

**A Review of the University of Central Florida Business  
Incubation Program Economic Impacts from October 1, 2011,  
through June 30, 2013**

To

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By

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Review & Foreword

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## FOREWORD

The updated analysis for 2013 prepared by Dr. Vernet Lasrado is a thorough and credible report regarding the continuing growth and effectiveness of the UCF Business Incubation Program (UCFBIP). Lasrado has updated the analysis methodology to incorporate IMPLAN – a highly regarded and oft-used input-output model that allows for impact analysis at a local and regional level, using primary data collected locally, as well as national trends within specific industry groups.

I feel that Lasrado has been careful to make conservative yet accurate comparisons between the current impact findings and estimates that were provided as the products of my earlier analyses in 2009 and 2011. I applaud his efforts and the straightforward presentation of the data incorporated, the methodology employed and the summary findings of his analysis.

There is also no denying that UCFBIP is a job-creating “machine” of a high order. In the four years since summer 2009, UCFBIP has directly or indirectly produced and sustained 3,356 full-time, permanent, high-quality jobs within the Central Florida regional economy. Following graduation of client firms from UCFBIP, these new jobs are compensating employees at an average exceeding \$67,000 annually. Even more remarkable, this new job creation has occurred during one of the most challenging economic environments in U.S. history. These totals DO NOT include about 10,000 new jobs initiated by firms that started at UCFBIP, but subsequently relocated outside of Central Florida through acquisition or in pursuit of venture capital funding.

Since 2009, the total economic output of the firms sustained by UCFBIP is approaching – if not exceeding – \$1 billion in Central Florida. As documented in the current report, this “output” includes a combination of employee wages and earnings; business sales and purchases; research grant awards; imports and exports; resource development; and, taxes paid to state and local government – through direct impacts, as well as induced and indirect impacts throughout the regional economy.

This current update clearly demonstrates that through good management, careful client selection and training, focused education of clients, and, ongoing follow-up support, UCFBIP has managed to grow its network of facilities while maintaining its high standards of accountability and success. With a network of nine (formerly 10) incubators now operating within five Central Florida counties, UCFBIP has built a foundation of success for local economic development efforts and has provided a platform for aspiring entrepreneurs to conceive, develop, nurture and grow their business dreams.

## EXECUTIVE SUMMARY

Since its formation in 1999, the University of Central Florida Business Incubation Program (UCFBIP) has provided more than 250 early-stage companies with the enabling tools, training and infrastructure to create financially stable high-growth/impact enterprises. With multiple locations across Central Florida, UCFBIP is supported by a number of partners including city and county governments and the Florida High Tech Corridor Council, which commissioned the previous studies of UCFBIP's economic impact in 2009 and 2011.

This updated study of the program's impact spanned from October 1, 2011, through June 30, 2013, and reveals that UCFBIP's current client and past graduated firms have:

1. Directly sustained 1,856 Jobs in the Central Florida region at the end of the study period;
2. Indirectly sustained an additional 1,500 jobs throughout the Central Florida region;
3. Had an overall direct regional economic output in the amount of \$327,155,567<sup>1</sup>;
4. Indirectly impacted almost \$300 million of additional regional economic output; and,
5. Had a total impact on state and local taxes in the amount of \$18,578,262 resulting in a fiscal return of \$6.16 for every \$1 of public investment in UCFBIP for the study period.

These findings demonstrate continued strong progress by UCFBIP in the creation of new jobs and economic output for the region, with direct job creation up 18 percent since October 2011. Over the same 20-month period, tax revenues have increased by 100 percent, driving the multiplier effect of public investment upward by 22 percent from the \$5.04 in 2011 to \$6.16 in 2013.

It is evident a greater portion of the benefits to the regional economy are resultant from the activities of the graduated UCFBIP firms.

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<sup>1</sup> All reported dollar amounts have been adjusted to 2013 dollars.

