# Literature Review and Preliminary Analysis of the Impact of Enterprise Zones on State & Local Revenue Collections



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Prepared by:
The Legislative Office of Economic and Demographic Research

# **Table of Contents**

INTRODUCTION	2
LITERATURE REVIEW: Economic Theory and Empirical Evidence	2
Economic Theory	2
Policies Providing Incentive to Overcome the Barriers	3
Measuring Success of an Enterprise Zone Program	4
Empirical Methodologies	4
Empirical Findings	6
Findings and Conclusions from Literature Review	8
FLORIDA ENTERPRISE ZONE ANALYSIS	9
Hypothesis	9
Methodology	9
Property Value Change Analysis	13
Property Value Proportional Analysis	14
Findings and Conclusions: Impact of Enterprise Zones on Property Values	15
RECOMMENDATIONS	16
Appendix A - Bibliography	17
Appendix B – Property Tax Data	19

# Literature Review and Preliminary Analysis of the Impact of Enterprise Zones on State & Local Revenue Collections

#### INTRODUCTION

A committee of the Florida House of Representatives asked the Legislative Office of Economic and Demographic Research (EDR) to review the methodology currently used by the Revenue Estimating Conference (REC) to place fiscal impacts on enterprise zone creation and expansion. Current REC practice has been to concentrate on impacts to the General Revenue Fund (GR). The REC assumes that economic activity in an enterprise zone would have occurred within the zone or somewhere else in the State absent formation of the zone. That is, businesses moving into the zone do not increase the total economic activity within the State. The analysis begins with a literature search to determine: (1) if the REC assumptions regarding economic activity and business location occurring irrespective of zone formation are flawed; and (2) if the current methodology misses any significant areas that might impact state and/or local revenue collections. Results from the literature review guided the subsequent staff analysis.

#### LITERATURE REVIEW: ECONOMIC THEORY AND EMPIRICAL EVIDENCE

Enterprise zone (EZ) creation is one of the principal mechanisms by which state governments and the federal government try to promote economic development in designated locations (usually described as economically-distressed areas). Over the past three decades, the federal government and most state governments have adopted enterprise zone programs to stimulate economic activity in their respective geographic jurisdictions. Florida created its own enterprise zone program in the early 1980s. It was one of the first states to provide incentives to encourage economic growth and investment in distressed areas by offering tax advantages to businesses willing to make an investment in such areas within the state. Now there are 57 enterprise zones established around the state of Florida.

### **Economic Theory**

An enterprise zone program usually designates specific areas within which lower taxes are levied and/or fewer regulations are enforced by state and local governments. Principles of economics suggest that lower taxes would help overcome economic barriers to development in economically distressed areas by reducing the cost of doing business and hence attracting more investment. As business investment rises, employment and general economic activity will increase.

Ignoring some of the attendant social costs, an *economically distressed area* simply means that businesses encounter higher costs or more barriers to doing business in such a location. An enterprise zone program is a policy instrument designed to overcome high economic costs and

2

<sup>&</sup>lt;sup>1</sup> Focus is on state EZ programs in this study.

barriers to development and thereby stimulate growth in jobs and income. Specifically, an economically distressed area tends to suffer the following high costs:<sup>2</sup>

- 1. Poor transportation access: poor access to roads, rail, and other means to transport goods and service raises costs and contributes to an area's low level of economic activity;
- 2. Poor financial access to capital: bankers may be reluctant to loan money to businesses or individuals in an economically distressed area.
- 3. Poor access to labor: there are a limited number of workers, particularly those with skills that an entrepreneur would need for a successful operation in the area.
- 4. Burden of crime: high economic costs may be exacerbated by a high crime rate in the area which raises concerns regarding property damage and losses, safety in the community and personal harm.
- 5. Environmental compliance: some areas may face serious retooling to meet environmental standards, such as costly cleanup expenses.

These high economic costs will result in a lower level or a lack of business investment that in turn reduces the opportunities for zone residents to enjoy a level of employment and income that is comparable to other non-zone areas.

## **Policies Providing Incentive to Overcome the Barriers**

Economic theory assumes that high costs/barriers to development prevent economically distressed areas from increases in economic activity. If an enterprise zone program as a policy instrument provides tax incentives high enough, these barriers can be overcome. When such a policy instrument is available, a business will weigh available tax incentives against the high costs of investment within a zone. If net profits are large enough in terms of providing an equal or higher return than alternative investments a business might make, then the enterprise zone program will attract investment into a zone location.

