

**THE LONG ISLAND CENTER FOR SOCIO-ECONOMIC POLICY**

**THE STATE OF THE LONG ISLAND MANUFACTURING SECTOR: 2011 – 2014  
WHEN MANUFACTURING GROWS LONG ISLAND PROSPERS**

**PREPARED FOR**

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**The State of Long Island’s Manufacturing Sector: 2011 – 2014**  
**When Manufacturing Grows Long Island Prospers**  
**December 2014**

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## ABSTRACT

The Long Island Forum for Technology's 2014 State of Long Island Manufacturing Survey is presented in context with the results of LIFT's 2012 survey, providing an illuminating four year trend line of Long Island's manufacturing sector.

LIFT 2014 respondents were evenly divided on the improvement of Long Island's economy, an improvement from 2012 when 68 percent disagreed that the economy had improved. However, when asked whether the Long Island economy will improve over the next five years, nearly 60 percent of 2014 respondents agreed that the economy will improve; a decrease from the 70 percent of 2012 respondents.

Gross revenue had increased between 2011 and 2013 for 58 percent of 2014 respondents, a slight improvement from the 54 percent of 2012 respondents who experienced gross revenues increases from 2010. However, gross revenue increases did not result in employee increases. In 2014 more respondents reported decreases or no change in employees than employee increases, with 2014 decreases and no change in employees marginally higher than 2012. Yet while employees decreased or remained unchanged, nearly 97 of 2014 respondents agree that finding qualified employees were important to the growth of their company and were basically unchanged from 96 percent in 2012. Consistent with the need for qualified employees is the 90 percent of 2014 respondents who agree that workforce development was integral to the growth of their company, unchanged from the 90 percent of 2012 respondents.

As to the importance of technology for business growth, 81 percent of 2014 respondents agree that it was, unchanged from the 82 percent of 2012 respondents.

When asked if Long Island's high costs would force their company to relocate, 56 percent of 2014 respondents agree, essentially unchanged from 54 percent in 2012. Expressing their concern for the growth of Long Island's manufacturing sector, 81 percent of 2014 respondents agree that the manufacturing sector will not grow over the next five years, increasing from 70 percent in 2012. As for contraction of the manufacturing sector, 69 percent of 2014 respondents agree that it would contract, as compared to 80 percent in 2012.

Exporting was identified as an untapped economic growth area for Long Island, with 78 percent of respondents selling predominantly to domestic markets while 21 percent generate more than half their revenues from international markets. Confirming the potential for exporting

is the 49 percent of 2014 respondents who agreed that exporting was a part of their strategic plan, a decrease from 67 percent in 2012.

A correlation matrix revealed that the strongest relationship expressed by 2014 respondents existed between Long Island's high costs and company relocations away from Long Island. Other strong relationships existed between gross revenues and employees, revenues from international markets and increase in employees, with weaker relationships existing between Long Island's high costs and revenue increases and decreases.

The correlation matrix also revealed that strong negative relationships existed between domestic revenue sources and international revenue sources. Other negative relationships existed between gross revenues and revenue increases, gross revenues and employee increases and decreases, gross revenues and Long Island's high costs, increases and decreases in employees and revenues from international revenue sources, domestic revenue sources and increases and decreases of employees, and employees and increase and decreases of employees.

A regression analysis illustrated that Long Island's high costs predict 70 percent of the variance in the relocation of Long Island's manufacturing companies, a troubling trend that has continued since 2012.

## **INTRODUCTION**

Long Island has taken a long winding road to emerge from the Great Recession. The Long Island economy that has emerged is much different than the economy before the Great Recession. Long Island has becoming more of a service-sector economy with more jobs being created in the lower-paying retail, health care and tourism sectors. While manufacturing companies have left the region taking with them valued manufacturing jobs, other Long Island manufacturers have created jobs, resulting with jobs in the higher-paying manufacturing sector remaining basically unchanged since 2008 after a period of job losses beginning with 2000.

Thus, while the number of jobs created in the lower-paying sectors is outpacing the number of jobs lost elsewhere, the economic impact is smaller. This is because a service-sector economy reliant on lower-paying and part-time jobs has a smaller multiplier effect, which means that these jobs spin off fewer secondary jobs. Job losses in the higher-paying manufacturing sector result in an incrementally greater loss of secondary jobs and the lower sales tax revenues that Nassau and Suffolk Counties are experiencing. So, while there is some good news, a look behind the numbers reveals that the economic news is not that good.

While the Long Island economy is experiencing growth, it is critical that efforts to create jobs in the emerging value-added industry sectors such as manufacturing, technology, cyber security and advanced manufacturing be successful. It wasn't long ago in the year 2000 when manufacturing jobs were 8.1 percent of Long Island's job base, decreasing to 6.3 percent in 2010 and 5.6 percent by September 2014, with manufacturing companies dropping from 4,096 in 2000 to 3,357 in 2010 and 3,182 by September 2014 a decrease of 22 percent from year 2000 and 5.2 percent from 2010. This trend was identified in LIFT's 2012 State of Long Island Manufacturing survey. LIFT has initiated programs to address these trends and the needs of Long Island manufacturers.

To foster manufacturing job growth will take financing, technological innovation, and a place where existing and emerging companies can grow and prosper despite Long Island high costs of property taxes, wages and energy that sap the profits of Long Island businesses. It are these costs that business identify as reasons why they will leave the region. And leave the region they have.

Just in the last six months Long Island has lost over 1,900 jobs and nearly \$100 million in economic activity. Remy USA Industries, a Bay Shore automotive-parts manufacturer, is closing

and eliminating 271 jobs. Pharmaceutical giant Forest Laboratories is leaving Long Island and eliminating all 475 jobs and their annual economic impact of over \$80 million. Bay Shore's Entenmann's Bakery is shifting production elsewhere because of lost market competitiveness costing 276 Long Islanders their jobs following a Long Island original, Northrop Grumman which sent over 60 percent of its local workforce or 850 jobs to Florida and California.

These job losses and corporate relocations, while disappointing, should come as no surprise. Respondents to LIFT's 2012 State of Long Island's Manufacturing Sector predicted that Long Islands' manufacturing base would contract over the next five years and that Long Island's high costs would force them to relocate. The combination of Long Island's high costs, having companies thinking about leaving Long Island along with the feeling that the manufacturing sector will not grow but will contract projects future struggles of the Long Island economy.

While manufacturing jobs are basically unchanged, their percent of Long Island's job base has declined. Thus the importance of stemming further erosion of the manufacturing sector can't be understated. However, respondents to LIFT's 2014 State of the Long Island Manufacturing Sector suggest further erosion is likely.

Why this matters is that manufacturing companies exiting Long Island not only snuffs out their share of Long Island's economy but also cause an equivalent secondary economic loss. It is for that reason that regions and states fight for high paying job creating companies like the ones Long Island is losing. Workforces, their economic impact and tax revenues flow to locations where they wish to live and find jobs, with companies relocating to where that workforce is. Long Island has to encourage these businesses and the jobs and economic activity they generate to remain, a challenge made more difficult by company mobility and the global economy.