# TABLE OF CONTENTS

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Review of the state of UCFBIP for the study period .....	2
<b>2</b>	<b>Methodology .....</b>	<b>2</b>
2.1	Assumptions.....	2
2.1.1	Use of MSAs .....	2
2.1.2	Use of 2013 dollars for analysis.....	3
2.2	Data collection and assimilation.....	5
2.3	Summary results as reported by the site managers .....	5
2.3.1	Current UCFBIP client firms.....	5
2.3.2	Graduated UCFBIP firms .....	6
2.4	Analysis .....	6
<b>3</b>	<b>Results.....</b>	<b>7</b>
3.1	Summary results as estimated by IMPLAN v3 .....	7
3.1.1	Jobs sustained .....	7
3.1.2	Economic output generated.....	7
3.1.3	Return on investment for UCFBIP across all sites .....	8
3.1.4	Estimate for UCFBIP employee income .....	8
<b>4</b>	<b>Conclusions .....</b>	<b>9</b>
<b>5</b>	<b>Appendix: IMPLAN Information.....</b>	<b>10</b>

## LIST OF TABLES

Table 1-1: UCFBIP incubator sites and status.....	2
Table 2-1: UCFBIP incubator sites, county and MSA information .....	3
Table 2-2: Inflation Adjustment Multipliers.....	4
Table 2-3: UCFBIP summary of public funding adjusted to 2013 dollars .....	4
Table 2-4: UCFBIP summary of public funding adjusted for the study period .....	4
Table 2-5: Reported jobs sustained as a result of all current UCFBIP clients at end of the study period.....	6
Table 2-6: Reported jobs sustained as a result of all graduated UCFBIP clients at the end of the study period.....	6
Table 3-1: Estimate of full-time, year-round jobs sustained as a result of all current and graduated UCFBIP clients for the study period.....	7
Table 3-2: Total economic output generated by activities of all local current and local graduated UCFBIP clients for the study period .....	8
Table 3-3: Total state and local tax generated by activities of all current and graduated UCFBIP clients for the study period.....	8
Table 3-4: Estimate of UCFBIP client labor income across all sites .....	8
Table 5-1: Definition of IMPLAN terms.....	10

## 1. INTRODUCTION

The goal of the UCF Business Incubation Program (UCFBIP) and its community partners is to facilitate smarter, faster startup and growth of emerging companies so those companies will become financially successful, high-growth companies in the community. The mission is to have a University-driven community partnership providing early-stage companies with the enabling tools, training and infrastructure to create financially stable high-growth/impact enterprises.

Since its inception, UCFBIP clients have been provided an array of business development services and resources to help accelerate growth. The formal incubation process takes place through a series of strategic and tactical working sessions. The strategic sessions are designed to help define the company business, market and capital strategies, and to build the business plan. Expertise and resources are identified for the company to utilize in addressing tactical needs as they are identified through the strategy sessions or through other informal interactions with incubator staff and advisors. Regular education and networking programs also are designed to address the shared needs identified among UCFBIP clients. Graduation takes place when a client has achieved a level of financial and corporate growth that enables them to leave the incubator and enter the second stage of corporate growth.

The review of the economic impact of UCFBIP of the surrounding counties was first performed in 2009 by W.H. Owen while employed at Real Estate Research Consultants Inc. (RERC). In 2011, a subsequent review was performed again by W.H. Owen with W.H. Owen Consulting Inc. (WHO), retained by the Florida High Tech Corridor Council (FHTCC) to prepare an economic impact analysis of UCFBIP. The latter study accounted for the impact of UCFBIP up to October 2011. These impact analyses measured the spending patterns and tax impacts of companies and employees currently operating within the incubators or those having graduated from the UCF incubators and still operating within the greater Orlando metropolitan region. The same methodologies used in 2009 were employed in the update for consistency of results.

The current study is conducted over the period of October 1, 2011, through June 30, 2013; henceforth referred to as the *study period*. The current study also differs in the fact that the program used to estimate the economic impact has been switched from RIMS II to IMPLAN version 3. Hence, it should be noted that direct comparison of the outcomes of the two reports may not be possible as a result of the newer methodology. The switch to IMPLAN reflects the general trend toward its use by multiple departments within the Office of Research and Commercialization thereby leading to a more standardized output across the reports generated.

