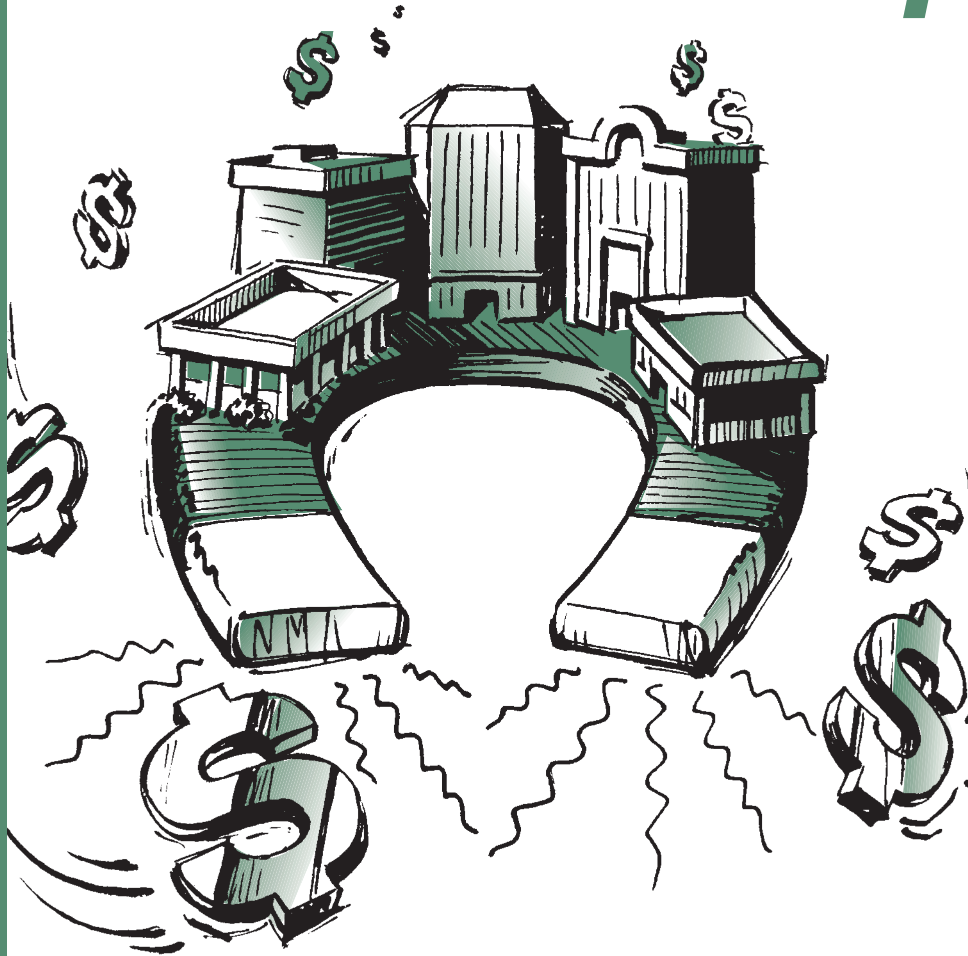
The Flow of Money



and Its Impact on Local Economies

In a continuing effort to develop new resources that office and industrial development professionals can use to shape the business landscape of the new millennium, NAIOP offers this publication on the primary influences to productive community growth.

William H. Fruth impressed participants at the NAIOP Chapter Leadership & Legislative Retreat with his cogent analysis of local economies. In this publication, he shows that not all jobs stimulate the local economy and not all population growth leads to prosperity. Fruth defines the kind of industry a community must attract in order to increase both the quantity and quality of money that flows into the local economy.

One of the goals of Smart Growth should be to have a thriving community in which all citizens benefit. We hope that this fresh outlook on growth will be a valuable tool for not only NAIOP Chapters and members, but also for interested businesses, government bodies and citizens who want to live and work in vibrant and financially secure communities.

For additional information on Smart Growth, check the NAIOP home page at www.naiop.org under Government Affairs: Smart Growth Resources.

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The Flow of Money and Its Impact on Local Economies

Prepared for the

National Association of Industrial and Office Properties

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Summary

Community and government leaders across the nation have come to realize their actions can change, alter and direct the condition of their local economy. The economic quality of life of the residents and the success of businesses many times are directly affected by the policies and leadership of those who have the influence and power to create a climate conducive to economic growth.

A local economy is a geographic area where people live and work, earn and spend. Local economies can be measured for their consistency, growth in size and growth in quality. All of these are influenced by the "quantity and quality" of the money flowing into the area by the activity of the "primary" or contributory industries in the area.

The primary industries are those that import money into the local economy. Typically, they are the businesses that sell goods or services outside the local economy. This imports money to the local area. After the money is imported, it enters the area's "bucket of wealth" where it is churned and mixed, going from person to person, business to business, after which it is consumed and leaves the local economy.

A vast majority of the businesses and a preponderance of all jobs in an area are dependent upon the success and growth of a small number of businesses that contribute or import the wealth to the local economy.

Communities that desire to improve their local economies have created economic development organizations. The economic development organizations implement three basic programs: 1) existing industry program designed to retain and cause the expansion of existing primary employers in the area, 2) recruitment program to attract new companies to the area and 3) start-up program which encourages the formation of new contributory businesses from within the area.

While there are certain minimum location requirements for each company, whether expanding or relocating, in today's competitive world market, the most important criteria for choosing a community is profitability.

In choosing a location a company considers three important things which affect profitability: 1) costs (initial setup and long term operating), 2) the time necessary to establish the operation and 3) community attitude.

For a community to be competitive in economic development, either causing existing companies to expand or recruiting new companies to the area, the following are the most important elements:

- ▲ Existing buildings.
- ▲ Approved and improved industrial property for either office or manufacturing use.
- ▲ Tax structure that recognizes the importance of contributory businesses and does not disproportionately place the burden of revenue generation on the productive sector.
- ▲ A history of cooperative attitude within the community, which fosters cost maintenance or cost reduction for the company.

It is a characteristic of strong economies to grow in population, but not all areas that grow in population have strong economies. The weakest economies usually decline in population. Typically efforts to force a reduction in population growth will cause a decline in the local economy.

Introduction

Community and government leaders across the nation have come to realize their actions can change, alter and direct the condition of their local economy. The economic quality of life of the residents and the success of businesses many times are directly affected by the policies and leadership of those who have the influence and power to create a climate conducive to economic growth.

In areas with strong economies, local governments do not struggle to provide essential services and are usually able to provide expanded programs benefiting all that reside in the area. In such areas, schools are strong, streets safe and clean, park and recreation programs are abundant and the need to provide social-welfare programs for impoverished citizens is reduced.

Citizens living in an area with a strong economy enjoy consistent employment, regular wage gains, opportunities for personal advancement and are able to reliably save and invest in their future.

Businesses are able to plan for consistent expansion, hire full-time employees for the long term and are willing to risk significant capital, investing in their operations.

Communities grow closer, tight-knit, as young men and women, after completing high school or college, remain in the area as growing employment opportunities in their "hometown" capture their interest.

Unfortunately, in areas with weak or declining economies, the opposite occurs. Local governments struggle to fund essential programs with budgets under growing pressure to assist the impoverished. Residents have uncertain futures, personal anxieties, limited employment opportunities and subsistence level jobs. Businesses employ part-time workers and are unwilling to risk significant capital because of an uncertain future. Young men and women must move from the area to seek employment, which is not available in their hometown.