Intellectual capital, such as being developed on Long Island, when ready for manufacturing can be manufactured anywhere where costs are lower and profits are higher. Inventors and entrepreneurs are more loyal to their ideas and the profits that can be made from them - either from selling the development rights or the patents they obtained - than they are to the area where the ideas were developed. This makes emerging from a service economy more difficult for Long Island. As LIFT concluded in its 2012 report, for Long Island's economy to grow, we can't let the ideas that are developed here be manufactured elsewhere.

The purpose of this study was to elicit the current opinions of executives of Long Island's manufacturing and technology sectors as to Long Island's current and future economy and

manufacturing sector. The manufacturing companies surveyed were in Defense-Aerospace-Homeland Security; Medical Devices; Pharmaceuticals; and Test and Measurement.

This study examined the relationships between these manufacturing companies and the years operated on Long Island, annual gross revenues, increase or decrease in gross revenues, employees, increase or decrease in employees, and percent of revenues derived from domestic and international markets.

Also examined were the importance of exporting in company strategic plans, reliance on technology, finding qualified employees, and importance of workforce development; company executive's current view of the Long Island economy and manufacturing sector; and any relocation plans from Long Island that they might have. To identify any changing trends, these responses were compared with responses in LIFT's 2012 State of Long Island's Manufacturing Sector.

The benefit of this study is that it will provide an opportunity for LIFT to assess the growth of Long Island's manufacturing and technology sectors. Participation in this study involved no risks, with responses confidential and anonymous.

## **Research Questions**

The following questions guided this study.

### **Research Question One**

For the random sampled returned surveys of the Long Island manufacturing sector, what were the description of these manufacturing companies as to the years operated on Long Island, annual gross revenues, increase or decrease in gross revenues, employees, employee increase or decrease, percent of revenues from domestic and international markets, and primary country where revenues originated?

Also examined were the distributions of these manufacturing companies as to the importance placed on exporting, reliance on technology, finding qualified employees, and of workforce development; their current view of the Long Island economy and manufacturing sector; and their relocation plans from Long Island and the role that Long Island's high costs play in relocation decisions.

## **Research Question Two**

For the random sampled Defense-Aerospace-Homeland Security, Medical Devices, Pharmaceuticals, and Test and Measurement elements of the Long Island manufacturing sector, what were the relationships between these manufacturing companies and the years in business on Long Island, annual gross revenues, increase or decrease in gross revenues, employees, increase or decrease in employees, percent of revenues from domestic and internal markets, any relocation plans for leaving Long Island and the role of Long Island's high costs in those relocation decisions.

## **Research Question Three**

How did the random sampled Defense-Aerospace-Homeland Security, and Medical Devices, Pharmaceuticals, and Test and Measurement elements of the Long Island manufacturing sector and the years in business, gross revenues, gross revenue increases, amount of employees, percent of revenues from domestic and international markets, and Long Island's high costs predict company relocations from Long Island?

## **Description of Subjects**

This study examined Long Island manufacturing companies in the industry categories of Defense-Aerospace-Homeland Security, and Medical Devices, Pharmaceuticals, and Test and Measurement.

The companies were purposefully selected by amount of employees, resulting in a total population to be sampled of 884 companies in four industry categories.

The subjects in this study were the chief executive or chief operating officers of each selected company in the 884 purposefully selected industry categories of Defense-Aerospace-Homeland Security, and Medical Devices, Pharmaceuticals, and Test and Measurement. Respondents were placed one of two industry categories and contrasted as to their years in business, gross revenues, increase or decrease in gross revenues, amount of employees, increase or decrease in their employees, and percent of revenues derived from domestic and international markets. Respondent companies remained anonymous and confidential.

## **Description of the Respondents**

Of the 884 surveys mailed in late September and early October 2014 to the selected chief executives and chief operating officers of the purposefully selected companies, 195 (22 percent) were returned as unable to be delivered due to relocation of the company. Of the remaining 689 purposefully selected sample, 428 (62 percent) were in Defense-Aerospace-Homeland Security, 261 (38 percent) were in Medical Devices, Pharmaceuticals, and Test and Measurement.

Of the purposefully selected sample responses received from each industry sector Defense-Aerospace-Homeland Security was 40 of 428 or 9 percent, and Medical Devices, Pharmaceuticals and Test and Measurement was 19 of 261 or 7 percent.

Of the 59 random sampled survey responses (nine percent return rate) received from the 689 purposefully selected sample, 40 or 68 percent were Defense-Aerospace-Homeland Security, and 19 or 32 percent were Medical Devices, Pharmaceuticals, and Test and Measurement. Table 1 presents the descriptive statistics for the 59 survey respondents.

### **Descriptive Statistics**

#### **Company Industry Sector and Selected Population Sample**

**Table 1: Frequency of Responses - Company Industry Sector**

Industry Sector	Frequency	Percent	Valid Percent	Cumulative Percent
1	<b>40</b>	67.8	<b>67.8</b>	<b>67.8</b>
2	<b>19</b>	32.2	<b>32.2</b>	<b>100.0</b>
<b>Total</b>	<b>59</b>	100.0	<b>100.0</b>	

Notes; (1) Defense-Aerospace-Homeland Security; (2) Medical, Pharmaceutical, Test and/Measurement,

#### **Respondents in Table 1 Consistent With LIFT 2012 Survey Respondents**

In developing a trend analysis of Long Island's manufacturing sector, necessary was that the 2014 respondents in Table 1 were consistent with LIFT's 2012 survey respondents, which they were. Defense-Aerospace-Homeland Security companies in 2012 were 63.7 percent of respondents as compared to 67.8 percent in 2014, and 29.7 percent for 2012 Medical Devices, Pharmaceutical, and Test and Measurement respondents as compared to 32.2 percent in 2014.

**Years In Business**

The years in business of the 59 respondents, illustrated in Table 2, ranged in years from 11 to 93 with mean years in business of 52 years and median years in business of 40 years.

**Table 2: 2014 Frequency of Responses - Years In Business**

Years In Business	Frequency	Percent	Valid Percent	Cumulative Percent
11	1	1.7	1.7	1.7
12	1	1.7	1.7	3.4
17	1	1.7	1.7	5.1
20	2	3.4	3.4	8.5
22	1	1.7	1.7	10.2
24	3	5.1	5.1	15.3
25	1	1.7	1.7	16.9
26	1	1.7	1.7	18.6
27	2	3.4	3.4	22.0
28	1	1.7	1.7	23.7
29	1	1.7	1.7	25.4
30	1	1.7	1.7	27.1
32	1	1.7	1.7	28.8
34	1	1.7	1.7	30.5
35	4	6.8	6.8	37.3
37	3	5.1	5.1	42.4
38	1	1.7	1.7	44.1
40	4	6.8	6.8	50.8
41	3	5.1	5.1	55.9
43	1	1.7	1.7	57.6
45	2	3.4	3.4	61.0
49	2	3.4	3.4	64.4
50	4	6.8	6.8	71.2
51	1	1.7	1.7	72.9
52	2	3.4	3.4	76.3
55	2	3.4	3.4	79.7
57	2	3.4	3.4	83.1
58	1	1.7	1.7	84.7
60	1	1.7	1.7	86.4
61	1	1.7	1.7	88.1
63	2	3.4	3.4	91.5
64	1	1.7	1.7	93.2
68	1	1.7	1.7	94.9
82	1	1.7	1.7	96.6
85	1	1.7	1.7	98.3
93	1	1.7	1.7	100.0
<b>Total</b>	<b>59</b>	<b>100.0</b>	<b>100.0</b>	

## **Respondents in Table 2 Consistent with LIFT 2012 Survey Respondents**

The 2014 respondents in Table 2 were consistent with respondent years in business in LIFT's 2012 survey. In 2012 the respondent median years in business was 35 years. The 2014 median respondent years in business was 40 years.