## 1.1 Review of the state of UCFBIP for the study period

Table 1-1 below indicates the incubators and their status for the duration of the study and current status.

Table 1-1: UCFBIP incubator sites and status

Incubator	Status 2011	Status 2012	Status 2013
Apopka	Operational	Operational	Operational
Central Florida Research Park	Operational	Operational	Operational
Daytona	Operational	Operational	Operational
Downtown (Merged w/ Orlando)	Vacated	Vacated	Vacated
Orlando	Operational	Operational	Operational
Kissimmee	Operational	Operational	Operational
Leesburg	Operational	Operational	Transferred to Lake County
Photonics	Operational	Operational	Operational
Sanford	Operational	Operational	Operational
St. Cloud	Operational	Operational	Operational
Winter Springs	Operational	Operational	Operational

It should be noted that the operations of the Leesburg incubator have been transferred to Lake County as of 1/1/2013 and the Downtown incubator has merged with the Orlando incubator. Hence, as it can be seen for the purposes of the time period of this study, the Leesburg incubator clients will be considered as being current clients 2011 and 2012. Any graduated firms from the Leesburg incubator prior to 2013 were included in the 2013 portion of the analysis as they had graduated prior to the transfer of operations from UCFBIP to Lake County. For the study period, the UCF Downtown incubator clients will be considered as indicated by the data received from the site managers.

The remainder of the report will discuss the methodology used and present the outcomes of the current study.

## 2. METHODOLOGY

### 2.1 Assumptions

#### 2.1.1 Use of MSAs

This study builds upon the use of Metropolitan Statistical Areas (MSAs) as the basis unit of measurement of the study area. Using just the county information assumes that all of the client employees and business takes place within the county. In reality, many of the client

employees and business takes place across counties and this is effectively captured by using MSAs as the basis of the study area. Each MSA area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core (U.S. Census Bureau website [www.census.gov/population/metro/](http://www.census.gov/population/metro/)). For our study as indicated by Table 2-1, all our incubator counties fall under the MSAs as shown in the table. The most current and up to date list of MSAs and the corresponding counties is presented by the U.S. Census Bureau at [www.census.gov/population/metro/data/def.html](http://www.census.gov/population/metro/data/def.html).

Table 2-1: UCFBIP incubator sites, county and MSA information

Incubator	City	County	MSA
Apopka	Apopka	Orange	Orlando-Kissimmee-Sanford, FL
Central Florida Research Park	Orlando	Orange	Orlando-Kissimmee-Sanford, FL
Daytona	Daytona	Volusia	Deltona-Daytona Beach-Ormond Beach, FL
Downtown (Merged w/ Orlando)	Orlando	Orange	Orlando-Kissimmee-Sanford, FL
Orlando	Orlando	Orange	Orlando-Kissimmee-Sanford, FL
Kissimmee	Kissimmee	Osceola	Orlando-Kissimmee-Sanford, FL
Leesburg	Leesburg	Lake	Orlando-Kissimmee-Sanford, FL
Photonics	Orlando	Orange	Orlando-Kissimmee-Sanford, FL
Sanford	Sanford	Seminole	Orlando-Kissimmee-Sanford, FL
St. Cloud	St. Cloud	Osceola	Orlando-Kissimmee-Sanford, FL
Winter Springs	Winter Springs	Seminole	Orlando-Kissimmee-Sanford, FL

### 2.1.2 Use of 2013 dollars for analysis

All the analysis performed reports any dollar amounts in 2013 dollars. This can be performed by using the Consumer Price Index (CPI) as a measure to indicate the amount of inflation or deflation (as presented at <ftp://ftp.bls.gov/pub/special.requests/cpi/cpi.ai.txt>). As it can be seen in **Error! Reference source not found.**, the multiplier column is the amount of inflation required to equate the corresponding year’s dollar amount to 2013. This is derived by dividing the 2013 CPI by the corresponding year’s CPI. If the number is greater than one there is inflation, otherwise there is deflation. It is important that the funding is reported for the fiscal year, i.e., July 1 (Current Year) though June 30 (Next Year). Hence (as presented in