However, "how high" the tax incentives should be in order to attract business investment and make a zone program successful is a difficult issue for policymaker to determine. As indicated above, high costs/barriers to development may exist in various forms. Ideally the incentives would be set at a level that is large enough to induce the business investment, but no larger. On one hand, the tax incentives need to be high enough so that business pursuing maximal profit will receive enough benefits to view the zone as the most profitable location in the region. On the other hand, any incentive above the level where a business maximizes its profit would simply raise the cost of an enterprise zone program and waste the taxpayer dollars with no corresponding benefits to the zone area.

3

<sup>&</sup>lt;sup>2</sup> See "Enterprise Zones: A Review of the Economic Theory and Empirical Evidence", by Don Hirasumna and Joel Michael, Research Department of Minnesota House of Representative, January 2005.

Another difficult issue regarding the adequacy of tax incentives is that, normally, criteria for zone creation uniformly apply to multiple areas, yet the high costs/barriers to development in specific zones vary and the needs of businesses differ as well.

The language of economics textbooks may describe the best enterprise zone program as one in which the tax incentives are set at a level that equates marginal social benefits generated by an enterprise zone program with the marginal social costs incurred by the very same program. However, in the process of collective policy-making, either deciding upon the value of social benefits or determining the level of social cost quantitatively is a daunting task.

## Measuring Success of an Enterprise Zone Program

The tax incentives provided by an enterprise zone program have an opportunity cost. That is, state governments forego tax dollars in exchange for economic development in zone areas at the expense of losing the use of those tax dollars elsewhere to maintain or increase public services. On the other hand, the increase in economic activity in zone areas will improve employment and raise income, thereby contributing to state tax revenue.

At least three challenges exist in measuring the policy success of an enterprise zone program. First, as the economic activity increases in a zone area, researchers need to ask whether the activity would have occurred in the zone anyway or whether it was generated by the enterprise zone program. To measure the success of the enterprise zone program, a comparison must be made of costs and benefits. This is done by looking at the net amount of expended tax dollars and calculating all the benefits of improved employment and income, including assigning a monetary value to the improvement of social conditions that are not explicitly measured by market values, such as reductions in crime rate and environmental cost. Accurately measuring economic and social conditions often pose a serious challenge in data collection for any study of enterprise zone programs.

The second challenge is whether additional businesses locating in the enterprise zone are new investments brought by the enterprise zone program to the state, or merely an investment induced to relocate to the zone rather than a place outside of the zone but still within the state.

The third challenge is whether the increased business is sustainable or not. If the benefits generated by an enterprise zone program are sustainable, then the final test is whether the benefits exceed the costs.

#### **Empirical Methodologies**

An enterprise zone program is considered a success only if the benefits outweigh the costs. Therefore, the task for empirical studies is to identify and measure the benefits and costs, particularly the increases in employment and income that result from the policy implementation.

As discussed above, it can be a serious challenge for empirical studies to accurately measure benefits as the enterprise zone effects need to be properly isolated from the zone backdrops. A real task for any empirical enterprise zone study is to identify the zone effects in comparison

with what would have happened in the zone without the zone policy. It is likely that some zones that have shown growth may have done so regardless of whether there is an enterprise zone program or not. Alternatively, in some other zones, employment and income may have been much lower in the absence of an enterprise zone program.

Therefore, it is desirable to separate the zone effects from background effects. Ideally, an empirical study would have established zones to show the zone effects (treatment group), and areas in which all the zone characteristics are identical except that no enterprise zone program is available (control group). Thus, the background effects can be demonstrated and compared to the zone effects. However, a typical empirical problem is that areas designated as zones are fundamentally different from non-zone areas and therefore it is very difficult for empirical researchers to delineate areas as control groups.<sup>3</sup>

To address methodological difficulty, empirical researchers have tried various approaches to evaluate the effectiveness of enterprise zone programs. In the first area of study, survey methods have been used. Empirical studies using survey methods tend to show the largest increases in employment and income. However, this method provides no assurance that the increases are attributable to enterprise zone programs. Typically, there are three flaws in survey methodology: (1) it cannot determine whether or not a business would invest within the zone absent enterprise zone programs; (2) surveyors have no way to isolate how much of any improvement in employment and income is attributable to the zone effects versus other economic factors in the state (lack of a control group); (3) surveyors generally rely on businesses and/or other respondents to provide survey responses that may be biased and unreliable.

