

AT A GLANCE: Fiscal and Economic Impacts of the New Markets Tax Credit Program

U.S. taxpayers enjoy a substantial return on the New Markets Tax Credit (NMTC) program, gaining increased federal revenue potentially reaching nearly 15 times the value of tax credits awarded by the Treasury Department since the Program's inception, according to a recent study conducted by Business Development Advisors (BDA) for the Partnership for Job Creation (PJC).

Established by Congress in 2000, the NMTC Program is designed to spur increased investment in low-income communities. The Program incentivizes equity investments in accredited Community Development Entities (CDEs) by offering tax credits to investors equaling 39 percent of capital invested in such entities, claimable over a fixed, seven-year investment schedule.

The PJC report, which focuses on net federal tax revenue ultimately generated by the NMTC Program, concludes that revenues directly and indirectly attributable to CDE investments in operating businesses and commercial developments substantially exceed revenues foregone by the tax credit. BDA estimates that the resulting net return to U.S. taxpayers may range in value from 2.2 to 14.8 times the value of tax credits awarded under the program, based on an average of projected NMTC-related tax outlays.

The report also addresses the overall economic impact of businesses funded through NMTC investments, noting that the 600 PJC-financed businesses sampled by BDA—representing only a fraction of all NMTC-assisted ventures—directly employ over 100,000 people and generate an estimated 82,000 additional indirect jobs supported by inter-industry spending across the country.

To project the aggregate revenue impact of the NMTC program, BDA modeled the expected tax flows from a sample portfolio of typical investments financed through the program. This sample portfolio consisted of five "project types" drawn from previous studies of the NMTC, as well as project-level data provided by several members of the PJC. After reconciling minor differences between the data sets—including PJC's enhanced emphasis on trade and transportation projects, healthcare and social assistance related to education, and commercial real estate investments—BDA selected five representative project types to populate the sample portfolio: (1) mixed-use commercial real estate, (2) health care, (3) community facilities, (4) manufacturing, and (5) trade and transportation.

Data gathered from NMTC case studies, as well as government and business databases, were then used to estimate outlays by each of these project types for corporate income tax, taxes on partnerships and S-corporation income, personal income tax, and payroll tax. Finally, BDA compared these projected outlays to the estimated cost of foregone tax revenue owing to the NMTC credit.

For the purposes of this study, BDA estimated this opportunity cost to equal 39% of Qualified Equity Investments (QEIs) in NMTC-related CDEs. It should be noted that other studies have estimated this cost to be lower than 39%, largely because of taxes that investors must pay on earnings and taxes on equity that some of the businesses receiving the investments must pay. The PJC study instead adopts a simplified, conservative starting point for "cost" equal to the nominal amount of the tax credit (39% of QEI), instead of the federal government's lower, alternative cost estimates (as low as 25.6% in estimates prepared by the Congressional Joint Committee on Taxation). Notably, an even more robust return on the NMTC program would be expected applying the government's lower cost estimates.

The PJC report's analysis ultimately yields a highly favorable picture of the U.S. taxpayers' return on the NMTC program. In the report's most conservative projection—accounting only for revenue related to new jobs created at NMTC-financed businesses—the federal government realizes a return 2.2 times greater than the value of the tax credits. This multiple reflects the average value of taxes generated by the five representative project types over a ten year period, with the community facility generating the lowest return and the trade and transportation project generating the highest return. In a middle scenario, factoring in jobs both created *and* maintained by NMTC financing, the projected return grows to 7.4 times the value of tax credits awarded (based on an average of the five project projections). Finally, in the study's highest projected scenario, including revenue derived from all jobs created and maintained by the program and multiplier effects from indirect jobs and construction spending, PJC projects a taxpayer return equal to 14.8 times the value of the NMTC tax credit (again, based on an average of the five project projections).

Return on Investment: Fiscal and Economic Impacts of the New Markets Tax Credit Program

Prepared for the Partnership for Job Creation

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The Partnership for Job Creation is a broad-based national coalition of New Markets Tax Credit Program practitioners.

Background

The New Markets Tax Credit Program (NMTC Program) was established by Congress in 2000 to spur new or increased investments into operating businesses and real estate projects located in low-income communities. The NMTC Program attracts investment capital to low-income communities by permitting individual and corporate investors to receive a tax credit against their Federal income tax return in exchange for making equity investments in specialized financial institutions called Community Development Entities (CDEs). The credit totals 39 percent of the original investment amount and is claimed over a period of seven years (five percent for each of the first three years, and six percent for each of the remaining four years). The investment in the CDE cannot be redeemed before the end of the seven-year period.

Since the NMTC Program's inception, the Treasury Department's Community Development Financial Institutions (CDFI) Fund has made 664 awards allocating a total of \$33 billion in tax credit authority to CDEs through a competitive application process. This \$33 billion includes \$3 billion in Recovery Act Awards and \$1 billion of special allocation authority to be used for the recovery and redevelopment of the Gulf Opportunity Zone.

Eligibility

An organization wishing to receive awards under the NMTC Program must be certified as a CDE by the Fund. To qualify as a CDE, an organization must:

- be a domestic corporation or partnership at the time of the certification application;*
- demonstrate a primary a mission of serving, or providing investment capital for, low-income communities or low-income persons; and*
- maintain accountability to residents of low-income communities through representation on a governing board of or advisory board to the entity.*

NMTC allocations are awarded through a highly competitive process in which CDEs are evaluated on four criteria: Business Strategy, Capitalization Strategy, Investment Track Record, and Community Impact. Through the first eight allocation rounds, 29 percent of applicants were selected to receive an award.

Qualified Investments

Substantially all of the qualified equity investment must be used by the CDE to provide investments in low-income communities, principally loans and investments in operating businesses and real estate developments. In FY 2011, all the allocatees indicated they would invest more than the minimally required 85%, with most indicating they would invest at least 95%.

The NMTC Program supports investments in a variety of businesses and development activities, including manufacturing firms, community facilities, retail, distribution operations, and mixed-use developments, to name a few.

Additionally, the CDFI Fund has sought to ensure that Rural CDEs receive an appropriate proportion of all awards and that at least 20% of all dollars are invested in non-metropolitan counties.

Sources: US Department of Treasury, Community Development Financial Institutions Fund. http://www.cdfifund.gov/what_we_do/programs_id.asp?programID=5 (accessed October 2012) and CDFI Fund Agency Financial Report FY 2011.

Table of Contents

Table of Contents	1
Executive Summary	2
Findings.....	2
Introduction	4
The New Markets Tax Credit	4
Project Types	5
Project Profiles.....	7
Federal Taxes.....	8
Scenarios and Assumptions	9
Fiscal Impacts	10
Low Scenario – New Jobs.....	10
Middle Scenario – New and Retained Jobs.....	11
High Scenario – New and Retained Jobs plus Construction and Indirect Effects.....	12
Summary.....	13
Economic Impacts	14
Conclusion	15

Executive Summary

The purpose of this study is to consider the “return on investment” that the New Markets Tax Credit (NMTC) Program provides to taxpayers through its assistance in financing operating businesses and commercial developments in economically distressed communities throughout the United States.

The NMTC Program is designed to encourage private capital investment in businesses in economically distressed communities. Investors receive a 39% federal income tax credit distributed over seven years for investments in approved Community Development Entities, which, in turn, make investments in qualified businesses and developments in distressed communities.

