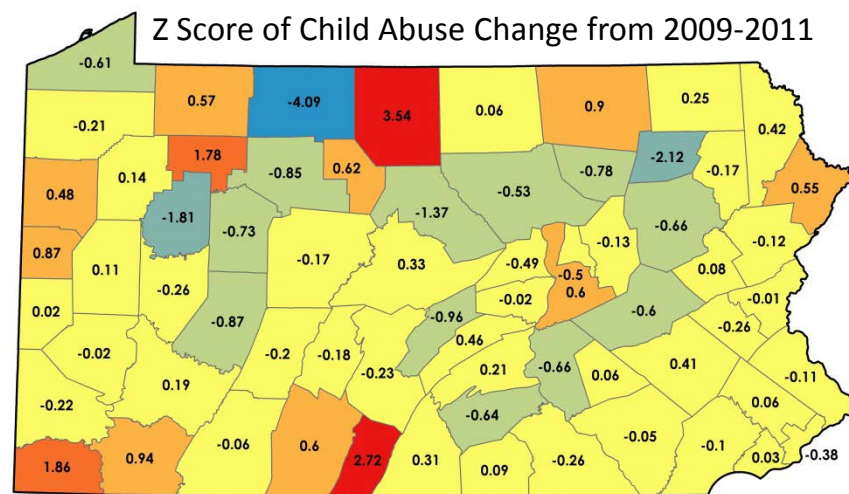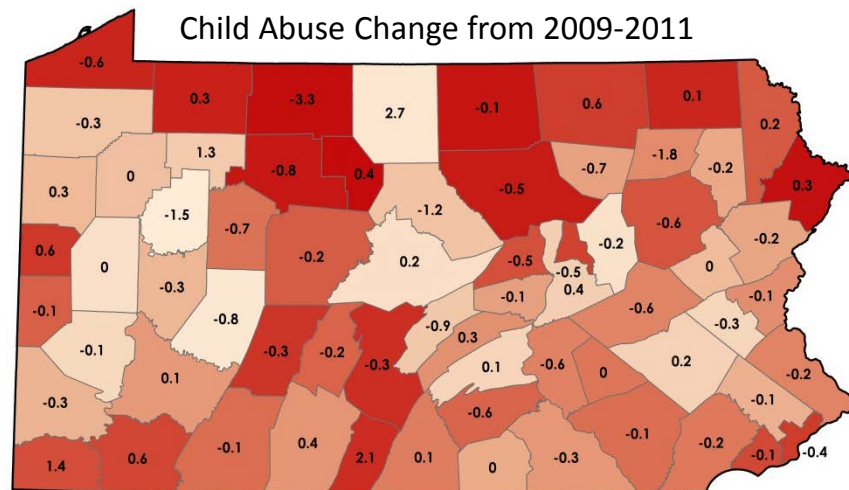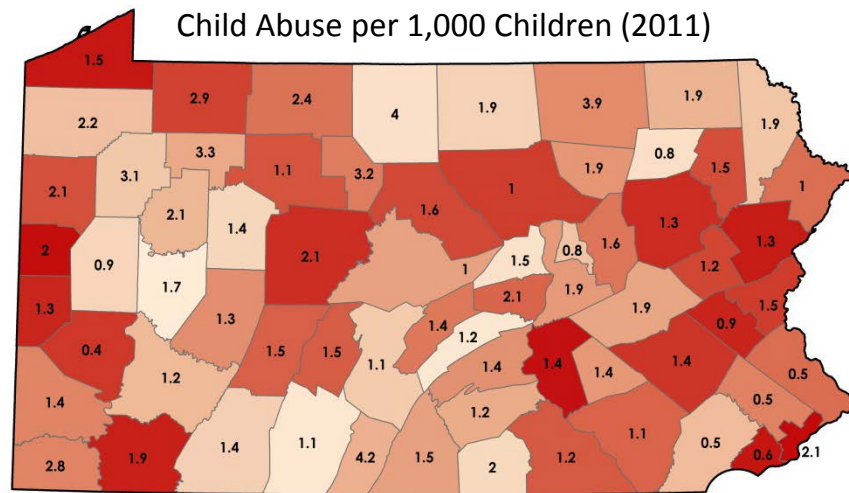
$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

Greene County experienced a crime rate increase of 169 serious crimes per 100,000 residents between 2009 – 2011. Washington County decreased by 94 crimes per 100,000 residents.

The Pennsylvania State Police Uniform Crime Report is an annual report of crime statistics for the Commonwealth of Pennsylvania. 'Serious Crimes' are Crime Index offenses under the Uniform Crime Report and include; criminal homicide, forcible rate, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson.

Crime Index offenses are considered to be both the most serious and most likely to be reported, and are used nationally as the standard base for comparisons.

The following are considered 'Part II' offenses, and are *not* counted in these numbers: other assaults, forgery and counterfeiting, fraud, embezzlement, stolen property, vandalism, weapons, prostitution, other sex offenses, drug abuse violations, gambling, offenses against the family, driving under the influence, liquor law violations, drunkenness, disorderly conduct, vagrancy, and all other offenses.

PA Counties	Crime Rate Per 100k (2009)	Crime Rate Per 100k (2011)	Change Crime (09-11)	Z Score Change Crime	Z Score Rank
Cameron County	1,433	2,056	623	2.64	1
McKean County	1,607	2,101	494	2.07	2
Pike County	1,690	2,111	421	1.74	3
Tioga County	1,006	1,417	411	1.70	4
Elk County	1,912	2,309	397	1.63	5
Lycoming County	2,048	2,415	367	1.50	6
Warren County	2,052	2,411	358	1.46	7
Erie County	2,625	2,956	331	1.34	8
Susquehanna County	1,331	1,655	324	1.31	9
Fulton County	1,353	1,662	309	1.24	10
Huntingdon County	1,212	1,476	264	1.04	11
Cambria County	2,008	2,269	261	1.02	12
Lawrence County	3,102	3,353	251	0.98	13
Philadelphia County	4,852	5,073	222	0.85	14
Bradford County	1,718	1,936	218	0.83	15
Montour County	1,321	1,525	204	0.77	16
Fayette County	2,642	2,818	176	0.64	17
Delaware County	2,891	3,065	173	0.63	18
Greene County	1,784	1,952	169	0.61	19
Union County	1,049	1,191	142	0.49	20
Luzerne County	2,597	2,714	117	0.38	21
Wayne County	1,412	1,523	110	0.35	22
Clearfield County	2,495	2,597	102	0.31	23
Beaver County	2,618	2,717	99	0.29	24
Blair County	2,187	2,285	98	0.29	25
Cumberland County	1,597	1,683	86	0.24	26
Somerset County	1,344	1,422	79	0.20	27
Lancaster County	2,136	2,207	71	0.17	28
Jefferson County	1,324	1,372	48	0.07	29
Lebanon County	1,850	1,876	27	-0.03	30
Chester County	1,577	1,591	14	-0.08	31
Franklin County	1,752	1,762	10	-0.10	32
Dauphin County	3,306	3,310	4	-0.13	33
Bucks County	2,152	2,153	1	-0.14	34
Schuylkill County	1,726	1,725	0	-0.15	35
Wyoming County	1,280	1,278	-2	-0.16	36
Northampton County	2,440	2,433	-6	-0.18	37
Juniata County	1,138	1,131	-6	-0.18	38
Bedford County	1,144	1,134	-10	-0.19	39
York County	2,329	2,306	-23	-0.25	40
Westmoreland County	1,644	1,598	-45	-0.35	41
Snyder County	2,212	2,160	-52	-0.38	42
Sullivan County	1,954	1,898	-56	-0.40	43
Monroe County	2,937	2,879	-58	-0.41	44
Lackawanna County	2,432	2,368	-65	-0.44	45
Adams County	1,415	1,332	-83	-0.52	46
Montgomery County	2,140	2,053	-87	-0.54	47
Washington County	2,033	1,940	-94	-0.57	48
Armstrong County	1,172	1,078	-94	-0.57	49
Mercer County	2,454	2,359	-95	-0.57	50
Carbon County	2,507	2,402	-105	-0.62	51
Venango County	1,593	1,481	-111	-0.65	52
Clinton County	2,541	2,392	-149	-0.81	53
Crawford County	1,723	1,572	-151	-0.82	54
Mifflin County	2,220	2,064	-157	-0.85	55
Forest County	1,875	1,687	-188	-0.99	56
Northumberland County	1,976	1,771	-204	-1.06	57
Berks County	2,755	2,534	-222	-1.14	58
Perry County	2,132	1,907	-225	-1.16	59
Lehigh County	3,031	2,802	-229	-1.18	60
Allegheny County	2,766	2,532	-234	-1.20	61
Centre County	1,981	1,728	-254	-1.29	62
Butler County	1,669	1,406	-263	-1.33	63
Columbia County	2,411	2,093	-319	-1.58	64
Potter County	1,591	1,249	-342	-1.68	65
Indiana County	2,297	1,925	-372	-1.82	66
Clarion County	2,059	1,614	-445	-2.14	67

Mean (line between Jefferson County and Lebanon County rows)

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Housing Stock Age

Housing built 1939 or earlier (>70 yrs. old)

% Housing built 1939 or earlier (>70 yrs. old)

Z Score of Housing built 1939 or earlier

Z Score

	< -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.5 Std. Dev.
	> 2.5 Std. Dev.

Data Sources: 2007-11 American Community Survey, U.S. Census Bureau.
http://www.census.gov/acs/www/

$$Z = \frac{\text{(County Value)} - \text{(Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.

Greene County is ranked 18th out of 67 counties in PA for the highest % of homes over 70 years old.

Disproportionately aging housing stock can be indicative of a population that is at an economic disadvantage.

Older housing stock, if not properly maintained, may have building materials that may be harmful to human health, such as lead-based paints and asbestos insulation and flooring.

If neglected, older housing stock can have a synergistic effect with other risk factors.

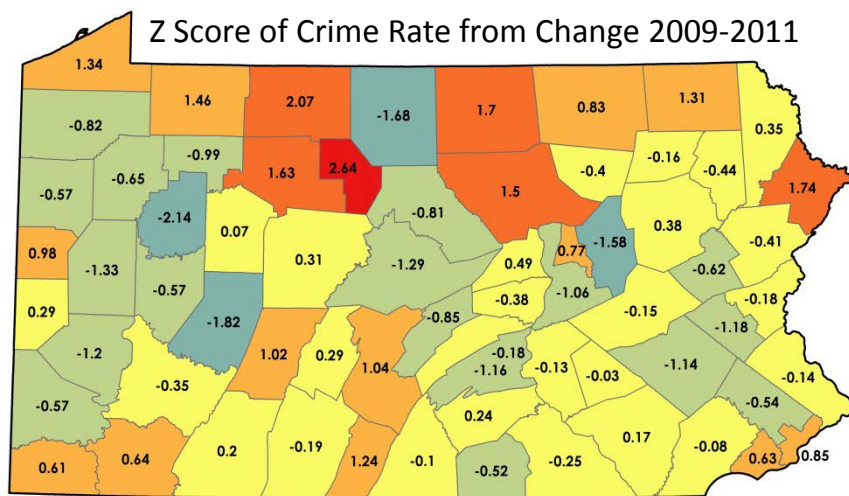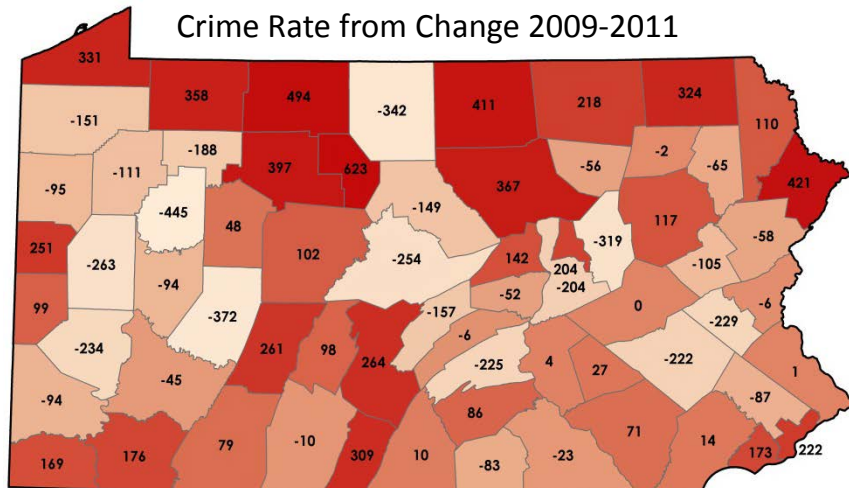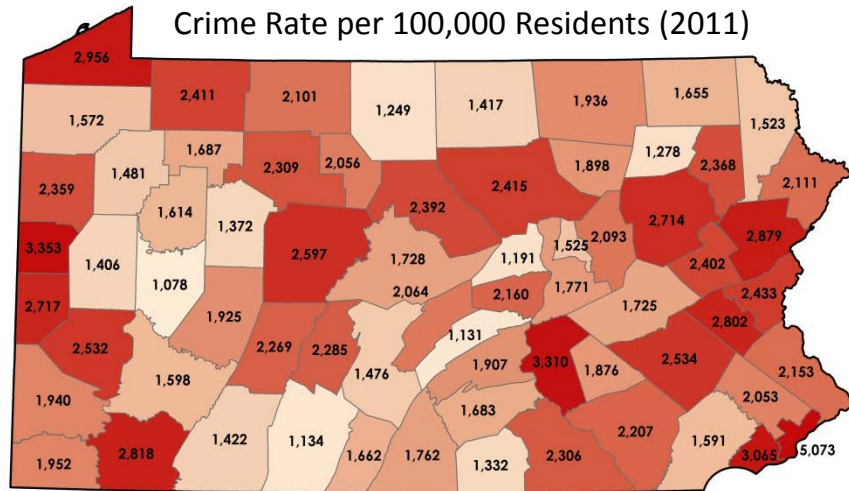| PA Counties	Total Housing Units	% Built 2000-2005	% Built 1990-1999	% Built 1980-1989	% Built 1970-1979	% Built 1960-1969	% Built 1950-1959	% Built 1940-1949	% Built 1930-1939	Z Score % ≥ 1939	Z Score Rank
Schuylkill County	69,335	5%	7%	7%	10%	6%	8%	8%	50%	2.52	1
Northumberland County	44,992	4%	7%	8%	13%	6%	9%	8%	45%	1.99	2
Lackawanna County	96,789	5%	7%	8%	12%	8%	8%	7%	45%	1.90	3
McKean County	21,264	4%	6%	8%	10%	8%	12%	10%	41%	1.51	4
Luzerne County	148,672	5%	7%	7%	14%	7%	10%	9%	41%	1.46	5
Philadelphia County	669,672	3%	3%	4%	7%	11%	18%	16%	40%	1.32	6
Venango County	27,465	5%	7%	9%	14%	8%	11%	7%	39%	1.24	7
Columbia County	29,403	7%	9%	11%	15%	7%	8%	5%	38%	1.08	8
Bradford County	29,958	6%	12%	11%	16%	7%	6%	4%	38%	1.08	9
Jefferson County	22,467	4%	8%	9%	18%	8%	9%	8%	37%	0.94	10
Armstrong County	32,567	4%	8%	9%	15%	8%	12%	9%	36%	0.83	11
Fayette County	63,085	5%	9%	8%	14%	8%	11%	9%	36%	0.82	12
Cambria County	65,685	4%	5%	7%	13%	8%	16%	12%	35%	0.81	13
Lycoming County	52,583	5%	9%	9%	14%	9%	12%	7%	35%	0.76	14
Tioga County	21,319	7%	13%	12%	16%	9%	5%	4%	35%	0.74	15
Blair County	56,263	6%	9%	8%	13%	9%	11%	9%	35%	0.73	16
Sullivan County	6,296	5%	15%	12%	17%	6%	7%	4%	34%	0.65	17
Greene County	16,519	7%	8%	11%	13%	7%	10%	10%	33%	0.56	18
Clearfield County	38,719	5%	11%	12%	15%	7%	10%	6%	33%	0.53	19
Warren County	23,580	3%	8%	9%	14%	12%	14%	7%	33%	0.49	20
Carbon County	34,106	9%	11%	18%	12%	6%	6%	5%	33%	0.48	21
Susquehanna County	22,944	6%	13%	16%	14%	9%	6%	4%	32%	0.46	22
Montour County	7,935	7%	15%	14%	16%	8%	5%	3%	32%	0.41	23
Lawrence County	40,937	6%	8%	7%	11%	9%	18%	9%	32%	0.41	24
Potter County	12,927	7%	10%	14%	16%	7%	8%	6%	32%	0.35	25
Allegheny County	589,388	5%	5%	7%	10%	12%	19%	11%	31%	0.33	26
Mifflin County	21,541	5%	9%	10%	13%	9%	12%	9%	31%	0.29	27
Huntingdon County	22,321	7%	11%	11%	18%	7%	8%	6%	31%	0.29	28
Clinton County	19,054	7%	11%	9%	15%	10%	11%	5%	31%	0.27	29
Somerset County	38,067	5%	11%	12%	14%	9%	10%	8%	31%	0.24	30
Elk County	17,628	4%	11%	11%	13%	9%	13%	10%	31%	0.23	31
Clarion County	19,987	7%	10%	11%	17%	10%	11%	5%	30%	0.19	32
Berks County	164,226	10%	12%	10%	12%	8%	11%	6%	30%	0.12	33
Wyoming County	13,268	6%	13%	12%	21%	8%	6%	5%	29%	0.06	34
Northampton County	119,851	12%	11%	11%	11%	9%	12%	6%	29%	0.05	35
Crawford County	44,628	7%	11%	9%	17%	9%	11%	9%	29%	0.00	36
Mercer County	51,701	7%	9%	7%	14%	10%	15%	9%	28%	-0.03	37
Washington County	92,813	10%	10%	8%	13%	9%	14%	9%	28%	-0.09	38
Erie County	118,967	6%	9%	9%	15%	10%	16%	8%	28%	-0.09	39
Bedford County	23,966	8%	12%	11%	16%	10%	10%	5%	27%	-0.20	40
Perry County	20,354	8%	15%	15%	16%	7%	8%	4%	27%	-0.22	41
Union County	16,869	10%	14%	12%	16%	8%	8%	6%	26%	-0.27	42
Juniata County	10,937	8%	14%	13%	17%	8%	8%	5%	26%	-0.28	43
Lehigh County	141,942	10%	9%	11%	14%	11%	13%	6%	26%	-0.34	44
Indiana County	38,222	9%	11%	12%	19%	9%	8%	7%	26%	-0.35	45
Lebanon County	55,288	12%	11%	10%	15%	8%	12%	8%	25%	-0.44	46
Beaver County	78,294	5%	7%	6%	14%	11%	19%	13%	25%	-0.44	47
Dauphin County	119,930	8%	10%	11%	14%	10%	15%	7%	24%	-0.49	48
Westmoreland County	167,991	7%	9%	9%	14%	12%	16%	9%	24%	-0.51	49
Fulton County	7,126	9%	12%	14%	20%	9%	7%	5%	24%	-0.53	50
Cameron County	4,476	4%	13%	8%	13%	6%	22%	10%	24%	-0.55	51
Lancaster County	201,730	11%	14%	15%	13%	9%	10%	5%	24%	-0.57	52
Snyder County	15,965	7%	12%	10%	19%	10%	8%	5%	24%	-0.58	53
Delaware County	222,794	5%	5%	6%	9%	11%	26%	15%	22%	-0.71	54
Franklin County	62,603	14%	15%	12%	14%	10%	9%	6%	21%	-0.94	55
Wayne County	31,691	8%	14%	22%	18%	7%	7%	3%	20%	-0.97	56
Adams County	40,636	15%	16%	15%	13%	7%	9%	4%	20%	-1.03	57
York County	177,771	14%	15%	12%	14%	9%	12%	6%	19%	-1.13	58
Montgomery County	324,427	9%	11%	11%	13%	12%	17%	7%	19%	-1.14	59
Cumberland County	99,055	12%	13%	14%	16%	11%	11%	5%	17%	-1.35	60
Butler County	77,850	14%	17%	11%	14%	9%	11%	6%	17%	-1.40	61
Centre County	62,682	12%	16%	15%	17%	11%	10%	4%	16%	-1.45	62
Chester County	191,146	15%	16%	17%	15%	10%	9%	3%	15%	-1.65	63
Forest County	8,783	5%	6%	12%	34%	15%	10%	4%	13%	-1.82	64
Monroe County	79,969	14%	18%	23%	17%	7%	6%	3%	11%	-2.04	65
Bucks County	245,216	9%	13%	15%	19%	14%	17%	4%	10%	-2.22	66
Pike County	38,304	14%	18%	26%	17%	8%	4%	3%	9%	-2.30	67

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Housing Units – Type & Density (Average 2007-2011)

Housing Units Per Square Mile

% Housing Units Not Single Family Detached

Z Score of % Not Single Family Detached

Z Score

- 🟦 < -1.5 Std. Dev.
- 🟩 -1.5 - -0.50 Std. Dev.
- 🟨 -0.50 - 0.50 Std. Dev.
- 🟧 0.50 - 1.5 Std. Dev.
- 🟥 > 1.5 Std. Dev.

Data Sources: 2007-11 American Community Survey, U.S. Census Bureau.
http://www.census.gov/acs/www/

$$Z = \frac{(\text{County Value}) - (\text{Average of All Counties})}{(\text{Standard Deviation of All Counties})}$$

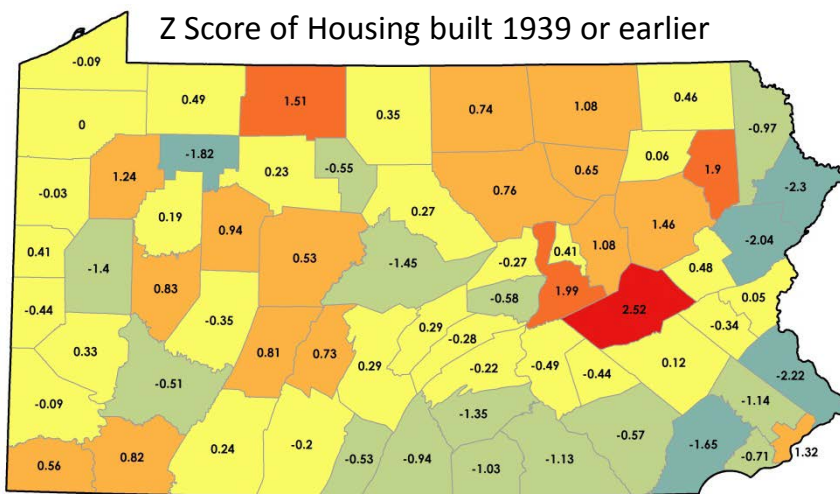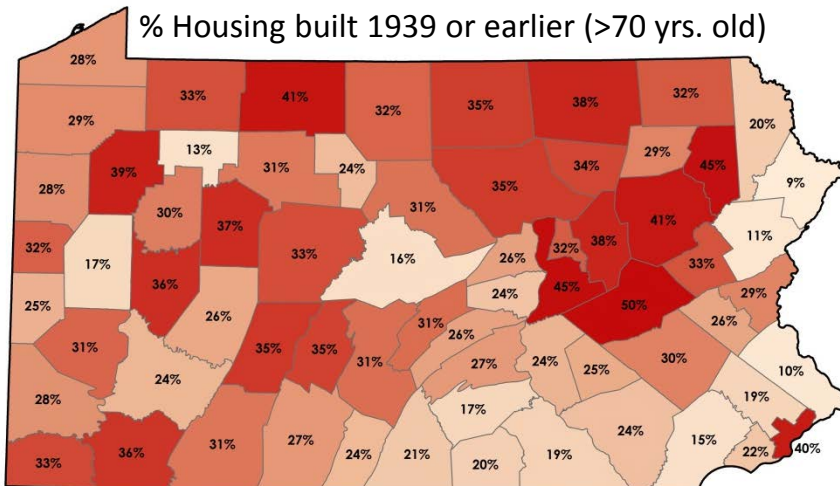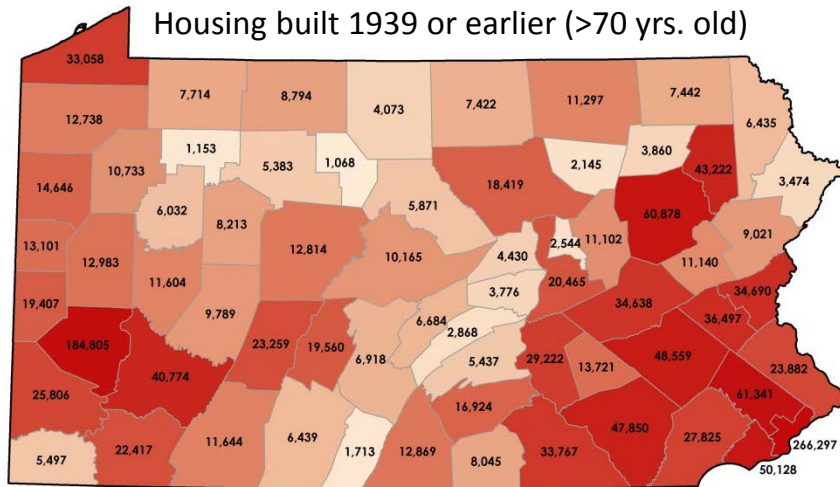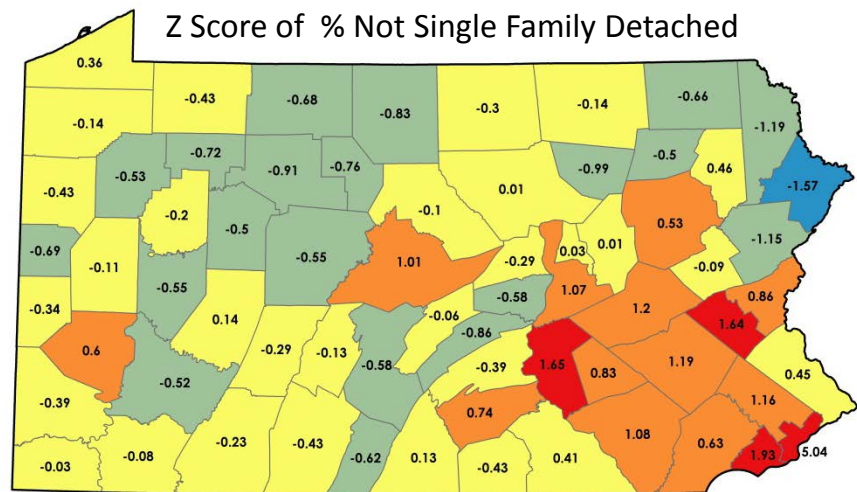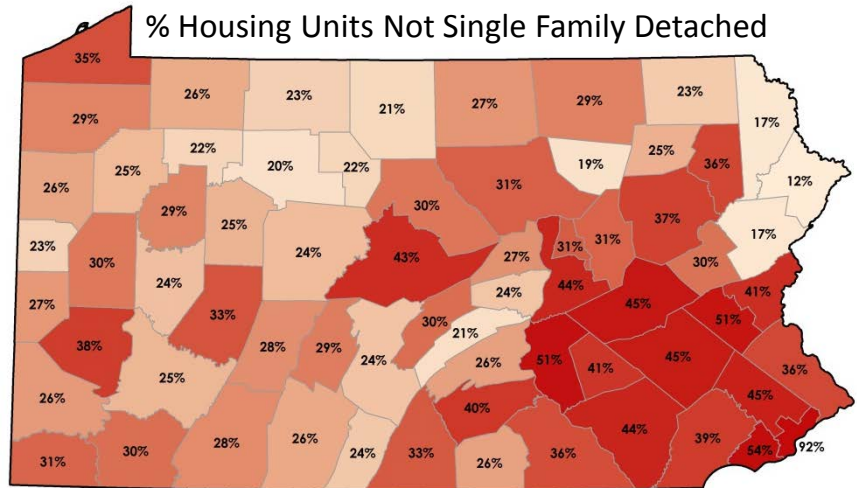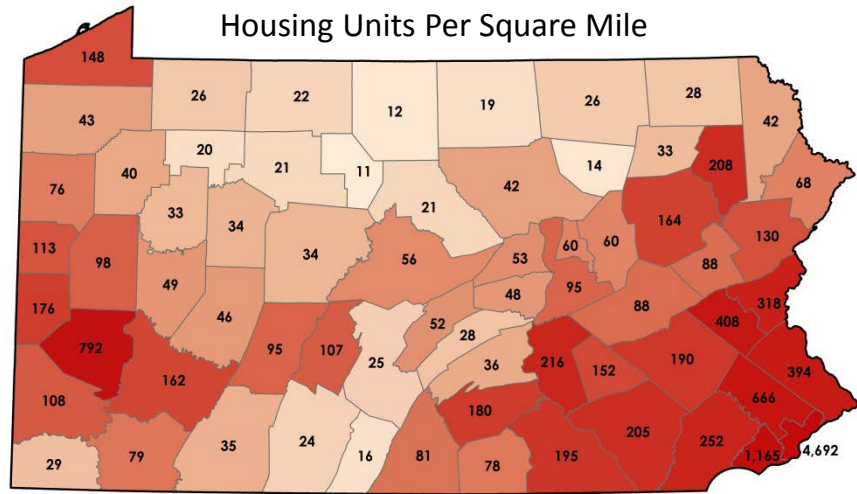Data beyond two standard deviations away from the mean is considered unusual data.

Greene and Washington Counties both have near the average amount of single-family homes.

A single-family home means that the building is usually occupied by just one household or family, and consists of just one dwelling unit. 'Detached' means that the building does not share an inside wall with any other dwelling.

The type and density of housing units can be used as indicators of regional economic structure, cultural variation, urban/rural places, and land-use practices.

Single family, detached dwellings are likely to use more energy for climate control, and residents are more likely dependent on private transportation.

PA Counties	Total Housing Units 2000-2011	% Single Family Housing	% Duplex /Tow/Row	% Apartment	% Mobile Home	Housing Units Per Sq. Mi.	Not Single Family Detached	Z Score Not Single Family	Z Score Rank
Philadelphia County	669,672	8.5%	58.5%	32.8%	0.2%	4,692	91.5%	5.04	1
Delaware County	222,794	45.8%	29.7%	24.1%	0.3%	1,165	54.2%	1.93	2
Dauphin County	119,930	49.2%	23.6%	24.5%	2.7%	216	50.8%	1.65	3
Lehigh County	141,942	49.3%	24.4%	24.0%	2.2%	408	50.7%	1.64	4
Schuylkill County	69,335	54.6%	28.7%	12.9%	3.7%	88	45.4%	1.20	5
Berks County	164,231	54.7%	23.7%	18.2%	3.3%	190	45.3%	1.19	6
Montgomery County	324,427	55.0%	19.6%	24.3%	0.9%	666	45.0%	1.16	7
Lancaster County	201,730	56.0%	20.2%	19.5%	4.2%	205	44.0%	1.08	8
Northumberland County	44,992	56.2%	23.7%	15.9%	4.1%	95	43.8%	1.07	9
Centre County	62,682	56.9%	6.8%	30.4%	5.9%	56	43.1%	1.01	10
Northampton County	119,851	58.7%	21.1%	17.5%	2.7%	318	41.3%	0.86	11
Lebanon County	55,288	59.1%	18.0%	17.8%	5.2%	152	40.9%	0.83	12
Cumberland County	99,055	60.1%	15.2%	19.5%	5.2%	180	39.9%	0.74	13
Chester County	191,146	61.5%	17.4%	18.4%	2.8%	252	38.5%	0.63	14
Allegheny County	589,388	61.8%	10.4%	27.0%	0.8%	792	38.2%	0.60	15
Luzerne County	148,672	62.7%	13.0%	20.8%	3.5%	164	37.3%	0.53	16
Lackawanna County	96,789	63.5%	6.1%	28.0%	2.4%	208	36.5%	0.46	17
Bucks County	245,216	63.6%	15.2%	19.2%	2.1%	394	36.4%	0.45	18
York County	177,771	64.1%	16.3%	14.5%	5.2%	195	35.9%	0.41	19
Erie County	118,967	64.7%	4.4%	25.1%	5.8%	148	35.3%	0.36	20
Indiana County	38,222	67.3%	2.2%	17.9%	12.6%	46	32.7%	0.14	21
Franklin County	62,603	67.4%	8.0%	16.1%	8.4%	81	32.6%	0.13	22
Montour County	7,935	68.7%	7.2%	16.5%	7.6%	60	31.3%	0.03	23
Lycoming County	52,583	68.9%	5.7%	19.2%	6.2%	42	31.1%	0.01	24
Columbia County	29,403	68.9%	5.1%	16.9%	9.1%	60	31.1%	0.01	25
Greene County	16,519	69.4%	3.2%	10.2%	17.2%	29	30.6%	-0.03	26
Mifflin County	21,541	69.7%	10.6%	11.7%	8.0%	52	30.3%	-0.06	27
Fayette County	63,085	70.0%	5.3%	12.5%	12.1%	79	30.0%	-0.08	28
Carbon County	34,106	70.1%	17.2%	8.6%	4.0%	88	29.9%	-0.09	29
Clinton County	19,054	70.2%	3.5%	15.7%	10.5%	21	29.8%	-0.10	30
Butler County	77,850	70.4%	6.1%	13.6%	9.9%	98	29.6%	-0.11	31
Blair County	56,263	70.5%	4.5%	18.0%	6.9%	107	29.5%	-0.13	32
Bradford County	29,958	70.7%	0.8%	11.4%	17.0%	26	29.3%	-0.14	33
Crawford County	44,628	70.7%	2.0%	13.2%	14.1%	43	29.3%	-0.14	34
Clarion County	19,987	71.4%	0.6%	13.6%	14.3%	33	28.6%	-0.20	35
Somerset County	38,067	71.8%	6.2%	10.9%	11.1%	35	28.2%	-0.23	36
Cambria County	65,685	72.5%	6.9%	16.1%	4.4%	95	27.5%	-0.29	37
Union County	16,869	72.5%	4.7%	14.4%	8.4%	53	27.5%	-0.29	38
Tioga County	21,319	72.6%	1.2%	10.5%	15.7%	19	27.4%	-0.30	39
Beaver County	78,294	73.1%	4.6%	17.1%	5.1%	176	26.9%	-0.34	40
Washington County	92,813	73.7%	6.1%	13.9%	6.3%	108	26.3%	-0.39	41
Perry County	20,354	73.7%	5.2%	8.4%	12.6%	36	26.3%	-0.39	42
Adams County	40,636	74.1%	8.6%	9.6%	7.7%	78	25.9%	-0.43	43
Mercer County	51,701	74.1%	2.6%	15.1%	8.1%	76	25.9%	-0.43	44
Bedford County	23,966	74.2%	1.8%	7.8%	16.2%	24	25.8%	-0.43	45
Warren County	23,580	74.2%	1.3%	11.4%	13.1%	26	25.8%	-0.43	46
Wyoming County	13,268	75.0%	1.0%	9.4%	14.6%	33	25.0%	-0.50	47
Jefferson County	22,467	75.0%	1.7%	11.7%	11.5%	34	25.0%	-0.50	48
Westmoreland County	167,991	75.3%	4.2%	14.2%	6.3%	162	24.7%	-0.52	49
Venango County	27,465	75.4%	1.3%	12.3%	11.1%	40	24.6%	-0.53	50
Clearfield County	38,719	75.5%	1.1%	10.6%	12.7%	34	24.5%	-0.55	51
Armstrong County	32,567	75.6%	3.1%	9.7%	11.6%	49	24.4%	-0.55	52
Huntingdon County	22,321	75.9%	2.0%	8.4%	13.6%	25	24.1%	-0.58	53
Snyder County	15,965	76.0%	5.3%	9.8%	8.9%	48	24.0%	-0.58	54
Fulton County	7,126	76.5%	1.3%	4.7%	17.3%	16	23.5%	-0.62	55
Susquehanna County	22,944	76.9%	0.8%	8.9%	13.4%	28	23.1%	-0.66	56
McKean County	21,264	77.2%	1.7%	10.9%	10.1%	22	22.8%	-0.68	57
Lawrence County	40,937	77.3%	3.4%	12.4%	7.0%	113	22.7%	-0.69	58
Forest County	8,783	77.7%	0.3%	1.7%	20.3%	20	22.3%	-0.72	59
Cameron County	4,476	78.1%	1.1%	9.1%	11.6%	11	21.9%	-0.76	60
Potter County	12,927	79.0%	1.1%	6.1%	13.9%	12	21.0%	-0.83	61
Juniata County	10,937	79.3%	2.5%	6.8%	11.3%	28	20.7%	-0.86	62
Elk County	17,628	79.9%	1.3%	11.6%	7.2%	35.36%	20.1%	-1.58	63
Sullivan County	6,296	80.8%	0.5%	4.6%	14.1%	34.27%	19.2%	-1.68	64
Monroe County	79,969	82.7%	4.8%	8.8%	3.7%	30.66%	17.3%	-1.78	65
Wayne County	31,691	83.3%	1.0%	5.1%	10.6%	50.16%	16.7%	-2.90	66
Pike County	38,304	87.8%	3.4%	3.7%	5.0%	60.05%	12.2%	-3.76	67

Mean (line between Columbia County and Greene County)

Homeownership (Average 2007-2010)

% Owner Occupied

% Change Owner Occupied (2000-2010)

Z Score of Change Owner Occupied (2000-2010)

Z Score

■	< -1.5 Std. Dev.
■	-1.5 - -0.50 Std. Dev.
■	-0.50 - 0.50 Std. Dev.
■	0.50 - 1.5 Std. Dev.
■	> 1.5 Std. Dev.

Greene County had the 8th highest decrease in homeownership in PA between 2007 – 2010 (-4.3%). Greene was slightly below the PA average of 73.4% owner-occupied units in 2010 with 72.5%.
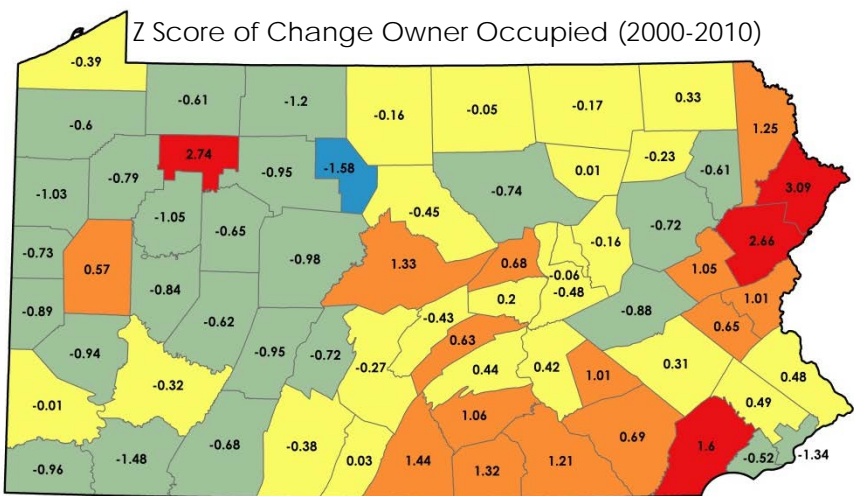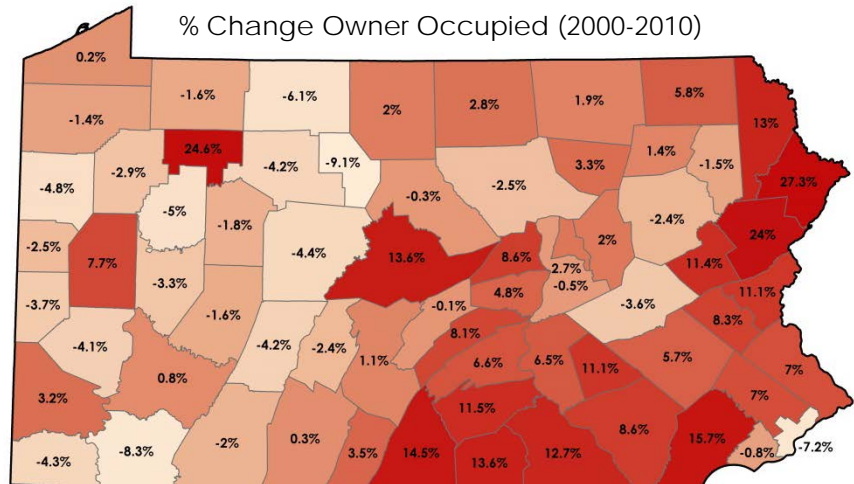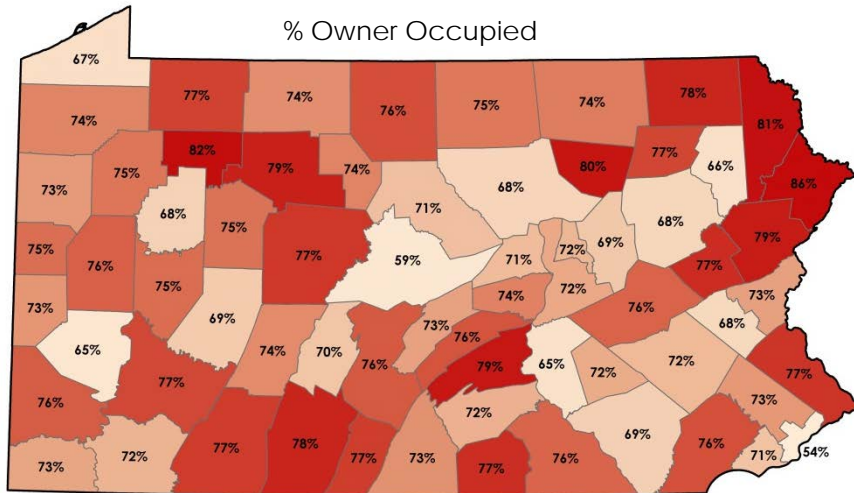
According to the US Census Bureau, homeowners in the United States tend to have higher incomes, and households residing in their own home were more likely to be families (as opposed to individuals) than were their tenant counterparts.

