



6-1-2012

# 2011 Economic Impact of Jumpstart Inc. Portfolio and Client Companies

Ziona Austrian


Cleveland State University, [z.austrian@csuohio.edu](mailto:z.austrian@csuohio.edu)

Candice Clouse

Cleveland State University, [c.clouse@csuohio.edu](mailto:c.clouse@csuohio.edu)

## How does access to this work benefit you? Let us know!

Follow this and additional works at: [http://engagedscholarship.csuohio.edu/urban\\_facpub](http://engagedscholarship.csuohio.edu/urban_facpub)

 Part of the [Growth and Development Commons](#), [Urban Studies Commons](#), and the [Urban Studies and Planning Commons](#)

---

## Repository Citation

Austrian, Ziona and Clouse, Candice, "2011 Economic Impact of Jumpstart Inc. Portfolio and Client Companies" (2012). *Urban Publications*. 0 1 2 3 469.

[http://engagedscholarship.csuohio.edu/urban\\_facpub/469](http://engagedscholarship.csuohio.edu/urban_facpub/469)

This Report is brought to you for free and open access by the Maxine Goodman Levin College of Urban Affairs at EngagedScholarship@CSU. It has been accepted for inclusion in Urban Publications by an authorized administrator of EngagedScholarship@CSU. For more information, please contact [library.es@csuohio.edu](mailto:library.es@csuohio.edu).



Prepared for:  
**JumpStart Inc.**

Prepared by:  
**Ziona Austrian, Ph.D.**  
**Candice Clouse, M.S.**

June 2012

**2011 ECONOMIC  
IMPACT OF JUMPSTART  
INC. PORTFOLIO AND  
CLIENT COMPANIES**

**CENTER FOR  
ECONOMIC  
DEVELOPMENT**



## TABLE OF CONTENTS

Executive Summary.....	1
Economic Impact on Northeast Ohio (NEO).....	2
Economic Impact on Ohio.....	2
Comparison of Economic Impact Between 2010 and 2011.....	2
Introduction .....	3
Report Structure .....	4
Methodology.....	5
Economic Impact Defined.....	5
Study Methodology.....	5
Economic Impact Estimates.....	8
Economic Impact Estimates for Northeast Ohio (NEO).....	8
Economic Impact Estimates for Ohio.....	11
2010 – 2011 Comparison .....	14

## LIST OF TABLES & FIGURES

Table 1. Economic Impact in Northeast Ohio, 2011.....	8
Figure 1. Output, Value-Added & Labor Income Impact Measures for NEO, 2011.....	9
Figure 2. Employment in NEO by Impact Measure, 2011.....	10
Table 2. Economic Impact in Ohio, 2011 .....	11
Figure 3. Output, Value-Added & Labor Income Impact Measures for Ohio, 2011.....	12
Figure 4. Employment in Ohio by Impact Measure, 2011 .....	13
Table 3: Comparison of 2010 and 2011 Impact Results for NEO .....	14
Table 4: Comparison of 2010 and 2011 Impact Results for Ohio.....	14
Figure 5. Employment in JumpStart Portfolio and Client Companies Included in Impact, 2010- 2011 .....	16

## EXECUTIVE SUMMARY

This report measures the economic impact of companies supported by JumpStart during calendar year 2011. Companies supported by JumpStart Inc. that are included in this report have received either technical assistance only or both technical assistance and direct investment funding from JumpStart since its inception in 2004. The report also includes the calendar 2011 economic impact of companies that received investment from North Coast Angel Fund since its inception in 2006, as North Coast Angel Fund's operations are supported by JumpStart Inc. The North Coast Angel Fund invests in companies in both Northeast Ohio and in the remainder of Ohio.

The Center for Economic Development at Cleveland State University's Levin College of Urban Affairs prepared this economic impact study for JumpStart Inc. In total, 268 companies were surveyed for this study, and 147 companies responded to the survey. Of the surveyed companies, 100% of the companies who had received funding from JumpStart or North Coast Angel Fund responded (51 JumpStart portfolio companies, and 12 North Coast Angel Fund companies.) Forty one percent (84) of JumpStart client companies responded to the survey. It is important to note that the overall economic impact in this study would have likely been higher if more than 41% of the client companies had responded to the survey.

