

Economic Change in Southwest Pennsylvania

Stephan J. Goetz, Ph.D.

**Director, The Northeast Regional Center for Rural Development
and Professor of Agricultural and Regional Economics**

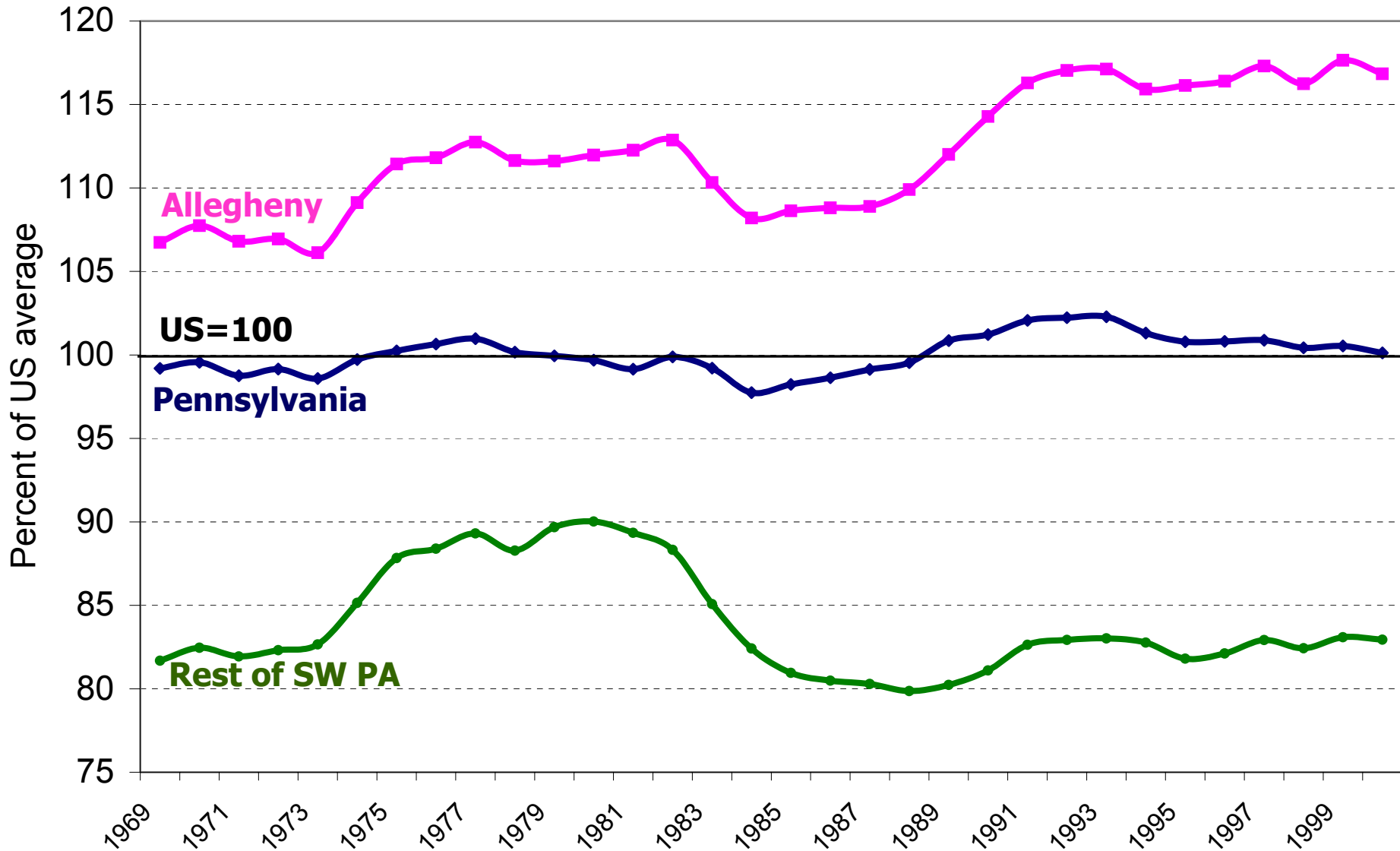
**Prepared for the Southwest Regional Staff
Conference on "Leading and Managing Change"
Pittsburgh, PA; May 15, 2003**



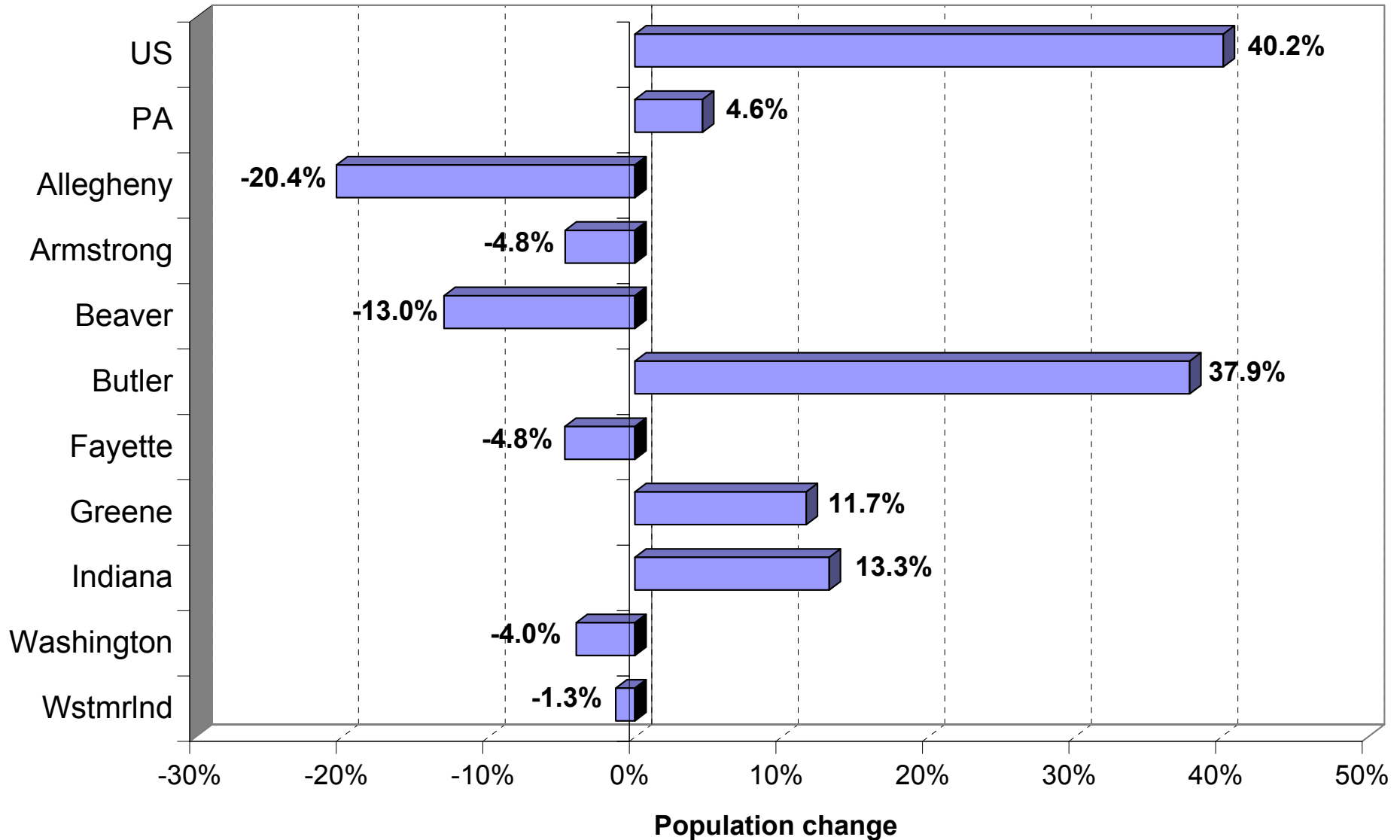
Outline

- **Income**
- **Population & Employment**
- **Poverty**
- **Human capital**
- **Quality of life issues**
- **What to do (if anything)?**
 - **Self-employment/entrepreneurship**
 - **Cluster development**

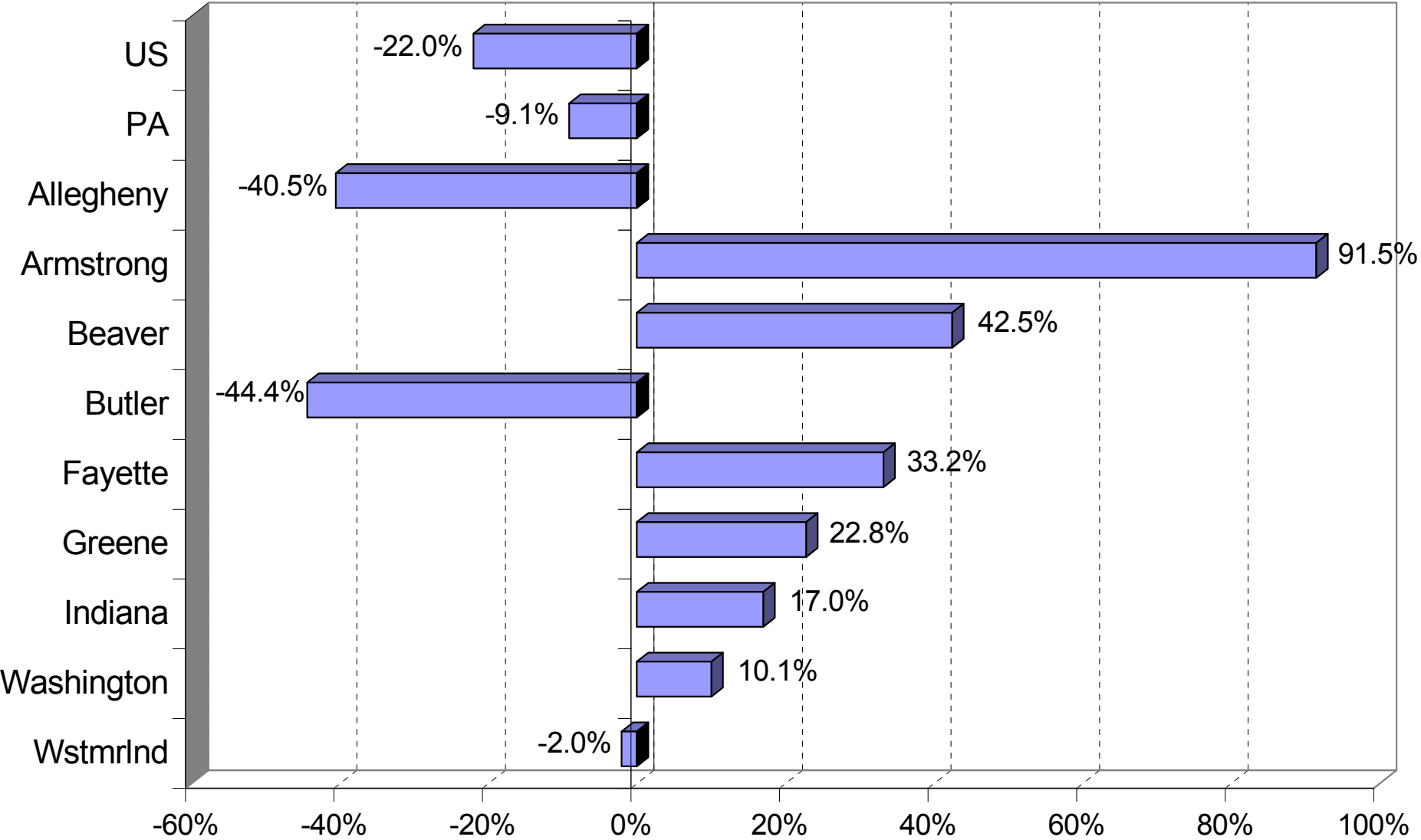
Per Capita Income Relative to the US, 1969-2000



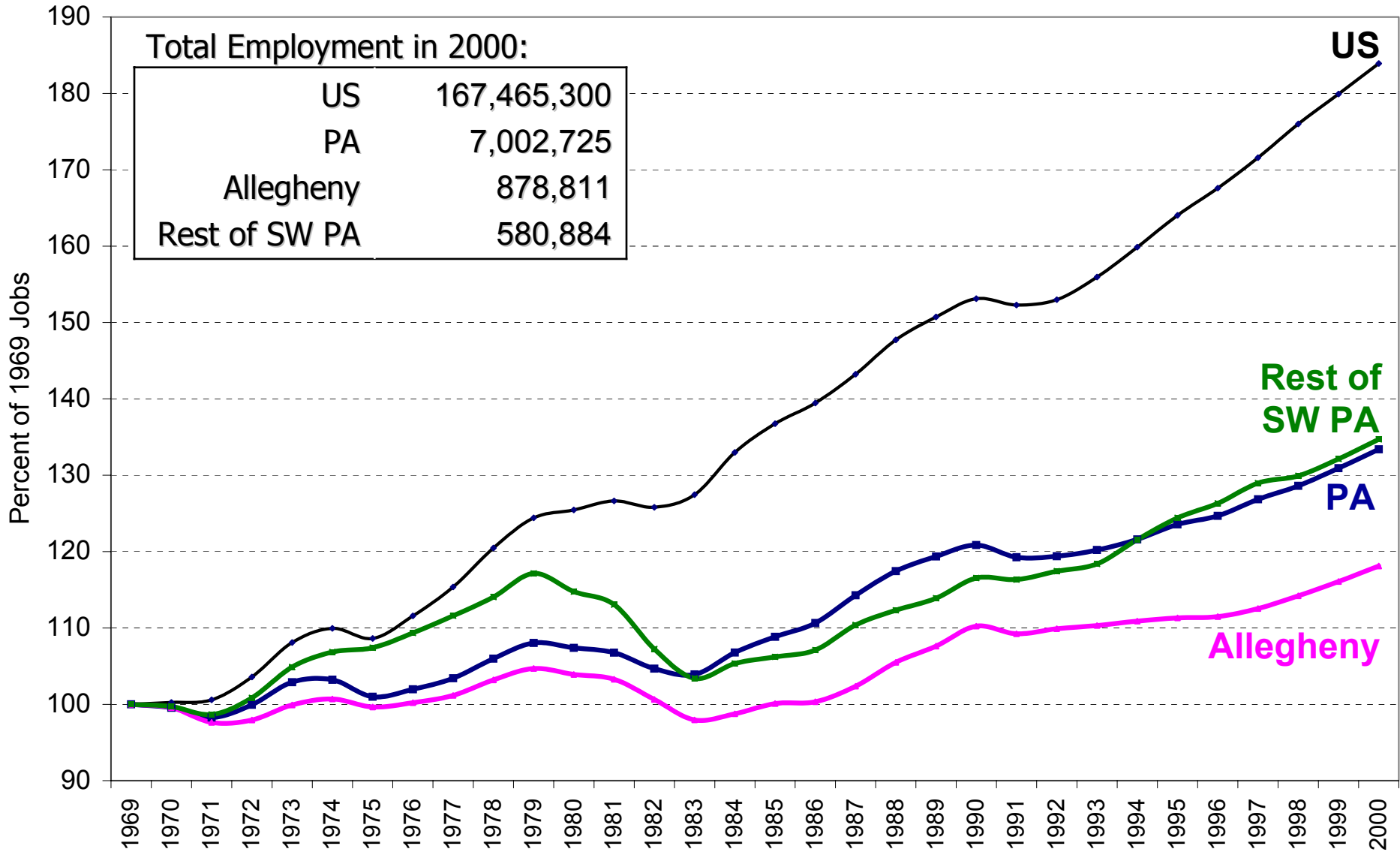
Percent change in population, 1969-2000



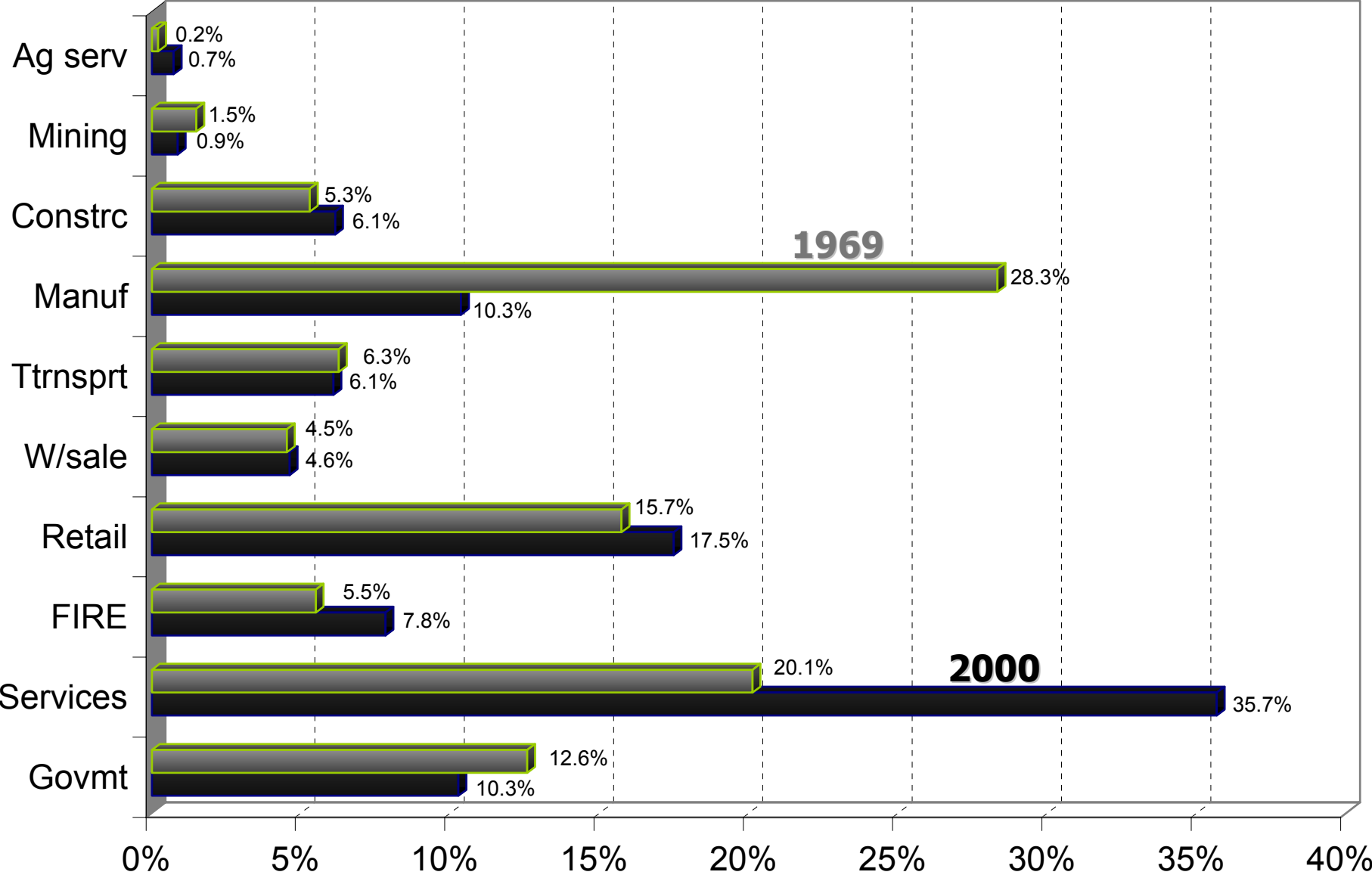
Percent change in farm employment, 1969-2000