Homeownership can also be an indicator of investment in a community. When a community has high homeownership rates, it can be a sign that the community will have more pride and cohesion. It can be an indicator that that community will have a stronger 'sense of place' than other communities with lesser homeownership rates. Communities with lower homeownership rates, and thus more renting, can be indicative of a community that is a less-stable community or one that is a transitional community.

Changes in homeownership rates can be an indicator of the future path a community is heading towards.

This Z score in the table is multiplied by -1 because the category Z score summary scores require positive values to indicate less-desirable conditions. In this instance, declining homeownership is less-desirable than increasing rates of homeownership. The Z score map (left) shows original Z scores.

Data Sources: 2007-11 American Community Survey, U.S. Census Bureau.
http://www.census.gov/acs/www/

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Owner Occupied Units Avg. 2007-2010	% Owner Occupied 2010	% Change Homeowner	Z Score Change	Z Score Rank
Cameron County	1,677	73.8%	-9.06%	1.58	1
Fayette County	40,247	71.9%	-8.27%	1.48	2
Philadelphia County	324,536	54.1%	-7.18%	1.34	3
McKean County	12,640	73.6%	-6.11%	1.2	4
Clarion County	11,022	68.3%	-4.97%	1.05	5
Mercer County	33,938	73.1%	-4.79%	1.03	6
Clearfield County	24,825	76.9%	-4.40%	0.98	7
Greene County	**10,681**	**72.5%**	**-4.28%**	**0.96**	**8**
Elk County	10,750	78.5%	-4.16%	0.95	9
Cambria County	43,392	73.6%	-4.15%	0.95	10
Allegheny County	345,393	64.7%	-4.07%	0.94	11
Beaver County	52,335	73.3%	-3.74%	0.89	12
Schuylkill County	45,496	75.6%	-3.61%	0.88	13
Armstrong County	21,668	75.5%	-3.30%	0.84	14
Venango County	16,876	74.6%	-2.93%	0.79	15
Lycoming County	31,821	68.1%	-2.50%	0.74	16
Lawrence County	27,967	75.3%	-2.46%	0.73	17
Blair County	36,653	70.3%	-2.40%	0.72	18
Luzerne County	89,742	68.0%	-2.36%	0.72	19
Somerset County	23,885	76.8%	-2.03%	0.68	20
Jefferson County	13,906	74.9%	-1.85%	0.65	21
Indiana County	24,082	68.8%	-1.60%	0.62	22
Warren County	13,630	76.7%	-1.55%	0.61	23
Lackawanna County	57,353	65.8%	-1.53%	0.61	24
Crawford County	25,816	73.7%	-1.43%	0.6	25
Delaware County	147,212	70.5%	-0.79%	0.52	26
Northumberland County	28,413	72.4%	-0.52%	0.48	27
Clinton County	10,745	70.9%	-0.28%	0.45	28
Mifflin County	13,613	72.6%	-0.13%	0.43	29
Erie County	73,847	66.9%	0.16%	0.39	30
Bedford County	15,882	78.5%	0.26%	0.38	31
Westmoreland County	117,726	76.6%	0.75%	0.32	32
Huntingdon County	13,136	76.0%	1.14%	0.27	33
Wyoming County	8,612	76.6%	1.41%	0.23	34
Bradford County	18,801	74.3%	1.87%	0.17	35
Potter County	5,524	76.4%	1.96%	0.16	36
Columbia County	18,387	69.4%	1.98%	0.16	37
Montour County	5,313	71.9%	2.75%	0.06	38
Tioga County	12,478	74.6%	2.84%	0.05	39
Washington County	**64,541**	**75.9%**	**3.16%**	**0.01**	**40**
Sullivan County	2,220	79.9%	3.30%	-0.01	41
Fulton County	4,617	76.8%	3.47%	-0.03	42
Snyder County	10,947	74.2%	4.83%	-0.2	43
Berks County	110,653	71.7%	5.67%	-0.31	44
Susquehanna County	13,911	78.2%	5.83%	-0.33	45
Dauphin County	71,491	64.7%	6.49%	-0.42	46
Perry County	14,210	79.4%	6.63%	-0.44	47
Bucks County	181,013	77.1%	6.98%	-0.48	48
Montgomery County	225,001	73.1%	7.02%	-0.49	49
Butler County	55,241	75.8%	7.71%	-0.57	50
Juniata County	7,213	76.1%	8.14%	-0.63	51
Lehigh County	90,846	67.8%	8.34%	-0.65	52
Union County	10,492	71.1%	8.56%	-0.68	53
Lancaster County	132,703	68.5%	8.59%	-0.69	54
Northampton County	82,719	72.8%	11.09%	-1.01	55
Lebanon County	37,622	72.0%	11.12%	-1.01	56
Carbon County	20,643	77.4%	11.41%	-1.05	57
Cumberland County	67,606	72.0%	11.48%	-1.06	58
York County	127,173	75.5%	12.69%	-1.21	59
Wayne County	16,656	80.8%	12.96%	-1.25	60
Adams County	29,368	77.3%	13.56%	-1.32	61
Centre County	33,716	58.6%	13.61%	-1.33	62
Franklin County	42,883	73.4%	14.48%	-1.44	63
Chester County	139,328	76.2%	15.69%	-1.6	64
Monroe County	48,017	78.6%	23.97%	-2.66	65
Forest County	2,061	82.1%	24.61%	-2.74	66
Pike County	18,811	85.8%	27.32%	-3.09	67

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Percent Vacant Housing Units

Social

Community Indicators

Total Vacant Housing Units (2010)

% Housing Units Vacant (Not 2nd homes)

Z Score % Housing Units Vacant (Not 2nd homes)

Z Score

- ■ < -1.5 Std. Dev.
- ■ -1.5 - -0.50 Std. Dev.
- ■ -0.50 - 0.50 Std. Dev.
- ■ 0.50 - 1.5 Std. Dev.
- ■ > 1.5 Std. Dev.

Data Sources: 2007-11 American Community Survey, U.S. Census Bureau.
http://www.census.gov/acs/www/

Greene County and Washington County both had higher average housing vacancy rates from 2007-2011 than the PA average of 6%. Greene's rate approaches unusual.

The US Census Bureau collected vacancy rates of housing from the American Community Survey. Housing vacancy, along with rental vs. owner-occupied, are statistics that can be used to indicate transient, established, declining, or growing communities.

The values in the table shows a percentage of the total vacant housing unit value, but does not include those units that are seasonal, recreational, or used occasionally by the owner (i.e., second homes are not represented in the percent vacant). Not including second homes shows the characteristics of substance housing in communities.

Changes in housing vacancy rates, like homeownership rates, can be an indicator that a community is becoming less-traditional and more transitional.

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Total Housing Units Avg. 2007-2011	Vacant Housing Units	% Vacant Not Second Home	Z Score Vacant	Z Score Rank
Northumberland County	44,992	5,883	11.5%	5.48	1
Schuylkill County	69,335	9,131	11.2%	5.21	2
Philadelphia County	669,672	70,435	10.2%	4.18	3
Luzerne County	141,942	16,816	9.0%	3.01	4
Allegheny County	589,388	55,241	8.9%	2.93	5
Cambria County	65,685	6,700	8.8%	2.77	6
Beaver County	78,294	6,828	8.3%	2.27	7
Fayette County	62,603	6,776	8.3%	2.26	8
Lawrence County	40,937	3,849	8.2%	2.25	9
Mercer County	51,701	5,291	8.2%	2.20	10
Greene County	16,519	1,736	8.0%	2.03	11
McKean County	21,264	4,042	8.0%	2.02	12
Armstrong County	38,067	3,807	7.9%	1.93	13
Washington County	92,813	7,888	7.9%	1.90	14
Lackawanna County	96,789	9,606	7.8%	1.82	15
Dauphin County	119,851	9,971	7.6%	1.62	16
Westmoreland County	164,226	14,549	7.5%	1.53	17
Carbon County	34,106	7,615	7.5%	1.53	18
Clearfield County	38,304	6,356	7.5%	1.49	19
Venango County	29,958	4,843	7.4%	1.39	20
Fulton County	7,935	1,108	7.3%	1.34	21
Mifflin County	23,580	2,794	7.2%	1.16	22
Crawford County	40,636	9,658	7.1%	1.09	23
Monroe County	77,850	19,268	7.1%	1.07	24
Cameron County	4,476	2,182	6.8%	0.80	25
Jefferson County	22,944	3,873	6.7%	0.68	26
Bedford County	23,966	3,721	6.6%	0.59	27
Blair County	55,288	4,117	6.6%	0.58	28
Indiana County	38,719	3,231	6.5%	0.53	29
Elk County	15,965	3,892	6.5%	0.48	30
Somerset County	38,222	7,023	6.5%	0.46	31
Clarion County	19,987	3,834	6.3%	0.27	32
Montour County	10,937	572	6.1%	0.11	33
Warren County	21,541	5,793	6.1%	0.11	34
Columbia County	32,567	3,019	6.1%	0.11	35
Delaware County	222,794	14,202	6.1%	0.09	36
Franklin County	63,085	4,830	6.0%	-0.03	37
Erie County	118,967	8,725	6.0%	-0.04	38
Berks County	167,991	10,471	5.9%	-0.09	39
Susquehanna County	22,321	5,170	5.8%	-0.16	40
Butler County	79,969	5,332	5.8%	-0.22	41
Huntingdon County	21,319	5,085	5.8%	-0.23	42
Clinton County	19,054	3,929	5.6%	-0.40	43
Pike County	29,403	16,425	5.6%	-0.41	44
Lehigh County	148,672	8,630	5.6%	-0.41	45
Perry County	22,467	2,521	5.6%	-0.44	46
Bradford County	31,691	4,658	5.5%	-0.54	47
Tioga County	20,354	4,637	5.4%	-0.57	48
Lycoming County	52,583	5,800	5.3%	-0.67	49
Potter County	8,783	5,705	5.3%	-0.69	50
Wayne County	27,465	11,028	5.2%	-0.80	51
Juniata County	12,927	1,502	5.2%	-0.80	52
Union County	17,628	2,232	5.2%	-0.80	53
Cumberland County	99,055	6,045	5.2%	-0.81	54
York County	177,771	10,299	5.1%	-0.86	55
Adams County	44,628	2,807	5.1%	-0.91	56
Lebanon County	56,263	3,334	5.1%	-0.91	57
Montgomery County	324,427	17,985	5.1%	-0.94	58
Northampton County	119,930	6,798	5.0%	-0.98	59
Snyder County	16,869	1,277	5.0%	-1.01	60
Wyoming County	13,268	2,017	4.9%	-1.10	61
Chester County	191,146	9,562	4.4%	-1.58	62
Lancaster County	201,730	9,350	4.1%	-1.85	63
Bucks County	245,216	11,107	3.9%	-2.11	64
Centre County	62,682	5,724	3.7%	-2.29	65
Sullivan County	7,126	3,527	3.7%	-2.29	66
Forest County	6,296	6,249	3.3%	-2.72	67

Housing Values

Median House Value ($k) (2007-2011)

Average House Value ($k) (2007-2011)

Z Score of Average House Value

Z Score

- 🟩 < -0.50 Std. Dev.
- 🟨 -0.50 - 0.50 Std. Dev.
- 🟧 0.50 - 1.5 Std. Dev.
- 🟥 > 1.5 Std. Dev.

Greene County had the 9th lowest average house value in PA (2007-2011) after adjusting for inflation.
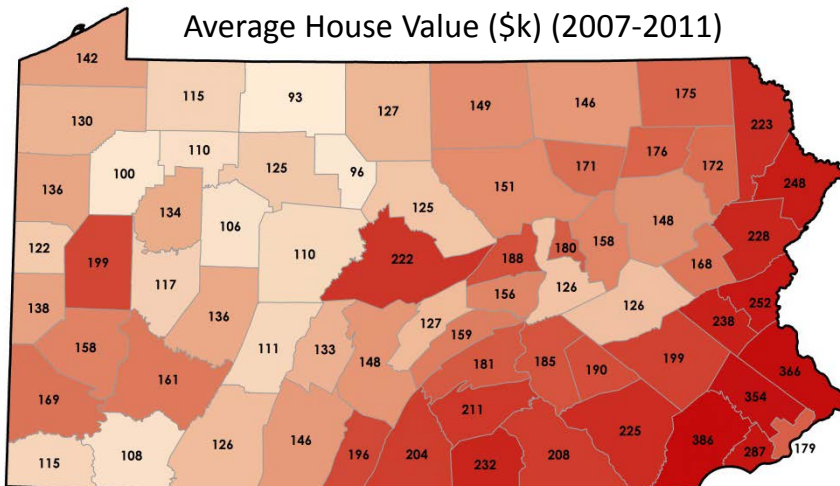
The US Census Bureau collected financial characteristics of housing from the American Community Survey. The value of home and property is an important measure of neighborhood quality, housing affordability, and wealth.

These values refer to owner-occupied single-family housing units on less than 10 acres without a business or medical office on the property.

These data are used by federal, state and local government agencies, the private sector, and researchers for activities such as; housing assistance plans for elderly and low-income households, transportation plans and programs, regional value variations, and analyses of housing needs.
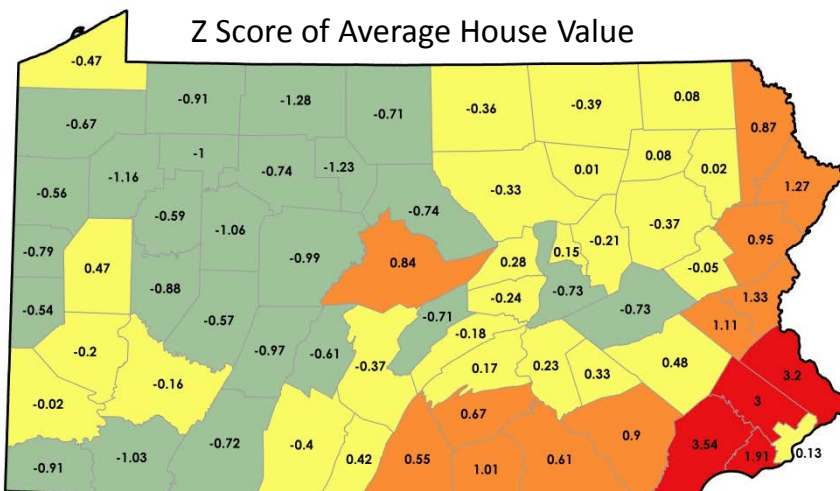
This Z score in the table is multiplied by -1 because the category Z score summary scores require positive values to indicate less-desirable conditions. In this instance, declining home values are less-desirable than rising home values. The Z score map (left) shows original Z scores.

Data Sources: 2007-11 American Community Survey, U.S. Census Bureau.
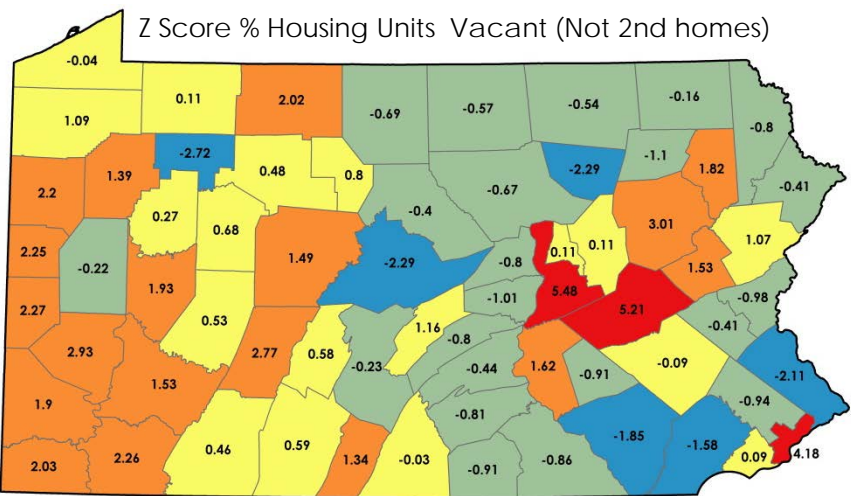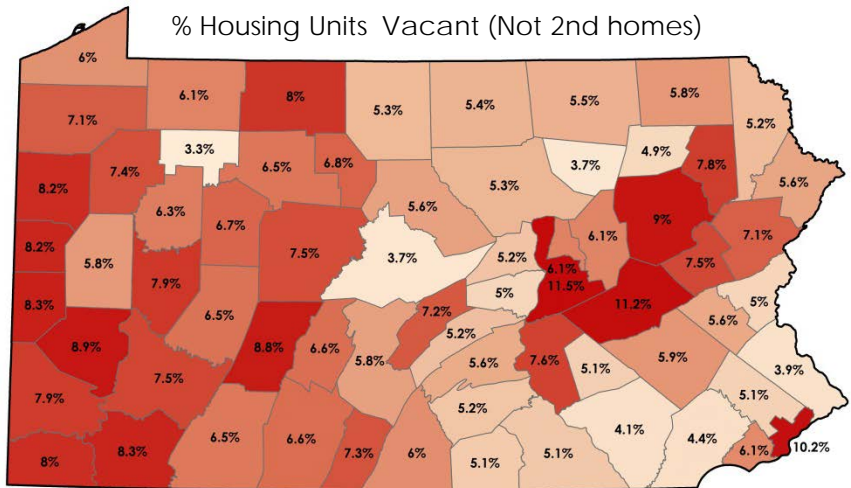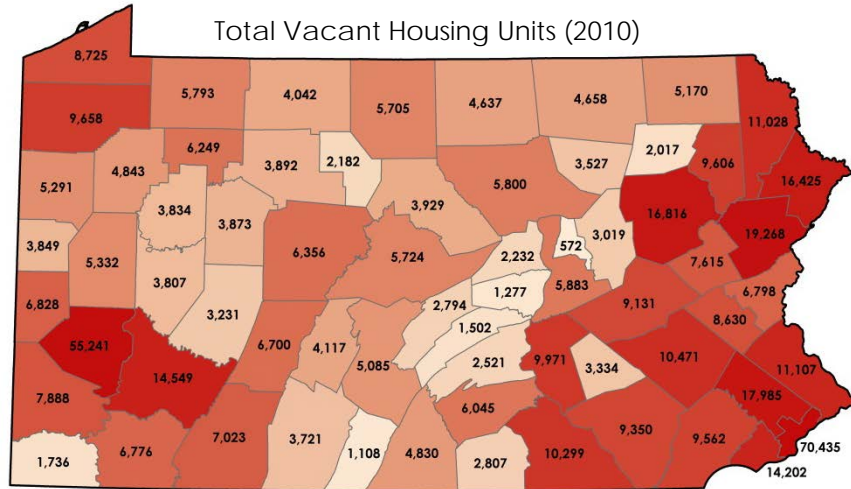http://www.census.gov/acs/www/

$$Z = \frac{(\text{County Value}) - (\text{Average of All Counties})}{(\text{Standard Deviation of All Counties})}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Median House Value (x1,000) (2007-2011)	Average House Value (x1,000) (2007-2011)	Z Score Average Value	Z Score Rank
McKean County	$74	$93	1.28	1
Cameron County	$74	$96	1.23	2
Venango County	$79	$100	1.16	3
Jefferson County	$83	$106	1.06	4
Fayette County	$84	$108	1.03	5
Forest County	$81	$110	1	6
Clearfield County	$84	$110	0.99	7
Cambria County	$88	$111	0.97	8
Greene County	$85	$115	0.91	9
Warren County	$85	$115	0.91	10
Armstrong County	$92	$117	0.88	11
Lawrence County	$94	$122	0.79	12
Elk County	$94	$125	0.74	13
Clinton County	$101	$125	0.74	14
Northumberland County	$96	$126	0.73	15
Schuylkill County	$91	$126	0.73	16
Somerset County	$94	$126	0.72	17
Mifflin County	$93	$127	0.71	18
Potter County	$91	$127	0.71	19
Crawford County	$100	$130	0.67	20
Blair County	$102	$133	0.61	21
Clarion County	$100	$134	0.59	22
Indiana County	$104	$136	0.57	23
Mercer County	$101	$136	0.56	24
Beaver County	$114	$138	0.54	25
Erie County	$113	$142	0.47	26
Bedford County	$115	$146	0.4	27
Bradford County	$109	$146	0.39	28
Huntingdon County	$112	$148	0.37	29
Luzerne County	$117	$148	0.37	30
Tioga County	$111	$149	0.36	31
Lycoming County	$125	$151	0.33	32
Snyder County	$128	$156	0.24	33
Columbia County	$129	$158	0.21	34
Allegheny County	$119	$158	0.2	35
Juniata County	$133	$159	0.18	36
Westmoreland County	$131	$161	0.16	37
Carbon County	$146	$168	0.05	38
Washington County	$136	$169	0.02	39
Sullivan County	$124	$171	-0.01	40
Lackawanna County	$142	$172	-0.02	41
Susquehanna County	$132	$175	-0.08	42
Wyoming County	$147	$176	-0.08	43
Philadelphia County	$141	$179	-0.13	44
Montour County	$148	$180	-0.15	45
Perry County	$150	$181	-0.17	46
Dauphin County	$157	$185	-0.23	47
Union County	$149	$188	-0.28	48
Lebanon County	$161	$190	-0.33	49
Fulton County	$161	$196	-0.42	50
Butler County	$163	$199	-0.47	51
Berks County	$174	$199	-0.48	52
Franklin County	$178	$204	-0.55	53
York County	$178	$208	-0.61	54
Cumberland County	$179	$211	-0.67	55
Centre County	$181	$222	-0.84	56
Wayne County	$180	$223	-0.87	57
Lancaster County	$187	$225	-0.9	58
Monroe County	$205	$228	-0.95	59
Adams County	$203	$232	-1.01	60
Lehigh County	$206	$238	-1.11	61
Pike County	$216	$248	-1.27	62
Northampton County	$222	$252	-1.33	63
Delaware County	$235	$287	-1.91	64
Montgomery County	$298	$354	-3	65
Bucks County	$320	$366	-3.2	66
Chester County	$333	$386	-3.54	67

Mean (at Washington County row)

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Public School Dropout Rate*

Total Dropouts (2009/2010)

(map of Pennsylvania counties with dropout totals)

% Dropout Rate (2009/2010)

(map of Pennsylvania counties with percentage dropout rates)

Z Score of % Dropout Rate (2009/2010)

(map of Pennsylvania counties with Z scores)

Z Score

Color	Range
	< -2.5 Std. Dev.
	-2.5 - -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	> 1.5 Std. Dev.
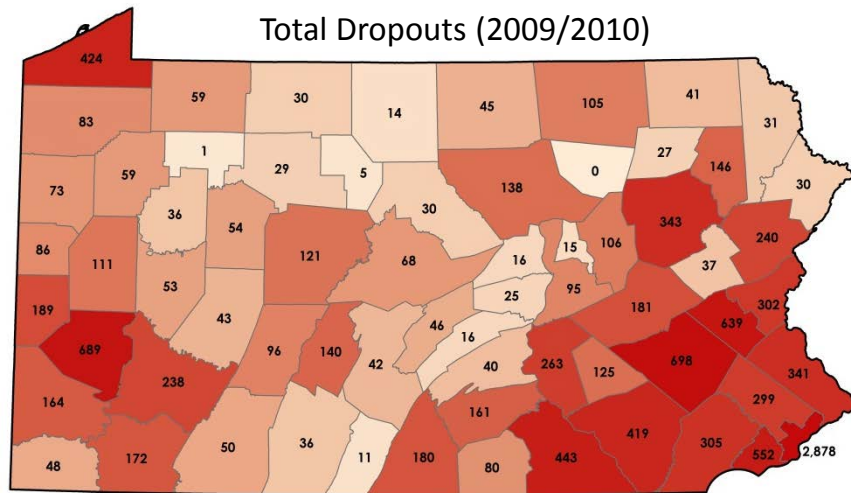
Greene County had the 12th highest public school dropout rate in PA (2009/2010).

This data shows the dropout rates for public school districts, aggregated by county.

*These numbers reflect the fall enrollment in grades 7 through 12 and the total number of dropouts in those grades through a single school year.

When middle-school grade enrollments are withheld from the analysis, significant differences in the total dropout rates change.

The legal age for a child to dropout of school in Pennsylvania is 16, if the child holds an employment certificate.
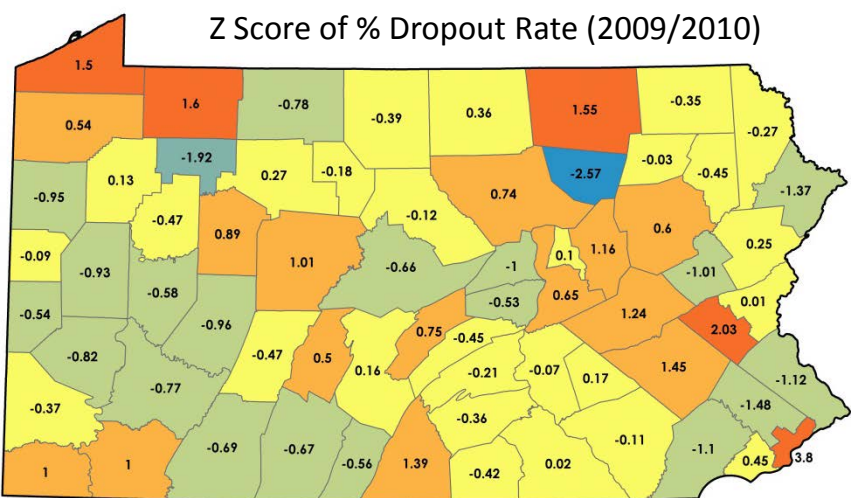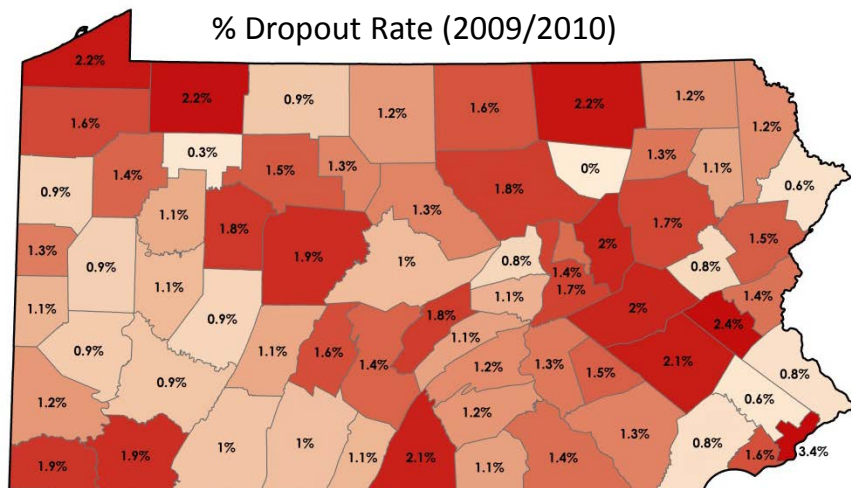
Data Sources: PA Dept. of Education, Division of Data Services / Pennsylvania Information Management System (PIMS). http://www.education.state.pa.us
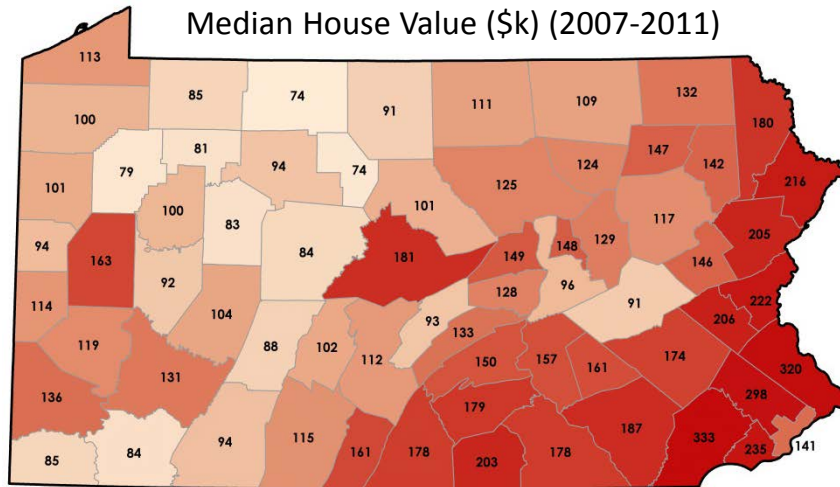
$$Z = \frac{\text{(County Value)} - \text{(Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Enrollment Grades 7-12 (2009/2010)	Drop Out Rate Total	D.O. Rate Females	D.O. Rate Males	% D.O. Rate (2009/2010)	Z Score D.O. Rate	Z Score Rank
Philadelphia	85,340	2,878	1,274	1,604	3.37%	3.80	1
Lehigh	26,248	639	256	383	2.43%	2.03	2
Warren	2,673	59	29	30	2.21%	1.60	3
Bradford	4,813	105	42	63	2.18%	1.55	4
Erie	19,689	424	192	232	2.15%	1.50	5
Berks	32,830	698	326	372	2.13%	1.45	6
Franklin	8,579	180	73	107	2.10%	1.39	7
Schuylkill	8,967	181	76	105	2.02%	1.24	8
Columbia	5,363	106	47	59	1.98%	1.16	9
Clearfield	6,385	121	57	64	1.90%	1.01	10
Fayette	9,095	172	75	97	1.89%	1.00	11
Greene	2,542	48	24	24	1.89%	1.00	12
Jefferson	2,948	54	24	30	1.83%	0.89	13
Mifflin	2,617	46	23	23	1.76%	0.75	14
Lycoming	7,876	138	62	76	1.75%	0.74	15
Northumberland	5,581	95	33	62	1.70%	0.65	16
Luzerne	20,463	343	153	190	1.68%	0.60	17
Crawford	5,050	83	27	56	1.64%	0.54	18
Blair	8,620	140	54	86	1.62%	0.50	19
Delaware	34,519	552	252	300	1.60%	0.45	20
Tioga	2,900	45	17	28	1.55%	0.36	21
Elk	1,928	29	9	20	1.50%	0.27	22
Monroe	16,096	240	95	145	1.49%	0.25	23
Lebanon	8,609	125	40	85	1.45%	0.17	24
Huntingdon	2,905	42	15	27	1.45%	0.16	25
Venango	4,129	59	30	29	1.43%	0.13	26
Montour	1,061	15	8	7	1.41%	0.10	27
York	32,272	443	161	282	1.37%	0.02	28
Northampton	22,093	302	140	162	1.37%	0.01	29
Wyoming	2,007	27	8	19	1.35%	-0.03	30
Dauphin	19,868	263	104	159	1.32%	-0.07	31
Lawrence	6,546	86	35	51	1.31%	-0.09	32
Lancaster	32,251	419	158	261	1.30%	-0.11	33
Clinton	2,313	30	10	20	1.30%	-0.12	34
Cameron	396	5	1	4	1.26%	-0.18	35
Perry	3,206	40	20	20	1.25%	-0.21	36
Wayne	2,553	31	9	22	1.21%	-0.27	37
Susquehanna	3,487	41	20	21	1.18%	-0.35	38
Cumberland	13,786	161	62	99	1.17%	-0.36	39
Washington	14,081	164	68	96	1.16%	-0.37	40
Potter	1,213	14	4	10	1.15%	-0.39	41
Adams	7,022	80	26	54	1.14%	-0.42	42
Juniata	1,426	16	8	8	1.12%	-0.45	43
Lackawanna	13,026	146	58	88	1.12%	-0.45	44
Cambria	8,622	96	43	53	1.11%	-0.47	45
Clarion	3,234	36	21	15	1.11%	-0.47	46
Snyder	2,319	25	14	11	1.08%	-0.53	47
Beaver	17,614	189	95	94	1.07%	-0.54	48
Fulton	1,034	11	4	7	1.06%	-0.56	49
Armstrong	5,043	53	17	36	1.05%	-0.58	50
Centre	6,747	68	33	35	1.01%	-0.66	51
Bedford	3,590	36	17	19	1.00%	-0.67	52
Somerset	5,040	50	20	30	0.99%	-0.69	53
Westmoreland	25,058	238	94	144	0.95%	-0.77	54
McKean	3,172	30	12	18	0.95%	-0.78	55
Allegheny	74,475	689	298	391	0.93%	-0.82	56
Butler	12,827	111	50	61	0.87%	-0.93	57
Mercer	8,515	73	31	42	0.86%	-0.95	58
Indiana	5,038	43	20	23	0.85%	-0.96	59
Union	1,925	16	6	10	0.83%	-1.00	60
Carbon	4,491	37	18	19	0.82%	-1.01	61
Chester	39,332	305	146	159	0.78%	-1.10	62
Bucks	44,388	341	132	209	0.77%	-1.12	63
Pike	4,730	30	13	17	0.63%	-1.37	64
Montgomery	51,933	299	122	177	0.58%	-1.48	65
Forest	291	1	0	1	0.34%	-1.92	66
Sullivan	329	0	0	0	0.00%	-2.57	67

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Voter Participation

Voter Participation (Nov. 2012)

Average Voter Participation (2000-2012)

Z Score of Avg. Voter Participation (2000-2012)
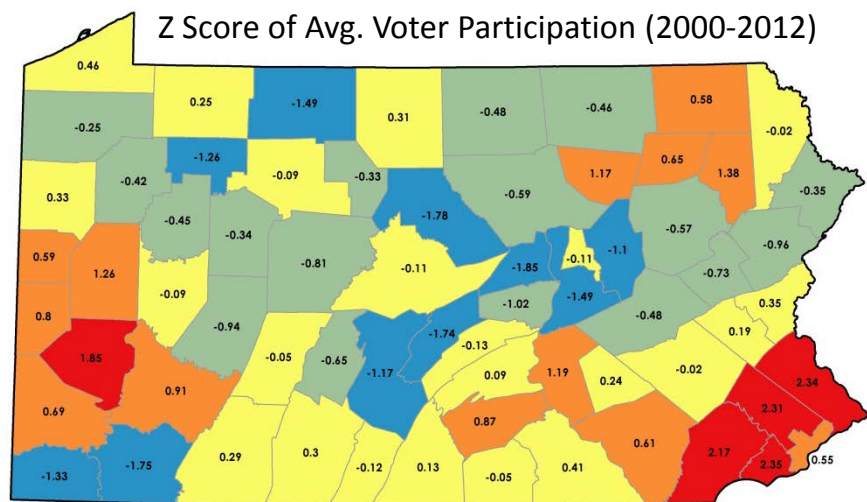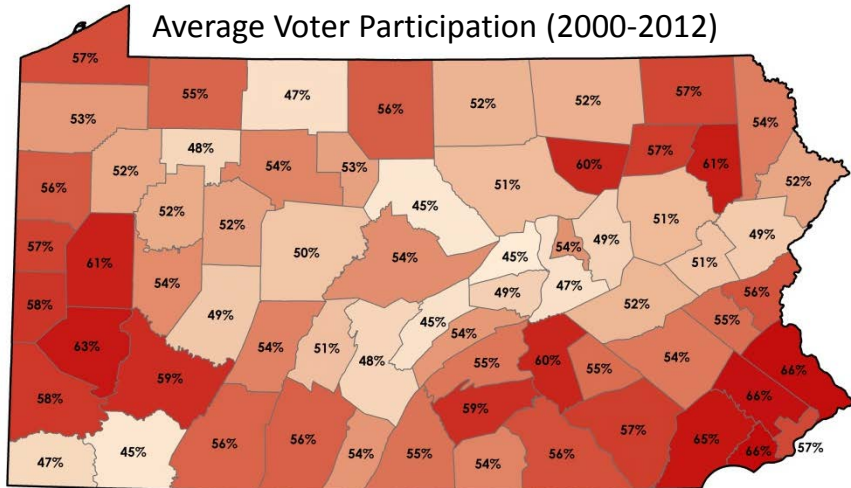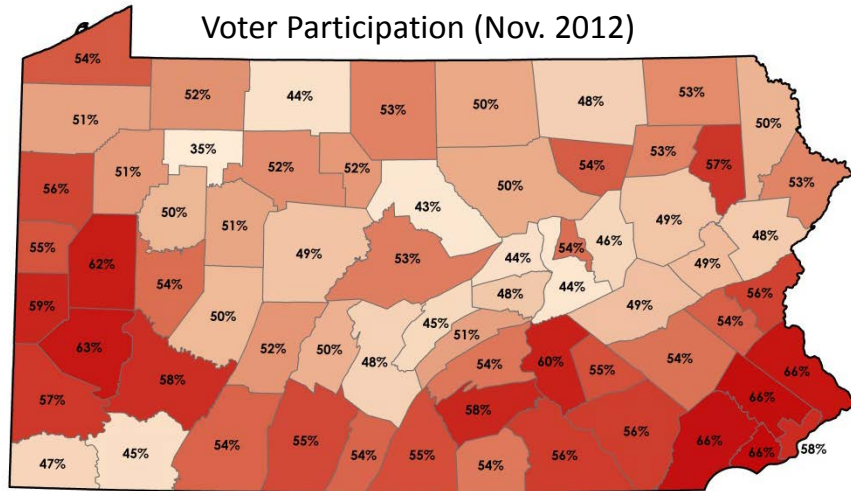
Greene County has the 7th lowest voter participation average from 2000 -2012 in PA.

This data shows the percentage of voter participation by registered voters per county. Z scores are for voter – nonparticipation.

Voter turnout is declining in Pennsylvania. The percentage of registered voters voting in Presidential elections in Pennsylvania from 1960 to 2012 was 76%. The percentage of registered voters voting in Presidential elections in Pennsylvania from 2000 to 2012 was 67%.

Low turnout is often considered to be undesirable, as it indicates apathy in the political process and, perhaps most importantly, a small number of citizens decides who will represent everyone.

Z Score

- ![blue] < -2.5 Std. Dev.
- ![teal] -2.5 - -1.5 Std. Dev.
- ![green] -1.5 - -0.50 Std. Dev.
- ![yellow] -0.50 - 0.50 Std. Dev.
- ![orange] 0.50 - 1.5 Std. Dev.
- ![darkorange] 1.5 - 2.3 Std. Dev.

