Return-on-Investment for Select Economic Development Incentive Programs

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Presented by:

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Statutory Requirement...

- Legislation passed during the 2013 Session directs the Office of Economic and Demographic Research (EDR) and the Office of Program Policy Analysis and Government Accountability (OPPAGA) to analyze and evaluate 18 state economic development incentive programs on a recurring three-year schedule.

- The strict three-year window captures a mix of projects that began prior to the period and continue throughout or that began during the period. Ideally, the snapshot provides a fair representation of ongoing conditions over time; however, future reviews will provide a better indication of the ROI's stability. Measurements for programs with a significant number of projects are likely to be more reliable.

- The first review period covers Fiscal Years 2009-10, 2010-11, and 2011-12. The following programs are under review:

    - Capital Investment Tax Credit - CITC;
    - Qualified Target Industry Tax Refund - QTI;
    - Brownfield Redevelopment Bonus Tax Refund - BFRD;
    - High-Impact Sector Performance Grant - HIPI;
    - Quick Action Closing Fund - QACF;
    - Innovation Incentive Program - IIP; and
    - Enterprise Zone Program - EZ.

EDR's Charge...

- EDR is required to evaluate the economic benefits of each program, using project data from the three-year period, and to provide an explanation of the model used in its analysis and the model's key assumptions.

- Economic Benefit is defined as "the direct, indirect, and induced gains in **state revenues** as a percentage of the state's investment" – which includes "state grants, tax exemptions, tax refunds, tax credits, and other state incentives."

- In the report, the term Return-on-Investment (ROI) is synonymous with economic benefit, and is used in lieu of the statutory term. This measure does not address issues of overall effectiveness or societal benefit; instead, it focuses on tangible financial gains or losses to state revenues, and is ultimately conditioned by the state's tax policy.

- EDR's evaluation also requires identification of jobs created, the increase or decrease in personal income, and the impact on state Gross Domestic Product (GDP) for each program.

Return-on-Investment...

- As used by EDR for this analysis, the returns can be categorized as follows:

    - **Greater Than One (>1.0)…**the program more than breaks even; the return to the state produces more revenues than the total cost of the incentives.
    - **Equal To One (=1.0)…**the program breaks even; the return to the state in additional revenues equals the total cost of the incentives.
    - **Less Than One, But Positive (+, <1)…**the program does not break even; however, the state generates enough revenues to recover a portion of its cost for the incentives.
    - **Less Than Zero (-, <0)…**the program does not recover any portion of the incentive cost, and state revenues are less than they would have been in the absence of the program because taxable activity is shifted to non-taxable activity.

- The numerical ROI can be interpreted as return in tax revenues for each dollar spent by the state. For example, a ROI of 2.5 would mean that $2.50 in tax revenues is received back from each dollar spent by the state.

Results...

The seven programs are evaluated over 14 scenarios, which include projects that receive awards from only one program (single incentive) and projects that receive awards from multiple programs (bundled). Culled scenarios have had projects that are clearly Florida market or resource dependent removed.

For comparative purposes, the evaluation also develops two hybrid scenarios that combine all projects in the review (excluding the Enterprise Zone program) for a total of 16 scenarios. These hybrid measures serve as a benchmark for the individual programs.

Return-on-Investment for the 3 year period

	Scenario	ROI
Greater Than One (>1.0)		
	QTI Bundled	6.9
	QTI Single	6.8
	QTI Single (Culled)	6.4
	QACF Single	6.1
	BFRD Single	4.0
	CITC Bundled	2.3
	CITC Single	1.9
Approximately Equal To One (=1.0)		
	Hybrid 1*	1.5
	Hybrid 2**	1.1
	QACF Bundled	1.1
	BFRD Single (Culled)	1.1
Less Than One, But Positive (+, <1)		
	HIPI Bundled	0.7
	IIP Bundled	0.2
	IIP Single	0.1
Less Than Zero (-, <0)		
	EZ 1***	-0.04
	EZ 2****	-0.05

** Hybrid 1 is Weighted Average of Bundled Projects*

*** Hybrid 2 is Weighted Average of ALL Projects*

**** EZ 1 is No Property Appreciation*

***** EZ 2 is With Property Appreciation*

Greater Than One...