While several studies have addressed the positive economic and social impacts of the NMTC Program, this report takes a different approach by estimating how federal taxes generated by NMTC-financed businesses compare to the revenue foregone from the tax credit. Since information on federal taxes paid by individual businesses is not available, we developed profiles for five project types to represent a portfolio of typical business investments financed through the NMTC Program. We then estimated the federal taxes likely to be paid by these businesses and the cost of the tax credit under low, middle and high scenarios. This report also addresses jobs supported by the NMTC Program investments.

Findings

The overall “return on investment” to taxpayers from the NMTC is strongly positive in all three scenarios. That is, the taxes generated by the representative projects over ten years are greater than the cost (revenue foregone) of the NMTC.

- The low scenario considers the fiscal impact associated with only **new jobs at businesses financed with the assistance of the NMTC**. The estimated value of taxes generated by these representative projects is **2.2 times greater than the value of the tax credit**.
- The middle scenario considers the fiscal impact associated with **all jobs (new and retained) at businesses financed with the assistance of the NMTC**. The estimated value of taxes generated by the representative projects is **7.4 times greater than the value of the tax credit**.
- The high scenario includes the fiscal impact associated with **all jobs (new and retained), multiplier effects (indirect jobs only) and construction spending at businesses financed with the assistance of the NMTC**. The estimated value of taxes generated by the representative projects is **14.8 times greater than the value of the tax credit**.

The NMTC Program’s fiscal impact is strongly positive because it incentivizes investments in businesses and commercial developments that create and retain jobs,

generating personal income and payroll taxes and, in the case of for-profit businesses, business income taxes.

BDA also examined the overall **economic impact** of businesses financed by members of the Partnership for Job Creation (PJC). Upon our request, the PJC provided employment and industry classification information for over 600 NMTC businesses financed over the past ten years.

- These businesses, which represent a fraction of all businesses that have accessed NMTC-assisted financing, **employ over 100,000** people in a wide variety of industries in the United States.
- Taken together these businesses generate an estimated **additional 82,000 indirect jobs** supported by inter-industry spending across the country. This figure does not include induced employment supported by increases in spending based on growth in individual earnings.

Introduction

The purpose of this study is to consider the “return on investment” that the New Markets Tax Credit (NMTC) Program provides to taxpayers through its assistance in financing operating businesses and commercial developments in economically distressed communities throughout the United States.

Several studies and reports have previously addressed the positive economic impact of the NMTC Program in communities receiving investments (see, for example, Armistead 2005, GAO 2007, Bershadker et al 2008, LaFranchi 2010, Rapoza Associates 2011, 2012); the beneficial fiscal impacts of state-level New Markets programs (see, for example, Fuller 2009, Phares 2011, Elliott D. Pollack & Company 2012); and the local economic impact of individual businesses and developments (see, for example, Strategic Development Solutions 2009, Clinch 2010).

This report takes a different approach by estimating how federal taxes generated by a representative set of NMTC-financed businesses (revenue gained) compare to the value of the tax credit (revenue foregone).

The New Markets Tax Credit

The New Markets Tax Credit is designed to encourage investment in economically distressed communities in both rural and urban areas. Investors receive a 39% tax credit for private capital investments (Qualified Equity Investments, or QEIs) in approved Community Development Entities, which, in turn, make investments in qualified businesses and developments in designated distressed communities.

Many studies have addressed different aspects of NMTC Program effectiveness. Delivering returns to taxpayers from investments in qualified businesses and developments is not a stated objective of the NMTC Program, or, to our knowledge, other federal tax credit programs. Therefore, it has not been evaluated by this measure to date. In the 2010 report, “Evaluating Community and Economic Development Programs. A Literature Review to Inform Evaluation of the New Markets Tax Credit Program,” Abravenel et al mention only three studies that have used tax revenues to assess the outcomes of economic development programs, in each case emphasizing state and local taxes, but addressing sales taxes, payroll taxes, income taxes, corporate taxes and property taxes. The authors of that study did not recommend using tax revenues as one of the main evaluation factors for NMTC Program outcomes, instead emphasizing a series of other factors such as “generating employment, supporting physical development, creating housing opportunities; constructing public or community service facilities; financing business development; supporting industrial, commercial retail, or mixed-use enterprises; or stimulating enhanced local or institutional community and economic development capacity.” (77)

Generating tax revenue, then, is not a primary program objective and other outcome measures are tied more directly to the program’s intent. Still, as Congress considers

the future of the NMTC Program, it remains a valid question as to whether the private capital investments incentivized by this tax credit are likely to generate a return to taxpayers that exceeds the value of the credit.

Approach

Since information on federal taxes paid by individual businesses is not readily available, our initial approach involved accessing project data from either the Community Investment Impact System (CIIS) or the Partnership for Job Creation (PJC), a broad-based national coalition of NMTC practitioners, to calculate an overall estimate of federal taxes paid based on business structure, revenue and employment for a large set of NMTC investments. However, we quickly learned that data, while voluminous, were neither sufficiently complete nor reliably comparable across projects and years to enable this type of analysis (Smith & Fitzpatrick 2004, GAO 2010, Abravenel et al 2010).

Therefore, we adapted our approach to model expected tax flows instead of calculating total taxes across projects. To do so, BDA developed profiles for five project types to represent a portfolio of typical investments financed through the NMTC Program. We then estimated the federal taxes likely to be paid by these businesses and real estate developments.

This approach is often used to estimate the value of state or local tax incentives that are available to different types of businesses (Ohio Department of Development 2009, LeRoy 2010, Peake Consulting 2010) and has also been used to estimate the federal fiscal impacts of different types of tax credits (see, for example, an analysis of a prototype property development for the State Historic Tax Credit Program in Massachusetts, 2012) and state taxes generated from small business loan guarantees (Bradshaw 2002). It is a useful tool to understand the magnitude and direction of the fiscal impact of a policy action in the absence of firm-specific data.

Project Types

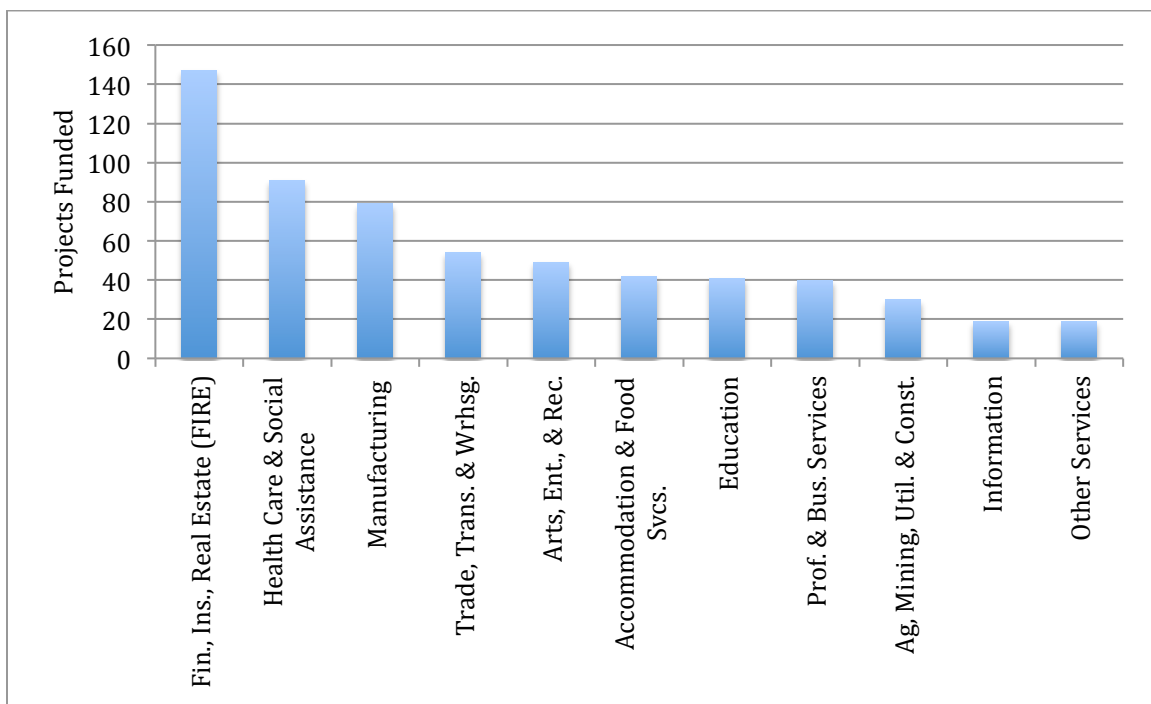
BDA defined the project types by striving to understand the different categories of investments made through the NMTC Program. This task involved two steps. First, we drew project typologies from various studies on the NMTC program, emphasizing recent reports from the US Government Accountability Office (GAO) and annual NMTC Progress Reports. For example:

- A 2010 GAO report estimated that 65% of NMTC loans and investments were used for real estate developments, while the New Markets Tax Credit Progress Report 2011 reported that respondents to its annual survey financed roughly even numbers of real estate and operating businesses.
- The 2011 NMTC Progress Report noted that community facilities, mixed use, industrial/manufacturing, and healthcare were the most common types of businesses financed.

- The 2012 NMTC Progress Report listed education, industrial/manufacturing, mixed use and healthcare as the most common, accounting for over 60% of financed businesses.

Second, BDA examined project-level data provided by several members of the PJC. The PJC provided information on jobs (created and retained) and industry classification (six-digit North American Industry Classification System (NAICS) level) for over 600 funded projects. Neither project names nor locations were provided, only the total number of jobs and industry classification. Figure 1 shows the distribution of PJC investments across major economic sectors.

Figure 1. Projects Funded by Sector



Source: Business Development Advisors. Data from the Partnership for Job Creation.

As expected, the FIRE sector, including real estate projects, accounted for the largest percentage of investments made by PJC members, followed by health care and social assistance, manufacturing, and trade, transportation and warehousing.

While the PJC projects are consistent with the overall data on NMTC financed projects, the detailed PJC data differ from the survey data reported in the NMTC Progress Reports and other summary reports in a few ways. First, the PJC members appear to have financed a higher percentage of trade and transportation projects. Second, they have made more investments in healthcare and social assistance relative to education. Third, the PJC real estate projects have had a heavier focus on commercial real estate compared to housing or mixed-use commercial and residential projects.

Combining these sources, we selected the following categories as representative of PJC member and other NMTC projects.

- Mixed-use commercial real estate (office and retail)
- Health care
- Community facilities
- Manufacturing
- Trade and transportation

Project Profiles

We then created profiles to represent typical NMTC projects in these five categories and to allow us to estimate federal taxes paid. Profiles include:

- Project description
- Business structure
- Industry (NAICS code)
- Employment (total, new)
- Payroll
- Annual revenue (where appropriate)
- NMTC allocation
- Project cost

The characteristics of each profile were derived from a review of dozens of NMTC case studies (both from PJC members and from other NMTC investors) and from summary and average figures by NAICS code obtained from business and government databases. Details on source material for the profiles are available in the Appendix, provided separately. While these profiles do not represent any specific project that accessed NMTC-assisted financing, we believe that overall they are representative of a set of typical projects across these major categories of NMTC activity. Summary profiles are presented in Table 1.

Table 1. Project Profiles

	Manufacturing	Trade & Transportation	Healthcare	Mixed Use Commercial Real Estate	Community Facility
Business structure	Private, corporation	Private, corporation	Not-for-profit	Partnership, with mix of tenant businesses	Not-for-profit
Description	Equipment and facility modernization for a food processing operation	Construction of a new distribution facility for a wholesale operation	Construction of a new facility or rehabilitation of an existing facility for a community hospital (real estate)	150,000 SF with offices, retail and restaurants (real estate)	Redevelopment project to create a HQ and service center for a social assistance organization (real estate)
Total employment	150 FTEs	70 FTEs	300 FTEs	403 FTEs (partnership plus tenant businesses)	200 FTEs
New jobs	40	70	50	105	50
NMTC investment	\$5 million	\$4 million	\$10 million	\$6 million	\$7 million
Total project expenditure	\$14 million	\$10 million	\$25 million	\$15 million	\$23 million

Federal Taxes

We include the following federal taxes in this analysis:

- Corporate income tax
- Taxes on partnership and S-corporation income
- Personal income tax
- Payroll tax

These taxes represent the major taxes paid by businesses and their workers and are consistent with those used or addressed in other fiscal impact studies related to the NMTC Program and other tax credits (Fuller 2009, Strategic Development Solutions 2009, Center for Urban Policy Research 2011, US Partnership for Renewable Energy Finance 2012, Hicks & Faulk 2012).

BDA used a variety of sources to estimate the effective tax rate and taxes paid for each tax category and project type. Since reliable estimates of taxable income are not available, we did not use published tax rates to estimate either corporate or personal income taxes paid. Instead, we used national-level data on taxes paid by industry, revenue category and business structure to calculate effective tax rates based on revenue and payroll.

For corporate tax estimates we relied on figures derived from the Internal Revenue Service (IRS) Statistics of Income to calculate an effective tax rate based on federal income taxes paid relative to business receipts (revenue) by industry. We also used data from IRS Statistics of Income to estimate income allocated to partners or S-corporations by industry and then assigned a personal income tax rate to that income.

To estimate personal income and payroll taxes, we calculated average payroll per worker by industry using national-level data from US County Business Patterns¹. The effective personal income tax rate was calculated based on income tax paid as a percentage of adjusted gross income according to data by income taken from IRS Publication 1304, Individual Income Tax Returns 2010. Payroll taxes were calculated from the same payroll figures following guidance from IRS Form 941.

Scenarios and Assumptions

Scenarios

For each of the five project types, we prepared low, medium and high scenarios. The low scenario estimates the federal taxes associated only with new jobs created as a result of the investment. The medium scenario estimates taxes associated with all jobs (new and retained) for each project type. The high scenario includes all jobs (new and retained) plus taxes generated from jobs associated with construction activities and multiplier effects (indirect jobs and earnings) for each project type. Many of the other fiscal impact studies reviewed for this project are based on the assumptions included in the “high” scenario plus induced impacts, which we do not include here.

Assumptions

We made the following additional assumptions in our calculations and scenarios:

¹ National-level data are used because the projects and scenarios are not location-specific given the objective to estimate fiscal impacts at the federal level. (We did consider whether payroll should be adjusted downward to reflect the low-income communities in which these investments occur. However, we are not aware of any data sources that would enable this type of calculation since our profiles do not assume a specific geographic location and the NMTC definition of “low income” also varies by location. Further, it is reasonable to assume that the jobs associated with these projects pay average wages, rather than below-average wages, since low incomes in a community may reflect a lack of jobs rather than low wages.)

