

Economic Impact of Reaching Physical Build-Out



Pinellas County Florida

September - 2001

*Economic Impact Upon
Pinellas County, Florida
Of Reaching Physical
Build-Out*

Prepared for the

**Office of Economic Development
Pinellas County**

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Summary: Economic Impact Upon Pinellas County of Reaching Physical Build-Out

Pinellas County Economy - Pinellas County, Florida is one of four component counties of the Tampa-St. Petersburg-Clearwater, FL metropolitan area. The metropolitan area is ranked 70th among the 318 metropolitan areas for “economic strength” by POLICOM in its 2001 study. The county’s economy is extremely well diversified and has been growing in size and quality for many years.

Size of the Economy – Employment and earnings growth for the county, since 1980, has been faster than a vast majority of the metropolitan areas. Growth in the size of the economy has been comparable to the ten strongest metropolitan areas in the United States since 1970.

Quality of the Economy – The quality of the county’s economy has improved significantly over the years. Growth of the average annual earnings per worker (AEPW) has exceeded inflation each year since 1991. The percentage the county’s AEPW is of the state of Florida’s AEPW has increased each of the last eleven years. Growth in the inflation factored AEPW follows a path similar to the ten strongest local economies. From 1997 to 1999, however, the percentage Pinellas County’s AEPW is of the national AEPW declined.

Components of the Economy – The “retirement” industry is the largest economic contributor (primary industry) of any single industry in the county as Government Transfers for retirement age individuals account for approximately 30% of the “imported” money to the area. However, the county has numerous economic contributors, most of which include high-wage employers. Manufacturing is the second biggest contributory and includes instruments, electronic equipment, publishing, and industrial machinery. The finance and insurance sector, wholesale trade, and computer software development and programming are all important to the economy.

Unique Economy – Approximately 23% of the population of Pinellas County is over the age of 65. The national average is approximately 12%. Economies, which are heavily dominated by the “retirement” industry, typically grow only if there is in-migration of more people and typically have a gradual decline in the quality of the economy.

Charlotte County, Florida is a prototype retirement based economy. Having no other significant contributory industry aside from retirement, it has grown rapidly in size as a result of an increase in population. The quality of the economy has been on decline for many years and the AEPW for the county is the 2nd lowest among the 318 metropolitan areas in the nation. Pinellas County has a very large industrial sector coexisting with a large retirement age population. This is a unique situation. One of the benefits is the residential sector in Pinellas County pays a significantly lower share of locally levied property taxes than the residents of Charlotte County, which does not have an industrial sector.

Future Economy – Economic projections, based upon the history of the county’s economic growth and the nature of the area’s industry, have been created. They show the county should, under normal circumstances, have continued, rapid growth in both the size and the quality of the economy. However, the projections cannot come to reality as the Pinellas County is approaching and will soon reach physical Build-Out. This is the condition when, for practical purposes, there is no more Greenfield land upon which new companies can locate or existing companies expand.

Affect of Build-Out on Local Economies – When a city or a county reaches Build-Out, new companies cannot locate in the area. As a result, economic growth begins to slow. Existing companies, which need to expand, have no place to build in the area and are forced to leave. As a result, the economy begins to decline. As time goes by, existing industrial facilities begin to deteriorate, finally reaching a point when they are abandoned, causing more companies to leave the area, accelerating economic decline.

Economies In Which Build-Out Has Occurred – Most cities and many counties in the oldest parts of our country have reached a Build-Out situation. Build-Out occurs first in areas, which are small geographically, have had rapid growth, and are the oldest. Pinellas County will likely become the first county in Florida to reach Build-Out. Typically, areas, which reach Build-Out, suffer gradual economic decline.

Lucas County, Ohio – The major component county of the Toledo, OH metropolitan area (ranked 169th for economic strength), Lucas County reached Build-Out at least 25 years ago. During the last 20 years, the county lost approximately 22,500 manufacturing jobs and had no net gain in wholesale-distribution, as a result of not having Greenfield parcels available. Additionally, the county lost population during this period. However, the counties, which surround Lucas County, increased in population and gained 11,000 manufacturing jobs and 29,000 wholesale-distribution jobs. Greenfield parcels were available in these counties. Today, there are hundreds of thousands of square feet of abandoned manufacturing space in Lucas County.

Denver County, Colorado – The central component county for the Denver metropolitan area (ranked 2nd in economic strength), Denver County reached Build-Out at least 20 years ago. During the last 20 years, the county lost population and had a mild increase in the number of new jobs. The quality of the economy improved significantly, as most of the new jobs created were high-wage positions. There has been significant economic growth in the “Greenfield” counties, which surround Denver County. Problems relating to the deterioration or abandonment of aged structures are pervasive in Denver County. To help cure this problem, the county has identified almost 25,000 acres as an enterprise zone.

Impact Upon Pinellas County of Reaching Build-Out - Pinellas County will likely reach practical Build-Out within six years. The impact of presently aging facilities in the oldest parts of the county combined with the affects of Build-Out will cause growth in the size of the economy to stall by 2015 and the quality of the economy to begin to decline the same year.

What Can Pinellas County Do to Prevent a Reduction in the Quality of the Economy? – Leaders in Pinellas County have the advantage they can see the historical impact upon an economy when Build-Out occurs. As a result, they can begin programs now, which can forestall or even prevent some of the negative aspects of Build-Out.

Economic Development Program – The area should implement an aggressive, well financed Existing Industry Program which will help retain and cause the expansion of existing, high-wage contributory employers.

Prevent Facility Deterioration and Abandonment – The County should create financial incentive packages for contributory employers which will encourage them to rehabilitate existing facilities or construct new facilities in Brownfield locations.

About POLICOM – POLICOM Corporation is an independent economic research company, which specializes in analyzing local and state economies.

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Introduction

An individual or business is most affected by the economic condition in closest proximity to where the individual lives or the business is located. The economic growth of the local economy typically determines the quality of life for the individual or the success of the business.

A local economy will grow and expand, shrink and decline, in direct proportion to the amount of money which is flowing into the area as a result of the “primary or contributory industries.” Primary industries are those which cause money to enter a local economy. Consumptive industries are those which utilize this money and cause the wealth to leave the local economy.

There are many things, which affect the success of the primary industries on a statewide or county level. Some of these are taxation, regulatory climate, demographic composition of the populace, the skill level of the labor market, and many more.

One of the most important issues, which influence the primary industries, is the availability of land and/or buildings, which are utilized to perform their function.

Pinellas County, Florida is a relatively small county geographically. For the last 40 years it has enjoyed rapid growth not only in population but also in the size and quality of its economy. However, the county is approaching a condition when there will be, for practical purposes, little land available for new development. The county will be, for practical purposes, “built out.”

The purpose of this study is to examine the economic impact of such a condition upon the Pinellas County economy.

The study will include reviewing the historic and present day condition of the economy, determining how it compares to the rest of the nation, what is driving it, and where it is heading. Communities, which have reached a built out condition, will be examined to determine the economic affect of such a state. The economic implications for Pinellas County will be discussed and projections will be made as to the future condition of the economy.

In order to complete this study, POLICOM prepared a *Historical, Comparative Economic Analysis for Pinellas County*. Reference is made throughout this study to data, which is contained in that analysis.

Pinellas County Economy

Pinellas County, Florida is one of four component counties of the Tampa-St. Petersburg-Clearwater, FL metropolitan area. The metropolitan area is ranked 70th among the 318 metropolitan areas for “economic strength” by POLICOM in its 2001 study.¹

Annually POLICOM evaluates all 318 metropolitan areas², measuring the growth and stability of eighteen economic factors over the most recent 25-year period. The rankings are a measure of how consistent the economy grew in size and quality over an extended period of time.

Hillsborough, Pasco, and Hernando Counties comprise the balance of the metropolitan area. Employment and earnings data is based upon the geographic location of the job. Individuals might live in one county in the metropolitan area but work in another.

The Pinellas County economy is extremely well diversified and has been growing in both size and quality for many years, especially the five-year period from 1995 to 1999. Many people who work in Pinellas County however live in other counties.

Size of the Economy

Two measures of how a local economy grows in size are total Earnings and total Employment. Earnings are all the wages and salaries paid and the profits of proprietors located within the county. Employment is the number of wage and salaried workers and the number of proprietors in the county. The growth of each is an indication of the increase in the overall volume of the economy.

To measure the growth in size, the average annual percentage increase (AAI) for both Earnings and Employment was calculated for Pinellas County over three time periods: 1) the last five years (1995-1999), 2) the last ten years (1990-1999) and the previous ten years (1980-1989). The AAI for each time period was ranked against the 318 metropolitan areas for comparison purposes.

¹ Annually POLICOM ranks all metropolitan areas for “economic strength.” A complete list of all the areas can be found in Section 4 of the Historical, Comparative Economic Analysis for Pinellas County or by going to www.policom.com.

² As of June 2001, there are 318 metropolitan areas in the United States. The Office of Management and Budget defines metropolitan areas, which are basically determined by commuting patterns. For comparative growth rates, POLICOM will compare Pinellas County’s data to the 318 metropolitan areas as if it were, itself, a defined area.

The following chart shows the results.³

Earnings-All Workers

| 1999-1995 | <u>AAI</u> | <u>Rank</u> |
|------------------|-------------------|--------------------|
| USA | 5.98% | |
| Pinellas County | 7.24% | 35 |

| 1999-1990 | <u>AAI</u> | <u>Rank</u> |
|------------------|-------------------|--------------------|
| USA | 5.49% | |
| Pinellas County | 6.30% | 74 |

| 1989-1980 | <u>AAI</u> | <u>Rank</u> |
|------------------|-------------------|--------------------|
| USA | 7.58% | |
| Pinellas County | 9.30% | 54 |

Employment-All Workers

| 1999-1995 | <u>AAI</u> | <u>Rank</u> |
|------------------|-------------------|--------------------|
| USA | 2.38% | |
| Pinellas County | 3.58% | 35 |

| 1999-1990 | <u>AAI</u> | <u>Rank</u> |
|------------------|-------------------|--------------------|
| USA | 1.79% | |
| Pinellas County | 2.30% | 119 |

| 1989-1980 | <u>AAI</u> | <u>Rank</u> |
|------------------|-------------------|--------------------|
| USA | 1.95% | |
| Pinellas County | 3.86% | 37 |

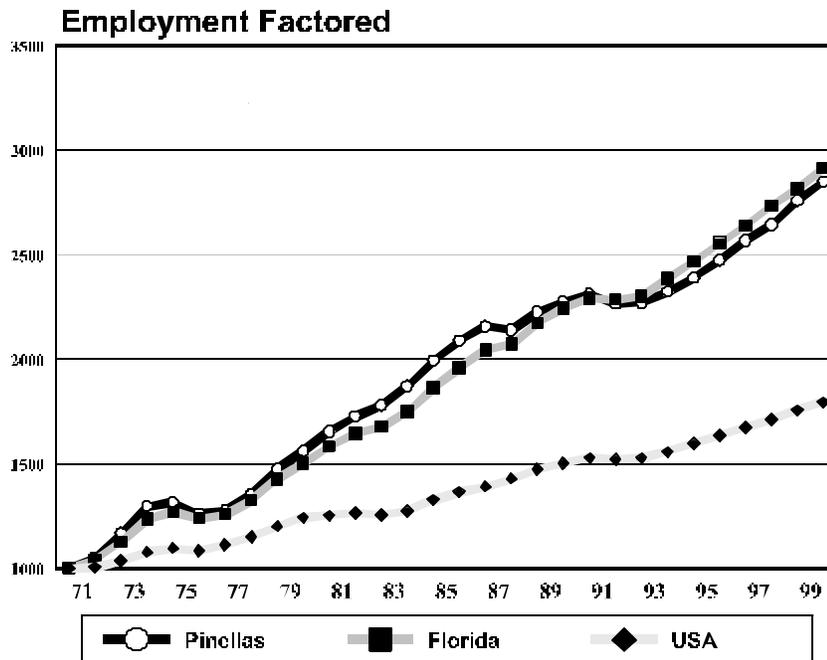
Note the county had growth rates easily exceeding the nation for each of the time periods. Also note the variance in both the growth rate and the overall ranking between the last five years and the last ten years. From 1990 to 1994 the area suffered as a result of the national recession. However, it quickly responded when the recession ended.⁴

³ Unless otherwise noted, the economic data used in this study is published by the Bureau of Economic Analysis, U.S. Department of Commerce. Known as Region Economic Information Systems (REIS) data, it is the most comprehensive and authoritative database in the United States.

⁴ Growth data for 118 economic elements for three time periods and their comparative ranking appear in Section 3 of the Historical, Comparative Economic Analysis for Pinellas County.

The growth in the size of the economy is visually shown by the following graphs. To visually compare areas graphically, the annual percentage increase was calculated and then multiplied by a common factor (in this case 1000). The “factoring” enables direct visual comparisons among areas.⁵

The first graph shows the annual factored growth of Employment, from 1970 to 1999, for Pinellas County, the State of Florida, and the nation.



Note the growth rate of total employment for Pinellas virtually mirrors that of Florida and has been considerably more brisk than the nation as a whole. Note also the significant dips in employment growth for both Pinellas and Florida during the recessions of 1973-75 and 1989-92. The area withstood the national recession between 1981-83.

Since Pinellas is a “local” economy, not a state or nation, it is appropriate to compare its growth to other local economies. The following graph compares the factored growth in Employment to the ten strongest and ten weakest metropolitan area economies in the nation. These economies were identified by POLICOM in its national ranking for economy strength. The data for each was calculated, factored, and then averaged to create the following graph.

⁵ For a more detailed discussion regarding Factoring data, please see Section 2 – Page 1 of the Historical, Comparative Economic Analysis for Pinellas County.