Scenario	ROI
QTI Bundled	6.9
QTI Single	6.8
QTI Single (Culled)	6.4
QACF Single	6.1
BFRD Single	4.0
CITC Bundled	2.3
CITC Single	1.9

Other than the special case of Brownfield Single, the programs in the Greater Than One category possess one or more elements that lead to their high ROIs:

- Capital Investment Requirements
- High Wage Requirements
- Large Industry Multipliers
- Non-Economic Forces Affecting Costs and Benefits

Program Emphasis...

- **Capital Investment Requirements –** Capital investment usually takes the form of construction. The benefits of construction are typically localized. In this regard, the work is labor intensive and the wages are spent locally which drives up indirect and induced effects. In addition, many of the materials used in construction projects are purchased locally and are generally taxable. Relative to other industries, there are few leakages to the rest of the world.

- **High Wage Requirements –** The top four scenarios share high wage requirements. In the Statewide Model high wages are linked to higher output and productivity which results in more household spending. This program feature is best exemplified in the QTI program scenarios and the QACF single-incentive project scenario. While the IIP and HIPI programs also have this requirement, the positive aspect of this feature is offset by other factors that adversely affect program ROI.

Industry Effects...

- **Large Industry Multipliers –** Industries with high multipliers typically have strong backward linkages to local suppliers. They also have high employment multipliers. Both of these factors result in greater indirect and induced benefits. Relative to other industries, there are few leakages to the rest of the world. Examples are found by looking at multipliers in manufacturing industries.

State of Florida Aggregate Type II Multipliers (2002/2007)

Industry	Multiplier Direct Effect Earnings (dollars)	Multiplier Direct Effect Employment (jobs)
Crop and Animal Production	2.2417	1.6801
Forestry, fishing, and related activities	2.0920	1.6618
Mining, except oil and gas	2.0099	3.1418
Utilities	1.7595	2.8774
Construction	1.8981	1.9967
Fabricated Metal Product Manufacturing	2.0443	2.1938
Computer and Electronic Part Manufacturing	2.3997	3.5272
Miscellaneous Manufacturing	1.8788	2.6587
Chemical Manufacturing	2.7699	4.1944
Wholesale Trade	1.8347	2.3644
Retail Trade	1.7763	1.5674
Air Transportation	1.9280	2.5293
Warehousing and Storage	1.7632	1.7905
Internet and Other Information Services	1.9398	2.5371
Credit intermediation and related services	2.0484	2.5995
Real Estate	2.8866	1.8975
Professional, Scientific, and Technical Services	1.6933	2.1082
Management of Companies and Enterprises	1.8285	2.9350
Administrative and Support Services	1.7091	1.4624
Educational Services	1.7702	1.6030
Hospitals	1.7646	2.0150
Performing Arts, sports, museums, and parks	1.9371	1.7188
Accommodation	1.9141	1.7708
Other Services	2.0108	1.7248

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Input-Output Modeling System (RIMS II)

Note: Current Target Industries are highlighted in yellow.

ROI Formula...

- **Non-Economic Forces Affecting Costs and Benefits –** In some scenarios, awards are not fully used – and in others, jobs, wages, and capital investments are being created in excess of the state's contracted levels. These circumstances artificially increase the ROI for the programs by reducing the state's cost or increasing the state's benefit. However, if businesses were able to receive the incentives' full face value or limited job creation to the minimum jobs required, the ROIs would be lower, and the difference is a risk to the state.

HIGHER ROIs

State Investment (Cost)	State Benefit (Revenues)
***Awards Not Being Fully Used:**	***Higher Than Contracted:**
--- *Insufficient Tax Liability*	--- *Jobs (Personal Income)*
--- *Delayed Payments/Partial Failure*	--- *Wages (Personal Income)*
***Low Cost Awards**	--- *Capital Investments (Direct)*

CITC...*For the projects in the Single Incentive Projects Scenario, there were potentially $176.7 million in credits that could have been taken. The state benefits from the $154 million in potential credits not taken. Had these additional available credits been fully taken, it would have reduced the ROI to 0.25 from the reported 1.9. (For the bundled projects, the ROI would have dropped to 0.7 from 2.3.)*

QTI...*Businesses have created more than three times as many jobs as expected which is a function of both projects that have hired faster than expected and projects that have hired more jobs in total. Future ROIs would be lower if businesses created only the contractually required number of jobs.*

Approximately Equal To One...