Table 2-2: Inflation Adjustment Multipliers

Year	CPI	Multiplier	Year	CPI	Multiplier
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2001	172.2	1.337282	2007	202.42	1.137635
2002	177.10	1.300282	2008	211.08	1.090961
2003	181.70	1.267364	2009	211.14	1.090651
2004	185.20	1.243413	2010	216.69	1.062716
2005	190.70	1.207551	2011	220.22	1.045682
2006	198.30	1.161271	2012	226.67	1.015926
			2013	230.28	1

Table 2-3), the multipliers are used across years to adjust each of the fiscal dollar amounts to 2013 dollar amounts.

Table 2-2: Inflation Adjustment Multipliers

Year	CPI	Multiplier	Year	CPI	Multiplier
2001	172.2	1.337282	2007	202.42	1.137635
2002	177.10	1.300282	2008	211.08	1.090961
2003	181.70	1.267364	2009	211.14	1.090651
2004	185.20	1.243413	2010	216.69	1.062716
2005	190.70	1.207551	2011	220.22	1.045682
2006	198.30	1.161271	2012	226.67	1.015926
			2013	230.28	1

Table 2-3: UCFBIP summary of public funding adjusted to 2013 dollars

Fiscal Year	Public Funding	FHTC	Adjusted 2013 Amount
2001-2002	\$250,000		\$329,696
2002-2003	\$250,000		\$320,956
2003-2004	\$250,000		\$313,847
2004-2005	\$250,000		\$306,370
2005-2006	\$250,000	\$30,000	\$331,635
2006-2007	\$550,000	\$30,000	\$666,683
2007-2008	\$875,000	\$30,000	\$1,008,439
2008-2009	\$875,000	\$50,000	\$1,008,995
2009-2010	\$1,097,000	\$50,000	\$1,234,956
2010-2011	\$1,807,000	\$50,000	\$1,957,647
2011-2012	\$1,694,569	\$50,000	\$1,798,308
2012-2013	\$1,603,953	\$50,000	\$1,667,124

Total	\$9,752,522	\$340,000	\$10,944,657
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It should be noted that for the study period the total amount invested is \$1,348,730 (\$1,798,308\*3/4) for three quarters of fiscal year 2011-2012 added to \$1,667,124 for fiscal year 2012-2013. This gives a total of \$3,015,854 invested to UCFBIP by public funding for the study period as further elaborated in Table 2-4.

Table 2-4: UCFBIP summary of public funding adjusted for study period

Fiscal Year	Investment
2011-2012	\$1,348,730
2012-2013	\$1,667,124
Total	\$3,015,854

## 2.2 Data collection and assimilation

The site managers performed the arduous task of collecting information on current and graduated client firms. The data collection endeavor was a great success in providing accurate and complete data for the analysis to be performed. If available, for each firm the data collected included information on:

- Industry classification
- Number of employees
- Sales
- Grants received
- Angel investment received
- Year joined UCFBIP
- Year graduated from UCFBIP
- Employer Identification Number (EIN)
- DUNS number

For the current or graduated firms for which no information was reported, the EIN and DUNS numbers were used to search the ES202 and LEXISNEXIS databases for further information on the employment and sales of these firms.

It should be noted that for most of the current UCFBIP client firms, the site managers had reported most of the information as described above. However, for the graduated UCFBIP firms the information reported was sparse and generally included information only on employment as the firms were not obligated to respond to data collection efforts by the site managers. This is not an issue as the analysis software (to be discussed) IMPLAN v3 can accept either earnings or employment counts as inputs to determine the economic impact.

## 2.3 Summary results as reported by the site managers

### 2.3.1 Current UCFBIP client firms

From October 1, 2011, through June 30, 2013, the University of Central Florida Business Incubation Program has grown from 118 client (current) firms at the start of the study period to 143 client firms by the end of the study period. The overall employment at the client firms grew from 503 jobs to 835 jobs, a gain of 66 percent in less than two years. To further elaborate, of the 143 client firms (a) 45 client firms have no change in jobs with an average size of 1.91 employees at the end of the study period; (b) 78 client firms created 391 jobs with an average size of 8.21 employees at the end of the study period; and, (c) 20 client firms lost 59 jobs with an average size of 5.45 employees at the end of the study period. Table 2-5 summarizes the results as presented above.