The ten strongest areas have had rapid, consistent growth in the size and quality of their economies for an extended period of time. The weakest economies have been extremely inconsistent and or have been on volatile decline for an extended period of time.

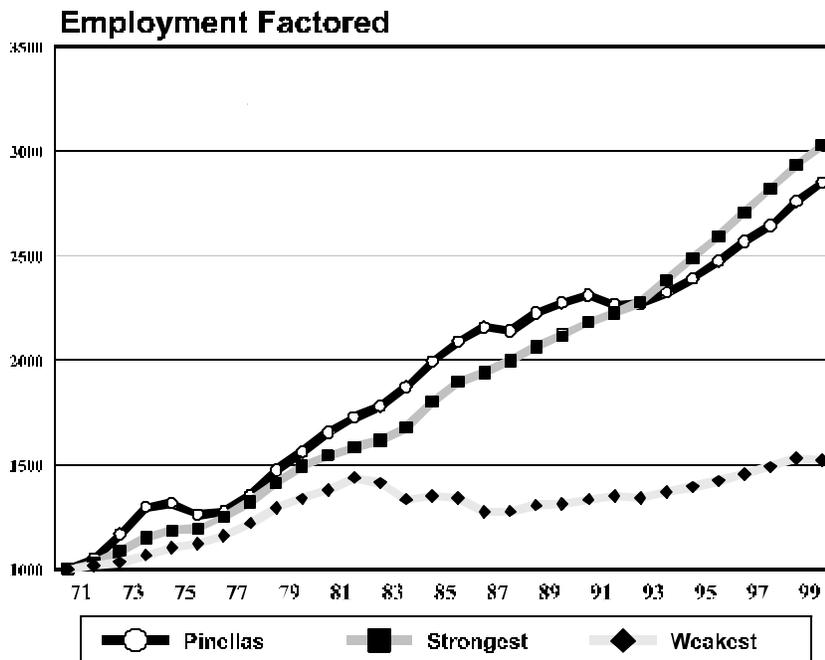
The ten strongest and weakest areas include the following metropolitan areas:

Ten Strongest

Ten Weakest

- | | |
|----------------------|------------------------|
| 1 Austin, TX | 318 Odessa-Midland, TX |
| 2 Denver, CO | 317 Casper, WY |
| 3 Atlanta, GA | 316 Yuma, AZ |
| 4 Seattle, WA | 315 Pine Bluff, AR |
| 5 Salt Lake City, UT | 314 Steubenville OH |
| 6 Raleigh-Durham, NC | 313 Houma, LA |
| 7 Dallas, TX | 312 Enid, OK |
| 8 Fort Collins, CO | 311 Cumberland, MD-WV |
| 9 San Antonio, TX | 310 Wichita Falls, TX |
| 10 Madison, WI | 309 Beaumont, TX |

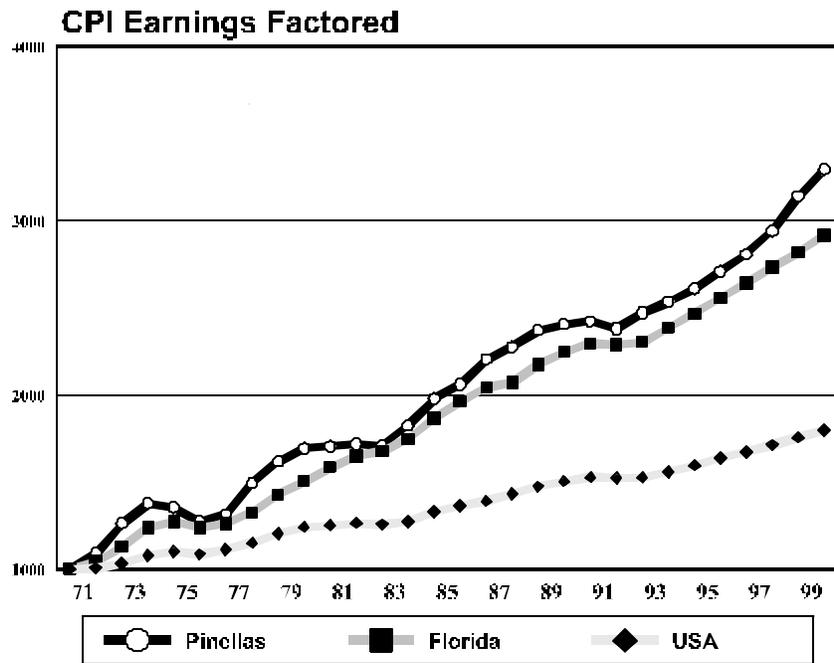
The following graph compares the factored growth in employment.



Note how Pinellas County grew in size relative to employment at a rate faster than the ten strongest areas until 1990 when the area lost employment due to the recession. After the recession, job growth

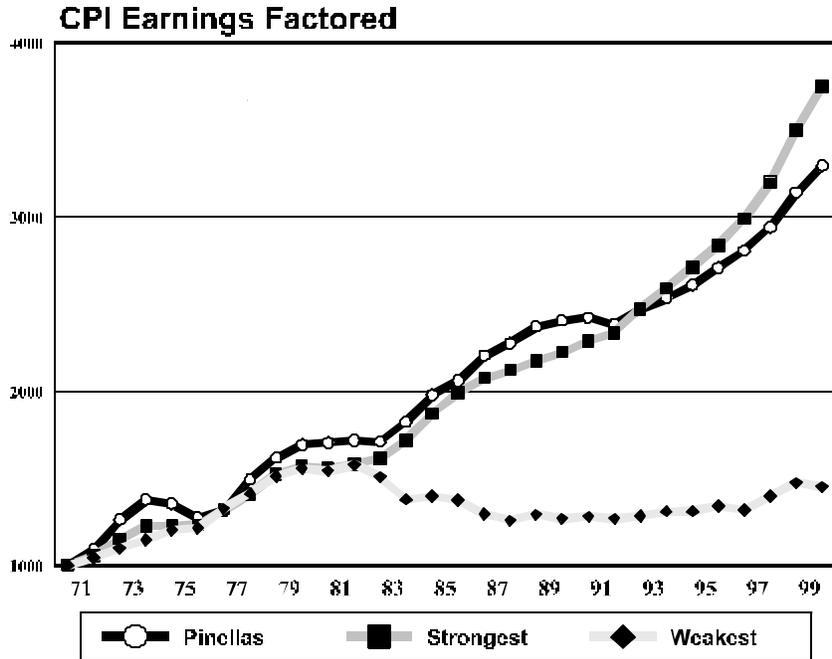
resumed at a rate almost as fast as the ten strongest areas. Notice the lack of relative job growth in the ten weakest economies. In some of them, there are fewer people working today than in 1980.

The following graphs compare the growth in the size of the economy based upon total earnings. Prior to factoring, the total earnings for each area were adjusted for inflation. The value of the earnings for each year was “brought to” the value of the 1999-dollar to provide a more relevant comparison. After adjusting for inflation, the percentage increases were factored for direct comparison.



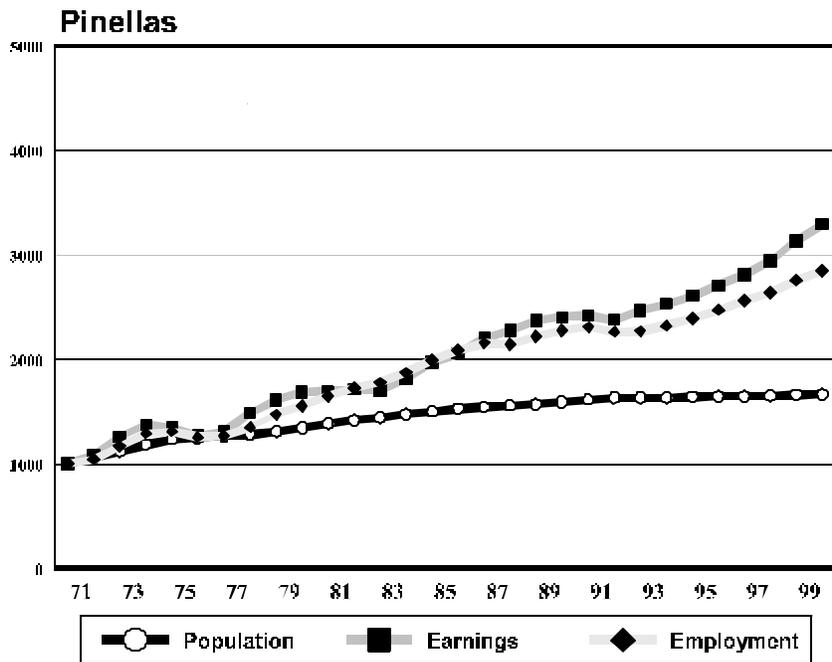
While employment growth for Pinellas County was mildly slower than Florida for the last ten years, its growth in inflation adjusted earnings exceeded the state.

The county's growth was very comparable to the ten strongest areas. Note the size of the economy for the ten weakest areas, after adjusting for inflation, is smaller than in 1980.



While the size of the economy has grown extremely fast, the overall population growth, when compared to the rest of the nation, has been relatively slow. From 1990 to 1999, the population in Pinellas County grew at an average annual rate of .44% which ranked 228th among the 318 metropolitan areas and less than half the rate for the nation of 1.00%.

The graph below shows the factored relationship between population growth and the growth of earnings and employment. The economy has grown as a result of the creation of new jobs and not the result of the in-migration of people.



Overall, when measured by the growth in total employment and earnings, the Pinellas County economy has grown at a rate comparable to the strongest economies in the United States, even though it has had very slow growth in its population.

Quality of the Economy

One of the best means to measure the “quality” of a local economy is to examine the growth in the Annual Earnings Per Worker (AEPW). The annual earnings by people in an area, and respective growth, establishes the level of their economic “quality of life.” How much money they earn each year determines the quality of their housing, the food they eat, the amount of taxes they can pay, and the size of their savings or retirement account.

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

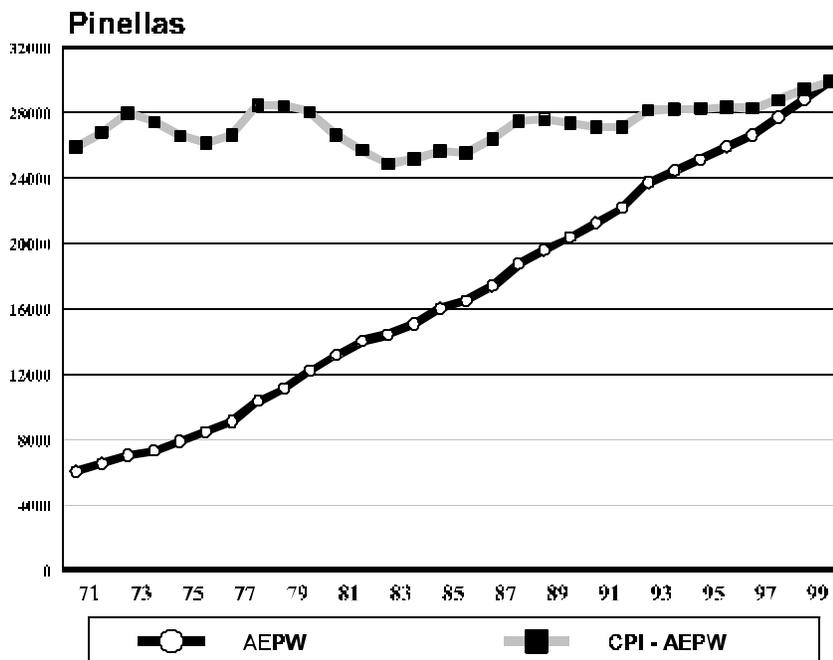
Since the amount of money people are paid each year, for the vast majority of the people, determines their lifestyle, the annual earnings per worker will be examined thoroughly for the area to measure the quality of the economy.

The growth in AEPW will be examined three ways: 1) the actual growth pattern which is adjusted for inflation from 1970 to 1999, 2) the percentage the actual AEPW is of the state and nation, and 3) how the growth pattern compares to the strongest and weakest economies in the nation.

The first graph shows the actual AEPW for Pinellas County along with an inflation adjusted AEPW. The AEPW for each year was adjusted to the value of the 1999-dollar.

The actual AEPW grew steadily since 1970. Most importantly, after adjusting for inflation, the inflation adjusted AEPW has grown at a rate fastest than inflation for most years since 1980. This is not the case in a vast majority of the local economies in the United States. In most local economies and the nation as a whole, wage increases did not keep pace with inflation for a most of the last twenty years.

Relative to inflation, the quality of the Pinellas County economy has improved.

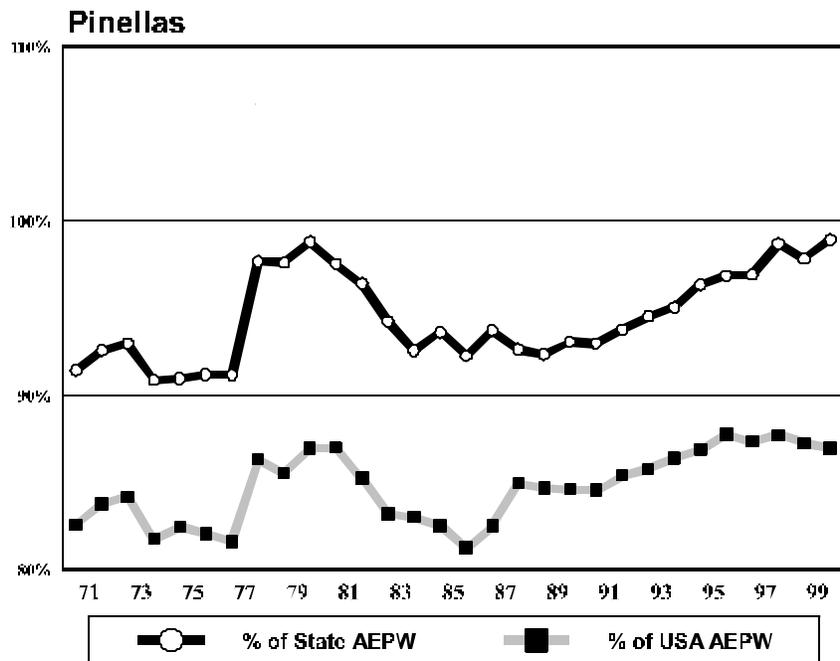


Another means to measure relative improvement in the AEPW is to determine if the actual AEPW has gained or lost relative to the nation or state. This is done by calculating the percentage the Pinellas County actual AEPW is of the state and the USA. For each year, the AEPW was divided by the AEPW for the state and the nation.