Even though local community leaders cannot control the actions or policies of the federal or state government, they can establish policies and create local programs that assist and foster economic growth.

Nationally, there are more than 6,000 economic development organizations, chambers of commerce, and local, regional and state government offices working in some fashion to improve the economy of their respective areas. Never in history has there been such an effort.

Some organizations have large budgets, better community cooperation and a stronger commitment from local government than others do. These areas have the best chance to either maintain or improve the economic quality of life for their citizens.

Some areas, however, provide just "casual attention" to economic development programs. They do not fully understand the need to have a constant, aggressive economic development program just to maintain the existing condition. In these areas, typically, the local economy is in decline.

To assist community leaders in the decision-making process regarding actions that affect their local economy, the following study discusses how a local economy works, what causes its growth or decline, and some of the characteristics of strong and weak economies.

What is a local economy?

For a discussion regarding the condition and influences on a local economy, it is important to understand what, indeed, is a "local economy."

For the purposes of this paper, a local economy is the geographic area in which a preponderance of the people both lives and works. This area would also be the place in which the people both earn and spend, thus measuring the trail of the flow of money. This is the principal test of the Office of Management and Budget in defining "metropolitan areas" in the United States.

There are 316 defined metropolitan areas in the United States. They include approximately 80 percent of the nation's population. In order to become a metropolitan area, the area needs to have certain levels of population and economic activity to be considered. However, the actual geographic definition is based upon commuting patterns, which identify where people live and work, earn and spend.

A metropolitan area cannot be less than one county. Oftentimes, a metropolitan area is composed of multiple counties, sometimes lying in more than one state. When a metropolitan area is composed of more than one county, the Office of Management and Budget has determined that the counties are linked economically as a result of commuting patterns.

In multiple county metropolitan areas, one county might serve as the place of employment while others (suburbia) are the location of residence. Typically, people spend where they live. To measure the economy, the data of all counties must be considered.

Additionally, it is important to understand from what perspective the condition of a local economy is viewed. For various business enterprises, the criteria vary for measuring the condition of a specific area of the nation. A major financial institution, when evaluating future markets, might only consider population growth (more people, more depositors). A major healthcare provider might look for areas with a high aging population. A company that sells its products to people in lower income levels would look to areas that create low-wage jobs. For each of these, the economic opportunity is determined by different criteria.

POLICOM measures the "economic strength" or condition of a local economy from the perspective of how the economy affects the people living and working in the area. It measures the "economic quality of life" and how it has improved or declined.

POLICOM Corporation annually measures and ranks the "Economic Strength" of the 316 metropolitan areas for the purpose of studying the characteristics of strong and weak economies. Economic strength is a combination of the rate of growth, the quality of growth and the consistency of the growth.

To determine the economic strength for the metropolitan areas, 25 years of data are examined. The average annual growth rate and the average annual deviation are calculated for 18 different categories in the economy for two different time periods. The categories and industrial sectors used in the analysis reflect how an economy is behaving, not what is causing it to behave.

The 1999 economic strength ranking includes two time periods: the 15-year term from 1973 through 1987 and the 10-year term from 1988 through 1997 (the most current data available at this time). The data for the last 10 years are counted twice to give double emphasis to the most recent activity while still considering the historical trend in each of the economies.
The following are the 10 strongest and 10 weakest metropolitan area economies:

Ten Strongest Areas

1. Austin-San Marcos, TX
2. Salt Lake City-Ogden, UT
3. Raleigh-Durham-Chapel Hill, NC
4. Seattle-Bellevue-Everett, WA
5. Fort Collins-Loveland, CO
6. Las Vegas, NV
7. Boulder-Longmont, CO
8. Portland-Vancouver, OR-WA
9. Dallas, TX
10. Wilmington, NC

Ten Weakest Areas

307. Wichita Falls, TX
308. Merced, CA
309. Enid, OK
310. Kenosha, WI
311. Lawton, OK
312. Casper, WY
313. Flint, MI
314. Steubenville-Weirton, OH-WV
315. Yuma, AZ
316. Pine Bluff, AR

POLICOM Corporation has created rankings for the metropolitan areas for each of the last five years based upon the previous 25 years of data. The rankings for all years for all 316 metropolitan areas, along with the geographic definitions for the metropolitan areas, state maps, and explanations of the methodology used are posted on its web site: www.policom.com.

How a local economy works

A local economy is the geographic location where people live and work, earn and spend. Money flows into the area, is circulated and leaves the area.

To understand the dynamics which occur, imagine that all of the wealth of an area is contained in a bucket. It swirls around and around, like being churned with a mixer. It goes from person to person, business to business, person to business, and is constantly moving.

One person purchases a house and the realtor makes a deposit at the bank. The banker makes a loan to another who buys an automobile. The car salesperson buys a new shirt. The storeowner pays a life insurance premium. The insurance agent pays school taxes. The teacher pays the water bill. The money moves on and on and on. Money is like a hive of bees following the path of a three-dimensional spider web, moving around and around as it circulates throughout the economy.

But, there is a hole in the bucket and all the wealth of the community is leaking out.

Every time someone purchases an automobile, a good share of the purchase price is returned to Detroit, or Nashville, or Tokyo, wherever the car was made. Every time someone purchases a shirt, buys a pair of shoes, makes their life insurance payment, goes on vacation, pays their income taxes, money leaves the community and goes to the area in which the product was made or the service performed.

Money is continuously leaving the community through the hole in the bucket. The outward flow is constant, pervasive, and ongoing. There is nothing that can be done to stop it, no matter how small the hole. Like a bucket with a hole in the bottom filled with water, all the water will eventually drain out, leaving the bucket empty, or the local economy drained of its wealth.

So what can be done? A community needs to add money to the bucket, replenishing its supply. A faucet at the top of the bucket needs to be turned on, filling the bucket with fresh, rejuvenating wealth, which enables the churning process to continue. Since money is continuously being drained or exported from the local area, it also needs to be imported for the economy to continue.

Money is imported to an area principally by the business activity of the "primary" or contributory industries located within the

economy. A primary industry is one that sells its goods or services outside the geography of the local economy, importing money to the local area.

When an automobile is purchased in one area, the community where the car was assembled imports money from the purchasing community. In turn, the communities that manufactured the tires, fenders, headlights, seat cushions and all of the other components of the automobile import a portion of the purchase price to their respective areas, replenishing their supply of money, filling their bucket.

When a local manufacturer sells its product to a buyer in another community or state, money flows into the home community. When a farmer sells grain, money flows into the home community. When an engineer designs a bridge for another city, money flows into the home community. When the primary industry is paid for its goods or services, the workers it employs are paid, and the wealth enters the local economy, which is then mixed and churned, and eventually consumed. The imported money also enters the bucket of wealth when it is used to pay local suppliers, rent, utilities and other expenses of the primary business.

The churning process of the wealth in the bucket generates most of the jobs for the residents within a community as goods and services are consumed. For the most part, a business enterprise either contributes or consumes. If the business is not dependent upon the local marketplace, it likely is "primary" in nature. If it is dependent upon the local market, it is consumptive and can only exist if money flows into the local area. Some businesses are a combination of both: some of their market is local, some outside. The amount of the sales outside the economy is the contributory portion of the business.

