

First Five Plus Program Summary

Return on Investment Analysis

Catherine Smith, Department of Economic and Community Development January 2018

By providing investment-oriented incentives to large companies to grow in Connecticut, we have not only seen substantial growth in good paying jobs, but the state expects to more than fully recoup its initial investments.

First Five Plus Program Summary

December 2017

The First Five Plus companies continue to make significant contributions to the state's economy. To date, the First Five Plus companies have created 4,668 jobs and retained more than 17,000 jobs. Under the First Five Plus Program, companies are bringing significant additional tax revenue to the state, through both income and sales and use taxes. We expect nearly \$343.3M in combined revenue between 2012 and 2021. (Note: the sales and use tax is largely generated through construction work, which is usually completed within the first few years of the projects.)













*Net present value (NPV) is a financial calculation often used to evaluate investments over an extended period of time. Any NPV greater than zero is consider a good investment. To determine the state's return on the First Five Plus investments, the calculation 1.) takes the year by year stream of payments to the state from taxes (shown in the Minimum New Tax Revenue graph), adds in annual principle and interest payments from the companies, and subtracts the payments the state makes for the capital used to provide incentives; and 2.) discounts the resulting net stream of cash flow at the rate of the cost of capital to the state (3.25%), to reflect the risk and timing of receiving the funds in the future. Because the NPV of the First Five Plus program is over \$100million based on this calculation, the state is making very good use of capital.

Governor Malloy's First Five jobs initiative (now referred to as the First Five Plus) provides assistance for large-scale business projects as a means of encouraging business expansion, relocation and job creation. Per state statute, DECD has flexibility in the construct of any financial assistant agreements, using loans, forgivable loans, tax credits and other forms of assistance. In return, companies must promise to either create two hundred new jobs within two years or invest \$25 million dollars and create 200 jobs within five years.

With five years of the program now complete, we believe the First Five Plus program is clearly meeting—if not exceeding—expectations. In this report, we look specifically at the financial returns, which are already strong and projected to get stronger.

Summary of First Five Plus Impacts

The First Five Plus program generates significant economic benefit to the state. Not only does the initiative help to facilitate job creation and expansion, it stimulates enormous direct and indirect growth for the Connecticut economy.

Financial Impacts – as outlined in the analysis that follows

- If the companies add the minimum jobs required, they generate approximately \$265.3 million of new state income tax revenue (in current dollars) over the course of 10 years, in addition to many millions of dollars of sales and use tax.
- Should the companies reach their maximum job creation goals, over 7,000 new jobs and \$300.0 million in state income tax revenue (in current dollars) will be generated in the state over the next 10 years.
- State investment over ten years has a total value (in current dollars) of \$151.2 million, clear proof that the value of the investment dramatically exceeds the state's costs—even if the companies add only the minimum jobs required.
- > Other direct impacts related to jobs, capital investment and leveraging are provided on pages 3 and 14.

Social Impacts - community-related returns not captured by this analysis

- > Cultural and community organizations are the recipients of corporate philanthropy by both the companies themselves, as well as their employees.
- > Companies are working closely with our schools and universities, helping to create the next generation of employees.
- > Our cities benefit from the presence of more people working, shopping and dining in our downtowns.

First Five Plus Program Overview December 2017							
Total Businesses Participating	15*						
State Direct Assistance Source: Manufacturing Assistance Act Funds	\$321,600,000						
Tax Credits Source: Urban and Industrial Sites Reinvestment (URA) Tax Credits	\$160,000,000						
Total Jobs Retained	17,230						
Minimum New Jobs Required	5,874						
Maximum New Jobs under Contract	9,580						
Total Jobs (Max New and Retained)	26,810						
State Direct Assistance per Job	\$11,996						
Reported Private Investment	\$1,744,073,493						
Leverage Factor (reported private dollars invested divided by state direct assistance)	6.4x						
*Alexion left the First Five Program in 2017, and is not included in this count. The company analysis below through 2017.	r's jobs and repayments of the loan, penalty and outstanding interest is included in the						

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Return on Investment

New Jobs Created: Direct Returns to the State

We have calculated the return on state investment in two ways. The first method uses a direct investment model to evaluate the expected repayments to the state in the form of interest on any loan, state income tax from new employment, state sales tax on new investments and repayment of principal amounts. It is based on new investments made and jobs created, to best capture the incremental impact of the new activity in the economy. To be conservative, this calculation has been done over a 20-year period with a 5% decline in jobs after year 10.