As an example, if the area’s AEPW for 1999 was \$25,000 and the state’s AEPW was \$26,000, the percentage the area’s AEPW of the state’s AEPW would be 96%.

By doing this calculation for all of the years, a pattern or trend can be determined. The question is: “Has the quality of the economy gained or lost versus the state or nation.

If, in one year, the area’s AEPW was 90% of the state’s AEPW, and the next year it was 92%, the area gained relative to the state. However, if the following year the area’s AEPW was 88% of the state, then it did not improve as much as the state. The following graph shows the percentage the Pinellas County AEPW was of Florida and the USA since 1970.



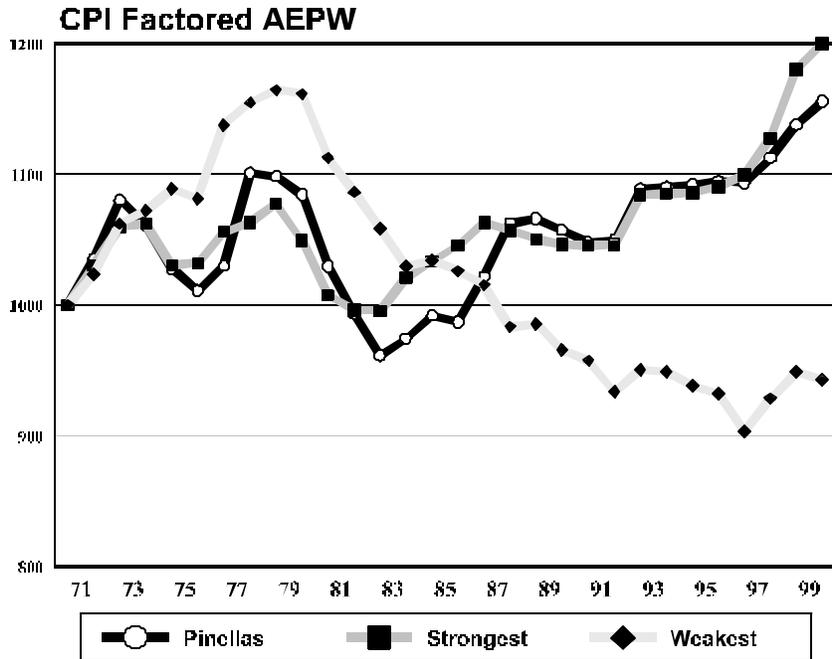
As you can see, the Pinellas AEPW gained against the state of Florida for twelve of the last thirteen years. In 1988, the Pinellas AEPW was 92% of the state average and by 1999 climbed to 99%. The county also gained against the national average until 1998 when it declined for two straight years.

Overall, the quality of the economy improved better than the state or the nation over the last ten years.

The next visual measure of the growth of the quality of the economy is the CPI-Factored-AEPW. The AEPW has been adjusted to the value of the 1999 and the percentage increase for each year is then multiplied by a common factor.

This exercise measures how the quality of the economy has improved relative to the economy itself. If the line goes up, the quality of the economy improved from the previous year.

The following graph compares the CPI-Factored-AEPW for Pinellas County to the Ten Strongest and Ten Weakest local economies.



From the above graph you can see the quality of the Pinellas County economy has improve significantly over its level in 1970. The rate of improvement from 1987 to 1997 was as good as the Ten Strongest local economies. Note how the level of the quality of the economies of the Ten Weakest areas is far below that in 1970.

Overall, the growth in the quality of the Pinellas County economy has been extremely good and has been comparable to some of the strongest local economies in the United States.⁶

⁶ For a more complete review to the comparative growth in the size and the quality of the economy, please refer to Section 2 of the Historical, Comparative Economic Analysis for Pinellas County.

Components of the Economy

A local economy will grow or decline in size and quality in direct proportion to the success of its “Primary Industries.”

Primary or contributory industries are those which import money to a local economy. This imported money circulates and flows from person to person, business to business, until it is fully consumed and leaves the local economy. The success of most service and retail business and a vast majority of the jobs in a local area are dependent upon this flow. Nationally, the most important primary industry in a majority of the local economies is manufacturing.

The size of a local economy will grow in direct proportion to the amount of money entering the area year after year. The reactive-consumptive businesses will grow, or decline, based upon this flow.

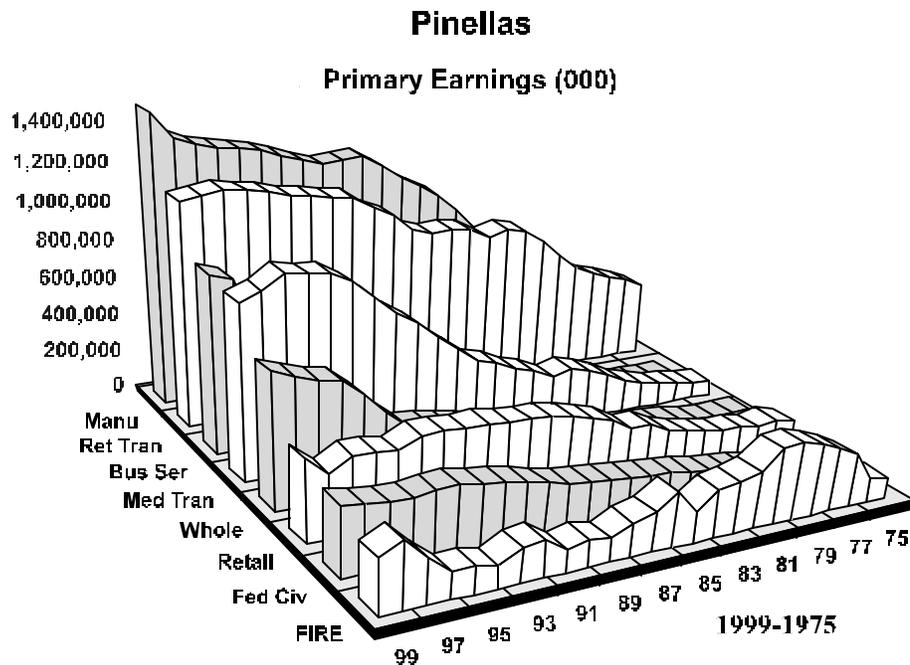
The quality of a local economy is dependent upon the wage level paid within or as a result of the primary industries. The “level” of a local economy (average area wage) will approach but cannot exceed the wages paid within the primary industries.

POLICOM has developed formulas, which estimate the source and the amount of primary or contributory earnings by workers in each industry and other major sources of money flowing into an economy.

The formulas consider certain norms in each industry and are designed to provide a reasonable estimate as to the contributory impact each has on the local economy. These estimates do not consider ancillary spending by a company, such as office supplies, printing, and taxes, but only its payroll.⁷

⁷ For a more detailed discussion on Primary Industries, please see Section 1 of the Historical, Comparative Economic Analysis for Pinellas County.

The following graph shows the sources of the initial flow of money into Pinellas County from 1970 to 1999 by industry.



From the graph above you can see Pinellas County has multiple contributory industries. This is a characteristic of a strong economy. Weak economies are typically dependent upon one or two primary industries.

Net imported wages in “manufacturing” is the single largest source of imported money. However, the “retirement industry” is the most dominant economic contributor to economy (approximate 30% of the imported money).

The retirement industry adds money to the economy by way of private pension programs (not able to provide estimate due to lack of data) and government transfers or entitlement programs. Government transfers for retirement “Ret Tran” (social security) and healthcare “Med Tran” (Medicare) accounted for more than \$2 billion of contributory money in 1999. However, the total net gain of government transfers has been declining. (The contributory amount of government transfers is based upon the net gain of money sent to the area for the programs and the money extracted by way of payroll taxes.)

Manufacturing is growing as an industry and is well diversified. It includes instruments, electronic equipment, publishing, and industrial machinery. Additionally, the finance and insurance sector is a strong contributor along with wholesale trade. These industrial sectors account for thousands of high-wage jobs and hundreds of millions of imported dollars.

One of the most important and fastest growing contributors is “Business Services.” Typically this sector is a reactive, dependent industry including office maintenance, advertising agencies, and temporary worker services. However, “buried” in the data for this sector is “computer programming and software development (SIC 737). This sector has been growing rapidly in the county and is contributory in nature. In 1999 there were more than 4,000 people employed in SIC 737 earning on average \$52,500 per year.

The health care industry has a large presence in the county, principally as a result of the high presence of retirement age individuals. Medicare is one of the main sources of funding for this service. However, in addition to general health care, which is a dependent industry, there is a large presence of medical research and laboratory testing, which is contributory.

Overall, as a result of having multiple primary industries, the Pinellas County economy is less susceptible to periodic national recessions.

Unique Economy

As previously mentioned, the “retirement industry” is the single largest contributory industry in Pinellas County. According to the 2000 census, approximately 23% of the county’s population are over the age of 65. This is greater than the Florida average of 18% and almost twice the national average of 12%.

The fact the county has such a strong, growing economy with such a high percentage of retirement age individuals living in the area is extremely unusual and unique. To demonstrate the importance of this unique situation, it is important to first examine the nature of the “retirement” industry.

The concept of economies being based upon the “retirement” industry is relatively new when looking at the economic history of our nation. It was only after the interstate highway system was constructed, airports expanded, and southern states with warm climates were able to generate sufficient electric

power to support “air conditioning systems” that the older population began to leave their northern homes to spend their golden years in states like Florida and Arizona.

Over the last ten to fifteen years, as a result of large retirement funds and expanded social security and Medicare programs, virtually all individuals who desire to locate in another state for their retirement years can afford to do so. As a result, entire local economies have been created as a result of this in-migration.

POLICOM has examined the economic impact upon a local economy of “retirement” as an industry and, for the purposes of this paper, will address two general characteristics. Local economies, which are dependent upon the “retirement” industry, 1) grow as a result of the in-migration of more people and 2) have a “quality” which is lackluster or even poor.

The discussion which follows regarding the retirement industry in no manner suggests anything derogatory toward the senior citizens who live in our country, as they are today and have been in the past a valuable contributor and resource for our society. The examination, which follows, is directed toward the measurable economic impact of the retirement sector as an economic industry.

Typically the retirement industry promulgates the creation of low-wage retail and services jobs and there is rarely a major industrial component within the economy.

Charlotte County, Florida

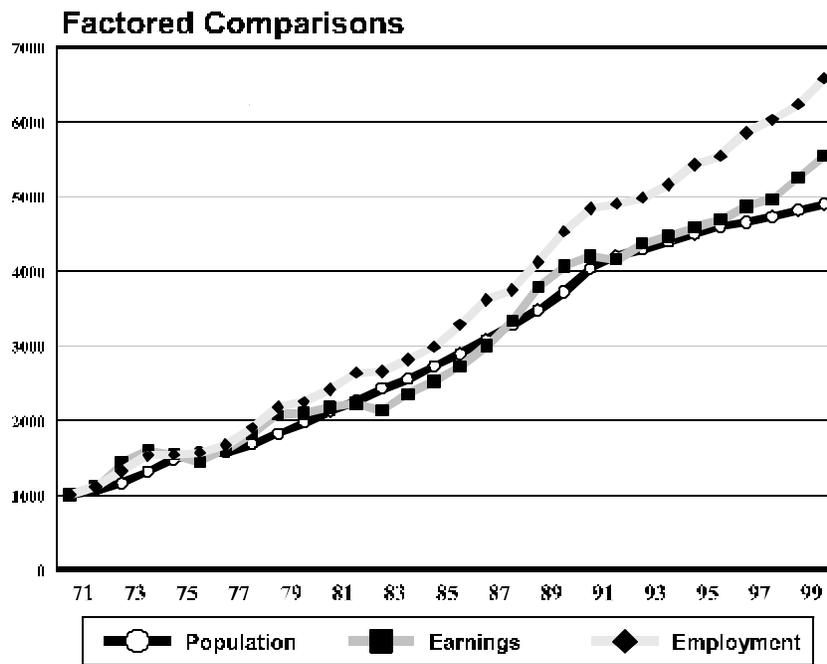
One of the economic laboratories used by POLICOM to study the retirement industry is Charlotte County, Florida. Also known as the Punta Gorda metropolitan area, Charlotte County has the highest percentage of its population (35%) over the age of 65 of any metropolitan area, and possibly any county, in the United States. Additionally, there is a significant absence of any other primary industry as 85% of the contributory money is attributed to retirement transfers.

The Charlotte County economy has grown very rapidly in size over the last twenty years. Its rate of job growth has been one of the fastest in the nation. From 1980 to 1989, employment grew at the annual

rate of 7.3%, the 2nd fastest rate among the metropolitan areas. From 1990 to 1999, jobs grew 3.8% per year, the 15th fastest rate. Growth rates in total earnings were comparable.⁸

However, the size of the economy grew as a result of the in-migration of people and not an internal expansion. From 1980 to 1989, the population of the county grew 6.5% per year, the fastest rate in the country and from 1990 to 1999, it grew 2.8% per year, the 14th fastest rate.