This Z score in the table is calculated by first subtracting the participation rate by 100% in order to show non-participation rate. The Z score map (left) shows original Z scores.

PA Counties	% Voter Participation (Nov. 2000)	% Voter Participation (Nov. 2004)	% Voter Participation (Nov. 2008)	% Voter Participation (Nov. 2012)	Avg. Voter Participation (2000-2012)	Z Score Avg. Voter NON-Partic.	Z Score Rank
Union County	39.6%	46.8%	48.8%	44.4%	44.9%	1.85	1
Clinton County	40.3%	47.5%	50.4%	42.7%	45.2%	1.78	2
Fayette County	43.1%	47.8%	46.1%	44.5%	45.4%	1.75	3
Mifflin County	41.7%	48.0%	46.7%	45.2%	45.4%	1.74	4
Northumberland County	45.0%	50.9%	46.7%	44.1%	46.7%	1.49	5
McKean County	45.1%	50.7%	46.8%	44.2%	46.7%	1.49	6
Greene County	43.0%	49.7%	50.7%	46.6%	47.5%	1.33	7
Forest County	59.7%	54.9%	42.2%	34.6%	47.9%	1.26	8
Huntingdon County	44.7%	49.9%	50.8%	47.9%	48.3%	1.17	9
Columbia County	43.1%	51.9%	53.3%	46.4%	48.7%	1.10	10
Snyder County	45.0%	51.3%	51.7%	48.3%	49.1%	1.02	11
Monroe County	46.2%	48.5%	54.6%	48.2%	49.4%	0.96	12
Indiana County	44.4%	51.1%	52.5%	49.8%	49.5%	0.94	13
Clearfield County	47.5%	53.0%	51.1%	48.8%	50.1%	0.81	14
Carbon County	46.5%	52.7%	53.6%	49.3%	50.5%	0.73	15
Blair County	45.2%	54.8%	53.6%	50.0%	50.9%	0.65	16
Lycoming County	46.9%	54.3%	53.5%	50.2%	51.2%	0.59	17
Luzerne County	47.4%	54.9%	54.4%	48.5%	51.3%	0.57	18
Schuylkill County	49.0%	55.8%	53.4%	48.8%	51.7%	0.48	19
Tioga County	46.8%	54.5%	55.5%	50.3%	51.8%	0.48	20
Bradford County	49.9%	54.7%	54.9%	47.9%	51.9%	0.46	21
Clarion County	48.4%	53.8%	55.7%	49.9%	51.9%	0.45	22
Venango County	47.1%	55.0%	54.7%	51.5%	52.0%	0.42	23
Pike County	51.1%	53.3%	52.5%	52.8%	52.4%	0.35	24
Jefferson County	50.0%	55.6%	53.3%	51.1%	52.5%	0.34	25
Cameron County	49.8%	55.0%	53.6%	51.7%	52.5%	0.33	26
Crawford County	49.0%	56.0%	55.6%	51.1%	52.9%	0.25	27
Juniata County	50.6%	57.3%	54.9%	51.2%	53.5%	0.13	28
Fulton County	49.1%	56.5%	54.6%	54.1%	53.6%	0.12	29
Montour County	47.1%	55.2%	58.2%	54.1%	53.6%	0.11	30
Centre County	44.5%	54.8%	62.1%	53.2%	53.6%	0.11	31
Armstrong County	49.1%	56.2%	55.5%	54.1%	53.7%	0.09	32
Elk County	50.9%	55.6%	56.0%	52.4%	53.7%	0.09	33
Adams County	48.8%	56.8%	56.6%	53.5%	53.9%	0.05	34
Cambria County	50.0%	56.9%	56.7%	52.2%	53.9%	0.05	35
Wayne County	52.1%	57.8%	56.4%	50.0%	54.1%	0.02	36
Berks County	48.0%	55.9%	58.5%	53.9%	54.1%	0.02	37
Perry County	49.5%	58.1%	57.1%	53.8%	54.6%	-0.09	38
Franklin County	49.8%	56.9%	57.7%	54.7%	54.8%	-0.13	39
Lehigh County	49.0%	58.7%	58.5%	54.3%	55.1%	-0.19	40
Lebanon County	50.0%	58.6%	58.4%	54.5%	55.4%	-0.24	41
Warren County	52.7%	59.2%	57.5%	52.3%	55.4%	-0.25	42
Somerset County	53.1%	58.8%	56.6%	54.2%	55.7%	-0.29	43
Bedford County	50.9%	59.0%	57.5%	55.4%	55.7%	-0.30	44
Potter County	53.0%	59.6%	57.5%	52.9%	55.7%	-0.31	45
Mercer County	52.9%	56.1%	58.9%	55.6%	55.9%	-0.33	46
Northampton County	51.1%	58.2%	58.7%	55.8%	55.9%	-0.35	47
York County	50.1%	58.9%	59.5%	56.3%	56.2%	-0.41	48
Erie County	53.4%	59.1%	59.2%	54.4%	56.5%	-0.46	49
Philadelphia County	49.5%	59.2%	61.0%	58.0%	56.9%	-0.55	50
Susquehanna County	54.9%	60.1%	60.7%	52.6%	57.1%	-0.58	51
Lawrence County	54.5%	60.4%	59.2%	54.5%	57.1%	-0.59	52
Lancaster County	50.8%	61.5%	60.4%	56.3%	57.2%	-0.61	53
Wyoming County	55.9%	60.1%	60.9%	52.8%	57.4%	-0.65	54
Washington County	53.5%	60.2%	59.9%	57.0%	57.7%	-0.69	55
Beaver County	52.4%	59.5%	61.7%	59.2%	58.2%	-0.80	56
Cumberland County	52.8%	61.0%	61.9%	58.4%	58.5%	-0.87	57
Westmoreland County	54.3%	62.0%	61.0%	57.8%	58.8%	-0.91	58
Sullivan County	59.8%	63.9%	62.1%	54.3%	60.0%	-1.17	59
Dauphin County	52.8%	62.8%	65.2%	59.8%	60.2%	-1.19	60
Butler County	54.0%	62.5%	63.7%	62.0%	60.5%	-1.26	61
Lackawanna County	57.8%	64.1%	65.1%	57.4%	61.1%	-1.38	62
Allegheny County	58.2%	65.7%	67.0%	63.0%	63.5%	-1.85	63
Chester County	58.6%	66.9%	68.6%	66.1%	65.1%	-2.17	64
Montgomery County	58.5%	68.0%	70.4%	66.2%	65.8%	-2.31	65
Bucks County	59.3%	69.0%	69.4%	66.1%	65.9%	-2.34	66
Delaware County	59.8%	68.1%	69.8%	66.2%	66.0%	-2.35	67

(Mean is indicated between rows 37 and 38.)

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

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Federal Expenditures

Federal Expenditures ($1,000) (2010)

% Change Federal Expenditures(2007-2010)

Z Score of Change Owner Occupied (2000-2010)

Z Score

⬛	< -2.5 Std. Dev.
⬛	-2.5 - -1.5 Std. Dev.
⬛	-1.5 - -0.50 Std. Dev.
⬛	-0.50 - 0.50 Std. Dev.
⬛	0.50 - 1.5 Std. Dev.
⬛	1.5 - 2.5 Std. Dev.
⬛	> 2.5 Std. Dev.

Data Sources: U.S. Census Bureau, Consolidated Federal Funds Report.
http://www.census.gov/govs/www/cffr.html

Washington County received an increase of 10.3% of Federal dollars from 2007-2010, and Greene County received an increase of 4.3% during the same time.

This data sums all of the Federal dollars for all programs spent in a county. Data are obtained on the amount of virtually all Federal expenditures, including grants, loans, direct payments, insurance, procurement, salaries and wages, and other awards (such as price supports and research awards). Data represent actual expenditures (or outlays) with some exceptions.
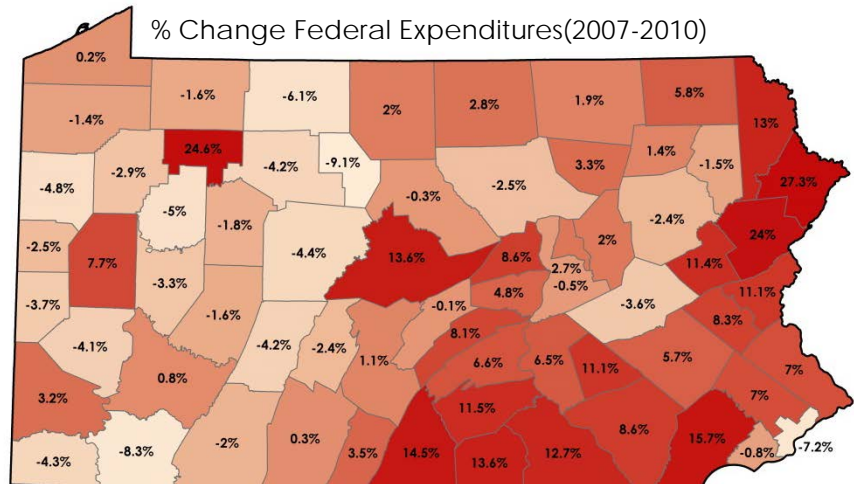
The Bureau of Economic Analysis, Office of Management and Budget, U.S. Congress, state governments, and private researchers use the data to measure and assess Federal expenditures in state and sub-state areas. These and other analysts use the data on an expenditure basis for studies that evaluate Federal revenues from state areas versus Federal expenditure to those areas.

Due to the termination of the Federal Financial Statistics program, the Consolidated Federal Funds Report data will no longer available.
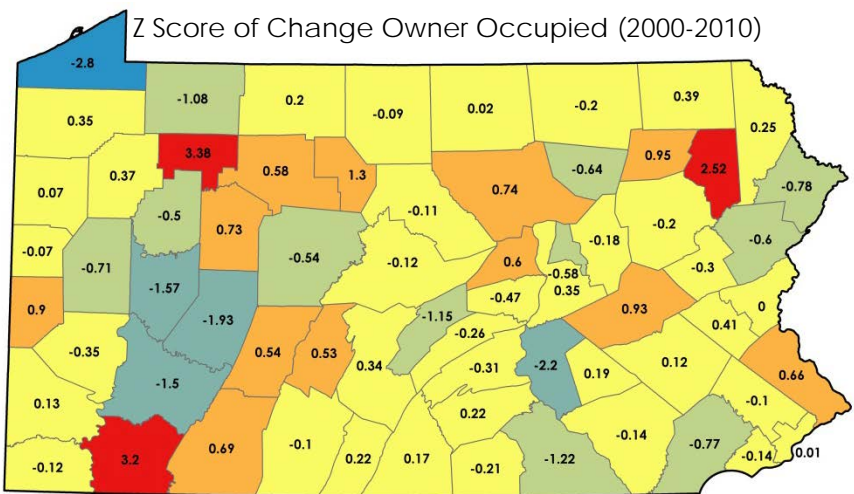
This Z score in the table is multiplied by -1 because the category Z score summary scores require positive values to indicate less-desirable conditions. In this instance, federal expenditure decreases are less desirable than increases. The Z score map (left) shows original Z scores

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Federal Expenditures ($1000) (2010)	Federal Expenditures Per Capita	% Change Federal Expenditures (2007-2010)	Z Score % Change	Z Score Rank
Erie County	$409,447	$8,258	-61.4%	2.8	1
Dauphin County	$265,795	$8,303	-46.7%	2.2	2
Indiana County	$718,608	$7,023	-40.2%	1.93	3
Armstrong County	$3,882,079	$9,050	-31.3%	1.57	4
Westmoreland County	$358,438	$7,896	-29.6%	1.5	5
York County	$153,203	$6,627	-22.8%	1.22	6
Mifflin County	$688,577	$10,148	-20.9%	1.15	7
Warren County	$5,547,998	$9,942	-19.2%	1.08	8
Pike County	$479,127	$7,838	-12.0%	0.78	9
Chester County	$63,338	$9,349	-11.6%	0.77	10
Butler County	$747,768	$9,717	-10.2%	0.71	11
Sullivan County	$319,310	$8,678	-8.4%	0.64	12
Monroe County	$388,296	$9,555	-7.6%	0.6	13
Montour County	$301,576	$4,982	-7.1%	0.58	14
Clearfield County	$146,132	$8,249	-6.0%	0.54	15
Clarion County	$376,804	$8,650	-5.0%	0.5	16
Snyder County	$356,339	$8,718	-4.3%	0.47	17
Allegheny County	$969,454	$8,297	-1.5%	0.35	18
Perry County	$349,057	$8,842	-0.4%	0.31	19
Carbon County	$518,891	$8,125	-0.2%	0.3	20
Juniata County	$490,336	$7,531	0.8%	0.26	21
Adams County	$398,742	$9,231	2.1%	0.21	22
Bradford County	$283,477	$6,230	2.1%	0.2	23
Luzerne County	$3,355,829	$9,264	2.2%	0.2	24
Columbia County	$234,017	$6,075	2.8%	0.18	25
Delaware County	$303,739	$7,473	3.7%	0.14	26
Lancaster County	$2,449,904	$11,733	3.8%	0.14	27
Centre County	$155,992	$9,333	4.2%	0.12	28
Greene County	**$1,567,763**	**$9,132**	**4.3%**	**0.12**	**29**
Clinton County	$2,993,689	$5,896	4.4%	0.11	30
Bedford County	$504,004	$9,302	4.6%	0.1	31
Montgomery County	$206,864	$7,439	4.8%	0.1	32
Potter County	$1,332,938	$9,193	4.9%	0.09	33
Lawrence County	$2,648,722	$6,506	5.6%	0.07	34
Northampton County	$467,842	$9,113	7.1%	0	35
Philadelphia County	$54,872	$10,628	7.4%	-0.01	36
Tioga County	$450,537	$11,480	7.6%	-0.02	37
Mercer County	$2,482,659	$8,303	9.0%	-0.07	38
Berks County	$2,238,245	$7,985	10.1%	-0.12	39
Washington County	**$1,076,163**	**$9,272**	**10.3%**	**-0.13**	**40**
Franklin County	$406,531	$9,108	11.4%	-0.17	41
Lebanon County	$695,954	$8,454	11.7%	-0.19	42
McKean County	$1,405,494	$9,613	12.0%	-0.2	43
Cumberland County	$942,804	$10,457	12.5%	-0.22	44
Fulton County	$3,227,068	$10,315	12.6%	-0.22	45
Wayne County	$1,338,883	$9,111	13.3%	-0.25	46
Huntingdon County	$1,986,273	$9,578	15.6%	-0.34	47
Northumberland County	$806,949	$9,228	15.7%	-0.35	48
Crawford County	$1,300,759	$10,313	15.8%	-0.35	49
Venango County	$1,528,984	$8,278	16.2%	-0.37	50
Susquehanna County	$740,921	$8,370	16.8%	-0.39	51
Lehigh County	$829,953	$9,089	17.2%	-0.41	52
Blair County	$17,592,429	$14,438	20.1%	-0.53	53
Cambria County	$4,456,928	$7,120	20.4%	-0.54	54
Elk County	$2,421,518	$10,416	21.3%	-0.58	55
Union County	$1,753,749	$12,298	21.9%	-0.6	56
Bucks County	$70,913	$11,549	23.3%	-0.66	57
Somerset County	$304,220	$20,483	24.1%	-0.69	58
Jefferson County	$7,173,011	$9,169	25.1%	-0.73	59
Lycoming County	$407,589	$8,873	25.3%	-0.74	60
Beaver County	$1,398,633	$10,717	29.1%	-0.9	61
Schuylkill County	$2,678,198	$7,796	30.0%	-0.93	62
Wyoming County	$2,069,477	$12,440	30.5%	-0.95	63
Cameron County	$23,099,361	$14,929	38.9%	-1.3	64
Lackawanna County	$2,819,357	$19,579	68.8%	-2.52	65
Fayette County	$5,285,681	$10,595	85.4%	-3.2	66
Forest County	$9,329,489	$36,030	89.9%	-3.38	67

Federal Expenditures

Social

Community Indicators

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Income Per Capita and Income Change*

Income Per Capita ($1,000) (2011)

% Change Income Per Capita (2002-2011)

Z Score of % Change Income Per Capita (2002-2011)

Greene County experienced the largest increase in income per capita (35%) amongst all PA Counties from 2002-2011. Washington County had the second-highest increase (25%).

Per capita income is often used as average income. Here it is used as a measure of the wealth of the population of a county, and can be used in comparison to other counties. Per capita income is often used to measure a country's standard of living.

It is calculated by taking a measure of all sources of income in the aggregate (such as Gross national income) and dividing it by the total population.

* All dollar estimates are in current dollars, therefore they have not been adjusted for inflation.

Z Score

■	< -1.5 Std. Dev.
■	-1.5 - -0.50 Std. Dev.
■	-0.50 - 0.50 Std. Dev.
■	0.50 - 1.5 Std. Dev.
■	> 1.5 Std. Dev.

Data Sources: US Dept. of Commerce, Bureau of Economic Analysis, Regional Economic Information System. http://www.bea.gov/regional/index.htm
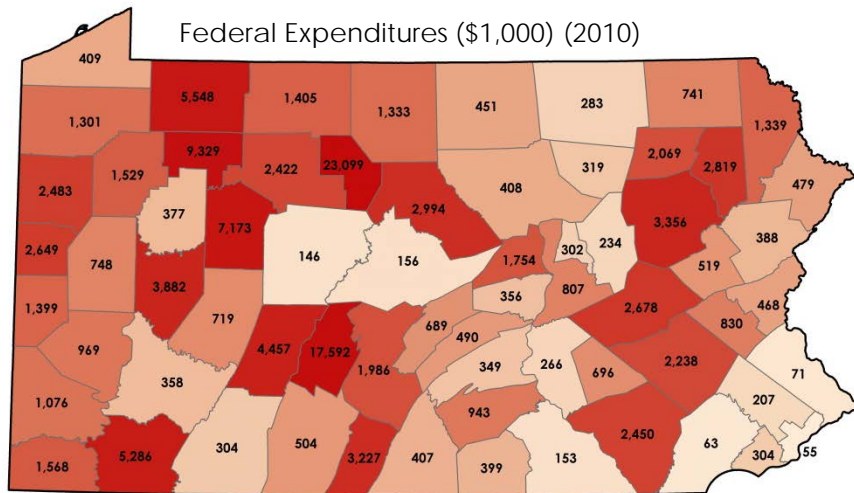
$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Income Per Capita (2002)	Income Per Capita (2007)	Income Per Capita (2011)	% Change Per Capita (2002-2011)	Z Score % Change	Z Score Rank
Greene County	$26,265	$29,241	$35,499	35%	4.06	1
Washington County	$37,029	$42,335	$46,237	25%	2.50	2
Somerset County	$27,263	$29,954	$33,549	23%	2.22	3
Butler County	$37,634	$43,034	$43,876	17%	1.24	4
Westmoreland County	$35,755	$40,240	$41,510	16%	1.17	5
Beaver County	$32,981	$36,701	$38,025	15%	1.05	6
Indiana County	$30,072	$33,347	$34,613	15%	1.02	7
Philadelphia County	$33,987	$36,813	$39,041	15%	0.98	8
Tioga County	$26,205	$27,288	$30,100	15%	0.98	9
Clinton County	$28,011	$28,786	$31,912	14%	0.84	10
Bradford County	$29,571	$30,623	$33,462	13%	0.72	11
Huntingdon County	$25,845	$27,998	$29,108	13%	0.64	12
Cameron County	$29,927	$32,255	$33,642	12%	0.61	13
Jefferson County	$29,426	$31,532	$32,959	12%	0.55	14
McKean County	$30,534	$32,144	$34,171	12%	0.53	15
Venango County	$30,225	$31,593	$33,628	11%	0.43	16
Montour County	$37,426	$40,935	$41,632	11%	0.43	17
Warren County	$29,917	$32,555	$33,268	11%	0.43	18
Lebanon County	$34,651	$37,579	$38,489	11%	0.41	19
Centre County	$31,857	$34,101	$35,347	11%	0.39	20
Lycoming County	$31,806	$32,795	$35,283	11%	0.39	21
Lawrence County	$30,194	$32,697	$33,475	11%	0.38	22
Crawford County	$28,400	$30,208	$31,485	11%	0.37	23
Clarion County	$29,799	$31,453	$32,931	11%	0.32	24
Union County	$28,840	$30,000	$31,721	10%	0.24	25
Blair County	$31,419	$33,353	$34,511	10%	0.22	26
Wyoming County	$29,441	$32,197	$32,275	10%	0.19	27
Bedford County	$28,799	$30,347	$31,564	10%	0.18	28
Elk County	$33,311	$34,900	$36,472	9%	0.17	29
Cambria County	$30,084	$32,591	$32,810	9%	0.10	30
Northumberland County	$30,589	$31,811	$33,328	9%	0.09	31
Pike County	$32,675	$35,083	$35,523	9%	0.05	32
Mifflin County	$27,670	$29,296	$30,017	8%	0.01	33
Clearfield County	$29,692	$30,375	$32,181	8%	0.00	34
Erie County	$32,085	$34,001	$34,721	8%	-0.03	35
Bucks County	$50,519	$55,415	$54,609	8%	-0.04	36
Fayette County	$31,047	$32,316	$33,527	8%	-0.06	37
Mercer County	$30,735	$33,294	$33,136	8%	-0.09	38
Lackawanna County	$35,411	$37,602	$38,171	8%	-0.09	39
Perry County	$32,011	$33,681	$34,367	7%	-0.16	40
Schuylkill County	$30,530	$31,668	$32,744	7%	-0.17	41
Sullivan County	$29,473	$29,416	$31,566	7%	-0.20	42
Allegheny County	$45,582	$49,217	$48,812	7%	-0.20	43
Montgomery County	$60,661	$67,556	$64,718	7%	-0.26	44
Armstrong County	$31,973	$34,002	$34,094	7%	-0.27	45
Fulton County	$30,187	$32,657	$31,808	5%	-0.46	46
Delaware County	$47,282	$51,867	$49,795	5%	-0.47	47
Luzerne County	$34,655	$36,596	$36,441	5%	-0.49	48
Susquehanna County	$29,557	$31,096	$30,975	5%	-0.54	49
Juniata County	$30,004	$30,394	$31,385	5%	-0.57	50
Franklin County	$32,904	$35,488	$34,277	4%	-0.64	51
York County	$35,942	$37,839	$37,380	4%	-0.67	52
Wayne County	$31,196	$31,982	$32,431	4%	-0.67	53
Potter County	$31,002	$31,386	$32,120	4%	-0.72	54
Northampton County	$37,937	$39,734	$39,078	3%	-0.82	55
Cumberland County	$41,668	$43,098	$42,552	2%	-0.95	56
Lancaster County	$36,770	$38,603	$37,535	2%	-0.96	57
Dauphin County	$40,363	$40,787	$41,067	2%	-1.01	58
Chester County	$59,085	$63,013	$59,467	1%	-1.17	59
Snyder County	$31,088	$31,849	$31,031	0%	-1.30	60
Berks County	$37,824	$38,515	$37,675	0%	-1.33	61
Lehigh County	$41,356	$42,112	$40,890	-1%	-1.44	62
Carbon County	$32,838	$32,328	$32,394	-1%	-1.48	63
Columbia County	$31,528	$31,616	$31,025	-2%	-1.51	64
Monroe County	$32,166	$32,682	$31,566	-2%	-1.55	65
Adams County	$34,238	$34,219	$33,360	-3%	-1.66	66
Forest County	$25,097	$20,878	$24,014	-4%	-1.93	67

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Median Household Income

Median Household Income ($) (2011)

% Change Median HH Income (2009-2011)

Z Score of % Change Median HH Income (2009-2011)
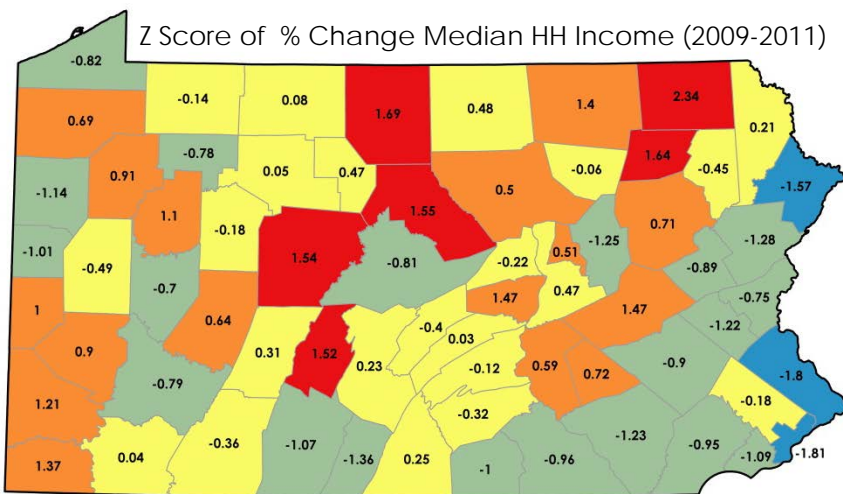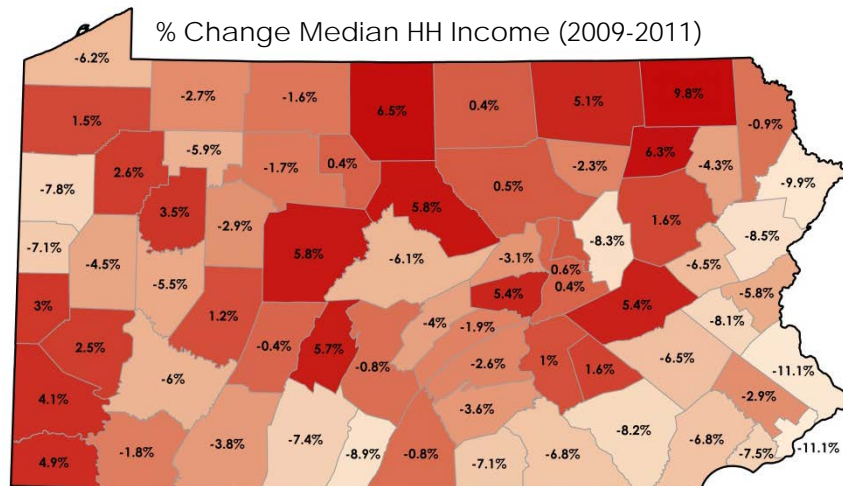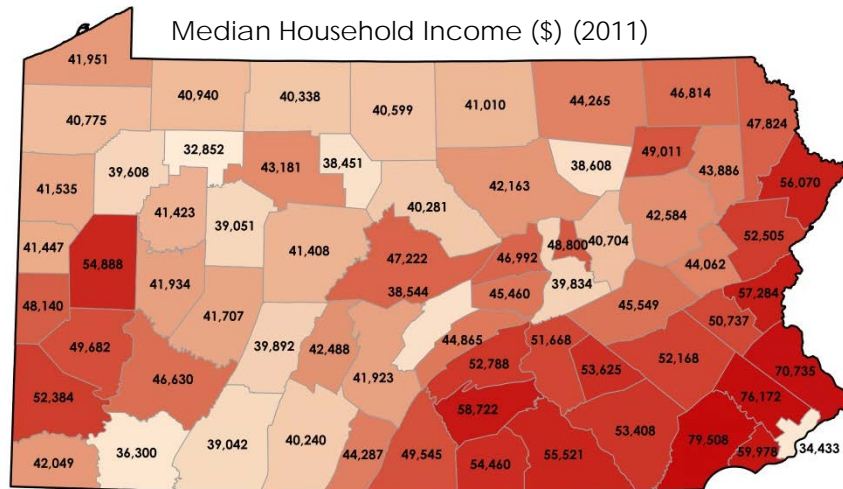
Greene County experienced the 10th largest increase in household income (4.9%) amongst all PA Counties from 2009-2011. Washington County had the 11th highest increase (4.1%).

Median income is the amount which divides the income distribution into two equal groups, half having income above that amount, and half having income below that amount.

Mean income (average) is the amount obtained by dividing the total aggregate income of a group by the number of units in that group. The means and medians for households and families are based on all households and families. Means and medians for people are based on people 15 years old and over with income.

Household income is not to be confused with family or personal income. Household income is often the combination of two income earners pooling the resources and should therefore not be confused with an individual's earnings.

Z Score

	< -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.4 Std. Dev.

Data Sources: 2007-11 American Community Survey, U.S. Census Bureau.
http://www.census.gov/acs/www/
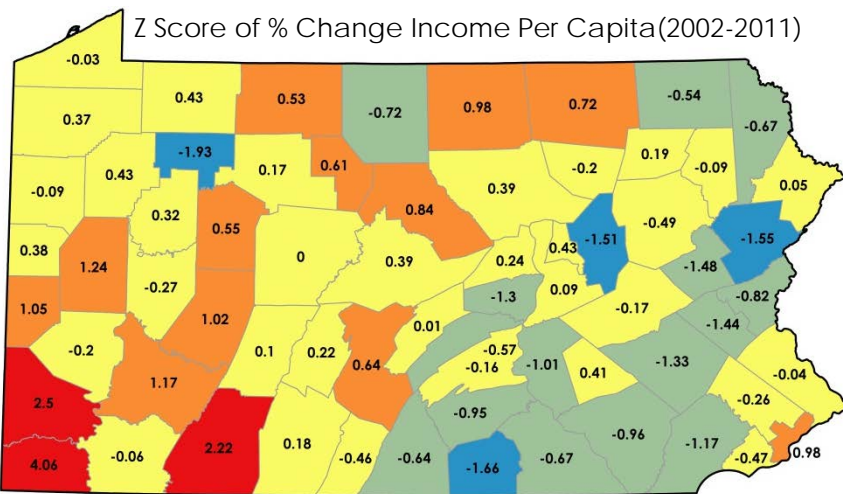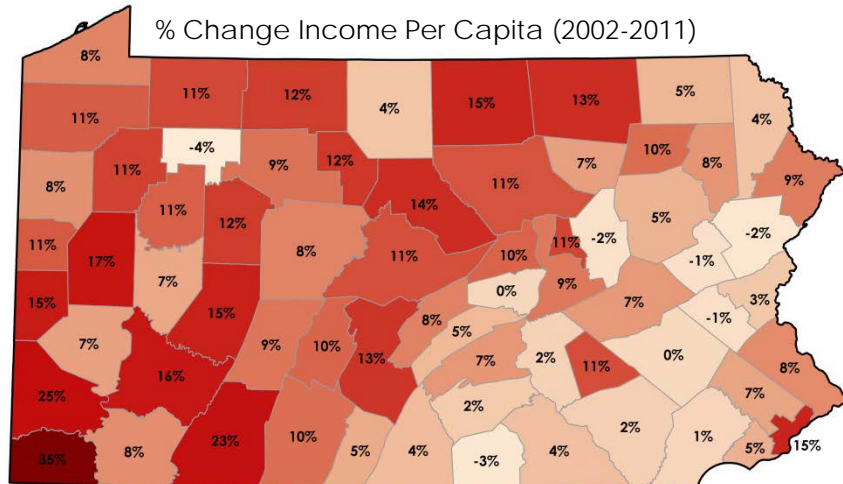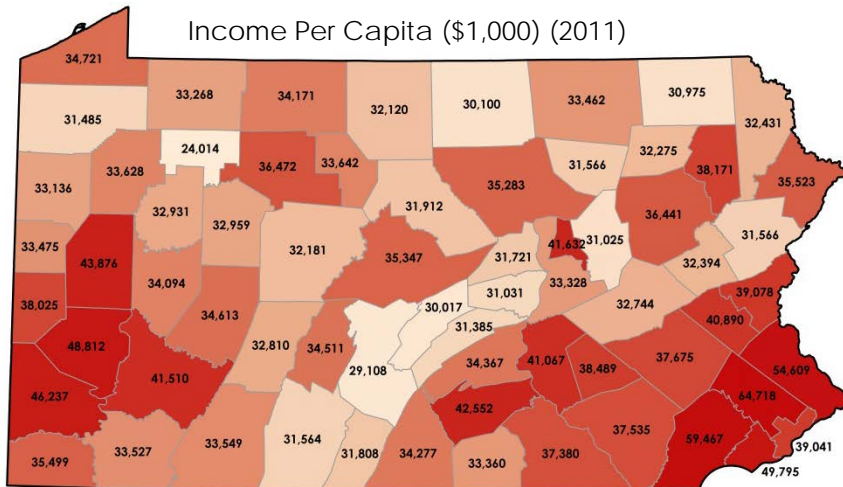
$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Med. HH Income (2009)	Med. HH Income (2010)	Med. HH Income (2011)	% Change Med. HH (2009-2011)	Z Score % Change	Z Score Rank
Susquehanna County	$42,637	$44,959	$46,814	9.8%	2.34	1
Potter County	$38,111	$41,750	$40,599	6.5%	1.69	2
Wyoming County	$46,119	$48,379	$49,011	6.3%	1.64	3
Clinton County	$38,062	$39,636	$40,281	5.8%	1.55	4
Clearfield County	$39,140	$38,194	$41,408	5.8%	1.54	5
Blair County	$40,214	$42,392	$42,488	5.7%	1.52	6
Schuylkill County	$43,208	$41,659	$45,549	5.4%	1.47	7
Snyder County	$43,127	$43,342	$45,460	5.4%	1.47	8
Bradford County	$42,120	$44,419	$44,265	5.1%	1.40	9
Greene County	$40,087	$43,250	$42,049	4.9%	1.37	10
Washington County	$50,327	$49,333	$52,384	4.1%	1.21	11
Clarion County	$40,004	$38,931	$41,423	3.5%	1.10	12
Beaver County	$46,717	$45,410	$48,140	3.0%	1.00	13
Venango County	$38,602	$40,593	$39,608	2.6%	0.91	14
Allegheny County	$48,453	$48,989	$49,682	2.5%	0.90	15
Lebanon County	$52,774	$52,756	$53,625	1.6%	0.72	16
Luzerne County	$41,923	$43,063	$42,584	1.6%	0.71	17
Crawford County	$40,173	$39,511	$40,775	1.5%	0.69	18
Indiana County	$41,197	$41,818	$41,707	1.2%	0.64	19
Dauphin County	$51,158	$53,301	$51,668	1.0%	0.59	20
Montour County	$48,527	$49,018	$48,800	0.6%	0.51	21
Lycoming County	$41,947	$42,114	$42,163	0.5%	0.50	22
Tioga County	$40,843	$41,934	$41,010	0.4%	0.48	23
Cameron County	$38,307	$37,423	$38,451	0.4%	0.47	24
Northumberland County	$39,690	$37,655	$39,834	0.4%	0.47	25
Cambria County	$40,057	$41,772	$39,892	-0.4%	0.31	26
Franklin County	$49,919	$51,105	$49,545	-0.8%	0.25	27
Huntingdon County	$42,277	$42,240	$41,923	-0.8%	0.23	28
Wayne County	$48,268	$45,004	$47,824	-0.9%	0.21	29
McKean County	$40,993	$40,931	$40,338	-1.6%	0.08	30
Elk County	$43,940	$44,099	$43,181	-1.7%	0.05	31
Fayette County	$36,970	$36,561	$36,300	-1.8%	0.04	32
Juniata County	$45,718	$47,256	$44,865	-1.9%	0.03	33
Sullivan County	$39,526	$35,100	$38,608	-2.3%	-0.06	34
Perry County	$54,212	$53,012	$52,788	-2.6%	-0.12	35
Warren County	$42,085	$42,302	$40,940	-2.7%	-0.14	36
Montgomery County	$78,447	$77,748	$76,172	-2.9%	-0.18	37
Jefferson County	$40,224	$39,108	$39,051	-2.9%	-0.18	38
Union County	$48,507	$46,417	$46,992	-3.1%	-0.22	39
Cumberland County	$60,934	$58,065	$58,722	-3.6%	-0.32	40
Somerset County	$40,589	$40,790	$39,042	-3.8%	-0.36	41
Mifflin County	$40,167	$38,336	$38,544	-4.0%	-0.40	42
Lackawanna County	$45,835	$43,409	$43,886	-4.3%	-0.45	43
Butler County	$57,460	$56,079	$54,888	-4.5%	-0.49	44
Armstrong County	$44,380	$44,059	$41,934	-5.5%	-0.70	45
Northampton County	$60,811	$58,148	$57,284	-5.8%	-0.75	46
Forest County	$34,928	$35,832	$32,852	-5.9%	-0.78	47
Westmoreland County	$49,606	$47,935	$46,630	-6.0%	-0.79	48
Centre County	$50,292	$46,579	$47,222	-6.1%	-0.81	49
Erie County	$44,702	$43,678	$41,951	-6.2%	-0.82	50
Carbon County	$47,124	$47,140	$44,062	-6.5%	-0.89	51
Berks County	$55,820	$53,261	$52,168	-6.5%	-0.90	52
Chester County	$85,326	$86,475	$79,508	-6.8%	-0.95	53
York County	$59,589	$57,726	$55,521	-6.8%	-0.96	54
Adams County	$58,598	$56,133	$54,460	-7.1%	-1.00	55
Lawrence County	$44,604	$40,280	$41,447	-7.1%	-1.01	56
Bedford County	$43,459	$39,765	$40,240	-7.4%	-1.07	57
Delaware County	$64,847	$60,902	$59,978	-7.5%	-1.09	58
Mercer County	$45,039	$41,514	$41,535	-7.8%	-1.14	59
Lehigh County	$55,234	$53,049	$50,737	-8.1%	-1.22	60
Lancaster County	$58,195	$53,419	$53,408	-8.2%	-1.23	61
Columbia County	$44,392	$43,221	$40,704	-8.3%	-1.25	62
Monroe County	$57,355	$55,819	$52,505	-8.5%	-1.28	63
Fulton County	$48,609	$45,334	$44,287	-8.9%	-1.36	64
Pike County	$62,248	$56,400	$56,070	-9.9%	-1.57	65
Bucks County	$79,575	$73,200	$70,735	-11.1%	-1.80	66
Philadelphia County	$38,751	$35,761	$34,433	-11.1%	-1.81	67

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Source of Income

% Income from Wages / Salaries (2011)

% Income Dividends, Interest, Rent (2011)

% Income Transfer Payments (2011)

Z Score of % Transfer Payment (2011)

Greene County ranks 26th of 67 for amount of income from transfer payments (27%). The PA average percent of income from transfer payments is 25%. The PA average for income from dividends, interest and rent is 15%. Both Greene and Washington Counties fall below this average.

The Sources of Income indicators show how income is earned based on three categories: Income earned by 1) wages or salary, 2) dividends, interest, or rent, and 3) transfer payments. Wages and salary compose income from service rendered with labor. Dividends, interest, or rents compose income from various forms of investments. Transfer payments are all forms of government transfers of payments to individuals (i.e., public assistance, welfare, social security) but not related to income from services rendered or retirement payments.

Greene County (11.2%) is the second lowest (by less than 1%) for the county with the *least* amount of income earned by dividends, interest or rent. Only Philadelphia County is lower at 10.6% This makes Green the lowest ranked rural county that generates income from sources other than wages/salary or transfer payments.

Z Score

- ◼ < -2.5 Std. Dev.
- ◼ -2.5 - -1.5 Std. Dev.
- ◼ -1.5 - -0.50 Std. Dev.
- ◼ -0.50 - 0.50 Std. Dev.
- ◼ 0.50 - 1.5 Std. Dev.
- ◼ 1.5 - 2.1 Std. Dev.