To have a clearer understanding of what happens in the bucket, do what "Deep Throat" told reporter Bob Woodward during the Watergate era: "Follow the money." Goods are sold or services performed outside the area, the employees received their paycheck, they pay their bills and purchase goods, the businesses which received the payments or sell the goods pay their workers, who then pay their bills and buy goods, so on and so.... until the money leaves the area.

The economic quality of life for individuals living in an area is dependent upon the amount and rate of money flowing into the community's bucket of wealth. Areas which are able to replenish the wealth as fast as it is leaking out will have a stable economy. The people living there will have a consistent economic quality of life. Communities that replenish the money faster than it is leaking out the bottom of the bucket will enjoy economic growth. The residents will, in turn, enjoy an improved economic quality of life. Unfortunately, areas that are not able to import as much wealth as they are exporting will decline economically. Over a period of years, the community and its residents will gradually grow poorer and poorer.

Which industries contribute, which consume?

Once again, a primary industry or business is one that sells its goods or services outside the local economy. Based upon the Bureau of Labor industrial classification system, many of these industries can be identified. Based upon traditional measurements, farming, mining, manufacturing, transportation and wholesaling are the main primary industries in a community.

Unless the crops are sold locally, virtually all of the components of the farming industry are contributory. The extraction of materials (metals, coal, petroleum) from beneath the earth's surface and selling the materials outside the economy imports wealth. In nine out of 10

local economies, manufacturing is still the most important contributory industry. The transportation, trucking and distribution industry adds value to these products and imports money to the local area. Wholesaling, when not serving the local market, additionally is part of the wealth generating process.

The Finance, Insurance and Real Estate (FIRE) sector is one of the principal mixers in the economy as it moves money around. It is a dependent industry but does not consume as much wealth as other industries.

For the most part, federal and state governments are consumptive industries as they extract more money by way of taxation than they return. However, in communities with a high number of federal or state workers, this industry becomes contributory. State capitals import state tax money which is paid to state workers locally, contributing to the local economy. Areas that have federal government facilities, such as an IRS processing center, a Department of Energy research laboratory or a military base, import much more money than they export.

For the most part, retail, services and construction are consumptive industries and represent the biggest “hole in the bucket.” Each of these is almost solely dependent upon existing money and the flow of new money into the local economy.

Retail is the most consumptive. That is why when we purchase something we are called “consumers.” There is nothing wrong with having retail in the economy. We work hard so we can purchase things. But the act of purchasing drains wealth from the area. Retail is absolutely dependent upon the condition of the local economy. It cannot grow any greater than the amount of disposable income within the economy. It will decline if the flow of money into an area is reduced. It does not create wealth but absorbs wealth. A vibrant, dynamic retail sector is not the cause of a strong local economy, but the result of it.

The service industry also is dependent upon the condition of the local economy. The market for most service-related businesses, whether they do accounting, landscape maintenance, computer repair or shopkeeping, is inherently local. As each service is performed, some of the wealth leaves the economy. Services, however, are not as consumptive as retail since the principal cost of a service is labor and not a product.

Construction is, on a local basis, a dependent, consumptive industry. There is residual value with construction, but since local economies are based upon cash flow, this industry causes money to flow from the area. Let us follow the money to see how this occurs.

Suppose an individual wants to build a new house and has $100,000 in the bank pay for it. We start with local money. If this money is not present in the economy, the house is not built. Only between 25 percent and 35 percent of the cost of a new home is labor that is paid to local workers. The balance of the cost is for materials such as lumber, nails, carpet, tile, lighting fixtures, toilets, sinks, draperies and more. When these materials are purchased, the money flows from the local economy and is sent to the area in which the materials were manufactured. After the home is built, only about $35,000 (labor portion) remain in the local area and $65,000 are consumed.

The above generalizes the industrial function of each industry as to whether it consumes or contributes. There are exceptions in each industry. A farmer who grows vegetables just for the farmer’s roadside stand is a dependent business. A manufacturer who makes a product that is sold only in the local market is a dependent business. The local rock quarry that sells its stone for local construction is a dependent business.

The headquarters of a regional bank that processes loans and payments for a multi-county or statewide area is a contributory

business. An engineering firm that designs bridges across the nation, while classified as a service industry, is a primary business. When someone moves to the area and brings with them $100,000 for the construction of a house, the construction industry is the first recipient of the new money added to the economy. (Construction is still dependent and did not cause the wealth to be generated in this case. It is the beneficiary of the in-migration.)

So once again, to determine if a certain business contributes or consumes, determine from where the money comes to pay the workers at the business. If it comes from the sale of goods or services outside the area, it contributes.

A local economy can have sources of money other than the business activity of the primary industries. In some local economies, these sources exceed business activity in their contribution.

The first is "government transfers." Also known as government entitlement programs, government transfers include direct payments to individuals or vendors for the various government programs. These principally include Social Security and government retirement, medical transfers for the Medicare and Medicaid programs, income maintenance (welfare), veterans' benefits and unemployment compensation.

In a vast majority of the local economies in the United States, there is more money extracted by way of taxation than returned to the local area via transfers. However, in areas with a high percentage of the population in retirement (Social Security and Medicare) or in extremely distressed areas (Medicaid and welfare), government transfers can be the most important contributor in the economy.

The second additional source is the passive income or private retirement programs for the people living in the area. In addition to Social Security, most retirees have some type of pension or savings on which they draw for their living expenses. Most private pension money is imported to the local area and enters the bucket of wealth. Local savings are "existing" wealth and are not additive to the local economy. These savings are likely loaned by the bank and already in circulation. When they are withdrawn by the retiree, the amount of available loaned capital is reduced. Additionally, individuals who have private investments, either in stocks, rentals or savings, earn income. If the investments are located outside the local area, the money (rents, dividends, interest) are imported to the local economy. The impact of this passive income depends on the amount that is spent or circulated locally. If it is reinvested outside the local area, it has no impact.

Aside from retirement-based economies and distressed areas, the activity of the primary businesses is the most important contributor for a vast majority of the local economies.

The actual number of business enterprises that contribute is usually a small percentage of the total in an area. A community can have five large contributory businesses (factories, corporate headquarters or other businesses) which employ a total of 5,000 people. These jobs can easily be responsible for the formation of 12,500 other jobs in the economy.

Most dependent industry businesses are small employers. Aside from government and the utility companies in the area, the typical business employs fewer than 10 people and many are sole proprietors. The 12,500 workers could easily be employed or self-employed by as many as 500 separate business enterprises. Just scan through the yellow pages of your telephone book and you can see just how many there are in your community. Looking at the yellow pages, a local marketing tool, will also give you an idea of the number and type of dependent industries in your area.

Consistency, quantity and quality...of the flow of money

The economic strength and economic quality of life for the residents of a local area depend on the consistency, quantity and quality of the money flowing into the local bucket of wealth.

Consistency of growth

"Consistency" is the dependability and regularity of the money entering the economy.

If you ever irrigated crops in the field using a gasoline powered pump drawing water from a pond, you understand consistency of flow. Sometimes air will enter the pump causing it to lose its prime momentarily. The flow of water will become erratic. It will gush, stop, and gush again until the pump is properly primed. It might take some time before the pump is causing a smooth flow of water. Sometimes, it will never adjust properly, causing a repeated, ongoing gushing and stopping of water. Eventually, the volume of water reaches the desired level, but the means by which it was achieved is undesirable.