### **Data Gathering Techniques**

All survey respondents and their specific responses were kept confidential. The relationships between the manufacturing companies and the years operated on Long Island, annual gross revenues, increase or decrease in gross revenues, employees, wages paid, increase or decrease in wages paid and percent of revenues derived from domestic and international markets were ascertained by way of a survey that was distributed by U.S. Mail.

Other variables for the manufacturing companies ascertained by the survey were the importance of exporting, reliance on technology, finding qualified employees, importance of workforce development, respondents' current view of the Long Island economy and manufacturing sector, and any relocation plans from Long Island that they might have.

Included with the mailed survey packet to the chief executives or chief operating officers of the purposefully selected sample of 884 manufacturing companies in the Defense-Aerospace-Homeland Security, Medical Devices, Pharmaceutical, and Test and Measurement industry categories was a letter from LIFT Executive Director Bill Wahlig asking them in advance for their assistance and instructions on how to complete the survey. The letter of invitation to participate explained the guarantee of confidentiality and anonymity. The survey was individually addressed with preprinted labels addressed to the chief executives and chief operating officers of the purposefully selected sample of manufacturing companies with a self-addressed return envelope to LIFT economic consultant Dr. Martin R. Cantor, CPA.

### **Instrumentation**

The survey, as included in Appendix A, gathered data from 59 chief executives or chief operating officers of the purposefully selected sample of Defense-Aerospace-Homeland Security, Medical Devices, Pharmaceutical, and Test and Measurement manufacturing companies. A six-point Likert Scale was used by respondents to report their opinions, business practices, and

strategies. The Likert Scale for all items was 1=Strongly Disagree, 2=Disagree, 3=Somewhat Disagree, 4= Somewhat Agree, 5=Agree, and 6=Strongly Agree.

The survey was comprised of two parts. Part one consisted of 10 questions designed to obtain from survey respondents the of importance of exporting, reliance on technology, finding qualified employees, importance of workforce development, their current and future view of the Long Island economy and manufacturing sector; and any relocation plans from Long Island that they might have.

Part 2 consisted of six parts designed to obtain the years survey respondents have been in business on Long Island, annual gross revenues, increase or decrease in gross revenues, employees, increase or decrease in employees, and percent of revenues from domestic and international markets.

### **Research Question One**

For the total of returned surveys of the Long Island manufacturing sector, what were the descriptions of these manufacturing companies and the years operated on Long Island, annual gross revenues, increase or decrease in gross revenues, employees, increase or decrease in employees, percent of revenues from domestic and international markets, and primary country where revenues originated?

Also what were the distribution of these manufacturing companies in the importance of exporting, technology innovation, finding qualified employees, and investment in workforce development; their current view of the Long Island economy and manufacturing sector; and any relocation plans for leaving Long Island and the role of Long Island's high costs in those relocation decisions.

### **Respondent Descriptives**

#### **Gross Revenue of 2014 Survey Respondents**

The respondents were divided into two categories, those with gross revenues less than five million dollars and those with gross revenues more than five million dollars. Of the 58 companies in Table 3 identifying their gross revenues, 44.8 percent had gross revenues less than five million dollars and 55.2 percent reported gross revenues greater than five million dollars.

### Respondents in Table 3 Consistent with LIFT 2012 Survey Respondents

Consistency matters when evaluating the 2012 and 2014 survey respondents' opinions. In LIFT's 2012 survey 43.2% of the respondents had gross revenues less than \$5 million; and 56.8% had gross revenues of more than \$5 million. This was consistent with the 2014 survey respondents where 44.8% reported gross revenues of less than \$5 million and 55.2%, had gross revenues of more than \$5 million.

**Table 3: 2013 Gross Revenues of Survey Respondents**

Gross Revenue Category	Frequency	Percent	Valid Percent	Cumulative Percent
1	26	44.1	44.8	44.8
2	32	54.2	55.2	100.0
<b>Total</b>	<b>58</b>	98.3	<b>100.0</b>	
No Reply	1	1.7		
Total	59	100.0		

Note: (1) Gross Revenues Less than \$5 million; (2) Gross Revenues More than \$5 million;  
(3) No change from prior year.

### 2014 Survey Respondents: Increase in Gross Revenues: 2012 - 2013

Of the 59 survey respondents 55 reported their gross revenue activity between 2012 and 2013. Table 4 reflects that of the 55 companies, 32 companies or 58.2 percent reported gross revenue increases from 2012, 34.5 percent or 19 companies reported gross revenue decreases, with 7.3 percent or four companies reporting no change in their gross revenues.

**Table 4: Gross Revenue Increase-Decrease From 2012**

Gross Revenue Increase / Decrease	Frequency	Percent	Valid Percent	Cumulative Percent
Increase	32	54.2	58.2	58.2
Decrease	19	32.2	34.5	92.7
No Change	4	6.8	7.3	100.0
<b>Total</b>	<b>55</b>	93.2	<b>100.0</b>	
No Reply	4	6.8		
Total	59	100.0		

### Table 4 Gross Revenue Increases Slight Improvement from LIFT 2012 Survey

LIFT's 2012 survey reported that between 2010 and 2011 53.6% of the respondents had gross revenue increases, 42.8% had decreases in gross revenues and 3.6% reported that their

gross revenues had not changed. The 2014 survey respondents reported a slight improvement over 2012 where Increased gross revenues were reported by 58.2% of 2014 respondents, 34.5% had gross revenues decreases and 7.3% had no change in their gross revenues.

**Total Employees of Respondent Companies**

**Table 5: 2013 Company Employees**

Employee Total	Frequency	Percent	Valid Percent	Cumulative Percent
0	1	1.7	1.8	1.8
2	1	1.7	1.8	3.6
5	1	1.7	1.8	5.4
7	1	1.7	1.8	7.1
8	1	1.7	1.8	8.9
10	2	3.4	3.6	12.5
12	3	5.1	5.4	17.9
13	2	3.4	3.6	21.4
15	5	8.5	8.9	30.4
16	1	1.7	1.8	32.1
17	4	6.8	7.1	39.3
20	1	1.7	1.8	41.1
21	1	1.7	1.8	42.9
24	1	1.7	1.8	44.6
25	1	1.7	1.8	46.4
28	2	3.4	3.6	50.0
30	1	1.7	1.8	51.8
36	1	1.7	1.8	53.6
38	1	1.7	1.8	55.4
40	2	3.4	3.6	58.9
41	1	1.7	1.8	60.7
42	1	1.7	1.8	62.5
50	1	1.7	1.8	64.3
54	1	1.7	1.8	66.1
55	1	1.7	1.8	67.9
60	1	1.7	1.8	69.6
65	1	1.7	1.8	71.4
70	2	3.4	3.6	75.0
75	2	3.4	3.6	78.6
84	1	1.7	1.8	80.4
86	1	1.7	1.8	82.1
90	1	1.7	1.8	83.9
104	1	1.7	1.8	85.7
120	1	1.7	1.8	87.5
125	1	1.7	1.8	89.3
170	1	1.7	1.8	91.1
270	1	1.7	1.8	92.9
275	1	1.7	1.8	94.6
330	1	1.7	1.8	96.4
425	1	1.7	1.8	98.2
825	1	1.7	1.8	100.0
<b>Total</b>	<b>56</b>	<b>94.9</b>	<b>100.0</b>	
No Reply	3	5.1		
Total	59	100.0		

## Company Employees

Of the 59 respondents reflected in Table 5, 56 companies reported the amount of their employees, ranging from no employees to 825. Half of the companies have between none and 28 employees and the remaining half have between 30 and 825 employees.