Data Sources: US Dept. of Commerce, Bureau of Economic Analysis, Regional Economic Information System. http://www.bea.gov/regional/index.htm

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	% Income Wages, Salaries	% Income Dividends, Interest, Rent	% Transfer Payments	Z Score % Transfer Payments	Z Score Rank
Forest County	46.8%	17.2%	35.9%	2.05	1
Fayette County	52.3%	13.1%	34.6%	1.81	2
Venango County	53.0%	14.0%	33.0%	1.50	3
Cameron County	47.5%	19.6%	32.9%	1.49	4
Cambria County	54.4%	13.7%	32.0%	1.32	5
Sullivan County	48.2%	20.5%	31.3%	1.20	6
Mifflin County	56.6%	12.5%	30.9%	1.12	7
Lawrence County	54.9%	14.4%	30.7%	1.08	8
Clarion County	53.6%	16.3%	30.1%	0.98	9
Clearfield County	56.2%	13.7%	30.1%	0.97	10
Mercer County	55.3%	15.0%	29.7%	0.91	11
Snyder County	55.8%	14.4%	29.7%	0.90	12
Jefferson County	54.4%	15.9%	29.7%	0.90	13
Huntingdon County	56.9%	13.7%	29.4%	0.85	14
Crawford County	57.3%	13.5%	29.2%	0.81	15
Armstrong County	58.1%	12.8%	29.1%	0.80	16
Schuylkill County	56.8%	14.4%	28.8%	0.74	17
Philadelphia County	61.1%	10.6%	28.3%	0.65	18
Potter County	57.5%	14.2%	28.3%	0.64	19
Bedford County	58.9%	13.1%	28.0%	0.58	20
Warren County	57.0%	15.1%	27.9%	0.57	21
Blair County	58.0%	14.1%	27.9%	0.57	22
McKean County	58.8%	13.7%	27.5%	0.50	23
Northumberland County	58.3%	14.3%	27.4%	0.47	24
Carbon County	58.2%	14.5%	27.3%	0.46	25
Greene County	61.7%	11.2%	27.1%	0.43	26
Tioga County	58.0%	14.9%	27.1%	0.42	27
Somerset County	57.8%	15.1%	27.1%	0.41	28
Wayne County	54.0%	19.0%	27.0%	0.40	29
Beaver County	61.8%	11.8%	26.5%	0.30	30
Lackawanna County	58.2%	15.4%	26.4%	0.29	31
Erie County	60.0%	14.0%	26.0%	0.22	32
Luzerne County	59.6%	14.4%	26.0%	0.21	33
Clinton County	62.0%	12.0%	26.0%	0.21	34
Elk County	58.5%	15.6%	25.9%	0.21	35
Columbia County	58.7%	15.4%	25.9%	0.19	36
Susquehanna County	58.4%	16.1%	25.5%	0.13	37
Wyoming County	59.1%	15.5%	25.5%	0.12	38
Fulton County	58.7%	15.9%	25.5%	0.12	39
Indiana County	61.5%	13.8%	24.6%	-0.04	40
Juniata County	60.3%	15.5%	24.1%	-0.13	41
Bradford County	63.3%	13.1%	23.6%	-0.23	42
Lycoming County	61.0%	15.5%	23.5%	-0.24	43
Westmoreland County	62.9%	13.9%	23.2%	-0.29	44
Monroe County	65.3%	12.5%	22.2%	-0.49	45
Perry County	66.6%	12.1%	21.3%	-0.65	46
Franklin County	62.2%	17.0%	20.9%	-0.73	47
Berks County	64.3%	14.9%	20.9%	-0.73	48
Pike County	64.6%	14.6%	20.7%	-0.76	49
Adams County	63.9%	15.5%	20.5%	-0.79	50
Washington County	66.9%	12.6%	20.5%	-0.80	51
Northampton County	63.8%	15.7%	20.5%	-0.80	52
Lebanon County	65.5%	14.2%	20.3%	-0.84	53
Montour County	65.6%	14.3%	20.1%	-0.87	54
Lehigh County	64.6%	15.3%	20.1%	-0.88	55
Dauphin County	66.9%	13.4%	19.7%	-0.95	56
Union County	65.0%	15.6%	19.4%	-1.00	57
York County	66.4%	14.8%	18.8%	-1.12	58
Allegheny County	66.2%	15.0%	18.8%	-1.12	59
Lancaster County	64.0%	17.2%	18.7%	-1.13	60
Butler County	67.5%	14.0%	18.5%	-1.17	61
Delaware County	67.1%	15.8%	17.1%	-1.43	62
Cumberland County	66.8%	16.8%	16.3%	-1.57	63
Centre County	67.9%	16.2%	15.9%	-1.66	64
Bucks County	67.9%	18.3%	13.7%	-2.06	65
Montgomery County	70.6%	17.8%	11.6%	-2.45	66
Chester County	72.2%	17.1%	10.8%	-2.60	67

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Sources of Income

Economic

Community Indicators

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Seasonally Adjusted Unemployment Rate

Unemployed(2012)

% Unemployed (2012)

Z Score % Unemployed(2012)

Z Score

▨	< -1.5 Std. Dev.
▨	-1.5 - -0.50 Std. Dev.
▨	-0.50 - 0.50 Std. Dev.
▨	0.50 - 1.5 Std. Dev.
▨	1.5 - 2.5 Std. Dev.
▨	> 2.5 Std. Dev.

Greene (7%) and Washington (7.4%) Counties experienced lower unemployment rates in 2012 than the average PA Counties (8.1%)

The unemployment rate corrects for the normal increase in the number of people employed due to increases in population and increases in the labor force relative to population. The rate is calculated by dividing the number of unemployed workers by the total labor force and multiplying by 100 (for a percentage).

Seasonal adjustment is a statistical method for removing the seasonal component of a time series that is used when analyzing non-seasonal trends. Seasonally adjusted unemployment rates are shown as a percentage of the labor force, and all data refer to place of residence.

$$Z = \frac{\text{(County Value)} - \text{(Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.

Data Sources: PA Dept. of Labor and Industry, Center for Workforce Information and Analysis.
http://www.dli.state.pa.us/landi/cwp/view.asp?A=191&Q=57249

County	Pop. Est. as of 07/2012	% Unemployed 2010	% Unemployed 2011	# Unemployed 2012	% Unemployed 2012	Z Score Unem.	Z Score Rank
Cameron County	4,939	12.5%	11.3%	568	11.5%	2.73	1
Philadelphia County	1,547,607	10.6%	11.1%	167,142	10.8%	2.16	2
Pike County	56,899	9.9%	10.6%	6,145	10.8%	2.16	3
Carbon County	65,006	9.8%	10.6%	6,631	10.2%	1.67	4
Wyoming County	28,125	9.1%	9.4%	2,813	10.0%	1.51	5
Luzerne County	321,027	9.7%	9.9%	31,461	9.8%	1.35	6
Monroe County	168,798	9.6%	9.7%	16,373	9.7%	1.27	7
Huntingdon County	45,943	10.0%	9.5%	4,411	9.6%	1.19	8
Fayette County	135,660	9.5%	9.2%	12,888	9.5%	1.11	9
Forest County	7,667	8.0%	8.7%	728	9.5%	1.11	10
Potter County	17,577	10.2%	9.4%	1,670	9.5%	1.11	11
Schuylkill County	147,063	10.0%	9.6%	13,971	9.5%	1.11	12
Bedford County	49,324	9.9%	9.4%	4,538	9.2%	0.86	13
Clarion County	39,646	10.1%	9.8%	3,647	9.2%	0.86	14
Lackawanna County	214,437	9.1%	9.2%	19,517	9.1%	0.78	15
Armstrong County	68,409	8.7%	8.6%	6,157	9.0%	0.70	16
Cambria County	141,584	9.0%	8.6%	12,743	9.0%	0.70	17
Clearfield County	81,184	9.4%	8.8%	7,307	9.0%	0.70	18
Fulton County	14,772	11.2%	9.4%	1,329	9.0%	0.70	19
Somerset County	76,957	8.8%	8.7%	6,926	9.0%	0.70	20
Lehigh County	355,245	8.8%	8.9%	30,906	8.7%	0.46	21
Mercer County	115,655	9.7%	9.0%	10,062	8.7%	0.46	22
Northumberland County	94,428	9.3%	9.1%	8,215	8.7%	0.46	23
Northampton County	299,267	8.8%	8.5%	25,737	8.6%	0.37	24
Clinton County	39,517	8.8%	8.0%	3,359	8.5%	0.29	25
Lawrence County	89,871	9.0%	8.7%	7,549	8.4%	0.21	26
Lycoming County	117,168	8.4%	7.8%	9,842	8.4%	0.21	27
McKean County	43,127	9.2%	8.6%	3,536	8.2%	0.05	28
Mifflin County	46,773	9.0%	8.2%	3,835	8.2%	0.05	29
Venango County	54,272	8.1%	7.5%	4,450	8.2%	0.05	30
Berks County	413,491	8.7%	8.2%	33,493	8.1%	-0.03	31
Columbia County	66,887	8.5%	8.5%	5,418	8.1%	-0.03	32
Delaware County	561,098	8.1%	8.1%	44,888	8.0%	-0.11	33
Jefferson County	44,764	9.0%	8.0%	3,581	8.0%	-0.11	34
Indiana County	88,218	7.7%	7.4%	6,969	7.9%	-0.20	35
Tioga County	42,577	7.9%	6.9%	3,364	7.9%	-0.20	36
York County	437,846	8.4%	7.8%	34,590	7.9%	-0.20	37
Dauphin County	269,665	8.0%	7.7%	21,034	7.8%	-0.28	38
Erie County	280,646	8.8%	8.0%	21,890	7.8%	-0.28	39
Crawford County	87,598	8.8%	7.8%	6,745	7.7%	-0.36	40
Snyder County	39,672	8.2%	8.1%	3,055	7.7%	-0.36	41
Union County	44,952	8.6%	7.9%	3,461	7.7%	-0.36	42
Blair County	127,121	7.4%	7.1%	9,661	7.6%	-0.44	43
Beaver County	170,245	7.6%	7.6%	12,768	7.5%	-0.52	44
Bucks County	627,053	7.5%	7.3%	47,029	7.5%	-0.52	45
Westmoreland County	363,395	7.8%	7.4%	27,255	7.5%	-0.52	46
Susquehanna County	42,696	8.1%	7.8%	3,160	7.4%	-0.60	47
Washington County	**208,716**	**7.4%**	**7.3%**	**15,445**	**7.4%**	**-0.60**	**48**
Wayne County	51,955	7.5%	7.6%	3,845	7.4%	-0.60	49
Sullivan County	6,461	7.4%	6.8%	472	7.3%	-0.68	50
Juniata County	24,904	7.5%	7.2%	1,793	7.2%	-0.76	51
Warren County	41,146	7.8%	7.3%	2,921	7.1%	-0.85	52
Greene County	**38,085**	**7.0%**	**6.8%**	**2,666**	**7.0%**	**-0.93**	**53**
Perry County	45,701	7.8%	7.9%	3,199	7.0%	-0.93	54
Allegheny County	1,229,338	7.2%	7.0%	84,824	6.9%	-1.01	55
Elk County	31,550	8.6%	7.0%	2,177	6.9%	-1.01	56
Bradford County	62,792	6.4%	6.2%	4,270	6.8%	-1.09	57
Franklin County	151,275	7.6%	6.8%	10,287	6.8%	-1.09	58
Montgomery County	808,460	7.0%	6.7%	54,975	6.8%	-1.09	59
Adams County	101,482	7.3%	6.7%	6,799	6.7%	-1.17	60
Cumberland County	238,614	6.7%	6.8%	15,987	6.7%	-1.17	61
Lancaster County	526,823	7.2%	6.9%	35,297	6.7%	-1.17	62
Lebanon County	135,251	6.9%	6.6%	9,062	6.7%	-1.17	63
Butler County	184,970	7.1%	6.6%	12,023	6.5%	-1.33	64
Chester County	506,575	6.2%	6.1%	30,901	6.1%	-1.66	65
Centre County	155,171	6.0%	5.7%	9,310	6.0%	-1.74	66
Montour County	18,356	6.7%	6.4%	1,046	5.7%	-1.98	67

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Employment by Sector

Employed(2007-2011)

Greene County had the most people (26.6%) employed in the mining, construction, utilities, transportation and warehousing sector. Washington County also had slightly more people (15.3%) employed in this sector than the PA average (15%).

This data shows the employment by major industry sector as a percent distribution calculated as an average from 2007-2011.

The major industries shown in the table at right are:

Sector 1 – Manufacturing
Sector 2 – Wholesale & Retail
Sector 3 – Information, Finance, Insurance & Real Estate
Sector 4 – Education, Professional, Scientific & Technical Services
Sector 5 – Health Care and Social Assistance
Sector 6 – Accommodation and Food Services
Sector 7– Public Administration and Other Services
Sector 8 – Mining, Construction, Utilities, Transportation & Warehousing

Diversity of employment by sector is optimal, as it shows that a local economy has a wide base and is more insulated from structural or cyclical economic downturns, as opposed to a local economy that is dominated by one or two sectors. These local economies are very susceptible to economic volatility.

% Employed by Sector 8

Z Score % Employed by Sector 8

Z Score

	< -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.5 Std. Dev.
	> 2.5 Std. Dev.

Data Sources: PA Dept. of Labor and Industry, Center for Workforce Information and Analysis.
http://www.dli.state.pa.us/landi/cwp/view.asp?A=191&Q=57249
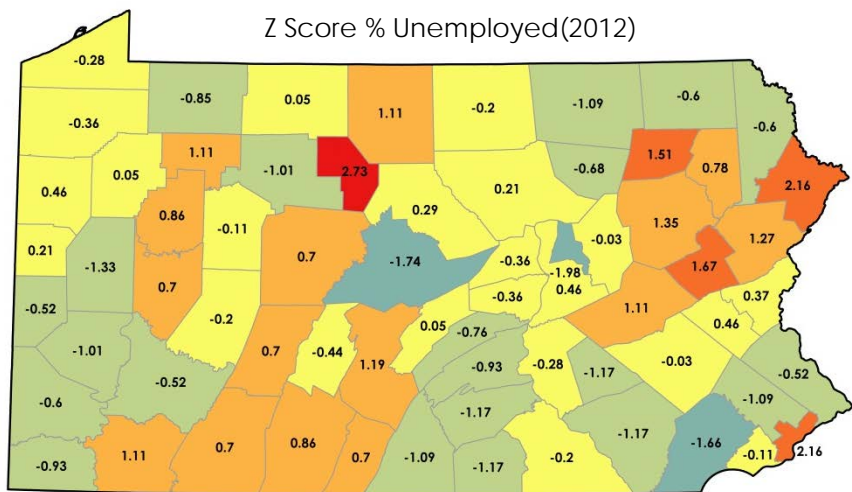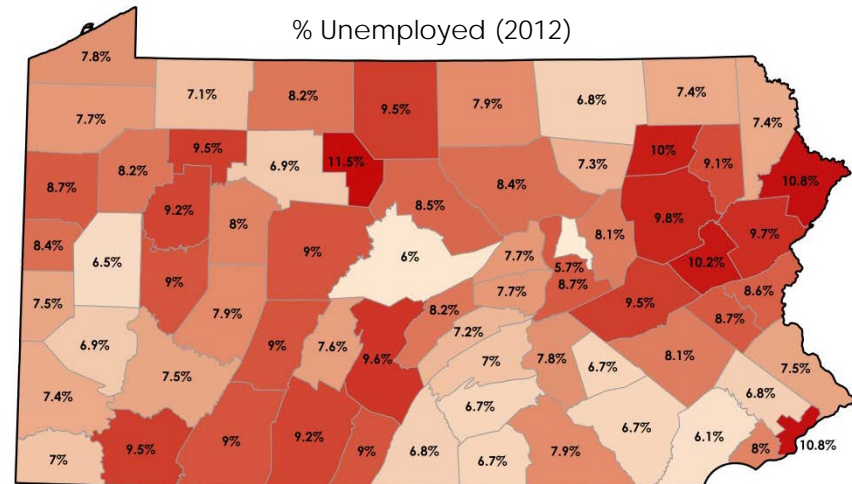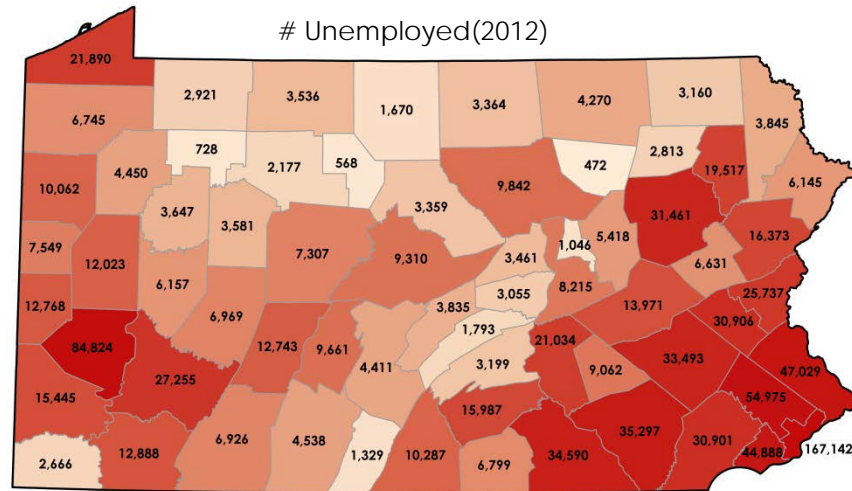
$$Z = \frac{\text{(County Value)} - \text{(Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.

County	# Employed 2007-11	% Sector 1	% Sector 2	% Sector 3	% Sector 4	% Sector 5	% Sector 6	% Sector 7	% Sector 8	Z Score Emp.	Z Score Rank
Greene County	**15,726**	**7.6%**	**11.3%**	**4.9%**	**13.8%**	**15.1%**	**5.1%**	**15.7%**	**26.6%**	**2.90**	**1**
Fulton County	6,614	19.4%	14.0%	5.4%	7.5%	11.1%	4.8%	15.1%	22.6%	1.91	2
Perry County	22,724	8.7%	15.7%	9.3%	11.3%	12.0%	4.1%	16.6%	22.3%	1.82	3
Susquehanna County	19,937	15.6%	13.8%	5.8%	12.4%	13.2%	5.8%	11.6%	21.8%	1.70	4
Bedford County	22,357	14.7%	16.8%	4.7%	8.6%	11.9%	8.6%	13.1%	21.6%	1.66	5
Juniata County	11,281	19.9%	14.3%	5.8%	9.3%	12.0%	5.1%	12.4%	21.1%	1.53	6
Somerset County	34,008	14.2%	14.0%	5.2%	10.5%	14.4%	7.5%	14.2%	20.1%	1.28	7
Potter County	7,118	19.0%	11.7%	7.3%	11.0%	13.2%	5.1%	12.8%	20.0%	1.24	8
Sullivan County	2,722	20.3%	12.0%	3.8%	7.6%	14.3%	5.0%	17.2%	19.8%	1.19	9
Indiana County	39,591	10.1%	14.5%	6.5%	14.7%	15.1%	7.0%	12.3%	19.7%	1.18	10
Jefferson County	19,456	16.9%	15.9%	4.3%	10.0%	15.9%	5.6%	12.0%	19.4%	1.09	11
Forest County	2,023	10.7%	20.1%	2.2%	7.1%	12.3%	11.1%	17.1%	19.3%	1.08	12
Armstrong County	31,181	15.7%	15.0%	5.2%	10.1%	17.2%	5.4%	12.9%	18.5%	0.88	13
Bradford County	27,270	21.0%	13.6%	4.4%	10.5%	17.5%	4.1%	10.3%	18.5%	0.88	14
Clearfield County	34,720	11.7%	17.3%	5.0%	12.0%	16.0%	6.5%	13.1%	18.4%	0.86	15
Tioga County	18,233	17.3%	13.7%	5.9%	13.7%	13.8%	5.7%	11.5%	18.4%	0.85	16
Huntingdon County	18,795	14.5%	12.5%	5.1%	14.7%	15.0%	4.6%	15.7%	17.9%	0.72	17
Wayne County	22,529	7.6%	17.0%	6.9%	10.9%	14.7%	7.7%	17.6%	17.6%	0.64	18
Carbon County	29,207	13.1%	16.0%	6.6%	11.2%	16.4%	5.3%	13.9%	17.4%	0.60	19
Fayette County	54,727	11.8%	16.5%	5.4%	11.5%	15.9%	8.1%	14.1%	16.6%	0.41	20
Clarion County	17,790	13.7%	15.6%	3.8%	15.9%	16.6%	6.3%	11.7%	16.5%	0.38	21
Wyoming County	13,182	16.7%	15.1%	6.9%	11.4%	13.2%	6.4%	14.0%	16.3%	0.32	22
Adams County	51,673	18.6%	13.9%	5.8%	12.7%	12.4%	7.0%	13.4%	16.2%	0.31	23
Mifflin County	19,271	23.0%	13.6%	4.8%	9.4%	15.3%	6.2%	11.7%	16.0%	0.24	24
Pike County	24,092	6.5%	16.4%	9.0%	13.0%	15.6%	7.8%	15.8%	15.9%	0.24	25
Lancaster County	252,430	17.5%	16.7%	6.6%	12.2%	13.2%	6.0%	12.1%	15.7%	0.16	26
Washington County	**97,513**	**11.6%**	**15.4%**	**7.8%**	**13.3%**	**15.7%**	**7.3%**	**13.6%**	**15.3%**	**0.08**	**27**
Beaver County	80,853	12.0%	15.3%	6.5%	13.5%	16.6%	6.4%	13.3%	15.3%	0.08	28
Schuylkill County	64,162	19.0%	16.6%	4.6%	10.5%	16.1%	5.0%	12.8%	15.3%	0.06	29
Clinton County	16,787	18.8%	14.5%	5.2%	12.6%	12.3%	6.7%	14.6%	15.2%	0.05	30
Blair County	57,571	12.3%	18.6%	5.3%	11.9%	18.0%	6.2%	12.5%	15.2%	0.04	31
Northumberland County	41,846	16.5%	14.8%	4.8%	9.2%	19.0%	5.2%	14.8%	14.8%	-0.06	32
Franklin County	69,767	15.7%	15.6%	6.6%	12.2%	14.4%	5.2%	15.6%	14.7%	-0.07	33
Monroe County	76,678	10.1%	16.0%	8.0%	13.6%	14.3%	8.8%	14.5%	14.7%	-0.08	34
Snyder County	18,897	19.6%	18.3%	3.1%	10.5%	15.4%	5.9%	12.6%	14.6%	-0.09	35
Cambria County	61,595	10.0%	14.0%	6.3%	13.3%	20.0%	6.3%	15.5%	14.6%	-0.10	36
Union County	17,665	15.0%	13.6%	4.2%	19.0%	15.3%	6.6%	12.0%	14.5%	-0.13	37
McKean County	18,240	21.6%	12.5%	5.1%	11.2%	17.0%	5.8%	12.4%	14.5%	-0.14	38
Crawford County	38,009	20.2%	13.4%	4.8%	13.0%	15.6%	6.7%	12.3%	14.0%	-0.24	39
Westmoreland County	171,543	14.1%	16.3%	6.8%	13.4%	16.2%	6.6%	12.8%	13.9%	-0.26	40
York County	216,693	18.4%	15.5%	7.1%	12.5%	12.8%	5.6%	14.2%	13.9%	-0.29	41
Butler County	89,838	14.8%	16.8%	7.5%	13.2%	14.8%	6.1%	12.9%	13.8%	-0.29	42
Warren County	19,264	20.8%	17.0%	6.0%	9.6%	16.0%	5.0%	11.8%	13.7%	-0.31	43
Lawrence County	40,551	15.1%	15.8%	6.6%	12.4%	15.9%	6.9%	13.7%	13.6%	-0.35	44
Lycoming County	54,441	18.3%	15.6%	6.1%	12.6%	15.2%	6.0%	13.0%	13.1%	-0.48	45
Cameron County	2,283	36.8%	10.7%	3.7%	7.8%	10.4%	5.4%	12.5%	12.7%	-0.56	46
Berks County	195,640	18.5%	15.5%	7.4%	13.8%	14.2%	5.6%	12.4%	12.6%	-0.59	47
Venango County	24,432	21.5%	15.4%	4.0%	8.7%	18.9%	5.3%	13.5%	12.6%	-0.59	48
Columbia County	31,174	18.3%	14.8%	5.2%	14.5%	15.4%	7.3%	12.2%	12.3%	-0.68	49
Luzerne County	146,965	13.5%	17.1%	8.1%	11.0%	16.5%	6.4%	15.1%	12.3%	-0.68	50
Dauphin County	133,193	9.3%	14.0%	9.6%	13.2%	13.7%	6.5%	21.4%	12.3%	-0.68	51
Lebanon County	63,590	17.1%	16.5%	6.3%	10.3%	16.9%	6.5%	14.3%	12.2%	-0.70	52
Montour County	8,475	12.5%	9.3%	3.9%	9.8%	32.1%	7.6%	12.9%	12.0%	-0.76	53
Cumberland County	118,301	8.4%	15.7%	10.7%	17.3%	12.6%	5.9%	17.5%	11.9%	-0.77	54
Lehigh County	164,314	14.6%	15.2%	8.6%	15.0%	15.7%	5.6%	13.3%	11.7%	-0.82	55
Mercer County	49,825	17.6%	15.0%	5.0%	11.6%	18.5%	6.4%	14.3%	11.7%	-0.83	56
Chester County	253,010	12.6%	14.3%	12.1%	20.6%	12.2%	4.3%	12.3%	11.6%	-0.85	57
Delaware County	267,730	8.8%	12.8%	11.0%	20.1%	16.8%	5.4%	13.7%	11.5%	-0.88	58
Bucks County	320,885	12.2%	16.3%	10.1%	18.0%	13.6%	5.4%	13.1%	11.3%	-0.92	59
Northampton County	141,992	16.3%	14.4%	8.9%	14.8%	15.5%	5.3%	13.6%	11.2%	-0.95	60
Lackawanna County	100,584	11.8%	15.5%	8.4%	14.7%	16.9%	6.1%	15.5%	11.1%	-0.98	61
Allegheny County	597,728	8.3%	13.7%	10.7%	18.6%	17.3%	7.2%	13.7%	10.4%	-1.14	62
Philadelphia County	619,412	7.3%	12.1%	8.7%	17.0%	19.0%	7.4%	18.5%	10.0%	-1.24	63
Centre County	72,984	7.8%	12.2%	6.3%	33.0%	10.1%	9.1%	11.6%	9.8%	-1.30	64
Elk County	15,157	39.3%	11.6%	3.6%	7.4%	12.0%	5.2%	11.3%	9.4%	-1.39	65
Montgomery County	412,931	12.4%	13.3%	12.4%	20.4%	14.8%	4.6%	12.7%	9.4%	-1.40	66
Erie County	127,332	17.9%	14.2%	7.4%	13.3%	17.0%	7.4%	13.3%	9.4%	-1.41	67

Mean

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Poverty Rate

in Poverty (2011)

% in Poverty (2011)

Z Score of % in Poverty (2011)

Greene County's poverty rate (15.5%) was 2% higher than PA's average rate (13.5%) in 2011. Washington County's poverty rate in 2011 was 10.6%.

The US Census Bureau calculates poverty thresholds each year to determine who is in poverty. Poverty thresholds are the dollar amounts used to determine poverty status. Each person or family is assigned one out of 48 possible poverty thresholds. Thresholds vary according to: size of the family, and ages of the members. The same thresholds are used throughout the United States and do not vary geographically.

The Poverty Threshold for 2011 calculated by the US Census Bureau reports that a family of four earning $23,021 or less are below the poverty threshold. For one person, the threshold was $11,702 if under 65 years of age, and $10,788 if 65 or over. If total family income is less than the threshold appropriate for that family, the family is in poverty, and all family members have the same poverty status.

Nationally, the official poverty rate was 15% in 2011. There were 46.2 million people in poverty.

Z Score

	< -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.5 Std. Dev.
	> 2.5 Std. Dev.

Data Sources: US Census Bureau.
http://www.census.gov/hhes/www/poverty/about/index.html

$$ Z = \frac{(\text{County Value}) - (\text{Average of All Counties})}{(\text{Standard Deviation of All Counties})} $$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Poverty Rate (2009)	Poverty Rate (2010)	# in Poverty (2011)	Poverty Rate (2011)	Z Score % Poverty	Z Score Rank
Philadelphia County	24.5%	26.4%	429,260	27.9%	4.10	1
Forest County	22.4%	20.4%	1,704	22.0%	2.42	2
Fayette County	17.3%	20.7%	26,819	19.7%	1.76	3
Centre County	18.0%	18.9%	30,172	19.5%	1.71	4
Indiana County	17.6%	18.6%	16,118	18.2%	1.34	5
Mifflin County	15.1%	16.6%	8,420	18.0%	1.28	6
McKean County	16.1%	14.9%	7,734	17.9%	1.25	7
Venango County	17.5%	15.4%	9,082	16.6%	0.88	8
Erie County	15.7%	17.2%	46,363	16.5%	0.85	9
Lawrence County	12.0%	16.2%	14,554	16.1%	0.74	10
Columbia County	13.7%	15.4%	10,630	15.9%	0.68	11
Potter County	15.7%	14.8%	2,737	15.7%	0.62	12
Tioga County	16.0%	15.8%	6,656	15.7%	0.62	13
Greene County	17.5%	18.0%	5,956	15.5%	0.57	14
Clinton County	16.3%	16.9%	6,045	15.3%	0.51	15
Crawford County	16.2%	19.7%	13,480	15.3%	0.51	16
Luzerne County	13.1%	15.9%	48,805	15.2%	0.48	17
Clarion County	14.3%	19.0%	5,977	15.0%	0.42	18
Clearfield County	14.2%	16.8%	12,063	14.8%	0.37	19
Blair County	14.6%	13.3%	18,576	14.6%	0.31	20
Bradford County	14.1%	10.9%	9,198	14.6%	0.31	21
Cameron County	13.1%	14.4%	723	14.5%	0.28	22
Jefferson County	14.3%	16.3%	6,515	14.5%	0.28	23
Union County	13.9%	12.7%	6,522	14.5%	0.28	24
Warren County	12.2%	14.1%	6,015	14.5%	0.28	25
Cambria County	15.5%	13.7%	20,538	14.4%	0.25	26
Lycoming County	14.7%	17.1%	16,685	14.3%	0.23	27
Mercer County	13.0%	16.6%	16,612	14.3%	0.23	28
Lehigh County	12.4%	13.2%	49,844	14.1%	0.17	29
Wayne County	11.2%	12.4%	7,377	14.1%	0.17	30
Huntingdon County	13.0%	14.3%	6,402	13.9%	0.11	31
Lackawanna County	14.4%	13.6%	29,413	13.7%	0.05	32
Somerset County	13.9%	14.9%	10,601	13.7%	0.05	33
Sullivan County	13.2%	15.2%	887	13.7%	0.05	34
Berks County	12.1%	13.7%	55,694	13.5%	0.00	35
Allegheny County	13.0%	11.9%	164,477	13.4%	-0.03	36
Monroe County	10.2%	13.0%	22,778	13.4%	-0.03	37
Susquehanna County	13.8%	12.8%	5,770	13.4%	-0.03	38
Armstrong County	12.5%	13.7%	9,069	13.2%	-0.09	39
Juniata County	10.4%	11.1%	3,263	13.1%	-0.12	40
Northumberland County	14.6%	15.0%	12,378	13.1%	-0.12	41
Fulton County	11.3%	10.5%	1,907	12.9%	-0.17	42
Bedford County	11.7%	13.6%	6,273	12.7%	-0.23	43
Dauphin County	12.6%	13.9%	34,166	12.7%	-0.23	44
Schuylkill County	11.9%	13.0%	18,597	12.6%	-0.26	45
Wyoming County	12.8%	12.7%	3,491	12.4%	-0.32	46
Beaver County	11.5%	15.1%	20,956	12.3%	-0.34	47
Carbon County	11.2%	12.2%	7,817	12.0%	-0.43	48
Snyder County	14.0%	13.2%	4,759	12.0%	-0.43	49
Montour County	10.7%	12.1%	2,087	11.4%	-0.60	50
Lebanon County	9.0%	11.0%	14,917	11.1%	-0.69	51
Lancaster County	9.4%	10.5%	56,577	10.8%	-0.77	52
Perry County	8.8%	10.1%	4,950	10.8%	-0.77	53
York County	8.9%	9.2%	47,200	10.8%	-0.77	54
Washington County	10.9%	10.6%	22,066	10.6%	-0.83	55
Westmoreland County	10.4%	10.4%	38,646	10.6%	-0.83	56
Franklin County	9.3%	9.5%	15,693	10.4%	-0.89	57
Delaware County	9.3%	10.0%	57,075	10.2%	-0.94	58
Pike County	8.2%	9.0%	5,814	10.1%	-0.97	59
Northampton County	8.5%	10.6%	29,852	10.0%	-1.00	60
Elk County	10.7%	11.7%	3,115	9.8%	-1.06	61
Butler County	8.9%	9.3%	16,438	8.9%	-1.31	62
Adams County	7.2%	9.9%	8,835	8.7%	-1.37	63
Cumberland County	6.7%	7.4%	18,940	8.0%	-1.57	64
Chester County	6.3%	6.4%	35,760	7.1%	-1.83	65
Bucks County	4.2%	6.4%	41,377	6.6%	-1.97	66
Montgomery County	5.5%	5.8%	52,331	6.5%	-2.00	67

Poverty Rate for Children Under 18 Years Old

Number of Children In Poverty (2011)

% Children In Poverty (2011)

Z Score of % Children In Poverty (2011)

Z Score

	< -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.5 Std. Dev.
	> 2.5 Std. Dev.

Data Sources: PA Dept. of Public Welfare, Office of Income Maintenance.
http://listserv.dpw.state.pa.us/ma-food-stamps-and-cash-stats.html

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

Greene County's child poverty rate (22.2%) was 2.7% higher than PA's average rate (19.5%) in 2011. Washington County's child poverty rate in 2011 was 13.8%.

The US Census Bureau calculates poverty thresholds each year to determine who is in poverty. Poverty thresholds are the dollar amounts used to determine poverty status. Each person or family is assigned one out of 48 possible poverty thresholds. Thresholds vary according to: size of the family, and ages of the members. The same thresholds are used throughout the United States and do not vary geographically.

The Poverty Threshold for 2011 calculated by the US Census Bureau reports that a family of four earning $23,021 or less are below the poverty threshold. If total family income is less than the threshold appropriate for that family, the family is in poverty, and all family members have the same poverty status.

Nationally, the poverty rate in 2011 for children under age 18 was 21.9 percent.
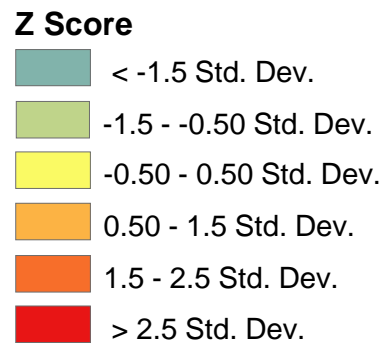
PA Counties	Child Poverty Rate (2009)	Child Poverty Rate (2010)	# in Poverty (2011)	Child Poverty Rate (2011)	Z Score % Poverty	Z Score Rank
Philadelphia County	32.8%	36.4%	134,160	38.7%	3.48	1
Forest County	30.7%	29.9%	306	31.9%	2.24	2
Fayette County	26.6%	31.7%	8,717	31.6%	2.18	3
Mifflin County	24.9%	28.1%	3,015	27.9%	1.50	4
Venango County	26.4%	26.6%	3,096	26.3%	1.21	5
Luzerne County	19.3%	26.6%	16,533	25.5%	1.06	6
Erie County	21.7%	24.4%	16,296	25.5%	1.06	7
Crawford County	23.3%	32.2%	4,921	24.9%	0.95	8
Potter County	24.8%	25.1%	958	24.6%	0.90	9
Lawrence County	19.6%	25.5%	4,704	24.5%	0.88	10
Warren County	18.7%	21.4%	2,093	24.2%	0.82	11
McKean County	22.9%	24.2%	2,174	23.9%	0.77	12
Indiana County	21.4%	22.6%	3,911	23.3%	0.66	13
Jefferson County	22.6%	24.8%	2,250	23.2%	0.64	14
Clinton County	21.7%	22.7%	1,888	23.1%	0.62	15
Cameron County	19.1%	23.7%	219	22.7%	0.55	16
Mercer County	20.5%	27.2%	5,679	22.6%	0.53	17
Bradford County	20.8%	17.1%	3,209	22.4%	0.49	18
Tioga County	22.4%	24.0%	1,934	22.3%	0.48	19
Greene County	22.6%	24.6%	1,693	22.2%	0.46	20
Clearfield County	21.6%	24.5%	3,595	22.1%	0.44	21
Lehigh County	19.6%	20.6%	18,315	21.9%	0.40	22
Sullivan County	20.1%	23.8%	224	21.7%	0.37	23
Blair County	22.2%	19.6%	5,812	21.6%	0.35	24
Cambria County	21.7%	22.4%	5,998	21.4%	0.31	25
Juniata County	17.1%	18.0%	1,273	21.3%	0.29	26
Susquehanna County	21.7%	20.1%	1,921	21.1%	0.26	27
Lycoming County	20.0%	24.3%	5,109	21.0%	0.24	28
Northumberland County	20.8%	22.4%	4,081	21.0%	0.24	29
Somerset County	19.3%	23.1%	3,148	20.9%	0.22	30
Wayne County	18.2%	18.5%	1,999	20.1%	0.07	31
Dauphin County	18.2%	23.1%	12,424	19.9%	0.03	32
Wyoming County	19.6%	19.4%	1,206	19.7%	0.00	33
Lackawanna County	20.6%	20.1%	8,536	19.4%	-0.06	34
Berks County	17.4%	21.6%	19,090	19.4%	-0.06	35
Huntingdon County	17.4%	20.0%	1,780	19.2%	-0.09	36
Allegheny County	18.1%	15.6%	46,312	19.1%	-0.11	37
Armstrong County	19.1%	21.6%	2,687	19.0%	-0.13	38
Snyder County	21.6%	18.3%	1,679	18.9%	-0.15	39
Carbon County	16.5%	18.5%	2,555	18.9%	-0.15	40
Fulton County	17.8%	17.7%	639	18.7%	-0.19	41
Schuylkill County	15.5%	19.0%	5,476	18.5%	-0.22	42
Clarion County	17.9%	28.1%	1,422	18.4%	-0.24	43
Columbia County	16.1%	16.9%	2,270	18.2%	-0.28	44
Beaver County	16.8%	21.6%	6,307	18.1%	-0.30	45
Bedford County	16.6%	20.3%	1,908	17.9%	-0.33	46
Montour County	17.0%	19.1%	695	17.9%	-0.33	47
Lebanon County	14.1%	17.0%	5,479	17.7%	-0.37	48
Monroe County	13.9%	16.9%	7,025	17.3%	-0.44	49
Perry County	14.2%	15.4%	1,815	17.0%	-0.50	50
Union County	14.3%	16.2%	1,389	16.7%	-0.55	51
Lancaster County	13.6%	15.7%	21,208	16.3%	-0.63	52
Westmoreland County	13.7%	15.7%	11,164	15.4%	-0.79	53
York County	12.3%	13.5%	15,477	15.1%	-0.85	54
Franklin County	13.5%	14.8%	5,443	15.1%	-0.85	55
Delaware County	13.4%	13.8%	19,452	14.9%	-0.88	56
Pike County	12.4%	13.2%	1,984	14.8%	-0.90	57
Elk County	15.0%	17.5%	960	14.5%	-0.96	58
Washington County	13.3%	14.1%	5,900	13.8%	-1.08	59
Centre County	13.7%	14.7%	3,300	13.4%	-1.16	60
Northampton County	11.3%	14.6%	8,757	13.4%	-1.16	61
Adams County	10.6%	15.9%	2,943	13.1%	-1.21	62
Butler County	10.3%	11.6%	4,643	11.2%	-1.56	63
Cumberland County	9.0%	10.2%	5,144	10.5%	-1.69	64
Chester County	7.1%	8.0%	10,646	8.5%	-2.06	65
Bucks County	5.0%	7.8%	11,944	8.3%	-2.09	66
Montgomery County	6.5%	7.2%	13,298	7.2%	-2.30	67

Mean

Public School Revenues & Per Student Spending

Total Public School Revenue ($1,000) (2010-11)
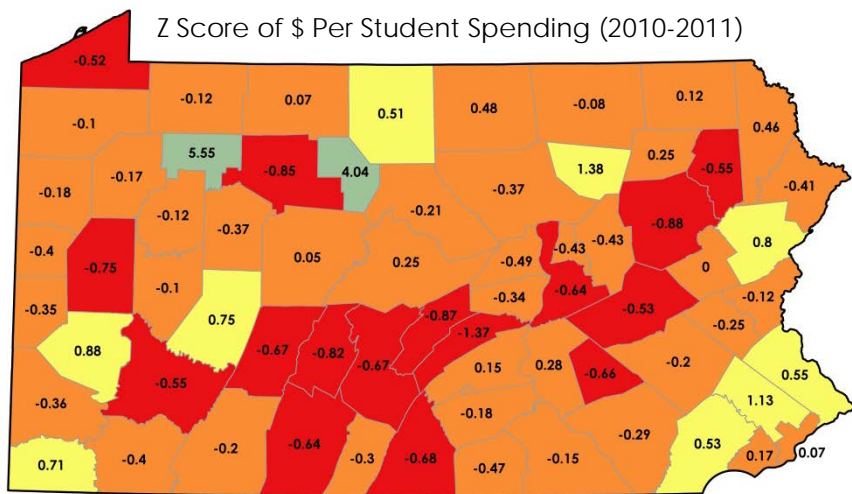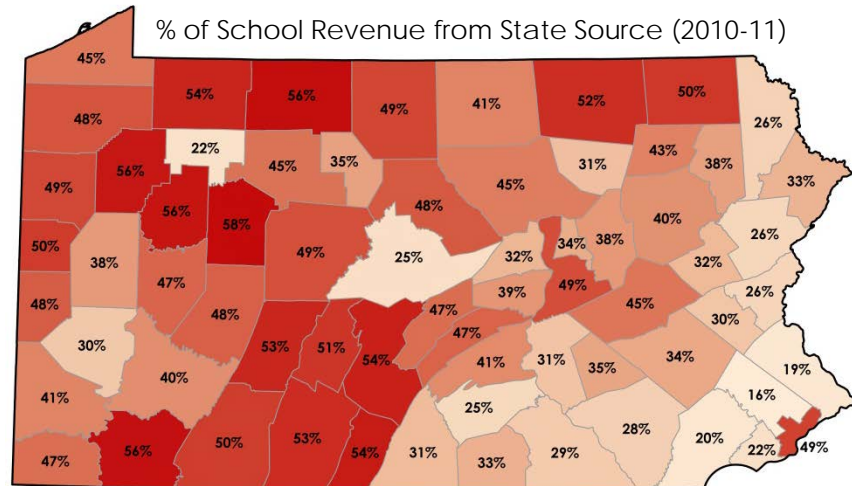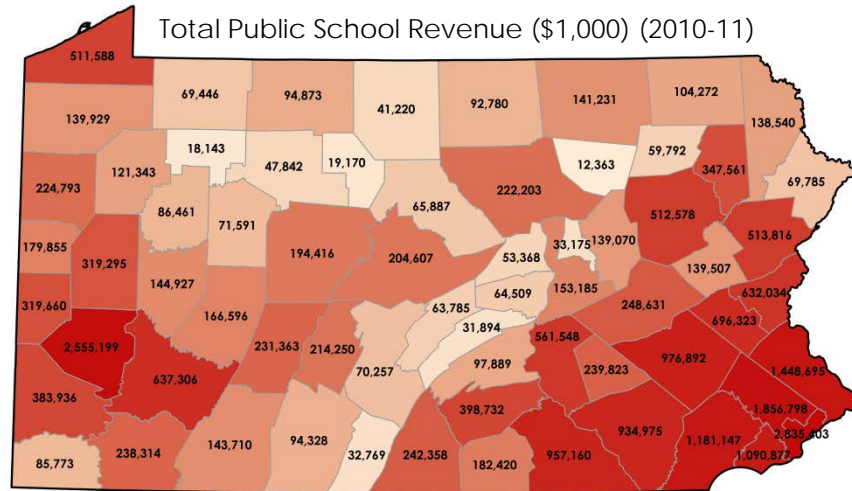
Washington County's per student spending in 2010-2011 was $12,901. In Greene County, per student spending was $15,955. The PA average was $13,813.