Scenario	ROI
Hybrid 1*	1.5
Hybrid 2**	1.1
QACF Bundled	1.1
BFRD Single (Culled)	1.1

The scenarios in the Approximately Equal To One category are essentially breaking even, with the additional state revenues covering the cost of the program.

- The Hybrid 1 and 2 scenarios were developed to provide benchmarks.
  - Hybrid 1 combines all bundled projects, but treats them as one program rather than distinguishing between specific programs.
  - Hybrid 2 is similar to Hybrid 1, but includes all single-program projects in addition to the bundled projects. This measure looks at the universe of projects.

- The ROI for QACF Bundled is negatively affected by the relative size of the Closing Fund award to the amount awarded from other economic development incentive programs. On average the Closing Fund award is approximately 46 percent of the total economic development incentive awarded to the business, yet it has the strongest overall requirements of its bundled counterparts.

- In Brownfield Single (Culled), six of the nine projects were removed because of Florida market or resource dependency; however, the state's payments remained. The "culled" scenario provides the best representation of the program's ROI.

Less Than One, But Positive...

Scenario	ROI
HIPI Bundled	0.7
IIP Bundled	0.2
IIP Single	0.1

The scenarios in the Less Than One, But Positive category are not recovering the cost of the state's investment in them.

- The low ROI for HIPI Bundled is attributable to the industry composition of the projects. Unlike other industries such as manufacturing, the research and development sector does not generate significant taxable output. Without the program's capital investment requirement, the ROI of the program would be even lower.

- The ROIs for IIP Bundled and Single are negatively affected for several reasons: (1) the awards are very large given the output; (2) half of the capital investment associated with these projects occurred prior to the time period under review, leaving only residual capital benefits; (3) the research and development industry has smaller multiplier effects than some other industries; and (4) the program is designed to generate a break-even ROI after 20 years and EDR's analysis covers only three years in the early stages of the program.

Less Than Zero (Negative)...

Scenario	ROI
EZ 1	-0.04
EZ 2	-0.05

The scenarios in the Less Than Zero or Negative category are not recovering any part of the cost of the state's investment, and actually reduce state revenues below what they would have been in the program's absence.

- **EZ 1** assumes there is no positive economic gain to the state and no detectable property appreciation within the zones relative to surrounding areas. No new output or investment was attributed to EZ businesses in the model. Only the state payments to the EZ businesses were included, which totaled approximately $115 million in the review period.

- **EZ 2** assumes there is some positive economic gain associated with property appreciation in the Enterprise Zones. The approach uses increases in local property tax revenue attributable to EZs to measure an incidental benefit to the state. This possibility was developed by using the results contained in the 2013 EDR study entitled "Florida's Enterprise Zones: Impact on Property Taxes" which found that the differential growth rate between parcels located within the Enterprise Zone and parcels in a 2-mile buffer outside the Enterprise Zone narrowed to the zones' favor after creation—given sufficient time.

