"Alternative Economic Futures for Florida: Thinking Strategically About The Future"

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ABSTRACT

This concept paper reviewed the literature on economic development, highlighted selected economic and demographic characterisitcs of the state, and analyzed economic activity, economic strucutre, and investment variables at the county and metropolitan level in Florida in order to get a clearer picture of the type of factors which can contribute to the growth in per capita income and a higher standard of living within the state. After exploring three possible pathways-- tourism and agriculture, international trade, and a targeted "high tech" pathway-- it was concluded that Florida will have to be active from a policy and program standpoint in all three areas but priority needs to be given to "high tech" and international trade so that Florida can make major changes in its standard of living and not be trapped into promoting growth which creates the highest proportion of its jobs in the lower paying service and retail sectors.

The challenge for policy makers is to review what the state is doing to promote each pathway and determine what priorities it wants to establish for the next decade. State activities should now be reviewed in depth by some independent research group so that the state can get an un-biased review of what it is doing and how much it is spending in policy and program areas and what impact these policies and programs have had.

Preliminary analysis suggests that current policy is heavily invested in continuing to promote the traditional pathway of tourism and agriculture and little is being done to promote a "high tech" future. Investment in "human capital" especially education, infra-structure, public goods and services, and improving the quality of life will require enormous long term investments by state and local government in Florida. International trade has received little attention in recent years.

As policy makers consider economic development policy alternatives in the future, they need the best information available and the four following studies are recommended:

* An evaluation of the impact of the state's marketing and advertisment programs and whether the money has been spent wisely.

* An updated survey of a sample of "high tech" firms around the state who have re-located, expanded, or been created in the last decade to explore their locational determinants and capital and human resource needs so that the state can be more responsive to the needs of "high tech" development.

* An updated survey of a sample of businesses and firms in the countries who are Florida's major trading partners in the "Latin Rim" to determine their demand for goods and services that are needed to modernize plant and business practices. Florida could then target their own firms for export assistance and venture capital.

* A more comprehensive multivariate analysis of the correlates of growth in per capita income within the 67 counties. Local strategies that work need to be identified so that they can be used in other parts of the state.

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Table of Contents

1. INTRODUCTION

Florida in the 1990s has joined the ranks of California, Texas, and New York as a "megastate". As the state's economy matures and becomes increasingly diverse and complex, the state is faced with the challenge of developing a more conscious, semi-planned path of economic development. Although Florida can not repeal the laws of comparative advantage and the historical "lock-ins" of economic activity to specific regions and states, it can, at the margin, impact its economy with well tailored supply and demand side economic development programs (Fosler, 1988).

Conscious economic development policies are currently in place in most of the larger states and many of these states feel compeled to adopt economic development programs or incentives used by the other states. Thus, as one state develops a new approach, other competing states routinely adopt it as well (Spindler and Forrester, 1993). Florida is no exception and over the past twenty years it has consciously tried to diversify its economy and make it attractive to a wide variety of industries and businesses by using the traditional inducements to lure mobile industries and businesses. Florida has also recently been encouraged to embark on an effort to attract, retain, and grow high value added industries, a strategy being pursued by many other states as well (SRI International, 1989).

While states with mature economies all use a wide variety of programs to attract industry and business from outside the state, to retain existing industries and businesses, and to create and expand enterprises, each state has been faced with prioritizing its activities in order to maximize the impact that these policies and programs can have on their economy (Fosler, 1988). In order for Florida to assess in some detail what it is doing in the area of economic development and then be able to better prioritize these activities in the future, it is critical to first explore the dif-

ferent future economic paths and which of these paths are the most preferred. Strategic investment can then be directed toward economic development activities which are aimed at reinforcing these desired paths.

The purpose of this concept paper is to review some of the more important dynamics of the Florida economy so that the most reasonable economic paths to the future can be examined. The implications for economic development policy for each of these paths will also be discussed. A brief review of the relevant literature on economic development is presented next in order to establish what we already know about the kinds of impacts that economic development policy can have on state and local economies.

2. THE LITERATURE ON ECONOMIC DEVELOPMENT

Industrial Location Studies-- Up until ten years ago, most of the empirical studies in the field of economic development were focused on collecting data in order to establish the major locational determinants of industry (Blair and Premus, 1987). Analysts in the field of economic development tried to describe why firms locate where they do. They largely ignored questions related to the creation of new industries and enterprises or even the growth of existing industries and firms. This preoccupation with the locational determinants was of considerable interest to states who were attempting to recruit industries or firms from other states (or countries) or induce out of state firms to build branch plants within their state.

However, these early studies consistently found that the costs of labor, access to markets, transportation, and access to raw materials were the most important determinants. These traditional economic factors largely overshadowed in importance the other locational factors more directly controllable by state and local government. Thus, factors such as tax incentives, tax differentials, education, unionization, business climate, etc. were usually way down the list in terms of

importance. For the most part, these studies concentrated on large, multiplant companies and they were very discouraging for states who might have spent a lot of time and efffort in trying to compete for these mobile industries and firms (Blair and Premus, 1987; Milward and Newman, 1989; Spindler and Forrester, 1993).

More recent studies in this field indicate that while the traditional factors are still important, their influence is waning. Locational factors that are more directly controllable by state and local government are now at least of moderate importance. Part of this is related to the fact that some of the recent studies have included industries and firms in a wider variety of sectors (Blair and Premus, 1987). Earlier studies concentrated on large manufacturing industries that required relatively unskilled labor. Since these industries are now a small and shrinking component of state and local economic growth, more recent studies which focus on the more high technology end of the industrial spectrum are of considerable interest to state government.

While the evidence is still recent and very limited, non-traditional locational factors are very critical to the locational choices of these more "high tech" industries. These industries appear to be very interested in areas where there is skilled labor, a good quality of public goods and services (i.e., education and infra-structure) and a high quality of life (i.e., climate and low crime rate). Thus, state and local governments which pursue "human capital" strategies where the objective is to improve the quality of resources and amenities are expected to do better with attracting, retaining, and creating more "high tech" industries (Warner, 1989).

The industrial location researchers have also found in more recent studies that once industries and firms make their interregional choice, they use a different set of factors to make their specific intraregional choice. Traditional economic factors are more important at the stage of making an interregional choice but at the intraregional stage when the specific site is chosen, non-traditional factors like taxes, education, and infra-structure become more central as determinants of locational choice (Blair and Premus, 1987).

The industrial location literature has some implications for Florida. Some industrial sectors are less responsive to factors state and local governments can control and thus government policy and programs appear limited in terms of what they can do. The implication is that Florida should avoid getting involved in bidding wars with other states for certain kinds of manufacturing industries which are known to use traditional economic factors when making interregional choices.

On the other hand, in the future, local governments, in particular, can impact on intraregional decisions if their service, amenity, and tax environments are more desirable to industry. Recent evidence suggests that "high tech" industries are more responsive to non-traditional factors when making their interregional choice. If state government wants to begin to attract more "high tech" industry, then investments in "human capital" across the state seem reasonable, although some areas of the state, as discussed later in this paper, already have a head start in this area and this may raise serious issues of equity if the state heavily invests in these areas rather than others.

Economic Growth Studies Which Focus on Employment Growth– Econometric studies are ideal for studying the impact of state and local policies and programs on the economy. In this literature, cross-sectional or time-series data are gathered on variables that are thought to influence economic growth. Traditional factors as discussed above can be "held constant" and the significance of the government policy or programs isolated. The most frequently used dependent variable in these studies has been aggregate changes in employment growth (Blair and Premus, 1987).

A comprehensive review of this literature was recently completed (Bartik, 1991). Job creation is one of the primary goals for all direct economic development programs from the perspective of politicians and voters and this review focuses on the extent to which state and local policies and programs can significantly effect job growth in states and their urban areas.

The results give convincing evidence that traditional tax and fiscal policies and major public services that benefit business (i.e., infra-structure) will lead to growth in the labor force when controlling for other major social, demographic, and economic variables. However, at present, there is not yet definitive evidence that "new wave" economic development policies and programs which are aimed at such things as venture capital, entrepreneurial training, research and high technology programs and services, and export assistance will also have the same kind of impact on job growth as the more traditional policies and programs (Bartik, 1991). Future research will confirm or disconfirm this.

Increases in job growth also have more net positive benefits for high unemployment areas, where the benefits of more jobs are the greatest. In addition, high job growth in an area has stronger positive effects on minority, younger, and less educated workers.

The overall assessment of this literature is quite optimistic because economic development policy is seen as both efficient and progressive.

The review of this literature does not make a distinction between the differential impacts of policies and programs on the location of industries or businesses, the expansion of existing ones, or the creation of new ones. Rather, the studies reviewed concentrate only on whether the government policy or program has an overall impact on the number of jobs created in an area. The specific reasons for why the job growth occurred in any particular area are not explored.

This body of literature is encouraging for Florida in terms of the long standing political commitment of the state to keeping taxes low and investing in infra-structure as a means of creating more jobs. However, growth in employment is an extremely narrow measure of economic development and it is only indirectly linked to the standard of living. Per capita income which is influenced by capital income, transfer payments, and value added in production serves as a broader more accurate measure of living standards (Warner, 1989).

Thus, Florida, may create more jobs by pursuing more traditional economic development policies and programs but the net result may not necessarily be a higher standard of living when compared to other states which Florida considers when making comparisons. As noted below in another section, you can create a lot of low wage jobs in the service and retail sectors, but not necessarily improve the overall standard of living.

Studies Which Focus on Increasing The Standard of Living Through Growth in Real Per Capita Income-- The most common approach used by state and local government has been labelled as traditional in this discussion. At the heart of the traditional approach is to develop policies and programs which minimize the industry or firm costs. Policies are designed to externalize these costs, thus minimizing out of pocket expenses paid by prospective industries or firms. In the literature, this is referred to as the "cost minimization" strategy. Examples are tax abatements, business tax reductions, relaxed environmental regulations, attempts to discourage unionization, and holding the line on or reducing property taxes (Warner, 1989).

More recent studies demonstrate that "cost minimization" strategies are cost effective for only a narrow set of enterprises-- that is, profit maximizing multiplant manufacturing industries with numerous branches (Warner, 1989). Development experts realize that most economic growth is generated internally. The amount of growth attributed to new business formation and the expansion of existing business is far greater than that resulting from relocation or branch plant openings.

This suggests that if Florida wants to really focus on high value added industries which have more of a potential to contribute to the growth of real personal income, then rising real per capita income, not employment growth, should become the dominant standard for judging economic performance.

Service industries such as finance and health and other industries like information, biomedical, and space and defense are known to be higher value added and it is argued that they

can contribute more to the growth in real per capita income than many of the lower wage multi-plant manufacturing industries (SRI International, 1989).

Development experts are now arguing, although with limited empirical evidence, that these kinds of industries depend more critically on such things as the availability of skilled labor and the quality of public goods, services, and other amenities for their employees ("human capital") as well as capital for investment and access to research and technology for product improvement ("new wave"). The debate in the research community now centers around whether investments in "human capital" and "new wave" strategies are more worthwhile in terms of raising the standard of living than other strategies.

This proposition is long run in that the lag necessary for policy tools to exert measurable influence could be substantial. For example, it could take years to upgrade the labor force through education and training as well as to develop technology and other research centers that could lead to the expansion of high value added industries or the growth of new enterprises.

"Cost minimization" will appeal to policy makers looking for faster implementation of policy tools. "Human capital" and "new wave" strategies will need further research over an extended time period to convince policy makers of the cost effectiveness of these strategies. At this time, researchers are just beginning to do studies which use growth in real per capita income as the dependent variable and investments in "human capital" or "new wave" strategies as the major determinants of this growth. Preliminary evidence is that these newer strategies are having some marginal impact on the attraction and development of industries at the more high technology end of the spectrum.

Florida will have to take some limited risks on "human capital" and "new wave" strategies until the research literature is more certain about the effectiveness of these strategies.

Summary and Implications for Florida-- Overall the literature in economic development demonstrates that state and local government policies and programs can have marginal impacts on their economies. In particular, the following observations are the most relevant for Florida:

* Although changing in importance over time, traditional economic locational factors still provide more of an explanation for the initial location (or relocation) of large multiplant manufacturing plants. On the other hand, other things being equal, if an industry has two locations to consider and the traditional locational factors are similar, they will choose the location where the state and local governments are pursuing "cost minimization" strategies. If Florida wants to keep pursuing these kinds of manufacturing industries, then they should continue to keep taxes low and not worry about up grading the labor force.

* On balance, state and local policies and programs have more of an impact on the intraregional rather than interregional locational choices of industries. For Florida, this would suggest supporting local efforts at "cost minimization" and giving localities as much flexibility as possible through home rule and other local fiscal autonomy.