## Respondents in Table 5 Consistent With LIFT 2012 Survey in Median Employees

The responding companies in the LIFT 2012 survey reported median employees of 29/30 which were consistent with the median employees of 28 reported by 2014 survey respondents.

### 2014 Survey Respondents: Increase – Decrease in Employees From 2012

Fifty-four companies responded as to the increase or decrease of their employees, with 20 or 37.0 percent reporting that their employee workforce increased from 2012 to 2013. Twenty-four companies or 44.5 percent reported decreases in their employees while 10 companies or 18.5 percent of respondents reported no change in their employees. The decreasing employees in the responding companies mirror the basically unchanged level in Long Island manufacturing employees during the period covered by this survey.

**Table 6: 2013 Increase-Decrease in Employees**

Employee Total Increase/Decrease	Frequency	Percent	Valid Percent	Cumulative Percent
Increase	20	33.9	37.0	37.0
Decrease	24	40.7	44.5	81.5
NoChange	10	16.9	18.5	100.0
Total	54	91.5	100.0	
No Reply	5	8.5		
Total	59	100.0		

## 2014 Respondents: Compared With 2012 Survey- Decrease of Employee Levels

Table 6 reflects a slight decrease in manufacturing employees as compared with LIFT's 2012 survey. In 2012, 39.7 percent of the responding companies reported increases in their employees increase; 34.6 percent reported employee decreases, and 25.7 percent reported no change in their employees. Consistent with 2012 respondents, 37 percent of 2014 respondents reported increased employee levels. However in 2014 more companies reported employee decreases with 44.5 percent having fewer employees, with 18.5 percent reporting unchanged employee levels.

## **2013 Revenues Originating From Domestic and International Markets: Untapped Potential**

Companies receiving the LIFT 2014 survey were asked to indicate what percent of their 2013 annual revenues originated from domestic or international markets. These responses appear in Tables 7 and 8.

Table 7 reflects that of the 58 companies responding to this inquiry, 45 or 77.6 percent of the respondents generated between 76 and 100 percent of their revenues from United States markets. This was followed by eight companies or 13.8 percent of respondents which generated between 51 and 75 percent and 5 companies or 8.6 percent of respondents which generated between 26 and 50 percent from domestic markets.

**Table 7: 2013 Revenues Originating From United States Markets**

Percent Sales from United States Sources	Frequency	Percent	Valid Percent	Cumulative Percent
26-50%	5	8.5	8.6	8.6
51-75%	8	13.6	13.8	22.4
76-100%	45	76.3	77.6	100.0
<b>Total</b>	<b>58</b>	<b>98.3</b>	<b>100.0</b>	
No Reply	1	1.7		
Total	59	100.0		

As would be expected, with such heavy revenue generation from United States markets as reflected in Table 7, Table 8 illustrates that only 38 or 64 percent of responding companies reported revenue generation from international markets.

**Table 8: 2013 Revenues Originating From International Markets**

Percent Sales From International Origin	Frequency	Percent	Valid Percent	Cumulative Percent
0%	6	10.2	15.8	15.8
1-25%	23	39.0	60.5	76.3
26-50%	1	1.7	2.6	78.9
51-75%	8	13.6	21.1	100.0
<b>Total</b>	<b>38</b>	<b>64.4</b>	<b>100.0</b>	
No Reply	21	35.6		
Total	59	100.0		

Table 8 indicates that of the 38 companies responding, only 23 companies or 60.5 percent of the 38 companies generated between one and 25 percent of their revenues from international markets. Six companies or 15.8 percent of respondents generated no revenues from international markets.

The fact that only eight companies or 21.1 percent of respondents reporting that they generated 51 to 75 percent of their revenues from international markets suggests that there is untapped revenue potential that Long Island manufactures can generate from exporting to international markets. That was affirmed in Table 18 where more than half of the respondents indicated that exporting was not part of their strategic plans

**2014 Respondents: Primary Country Where 2013 Revenues Originated**

Table 9 illustrates where 29 of the 59 responding companies generated their 2013 revenues. The fact that revenues of 44.8 percent are generated from United States markets reinforces that opportunity exists for Long Island companies to find new revenues in international markets.

**Table 9: Primary Country Where 2013 Revenues Originated**

	Frequency	Percent	Valid Percent	Cumulative Percent
Asia	5	8.5	17.2	17.2
Netherlands	1	1.7	3.4	20.7
China	1	1.7	3.4	24.1
India/Singap	1	1.7	3.4	27.6
USA	13	22.0	44.8	72.4
Germany	1	1.7	3.4	75.9
England	1	1.7	3.4	79.3
Brazil	1	1.7	3.4	82.8
Mexico	1	1.7	3.4	86.2
France	2	3.4	6.9	93.1
Canada	1	1.7	3.4	96.6
Puerto Rico	1	1.7	3.4	100.0
<b>Total</b>	<b>29</b>	<b>49.2</b>	<b>100.0</b>	
No Reply	30	50.8		
Total	59	100.0		

**View of Long Island’s Economy: Current Improvement But Uncertainty About Future**

In Tables 10 and 11 survey respondents opined on whether the Long Island economy had improved during the past year and whether the Long Island economy will improve over the next five years.

As for the improvement of the Long Island economy in the past year, the 59 respondents in Table 10 were evenly divided with 50.9 percent disagreeing and 49.1 percent agreeing. Not encouraging is that 37 companies or 62.7 percent did not have strong opinions of that growth by responding that they somewhat disagreed or somewhat agreed that the Long Island economy has not improved during the past year. However, more respondents strongly disagreed that the economy had not improved than those who strongly agreed that it had.

**Table 10: (Q1)Long Island’s Economy Improved During Year**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
1	<b>8</b>	13.6	<b>13.6</b>	<b>13.6</b>
2	<b>5</b>	8.5	<b>8.5</b>	<b>22.1</b>
3	<b>17</b>	28.8	<b>28.8</b>	<b>50.9</b>
4	<b>20</b>	33.9	<b>33.9</b>	<b>84.8</b>
5	<b>7</b>	11.9	<b>11.9</b>	<b>96.7</b>
6	<b>2</b>	3.4	<b>3.3</b>	<b>100.0</b>
<b>Total</b>	<b>59</b>	100.0	<b>100.0</b>	

Notes: (1) Strongly Disagree; (2)Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree  
(6) Strongly Agree

When asked whether the Long Island economy will improve over the next five years. Table 11 indicates that more respondents agreed that it would. But as the case with their view of the current Long Island economy more of the respondents did not have strong opinions of what the next five years would bring to the Long Island economy. Uncertainty of the future is not a good sign for business; uncertain businesses often do not expand and create jobs as we have seen in the flat job growth generated by the manufacturing sector of the Long Island economy.