The below table provides an overview of the assumptions used in the model, including the direct inputs (e.g., number of jobs created), incentives, and a summary of the fiscal and economic impacts.

PROJECT DESCRIPTION:								
This study evaluates the impact of the First Five Plus program based on Letters of Intent and contracts in place as of December 2017. The								
model only evaluates the incremental new jobs and capital spending promised by the companies and does not include their existing								
workforce. The model reflects the new jobs already created, as well as those still to be created, company investments made or promised to								
be made, and state assistance as inputs into the model. During the first five years, we ramp up job creation to the level of	jobs create	d as of						
May 31, 2017, and ramp up to the level of "maximum jobs to be created" over years six through eight, then hold jobs cons	stant at this							
maximum level for years nine and ten. During years 10-20 we assume 5% decline in jobs per year.								
Tax credits are modeled per state statute; loans are modeled as 10-year, 2% interest structures, with payments deferred a modeled per the contracts. Any repayments made thus far have been included. The modeling also reflects the cost of the the funds are drawn down in the first 5-7 years. The state incurs debt service on the bond issue to fund the loan at a rate of the state incurs debt service.	ind forgiver state's capi of 3.23%.	ness tal, as						
Direct Inputs:	Amo	ount						
Job creation – years 1 to 6 (ramped up to "jobs created so far")								
Job creation - years 7 to 10 (ramping up to "jobs to be created" under each scenario)	A: 6,385	B: 7,280						
Job creation - years 11 onwards (Project A: ramped up to "maximum jobs to be created;" Project B: "minimum jobs to be								
created")	A: 7,477	B: 8,954						
New jobs by year 20 (5% decrease annually from years 11-20) (for direct impact only)	A: 5,941	B: 7,405						
otal Investments \$1,744.1 MM								
Incentives:								
State assistance to fund grants and loans (modeled as 2% loans for 10 years, payments deferred/forgiven)	\$321.6 MM							
\$145 MM -\$16								
Tax credits (URA tax credits)								
Repayments of principal and interest made to state to date	\$77.96	5 MM						

Estimated Direct Impact (Maximum Jobs Created)

The following chart summarizes the cash flows expected, assuming all companies hire the maximum jobs under their contract. As the chart below shows, the cost of state funds and all earned tax credits are offset by increased flows from income and sales tax payments over a ten-year period. The net cash flow for the state is positive, with a net present value of \$120.9 million over the course of ten years. We believe that this evaluation best matches what we expect the companies to deliver, based on the significant results that they have already produced.

First Five Plus Program: Estimated Direct Impact											
Project A: 20-Year Analysis, Maximum Jobs Created											
Only years 1-10 shown below All figures in \$'(000s)											
Year: 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020											2021
COSTS TO CT:											
1. Total State Investment (loans,											(
grants) borrowed over time as		, İ	, l	1					1	1	1
needed	(321,600)			<mark>ا</mark> ــــــــــــــــــــــــــــــــــــ			I			ا ــــــ ا	
2. Cost of Funds (cost to bond,			/ />	1						\	1
principal & interest at 3.23%)		(6,650.1)	(7,377.8)	(10,522.1)	(12,666.5)	(15,000.7)	(16,483.6)	(20,534.2)	(20,534.2)	(20,705.8)	(20,705.8)
3. Cost of Tax Credits (URAs –		.	, I	1						1	1 /
fully utilized as contracted)	0.0	0.0	0.0	(1,000.0)	(6,000.0)	(11,500.0)	(19,300.0)	(13,500.0)	(18,500.0)	(26,500.0)	(25,500.0)
ESTIMATED RETURNS/ BENEFITS	ΓΟ CT:										
1. New Income Taxes from New		.	, I	1						1	1
Hires		8,284.7	12,821.0	17,545.2	22,162.3	26,392.7	34,234.8	39,443.5	42,903.4	46,614.0	49,463.1
2. New Sales Taxes (discounted		.	, I	1						1	1
to account for tax exemptions)		10,019.7	10,019.7	10,019.7	10,019.7	6,011.8	6,170.9	11,170.9	14,599.9	0.0	0.0
3. Payments of principal and		.	, I	1						1	1
interest (based on loan terms)	0.0	0.0	0.0	0.0	0.0	596.7	32,051.7	1,051.7	1,051.7	1,051.7	1,051.7
NET CASH FLOWS TO STATE	·	11,654.3	15,462.8	16,042.7	13,515.5	6,500.6	36,673.7	17,632.0	19,520.9	459.9	4,309.0
CONCLUSIONS OF ANALYSIS											
NET PRESENT VALUE – 10 Years	\$120,868					Assumption	<u>s</u>				
NET PRESENT VALUE – 20 Years	\$299,756					1. \$321.6MI	៧ state assistរ	ance in the for	rms of loans a	nd grants. Pav	yments
PAYBACK PERIOD	17 Years					made to date have been included.					
POSITIVE CASH FLOW	First Year			1		3. 3.23% cost of funds					