The study is based on information collected from survey responses from 60 companies that have received funding and technical assistance<sup>1</sup> ("portfolio companies") from JumpStart and/or North Coast Angel Fund and 61 separate and different companies that received only technical assistance ("client companies") from JumpStart staff. Some of the companies that responded to this survey have also received funding and/or technical assistance from other entities in the JumpStart Entrepreneurial Network, and some received funding from sources outside this network.<sup>2</sup> Of the 147 companies that responded to the survey, 26 were excluded from the impact analysis because they reported no employment, payroll, or expenditures.

This report mirrors the methodology used in the *2010 Economic Impact of Jumpstart Inc. Portfolio and Client Companies*, a report completed by the Center for Economic Development in September 2011. This report measured the economic impact of JumpStart and North Coast Angel Fund portfolio companies and client companies as a group, which was a different measurement than reports prepared for JumpStart in years prior to calendar 2010. The *Methodology* section of this report provides details on how data were collected and other methodological issues.

---

<sup>1</sup> Technical assistance includes the time spent by JumpStart both with and on behalf of portfolio and client companies. This assistance helps companies accelerate their strategic planning, operations, fundraising, talent acquisition, marketing, and/or public relations initiatives.

<sup>2</sup> The JumpStart Entrepreneurial Network is a connected group of Northeast Ohio entrepreneurial support entities managed by JumpStart Inc. For a list of these entities, visit [www.jumpstartnetwork.org](http://www.jumpstartnetwork.org).

## **ECONOMIC IMPACT ON NORTHEAST OHIO (NEO)**

The economic impact of JumpStart's portfolio and client companies in 2011 on Northeast Ohio includes the following impact measures:

- Output Impact: \$220.5 million
- Value Added Impact: \$143.6 million
- Labor Income Impact: \$89.4 million
- Employment Impact: 1,640 jobs
- Tax Impact: \$29.8 million
  - \$10.3 million to the state and local governments
  - \$19.5 million to the federal government

## **ECONOMIC IMPACT ON OHIO**

The economic impact of JumpStart's portfolio and client companies in 2011 on Ohio includes the following impact measures:

- Output Impact: \$259.5 million
- Value Added Impact: \$167.6 million
- Labor Income Impact: \$105.2 million
- Employment Impact: 1,891 jobs
- Tax Impact: \$34.8 million
  - \$12.0 million to the state and local governments
  - \$22.8 million to the federal government

## **COMPARISON OF ECONOMIC IMPACT BETWEEN 2010 AND 2011**

The 2011 economic impact estimates are larger than the 2010 results for both NEO and Ohio. The increase in economic impact is due to the inclusion of a larger number of companies as well as the growth of companies that answered the survey in both years. The companies that participated in the study in both years increased their aggregated NEO employment by 111, NEO payroll by \$8.6 million and NEO expenditures by \$20.6 million. They increased their aggregated Ohio employment by 131, Ohio payroll by \$10.8 million and Ohio expenditures by \$23.0 million.

## INTRODUCTION

This report measures the economic impact of companies supported by JumpStart during calendar year 2011. Companies supported by JumpStart Inc. that are included in this report have received either technical assistance only or both technical assistance and direct investment funding from JumpStart since its inception in 2004. The report also includes the calendar 2011 economic impact of companies that received investment from North Coast Angel Fund since its inception in 2006, as North Coast Angel Fund's operations are supported by JumpStart Inc. The North Coast Angel Fund invests in companies in both Northeast Ohio and in the remainder of Ohio.

The Center for Economic Development at Cleveland State University's Levin College of Urban Affairs prepared this economic impact study for JumpStart Inc. In total, 268 companies were surveyed for this study, and 147 companies responded to the survey. Of the surveyed companies, 100% of the companies who had received funding from JumpStart or North Coast Angel Fund responded (51 JumpStart portfolio companies, and 12 North Coast Angel Fund companies.) Forty one percent (84) of JumpStart client companies responded to the survey. It is important to note that the overall economic impact in this study would have likely been higher if more than 41% of the client companies had responded to the survey.

The study is based on information collected from survey responses from 60 companies that have received funding and technical assistance<sup>3</sup> ("portfolio companies") from JumpStart and/or North Coast Angel Fund and 61 separate and different companies that received only technical assistance ("client companies") from JumpStart staff. Some of the companies that responded to this survey have also received funding and/or technical assistance from other entities in the JumpStart Entrepreneurial Network, and some received funding from sources outside this network.<sup>4</sup> Of the 147 companies that responded to the survey, 26 were excluded from the impact analysis because they reported no employment, payroll, or expenditures.