The following graph shows the factored comparisons among population, employment, and inflation adjusted earnings growth. Note how the growth in the size of the economy parallels the growth in population.



While the size of the economy has grown, the quality of the economy has not. From 1980 to 1989, annual earnings per worker (AEPW) grew at the annual rate of 5.1%, below the national average and ranking 152nd. However, between 1990 and 1999, AEPW grew at the dismal rate of 2.3%, ranking 299th among the 318 metropolitan areas. In 1999, the annual earnings per worker for Charlotte County was **\$22,592, the second lowest among the metropolitan areas.**

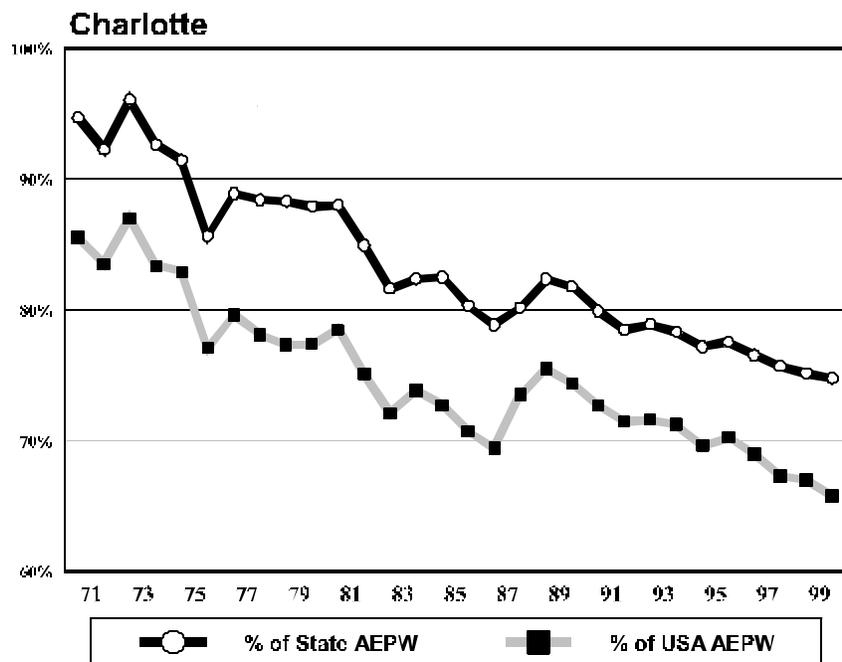
⁸ Charlotte County comparative growth data for 118 items is included in Section 3 of the Historical, Comparative Economic Analysis of Pinellas County.

The low AEPW for the can be attributed to the absence of high-wage industries in the economy. In 1999, the high-wage manufacturing sector (3rd highest wages in the nation) comprised only 2.6% of the workforce, the third lowest percentage among the metropolitan areas. Additionally, the transportation and public utilities sector (2nd highest wages in the nation) made up 2.7% of the workforce (ranked 287th) and wholesale trade (4th highest in wages) composed 1.8% of the Charlotte County workforce, the eight lowest percentage.

The workforce is overwhelmingly dominated by the service and retail trade industries as a result of the spending of the retirement community. In 1999, retail trade composed 23% of the workforce, the 6th highest percentage among the 318 metropolitan areas. Nationally, wages paid in the retail sector are 54% of the national average wage.

Services comprised 38% of the workforce in 1999, the 20th highest percentage. Nationally, wages paid in this industry are 91% of the national average. The services industry is dominated by the health services sector, which comprise 51% of all services earnings, the 21st highest percentage.

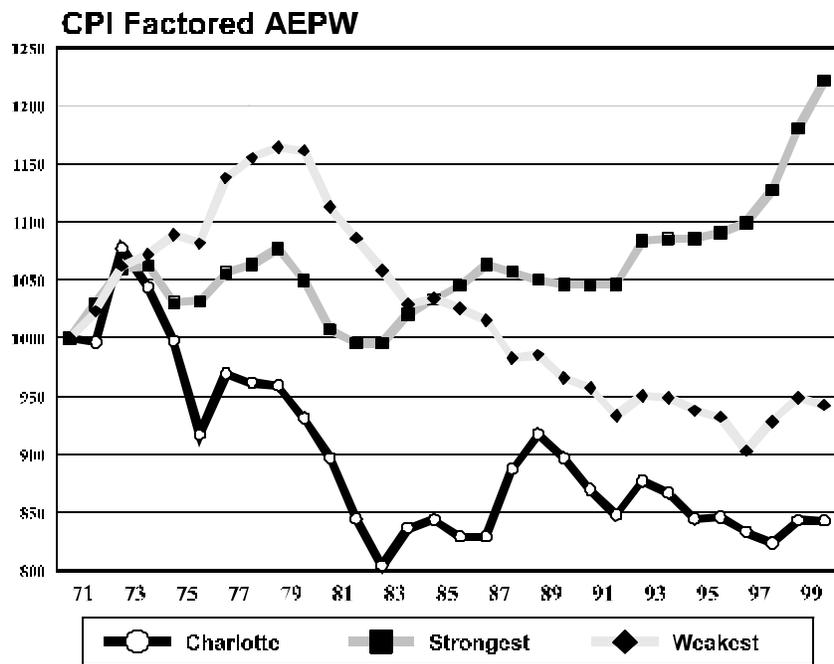
Over the last twenty years, a preponderance of the jobs created in the Charlotte County economy have been in the low-wage service and retail sectors. The affect upon the “quality” of the economy can be visually seen by the graphs for percentage of state and national AEPW and the CPI-Factored- AEPW.



Note how for almost twenty years the percentage the Charlotte County AEPW is of Florida and the nation has been on steady decline. In 1970, the Charlotte County AEPW was 95% of the state and 85% of the nation. By 1999, it had fallen to 75% and 66% respectively.

Remember the lines for Pinellas County went “up” instead of down.

The following graph compares the CPI-Factored-AEPW for Charlotte County to the ten strongest and ten weakest local economies.



Note how the decline in quality and the overall level of the economy is comparable to the ten weakest economies, even though the county’s growth in size has been faster than the ten strongest areas.

The discussion regarding “retirement” as an industry is provided since the issue is paramount to understanding the dynamics of the Pinellas County economy.

POLICOM has examined hundreds of local economies in the United States and has not found another local economy, which has such a high percentage of retirement age individuals and such a large industrial component as Pinellas County.

The coexistence of such a dynamic industrial sector and the retirement community is unique. Typically areas with a high retirement age population were settled for that purpose and an industrial component has yet to be created.

The benefits to the Pinellas County community of having a growing industrial sector, which employs high-wage earners, is significant for the following reasons:

- The economy will be more stable, not as susceptible to periodic national recessions.
- With a large number of corporations in the area, contributions to civic and social programs are greater.
- The best and the brightest young people, who grow up in the county, will have quality career opportunities to return to after college.
- The quality of the housing stock will be high.
- The tax burden upon the residential sector needed to support local government is less.

The last benefit listed should not be underestimated. POLICOM reviewed the taxable valuation of real property for Pinellas County and Charlotte County.

For 2001, in Charlotte County, improved residential real estate accounted for 72% of all real property taxes collected. This includes all single family homes, apartments, condominiums, mobile homes, and nursing homes. The balance of the property taxes was generated from the industrial-commercial property, agricultural lands, and undeveloped residential and commercial land.⁹

In Pinellas County, however, improved residential real estate accounted for only 54% of all real property taxes paid.¹⁰ With the large industrial-commercial component in the county, the residents living in Pinellas County pay a significantly smaller portion of the costs of local government and schools than those in Charlotte County, which has virtually no industrial sector.

⁹ Data supplied by the Charlotte County Property Appraiser.

¹⁰ Data supplied by the Pinellas County Property Appraiser.

Future Economy

POLICOM has created economic projections for Pinellas County beginning with the year 2001 to 2021. These projections are based upon national and state trends and the historical growth pattern for the county.

When projecting an economy, the researcher typically takes into consideration the industrial composition of the local economy. As an example, if the economy is based solely upon an industry, which has been declining, such as textiles, then the economy is projected to decline. If the economy is diversified and composed of industries, which are growing, the research will project the economy based upon the expected growth of these industries.

As previously mentioned, the Pinellas County economy is multi-faceted and is composed of several industries which appear to have long-term growth potential.

The following charts show the results of the projections for each industry for employment, earnings, and annual earnings per worker. The average annual increase for two projected times periods is provided along with the average annual increase from 1991 through 2000.¹¹

| <i>Employment Growth</i> | Project | Project | |
|--------------------------|-----------|-----------|-----------|
| Annual Increase | 1991-2000 | 2001-2011 | 2012-2021 |
| All Workers | 2.5% | 2.8% | 1.4% |
| Farm | 0.0% | 0.0% | 0.0% |
| Ag Services | 2.4% | 1.3% | 0.5% |
| Mining | 0.0% | 0.0% | 0.0% |
| Construction | 0.9% | 1.0% | 0.5% |
| Manufacturing | 0.4% | 0.8% | 0.3% |
| Trans, Comm | 4.2% | 3.3% | 1.3% |
| Wholesale | 4.0% | 2.9% | 1.3% |
| Retail | 0.0% | 0.5% | 0.3% |
| FIRE | 3.1% | 3.3% | 1.5% |
| Services | 4.7% | 4.4% | 2.0% |
| Federal Civilian | -0.4% | 0.2% | 0.0% |
| Military | -1.9% | -0.1% | 0.0% |
| State | 1.3% | 0.9% | 0.5% |
| Local | 1.1% | 1.0% | 0.5% |

¹¹ Data for Farm and Mining is not included in the projections as these industries have an insignificant portion of the economy and data for each is unreliable as a result.

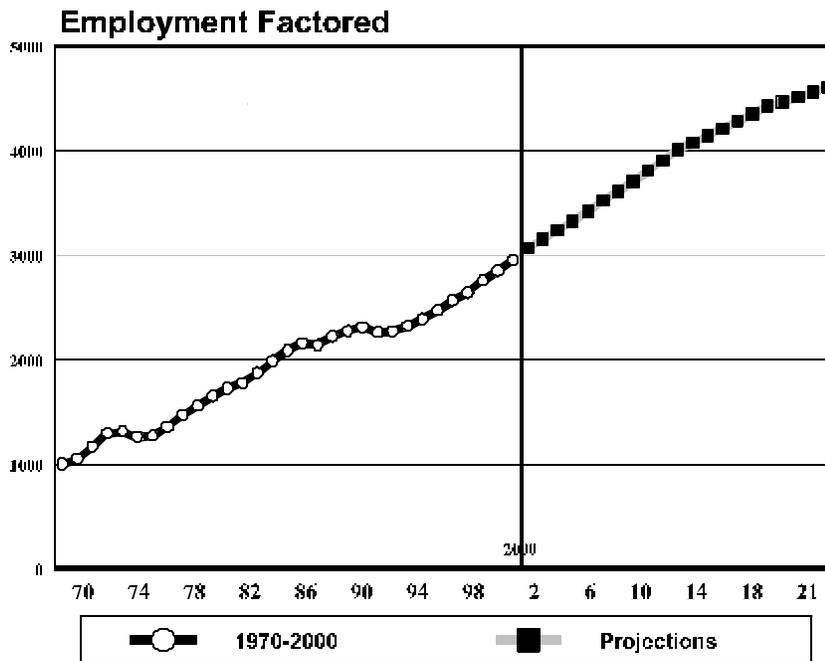
| <i>Earnings Growth</i> | | Project | Project |
|-------------------------------|-----------|-----------|-----------|
| Annual Increase | 1991-2000 | 2001-2011 | 2012-2021 |
| All Workers | 6.3% | 6.9% | 5.0% |
| Farm | 0.0% | 0.0% | 0.0% |
| Ag Services | 4.5% | 3.9% | 3.0% |
| Mining | 0.0% | 0.0% | 0.0% |
| Construction | 3.1% | 3.8% | 2.6% |
| Manufacturing | 3.0% | 4.7% | 3.0% |
| Trans, Comm | 7.7% | 7.2% | 5.3% |
| Wholesale | 9.3% | 6.8% | 4.5% |
| Retail | 4.0% | 4.1% | 3.0% |
| FIRE | 8.9% | 8.3% | 6.8% |
| Services | 8.3% | 8.8% | 5.6% |
| Federal Civilian | 4.5% | 3.7% | 3.0% |
| Military | 2.9% | 2.1% | 1.5% |
| State | 5.8% | 3.2% | 2.3% |
| Local | 5.2% | 4.0% | 3.0% |

| <i>Earnings Per Worker</i> | | Project | Project |
|-----------------------------------|-----------|-----------|-----------|
| Annual Increase | 1991-2000 | 2001-2011 | 2012-2021 |
| All Workers | 3.8% | 4.0% | 3.5% |
| Farm | 0.0% | 0.0% | 0.0% |
| Ag Services | 1.4% | 2.6% | 2.5% |
| Mining | 0.0% | 0.0% | 0.0% |
| Construction | 3.1% | 2.8% | 2.1% |
| Manufacturing | 2.9% | 3.9% | 2.7% |
| Trans, Comm | 3.9% | 3.8% | 4.0% |
| Wholesale | 5.2% | 3.8% | 3.2% |
| Retail | 4.2% | 3.6% | 2.7% |
| FIRE | 6.6% | 4.9% | 5.2% |
| Services | 3.4% | 4.2% | 3.6% |
| Federal Civilian | 3.7% | 3.5% | 3.0% |
| Military | 4.7% | 2.2% | 1.5% |
| State | 3.9% | 2.3% | 1.7% |
| Local | 3.5% | 3.0% | 2.5% |

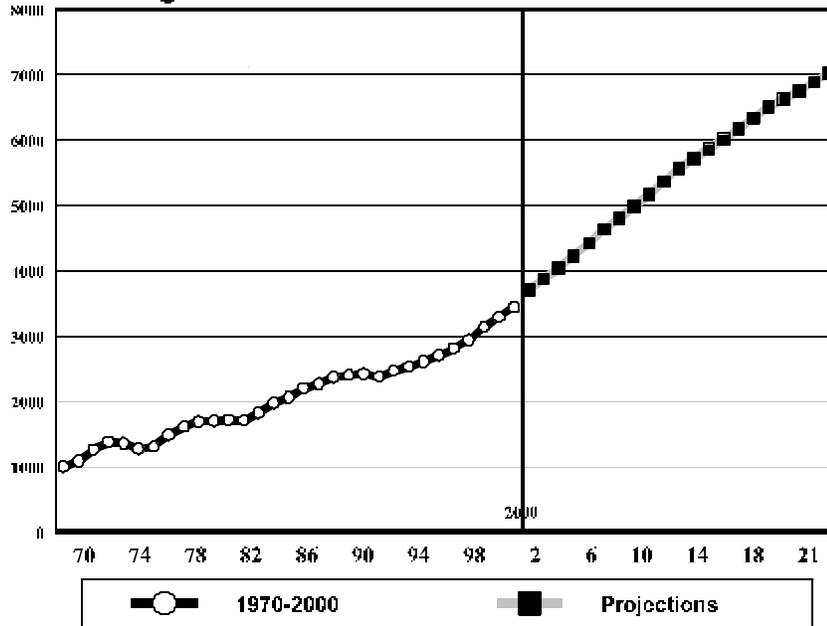
Based upon these projections, the following graphs show the future factored employment growth, inflation-adjusted earnings, and CPI-Adjusted-AEPW. Data, which appeared in the previous graphs (1970-1999), is included to show the historical trend.