- We selected a 10-year timeframe (Abravenel et al 2010, p. 78) for the analysis, which is an appropriate (though perhaps conservative) choice given the time horizon associated with real estate investments.
- We did not include a growth assumption in either revenue or employment. Figures are not adjusted for inflation.
- We estimate the cost of the New Markets Tax Credit at a straightforward 39% of Qualified Equity Investment, claimed over seven years. Other studies estimate the cost of foregone tax revenue to be lower than 39% because of taxes that investors must pay on earnings and taxes on equity that some of the businesses receiving the investments must pay (Rapoza & Associates 2012; Armistead 2005 cited in Abravenel et al 2010; GAO 2010).² We still use the 39% figure because it is more conservative and is strongly associated with the NMTC program.
- We used a discount rate of 5% as a reasonable ten-year rate of return from the investor perspective for the net present value calculation. We also calculated the models using a 2% discount rate to approximate the rate of return on a ten-year Treasury note, with those results presented in the Appendix.

Taken together, this approach -- the use of effective rather than published tax rates, the separation into three scenarios by new jobs, total jobs and total jobs plus multiplier effects, and our other assumptions-- represents a conservative but appropriate approach to estimating the federal fiscal impact of projects financed with the assistance of the NMTC.

Fiscal Impacts

This section summarizes the findings from our calculations of taxes generated and foregone as a result of NMTC Program investments based on the three scenarios across each of the five project types.

Low Scenario – New Jobs

The “low” scenario is the most conservative and includes only new jobs generated by the business that accessed NMTC-assisted financing. It does not include retained or existing jobs, even though these positions might cease to exist without the NMTC investment. This scenario represents the most restrictive definition of impact.

² Estimates range from 24-30%.

Table 2. Net Present Value of the NMTC and Taxes Generated by Financed Project – New Jobs (Low Scenario)

	Manufacturing	Trade & Transportation	Health Care	Mixed Use Commercial Real Estate	Community Facility
New Jobs	40	70	50	105	50
Business Taxes	\$1,338,000	\$1,544,000	n/a	\$2,255,000	n/a
Personal Income Taxes	\$716,000	\$2,698,000	\$1,566,000	\$859,000	\$382,000
Payroll Taxes	\$1,391,000	\$4,099,000	\$2,379,000	\$2,191,000	\$1,007,000
Value of the New Markets Tax Credit	(\$1,600,000)	(\$1,280,000)	(\$3,200,000)	(\$1,920,000)	(\$2,240,000)
Taxes Generated/ Value of the NMTC	2.15	6.52	1.23	2.76	0.62

Dollar figures are rounded to the nearest thousand.

Taken together, the overall “return on investment” to taxpayers is 2.19X under this scenario. That is, the value of taxes generated by these representative projects over ten years is 2.19 times greater than the value of the new markets tax credit. The return is positive despite the conservative restrictions placed on the low scenario calculations.

Looking at the individual projects, the ratio is highest for the trade and transportation project because all the jobs associated with that project are new. None would exist without the NMTC-assisted financing. The return is lowest for the community facility. This is not surprising since the typical organization in this category is a service-oriented, not-for-profit that does not pay corporate income tax and has relatively low average salaries.

Middle Scenario – New and Retained Jobs

The “middle” scenario includes new and retained (existing) jobs associated with the project that received the NMTC-assisted financing. Other reports have concluded that the credits help finance projects that typically would not be built without NMTC participation (Armistead 2005, Gurley-Calvez et al 2009, Rapoza & Associates 2012), while much anecdotal evidence from the case studies suggests that jobs are retained in communities thanks to the NMTC investment. We believe this scenario best

represents the true fiscal impact because in many cases existing jobs would be lost without the NMTC investment.

Table 3. Net Present Value of the NMTC and Taxes Generated by Financed Project – New and Retained Jobs (Middle Scenario)

	Manufacturing	Trade & Transportation	Health Care	Mixed Use Commercial Real Estate	Community Facility
Jobs	150	70	300	403	200
Business Taxes	\$5,019,000	\$1,544,000	n/a	\$5,701,000	n/a
Personal Income Taxes	\$2,685,000	\$2,698,000	\$9,396,000	\$6,542,000	\$1,529,000
Payroll Taxes	\$5,216,000	\$4,099,000	\$14,274,000	\$12,493,000	\$4,026,000
Value of the New Markets Tax Credit	(\$1,600,000)	(\$1,280,000)	(\$3,200,000)	(\$1,920,000)	(\$2,240,000)
Taxes Generated/ Tax Credit	8.08	6.52	7.40	12.89	2.48

Dollar figures are rounded to the nearest thousand.

The overall “return on investment” to taxpayers is 7.35X under this scenario. That is, the value of taxes generated by these representative projects over ten years is 7.35 times greater than the value of the new markets tax credit.

In this scenario, all the projects – including the not-for-profit investments – show a substantial, positive fiscal impact.

High Scenario – New and Retained Jobs plus Construction and Indirect Effects

The “high” scenario includes new and retained (existing) jobs associated with the project that received the NMTC-assisted financing plus the estimated federal taxes generated from project construction spending and from indirect jobs supported by the business or organization. Our scenario does not include induced effects³ or any additional business taxes paid by companies that benefit from the initial spending or job creation/retention. This scenario is most like other impact studies, which

³ We elected to include only the indirect (inter-industry) multiplier effects in the high scenario because of concerns the induced (income) multipliers might be overstated in the model results. Details are provided in the Appendix.

typically include construction and/or multiplier effects (indirect and induced) in their calculations.

Table 4. Net Present Value of the NMTC and Taxes Generated by Financed Project (New and Retained Jobs), Construction Activity, and Multiplier Effects (High Scenario)

	Manufacturing	Trade & Transportation	Hospital	Commercial Real Estate	Community Facility
Project plus Multiplier Jobs	657	100	473	492	243
Business Taxes	\$5,019,000	\$1,544,000	n/a	\$5,701,000	n/a
Personal Income Taxes	\$18,120,000	\$3,722,000	\$13,853,000	\$9,315,000	\$2,835,000
Payroll Taxes	\$28,665,000	\$5,731,000	\$22,042,000	\$16,706,000	\$6,011,000
Federal Taxes from Construction Spending	\$1,133,000	\$1,619,000	\$4,048,000	\$2,429,000	\$3,724,000
Value of the New Markets Tax Credit	(\$1,600,000)	(\$1,280,000)	(\$3,200,000)	(\$1,919,700)	(\$2,240,000)
Taxes Generated/ Tax Credit	33.09	9.90	12.48	17.79	5.61

Dollar figures are rounded to the nearest thousand.

The overall “return on investment” to taxpayers is 14.82X under this scenario. That is, the value of taxes generated by these representative projects over ten years is 14.82 times greater than the value of the new markets tax credit.

Summary

The overall “return on investment” to taxpayers from the New Markets Tax Credit Program is positive in all three scenarios. That is, the value of the taxes generated by the representative projects over ten years is greater than the value of the taxes foregone through the tax credit.

The fiscal impact is strongly positive because the NMTC Program incentivizes investments in businesses that create and retain jobs, generating personal income

and payroll taxes. Investments are made in both not-for-profit and for-profit organizations, the latter of which also pay business income taxes.