In this report, Northeast Ohio is defined as a 21-county region. This region is comprised of six metropolitan statistical areas (MSAs)—Akron, Canton-Massillon, Cleveland-Elyria-Mentor, Mansfield, Sandusky, and Youngstown-Warren-Boardman—and eight non-metro counties. The MSAs are defined as follows:

- Akron MSA includes Portage and Summit counties
- Canton-Massillon MSA includes Carroll and Stark counties
- Cleveland-Elyria-Mentor MSA includes Cuyahoga, Geauga, Lake, Lorain, and Medina counties

---

<sup>3</sup> Technical assistance includes the time spent by JumpStart both with and on behalf of portfolio and client companies. This assistance helps companies accelerate their strategic planning, operations, fundraising, talent acquisition, marketing, and/or public relations initiatives.

<sup>4</sup> The JumpStart Entrepreneurial Network is a connected group of Northeast Ohio entrepreneurial support entities managed by JumpStart Inc. For a list of these entities, visit [www.jumpstartnetwork.org](http://www.jumpstartnetwork.org).

- Mansfield MSA consists of Richland County
- Sandusky MSA consists of Erie County
- Youngstown-Warren-Boardman MSA includes Mahoning and Trumbull counties

The eight non-metro counties are Ashland, Ashtabula, Columbiana, Crawford, Holmes, Huron, Tuscarawas, and Wayne.

This report mirrors the methodology used in the *2010 Economic Impact of Jumpstart Inc. Portfolio and Client Companies*, a report completed by the Center for Economic Development in September 2011. This report measured the economic impact of JumpStart and North Coast Angel Fund portfolio companies and client companies as a group, which was a different measurement than reports prepared for JumpStart in years prior to calendar 2010. The *Methodology* section of this report provides details on how data were collected and other methodological issues.

## REPORT STRUCTURE

This report is composed of four sections. The first section was the preceding introduction. The second section describes the concept of economic impact and explains the methodology used in this study. The third section presents estimates of the economic impact the JumpStart portfolio and client companies had on Northeast Ohio and Ohio in 2011. The final section offers some comparisons to the 2010 report.



## METHODOLOGY

### ECONOMIC IMPACT DEFINED

Economic impact is an analytical approach used to estimate economic benefits produced in affected regions by projects, programs, or companies. Economic impact estimates the benefits for a specific region and time period. These economic benefits are estimated in terms of five different measures:

- *Output impact* measures the value of goods and services produced in the economy.
- *Value-added impact* estimates the value of goods and services produced in the economy less intermediary goods and services, such as materials, utilities, and other goods used in the production process. Value-added impact is comparable to gross regional product.
- *Labor income* estimates the household earnings that are generated in the economy.
- *Employment impact* measures the number of jobs created in the economy.
- *Taxes* include federal taxes as well as state and local taxes.

Each economic impact (output, value added, labor income, and employment) is a summation of three components: *direct impact*, *indirect impact*, and *induced impact*. *Direct impact* refers to the initial value of goods and services, including labor, purchased by the companies affected by JumpStart. These purchases are sometimes referred to as the first-round effect. *Indirect impact* measures the value of labor, capital, and other inputs of production needed to produce the goods and services required by the companies (second-round and additional-round effects). *Induced impact* measures the change in spending by local households as a result of increased earnings of employees working in the local companies that produce goods and services for the companies.

### STUDY METHODOLOGY

Economic impact analysis is based on inter-industry relationships within an economy—that is, the buy-sell relationships that exist among industries. These relationships largely determine how an economy responds to changes in economic activity. Input-output (I-O) models estimate inter-industry relationships in a region by measuring the industrial distribution of inputs purchased and outputs sold by each industry. Thus, by using I-O models, it is possible to estimate how the impact of one dollar or one job ripples through the local economy, creating additional expenditures and jobs. This is the concept of an economic multiplier, which measures the ripple effect that an initial expenditure has on the local economy.<sup>5</sup>

---

<sup>5</sup> For example, suppose that Company A reports sales of \$10 million. From the revenues of the company, they pay suppliers and workers, cover production costs, and take a profit. Once the suppliers and employees receive their payments, they will spend a portion of their money in the local economy purchasing goods and services, while another portion of the money will be spent outside the local economy (leakage). By evaluating the chain of local purchases that result from the initial infusion of \$10 million, it is possible to estimate a regional economic multiplier.