Full- and part-time total employment, 1969-2000 (1969=100)



Changes in Employment by Sector, Southwest Pennsylvania, 1969-2000

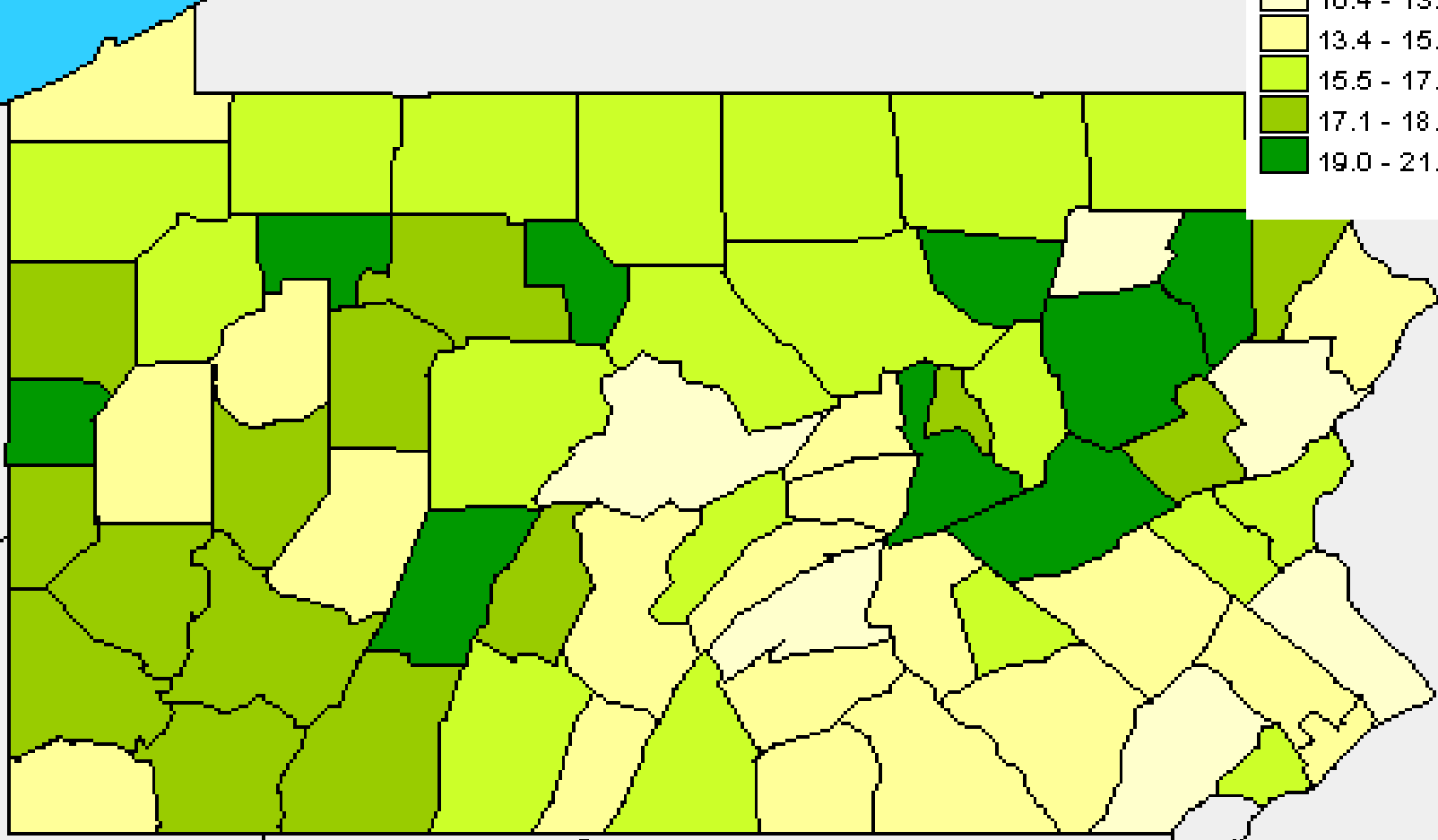
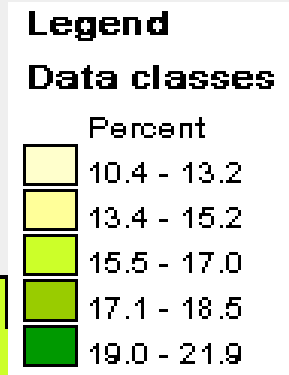


Sectors

Regions with lower rates of job creation tend to have larger shares of elderly residents... and vice versa!

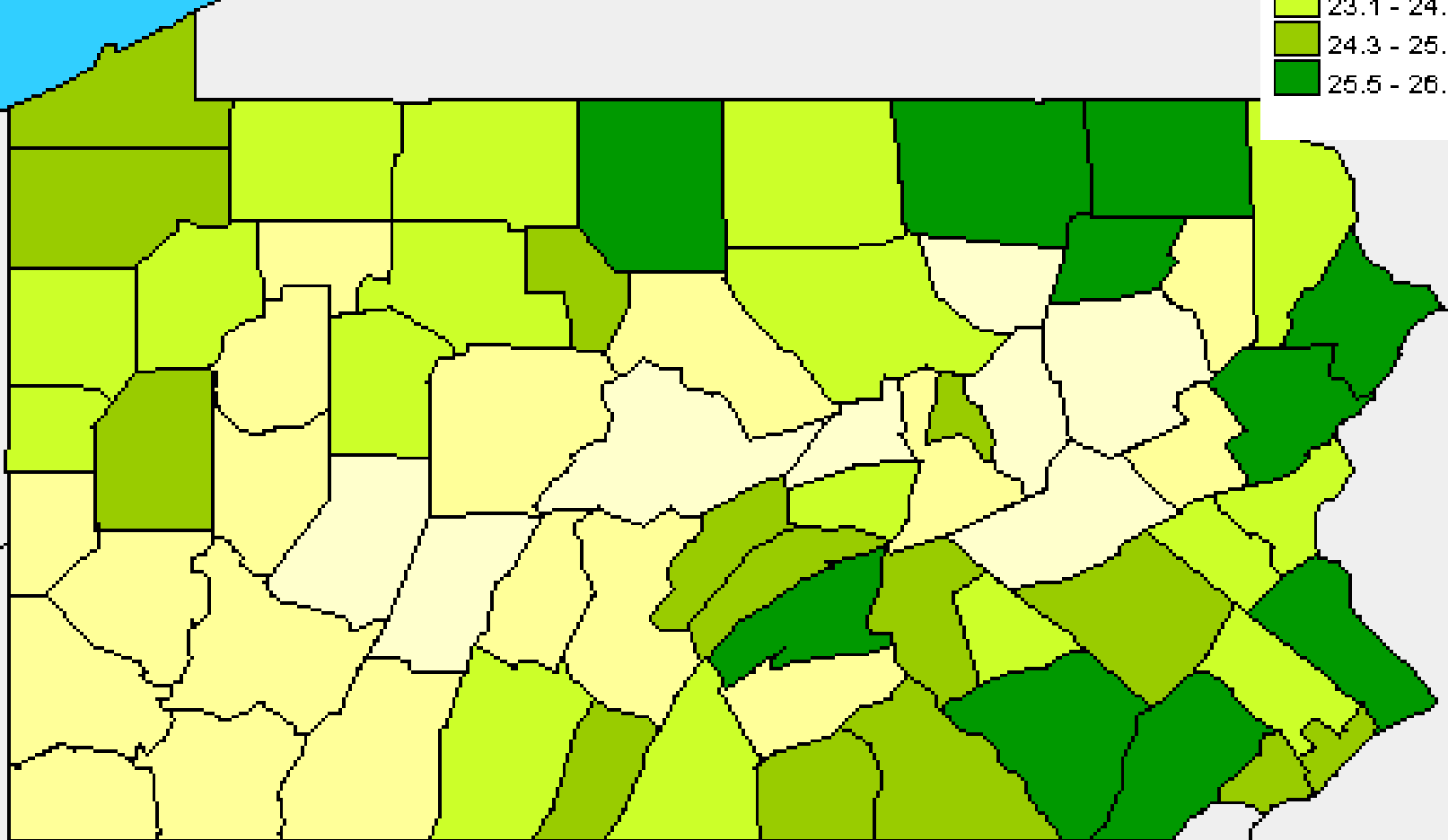
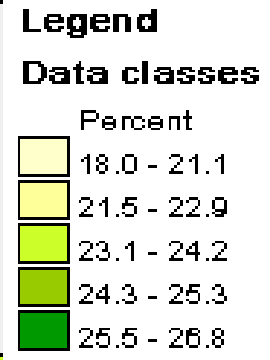
Percent of Persons 65 Years and Over, Pennsylvania by County
Census 2000

Percent Over 64, 2000

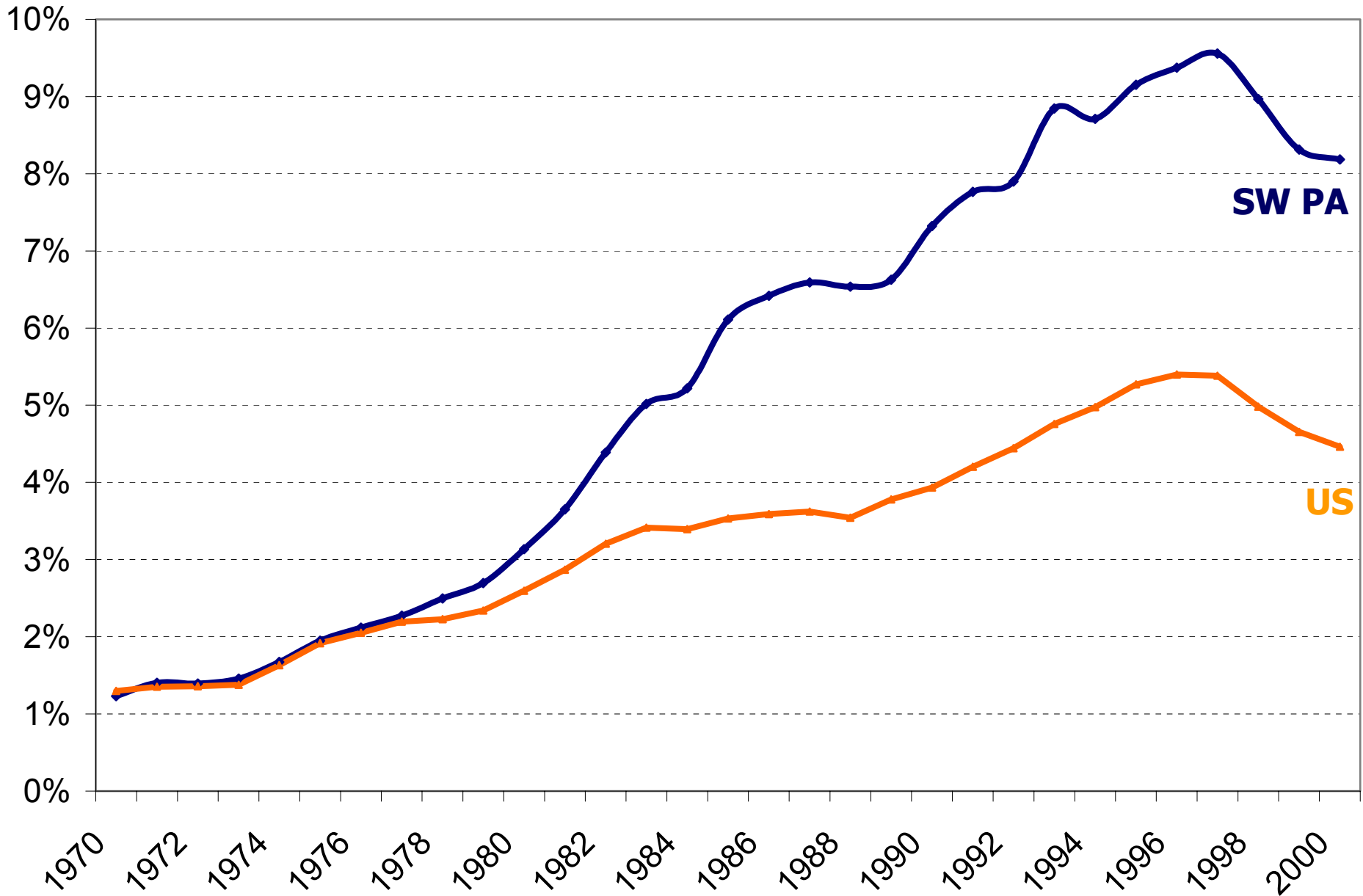


Percent of Persons Under 18 Years, Pennsylvania by County Census 2000

Percent Under 18, 2000



Medicare Payments as a percent of Wage & Salary Disbursements

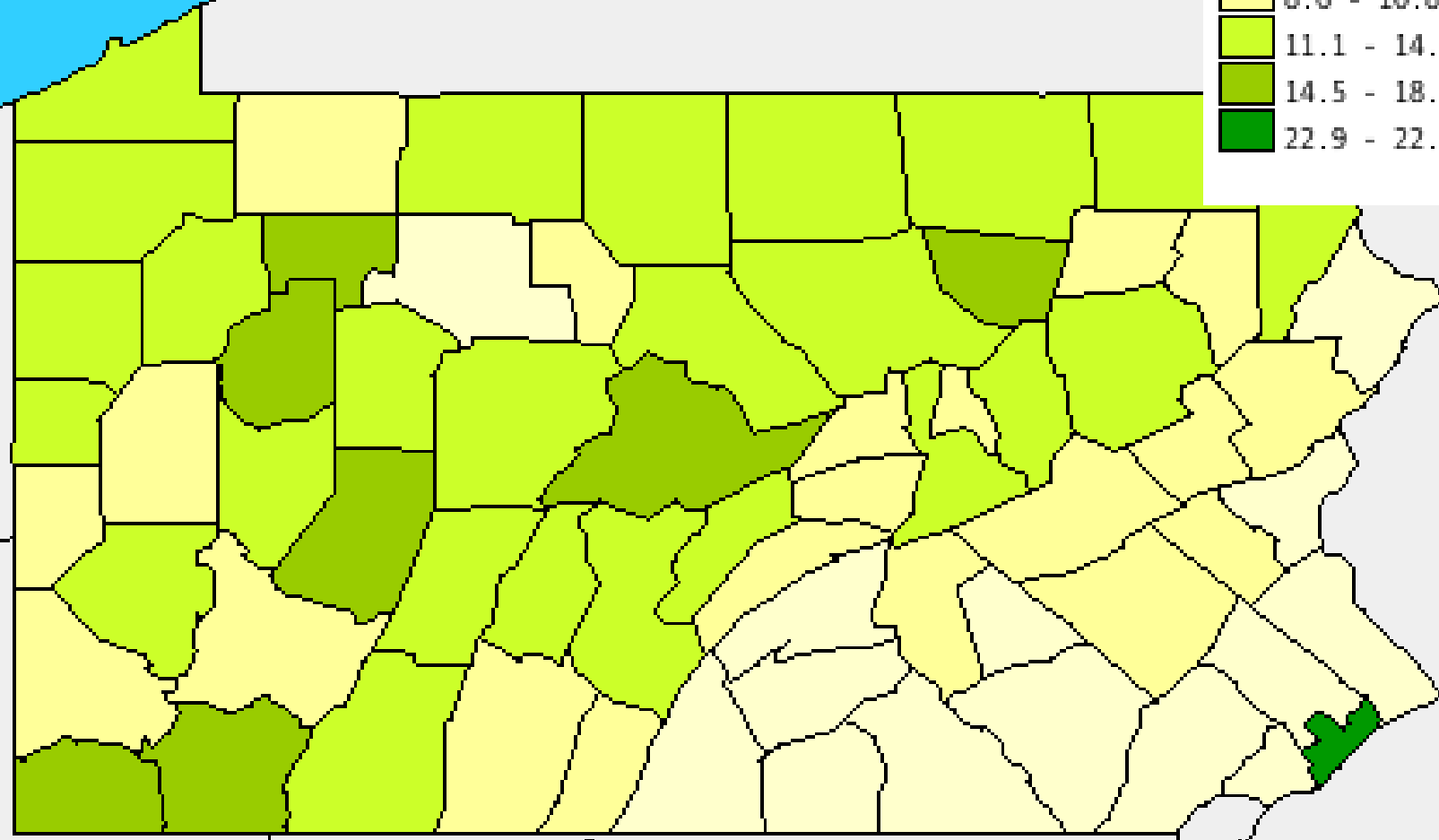
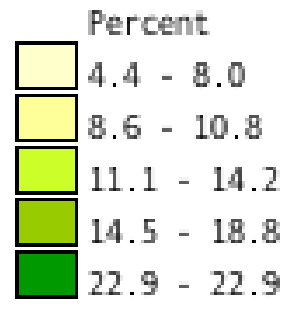