Of the 59 respondents in Table 11, 24 respondents or 40.6 percent disagreed that the economy would improve during the next five years with 35 respondents or 59.4 percent agreeing that the economy would improve. Not having strong opinions of the improvement of the Long

Island economy over the next five years were 35 respondents or 59.3 percent who either somewhat disagreed or somewhat agreed.

**Table 11: (Q2) Long Island’s Economy Will Improve Over Next 5 Years**

	Frequency	Percent	Valid Percent	Cumulative Percent
1	3	5.1	5.1	5.1
2	10	16.9	16.9	22.0
3	11	18.6	18.6	40.6
4	24	40.7	40.7	81.3
5	9	15.3	15.3	96.6
6	2	3.4	3.4	100.0
<b>Total</b>	<b>59</b>	<b>100.0</b>	<b>100.0</b>	

Notes: (1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree (6) Strongly Agree

**2014 Respondents: View of Current Economy Improved over 2012-Dimmer View of Future**

There was improvement in how 2014 survey respondents viewed the current Long Island economy from 2012. Of the 2012 LIFT respondents, 68.1 percent disagreed that the Long Island economy had improved during the past year with 31.9 percent agreeing that it had. This in comparison with the 2014 survey respondents, as noted in Table 10, who were evenly divided as to whether the Long Island economy had improved during the past year with 50.9 percent disagreeing that the economy had improved with 49.1 percent agreeing that it had.

However, when asked whether the Long Island economy would improve over the next five years 2014 respondents took a dimmer view than 2012 respondents. Of the 2012 respondents, 29.5 percent respondents disagreed that the Long Island economy will improve over the next five years, with 70.4 percent agreeing that it would. This contrasted with 40.6 percent of the 2014 respondents who disagreed that the Long Island economy would improve in the next five years with 59.4 percent agreeing that it would.

**Despite Improved Economy More Business Relocate Off Long Island During Next 5 Years**

Table 12 indicates that Long Island manufacturers are still considering relocating away from Long Island during the next five years. While 59.3 of survey respondents in Table 12 disagree that they will relocate their business off Long Island during the next five years, 40.7 percent of respondents agree that they will. That many manufacturers agreeing that they are thinking about

relocating adds uncertainty for growth in the Long Island economy and suggests the continuing exodus of manufacturers from Long Island that was predicted in LIFT’s 2012 survey.

**Table 12: (Q3) My Business May Relocate Off Long Island During Next 5 Years**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
1	17	28.8	28.8	28.8
2	9	15.3	15.3	44.1
3	9	15.3	15.3	59.3
4	6	10.2	10.2	69.5
5	13	22.0	22.0	91.5
6	5	8.5	8.5	100.0
<b>Total</b>	<b>59</b>	<b>100.0</b>	<b>100.0</b>	

Notes: (1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree  
(6) Strongly Agree

**Relocating Away From Long Island: 2014 Respondents Agreed Slightly More Than 2012**

While there was improvement in how 2014 survey respondents viewed the current Long Island economy as compared to 2012 survey respondents, their opinions of whether they would relocate their businesses off Long Island worsened.

In 2012, 63.7 percent of LIFT survey respondents disagreed that they would relocate their businesses away from Long Island while 36.3 percent agreed that they would. In 2014 those who agreed that they would relocate off Long Island increased to 40.7 percent of respondents and those who disagreed dropped a bit to 59.3 percent.

While manufacturing jobs have remained basically unchanged during the past four years, companies have relocated from the region. This is indicative of the responses of those agreeing that they will relocate from Long Island in LIFT’s 2012 and 2014 surveys.

**Long Island’s High Costs Will Force My Company Relocation**

Table 13 illustrates that 55.9 percent of the 2014 survey respondents identify Long Island’s high costs as the reason why they will be forced to relocate their company from Long Island with 44.1 percent disagreeing. The distribution of survey respondents were evenly split between those having strong opinions and those who did not, with 35.6 percent strongly disagreeing and disagreeing, 32.2 percent somewhat disagreeing and somewhat agreeing, and 32.2 percent agreeing and strongly agreeing.

**Table 13: (Q4) Long Island’s High Costs Will Force My Company To Relocate**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
1	<b>8</b>	13.6	<b>13.6</b>	<b>13.6</b>
2	<b>13</b>	22.0	<b>22.0</b>	<b>35.6</b>
3	<b>5</b>	8.5	<b>8.5</b>	<b>44.1</b>
4	<b>14</b>	23.7	<b>23.7</b>	<b>67.8</b>
5	<b>11</b>	18.6	<b>18.6</b>	<b>86.4</b>
6	<b>8</b>	13.6	<b>13.6</b>	<b>100.0</b>
<b>Total</b>	<b>59</b>	100.0	<b>100.0</b>	

Notes: (1) Strongly Disagree; (2)Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree  
(6) Strongly Agree

**Long Island High Costs Will Force Relocation: More Agree - No Change From 2012**

While more 2014 respondents in Table 13 agree than disagree that Long Island’s high costs will force their company to relocate, the opinions of the 2014 respondents were basically unchanged from the 2012 LIFT survey respondents. In 2012, 45.6 percent of survey respondents disagreed that Long Island’s high costs would force the relocation of their company, basically unchanged from the 44.1 percent reported in 2014. Likewise, the 55.9 percent of 2014 respondents who agreed that Long Island’s high costs will force their company to relocate were basically unchanged from the 54.4 percent of 2012 respondents.

**Long Island’s Manufacturing Sector Will Expand Over Next Five Years**

The results in Table 14 illustrate what lies ahead for Long Island’s manufacturing sector. The 46.6 percent of survey respondents who strongly disagree and disagree that Long Islands manufacturing sector will expand over the next five years reinforces the weakness in Long Island’s manufacturing sector as evidenced by the manufacturers who continue to leave the region. In contrast, 18.9 percent of respondents agree or somewhat agree that the manufacturing sector will expand over the next five years. There were no survey respondents who strongly agree that the manufacturing sector will expand over the next five years. When the 34.5 percent of respondents who somewhat disagree that the Long Island manufacturing sector will expand over the next five years are included with the 46.6 percent, a significant 81.1 percent of 2014 survey respondents disagree to varying degrees that Long Island’s manufacturing sector will expand over the next five years.