The rate of the flow of money into a community is similar. If the money is flowing smoothly as a result of constant pressure, the churning activity is smooth and consistent. Businesses and residents can count on certain things happening and, therefore, can plan their financial future in a better manner. When the flow is disrupted, slowed or stopped for a while, there is an immediate change in the churning process. With less money available for circulation, some businesses have to lay off workers and some families postpone purchases, until the next gush of money enters the economy.

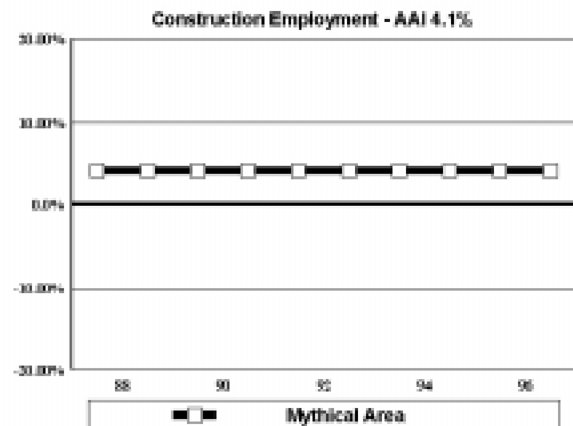
Areas with unstable, boom and bust economies are difficult places to conduct business. A merchant may lease extra floor space and increase inventory following three or four great years of activity only to bankrupt after a sudden collapse in the local economy. Residents are subject to economic uncertainty. A person might make significant long-term financial commitments based upon rapid increases in earnings or employment in the area, only to lose everything as a result of a downturn which causes massive layoffs.

Communities that are dependent upon seasonal tourism suffer from the erratic flow of money into their area. During the tourist season, money gushes into the area in large amounts. Everyone is busy working as hard as they can. When the tourists leave, the money flow stops, people are laid off and they have to survive the balance of the year on what they collected during the boom.

When reviewing economic growth percentages for local economies, the data can be misleading as to the consistency or stability of the economy.

To better understand the nature of economic stability, we will examine the consistency of the annual growth of an industry for three area economies.

The first graph shown depicts a Mythical Area, which had an Average Annual Increase in Construction Employment of 4.1 percent from 1987 through 1996.

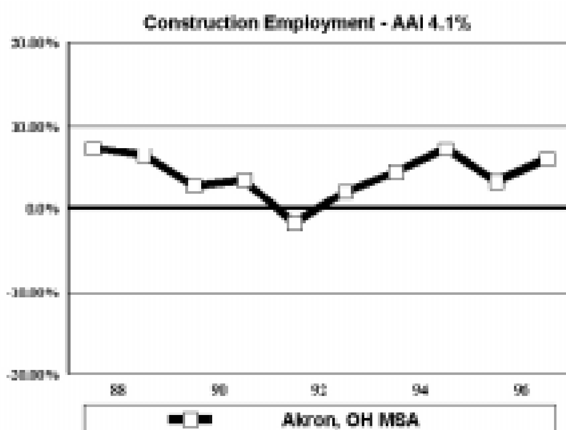


This Area had a 4.1 percent increase from 1986 to 1987. From 1987 to 1988, it again had a 4.1 percent increase. Each and every year, the area had exactly a 4.1 percent increase. This means construction employers, each and every year, increased the number of people they employed by 4.1 percent.

As a result, by averaging the 10-year history, the Mythical Area, obviously, had a 4.1 percent average annual increase. Most importantly, the area had perfect stability as depicted by the straight horizontal line on the graph. The flow of money into the area, which supports this industry, grew in an absolutely consistent manner. This is a perfect situation. However, this is myth, not reality.

Reality is different. The rate of the money entering a community fluctuates. In some communities, the fluctuation is not severe. In others, it can be quite disruptive.

Let us examine the economic stability of the Akron, Ohio, metropolitan area for the same economic element. Akron, during the same 10 years, had an average annual increase in construction employment of 4.1 percent. As represented in the graph, you can see the rate of growth is not absolutely stable. While over the 10 years it averages 4.1 percent, there are obvious fluctuations year by year. From 1986 to 1987, there was a 7.3 percent increase. The next year, a 6.4 percent increase. The next year showed a 2.7 percent increase, so on and so forth.



For the 10 years, the average of the annual increases is 4.1 percent. However, the rate of growth is not nearly as stable as the Mythical Area. The growth line is not straight but goes up and down.

While the rate of growth of construction employment for Akron is not absolutely stable, it is considerably more stable than the Bismarck, North Dakota, metropolitan area. As with Akron and the Mythical Area, Bismarck had an average annual increase of 4.1 percent over the 10 years. As you can see in the graph, the rate of growth is extremely volatile.

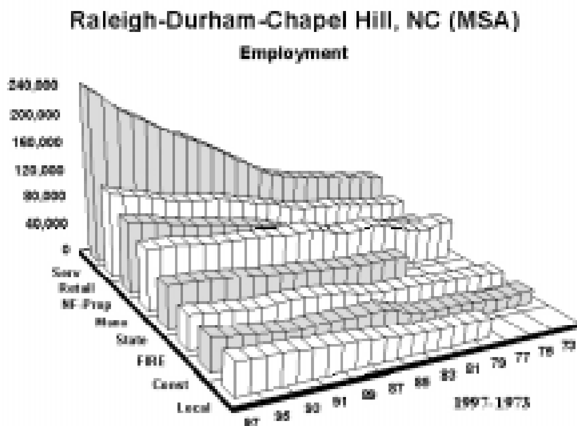
From 1986 to 1987, Bismarck lost 2.4 percent of its construction workers, the next year it lost 8 percent, then it increased construction employment by 4.2 percent, then 17 percent. Once again, the average for the 10 years is 4.1 percent, but the type and quality of growth in this industry is considerably different than that of Akron.

Obviously, simply relying upon economic growth percentages is not sufficient in order to determine the character of a local economy. Economic stability must be considered.

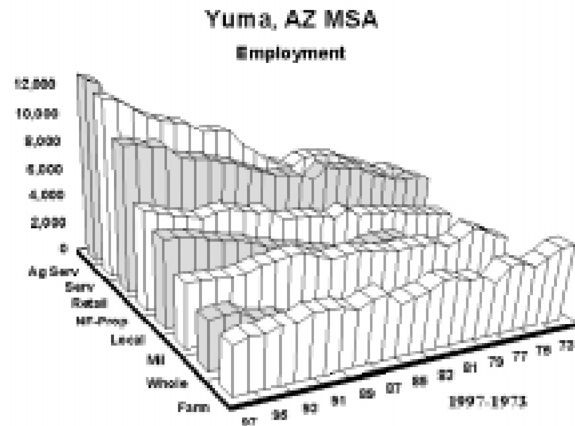
It is a characteristic of a strong economy to have consistent growth as a result of having multiple primary industries in the economy. With several, unrelated industries importing money into the area, if one industry falters, the entire economy does not fail.

It is a characteristic of unstable, inconsistent economies to be dependent upon one or two industries, which, by their nature, are undependable and fluctuate year by year, sometimes with extreme shifts either in growth or decline.