Economic Impacts

Economic impact is different than fiscal impact. Fiscal impact analyses strive to describe the tax and budgetary implications of investments and economic activity. Economic impact analyses attempt to measure the role investments and activities play in the overall economy as measured by jobs, earnings and output. Economic impact studies consider how a change in baseline spending or employment affects the spending and employment patterns of other businesses and individuals in the economy. “Multipliers” quantify the effect of these changes in jobs, earnings or spending from one industry on other industries.

This study considers the economic impact of the NMTC Program by examining the jobs and earnings multipliers associated with a set of projects financed by PJC members. Upon our request, PJC members provided employment and six-digit NAICS industry classification information for over 600 businesses and developments financed with the assistance of the NMTC over the past ten years. Combined, these businesses are reported to employ over 100,000 people in more than 190 different NAICS-based industries.

For this section of the study we began by assuming that all jobs associated with the NMTC-assisted businesses represent a change in the number of jobs. We did so because, 1) available data did not distinguish between “new” jobs and “retained” jobs for each project, 2) many operating businesses and real estate developments would not exist or would cease to exist without the NMTC financing, and, most importantly, 3) we are interested in the overall impact of businesses financed with the assistance of the NMTC to understand their contributions to the economy.

BDA used the Economic Modeling Specialists, Inc. (EMSI) Economic Impact model to estimate the overall economic impact, including multiplier effects, of these jobs at the national level. We chose this model because it allows the use of jobs, instead of spending, to estimate economic impact. Annual spending data, which is the primary input for many economic impact models, is not available for the NMTC-assisted businesses.

Jobs figures for each six-digit industry were entered into the model. The EMSI model divides the multiplier effects into direct, indirect and induced impacts based on the initial change in jobs by industry. The direct jobs are the result of new input purchases made by the initial industry. The indirect jobs are the result of purchases made further in the supply chain – or the inputs needed to support the direct jobs. The induced jobs result from purchases made by individuals based on their new earnings gained during the initial, direct and indirect changes. The direct and indirect changes are “inter-industry effects” while the induced changes are “income effects.” Consistent with the conservative assumptions in the high scenario for the

fiscal impact analysis, the induced effects are not included in the summary economic impact findings.⁴

Table 5 shows the summary results for the direct and indirect impacts.

Table 5. Summary of Multiplier Effects for PJC NMTC Projects

	Initial	Direct	Indirect	Total
Jobs	102,630	51,150	30,830	184,610
Earnings	\$5,584 m	\$2,420 m	\$1,623 m	\$9,627m

Figures are rounded. Earnings are in \$million. BDA and EMSI

Taken together, these projects generated an additional 82,000 direct and indirect jobs, leading to a total inter-industry jobs impact of 184,000 and a total earnings impact of \$9.6 billion.

Conclusion

The New Markets Tax Credit Program delivers a strongly positive “return on investment” of taxpayer dollars across the representative portfolio of projects and scenarios evaluated in this report. The estimated value of taxes generated by these projects ranges from 2.2 times (low scenario) to 7.4 times (middle scenario) to 14.8 times (high scenario) the value of the revenue foregone from the tax credit.

The fiscal impact is positive because businesses that access NMTC-assisted financing create and retain jobs, yielding personal income and payroll taxes, and for-profit companies also pay business income taxes.

Substantially all NMTC-assisted financing must go to businesses in economically distressed communities in both urban and rural areas. Businesses and developments financed by PJC members through the NMTC Program support over 100,000 jobs and \$5.6 billion in earnings in economically distressed communities, with an overall economic impact of 184,000 jobs and \$9.6 billion in earnings.

⁴ The model, if it had included induced effects, would have indicated that over 378,000 induced jobs would be created across the country.

Return on Investment: Fiscal and Economic Impacts of the New Markets Tax Credit Program

Appendix

Prepared for the Partnership for Job Creation

by

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Table of Contents

Table of Contents	1
Methodology and Assumptions	3
Profiles.....	3
Taxes.....	5
Economic Impact.....	7
Project Profiles for Tax Calculations	8
1. Commercial Mixed Use Real Estate	8
2. Health Care.....	9
3. Community Facility	10
4. Manufacturing Business.....	11
5. Trade and Transportation.....	12
Tax Calculations	14
1. Commercial Mixed Use Real Estate	14
2. Health Care.....	17
3. Community Facility	20

4. Manufacturing	23
5. Trade and Transportation.....	26
References and Resources	29

Methodology and Assumptions

The purpose of this study is to consider the “return on investment” that the New Markets Tax Credit (NMTC) Program provides to taxpayers through its financing of businesses and projects in economically distressed communities throughout the United States.

To do so, BDA estimates how federal taxes generated by five project types that represent a portfolio of typical business investments financed through the NMTC Program compare to the value of the tax credit. BDA defined the project types by considering typologies from other studies of the NMTC Program and project-level data provided by the Partnership for Job Creation (PJC). Combining these sources, we selected the following categories as representative of PJC and NMTC projects.

- Mixed-use commercial real estate (office and retail)
- Health care
- Community facilities
- Manufacturing
- Trade and transportation

We then developed profiles for each project type to estimate the federal taxes likely to be paid by each project.

Profiles

Once we defined the five project types, we created an operating profile for a representative project for each category. BDA used several resources but relied most heavily on a broad review of case studies that were prepared by NMTC investors, allocatees and outside analysts. Many evaluations and impact studies of the overall NMTC Program also include case studies, and we included these in our review as well. Finally, we checked our assumptions against summary data by industry that members of the PJC provided to BDA and against industry averages from US government data sources, primarily County Business Patterns, and subscription business databases.

The profiles include the following information.

Industry

A North American Industrial Classification System (NAICS) code was assigned to each project. Case studies (for which we had project names through which we were able to identify a NAICS code) and PJC project data (for which we did not have project names but did have a NAICS code) allowed us to select the industry code that best represented the overall category within the NMTC program and among PJC members.

Employment

We estimated total and new employment associated with each project by using several sources. We considered new and total employment cited in the case studies, employment by case study organization as obtained from subscription business databases, jobs reported by NAICS code and project by PJC members, and average employment by NAICS code from County Business Patterns.

Revenue

Annual revenue by company, where appropriate, was estimated based on revenues for case study companies as obtained from subscription business databases and by calculating average revenue by industry category and employment range, also using subscription business databases.

Business Structure

Business structure (such as private or public; for-profit or not-for-profit; partnership or corporation, etc.) is important for calculation of business taxes. The business structure for the representative projects was determined from actual business structure for both case study projects and a set of companies in relevant industry and employment range categories as obtained from subscription business databases. County Business Patterns, accessed through FactFinder, also yielded useful information on business structure by employment range and industry.

Payroll

Payroll per employee was calculated by NAICS code from County Business Patterns data for the U.S. for each project type.

NMTC Allocation

The NMTC allocation from which the value of the tax credit is estimated is based primarily on allocations reported in the case studies by project type along with inputs from the PJC. The GAO has reported that NMTC financing averages 36% of total

project costs (GAO 2010). We examined the NMTC allocation as a percentage of total project costs in the case studies we identified and generally found that the project types of interest to us here also had a range of 30-40%.

Project Cost

The total project cost is primarily based on costs reported in the case studies reviewed for this project. In some cases, the total project cost was estimated as a function of the value of the NMTC allocation. Project cost is used only to estimate the federal taxes associated with construction spending.

Taxes

This section describes the sources we used for the tax rates to estimate taxes generated. We relied on data from the IRS Statistics of Income to estimate business and personal taxes, as described below. We used the latest year of data available at the time of our research for each category.