Pennsylvania public schools (school districts, career and technology centers, charter schools, and special program jointures) are required to file an annual financial report (AFR) with the Department of Education following each school year.

The data shown here is for public schools only. Included in the totals are revenues and spending per student for intermediate units and vocational technical schools.

The data shows percentages of school revenue by local, state, and federal sources for the year 2010-2011. Dividing the total school revenue by the total by the school's enrollment determines the per student spending.

% of School Revenue from State Source (2010-11)

Z Score of $ Per Student Spending (2010-2011)

Z Score

- ■ < -0.50 Std. Dev.
- ■ -0.50 - 0.50 Std. Dev.
- ■ 0.50 - 1.5 Std. Dev.
- ■ > 1.5 Std. Dev.

This Z score is multiplied by -1 because the category Z score summary scores require positive values to indicate less-desirable conditions. In this instance, fewer dollars spent per student is less desirable than more dollars spent per student. The Z score map (left) shows original Z scores.

County	School Revenue 2010-11 ($1,000)	% Revenue Local Source 2010-11	% Revenue State Source 2010-11	% Revenue Fed/Other 2010-11	$ Per Student Spending 2010-11	Z Score Per Student	Z Score Rank
Juniata County	31,894	42%	47%	11%	9,992	1.37	1
Luzerne County	512,578	49%	40%	10%	11,398	0.88	2
Mifflin County	63,785	41%	47%	12%	11,427	0.87	3
Elk County	47,842	47%	45%	8%	11,493	0.85	4
Blair County	214,250	36%	51%	14%	11,578	0.82	5
Butler County	319,295	55%	38%	7%	11,761	0.75	6
Franklin County	242,358	57%	31%	12%	11,970	0.68	7
Cambria County	231,363	34%	53%	12%	11,984	0.67	8
Huntingdon County	70,257	33%	54%	13%	12,001	0.67	9
Lebanon County	239,823	58%	35%	8%	12,039	0.66	10
Bedford County	94,328	35%	53%	12%	12,077	0.64	11
Northumberland County	153,185	39%	49%	12%	12,092	0.64	12
Westmoreland County	637,306	52%	40%	8%	12,330	0.55	13
Lackawanna County	347,561	53%	38%	10%	12,343	0.55	14
Schuylkill County	248,631	44%	45%	11%	12,406	0.53	15
Erie County	511,588	42%	45%	13%	12,435	0.52	16
Union County	53,368	62%	32%	6%	12,528	0.49	17
Adams County	182,420	61%	33%	6%	12,572	0.47	18
Montour County	33,175	57%	34%	9%	12,681	0.43	19
Columbia County	139,070	47%	38%	14%	12,699	0.43	20
Pike County	69,785	61%	33%	6%	12,734	0.41	21
Fayette County	238,314	29%	56%	15%	12,777	0.4	22
Lawrence County	179,855	34%	50%	16%	12,787	0.4	23
Lycoming County	222,203	45%	45%	11%	12,869	0.37	24
Jefferson County	71,591	29%	58%	13%	12,872	0.37	25
Washington County	383,936	49%	41%	10%	12,901	0.36	26
Beaver County	319,660	42%	48%	11%	12,927	0.35	27
Snyder County	64,509	53%	39%	8%	12,958	0.34	28
Fulton County	32,769	34%	54%	12%	13,057	0.3	29
Lancaster County	934,975	65%	28%	8%	13,091	0.29	30
Lehigh County	696,323	62%	30%	8%	13,217	0.25	31
Clinton County	65,887	41%	48%	11%	13,315	0.21	32
Somerset County	143,710	36%	50%	15%	13,357	0.2	33
Berks County	976,892	57%	34%	8%	13,362	0.2	34
Mercer County	224,793	41%	49%	11%	13,392	0.18	35
Cumberland County	398,732	66%	25%	9%	13,394	0.18	36
Venango County	121,343	32%	56%	12%	13,431	0.17	37
York County	957,160	64%	29%	7%	13,482	0.15	38
Northampton County	632,034	69%	26%	5%	13,568	0.12	39
Clarion County	86,461	33%	56%	12%	13,589	0.12	40
Warren County	69,446	33%	54%	13%	13,589	0.12	41
Crawford County	139,929	42%	48%	9%	13,642	0.1	42
Armstrong County	144,927	43%	47%	10%	13,648	0.1	43
Bradford County	141,231	38%	52%	10%	13,692	0.08	44
Carbon County	139,507	57%	32%	11%	13,934	0	45
Clearfield County	194,416	32%	49%	20%	14,066	-0.05	46
Philadelphia County	2,835,403	30%	49%	21%	14,132	-0.07	47
McKean County	94,873	30%	56%	14%	14,133	-0.07	48
Susquehanna County	104,272	38%	50%	11%	14,268	-0.12	49
Perry County	97,889	46%	41%	14%	14,356	-0.15	50
Delaware County	1,090,877	71%	22%	7%	14,411	-0.17	51
Wyoming County	59,792	47%	43%	9%	14,627	-0.25	52
Centre County	204,607	70%	25%	5%	14,646	-0.25	53
Dauphin County	561,548	59%	31%	10%	14,715	-0.28	54
Wayne County	138,540	68%	26%	5%	15,252	-0.46	55
Tioga County	92,780	38%	41%	21%	15,311	-0.48	56
Potter County	41,220	39%	49%	12%	15,397	-0.51	57
Chester County	1,181,147	77%	20%	4%	15,436	-0.53	58
Bucks County	1,448,695	77%	19%	4%	15,492	-0.55	59
Greene County	85,773	42%	47%	11%	15,955	-0.71	60
Indiana County	166,596	40%	48%	12%	16,087	-0.75	61
Monroe County	513,816	69%	26%	5%	16,214	-0.8	62
Allegheny County	2,555,199	60%	30%	10%	16,446	-0.88	63
Montgomery County	1,856,798	80%	16%	4%	17,168	-1.13	64
Sullivan County	12,363	63%	31%	6%	17,880	-1.38	65
Cameron County	19,170	22%	35%	42%	25,529	-4.04	66
Forest County	18,143	32%	22%	46%	29,874	-5.55	67

(*Mean* line at Z Score 0.08 / Rank 44)

Data Sources: PA Dept. of Education. Totals include Intermediate Units and vocational technical schools. All data refer to public schools only unless otherwise indicated. http://www.pde.state.pa.us/

$$ Z = \frac{(\text{County Value}) - (\text{Average of All Counties})}{(\text{Standard Deviation of All Counties})} $$

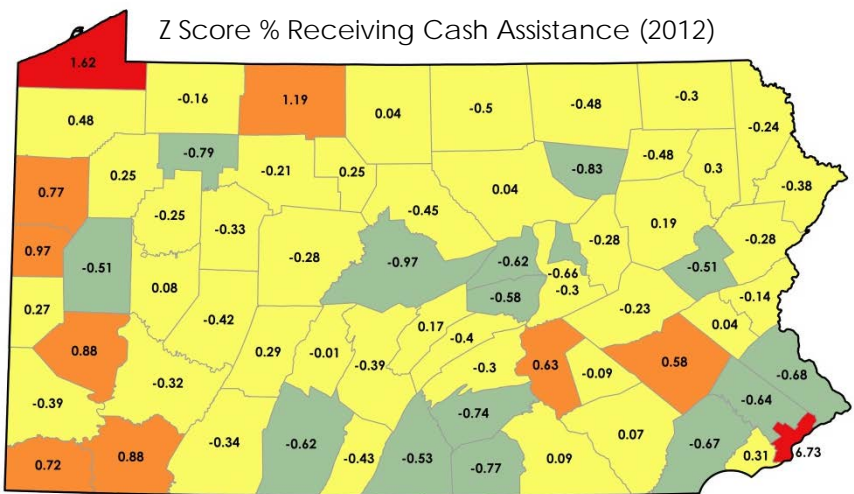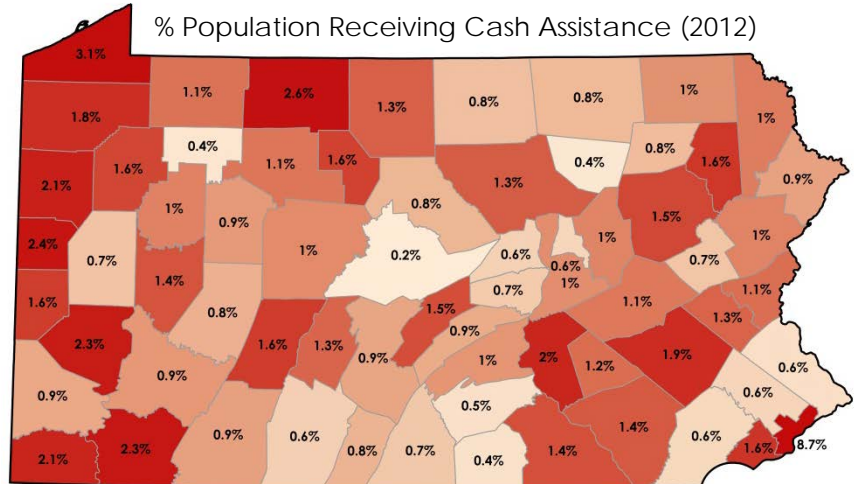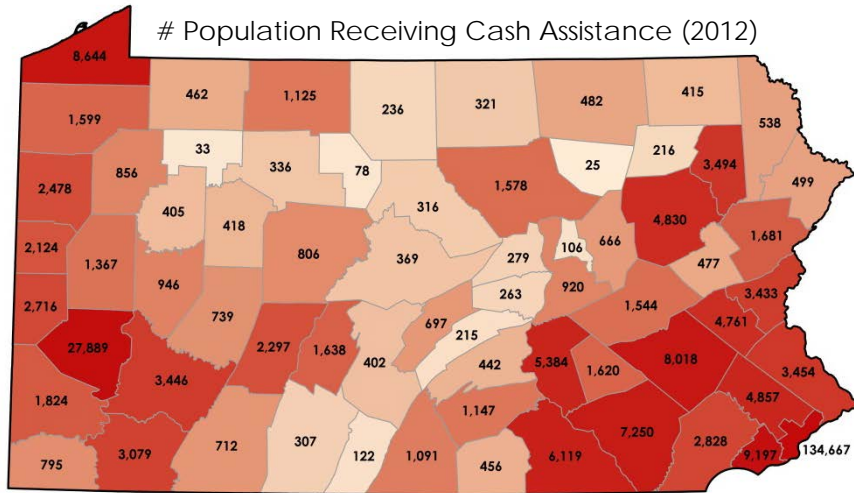Data beyond two standard deviations away from the mean is considered unusual data.

Public Assistance - Cash Assistance

Population Receiving Cash Assistance (2012)

% Population Receiving Cash Assistance (2012)

Z Score % Receiving Cash Assistance (2012)

Z Score

(green)	< -0.50 Std. Dev.
(yellow)	-0.50 - 0.50 Std. Dev.
(orange)	0.50 - 1.5 Std. Dev.
(red)	> 1.5 Std. Dev.

In 2012, 2.1% of Greene County's population received some form of cash assistance from PA. Only 0.9% of Washington County's population received cash assistance. The PA average, by county, was 1.3%.

Pennsylvania citizens may be eligible for cash assistance if there is not enough income generated to support an individual or a family, or if an individual cannot work because of a disability.

Cash Assistance programs include; the Temporary Assistance for Needy Families (TANF), the Diversion Program, the State Blind Pension Program, and the Refugee Cash Assistance Program.

TANF provides money for pregnant women, dependent children and parents or relatives who live with them. The Diversion Program is a one-time lump sum for eligible emergencies. The State Blind Pension Program provided blind pensions benefits for adults who meet visual requirements and other conditions. The Refugee Cash Assistance Program provides money for up to eight months from the date of entry into the United States for refugees who do not meet TANF)eligibility.

Data Sources: PA Dept. of Public Welfare, Office of Income Maintenance.
http://listserv.dpw.state.pa.us/ma-food-stamps-and-cash-stats.html

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	% Receiving Cash Assist. (2011)	# Receiving Cash Assist. (2012)	% Receiving Cash Assist. (2012)	Z Score % 2012	Z Score % Rank
Philadelphia County	8.8%	134,667	8.7%	6.73	1
Erie County	3.2%	8,644	3.1%	1.62	2
McKean County	2.9%	1,125	2.6%	1.19	3
Lawrence County	2.4%	2,124	2.4%	0.97	4
Fayette County	2.6%	3,079	2.3%	0.88	5
Allegheny County	2.3%	27,889	2.3%	0.88	6
Mercer County	2.3%	2,478	2.1%	0.77	7
Greene County	2.4%	795	2.1%	0.72	8
Dauphin County	2.0%	5,384	2.0%	0.63	9
Berks County	2.0%	8,018	1.9%	0.58	10
Crawford County	1.9%	1,599	1.8%	0.48	11
Delaware County	1.6%	9,197	1.6%	0.31	12
Lackawanna County	1.7%	3,494	1.6%	0.30	13
Cambria County	1.8%	2,297	1.6%	0.29	14
Beaver County	1.8%	2,716	1.6%	0.27	15
Cameron County	1.3%	78	1.6%	0.25	16
Venango County	1.8%	856	1.6%	0.25	17
Luzerne County	1.5%	4,830	1.5%	0.19	18
Mifflin County	1.6%	697	1.5%	0.17	19
York County	1.4%	6,119	1.4%	0.09	20
Armstrong County	1.4%	946	1.4%	0.08	21
Lancaster County	1.4%	7,250	1.4%	0.07	22
Lycoming County	1.6%	1,578	1.3%	0.04	23
Potter County	1.6%	236	1.3%	0.04	24
Lehigh County	1.5%	4,761	1.3%	0.04	25
Blair County	1.5%	1,638	1.3%	-0.01	26
Lebanon County	1.2%	1,620	1.2%	-0.09	27
Northampton County	1.2%	3,433	1.1%	-0.14	28
Warren County	1.3%	462	1.1%	-0.16	29
Elk County	1.3%	336	1.1%	-0.21	30
Schuylkill County	1.1%	1,544	1.1%	-0.23	31
Wayne County	1.0%	538	1.0%	-0.24	32
Clarion County	1.0%	405	1.0%	-0.25	33
Monroe County	1.0%	1,681	1.0%	-0.28	34
Columbia County	1.1%	666	1.0%	-0.28	35
Clearfield County	1.3%	806	1.0%	-0.28	36
Northumberland County	1.0%	920	1.0%	-0.30	37
Susquehanna County	1.2%	415	1.0%	-0.30	38
Perry County	0.8%	442	1.0%	-0.30	39
Westmoreland County	1.1%	3,446	0.9%	-0.32	40
Jefferson County	1.0%	418	0.9%	-0.33	41
Somerset County	0.9%	712	0.9%	-0.34	42
Pike County	0.8%	499	0.9%	-0.38	43
Huntingdon County	0.9%	402	0.9%	-0.39	44
Washington County	1.0%	1,824	0.9%	-0.39	45
Juniata County	0.9%	215	0.9%	-0.40	46
Indiana County	1.0%	739	0.8%	-0.42	47
Fulton County	0.9%	122	0.8%	-0.43	48
Clinton County	1.0%	316	0.8%	-0.45	49
Bradford County	0.9%	482	0.8%	-0.48	50
Wyoming County	1.2%	216	0.8%	-0.48	51
Tioga County	0.9%	321	0.8%	-0.50	52
Butler County	0.9%	1,367	0.7%	-0.51	53
Carbon County	0.7%	477	0.7%	-0.51	54
Franklin County	0.9%	1,091	0.7%	-0.53	55
Snyder County	0.8%	263	0.7%	-0.58	56
Bedford County	0.7%	307	0.6%	-0.62	57
Union County	0.8%	279	0.6%	-0.62	58
Montgomery County	0.7%	4,857	0.6%	-0.64	59
Montour County	0.7%	106	0.6%	-0.66	60
Chester County	0.5%	2,828	0.6%	-0.67	61
Bucks County	0.5%	3,454	0.6%	-0.68	62
Cumberland County	0.6%	1,147	0.5%	-0.74	63
Adams County	0.5%	456	0.4%	-0.77	64
Forest County	0.5%	33	0.4%	-0.79	65
Sullivan County	0.3%	25	0.4%	-0.83	66
Centre County	0.2%	369	0.2%	-0.97	67

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Public Assistance – Eligible for Medical Assistance
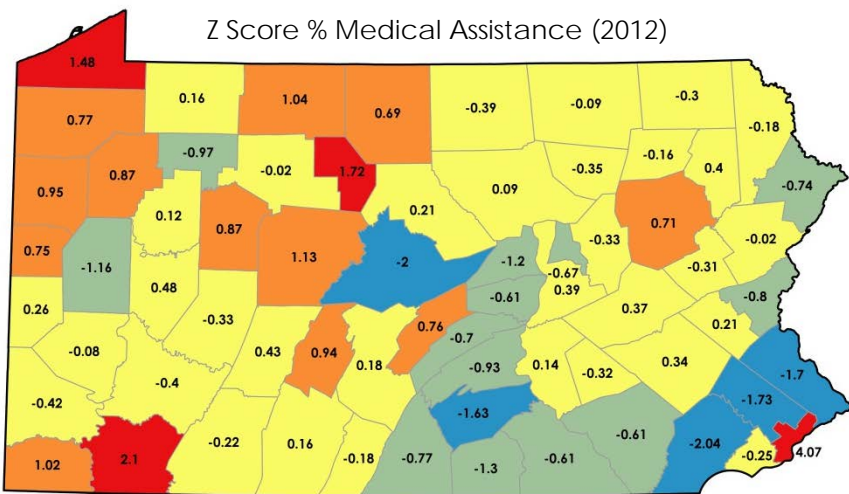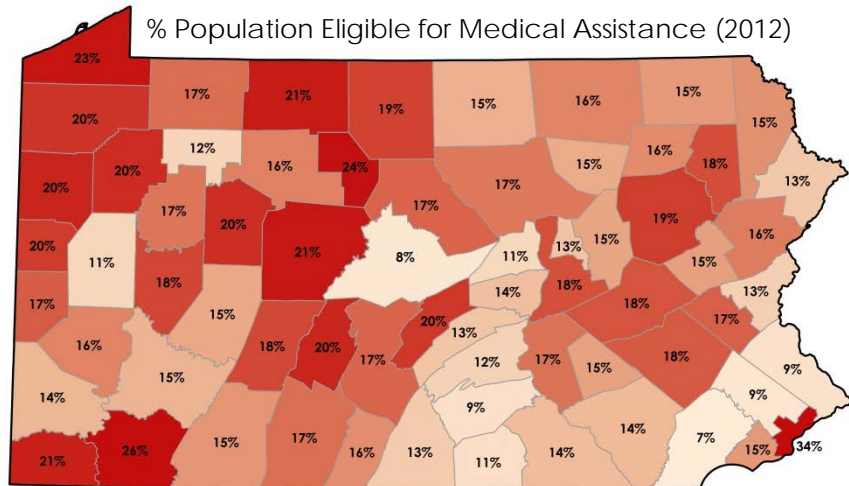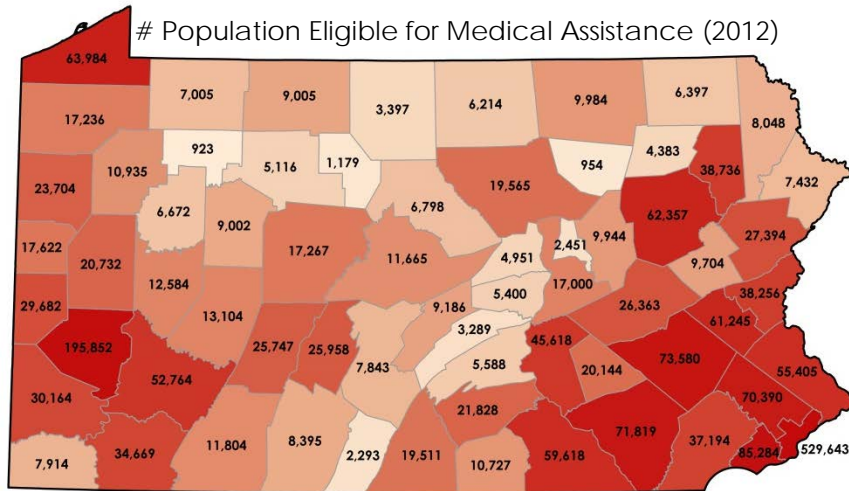
Population Eligible for Medical Assistance (2012)

Greene County's poverty rate (15.5%) was 2% higher than PA's average rate (13.5%) in 2011. Washington County's poverty rate in 2011 was 10.6%.

Medicaid, also called Medical Assistance (MA), offers free health care coverage to children and adults. Eligibility is based on family size and income, and the age of your children.

Benefits may include check ups, hospital stays, shots, prescriptions, and dental and vision coverage. Under Medicaid, all medically necessary services for children are covered.

An MA identification card called the "Pennsylvania ACCESS card" is issued to each eligible individual.

% Population Eligible for Medical Assistance (2012)

Z Score % Medical Assistance (2012)

Z Score

Color	Range
Blue	< -1.5 Std. Dev.
Green	-1.5 - -0.50 Std. Dev.
Yellow	-0.50 - 0.50 Std. Dev.
Orange	0.50 - 1.5 Std. Dev.
Red	> 1.5 Std. Dev.

Data Sources: PA Dept. of Public Welfare, Office of Income Maintenance.
http://listserv.dpw.state.pa.us/ma-food-stamps-and-cash-stats.html

$$Z = \frac{\text{(County Value)} - \text{(Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	% Receiving Med. Assist. (2011)	# Receiving Med. Assist. (2012)	% Receiving Med. Assist. (2012)	Z Score % 2012	Z Score Rank
Philadelphia County	36.0%	529,643	34.2%	4.07	1
Fayette County	27.0%	34,669	25.6%	2.10	2
Cameron County	25.1%	1,179	23.9%	1.72	3
Erie County	24.2%	63,984	22.8%	1.48	4
Clearfield County	22.7%	17,267	21.3%	1.13	5
McKean County	22.1%	9,005	20.9%	1.04	6
Greene County	22.9%	7,914	20.8%	1.02	7
Mercer County	21.4%	23,704	20.5%	0.95	8
Blair County	21.3%	25,958	20.4%	0.94	9
Venango County	21.8%	10,935	20.1%	0.87	10
Jefferson County	22.2%	9,002	20.1%	0.87	11
Crawford County	21.5%	17,236	19.7%	0.77	12
Mifflin County	20.8%	9,186	19.6%	0.76	13
Lawrence County	21.0%	17,622	19.6%	0.75	14
Luzerne County	20.1%	62,357	19.4%	0.71	15
Potter County	20.8%	3,397	19.3%	0.69	16
Armstrong County	19.3%	12,584	18.4%	0.48	17
Cambria County	19.2%	25,747	18.2%	0.43	18
Lackawanna County	18.9%	38,736	18.1%	0.40	19
Northumberland County	18.7%	17,000	18.0%	0.39	20
Schuylkill County	18.7%	26,363	17.9%	0.37	21
Berks County	18.9%	73,580	17.8%	0.34	22
Beaver County	18.4%	29,682	17.4%	0.26	23
Lehigh County	18.5%	61,245	17.2%	0.21	24
Clinton County	18.4%	6,798	17.2%	0.21	25
Huntingdon County	18.0%	7,843	17.1%	0.18	26
Warren County	18.0%	7,005	17.0%	0.16	27
Bedford County	17.7%	8,395	17.0%	0.16	28
Dauphin County	17.7%	45,618	16.9%	0.14	29
Clarion County	18.3%	6,672	16.8%	0.12	30
Lycoming County	18.1%	19,565	16.7%	0.09	31
Monroe County	17.2%	27,394	16.2%	-0.02	32
Elk County	17.7%	5,116	16.2%	-0.02	33
Allegheny County	17.1%	195,852	15.9%	-0.08	34
Bradford County	17.8%	9,984	15.9%	-0.09	35
Wyoming County	17.3%	4,383	15.6%	-0.16	36
Fulton County	17.3%	2,293	15.5%	-0.18	37
Wayne County	16.4%	8,048	15.5%	-0.18	38
Somerset County	16.1%	11,804	15.3%	-0.22	39
Delaware County	15.6%	85,284	15.2%	-0.25	40
Susquehanna County	16.3%	6,397	15.0%	-0.30	41
Carbon County	15.4%	9,704	14.9%	-0.31	42
Lebanon County	15.4%	20,144	14.9%	-0.32	43
Columbia County	15.7%	9,944	14.9%	-0.33	44
Indiana County	15.7%	13,104	14.9%	-0.33	45
Sullivan County	15.6%	954	14.8%	-0.35	46
Tioga County	16.3%	6,214	14.6%	-0.39	47
Westmoreland County	15.3%	52,764	14.5%	-0.40	48
Washington County	15.4%	30,164	14.5%	-0.42	49
Lancaster County	14.2%	71,819	13.6%	-0.61	50
York County	14.0%	59,618	13.6%	-0.61	51
Snyder County	14.4%	5,400	13.6%	-0.61	52
Montour County	14.2%	2,451	13.4%	-0.67	53
Juniata County	14.0%	3,289	13.2%	-0.70	54
Pike County	13.3%	7,432	13.1%	-0.74	55
Franklin County	13.4%	19,511	12.9%	-0.77	56
Northampton County	13.5%	38,256	12.8%	-0.80	57
Perry County	12.7%	5,588	12.2%	-0.93	58
Forest County	12.5%	923	12.0%	-0.97	59
Butler County	11.7%	20,732	11.2%	-1.16	60
Union County	11.5%	4,951	11.0%	-1.20	61
Adams County	10.8%	10,727	10.6%	-1.30	62
Cumberland County	9.3%	21,828	9.1%	-1.63	63
Bucks County	9.3%	55,405	8.8%	-1.70	64
Montgomery County	8.8%	70,390	8.7%	-1.73	65
Centre County	8.0%	11,665	7.5%	-2.00	66
Chester County	8.0%	37,194	7.3%	-2.04	67

Mean

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Public Assistance – National School Lunch Program (NSLP)

of Students Free or Reduced Enrolled (2012)
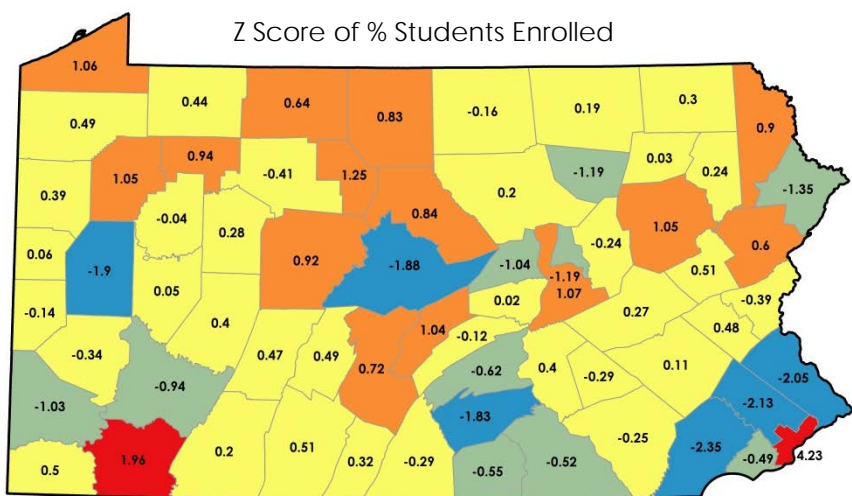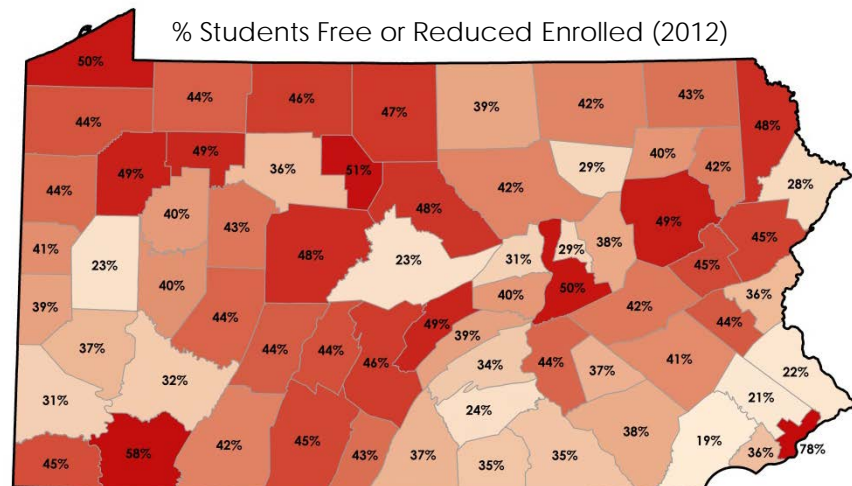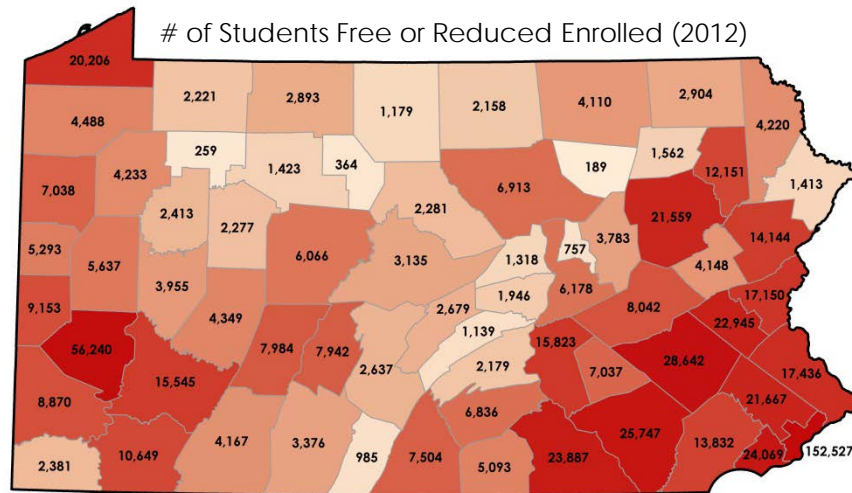
The school-aged population of Greene County that was eligible for free or reduced school lunches was 45%. Washington County had 31% eligible in the same year. The PA average, by county, was 40%.

The National School Lunch Program (NSLP) is a federal and state reimbursement program for each meal served that meets federal requirements. All NSLP sponsors are required to offer free and reduced-price lunches to eligible children. Reimbursement rates are established annually by the United States Department of Agriculture (USDA).

Any public school, intermediate unit, charter school, area vocational technical or career technology school, public residential child care institution, and tax exempt non-public school or residential child care institution may apply to be an NSLP sponsor.

Children from families with incomes at or below 130% of the poverty level, and children in families receiving Temporary Assistance for Needy Families (TANF) and children in families receiving food stamp benefits are eligible for free lunches. Children in families whose income is between 130% and 185% of the poverty level are eligible for reduced price lunches.

% Students Free or Reduced Enrolled (2012)

Z Score of % Students Enrolled

Z Score
- < -1.5 Std. Dev.
- -1.5 - -0.50 Std. Dev.
- -0.50 - 0.50 Std. Dev.
- 0.50 - 1.5 Std. Dev.
- > 1.5 Std. Dev.

Data Sources: PA Dept. of Education. http://www.education.state.pa.us

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Student Enrollment	# Free Lunch 2012	# Reduced Lunch 2012	# Free/Reduced Combined	% Free/Reduced 2012	Z Score % Free/Reduced	Z Score Rank
Philadelphia County	195,400	137,348	15,179	152,527	78%	4.23	1
Fayette County	18,488	9,284	1,365	10,649	58%	1.96	2
Cameron County	710	316	48	364	51%	1.25	3
Northumberland County	12,441	4,988	1,190	6,178	50%	1.07	4
Erie County	40,806	17,139	3,067	20,206	50%	1.06	5
Luzerne County	43,566	18,529	3,030	21,559	49%	1.05	6
Venango County	8,565	3,537	696	4,233	49%	1.05	7
Mifflin County	5,428	2,200	479	2,679	49%	1.04	8
Forest County	534	197	62	259	49%	0.94	9
Clearfield County	12,555	4,938	1,128	6,066	48%	0.92	10
Wayne County	8,770	3,298	922	4,220	48%	0.90	11
Clinton County	4,795	1,794	487	2,281	48%	0.84	12
Potter County	2,486	998	181	1,179	47%	0.83	13
Huntingdon County	5,675	2,134	503	2,637	46%	0.72	14
McKean County	6,327	2,463	430	2,893	46%	0.64	15
Monroe County	31,145	11,621	2,523	14,144	45%	0.60	16
Bedford County	7,574	2,583	793	3,376	45%	0.51	17
Carbon County	9,310	3,375	773	4,148	45%	0.51	18
Greene County	5,347	1,995	386	2,381	45%	0.50	19
Blair County	17,868	6,618	1,324	7,942	44%	0.49	20
Crawford County	10,106	3,680	808	4,488	44%	0.49	21
Lehigh County	51,806	19,496	3,449	22,945	44%	0.48	22
Cambria County	18,040	6,500	1,484	7,984	44%	0.47	23
Warren County	5,051	1,830	391	2,221	44%	0.44	24
Indiana County	9,971	3,357	992	4,349	44%	0.40	25
Dauphin County	36,318	13,548	2,275	15,823	44%	0.40	26
Mercer County	16,174	6,009	1,029	7,038	44%	0.39	27
Fulton County	2,298	768	217	985	43%	0.32	28
Susquehanna County	6,801	2,256	648	2,904	43%	0.30	29
Jefferson County	5,354	1,812	465	2,277	43%	0.28	30
Schuylkill County	18,937	6,546	1,496	8,042	42%	0.27	31
Lackawanna County	28,845	10,517	1,634	12,151	42%	0.24	32
Somerset County	9,963	3,339	828	4,167	42%	0.20	33
Lycoming County	16,547	5,550	1,363	6,913	42%	0.20	34
Bradford County	9,851	3,175	935	4,110	42%	0.19	35
Berks County	69,903	24,769	3,873	28,642	41%	0.11	36
Lawrence County	13,052	4,546	747	5,293	41%	0.06	37
Armstrong County	9,780	3,160	795	3,955	40%	0.05	38
Wyoming County	3,878	1,274	288	1,562	40%	0.03	39
Snyder County	4,847	1,422	524	1,946	40%	0.02	40
Clarion County	6,093	1,863	550	2,413	40%	-0.04	41
Juniata County	2,929	854	285	1,139	39%	-0.12	42
Beaver County	23,604	7,651	1,502	9,153	39%	-0.14	43
Tioga County	5,598	1,552	606	2,158	39%	-0.16	44
Columbia County	9,989	3,029	754	3,783	38%	-0.24	45
Lancaster County	68,272	20,459	5,288	25,747	38%	-0.25	46
Lebanon County	18,798	5,860	1,177	7,037	37%	-0.29	47
Franklin County	20,055	5,895	1,609	7,504	37%	-0.29	48
Allegheny County	152,403	48,665	7,575	56,240	37%	-0.34	49
Northampton County	47,021	14,137	3,013	17,150	36%	-0.39	50
Elk County	3,923	1,106	317	1,423	36%	-0.41	51
Delaware County	67,586	20,390	3,679	24,069	36%	-0.49	52
York County	67,621	19,638	4,249	23,887	35%	-0.52	53
Adams County	14,538	3,936	1,157	5,093	35%	-0.55	54
Perry County	6,333	1,630	549	2,179	34%	-0.62	55
Westmoreland County	49,341	12,779	2,766	15,545	32%	-0.94	56
Washington County	28,883	7,304	1,566	8,870	31%	-1.03	57
Union County	4,305	1,062	256	1,318	31%	-1.04	58
Montour County	2,583	624	133	757	29%	-1.19	59
Sullivan County	646	157	32	189	29%	-1.19	60
Pike County	5,070	1,137	276	1,413	28%	-1.35	61
Cumberland County	29,028	5,244	1,592	6,836	24%	-1.83	62
Centre County	13,585	2,369	766	3,135	23%	-1.88	63
Butler County	24,640	4,533	1,104	5,637	23%	-1.90	64
Bucks County	80,943	13,578	3,858	17,436	22%	-2.05	65
Montgomery County	104,196	17,556	4,111	21,667	21%	-2.13	66
Chester County	73,449	11,444	2,388	13,832	19%	-2.35	67

Population Participating in SNAP(2012)

% Population Participating in SNAP(2012)
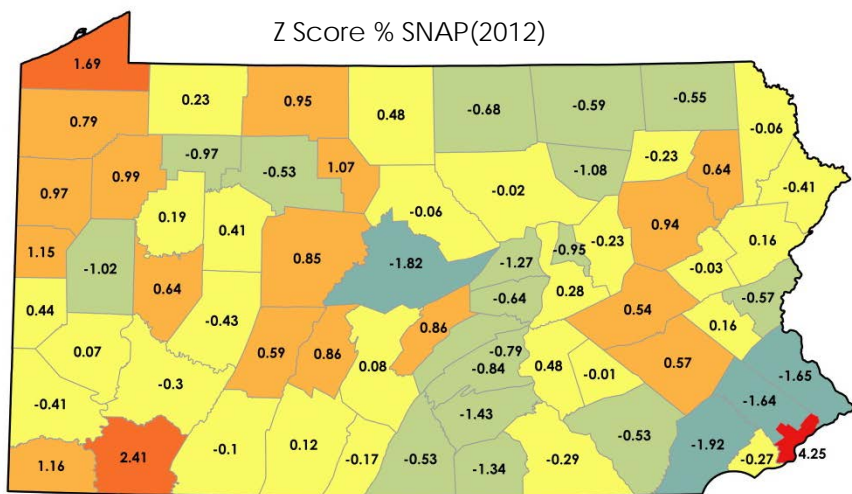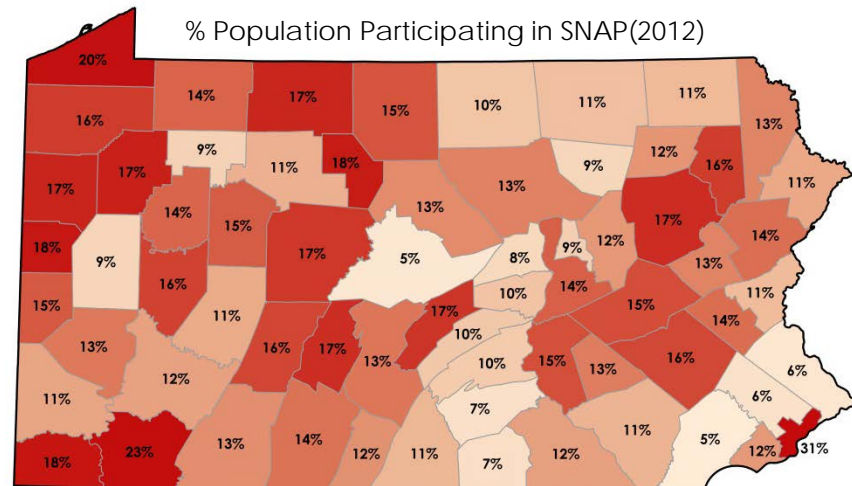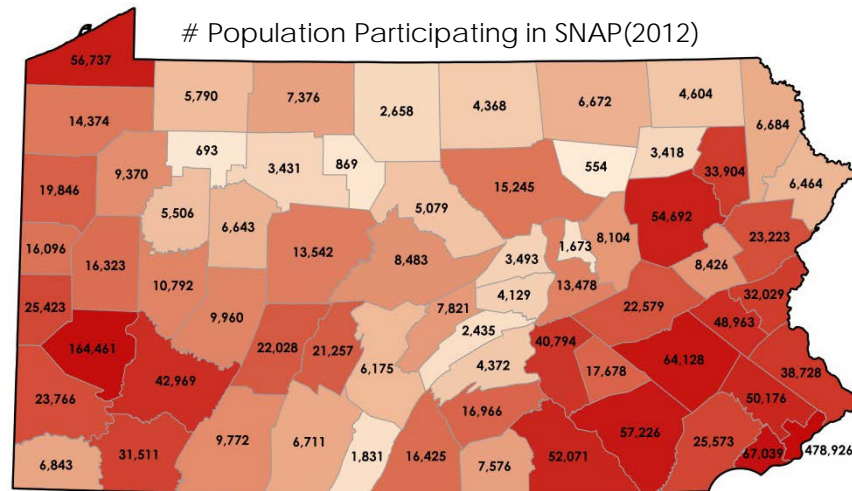
The percentage of Greene County's population receiving SNAP benefits in 2012 was 18%, and Washington County was 11.4%. The PA average per county was 13.2%.