* There is limited evidence that "high tech" industries are more influenced by "human capital" and "new wave" strategies but government will need to watch the research in this area very carefully, although the preliminary evidence is positive. If Florida wants to pursue high value added industries that can potentially impact more on the growth in real per capita income, then the state will have to start making long term investments in education and training, research and technology, high quality public services, and capital investments in emerging "high tech" industries.

* Closely related to this, traditional tax and fiscal policies and infra-structure investments which are aimed at "cost minimization" will lead to growth in employment but not necessarily growth in real per capita income which is the best indicator of increases in the standard of living. Florida has to decide whether it wants to continue to focus on creating jobs in general, and if it

does, then "cost minimization" strategies are in order. However, if the state wants to shift to growth in real per capita income as an economic development goal then the state will have to make major investments in "human capital" and "new wave" strategies even though they are still somewhat risky strategies.

3. OVERVIEW OF THE STATE ECONOMY

Population Changes -- Florida continues to be among the nation's leading growth states. It currently ranks fourth in total population and by the year 2010 it will move into second place behind California. For 1990-1992, Florida ranked first in net migration population change demonstrating that the state is still attracting more residents than any other state in the country. The state was also fourth in growth rate from 1980 through 1992 and while the growth rate in the 1990's is estimated to be lower than it was in the 1980's, Florida will continue to see its economy expand as a result of population growth well in to the next century (Florida and The Other Forty-Nine, 1993).

In addition, a recent study done by the Bureau of Economic and Business Research at the University of Florida indicates that the "typical" recent migrant to Florida is now a young, well educated northerner with above average income who came to Florida for employment reasons. If this type of migrant continues to come to the state in large numbers, the overall educational and income levels of the Florida population will rise in the future (Smith, 1990).

General Economic Changes-- As the economy expands, it is important to look at the nature of the structural changes in the economy. For example, Florida ranked fourth in 1992 in new plants and expansions, sixth in U.S. Department of Defense Contracts, sixth in total dollar value of exports from 1990 to 1992, and second in growth of the civilian labor force from 1980-1992. These indicators on the face of it are impressive and demonstrate steady economy growth (Florida and The Other Forty-Nine, 1993).

Nevertheless, expansion masks another economic trend which is not as favorable. Most notable is that changes in per capita income from 1980 to 1992 were below the average for the entire country and the per cent change in per capita income for the period placed Florida twenty seventh among the states. Florida's relatively low growth in per capita income reflects an inability to translate general economic growth into a higher standard of living. Part of this is explained by the fact that wages are low, for example, Florida is forty fourth in average hourly earnings in manufacturing and twenty seventh in annual pay. And as will be discussed below, the employment sectors that are growing the fastest in the state are not in the high wage categories but in the low to moderate wage categories. More economic growth, more jobs, but little growth in real wages, translates into a very below average growth in the standard of living over the last decade for the state (Florida and The Other Forty-Nine, 1993).

Employment Sectors-- Appendix 1 illustrates the changes in the employment sectors in the state since 1960. The patterns are revealing. First, the employment sectors of wholesale and retail trade and services have grown steadily since 1960. Today these two sectors account for 55% of all of the non-farm jobs in the state up from 43.7% in 1960. Service jobs have grown the fastest since 1960 and this sector is now the largest employer in the state. Wholesale and retail trade is the second largest employer in the state and its growth rate is the third fastest among the different sectors.

The slowest growth in employment sectors has taken place in manufacturing and transportation, communication, and public utilities. Both sectors account for a smaller percentage of the workforce in 1990 than they did in previous years. The employment base is becoming more and more service and trade and less manufacturing and transportation, communication, and public utilities. Since wages are generally lower in the service and trade sector than in manufacturing and transportation, communication, and public utilities, it is clearer why there has only been below average growth in real per capita income.

One bright spot in the employment sector figures is that finance, insurance, and real estate which usually have above average wages grew at the second fastest rate since 1960 and this sector is now the fourth largest employer in the state.

Nevertheless, the overall picture is clear--Florida has created a lot of jobs in the last thirty years (5,481,304) but 57.8% of these jobs have been in the service and trade sectors while only 10.0% have been in manufacturing and transportation, communication, and public utilities. This is part of the dilemma faced by the state. Job growth has been robust for the last thirty years but the growth is occurring largely in lower wage and lower value added industries and businesses.

Estimates of Gross State Product-- Changes in the share of Gross State Product accounted for by different industries and businesses gives further insight into the economic structure of the state.

Industry/Bus	%GSP, 1976	%of GSP, 1986
Agriculture	3.08	3.10
Construction	6.32	7.20
Manufacturing	9.67	12.45
Trans,Comm,PU	10.29	9.08
Wholesale	6.91	7.93
Retail	12.28	12.52
Finance,Ins,RE	18.37	17.20
Services	16.50	18.30
Government	14.39	11.09

Source: SRI International, 1989.

Manufacturing, construction, and wholesale all accounted for a larger proportion of GSP in 1986 than they did in 1976 although the number of jobs being created in these sectors ranked far behind the other sectors discussed above. The implication is that there was more value added per worker in these industries and businesses.

Services also jumped in importance from 1976 to 1986 but this employment sector grew the fastest in terms of number of jobs so the the growth in GSP is not surprising.

Agriculture and Retail showed no real change during the decade in GSP but Retail showed significant job growth. In this context, Retail is doing very little for the value added per worker figures.

Transportation, Communication, and Public Utilities, Government, and Finance, Insurance, and Real Estate all accounted for a lower share of GSP over time. Given the slower job growth rates in Government and Transportation, et. al., this is not surprising. However, Finance, Insurance, and Real Estate showed very high job growth but less contribution to the GSP suggesting that many of the the jobs in Finance, Insurance, and Real Estate being created during this period were at the lower end of the wage scale.

In sum, the figures on GSP suggest that if the state wants to strategically move toward growth in real per capita income, it should focus on industries and businesses which are having a higher value added per worker, in this case, manufacturing, construction, and wholesale.

Value Added By Manufacturing-- Since changes in manufacturing offer the state the best opportunity to impact on the growth of real per capita income, it is important to identify which categories of manufacturing in Florida have been growing the fastest in terms of value added to the economy of the state. Appendix 2 shows the growth in value added by manufacturing over the last twenty years. The top five types of manufacturing that are growing the fastest in value added to the economy are:

Instruments and Related, SIC 38

Tobacco Products, SIC 21

Electronic, SIC 36

Rubber, Plastics, SIC 30

Printing and Publishing, SIC 27

With the exception of Tobacco Products which started with a very low base and are a relatively small part of the economic base of the state, the other four manufacturing categories represent industries that are at the high technology end of the industrial spectrum. If the state wanted to concentrate on industrial clusters which produced high value added to the economy and in turn had a more significant impact on growth in real per capita income, then the fastest growers in value added by manufacturing should be singled out when designing new economic development policies and programs.

Summary-- The message of this brief overview of the Florida economy is straight foward. While Florida's population will continue to grow rapidly into the next century and the state will continue to expand its economy, the challenge for the state will be whether it can use state and local economic development policies and programs to impact on the type of economic activity going on in the state. Given the patterns of the last three decades, Florida will not be able to substantially increase real per capita income or its standard of living unless it begins to dramatically shift its economic development activities toward attracting, retaining, and creating industries and businesses which add a high value to the economy and lead to higher wage jobs.

4. PATTERNS WITHIN THE 67 COUNTIES

As indicated earlier, recent evidence indicates that general business climate and human resource development are important determinants of economic activity. These determinants were largely ignored as predictors of economic activity in earlier studies, which focused almost exclusively on costs of labor, transportation, and access to markets for large, multiplant companies.

Thus, we use Florida 1980 and 1990 county data to examine two related hypotheses. First, direct public investment, including both transportation (a traditional indicator) and education (a nontraditional indicator) are predictors of economic activity: the more public investment, the higher per capital personal income, for example. Second, business climate, represented by economic structure variables, is also a predictor of economic activity. For example, the higher the proportion of manufacturing and high tech industry, the higher county per capita income should be.

Because this analysis is preliminary and conceptual, we use simplifying assumptions and simple correlation analysis. From looking at changes in county rankings for per capita income between 1980 and 1990, it was clear that little change had taken place relative to these rankings (see Table 1). This information led to two simplifying assumptions.

First, the level of current economic activity is largely determined by the level of previous economic activity. Second, the level of current investment is largely determined by the level of previous investment. The second assumption is particularly important. Investment, by definition, results in future consumption. However, if the level of present investment is highly correlated with the level of past investment, current economic activity should be highly correlated with current investment.

To further simplify, we avoided the issue of endogeneity (when an independent variable is partly determined by a dependent variable) by conducting a simple correlation analysis. This allowed us to explore relationships among variables, and develop preliminary information that will be used to create a more sophisticated analysis at some later point in time.

Correlations Among Theoretical Factors

In the correlation analysis, we explored three types of variables and their intra- and interrelationships. First, **economic activity** variables can be viewed as outcome variables. These included 1990 real per capita income, percent change in labor force growth between 1980 and 1990, percent change in population growth between 1980 and 1990, and percent change in the ad valorem tax base between 1980 and 1990. Theoretically, these variables should be highly correlated, since employment growth increases per capita income, spurring population growth and increasing the ad valorem tax base. Table 2 shows that these variables are indeed highly correlated.

We divided variables that would theoretically predict economic activity into two groups. The first group of variables represent **investment activities** and include per capita expenditures for transportation, the millage rate for district schools, and per capita expenditures for economic development (all for 1990). To the extent that government activities are coordinated to form an overall strategy, one would expect to see positive correlations.

However, our results (see Table 3) show only one significant positive correlation--between per capita transportation and per capita economic development. Two variables, per capita economic development and education millage, are significantly negatively correlated. We speculate that different types of investment activities may take place at different points in time, with economic development and transportation being earlier activities in the development of an economy, leading later to educational investment.

The second group of variables that can be expected to predict economic activity are **economic structure** variables. These variables are the result of investment; they are the intermediate instruments that create the outcomes of economic activity. They include the proportion of total employment that is manufacturing employment, the proportion of total manufacturing employment that is "high-tech" employment, the proportion of families in poverty, and per capita transfer payments (all for 1990).

Significant correlations are shown in Table 4. Per capita transfer payments and percent of families in poverty are both significantly positively correlated with manufacturing employment, but significantly negatively correlated with "high-tech" employment. From these results, we would expect "high-tech" employment to exert a positive effect on economic activity, while manufacturing employment may be negatively correlated, especially if the manufacturing jobs are mainly low-wage jobs.

Correlations Between Factors

Tables 5 shows correlations between investment variables and economic activity variables in 1990. As shown, education millage is significantly and positively correlated with all four economic activity variables. Per capita transportation expenditures is correlated significantly with growth in the ad valorem tax base. Other correlations are insignificant. We speculate that economic development and transportation development represent an earlier stage in investment, and that the education infra-structure represents a later, more sophisticated stage. These results are consistent with the hypothesis (and evidence from recent studies) that human resource investment is an important determinant of economic activity.

Finally, we examined correlations between the economic structure variables and the outcome variables. As shown in Table 6, only "high tech" employment as a percent of total manfacturing employment is highly and consistently significant across the four economic activity

indicators. Proportion of employment in the manfacturing sector is significantly negatively correlated with the economic activity indicators. As expected, transfer payments and families in poverty are significantly and negatively correlated with economic outcomes. From these structural data, we speculate that development activities should focus mainly on increasing "high tech" employment: development of high wage jobs, not low wage jobs, should be the focus of public investment activities.

Tables 7 and 8 show correlations between economic activity variables and investment and economic structure variables for 1980. As shown, relationships are similar to those in 1990. More specifically, relationships between economic activity and both education millage and "high-tech" structure are positive and significant as they were in 1990.

This preliminary analysis is consistent with evidence from recent studies indicating that local governments that pursue "human capital" strategies in order to improve the quality of resources will attract "high tech" industries, which will increase economic activity. As this analysis shows, both education and high technology jobs are significantly and consistently associated with greater economic activity across all four indicators.

Table 1: Top Ten Florida Counties for Per Capita Income and Ad Valorem Tax Base, 1980 and 1990

Per Capita Income,1980	Per Capita Income, 1990
Palm Beach	Martin
Martin	Palm Beach
Sarasota	Collier
Collier	Sarasota
Broward	Indian River
Indian River	Broward
Pinellas	Pinellas
Hendry	Monroe
Dade	St. Johns
Manatee	Lee

Table 2: Correlations Among Economic Activity Variables, 1990

Variables	Correlation
1. 1990 Per Capita Income 2. Percent change in labor force 1980-90	.29**
1. 1990 Per Capita Income 2. Percent change in ad valorem tax base, 1980-90	.54**
1. 1990 Per Capita Income 2. Percent change in population, 1980-90	.29**
1. Percent change in labor force 1980-90 2. Percent change in ad valorem tax base, 1980-90	.79**
1. Percent change in labor force 1980-90 2. Percent change in population, 1980-90	.89**
1. Percent change in ad valorem tax base, 1980-90 2. Percent change in population 1980-90	.68**

**Significant at less than or equal to .01.

Florida County Comparisons, 1993, Florida Department of Commerce

Table 3: Correlations Among Infrastructure/Investment Variables, 1990

Variables	Correlation
1. Per Capita Transportation Expenditures 2. Education Millage	-.06
1. Per Capita Transportation Expenditures 2. Per Capita Economic Development Expenditures	.26*
1. Education Millage 2. Per Capita Economic Development Expenditures	-.30*

*Significant at less than or equal to .05.