The economic impact estimates presented in this report use the IMPLAN® Version 3.0 model, which is the most recent economic impact assessment software system released by Minnesota IMPLAN Group, Inc.<sup>6</sup> The user can develop sophisticated models of local economies in order to estimate a wide range of economic impacts. The IMPLAN® impact model is used by more than 1,000 public and private institutions, including the U.S. Bureau of Economic Analysis, the U.S. Department of Defense, the Federal Reserve Bank, the Ohio Department of Development, Columbia University, Yale University, and many others. The number of users, as well as their reputations, points to the high regard for the IMPLAN® model among researchers and consultants. The economic impact for Northeast Ohio was estimated through an IMPLAN model built for the 21-county area. To estimate an economic impact for Ohio, a separate IMPLAN model was built for the remainder of Ohio (a 67-county region) and the impact estimates of the two regions were summed to estimate the impact on Ohio. The data provided by JumpStart's client and portfolio companies informed whether their employees and expenditures were located in NEO; outside of NEO, but within the state of Ohio; or outside Ohio.

## Impact Study Data

Cleveland State University and JumpStart designed an online survey questionnaire with specific questions to distinguish among a responding company's activities in Northeast Ohio, the remainder of Ohio, and outside Ohio for calendar year 2011. The economic impact study presented in this report uses company data for Northeast Ohio and Ohio.

JumpStart sent the online survey to 205 client companies, 51 portfolio companies of JumpStart, and 12 portfolio companies of the North Coast Angel Fund. These companies<sup>7</sup> received 7,044 hours of pro-bono technical assistance from JumpStart in 2011 and 29,900 hours of pro-bono technical assistance from JumpStart in total. Following the collection of data via the online survey, JumpStart collected additional data via telephone interviews pertaining to Cleveland State University's follow-up questions on employment, payroll, and expenditures. An official member of each client or portfolio company's management team, legally allowed to verify the accuracy of company data, provided and confirmed the information.<sup>8</sup> Cleveland State University also verified company-level data by ensuring consistency between the different variables and geographies.

---

<sup>6</sup> IMPLAN was originally developed by two federal agencies, the Department of Agriculture and the Department of the Interior, to assist in land and resource management planning. The model was later commercialized by the Minnesota IMPLAN Group, Inc.

<sup>7</sup> This includes all companies with the exception of the NCAF portfolio companies which have their headquarters outside of NEO.

<sup>8</sup> The exact language as noted on the survey was "I hereby certify that I am authorized to provide the patent, employment, and financial information for my company and that they survey information reported herein is correct for the period stated and is consistent with any information reported to government entities for payroll, tax, unemployment insurance, and workers compensation purposes"

In total, JumpStart collected complete survey data from 147 companies. Of the surveyed companies, 100% of the companies receiving funding from JumpStart or North Coast Angel Fund responded (51 of JumpStart portfolio companies, and 12 of North Coast Angel Fund companies.) Forty one percent (84) of JumpStart client companies responded to the survey. It is important to note that the overall economic impact in this study would have likely been higher if more than 41% of the client companies had responded to the survey.

Of the companies which responded, 26 (3 JumpStart portfolio company and 23 JumpStart client companies) were excluded because of lack of economic activity in Ohio.<sup>9</sup> Of the remaining 121 companies, 60 were portfolio companies of JumpStart and/or North Coast Angel Fund and 61 were client companies. The economic impact analysis is based on these 121 companies.

The 48 JumpStart portfolio companies included in the analysis received an average of 360 hours of technical assistance from JumpStart (in addition to the capital). The 61 client companies included in the analysis received an average of 160 hours of technical assistance from JumpStart.

Of the 121 young companies, nearly 80% have 10 employees or less. However, several of the companies are becoming bigger employers. Eleven other companies employ between 11 and 20 employees each, and 16 companies employ more than 20 employees in Ohio. Among the large employers, one company is employing 80 employees in NEO as of 12/31/11.

Each of these 121 portfolio and client companies was assigned to one of the 440 sectors included in the IMPLAN® model. The IMPLAN® regional model and its data were edited to reflect each company's information. These changes to the model result in better impact estimates because they are based on actual estimates of the specific startup companies, rather than on the average industry data provided by IMPLAN®.

