

# ***Using Economic Information to Better Understand Your Local Economy***

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*Making Life Better*

# Using Economic Information to Better Understand Your Local Economy

## Problem

In order to craft effective economic development strategies, it is essential to understand the current state of the local economy, including its relative strengths and weaknesses. To learn more about your local economy, you are encouraged to conduct a detailed study of its current and historical performance.

This tool is designed to help you address a number of important questions.

- What are the current economic conditions in your community?
- What parts of the local economy have been growing? Which industries have been declining?
- How does the local economy compare to other nearby economies? The state?

We offer these tools to help you get started in examining important economic trends in your community. The methods are flexible and can be used on a variety of economic indicators, including employment and unemployment, income, poverty rates and housing. The tools can use secondary data, readily available from sources such as the Census Bureau, the Bureau of Economic Analysis, and the Bureau of Labor Statistics. The analysis should help a variety of local efforts, including industry development, grant writing and visioning.

## Analysis

In practice, there are a number of indicators that illuminate our understanding of the local economy, ranging from simple descriptive statistics to in-depth surveys and analysis. Regardless of the methods and measures chosen, there are important guidelines that can help you make the most of your efforts. We urge you to keep the following points in mind when using the tools developed below.

1. **There is no “single number” that represents the local economy.** When thoroughly assessing the local economy, one needs to use several measures, as reliance on a single measure provides only limited insight. For example, a high job growth rate may show the community is generating new employment opportunities; but there should be interest in the wages provided by new jobs as well, in order to get a better understanding of the local labor market’s “true performance.”
2. **It is important to make comparisons among communities.** No community exists in isolation. In order to better understand local economic performance, you should compare your community to “similar” communities, the state and the nation.
3. **It is important to examine changes over time.** While a “snapshot” analysis provides a good indication of where the community is today, it is important to

know long-term trends in the community. With respect to employment, industries that have traditionally been important may now be declining. Trend analysis can be particularly informative as it often provides good predictions about the near future.

4. **A “reality check” is essential.** While using the methods here to analyze “hard data” is a starting point, it is also important to tap the insights of local citizens and policy makers. If the analysis and the data are at odds, a more in depth examination may be necessary.
5. **The analyst, not the data, should tell the story.** Always remember, economic data is boring, and no reader wants to pour over reams of tables and charts. But the information can be extremely helpful if it is used to complement a coherent, consistent and truthful story about the economy. The information is most useful when summarized with themes, interpretations and conclusions.

Of course, the first step is to define the “local” economy. While in reality the mobility of people and money means any economy is not really place specific, it is necessary to define *some* region as the local economy. For practical reasons (i.e., data availability) “The Economy” is often defined according to political jurisdictions, such as municipalities, counties or states. While practitioners usually want to define the economy as locally as possible, it is important to keep in mind that better data becomes more available as we move up the political hierarchy. Generally, comprehensive data at the sub-county level is available only every 10 years from the Census. Conversely, state, national, and even some county data is often updated monthly.

Once you have defined your economy, you can use the following tools to size up your economy; keeping in mind the principles outlined above.

### **Tool 1. Develop a “snapshot” of important local economic indicators.**

At the local level, the first question usually asked is “What is the state of our economy?” A variety of indicators can inform this question. Some common ones are industry employment, unemployment, wages, population and housing starts. We provide a more thorough discussion of these and other indicators--with appropriate web links provided--in the “Some Potential Indicators” section; this section emphasizes general methods.

