

Wisconsin Economic Development Corporation Evaluating the Jobs Tax Credit Program



UNIVERSITY OF WISCONSIN
WHITEWATER

Fiscal and Economic Research Center



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Summary of Jobs Tax Credit Program

IA Description of the Program

The purpose of the Jobs Tax Credit Program (JTC) is to incentivize businesses to locate and expand their activities in Wisconsin. The goal of the JTC program is to incentivize job creation through providing companies with refundable tax credits that would help reduce their tax liability within Wisconsin. This enhances their cash flow to expand the expansion project's scope, accelerate the timing of the project, or enhance payroll.

IB Timeline of Business Expansion Tax Incentives in Wisconsin

The JTC program was not the first of the business expansion tax incentive programs enacted in Wisconsin. Prior to the formation of WEDC, the Department of Commerce (since 1987) administered several tax based incentives to encourage businesses to relocate and/or expand in Wisconsin. Most of these programs have sunset, including the JTC program. Below is a list of business expansion tax incentive programs that have existed in Wisconsin.

1987 (Act 328) **Community Development Zone Program**

1993 (Act 232) **Development Opportunity Zone Program** (still active)

1995 (Act 27) **Enterprise Development Zone Program**

2001 (Act 16) **Technology Zone Program**

2001 (Act 16) **Agricultural Development Zone Program**

2005 (Act 361) **Enterprise Zone Program**

2005 (Act 487) **Airport Development Zone Program**

2009 (Act 2) **Economic Development Tax Credit Program**

2009 (Act 28) **Jobs Tax Credit Program**

2015 (Act 55) **Business Development Tax Credit Program** (still active)

ICI Eligibility for the Jobs Tax Credit Program

Businesses that are considered eligible must be for-profit institutions. Retail shops and stores are not eligible for the tax credit. Businesses that do receive the tax credit may have their designation up to 10 years. Certified businesses must increase the net employment level above the base employment level in the state every year to remain eligible.

The following organizations were ineligible to claim a JTC:

- Payday loan and title loan companies,
- Telemarketing,
- Pawn shops,
- Media outlets, such as newspapers and radio (unless the job creation is significant),
- Businesses in the tourism industry (unless the job creation is significant),
- Retail,
- Farms,
- Primary care medical facilities, and
- Financial institutions.

IDI Profile of the Program

From 2010 to 2016, the program has allocated up to \$104,389,500 in awards to businesses, and has verified \$59,803,589 of the awards that were given to the businesses in this time period to 86 businesses across Wisconsin. Diagram 1 (below) illustrates the distribution of awards and verified tax credits (from 2010 to 2016), and Diagram 2 (below) illustrates the number of recipients (from 2010 to 2016).

Diagram 1: Jobs Tax Credit Award and Verified Credits

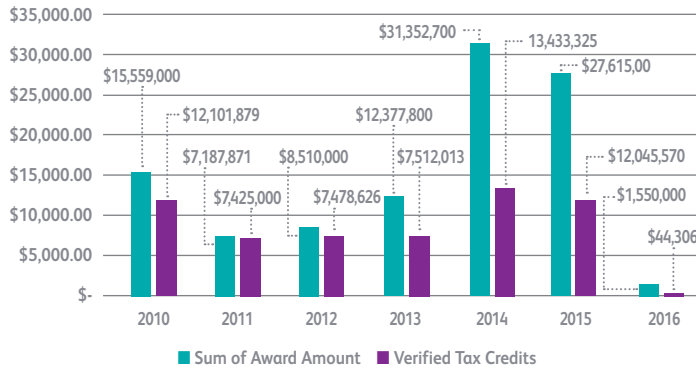


Diagram 2: Number of Award Recipients per Year.