Estimated Direct Impact (Minimum Jobs Created, Using Current Levels)

In the following chart, we model the scenario in which only the minimum jobs are created, thereby reducing the level of new hires, related income tax, and factoring in the lack of forgiveness on loans, and thus the related repayment of principal and related interest to the state. Several of the First Five Plus companies have already hired beyond the minimum job creation goals, so actual current job numbers are used where the company has already exceeded their contractual minimum.

First Five Plus Program: Estimated Direct Impact Project B: 20-Year Analysis, Minimum Jobs Created Using Current Levels											
Only years 1-10 shown below All figures in \$('000s)											
Year:	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
COSTS TO CT:											
1. Total State Investment (loans,			,	, 	I	'	· ·	'	I	, I	
grants) borrowed over time as			, I	1	1	1	'	1	1 1	1 1	1
needed	(321,600)		<u>ا</u>	ļ'	<u> </u>	<u> </u>	<u> </u> '	<u> </u>	<u>ا</u> ا	<u>ا</u> ا	ļ
2. Cost of Funds (cost to bond,			, I	1	1	1	'	1	1	1	1
principal & interest at 3.23%)		(6,650.1)	(7,377.8)	(10,522.1)	(12,666.5)	(15,000.7)	(16,483.6)	(20,534.2)	(20,534.2)	(20,705.8)	(20,705.8)
3. Cost of Tax Credits (URAs –							'	1	1	1	1
discounted by 12.5% to account			, I	1	1	1	'	1	1	1	1
for minimum jobs)	0.0	0.0	0.0	(1,000.0)	(6,000.0)	(11,500.0)	(19,300.0)	(13,500.0)	(15,166.7)	(22,666.7)	(21,666.7)
ESTIMATED RETURNS/ BENEFITS 1	<u>го ст:</u>								1	1	1
1. New Income Taxes from New			12.001.0	1					1		
Hires		8,284.7	12,821.0	17,545.2	22,162.3	26,392.7	34,234.8	32,928.2	34,601.6	36,875.3	39,409.0
2. New Sales Taxes (discounted		10.010.7	10.010 -	1 10 010 -	1.0.010 -				1	1	
to account for tax exemptions)		10,019.7	10,019.7	10,019.7	10,019.7	6,011.8	6,170.9	11,170.9	14,599.9	0.0	0.0
3. Payments of principal and				'				1	1	1	1 051 7
interest (based on ioan terms)	0.0	0.0	0.0	0.0	0.0	596.7	32,051.7	1,051.7	1,051.7	1,051.7	1,051.7
NET CASH FLOWS TO STATE		11,654.3	15,462.8	16,042.7	13,515.5	6,500.6	36,673.7	11,116.7	14,552.3	(5,445.5)	(1,911.8)
CONCLUSIONS OF ANALYSIS											
NET PRESENT VALUE – 10 Years	\$102,837			, 		Assumption	<u>IS</u>				
NET DESENT VALUE - 20 Vears	\$2/12 997					1. \$321.6MI	M state assista	ance in the for	rms of loans a	nd grants. Pay	ments
NET PRESENT VALUE - 20 TEATS	ې۲۹۵,00 <i>۱</i>		·	·'	├ ────┦	made to dat	e have been i	ncluded. Unfo	rgiven princip	al is added ba	ck where
PAYBACK PERIOD	19 Years		ا ا	ļ'	<u> </u>	loan condition	ons are not m	et			
POSITIVE CASH FLOW	First Year					2. Tax rates from 5%-6.5% considered for state income tax 3. 3.23% cost of funds					