**Table 14: (Q5) Long Island Manufacturing Sector Will Expand Over Next Five Years**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
1	<b>12</b>	20.3	<b>20.7</b>	<b>20.7</b>
2	<b>15</b>	25.4	<b>25.9</b>	<b>46.6</b>
3	<b>20</b>	33.9	<b>34.5</b>	<b>81.1</b>
4	<b>9</b>	15.3	<b>15.5</b>	<b>96.6</b>
5	<b>2</b>	3.4	<b>3.4</b>	<b>100.0</b>
<b>Total</b>	<b>58</b>	98.3	<b>100.0</b>	
No Reply	1	1.7		
Total	59	100.0		

Notes: (1) Strongly Disagree; (2)Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree  
(6) Strongly Agree

**Long Island Manufacturing Will Not Expand Over Next 5 Years: Increase From 2012**

Reinforcing the importance of the 81.1 percent of 2014 survey respondents who disagree that Long Islands manufacturing sector will increase over the next five years is the 16 percent increase between 2012 and 2014 in respondents having that opinion. In 2012, 70.0 percent of respondents disagreed that Long Islands manufacturing sector would increase over the next five years. Furthermore, those who agreed that Long Islands manufacturing sector would increase over the next five years decreased by 37 percent from 30.0 percent in 2012 to 18.9 percent in 2014.

**Long Island’s Manufacturing Sector Will Contract Over Next 5 Years**

Another indicator of the weakness in Long Island’s manufacturing sector is the response to whether Long Island’s manufacturing sector will expand over the next five years. Table 15 reflects that 68.5 percent of the respondents somewhat agree, agree, and strongly agree that Long Island’s manufacturing sector would contract over the next five years. Included were 52.7 percent who agree and strongly agree. With 31.5 percent of the respondents disagreeing that the region’s manufacturing sector would contract, and having more than two-thirds of the respondents agreeing that Long Islands manufacturing sector will contract does not bode well for Long Island manufacturing and the regional economy. New York State Department of Labor data of manufacturing company contraction validates 2014 and 2012 LIFT survey respondents.

**Table 15: (Q6) Long Island Manufacturing Sector Will Contract Over Next 5 Years**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	2	3.4	3.5	3.5
2	4	6.8	7.0	10.5
3	12	20.3	21.0	31.5
4	9	15.3	15.8	47.3
5	18	30.5	31.6	78.9
6	12	20.3	21.1	100.0
<b>Total</b>	<b>57</b>	<b>96.6</b>	<b>100.0</b>	
No Reply	2	3.4		
<b>Total</b>	<b>59</b>	<b>100.0</b>		

Notes: (1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree  
(6) Strongly Agree

**Long Island Manufacturing Sector Will Contract Over Next 5 Years: Decrease From 2014**

While Table 14 reflected an increase from 2012 of those who disagreed that Long Island’s manufacturing base will expand over the next five years, 2014 respondents agree that Long Island’s manufacturing sector will contract over the next five years, however in lesser percentages than 2012.

The 68.5 percent of respondents in LIFT’s 2014 survey who agree that Long Island’s manufacturing sector would contract over the next five years was a decrease from the 80 percent of the 2012 respondents who shared the same belief. While fewer respondents in 2014 agree that the manufacturing sector will contract, when nearly 70 percent agree that the manufacturing sector will contract it is not a good sign for Long Island manufacturing.

Manufacturing is a critical sector in any regional economy because it has the highest economic multiplier and the wages paid to manufacturing employees are some of the region’s highest.

**Qualified Employees Important to Company Growth**

Long Island employers are constantly seeking qualified employees, often commenting that they can’t find enough. Survey respondents in Table 16 somewhat agree, agree, and strongly agree by a margin of 96.6 percent to 3.4 percent who somewhat disagree that qualified employees are important to the growth of their company.

**Table 16: (Q7) Qualified Employees Important to My Company's Growth**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
3	2	3.4	3.4	3.4
4	7	11.9	11.9	15.3
5	15	25.4	25.4	40.7
6	35	59.3	59.3	100.0
<b>Total</b>	<b>59</b>	<b>100.0</b>	<b>100.0</b>	

Notes: (1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree  
(6) Strongly Agree

**Qualified Employees Important for Company Growth: Basically Unchanged from 2012**

The 96.6 percent of 2014 respondents agreeing that qualified employees are important for the growth of their company was essentially unchanged from the 95.6 percent of 2012 LIFT survey respondents who agreed that finding qualified employees were important to the growth of their company.

**Business Depends on Technology For Growth**

Technology has become integral to business profitability and employee productivity. Table 17 makes that clear reflecting that of all 59 companies responding to this question, 48 companies or 81.3 percent agree that their company depends on technology for the business growth of their company.

**Table 17: (Q8) Technology Important to Business Growth**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
1	2	3.4	3.4	3.4
2	3	5.1	5.1	8.5
3	6	10.2	10.2	18.7
4	14	23.7	23.7	42.4
5	20	33.9	33.9	76.3
6	14	23.7	23.7	100.0
<b>Total</b>	<b>59</b>	<b>100.0</b>	<b>100.0</b>	

Notes: (1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree  
(6) Strongly Agree

**Technology Important for 2014 Business Growth: Unchanged from 2012**

The 81.3 percent of 2014 respondents who agree technology is important for the growth of their company was basically unchanged from the 82.4 percent of 2012 respondents who similarly agreed. Clearly Long Island businesses have recognized the importance that technology has on the growth of their businesses

**Long Island’s Companies and Exporting**

Exporting is critical for regional economic growth because it opens new markets; something that Long Island manufacturers say they are looking for. The other benefit is that the more a Long Island manufacturing company produces and exports the more jobs are created locally and the greater the economic impact generated on Long Island.

Table 18 illustrates that exporting already is part of the strategic growth plan of Long Island companies; however there is much room for growth in exports. Respondents are evenly split on their taking advantage of exporting with half of respondents or 50.8 percent disagreeing that their company strategic plan includes exporting and 49.2 percent agreeing that their strategic plan does. The results illustrate that there is growth potential for Long Island exporting with 50.8 percent of respondents not including exporting in their company strategic plans.

**Table 18: (Q9) Company Strategic Plan Includes Exporting**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
1	<b>10</b>	16.9	<b>16.9</b>	<b>16.9</b>
2	<b>10</b>	16.9	<b>16.9</b>	<b>33.8</b>
3	<b>10</b>	16.9	<b>17.0</b>	<b>50.8</b>
4	<b>11</b>	18.6	<b>18.7</b>	<b>69.5</b>
5	<b>10</b>	16.9	<b>16.9</b>	<b>86.4</b>
6	<b>8</b>	13.6	<b>13.6</b>	<b>100.0</b>
<b>Total</b>	<b>59</b>	100.0	<b>100.0</b>	

Notes: (1) Strongly Disagree; (2)Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree  
(6) Strongly Agree

**Company Strategic Plan Includes Exporting: Significant Decrease From 2012**

While finding new markets is one of the most sought after needs of Long Island manufacturers, respondents have indicated that they have lost their focus on exporting as a way to identify new markets. In 2014, the 50.8 percent of respondents who disagree that their

strategic plans do not include exporting increased by 54 percent from the 33 percent of 2012 respondents who disagreed that their company strategic plan included exporting. Similarly, the 49.2 percent of 2014 respondents who agree that exporting is part of their company’s strategic plan decreased by 26.6 percent from the 67 percent of 2012 respondents who agreed that exporting was part of their company strategic plan.

**Workforce Development Integral To Company Growth**

As Table 16 indicates, survey respondents acknowledge by a wide margin that qualified employees are important to the growth of their company. In that regard Long Island manufacturers have commented that they are always seeking qualified employees and that they can’t find enough. Part of the process of having qualified and productive employees includes continuous training of existing workers, or workforce development.