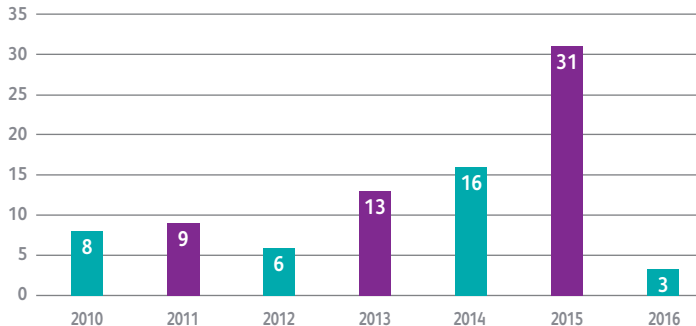


Table 1 lists the top 10 industries that were awarded the highest amount in tax credits. It is important to note that five of the top fields are manufacturing industries that have high multiplier effects due to their robust supply chains, and tend to have employees that have high technical skills. Each job created by businesses that belong in these industries tend to create at least 1.5 more jobs within the communities these businesses are located in, and according to Bartik, funding industries with such a multiplier tends to produce a greater benefit than cost to the state!

Table 1: Top Ten Industries that received the highest number of awards in terms of tax credits.

Industry by 3 Digit NAICS Code	Award Amount Per Industry (\$)
335 Electrical Equipment, Appliance, & Component Mfg.	17,825,000
541 Professional, Scientific, and Technical Services	10,150,000
333 Machinery Manufacturing	9,373,800
332 Fabricated Metal Product Manufacturing	8,830,000
322 Paper Manufacturing	7,434,000
424 Merchant Wholesalers, Nondurable Goods	7,000,000
339 Miscellaneous Manufacturing	6,900,000
325 Chemical Manufacturing	6,630,000
311 Food Manufacturing	6,107,000
493 Warehousing and Storage	5,250,000

Prior Research of Tax Incentive Programs

When looking for the effectiveness of tax credits, the Fiscal and Economic Research Center (FERC) understands that there must be an understanding of tax incentives in general. Prior research has been conducted by many academics, organizations, and entities in order to understand the nature of the effect that tax incentives have on the economy. As such, the FERC will be utilizing this body of research to build an understanding of its effects.

IAI Operations

The purpose behind tax incentives is to generate additional economic growth by reducing costs for businesses (in this case payroll costs) to allow these businesses to expand and grow, and through this expansion, generate a greater revenue to the state than the cost of the incentives.

Giving tax incentives to companies that have a higher job multiplier is the best way to secure the best use of tax incentives. A job multiplier works as follows: suppose that a company belongs to an industry which has a multiplier of 3, and the tax incentives that were given out created 1,000 jobs in that company. This creation of 1,000 jobs leads to a further creation of 3,000 more jobs through indirect and induced economic activity generated by those initial 1,000 jobs. Thus, it is vital that tax incentives are given to companies that fall into an industry with a high multiplier effect. Timothy Bartik of Upjohn Institute points out that industries which have a multiplier effect of more than 2.5 should be the target recipients for business expansion tax incentives. The JTC program doesn't restrict itself to a specific array of industries that have a high multiplier.





The literature also points out that placing budget caps on incentives is an efficient method of running business expansion tax incentives. The WEDC does have an allocated budget amount for each year for the awards and this helps policy makers formulate efficient tax policy moving into the future. Tax credits may reduce revenue initially, and when making fiscal decisions, a budget cap for the program helps policy makers create better tax policy.

Based on third party research, the FERC has found that placing recapturing provisions is an effective mechanism in maximizing job creation. Recapture provisions are a good way of enforcing companies to act on their obligations, as there would be repercussions for not reaching their targeted job numbers. The WEDC in this case does place recapturing provisions, which has shown to be a good practice^{vi}.