The previous graphs which used inflation adjusted data were based upon the actual inflation for each year. Beginning with 2000 and through 2021, inflation is estimated to be an average annual rate of 2.5%. The “future” value of earnings and AEPW is based upon this rate.

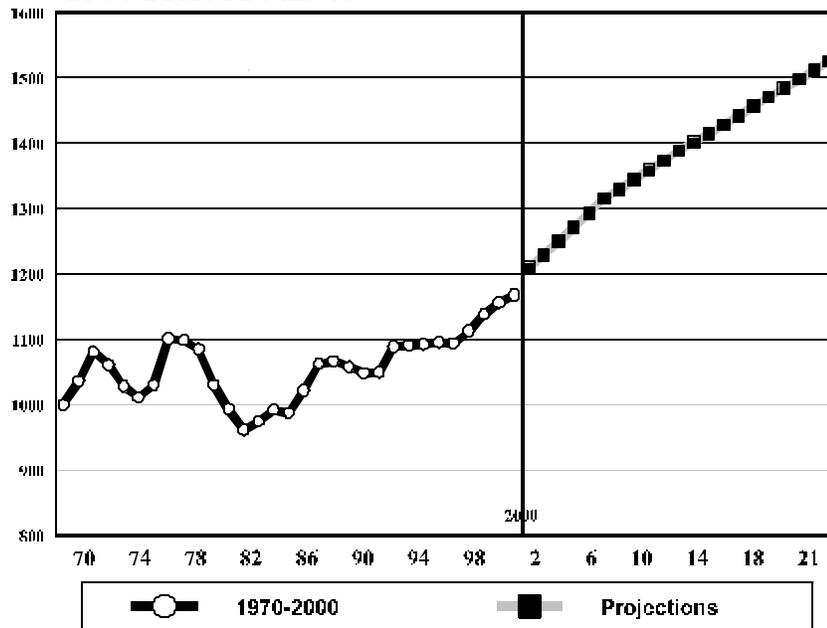
The projected lines do not include interruptions for periodic recessions. However, typically after a recession there is a rapid recovery period.



Earnings CPI Factored



CPI Factored AEPW



The projections provide for a continuation of the rapid economic growth, which has been prevalent in the county for almost twenty years. There are several economies in the United States, which have had long term economic growth similar to these projections.

However, Pinellas County cannot sustain these projections since it does not have sufficient vacant, undeveloped land within the boundaries of the county to accommodate the physical structures necessary to house the projected workforce. Pinellas County is rapidly approaching “physical Build-Out” and the result could cause a decline in the economy.

The following chart shows the actual number of workers in the economy for the projections and the gain from each time period.

| <u>Year</u> | <u>Jobs</u> | <u>Gain</u> |
|-------------|-------------|-------------|
| 2021 | 885,276 | 113,829 |
| 2011 | 771,447 | 203,843 |
| 2000 | 567,604 | 123,661 |
| 1990 | 443,943 | 126,114 |
| 1980 | 317,829 | |

From 1980 to 2000, the area gained 249,775 new jobs. The projections provide for the creation of 317,672 more jobs from 2000 to 2021, a 56% increase over the 2000 level. This job increase will cause a significant demand for more facility space.

Based upon 325 square feet of space per worker (low space requirement), it appears there will be a need for approximately 103,000,000 square feet of additional industrial, commercial, government, institutional, and retail space to accommodate the workforce. With a ratio of floor area to land of 30% (high for some uses, low for others), the new buildings will require at least 7,800 acres of usable land (excluding roadways, retention lakes, wetlands or green space set-asides).

A simpler way to look at the space needs, for every two square feet of existing non-residential floor space in the county, there will be a need for an additional one square foot by 2021.

The land necessary for the construction of the additional facilities to meet the projections does not exist in Pinellas County. Presently it is estimated there is only 1,500 acres of undeveloped industrial, commercial property, some of which will be lost to roadways and set-asides during development.

Based upon current absorption rates, there appears to be a four to six year supply of improved industrial property remaining.

Forecasting the Pinellas County economy must take into consideration the fact the area will not have sufficient land available for the projected economic growth. **Therefore, the preceding projections will not occur.**

Affect of “Build-Out” on Local Economies.

Build-Out for a community is the state where there is, for practical purposes, no undeveloped land available for construction.

For the purpose of this paper, the undeveloped land shall be called a “Greenfield.” While there may be scattered in-fill parcels located in the area, practical Build-Out will be when there is not at least 100 contiguous acres of improved Greenfield land properly zoned for industrial use. Also, for the purpose of this paper, a “Brownfield” shall be considered improved land, which formerly was utilized for an industrial purpose and might be subject to pollution or contamination.

The economy is affected when there is no longer non-residential Greenfields available. At Build-Out, there is no longer a location for a new company to locate or an existing company to expand, stopping the growth of the area’s primary industries.

Build-Out of a political subdivision occurs in direct proportion to the age of the political subdivision and the geographic size of the area.

Municipalities Build-Out first as they are geographically restricted the most. The Build-Out of a municipality should concern the city leaders, but rarely is a concern of county government and community leaders as the economic growth flows over the city boundary into the unincorporated portion of the county. The Build-Out of a county does not concern state government leaders, as the economic growth spreads to other counties and the state still benefits.

Build-Out occurs first in areas, which have the longest history, least land, and fastest growth. The northeastern portion of the United States was settled in the late 1600's and has had 300 years to grow and expand. Virtually all municipalities in this part of the country have built-out as have many of the small counties.

The mid-west portion of the nation (Northwest Territory) was settled in the late 1700's and has had 200 years of population and economic growth. Many municipalities and some counties in this part of the country have reached Build-Out. California began rapid population and economic growth in the mid-1800's and many cities and some counties are built-out today.

The condition of Build-Out, even in the northeast, is a relatively new condition when looking at the 300-year history of North America. The nation's industrial expansion did not begin until the early 1900's. During World War II and immediately thereafter in the 1950's, the United States had its most rapid expansion in manufacturing, transportation, and population in its history. It was during the late 1940's and through the early 1960's that thousands of manufacturing plants were constructed in the industrial Northeast and Midwest.

Florida, as with many southern states, is relatively young regarding population and economic growth. Most southern states were agrarian in nature until the late 1950's and early 1960's when the nation's transportation network (interstate highway system and airports) and electric generating capacity (air conditioning) and were expanded, opening the southern part of the country to economic and population growth. Rapid economic growth did not begin until the late 1960's in most southern states.

Pinellas County will be the first Florida county to reach Build-Out. Due to its rapid population and economic growth for the last 40 years and its relatively small size, Greenfield availability will be severely limited within the next five years.

This will have a significant negative impact upon the county's economy for the following reasons.

The quality of a local economy and its growth is dependent upon the flow of money into the area, which is generated by the business activity of its primary industries. The size of the economy is based principally upon the total volume of wages paid and the wage level determines the quality of the

economy. The consistency of a local economy is dependent upon having a variety of primary industries in the area.

The Pinellas County economy has grown in both size and quality as a result of having a large number of high wage contributory businesses expand in and/or locate to the area.

Economic development is the activity of encouraging contributory, primary businesses to expand in or locate in a community. During the community selection process by a company, which is considering a location for a new facility or the expansion of an existing facility, many factors relating to the costs of operation in an area are considered. These include local taxes, wage rates, utility costs, and many more. **However, the ultimate act of the economic development, site selection process is a real estate transaction.**

A local economy will begin to decline when it reaches Build-Out 1) as a result of not having land upon which to construct new facilities and 2) as a result of the physical or technological economic deterioration of existing facilities utilized by the contributory businesses.

The result of the first affect of Build-Out is obvious. If there is no land upon which to build a new facility and a suitable, vacant existing facility is not available, a company looking to locate to the area or an existing company looking to expand has no option other than seeking an existing building or a Greenfield site outside the county. Without new companies moving to the area, the economy will not grow. Existing companies leaving the area will cause a decline.

The second affect is subtler than the first but over the long term will cause an almost unavoidable, gradual decline in the economy.

For the purpose of this discussion, a “facility” is considered a building of some nature. It can be a warehouse, office structure, or factory. A “business” is one, which is “primary” in nature, that it imports money to the area by selling its products or services outside the economy.

Each business, in order to produce its product or provide its service, must operate from a facility. The facility is the location in which the workers perform their tasks.

A facility has a finite number of years of functional use. The ability of the business to conduct its affairs is dependent upon the function and the condition of the facility. When the condition of the facility no longer meets the needs of the business, the business must 1) raze the exiting structure and build a new facility, 2) occupy another facility or 3) build a new facility in a Greenfield.

There are two scenarios when a facility no long functions to meet the needs of a business.

The first relates to the physical deterioration of the building. The functional life of a building travels in stages, all related to the cost/benefit of repairing and maintaining a building. Typically, but not always, the stages follow this pattern:

- 1-10 years of life - A building is constructed for a business (for the sake of this discussion, a high-wage employer) and for the first ten years requires little maintenance and repair.
- 11-20 years of life – During the ensuing ten years, repair costs increase and become a greater portion of the company’s budget. At the end of the 20th year, the business begins to question if it should continue operation in the present facility, anticipating growing maintenance and repair over the next ten years.

At this point, some businesses elect to move to another location. The facility is sold or leased to another business, which can operate in a facility in need of repair. This business typically has a less sophisticated operation and will pay its workers less money.

- 21-30 years of life – Significant repairs are needed at the end of the 30th year. Major roof problems now exist, electrical wiring is frayed, floors are cracked, the exterior is weathered, and the structure has difficulty meeting existing fire codes. The business occupying the structure, in order to continue operation, must 1) expend massive amounts of money to rebuild the structure, 2) raze the structure and build a new facility, or 3) locate to another facility or build in a Greenfield.

If the high wage employ still occupies the facility, it might invest in the structure due to it unique location. However, razing and constructing a new facility is rarely an option as it is typically more cost affective to construct in a Greenfield.

If the low wage employer occupies the building, it will rarely invest in the building, as by the nature of the business it needs a low cost location. It will likely move to another location.

Typically, one of two things will happen to the building. One, it will be sold or leased to an employer who can operate in a facility in disrepair. This employer, who is extremely cost conscience, will likely pay a wage at the lowest end of the scale. The second future for the building is to become abandoned.

- 30-40 years of life – At the end of the 40th year, typically the structure is in such structural disrepair it is abandoned.

There are certainly exceptions to this scenario as an owner might continuously reinvest in the facility, not allowing it to reach to point of abandonment. However, all buildings have a limited life and some day will have no usefulness.

Through the stages of the life of the facility, as the structure got older, the business, which occupied it, pays lower wages. This causes a reduction in the size of the economy and a reduction in the quality of the economy. Upon abandonment, there is no money following into the economy as a result of activity in the structure.

The second scenario relates to the technological obsolescence of the facility.

For some businesses, the facility itself is the major tool for the production of its product or service. As an example, for a chemical manufacturer, the facility is constructed in such a manner that it produces a product and the facility cannot be used for another purpose. The manufacturing process is integrated into the building.

Specialty buildings are not uncommon. Today's modern semi-conductor plant and even a facility where "software" is created have structural components included in the building design.

Specialty buildings many times, however, have a shorter economic life span than a normal facility. Due to rapidly changing technology, the methodology used to create a product or service by a business is continuously being altered.

In order to be competitive in the world marketplace, businesses have had to learn to do things "faster, cheaper, and better." Businesses have therefore embraced technology and have incorporated it into their manufacturing processes and the production of their services.

A modern manufacturing plant producing microprocessors built today has little resemblance to a facility constructed 20 years ago. A recently constructed automobile manufacturing plant employs more robots than it does people. New steel plants have 10 percent of the workers producing twice as much steel. Even a new multi-use office building includes telecommunication systems, climate controls, and elevator systems which, technologically, did not exist ten years ago.

A business, which is dependent upon a specialty building, will continue operation until the point the building reaches a state of technological obsolescence, at which time, the cost of producing the ir product or service is no longer competitive in the marketplace. The life span of some specialty buildings, as a result of today’s accelerated pace of technological change, can be as short as ten years.