Table 4: Correlations Among Economic Structure Variables, 1990

Variables	Correlation
1. Mfg. Empl./Total Empl. 2. High-Tech Empl./Mfg. Empl.	-.21
1. Mfg. Empl./Total Empl. 2. Per Capita Transfer Payments	.54**
1. Mfg. Empl./Total Empl. 2. Percent of Families in Poverty	.49**
1. High-Tech Empl./Mfg. Empl. 2. Per Capita Transfer Payments	-.59**
1. High-Tech Empl./Mfg. Empl. 2. Percent of Families in Poverty	-.56**
1. Per Capita Transfer Payments 2. Percent of Families in Poverty	.86**

*Significant at less than or equal to .05.
**Significant at less than or equal to .01.

Table 5: Correlations Between Economic Activity Variables and Investment Variables, 1990

Economic Activity Variables	Per Capita Transportation	Education Millage	Per Capita Economic Development
Per capita income	.14	.32**	-.02
Percent change in labor force	.10	.31**	-.09
Percent change in ad valorem tax base	.28*	.24*	.07
Percent change in population	.14	.34**	-.10

Table 6: Correlations Between
Economic Activity Variables and
Economic Structure Variables ,1990

Economic Activity Variables	Mfg. Empl./ Total Empl.	High-Tech Empl./ Total Mfg. Empl.	Per Capita Transfer Payments	Percent Families in Poverty
Per capita income	-.35**	.42**	-.59**	-.69**
Percent change in labor force	-.33**	.47**	-.64**	-.57**
Percent change in ad valorem tax base	-.17	.50**	-.58**	-.62**
Percent change in population	-.30*	.53**	-.63**	-.57**

Table 7: Correlations Between Economic Activity Variable and Investment Variables, 1980

Economic Activity Variables	Per Capita Transportation	Education Millage	Per Capita Economic Development
Per capita income	-.24*	.47**	.04

Table 8: Correlations Between
Economic Activity Variable and
Economic Structure Variables, 1980

Economic Activity Variables	Mfg. Empl./ Total Empl.	High-Tech Empl./ Total Mfg. Empl.	Per Capita Transfer Payments	Percent Families in Poverty
Per capita income	-.22	.30*	-.64**	-.77**

5. PATTERNS WITHIN 18 METROPOLITAN AREAS

Florida is now an urban state; 87% of the state's nearly 6.8 million workers are located in its 18 metropolitan areas. Given the importance of the urban areas, future economic development policy should emphasize the state's urban maturity and the different patterns of urban economic development around the state.

This section explores some of the more important patterns among the 18 metropolitan areas in an effort to get some insight into the factors that impact on the level of economic activity and more importantly the desired outcome, growth in per capita income. While the previous section used correlation analysis to explore the relationships between the critical factors, this section is more impressionistic since there are not enough cases (i.e.,18) to do any formal statistical analysis. This analysis is meant to complement the quantitative look at the counties within the state in the previous section.

The Tables in this section highlight some of the more important economic and demographic characteristics of the metropolitan areas. A more detailed statistical picture of the 18 areas over the last thirty years appears in Appendix 3 and should be reviewed to understand the context of these areas. Tables 9, 10, 11 rank order the metropolitan areas from those which have grown the fastest in per capita income from 1980-90 to those which have grown the slowest. Some preliminary impressions of the factors which are associated with growth in per capita income are indicated below. Since this is not a statistical analysis, caution should be used with these observations.

If there are any consistent patterns they should show up by focusing on the top six metropolitan areas and the bottom six. Looking at the extremes--and by comparing those growing

the fastest with those growing the slowest-- any major patterns should be revealed. Those patterns can then be tested out on a data set with a larger number of cases in future studies.

The basic question is when you look at the areas which have grown the fastest in per capita income, what do they seem to have in common? Similarly, when you look at those who have grown the slowest, what do they have in common?

Table 9 includes three economic activity variables. The metropolitan areas at the bottom of the list show considerable similarity. Besides the fact that their per capita income has grown slower than those areas at the top of the list, they ALL are areas whose population and job growth have been below the median for the 18 metropolitan areas. In turn, with one exception, the fastest growers in per capita income also have population and job growth rates above the median. In short, the implication here is that metropolitan areas where population is growing the fastest are also the ones growing the fastest in terms of job creation. Since these are also the areas where per capita income is rising the fastest, the implication is that above average population and job growth are a necessary ingredient for metropolitan areas which want to continue to improve their standard of living. Slow growth areas just do not do as well as high growth areas.

Looking at education millage in Table 9 which is an investment activity and part of the "human capital" strategy mentioned earlier, the pattern is not as pronounced as the economic activity variables but, nevertheless, there. Five of the six top metropolitan areas are above the median in investment in education while only three of the six at the bottom of the list are. This lends moderate support for the hypothesis that education investment is associated with growth in per capita income. This pattern, however, is consistent with the quantitative analysis of the counties and therefore lends additional credence to the use of "human capital" strategies.

Table 10 includes economic structure variables, more specifically, a cross sectional look at the type of labor force which each metropolitan has. This Table isolates a selected number of job sectors to focus on. Employment in general manufacturing and "high tech" manufacturing

were selected because of the high value added nature of the industries and their higher wage levels. In either case, both are known to contribute to growth in per capita income. Employment in finance, insurance, and real estate, public administration, and professional services were chosen because of their higher wage levels as well as the fact that these employment sectors grew rapidly in the last decade within the state (see Appendix 3). The entertainment and recreation sector was chosen because of its very rapid growth in the last decade in the state, even though wage levels are known to be lower.

The fastest growers when compared to the slowest growers have something in common. Table 10 indicates that the faster growers have higher than average employment (i.e., they employed in 1990 a higher percentage of workers in these sectors than the average for all the metropolitan areas) in "high tech" manufacturing, finance, insurance, and real estate, and entertainment and recreation. This combination is associated with growth in per capita income. Employment in general manufacturing, professional services, and public administration did not help to distinguish between the top and the bottom of the list. The implication is that economic policies which focus on the clusters of industries and businesses which employ people in "high tech", finance, insurance, and real estate, and entertainment and recreation will help to contribute to growth in per capita income.

Table 11 looks at the economic structure variables from a longitudinal perspective and the patterns are again consistent and revealing. This Table illustrates the per cent change from 1980-90 in these same employment sectors. It gives a partial answer to the question of which sectors the most job creation was taking place in during the decade. The Table shows convincingly that the top six have had above average change in five of the six employment sectors; "high tech", finance, insurance, and real estate, entertainment and recreation, professional services, and public administration. There is no pattern with general manufacturing at either the top or the bottom of the list.

The message is that metropolitan areas that are growing in per capita income the fastest show above average job growth in key employment sectors and policies aimed at impacting businesses and industries which employ workers in these sectors will contribute to a higher standard of living.

The longitudinal data expands the list of important employment sectors and indicates that the longitudinal view may be more revealing than the cross sectional view. Future research on a larger data set can look at whether it is more important to show job growth in key sectors than it is to show a large percentage of employment in any particular sector or sectors. Future multivariate analyses will allow this question to be answered.

In sum, there are key employment sectors which contribute to economic performance. The impressionistic evidence from the 18 metropolitan areas suggests that areas which are growing in population and creating new jobs particularly in "high tech", finance, insurance, and real estate, entertainment and recreation, professional services, and public administration are changing the standard of living in their area faster than elsewhere. Investment in education is also related to changes in per capita income.

The implication of this section is that economic development strategies which target and cluster and facilitate the attraction, retention, and growth of businesses and industries which employ workers in these strategic sectors is desirable if the long term goal is to increase the standard of living of a metropolitan area.

Table 9: Selected Characteristics of Metro Areas in Florida, 1980-90

Area	Ch.PCI*	Ch.Pop.*	Ch.Lab.Force*	Educ.Mil.*
W. Palm	123.9	+	+	+
Sarasota	118.3	-	+	+
Orlando	109.9	+	+	+
Jacksonville	109.6	+	-	+
Melbourne	108.2	+	+	-
Ft. Meyers	106.8	+	+	+
Panama City	104.8	-	-	-
Ft. Walton Bch	104.7	-	+	-
Tampa-St.Pete	103.3	+	-	-
Ocala	102.7	+	+	+
Daytona Bch	101.7	+	+	-
Bradenton	100.4	+	+	-
Pensacola	99.4	-	-	-
Gainesville	97.5	-	-	+
Ft. Lauderdale	95.8	-	-	+
Tallahassee	94.6	-	-	+
Lakeland	91.8	-	-	-
Miami	77.2	-	-	-
Median		40.0	52.9	9.2590

Notes: (+) refers to above median for the 18 areas and (-)refers to below the median.
(*) Change PCI is % change in per capita income, 1980-90; Change Pop. is % change in population, 1980-90; Change Labor Force is % change in total employment, 1980-90; and Education Millage is for the millage for the District School Board in the County (Counties) making up the metro area, 1990.

Source: See Appendix 3 for complete data on the 18 areas.

Table 10: Selected Characteristics of Economic Structure for Metro Areas in Florida, 1990

Area	HT/Mfg*	Mfg*	F/I/RE*	Ent/Rec*	Prof*	P.Adm.*
W. Palm	+	-	+	+	+	-
Sarasota	+	-	+	+	+	-
Orlando	+	+	+	+	-	-
Jacksonville	+	-	+	-	-	+
Melbourne	+	+	-	-	-	+
Ft. Meyers	-	-	+	+	+	-
Panama City	-	-	-	+	-	+
Ft. Walton Bch	+	-	-	-	-	+
Tampa-St.Pete	-	+	+	+	+	-
Ocala	+	+	-	-	-	+
Daytona Bch	+	+	-	+	-	+
Bradenton	+	+	+	-	+	-
Pensacola	-	+	-	-	+	+
Gainesville	+	-	-	-	+	+
Ft. Lauderdale	+	-	+	+	+	-
Tallahassee	-	-	-	-	+	+
Lakeland	-	+	-	+	-	-
Miami	-	+	+	-	+	-
Median	35.5	9.9	7.1	1.8	14.9	4.5

Notes: (*) HT/Mfg is hi tech employment as % of manufacturing employment in 1990; Mfg. is manufacturing employment as % of total employment in 1990; F/I/RE is finance, insurance, and real estate as % of total employment in 1990; Ent/Rec is entertainment and recreation as % of total employment in 1990; Prof. is professional services as % of total employment in 1990; and Pub. Adm. is public administration as % of total employment in 1990.

Source: See Appendix 3.

Table 11: Selected Characteristics of Economic Structure for Metro Areas in Florida, 1980-90

Area	HT*	Mfg*	F/I/RE*	Ent/Rec*	Prof*	Pub.Adm.*
W. Palm	-	-	+	+	+	+
Sarasota	+	-	-	-	+	+
Orlando	+	+	+	+	+	+
Jacksonville	+	-	+	-	-	-
Melbourne	+	+	+	+	-	+
Ft. Meyers	+	+	+	+	+	+
Panama City	-	-	-	+	-	+
Ft. Walton Bch	-	+	-	+	+	-
Tamp-St.Pete	-	-	+	-	+	-
Ocala	+	+	+	+	+	+
Daytona Bch	+	+	+	+	-	+
Bradenton	+	+	+	-	-	+
Pensacola	-	-	-	-	-	-
Gainesville	+	+	-	-	-	-
Ft. Lauderdale	-	-	-	-	-	-
Tallahassee	-	+	-	+	+	-
Lakeland	-	-	-	+	-	-
Miami	-	-	-	-	-	-
Median	23.7	33.4	54.3	88.1	92.5	40.8

Notes: (*) refers to the % change in the number of jobs in each employment sector, 1980-90. See note in Table 10 for definition of employment sectors.

Source: See Appendix 3.

6. ALTERNATIVE PATHWAYS TO THE FUTURE

Florida can consider a number of alternative economic pathways to the future. These pathways present policy makers with a way to think conceptually and strategically about where they are going and how to use public policy and economic development strategies to accomplish their goals. The following discussion distinguishes between three pathways. The state is currently active in promoting each of these pathways now. The challenge for state and local policy makers is to decide which pathway or which combination of pathways should receive prioritized attention over the next decade. While Florida can not reverse economic development patterns already taking place, it can, at the margin, concentrate its resources on facilitating and strengthening pathways which have greater long term benefits for the state.