Business Income Taxes

For the commercial real estate project, we assumed the real estate business receiving the investment is structured as a partnership. We calculated the income allocated to partners by industry using Table 5 from Partnership Returns, 2009. Partnership income is taxed as personal income. We assumed partners are in the 95-99 percentile of cash income, with an effective individual tax rate of approximately 20%. We assumed the retail stores, restaurants and half of the professional services tenant firms in the real estate project are structured as corporations that pay the average income tax per return, as calculated from Table 1 of the Returns of Active Corporations for Tax Year 2008. We assume the remaining professional services tenant firms are structured as S corporations. We calculated the net income per return by industry from Table 1 of the S Corporation Statistics for Tax Year 2008. S-corp income is taxed as personal income. We assume the S-corp members are taxed at the average effective individual tax rate as a percentage of adjusted gross income for all levels of income of 11.5%. These average effective tax rates were obtained from the Tax Policy Center (Average Effective Federal Tax Rates by Cash Income Percentiles 2011 Baseline: Current Law).

For the manufacturing project, we assumed the business is structured as a corporation. We estimated annual business receipts (revenue) based on revenue for companies identified in the case studies combined with average revenue by company size (employment) by industry derived from a subscription business database. The corporate income tax rate is total income tax after credits as a percentage of business receipts for food manufacturing businesses as calculated from Table 1 of 2009 Corporation Returns.

For the trade and transportation project we assumed the business is structured as a corporation. We estimated annual business receipts (revenue) based on revenue for companies identified in the case studies combined with average revenue by company size (employment) by industry derived from a subscription business database. The corporate income tax rate is total income tax after credits as a percentage of business receipts for merchant wholesaler businesses as calculated from Table 1 of 2009 Corporation Returns.

Personal Income and Payroll Taxes

We assume that payroll per employee as calculated from County Business Patterns by industry is comparable to adjusted gross income since the US Census reports that the County Business Patterns definition of payroll is the same as that used by the IRS on Form 941. Adjusted gross income includes compensation for services, including wages, salaries, fees, commission, tips, taxable fringe benefits and similar items. The income tax is calculated from income tax rates as a percentage of adjusted gross income (less deficit) by income level as provided in Table 1 from Individual Income Tax Return (Form 1040) Statistics for 2010.

Payroll taxes, including social security and Medicare wages paid by both the employer and employee, were calculated using guidance from IRS Form 941 using 2012 rates of 6.2% for the employer and 4.2% for the employee for social security and 1.45% for Medicare.

Taxes associated with construction spending

The high scenario also requires estimates of the impact of construction spending. First, we estimated total project cost for each project type and the percentage of project cost for construction activities. In most cases, we assumed that 100% of the “project cost” was “construction cost,” given the nature of the project. The exception is the manufacturing facility, for which we estimated that 50% of total project cost is construction cost. We then drew on the federal tax calculations prepared for the “Second Annual Report on the Economic Impact of the Federal Historic Tax Credit” to make an estimate of federal taxes paid on construction projects. This is an appropriate approach because many historic tax credit projects also have an NMTC component. Also, this study only examined construction impacts while including multiplier effects so it captures the range of impact we are seeking. We then made a simple calculation of total federal taxes paid relative to FHTC project expenditures in 2009-10 to estimate the percentage of federal taxes generated from construction spending.

Economic Impact

BDA used the Economic Modeling Specialists, Inc. (EMSI) Economic Impact model to estimate the overall economic impact, including multiplier effects, of NMTC projects at the national level by jobs and earnings. We chose this model because it allows the use of jobs, instead of spending, to estimate economic impact. Annual spending data, which is the primary input for many economic impact models, is not available for the NMTC-financed businesses.

Jobs figures for over 190 different 6-digit industries were entered into the model. The EMSI model divides the multiplier effects into direct, indirect and induced impacts based on the initial change in jobs by industry. The direct jobs are the result of new input purchases made by the initial industry. The indirect jobs are the result of purchases made further in the supply chain – or the inputs needed to support the direct jobs. The induced jobs result from purchases made by individuals based on their new earnings gained during the initial, direct and indirect changes. The direct and indirect changes are “inter-industry effects” while the induced changes are “income effects.”

The overall multiplier effects were higher than expected. There are several reasons for this. First, the EMSI model generally yields higher multipliers than other models because it does not place an upper bound on growth that may be generated as result of investments. Second, because we are conducting the analysis at the national level rather than a regional level, the model assumes that most of the money stays in the economy, rather than leaking out as would be the assumption within a regional economy. Third, the induced jobs – those “created” as a result of individual spending of wages and salaries on food, clothing, medical services and other goods and services appear to be overstated in the model. It seems unlikely that 378,000 induced jobs would truly result from the initial creation of 100,000 jobs. Because we were not comfortable with this figure, we did not include it in our main analysis and focused instead only on the direct and indirect, or inter-industry, impacts.

Project Profiles for Tax Calculations

1. Commercial Mixed Use Real Estate

Project Description

150,000 square foot (SF) mixed use real estate development with office, retail and restaurant space

Business Structure

The business receiving the investments is a private real estate entity organized as a partnership. The tenants in the real estate development are: 50% retail, 15% food service, and 40% office (10% not-for-profit organizations and 30% for-profit professional services businesses). All the retail and food service tenants are corporations. Half the professional services firms are partnerships and half are corporations.

NAICS Code

- Real estate partnership: 531120, lessors of nonresidential buildings
- Retail tenants: 448, clothing and clothing accessories stores and 446, health and personal care stores
- Restaurant tenants: 7221, full-service restaurants
- Not-for profit tenants: 624, social assistance
- For-profit business tenants: 54, professional services

Employment

- Real estate partnership: 3 total, 3 new
- Not-for profit tenants: 100 total, 2 new
- For-profit business tenants: 100 total, 0 new (10 firms, 0 new)
 - 52,500 SF office space, 250 SF per employee
- Retail tenants: 140 total, 70 new (14 stores, 6 new)
- Restaurant tenants: 60 total, 30 new (4 restaurants, 2 new)
 - 97,500 SF retail & restaurant space, 450 SF per employee

Employment range from case studies and PJC data: 10-2,000 employees

Payroll/employee

- Real estate partnership: \$51,000
- Retail tenants: \$18,000 (clothing stores) and \$32,000 (health and personal care)
- Restaurant tenants: \$15,000
- Not-for profit tenants: \$21,000
- For-profit business tenants: \$70,000

NMTC Allocation

\$6 million

Project Cost

\$15 million

2. Health Care

Business Description

Real estate project to construct a new facility or rehabilitate an existing facility for a community hospital. Within the health care category, hospitals account for the most jobs and the largest number of projects funded by PJC members.

Business Structure

The hospital company is structured as a private, not-for-profit organization.

NAICS Code

622110, general medical and surgical hospitals

Employment

300 total jobs, including 50 new jobs

Employment range from case studies and PJC data: 36-1,841 employees

Payroll/employee

\$52,000

NMTC Allocation

\$10 million

Project Cost

\$25 million

3. Community Facility**Business Description**

Real estate redevelopment project to create a headquarters and service center for an existing social services organization that provides assistance to individuals and families.

Business Structure

The entity is structured as a private, not-for-profit organization.