The first graph (below) shows the employment history for the eight largest sectors for the Raleigh-Durham-Chapel Hill, North Carolina, metropolitan area, which is one of the strongest economies in the nation. Note the smooth, consistent growth lines. This area has multiple industries within its economy. The manufacturing sector is the most important contributory industry in the economy. However, within manufacturing, there are numerous sub-sectors from electronics to bio-medical to chemicals to industrial machinery. Within these sub-sectors, the activity varies from production to product research to administrative headquarters. State government is also a major contributor, not only because it is a state capital, but also because three large state-supported universities are located in the area along with state research laboratories.



Over the last 25 years, all of these industries did not grow consistently and each had periods of decline. However, when one industry declined in the area, another grew to take its place, counterbalancing or compensating for the loss of the earnings and employment. As a result, the volume of money flowing into this economy over an extended period of years grew in a consistent manner.



The second graph (above) is the employment history for the Yuma, Arizona, metropolitan area. Yuma is dependent upon two industries, farming and military. Both of these industries and their related employment in a community have had a long history of inconsistency. Note the repeated ups and downs of employment on the Yuma graph, demonstrating an extremely inconsistent economy. Whether the lines are going up or down, they are repeatedly choppy and unpredictable.

Quantity of growth

The quantity or volume of the money flowing into an area determines the size of the economy or the bucket of wealth. Since POLICOM's perspective in analyzing a local economy is how it affects the people living and working in an area, the growth in size of the economy is measured by the growth in the total earnings and the number of jobs.

The dollar volume of sales by the businesses in the area is not a direct reflection of the impact upon the people. A yacht broker who sells expensive boats scattered around the country could have $100,000,000 in sales in one year. But the only impact upon the local economy is the amount of commissions earned by the broker. A corporate headquarters based in an area might have worldwide sales of $100 billion, but the impact of the headquarters upon the local economy is limited to the amount of the $100 billion, typically the wages paid to the administrative workers, which actually enters the local area.

Therefore, the growth in the size of the economy is measured by the direct result of the activity of the businesses, jobs and earnings that affect the people.

The growth in the size of the economy is directly related to the growth in the amount of money flowing into the bucket of wealth. As the primary industries grow, the overall economy grows. When they decline, the size of the economy becomes smaller.

The strongest economies in the nation have had a significant increase in the number of jobs, as well as the total earnings generated by these jobs, as a result of the growth of their primary industries. The weakest economies have had little growth in employment and some have fewer people working in the area than 10 years ago. For some, after adjusting for inflation, they actually have fewer dollars in the economy than they did 25 years ago.

POLICOM has evaluated the growth rates for employment and earnings for the 10 strongest and 10 weakest local economies from 1969 to 1997.

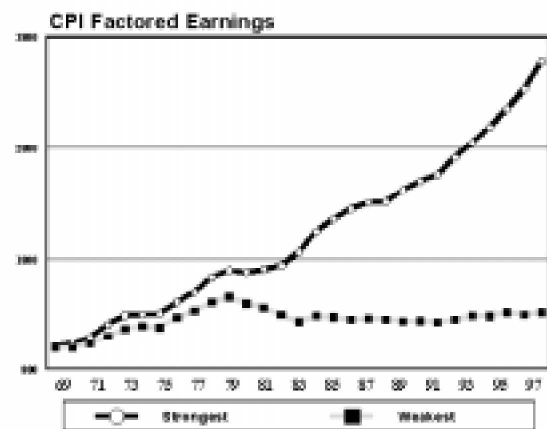
To determine the actual value of the growth in earnings over this period of time, the earnings totals for each area were adjusted for inflation, bringing each year to the value of 1997. Using the National Aeronautics and Space Administration's (NASA) formulas for calculating the value of the dollar for previous years, annual adjustments are made to the total earnings for an area. As an example, if an area had a total of $1,000,000 of earnings in 1969, it would be equivalent to $4,373,000 in 1997. The annual increase is then calculated.

To visually compare the growth of each economy the data is **"factored."** This simply means the data for all the areas is statistically brought to a common denominator for direct comparison. The mathematics is rather simple. First, the annual percentage increase from the previous year is calculated for each year.

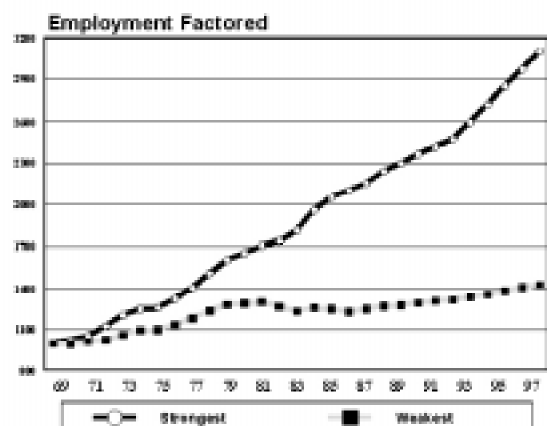
Second, the annual percentage increase is multiplied by the same number or factor for each area. It does not matter what number it is, as long as it is the same number for all areas. POLICOM chooses 1000 as the factor beginning.

The year 1969 serves as the basis year. All areas begin at 1000 at this point. Where they wind up is determined by their respective percentage increase. This process is similar to the start of a track race. Every runner begins at the same spot. By factoring the data, direct, visual comparisons can be made.

The first graph (below) shows the average factored growth in total inflation adjusted earnings of all workers for the ten strongest and ten weakest economies.



The second graph (below) shows the comparative growth in the number of jobs in each. Note how the strongest areas have had rapid increases in both, while the weakest areas are at a level barely above their condition in 1969.



The difference in the growth in volume between the strongest and weakest economies is significant. The total size of the strongest economies has grown more than 200percent since 1969 while in the weakest areas there has been little actual growth since 1985.

Quality of growth

The quality of the economy reflects the level of the economic quality of life for the people living and working in an area. It is the amount of money earned annually by the people living and working in the area.

Earl Nightingale, the famous writer and philosopher, was fond of saying, "there is nothing more important than money... for those things money is intended."

For a vast majority of people, the amount of money earned each year determines their lifestyle. The size of their home, type of automobile, the food they eat, the type of recreation they can enjoy and their savings are all determined by annual earnings. Therefore, the annual earnings per worker in a local economy are a reflection of the quality of the economy.

The type of primary industry jobs located in an area determines the level or quality of the economy. The average area wage will seek the level (and cannot exceed) of the wages paid in the primary industries. If a local economy is dependent upon industries that traditionally employ high-wage workers, the overall level of the economy (dependent industries) will rise toward those wages. If the area is dependent upon consumer industries that pay low-wages, the overall level will also be low.

As a community improves the quality of the primary industry jobs, the bottom rung of the economic ladder rises. As the economy grows stronger, part-time low paying retail and service jobs fold into full time jobs at higher wage levels and with fringe benefits. As a result of the strength of the economy, employers in these sectors want a more reliable worker and are willing to pay more to have them.

The quality of the economy will continue to rise if the new primary jobs created in the area pay a wage higher than the local average. However, the quality could regress or dilute if these jobs pay less. The axiom that "Any new job will help the economy" is not always true.