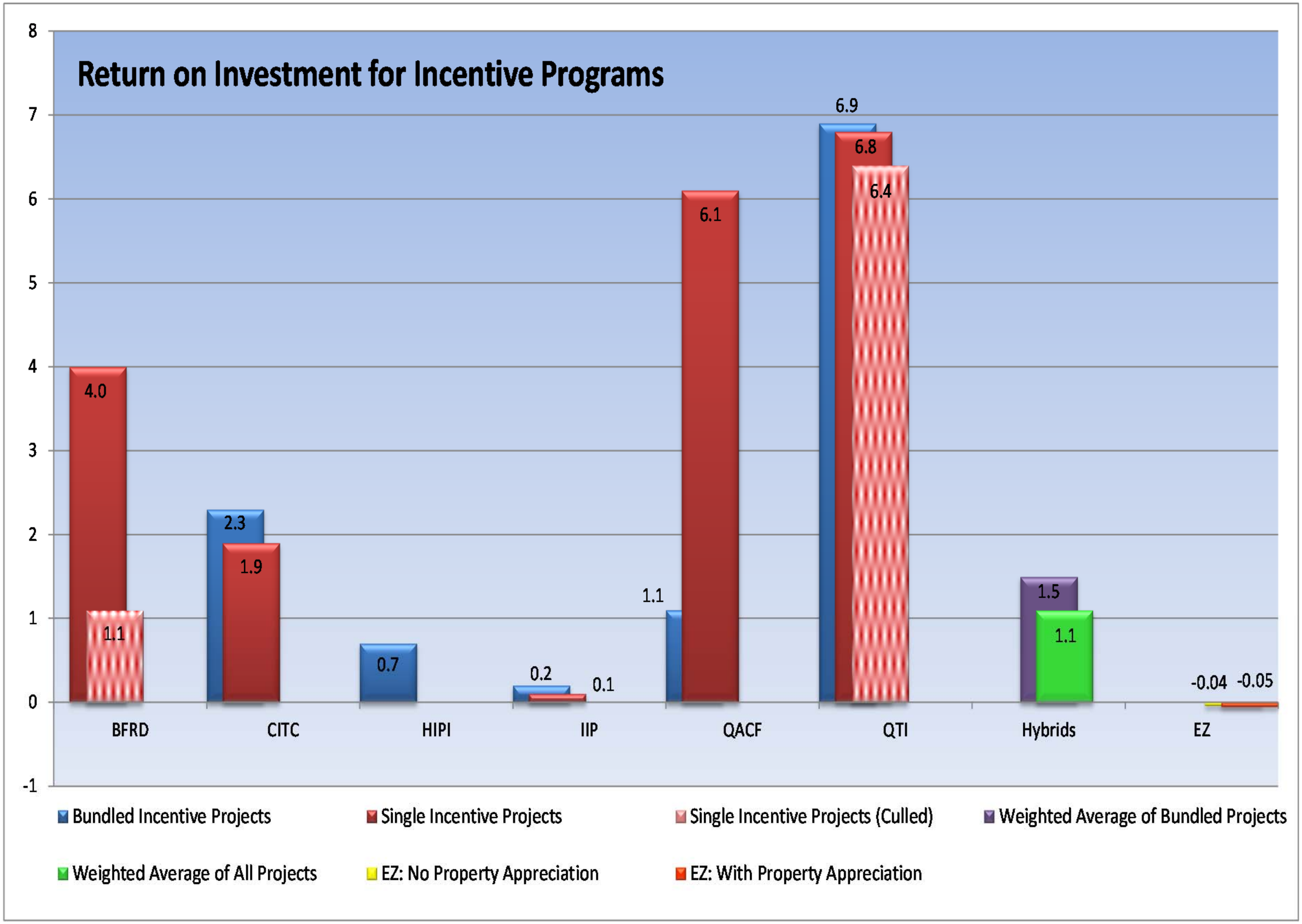
Enterprise Zones...

- EDR's research found that the state Enterprise Zone program produces a negative ROI. The analysis does not evaluate the impact of EZ incentives on the local economy which clearly would have had some benefit from the additional local government spending in the second scenario (GDP, Output, Consumption by Households and Government, and Total Employment turn positive in the second scenario).

- From the state's perspective, previously taxable activity has been converted to non-taxable activity. Further, to the extent the state funds supporting the incentive could have been more productively spent elsewhere and the business activity would have occurred anyway, the state actually foregoes revenues beyond the direct cost of the incentives.

- EDR's assessment regarding the Enterprise Zone program is consistent with recent evaluations of similar programs in other states and the United Kingdom.

Comparison Across Programs



ROI Conclusions...

- Ultimately, a program with a ROI above 1 has sufficient justification from a financial perspective to continue the state's investment in the program.

- In this regard, decision-makers have several options as to the appropriate evaluation standard to use: breaks even; equals or improves upon the result of Hybrid Scenario #1 (all bundled projects; ROI of 1.5); or, equals or improves upon the result of Hybrid Scenario #2 (all projects; ROI of 1.1).

- Only policy considerations such as societal benefit or another economic measure would justify the continuance of programs that fail to break even or go negative.

Other Economic Measures...