The second methodology represents an attempt to isolate job growth (or other economic conditions) within a zone from job growth in a larger region (such as a state or territory). This approach can be called shift-share or proportionality analysis. The approach first assumes that growth within the zone would be proportionate to growth within the region, and then constructs measures to isolate growth attributable to the zone. However, the proportionality assumption is simplistic and may not reflect reality. Obviously, part of the growth within the zone is attributed to state or other exogenous factors, but a simple proportionate relationship is unlikely to pick up these up. In addition, this kind of analysis does not control for other factors specific to a zone, such as characteristics of workers. Therefore, even if a proportionality analysis shows a job increase in the zone, it may only point to the need for further study before a conclusion can be made regarding a net benefit arising from the enterprise zone program.

In order to overcome the problems endemic to the survey and proportionality methodologies, economists have turned to more sophisticated econometric techniques. An example of this approach is regression analysis. Regression analysis can be used to find how a set of factors would affect "target" variables such as employment or income. By estimating how much a set of background factors such as underlying economic conditions and demographic variables contribute to the economic performance in a zone, the regression analysis would allow the zone effects to be isolated from the background effects.

<sup>&</sup>lt;sup>3</sup> For practical purposes, border areas are usually used as a proxy for control groups.

## **Empirical Findings**

Using an appropriate method does not guarantee a conclusive research outcome. As the data on enterprise zone programs became more and more mature over the past two decades, economists have used regression techniques to analyze various state enterprise programs, but these studies have produced mixed estimates on the benefits of enterprise zone programs. Some have found increases in jobs and income, while others have failed to identify any significant or sustained increases in employment and income within the zones.

The causes of such mixed results are many, but the most important ones are the use of imperfect statistical modeling techniques and the effects of different data schemes used to form control groups.

Most studies mainly focus on zone effects in term of employment and income, while some others also provided analysis on property values and other effects of the zone program. Summaries of the highlights are provided below.

Papke's (1994) study of Indiana's enterprise zone program estimated the impact on unemployment. It found a reduction in unemployment (about 19%). However, data used in this study excluded unemployed persons who had exhausted their benefits, persons who lost jobs and were not covered by unemployment insurance system, and new workers who had not earned rights to unemployment insurance. Considering this exclusion, Papke's estimates tended to overstate the impact of the Indiana's enterprise zone program on reduction in unemployment.<sup>4</sup>

Boarnet and Bogart (1996) presented their econometric evidence regarding the effectiveness of the New Jersey enterprise zone program.<sup>5</sup> They reported no positive impacts on employment and on property values. Their conclusions were that the enterprise zone program in New Jersey was ineffective in achieving the goal of improving the economy in zones and their surrounding areas. However, the authors hinted that enterprise zone incentives in New Jersey might have increased investment without increasing employment or property value, but the data used in this study would not allow such investment effects to be identified.

Moore (2003) used data from the California enterprise zone program and found an increase in the number of establishments in industries of finance, insurance, real-estate, wholesale and retail trade establishments, but a decrease in the number of manufacturing establishments. However, this finding was not statistically significant.<sup>6</sup>

Sridhar (2000) did a benefit-cost analysis on Ohio's enterprise zone program by focusing research efforts on the employment effects of the tax incentives. He tried to identify the effects on job creation by comparing the unemployment rate within the enterprise zone to the unemployment rate in areas without tax incentives. A temporary decrease, ranging up to a 2.9%

<sup>&</sup>lt;sup>4</sup> Papke, Leslie. 1994. Tax policy and urban development: Evidence from the Indiana enterprise zone program. *Journal of Public Economics*. 54: 37-49.

<sup>&</sup>lt;sup>5</sup> Boarnet, Marlon and William T. Bogart. 1996. Enterprise zones and employment: Evidence from New Jersey. Journal of Urban Economics. 40 (2): 198-215.

<sup>&</sup>lt;sup>6</sup> Moore, William S. 2003. Enterprise zones, Firms attraction and retention: A Study of the California Enterprise Zone Program. *Public Finance and management*, no. 3: 376-392.

<sup>&</sup>lt;sup>7</sup> Sridhar, Kala S. 2000. Tax costs and employment benefits. The Review of Regional Studies. 30(3): 275-298.

point change in unemployment rates, was found over the course of one to five years in the enterprise zone.

O'Keefe (2004) used census tract data and also demonstrated temporary gains in employment, although such gains were at least partially lost sometime between seven and 13 years after the program began.<sup>8</sup> However, this study found no positive effects on income.