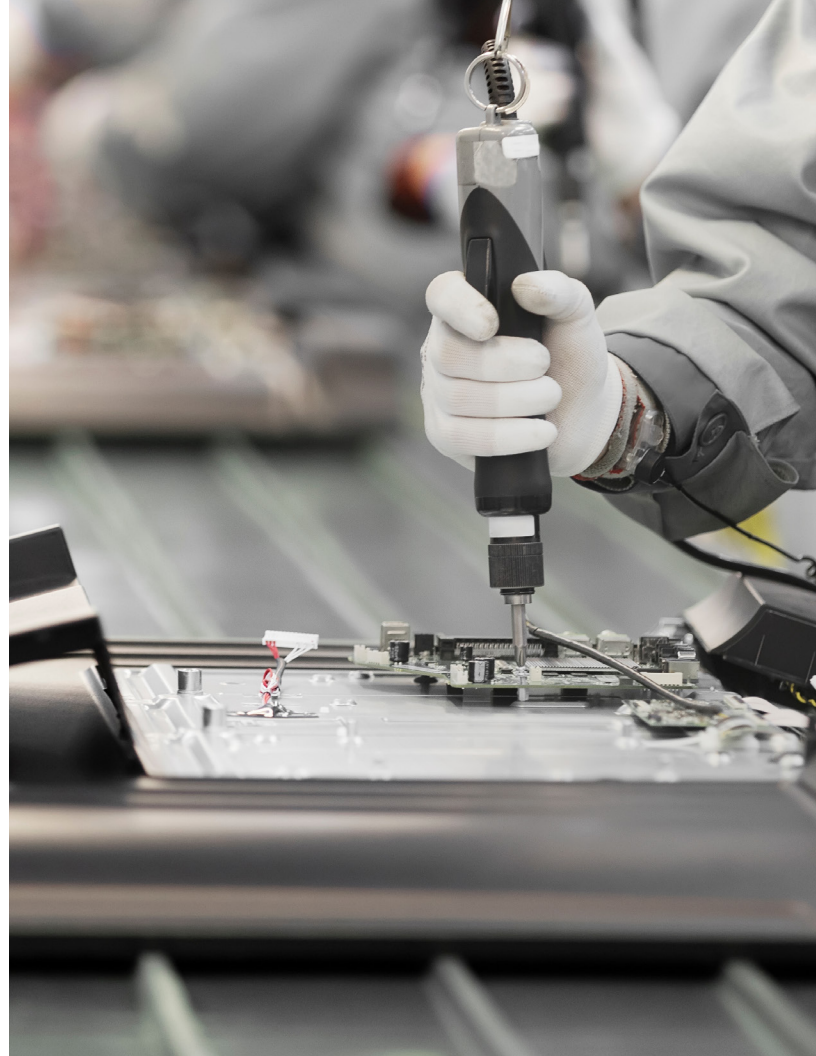
IBI Effect on Employment

The FERC has extracted an understanding from literature that has analyzed similar programs to the JTC program offered by the WEDC. When looking at the results of this literature, it is evident to the FERC that there is a positive effect on employment. A study done on Georgia's Job Tax Credit program, a similar program to the JTC program, seemed to have positive results from the program. A working paper by the Institute for Federalism & Intergovernmental Relations reinforces that, based on their analysis of tax credit programs in Kentucky, business incentives such as tax credits provide an increase in short run employment^{vi}.

It is important to recognize that a portion of the jobs created through business expansion tax credits would have been created regardless of whether or not the program existed. However, the incentives enable the firms to widen their scope of business expansion. In 2002, a study looking at a Georgia program concluded that “Firms taking the credit created 23.5 to 27.6 percent more jobs (increased from 1,870 to 2,196) than eligible firms not taking the credit between 1993 and 1995”.

Tax incentives tend to have higher returns in areas of lower affluence rather than in wealthy areas. This could tie into how areas with lower affluence would have a greater gain from the incremental economic activity generated by the businesses that received their tax incentives than wealthier areas due to diminishing returns.

Finally, with regards to the timing of the employment, it does take a few years for return on investment effects to take place. Chirinko & Wilson came to the conclusion that the effect of tax incentives does take time; however, they did not specify when it would take place. It should be taken on a case by case basis; individual firms could take differing time periods to implement their projects, due to the differences in the scope and size of the projects of each individual firm. Thus, trying to specify a range for a time period for when the jobs would manifest, after the distribution of tax incentives, would require an additional analysis.





Business Expansion Incentives Offered by Other States

The FERC found four distinct practices that states utilized in their programs. The first being that certain states would only provide tax credits to a select group of industries (mainly manufacturing, tech-based industries and companies that are looking to re-locate). Another group of states utilize thresholds for job creation numbers when filtering for valid applicants. The third group of states split job retention and job creation tax incentives into two different programs, or only provide a job creation tax incentive. Finally, certain states only provide tax incentives to small businesses that are looking to expand.