I. The Traditional Pathway: Tourism and Agriculture. According to the Florida Department of Commerce, in 1993, 40.5 million visitors came to Florida generating an economic impact of approximately $30.8 billion. Over the last past several decades, tourism`s major contribution of jobs, income, and government revenues has made it a major part of Florida's economy. Tourism plays a major role in the level of employment in a host of associated industries in the state, including air transpoartation, hotels and motels, restaurants, and amusement and recreation services (this is now being referred to as the "experience" industry). This sector is Florida's largest employer and in 1991 it was estimated to employee over 600,000 people or 8.4% of the total labor force (Travel Industry Association of America, 1993).

U.S. Bureau of Labor Statistics indicate, however, that employment in services and retail trade, which are the bulk of the jobs in this sector, pay low wages when compared to the other major sectors. In addition, Florida's tourism industry is growing at a slower pace than it did in

the 1970s and 1980s. This sector is now more vulnerable than before to growing national and international competition, higher gasoline prices, price competition between the airlines and changing consumer demand. Recent slow downs in tourist travel have also been influenced by Florida's image as a high crime state.

This pathway relies on the strong comparative advantage that Florida has had in the past because of its strength as a tourist destination and the future development of the emerging "experience" industry through out the state.

More competition for the growing tourist dollar will require effective marketing and more sophisticated differentiation of the products (experiences) within the industry.

The Florida economy over the past few decades has also relied on agriculture and food processing. However, this sector still constitutes about the same percentage of the Gross State Product (See Section 3) as it did in the 1970s and it has been experiencing relatively slow growth over the last decade because of a variety of external forces related to the strength of the dollar, increased production costs, stronger import competition, and weaker export markets. This is not one of Florida's leading employment sectors in terms of the total number of jobs and wages are generally low.

The State Department of Agriculute and University Research are now trying to develop alternative higher value added agricultural products that would be suitable to the state's climate and could serve growing consumer markets. Opportunities also exist for higher value added food processing although this capital intensive business has been restructuring in recent years and Florida's share of the national market is very small.

This sector is now being challenged to move beyond simply increasing production to increasing the quality of products, capturing more value from production, and identifying new market opportunities. It is a sector in transition.

Overall, this traditional pathway of tourism and agriculture has generated jobs over the last two decades and contributed to the economy but because of the low value added nature of the services and products and the low wages, this pathway has only had a modest impact on the growth in per capita income.

Unless major product breakthroughs are made in agriculture and/or the tourism industry can raise wage levels dramatically in the emerging "experience" industries, Florida will find it difficult to upgrade its standard of living relative to other states by continuing to emphasize this pathway. On the other hand, these sectors will, in all probability, in the near future continue to form the core of the state`s economy. However, if the state wants more significant improvement in economic performance in the future, it will need to emphasize other economic pathways to the future as well.

II. International Trade: An Emerging Pathway. International trade and finance have increased in importance in Florida. The U.S. Customs District collects data for Florida in two Custom Districts. District 52, the geographically smaller region extends from Ft. Pierce south to Key West and contains the bulk of the states activity. District 10 is the remainder of the state and is dominated by mineral (phosphate) exports for Tampa and automobile exports from Jacksonville.

The bulk of District 52 trade activity is through Miami's airport and seaport. For example, U.S. Department of Commerce data from 1980 shows $6.8 billion worth of exports left District 52, of which $1.5 billion went to the Caribbean, $1.2 billion was shipped to Central America, and $3.5 billion went to South America, representing 91% of total exports. By 1990 total exports had grown by 63.2% to $11.1 billion with $2.7 going to the Caribbean, $1.6 billion to Central America and $4.8 billion to South America representing 81.9% of total exports. Increased exports to Europe and the rest of the world enhanced the region's international trade status but the bulk of the trade continued to be with the "Latin Rim".

While trade increase and geographical diversity within the "Latin Rim" represents positive growth, international trade is competitive and dynamic. While New York represents the U.S.'s most prominent gateway for trade with Europe and California represents the primary gateway with Asia, New Orleans and Houston represent serious competition for Latin American trade. While New Orleans is the nation's largest port handling primarily agricultural shipments, if it vigorously pursued the Latin trade it could become competitive with Florida. Houston's petroleum based trade activity tends to be one dimensional, while its demographic characteristics with a large Spanish speaking population and a full university community could also exploit its trade potential to the South.

Florida's trade diversity with virtually all nation's and territories of Latin America and Caribbean represents the states strength. These countries have their own diverse trading requirements and this provides some protection against catastrophic shifts.

Hence, after reviewing U.S. Department of Commerce international trade data from 1980 and 1990, several important issues are clear. One issue was reconfirmed, that is, trade between South Florida and the nations and territories of the Caribbean was substantial, constant and strong. Of special note in the context of the North American Free Trade Agreement, trade between Mexico and South Florida was small, increasing, and weak by comparison. Furthermore, the data makes it evidently clear that U.S. trade with Mexico has consistently been via the landborder between Texas and Mexico. Given the infra-structure improvements for highway and rail freight that are taking place or being contemplated along this border, it is obvious that trade growth with Mexico under NAFTA will occur in Texas with some secondary benefits derived by California, Arizona, and New Mexico. Only the development of Mexico's Yucatan peninsula or a routing of trade through the Yucatan which inexplicably avoided the more proximate Port of New Orleans would benefit the Florida economy.

In addition, renewed trade with Cuba represents an interesting option for a stimulation of the Florida economy, especially if NAFTA results in an erosion of the trade base due to a shift of investment from the Caribbean and Central America to Mexico due to NAFTA's more favorable terms with Mexico. While there is little doubt that the current embargo has hurt the Cuban economy, unlike any other state in the U.S., the Florida economy also incurs an extremely high opportunity cost for this policy in terms of lost jobs, wages and business development. It is quite clear that trade with Cuba either under a new Cuba policy or a new Cuban government will provide substantial benefits to the Florida economy. This trade will be especially important to both the Tampa and Miami areas if NAFTA does result in an erosion of Miami's Caribbean trade base without any offsetting increases in Mexican trade.

The top destinations for exports from Florida are Venezuela, Brazil, Argentina, Columbia, Dominican Republic, Chile, Costa Rica, and Panama. These countries accounted for 51.8% of the total exports in 1993 according to the U.S. Department of Commerce figures and these figures demonstrate substantial diversity in trading partners.

Leading exports from Florida currently are fertilizers, motor vehicle parts, passenger vehicles, telecommunication parts, tractor parts, digital processing units, and data processing units. A noted Florida economist, Antonio Villamil also suggests that Latin America's business leaders want to upgrade and modernize plant and business practices and, as a result, Florida corporations may find profitable "niches" among products and services in high demand like: state of the art equipment for airports and ports, telecommunications products and services, construction and management consulting, "high tech" products and services, business consulting services, and technical expertise for the development of small businesses (Villamil, 1994).

Future projections are that exports will continue to rise to the "Latin Rim", that Florida will have a wide variety of trading partners, and that there will be a wide range of products and services in high demand. Florida is strategically positioned to become more involved in the develop-

ment of these markets and reinforcing this pathway will require the state to develop strategies which give export assistance to exisiting companies, market Florida products and services, and help provide venture capital for the development of new businesses that will be exporting to the "Latin Rim".

The challenge for the state will be to identify and help nuture high value added products and services in higher wage industries. If Florida can accomplish this in the next decade, it can further diversify its economy and not be as reliant as it has been in the past on tourism and agriculture.

III. A Targeted High Tech Pathway: Improving Economic Performance. The U.S. Department of Commerce currently defines ten industries as "high tech". They are: (1) guided missiles and spacecraft; (2) communications equipment and electronic components; (3) aircraft and parts; (4) office and computing machines; (5) ordnance and accessories; (6) drugs and medicine; (7) industrial inorganic chemicals; (8) professional and scientific instruments; (9) engines, turbines, and parts; and (10) plastic materials and other synthetics. "High Tech" industries are high value added and have a high ratio of output price to input costs. High value added industries compete on the basis of quality and productivity rather than simply cost. These industries also have higher wage levels and as reviewed in earlier sections of this paper, "high tech" industries can contribute significantly to growth in per capita income when compared with other sectors of the economy.

Appendix 2 shows value added by manufacturing in Florida from 1972 to 1991. Three "high tech" industries grew the fastest during this time period: communications equipment and electronic components; professional and scientific instruments; and plastic materials and other synthetics. These industries have led the way in Florida for the past two decades in terms of growth in value added by manufacturing. "High Tech" employment in 1990 accounted for 39.1% of all manufacturing employment in the state.

Breaking down "high tech" employment by location, calculations made using the figures in Appendix 3 reveal that 75% of all the "high tech" jobs are located in six metropolitan areas (i.e.,Tampa-St. Petersburg, Orlando, Melbourne, Ft. Lauderdale, Miami, and West Palm Beach) The implication is that while growth in the "high tech" employment has positive impacts on economic performance, the impact is heavily concentrated in only about a third of the metropolitan areas around the state. Unless "high tech" firms can be encouraged to relocate, expand, or start up in other areas around the state, growth in "high tech" will have significant regional impact but will not be a more general engine of growth for the state.

The implication is that while reinforcing this pathway is very important, it will still have to be supplemented by other strategies since Florida's economy is now diversified enough that no single pathway alone will be able to steer the economy into the next century. Florida will need to pursue a combination of pathways to do this. Nevertheless, given the presumed connections between "high tech" and economic performance, the state should do everything possible to expand this sector in the future.

Economic development experts and research indicate that sustained "high tech" economies require first class, indeed, world class basic and applied research institutions, a large supply of entrepreneurial risk takers, significant amounts of venture capital, and agents to turn findings into marketable products.

As discussed earlier, "human capital" strategies which emphasize a skilled workforce, a good quality of public goods and services (i.e., education and infra-strucutre) and a high quality of life combined with "new wave" economic development policies aimed at such things as providing venture capital, entrepreneurial training, research and technology development, and export assistance are the best ways to attract, expand, and develop "high tech" industrial clusters.

By the year 2000, the aging population (i.e., over 60 years old) in Florida is projected to rise to 24.3% of the total polulation which will be the highest percentage among the states. Demographic studies show that Florida will continue to be a desirable retirement location for more

affluent older people with considerable disposable income (Smith, 1990). With the anticipation of the enormous national market that will result when the "baby boom" generation reaches retirement age early in the next century, Florida is in a perfect position to experiment with "high tech" goods and services for older people. The state could become the place where new products and services are developed and tried out before they are marketed through out the country and the world. This could broaden the impact of "high tech" industries beyond the six metropolitan areas since the older population is more widely distributed within the state.

In sum, Florida has already made progress moving towards a "high tech" future and given the importance that high value added and high wage industries have for economic performance and the growth in per capita income, the state will have to target clusters of "high tech" industries for assistance in order to both continue to diversify its economy as well as to increase the overall standard of living within the state.

7. IMPLICATIONS FOR STATE AND LOCAL ECONOMIC DEVELOPMENT POLICIES AND PROGRAMS

This concept paper has reviewed the literature on economic development, highlighted selected economic and demographic characteristics of the state, and analyzed economic activity, economic structure, and investment variables at the county and metropolitan level in Florida in order to get a clearer picture of the type of factors which can contribute to the growth in per capita income and a higher standard of living within the state. After exploring three possible pathways, it was concluded that Florida will have to be active from a policy and program standpoint in all three areas.

At this point in time, the challenge for policy makers is to review what the state is doing to promote each pathway and determine what priorities it wants to establish for the next decade. This paper will not review state activities in depth, it is argued that this should be done in

the near future by an some independent research group so that the state can get an un-biased review of what it is doing and how much it is spending in policy and program areas and what impact these policies and programs have had.

A cursory look at the FY 1993 state budget (see Appendix 4) indicates that the bulk of the state spending on economic development activities is concentrated in three Departments: Commerce; Citrus; and Agriculture. Looking at the Divisions within these Departments, the major observation to be made is that the overwhelming emphasis at the state level is on marketing and advertising products produced in the state or selling the state as a tourist destination.

While there is some attention being paid to the development of international trade in the Department of Commerce, there is little attention being paid to "human capital" and "new wave" strategies which would be more appropriate for the international trade and "high tech" pathways described above. In short, current policy is heavily invested in continuing to promote the traditional pathway of tourism and agriculture. However, there is a notable exception. In 1993, the state legislature set up a non-profit organization, Enterprise Florida, in an effort to increase the number of high wage jobs in Florida by targeting deficiencies in capital, training, and the use of technology. This effort is just beginning and it does show recognition at the state level that it must take a more active role in promoting a "high tech" future.