---

<sup>9</sup> The 23 client companies without economic activity in Ohio are at the earliest stage of development. The three portfolio companies without economic activity are passive investments for JumpStart.

## ECONOMIC IMPACT ESTIMATES

### ECONOMIC IMPACT ESTIMATES FOR NORTHEAST OHIO (NEO)

This study reports the economic impact of JumpStart-supported companies in terms of five measures: output, value added, labor income, employment, and taxes. Hereafter, JumpStart’s portfolio and client companies will be referred to collectively as “the companies.”

The direct economic impact of the companies on Northeast Ohio in 2011 included a total of 776 employees, a payroll of \$53.8 million, and expenditures of \$119.9 million. Table 1 summarizes the impact results of the first four measures for 2011 by direct, indirect, induced, and total effects. The economic impact of the portfolio companies represented over 69% of the total impact. Tax impact is discussed later.

**Table 1. Economic Impact in Northeast Ohio, 2011**

Impact Type	Output	Value Added	Labor Income	Employment
Direct Effect	\$119,892,670	\$83,068,865	\$53,780,427	776
Indirect Effect	\$37,173,594	\$21,764,645	\$13,872,613	282
Induced Effect	\$63,385,270	\$38,772,426	\$21,705,670	582
<b>Total Effect</b>	<b>\$220,451,534</b>	<b>\$143,605,936</b>	<b>\$89,358,710</b>	<b>1,640</b>

*Notes:*

The economic impact is presented in 2011 dollars.

All numbers have been rounded to the nearest whole number.

### Output Impact

Output measures the total value of goods and services produced in the region as a result of the companies’ spending. Output impact provides an estimate of the total change in output produced in Northeast Ohio because of the companies’ activities in 2011. Output impact in 2011 amounted to \$220.5 million (in \$2011). Of that, the direct production of goods and services by the companies accounted for \$119.9 million (54%). An additional \$37.2 million (17%) was indirect impact—goods and services produced regionally to support the activities of the companies. The induced impact of \$63.4 million (29%) measures the value of goods and services produced in the region to satisfy the increased demand by households working for the companies and their suppliers.

### Value-Added Impact

Value-added impact measures the value of goods and services produced in the economy less intermediate goods and services; it is equivalent to the definition of gross regional product. In 2011, the value-added impact from the companies was \$143.6 million. Of that, \$83.1 million

(58%) was attributed to direct impact, \$21.8 million (15%) to indirect impact, and \$38.8 (27%) to induced impact.

**Labor Income (Earnings) Impact**

Every job created by the companies and their suppliers generates earnings for local households. In 2011, total household earnings in Northeast Ohio increased by \$89.4 million. Of this impact, \$53.8 million (60%) resulted from the direct effects of the companies’ payroll, and \$13.9 million dollars (16%) resulted from increased earnings in other industries in the region that supply the companies. The induced income impact of \$21.7 million (24%) was due to increased household earnings throughout the economy. Figure 1 shows the breakdown of the output, value-added, and labor income impacts by type of effect.

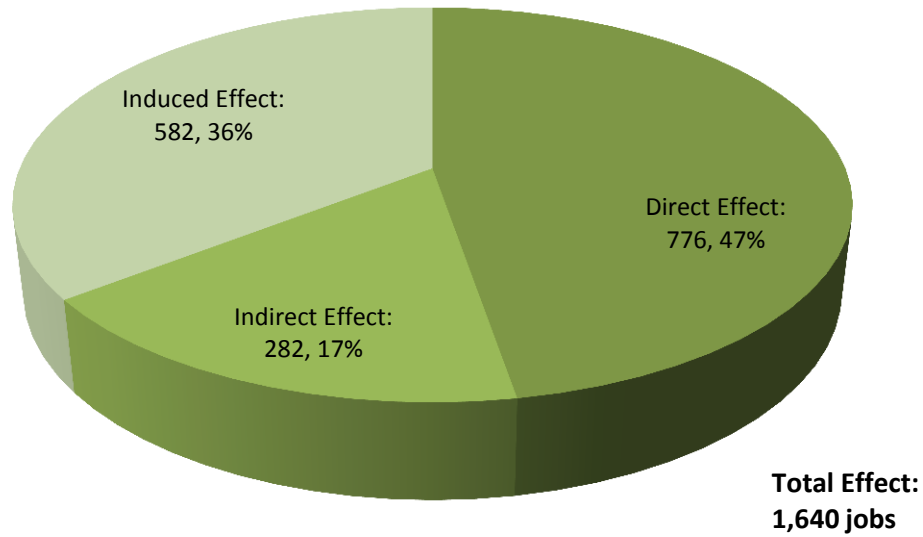
**Figure 1. Output, Value-Added & Labor Income Impact Measures for NEO, 2011**