When the facility reaches technological obsolescence, the business will either raze and reconstruct the facility at the same location or construct a new facility in a Greenfield. It is rare an existing, vacant, modern specialty building exists for purchase by the company. Tearing down the existing facility is also usually not a suitable option. The business will loose production for likely at least a year during the tearing down, construction process.

The future of a specialty building, which has reached economic obsolescence, is usually bleak. Unless it can be cost effectively gutted and adapted for another use, many of these structures become abandoned and eventually torn down. If the building is torn down, a potential building site is created but these are usually considered “Brownfield” sites, possibly subject to pollution, and typically avoided.

Therefore, as a result of reaching Build-Out, the economy of the area will likely begin to decline due to the gradual exodus of high-wage, contributory businesses.

Economies in Which Build-Out Has Occurred

To study the economic impact of reaching Build-Out and implications for Pinellas County, POLICOM has examined two county economies in which Build-Out has occurred.

To provide a valid comparison to Pinellas County, the counties examined need to meet the following criteria:

- Be geographically in similar size to Pinellas County.
- Be the central or most populated county of a multi-county metropolitan area.
- Have reached a point of practical Build-Out.

POLICOM chose to examine Lucas County, Ohio and Denver County, Colorado as each meets the criteria. They also have contrasting economies.

| | Pinellas | Lucas | Denver |
|-----------------------|----------|---------|---------|
| Population | 921,482 | 455,054 | 554,636 |
| Land Area - Sq. Miles | 280 | 340 | 153 |
| Persons/Sq. Mile | 3,291 | 1,338 | 3,625 |

Lucas County, Ohio

Lucas County is located in northwest Ohio along the Michigan border. It is one of three component counties of the Toledo, OH metropolitan area. Wood and Fulton Counties comprise the balance of the MSA. There is economic linkage with Monroe County, Michigan to the north. The metropolitan area is ranked 169th by POLICOM for economic strength.

The City of Toledo includes approximately 70% of the county's population and serves as the seat of government.

Lucas County has had a long history of serving as the headquarters location of several Fortune 500 companies and has been supported by the manufacturing of automobiles, metal fabrication, and the glass industry.

Lucas County reached practical Build-Out approximately 25 years ago.

Economic growth in the county has been extremely slow for the last twenty years. The rate of growth in jobs, earnings, and annual earnings per worker was less than half the national average.¹² From 1979 to 1999, the county lost more than 22,500 manufacturing jobs. The size of the county's economy, based upon CPI Factored Earnings, is approximately what it was in 1979. Additionally, there are fewer people living in the county than in 1979.

While many communities in Midwestern states (rust-belt area) suffered economic decline during the last twenty years, the overall Toledo metropolitan area had economic growth.

¹² Growth rate comparisons for Lucas County for 118 items are included in Section 3 of the Historical, Comparative Economic Analysis for Pinellas County.

Wood County, to the south of Lucas County, for the last ten years had an annual job growth rate of 2.5%, the 94th fastest rate among the metropolitan areas. Manufacturing employment in Wood County additionally grew during the same period at the 28th fastest rate with an average annual increase of 2.7%. From 1979 to 1999, the county had a net gain of approximately 4,000 manufacturing jobs.

Fulton County, to the west of Lucas County, increased in population, had job growth rates better than the national average, and increased manufacturing employment at the annual rate of 3.3%, the 17th fastest rate in the nation. The county, from 1979 to 1999 had a net gain of approximately 3,000 manufacturing jobs.

Monroe County, Michigan, to the north of Lucas County, also had job growth rates much better than the national average for the last ten years and increased manufacturing employment 2.6% per year. From 1979 to 1999 the county gained approximately 4,000 new manufacturing jobs.

During the time Lucas County lost 22,500 manufacturing jobs, the counties, which surround Lucas, gained 11,000 manufacturing jobs. Additionally, in 1999, Lucas County had the same number of jobs in the wholesale trade – distribution sector as it did in 1979. However, from 1979 to 1999, the surrounding counties grew 29,000 jobs in this industry.

While the general area was subject to national economic forces relating to being in a “rust-belt” area, one of the principle reasons for the decline of the Lucas County economy was Build-Out.

As previously mentioned, the county had a long history of manufacturing. This industry began in the 1800’s, grew in the early 1900’s, and rapidly grew during World War II and in the 1950’s and 1960’s. The county reached practical Build-Out in approximately 1970.

The stages of facility deterioration began in the 1960’s and accelerated in the 1970’s. Wood, Fulton, and Monroe Counties, during this time and still presently, offered Greenfields for industrial expansion.

Economic development officials representing Lucas County and the City of Toledo advised POLICOM that:

- There is presently no Greenfield industrial land available in the county.
- There are hundreds of thousands of square feet of abandoned manufacturing space in the county.

The affect of reaching Build-Out upon Lucas County has been significant. While economic growth has been slower than most areas in the nation for the metropolitan area as a whole, virtually all of the economic growth and population growth has occurred in the Greenfield counties, which border Lucas.

Reacting to the growing number of abandoned buildings, both industrial and residential, the City of Toledo, approximately four years ago, embarked on a program to cause their demolition.

Approximately 300 structures per year, 20-30 of them commercial and industrial, have been razed since, creating scattered Brownfield sites in the community. Even so, there presently are no large locations for industrial users to locate which are not Brownfield in nature. However, large Brownfield locations can be utilized.

Lucas County has been the home of the Willys-Jeep Corporation since prior to World War II and various models of the Jeep vehicle have been manufactured in the county ever since. In 1997, Chrysler-Jeep announced it was looking for a site for a new manufacturing facility. To prevent the loss of another manufacturer, Lucas County and the City of Toledo created an incentive program for Chrysler-Jeep of approximately \$80 million in value.

Included in the package was a 100-acre Brownfield site, which was a former landfill. The available acreage at the landfill was insufficient and the City and County acquired aged, yet occupied, commercial buildings, which were torn down to, provide sufficient land for the facility. The facility is now constructed and the new Jeep Liberty is now being manufactured at this facility.

The process of reclaiming industrial locations through demolition came very late after the county reached Build-Out. As a result, the county did not have lands available for industrial expansion. Should the area maintain its pace of creating Brownfield locations and if the “stigma” relating to building at a Brownfield location can be overcome, the county will have opportunity in the future to begin to grow economically.

Denver County, Colorado

Denver County is located in north-central portion of Colorado. It is one of five component counties of the Denver, CO metropolitan area. Adams, Arapahoe, Douglas, and Jefferson Counties comprise the balance of the MSA. The metropolitan area is one of the strongest economies in the nation and is ranked 2nd by POLICOM among the 318 metropolitan areas for economic strength.

The City of Denver includes 100% of the area and population of Denver County. Denver County was settled in the mid-1800's and reached practical Build-Out at least 25 years ago.

The Denver metropolitan area is one of the most dynamic, fastest growing economies in the nation. Over the last ten years, the population of the metropolitan area grew at twice the national rate (ranked 44th). Annual job growth increased 3.2% per year, the 35th fastest rate in the country.¹³ Annual earnings per worker (AEPW) increased at the annual rate of 4.8%, the 10th best among the metropolitan areas. The economy has been driven by the growth of the communications, insurance and finance, manufacturing, and transportation industries.

However, while the Denver metropolitan area has grown rapidly, Denver County has not relative to population and total employment.

As a result of Build-Out, the population of Denver County has actually declined since 1970. Job growth increased between 1990 and 1999 at the annual rate of 1.6%, slower than the national average and ranking 191st among the metropolitan areas.

While the size of the Denver County economy has grown little over the last 20 years as measured by job growth, it has grown in volume as measured by total earnings. As a result, the quality of the economy has improved significantly over the last ten years.

¹³ Growth rate comparisons for Denver County for 118 items are included in Section 3 of the Historical, Comparative Economic Analysis for Pinellas County.

The total amount of earnings by those who work in the county increased at the annual rate of 6.7% from 1990 to 1999, much faster than the national average and the 44th fastest rate in the nation. From 1990 to 1999, annual earnings per worker increased 5% per year, the 7th best rate in the country.

Since there was slow growth in the number of jobs but rapid growth in earnings, a “shift” in the type of employment occurred during this period of time. Lower paying jobs were replaced by higher paying jobs.

Job growth did not stall in Denver County as it did in Lucas County. Many of the facilities, which presently house the new workers, are “vertical” in nature, as several large employers presently operate in high-rise office structures which have been constructed over the last ten years. Growth in vertical industries such as software development, telecommunications, finance, and insurance has improved the quality of the economy.

However, the problem of facility obsolescence, both industrial and residential, is very present in Denver County. To cope with the problems of aging industrial and residential areas, Denver County, created a large “enterprise zone” in 1986. **The enterprise zone encompasses approximately 25,000 acres, which is about ¼ of the entire county.**

Aged industrial areas, which are near interstate exits, are being targeted for industrial reuse. Aged industrial, commercial and/or residential areas not located near interstate exits and do not have the necessary services for industrial reuse are being targeted for residential and mixed resident-commercial reuse.

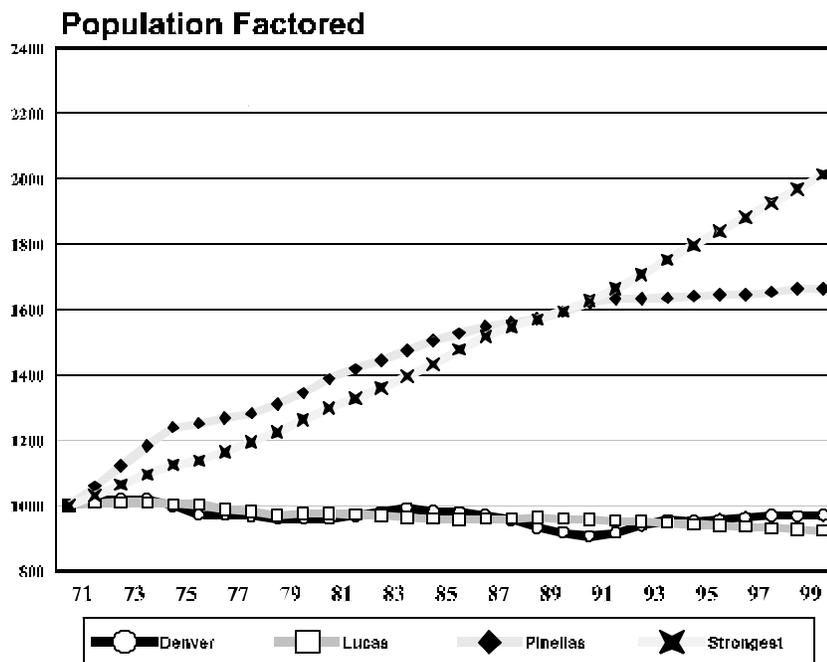
Two large tracts of land are presently being redeveloped which will provide the county a future opportunity for industrial expansion. These include the 3,000-acre former Lowery Air Force Base and the former Stapleton Airport (4,700 acres). Each of these areas need significant “clean-up” and are considered Brownfields at this time.

The county now offers loans, grants, and nine different tax credits to companies, which locate in the enterprise zone. One of the tax credits highlights the problem of facility obsolescence, as a company can receive a tax credit for **“25% of the cost of rehabilitating a facility which is at least 20 years old and has been abandoned for at least two years.”**

Economic development representatives told POLICOM that while they are encouraged by the participation in the enterprise zone programs, it is very difficult to compete with the Greenfield opportunities offered in neighboring counties. The cost of rehabilitating existing industrial areas is very high, and while they have been successful, admit it would have been very difficult if the overall size of the area's economy had not been growing at such a rapid rate and the demand for industrial space was not so high.

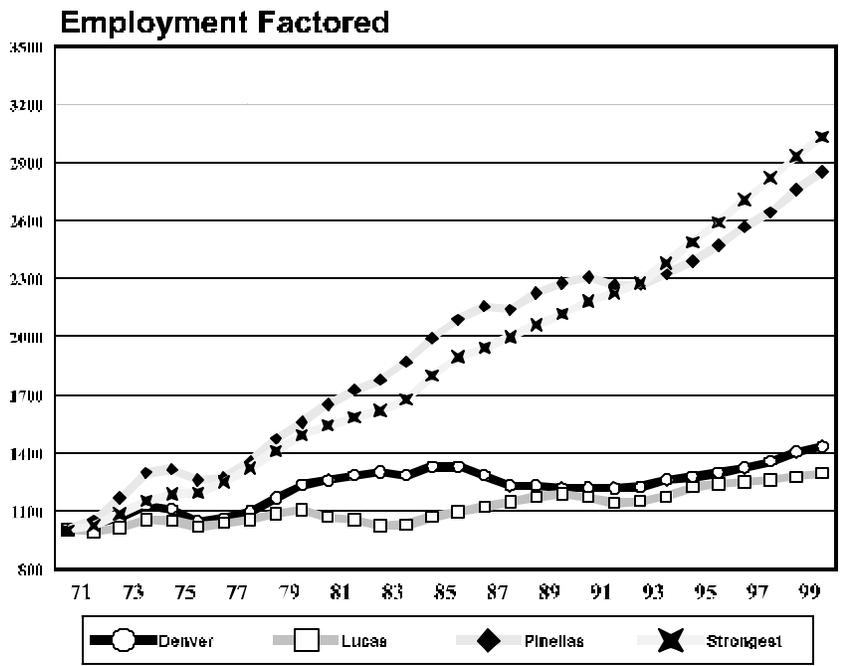
To visually see the impact of reaching Build-Out by Lucas and Denver Counties, the factored growth in population, employment, total earnings, and AEPW was calculated in the same manner as it was for Pinellas County.

The first graph shows the population factors for the three counties along with the ten strongest local economies.