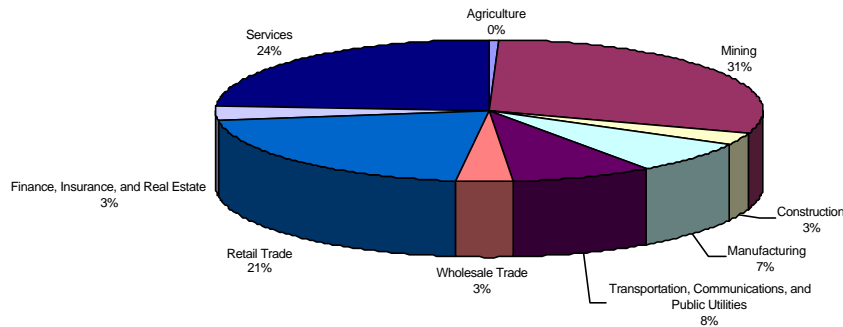
A **snapshot** provides a basic overview of important economic indicators. Usually, these snapshots are presented as a series of tables and charts. For example, you might develop a *Current Employment Picture* that shows the breakdown of local employment by industry. Alternatively, you might develop a *Social Indicators Picture* that shows the local poverty rate, health care availability, etc. Here’s an example.

## Key County Social and Economic Indicators

Variable	County	Pennsylvania
Population (1997)	37,121	12,085,201
Population Growth (1990-1997)		
Total Change	(131)	189,680
Percent Change	-0.4%	2%
Percent of Population at least 65 years old	16.8%	15.8%
Per Capita Income (1997)	\$19,184	\$26,641
Poverty Rate (1995)	14.2%	11.4%
Percent of Population aged 25 or older with at least a high school degree (1989)	72.5%	74.7%
Percent of Population aged 25 or older with at least a college degree (1989)	11.7%	17.9%
Unemployment Rate (Sept, 1999)	4.5%	4.3%
Total Employment (1998)	12,114	5,410,983
Agriculture	99	51,294
Mining		3,578
Construction	328	231,493
Manufacturing	3,624	953,071
Transportation, Communications, and Utilities	469	273,085
Wholesale Trade	249	272,184
Retail Trade	2,629	967,525
Finance, Insurance, and Real Estate	337	320,079
Services	2,200	1,662,322
Federal Government (excluding Military)	135	112,380
State Government	628	124,371
Local Government	1,416	439,601

Regardless of your choice of indicator, this data can be used in a spreadsheet and presented in either tabular form or as a pie chart. For example, tables are helpful way to provide actual values of employment. This helps enhance understanding about the relative *size* of the economy. Pie charts are useful for examining the relative levels of economic *dependence* on certain sectors within the economy. Local pie charts can also be compared to state pie charts to examine relative dependence across economies.

## County Employment by Industry, 2000



After developing this snapshot, you should spend some time interpreting the data. Continuing with the employment example, there are several questions you might want to consider.

*What is the major industry in your community? How is this industry affected by change at the state or national level?*

*Compared to other regions, does the community seem highly dependent on any particular industry? How might this dependence be problematic? Or, is this dependence a strength?*

*Does this information support popular perceptions? For example, many rural communities are surprised to find out that agriculture is a relatively small sector when compared to the service industry.*

With this basic understanding of current economic conditions, you are in a better position to identify not only the strengths and weaknesses of the local economy, but also the needs and potential opportunities for development.

## **Tool 2. Chart the historical performance of key economic indicators.**

While a snapshot is a good way to capture today's economy, it is also important to understand how the local economy has changed over time, for several reasons. First, historical analysis allows you to examine long-term **trends**, identifying indicators that have shown strength over time, and those that are declining. Using historical analysis to identify important trends will help you get started in implementing actions that further develop areas of strength, or address new or long-standing problems.