The number or growth of low paying jobs in an economy can significantly affect the economic quality of life for the area residents. The composition of the workforce needs to lean as much as possible toward the higher paying positions, as the growth of low paying jobs disproportionate to the higher paying jobs can actually cause the economy to decline.

As an example, suppose an economy is composed of 1,000 workers and has average earnings per worker of $30,000. In this economy, 300 workers earn $40,000 per year and 700 workers earn $25,714, causing the average to be $30,000. The workforce composition is 30 percent high-wage earners and 70 percent low-wage earners.

If 100 new low-wage jobs are created during the course of a year, and no new high-wage jobs are generated, the average earnings per worker for the area will fall to $29,610. The percentage of high-wage jobs in the workforce drops to 27 percent and the percentage of low-wage jobs grows to 73 percent. If this economy does not increase the percentage of high-wage jobs, then the overall economic quality of life for the residents in the area will continue to decline in the area if this job generation ratio becomes a long-term pattern.

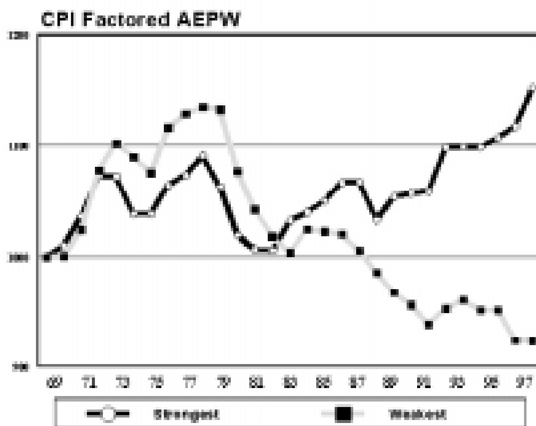
The process of adding a greater percentage of low-wage jobs than high-wage jobs to an economy causes "dilution" in the economy. Over the last 25 years, virtually every economy in the country suffered dilution as a result of the rapid creation of low paying service and retail jobs. The economies that were best at

creating new high paying jobs relative to the increase in low paying jobs over this period of time have the strongest economies today.

For the 25 strongest economies in POLICOM's study, over the last 10 years, between 30 percent and 40 percent of the new jobs created in these economies pay a wage higher than the local average wage.

In the weakest 25 areas that have, nevertheless, increased their workforce over the past 10 years, only about 8 percent of the new jobs created pay a wage higher than their local average.

To compare the growth of the quality of the local economies, the annual earnings per worker in an area is determined for a series of years. These earnings are adjusted for inflation and brought to the value of the 1997 dollar. As an example, earning $5,000 in 1969 would have been equivalent to earning $21,865 in 1997. By adjusting for inflation, the true increase in the value of the earnings can be compared to previous years.



The growth rates, after adjusting for inflation, were calculated, factored, and averaged for the 10 strongest and weakest economies. The graph shows the relative growth in the quality of these economies since 1969.

All areas of the nation suffered a loss in the quality of their economies during the high inflationary period from 1978 to 1982.

However, note how in the strongest areas the quality of the economies has increased significantly. All of these areas have an inflation-adjusted level much higher than it had in 1969.

But look at the weakest economies. For almost 20 years, they have had a decline in the overall level of the quality of their economies.

It is a characteristic of strong economies to create or maintain primary industry jobs that pay a wage higher than their local average wage and improve the quality of the economy. It is a characteristic of weak economies to either lose high-wage jobs or create a plethora of low-wage jobs, which dilutes the quality of the economy.

POLICOM has evaluated the various industries for their impact of consistency, quantity and quality upon a local economy. The following is a list, in the order of the greatest to the least impact, of the contributory businesses that will help communities the most in improving their local economies.

- ▲ **Manufacturing of high value, high bulk products:** High wages, large capital investment and a large number of support industries. Examples include automobile assembly, commercial aircraft and rockets.
- ▲ **Manufacturing of high value products:** High wages, large capital investment, and some support industries. Examples include satellites, sophisticated electronic devices and power generation facilities.
- ▲ **Transportation of products:** High wages, large capital investment. Examples include major trucking, rail, air and port facilities dedicated to the transport of products.
- ▲ **Research and Development:** High wages and oftentimes high capital investment. Examples include the development and design of expensive products (small and large), software development and sophisticated research (nuclear, bio-medical, and electronic).

- ▲ **Federal Government:** Highest average wages of any major industrial division in the United States. Typically a consistent employer with annual wage increases greater than the rate of inflation. Examples include a regional headquarters for the IRS, major postal distribution facility and research facilities.
- ▲ **Corporate headquarters:** High to low wages, depending on the activity at the headquarters. Some headquarters house all the top, highly paid executives, with a minimal number of low paid support positions. Others, however, have few high paid positions (these are scattered through the region or country at the facilities they manage) and a large number of low-wage support workers. The number of high wage jobs determines the impact.
- ▲ **Manufacturing of mid-value products:** Middle-wage jobs, sometimes a large capital investment and sometimes support industries are needed. Examples include computer assembly, semi-conductors, household appliances and building materials.
- ▲ **State Government:** Middle-wage jobs but typically higher than the local average. Most state government employment centers are typically located in the state capital. However, some states have distributed the employment centers throughout the state to provide benefit to more than one area.
- ▲ **Information processing and telecommunication centers:** Middle- to low-wage jobs, average to low capital investment, and few support industries. Examples include subscription fulfillment, telemarketing centers, and the processing and collating of information for a host of industries such as banking and insurance.
- ▲ **Manufacturing of low value products:** Low wages and average capital investment. Examples include food processing, plastics and apparel.
- ▲ **Military:** Typically low wages (unless an aircraft or officer base) and inconsistent employment (number of soldiers can vary year to year). Large capital investment but not taxable by the local authority.
- ▲ **Retirement industry:** Low wages, little capital investment except by the healthcare industry. This industry typically promulgates the formation of low wage, low skill service and retail jobs. It is very consistent, but growth of the economy is dependent upon the in-migration of more retirees. Typically economies based upon retirement are lethargic and the quality of the economy is low.
- ▲ **Tourism industry:** Low wages and little capital investment except by hotels. This industry typically promulgates the formation of low skill service and retail jobs and is very inconsistent as a result of seasonal employment. Economies solely dependent upon tourism lack dependability and are generally low in quality.

Within each of the above categories are exceptions as to their impact upon a local economy based upon the wage level paid and the consistency of the employment of each business enterprise. However, overall, the list is in the order of priority according to which will improve the strength of a local economy.

Local economies are dependent upon the importing of money to the area, which is principally caused by the business activity of the primary industries. The consistency of the economy is dependent upon the consistency of these businesses. The growth or decline in the size of the economy is in direct proportion to the amount of money flowing into the local economy. The quality of the economy seeks the level of the wages paid by the employers of the contributory businesses.

Economic development

Economic development is the activity that is directed toward improving the overall economic strength of a community and the economic quality of life for all the residents in the area. Economic development lifts the entire ship, bringing with it all its passengers and crew.

Economic development differs from community development. Community development, while also an important activity for an area, is designed to relieve or cure a specific socioeconomic problem within the community. It is targeted to assist a specific geographic section or economically distressed class of residents. Programs to eliminate urban blight, revitalize crime-ridden neighborhood and housing assistance to the poor are community development activities. However, they are not economic development activities.