Scenarios Ranked by ROI and Economic Indicators*

Scenario	ROI	Personal Income	GDP	Overall Employment
	for 3 year period	*average per year per investment $*		
QTI Bundled	**1**	3	3	2
QTI Single	2	**1**	**1**	4
QTI Single (Culled)	3	2	2	5
QACF Single	4	4	4	3
BFRD Single	5	5	5	**1**
CITC Bundled	6	8	7	8
CITC Single	7	9	9	7
QACF Bundled	8	6	6	6
BFRD Single (Culled)	9	7	8	9
HIPI Bundled	10	10	10	10
IIP Bundled	11	11	11	11
IIP Single	12	12	12	12
EZ 1	13	13	14	14
EZ 2	14	14	13	13

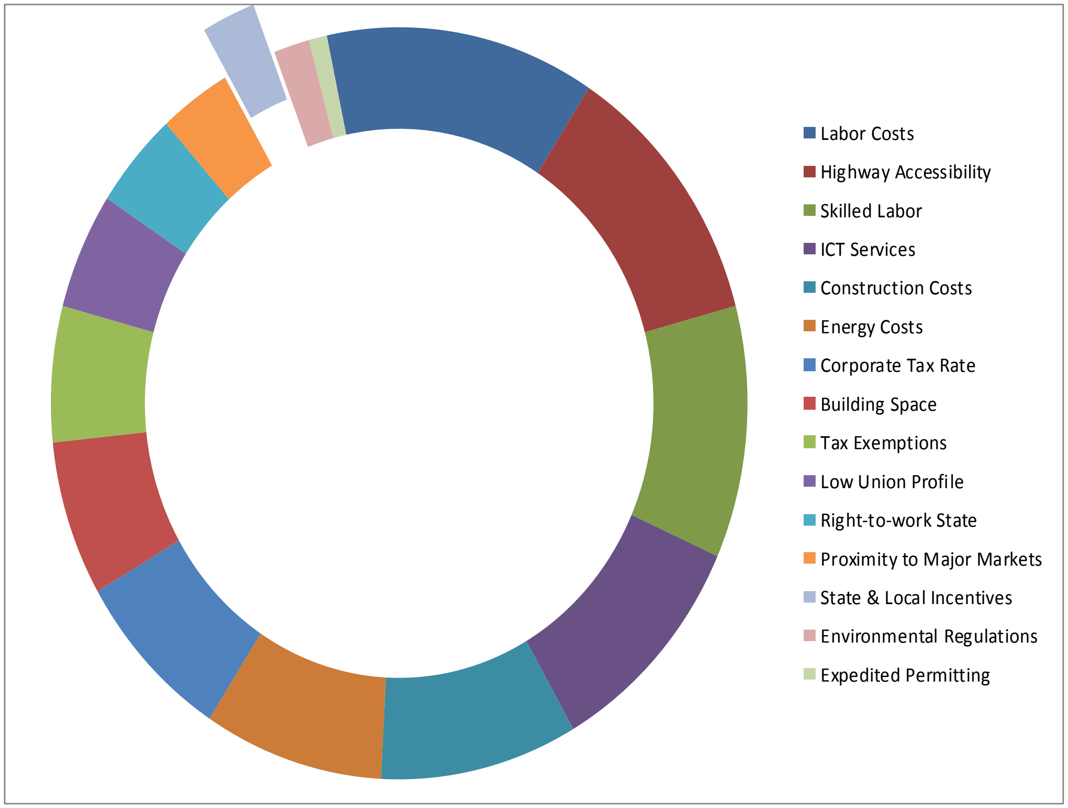
*Scenarios are ranked from 1 to 14, with 1 being the highest. Personal Income, GDP, and Employment rankings are based on calculations of the state's average investment per year compared to the average economic impact in order to account for program size.

The other economic indicators have been adjusted to reflect averages per year per investment dollar. The results are very similar to the ROI rankings with the QTI scenarios being at the top for most measures. The cost of the award per job created provides the greatest differences.

Discussion of Seven Key Assumptions Used in the Analysis

Role of Incentives...

Factors Affecting Business Location Decisions



The heads of Florida's economic development agencies believe that incentives are used to compensate businesses for deficiencies in operating conditions and quality-of-life factors relative to the next viable location. Unlike other static site selection factors like labor costs, incentives can be adjusted to meet the needs of individual projects.

EDR's analysis assumes that state incentives were the determining factor in business retention, expansion, or location decisions, provided the program was created and designed to attract new business activity to the state. Otherwise, the ROIs would have been lower. However, this assumption was relaxed in certain scenarios.

Classification of Incentives...