New Jobs Created: Total Returns to the State (including induced and indirect investment)

In this analysis, we utilize the REMI model (Regional Economic Modeling, Inc.) to examine the total direct and indirect return on investment from the creation of new jobs and other investments made by First Five Plus companies. DECD now uses the REMI TaxPI model, which improves on older models by utilizing CT budget data and more recent economic data among other variables. The results are more conservative and are not comparable with earlier analyses employing older models. The model assesses all downstream impacts (the indirect/induced impact, often referred to as a multiplier effect) on the economy, as well as the direct impact of the new jobs and capital improvements resulting from the specific investment. Though REMI is a widely used economic modeling tool, holding all pieces of the economy constant often leads to optimistic outlooks. As such, we discount its importance in analytic evaluation of these investments, and weight the impacts of our Direct Return models greater than the REMI models. The following chart assesses the total returns assuming all companies hire the maximum jobs under their contract.

Project A: Total Returns to State									
(Maximum jobs, including indirect and induced effects)									
December 2017									
EMPLOYMENT:	10 Year Avg.	20 Year Avg.							
All Sectors	12,454	13,768							
Direct	4,506	6,455							
Indirect incl. Construction	5,299	7,312							
Multiplier Effect (Total (net of construction jobs) Jobs /Direct Jobs)	2.36	1.93							
FISCAL IMPACTS:									
State Net New Revenue '(000s):	10 Year	20 Year							
Total (Cumulative)	\$638,847	\$1,542,049							
Net Present Value	\$526,521	\$1,081,724							
Per Year Average	\$63,885	\$77,102							
ECONOMIC IMPACTS:									
Gross State Product '(000s):	10 Year	20 Year							
Total (Cumulative)	\$21,655,745	\$55,760,725							
Net Present Value	\$17,740,677	\$38,632,361							
Per Year Average	\$2,165,575	\$2,788,036							



The Project B: Total Returns to State chart below shows the total economic impacts of the First Five Plus program using the actual number of jobs created over the first five years and then holding job creation constant at this level for years six through ten. For companies that had not yet reached their minimum required level of 200 jobs, we increased their job creation data to the minimum requirement of 200 and held it constant for the required 10-year period.

Even if the First Five Plus companies do no further hiring, there is tremendous benefit to the Connecticut economy from the investments and hiring that have already occurred. As delineated in the First Five Plus contracts, should companies fail to meet all of their job growth and capital spending requirements, they must repay the state's funding (or the portion that is not forgiven due to lack of job growth) with interest. If a First Five Plus company leaves the state during the ten-year term of the contract, it must repay all state investment with an interest-based penalty.

Project B: Total Returns to State									
(Minimum jobs using current levels, including indirect and induc	ed effects)								
December 2017									
EMPLOYMENT:	10 Year Avg.	20 Year Avg.							
All Sectors	11,408	11,985							
Direct	3,984	5,431							
Indirect incl. Construction	4,950	6,553							
Multiplier Effect (Total (net of construction jobs) Jobs /Direct Jobs)	2.46	2.01							
FISCAL IMPACTS:									
State Net New Revenue '(000s):	10 Year	20 Year							
Total (Cumulative)	\$580,715	\$1,345,941							
Net Present Value	\$482,300	\$953,963							
Per Year Average	\$58,071	\$67,297							
ECONOMIC IMPACTS:									
Gross State Product '(000s):	10 Year	20 Year							
Total (Cumulative)	\$20,058,728	\$49,213,434							
Net Present Value	\$16,529,689	\$34,413,076							
Per Year Average	\$2,005,873	\$2,460,672							

First Five Plus Statistics



Our statewide strategic plan identifies six industry clusters that are critical to a comprehensive economic development strategy – the First Five Plus companies represent five of those six industry clusters.