West Virginia, for instance, utilizes a similar concept to what Timothy Bartik of Upjohn Institute found. West Virginia only provides its business tax credits to companies that are in the industries of manufacturing (including high-tech computer and peripheral equipment manufacturing), information processing, warehousing, non-retail goods distribution, qualified research and development, the relocation of a corporate headquarters, and destination-oriented recreation and tourism. New York's *Excelsior Jobs Program*, Delaware's *New Job Creation Credit*, Mississippi's *Jobs Tax Credit Program*, and Tennessee's *Job Tax Credit* programs are all examples of programs that only grant tax incentives to specific industries. The common theme between all these select industries is that they are manufacturing or tech-based, or are warehousing and transportation industries. It is worth noting that the industries listed above generally have a high multiplier effect, based on the employment multipliers provided in IMPLAN 2016

Certain states use job creation thresholds, in order for businesses to qualify for the program. For example, Virginia imposes a job creation floor of 50 jobs (i.e. businesses that seek the tax incentive must create at least 50 jobs to be qualified to apply for jobs tax credits). There are advantages and disadvantages

to this approach^{xi}. One advantage is that companies that apply have a certainty that they would create *at least* the required amount of jobs. One disadvantage of this approach is that it may discourage small businesses from applying. Small businesses are vital as they tend to operate within the state thus they tend to have less leakages.

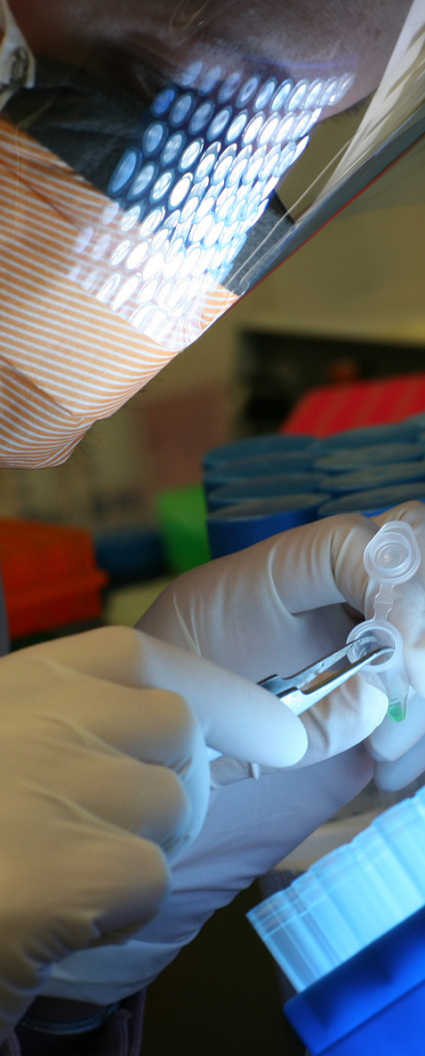
To take a different example, Utah imposes a job creation ceiling of 30 jobs for each business that is seeking to be a part of the program. This method is cost effective; however, this method is not a good tool for attracting the expansion and relocation of larger businesses^{xii}.

Certain states have tax credits that focus solely on job creation. The JTC program is applicable to both job retention and creation. The Job Creation Tax Credit program in Ohio requires that the businesses at least create 10 jobs with a minimum annual payroll of \$660,000. Utah, on the other hand, provides a fixed level of tax credits to each employee created by businesses within an enterprise zone^{xiii}.

Still other states have created tax credit programs that focus exclusively on small businesses. For instance, Kentucky provides a tax incentive called the *Kentucky Small Business Tax Credit* program that is specific to small businesses (and is similar to the JTC program)^{xiv}.

This program attempts to incentivize small businesses to create or fill at least one position, and invest at least \$5,000 in equipment and technology. Small businesses tend to have a higher impact on the local economy, as most expenditures for operations occur within the state, and thus small businesses tend to have higher multiplier effects due the lack of leakages.





Evaluation of the Economic Impact of the JTC Program

IAI Methodology

This report evaluates economic impact and the ROI of the jobs created by the JTC program by the recipients of the tax credits from 2012 to 2016. However, it must be recognized that tax credits also help fund jobs that might have existed without the program. In order to find the economic impact of the jobs created by the JTC program, the report utilizes the percentage of new jobs created by a similar tax credit program initiated in Georgia.

This analysis utilizes the 2016 IMPLAN economic modeling system to develop the economic impact of the jobs created by the JTC award recipients. This model produces an economic multiplier, a quantitative measure of economic impact that recognizes that all levels of economies are interconnected networks of interdependent activity. Events and changes in one part of the economy influences the rest of the economy. This usually results in a greater total impact than the impact caused by the original injection of activity into the economy.