**Employment Impact**

The total employment impact in Northeast Ohio attributed to the companies in 2011 amounted to 1,640 jobs (Figure 2). Of these, 776 (47%) were the result of direct impact – the employees of the companies. An additional 282 jobs (17%) were created in industries supporting the companies, and 582 (36%) more jobs were created throughout the economy because of increased employee earnings.

Figure 2. Employment in NEO by Impact Measure, 2011



### Tax Impact

Based on the IMPLAN model, there was \$29.8 million in tax revenue associated with the activity of the companies in 2011. Of this, \$19.5 million was federal tax revenue (65%) and \$10.3 million was state and local tax revenue (35%).

## ECONOMIC IMPACT ESTIMATES FOR OHIO

The economic impact for Ohio is based on the summation of the impact in Northeast Ohio discussed above and an impact conducted for the remaining 67 counties in Ohio. This economic impact of companies in the remaining 67 counties comes primarily from companies that received investment from North Coast Angel Fund, a fund whose operations are paid for by JumpStart. The Fund invests in companies in Northeast Ohio and across Ohio. In the companies in which it invests which have operations in the 67 counties outside of Northeast Ohio, denoted collectively as the remainder of Ohio, there were a total of 104 employees, a payroll of \$9,178,810, and expenditures of \$21,066,684.

The same five measures of impact are summarized for the state of Ohio during 2011: output, value added, labor income, employment, and taxes. The impact results of the first four measures are summarized in Table 2 by direct, indirect, induced, and total effects. The economic impact of the portfolio companies represented over 72% of the total impact in Ohio. Again, the tax impact will be discussed at the end of the section.

**Table 2. Economic Impact in Ohio, 2011**

Impact Type	Output	Value Added	Labor Income	Employment
Direct Effect	\$140,959,354	\$96,111,194	\$62,959,237	880
Indirect Effect	\$44,077,703	\$25,926,410	\$16,753,333	329
Induced Effect	\$74,473,792	\$45,531,633	\$25,463,173	682
<b>Total Effect</b>	<b>\$259,510,849</b>	<b>\$167,569,237</b>	<b>\$105,175,743</b>	<b>1,891</b>

*Notes:*

The economic impact is presented in 2011 dollars.

All numbers have been rounded to the nearest whole number.

### Output Impact

Output impact is an estimate of the total change in the value of goods and services produced in Ohio due to the activities of the companies. Output impact in 2011 amounted to \$259.5 million (in \$2011). Of that, \$141.0 million (54%) was accounted for by the direct production of goods and services by the companies. An additional \$44.1 million (17%) was indirect impact—goods and services produced in the state to support the activities of the companies. The induced impact of \$74.5 million (29%) measures the value of goods and services produced in the state to satisfy the increased demand by households.

### Value-Added Impact

Value-added impact corresponds to gross regional product. In 2011, the value-added impact in the state from the companies was almost \$167.6 million. Of that, \$96.1 million (57%) was

attributed to direct impact, \$25.9 million (16%) to indirect impact, and \$45.5 million (27%) to induced impact.

### Labor Income (Earnings) Impact

The increase in household earnings created by the companies and their suppliers represents the labor income impact. In 2011, total household earnings in Ohio increased by almost \$105.2 million. Of this impact, \$63.0 million (60%) resulted from the direct effects of the companies' payroll, and \$16.8 million dollars (16%) resulted from increased earnings in other industries in the state that supply the companies. The induced income impact of \$25.5 million (24%) was due to increased household earnings throughout the economy. Figure 3 shows the breakdown of the output, value added, and labor income impacts by type of effect.