Bondonia and Engberg (2000) looked at data from enterprise zone programs in California, Kentucky, Pennsylvania, New York, and Virginia, but failed to find significant impacts on employment, income, and property value.<sup>9</sup>

Bondonia and Greenbaum (2007) did a comprehensive study using plant level data from enterprise zone programs in eleven states, in an effort to sort out growth outcomes into gross flows accounting for new, existing, and vanishing businesses in the zone areas. <sup>10</sup> This study focused on enterprise zone effects upon employment, sales, capital expenditures, and payroll per employee outcomes, and found only modest (statistically insignificant) impacts from enterprise zone incentives.

Imrohoroglu and Swenson (2006) used data collected over the past twenty years from enterprise zones across the nation and examined the enterprise zone impacts by delineating border areas as control groups. This study found positive impacts of enterprise zone programs along economic dimensions of employment, income and poverty level.<sup>11</sup>

Neumark and Kolko (2008) examined establishment-level data from the California enterprise zone program and provided evidence that the enterprise zone program in California failed to increase employment.<sup>12</sup> This study also found no shift of employment toward lower-wage workers or the manufacturing sector. Since these areas had been specifically targeted by the enterprise zone incentives, they concluded that the California enterprise zone program is ineffective in achieving its primary goals.

Data challenges obviously exist in the empirical studies, and they explain at least in part the inconsistency of the study results regarding the effectiveness of enterprise zone programs. The first challenge is how to identify the targeted areas so that well-defined data can be collected. The second is how to select a comparison or control group so that: (1) a meaningful comparison can be made; and (2) the effects of enterprise zone programs can be distinguished from other state factors.

<sup>&</sup>lt;sup>8</sup> O'Keefe, Suzanne. 2004. Job Creation in California's Enterprise Zones: A Comparison Using a Propensity Score Matching Mode." *Journal of Urban Economics*, Vol. 55, No. 1, pp. 131-150.

<sup>&</sup>lt;sup>9</sup> Bondonio, Danniele, and John Engberg. 2000. Enterprise Zones and Local Employment: Evidence from the State's Programs. Regional Science & Urban Economics, Vol. 30, No. 5, pp. 519-549.

<sup>&</sup>lt;sup>10</sup> Bondonio, Danniele, and Robert T. Greenbaum. 2007. Do Local Tax Incentives Affect Economic Growth? What Mean Impacts Miss in the analysis of Enterprise Zone Policies. Regional Science & Urban Economics. Vol. 37, No. 1, pp 121-136.

<sup>&</sup>lt;sup>11</sup> Imrohoroglu A. and C. Swenson. 2006. Do Enterprise Zones Work? Mimeo, Marshall School of Business, University of Southern California.

<sup>&</sup>lt;sup>12</sup> Neumark, D. and J. Kolko (2008). Do Enterprise Zones Create Jobs? Evidence from California's Enterprise Zone Program. NBER Working Paper 14530.

Different methodologies chosen by various researchers may also contribute to the difference in research outcomes. In addition, available data may not allow sophisticated methods such as regression analysis. As a result, studies may have to be compromised by using survey or proportionality approaches instead of full-fledged regression analysis.

## Findings and Conclusions from Literature Review

To sum up, the literature review did not provide any conclusive evidence that the current REC assumption about economic activity / business location within a zone is flawed. That is, there does not appear to be any inherent flaw in the current REC method of calculating GR impacts. However, the review did reveal that possible impacts to property taxes have not been accounted for in the REC methodology. Property tax revenue primarily impacts local governments and has a knock-on effect on budgeted revenues through the Florida Education Foundation Program which funds public schools. Based on these findings, EDR staff conducted an analysis to probe possible property tax impacts from enterprise zone formation.

#### FLORIDA ENTERPRISE ZONE ANALYSIS

Although the enterprise zone literature search confirmed that it is extremely difficult to measure the effectiveness of enterprise zones and that the methodology and form of analysis used may often determine the outcome, EDR staff performed a high-level analysis of selected Florida Enterprise Zones in an attempt to find evidence that the impact of property taxes should be included in fiscal impact analyses. In essence, the research question is whether enterprise zones are effective as mechanisms to eliminate or reduce slum and blight in these areas. We measure effectiveness by changes in property tax values.

## **Hypothesis**

To accomplish this analysis, EDR assumed that there is an inverse relationship between property values (just valuation) and the degree of slum and blight present in enterprise zones. As slum and blight conditions increase, property values decrease and vice-versa. Therefore, comparing property values for a period prior to Enterprise Zone designation and for a period following zone designation may demonstrate a clear change in the degree of slum and blight.