Investment in "human capital" especially education, infra-structure, public goods and services, and improving the quality of life will require enormous long term investments by state and local government. Nevertheless, Florida can not get by in the future with an economy which is as heavily reliant on tourism and agriculture as it is now, it will have to pursue the other two pathways as well if it hopes to subtantially improve economic performance. The implication is not that this is a zero sum game in terms of the budget. Money should not necessarily be re-allocated from marketing and advertising programs to "human capital" and "new wave" programs. Rather the state needs to be engaged in all three areas.

Despite activity in all three areas, the least efficient and effective of the marketing and advertising programs should be down-sized and that will help to stretch the scarce budget resources. The more challenging issue is how the state can find additional resources that can be devoted to promoting international trade and "high tech" development. Unless Florida deals with this question seriously, the next decade may find the state's population and economy continuing to grow, but the standard of living may slip still further when compared to other states.

In 1979, the Division of Economic Development in the Department of Commerce established long range economic development goals for the state. In particular, the goals of raising per capita income at a faster rate and increasing the number of manufacturing jobs especially in high wage industries seem as relevant today as then. These goals were reaffirmed in 1993 by Enterprise Florida. What remains is to formally commit the state and more of its resources to policies which impact on international trade and "high tech" industry.

Florida needs to update its economic development actvities and invest substantially more resources in "human capital" and "new wave" strategies. As it moves toward pathways which require these types of strategies, there are four studies which are recommended in the near future so that policy makers can have the best information available when they consider economic development policy alternatives.

1. The state needs to evaluate the impact of its marketing and advertisment programs and determine whether the money is being spent wisely and prudently. This should be a systematic and comprehensive analysis performed by an independent research group outside of government.

2. There should be an up to date survey done on a sample of "high tech" firms around the state who have re-located, expanded, or been created in the last decade. The survey should explore their locational determinants and capital and human resource needs so that state and local policy can be more responsive to "high tech" development.

3. There should be an up to date survey done on a sample of businesses and firms in the countries who are Florida's major trading partners in the "Latin Rim" to determine their demand for goods and services that are needed to modernize plant and business practices. The state would then be in a better position to target Florida firms for export assistance and venture capital.

4. A more comprehensive multivariate analysis of the correlates of growth in per capita income within the 67 counties around the state should be completed. The analysis in this paper used, for the most part, already published census information. What is needed in addition to this census data is specific information on economic development programs and strategies being used by each county so that the impact of local policies can be isolated. This will require original data collection by contacting each county.

Florida's economic structure must continue to diversify and shift toward higher value added service and manufacturing industries. Many of these may export to the "Latin Rim" as well as the U.S. All three pathways discussed will have to be pursued, however, priority will need to be given to the "high tech" and international trade pathways in the future so that Flordida can make major changes in its standard of living and not be trapped into promoting growth which creates the highest proportion of its jobs in the low paying service and retail sectors. (a more extended argument in favor of using a "human capital" strategy in the future in Florida is included in Appendix 5.

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Appendix 1- Employment Sectors, 1960-1990

Employment Sectors, 1960-1990

FLORIDA

	Empl 1960	Empl 1970	Empl 1980	Empl 1990	change 1960-90
TOTAL Non-Farm	1,320,600	2,181,600	4,168,476	6,801,904	415%
Construction	124,700	174,600	261,008	446,265	258%
Percent of Total	9.5%	8.0%	6.3%	6.6%	
Manufacturing	207,500	331,600	452,549	542,675	162%
Percent of Total	15.7%	15.2%	10.8%	7.9%	
Transp, Comm, Pub Util	100,200	151,900	301,488	318,836	218%
Percent of Total	7.6%	6.9%	7.2%	4.7%	
Trade*	349,700	571,900	929,254	1,643,103	370%
Percent of Total	26.5%	26.2%	22.3%	24.2%	
Services**	227,700	409,400	875,877	2,101,664	823%
Percent of Total	17.2%	18.8%	21.0%	30.8%	
Finance, Ins, Real Est	82,100	131,200	246,438	629,200	666%
Percent of Total	6.2%	6.0%	6.0%	9.3%	
Public Admin(Govt)	220,500	402,700	736,023	979,333	344%
Percent of Total	16.7%	18.5%	17.6%	14.4%	
Other	8,200	8,300	365,839	140,828	1617%
Percent of Total	.6%	.4%	8.8%	2.1%	
Total	100 %	100 %	100 %	100 %	

***Trade= Wholesale and Retail**
****Services=Business & Repair, Personal, Entertainment & Recr, Professional, Education**

Source: Florida Dept. of Commerce, Florida County Comparisons(1980,1990) and Fla Statistical Abstract(1960, 1970)

Appendix 2- Value Added by Manufacturing, 1972-1991

Value Added by Manufacturing

FLORIDA

	1972 (millions $)	1982 (millions $)	1991 (millions $)	% Change 1972-1991	Rank
MANUFACTURING	5,786.8	18,111.8	27,574.2	376	
Food & Kindred Products SIC20	968.7	2,914.6	4,155.1	329	11
Tobacco Products SIC21	52.6	586.0	(NA)	**1014** (72-82)	**2**
Textile Mill Products SIC22	56.7	62.7	(NA)	11 (72-82)	20
Apparel SIC23	232.4	570.2	1,000.3	330	10
Lumber & Wood SIC24	264.1	109.6	708.2	168	18
Furniture & Fixtures SIC25	121.6	321.0	416.8	243	13
Paper & Allied Products SIC26	351.7	(NA)	1,220.3	247	12
Printing & Publishing SIC27	466.4	1703.1	3,340.6	**616**	**5**
Chemicals & Allied SIC28	516.3	1402.1	2,668.9	417	**7**
Petroleum & Coal SIC29	26.5	162.6	120.3	354	**9**
Rubber, Misc Plastics SIC30	122.7	421.8	934.5	**662**	**4**
Leather SIC31	26.8	73.3	(NA)	173 (72-82)	17
Stone,Clay,Glass SIC32	375.3	680.9	938.0	150	19
Primary Metals SIC33	74.6	195.7	208.8	180	16
Fabricated Metals SIC34	425.4	1008.6	1,370.6	222	15
Industrial Machinery SIC35	287.6	1785.8	1,355.6	371	**8**
Electronic SIC36	580.9	(NA)	4,526.6	**679**	**3**
Transportation Equip SIC37	700.2	2220.3	2,396.0	242	14
Instruments & related SIC38*	68.4	(NA)	3,074.4	**4395**	**1**
Miscellaneous Mfg SIC39	67.8	234.0	373.0	450	**6**

*** Includes: Search & Navigation, Measuring & controlling devices, Medical instruments, Opthalmic**
**** fruits,nuts, & berries = one-third of total**

Source: Census of Manufacturing, U.S. Department of Commerce

Appendix 3:

Selected Characteristics

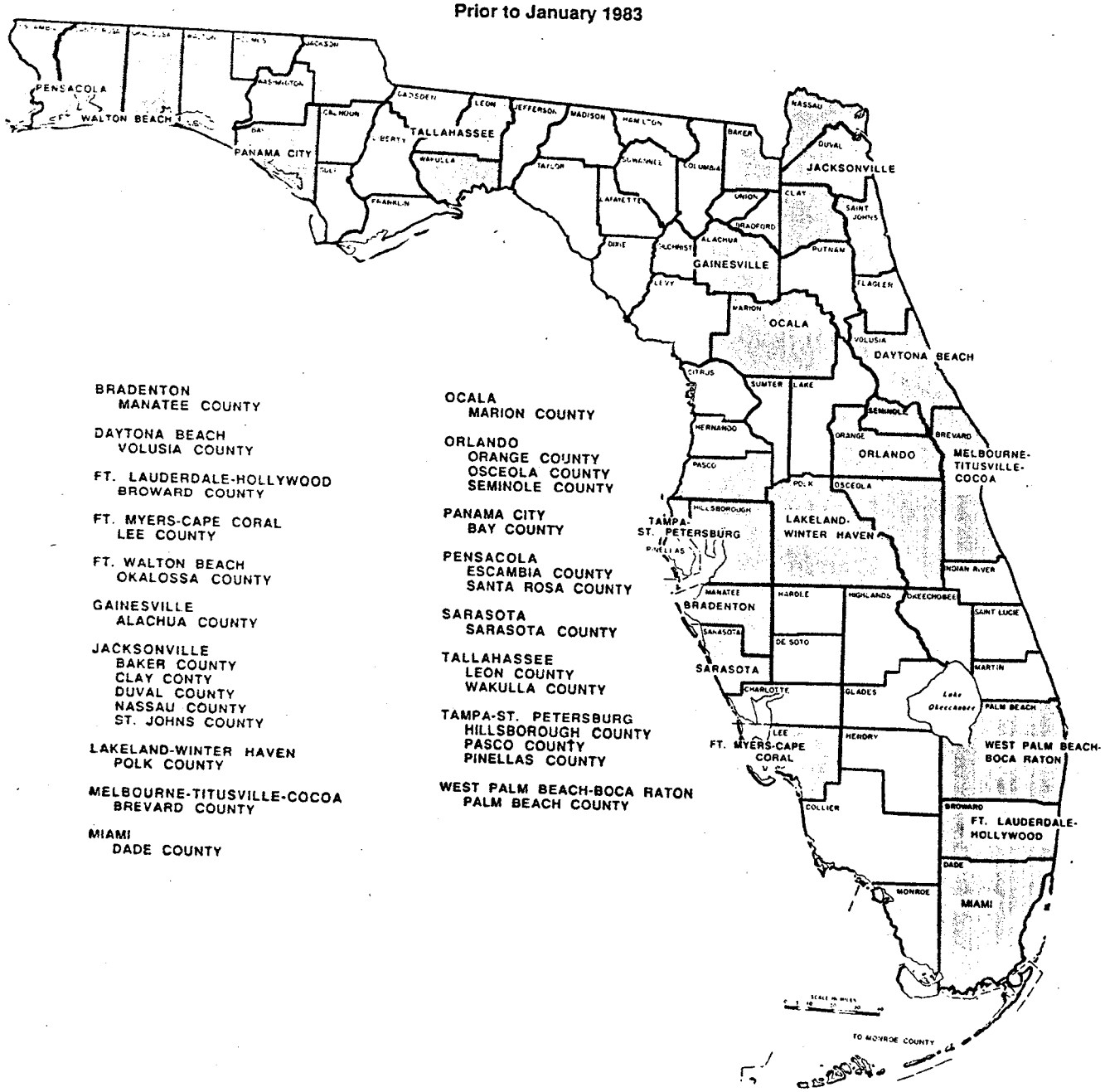
Metropolitan Areas in Florida

1970 - 1990

Source for Tables 1-18:
1970 and 1980 figures: U.S. Bureau of the Census. Census of Population. Vol. 1, CHARACTERISTICS OF THE POPULATION. Part II, Florida. Sections 1 and 2. U.S. Printing Office. Washington, D.C.,1973 and 1983.
1990 figures: STF 3A, updated software version 2.1. Bureau of the Census. Washington, D.C., 1993.