Table 2-5: Reported jobs sustained as a result of all current UCFBIP clients at end of the study period

Current UCFBIP Clients	No Change	Jobs Created	Jobs Lost	Total
Firms	45	78	20	143
Job Change	0	391	-59	332
Average Size	1.91	8.21	5.45	5.84
Active Jobs	86	640	109	835

### 2.3.2 Graduated UCFBIP firms

From October 1, 2011 through, June 30, 2013, the University of Central Florida Business Incubation Program has grown from 66 graduated firms at the start of the study period to 110 graduated firms by the end of the study period. The overall employment at the client firms grew from 1,100 jobs to 1,540 jobs, a gain of 40 percent in less than two years. To further elaborate, of the 110 client firms (a) 26 client firms have no change in jobs with an average size of 9.15 employees at the end of the study period; (b) 60 client firms created 522 jobs with an average size of 17.87 employees at the end of the study period; and, (c) 24 client firms lost 82 jobs with an average size of 9.58 employees at the end of the study period. Table 2-6 summarizes the results as presented above.

Table 2-6: Reported jobs sustained as a result of all graduated UCFBIP clients at the end of the study period

Graduate UCFBIP Clients	No Change	Jobs Created	Jobs Lost	Total
Firms	26	60	24	110
Job Change	0	522	-82	440
Average Size	9.15	17.87	9.58	14.00
Active Jobs	238	1,072	230	1,540

## 2.4 Analysis

For an in-depth explanation of IMPLAN, please refer to the appendix on IMPLAN presented on page 10. The study was performed using IMPLAN Version 3. This software enables the user to define the study area (that may contain multiple counties). As discussed earlier, multiple counties have been grouped into MSAs which form the base unit of the study area. Furthermore, in order to accurately capture the impacts that occur in a particular study area; only expenditures resulting from the amount of demand or sales occurring locally should be considered in the study. This study leverages IMPLAN's ability to isolate the impacts that occur only as a result of local expenditures, thereby providing a conservative estimate for the impact of UCFBIP of the study area.

From the data collected and reported by the site managers, information was extracted so as to provide all the details of the current and graduated UCFBIP firms for both 2011 and 2012. This information was then compiled and formatted so as to be entered into IMPLAN. An Impact Scenario for each UCFBIP incubator for 2011, 2012 and 2013; and, for current and graduated clients was created. This resulted in a total of 62 different scenarios that were analyzed and aggregated together to form the outcomes that represent the economic impact for UCFBIP for the study period across the study area. IMPLAN v3 gives estimates of jobs sustained, economic output generated, state and local taxes generated, federal taxes generated, and employee income.

## 3. RESULTS

### 3.1 Summary results as estimated by IMPLAN v3

#### 3.1.1 Jobs sustained

As indicated by Table 3-1, UCFBIP client and past graduated firms have sustained 3,356 jobs in the Central Florida region at the end of the study period of which 1,856 Jobs<sup>2</sup> were directly sustained by UCFBIP current and graduated firms.

Table 3-1: Estimate of full-time, year-round jobs sustained as a result of all current and graduated UCFBIP clients for the study period

UCFBIP Client Jobs	Direct	Indirect	Induced	Total
Current	696	170	242	1,108
Graduate	1,160	431	657	2,248
<b>Total</b>	<b>1,856</b>	<b>601</b>	<b>899</b>	<b>3,356</b>

<sup>2</sup> This computed number is approximately 22 percent lower than the figures in Table 2-5 and Table 2-6 as IMPLAN accounts for seasonal employees by industry by area.

### 3.1.2 Economic output generated

As indicated by

Table 3-2, the UCFBIP the client and past graduated firms have resulted in an estimated output of \$620,869,242 of which they had a direct regional economic output in the amount of \$327,155,567.