The Supplemental Nutrition Assistance Program is the new name for the Food Stamp program. These benefits are used to buy food and help eligible low-income households in Pennsylvania obtain more nutritious diets by increasing their food purchasing power at grocery stores and supermarkets. Eligible residents receive a Pennsylvania Electronic Benefits Transfer (EBT) ACCESS Card which is used to make food purchases at grocery stores and supermarkets.

The maximum monthly benefit amount for one person is $200. The maximum monthly benefit amount for a family of fours is $668.

To get SNAP benefits, applicant income has to be under certain limits. SNAP households may receive deductions from their gross income for things like housing costs, child or dependent care payments, and medical expenses over $35 for elderly or disabled people.

Z Score % SNAP(2012)

Z Score

	< -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	1.5 - 2.5 Std. Dev.
	> 2.5 Std. Dev.

Data Sources: PA Dept. of Public Welfare, Office of Income Maintenance.
http://listserv.dpw.state.pa.us/ma-food-stamps-and-cash-stats.html

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	% Receiving SNAP (2011)	# Receiving SNAP (2012)	% Receiving SNAP (2012)	Z Score % 2012	Z Score Rank
Philadelphia County	29.6%	478,926	30.9%	4.25	1
Fayette County	23.2%	31,511	23.2%	2.41	2
Erie County	19.9%	56,737	20.2%	1.69	3
Greene County	18.5%	6,843	18.0%	1.16	4
Lawrence County	17.6%	16,096	17.9%	1.15	5
Cameron County	17.8%	869	17.6%	1.07	6
Venango County	17.1%	9,370	17.3%	0.99	7
Mercer County	16.9%	19,846	17.2%	0.97	8
McKean County	17.1%	7,376	17.1%	0.95	9
Luzerne County	16.5%	54,692	17.0%	0.94	10
Blair County	16.4%	21,257	16.7%	0.86	11
Mifflin County	16.7%	7,821	16.7%	0.86	12
Clearfield County	17.5%	13,542	16.7%	0.85	13
Crawford County	16.7%	14,374	16.4%	0.79	14
Lackawanna County	15.1%	33,904	15.8%	0.64	15
Armstrong County	15.8%	10,792	15.8%	0.64	16
Cambria County	15.2%	22,028	15.6%	0.59	17
Berks County	15.1%	64,128	15.5%	0.57	18
Schuylkill County	14.8%	22,579	15.4%	0.54	19
Dauphin County	14.4%	40,794	15.1%	0.48	20
Potter County	16.1%	2,658	15.1%	0.48	21
Beaver County	15.0%	25,423	14.9%	0.44	22
Jefferson County	15.5%	6,643	14.8%	0.41	23
Northumberland County	13.4%	13,478	14.3%	0.28	24
Warren County	13.9%	5,790	14.1%	0.23	25
Clarion County	14.3%	5,506	13.9%	0.19	26
Lehigh County	13.7%	48,963	13.8%	0.16	27
Monroe County	13.2%	23,223	13.8%	0.16	28
Bedford County	13.3%	6,711	13.6%	0.12	29
Huntingdon County	13.3%	6,175	13.4%	0.08	30
Allegheny County	13.0%	164,461	13.4%	0.07	31
Lebanon County	12.2%	17,678	13.1%	-0.01	32
Lycoming County	13.4%	15,245	13.0%	-0.02	33
Carbon County	12.7%	8,426	13.0%	-0.03	34
Wayne County	12.5%	6,684	12.9%	-0.06	35
Clinton County	13.0%	5,079	12.9%	-0.06	36
Somerset County	12.4%	9,772	12.7%	-0.10	37
Fulton County	12.9%	1,831	12.4%	-0.17	38
Wyoming County	12.8%	3,418	12.2%	-0.23	39
Columbia County	11.7%	8,104	12.1%	-0.23	40
Delaware County	11.2%	67,039	11.9%	-0.27	41
York County	11.1%	52,071	11.9%	-0.29	42
Westmoreland County	11.7%	42,969	11.8%	-0.30	43
Washington County	11.5%	23,766	11.4%	-0.41	44
Pike County	10.4%	6,464	11.4%	-0.41	45
Indiana County	11.5%	9,960	11.3%	-0.43	46
Elk County	11.3%	3,431	10.9%	-0.53	47
Lancaster County	10.5%	57,226	10.9%	-0.53	48
Franklin County	10.5%	16,425	10.9%	-0.53	49
Susquehanna County	11.3%	4,604	10.8%	-0.55	50
Northampton County	10.3%	32,029	10.7%	-0.57	51
Bradford County	11.7%	6,672	10.6%	-0.59	52
Snyder County	10.4%	4,129	10.4%	-0.64	53
Tioga County	11.3%	4,368	10.3%	-0.68	54
Juniata County	9.9%	2,435	9.8%	-0.79	55
Perry County	9.3%	4,372	9.6%	-0.84	56
Montour County	9.8%	1,673	9.1%	-0.95	57
Forest County	9.5%	693	9.0%	-0.97	58
Butler County	8.8%	16,323	8.8%	-1.02	59
Sullivan County	8.8%	554	8.6%	-1.08	60
Union County	7.8%	3,493	7.8%	-1.27	61
Adams County	7.1%	7,576	7.5%	-1.34	62
Cumberland County	6.8%	16,966	7.1%	-1.43	63
Montgomery County	5.6%	50,176	6.2%	-1.64	64
Bucks County	5.7%	38,728	6.2%	-1.65	65
Centre County	5.6%	8,483	5.5%	-1.82	66
Chester County	4.6%	25,573	5.0%	-1.92	67

Mean

Public Assistance – WIC (Women, Infants and Children)

Population Participating in WIC (2010)

% Population Participating in WIC (2010)

Z Score % WIC (2010)

Data Sources: PA Dept. of Health.
http://www.dsf.health.state.pa.us/health/site/default.asp

The percentage of Greene County's population receiving WIC benefits in 2010 was 2.5%, and Washington County was 1.6%. The PA average per county was 2.1%.

WIC is a federally funded program that provides healthy supplemental foods and nutrition services for pregnant women, postpartum and breastfeeding women, infants and children under age five in a supportive environment.

The goal of the WIC Program is to decrease the risk of poor birth outcomes and to improve the health of the participants during critical stages of growth and development.

The Pennsylvania WIC Program states that it is committed to improving the health of eligible pregnant women, new mothers, and children by providing nutrition education, breastfeeding support, healthy foods, and referrals to health and social programs during the critical stages of fetal and early childhood development.

Z Score

- 🟦 < -1.5 Std. Dev.
- 🟩 -1.5 - -0.50 Std. Dev.
- 🟨 -0.50 - 0.50 Std. Dev.
- 🟧 0.50 - 1.5 Std. Dev.
- 🟥 > 1.5 Std. Dev.
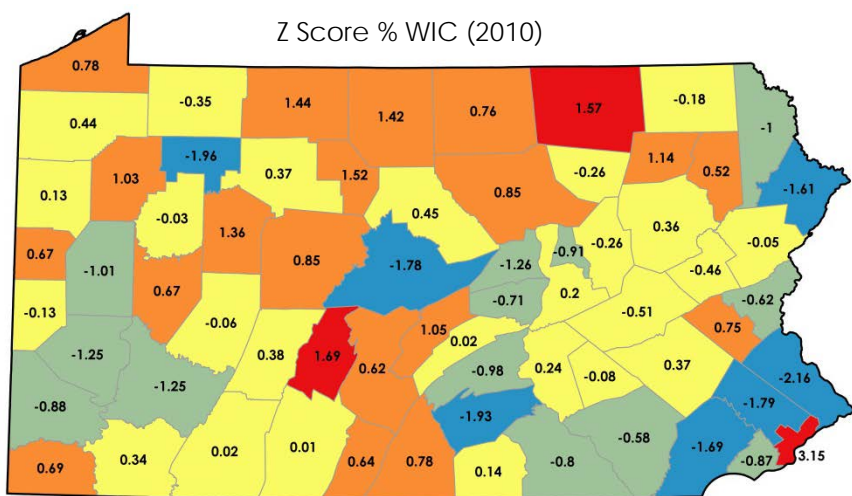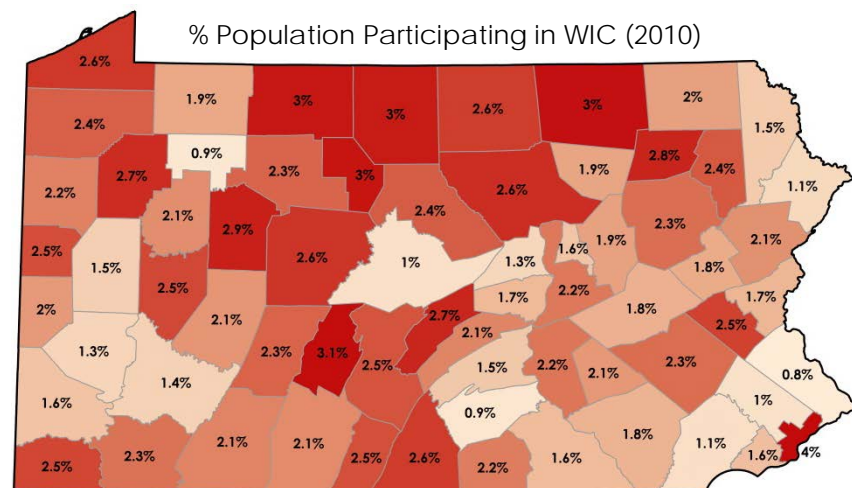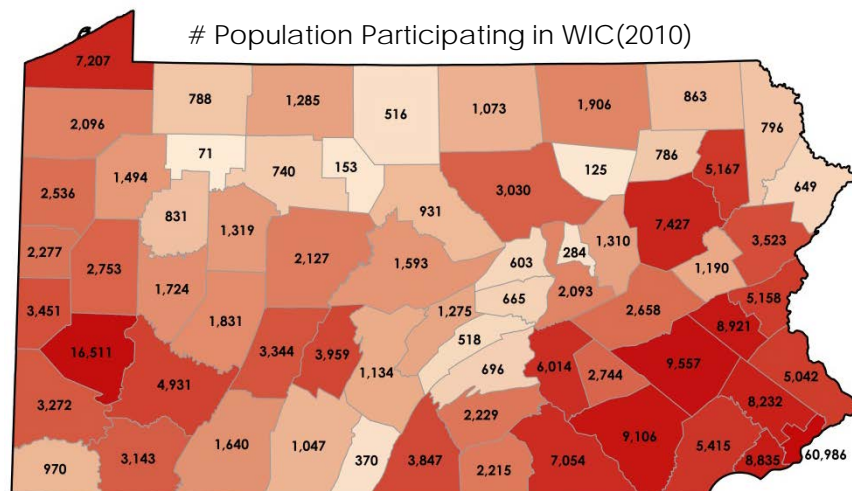
$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	% Receiving WIC (2008)	# Receiving WIC (2010)	% Receiving WIC (2010)	Z Score % 2010	Z Score Rank
Philadelphia County	3.5%	60,986	4.0%	3.15	1
Blair County	2.9%	3,959	3.1%	1.69	2
Bradford County	3.2%	1,906	3.0%	1.57	3
Cameron County	3.1%	153	3.0%	1.52	4
McKean County	2.9%	1,285	3.0%	1.44	5
Potter County	3.6%	516	3.0%	1.42	6
Jefferson County	2.8%	1,319	2.9%	1.36	7
Wyoming County	2.2%	786	2.8%	1.14	8
Mifflin County	3.0%	1,275	2.7%	1.05	9
Venango County	2.9%	1,494	2.7%	1.03	10
Lycoming County	2.5%	3,030	2.6%	0.85	11
Clearfield County	2.7%	2,127	2.6%	0.85	12
Erie County	2.4%	7,207	2.6%	0.78	13
Franklin County	2.1%	3,847	2.6%	0.78	14
Tioga County	2.5%	1,073	2.6%	0.76	15
Lehigh County	2.1%	8,921	2.5%	0.75	16
Greene County	3.4%	970	2.5%	0.69	17
Armstrong County	2.7%	1,724	2.5%	0.67	18
Lawrence County	2.2%	2,277	2.5%	0.67	19
Fulton County	1.7%	370	2.5%	0.64	20
Huntingdon County	2.2%	1,134	2.5%	0.62	21
Lackawanna County	2.2%	5,167	2.4%	0.52	22
Clinton County	2.6%	931	2.4%	0.45	23
Crawford County	2.4%	2,096	2.4%	0.44	24
Cambria County	2.3%	3,344	2.3%	0.38	25
Elk County	2.4%	740	2.3%	0.37	26
Berks County	2.2%	9,557	2.3%	0.37	27
Luzerne County	2.0%	7,427	2.3%	0.36	28
Fayette County	2.6%	3,143	2.3%	0.34	29
Dauphin County	2.1%	6,014	2.2%	0.24	30
Northumberland County	1.9%	2,093	2.2%	0.20	31
Adams County	2.3%	2,215	2.2%	0.14	32
Mercer County	1.9%	2,536	2.2%	0.13	33
Somerset County	2.4%	1,640	2.1%	0.02	34
Juniata County	2.1%	518	2.1%	0.02	35
Bedford County	2.1%	1,047	2.1%	0.01	36
Clarion County	2.1%	831	2.1%	-0.03	37
Monroe County	1.7%	3,523	2.1%	-0.05	38
Indiana County	2.0%	1,831	2.1%	-0.06	39
Lebanon County	2.0%	2,744	2.1%	-0.08	40
Beaver County	1.9%	3,451	2.0%	-0.13	41
Susquehanna County	2.4%	863	2.0%	-0.18	42
Columbia County	2.0%	1,310	1.9%	-0.26	43
Sullivan County	1.6%	125	1.9%	-0.26	44
Warren County	2.1%	788	1.9%	-0.35	45
Carbon County	1.6%	1,190	1.8%	-0.46	46
Schuylkill County	1.7%	2,658	1.8%	-0.51	47
Lancaster County	1.6%	9,106	1.8%	-0.58	48
Northampton County	1.6%	5,158	1.7%	-0.62	49
Snyder County	1.7%	665	1.7%	-0.71	50
York County	1.5%	7,054	1.6%	-0.80	51
Delaware County	1.4%	8,835	1.6%	-0.87	52
Washington County	1.8%	3,272	1.6%	-0.88	53
Montour County	1.5%	284	1.6%	-0.91	54
Perry County	1.7%	696	1.5%	-0.98	55
Wayne County	1.4%	796	1.5%	-1.00	56
Butler County	1.6%	2,753	1.5%	-1.01	57
Westmoreland County	1.4%	4,931	1.4%	-1.25	58
Allegheny County	1.3%	16,511	1.3%	-1.25	59
Union County	1.6%	603	1.3%	-1.26	60
Pike County	1.0%	649	1.1%	-1.61	61
Chester County	0.9%	5,415	1.1%	-1.69	62
Centre County	1.1%	1,593	1.0%	-1.78	63
Montgomery County	0.9%	8,232	1.0%	-1.79	64
Cumberland County	0.9%	2,229	0.9%	-1.93	65
Forest County	1.1%	71	0.9%	-1.96	66
Bucks County	0.8%	5,042	0.8%	-2.16	67

Mean

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Population Participating in PACE
Pharmaceutical Assist. Contract for the Elderly (PACE)

Population Enrolled in PACE (2011)

% Population 65+ Enrolled in PACE (2011)

Z Score Population 65+ Enrolled in PACE (2011)
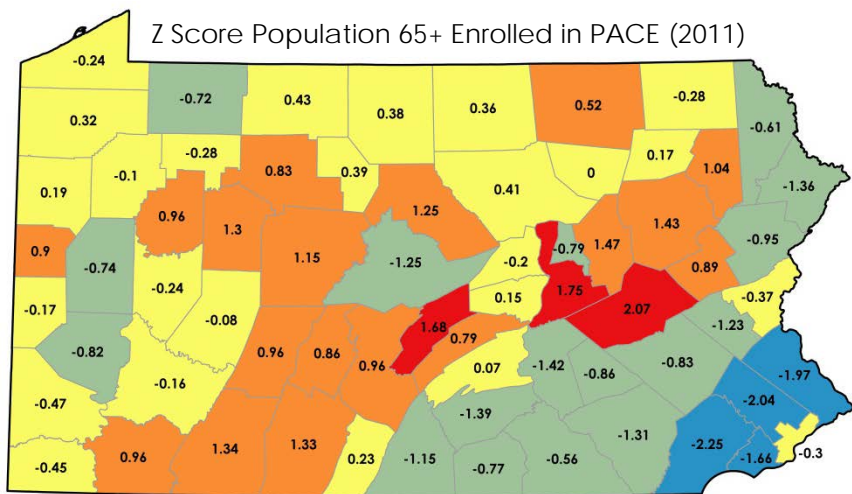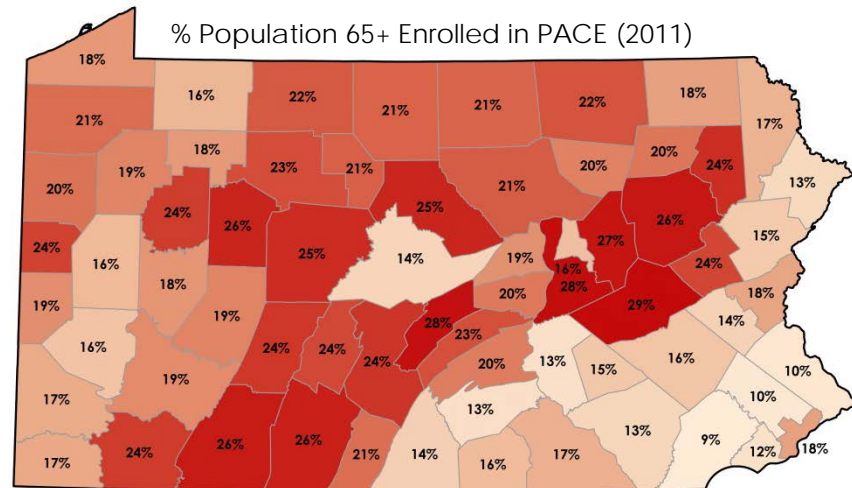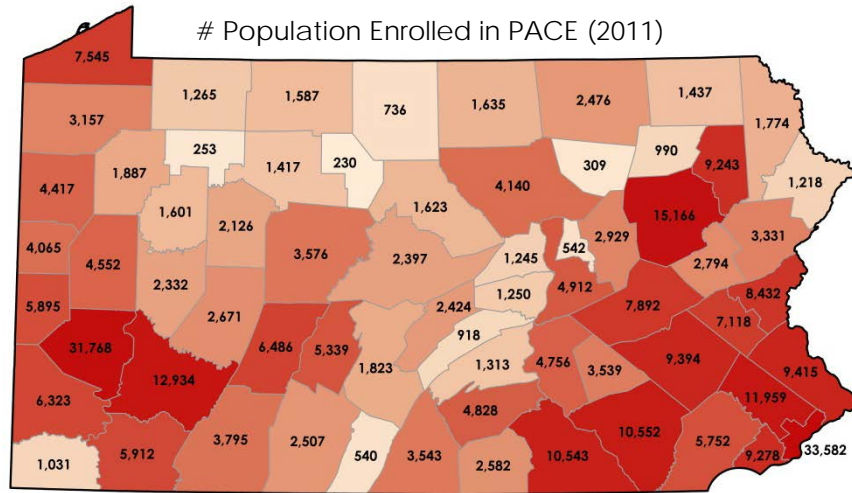
The percent of eligible-aged population enrolled in PACE in 2011 in Greene County was 17.3% and in Washington was 17.2%. The PA average, by county, was 19.3%.

PACE, PACENET and PACE plus Medicare are Pennsylvania's prescription assistance programs for older adults, offering low-cost prescription medication to qualified residents, age 65 and older.

To be eligible for PACE, an applicant must be 65 years of age or older, a PA resident for at least 90 days, and not enrolled in the Department of Welfare's Medicaid prescription benefit.

If the above conditions are met, PACE eligibility is determined by the applicants previous calendar year's income. For a single person, total income must be $14,500 or less. For a married couple combined total income must be $17,700 or less.

Z Score

▉	< -1.5 Std. Dev.
▉	-1.5 - -0.50 Std. Dev.
▉	-0.50 - 0.50 Std. Dev.
▉	0.50 - 1.5 Std. Dev.
▉	1.5 - 2.1 Std. Dev.

Data Sources: PA Dept. of Aging. http://www.aging.state.pa.us/

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	# Pop. Enrolled in PACE (2011)	% Pop. (65+) Enrolled in PACE (2011)	Z Score % 2011	Z Score Rank
Schuylkill County	7,892	29.4%	2.07	1
Northumberland County	4,912	27.9%	1.75	2
Mifflin County	2,424	27.6%	1.68	3
Columbia County	2,929	26.6%	1.47	4
Luzerne County	15,166	26.4%	1.43	5
Somerset County	3,795	25.9%	1.34	6
Bedford County	2,507	25.9%	1.33	7
Jefferson County	2,126	25.7%	1.30	8
Clinton County	1,623	25.5%	1.25	9
Clearfield County	3,576	25.0%	1.15	10
Lackawanna County	9,243	24.5%	1.04	11
Huntingdon County	1,823	24.1%	0.96	12
Cambria County	6,486	24.1%	0.96	13
Fayette County	5,912	24.1%	0.96	14
Clarion County	1,601	24.1%	0.96	15
Lawrence County	4,065	23.8%	0.90	16
Carbon County	2,794	23.8%	0.89	17
Blair County	5,339	23.6%	0.86	18
Elk County	1,417	23.5%	0.83	19
Juniata County	918	23.3%	0.79	20
Bradford County	2,476	22.0%	0.52	21
McKean County	1,587	21.6%	0.43	22
Lycoming County	4,140	21.5%	0.41	23
Cameron County	230	21.4%	0.39	24
Potter County	736	21.3%	0.38	25
Tioga County	1,635	21.2%	0.36	26
Crawford County	3,157	21.1%	0.32	27
Fulton County	540	20.6%	0.23	28
Mercer County	4,417	20.4%	0.19	29
Wyoming County	990	20.3%	0.17	30
Snyder County	1,250	20.2%	0.15	31
Perry County	1,313	19.9%	0.07	32
Sullivan County	309	19.5%	0.00	33
Indiana County	2,671	19.1%	-0.08	34
Venango County	1,887	19.0%	-0.10	35
Westmoreland County	12,934	18.7%	-0.16	36
Beaver County	5,895	18.7%	-0.17	37
Union County	1,245	18.5%	-0.20	38
Armstrong County	2,332	18.3%	-0.24	39
Erie County	7,545	18.3%	-0.24	40
Forest County	253	18.1%	-0.28	41
Susquehanna County	1,437	18.1%	-0.28	42
Philadelphia County	33,582	18.0%	-0.30	43
Northampton County	8,432	17.7%	-0.37	44
Greene County	1,031	17.3%	-0.45	45
Washington County	6,323	17.2%	-0.47	46
York County	10,543	16.8%	-0.56	47
Wayne County	1,774	16.6%	-0.61	48
Warren County	1,265	16.1%	-0.72	49
Butler County	4,552	16.0%	-0.74	50
Adams County	2,582	15.8%	-0.77	51
Montour County	542	15.7%	-0.79	52
Allegheny County	31,768	15.6%	-0.82	53
Berks County	9,394	15.5%	-0.83	54
Lebanon County	3,539	15.4%	-0.86	55
Monroe County	3,331	14.9%	-0.95	56
Franklin County	3,543	14.0%	-1.15	57
Lehigh County	7,118	13.6%	-1.23	58
Centre County	2,397	13.5%	-1.25	59
Lancaster County	10,552	13.2%	-1.31	60
Pike County	1,218	13.0%	-1.36	61
Cumberland County	4,828	12.8%	-1.39	62
Dauphin County	4,756	12.7%	-1.42	63
Delaware County	9,278	11.5%	-1.66	64
Bucks County	9,415	10.0%	-1.97	65
Montgomery County	11,959	9.7%	-2.04	66
Chester County	5,752	8.7%	-2.25	67

Mean

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Highways by Type

Total Miles of Highway

Greene County ranked 30th of 67 in terms of highway miles per square mile with approximately 2.61 miles. Washington County's 3.33 miles was above the PA average, per county, of 3 miles.

Highway miles (and population) are used by the PA Public Utilities Commission to determine if a municipality without active drilling is eligible to receive Act 13 disbursements by calculating whether it is contiguous to a municipality with wells or within five miles of a municipality with wells.

As defined in Act 13, the calculation for highway miles is based on the number of miles of public roads and streets most recently certified by the Department of Transportation as eligible for distribution of liquid fuels funds under the Liquid Fuels Tax Municipal Allocation Law.

Miles of Highway per County Square Mile

Z Score of % Miles of Highway per Square Mile

Z Score

- █ < -0.50 Std. Dev.
- █ -0.50 - 0.50 Std. Dev.
- █ 0.50 - 1.5 Std. Dev.
- █ 1.5 - 2.5 Std. Dev.
- █ > 2.5 Std. Dev.

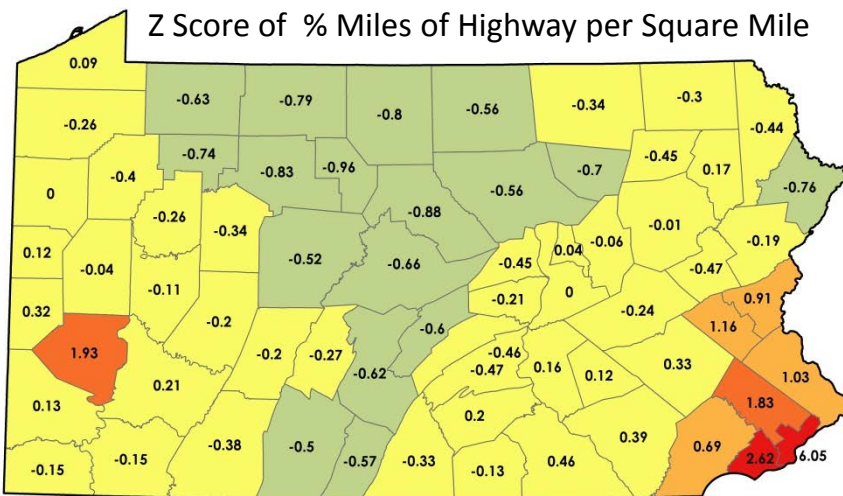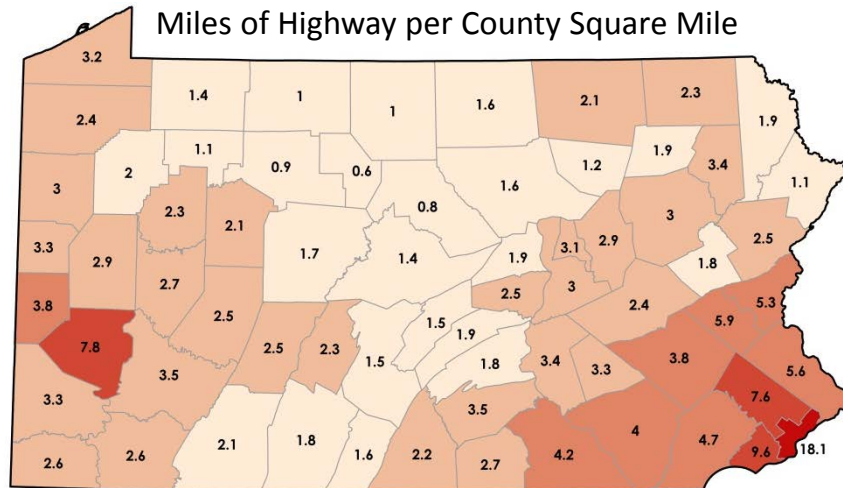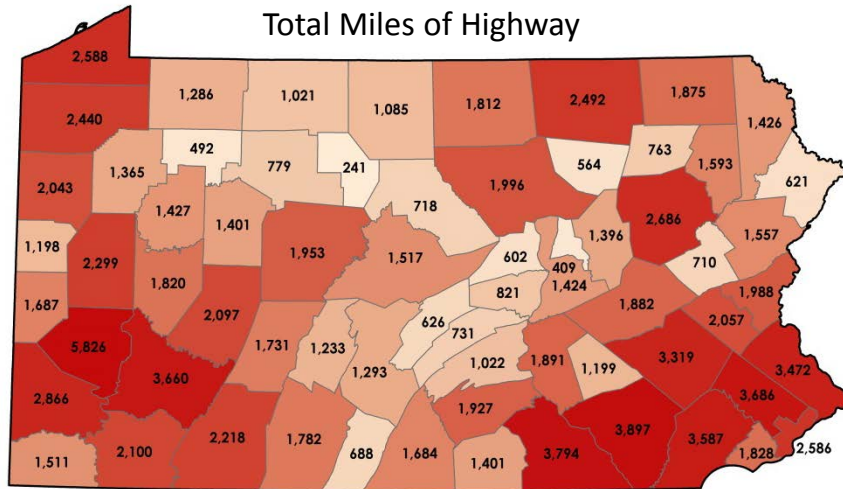**Data Sources:** PA Dept. of Transportation. http://www.dot.state.pa.us/

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Total Miles of Highway (2010)	% PADOT/ State/Federal Highways	Local Highways	Miles of Highway per Cnty. Sq. Mi.	Z Score Per Sq. Mi.	Z Score Rank
Philadelphia County	2,586	0.14	0.86	18.12	6.05	1
Delaware County	1,828	0.26	0.74	9.56	2.62	2
Allegheny County	5,826	0.21	0.79	7.83	1.93	3
Montgomery County	3,686	0.23	0.77	7.57	1.83	4
Lehigh County	2,057	0.28	0.72	5.91	1.16	5
Bucks County	3,472	0.29	0.71	5.58	1.03	6
Northampton County	1,988	0.25	0.75	5.27	0.91	7
Chester County	3,587	0.30	0.70	4.72	0.69	8
York County	3,794	0.30	0.70	4.16	0.46	9
Lancaster County	3,897	0.28	0.72	3.97	0.39	10
Berks County	3,319	0.28	0.72	3.84	0.33	11
Beaver County	1,687	0.39	0.61	3.80	0.32	12
Westmoreland County	3,660	0.35	0.65	3.53	0.21	13
Cumberland County	1,927	0.34	0.66	3.50	0.20	14
Lackawanna County	1,593	0.36	0.64	3.43	0.17	15
Dauphin County	1,891	0.30	0.70	3.41	0.16	16
Washington County	2,866	0.39	0.61	3.33	0.13	17
Lebanon County	1,199	0.31	0.69	3.30	0.12	18
Lawrence County	1,198	0.34	0.66	3.30	0.12	19
Erie County	2,588	0.31	0.69	3.22	0.09	20
Montour County	409	0.44	0.56	3.09	0.04	21
Northumberland County	1,424	0.37	0.63	3.00	0.00	22
Mercer County	2,043	0.38	0.62	2.99	0.00	23
Luzerne County	2,686	0.34	0.66	2.97	-0.01	24
Butler County	2,299	0.30	0.70	2.89	-0.04	25
Columbia County	1,396	0.36	0.64	2.85	-0.06	26
Armstrong County	1,820	0.37	0.63	2.74	-0.11	27
Adams County	1,401	0.41	0.59	2.69	-0.13	28
Fayette County	2,100	0.38	0.62	2.63	-0.15	29
Greene County	1,511	0.38	0.62	2.61	-0.15	30
Monroe County	1,557	0.35	0.65	2.52	-0.19	31
Indiana County	2,097	0.40	0.60	2.51	-0.20	32
Cambria County	1,731	0.40	0.60	2.50	-0.20	33
Snyder County	821	0.37	0.63	2.47	-0.21	34
Schuylkill County	1,882	0.32	0.68	2.40	-0.24	35
Crawford County	2,440	0.39	0.61	2.35	-0.26	36
Clarion County	1,427	0.34	0.66	2.35	-0.26	37
Blair County	1,233	0.38	0.62	2.34	-0.27	38
Susquehanna County	1,875	0.42	0.58	2.25	-0.30	39
Franklin County	1,684	0.38	0.62	2.18	-0.33	40
Bradford County	2,492	0.36	0.64	2.15	-0.34	41
Jefferson County	1,401	0.40	0.60	2.14	-0.34	42
Somerset County	2,218	0.42	0.58	2.05	-0.38	43
Venango County	1,365	0.39	0.61	2.00	-0.40	44
Wayne County	1,426	0.51	0.49	1.90	-0.44	45
Union County	602	0.48	0.52	1.89	-0.45	46
Wyoming County	763	0.48	0.52	1.88	-0.45	47
Juniata County	731	0.49	0.51	1.86	-0.46	48
Carbon County	710	0.43	0.57	1.84	-0.47	49
Perry County	1,022	0.41	0.59	1.83	-0.47	50
Bedford County	1,782	0.48	0.52	1.75	-0.50	51
Clearfield County	1,953	0.42	0.58	1.69	-0.52	52
Lycoming County	1,996	0.37	0.63	1.60	-0.56	53
Tioga County	1,812	0.37	0.63	1.59	-0.56	54
Fulton County	688	0.53	0.47	1.57	-0.57	55
Mifflin County	626	0.39	0.61	1.51	-0.60	56
Huntingdon County	1,293	0.51	0.49	1.46	-0.62	57
Warren County	1,286	0.52	0.48	1.43	-0.63	58
Centre County	1,517	0.41	0.59	1.36	-0.66	59
Sullivan County	564	0.47	0.53	1.25	-0.70	60
Forest County	492	0.67	0.33	1.14	-0.74	61
Pike County	621	0.59	0.41	1.09	-0.76	62
McKean County	1,021	0.53	0.47	1.04	-0.79	63
Potter County	1,085	0.41	0.59	1.00	-0.80	64
Elk County	779	0.52	0.48	0.93	-0.83	65
Clinton County	718	0.43	0.57	0.80	-0.88	66
Cameron County	241	0.48	0.52	0.60	-0.96	67

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Farms and Change in Farmland

Total Acres in Farmland (2007)

Washington County lost the most farmland of all 67 PA counties from 2002-2007 (-9.1%). The PA average was ~1%.

The United States Department of Agriculture (USDA) defines a farm as any place from which $1,000 or more of agricultural products were, or normally world be, produced and sold during the Census year.

The average percent of farmland per county in Pennsylvania has remained at 27% from 1997 – 2007, and the average farm size was 124 acres in 2007).

% Change in County Farmland (2002-2007)

This Z score in the table is multiplied by -1 because the category Z score summary scores require positive values to indicate less-desirable conditions. In this instance, loss of farmland is less desirable than an increase in farmland. The Z score map (left) shows original Z scores.

Z Score of % Change in County Farmland

Z Score

Color	Range
	< -2.5 Std. Dev.
	-2.5 - -1.5 Std. Dev.
	-1.5 - -0.50 Std. Dev.
	-0.50 - 0.50 Std. Dev.
	0.50 - 1.5 Std. Dev.
	> 1.5 Std. Dev.