Table 19 illustrates that of all 59 companies responding, 89.8 percent strongly agree, agree and somewhat agree, that workforce development training is integral to the growth of their company.

**Table 19: (Q10) Workforce Development Integral To Company Growth**

Agree or Disagree	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	3.4	3.4	3.4
3	4	6.8	6.8	10.2
4	13	22.0	22.0	32.2
5	23	39.0	39.0	71.2
6	17	28.8	28.8	100.0
<b>Total</b>	<b>59</b>	100.0	100.0	

Notes: (1) Strongly Disagree; (2)Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree

**Workforce Development Integral to Company Growth: Manufacturers Strongly Agree**

By their responses to the 2012 and 2014 LIFT surveys, respondents have shown that they understand the importance of workforce development on the growth of their company.

In 2014, the 89.8 percent of respondents who agree that workforce development was integral to the growth of their company was basically unchanged from the 90.1 percent of 2012 respondents who also agreed that workforce development was integral to the growth of their company.

## Research Question Two

For the Defense-Aerospace-Homeland Security, Medical Devices, Pharmaceuticals, and Test and Measurement elements of the Long Island manufacturing sector, what were the relationships between these manufacturing companies as differentiated by the years in business on Long Island, annual gross revenues, increase or decrease in gross revenues, employees, increase or decrease in employees, wages paid, increase or decrease in wages paid, percent of revenues from domestic and internal markets, and any relocation plans for leaving Long Island and the role of Long Island’s high costs in those relocation decisions. A Pearson Product Moment Correlation analysis was used to examine these relationships.

The results of the Pearson product moment correlation matrix appear in Table A.

**Table A: Pearson Product Correlation Matrix**

N=59									
Category	Years In Business	Gross Revenues	Revenue Inc/Dec	Employee	Employee Inc/Dec	Revenue US Mkts	Revenue Intl Mkts	Leave LI	LI High Costs
Years In Business	1								
Gross Revenues	-.030	1							
Revenue Inc/Dec	-.077	-.393**	1						
Employee	-.048	.392**	-.148	1					
Employee Inc/Dec	-.156	-.331*	.219	-.296*	1				
Revenue US Mkts	.103	-.197	.055	-.291*	.128	1			
Revenue Intl Mkts	-.075	.310	-.066	.359*	-.337*	-.749**	1		
Leave LI	.068	-.152	.110	-.095	-.062	-.122	.094	1	
LI High Costs	.029	-.330*	.269**	-.146	-.049	-.176	.128	.787**	1

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

The correlation matrix shows strong relationships existing between Long Island’s high costs and the company relocating away from Long Island (62% variance), gross revenues and employees (15% variance), revenues from international markets and increase in employees (13% variance) and weaker relationships of Long Island’s high costs and revenue increase and decreases (7 % variance).

The correlation matrix also shows strong negative relationships existing between domestic revenue sources and international revenue sources (56%) of the variance. That respondents with

strong domestic revenues did not have strong international revenue sources. Other negative relationships were found between gross revenues and revenue increases (15% variance), gross revenues and employee increases and decreases (11% variance), gross revenues and Long Island’s high costs (11% variance), employee increases and decreases and revenues from international markets (11% variance), revenue from domestic markets and increases and decreases of employees (8% variance), and employees and increase and decreases of employees (9% variance).

### Research Question Three

How did the Defense-Aerospace-Homeland Security, Medical Devices, Pharmaceuticals, and Test and Measurement elements of the Long Island manufacturing sector and the years in business, gross revenues, gross revenue increases, amount of employees, increase or decrease in employees, percent of revenues from domestic and international markets and Long Island’s high costs predict company relocations from Long Island?

Table B presents a stepwise multiple regression model that was used to calculate the extent to which the years in business, gross revenues, gross revenue increases, amount of employees, increase or decrease in employees, percent of revenues from domestic and international markets and Long Island’s high costs predict company relocations from Long Island.

Results are consistent with the results in Table A regarding the impact of Long Island’s high costs and company relocation from the region.

**Table B: Stepwise Multiple Regression: Companies Relocating From Long Island**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.846 <sup>a</sup>	.716	.707	.943	.716	75.642	1	30	.000

a. Predictors: (Constant), Q4LHighCost

Table B indicates that that Long Island’s high costs predict 70 percent of the variance in the relocation of Long Island’s manufacturing companies, a troubling trend that has continued since respondents to LIFT’s 2012 survey predicted that Long Island’s high costs would force them to leave Long Island. The companies that have left Long Island confirm the predictions

illustrated in LIFT's 2012 survey. Table B suggests that more companies leaving Long Island are to follow.

## **CONCLUSION**

There was improvement in how 2014 respondents felt about the Long Island economy as compared to 2012. Respondents to the 2014 LIFT survey were evenly divided whether the Long Island economy has improved during the past year (2013), which was an improvement from 2012 when 68 percent of respondents disagreed that the economy had improved during the past year (2011). Whether the Long Island economy will improve over the next five years grew dimmer between 2012 and 2014 with nearly 60 percent of 2014 respondents agreeing that it would, a decrease from 70 percent of 2012 respondents.

Consistent with respondents indicating improvement in the current economy was the growth of gross revenues reported by respondents. In 2012 nearly 54 percent of respondents reported increased in gross revenue from the prior year as compared to 2014 where 58 percent reported year to year increase in gross revenues.

However as compared to 2012, the growth in gross revenues did not result in hiring additional employees with respondents reporting increases in employees basically unchanged. In 2014 more respondents had a decrease in employees than had employee increases, with 2014 percent of employee decreases greater than 2012 employee decreases. This is especially important since nearly 97 percent of 2014 respondents agreed that finding qualified employees were important to the growth of their company, basically unchanged from 96 percent in 2012.

Contrary to 2014 respondents being evenly divided between agreeing and disagreeing that the current Long Island economy had improved, they agreed, as they did in 2012, that Long Island's high costs may force their company to relocate. In 2014, 56 percent of respondents agree that Long Island's high costs would force their company to relocate, a slight increase from the 54 percent in 2012.

Respondents in 2014 agree that Long Island's manufacturing sector not only will not expand over the next five years, but will contract over the next five years. In 2014, 81percent of respondents disagree that the manufacturing sector will expand, increasing from 70 percent in

2012. As for the contraction of Long Island's manufacturing sector, 69 percent of 2014 respondents agree that it will contract, as compared to 80 percent in 2012.

As to relocating off Long Island in five years, 40.7 percent of 2014 respondents agree that they would. This was a 12 percent increase from 36.3 percent of 2012 respondents. As to whether Long Island's high costs will force their company to relocate 56 percent of 2014 respondents agree, slightly more than the 54 percent in 2012 high. The lack of improvement in these statistics indicates future weakness in the growth of Long Island's manufacturing sector.

As for exporting, respondents identified this as an untapped economic growth area for Long Island. More exporting would increase manufacturing company revenues and create new Long Island jobs. Supporting this are the 75 percent of respondents who predominantly sell to domestic markets while only 21 percent generate more than half their revenues from international markets. This untapped potential for international trade where Long Island manufacturers can find buyers for their products is confirmed by 49 percent of 2014 respondents who agree that exporting was a part of their strategic plan, a decrease from 67 percent in 2012. This is a decrease of 27 percent between 2012 and 2014 of Long Island manufacturers who include exporting in the strategic plan of their company.