Table 3-2: Total economic output generated by activities of all local current and local graduated UCFBIP clients for the study period

UCFBIP Client Output	Direct	Indirect	Induced	Total
Current	\$75,533,027	\$27,598,772	\$40,459,586	\$143,591,385
Graduate	\$251,622,540	\$86,673,447	\$138,981,870	\$477,277,857
<b>Total</b>	<b>\$327,155,567</b>	<b>\$114,272,219</b>	<b>\$179,441,456</b>	<b>\$620,869,242</b>

### 3.1.3 Return on Investment for UCFBIP across all sites

As indicated by Table 3-3, UCFBIP clients have generated estimated state and local taxes in the amount of \$18,578,262.

Table 3-3: Total state and local tax generated by activities of all current and graduated UCFBIP clients for the study period

UCFBIP Client Tax Generated	Tax Sources				Total
	Employee Compensation	Production and Imports	Households	Corporations	
Current	\$34,909	\$4,404,364	\$201,072	\$76,016	\$4,716,361
Graduate	\$119,968	\$12,853,571	\$688,962	\$199,400	\$13,861,901
<b>Total</b>	<b>\$154,877</b>	<b>\$17,257,935</b>	<b>\$890,034</b>	<b>\$275,416</b>	<b>\$18,578,262</b>

These results reflect a return of \$6.16 for every \$1 of public investment in UCFBIP for the study period from October 1, 2011, through June 30, 2013. This amount is estimated by

dividing the amount generated in state and local taxes by the amount invested by public funding (\$3,015,854).

### 3.1.4 Estimate for UCFBIP employee income

As indicated by Table 3-4, it is estimated that UCFBIP client employees on an average earn \$58,075 of which current UCFBIP client employees earn an estimated \$39,417 while UCFBIP graduate client employees earn an estimated \$67,293.

Table 3-4: Estimate of UCFBIP client labor income across all sites

UCFBIP Client Income	Income
Current	\$39,417
Graduate	\$67,293
All	\$58,075

This disparity in earning is perfectly normal as many of the current UCFBIP clients are still in the product development stage and have yet to see income result from the work they are doing. On the other hand, once most of these firms develop products there is a significant jump in the estimated salary of the employees as shown in the graduate client earnings estimate.

For those interested, further support for these claims can be supplied upon request.

## 4. CONCLUSIONS

The UCF Business Incubation Program provides client companies with the experience and insight needed to create successful companies through relationships it has created with its network of experienced entrepreneurs, professional service providers, economic development partners, small business service providers, university experts, as well as a dedicated staff.

With the wealth of talent and resources developed by UCF and the benefits of its prime locations, the UCF Business Incubation Program is making a significant contribution to the economic development of the region. Combined with efforts by other organizations such as: The National Entrepreneur Center; SBDC at UCF; UCF Venture Lab; UCF Center for Entrepreneurship & Innovation; the Florida High Tech Corridor Council; the Metro Orlando Economic Development Commission; and many others, the region is already recognized as one of the nation's premier locations for developing high-growth/impact enterprises.

It is also important to note that several UCFBIP graduates have moved out of Florida either for venture capital funding or because they were acquired by a larger corporation. These firms have created more than 10,000 jobs since their departure from Florida.

Once again the UCF Business Incubation Program has demonstrated that it provides an extremely productive and efficient tool for creating new quality jobs and economic activity for the Central Florida region and beyond. During the most turbulent economic times in recent memory, UCFBIP has been a job-producing “machine” bringing forth in the local economy a variety of businesses and employers that demonstrate sound management practices and potential for continued growth.

In the four years since 2009, UCFBIP has been responsible for nurturing and sustaining more than 3,000 jobs and almost \$1 billion of economic output in the Central Florida region. All of this has been achieved with a huge positive return on investment for funding partners.