Figure 3. Output, Value-Added & Labor Income Impact Measures for Ohio, 2011

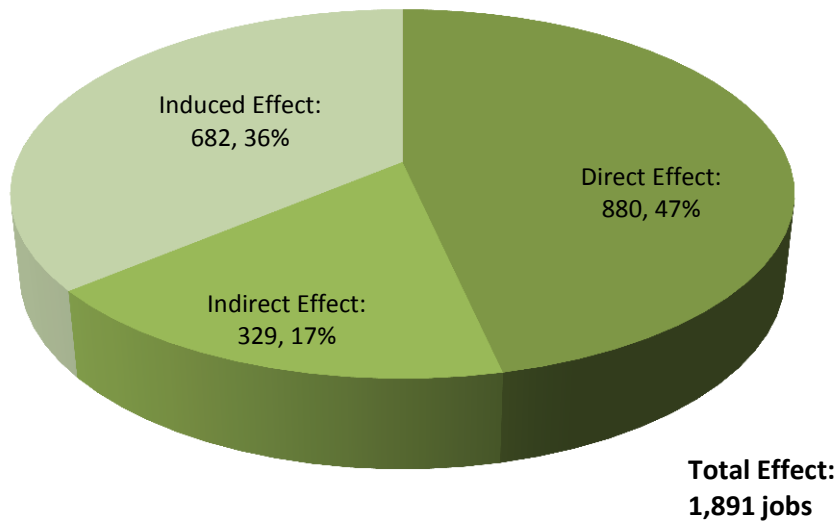


### Employment Impact

The total statewide employment impact in 2011 attributed to the companies amounted to 1,891 jobs. Of these, 880 (47%) were the result of direct impact. An additional 329 jobs (17%) were created in industries supporting the companies, and 682 (36%) more jobs were created throughout the economy due to increased employee earnings (Figure 4).



Figure 4. Employment in Ohio by Impact Measure, 2011



### Tax Impact

Tax revenues increased by \$34.8 million in 2011 in Ohio. Federal tax revenues increased by \$22.8 million (66% of the total tax impact), and state and local taxes increased by \$12.0 million (34% of the total tax impact).

## 2010 – 2011 COMPARISON

The 2011 economic impact estimates are significantly larger than the 2010 results. In Northeast Ohio, the total impact results grew in each measure between 2010 and 2011 (Table 3). Calculated in nominal terms, without adjusting for inflation, output increased by 43%, value-added increased by 60%, labor income increased by 54%, employment increased by 47%, and taxes increased by 63%.

**Table 3: Comparison of 2010 and 2011 Impact Results for NEO<sup>10</sup>**

	2010	2011	% Change
<b>Output</b>	\$154,380,995	\$220,451,534	43%
<b>Value Added</b>	\$89,691,693	\$143,605,936	60%
<b>Labor Income</b>	\$58,028,949	\$89,358,710	54%
<b>Employment</b>	1,115	1,640	47%
<b>Taxes</b>	\$18,281,682	\$29,840,714	63%

In the entire state, the total impact results also grew in each measure between 2010 and 2011 (Table 4). Calculated in nominal terms, without adjusting for inflation, output increased by 67%, value-added increased by 85%, labor income increased by 80%, employment increased by 68%, and taxes increased by 89%.

**Table 4: Comparison of 2010 and 2011 Impact Results for Ohio**

	2010	2011	% Change
<b>Output</b>	\$155,679,400	\$259,510,849	67%
<b>Value Added</b>	\$90,439,691	\$167,569,237	85%
<b>Labor Income</b>	\$58,500,099	\$105,175,743	80%
<b>Employment</b>	1,125	1,891	68%
<b>Taxes</b>	\$18,427,520	\$34,799,184	89%

<sup>10</sup> All dollars are reported in nominal terms.

The increase in economic impact between 2010 and 2011 is due to both the growth of companies that existed in both years and the inclusion of a larger number of companies.