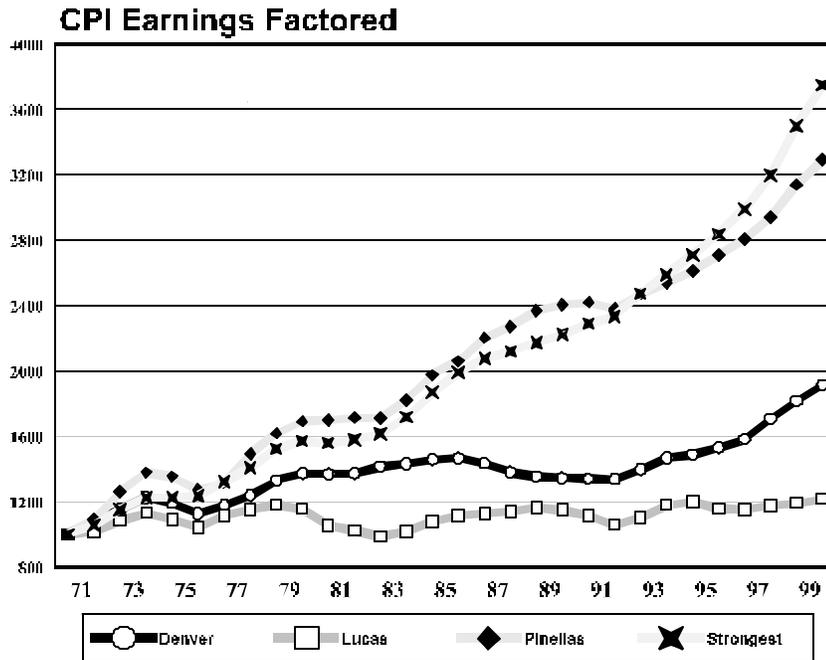
The population growth line for Lucas and Denver Counties are virtually atop each other as neither has grown in population since 1970. The population growth rate for the ten strongest areas has increased steadily since 1970. Note the growth in population in Pinellas County stalled around 1990, which is the first indication the county is reaching Build-Out.

The following chart shows the factored growth in total jobs.



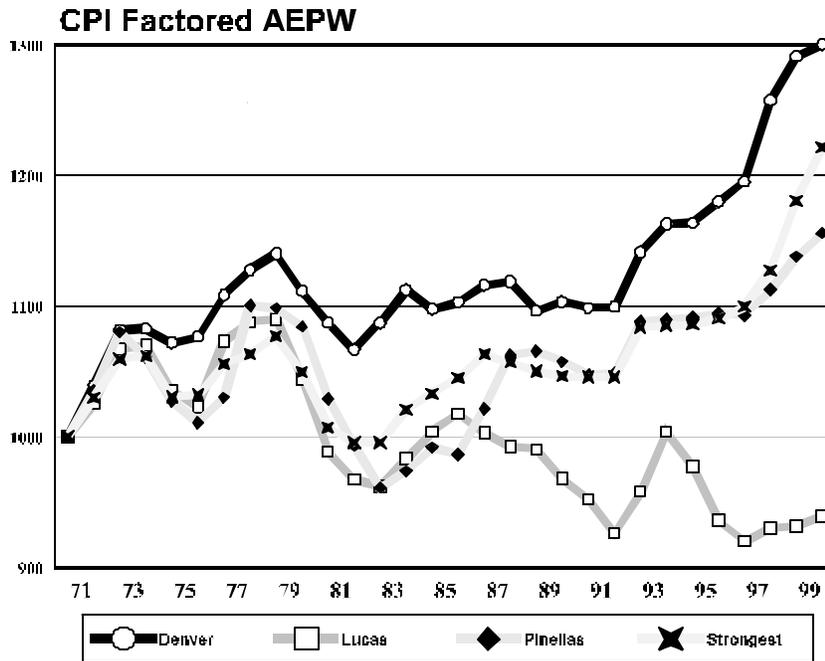
As previously mentioned, due to limitations in available land and facilities, neither Lucas nor Denver County grew in total employment when compared to the ten strongest economies. Pinellas County grew rapidly in total employment as, during this period of time, it still had Greenfields available for industrial growth.

The following chart shows the inflation factored total earnings for each area.



Lucas County has shown little if any growth in earnings. During the last ten years, as a result of shifting to higher wage jobs, the volume of earnings increased significantly in Denver County. However, the growth in earnings occurs in just the last ten of the preceding 30 years shown on the chart. Once again, Pinellas County is growing at the same rate as the ten strongest economies.

The following graph shows the growth in quality as measured by the inflation adjusted – factored annual earnings per worker.



The quality of the Lucas County economy has declined over the last 30 years and is at a level below that of 1970. Note how, even though overall growth has been slow, Denver County improved significantly in quality. Also note how the growth in quality in Pinellas County is beginning to slow.

Impact Upon Pinellas County of Reaching Build-Out

As previously mentioned, there are approximately 1,500 acres of useable industrial-commercial Greenfield land available in Pinellas County. Among these acres, only about 900 could be used by a large company (100-acre parcel). At the present rate of absorption, the county should reach practical Build-Out by the year 2006.

By 2006, there will still be land available, as several scattered green parcels will still exist. The impact of Build-Out will begin. (The exact year in which Build-Out will occur is very difficult to predict. However, it will occur. Therefore, the following economic projections will essentially begin when Build-Out actually occurs.)

Additionally, there are industrial and commercial areas in the county which have reached an “age” where the stages of physical obsolescence are present. The transition from high-wage employer to low-wage employer to lowest-wage employer to abandonment is occurring. These areas are those which were developed earliest in the history of the county.

The economy will not come to a grinding halt as a result of reaching Build-Out. The affect of Build-Out will be gradual. POLICOM anticipates the economic growth scenario for the county to follow this path, subject to national recessions.

2001-2006 – Existing Greenfields will continue to be developed by quality companies. A transition to lower wage workers and abandonment will continue in the oldest areas in the county, causing a mild dilution in the quality of the economy. The overall taxable value of industrial-commercial property will increase.

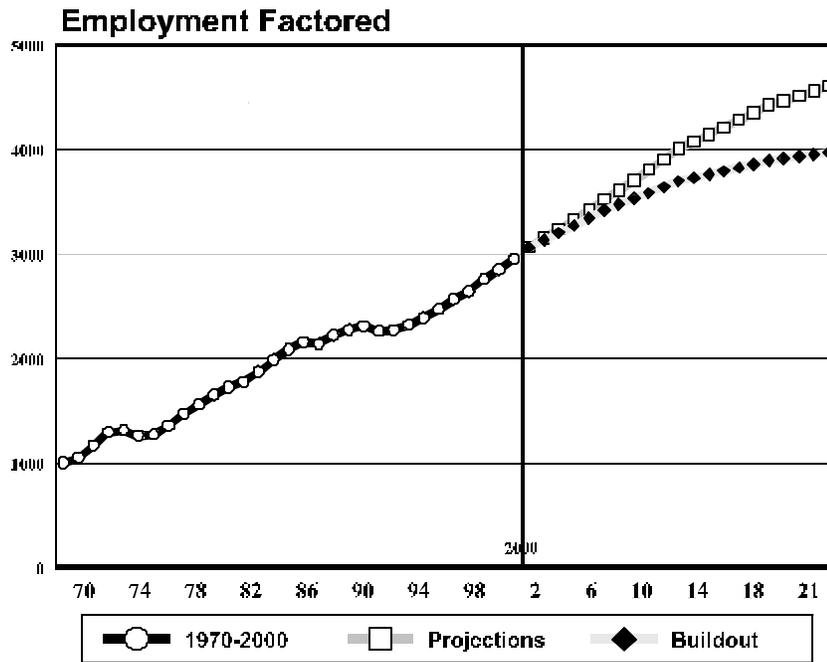
2007-2011 – Reaching practical Build-Out, few new companies will be moving to the area. Employment growth rates will be significantly reduced. The oldest areas will be in significant disrepair. Facilities constructed in 1990 are beginning the stage when the quality of their economic impact is declining (lower wage users). Some specialty buildings are no longer being used for their original purpose. The rate of growth of total earnings is slowing rapidly as high-wage employers are being gradually replaced by lower wage employers, causing a gradual decline in the quality of the economy. The overall taxable value of industrial-commercial property will not increase.

2012-2016 – The oldest areas have significant abandonment or are occupied by the lowest wage workers. Most scattered green parcels have been utilized. Employment and earnings growth is very slow. The quality of the economy is not improving. Facilities built in 1990 are entering the last stages of economic life. Several specialty buildings are no longer utilized. The overall taxable value of industrial-commercial property has reached a summit or is beginning to decline. The burden of taxation to support local government is shifting to the residential sector.

2017-2021 – The oldest areas lay in disrepair or have been converted to Brownfield sites. Facilities constructed in 1990 are approaching their final stages of useful life. Facilities constructed in 2000 are beginning the transition from high-wage to lower wage users. Some specialty buildings, constructed as early as 2005, are no longer used. Employment growth has stalled. Inflation adjusted earnings are on decline. The quality of the economy is on decline. The overall taxable value of industrial-commercial property is on decline. There is a significant shift of the burden of taxation to support local government to the residential sector.

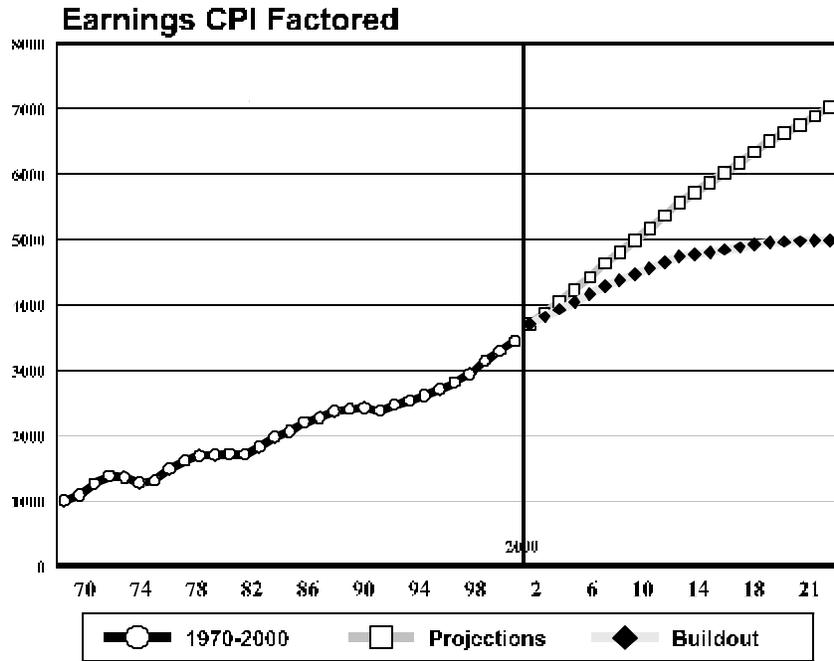
To visually see the impact upon the Pinellas County economy of the preceding scenario, POLICOM has calculated the growth rates, by industry, for the 20-year period from 2002 to 2021. The following graphs compare the original **Projections**, provided previously, to projections based upon a gradual **Build-Out** scenario.

The first graph compares the employment growth.



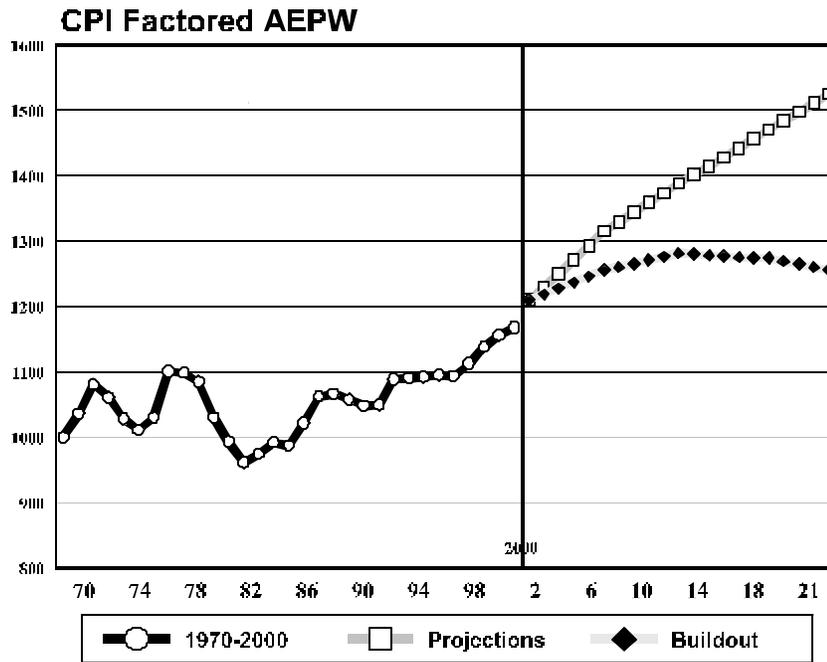
The rate of the growth in total employment will be significantly reduced beginning 2017.

The following graph shows the growth of total earnings. Remember total earnings have been adjusted for anticipated inflation and brought to the value of the 1999-dollar to demonstrate “absolute” growth in the size of the economy.



The size of the economy stops growing beginning in 2017.

The following graph shows the impact of Build-Out on the “quality” of the economy.



From 1982 to 2000, the quality of the economy has improved significantly. However, as a result of the aging of some industrial areas, dilution in the quality of the economy has already begun. The quality will stop improving around 2012 and will begin to decline.

The growth rates for earnings and employed were derived from a review of the growth rates for Denver and Lucas Counties. POLICOM took into consideration the transition period prior to Build-Out.

While overall economic growth will slow, there will still be a large number of new jobs created between 2001 and 2021. The original projections provided for the creation of 317,672 new jobs between 2001 and 2021. The Build-Out scenario will create 201,732 new jobs.