Counties and Standard Metropolitan Statistical Areas

Prior to January 1983



BRADENTON
MANATEE COUNTY

DAYTONA BEACH
VOLUSIA COUNTY

FT. LAUDERDALE-HOLLYWOOD
BROWARD COUNTY

FT. MYERS-CAPE CORAL
LEE COUNTY

FT. WALTON BEACH
OKALOSSA COUNTY

GAINESVILLE
ALACHUA COUNTY

JACKSONVILLE
BAKER COUNTY
CLAY CONTY
DUVAL COUNTY
NASSAU COUNTY
ST. JOHNS COUNTY

LAKELAND-WINTER HAVEN
POLK COUNTY

MELBOURNE-TITUSVILLE-COCOA
BREVARD COUNTY

MIAMI
DADE COUNTY

OCALA
MARION COUNTY

ORLANDO
ORANGE COUNTY
OSCEOLA COUNTY
SEMINOLE COUNTY

PANAMA CITY
BAY COUNTY

PENSACOLA
ESCAMBIA COUNTY
SANTA ROSA COUNTY

SARASOTA
SARASOTA COUNTY

TALLAHASSEE
LEON COUNTY
WAKULLA COUNTY

TAMPA-ST. PETERSBURG
HILLSBOROUGH COUNTY
PASCO COUNTY
PINELLAS COUNTY

WEST PALM BEACH-BOCA RATON
PALM BEACH COUNTY

Table 1 BRADENTON-MANATEE COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,588		7,206		14,444		458.1	100.4
Total Population	97,115		148,442		211,707		118.0	42.6
Total Employment	6,808	100.0	54,010	100.0	87,581	100.0	1186.4	62.2
Agri,Forest,Fish	326	4.8	3,239	6.0	3,864	4.4	1085.3	19.3
Construction	668	9.8	5,353	9.9	7,289	8.3	991.2	36.2
Manufacturing	1,025	15.1	7,128	13.2	11,861	13.5	1057.2	66.4
Transp,Com,P.Util	265	3.9	3,270	6.1	5,014	5.7	1792.1	53.3
Wholesale Trade	191	2.8	1,669	3.1	3,386	3.9	1672.8	102.9
Retail Trade	861	12.6	11,538	21.4	18,618	21.3	2062.4	61.4
Finc,Inc,Real Est	359	5.3	3,935	7.3	6,339	7.2	1665.7	61.1
Bus/Repair Srvc	235	3.5	2,054	3.8	4,469	5.1	1801.7	117.6
Personal Service	348	5.1	2,048	3.8	3,453	3.9	892.2	68.6
Entrtmt/Rec Srvc	43	0.6	900	1.7	1,606	1.8	3634.9	78.4
Professional Srvc	761	11.2	7,255	13.4	13,419	15.3	1663.3	85.0
Public Admin.	206	3.0	1,774	3.3	3,266	3.7	1485.4	84.1
Education Srvc	450	6.6	3,308	6.1	4,868	5.6	981.8	47.2
Other	1,070	15.7	539	1.0	129	0.1	-87.9	-76.1

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 2 DAYTONA BEACH-VOLUSIA COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,723		6,588		13,288		388.0	101.7
Total Population	169,487		258,762		370,712		118.7	43.3
Total Employment	15,939	100.0	96,113	100.0	155,529	100.0	875.8	61.8
Agri,Forest,Fish	282	1.8	3,278	3.4	5,468	3.5	1839.0	66.8
Construction	1,164	7.3	8,800	9.2	13,254	8.5	1038.7	50.6
Manufacturing	1,206	7.6	10,456	10.9	16,799	10.8	1293.0	60.7
Transp,Com,P.Util	780	4.9	5,498	5.7	9,317	6.0	1094.5	69.5
Wholesale Trade	298	1.9	2,684	2.8	5,477	3.5	1737.9	104.1
Retail Trade	3,258	20.4	22,590	23.5	34,590	22.2	961.7	53.1
Finc,Inc,Real Est	819	5.1	6,399	6.7	10,693	6.9	1205.6	67.1
Bus/Repair Srvc	437	2.7	3,914	4.1	7,598	4.9	1638.7	94.1
Personal Service	1,883	11.8	5,744	6.0	7,697	4.9	308.8	34.0
Entrtmt/Rec Srvc	388	2.4	1,616	1.7	3,213	2.1	728.1	98.8
Professional Srvc	2,182	13.7	11,426	11.9	21,299	13.7	876.1	86.4
Public Admin.	637	4.0	5,095	5.3	7,789	5.0	1122.8	52.9
Education Srvc	1,395	8.8	7,472	7.8	11,197	7.2	702.7	49.9
Other	1,210	7.6	1,141	1.2	1,138	0.7	-6.0	-0.3

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 3 FT.LAUDERDALE-HOLLYWOOD-BROWARD COUNTY

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	3,930		8,624		16,883		329.6	95.8
Total Population	613,797		1,008,526		1,255,000		104.5	24.4
Total Employment	228,703	100.0	436,227	100.0	599,119	100.0	162.0	37.3
Agri,Forest,Fish	5,092	2.2	7,503	1.7	9,788	1.6	92.2	30.5
Construction	27,045	11.8	41,065	9.4	47,729	8.0	76.5	16.2
Manufacturing	27,083	11.8	51,815	11.9	57,094	9.5	110.8	10.2
Transp,Com,P.Util	16,392	7.2	37,416	8.6	48,577	8.1	196.3	29.8
Wholesale Trade	8,822	3.9	20,490	4.7	31,461	5.3	256.6	53.5
Retail Trade	50,075	21.9	92,080	21.1	119,961	20.0	139.6	30.3
Finc,Inc,Real Est	16,879	7.4	40,082	9.2	56,826	9.5	236.7	41.8
Bus/Repair Srvc	10,281	4.5	24,745	5.7	39,146	6.5	280.8	58.2
Personal Service	19,871	8.7	17,275	4.0	27,148	4.5	36.6	57.2
Entrtmt/Rec Srvc	4,342	1.9	8,896	2.0	13,194	2.2	203.9	48.3
Professional Srvc	19,726	8.6	48,863	11.2	88,044	14.7	346.3	80.2
Public Admin.	9,621	4.2	17,922	4.1	25,241	4.2	162.4	40.8
Education Srvc	13,212	5.8	23,461	5.4	34,481	5.8	161.0	47.0
Other	262	0.1	4,614	1.1	429	0.1	63.7	-90.7

Note: * SMSA.

Table 4 FT.MYERS-CAPE CORAL-LEE COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	3,002		7,554		15,623		420.4	106.8
Total Population	105,216		208,266		335,113		218.5	60.9
Total Employment	13,886	100.0	78,823	100.0	144,465	100.0	940.4	83.3
Agri,Forest,Fish	947	6.8	3,266	4.1	4,470	3.1	372.0	36.9
Construction	1,699	12.2	10,710	13.6	16,599	11.5	877.0	55.0
Manufacturing	750	5.4	5,264	6.7	8,994	6.2	1099.2	70.9
Transp,Com,P.Util	1,032	7.4	5,650	7.2	10,243	7.1	892.5	81.3
Wholesale Trade	510	3.7	3,053	3.9	5,266	3.6	932.5	72.5
Retail Trade	2,967	21.4	17,605	22.3	32,180	22.3	984.6	82.8
Finc,Inc,Real Est	1,269	9.1	7,265	9.2	13,045	9.0	928.0	79.6
Bus/Repair Srvc	370	2.7	3,317	4.2	8,277	5.7	2137.0	149.5
Personal Service	761	5.5	3,654	4.6	6,951	4.8	813.4	90.2
Entrtmt/Rec Srvc	246	1.8	1,210	1.5	3,050	2.1	1139.8	152.1
Professional Srvc	1,718	12.4	9,554	12.1	21,449	14.8	1148.5	124.5
Public Admin.	429	3.1	2,947	3.7	5,757	4.0	1242.0	95.4
Education Srvc	672	4.8	4,459	5.7	7,873	5.4	1071.6	76.6
Other	516	3.7	869	1.1	311	0.2	-39.7	-64.2

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 5 FT.WALTON BEACH-OKALOOSA COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,939		6,422		13,147		347.3	104.7
Total Population	88,187		109,920		143,776		63.0	30.8
Total Employment	5,730	100.0	37,391	100.0	58,554	100.0	921.9	56.6
Agri,Forest,Fish	97	1.7	727	1.9	1,080	1.8	1013.4	48.6
Construction	268	4.7	2,998	8.0	4,635	7.9	1629.5	54.6
Manufacturing	392	6.8	3,335	8.9	5,204	8.9	1227.6	56.0
Transp,Com,P.Util	396	6.9	2,262	6.0	3,316	5.7	737.4	46.6
Wholesale Trade	81	1.4	912	2.4	984	1.7	1114.8	7.9
Retail Trade	1,304	22.8	8,173	21.9	13,489	23.0	934.4	65.0
Finc,Inc,Real Est	248	4.3	2,218	5.9	3,254	5.6	1212.1	46.7
Bus/Repair Srvc	302	5.3	1,540	4.1	3,167	5.4	948.7	105.6
Personal Service	380	6.6	2,052	5.5	2,854	4.9	651.1	39.1
Entrtmt/Rec Srvc	66	1.2	399	1.1	982	1.7	1387.9	146.1
Professional Srvc	414	7.2	3,466	9.3	8,028	13.7	1839.1	131.6
Public Admin.	973	17.0	5,565	14.9	7,241	12.4	644.2	30.1
Education Srvc	605	10.6	3,146	8.4	4,204	7.2	594.9	33.6
Other	204	3.6	598	1.6	116	0.2	-43.1	-80.6

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 6 GAINESVILLE-ALACHUA COUNTY

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,717		6,094		12,035		343.0	97.5
Total Population	104,764		171,371		204,111		94.8	19.1
Total Employment	39,639	100.0	66,783	100.0	94,036	100.0	137.2	40.8
Agri,Forest,Fish	1,233	3.1	1,917	2.9	2,368	2.5	92.1	23.5
Construction	2,694	6.8	4,092	6.1	4,590	4.9	70.4	12.2
Manufacturing	2,972	7.5	4,116	6.2	5,649	6.0	90.1	37.2
Transp,Com,P.Util	2,041	5.1	3,305	4.9	4,389	4.7	115.0	32.8
Wholesale Trade	928	2.3	1,577	2.4	1,923	2.0	107.2	21.9
Retail Trade	6,750	17.0	11,412	17.1	16,860	17.9	149.8	47.7
Finc,Inc,Real Est	1,538	3.9	3,752	5.6	4,640	4.9	201.7	23.7
Bus/Repair Srvc	819	2.1	2,376	3.6	3,283	3.5	300.9	38.2
Personal Service	1,198	3.0	1,625	2.4	2,972	3.2	148.1	82.9
Entrtmt/Rec Srvc	293	0.7	784	1.2	1,199	1.3	309.2	52.9
Professional Srvc	5,519	13.9	12,047	18.0	20,317	21.6	268.1	68.6
Public Admin.	1,882	4.7	4,476	6.7	6,151	6.5	226.8	37.4
Education Srvc	10,598	26.7	14,557	21.8	19,451	20.7	83.5	33.6
Other	1,174	3.0	747	1.1	244	0.3	-79.2	-67.3

Note: * SMSA.

Table 7 JACKSONVILLE-BAKER, CLAY, DUVALL, NASSAU, ST.JOHNS COUNTIES

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,861		6,746		14,141		394.3	109.6
Total Population	259,585		598,015		907,000		249.4	51.7
Total Employment	195,983	100.0	306,003	100.0	422,421	100.0	115.5	38.0
Agri,Forest,Fish	2,436	1.2	4,936	1.6	6,692	1.6	174.7	35.6
Construction	14,003	7.1	21,486	7.0	30,926	7.3	120.9	43.9
Manufacturing	23,729	12.1	35,668	11.7	40,434	9.6	70.4	13.4
Transp,Com,P.Util	20,833	10.6	32,268	10.5	42,908	10.2	106.0	33.0
Wholesale Trade	12,540	6.4	15,722	5.1	20,016	4.7	59.6	27.3
Retail Trade	36,051	18.4	55,469	18.1	78,104	18.5	116.6	40.8
Finc,Inc,Real Est	17,314	8.8	30,072	9.8	46,531	11.0	168.7	54.7
Bus/Repair Srvc	7,856	4.0	14,480	4.7	22,666	5.4	188.5	56.5
Personal Service	12,131	6.2	8,893	2.9	14,933	3.5	23.1	67.9
Entrtmt/Rec Srvc	1,831	0.9	3,493	1.1	5,925	1.4	223.6	69.6
Professional Srvc	16,737	8.5	34,281	11.2	57,871	13.7	245.8	68.8
Public Admin.	14,503	7.4	23,317	7.6	26,433	6.3	82.3	13.4
Education Srvc	12,453	6.4	23,333	7.6	28,478	6.7	128.7	22.1
Other	3,566	1.8	2,585	0.8	504	0.1	-85.9	-80.5

Note: * SMSA.