There are three basic economic development programs that are focused directly at creating primary industry jobs: 1) existing industry program, 2) attraction/recruitment program and 3) start-up program.

The Existing Industry Program is designed to foster the retention and cause the expansion of the existing primary-contributory businesses in the community. It is the most important yet least expensive of the three programs. Many communities have fallen into economic distress simply because their existing primary industries have reduced employment or left the area entirely. The focus of an existing industry program is to reduce the local costs to business as much as possible related to being located in the community, solve local problems and attempt to expand the markets for the contributory businesses located in the area. Some areas have been so successful in causing their local companies to expand that they do not focus a great deal on a Recruitment Program.

The Recruitment Program encourages new contributory companies to locate in the area. The program is designed to increase the quantity and quality of money flowing into the area and to make the economy more consistent through diversifying the types of contributory businesses. A recruitment program is time consuming and expensive, yet absolutely necessary for a community to survive, especially if the community's existing industries are on decline.

The Start-Up Program involves establishing programs, venture funds, and buildings (incubators) that assist in the creation of new contributory companies, which have a chance to grow and develop s years pass. The visible and financial rewards to the community of such a program are in the future, and patience is required. Some areas of the nation have very dynamic economies as a result of nurturing start-up companies, which have grown to become major employers. Typically areas with major research universities have active start-up programs, but the presence of a university is not absolutely necessary. The most important needs are 1) a building (incubator), 2) venture capital, and 3) community encouragement.

The criteria used by businesses to determine in which community they will establish a facility varies from company to company. The geographic/economic needs are different for each industrial sector. One group might have to be located close to a major seaport, another in close proximately to its raw material supply; still another might have to be associated with the computer science research department of a major university. Some business organizations whose principle product is processing information can be located literally anywhere in the world as long as sufficient telecommunications equipment is available.

While there are certain minimum location requirements for each company, in today's competitive world market, the most important criteria for choosing a community is profitability.

A professional site seeking consultant can easily create a "checklist" of information with more than 100 items measuring the competitiveness of a community regarding profitability for a company. However, this checklist is directly related to the following three criteria.

Costs...Time...Community Attitude

Costs are considered in two ways: 1) initial start-up costs and 2) long-term operating costs. Initial start-up costs include, but are not limited to, the land, construction of a building and employee training. These costs can vary greatly state to state and even between adjoining counties. Local regulations in one county can add 10 to 20 percent to the cost of a facility over a neighboring county.

Long-term costs consider local wage rates, state and local taxes and fees, proximity to the market and ancillary transportation costs, and the costs related to complying with annual regulations promulgated by both the state and local government.

Time relates directly to the number of weeks, months or years necessary to bring the facility to operational level. Time has become one of the most important criterion in the site selection process. Due to global competition, rapidly changing technology and the fervent pace of new invention, the companies which can produce products or provide services "faster, cheaper, better" will be the most successful.

After a company's research department designs a new process or invents a marketable product, the company wants to begin production in months, not years. As a result, the need for companies to become operational as fast as possible has never been more important.

If the company is purchasing an existing facility, it can shorten the time to production significantly and the company knows exactly what the land/building costs will be. This is why communities that have existing structures available hold a competitive advantage over other areas.

If the company must construct a building, the time necessary to design, attain government approvals and permits, and build the structure becomes one of the most important elements in the community selection process. Each step — zoning approval, site plan approval, building design, building permit and the time to build relative to inspections — is affected by local and state government.

The amount of time necessary to complete the steps varies significantly among communities. Some areas have expedited the process to such a degree that it might take only a couple of months to receive a building permit. However, some areas have a labyrinth of rules and steps that delay the necessary permits for more than a year. The first community has a significant competitive advantage over the second community in attracting the company to its area. Sometimes a company will pay a higher start-up cost if the "time" necessary to become operational is significantly reduced.

The third most important element considered by a company is the attitude of the community toward the company. The question before the company is whether it is truly wanted by the community. Since the most important criterion for community selection is profitability, the attitude of a community is measured by its tendency to add operational costs to similar business enterprises and the willingness to work to solve the company's local problems.

An active existing industry program will provide evidence that the community wants to solve problems for the employers. Some areas have community teams established for this purpose. However, some areas do not and the relationship between the local government and the productive sector can be adversarial.

The company most likely will meet with local employers to discuss the community attitude. Of principal concern to the company is the history of the community or state regarding adding operational costs to the business community.

The company will look at two specific things:

1 The long-term propensity of the local and state government to increase taxes and/or promulgate regulations which add a direct cost to the operation.

2 The history of local government of shifting the government's revenue needs for basic services from the residential community to the non-voting business community.

Some communities have a history of placing a disproportionate share of the revenue burden on the business community. If a local government needs more money to support its water system, some have levied water surcharges upon manufacturers or commercial establishments instead of raising rates upon the residents. Similar charges are sometimes levied for solid waste and sanitary sewage disposal. Other areas have levied special taxes specific to the corporate community (the City of Detroit has a municipal corporate income tax).

These activities project an "attitude" by the community toward contributory businesses. Companies will seek those areas that truly want the company to locate in the area as shown by its historical treatment of the existing companies in the area.

For a community to be competitive in economic development, either causing existing companies to expand or recruiting new companies to the area, the following are the most important elements:

- ▲ Existing buildings.
- ▲ Approved (zoning) and improved (horizontal infrastructure) industrial property for either office or manufacturing use.
- ▲ Tax structure that recognizes the importance of contributory businesses and does not disproportionately place the burden of revenue generation on the productive sector.
- ▲ A history of cooperative attitude within the community, which fosters cost maintenance or cost reduction for the company.

Communities that are the most profitable locations for companies will be the most successful.

Population paradox

One of the reasons communities have promulgated regulations which increase costs to contributory employers is to control or manage population growth.

The nation and most local economies have grown in population over the last 10 years. Population growth causes "change" in communities and people inherently resist change. Change represents the unknown and causes uncertainly among some people.

Population growth causes new home development, converting former open space to tract housing. It increases traffic on the highways, the number of students in the schools and it increases the service area for local government.

Because of change due to population growth and at the spurring of some residents, some communities have enacted complicated "growth management" regulations. As a result of land set-asides, significant fees and lengthening the approval process, significant costs are added to new development. Unfortunately, this activity can cause degeneration in the strength of a local economy.

It is a characteristic of the strongest local economies to grow in population, but not all economies that grow in population are strong. Communities grow in population for three basic

reasons: 1) in-migration to the area for employment, 2) in-migration to the area by the retirement community, 3) immigration from a foreign country.

POLICOM has examined the population growth rates for all the 316 metropolitan areas from 1988 through 1997. During this period of time, the United States grew at the average annual rate of 1.0 percent per year. Among the 25 strongest metropolitan areas, all grew in population at a rate faster than the national average.

The following chart lists the 25 strongest areas ranked in order of their economic strength. The average annual increase in population growth from 1988 through 1997 is shown along with the rank among the 316 metropolitan areas.

While all of the strongest economies have grown in population, only seven of the top 25 were also ranked in the highest 25 areas for population growth rate.

There is an assumption by some that an area that is growing rapidly in population must have a strong economy. This is simply not the case.

The chart on the following page shows the fastest 25 metropolitan areas ranked for population growth rate. While some of the areas have grown as a result of a strong economy, most have grown for the other two reasons, immigration and in-migration of retirees.