The nature of leakages is a critical component of this analysis: when evaluating the operations and capital expenditures, only a portion of the money likely remains in the local and national economy, as some of those funds “leak” out as a result of taxes, or because of spending outside of the local economy. For example, there are components of the supply chain that exist outside the state and the nation. In other cases, employee spending may be directed at goods and services produced elsewhere. The multiplier effect takes into account these leakages.

IBI IMPLAN Analysis

To determine if the WEDC jobs tax credit program was effective in Wisconsin, the FERC utilized IMPLAN 2016, an input-output method of analysis. The IMPLAN model is designed to determine the economic impact that the JTC Program has on the Wisconsin

economy. IMPLAN estimates are grouped into three categories that affect the local economy. These categories are the:

- Direct effect – The direct effect refers to the production change associated with a change in demand for the good itself. In other words, the direct effect is the initial impact to the economy, which is exogenous to the model. In the case of companies that received a JTC, this includes the spending brought about by purchasing necessary components to manufacture their products.
- Indirect effect – The indirect effect refers to the secondary impact caused by changing input needs of directly affected industries (e.g., additional input purchases to produce additional output). It concerns inter-industry transactions, as companies that received a JTC award create a demand for locally sourced materials (electrical equipment, components that are used to assemble products, etc.) that are needed to produce said companies' product.
- Induced effect – The induced effect is caused by changes in household spending due to the additional employment generated by direct and indirect effects. The induced effect measures the effects of the changes in household income, as individuals working in the training facilities and the industry's suppliers spend money at places such as restaurants, grocery stores and shops.

ICI Data:

The data for the report was based on the data provided to the FERC by the WEDC. The FERC utilized company-reported full time positions that were non-seasonal and non-independent, and verified tax credits to the company and not the claimed value of the tax credit.

IDI Results for Economic Impact

The economic impact of the tax credits are evaluated for each individual year from 2010 to 2016. Table 2 and 3 covers the total impact of the operations generated as a result of the jobs created by the award recipients.



Table 2: Economic Impact for all jobs created by the JTC Program from 2010 to 2012

Employment (Jobs)			
	2010	2011	2012
Direct Effect	1163	833	1,027
Indirect Effect	1146	689	743
Induced Effect	1008	671	928
Total Effect	3317	2,193	2,698
Labor Income(\$)			
	2010	2011	2012
Direct Effect	84,673,840	58,943,119	99,145,471
Indirect Effect	75,510,509	47,975,708	47,756,082
Induced Effect	43,101,176	28,714,530	39,487,331
Total Effect	203,285,525	135,633,357	186,388,884
Output(\$)			
	2,010	2,011	2,012
Direct Effect	538,806,919	327,144,216	528,725,216
Indirect Effect	224,849,931	133,103,468	144,965,551
Induced Effect	136,122,682	90,689,646	124,802,853
Total Effect	899,779,532	550,937,330	798,493,620

Table 2 and **3** shows that a total of 23,644 jobs were generated (based off the IMPLAN Analysis of the actual job creation numbers). This, in turn, leads to \$1,424,223,993 in wages to employees in Wisconsin every year. The jobs created a total impact of \$5,846,121,334 on the Wisconsin economy per year. However

Table 3: Economic Impact for all jobs created by the JTC Program from 2013 to 2015

Employment (Jobs)				
	2013	2014	2015	2016
Direct Effect	1,047	1,936	2,818	116
Indirect Effect	553	1,956	2,498	63
Induced Effect	689	1,267	2,415	78
Total Effect	2,289	5,159	7,731	257
Labor Income (\$)				
	2013	2014	2015	2016
Direct Effect	80,794,101	116,364,535	230,623,514	8,149,473
Indirect Effect	28,947,236	85,595,726	153,872,900	4,298,916
Induced Effect	29,447,056	54,180,515	103,299,144	3,342,653
Total Effect	139,188,852	256,140,776	487,795,558	15,791,041
Output(\$)				
	2,013	2,014	2,015	2,016
Direct Effect	233,107,889	578,601,916	1,294,123,643	35,742,158
Indirect Effect	81,964,721	274,617,331	485,789,877	11,999,447
Induced Effect	93,008,582	171,134,751	326,254,991	10,565,547
Total Effect	433,130,991	1,024,353,998	2,106,168,510	58,307,152

this analysis includes all jobs that would have been created regardless of the existence of the program. Since the program Faulk analyzed is a similar program to the WEDC JTC program, this report utilized the ratios to tease out the economic impact of the new jobs that were created as a result of the JTC program. **Table**