Further, the longitudinal comparison of property values of parcels in enterprise zones, characterized by higher levels of slum and blight, to areas surrounding enterprise zones, characterized by lower levels of slum and blight, might provide an indication of a lessening of slum and blight conditions as the zone matures.

Applying these assumptions and this methodology to select enterprise zones, it would be expected that property values in enterprise zones would generally be declining in the period prior to enterprise zone designation or, at the very least, that values in the zone would be increasing less than the areas surrounding the zone prior to designation. At some point upon zone designation or subsequently, this trend would slow, stop or reverse entirely, if the enterprise zone mechanism is effective.

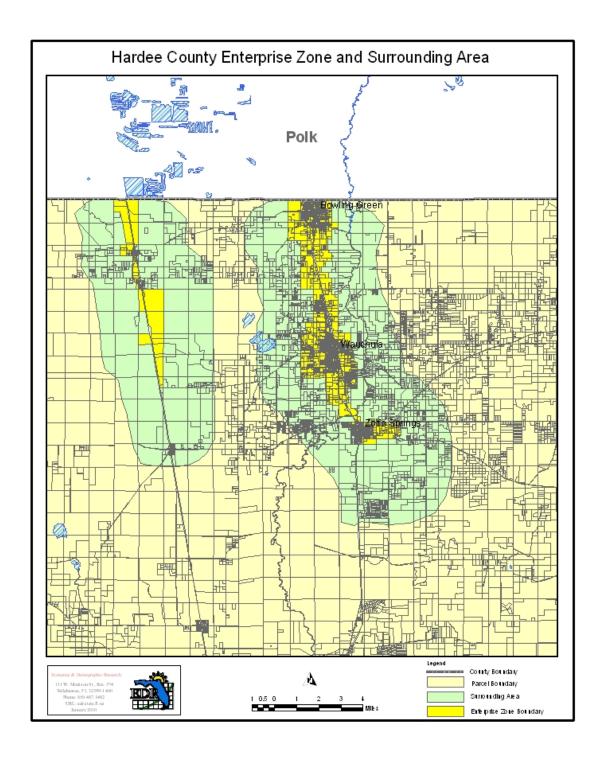
## Methodology

Based on this, EDR set out to analyze three enterprise zones, one rural and two non-rural, existing in counties with different population sizes. The analysis examined property values for a three-year period prior to enterprise zone designation, the year in which enterprise zone designation occurred and the two years following the year in which enterprise zone designation occurred.

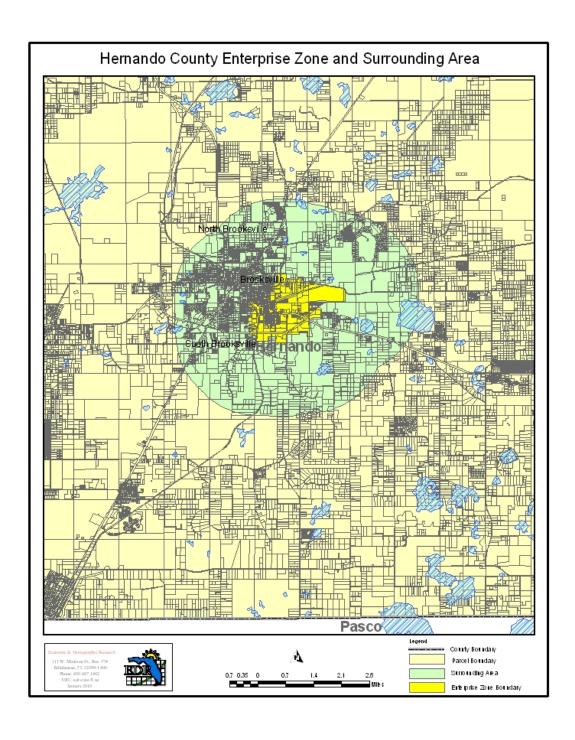
Due to time and data constraints in performing this analysis, zone selection was an issue. Time was not available for extensive collection of new data; therefore, it was necessary to use data readily accessible at the state or local level. This limited both the look-back period and the vintage of the zones that could be considered. Geographic information system and property tax database electronic files were only available for enterprise zones designated in 2002 and subsequently.

For analysis purposes, it was desirable to identify enterprise zones that were reasonably compact and contiguous. It was also important that the zones were not zones that had been previously designated as zones or were part of previously designated zones. The enterprise zones in Hardee (rural), Hernando (non-rural) and Sarasota (non-rural) were identified for analysis purposes. Each of these zones was designated on January 1, 2002.