Data Sources: National Agricultural Statistics Service, 2002 and 2007 Census of Agriculture.
http://www.nass.usda.gov/Statistics_by_State/Pennsylvania/index.asp

$$ Z = \frac{(\text{County Value}) - (\text{Average of All Counties})}{(\text{Standard Deviation of All Counties})} $$

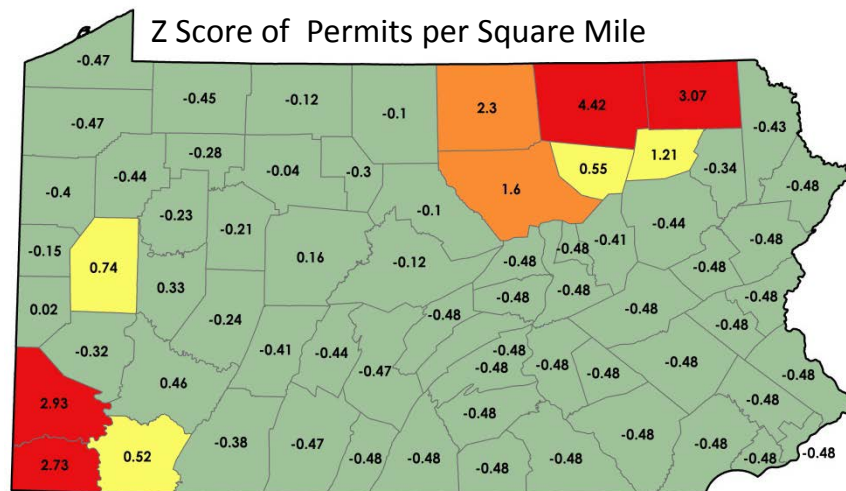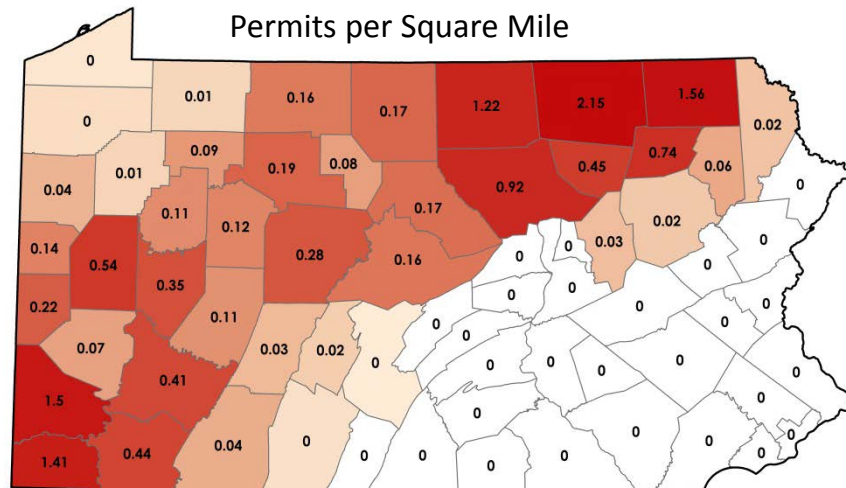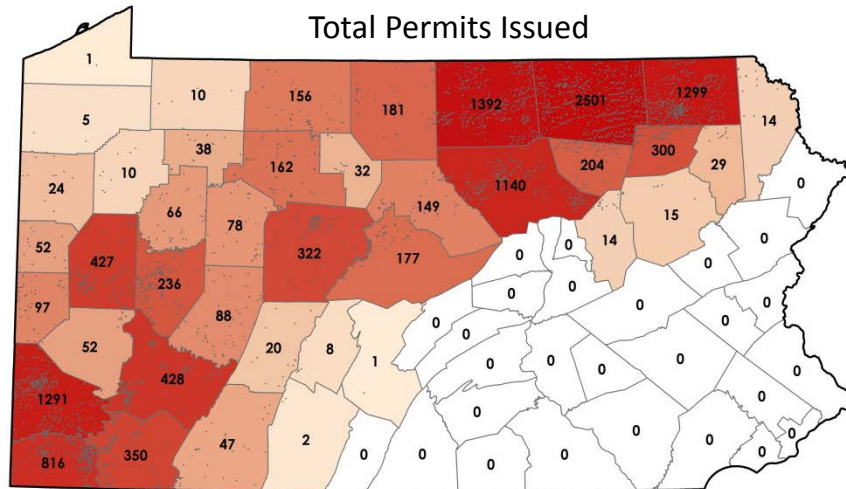Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	# Farms 2002	# Farms 2007	Acres in Farmland 2002	Acres in Farmland 2007	% Cnty Land in Farms 2002	% Cnty Land in Farms 2007	% Change 2002-2007	Z Score Chg. Land in Farms 2002-2007	Z Score Rank
Washington County	2,506	2,023	261,139	211,053	47.60%	38.47%	-9.13%	3.38	1
Susquehanna County	1,116	1,008	189,287	158,218	35.94%	30.04%	-5.90%	2.30	2
Lebanon County	1,104	1,193	125,066	113,486	54.01%	49.01%	-5.00%	2.00	3
Bradford County	1,495	1,457	302,475	266,635	41.07%	36.20%	-4.87%	1.96	4
Wayne County	661	603	113,167	92,939	24.24%	19.91%	-4.33%	1.78	5
Northampton County	487	486	77,556	68,252	32.41%	28.53%	-3.89%	1.63	6
Lehigh County	618	516	91,304	84,643	41.15%	38.15%	-3.00%	1.33	7
Butler County	1,174	1,116	143,985	129,850	28.53%	25.73%	-2.80%	1.27	8
Union County	521	575	69,424	63,795	34.25%	31.47%	-2.78%	1.26	9
Somerset County	1,194	1,156	223,323	206,651	32.47%	30.04%	-2.42%	1.14	10
Centre County	1,213	1,146	165,234	148,464	23.31%	20.94%	-2.37%	1.12	11
Tioga County	973	1,011	200,041	184,108	27.57%	25.37%	-2.20%	1.07	12
Lycoming County	1,323	1,211	177,347	160,456	22.44%	20.30%	-2.14%	1.05	13
Montgomery County	729	719	48,327	41,908	15.63%	13.55%	-2.08%	1.03	14
Armstrong County	739	794	130,637	122,275	31.21%	29.21%	-2.00%	1.00	15
Adams County	1,261	1,289	181,081	174,595	54.41%	52.46%	-1.95%	0.98	16
Dauphin County	852	836	94,983	89,533	28.25%	26.63%	-1.62%	0.87	17
Luzerne County	548	610	73,216	66,577	12.84%	11.68%	-1.16%	0.72	18
Sullivan County	170	165	31,096	27,821	10.80%	9.66%	-1.14%	0.71	19
Monroe County	324	349	32,938	29,165	8.47%	7.50%	-0.97%	0.66	20
Potter County	343	378	94,396	88,457	13.64%	12.78%	-0.86%	0.62	21
Franklin County	1,418	1,540	244,751	242,634	49.54%	49.11%	-0.43%	0.48	22
Columbia County	884	962	123,514	122,621	39.75%	39.46%	-0.29%	0.43	23
Chester County	1,918	1,733	168,165	166,891	34.76%	34.49%	-0.26%	0.42	24
Bucks County	917	934	76,831	75,883	19.76%	19.51%	-0.24%	0.41	25
McKean County	265	313	41,634	41,466	6.63%	6.60%	-0.03%	0.34	26
Cambria County	634	656	87,997	87,924	19.98%	19.97%	-0.02%	0.34	27
Philadelphia County	9	17	260	262	0.30%	0.30%	0.00%	0.33	28
Jefferson County	548	597	86,899	87,043	20.71%	20.75%	0.03%	0.32	29
Venango County	473	487	64,528	64,796	14.93%	15.00%	0.06%	0.31	30
Snyder County	784	998	100,034	100,179	47.19%	47.26%	0.07%	0.31	31
Clearfield County	468	473	60,961	62,721	8.30%	8.54%	0.24%	0.25	32
Carbon County	206	207	19,257	20,035	7.86%	8.18%	0.32%	0.23	33
Cameron County	35	34	4,254	5,092	1.67%	2.00%	0.33%	0.22	34
Blair County	504	523	85,687	87,434	25.46%	25.98%	0.52%	0.16	35
Clinton County	420	537	53,166	56,626	9.32%	9.93%	0.61%	0.13	36
Allegheny County	464	534	33,788	38,023	7.23%	8.14%	0.91%	0.03	37
Huntingdon County	848	930	143,048	148,289	25.53%	26.47%	0.94%	0.02	38
Fulton County	561	608	100,575	103,516	35.91%	36.96%	1.05%	-0.02	39
Berks County	1,791	1,980	215,679	222,119	39.22%	40.39%	1.17%	-0.06	40
York County	2,546	2,370	285,336	292,507	49.28%	50.52%	1.24%	-0.08	41
Erie County	1,283	1,609	166,130	173,125	32.37%	33.73%	1.36%	-0.12	42
Mifflin County	752	1,024	90,486	94,133	34.42%	35.81%	1.39%	-0.13	43
Delaware County	76	79	2,659	4,361	2.26%	3.70%	1.44%	-0.15	44
Schuylkill County	838	966	110,946	118,501	22.26%	23.78%	1.52%	-0.17	45
Beaver County	645	824	62,801	67,075	22.54%	24.08%	1.53%	-0.18	46
Crawford County	1,416	1,468	221,774	232,093	34.21%	35.80%	1.59%	-0.20	47
Mercer County	1,239	1,210	164,306	171,860	38.21%	39.97%	1.76%	-0.25	48
Forest County	59	84	5,679	10,728	2.07%	3.92%	1.84%	-0.28	49
Elk County	226	376	22,167	33,258	4.18%	6.27%	2.09%	-0.36	50
Lancaster County	5,293	5,462	411,848	425,336	67.80%	70.02%	2.22%	-0.41	51
Greene County	881	1,245	141,684	150,203	38.44%	40.75%	2.31%	-0.44	52
Lackawanna County	289	417	32,931	39,756	11.22%	13.54%	2.32%	-0.44	53
Lawrence County	703	708	86,987	92,391	37.70%	40.05%	2.34%	-0.45	54
Westmoreland County	1,353	1,415	150,967	167,489	23.07%	25.59%	2.52%	-0.51	55
Bedford County	1,093	1,173	192,811	210,990	29.69%	32.49%	2.80%	-0.60	56
Fayette County	978	1,220	125,034	140,688	24.73%	27.82%	3.10%	-0.70	57
Warren County	499	831	78,088	99,582	13.81%	17.61%	3.80%	-0.93	58
Cumberland County	1,116	1,550	143,159	157,388	40.66%	44.70%	4.04%	-1.01	59
Perry County	752	1,002	129,092	144,375	36.44%	40.75%	4.31%	-1.10	60
Juniata County	644	788	86,203	97,681	34.39%	38.97%	4.58%	-1.19	61
Pike County	51	54	10,113	27,569	2.89%	7.87%	4.99%	-1.33	62
Indiana County	903	1,544	157,286	187,711	29.63%	35.36%	5.73%	-1.58	63
Clarion County	591	872	108,860	132,140	28.23%	34.27%	6.04%	-1.68	64
Wyoming County	358	649	61,846	77,957	24.33%	30.66%	6.34%	-1.78	65
Northumberland County	719	936	119,129	147,660	40.47%	50.16%	9.69%	-2.90	66
Montour County	304	583	39,964	50,252	47.75%	60.05%	12.29%	-3.76	67

Shale Gas Drilling - Active Permit Sites

Total Permits Issued

Washington and Greene Counties ranked #3 (1.5) and #4 (1.41), respectively, for unconventional (shale) gas wells per square mile. The PA average in 2013 was 0.22 per sq. mi.

According to the PA Department of Environmental Protection, twenty-seven of the sixty-seven counties in Pennsylvania have been issued at least one 'unconventional' gas well drilling permit.

An unconventional gas well is a bore hole drilled or being drilled for the purpose of producing natural gas from an unconventional formation.

Unconventional formation is a geological shale formation existing below the base of the Elk Sandstone or its geologic equivalent stratigraphic interval where natural gas generally cannot be produced at economic flow rates or in economic volumes except by vertical or horizontal well bores stimulated by hydraulic fracture treatments or by using multilateral well bores or other techniques to expose more of the formation to the well bore.

This is commonly known as a 'shale' gas well.

Permits per Square Mile

Z Score of Permits per Square Mile

Z Score

🟩	< 0.50 Std. Dev.
🟨	0.50 - 1.5 Std. Dev.
🟧	1.5 - 2.5 Std. Dev.
🟥	> 2.5 Std. Dev.

Data Sources: PA Dept. of Environmental Protection.
www.pasda.psu.edu

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Total Permits 2012	Permits per sq. mi. 2012	Z Score Permits per sq. mi.	Z- Score Rank
Bradford County	2,501	2.15	4.42	1
Susquehanna County	1,299	1.56	3.07	2
Washington County	1,291	1.50	2.93	3
Greene County	816	1.41	2.73	4
Tioga County	1,392	1.22	2.30	5
Lycoming County	1,140	0.92	1.60	6
Wyoming County	300	0.74	1.21	7
Butler County	427	0.54	0.74	8
Sullivan County	204	0.45	0.55	9
Fayette County	350	0.44	0.52	10
Westmoreland County	428	0.41	0.46	11
Armstrong County	236	0.35	0.33	12
Clearfield County	322	0.28	0.16	13
Beaver County	97	0.22	0.02	14
Elk County	162	0.19	-0.04	15
Potter County	181	0.17	-0.10	16
Clinton County	149	0.17	-0.10	17
Centre County	177	0.16	-0.12	18
McKean County	156	0.16	-0.12	19
Lawrence County	52	0.14	-0.15	20
Jefferson County	78	0.12	-0.21	21
Clarion County	66	0.11	-0.23	22
Indiana County	88	0.11	-0.24	23
Forest County	38	0.09	-0.28	24
Cameron County	32	0.08	-0.30	25
Allegheny County	52	0.07	-0.32	26
Lackawanna County	29	0.06	-0.34	27
Somerset County	47	0.04	-0.38	28
Mercer County	24	0.04	-0.40	29
Cambria County	20	0.03	-0.41	30
Columbia County	14	0.03	-0.41	31
Wayne County	14	0.02	-0.43	32
Luzerne County	15	0.02	-0.44	33
Blair County	8	0.02	-0.44	34
Venango County	10	0.01	-0.44	35
Warren County	10	0.01	-0.45	36
Crawford County	5	0.00	-0.47	37
Bedford County	2	0.00	-0.47	38
Erie County	1	0.00	-0.47	39
Huntingdon County	1	0.00	-0.47	40
Adams County	0	0.00	-0.48	Tie 41
Berks County	0	0.00	-0.48	Tie 41
Bucks County	0	0.00	-0.48	Tie 41
Carbon County	0	0.00	-0.48	Tie 41
Chester County	0	0.00	-0.48	Tie 41
Cumberland County	0	0.00	-0.48	Tie 41
Dauphin County	0	0.00	-0.48	Tie 41
Delaware County	0	0.00	-0.48	Tie 41
Franklin County	0	0.00	-0.48	Tie 41
Fulton County	0	0.00	-0.48	Tie 41
Juniata County	0	0.00	-0.48	Tie 41
Lancaster County	0	0.00	-0.48	Tie 41
Lebanon County	0	0.00	-0.48	Tie 41
Lehigh County	0	0.00	-0.48	Tie 41
Mifflin County	0	0.00	-0.48	Tie 41
Monroe County	0	0.00	-0.48	Tie 41
Montgomery County	0	0.00	-0.48	Tie 41
Montour County	0	0.00	-0.48	Tie 41
Northampton County	0	0.00	-0.48	Tie 41
Northumberland County	0	0.00	-0.48	Tie 41
Perry County	0	0.00	-0.48	Tie 41
Philadelphia County	0	0.00	-0.48	Tie 41
Pike County	0	0.00	-0.48	Tie 41
Schuylkill County	0	0.00	-0.48	Tie 41
Snyder County	0	0.00	-0.48	Tie 41
Union County	0	0.00	-0.48	Tie 41
York County	0	0	-0.35	Tie 41

Mean

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Total Withdrawals

Withdrawals per 100 Square Miles

Z Score of Withdrawals per Square Miles

Z Score

Color	Range
(green)	< -0.50 Std. Dev.
(yellow)	-0.50 - 0.50 Std. Dev.
(orange)	0.50 - 1.5 Std. Dev.
(red)	> 1.5 Std. Dev.

Data Sources: PA Dept. of Environmental Protection.
www.pasda.psu.edu

$$Z = \frac{\text{(County Value)} - \text{(Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.
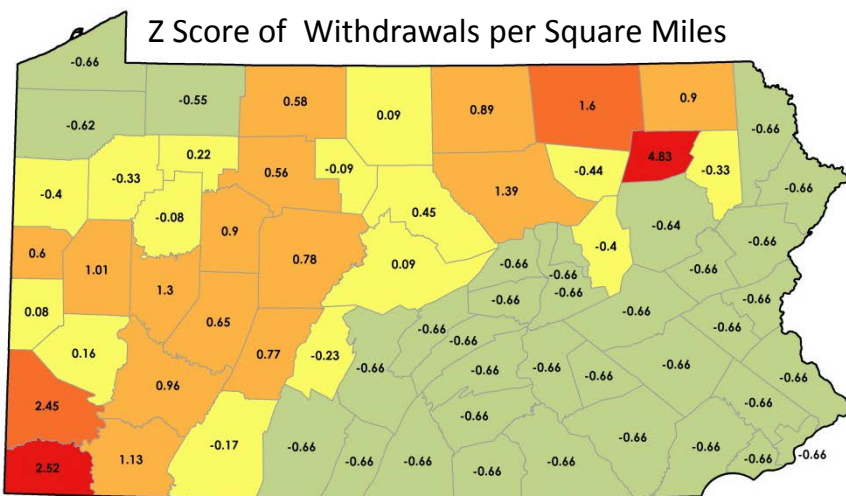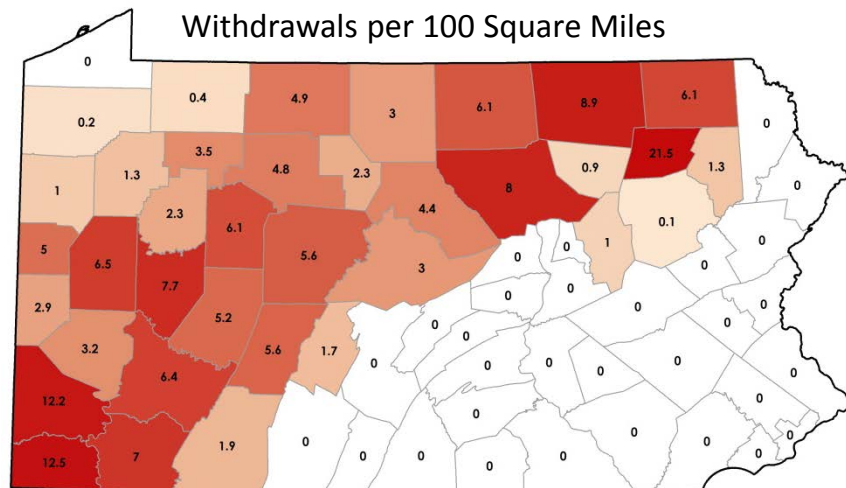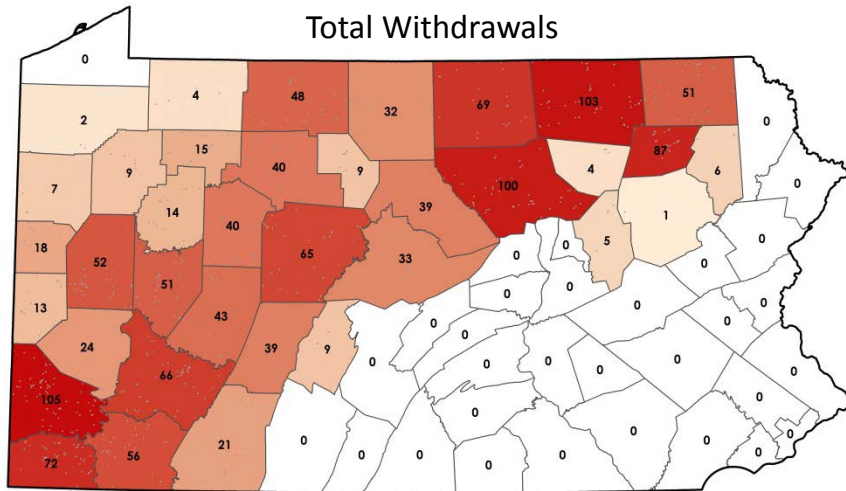
Greene and Washington Counties ranked #2 and #3 for the most water withdrawals for shale gas development per 100 square miles..

Water withdrawals include ground water, surface water, and municipal (interconnection) withdrawals.

Ground water withdrawals include subfacilities that may be a well, spring, quarry, infiltration gallery, deep mine, surface mine or an unidentified facility type. Surface water withdrawals include subfacilities that may be an instream diversion, intake from a dam, natural lake, pond, river well, or an unidentified facility type. An Interconnection subfacility type represents the point of interconnection between a water resources primary facilities. The subfacility type may be for an interconnection between two public water supply agencies or between a public water supply agency and a commercial or industrial water user.

For a further breakdown of these withdrawal type, see 'Water Resrouces_2013_04' spatial data by the PA DEP.

PA Counties	Total Withdrawals	Withdrawals per 100 sq. mi.	Z Score Withdrawals per 100 sq. mi.	Z- Score Rank
Wyoming County	87	21.5	4.83	1
Greene County	72	12.5	2.52	2
Washington County	105	12.2	2.45	3
Bradford County	103	8.9	1.60	4
Lycoming County	100	8.0	1.39	5
Armstrong County	51	7.7	1.30	6
Fayette County	56	7.0	1.13	7
Butler County	52	6.5	1.01	8
Westmoreland County	66	6.4	0.96	9
Susquehanna County	51	6.1	0.90	10
Jefferson County	40	6.1	0.90	11
Tioga County	69	6.1	0.89	12
Clearfield County	65	5.6	0.78	13
Cambria County	39	5.6	0.77	14
Indiana County	43	5.2	0.65	15
Lawrence County	18	5.0	0.60	16
McKean County	48	4.9	0.58	17
Elk County	40	4.8	0.56	18
Clinton County	39	4.4	0.45	19
Forest County	15	3.5	0.22	20
Allegheny County	24	3.2	0.16	21
Centre County	33	3.0	0.09	22
Potter County	32	3.0	0.09	23
Beaver County	13	2.9	0.08	24
Clarion County	14	2.3	-0.08	25
Cameron County	9	2.3	-0.09	26
Somerset County	21	1.9	-0.17	27
Blair County	9	1.7	-0.23	28
Venango County	9	1.3	-0.33	29
Lackawanna County	6	1.3	-0.33	30
Mercer County	7	1.0	-0.40	31
Columbia County	5	1.0	-0.40	32
Sullivan County	4	0.9	-0.44	33
Warren County	4	0.4	-0.55	34
Crawford County	2	0.2	-0.62	35
Luzerne County	1	0.1	-0.64	36
Adams County	0	0.0	-0.66	37
Bedford County	0	0.0	-0.66	38
Berks County	0	0.0	-0.66	39
Bucks County	0	0.0	-0.66	40
Carbon County	0	0.0	-0.66	41
Chester County	0	0.0	-0.66	42
Cumberland County	0	0.0	-0.66	43
Dauphin County	0	0.0	-0.66	44
Delaware County	0	0.0	-0.66	45
Erie County	0	0.0	-0.66	46
Franklin County	0	0.0	-0.66	47
Fulton County	0	0.0	-0.66	48
Huntingdon County	0	0.0	-0.66	49
Juniata County	0	0.0	-0.66	50
Lancaster County	0	0.0	-0.66	51
Lebanon County	0	0.0	-0.66	52
Lehigh County	0	0.0	-0.66	53
Mifflin County	0	0.0	-0.66	54
Monroe County	0	0.0	-0.66	55
Montgomery County	0	0.0	-0.66	56
Montour County	0	0.0	-0.66	57
Northampton County	0	0.0	-0.66	58
Northumberland County	0	0.0	-0.66	59
Perry County	0	0.0	-0.66	60
Philadelphia County	0	0.0	-0.66	61
Pike County	0	0.0	-0.66	62
Schuylkill County	0	0.0	-0.66	63
Snyder County	0	0.0	-0.66	64
Union County	0	0.0	-0.66	65
Wayne County	0	0.0	-0.66	66
York County	0	0.0	-0.66	67

Mean

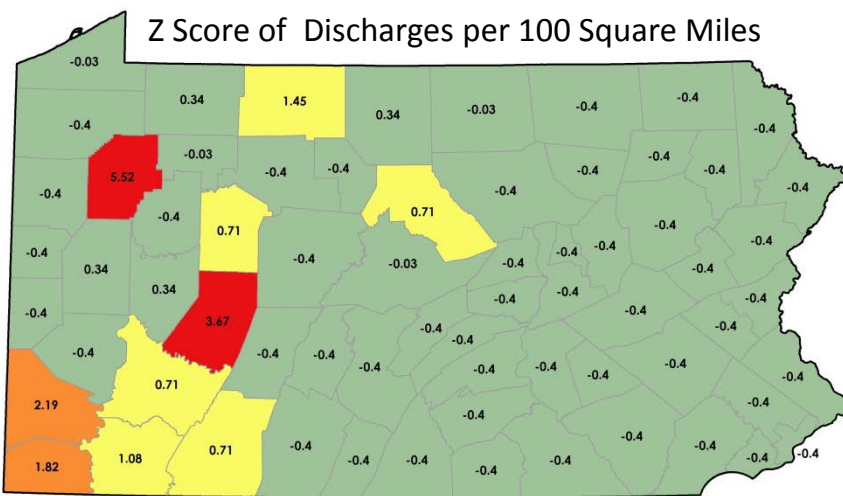CCJ Educate • Empower • Organize www.coalfieldjustice.org

Total Discharges
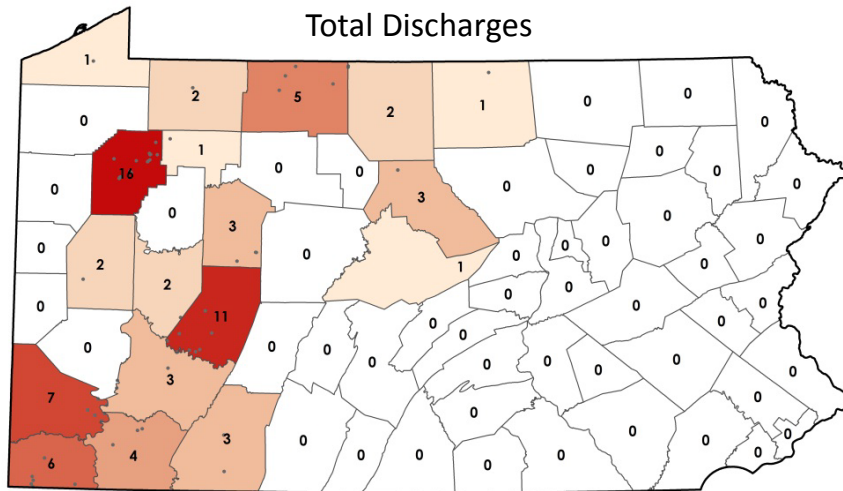
Greene and Washington Counties ranked #3 (1.04) and #4 (0.81), respectively, for the most oil and gas related water discharges per 100 square miles among the sixty-seven counties in PA.

Oil and Gas Pollution Control facilities 2013_04. Data shows those facilities that are either active or proposed. Facility types include discharge points and treatment plants. Monitoring points are not included in these numbers.
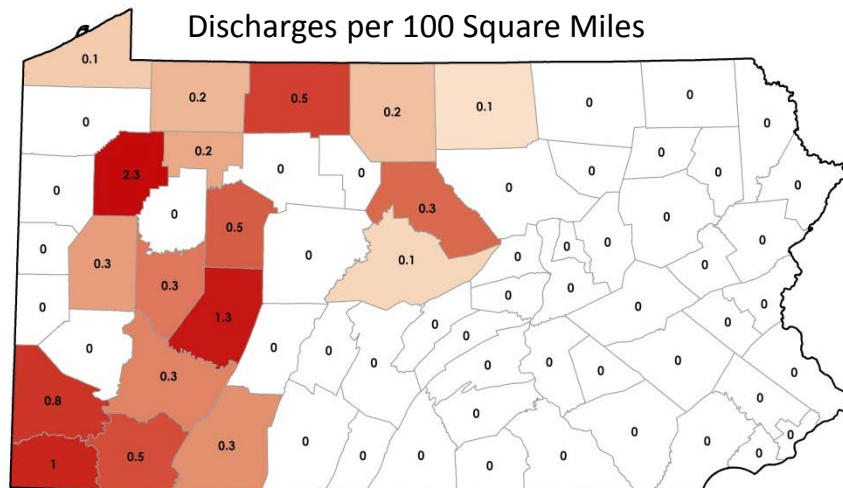
A Discharge Point is the outfall from a wastewater treatment facility for oil and gas fluids. A Treatment Plant is a facility for treating oil and gas wastewater to achieve permit effluent limits.

Discharges per 100 Square Miles

Z Score of Discharges per 100 Square Miles

Z Score

Color	Range
(green)	< 0.50 Std. Dev.
(yellow)	0.50 - 1.5 Std. Dev.
(orange)	1.5 - 2.5 Std. Dev.
(red)	> 2.5 Std. Dev.

Data Sources: PA Dept. of Environmental Protection.
www.pasda.psu.edu

$$Z = \frac{(\text{County Value}) - (\text{Average of All Counties})}{(\text{Standard Deviation of All Counties})}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Square Miles	Total Discharges	Discharges per 100 Sq. Mi.	Z-Score Discharges per 100 sq. mi.	Z- Score Rank
Venango County	683	16	2.34	5.95	1
Indiana County	835	11	1.32	3.18	2
Greene County	578	6	1.04	2.43	3
Washington County	862	7	0.81	1.82	4
McKean County	986	5	0.51	0.99	5
Fayette County	799	4	0.50	0.98	6
Jefferson County	655	3	0.46	0.86	7
Clinton County	894	3	0.34	0.53	8
Armstrong County	665	2	0.30	0.43	9
Westmoreland County	1,036	3	0.29	0.40	10
Somerset County	1,082	3	0.28	0.37	11
Butler County	795	2	0.25	0.30	12
Forest County	432	1	0.23	0.25	13
Warren County	899	2	0.22	0.22	14
Potter County	1,083	2	0.18	0.12	15
Erie County	804	1	0.12	-0.04	16
Centre County	1,115	1	0.09	-0.14	17
Tioga County	1,138	1	0.09	-0.14	18
Adams County	522	0	0.00	-0.38	Tie 19
Allegheny County	744	0	0.00	-0.38	Tie 19
Beaver County	444	0	0.00	-0.38	Tie 19
Bedford County	1,016	0	0.00	-0.38	Tie 19
Berks County	865	0	0.00	-0.38	Tie 19
Blair County	527	0	0.00	-0.38	Tie 19
Bradford County	1,162	0	0.00	-0.38	Tie 19
Bucks County	622	0	0.00	-0.38	Tie 19
Cambria County	693	0	0.00	-0.38	Tie 19
Cameron County	400	0	0.00	-0.38	Tie 19
Carbon County	387	0	0.00	-0.38	Tie 19
Chester County	759	0	0.00	-0.38	Tie 19
Clarion County	608	0	0.00	-0.38	Tie 19
Clearfield County	1,154	0	0.00	-0.38	Tie 19
Columbia County	490	0	0.00	-0.38	Tie 19
Crawford County	1,038	0	0.00	-0.38	Tie 19
Cumberland County	551	0	0.00	-0.38	Tie 19
Dauphin County	555	0	0.00	-0.38	Tie 19
Delaware County	191	0	0.00	-0.38	Tie 19
Elk County	833	0	0.00	-0.38	Tie 19
Franklin County	773	0	0.00	-0.38	Tie 19
Fulton County	438	0	0.00	-0.38	Tie 19
Huntingdon County	889	0	0.00	-0.38	Tie 19
Juniata County	393	0	0.00	-0.38	Tie 19
Lackawanna County	465	0	0.00	-0.38	Tie 19
Lancaster County	982	0	0.00	-0.38	Tie 19
Lawrence County	363	0	0.00	-0.38	Tie 19
Lebanon County	363	0	0.00	-0.38	Tie 19
Lehigh County	348	0	0.00	-0.38	Tie 19
Luzerne County	906	0	0.00	-0.38	Tie 19
Lycoming County	1,244	0	0.00	-0.38	Tie 19
Mercer County	682	0	0.00	-0.38	Tie 19
Mifflin County	415	0	0.00	-0.38	Tie 19
Monroe County	617	0	0.00	-0.38	Tie 19
Montgomery County	487	0	0.00	-0.38	Tie 19
Montour County	132	0	0.00	-0.38	Tie 19
Northampton County	377	0	0.00	-0.38	Tie 19
Northumberland County	475	0	0.00	-0.38	Tie 19
Perry County	558	0	0.00	-0.38	Tie 19
Philadelphia County	143	0	0.00	-0.38	Tie 19
Pike County	567	0	0.00	-0.38	Tie 19
Schuylkill County	783	0	0.00	-0.38	Tie 19
Snyder County	332	0	0.00	-0.38	Tie 19
Sullivan County	452	0	0.00	-0.38	Tie 19
Susquehanna County	833	0	0.00	-0.38	Tie 19
Union County	319	0	0.00	-0.38	Tie 19
Wayne County	751	0	0.00	-0.38	Tie 19
Wyoming County	405	0	0.00	-0.38	Tie 19
York County	912	0	0.00	-0.38	Tie 19

Landscape

Community Indicators

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Coal Mining – Underground Acres (Active, Pending, and Known Legacy)

Underground Acres Coal Mined
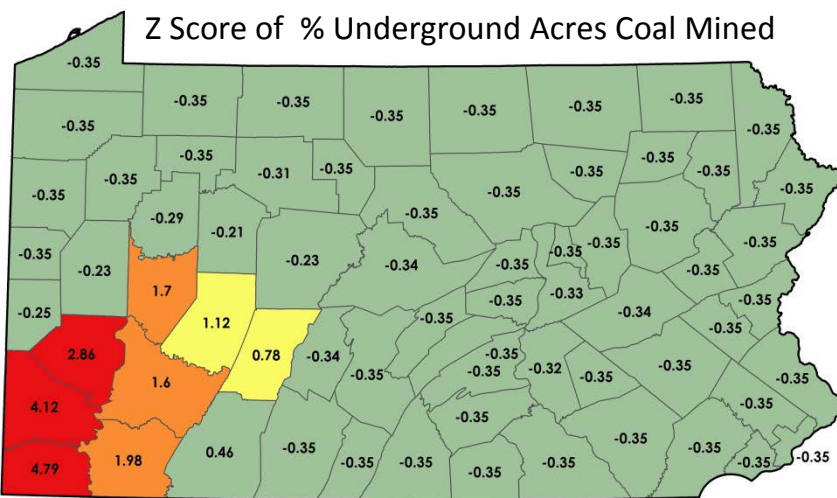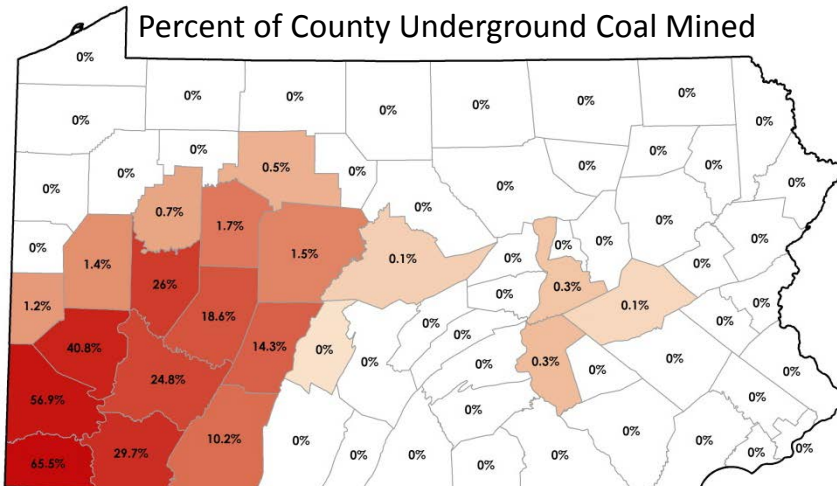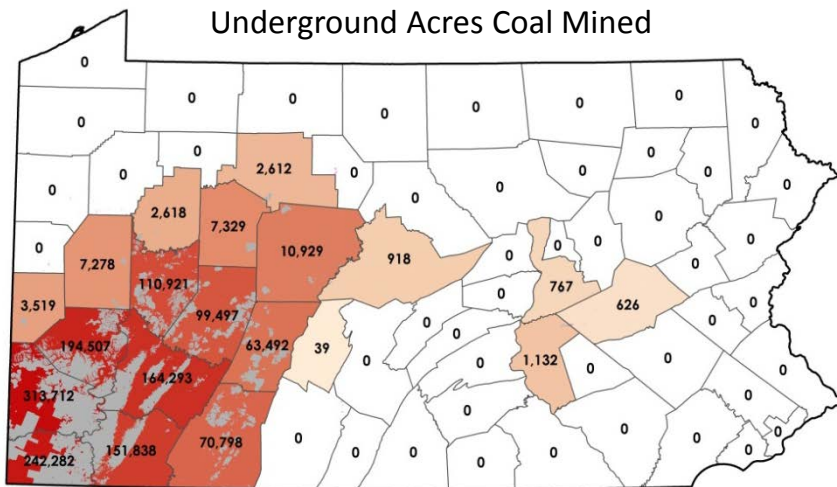
Greene and Washington Counties ranked #1 (65.5%) and #2 (56.9%), respectively, for percent of county undermined or permitted by underground coal operations. The PA average in 2013 was 4.4% underground coal mined.

According to the PA Department of Environmental Protection, twenty of the sixty-seven counties in Pennsylvania are known to have experienced underground coal mining (UGCM) that has been documented.

Five counties have experienced longwall coal mining at some point in time. (Armstrong, Cambria, Greene, Indiana, and Washington). Currently, only Greene and Washington Counties have active and/or pending longwall coalmining permits.

The longwall mines in Green and Washington mine the Pittsburgh Coal Seam, which has a seam height from 62″ to 84″ and between 500′ to 1,200′ below the surface (Coal Age, Feb. 2013).

Percent of County Underground Coal Mined

Z Score of % Underground Acres Coal Mined

Z Score

- 🟩 < 0.50 Std. Dev.
- 🟨 0.50 - 1.5 Std. Dev.
- 🟧 1.5 - 2.5 Std. Dev.
- 🟥 > 2.5 Std. Dev.