Table 4: Economic Impact of New Jobs Created by JTC Program from 2010 to 2012

Employment (Jobs)			
	2010	2011	2012
Direct Effect	273 - 320	196 - 230	241 - 283
Indirect Effect	269 - 316	162 - 190	174 - 204
Induced Effect	236 - 278	158 - 185	218 - 256
Total Effect	779 - 915	516 - 605	633 - 743
Labor Income(\$)			
	2010	2011	2012
Direct Effect	19,898,352 - 23,369,979	13,851,633 – 16,268,301	23,299,185 - 27,364,149
Indirect Effect	17,744,969 - 20,840,900	11,274,291 – 13,241,295	11,222,679 - 13,180,678
Induced Effect	10,128,776 - 11,895,924	6,747,915 - 7,925,210	9,279,522 - 10,898,503
Total Effect	47,772,098 - 56,106,804	31,873,839 - 37,434,806	43,801,386 - 51,443,330
Output(\$)			
	2010	2011	2012
Direct Effect	126,619,625 - 148,710,709	76,878,891 - 90,291,804	124,250,425 - 145,928,159
Indirect Effect	52,839,733 - 62,058,580	31,279,315 - 36,736,557	34,066,904 - 40,010,492
Induced Effect	31,988,830 - 37,569,860	21,312,067 - 25,030,342	29,328,670 - 34,445,587
Total Effect	211,448,190 - 248,339,150	129,470,273 - 152,058,703	187,645,999 - 220,384,238

4 and 5 depict the economic impact of the new jobs created each year. These tables show that 5,556 – 6,526 new jobs, which would not have existed before, were created as a result of the WEDC JTC program. The new jobs resulted in an increase of \$334,692,638 - \$393,085,822 in total labor income in Wisconsin.

Table 5: Economic Impact of New Jobs Created by JTC Program from 2013 to 2016

Employment (Jobs)				
	2013	2014	2015	2016
Direct Effect	246 - 289	454 - 534	662 - 777	27 - 32
Indirect Effect	130 - 153	459 - 539	587 - 689	14 - 17
Induced Effect	162 - 190	297 - 349	567 - 666	18 - 21
Total Effect	538 - 632	1,212 - 1,423	1,816 - 2,133	59 - 70
Labor Income (\$)				
	2013	2014	2015	2016
Direct Effect	18,986,614 - 22,299,172	27,345,665 - 32,116,611	54,196,525 - 63,652,089	1,915,126 - 2,249,254
Indirect Effect	6,802,709 - 7,989,564	20,114,995 - 23,624,420	36,160,131 - 42,468,920	1,010,245 - 1,186,500
Induced Effect	6,920,058 - 8,127,387	12,732,421 - 14,953,822	24,275,298 - 28,510,563	785,523 - 922,572
Total Effect	32,709,381 - 38,416,123	60,193,082 - 70,694,854	114,631,956 - 134,631,574	3,710,894 - 4,358,326
Output(\$)				
	2,013	2,014	2,015	2,016
Direct Effect	54,780,354 - 64,337,777	135,971,450 - 159,694,128	304,119,056 - 357,178,125	8,399,407 - 9,864,835
Indirect Effect	19,261,709 - 22,622,263	64,535,072 - 75,794,383	114,160,621 - 134,078,006	2,819,870 - 3,311,847
Induced Effect	21,857,017 - 25,670,369	40,216,666 - 47,233,191	76,669,922 - 90,046,377	2,482,903 - 2,916,090
Total Effect	95,899,080 - 112,630,409	240,723,189 - 282,721,703	494,949,599 - 581,302,508	13,702,180 - 16,092,772

Total Output in Wisconsin increased by \$1,373,838,513 - \$1,613,529,488 on the Wisconsin economy annually.