Poverty rates declined between 1990 and 2000 in most of the southwest PA region (and elsewhere), but they are still relatively high

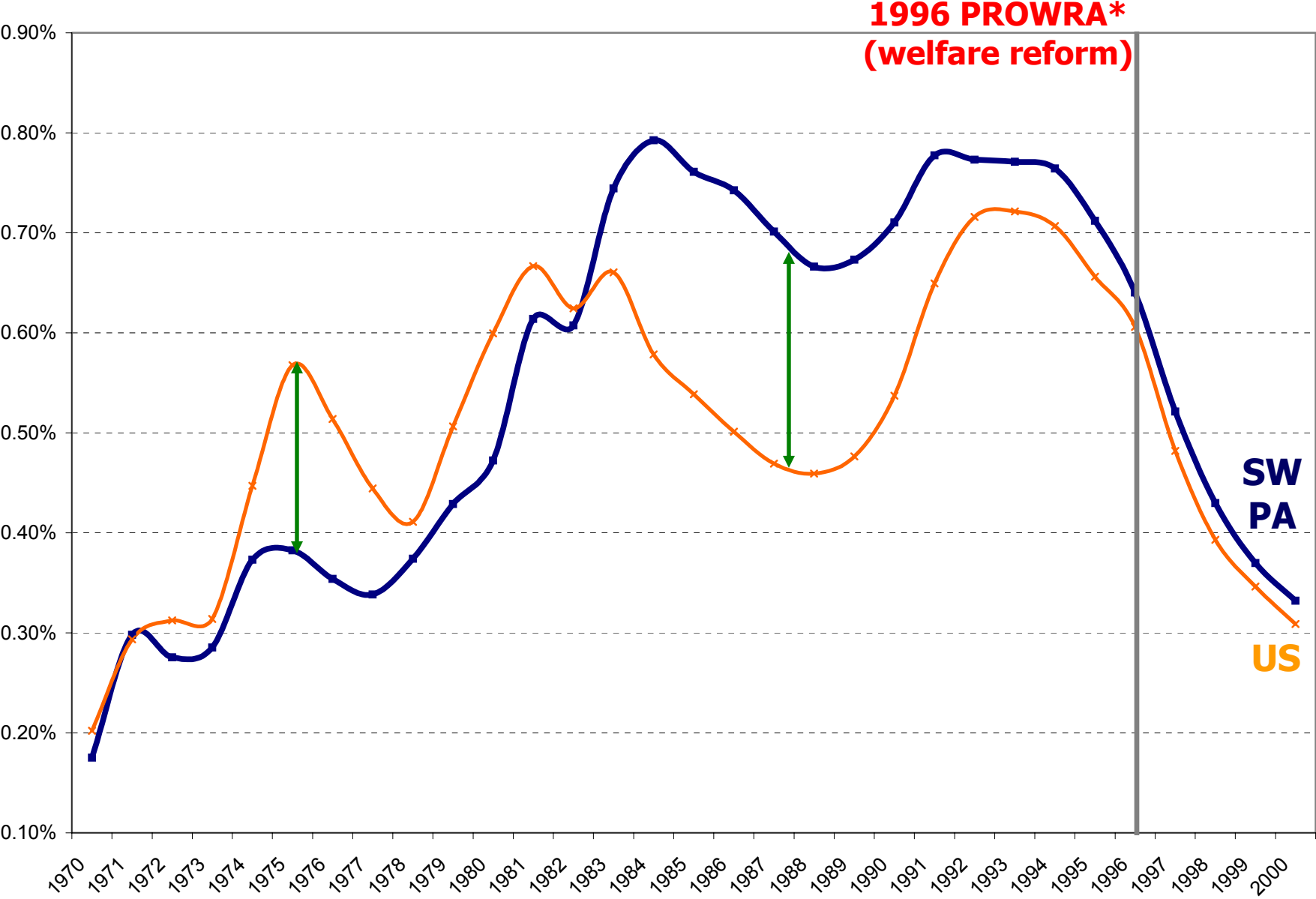
Percent of Persons Below the Poverty Level in 1999, Per
Census 2000

Percent Poor, 1999

Legend
Data classes



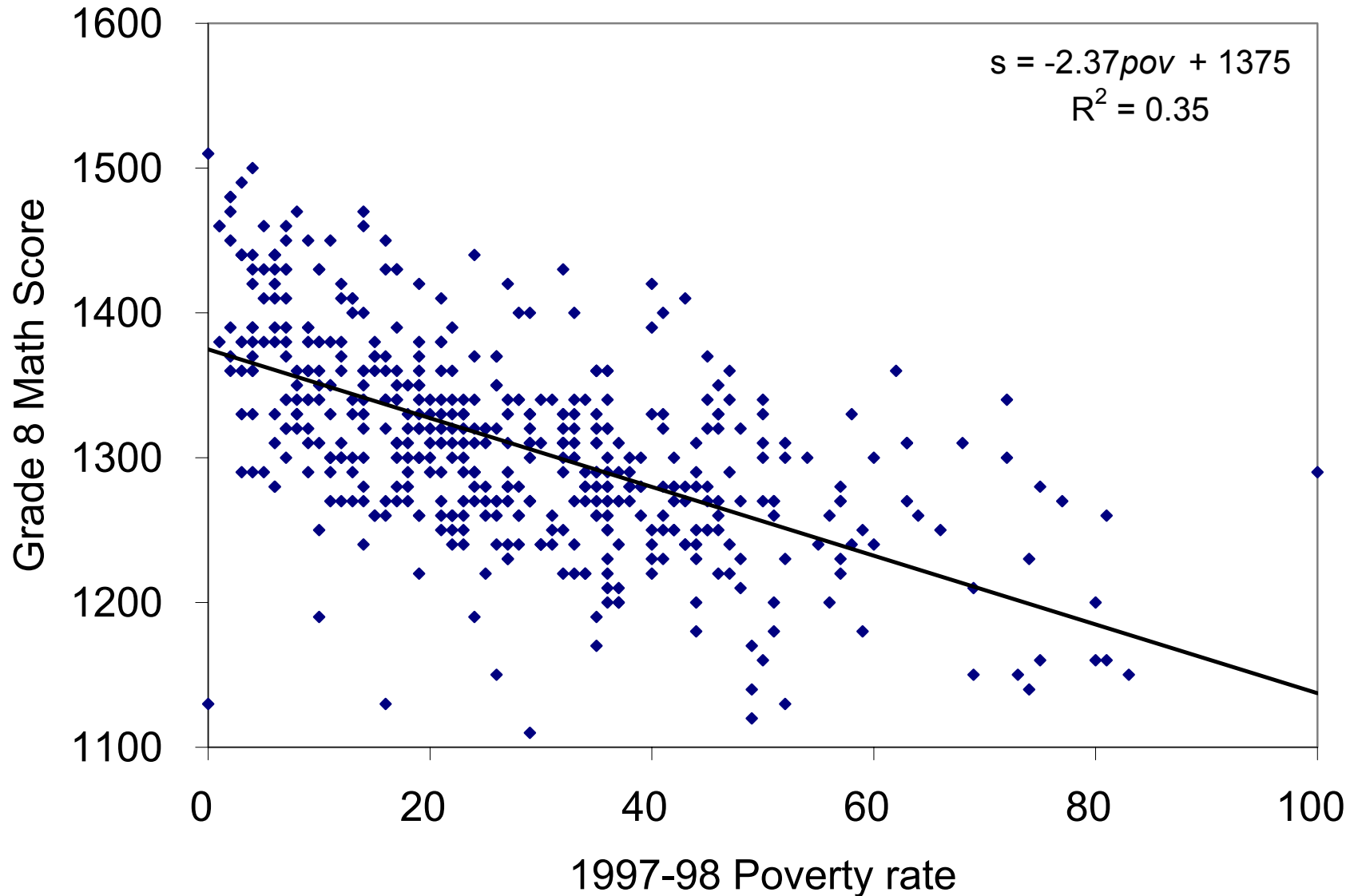
Food Stamp Benefits as a percent of Wage & Salary Disbursements



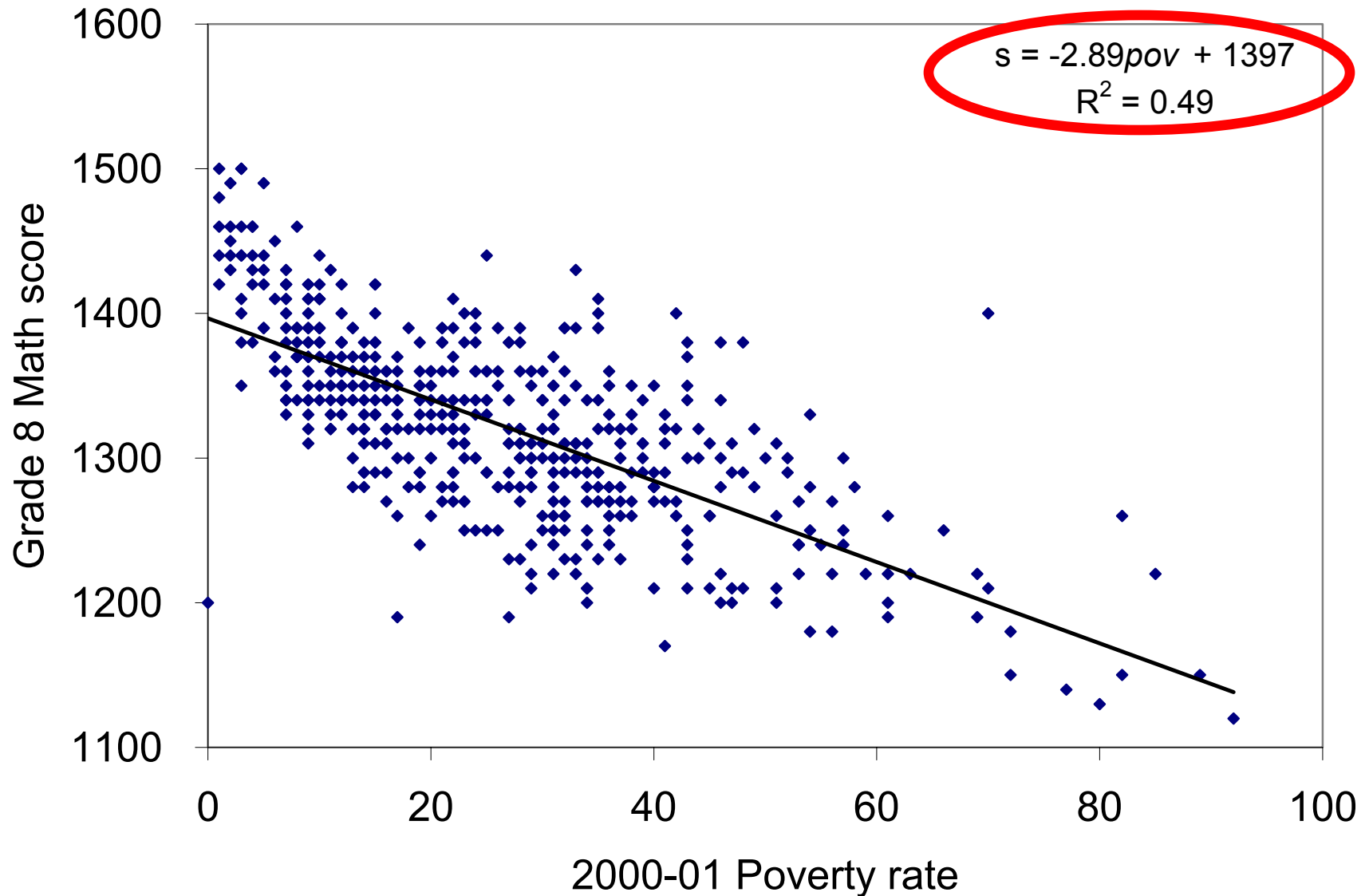
*Personal Responsibility and Work Opportunity Reconciliation Act

**The negative effect of poverty
on the performance of Grade 8
students in math statewide
has become stronger...**

Grade 8 Student PSSA Performance vs. Poverty: 1997-98 district-level data



Grade 8 Student PSSA Performance vs. Poverty: 2000-01 district-level data



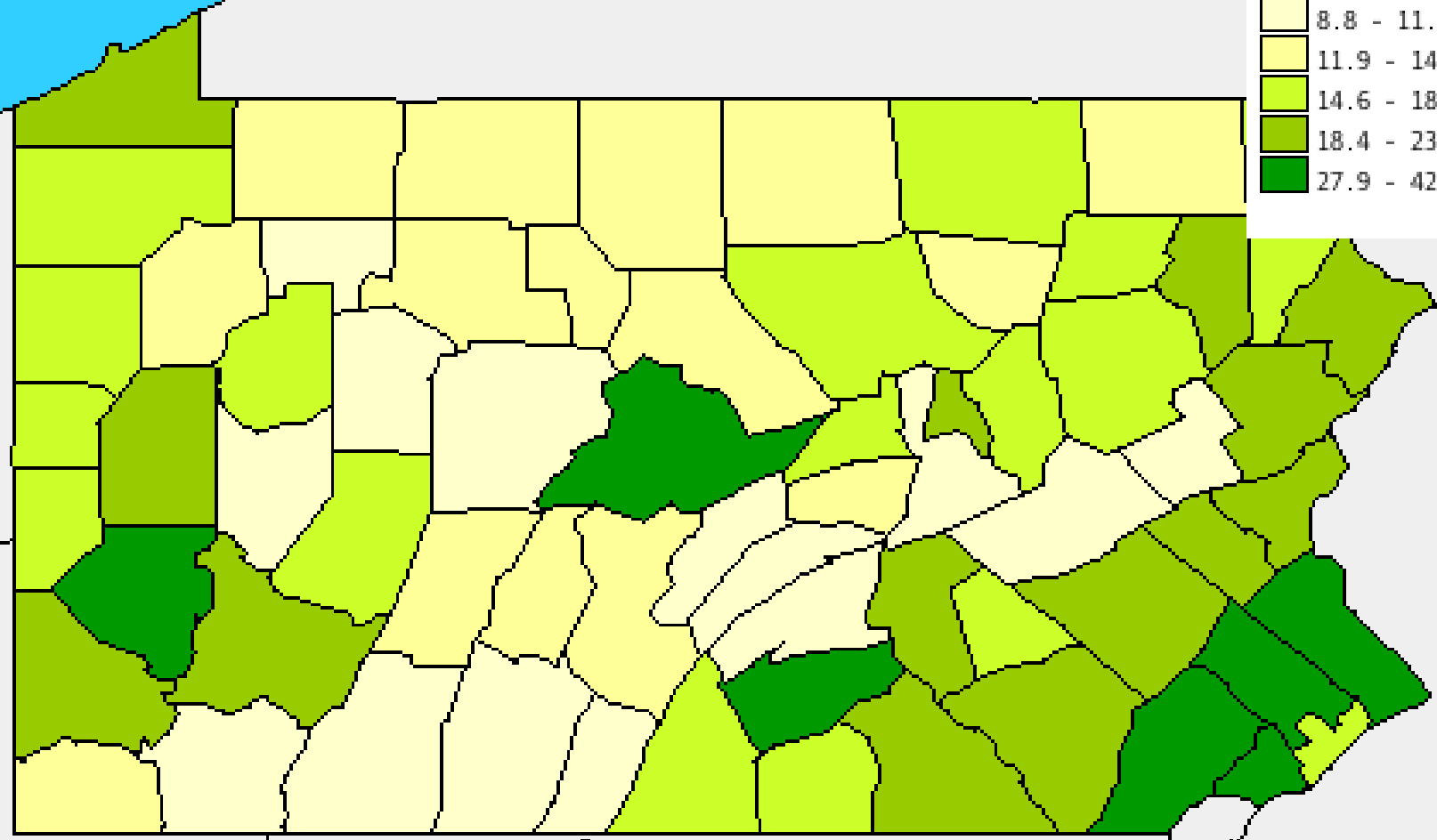
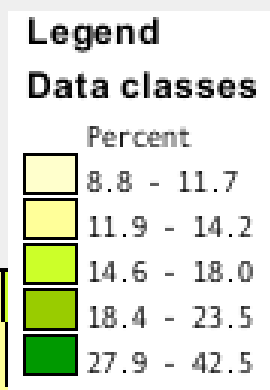
Grandparents taking care of grandkids, 2000: A new trend?