- Direct Financial Incentives are subject to appropriation and can be targeted through pre-screening and selection processes.
  - Qualified Target Industry Tax Refund
  - Brownfield Redevelopment Bonus Tax Refund
  - High-Impact Sector Performance Grants
  - Quick Action Closing Fund
  - Innovation Incentive Program

- Tax-Based Incentives use the state's tax code. While they generally function like direct financial incentives, from the business operating perspective, they have more uncertainty because they are typically subject to having sufficient tax liability or taxable activity to take full advantage of the incentive. The recipient may also experience timing delays related to tax filing deadlines.
  - Capital Investment Tax Credit
  - Enterprise Zone Program

- EDR's analysis assumes that businesses are indifferent between tax credits and cash awards and will not change their behavior based on the type of incentive award given. Otherwise, tax-based incentive programs would (1) delay state costs, and (2) reduce output, which is the typical business response to uncertainty. The ROI impact is unclear and would depend on the relative changes between the two factors.

Federal Tax Implications of State Incentives...

- While the state cost equals the face value of the economic development incentive, the incentive's federal tax treatment diminishes its value to the recipient business since it will pay part of the incentive to the federal government in the form of increased taxes.

- This asymmetric valuation suppresses the ROI if it is fully taken into account by reducing the state benefit coming directly from the business. For example, if the tax leakage to the federal government were not present, the business would either have been able to hire more employees at the awarded incentive level or it would have hired the same number of employees at a reduced incentive level—assuming all else is equal.

- EDR's analysis assumes businesses receive the full value of the state incentives and that related costs such as federal taxes are immaterial to the decision making process. Otherwise, the benefits—and the ROIs—would have been lower.

Federal and Local Incentives...

- Projects funded by state incentives may also receive federal and local incentives.

- From the business perspective, it may be that this total combination of incentives is necessary to be determinative to its decision regarding expansion, retention, or relocation.

- Data does not currently exist that shows the extent to which local and federal incentives are combined with the projects under review.

- EDR's analysis assumes that the influence of any federal incentives awarded to state-funded projects is immaterial to the size and location of the project. This is also true for local incentives; however, this assumption was relaxed for required local matches.

- Otherwise, excluding the local and federal incentives from the calculation likely overstates the ROI, jobs created, change in personal income, and change in state GDP attributed to the state incentive.

Treatment as a Subsidy...

- From an economic perspective, incentives are public subsidies intended to induce an economic activity or capital investment by a private business in a jurisdiction in which such activity or investment would not otherwise take place.

- Even though subsidies can be used to accomplish specific policy goals, they cause market distortions which result in inefficiencies and inequalities in the marketplace. This outcome forces decision-makers to weigh the negative repercussions of incentives against the benefits associated with the underlying goal.

- EDR's analysis assumes that businesses treat the incentives as subsidies. The subsidies lower the cost of production for each individual firm. Otherwise, to the extent that market distortions exist, the ROI may be overstated.

Florida Market and Resource Dependent Projects...

- Some projects are Florida market or state resource dependent. These are projects where the business' clients are primarily based in Florida or the business is dependent on Florida's resources to produce its products or services.

- While the projects may be technically qualified to receive an incentive from a program, there is no new state revenue resulting from those projects since the businesses are otherwise tied to Florida, meaning the state would have already been their location choice.

- EDR's analysis generally assumes that the output from projects expands the state's economy; however, this assumption was relaxed in certain circumstances. Otherwise, the program's ROI is overstated to the extent these projects are included. For this reason, the "culled" scenarios provide a better representation of the affected program's ROI for single incentive projects.

"But For"—Inducing Business Location Decisions with Incentives...

- As the use of incentives has proliferated, the question of whether the activity would have otherwise taken place has dominated recent research. At this point, the academic research on the "but for" issue is inconclusive.

- If incentives are the primary, or at least the determining factor, in expansion or relocation projects, the result would validate a positive ROI calculation. However, if the award of incentives is unrelated to such decisions, the ROI would swing negative since the new economic activity would have happened absent the incentive and without the state's cost.

- Any unnecessary state expenditure on incentives has two negative outcomes: a shift of private business costs to the general class of taxpayers and a reduction in available funding for other public services, some which promote or are necessary for economic growth.

- Based on available research and the program's design, the entire Enterprise Zone Program was assumed to fail the "but for" test. For the other programs, the ROI would be overstated to the extent that individual businesses would have made the same decisions absent the incentives.

Changing the Reported ROI...