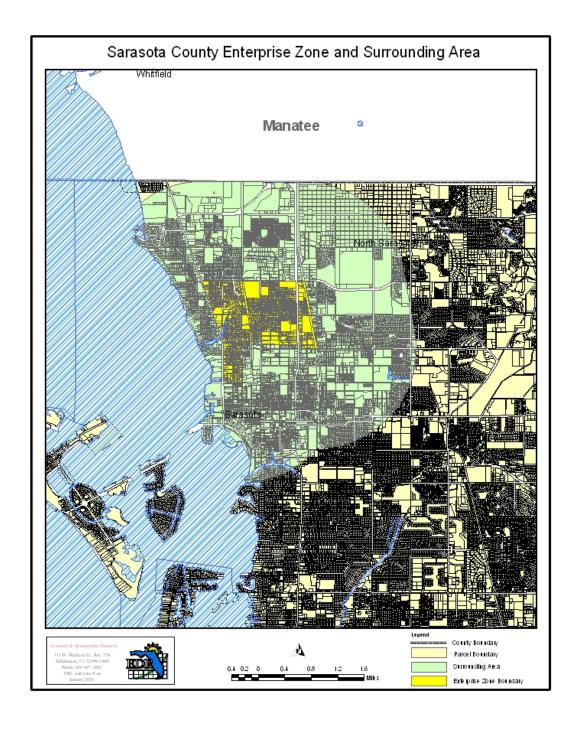
The following graphic depicts Hardee County, the Hardee County Enterprise Zone and a surrounding area of approximately the diameter of the enterprise zone:



The following graphic depicts Hernando County, the Hernando County Enterprise Zone and a surrounding area of approximately the diameter of the enterprise zone:



The following graphic depicts Sarasota County, the Sarasota County Enterprise Zone and a surrounding area of approximately the diameter of the enterprise zone:



The following tables provide two comparisons relating to the Hardee, Hernando, and Sarasota County enterprise zones (EZs) and surrounding areas (SAs). The first compares the annual percent change in just value in the EZs and SAs from 1999 to 2004. The second looks at the proportion of just value between the EZ and SA.

### **Property Value Change Analysis**

The change analysis is an effort to see whether EZ just value increases at a greater rate or decreases at a lesser rate subsequent to zone designation, as well as how EZ just value performs compared to the SA.

The Hardee County (Rural) EZ's growth in just value exceeds that of the surrounding area in the year before, the year of and the first year after EZ designation. In 2004, the second year following zone designation, the SA just value grows at twice the rate of the EZ. These results fail to show that the enterprise zone had any positive impact on property values. The Hardee enterprise zone change analysis data is as follows:

#### Hardee (Rural)

	Enterprise Zone (	(EZ) % Prior	Surrounding Area (SA)		
Local FY	JUST VALUE	Yr.	JUST VALUE	% Prior Yr.	
1999	355,781,625		410,156,975		
2000	366,738,848	3.08%	414,340,430	1.02%	
2001	373,363,110	1.81%	411,971,290	-0.57%	
2002	380,809,962	1.99%	397,374,181	-3.54%	
2003	389,810,956	2.36%	401,503,458	1.04%	
2004	407,897,221	4.64%	439,385,186	9.43%	

In Hernando's case, the change in just value in the EZ and SA were very similar, except in 2002 (the year the zone was designated) where just values declined in both, although the decline in the EZ occurred at twice the rate of the SA. However, these results do not appear to demonstrate that the enterprise zone had a positive impact on property values. The Hernando enterprise zone change analysis data is as follows:

#### Hernando (Urban)

	Enterprise Zone (EZ)		Surrounding Area (SA	١)
	JUST	% Prior		% Prior
Local FY	VALUE	Yr.	JUST VALUE	Yr.
1999	42,862,470		381,286,601	
2000	45,208,976	5.47%	396,497,481	3.99%
2001	51,381,246	13.65%	448,268,514	13.06%
2002	44,649,801	-13.10%	419,296,402	-6.46%
2003	47,644,928	6.71%	447,915,069	6.83%
2004	49,324,316	3.52%	468,000,010	4.48%