## 5. APPENDIX: IMPLAN INFORMATION

### What is IMPLAN?<sup>3</sup>

IMPLAN® is an acronym for IMPact analysis for PLANning. The IMPLAN System is a general input-output model that is comprised of software and regional data sets. One of the most powerful aspects of IMPLAN, is that input-output models for specific regional economies can be created. Rather than extrapolating regional data from national averages, IMPLAN measures economic impacts from data representing actual local economies. IMPLAN data sets are available from the ZIP code level to the national level, and regional files can be combined to create precise geographic definitions when calculating impacts. The analysis results provide the IMPLAN user or client with a report that demonstrates the detailed effects of local changes on supporting industries and households. Reports can provide both detailed and summary information related to job creation, income, production and taxes. IMPLAN Version 3.0 can even track the impacts of a local change on surrounding regional economies.

IMPLAN data tracks all the available industry groups in every level of the regional data. This permits detailed impact breakdowns and helps ensure accuracy of inter-industry relationships. If a study involves the introduction of an industry group that does not already exist in the local area, IMPLAN provides tools to create a new industry. This new industry can be used as a proxy to estimate the likely impacts of the new industry's production to the local economy. And if the industry exists in IMPLAN, but doesn't exactly match the sales and employment information for the industry being modeled, the IMPLAN industry relationships may be updated to match the known values, while still maintaining the local regional sales and employment averages for examining the indirect and induced impacts.

Table 5-1: Definition of IMPLAN Terms

IMPLAN Term	Definition
Backward Linkages	The tracking of industry purchases backward through the supply chain.
Direct Impact	The initial expenditures, or production, made by the industry experiencing the economic change.
Indirect Impact	The effects of local inter-industry spending through the backward linkages.
Induced Impact	The results of local spending of employee's wages and salaries for both employees of the directly impacted industry, and the employees of the indirectly affected industries.

Figure 5-1 illustrates the framework of the IMPAN model. Economic impact studies typically generate large amounts of information about local industries, employment, wages, profits,

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<sup>3</sup> The following section contains excerpts from various sections of "Day, F. (2012). *Principles of Impact Analysis and IMPLAN Applications*. Davidson, NC, USA: MIG"



labor spending and taxes that may be useful for a variety of purposes and circumstances. Most reports, therefore, seek to condense this information into a format that demonstrates the overall effect of the economic change as it relates to jobs or other monetary means, and in a manner that is meaningful to the report's intended audience. To generate the detailed background information that supports the overall affects economic factors have on the local region, or even on surrounding regions, economic impact analysis looks backward rather than forward through the economy. In other words, to determine the effect of increased production in a local industry, economic analysis looks at the industries which supply the producing industry with the items and services that industry incorporates into its production.