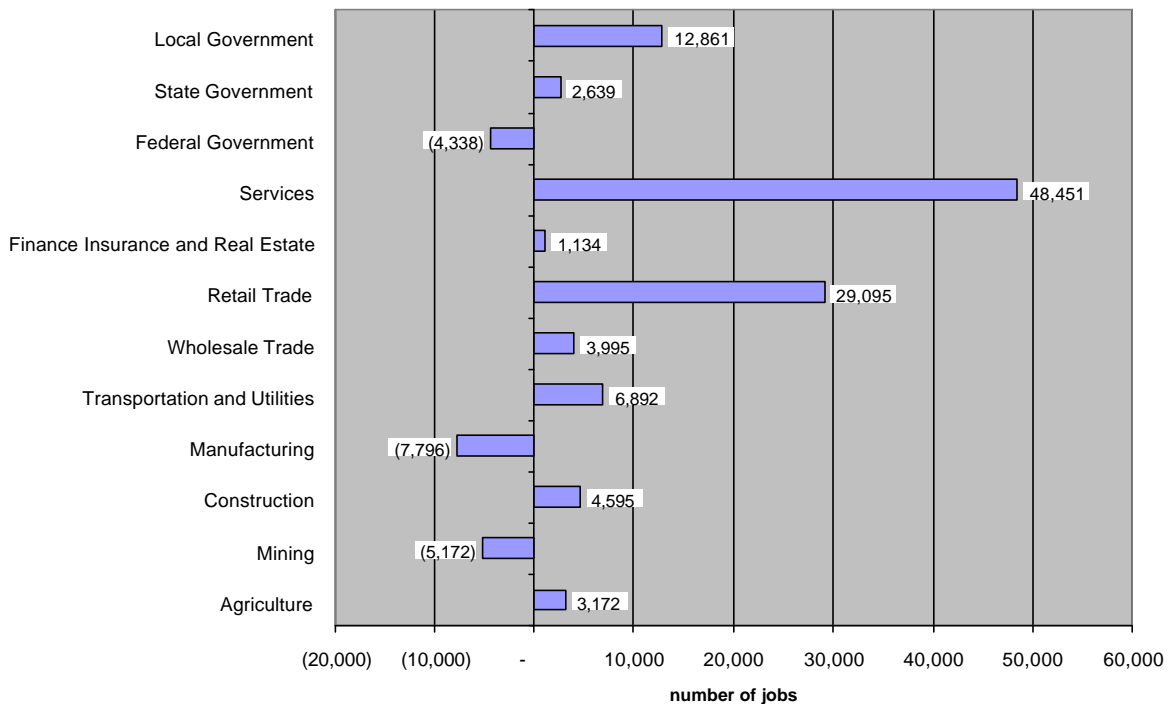
Second, trend analysis helps communities identify “shocks” to important local indicators (such as a sudden upsurge in unemployment). If the data shows some quick, dramatic change, you’ll probably want to know “why” this happened; perhaps a local factory moved overseas. Recognizing the economic factors that influence local industries can strengthen local ability to prevent shocks, or at least quickly respond to them.

Third, trend analysis can either raise or alleviate concerns. For example, a high local unemployment rate may be a historic local problem, suggesting that job creation is imperative. Alternatively, an increase in unemployment may just mirror national business cycle trends, and better times may be inevitable.

A final useful application of trend analysis is in identifying growth opportunities. Perhaps there are some economic sectors that have recently increased in importance. Once again, you’ll want to ask “why?” It may be that your community is especially well suited for some particular “new industry.” In this case, local economic development efforts might focus on developing a niche.

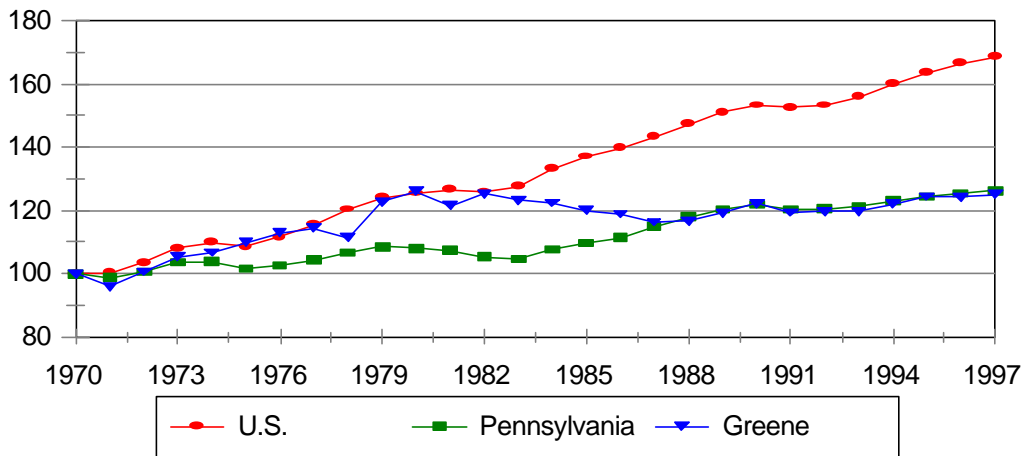
One useful way to analyze data over time is to examine trends relative to some baseline. With a bar chart you can look at how an indicator has changed between two time periods. These charts are especially useful for data available only periodically, such as Census data.