State/county	Grandparent living in household with one or more own grandchildren under 18 years	Grandparent responsible for grandchildren	Percent
PA	204,909	80,423	39.2%
Allegheny	17,441	6,900	39.6%
Armstrong	990	398	40.2%
Beaver	3,004	1,202	40.0%
Butler	2,084	773	→ 37.1%
Fayette	2,654	1,190	44.8%
Greene	633	345	→ 54.5%
Indiana	950	455	47.9%
Washington	2,991	1,110	→ 37.1%
Wstmrlnd	4,499	1,994	44.3%

**Educational attainment
(human capital) has a strong,
positive effect on economic
well-being**

Percent of Persons 25 Years and Over with Bachelor's Degree or Higher, Census 2000

Percent with BS Degree, 2000



Brain Drain: A just-published study suggests why the Pittsburgh area has difficulty retaining graduates (esp. minorities and high-tech) from its three major universities

Source: Susan B. Hansen, Carolyn Ban and Leonard Huggins, "Explaining the 'Brain Drain' from older industrial cities: The Pittsburgh region," *Economic Development Quarterly*, vol. 17, no. 2, May 2003, 132-47.

The *brain drain* of recent college graduates from Pittsburgh:

Some reasons

Source: Hansen et al. 2003, cont.

- **Lack competitive salaries, benefits**
- **High, rising college tuition a problem**
- **Need career counseling, internships**
- **Salary gaps for women and minorities, few job opportunities for spouses**
- **Lack of amenities (nightlife, cultural events, participatory sports)**

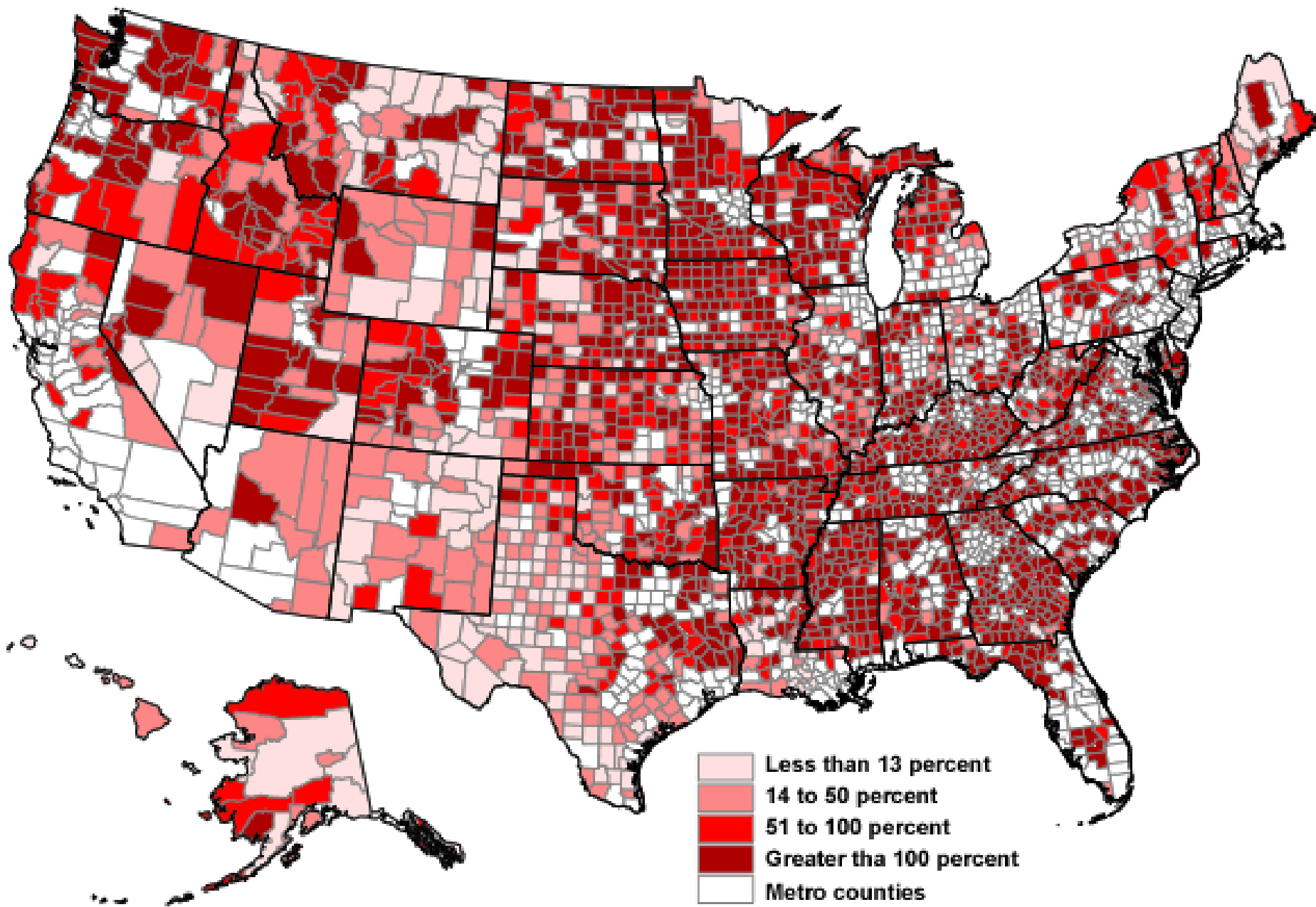
From blue-collar to white-collar, to no-collar...

Richard Florida (CMU) argues, and demonstrates, that regions open to diversity and new ideas experience faster economic growth.

*Source: Richard Florida, *The Rise of the Creative Class – and how it's transforming work, leisure, community and everyday life*, Basic Books, NY, 2002*

Unlike Philadelphia, and other large U.S. cities, the greater Pittsburgh area is no longer a major gateway for foreign immigrants...

Percent change in the nonmetro Hispanic population, 1990-2000

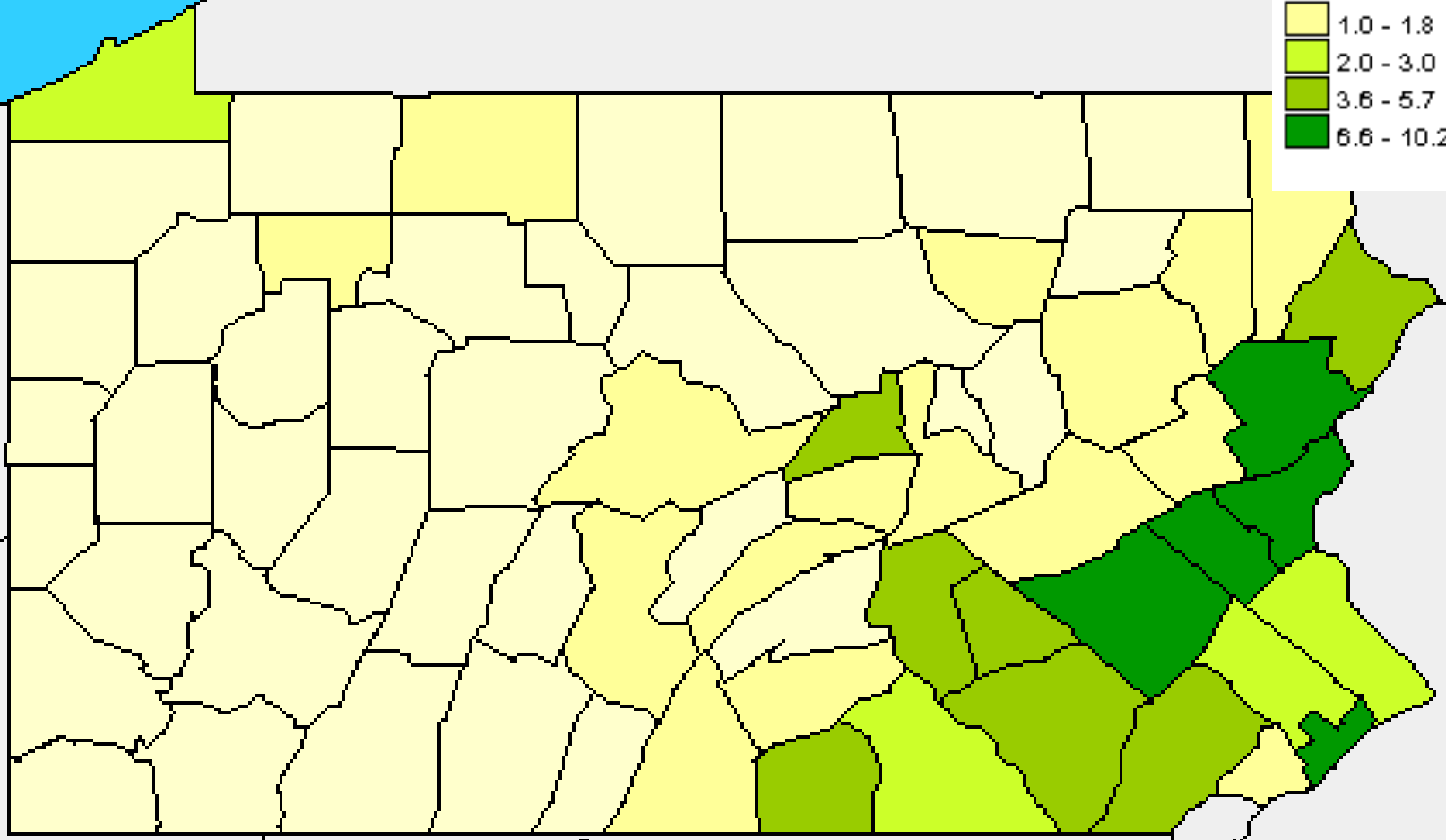
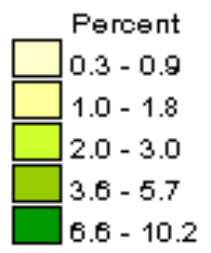


Source: Compiled by ERS using data from 1990 and 2000 Census data, U.S. Census Bureau.

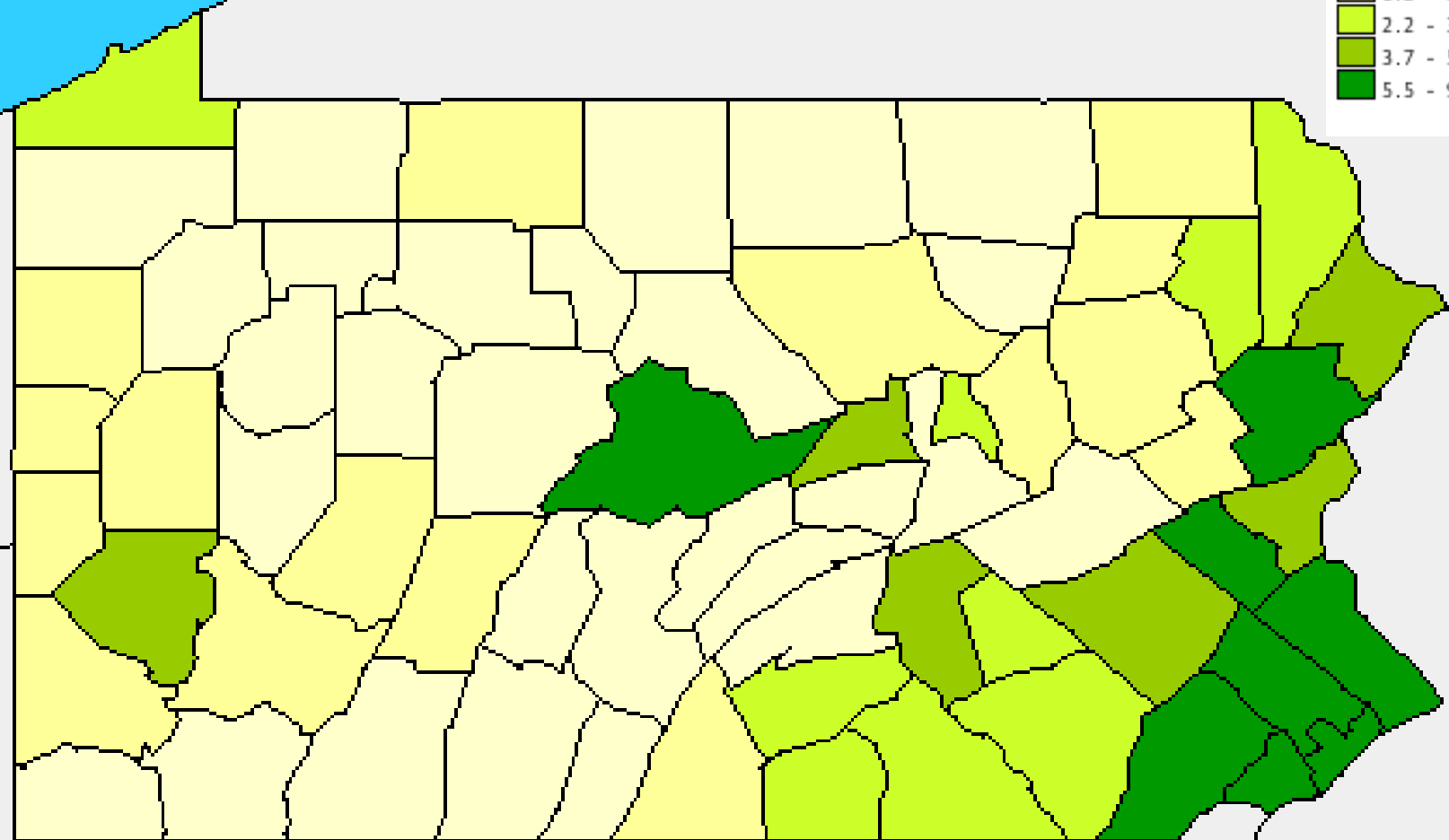
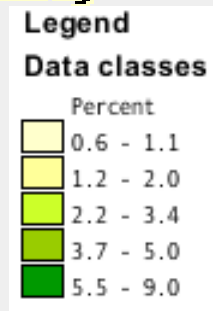
Percent of Persons Who Are Hispanic or Latino (of any race), Pennsylvania by County, Census 2000

Percent Hispanic, 2000

Legend
Data classes



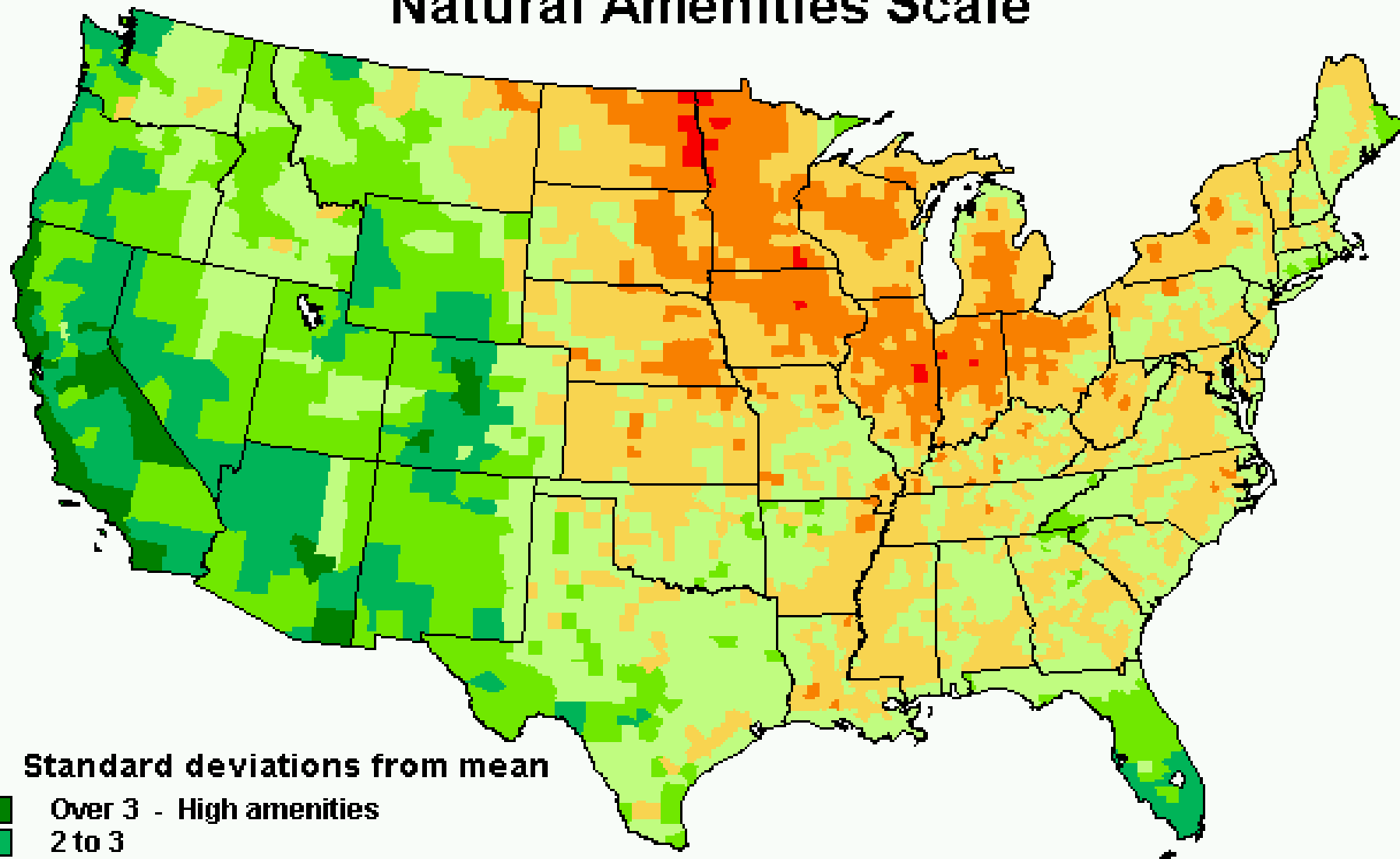
Percent Foreign-Born, 1990



Environmental and quality of life factors have become major economic and demographic drivers in the New Economy (Rupasingha and Goetz, 2003)...