The First Five Plus initiative has supported companies that not only capitalize on the state's strengths (e.g., insurance and financial services, manufacturing), but has also attracted businesses that help to further develop our emerging industries (e.g. digital media).



Connecticut is committed to further developing and revitalizing its downtown and urban areas. Seventy-five percent of the First Five Plus companies have chosen to expand or relocate in a Connecticut city, bringing with it new jobs and generating economic activity.

Stamford attracted many of the First Five Plus companies due to its abundance of young workers, newly developing high-amenity housing, and easy access to New York City.



First Five Plus Companies Summary

Company	Company		Jobs To Be	Jobs to Be Created		Company		State Direct	Full-Time	Net New	Total Forgiveable	State
Name	Location	Industry	Retained	Retained Min Max Investment Tax C	Tax Credits	Assistance	Jobs as of 5/31/17*	Jobs Created	Loans Available	Grants		
					Α	NNOUNCED PROJECT	S					
CIGNA	Bloomfield	Insurance	3,883	200	800	\$133,995,080	\$50,000,000	\$21,000,000	4,401	518	\$15,000,000	\$6,000,000
NBC Sports (Phase I & II)	Stamford	Digital Media	116	200	716	\$101,850,000	\$0	\$26,000,000	775	659	\$26,000,000	\$0
Alexion**	New Haven	Pharma	368	200	300	\$77,000,000	\$25,000,000	\$26,000,000	835	450	\$20,000,000	\$6,000,000
ESPN	Bristol	Digital Media	3,872	200	200	\$181,300,000	\$10,000,000	\$0	4,169	297	\$0	\$0
CareCentrix	Hartford	Healthcare	213	200	290	\$62,000,000	\$0	\$24,000,000	504	291	\$0	\$24,000,000
Sustainable Building Systems	East Windsor	Green Technology	-	208	408	\$79,000,000	\$0	\$19,100,000	46	46	\$19,100,000	\$0
Deloitte	Hartford, Stamford, and Wilton	Financial Services	1,153	200	500	\$38,364,810	\$0	\$14,500,000	1,240	87	\$0	\$14,500,000
Bridgewater Associates	Westport, Wilton, and Norwalk	Financial Services	1,225	200	750	\$505,500,000	\$30,000,000	\$22,000,000	1,702	477	\$17,000,000	\$5,000,000
Charter Communications I	Stamford	Digital Media	260	200	300	\$5,180,553	\$0	\$8,500,000	1,106	846	\$6,500,000	\$2,000,000
Charter Communications II	Stamford	Digital Media	664	1,000	1,450	\$90,000,000	\$10,000,000	\$10,000,000	0	0	\$10,000,000	\$0
Navigators	Stamford	Insurance	-	200	200	\$13,500,000	\$0	\$11,500,000	187	187	\$8,000,000	\$3,500,000
Pitney Bowes	Stamford, Danbury, and Shelton	Manufacturing	1,600	200	200	\$9,000,000	\$10,000,000	\$16,000,000	1,725	125	\$15,000,000	\$1,000,000
EDAC	Cheshire	Manufacturing	349	200	200	\$73,299,750	\$0	\$48,000,000	438	89	\$38,000,000	\$10,000,000
Synchrony Bank	Stamford	Financial Services	310	200	400	\$51,300,000	\$0	\$20,000,000	661	351	-	\$20,000,000
Henkel of America, Inc.	Stamford	Consumer Goods	678	266	266	\$30,000,000	\$5,000,000	\$20,000,000	751	73	\$20,000,000	\$0
AQR Capital Management, LLC	Greenwich and Trumbull	Financial Services	541	200	600	\$37,783,300	\$0	\$35,000,000	713	172	\$28,000,000	\$7,000,000
Amazon	North Haven	Consumer Goods	1,998	1,800	2,000	\$255,000,000	\$20,000,000	\$0	1,998	0	\$0	\$0
TOTALS:			17,230	5,874	9,580	\$1,744,073,493	\$160,000,000	\$321,600,000	21,251	4,668	\$222,600,000	\$99,000,000

*Data updated as of May 31, 2017; ESPN employment data as of June 31, 2017.

**Alexion left the First Five Program in 2017, and have repaid their loan, penalty and outstanding interest. Alexion's jobs and payments are accounted for this year but will be not be included in future analyses.