NAICS Code

6241, Individual and family services

Employment

200 total jobs, including 50 new jobs

Employment range from case studies and PJC data: 23-450 employees

Payroll/employee

\$22,000

NMTC Allocation

\$7 million

Project Cost

\$23 million

4. Manufacturing Business**Business Description**

This project financed equipment purchases and facility modernization for a food processing operation. Food processing was selected for the representative manufacturing project because this category accounted for the most projects funded by PJC members at the 3-digit NAICS level across manufacturing codes.

Business Structure

The entity is structured as a private corporation.

NAICS Code

311, food manufacturing

Employment

150 total jobs, including 40 new jobs

Employment range from case studies and PJC data: 21-526 employees

Payroll/employee

\$38,000

Annual Revenue

\$65 million; new revenue for the “low scenario” is \$17.3 million (calculated based on the ratio of new jobs to total jobs (40/150))

Range from case studies: \$0.6 - \$509 million; average revenue for companies with food manufacturing NAICS codes employing 150 people from OneSource

NMTC Allocation

\$5 million

Project Cost

\$14 million

5. Trade and Transportation

Business Description

This project financed the construction of a new distribution facility for a wholesale operation.

Business Structure

The entity is structured as a private corporation.

NAICS Code

423, wholesale, durable goods

Employment

70 total jobs, all of which are new jobs

Employment range from case studies and PJC data: 3-618 employees

Payroll/employee

\$64,000

Annual Revenue

\$50 million

Range from case studies: \$13.9-\$179 million; average revenue for companies with wholesale, durable goods NAICS codes employing 60-80 people from OneSource

NMTC Allocation

\$4 million

Project Cost

\$10 million

Tax Calculations

1. Commercial Mixed Use Real Estate

1.a. Low Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$282,000	\$282,000	\$282,000	\$282,000	\$282,000	\$282,000	\$282,000	\$282,000	\$282,000	\$282,000	\$2,820,000	\$2,177,529
Taxes on Partnership Income	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$100,000	\$77,217
Personal Income Tax	\$111,214	\$111,214	\$111,214	\$111,214	\$111,214	\$111,214	\$111,214	\$111,214	\$111,214	\$111,214	\$1,112,140	\$858,765
Payroll Tax	\$283,808	\$283,808	\$283,808	\$283,808	\$283,808	\$283,808	\$283,808	\$283,808	\$283,808	\$283,808	\$2,838,075	\$2,191,486
New Markets Tax Credit	\$300,000	\$300,000	\$300,000	\$360,000	\$360,000	\$360,000	\$360,000				\$2,340,000	\$1,919,700

The ratio of taxes generated to the value of the tax credit is 2.94 in nominal terms; 2.76 using a discount rate of 5%, and 2.86 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 2.07.

1.b. Middle Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$6,915,000	\$5,339,580
Taxes on Partnership Income	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$468,500	\$361,763
Personal Income Tax	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$8,472,140	\$6,541,962
Payroll Tax	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$16,178,805	\$12,492,844
New Markets Tax Credit	\$300,000	\$300,000	\$300,000	\$360,000	\$360,000	\$360,000	\$360,000				\$2,340,000	\$1,919,700

The ratio of taxes generated to the value of the tax credit is 13.69 in nominal terms; 12.89 using a discount rate of 5%, and 13.34 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 9.66.

1.c. High Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$691,500	\$6,915,000	\$5,339,580
Taxes on Partnership Income	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$46,850	\$468,500	\$361,763
Personal Income Tax (Project)	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$847,214	\$8,472,140	\$6,541,962
Payroll Tax (Project)	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$1,617,881	\$16,178,805	\$12,492,844
Personal Income Tax (Indirect)	\$359,133	\$359,133	\$359,133	\$359,133	\$359,133	\$359,133	\$359,133	\$359,133	\$359,133	\$359,133	\$3,591,334	\$2,773,133
Payroll Tax (Indirect)	\$545,606	\$545,606	\$545,606	\$545,606	\$545,606	\$545,606	\$545,606	\$545,606	\$545,606	\$545,606	\$5,456,065	\$4,213,029
Federal Taxes – Construction Spending	\$2,550,000										\$2,550,000	\$2,428,571
New Markets Tax Credit	\$300,000	\$300,000	\$300,000	\$360,000	\$360,000	\$360,000	\$360,000				\$2,340,000	\$1,919,700

The ratio of taxes generated to the value of the tax credit is 18.65 in nominal terms; 17.79 using a discount rate of 5%, and 20.53 using a discount rate of 2% (calculation not shown). Indirect effects only. The ratio of taxes generated to the value of the tax credit over a 7 year period is 13.65.

Estimated taxes generated from construction spending account for 7% of total taxes generated and contribute a 1.27 return to the overall return ratio of 17.79.

2. Health Care

2.a. Low Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax	\$202,800	\$202,800	\$202,800	\$202,800	\$202,800	\$202,800	\$202,800	\$202,800	\$202,800	\$202,800	\$2,028,000	\$1,565,968
Payroll Tax	\$308,100	\$308,100	\$308,100	\$308,100	\$308,100	\$308,100	\$308,100	\$308,100	\$308,100	\$308,100	\$3,081,000	\$2,379,067
New Markets Tax Credit	\$500,000	\$500,000	\$500,000	\$600,000	\$600,000	\$600,000	\$600,000				\$3,900,000	\$3,199,499

The ratio of taxes generated to the value of the tax credit is 1.31 in nominal terms; 1.23 using a discount rate of 5%, and 1.28 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 0.92.

2.b. Middle Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$12,168,000	\$9,395,807
Payroll Tax	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$18,486,000	\$14,274,399
New Markets Tax Credit	\$500,000	\$500,000	\$500,000	\$600,000	\$600,000	\$600,000	\$600,000				\$3,900,000	\$3,199,499

The ratio of taxes generated to the value of the tax credit is 7.86 in nominal terms; 7.4 using a discount rate of 5%, and 7.66 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 5.54.

2.c. High Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax (Project)	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$1,216,800	\$12,168,000	\$9,395,807
Payroll Tax (Project)	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$1,848,600	\$18,486,000	\$14,274,399
Personal Income Tax (Indirect)	\$577,283	\$577,283	\$577,283	\$577,283	\$577,283	\$577,283	\$577,283	\$577,283	\$577,283	\$577,283	\$5,772,830	\$4,457,626
Payroll Tax (Indirect)	\$1,006,001	\$1,006,001	\$1,006,001	\$1,006,001	\$1,006,001	\$1,006,001	\$1,006,001	\$1,006,001	\$1,006,001	\$1,006,001	\$10,060,005	\$7,768,069
Federal Taxes – Construction Spending	\$4,250,000										\$4,250,000	\$4,047,619
New Markets Tax Credit	\$500,000	\$500,000	\$500,000	\$600,000	\$600,000	\$600,000	\$600,000				\$3,900,000	\$3,199,499

The ratio of taxes generated to the value of the tax credit is 13.01 in nominal terms; 12.48 using a discount rate of 5%, and 12.78 using a discount rate of 2% (calculation not shown). Indirect effects only. The ratio of taxes generated to the value of the tax credit over a 7 year period is 9.67.

Estimated taxes generated from construction spending account for 10% of total taxes generated and contribute a 1.27 return to the overall return ratio of 12.48.

3. Community Facility

3.a. Low Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax	\$49,500	\$49,500	\$49,500	\$49,500	\$49,500	\$49,500	\$49,500	\$49,500	\$49,500	\$49,500	\$495,000	\$382,226
Payroll Tax	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$1,303,500	\$1,006,528
New Markets Tax Credit	\$350,000	\$350,000	\$350,000	\$420,000	\$420,000	\$420,000	\$420,000				\$2,730,000	\$2,239,649

The ratio of taxes generated to the value of the tax credit is 0.66 in nominal terms; 0.62 using a discount rate of 5%, and 0.64 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 0.46.