In the U.S. South and West, natural amenities are major determinants of population migration

Natural Amenities Scale

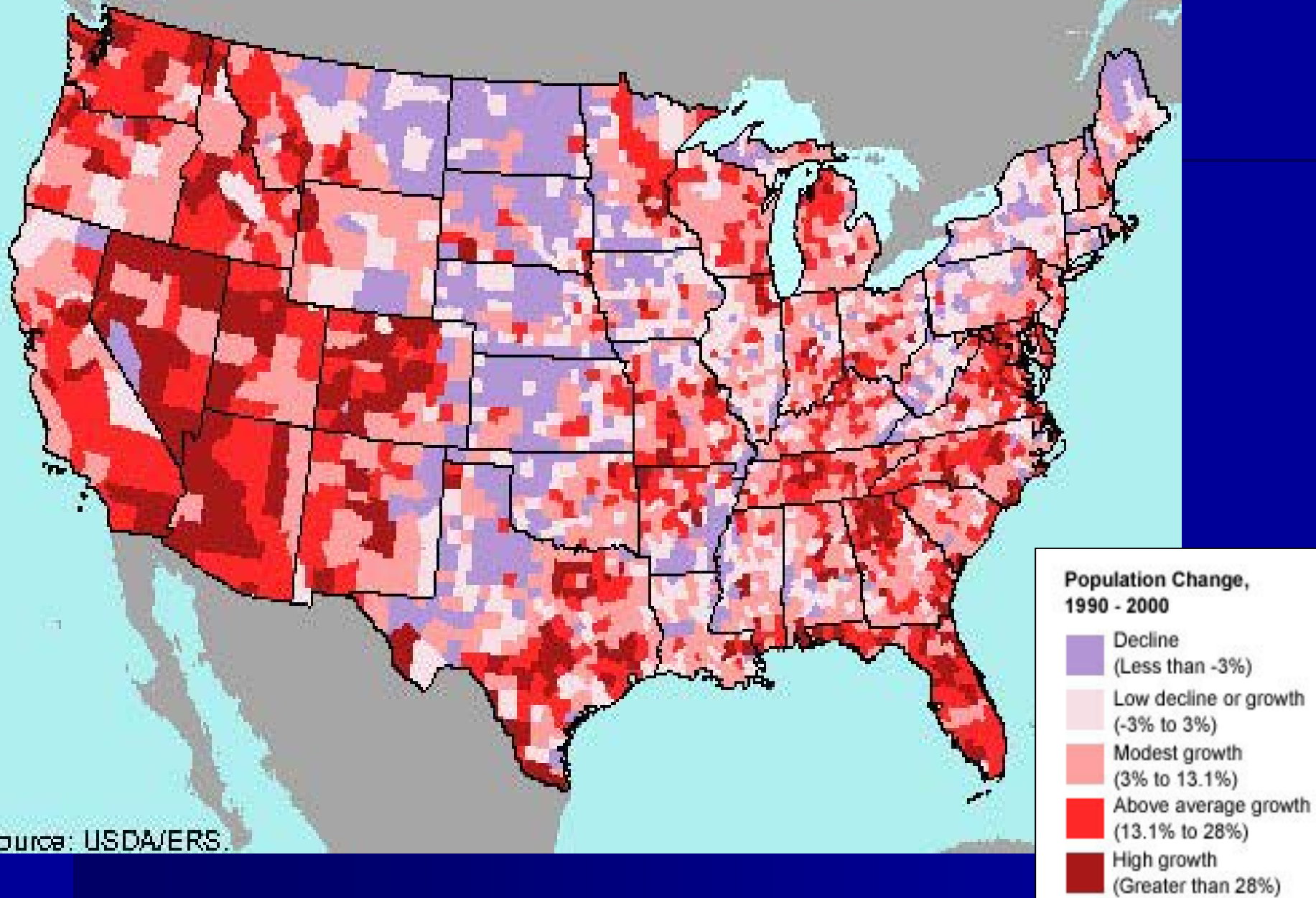


Standard deviations from mean

- Over 3 - High amenities
- 2 to 3
- 1 to 2
- 0 to 1
- 0 to -1
- 1 to -2
- Over -2 - Low amenities

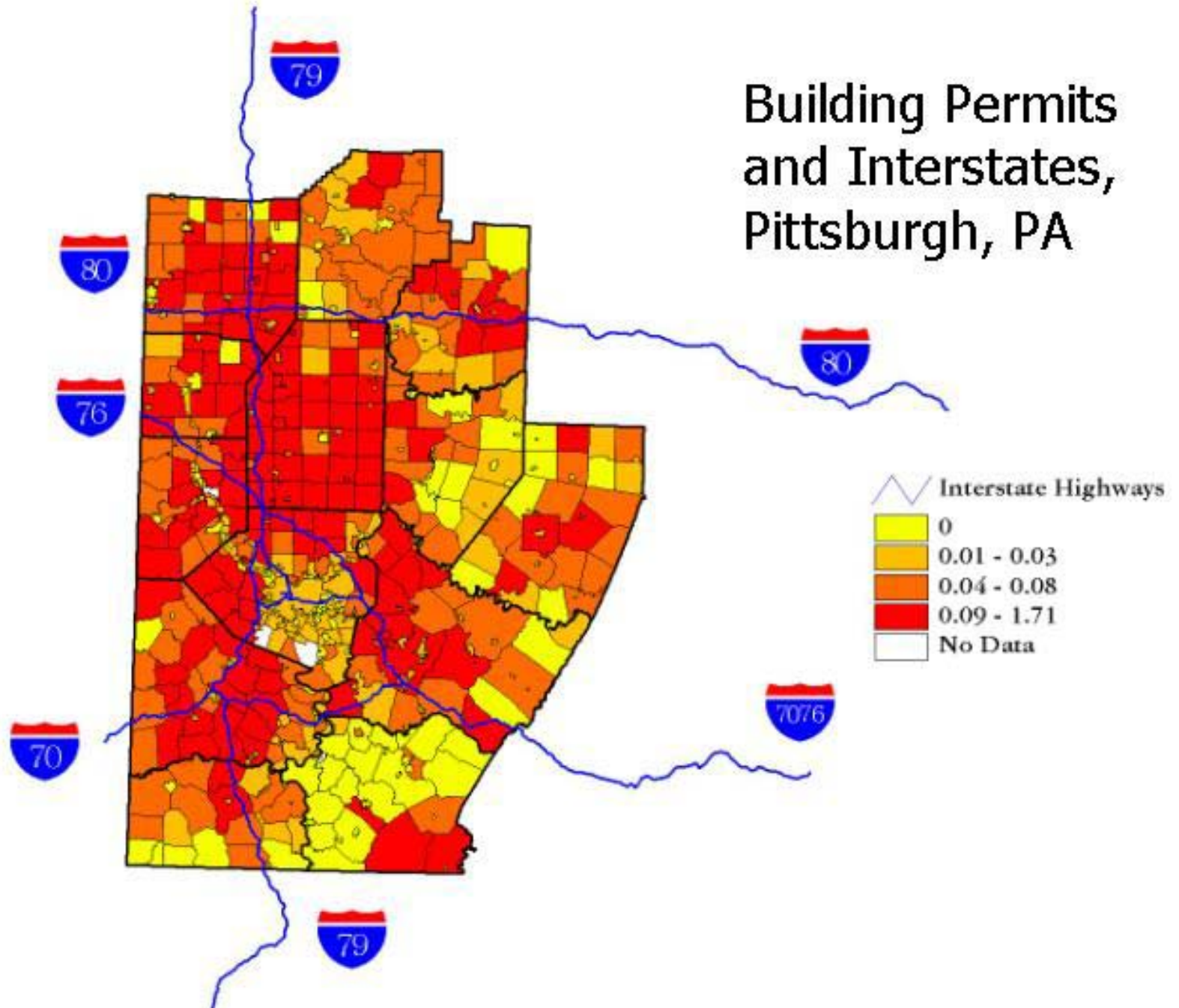
Source: USDA, Economic Research Service.

Figure 1: US Population Change, 1990-2000

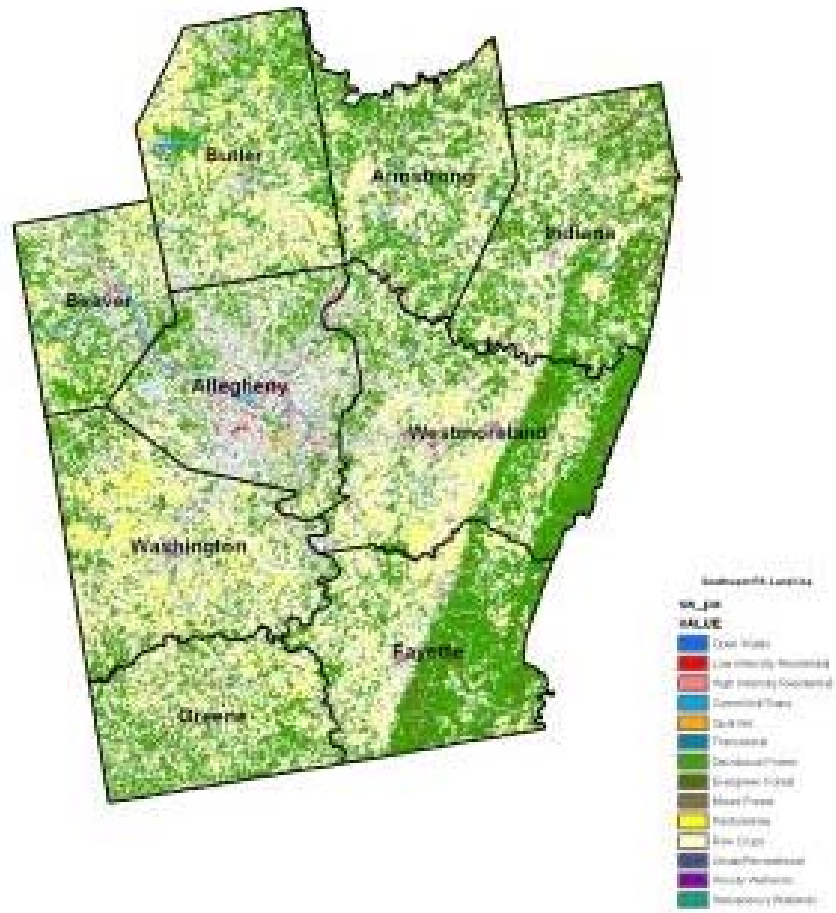


Source: USDA/ERS.

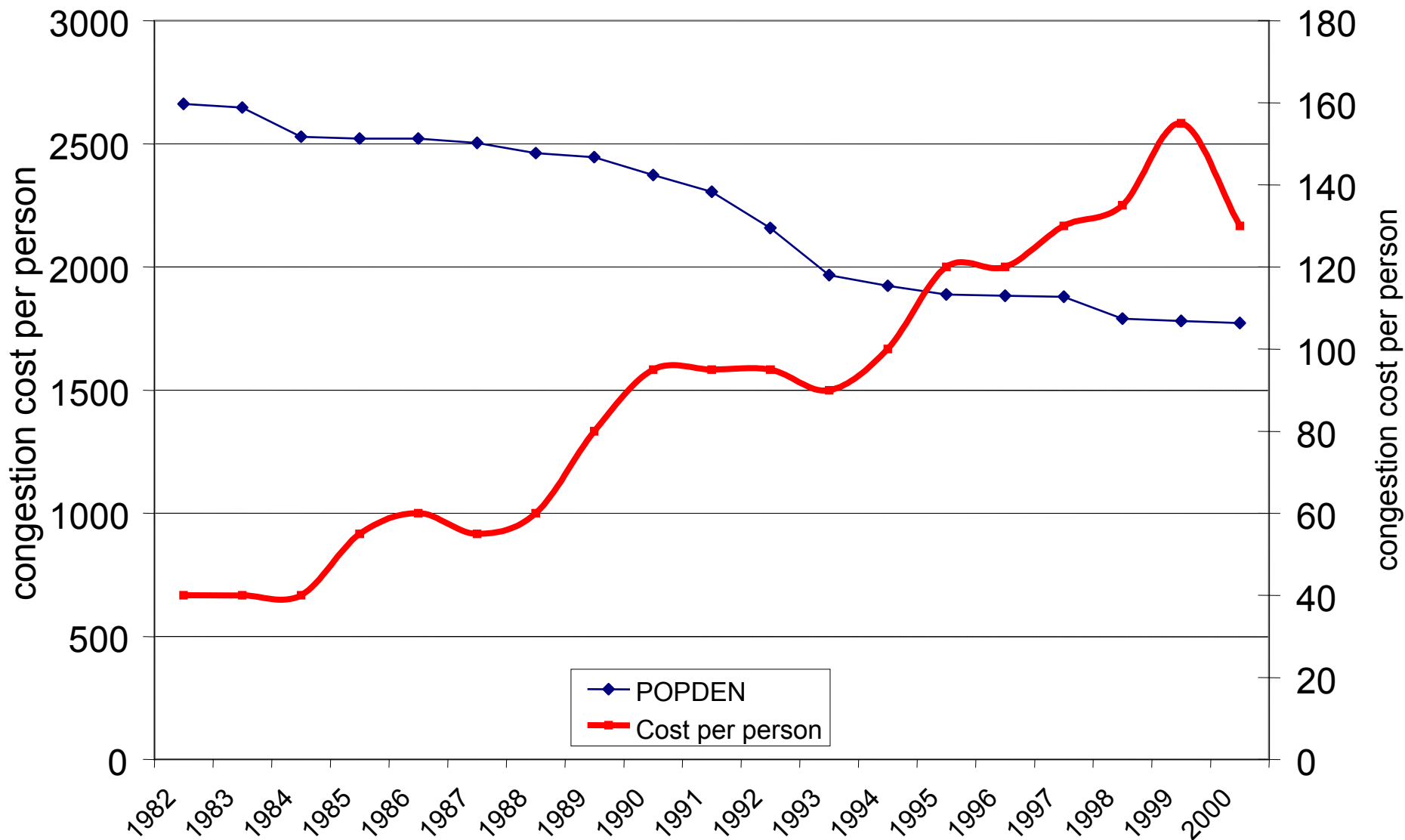
Building Permits and Interstates, Pittsburgh, PA



Southwest PA Land Use



Traffic Congestion in the Pittsburgh, PA Metro Area, 1982-2000



What to do?

How *could* the economy of southwest Pennsylvania change?

Traditional Economic Development Strategies

- **Recruitment of firms**
- **Firm retention and expansion**
- **Local entrepreneurs, including farm/non-farm proprietors**
- **Capture outside grants, other external funds**

Traditional Economic Development Strategies

- **Recruitment of Firms**
 - **Benefit depends on...**
 - **Type of industry**
 - **Wages paid relative to state average**
 - **How it complements existing firms**
 - **But: New jobs may not go to current residents!**

Traditional Economic Development Strategies

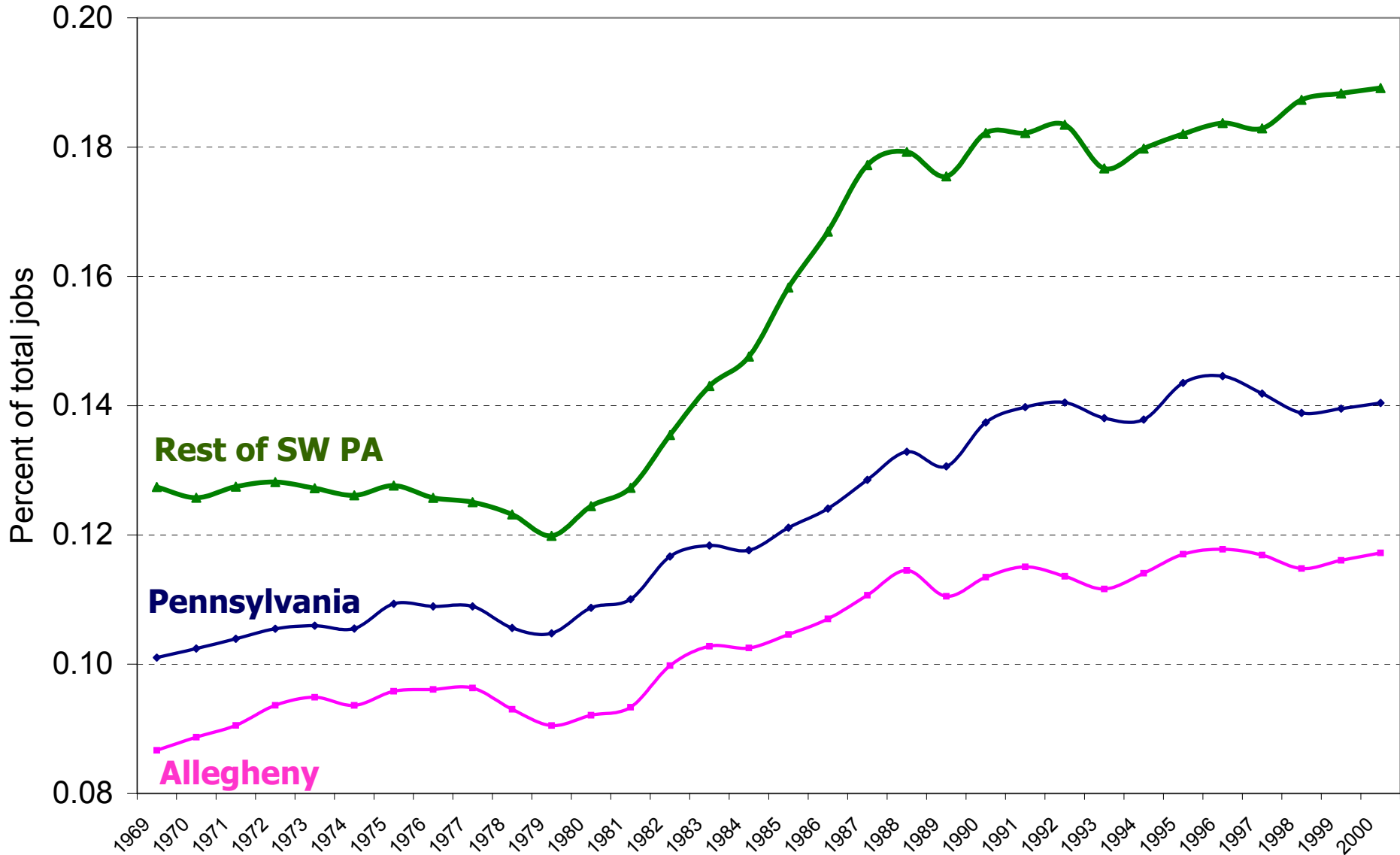
- **Firm Retention and Expansion**
 - **Technical assistance programs**
 - **Experts drawn from colleges, universities, government sector**
 - **Assist independently-owned firms**
 - **E.g., PennTAP**