The 2014 LIFT survey found that the strongest relationship existed was between Long Island's high costs and manufacturing company relocations away from Long Island (62% variance). Other strong relationships existed between gross revenues and employees (15% variance), revenues from international markets and increase in employees (13% variance), with weaker relationships existing between Long Island's high costs and revenue increases and decreases (7 % variance).

Strong negative relationships existed between domestic revenue sources and international revenue sources (56% variance). That is if Long Island manufacturers have strong domestic revenue sources it is unlikely they will also have strong international revenue sources. Other negative relationships were found between gross revenues and revenue increases (15% variance), gross revenues and employee increases and decreases (11% variance), gross revenues and Long Island's high costs (11% variance), employee increases and decreases and revenues from international revenue sources (11% variance), domestic revenue sources and increases and decreases of employees (8% variance), and employees and increase and decrease of employees (9% variance).

A regression analysis illustrated how Long Island's high costs predict 70 percent of the variance in the relocation of Long Island's manufacturing companies, a trend that has continued since respondents in LIFT's 2012 survey predicted that Long Island's high costs would force them to leave Long Island. Manufacturing companies that have left Long Island since 2012 and affirm the predictions illustrated in LIFT's 2012 survey.

While the costs that Long Island manufacturers must absorb are increasing, resulting in Long Island manufacturers leaving or thinking of leaving the region as respondents in both the 2012 and 2014 LIFT survey illustrate, the result is that Long Island is witnessing the erosion of its structural and foundation economic sectors; the defense and aerospace industry. Also lost is the intellectual capital where ideas turn into revenues, jobs and profits.

What LIFT survey respondents are telling Long Island is that despite the improvement in the Long Island economy they may well follow those who have left Long Island because they can't afford to remain here.

**APPENDIX A**

**Long Island Forum for Technology  
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(631) 969-3700**

Manufacturing and Technology Company Needs Survey

**Part 1**

Please indicate (by circling the appropriate number based on the scale below) the degree to which you agree or disagree with the needs and strategic plan of your company.

Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Somewhat Agree 4	Agree 5	Strongly Agree 6
---------------------------	---------------	---------------------------	------------------------	------------	------------------------

1. Long Island's economy has improved during the past year. 1 2 3 4 5 6
2. Long Island's economy will improve over the next 5 years. 1 2 3 4 5 6
3. My business may relocate off Long Island during the next 5 years. 1 2 3 4 5 6
4. Long Island's high costs will force relocation of my company. 1 2 3 4 5 6
5. Long Island's manufacturing sector will expand over the next 5 years. 1 2 3 4 5 6
6. Long Island's manufacturing sector will contract over the next 5 years. 1 2 3 4 5 6
7. Finding qualified staff is important to my company's growth 1 2 3 4 5 6
8. My business growth depends on technology innovation. 1 2 3 4 5 6
9. Exporting is part of my company's strategic growth plan. 1 2 3 4 5 6
10. Workforce development is integral to my company's growth. 1 2 3 4 5 6

**Part 2**

Please answer the following questions by filling in the blank or circling the closest answer.

11. How many years has your company operated on Long Island? \_\_\_\_\_

12. What are the annual gross revenues for 2013?

Less than \$5 million \_\_\_\_\_ More than \$5 million \_\_\_\_\_

This is an Increase \_\_\_\_\_ Decrease \_\_\_\_\_ from 2012.

13. How many employees did your company employ in 2013?

Employees \_\_\_\_\_ This is an Increase \_\_\_\_ or Decrease \_\_\_\_ from 2012.

14. Circle the best indicator of where your 2013 revenues originated:

From the United States: (1) 0% (2) 1-25% (3) 26-50% (4) 51-75% (5) 76-100%

International Sales: (6) 0% (7) 1-25% (8) 26-50% (9) 51-75% (10) 76-100%

What primary country of origination: \_\_\_\_\_

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Martin R. Cantor has a Bachelor of Science Degree in Accounting from Brooklyn College of the City University of New York, a Master of Arts Degree in Interdisciplinary Studies from Hofstra University focusing on the socio-economic relationships between education, household income, community and workforce development, and a Doctor of Education Degree from Dowling College. He has served as Suffolk County Economic Development Commissioner (New York State's largest suburban county), brought Computer Associates to Suffolk County, and created over 23,000 jobs with an estimated \$1.4 billion annual payroll economic impact. He has served as: Chief Economist-New York State Assembly Subcommittee for the Long Island Economy; Senior Fellow at the White Plains, New York based Institute for Socioeconomic Studies - a public policy think tank concentrating on poverty in America and senior citizen quality of life; Chair and Chief Economist of the Long Island Development Corp; a building trades labor/management arbitrator; a consultant to the Nassau Interim Financial Authority; a faculty member in the Brooklyn College Department of Economics; Executive Director of the Patchogue Village Business Improvement District; and Director of Economic Development and Chief Economist for Sustainable Long Island, and the Long Island Fund for Sustainable Development, providing financial, technical assistance to businesses and not-for-profit organizations His work is included in the *National Tax Rebate-A New America With Less Government*, and has prepared downtown revitalization plans for Long Island and New York City neighborhoods featuring arts districts, economic restructuring, waterfront projects and community organizing. He was the architect of the Nassau County Comptroller's debt restructuring plan for resolving Nassau County's fiscal crisis; has been a Long Island Business Journal columnist; has authored: federal, state and local legislation; economic impact analyses; analysis of Long Island's economic, demographic, employment, tax, and educational bases; a convention center feasibility study; taxpayer cost of acquiring open space; and health care reform; and Director of Dowling College's Long Island Economic and Social Policy Institute; and an Adjunct Associate Professor of Economics

He is a Certified Public Accountant in private practice; Director of the Long Island Center for Socio-Economic Policy, chief economist for Destination LI, a consulting economist and economic development consultant to public officials, counties, towns, villages, Industrial Development Agencies, and communities; and Chairman of the Suffolk County Judicial Facilities Agency which financed the acquisition of the Cohalan State Court Complex, oversaw the construction of the Suffolk County Jail in Yaphank and financed the \$70 million purchase/leaseback of the Dennison Building to Suffolk County. He provides economic and business commentary on television and radio; was Co-host of Focus 55, a public affairs program on Channel 55, is a columnist for the Long Island Business News, Long Island's largest business weekly, and Networking Newspaper for Women, has appeared in the New York Times, Newsday, and LI Pulse, and has been syndicated nationally by Newsday, Bridge News and Knight-Ridder/Tribune News Service. He is an Honorary Member of Delta Mu Delta - The National Honor Society in Business Administration and has been recognized by the National Association of Counties for innovative uses of Industrial Revenue Bonds, for international trade promotion initiatives, for downtown revitalization policies, and for minority business incubator initiatives. He was invited by Dr. William Julius Wilson of Harvard University's John F. Kennedy School of Government to present his paper entitled *Race Neutral Sustainable Economic Development*. He is the author of the recently published *Long Island, The Global Economy and Race: The Aging of America's First Suburb*.