Table 8 LAKELAND-WINTER HAVEN-POLK COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	3,019		6,460		12,392		310.5	91.8
Total Population	227,222		321,652		405,382		78.4	26.0
Total Employment	21,964	100.0	134,113	100.0	171,677	100.0	681.6	28.0
Agri,Forest,Fish	1,209	5.5	11,335	8.5	6,488	3.8	436.6	-42.8
Construction	1,351	6.2	10,665	8.0	13,404	7.8	892.2	25.7
Manufacturing	2,489	11.3	19,199	14.3	23,574	13.7	847.1	22.8
Transp,Com,P.Util	1,273	5.8	8,684	6.5	11,420	6.7	797.1	31.5
Wholesale Trade	893	4.1	5,923	4.4	8,106	4.7	807.7	36.9
Retail Trade	4,236	19.3	24,498	18.3	34,612	20.2	717.1	41.3
Finc,Inc,Real Est	1,483	6.8	6,833	5.1	10,183	5.9	586.6	49.0
Bus/Repair Srvc	711	3.2	3,458	2.6	7,153	4.2	906.0	106.9
Personal Service	904	4.1	4,429	3.3	8,873	5.2	881.5	100.3
Entrtmt/Rec Srvc	326	1.5	2,351	1.8	4,873	2.8	1394.8	107.3
Professional Srvc	2,763	12.6	12,932	9.6	21,517	12.5	678.8	66.4
Public Admin.	721	3.3	5,698	4.2	6,977	4.1	867.7	22.4
Education Srvc	2,165	9.9	9,884	7.4	11,627	6.8	437.0	17.6
Other	1,440	6.6	8,224	6.1	2,870	1.7	99.3	-65.1

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 9 MELBOURNE-TITUSVILLE-COCOA-BREVARD COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,921		7,448		15,509		430.9	108.2
Total Population	230,006		272,959		398,978		73.5	46.2
Total Employment	32,626	100.0	113,941	100.0	183,692	100.0	463.0	61.2
Agri,Forest,Fish	386	1.2	2,143	1.9	3,437	1.9	790.4	60.4
Construction	2,134	6.5	9,660	8.5	14,823	8.1	594.6	53.4
Manufacturing	7,240	22.2	24,729	21.7	36,333	19.8	401.8	46.9
Transp,Com,P.Util	1,714	5.3	6,394	5.6	10,630	5.8	520.2	66.2
Wholesale Trade	535	1.6	2,798	2.5	5,836	3.2	990.8	108.6
Retail Trade	5,842	17.9	20,979	18.4	34,686	18.9	493.7	65.3
Finc,Inc,Real Est	1,234	3.8	5,863	5.1	10,033	5.5	713.0	71.1
Bus/Repair Srvc	2,568	7.9	6,614	5.8	11,175	6.1	335.2	69.0
Personal Service	1,383	4.2	3,411	3.0	5,918	3.2	327.9	73.5
Entrtmt/Rec Srvc	270	0.8	1,414	1.2	3,144	1.7	1064.4	122.3
Professional Srvc	2,342	7.2	13,097	11.5	24,981	13.6	966.7	90.7
Public Admin.	3,322	10.2	7,622	6.7	11,596	6.3	249.1	52.1
Education Srvc	2,795	8.6	8,301	7.3	10,952	6.0	291.8	31.9
Other	861	2.6	916	0.8	148	0.1	-82.8	-83.8

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 10 MIAMI-DADE COUNTY

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	3,467		7,723		13,688		294.8	77.2
Total Population	1,219,661		1,608,661		1,937,094		58.8	20.4
Total Employment	513,164	100.0	742,632	100.0	901,828	100.0	75.7	21.4
Agri,Forest,Fish	9,074	1.8	12,940	1.7	16,397	1.8	80.7	26.7
Construction	35,648	6.9	47,414	6.4	57,017	6.3	59.9	20.3
Manufacturing	75,763	14.8	106,607	14.4	102,372	11.4	35.1	-4.0
Transp,Com,P.Util	56,202	11.0	80,804	10.9	88,723	9.8	57.9	9.8
Wholesale Trade	26,798	5.2	42,254	5.7	57,029	6.3	112.8	35.0
Retail Trade	93,600	18.2	130,509	17.6	157,772	17.5	68.6	20.9
Finc,Inc,Real Est	33,816	6.6	58,761	7.9	74,499	8.3	120.3	26.8
Bus/Repair Srvc	23,191	4.5	38,739	5.2	53,884	6.0	132.3	39.1
Personal Service	34,624	6.7	32,227	4.3	45,594	5.1	31.7	41.5
Entrtmt/Rec Srvc	7,562	1.5	11,043	1.5	14,723	1.6	94.7	33.3
Professional Srvc	52,751	10.3	92,890	12.5	133,937	14.9	153.9	44.2
Public Admin.	21,619	4.2	31,959	4.3	36,189	4.0	67.4	13.2
Education Srvc	31,814	6.2	47,877	6.4	63,163	7.0	98.5	31.9
Other	10,702	2.1	8,608	1.2	529	0.1	-95.1	-93.9

Note: * SMSA.

Table 11 OCALA-MARION COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,846		5,813		11,782		314.0	102.7
Total Population	69,030		122,488		194,833		182.2	59.1
Total Employment	8,867	100.0	43,511	100.0	74,958	100.0	745.4	72.3
Agri,Forest,Fish	270	3.0	3,170	7.3	4,030	5.4	1392.6	27.1
Construction	686	7.7	3,997	9.2	5,691	7.6	729.6	42.4
Manufacturing	1,028	11.6	5,120	11.8	10,794	14.4	950.0	110.8
Transp,Com,P.Util	550	6.2	2,813	6.5	4,055	5.4	637.3	44.2
Wholesale Trade	416	4.7	2,393	5.5	3,894	5.2	836.1	62.7
Retail Trade	2,007	22.6	8,373	19.2	15,125	20.2	653.6	80.6
Finc,Inc,Real Est	486	5.5	2,551	5.9	4,856	6.5	899.2	90.4
Bus/Repair Srvc	216	2.4	1,612	3.7	3,543	4.7	1540.3	119.8
Personal Service	426	4.8	1,601	3.7	2,582	3.4	506.1	61.3
Entrtmt/Rec Srvc	184	2.1	679	1.6	1,342	1.8	629.3	97.6
Professional Srvc	860	9.7	4,268	9.8	10,061	13.4	1069.9	135.7
Public Admin.	467	5.3	2,306	5.3	3,542	4.7	658.5	53.6
Education Srvc	935	10.5	3,792	8.7	5,230	7.0	459.4	37.9
Other	336	3.8	836	1.9	213	0.3	-36.6	-74.5

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 12 ORLANDO-ORANGE, OSCEOLA, SEMINOLE COUNTIES

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	3,018		7,096		14,895		393.5	109.9
Total Population	305,479		577,235		1,072,748		251.2	85.8
Total Employment	156,973	100.0	318,466	100.0	554,785	100.0	253.4	74.2
Agri,Forest,Fish	8,042	5.1	13,130	4.1	12,029	2.2	49.6	-8.4
Construction	14,136	9.0	23,894	7.5	43,202	7.8	205.6	80.8
Manufacturing	22,434	14.3	39,576	12.4	56,519	10.2	151.9	42.8
Transp,Com,P.Util	11,026	7.0	22,780	7.2	41,982	7.6	280.8	84.3
Wholesale Trade	9,502	6.1	15,124	4.7	27,787	5.0	192.4	83.7
Retail Trade	29,783	19.0	60,411	19.0	106,350	19.2	257.1	76.0
Finc,Inc,Real Est	10,294	6.6	23,212	7.3	42,346	7.6	311.4	82.4
Bus/Repair Srvc	6,798	4.3	16,558	5.2	34,710	6.3	410.6	109.6
Personal Service	8,958	5.7	14,584	4.6	33,418	6.0	273.1	129.1
Entrtmt/Rec Srvc	2,130	1.4	15,423	4.8	33,478	6.0	1471.7	117.1
Professional Srvc	14,847	9.5	33,809	10.6	69,564	12.5	368.5	105.8
Public Admin.	7,992	5.1	14,490	4.5	20,419	3.7	155.5	40.9
Education Srvc	10,939	7.0	22,374	7.0	32,696	5.9	198.9	46.1
Other	92	0.1	3,101	1.0	285	0.1	209.8	-90.8

Note: * SMSA.

Table 13 PANAMA CITY-BAY COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,520		5,968		12,225		385.1	104.8
Total Population	75,283		97,740		126,994		68.7	29.9
Total Employment	11,856	100.0	36,356	100.0	53,222	100.0	348.9	46.4
Agri,Forest,Fish	158	1.3	713	2.0	968	1.8	512.7	35.8
Construction	795	6.7	3,032	8.3	3,880	7.3	388.1	28.0
Manufacturing	1,399	11.8	4,091	11.3	4,488	8.4	220.8	9.7
Transp,Com,P.Util	756	6.4	2,821	7.8	3,591	6.7	375.0	27.3
Wholesale Trade	471	4.0	1,458	4.0	1,525	2.9	223.8	4.6
Retail Trade	2,586	21.8	8,078	22.2	12,761	24.0	393.5	58.0
Finc,Inc,Real Est	531	4.5	2,171	6.0	3,261	6.1	514.1	50.2
Bus/Repair Srvc	319	2.7	1,295	3.6	2,733	5.1	756.7	111.0
Personal Service	868	7.3	1,677	4.6	2,835	5.3	226.6	69.1
Entrtmt/Rec Srvc	116	1.0	568	1.6	1,160	2.2	900.0	104.2
Professional Srvc	1,087	9.2	3,924	10.8	7,513	14.1	591.2	91.5
Public Admin.	1,125	9.5	3,084	8.5	4,387	8.2	290.0	42.3
Education Srvc	1,179	9.9	2,994	8.2	4,047	7.6	243.3	35.2
Other	466	3.9	450	1.2	73	0.1	-84.3	-83.8

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 14 PENSACOLA-ESCAMBIA COUNTY and SANTA ROSA COUNTY

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,567		6,159		12,278		378.3	99.4
Total Population	243,075		289,782		344,406		41.7	18.9
Total Employment	75,319	100.0	106,408	100.0	143,322	100.0	90.3	34.7
Agri,Forest,Fish	1,438	1.9	1,649	1.5	2,448	1.7	70.2	48.5
Construction	6,395	8.5	8,476	8.0	11,261	7.9	76.1	32.9
Manufacturing	13,626	18.1	14,137	13.3	15,754	11.0	15.6	11.4
Transp,Com,P.Util	4,953	6.6	7,824	7.4	10,588	7.4	113.8	35.3
Wholesale Trade	2,477	3.3	3,911	3.7	4,843	3.4	95.5	23.8
Retail Trade	13,397	17.8	19,974	18.8	29,308	20.4	118.8	46.7
Finc,Inc,Real Est	2,900	3.9	5,431	5.1	7,012	4.9	141.8	29.1
Bus/Repair Srvc	2,148	2.9	3,962	3.7	6,770	4.7	215.2	70.9
Personal Service	3,000	4.0	3,051	2.9	4,639	3.2	54.6	52.0
Entrtmt/Rec Srvc	623	0.8	1,018	1.0	1,765	1.2	183.3	73.4
Professional Srvc	6,478	8.6	12,591	11.8	22,215	15.5	242.9	76.4
Public Admin.	9,054	12.0	11,783	11.1	13,244	9.2	46.3	12.4
Education Srvc	6,426	8.5	10,470	9.8	12,829	9.0	99.6	22.5
Other	2,404	3.2	2,131	2.0	646	0.5	-73.1	-69.7

Note: * SMSA.

Table 15 SARASOTA-SARASOTA COUNTY

	1970**	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	3,826		8,449		18,441		382.0	118.3
Total Population	120,413		202,251		277,776		130.7	37.3
Total Employment	13,916	100.0	74,700	100.0	114,217	100.0	720.8	52.9
Agri,Forest,Fish	311	2.2	1,816	2.4	2,555	2.2	721.5	40.7
Construction	20	0.1	8,656	11.6	10,548	9.2	52640.0	21.9
Manufacturing	1,187	8.5	7,184	9.6	9,307	8.1	684.1	29.6
Transp,Com,P.Util	719	5.2	4,345	5.8	5,819	5.1	709.3	33.9
Wholesale Trade	356	2.6	1,883	2.5	3,140	2.7	782.0	66.8
Retail Trade	3,036	21.8	17,642	23.6	26,836	23.5	783.9	52.1
Finc,Inc,Real Est	897	6.4	7,172	9.6	11,038	9.7	1130.5	53.9
Bus/Repair Srvc	469	3.4	3,822	5.1	7,189	6.3	1432.8	88.1
Personal Service	1,014	7.3	3,365	4.5	4,914	4.3	384.6	46.0
Entrtmt/Rec Srvc	398	2.9	1,650	2.2	2,945	2.6	639.9	78.5
Professional Srvc	1,701	12.2	9,761	13.1	20,063	17.6	1079.5	105.5
Public Admin.	456	3.3	2,166	2.9	3,850	3.4	744.3	77.7
Education Srvc	984	7.1	3,917	5.2	5,900	5.2	499.6	50.6
Other	2,368	17.0	1,321	1.8	113	0.1	-95.2	-91.4

Note: * SMSA. ** In 1970, this area was NOT defined as a SMSA. Figures include the major city plus adjacent urban areas to give an estimate of that metropolitan area in 1970.

Table 16 TALLAHASSEE-LEON COUNTY and WAKULLA COUNTY

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	2,887		6,742		13,122		354.5	94.6
Total Population	103,047		190,220		233,598		126.7	22.8
Total Employment	43,271	100.0	78,031	100.0	119,309	100.0	175.7	52.9
Agri,Forest,Fish	779	1.8	1,243	1.6	2,462	2.1	216.0	98.1
Construction	2,696	6.2	4,868	6.2	7,202	6.0	167.1	47.9
Manufacturing	2,182	5.0	3,708	4.8	6,073	5.1	178.3	63.8
Transp,Com,P.Util	1,980	4.6	4,229	5.4	5,399	4.5	172.7	27.7
Wholesale Trade	1,401	3.2	2,101	2.7	2,942	2.5	110.0	40.0
Retail Trade	6,742	15.6	13,141	16.8	19,627	16.5	191.1	49.4
Finc,Inc,Real Est	2,117	4.9	4,517	5.8	6,523	5.5	208.1	44.4
Bus/Repair Srvc	1,096	2.5	2,760	3.5	5,128	4.3	367.9	85.8
Personal Service	1,637	3.8	1,996	2.6	3,651	3.1	123.0	82.9
Entrtmt/Rec Srvc	292	0.7	629	0.8	1,993	1.7	582.5	216.9
Professional Srvc	4,575	10.6	8,570	11.0	18,901	15.8	313.1	120.5
Public Admin.	7,162	16.6	17,119	21.9	21,828	18.3	204.8	27.5
Education Srvc	9,024	20.9	12,057	15.5	17,328	14.5	92.0	43.7
Other	1,588	3.7	1,093	1.4	252	0.2	-84.1	-76.9

Note: * SMSA.