Emerging Strategy:

- **Proprietors/entrepreneurs (farm, non-farm) as a neglected asset**
- **Create soft network infrastructure that leverages industry clusters, making them work more efficiently**
- **“It matters not what we produce but *how* we produce it”**

Proprietor-Employment Rate, 1969-2000

Non-Farm Proprietor Employment as a Percent of Total Employment



Raising productivity (incomes) of the self-employed

- **Basic business principles**
 - NxLevel
 - Other small business training
- **Access to**
 - Markets, capital, information
- **IT Infrastructure (Penn State)**

Definition of Clusters

- “geographic concentrations of inter-connected companies, specialized suppliers, service providers, firms in related industries and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate”
(Porter, p.16)

Clusters... (continued)

- The importance of clusters suggests new roles for government at [all] levels ... removing obstacles to the growth and upgrading of existing and emerging clusters takes on a priority.
- All clusters can be desirable, and all offer the potential to contribute to prosperity.
- **Benefits are internal to the cluster, not the individual firm.**

Michael Porter (2000, pp. 15, 16 and 27).

Clustering benefits

- **Spillover of ideas, innovations**
- **Enhanced access to specialized inputs**
- **Supply chains or “buy-sell relationships”**

Cluster example: Inputs into Chemicals in Northeast Ohio



Specialized Community Infrastructure:

Access to
capital

Transportation Network & Highway Access

Trade
Association

Research
Univer-
sities

Educational Institutions – Providers of
Labor Force

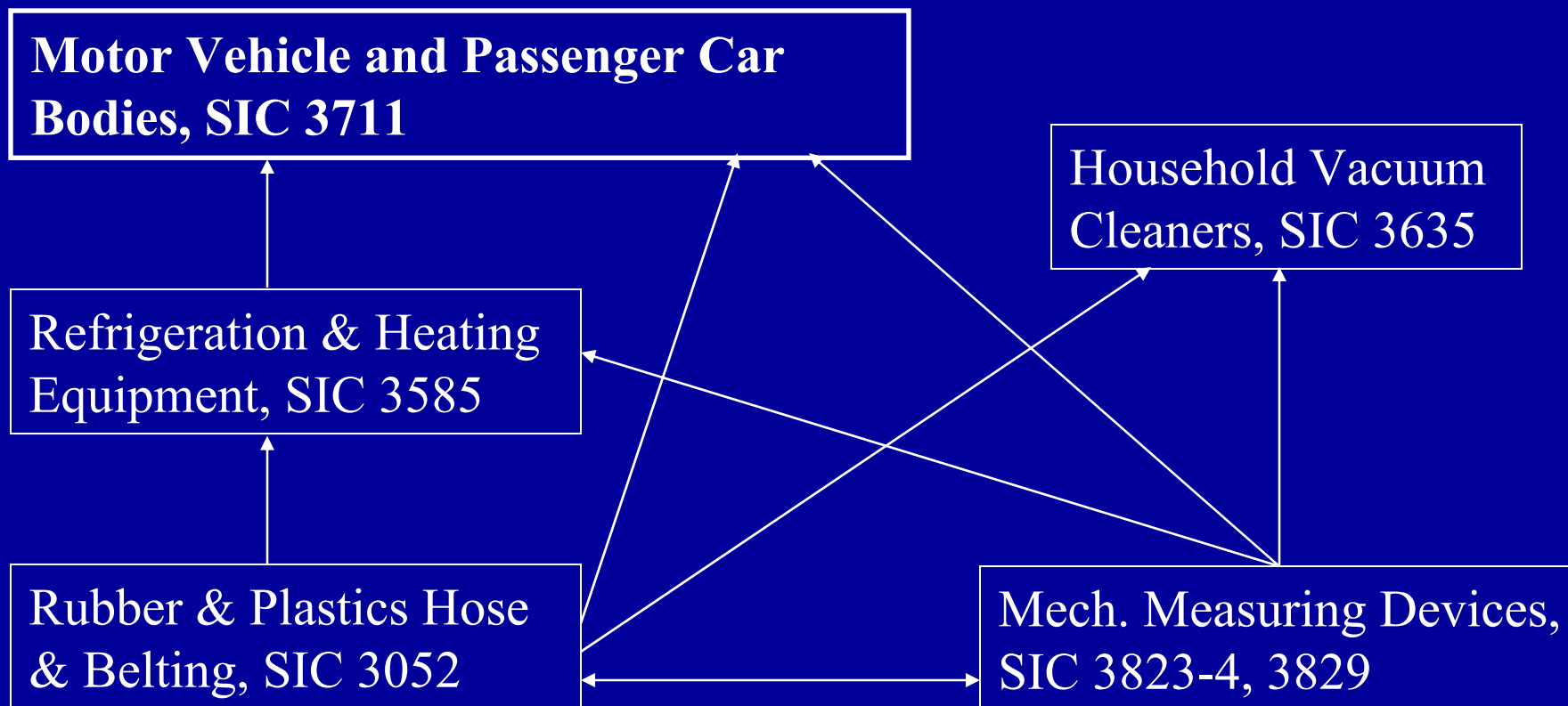
Healthy Business Environment Fostered by
State and Local Government

**Local
Development
Organizations**

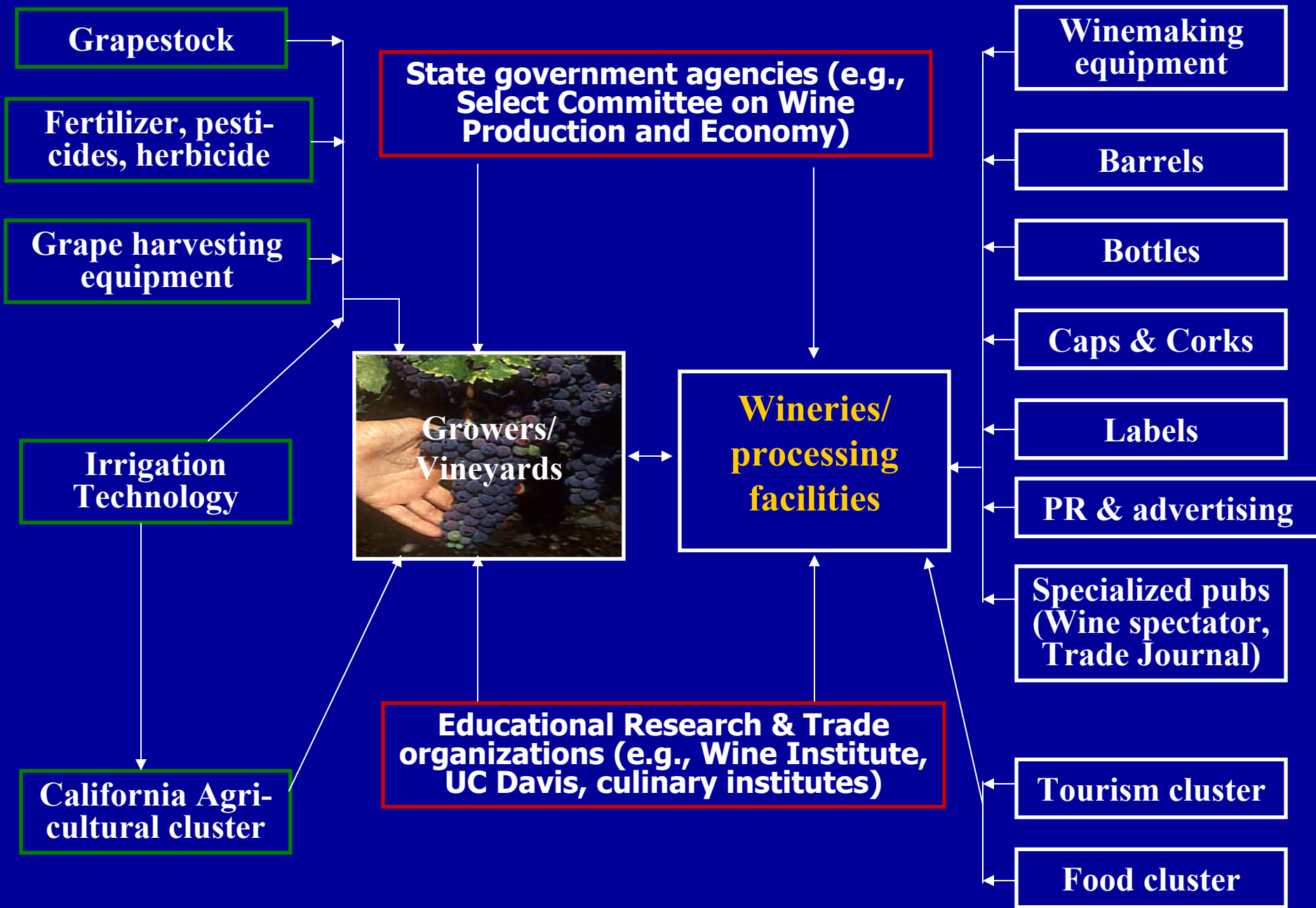
*Note: Based on Dwayne Keeney and Adina Swirsky, *The Chemicals Cluster in Northeast Ohio: A Briefing Paper*, Urban Center, Levin College of Urban Affairs, Cleveland State University, June 1998*

Cluster example:

Motor Vehicle Linkages in North Carolina



Note: Based on E. Bergman, E. Feser, and S. Sweeney, *Targeting North Carolina Manufacturing: Understanding the State's Economy Through Industrial Cluster Analysis*, Institute for Economic Development, University of North Carolina at Chapel Hill, March 1996.



California's Wine Cluster (based on Porter 2000, p.17)

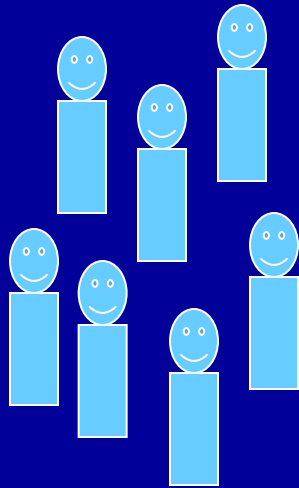
Other examples of clusters...

- **Houseboats (rural Kentucky)**
- **Automobile supply chain (I-75)**
- **Wine (NY Fingerlakes region)**
- **Cheese (north of San Francisco)**
- **BioTech**
 - 41 states pursuing life sciences
 - Michigan's \$1bn life sciences corridor
 - St. Louis' *BioBelt*
 - Gen*NY*sis, Kentucky, Pennsylvania
 - Brookings: The apparent scale of research funding required for becoming a biotechnology center may be beyond the reach of most metropolitan areas



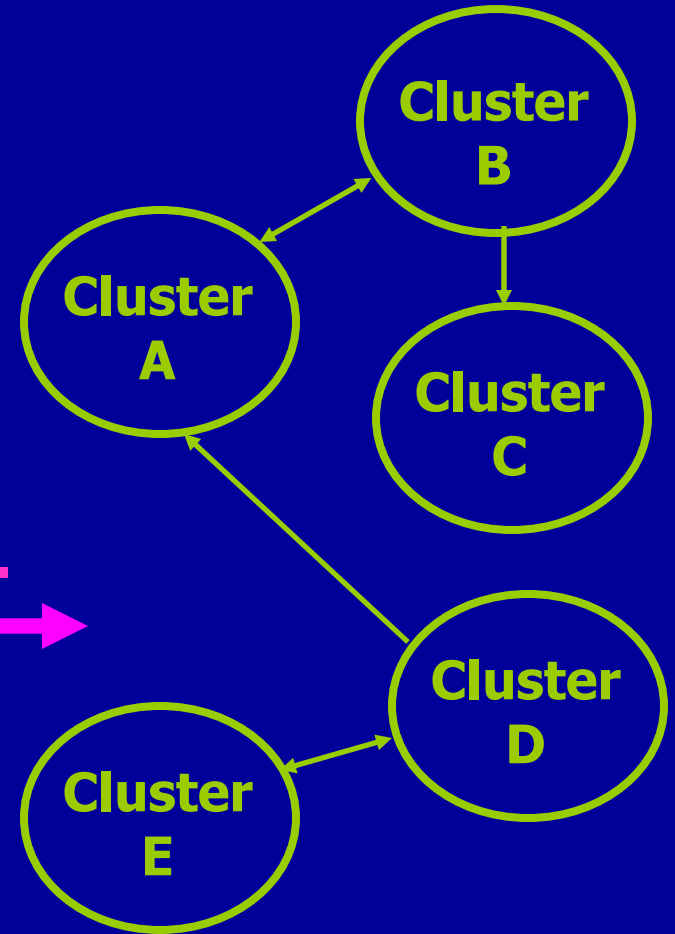
Synthesis: looking inside the community to stimulate economic development

Draw on existing resources, including proprietors...



Community leadership

...to enhance...



...within- and across-cluster benefits

Summary and Conclusion

- **Vibrant communities are created by...**
 - Looking inside, to all local assets
 - Involving all sectors synergistically
 - Combining physical and human capital investments, strategically
- **Clusters can provide a roadmap for this process**
- **Need to emphasize entrepreneurship, both on and off-the-farm**

The End

Thank you

Questions, comments?

For additional information, please contact:

Dr. Stephan J. Goetz

The Northeast Regional Center for Rural Development

7E Armsby Building, Penn State University

University Park, PA 16802-5602

Tel.: 814/863-4656; FAX: 863-0586; sgoetz@psu.edu

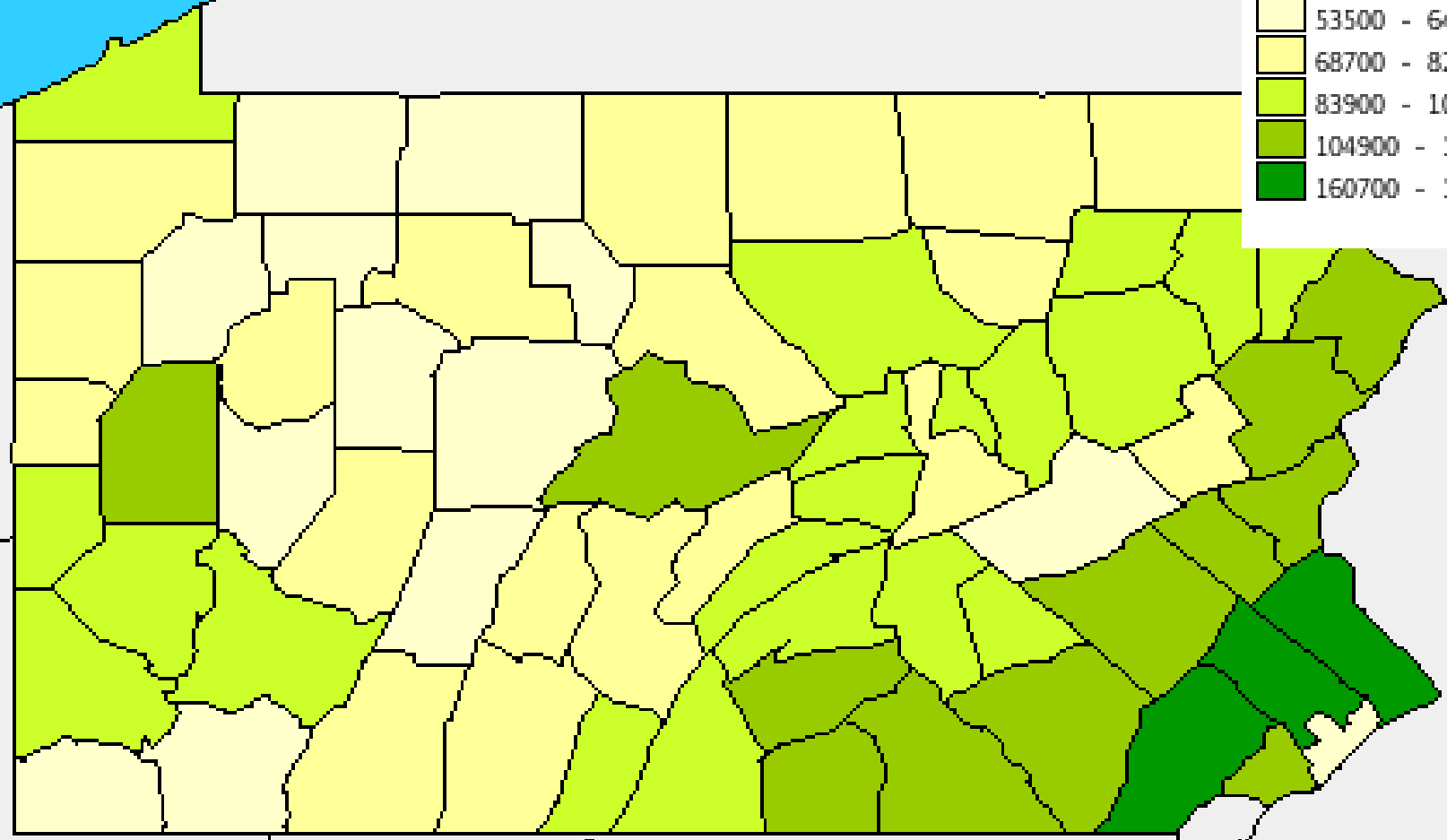
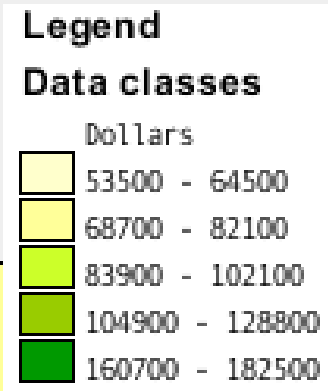
This slideshow is available at:

<http://www.cas.nercrd.psu.edu/SWPA.conf.sjg.ppt>

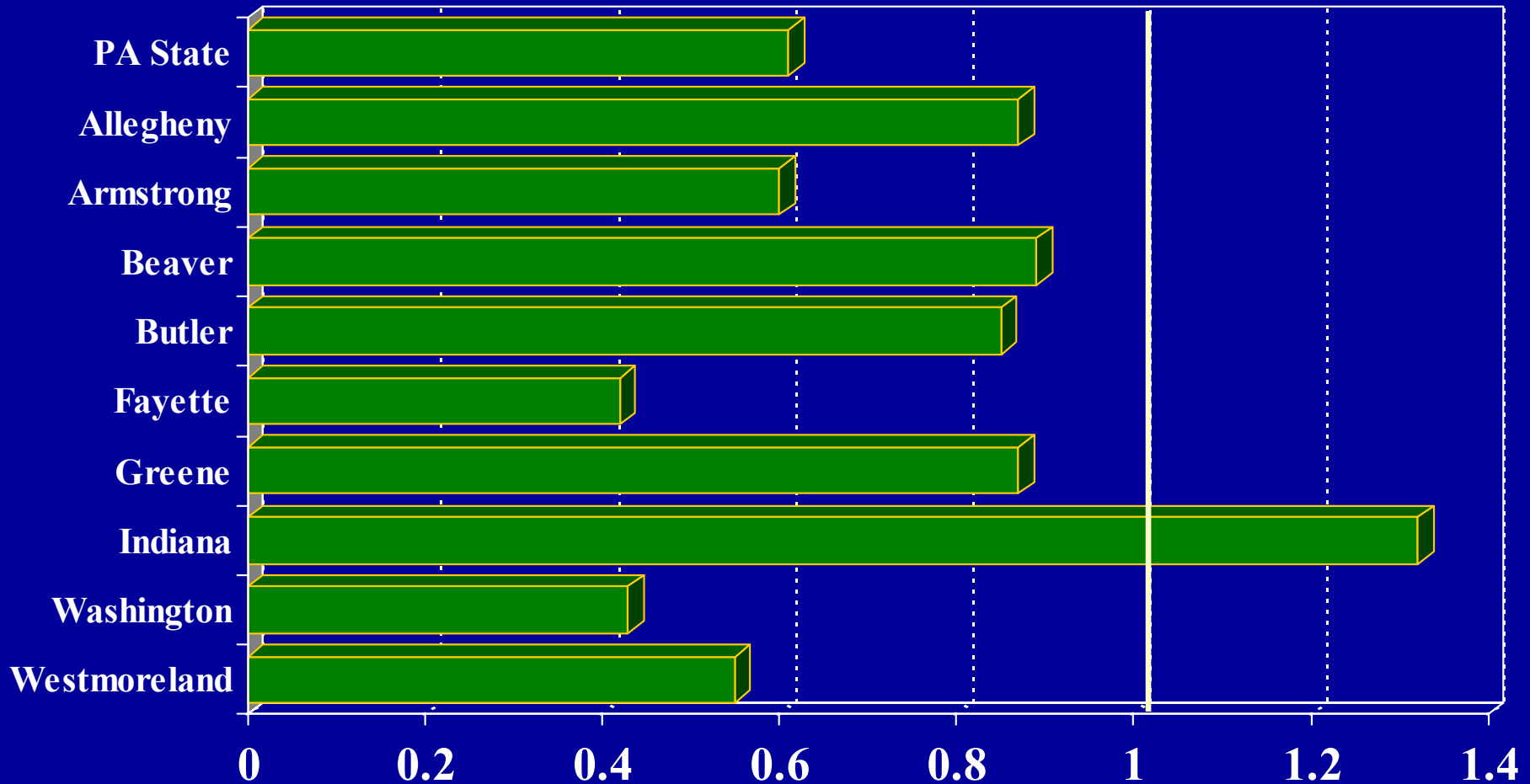
*Further details about the changing economic conditions in each of Pennsylvania's counties are available at the following site, provided by Dr. Martin Shields:

http://cecd.aers.psu.edu/county_profile.htm

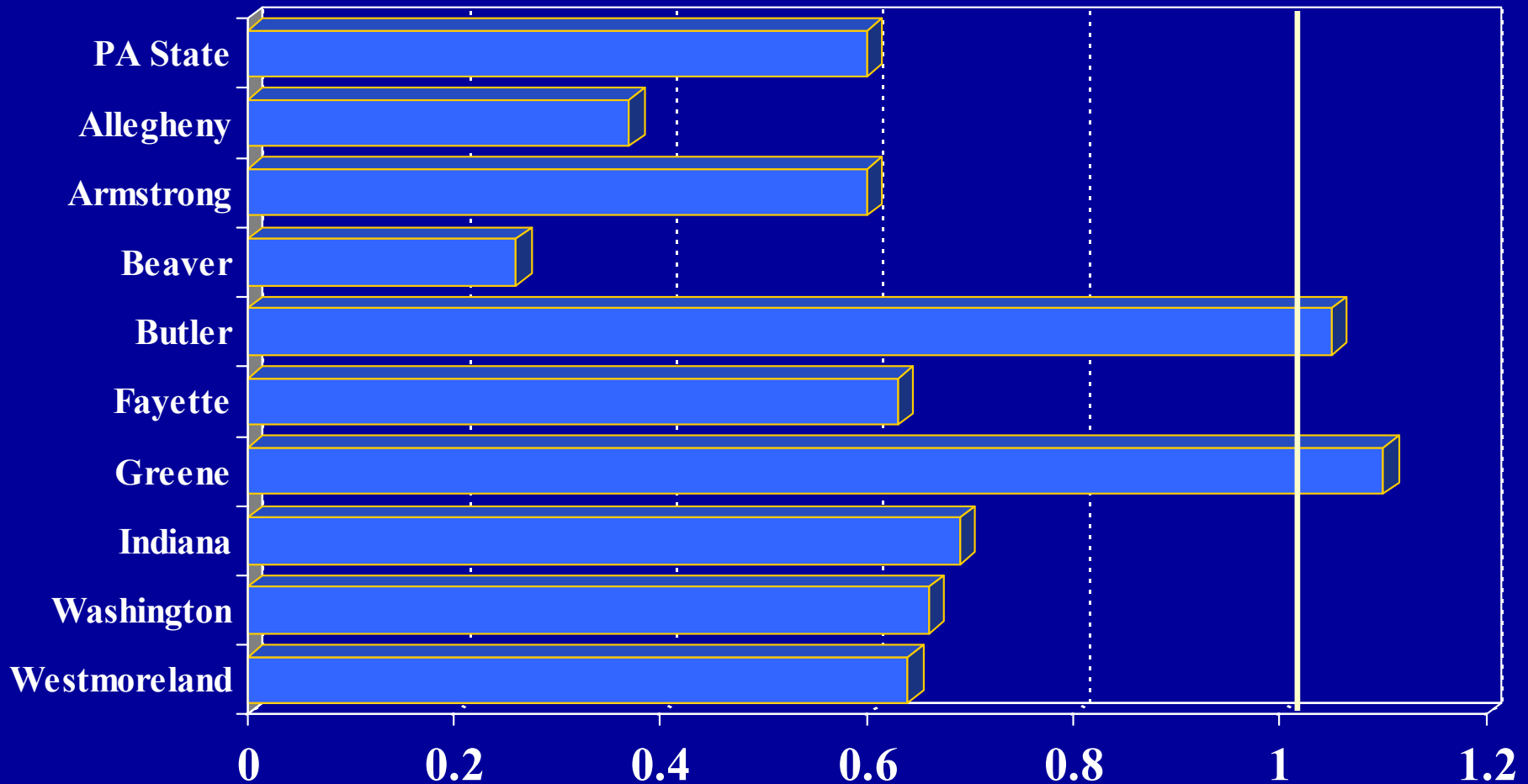
Median Value of Specified Owner-Occupied Housing Units, Pennsylvania by Census 2000



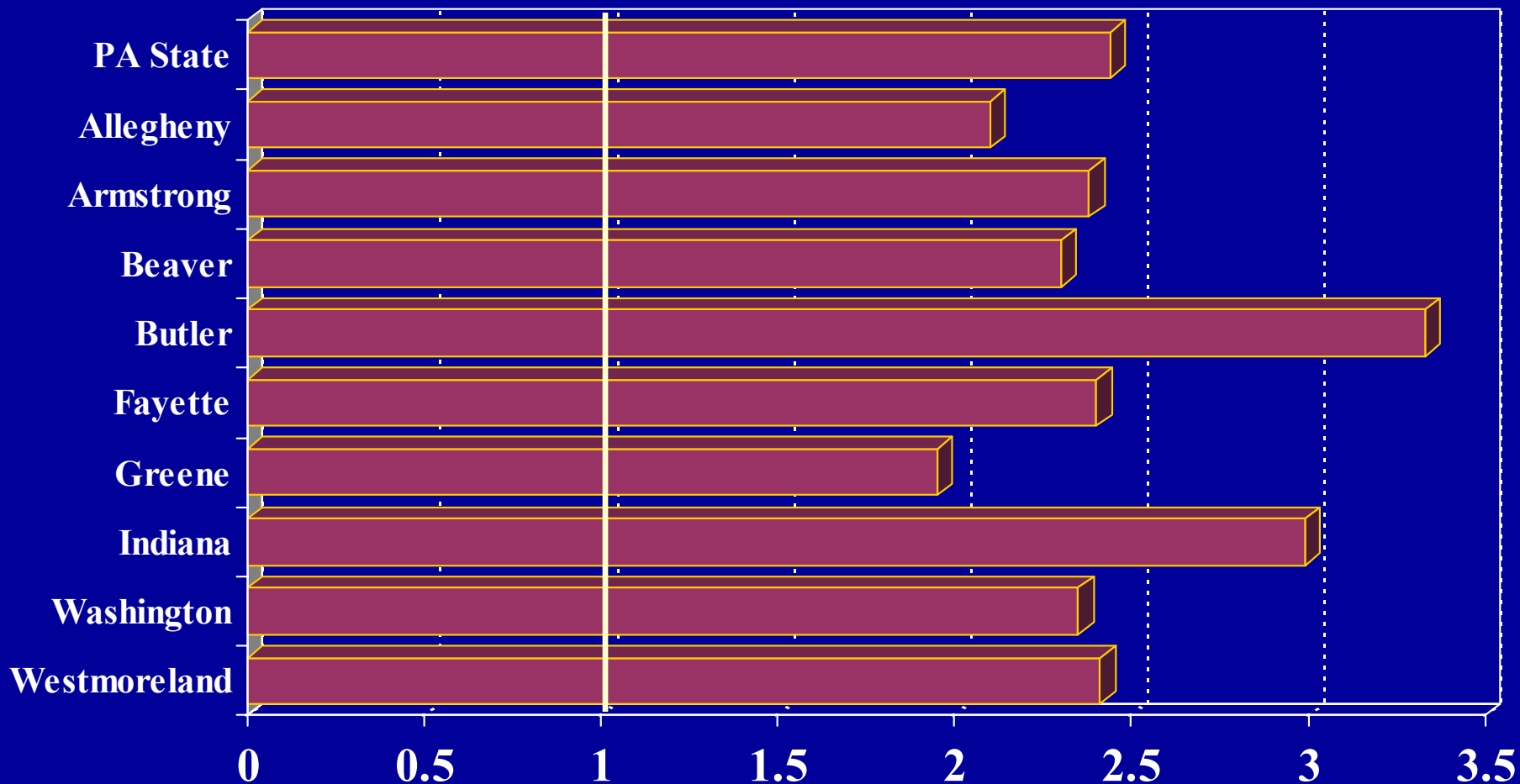
Mining employment in 2000 as a percent of 1969 mining employment



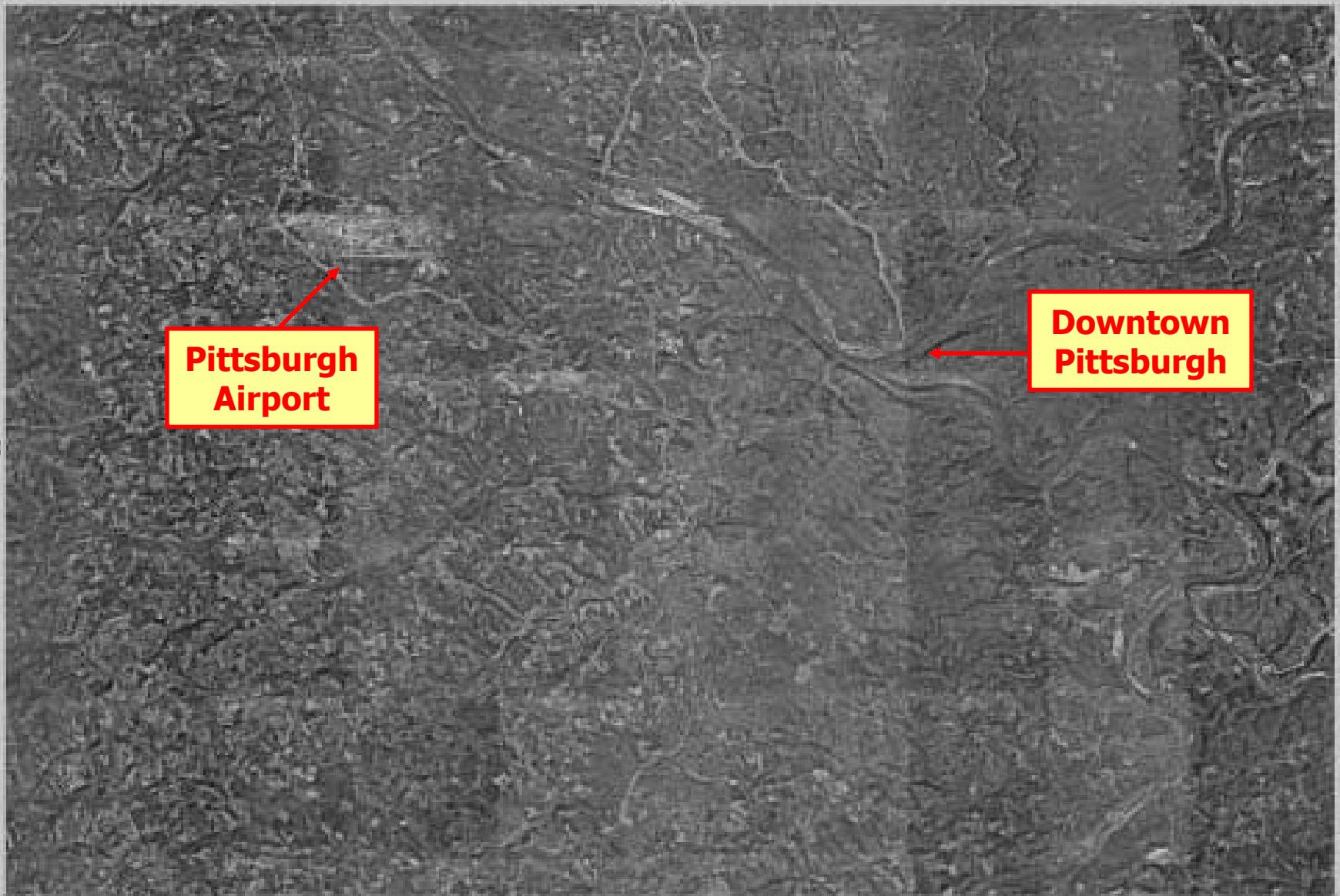
Manufacturing employment in 2000 as a percent of 1969 employment



Service sector employment in 2000 as a percent of 1969 employment



Pittsburgh, Pennsylvania, United States, 07 Apr 1997; aerial photo



Source: Terraserver.Microsoft.com; 07 Apr 1999 (accessed 23 Apr 2003)