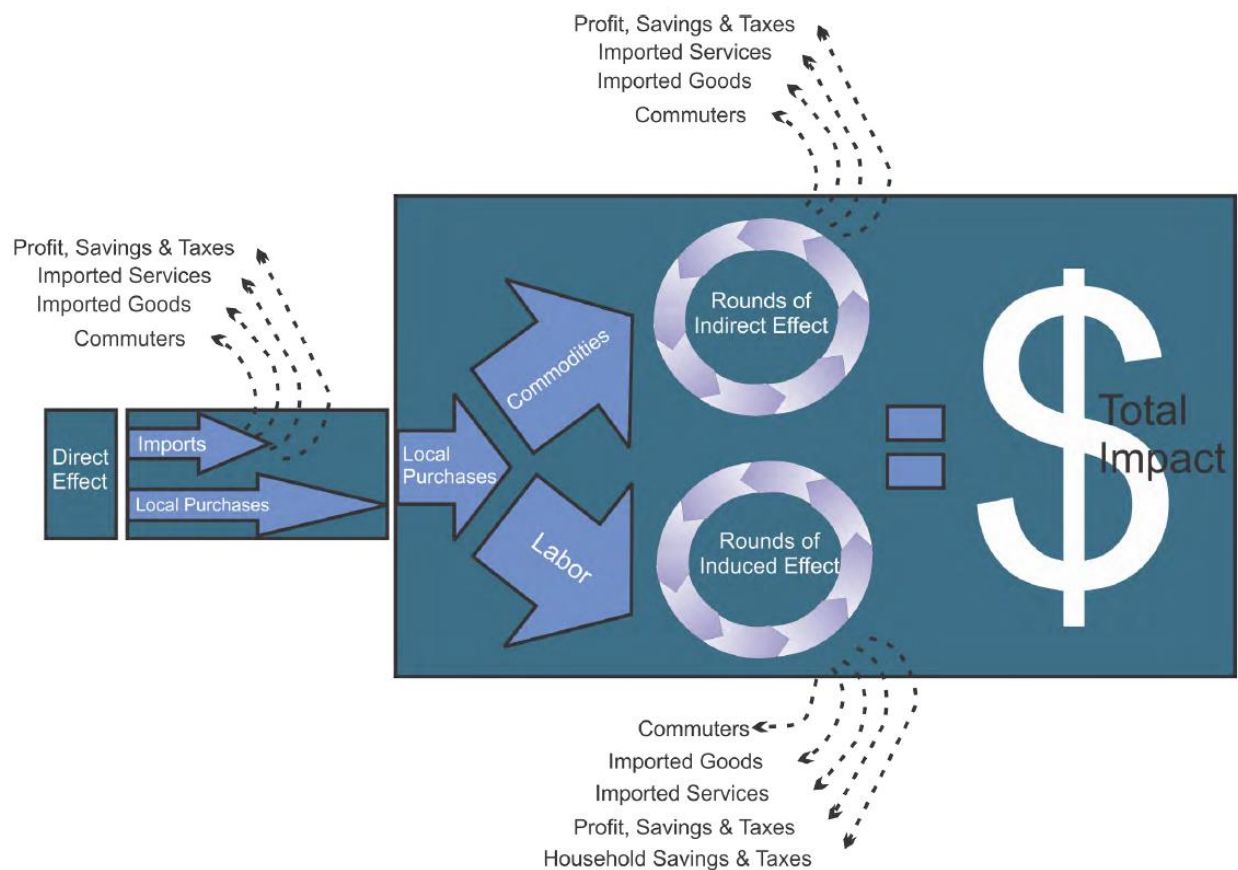


Figure 5-1: IMPLAN Model framework

So an increase in window production will result in the manufacturer purchasing a variety of supplies including wood, glass and furnishings for the windows, all of which will be incorporated into the final product. Collectively, tracing the impacts back through the supply chain is tracing the backward linkages. Each supplier in the chain represents a backward linkage. Since each supplier of an industry has to purchase inputs from other suppliers in order to create their own products (e.g., the window furniture company has to purchase sheet metal from which it stamps out its parts), the accumulation of these backward linkages can be tracked until the

resultant spending of the original impact is completely removed from the economy by imports, savings, taxes and profits.

These consecutive rounds of inter-industry spending traveling back through the supply chain are called the Indirect Effects. These impacts are “indirect” because the increase in these industry’s production is stimulated by the increase of sales in another industry. Increases in production not only require an increase in purchases of supplies, but typically also require an increase in employment and/or labor spending. This increase in labor dollars also has traceable economic effects, because increased labor dollars typically translate into increased income spending. The spending of income earned by the employees, resulting from both directly and indirectly affected industries, contributes to the induced effect. The induced effect, therefore, is a measurement of employee spending of all employees of the directly affected industry, and all the employees of subsequent indirectly impacted industries in the supply chain, as long as these employees live within the defined geography of the study.

IMPLAN also reports on the state/local taxes collected as a result of the modeled scenario. In the employee compensation field, IMPLAN reports on the amount of the employer collected and paid social security taxes on wages. For state/local taxes, these values are mostly contributions to government retirement funds. Taxes on production and imports are collected by the businesses on behalf of the state and local governments. These taxes include sales tax, property tax, motor vehicle tax, severance tax, business licenses taxes, and documentary and stamp taxes. Taxes reported under households include personal income tax (none for Florida), personal vehicle fee payments, personal property taxes, fines, donations and licensing fees. Taxes on corporations include corporate tax payments on profits and dividends paid to governments on government investments.