**Industry Employment Growth 1990-2000**



The *Index of Growth* is another tool that provides a cumulative measure of change over time and is an especially useful way to investigate local economic behavior relative to other economies (such as the state or nation).

## Employment Growth Index (1970=100)



The index is based on local economic performance relative to some base year (here, 1970), and is computed according to the following formula (with subscripts identifying region (r) and year (t)):

$$\text{Index}_{r,t} = (Y_{r,t} / Y_{r,1970}) * 100$$

where

- Y = Economic variable (employment, population, etc.)
- r = Region
- t = Year
- 1970 = Base Year (1970).

This index compares the level of a particular economic variable to its level at the beginning of the period. The Index for the base year is always 100. For example, if total employment is 5,000 in 1970 and 6,000 in 1990, then the value of the Index in 1990 is  $(6,000/5,000) \times 100 = 120$ . In this example, employment for the region increased by 20 percent (120 - 100). You can calculate the index for any number of years, and plot the resulting values in a graph.

There are three advantages to using this measure of economic performance. First, placing all regional data on an index basis allows a direct comparison between regions. Second, changes in the value of the index from one year to the next can be interpreted as a growth rate. Here fast growth and slow growth can be identified. Finally, by examining the index over a period of time, you can establish the relative stability of the local economy.

Once again, you should spend some time interpreting the data. When looking at employment trends, for example, there are many questions to consider.

*What local industry has shown the greatest growth? How has this growth compared to the state? The nation? What do you think has caused this growth?*

*Have there been any surprises, such as a sector that has grown or declined faster than was thought? Why do you think this is so?*

*Are there any aspects of local change that are similar to the state or US? Are there any that are different? Why do you think there are differences?*

*Does this information support popular perceptions? For example, in many communities, services have grown to be the largest share of local employment.*

It is also useful to look at a variety of indicators. For example, after identifying a “fast growing” industry, you might want to also look at wages in that industry...it could be that the jobs are not very high-paying, and the growth may not be as great of a local boon as was thought.

In general, recent trends tend to maintain themselves, at least in the short-term. By understanding historical growth patterns, you are in a better position to identify not only the strengths and weaknesses of the local economy, but also the needs and potential opportunities for development.

### **How is this Information Used?**

Information gleaned from these tools can be helpful in several aspects of community development.

For economic development interests, this information can enhance understanding of employment trends, not only as specific to the community, but also in context of other regions, the state or the nation. By identifying growing industries, as well as those that are declining, local development groups can concentrate their efforts on industries where the chances of success are greatest.

When applying for community development grants, it is important to document current and historical conditions. For non-government organization, using the tools yields information that can strengthen grant-writing efforts.

*Regardless of how you use the data, it is essential that you present it effectively!* While information generated by the data analysis tools is an important aspect of understanding the local economy, the fact is that tables and charts are almost always boring. In order to be effective, you must use the data to tell a story—don't expect it to be the story.

### **For More Information**

In addition to the links provided below, one of the web best sites for information on regional economic analysis is [www.econdata.net](http://www.econdata.net). At this site, you can find links to more than 800 online regional data collections, including the “Ten Best Sites.” There also is an excellent guide on *Socioeconomic Data for Understanding Your Regional Economy*. This guide provides some simple analytical tools as well as an overview of many data providers and data sets.

Another good overview of simple methods is available source in *Community Economic Analysis: A How to Manual*. Published by the **North Central Regional Center for Rural Development** (<http://www.ag.iastate.edu/centers/rdev/RuralDev.html>), this manual is designed to assist individuals who need to bring information to a group of citizens or decision makers concerned with the economic future of a community. The manual addresses non-local markets linkage, strategies for economic development, multipliers, assessing the size and shape of a community's trade area, keeping local dollars in the community, measuring the efficiency of local firms, and other strategies.