Pittsburgh, Pennsylvania, United States, 07 Apr 1997; aerial photo

**Pittsburgh
Airport**



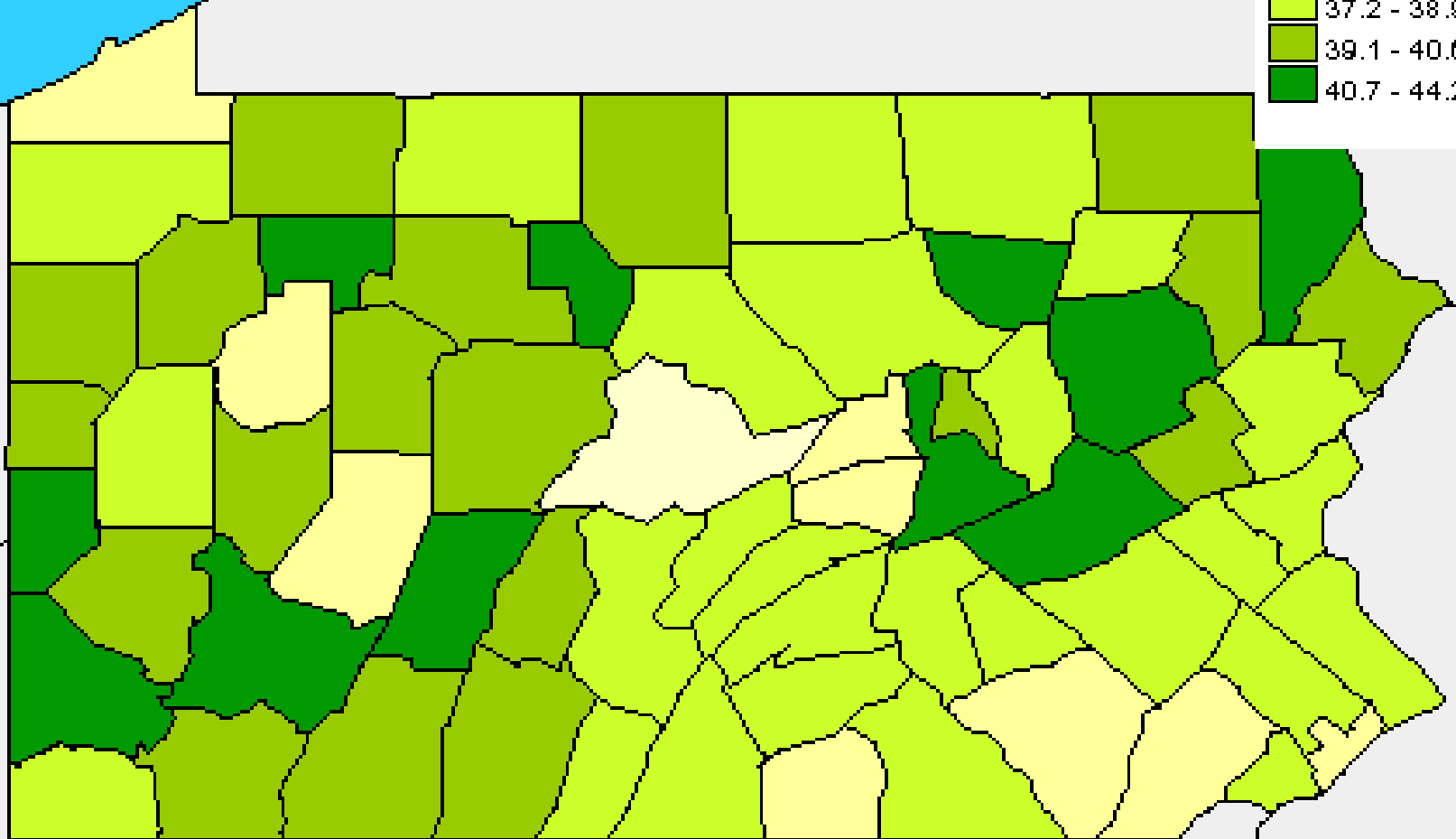
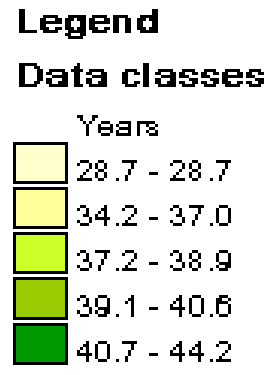
***Source:* Terraserver.Microsoft.com; 07 Apr 1999 (accessed 23 Apr 2003)**

Rural Investment Needs

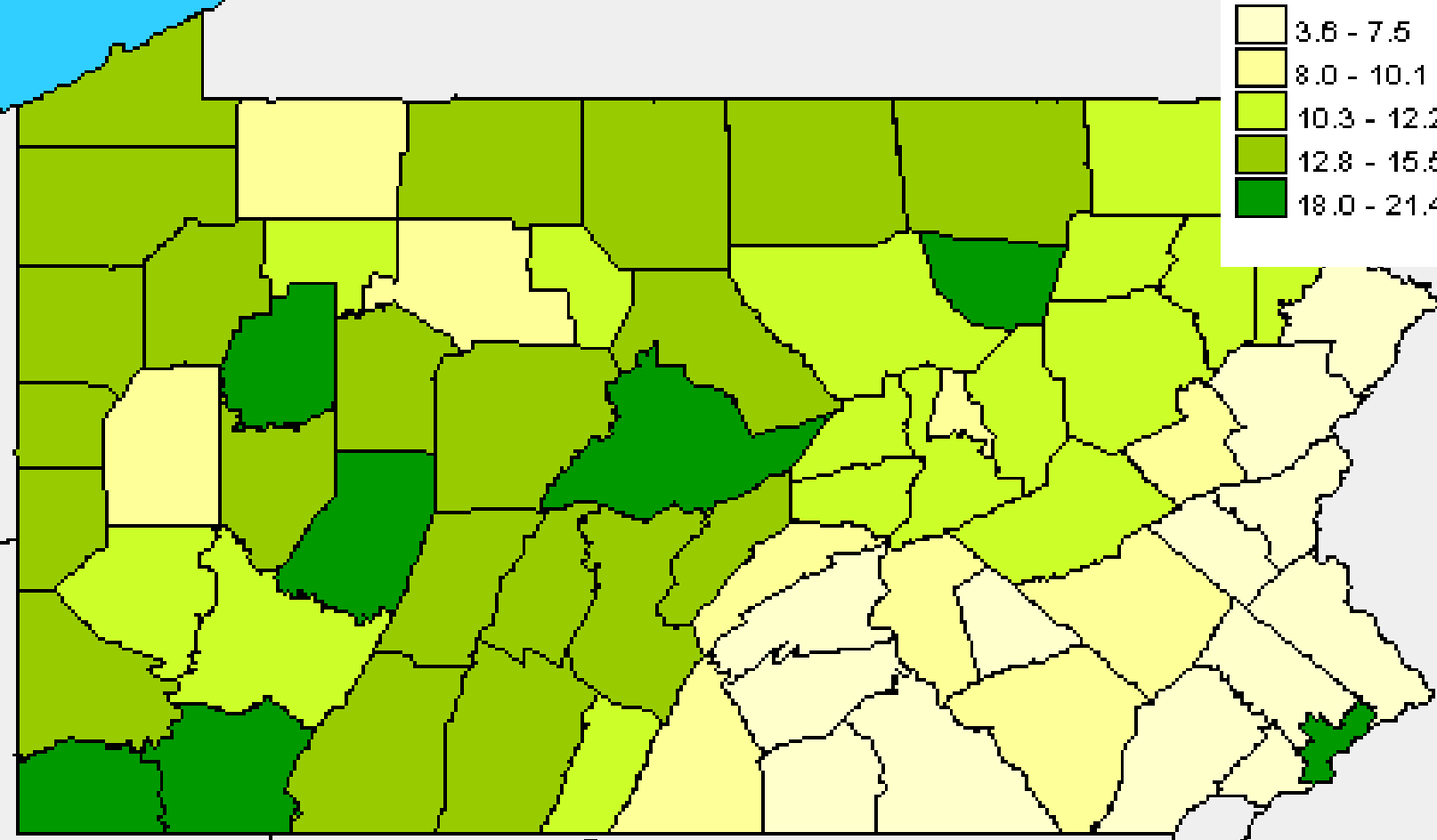
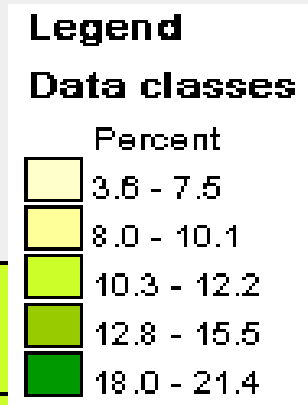
- **Expansion of Infrastructure and Public Services to Rural Areas**
 - Example of IT, broadband
 - Complement existing clusters
- **Human Capital Development of the Local Labor Force**
 - What makes sense?
 - Need to be realistic; chicken-and-egg issue
 - Programs for entrepreneurs

**Median Age, Pennsylvania by County
Census 2000**

Median Age, 2000

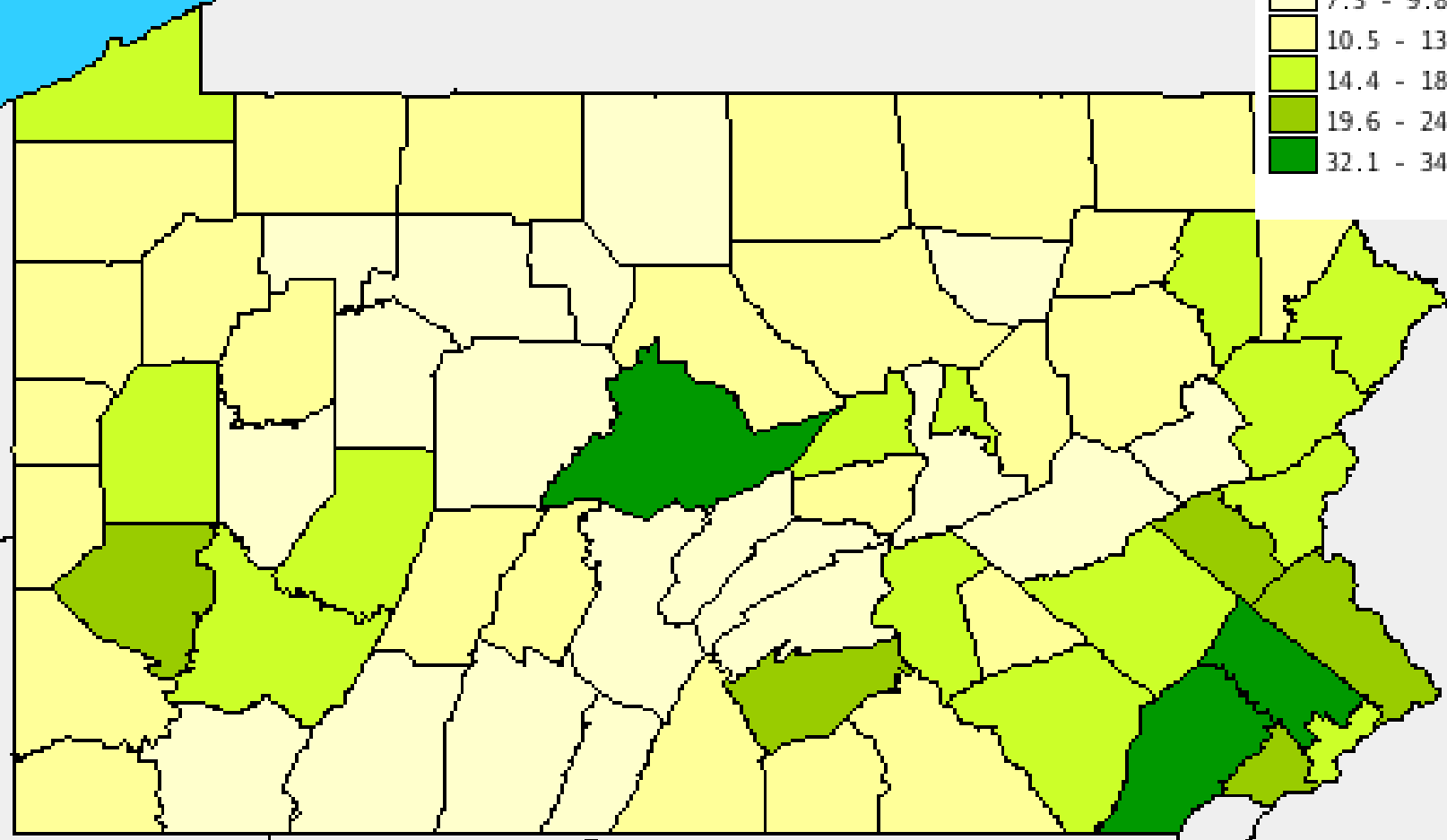
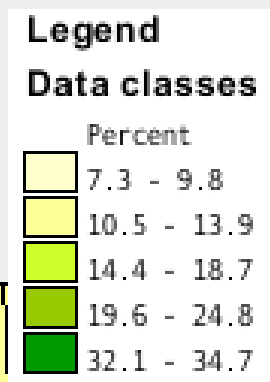


Percent Poor, 1989



Percent of Persons 25 Years and Over with Bachelor's Degree or Higher,
1990 Decennial Census

Percent with BS Degree, 1990



Percent of Persons of Hispanic Origin (of any race), Pennsylvania by County
1990 Decennial Census

Percent Hispanic, 1990

Legend
Data classes

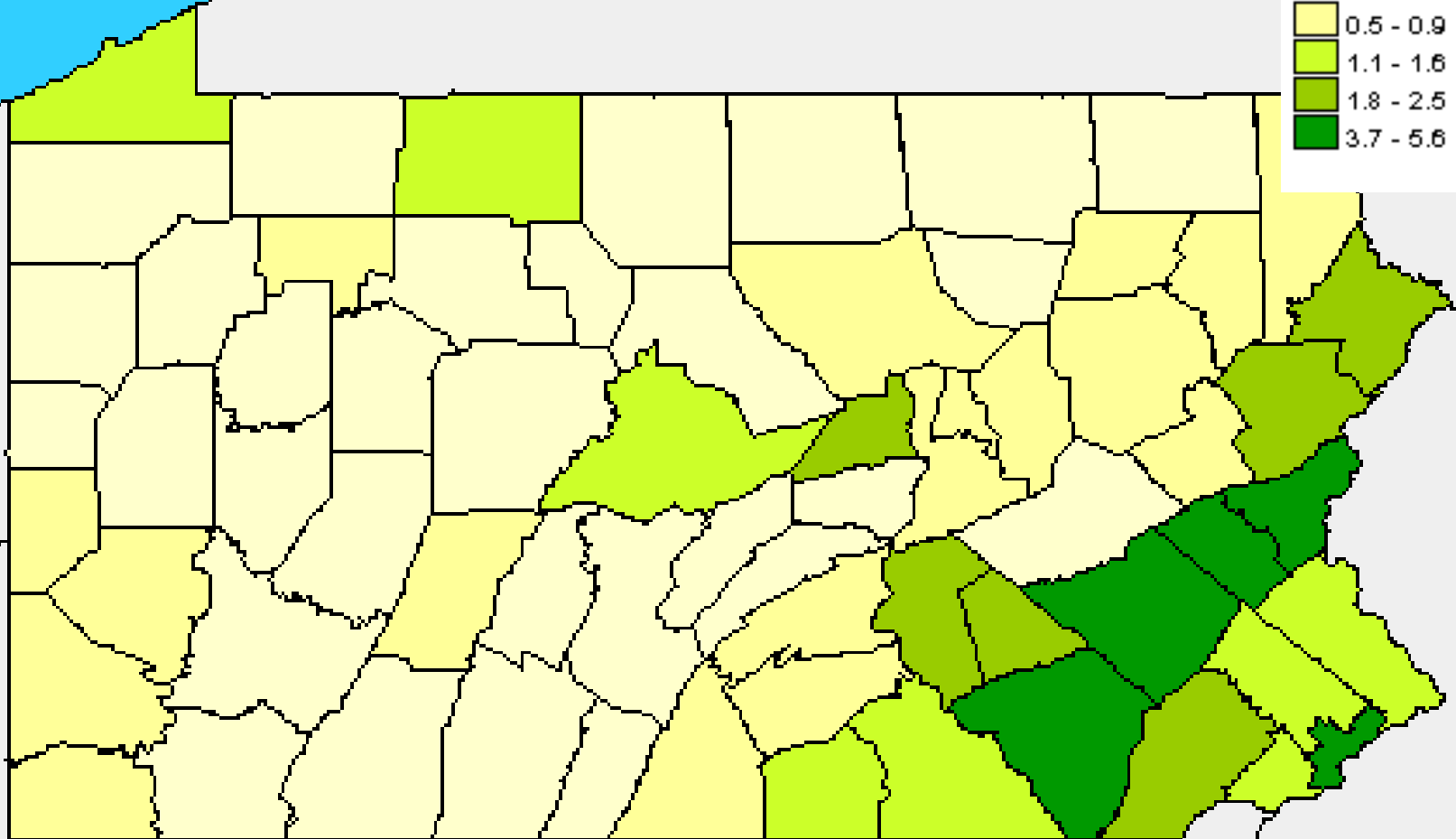
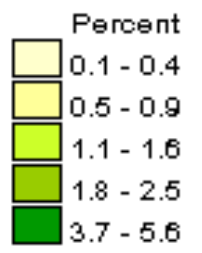


Figure 3: Second Homes as a Percent of All Homes, 2000