	Economic Strength Rank	**Pop % 1988-97**	**Pop Growth Rank**
United States		1.0%	
Austin-San Marcos, TX	1	2.9%	19
Salt Lake City-Ogden, UT	2	1.8%	72
Raleigh-Durham-Chapel Hill, NC	3	2.9%	18
Seattle-Bellevue-Everett, WA	4	2.0%	45
Fort Collins-Loveland, CO	5	2.4%	29
Las Vegas, NV	6	6.0%	1
Boulder-Longmont, CO	7	1.8%	64
Portland-Vancouver, OR-WA	8	2.4%	31
Dallas, TX	9	2.0%	52
Wilmington, NC	10	2.6%	26
Denver, CO	11	1.6%	84
Atlanta, GA	12	2.8%	21
Boise City, ID	13	3.2%	10
Phoenix-Mesa, AZ	14	3.1%	13
Madison, WI	15	1.9%	58
Charlotte-Gastonia-Rock Hill, NC-SC	16	2.1%	42
Indianapolis, IN	17	1.1%	141
Green Bay, WI	18	1.3%	114
San Antonio, TX	19	1.45	102
Nashville, TN	20	1.8%	70
Houston, TX	21	1.8%	65
Albuquerque, NM	22	1.8%	73
Des Moines, IA	23	1.4%	105
Santa Rosa, CA	24	1.8%	68
Provo-Orem, UT	25	2.8%	20

	Economic Strength Rank	Pop % 1988-97	Pop Growth Rank
Las Vegas, NV	6	6.0%	1
Naples, FL	149	4.2%	2
Laredo, TX	162	3.8%	3
Punta Gorda, FL	262	3.8%	4
Riverside-San Bernardino, CA	41	3.7%	5
McAllen-Edinburg-Mission, TX	54	3.5%	6
Yuma, AZ	315	3.4%	7
Bremerton, WA	105	3.3%	8
Olympia, WA	29	3.2%	9
Boise City, ID	13	3.2%	10
Ocala, FL	98	3.1%	11
Orlando, FL	61	3.1%	12
Phoenix-Mesa, AZ	14	3.1%	13
Fayetteville-Springdale-Rogers, AR	55	3.0%	14
Bellingham, WA	171	3.0%	15
Fort Pierce-Port St. Lucie, FL	209	3.0%	16
Las Cruces, NM	259	2.9%	17
Raleigh-Durham-Chapel Hill, NC	3	2.9%	18
Austin-San Marcos, TX	1	2.9%	19
Provo-Orem, UT	25	2.8%	20
Atlanta, GA	12	2.8%	21
Fort Myers-Cape Coral, Fl	129	2.7%	22
Daytona Beach, FL	258	2.7%	23
Reno, NV	46	2.7%	24
Modesto, CA	118	2.6%	25

For the Florida areas, the population growth is directly attributed to retiree relocation. In fact, the Punta Gorda MSA (Charlotte County) has more than 30 percent of the population over the age of 65 (national average is 13 percent). The economy is based upon the retirement industry, which is growing in quantity as a result of the in-migration of more retirees.

The areas located next to the border with Mexico have grown rapidly due to immigration. Note the economic strength rank for the economies that have grown due to retirement or immigration. Most are not strong economies.

Of the 50 fastest growing metropolitan areas in the United States from 1988 to 1997, only 16 rank in the top 50 in economic strength. In fact, 16 of the fastest growing areas are ranked in the lower half of the 316 metropolitan areas in economic strength.

While it is a characteristic of strong economies to grow in population, it is a characteristic of the weakest local economies not to grow and even decline in population.

The chart on the following page shows the 25 weakest local economies in the United States, their population growth rate, and their population rank among the 316 areas. The Yuma, Arizona, area is the only one that has had brisk population growth. This is due to rapid immigration from Mexico to supply labor for the farm industry.

	Economic Strength Rank	Pop % 1988-97	Pop Growth Rank
United States		1.0%	
Glen Falls, NY	292	0.7%	198
Decatur, IL	293	-0.5%	311
Kankakee, IL	294	0.6%	202
Mansfield, OH	295	0.0%	279
Abilene, TX	296	-0.2%	297
Williamsport, PA	297	0,1%	258
Dutchess County, NY	298	0.3%	242
Kokomo, IN	299	0.2%	254
Brazoria, TX	300	1.9%	57
Cumberland, MD-WV	301	-0.3%	304
Beaumont-Port Arthur, TX	302	0.2%	247
Jacksonville, NC	303	0.2%	256
Anchorage, AK	304	1.1%	143
Houma, LA	305	0.3%	240
Odessa-Midland, TX	306	0.4%	234
Witchita Falls, TX	307	0.4%	237
Merced, CA	308	1.8%	75
Enid, OK	309	-0.5%	310
Kenosha, WI	310	1.6%	85
Lawton, OK	311	-0.3%	305
Casper, WY	312	-0.1%	289
Flint, MI	313	0.0%	268
Steubenville-Weirton, OH-WV	314	-0.7%	315
Yuma, AZ	315	3.4%	7
Pine Bluff, AR	316	-0.6%	313

Of the 50 weakest economies, only eight had a population growth rate greater than the national average and 20 areas lost population.

To control or stop population growth, some communities have adopted the philosophy that if you make new development more expensive, fewer people will move to the area.

Unfortunately, extremes in this practice can lead directly to the decline of the economy. By increasing rules, requiring land set-asides, and extending the time period for approvals, the first two site selection criteria are immediately affected - costs and time - which makes the area less appealing for existing companies, causing them to leave, and eliminates consideration by new companies.

For communities that are growing as a result of foreign immigration, the United States government must change immigration policy to stop the growth. For areas that are growing as result of the in-migration of retirees, the area must make it less desirable for people to move there. For areas that are growing as result of a strong economy, they must work to cause economic decline

Aside from immigration policy, the steps necessary to stop or contain population growth are undesirable. Therefore communities should embrace an increase in their population and enjoy the benefits of having a desirable place to live and a strong economy.

About the author

William H. Fruth is the president of POLICOM Corporation, an independent economics research firm located in Jupiter, Florida, which specializes in studying the dynamics of local economies.

He has personally evaluated more than 400 local economies in the United States and provides presentations and workshops for state associations and local communities on the condition of their respective economies. During the last two years, he has given more than 70 presentations to communities and state associations in 21 states on the condition of their respective economies. Through his analysis, he determines if the economy is growing or declining, what is causing this to happen, and what can be done to improve the situation.

He is the author of the book, ***WHERE THE MONEY IS.... America's Strongest Local Economies***, which provides insight as to why local economies grow or decline, and has written numerous articles for newspapers and trade magazines regarding the economy.

He is a nationally recognized leader in the field of geographic economics and has extensive experience in economic development. From 1988 to 1995, Fruth served as vice president of a major industrial land development company, directing the development and marketing of a 500-acre corporate park in the West Palm Beach, Florida, area.

Prior to that, he was president of the Business Development Board of Palm Beach County and during that tenure was named Florida's Economic Development Professional of the Year in 1987.

From 1980 to 1984, Fruth served in a full time capacity of mayor of Tiffin, Ohio, located in northwest portion of the state. During this time, he was named one of the "Five Outstanding Young Men in Ohio" and was heavily involved in economic and community development, both locally and statewide.

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