In Sarasota, just value in the EZ increased at a greater rate than the SA from 1999 to 2000, at less than half the rate of the SA from 2000 to 2001, at a little more than half the rate from 2001 to 2002, at a higher rate than the SA from 2002 to 2003 and at a little less than the SA from 2003 to 2004. However, these results do not appear to demonstrate that the enterprise zone had any conclusively positive impact on property values using this method of analysis. The Sarasota enterprise zone change analysis data is as follows:

#### Sarasota (Urban)

	Enterprise Zone (	EZ)	Surrounding Area (SA)		
		% Prior		% Prior	
Local FY	JUST VALUE	Yr.	JUST VALUE	Yr.	
1999	162,181,982		1,710,821,460		
2000	179,068,303	10.41%	1,827,376,672	6.81%	
2001	187,805,200	4.88%	2,028,730,446	11.02%	
2002	202,385,400	7.76%	2,312,703,897	14.00%	
2003	247,355,100	22.22%	2,733,627,277	18.20%	
2004	280,979,800	13.59%	3,147,898,317	15.15%	

## **Property Value Proportional Analysis**

The proportional analysis is intended to determine whether EZ just value is decreasing as a percent of total just value for the combined EZ and SA prior to zone designation and then increasing as a percent after zone designation.

In Hardee (a rural zone), EZ just value as a percent of total value increased in 2002, the year the zone was designated. This was a faster pace than the increases by lesser amounts from 1999 to 2000 and 2000 to 2001, prior to designation. Therefore, the growth in just value compared to the SA was already increasing at an increasing rate prior to zone designation. Growth continued at .32% from 2002 to 2003 and then fell 1.12% in 2004. These results do not appear to demonstrate that this enterprise zone had any positive effect on property values. The Hardee enterprise zone proportional analysis data is as follows:

### Hardee (Rural)

	Enterprise Zone (E	Z)	Surrounding Area	(SA)	TOTAL EZ & SA	
Local		% EZ &		% EZ &		% EZ &
FY	JUST VALUE	SA	JUST VALUE	SA	JUST VALUE	SA
1999	355,781,625	46.45%	410,156,975	53.55%	765,938,600	100.00%
2000	366,738,848	46.95%	414,340,430	53.05%	781,079,278	100.00%
2001	373,363,110	47.54%	411,971,290	52.46%	785,334,400	100.00%
2002	380,809,962	48.94%	397,374,181	51.06%	778,184,143	100.00%
2003	389,810,956	49.26%	401,503,458	50.74%	791,314,414	100.00%
2004	407,897,221	48.14%	439,385,186	51.86%	847,282,407	100.00%

In Hernando (an urban zone), EZ just value as a percentage of total value increased in the periods 1999 to 2000 and 2000 to 2001, prior to zone designation. In 2002, the year the zone was designated, just value actually decreased. From 2002 to 2003 and 2003 to 2004, the EZ just value percentage continued to decline by .01% and .08% respectively. These results do not demonstrate that the enterprise zone had any positive impact on property values. The Hernando enterprise zone proportional analysis data is as follows:

#### Hernando (Urban)

	Enterprise Zone (	EZ)	Surrounding Area (	SA)	TOTAL EZ & SA	
Local	JUST	% EZ &		% EZ &		% EZ &
FY	VALUE	SA	JUST VALUE	SA	JUST VALUE	SA
1999	42,862,470	10.11%	381,286,601	89.89%	424,149,071	100.00%
2000	45,208,976	10.24%	396,497,481	89.76%	441,706,457	100.00%
2001	51,381,246	10.28%	448,268,514	89.72%	499,649,760	100.00%
2002	44,649,801	9.62%	419,296,402	90.38%	463,946,203	100.00%
2003	47,644,928	9.61%	447,915,069	90.39%	495,559,997	100.00%
2004	49,324,316	9.53%	468,000,010	90.47%	517,324,326	100.00%

In Sarasota (an urban zone and the most populous of the three), EZ just value as a percentage of total value increased from 1999 to 2000 and then decreased from 2000 to 2001, the years prior to zone designation. In 2002, the year the zone was designated, EZ just value percentage declined by .42%. From 2002 to 2003 and 2003 to 2004, the EZ just value percentage rose by 0.25% and then declined by 0.11% respectively. These results do not appear to demonstrate that the enterprise zone had any positive impact on property values. The Sarasota enterprise zone proportional analysis data is as follows:

#### Sarasota (Urban)

	Enterprise Zone (	EZ)	Surrounding Area (	SA)	TOTAL EZ & SA	
Local		% EZ &		% EZ &		% EZ &
FY	JUST VALUE	SA	JUST VALUE	SA	JUST VALUE	SA
1999	162,181,982	8.66%	1,710,821,460	91.34%	1,873,003,442	100.00%
2000	179,068,303	8.92%	1,827,376,672	91.08%	2,006,444,975	100.00%
2001	187,805,200	8.47%	2,028,730,446	91.53%	2,216,535,646	100.00%
2002	202,385,400	8.05%	2,312,703,897	91.95%	2,515,089,297	100.00%
2003	247,355,100	8.30%	2,733,627,277	91.70%	2,980,982,377	100.00%
2004	280,979,800	8.19%	3,147,898,317	91.81%	3,428,878,117	100.00%

#### Findings and Conclusions: Impact of Enterprise Zones on Property Values

According to EDR's hypothesis, in order to conclude that enterprise zones were successful in reducing or eliminating conditions of slum and blight as measured by property values, it would be expected that property values in enterprise zones would generally be declining in the period prior to enterprise zone designation or that property values would be increasing at a lesser rate than the surrounding area. At some point upon zone designation or subsequently, this trend

would slow, stop or reverse entirely, if the enterprise zone mechanism is effective. Ideally, this pattern would be clearly identifiable in each of the enterprise zones analyzed. The analysis of property values in Hardee, Hernando, and Sarasota enterprise zones from 1999 to 2004 does not support a conclusion that enterprise zones have a consistent, direct and quantifiable impact on property values. However, there is some reason to believe that these zones were not the worst areas in the counties to begin with—at least in terms of property values. This would skew the results. Moreover, property values may not be the best short-term measure. Consistent with the literature review, it is possible that more recognizable impacts may emerge over time.

While this analysis does not clearly demonstrate that enterprise zones positively impact property values in Florida, it does not provide proof that enterprise zones are ineffective. Even so, without more concrete evidence, there is no reason to include property tax impacts within fiscal analyses at this time.

#### RECOMMENDATIONS

Based upon this analysis, EDR staff recommends:

- 1. Property tax (ad valorem) impacts should not be included in enterprise zone impact analysis in the current year.
- 2. Analysis should continue for the next five years to determine whether any longer term impacts arise using the same three enterprise zones. If new enterprise zones are created, they should be added to the analysis. Going forward, data that does not include any portion of the housing bubble (and its subsequent decline) may provide more reliable estimates of impacts.
- 3. A more in-depth analysis of the General Revenue impact methodology should be conducted. Such an analysis could investigate fine-tuning the current approach. For example, the unit of analysis is currently a per-acre impact; perhaps other units of analysis are feasible. Enterprise zones could also be compared on several additional dimensions, in addition to the current urban-rural analysis. Some dimensions might be compactness, measurements of varying levels of economic distress and combinations of these and other dimensions.

## Appendix A

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Appendix B

# **Property Tax Data**

Hardee County					
	EZ		SA		
	Sum of JUST	Count of	Sum of JUST	Count of	
Year	VALUE	ID	VALUE	ID	
1999	355,781,625	5,404	410,156,975	2,688	
2000	366,738,848	5,411	414,340,430	2,706	
2001	373,363,110	5,432	411,971,290	2,735	
2002	380,809,962	5,465	397,374,181	2,769	
2003	389,810,956	5,485	401,503,458	2,802	
2004	407,897,221	5,512	439,385,186	2,815	
2005	414,678,094	5,495	459,238,219	2,803	

Hernando County						
	EZ		SA			
	Sum of JUST	Count of	Sum of JUST	Count of		
Year	VALUE	ID	VALUE	ID		
1999	42,862,470	893	381,286,601	5,064		
2000	45,208,976	906	396,497,481	5,179		
2001	51,381,246	909	448,268,514	5,245		
2002	44,649,801	839	419,296,402	4,869		
2003	47,644,928	813	447,915,069	4,828		
2004	49,324,316	799	468,000,010	4,760		
2005	56,598,376	799	534,110,841	4,729		

Sarasota County						
	EZ		SA			
	Sum of JUST	Count of	Sum of JUST	Count of		
Year	VALUE	ID	VALUE	ID		
1999	162,181,982	2,452	1,710,821,460	9,315		
2000	179,068,303	2,463	1,827,376,672	9,366		
2001	187,805,200	2,468	2,028,730,446	9,393		
2002	202,385,400	2,468	2,312,703,897	9,399		
2003	247,355,100	2,468	2,733,627,277	9,401		
2004	280,979,800	2,459	3,147,898,317	9,352		
2005	333,709,560	2,439	3,778,216,950	9,287		