Other Regional Rural Development Centers include:

#### **Northeast Regional Center for Rural Development**

([www.cas.psu.edu/docs/casconf/nercrd/nercrd.html](http://www.cas.psu.edu/docs/casconf/nercrd/nercrd.html))

#### **Southern Rural Development Center**

(<http://ext.msstate.edu/srdc/>)

#### **Western Rural Development Center**

(<http://extension.usu.edu/WRDC/> )

The **Penn State Data Center** (<http://pasdc.hbg.psu.edu/index.html>) provides extensive economic data. The PSDC mission is to provide easy and efficient access to U.S. Census Bureau data and information through a wide network of lead, coordinating and affiliate agencies in each state.

## Some Useful Indicators

In this section we discuss some potential indicators you may want to consider. Web sources of data are provided. This list is far from comprehensive!

### **Population** (<http://www.census.gov/>)

Historical population data is available from the US Dept of Commerce, Bureau of the Census. When analyzing local economies, population growth trends are often used as a crude measure of relative economic performance. Typically, areas with rapidly growing populations also have strong job growth.

### **Per Capita Personal Income** (<http://fisher.lib.Virginia.edu/reis/>)

Personal income is the income people receive from all sources--that is, from working, from transfer payments, and from interest and investments. Per Capita Income is the total personal income of the residents of a given area divided by the resident population of the area. *Per capita personal income* is often used as an indicator of the quality of consumer markets and of the economic well-being of the residents of an area. The Census Bureau provides Per Capita Income County data every ten years for every municipality. Annual state and county-level estimates are available from the Bureau of Economic Analysis.

### **Poverty Rate** (<http://www.census.gov/>)

This is an estimate of the percentage of the county population that lives below the poverty threshold, as established by the Federal government. In providing these estimates, the US Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor. As an example, the poverty threshold in 1998 for a family of four (two adults and two children) was \$16,530.

The poverty thresholds do not vary geographically, but they are updated annually for inflation using the Consumer Price Index. The official poverty definition counts money income before taxes and does not include capital gains and non-cash benefits (such as public housing, Medicaid, and food stamps).

### **Unemployment Rate (<http://www.bls.gov/>)**

The Bureau of Labor Statistics provides monthly estimates of county unemployment rates for states, metropolitan areas and counties. The unemployment rate is easy to calculate: it is the number of people who are jobless and available for work divided by the labor force. The basic concepts involved in identifying the employed and unemployed are quite simple:

People with jobs are employed.

People who are jobless, looking for jobs, and available for work are unemployed.

People who are neither employed nor unemployed are not in the labor force.

### **Employment (<http://fisher.lib.Virginia.edu/reis/>)**

The employment data is a complete measure of the number of full- and part-time jobs in the county. Historical state and county data from 1969-1999 is available the Bureau of Economic Analysis. The employment data include wage and salary workers, proprietors, private household employees and miscellaneous workers. Because part-time workers are included, a person holding two part-time jobs would be included twice. The Appendix provides details of sectors covered under each broad industry.

### **Earnings (<http://fisher.lib.Virginia.edu/reis/>)**

Earnings of employees is the sum of wages and salaries, other labor income (e.g., benefits) and proprietors' income. As with employment, data are from the Bureau of Economic Analysis. Also, like employment data, earnings data are by place of work, so that earnings of an employee who works in one county but resides in another are counted in the county where the job is. Earnings per worker are simply the total earnings in an industry divided by total number of employees.

### **Building Permits (<http://www.census.gov/const/www/index.html>)**

This data summarizes the number of new housing units authorized by building permits. The data relate to units intended for occupancy on a housekeeping basis. They exclude mobile home units. Building permit data is useful to understand the growth in residential development in a community (Penn State Cooperative Extension has produced an on-line workbook for communities to help understand potential impacts of residential development on government revenues and expenditures.

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