Table 17 TAMPA-ST.PETERSBURG-HILLSBOROUGH, PASCO, PINELLAS COUNTIES

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	3,054		7,071		14,374		370.7	103.3
Total Population	863,901		1,354,249		2,067,959		139.4	52.7
Total Employment	346,353	100.0	613,808	100.0	923,652	100.0	166.7	50.5
Agri,Forest,Fish	9,308	2.7	15,381	2.5	23,446	2.5	151.9	52.4
Construction	29,317	8.5	50,014	8.1	63,577	6.9	116.9	27.1
Manufacturing	54,396	15.7	84,475	13.8	102,469	11.1	88.4	21.3
Transp,Com,P.Util	24,565	7.1	46,374	7.6	70,743	7.7	188.0	52.5
Wholesale Trade	19,095	5.5	30,101	4.9	46,666	5.1	144.4	55.0
Retail Trade	71,194	20.6	124,271	20.2	187,962	20.3	164.0	51.3
Finc,Inc,Real Est	21,125	6.1	49,175	8.0	80,782	8.7	282.4	64.3
Bus/Repair Srvc	12,762	3.7	31,795	5.2	55,305	6.0	333.4	73.9
Personal Service	23,879	6.9	22,131	3.6	35,029	3.8	46.7	58.3
Entrtmt/Rec Srvc	4,377	1.3	10,787	1.8	17,054	1.8	289.6	58.1
Professional Srvc	36,112	10.4	74,730	12.2	144,547	15.6	300.3	93.4
Public Admin.	15,687	4.5	26,807	4.4	35,985	3.9	129.4	34.2
Education Srvc	23,194	6.7	41,820	6.8	58,015	6.3	150.1	38.7
Other	1,342	0.4	5,947	1.0	2,072	0.2	54.4	-65.2

Note: * SMSA.

Table 18 WEST PALM BEACH-BOCA RATON-PALM BEACH COUNTY

	1970*	%	1980*	%	1990*	%	% change 1970-90	% change 1980-90
PerCapita Income	3,893		8,903		19,937	5.1	412.1	123.9
Total Population	348,754		576,863		863,518	223.0	147.6	49.7
Total Employment	131,606	100.0	239,758	100.0	387,274	100.0	194.3	61.5
Agri,Forest,Fish	9,695	7.4	11,596	4.8	14,983	3.9	54.5	29.2
Construction	12,485	9.5	25,939	10.8	33,415	8.6	167.6	28.8
Manufacturing	20,675	15.7	29,927	12.5	36,991	9.6	78.9	23.6
Transp,Com,P.Util	6,452	4.9	15,301	6.4	25,735	6.6	298.9	68.2
Wholesale Trade	4,616	3.5	8,049	3.4	19,089	4.9	313.5	137.2
Retail Trade	24,442	18.6	44,817	18.7	74,327	19.2	204.1	65.8
Finc,Inc,Real Est	7,700	5.9	21,396	8.9	36,135	9.3	369.3	68.9
Bus/Repair Srvc	4,674	3.6	12,041	5.0	21,533	5.6	360.7	78.8
Personal Service	7,234	5.5	9,279	3.9	17,452	4.5	141.2	88.1
Entrtmt/Rec Srvc	2,258	1.7	4,926	2.1	10,000	2.6	342.9	103.0
Professional Srvc	12,022	9.1	26,806	11.2	57,849	14.9	381.2	115.8
Public Admin.	5,436	4.1	10,515	4.4	14,808	3.8	172.4	40.8
Education Srvc	8,956	6.8	14,854	6.2	24,785	6.4	176.7	66.9
Other	4,961	3.8	4,312	1.8	172	0.0	-96.5	-96.0

Note: * SMSA.

Appendix 4- State Budget, FY 1993, Economic Development Expenditures

Appendix 5- The Case In Favor Of A "Human Capital" Strategy

Appropriations Act FY1992-93, July 14, 1992

DEPARTMENT/DIV.	PROGRAM APPROPRIATION	DEPT/DIV APPROPRIATION
DEPT OF AGRICULTURE:		$ 157,853,055
Div: Marketing		14,422,069
Market Trade Show	$ 100,000	
Qtr Horse Racing Promo	140,000	
Saltwater Products	805,931	
Viticulture	116,000	
Fl Agri Promo Campaign	201,030	
Div: Plant Industry		18,362,943
Endangered Species	152,121	
Boll Weevil Eradic	1,120,000	
Necrotic Potato Vir	140,000	
Plant/Pest/Dis	300,000	
Caribbean Fruit Fly	100,000	
Citrus Canker Eradic	1,650,000	
DEPT OF EDUCATION:		$7,118,709,149
Div: Voc/Adult/Comm.Educ		15,888,529
Blueprint/career prep	$3,355,635	
Div: Community Colleges		542,005,000
Military-related Econ Dev	359,289	
Div: B.O.R.		60,168,959
G/A- Hi Tech R&D	1,867,279	
Tax & Budget Reform Comm	92,837	
DEPT OF LABOR & EMP SEC:		$ 379,399,089
Div: Labor, Empl, Training		90,310,774
Human Resource Dev	303,600	
DEPT OF BUSINESS REG:		$ 46,342,000
Div: Hotels & Restaur.		7,143,706
G/A-School-to-Career	100,000	
DEPT OF CITRUS:		$ 78,101,678
Paid Advertising/Promo	65,026,028	
DEPT OF COMMERCE:		$ 30,330,544
Div: Tourism		12,944,755
Sunshine State Games	300,000	
Paid Advertising	7,706,133	
Int'l Mktg Programs	180,000	
Div: Economic Dev		6,452,811
Econ Dev Transport	15,541	
Fl Int'l Trade & Promo	16,842	
Tourism Promo	79,634	
Paid Advertising	418,850	
Div: Int'l Trade & Dev		4,015,709
G/A- Int'l Trade Prog	1,000,000	
G/A- Seaport Employ. Trng	200,000	
Paid Advertising & Promo	146,464	
Ports Program	199,500	
G/A- Int'l Educ Linkages	500,000	
G/A- Educ Outreach/Int'l Vol Corp	121,606	
	150,000	
Taiwan Int'l Trade Office	500,000	
Linkage Institutes		
Int'l Trade, Ports Import/Export Reporting svc	199,500	
DEPT OF COMMUNITY AFFAIRS:		$ 68,534,264
Div: Resource Plng & Mgmt		6,778,589
Growth Mgmt, Local Gov't Aid	1,319,580	
Div: Housing & Comm. Dev		12,144,121
Economic Opportunity TF	116,146	
Comm. Dev. Block Grant	2,243,960	

"The Case In Favor Of A Human Capital Strategy"

By Howard Frank, PhD.

A growing body of literature suggests that "human capital" in the form of a skilled labor force is the most important ingredient to a jurisdiction's economic well being (Smith, 1988; Reich, 1991; Bartik, 1991; Carroll, 1992; Kennedy, 1993; Eastaugh, 1994). Cities and states whose citizens have superior problem solving and negotiating skills--skills found in a high-tech, entrepreneurial environment--will find their citizen's real wages keeping pace with or exceeding inflation. Jurisdictions with less skilled residents are likely to suffer real wage erosion in an increasingly comcompetitive global economy.

Empirical evidence presented in this concept paper from Florida's counties and major metropolitan areas bears out the utility of this reasoning. Jurisdictions with growth in "high tech" manufacturing and financial services had the highest wage gains. "Investment" in the form of education expenditure was positively related to wage gains and inversely related to welfare expenditures. Jurisdictions with sizable low-tech manufacturing and personal services labor force components experienced the lowest wage growth and highest growth in welfare expenditures. Perhaps most importantly, the analysis showed that job creation by itself does not lead to significant wage gains. The quality of job growth, as defined by sectoral analysis, is more important in predicting growth in wages.

This finding is not not new. An analysis undertaken by the Division of Economic Development in 1979 recognized the need for shifting Florida's employment growth into those areas with the greatest increase in real income (State of Florida, 1979). The recent founding of Enterprise Florida indicates that at least some policymakers in Tallahassee are aware of the need to increase Florida's high-wage jobs and further diversify the state's economic base.

Nonetheless, the need for high-wage jobs and economic diversification has still not become a major issue for public debate. One view is that this is due to the fact that in Florida, economic development and tourist development have become synonomous (Faiola, 1994a, 1994b). In most jurisdictions,

"competitiveness" connotes concern for a quality infra-structure and the skilled labor force needed to attract and retain high-paying jobs (Thurow, 1985). In Florida, "competitiveness" is often redefined in terms of attractiveness to tourists. For example, legalized casinos may very well help Florida "compete" with the 38 other states that now have some type of legalized gaming (Faiola, 1994b). That the majority of potential gaming jobs are likely to be at or near the minimum wage is never mentioned by gaming proponents. This is consistent with an attitude held by many of Florida's government and business leaders that "any jobs--even low-paying ones--are better than no jobs at all," (Carlson, 1990:1G).

Florida's budget priorities over the past decade must also be factored into the economic development equation. Recent initiatives in the protective and human services have squeezed outlays for infra-structure and education. (Terry and Frank, 1992). The number of prison beds in Florida has quadrupled since the start of the Martinez administration. In a more positive vein, the Legislature has increased funding for disadvantaged pre-schoolers. But at the same time, many large school districts have been forced to cut a period from their school day. Cuts in the State University System's funding have made admission to Florida's public universities among the most restrictive in the nation.

These priorities may reflect the wishes of a politically conservative electorate that has in many instances migrated to Florida to escape high tax burdens (Montanaro, 1989). They may also reflect the preferences of some political leaders that are unwilling or unable to recognize the import of "human capital" in the world economy. These priorities may also be symptomatic of short time horizons on the part of both elected officials and the citizenry. It is easier to justify short-term, low-risk policies (more pre-school programs, more prison beds) than it is to invest in reduced K-12 class size, greater access to universities, or significant public works projects that have great cost and long-term payoffs.

What might alter this short-term approach? Three possible factors could contribute to a change in stance toward "human capital" strategies.

***Stagnating Real Income**

Political ideology plays a small part in determining the size of the public sector. Per capita income plays a much larger role in explaining the willingness and ability to pay for public goods (Musgrave and Musgrave, 1980; Bahl, 1990). Elected officials in jurisdictions with stagnating real income will confront an increasingly disaffected electorate that wants "something-for-nothing." In Florida this will translate into an increasing resistance to pay for the costs of an increasing population. Enlightened political leadership may need to educate the electorate on the import of "human capital" development as a critical tool in meeting the economic demands of growth.

***Adverse Bond Ratings**

Florida and its political subdivisions have traditionally maintained high credit ratings. This is attributable to conservative fiscal management and solid economic growth. Nonetheless, rating agencies may begin to penalize Florida and its major metropolitan jurisdictions for their shortage of "knowledge workers" (Labich, 1993).

Current bond ratings reflect future ability to service future debt obligations. Moody's, Standard and Poors, and other financial institutions could penalize Florida and its subdivisions for having less qualified work forces than their peers.

Lower bond ratings would mean higher borrowing costs and reduced access to capital markets. This would exacerbate the state's significant infra-structure shortcomings and furtherdiminish economic competitiveness.

Competitive Federalism

Perhaps the most compelling reason for Florida to consider the "human capital" model is the fact that it is already being adopted in competing jurisdictions such as Southeast neighbors North Carolina, South Carolina, and Georgia.

Business, labor, and political leaders in these and other jurisdictions understand the importance of "value-added" high-tech research and manufacturing to their economies. Conversely, Florida's low-tax, low-wage, right-to-work environment may not represent "comparative advantage" in today's economic environment.This is particularly true if low-tech manufacturing and agriculture jobs are being "outsourced" to emerging economies in Latin America and the Caribbean.

It may be easy to dismiss "investment budgeting" as contemporary political jargon. Nonetheless, the empirical evidence presented in this concept paper plus experience in other jurisdictions indicates that the development of a skilled labor force offers significant potential payoffs in lowered crime and poverty and increased personal income. Admittedly, payoffs from this development model are likely to be long term in nature and costly to implement. Nonetheless, Florida's leaders and citizens need to consider the implications of failing to develop a workforce as skilled and adaptable as those found in other jurisdictions.

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