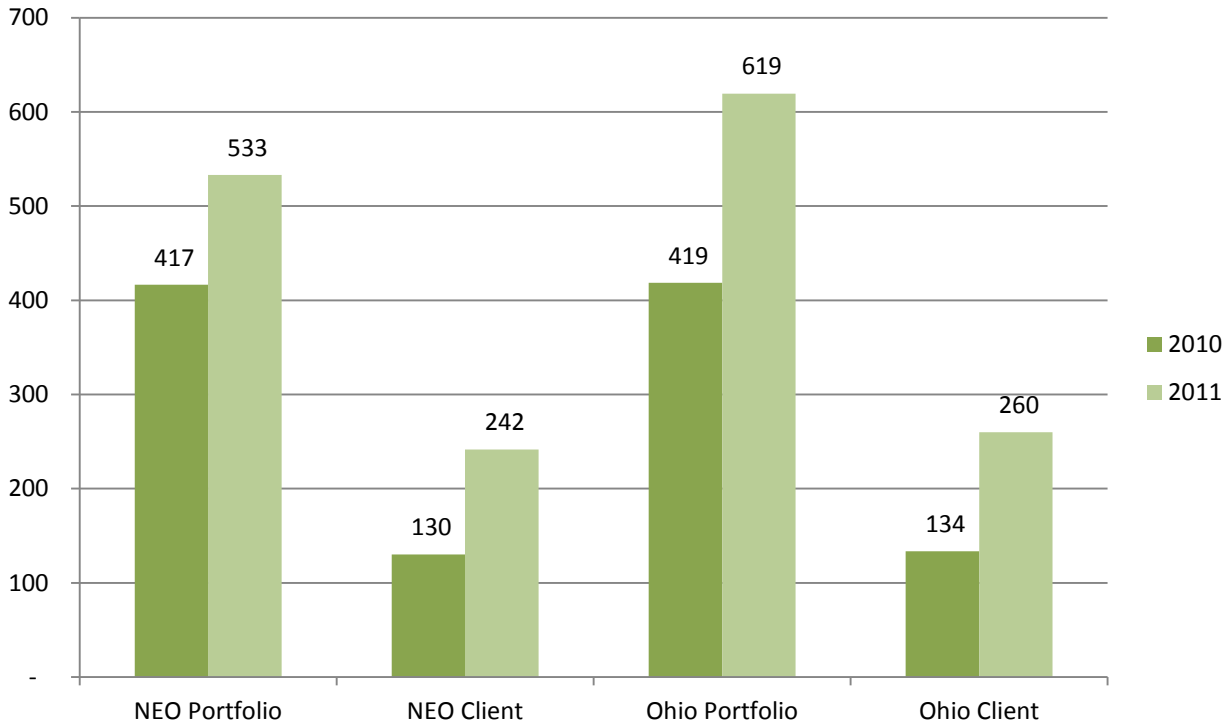
Sixty four companies responded in both years. These 64 companies increased their aggregated NEO employment by 111, payroll by \$8.7 million and expenditures by \$20.6 million; they increased their aggregated Ohio employment by 131, payroll by \$10.9 million and expenditures by \$23.0 million.

Of the 58 companies which responded to the survey in 2011 but not in 2010 and which had economic impact, 7 are new portfolio companies for JumpStart or North Coast Angel Fund and 33 are new client companies for JumpStart. Seven are companies receiving North Coast Angel Fund investment prior to 2010 which responded to the survey only in 2011, and 11 are client companies of JumpStart that were not new in 2011 but responded to the survey in 2011.

In Northeast Ohio, 90 companies with a total NEO employment of 547 were included in the 2010 impact analysis (Figure 5). This compares to 112 companies with a combined employment of 775 that were included in the 2011 analysis. The total amount of payroll included in the analysis increased from \$29.6 million in 2010 to \$53.8 million in 2011. The overall company NEO expenditures increased from \$84.4 million in 2010 to \$119.9 in 2011.

Sixty four portfolio and client companies were included in both years. In 2010, these companies had NEO employment of 446, NEO payroll of \$30.5 million, and NEO expenditures of \$70.1 million. In 2011, they had 549 NEO employees, NEO payroll of \$39.0 million, and NEO expenditures of \$89.4 million. These 64 companies increased their aggregated NEO employment by 111, payroll by \$8.7 million and expenditures by \$20.6 million.

**Figure 5. Employment in JumpStart Portfolio and Client Companies Included in Impact, 2010-2011**



In Ohio, there were 112 companies included in the 2010 impact, which increased to 121 in the 2011 analysis. In 2010, these companies had employment of 448, payroll of \$30.7 million, and expenditures of \$70.6 million. In 2011, they had 573 employees, payroll of \$41.6 million, and expenses of \$92.9 million. The Ohio employment included in the impact grew from 553 to 879, Ohio payroll increased from \$34.6 million in 2010 to \$63.0 million in 2011, and overall company expenditures in Ohio increased from \$85.1 million in 2010 to \$141.0 in 2011.

Analyzing data for Ohio reveals that there were also 64 portfolio and client companies that were included in both years for the statewide analysis. These companies continued to grow in Ohio as well; they increased their aggregated Ohio employment by 131, Ohio payroll by \$10.9 million and Ohio expenditures by \$23.0 million.