3.b. Middle Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$1,980,000	\$1,528,904
Payroll Tax	\$521,400	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$5,214,000	\$4,026,113
New Markets Tax Credit	\$350,000	\$350,000	\$350,000	\$420,000	\$420,000	\$420,000	\$420,000				\$2,730,000	\$2,239,649

The ratio of taxes generated to the value of the tax credit is 2.64 in nominal terms; 2.48 using a discount rate of 5%, and 2.57 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 1.86.

3.c. High Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax (Project)	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$1,980,000	\$1,528,904
Payroll Tax (Project)	\$521,400	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$130,350	\$5,214,000	\$4,026,113
Personal Income Tax (Indirect)	\$161,186	\$161,186	\$161,186	\$161,186	\$161,186	\$161,186	\$161,186	\$161,186	\$161,186	\$161,186	\$1,691,855	\$1,306,406
Payroll Tax (Indirect)	\$257,032	\$257,032	\$257,032	\$257,032	\$257,032	\$257,032	\$257,032	\$257,032	\$257,032	\$257,032	\$2,570,318	\$1,984,732
Federal Taxes – Construction Spending	\$3,910,000										\$3,910,000	\$3,723,810
New Markets Tax Credit	\$350,000	\$350,000	\$350,000	\$420,000	\$420,000	\$420,000	\$420,000				\$2,730,000	\$2,239,649

The ratio of taxes generated to the value of the tax credit is 5.63 in nominal terms; 5.61 using a discount rate of 5%, and 5.57 using a discount rate of 2% (calculation not shown). Indirect effects only. The ratio of taxes generated to the value of the tax credit over a 7 year period is 4.62.

Estimated taxes generated from construction spending account for 30% of total taxes generated and contribute a 1.66 return to the overall return ratio of 5.61.

4. Manufacturing

4.a. Low Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$173,333	\$173,333	\$173,333	\$173,333	\$173,333	\$173,333	\$173,333	\$173,333	\$173,333	\$173,333	\$1,733,333	\$1,338,434
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax	\$92,720	\$92,720	\$92,720	\$92,720	\$92,720	\$92,720	\$92,720	\$92,720	\$92,720	\$92,720	\$927,200	\$715,959
Payroll Tax	\$180,120	\$180,120	\$180,120	\$180,120	\$180,120	\$180,120	\$180,120	\$180,120	\$180,120	\$180,120	\$1,801,200	\$1,390,839
New Markets Tax Credit	\$250,000	\$250,000	\$250,000	\$300,000	\$300,000	\$300,000	\$300,000				\$1,950,000	\$1,599,750

The ratio of taxes generated to the value of the tax credit is 2.29 in nominal terms; 2.15 using a discount rate of 5%, and 2.23 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 1.61.

4.b. Middle Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$6,500,000	\$5,019,128
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$3,477,000	\$2,684,847
Payroll Tax	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$6,754,500	\$5,215,646
New Markets Tax Credit	\$250,000	\$250,000	\$250,000	\$300,000	\$300,000	\$300,000	\$300,000				\$1,950,000	\$1,599,750

The ratio of taxes generated to the value of the tax credit is 8.58 in nominal terms; 8.08 using a discount rate of 5%, and 8.36 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 6.05.

4.c. High Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$6,500,000	\$5,019,128
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax (Project)	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$347,700	\$3,477,000	\$2,684,847
Payroll Tax (Project)	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$675,450	\$6,754,500	\$5,215,646
Personal Income Tax (Indirect)	\$1,998,933	\$1,998,933	\$1,998,933	\$1,998,933	\$1,998,933	\$1,998,933	\$1,998,933	\$1,998,933	\$1,998,933	\$1,998,933	\$19,989,325	\$15,435,227
Payroll Tax (Indirect)	\$3,036,840	\$3,036,840	\$3,036,840	\$3,036,840	\$3,036,840	\$3,036,840	\$3,036,840	\$3,036,840	\$3,036,840	\$3,036,840	\$30,368,398	\$23,449,672
Federal Taxes – Construction Spending	\$1,190,000										\$1,190,000	\$1,133,333
New Markets Tax Credit	\$250,000	\$250,000	\$250,000	\$300,000	\$300,000	\$300,000	\$300,000				\$1,950,000	\$1,599,750

The ratio of taxes generated to the value of the tax credit is 35.01 in nominal terms; 33.09 using a discount rate of 5%, and 34.16 using a discount rate of 2% (calculation not shown). Indirect effects only. The ratio of taxes generated to the value of the tax credit over a 7 year period is 24.97.

Estimated taxes generated from construction spending account for 2% of total taxes generated and contribute a 0.71 return to the overall return ratio of 33.09.

5. Trade and Transportation

5.a. Low Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$2,000,000	\$1,544,347
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$3,494,400	\$2,698,283
Payroll Tax	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$5,308,800	\$4,099,315
New Markets Tax Credit	\$200,000	\$200,000	\$200,000	\$240,000	\$240,000	\$240,000	\$240,000				\$1,560,000	\$1,279,800

The ratio of taxes generated to the value of the tax credit is 6.93 in nominal terms; 6.52 using a discount rate of 5%, and 6.75 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 4.88.

5.b. Middle Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$2,000,000	\$1,544,347
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$3,494,400	\$2,698,283
Payroll Tax	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$5,308,800	\$4,099,315
New Markets Tax Credit	\$200,000	\$200,000	\$200,000	\$240,000	\$240,000	\$240,000	\$240,000				\$1,560,000	\$1,279,800

The ratio of taxes generated to the value of the tax credit is 6.93 in nominal terms; 6.52 using a discount rate of 5%, and 6.75 using a discount rate of 2% (calculation not shown). The ratio of taxes generated to the value of the tax credit over a 7 year period is 4.88.

5.c. High Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Net Present Value (5%)
Corporate Income Tax	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$2,000,000	\$1,544,347
Taxes on Partnership Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Personal Income Tax (Project)	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$349,440	\$3,494,400	\$2,698,283
Payroll Tax (Project)	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$530,880	\$5,308,800	\$4,099,315
Personal Income Tax (Indirect)	\$139,115	\$139,115	\$139,115	\$139,115	\$139,115	\$139,115	\$139,115	\$139,115	\$139,115	\$139,115	\$1,391,155	\$1,074,213
Payroll Tax (Indirect)	\$211,349	\$211,349	\$211,349	\$211,349	\$211,349	\$211,349	\$211,349	\$211,349	\$211,349	\$211,349	\$2,113,485	\$1,631,977
Federal Taxes – Construction Spending	\$1,700,000										\$1,700,000	\$1,619,048
New Markets Tax Credit	\$200,000	\$200,000	\$200,000	\$240,000	\$240,000	\$240,000	\$240,000				\$1,560,000	\$1,279,800

The ratio of taxes generated to the value of the tax credit is 10.26 in nominal terms; 9.90 using a discount rate of 5%, and 10.10 using a discount rate of 2% (calculation not shown). Indirect effects only. The ratio of taxes generated to the value of the tax credit over a 7 year period is 7.73.

Estimated taxes generated from construction spending account for 13% of total taxes generated and contribute a 1.27 return to the overall return ratio of 9.90.

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