IEI Tax Revenue and Return on Investment (ROI)

IMPLAN also details the taxes collected as a result of the economic activity generated by the jobs created by the JTC program. Once again, to tease out the tax revenue generated by the new jobs created by the program, Faulk’s ratios for new jobs created was utilized. For the purposes of this report, tax revenue is the sum of Sales Tax, Property Tax, Income Tax, and Corporate Profit Tax. **Table 6** describes the total tax revenue, as well as the tax revenue generated by the new jobs created through the JTC program.

The ROI is calculated based on the verified tax credits granted to businesses and the tax revenue generated by the new jobs that were created as a result of

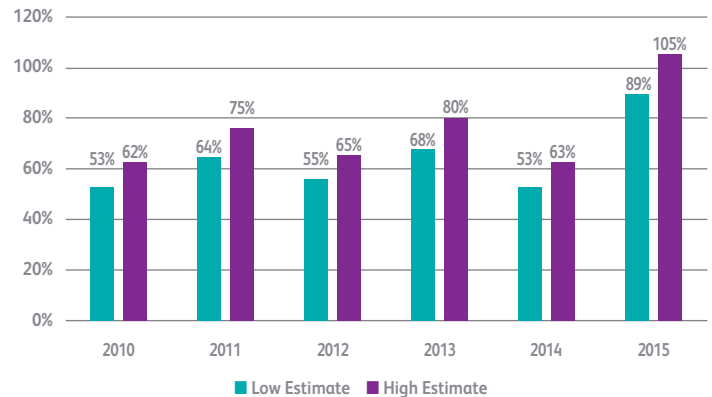
Table 6: Total Tax Revenue and Tax Revenue Generated Through New Jobs

Year	Total Tax Revenue Generated (\$)	Tax Revenue Generated through New Jobs (\$)
2010	27,172,966	6,385,647 - 7,499,738
2011	15,794,388	3,711,681 – 4,359,251
2012	17,574,296	4,129,959 - 4,850,505
2013	20,545,000	4,828,075 – 5,670,420
2014	34,489,925	8,105,132 - 9,519,219
2015	52,631,795	12,368,471 - 14,526,375
2016	56,024	13,165 - 15,462

the JTC program. **Diagram 3** illustrates the low and high estimates of the ROI generated by the program.

The report excludes the ROI for 2016 as many of the awards are in the process of being verified. Furthermore, there might be an underestimation of the ROI, as there were instances where the verified tax credit amount was calculated based on the description given in Section 4.c. of the report. Additionally, tax revenues and ROI generated by the economic impact created by the JTC program are revenues that would be created in a single year and does not take into account the multi-year effect of perpetual employment.

Diagram 3: Return on Investment to the State for the JTC Program



Conclusion

Looking at the results given above, it is clear the JTC program has provided satisfactory benefits to the Wisconsin economy. Based on our evaluation, the FERC recommends that similar programs in the future do the following:

1. Place a budget cap on the total dollar amount intended to be distributed as tax credits. Currently, the WEDC operates under a budget for their allocations, which allows the policy makers to create the most efficient tax policy.
2. Future programs should target specific industries that provide a high job multiplier effect (such as manufacturing). We suggest that industries with a multiplier effect of more than 2.5 should be considered for tax incentives in the future, based on prior research. The JTC program was open to businesses across many industries, thus future programs must be created to target specific industries.
3. Access to the program should not be restricted based on the size of a business. The majority of the firms that belong to the industries mentioned above tend to be larger in size. The WEDC, with the JTC program, did not narrow its applicants based on the size of a business, and we recommend they continue to do so future programs.
4. Recapture provisions are an effective tool of ensuring the success of the program. Businesses must meet certain employment targets to ensure that they avoid penalties. The JTC program had a recapture mechanism. We highly recommend future programs continue utilizing recapture provisions.
5. The economic activity that was measured through the IMPLAN model measures the economic activity within a year. Based on the results of the program, the investment by the state would have been returned within two years of activity via the current levels of new employment generated through the JTC program.

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About the Fiscal and Economic Research Center

The University of Wisconsin-Whitewater Fiscal and Economic Research Center provides research services for area businesses, not-for-profits organizations and government entities, including:

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- Ecological and biological analysis
- Government and public policy analysis
- Entrepreneurship
- Economic forecasting and business development

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For More Information: A full version of the Wisconsin Economic Development Corporation Evaluating the Jobs Tax Credit Program, complete with methodology, documentation, footnotes and appendices, is available at www.uww.edu/ferc/completed.

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