Data Sources: PA Dept. of Environmental Protection (Mined-Out Areas) and Underground Mining Permits. www.pasda.psu.edu. USGS Open File Report 96-280. http://pubs.usgs.gov/of/1996/of96-280/

$$Z = \frac{\text{(County Value) - (Average of All Counties)}}{\text{(Standard Deviation of All Counties)}}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Acres UGCM	% of County UGCM	Z Score UGCM	Z- Score Rank
Greene County	242,282	65.50%	4.79	1
Washington County	313,712	56.89%	4.12	2
Allegheny County	194,507	40.85%	2.86	3
Fayette County	151,838	29.71%	1.98	4
Armstrong County	110,921	26.04%	1.70	5
Westmoreland County	164,293	24.78%	1.60	6
Indiana County	99,497	18.62%	1.12	7
Cambria County	63,492	14.32%	0.78	8
Somerset County	70,798	10.23%	0.46	9
Jefferson County	7,329	1.75%	-0.21	10
Clearfield County	10,929	1.48%	-0.23	11
Butler County	7,278	1.43%	-0.23	12
Beaver County	3,519	1.24%	-0.25	13
Clarion County	2,618	0.67%	-0.29	14
Elk County	2,612	0.49%	-0.31	15
Dauphin County	1,132	0.32%	-0.32	16
Northumberland County	767	0.25%	-0.33	17
Centre County	918	0.13%	-0.34	18
Schuylkill County	626	0.12%	-0.34	19
Blair County	39	0.01%	-0.34	20
Adams County	0	0	-0.35	Tie 21
Bedford County	0	0	-0.35	Tie 21
Berks County	0	0	-0.35	Tie 21
Bradford County	0	0	-0.35	Tie 21
Bucks County	0	0	-0.35	Tie 21
Cameron County	0	0	-0.35	Tie 21
Carbon County	0	0	-0.35	Tie 21
Chester County	0	0	-0.35	Tie 21
Clinton County	0	0	-0.35	Tie 21
Columbia County	0	0	-0.35	Tie 21
Crawford County	0	0	-0.35	Tie 21
Cumberland County	0	0	-0.35	Tie 21
Delaware County	0	0	-0.35	Tie 21
Erie County	0	0	-0.35	Tie 21
Forest County	0	0	-0.35	Tie 21
Franklin County	0	0	-0.35	Tie 21
Fulton County	0	0	-0.35	Tie 21
Huntingdon County	0	0	-0.35	Tie 21
Juniata County	0	0	-0.35	Tie 21
Lackawanna County	0	0	-0.35	Tie 21
Lancaster County	0	0	-0.35	Tie 21
Lawrence County	0	0	-0.35	Tie 21
Lebanon County	0	0	-0.35	Tie 21
Lehigh County	0	0	-0.35	Tie 21
Luzerne County	0	0	-0.35	Tie 21
Lycoming County	0	0	-0.35	Tie 21
McKean County	0	0	-0.35	Tie 21
Mercer County	0	0	-0.35	Tie 21
Mifflin County	0	0	-0.35	Tie 21
Monroe County	0	0	-0.35	Tie 21
Montgomery County	0	0	-0.35	Tie 21
Montour County	0	0	-0.35	Tie 21
Northampton County	0	0	-0.35	Tie 21
Perry County	0	0	-0.35	Tie 21
Philadelphia County	0	0	-0.35	Tie 21
Pike County	0	0	-0.35	Tie 21
Potter County	0	0	-0.35	Tie 21
Snyder County	0	0	-0.35	Tie 21
Sullivan County	0	0	-0.35	Tie 21
Susquehanna County	0	0	-0.35	Tie 21
Tioga County	0	0	-0.35	Tie 21
Union County	0	0	-0.35	Tie 21
Venango County	0	0	-0.35	Tie 21
Warren County	0	0	-0.35	Tie 21
Wayne County	0	0	-0.35	Tie 21
Wyoming County	0	0	-0.35	Tie 21
York County	0	0	-0.35	Tie 21

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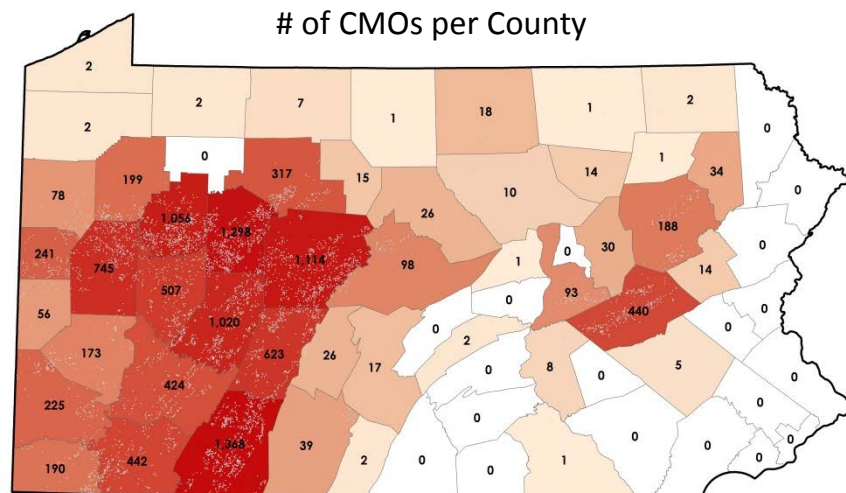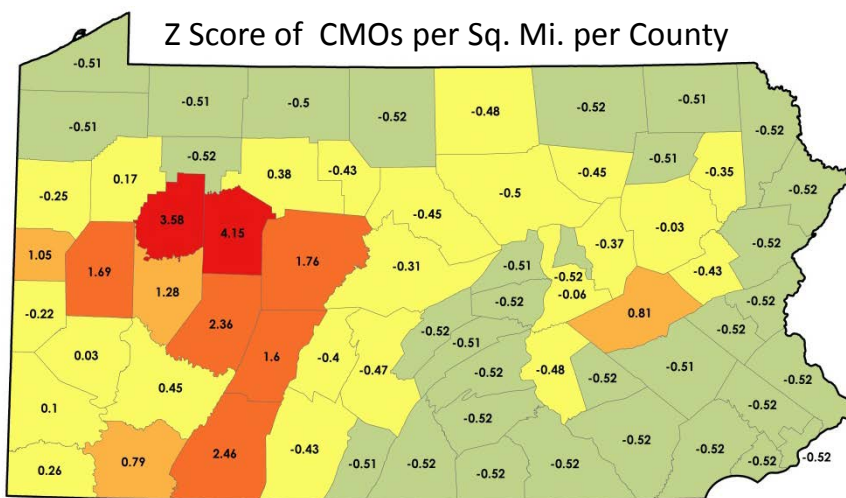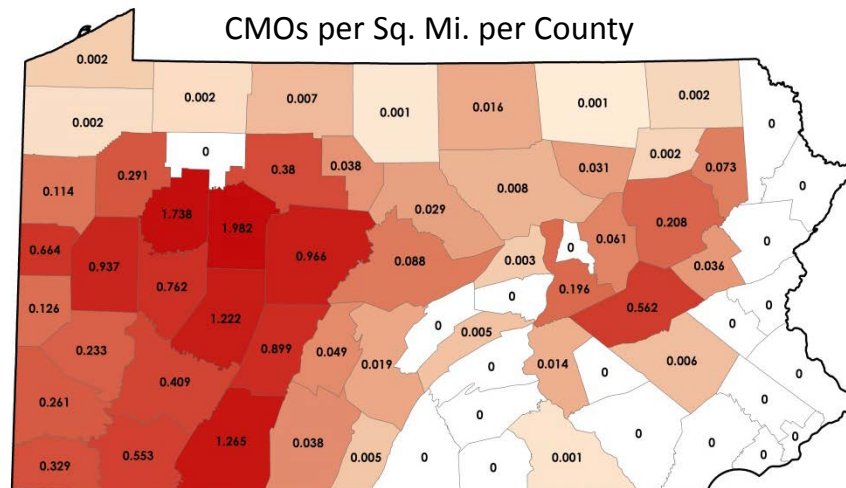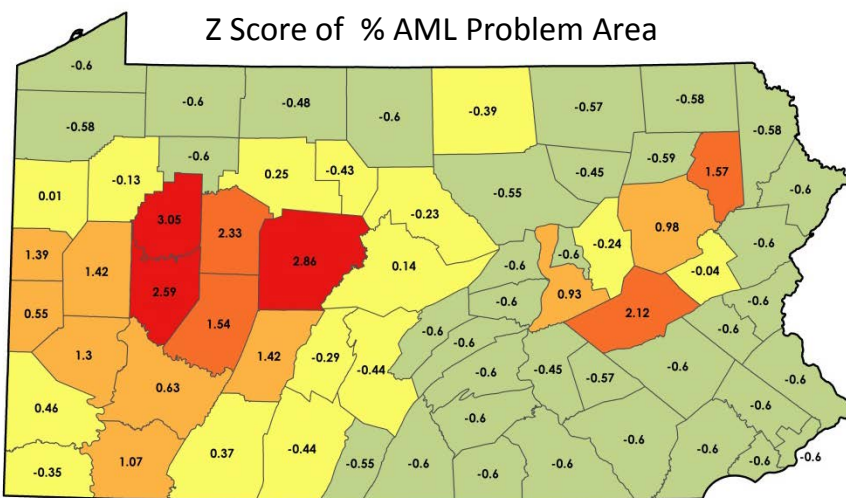
Greene and Washington Counties ranked #14 (0.33) and #16 (0.26), respectively, for the number of surface coal mining operations (CMOs) per square mile. The PA average in 2013 was 0.22 CMOs per square mile per county.

This data shows coal mining operations (CMOs) as points are cataloged by the PA DEP. The density of points per acre per county is used as an indicator.

CMOs in this data include:

- discharge points
- coal storage and preparation facilities
- NPDES discharge points
- post-mining discharges (groundwater seeps and flows)
- refuse disposal facilities
- mining stormwater sites
- refuse reprocessing facilities, and
- surface mines

Untreated discharges that enter clean streams cause acidification, which immediately kills much of the aquatic life. Coal mines that are predicted to have discharges are not permitted; however, coal mining operators are required to treat post-mining discharges in cases where the predictions do not come true.

of CMOs per County

CMOs per Sq. Mi. per County

Z Score of CMOs per Sq. Mi. per County

Z Score

- green: < -0.50 Std. Dev.
- yellow: -0.50 - 0.50 Std. Dev.
- orange: 0.50 - 1.5 Std. Dev.
- dark orange: 1.5 - 2.5 Std. Dev.
- red: > 2.5 Std. Dev.

Data Sources: PA Dept. of Environmental Protection / NPDES. www.pasda.psu.edu.

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

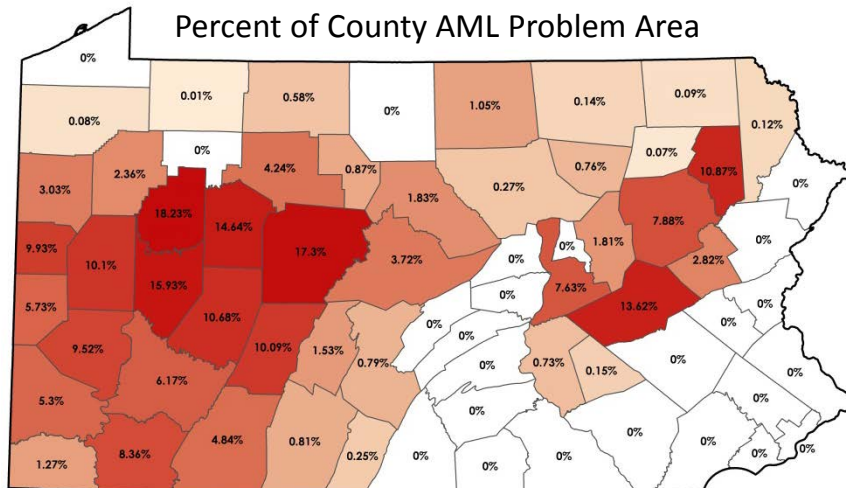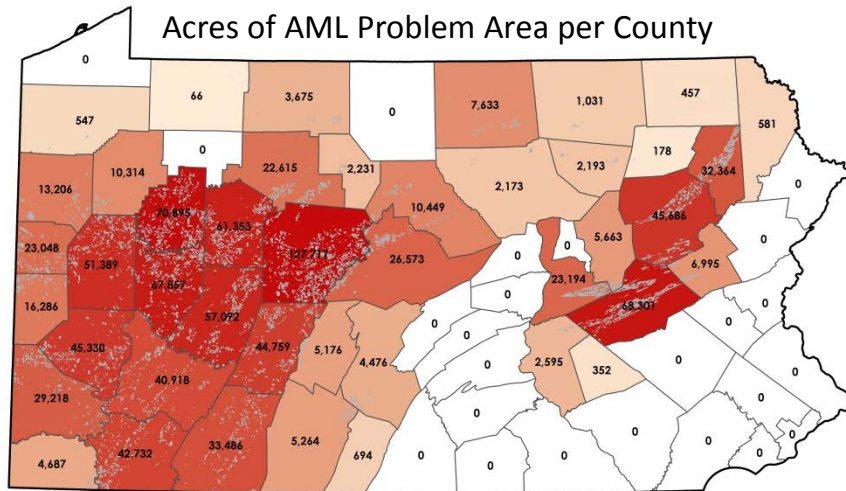Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	# of CMOs	CMOs per Sq. Mi.	Z Score CMOs per sq. mi.	Z Score Rank
Jefferson County	1298	1.98	4.15	1
Clarion County	1056	1.74	3.58	2
Somerset County	1368	1.26	2.46	3
Indiana County	1020	1.22	2.36	4
Clearfield County	1114	0.97	1.76	5
Butler County	745	0.94	1.69	6
Cambria County	623	0.90	1.60	7
Armstrong County	507	0.76	1.28	8
Lawrence County	241	0.66	1.05	9
Schuylkill County	440	0.56	0.81	10
Fayette County	442	0.55	0.79	11
Westmoreland County	424	0.41	0.45	12
Elk County	317	0.38	0.38	13
Greene County	190	0.33	0.26	14
Venango County	199	0.29	0.17	15
Washington County	225	0.26	0.10	16
Allegheny County	173	0.23	0.03	17
Luzerne County	188	0.21	-0.03	18
Northumberland County	93	0.20	-0.06	19
Beaver County	56	0.13	-0.22	20
Mercer County	78	0.11	-0.25	21
Centre County	98	0.09	-0.31	22
Lackawanna County	34	0.07	-0.35	23
Columbia County	30	0.06	-0.37	24
Blair County	26	0.05	-0.40	25
Bedford County	39	0.04	-0.43	26
Cameron County	15	0.04	-0.43	27
Carbon County	14	0.04	-0.43	28
Sullivan County	14	0.03	-0.45	29
Clinton County	26	0.03	-0.45	30
Huntingdon County	17	0.02	-0.47	31
Tioga County	18	0.02	-0.48	32
Dauphin County	8	0.01	-0.48	33
Lycoming County	10	0.01	-0.50	34
McKean County	7	0.01	-0.50	35
Berks County	5	0.01	-0.51	36
Juniata County	2	0.01	-0.51	37
Fulton County	2	0.00	-0.51	38
Union County	1	0.00	-0.51	39
Erie County	2	0.00	-0.51	40
Wyoming County	1	0.00	-0.51	41
Susquehanna County	2	0.00	-0.51	42
Warren County	2	0.00	-0.51	43
Crawford County	2	0.00	-0.51	44
York County	1	0.00	-0.52	45
Potter County	1	0.00	-0.52	46
Bradford County	1	0.00	-0.52	47
Adams County	0	0.00	-0.52	Tie 48
Bucks County	0	0.00	-0.52	Tie 48
Chester County	0	0.00	-0.52	Tie 48
Cumberland County	0	0.00	-0.52	Tie 48
Delaware County	0	0.00	-0.52	Tie 48
Forest County	0	0.00	-0.52	Tie 48
Franklin County	0	0.00	-0.52	Tie 48
Lancaster County	0	0.00	-0.52	Tie 48
Lebanon County	0	0.00	-0.52	Tie 48
Lehigh County	0	0.00	-0.52	Tie 48
Mifflin County	0	0.00	-0.52	Tie 48
Monroe County	0	0.00	-0.52	Tie 48
Montgomery County	0	0.00	-0.52	Tie 48
Montour County	0	0.00	-0.52	Tie 48
Northampton County	0	0.00	-0.52	Tie 48
Perry County	0	0.00	-0.52	Tie 48
Philadelphia County	0	0.00	-0.52	Tie 48
Pike County	0	0.00	-0.52	Tie 48
Snyder County	0	0.00	-0.52	Tie 48
Wayne County	0	0.00	-0.52	Tie 48

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Coal Mining - Abandoned Mine Land Sites (AMLs)

Acres of AML Problem Area per County

Washington County ranks 17th of 67 with 5.3% of its area composed of abandoned mine land (AML) problem areas. Greene County is 27th with 1.3% of its area AMLs. The PA average, by county, is 2.9%.

According to the Pennsylvania Department of Environmental Protection and the United States Office of Surface Mining, forty-three of the sixty-seven counties in Pennsylvania are known to have some type of abandoned mine land that has been documented.

The data set used to determine the values was the 'AML Problem Areas'. This data set encircles discrete AML points and areas and defines 'Problem Areas' as areas containing public health, safety, and public welfare problems created by past coal mining.

The Problem Area acreage represents the polygons around many AMLs and therefore represents more area than the individual AML sites.

This data is needed to implement Title IV SMCRA activities and is used for the reporting of the annual Abandoned Mine Land Program accomplishments to the US Congress.

Percent of County AML Problem Area

Z Score of % AML Problem Area

Z Score

- ▨ < -0.50 Std. Dev.
- ▨ -0.50 - 0.50 Std. Dev.
- ▨ 0.50 - 1.5 Std. Dev.
- ▨ 1.5 - 2.5 Std. Dev.
- ▨ > 2.5 Std. Dev.

Data Sources: PA Dept. of Environmental Protection / US Office of Surface Mining. www.pasda.com

$$Z = \frac{(County\ Value) - (Average\ of\ All\ Counties)}{(Standard\ Deviation\ of\ All\ Counties)}$$

Data beyond two standard deviations away from the mean is considered unusual data.

PA Counties	Acres AML 2013	% of County AMLs	Z Score AMLs	Z Score Rank
Clarion County	70,895	18.23%	3.05	1
Clearfield County	127,717	17.30%	2.86	2
Armstrong County	67,857	15.93%	2.59	3
Jefferson County	61,353	14.64%	2.33	4
Schuylkill County	68,301	13.62%	2.12	5
Lackawanna County	32,364	10.87%	1.57	6
Indiana County	57,092	10.68%	1.54	7
Butler County	51,389	10.10%	1.42	8
Cambria County	44,759	10.09%	1.42	9
Lawrence County	23,048	9.93%	1.39	10
Allegheny County	45,330	9.52%	1.30	11
Fayette County	42,732	8.36%	1.07	12
Luzerne County	45,686	7.88%	0.98	13
Northumberland County	23,194	7.63%	0.93	14
Westmoreland County	40,918	6.17%	0.63	15
Beaver County	16,286	5.73%	0.55	16
Washington County	29,218	5.30%	0.46	17
Somerset County	33,486	4.84%	0.37	18
Elk County	22,615	4.24%	0.25	19
Centre County	26,573	3.72%	0.14	20
Mercer County	13,206	3.03%	0.01	21
Carbon County	6,995	2.82%	-0.04	22
Venango County	10,314	2.36%	-0.13	23
Clinton County	10,449	1.83%	-0.23	24
Columbia County	5,663	1.81%	-0.24	25
Blair County	5,176	1.53%	-0.29	26
Greene County	4,687	1.27%	-0.35	27
Tioga County	7,633	1.05%	-0.39	28
Cameron County	2,231	0.87%	-0.43	29
Bedford County	5,264	0.81%	-0.44	30
Huntingdon County	4,476	0.79%	-0.44	31
Sullivan County	2,193	0.76%	-0.45	32
Dauphin County	2,595	0.73%	-0.45	33
McKean County	3,675	0.58%	-0.48	34
Lycoming County	2,173	0.27%	-0.55	35
Fulton County	694	0.25%	-0.55	36
Lebanon County	352	0.15%	-0.57	37
Bradford County	1,031	0.14%	-0.57	38
Wayne County	581	0.12%	-0.58	39
Susquehanna County	457	0.09%	-0.58	40
Crawford County	547	0.08%	-0.58	41
Wyoming County	178	0.07%	-0.59	42
Warren County	66	0.01%	-0.60	43
Adams County	0	0	-0.60	Tie 44
Berks County	0	0	-0.60	Tie 44
Bucks County	0	0	-0.60	Tie 44
Chester County	0	0	-0.60	Tie 44
Cumberland County	0	0	-0.60	Tie 44
Delaware County	0	0	-0.60	Tie 44
Erie County	0	0	-0.60	Tie 44
Forest County	0	0	-0.60	Tie 44
Franklin County	0	0	-0.60	Tie 44
Juniata County	0	0	-0.60	Tie 44
Lancaster County	0	0	-0.60	Tie 44
Lehigh County	0	0	-0.60	Tie 44
Mifflin County	0	0	-0.60	Tie 44
Monroe County	0	0	-0.60	Tie 44
Montgomery County	0	0	-0.60	Tie 44
Montour County	0	0	-0.60	Tie 44
Northampton County	0	0	-0.60	Tie 44
Perry County	0	0	-0.60	Tie 44
Philadelphia County	0	0	-0.60	Tie 44
Pike County	0	0	-0.60	Tie 44
Potter County	0	0	-0.60	Tie 44
Snyder County	0	0	-0.60	Tie 44
Union County	0	0	-0.60	Tie 44
York County	0	0	-0.60	Tie 44

Mean (marked at rank 21)

Category Z Scores

The table below shows the Z score calculation for each indicator in each category. The 'Sum of Z Scores' rows are summations of the Z scores within that category. These Category Z Scores provide estimations of conditions for each category. Z scores show how far each indicator value is from the average of all the values. No weighting of individual Z scores was performed. All indicators are valued equally. The Category Z Scores are not conclusive, as the indicators in each category were selected by the project design team. However, the table does provide an overview of the data presented in this report and easily allows for any two or more indicator Z scores to be analyzed by adding the Z scores of the indicators and comparing the sum to the mean of each indicator Z score. Grayed-out and italicized indicators are marked as such because they were not used in the Category Z Score calculations. Greene and Washington Counties are highlighted in each category by a gray column. The red line in the Sum of Z Score row is the mean.

Demographic
- Population Growth
- Birth Rate
- *Mortality (Death Rate)*
- Natural Rate of Increase
- Dependent Population
- *Population Density*
- Race / Diversity
- SUM OF Z SCORES:

Social
- Child Abuse
- Crime
- Housing > 70 yrs. Old
- *Non-single family detached homes*
- Homeownership
- Vacant Housing Rate
- Housing Value
- Public School Dropout Rate
- Voter Non-participation
- Federal Expenditures Increase
- SUM OF Z SCORES:

Economic
- Income Per Capita Increase
- Median Household Income Change
- Income from Transfer Payments
- Unemployment Rate
- *Employment by Sector*
- Poverty Rate
- Child Poverty Rate
- Per Student Spending
- Public Assistance - Cash Assistance
- Public Assistance - Medical Assistance
- Public Assistance - NSLP
- Public Assistance - SNAP
- Public Assistance - WIC
- Public Assistance - PACE
- SUM OF Z SCORES:

Landscape
- Highways by Type
- Loss of Farmland
- Shale Gas Drilling Permits
- Oil & Gas Drilling Water Withdrawals
- Oil & Gas Drilling Water Discharges
- % of County Underground Coal Mined
- Coal Mining Operation per square mile
- % of County Abandoned Mine Land Sites
- SUM OF Z SCORES:

Legend:
- Not used in the Category Z Score calculations
- Mean Indicator

Category Z Score Summary Maps

These Category Z Score Summary Maps show the County Summary Z Scores Values from the table on Page 49 and colors each by the sum's standard deviation from the mean.

Demographic Category Z Score Summary

Z Scores
- < -2.5 Std. Dev.
- -2.5 - -1.5 Std. Dev.
- -1.5 - -0.50 Std. Dev.
- -0.50 - 0.50 Std. Dev.
- 0.50 - 1.5 Std. Dev.
- 1.5 - 2.0 Std. Dev.
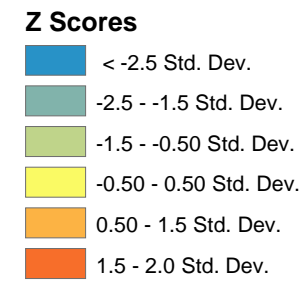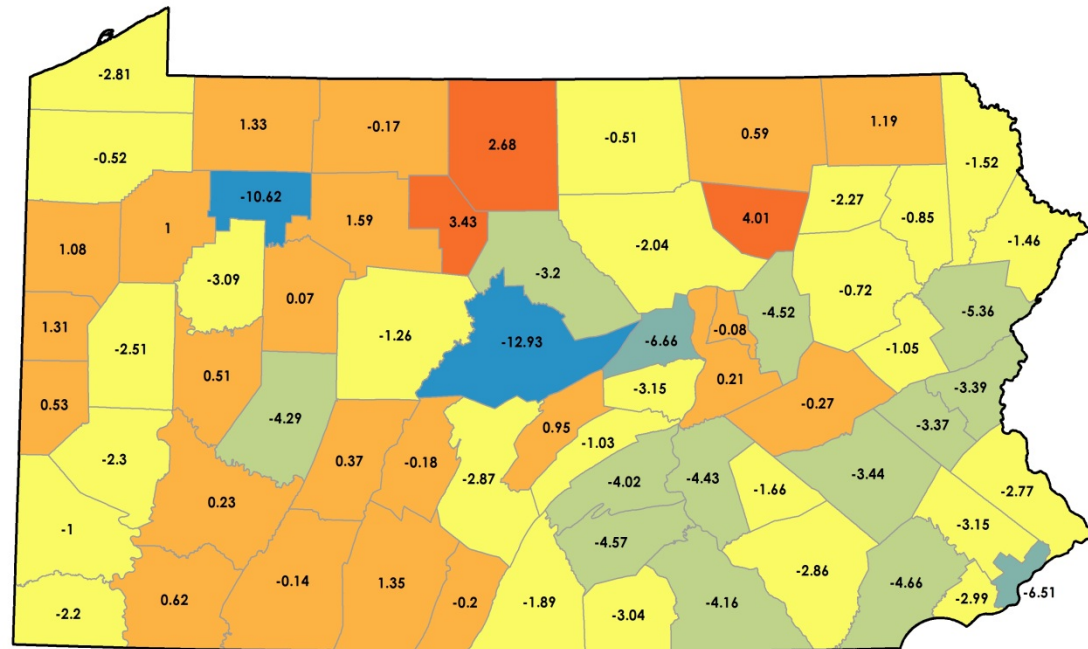
The higher the positive Z score, the less desirable.

Social Category Z Score Summary

Z Score
- < -2.5 Std. Dev.
- -2.5 - -1.5 Std. Dev.
- -1.5 - -0.50 Std. Dev.
- -0.50 - 0.50 Std. Dev.
- 0.50 - 1.5 Std. Dev.
- 1.5 - 2.0 Std. Dev.
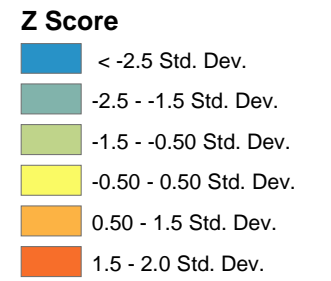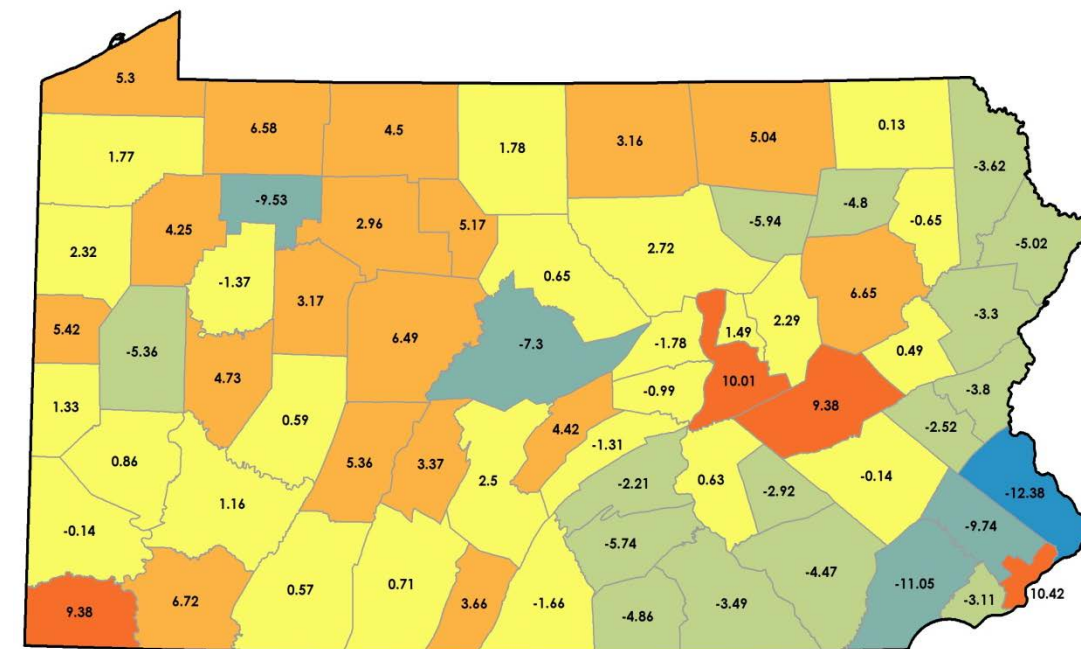
The higher the positive Z score, the less desirable.

Economic Category Z Score Summary

Z Score
- < -2.5 Std. Dev.
- -2.5 - -1.5 Std. Dev.
- -1.5 - -0.50 Std. Dev.
- -0.50 - 0.50 Std. Dev.
- 0.50 - 1.5 Std. Dev.
- 1.5 - 2.5 Std. Dev.
- > 2.5 Std. Dev.
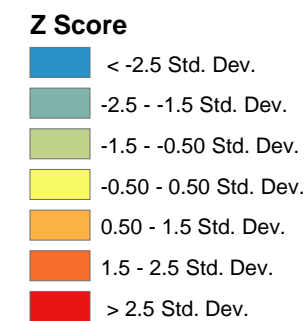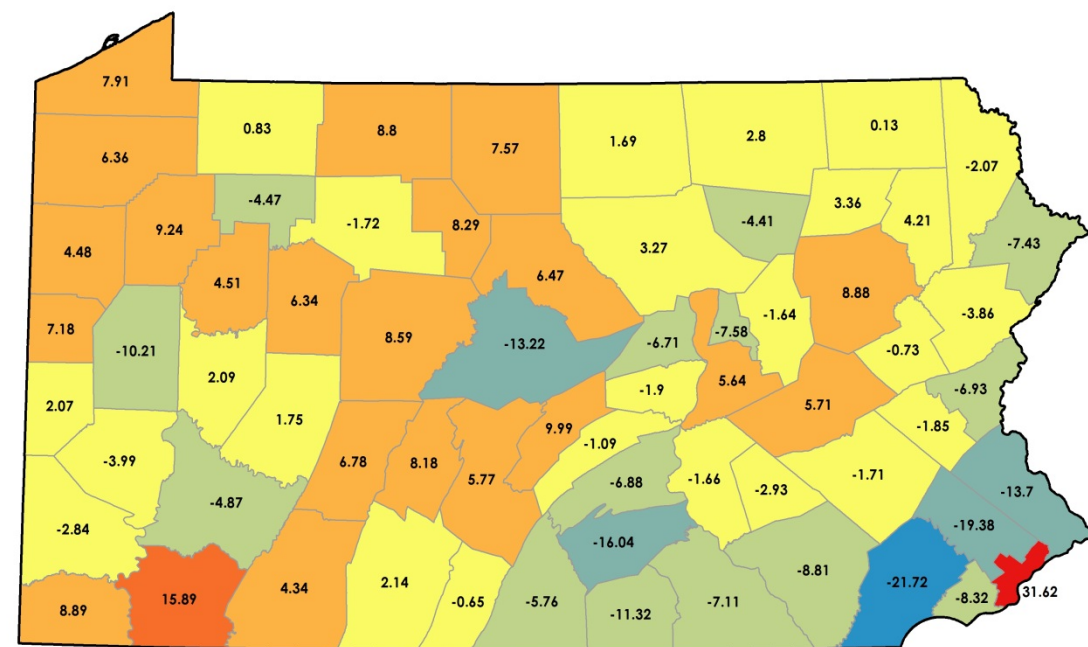
The higher the positive Z score, the less desirable.

Landscape Category Z Score Summary

Z Score
- < -1.5 Std. Dev.
- -1.5 - -0.50 Std. Dev.
- -0.50 - 0.50 Std. Dev.
- 0.50 - 1.5 Std. Dev.
- 1.5 - 2.5 Std. Dev.
- > 2.5 Std. Dev.
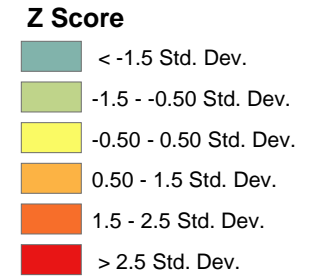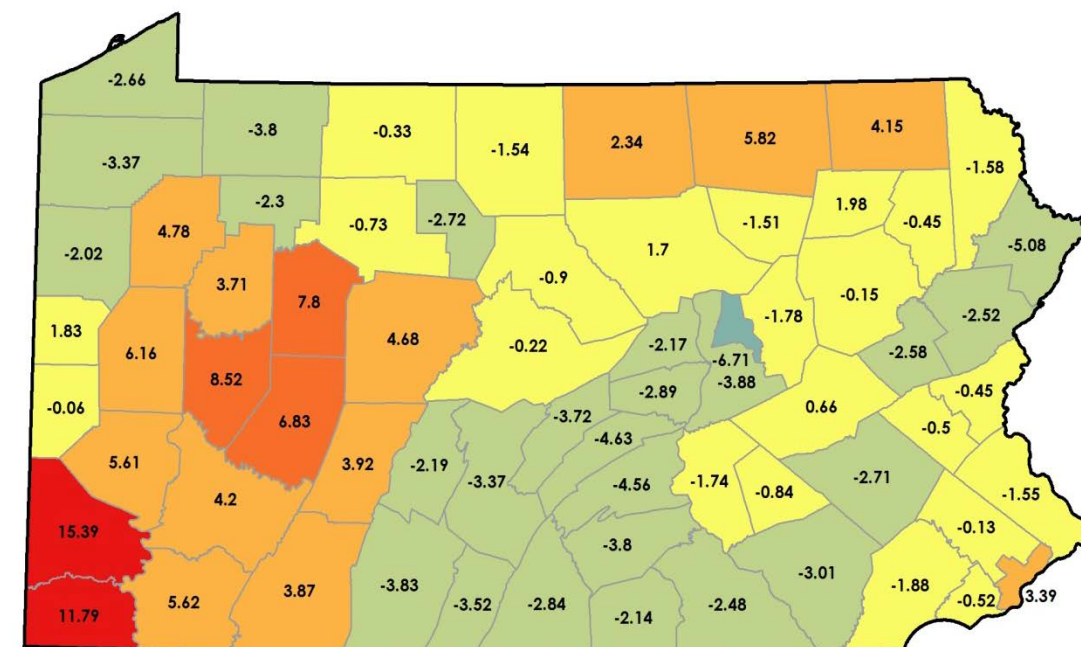
The higher the positive Z score, the less desirable.

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Glossary

Birth Rate – the total number of births per 1,000 of a population each year.

Child Abuse – abuse in the United States is defined as the maltreatment as in any act or series of acts of commission or omission by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child.

Coal Mining – Underground – a practice of removing coal from beneath the ground by tunneling or boring beneath the ground in effort to expose the coal seam for harvesting.

Coal Mining - Surface – a practice of removing coal from beneath the ground by removing the earth-material between the surface and the coal-seam in effort to expose the coal seam for harvesting.

Coal Mining – Abandoned Mine Lands – mine lands that have been abandoned prior to the passage of the Surface Mining Control and Reclamation Act of 1977.

Crime Rate – crime rate is the amount of defined and reported crimes experienced in a geographic area by a unit of population.

Dependent Population – those individuals in a population that are either under the ages of 18 or over the age of 65. These are generally the ages of populations out of the work-force.

Employment by Sector – industrial production is categorized into major industrial sectors. Employment by Sector shows how many in a population are employed by the various industrial sectors.

Farmland Loss – the amount of land defined by the USDA as 'farm land' that has ceased to be 'farm land' during a period of time.

Federal Expenditures – the US Government's spending of funds.

Highways by Type – a sum of different roadways by types (local, state, federal).

Homeownership – a owner-occupier of a dwelling. Usually expressed as a percentage of people who own a home in a particular geographic unit.

Housing Age – the average age of the housing stock in a particular geographic unit.

Housing Type – descriptive characteristic describing the various types of housing structures in a particular geographic unit.

Housing Value – the average value of a home in a particular geographic unit.

Income Per Capita – calculated by taking a measure of all sources of income in the aggregate (such as Gross national income) and dividing it by the total population of a particular geographic unit.

Land Area – the amount of land of a particular geographic unit, usually expressed in square miles.

Mean – average; the sum of a collection of numbers divided by the number of numbers in the collection

Median Household Income – the amount which divides the income distribution into two equal groups, half having income above that amount, and half having income below that amount.

Mortality – a measure of the number of deaths (in general, or due to a specific cause) in a population, scaled to the size of that population, per unit of time.

Population Density – a measurement of population per unit area or unit volume.

Population Growth – increase (or decrease) of people living in a specific area.

Poverty Rate – the percent of people who were in poverty in a calendar year.

Poverty Rate for Children – the percent of people under 18 years of age who were in poverty in a calendar year.

Per Student Spending – calculated by dividing the total school revenue by the total by the school's enrollment.

Public Assistance – Cash Assistance – a state program that may provide cash assistance if there is not enough income generated to support an individual or a family, or if an individual cannot work because of a disability.

Public Assistance – Medical Assistance – also called Medicaid, offers free health care coverage to children and adults. Eligibility is based on family size and income, and the age of your children.

Public Assistance – NSLP – the National School Lunch Program is a federal and state reimbursement program for each meal served that meets federal requirements. Children from families with incomes at or below 130% of the poverty level, and children in families receiving Temporary Assistance for Needy Families (TANF) and children in families receiving food stamp benefits are eligible for free lunches.

Public Assistance – SNAP – the Supplemental Nutrition Assistance Program is the new name for the Food Stamp program. Eligibility is based on income.

Public Assistance – WIC – Women, Infants and Children is a federally funded program that provides healthy supplemental foods and nutrition services for pregnant women, postpartum and breastfeeding women, infants and children under age five in a supportive environment.

Public Assistance – PACE – Pharmaceutical Assistance Contract for the Elderly is a PA prescription assistance program for older adults that offers low-cost prescription medication to eligible residents 65 and older.

Public School Drop Out Rate – a calculation that reflects the fall enrollment in grades 7 through 12 and the total number of dropouts in those grades through a single school year.

Racial Diversity – the racial composition of a population.

Rate of Natural Increase (RNI) – determined by taking the crude birth rate minus the crude death rate of a population.

Serious Crimes – crime Index offenses under the Uniform Crime Report and include; criminal homicide, forcible rate, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson.

Shale Gas Drilling – Permits – the amount of PA DEP approved permit applications for unconventional gas wells in a particular geographic unit.

Shale Gas Drilling – Water Withdraw – the amount of PA DEP approved permit applications for the removal of ground water, surface water or municipal water sources for the use in unconventional gas wells in a particular geographic unit.

Shale Gas Drilling – Water Discharge – the amount of PA DEP active or proposed permit applications for treatment plants or discharge points of wastewater that was once used in unconventional gas wells in a particular geographic unit..

Standard Deviation – shows how much variation exists from the mean.

Transfer Payments – all forms of government transfers of payments to individuals (i.e., public assistance, welfare, social security) but not related to income from services rendered or retirement payments.

Unemployment – calculated by dividing the number of unemployed workers .by the total labor force and multiplying by 100 (for a percentage).

Vacant Housing – the amount of housing stock in a particular geographic area that is not being utilized as a dwelling.

Voter Participation – the percentage of registered voters that participate in an election.

Z Score – the number standard deviations an observation is above or below the mean.

The Principles of Environmental Justice

Delegates to the First National People of Color Environmental Leadership Summit held on October 24-27, 1991, in Washington DC, drafted and adopted 17 principles of Environmental Justice. Since then, *The Principles* have served as a defining document for the growing grassroots movement for Environmental Justice.

PREAMBLE

WE, THE PEOPLE OF COLOR, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to ensure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:

1) **Environmental Justice** affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.

2) **Environmental Justice** demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.

3) **Environmental Justice** mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.

4) **Environmental Justice** calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.

5) **Environmental Justice** affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.

6) **Environmental Justice** demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.

7) **Environmental Justice** demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.

8) **Environmental Justice** affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.

9) **Environmental Justice** protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

10) **Environmental Justice** considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.

11) **Environmental Justice** must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.

12) **Environmental Justice** affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.

13) **Environmental Justice** calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

14) **Environmental Justice** opposes the destructive operations of multi-national corporations.

15) **Environmental Justice** opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.

16) **Environmental Justice** calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.

17) **Environmental Justice** requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

The Proceedings to the First National People of Color Environmental Leadership Summit are available from the **United Church of Christ Commission for Racial Justice**, 475 Riverside Dr. Suite 1950, New York, NY 10115.