The following chart shows the difference between the Projections and the Build-Out.

| <u>Year</u> | <u>Project</u> | <u>Build-Out</u> | | |
|-------------|----------------|------------------|-------------|-------------|
| | <u>Jobs</u> | <u>Gain</u> | <u>Jobs</u> | <u>Gain</u> |
| 2021 | 885,276 | 113,829 | 769,336 | 58,358 |
| 2011 | 771,447 | 203,843 | 710,978 | 143,374 |
| 2000 | 567,604 | 123,661 | 567,604 | 123,661 |
| 1990 | 443,943 | 126,114 | 443,943 | 126,114 |
| 1980 | 317,829 | | 317,829 | |

The following charts compare the growth rates for the Projections and Build-Out for employment, total earnings, and annual earnings per worker.

| <i>Employment Growth</i> | Project | | | Build-Out | | |
|-------------------------------------|-----------------|-----------|-----------|-----------|-----------|-----------|
| | Annual Increase | 1991-2000 | 2001-2011 | 2012-2021 | 2001-2011 | 2012-2021 |
| All Workers | | 2.5% | 2.8% | 1.4% | 2.1% | 0.7% |
| Farm | | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Ag Services | | 2.4% | 1.3% | 0.5% | 1.3% | 0.5% |
| Mining | | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Construction | | 0.9% | 1.0% | 0.5% | 1.0% | 0.5% |
| Manufacturing | | 0.4% | 0.8% | 0.3% | 0.7% | -1.4% |
| Trans, Comm | | 4.2% | 3.3% | 1.3% | 2.3% | 0.9% |
| Wholesale | | 4.0% | 2.9% | 1.3% | 2.0% | 0.8% |
| Retail | | 0.0% | 0.5% | 0.3% | 0.5% | 0.4% |
| FIRE | | 3.1% | 3.3% | 1.5% | 2.5% | 0.5% |
| Services | | 4.7% | 4.4% | 2.0% | 3.1% | 1.2% |
| Federal Civilian | | -0.4% | 0.2% | 0.0% | 0.2% | 0.0% |
| Military | | -1.9% | -0.1% | 0.0% | -0.1% | 0.0% |
| State | | 1.3% | 0.9% | 0.5% | 0.7% | 0.5% |
| Local | | 1.1% | 1.0% | 0.5% | 1.0% | 0.5% |

| Earnings Growth | Annual Increase | Project | | Build-Out | Build-Out |
|------------------------|-----------------|-----------|-----------|-----------|-----------|
| | | 1991-2000 | 2001-2011 | 2012-2021 | 2001-2011 |
| All Workers | 6.3% | 6.9% | 5.0% | 5.3% | 3.1% |
| Farm | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Ag Services | 4.5% | 3.9% | 3.0% | 3.4% | 2.0% |
| Mining | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Construction | 3.1% | 3.8% | 2.6% | 3.8% | 3.0% |
| Manufacturing | 3.0% | 4.7% | 3.0% | 3.8% | -1.4% |
| Trans, Comm | 7.7% | 7.2% | 5.3% | 5.4% | 4.0% |
| Wholesale | 9.3% | 6.8% | 4.5% | 5.0% | 2.3% |
| Retail | 4.0% | 4.1% | 3.0% | 3.9% | 2.9% |
| FIRE | 8.9% | 8.3% | 6.8% | 6.5% | 2.3% |
| Services | 8.3% | 8.8% | 5.6% | 6.5% | 4.2% |
| Federal Civilian | 4.5% | 3.7% | 3.0% | 3.3% | 3.0% |
| Military | 2.9% | 2.1% | 1.5% | 2.1% | 1.5% |
| State | 5.8% | 3.2% | 2.3% | 3.2% | 2.3% |
| Local | 5.2% | 4.0% | 3.0% | 3.6% | 3.0% |

| Earnings Per Worker | Annual Increase | Project | | Build-Out | Build-Out |
|----------------------------|-----------------|-----------|-----------|-----------|-----------|
| | | 1991-2000 | 2001-2011 | 2012-2021 | 2001-2011 |
| All Workers | 3.8% | 4.0% | 3.5% | 3.2% | 2.4% |
| Farm | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Ag Services | 1.4% | 2.6% | 2.5% | 2.1% | 1.5% |
| Mining | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Construction | 3.1% | 2.8% | 2.1% | 2.8% | 2.5% |
| Manufacturing | 2.9% | 3.9% | 2.7% | 3.0% | 0.0% |
| Trans, Comm | 3.9% | 3.8% | 4.0% | 2.9% | 3.1% |
| Wholesale | 5.2% | 3.8% | 3.2% | 2.9% | 1.5% |
| Retail | 4.2% | 3.6% | 2.7% | 3.4% | 2.5% |
| FIRE | 6.6% | 4.9% | 5.2% | 3.9% | 1.7% |
| Services | 3.4% | 4.2% | 3.6% | 3.3% | 3.0% |
| Federal Civilian | 3.7% | 3.5% | 3.0% | 3.0% | 3.0% |
| Military | 4.7% | 2.2% | 1.5% | 2.2% | 1.5% |
| State | 3.9% | 2.3% | 1.7% | 2.5% | 1.7% |
| Local | 3.5% | 3.0% | 2.5% | 2.6% | 2.5% |

What can Pinellas County do to prevent a reduction in the quality of the economy?

The negative affect upon local economies of reaching Build-Out is present throughout the United States in cities and many small counties. The phenomenon of reaching Build-Out is relatively new, compared to the age of our nation.

It is understandable community leaders in areas, which are suffering from Build-Out, did not anticipate the problem, as they had no historical reference, which would have forewarned them of the pending problem.

Community and government leaders in Pinellas County have the advantage of learning from the history of other areas. They are in the enviable position of being able anticipate the negative affect of Build-Out and to take measures to prevent a decline in the economy as a result of Build-Out.

Growth for growth sake should not necessarily be a goal for a community. Creating thousands of low-wage jobs in many cases can hurt the overall “quality of life” and dilute the standard of living for the existing community.

But since Pinellas County is approaching Build-Out, rapid job growth for the long-term future is a moot issue anyway, as it cannot occur.

The wage level of the jobs created by the contributory industries determines the quality of the economy. The overall level of the economy and the standard of living of the people living and working in an area approach this level. The higher the wages, the higher the standard of living is for most residents.

Pinellas County grew in quality from 1985 to 2000 as a result of the creation of thousands of high-wage, contributory jobs. Therefore, the community should concentrate its long-term efforts on maintaining and improving the quality of the economy through retaining and adding as many high-wage contributory jobs as possible.

Pinellas County will have significant competition in the immediate area for these high-wage jobs. Hillsborough County has a large supply of Greenfield sites and as does Pasco County. Pasco County additionally is embarking on an aggressive economic development, recruitment program.

There are two programs, which should be undertaken to help prevent the negative affects of Build-Out in the future: 1) have an active Economic Development Program and 2) create innovative measures to prevent facility deterioration and abandonment and encourage redevelopment.

Economic Development Program

The economic development program for the area should place significant emphasis on the “existing industry” program.

There are three basic elements to an economic development program:

- Existing Industry – Encourages the retention and expansion of existing contributory businesses.
- Marketing and Recruitment – Attracts new contributory employers to the area.
- Start-Up – Assists in the formation of locally grown contributory businesses.

Pinellas County has for many years had a very successful economic development program, having recruited many quality companies to the area. However, the ability to attract will be significantly diminished after the Greenfields have been consumed.

A “Start-Up” program is rapidly being accepted as a standard “third” economic development program as many local economies are flourishing today as a result of the expansion of locally grown industries. Many of the companies grew from community “incubators.” A “Start-Up” program should be initiated if the community does not already have one.

However, the biggest problem relative to Build-Out is the loss of existing companies. Therefore, the economic development activity should be structured, as much as possible, toward preserving and expanding existing industry.

POLICOM recommends the following:

- 1) Recruitment efforts continue, for existing Greenfield locations, but are directed toward contributory businesses, which will pay a wage at least 125% of the area average.
- 2) Recruitment efforts continue to fill aged facilities (Stage 2) which will pay a wage as high as possible given the condition of the structure.
- 3) Implement an aggressive, well financed, existing industry program, which is designed to reduce the costs of operating in Pinellas County as much as possible for existing contributory businesses. The program should include the follow steps:
 - A. Identify the existing contributory businesses in the area (large and small).
 - B. Develop quality, confidential communication with the companies to discover their needs and problems relative to being located in Pinellas County.
 - C. Solve their problems.

As previously mentioned, when a facility reaches the beginning of Stage 2, many companies begin the decision making process as to whether to stay in the facility or to move to another location. Many times the decision to move is based upon geographic-economic factors, which are influenced locally.

Some of these include taxation, regulatory climate, access to labor (commuting time), local cost of living, and “community attitude” toward the company. Others may be more facility related such as an antiquated sanitary sewage collection system, absence of modern telecommunications lines, or an undependable electric power supply, which is disrupted during frequent thunderstorms.

The more a community can reduce the costs of a company, the more likely the company will stay in the area. The existing industry program is created to detect and solve small problems, which add costs to a business, before they become big problems, which cause the company to leave the area.

Prevent Facility Deterioration and Abandonment

The most pervasive, long-term problem relative to Build-Out is the physical deterioration of the facilities occupied by the primary industries.

Facility deterioration occurs not only in the industrial sector, but also general services, retail, and older residential areas. Cities and counties throughout the United States are spending billions of dollars each year for community redevelopment, attempting to revitalize the aged areas of their community as they have fallen into physical and economic disrepair.

As previously mentioned, communities which presently suffer economic decline as a result of blighted, abandoned industrial areas had little historic reference to rely upon to take action to prevent it from occurring. Even if there was notice of the situation developing, it is likely the attitude was the “situation will cure itself.”

Pinellas County should take affirmative steps to retard or prevent the physical deterioration of its industrial areas to hinder future economic decline. The following are some suggestions on how this can be accomplished.

- 1) Identify the locations in which facility deterioration and abandonment is presently occurring. In these areas, significant measures need to be taken to retard a continuation of deterioration and to restore the area. Areas, which are located at interstate exits or are easily accessible by commuting workers, should be targeted for redevelopment for contributory businesses. Those, which do not presently and will not in the future be accessible, should be targeted for a mixed-use development, possibly residential.
 - Pass enabling legislation, which makes the areas eligible for incentive programs. These might include creating an enterprise zone or a tax increment-financing district (TIF).
 - Create a program, which modernized the horizontal infrastructure for the areas. This includes storm drainage, sanitary sewers, roadways, electric power, and telecommunications. Included in this program should be an effort to improve the esthetic appearance of the areas via landscaping and

berming if possible.

- Create a series of financial incentives, which will encourage private landowners to rehabilitate the facilities or cause them to be torn down. Some of these incentives might include
 - property tax abatement or credit
 - corporate income tax credit
 - sales tax credits on new equipment
 - subsidized training programs for workers
 - low interest loans for both the facility and new equipment
 - out-right grants
 - Pass enabling legislation which will cause abandoned, dilapidated structures to be razed, creating Brownfield locations. If vacant facilities present a clear and present danger to the health and safety, some communities have the authority to cause the removal these buildings. If the property owner fails to abide by a local ordinance to remove a building, then the government authority, at its expense, causes the building to be torn down. The cost of removal, if not immediately reimbursed by the property owner to the government, is placed upon the property as a lien, to be paid concurrent with the property taxes. If the property taxes are not paid, the property is sold for taxes and the lien. Concurrent with this program, legislation should be passed which requires structures to be maintained to “certain minimum conditions.”
 - Create a Brownfield restoration program in which the government authority actually acquires, via eminent domain, a series of buildings, which are dilapidated and contiguous, creating a large Brownfield parcel. These areas can be marketed as new building sites. Additionally, increased facility density should be considered in Brownfield locations to allow for vertical development.
- 2) Identify the locations where facility deterioration will occur within the next ten years. These will include structures, which were constructed from 1980 to the present. In these locations, abandonment has likely not yet occurred but the structures are beginning to cycle through the stages of deterioration. Since these areas are not in such a deteriorated condition as to justify “enterprise zone” designation, action should be taken to maintain the quality of the structures.
- The community should create TIF’s for these areas if possible. Money from the TIF should be reinvested into the area in the following manner:

Consistent upgrading and maintenance of the horizontal infrastructure.
Beautification programs for the general area.
Low interest loan pool or grant program for the rehabilitation of facilities located in the area.

- Minimum maintenance requirements should be adopted.
- Immediate demolition of a structure which should be razed. Blight is like cancer, if it is not quickly removed, it will spread.

Communities around the country are practicing the suggestions above to prevent future facility deterioration and to deal with existing conditions. The overall issue is the facility cost to a company. Communities, which can reduce the costs of reconstruction or are successful in having construction occur in its Brownfield locations will be most likely able to maintain quality economic growth.

In summary, the Pinellas County economy has for many years enjoyed rapid growth in the size and quality of its economy. However, since it will soon reach Build-Out, it must take affirmative action to prevent a gradual decline in the economy.

About POLICOM Corporation

POLICOM Corporation is an independent economic research firm, which specializes in analyzing local and state economies. Its products and services evaluate the economic condition of counties, metropolitan areas, and states, determine what is the cause of the condition, and offers suggestions and ideas on how to improve or maintain the economic “quality of life” for the residents.

Its President, William H. Fruth, the author of this study, has personally studied the data for more than 600 local economies in the United States and has given presentations to state, national, and community organizations in 27 states over the last four years.

Some of the company’s services include:

- Presentations and workshops for communities and state and national associations.
- Community Economic Analysis, Goal Setting, and Target Industry Studies.
- Strategic Plan of Action to improve the economy of a local area.
- Customized Economic Reports for communities.

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