



# What Are the NMTC Program's Impacts on Local Economic Conditions?

## Evaluating the New Markets Tax Credit Program

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The New Markets Tax Credit (NMTC) program provides federal tax credits to attract private investment into distressed communities. To understand how these investments affect communities, we estimated the effects of different types of NMTC projects on their neighborhoods to determine whether those projects had the expected impacts. We find large increases in local economic activity following NMTC projects, including statistically significant increases in the number of firms, jobs, residents with jobs, and median income, as well as reductions in poverty. We also find a small increase in the number of adults with college degrees, an increase large enough to account for the modest estimated increases in residents with jobs and wages and for much of the estimated decline in poverty. Therefore, it is possible that the gains following an NMTC project may accrue to new residents rather than preexisting residents, though further research is needed.

NMTCs support a wide range of projects, including large commercial developments, office buildings, hotels, arts centers, charter schools, day care centers, medical clinics, small-business expansions, mixed-use developments, and homes for sale. In this brief, we estimate the effects of different types of NMTC projects on their neighborhoods to determine whether those projects had the expected impacts.

This brief is the fifth in a six-part series about the NMTC program. For a full description of how the program works, see Abravanel et al. (2013), but in short, it seeks to attract private investment capital to low-income communities by providing taxpayers with credits against their federal income taxes for making investments (qualified equity investments) into organizations ("community development entities, or CDEs). These organizations must first be certified by the CDFI Fund and then competitively win access to provide the tax credits. Taxpayers accessing the credits ("investors") can reduce their federal income taxes by up to 39 percent of the amount of the qualified equity

investment. After CDEs sell the credits to investors, they use the capital they receive to make investments (“qualified low-income community investments,” or QLICs) in businesses and real-estate projects located in low-income communities. These projects are then carried out by nonprofits or businesses (qualified active low-income community businesses).

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## BOX 1

### The New Markets Tax Credit Evaluation

With funding from Arnold Ventures, the Urban Institute is conducting an impact evaluation of the NMTC program nearly two decades after its original implementation. The evaluation has produced six briefs that focus on different aspects of the program. This brief describes the program’s impacts on local economic conditions. The briefs are as follows:

1. How Has the NMTC Program Been Funded over Time?
2. Which Types of Projects Receive NMTC Funding?
3. Where Do NMTC Projects Go?
4. Which Community Development Entities Receive NMTC Funding?
5. What Are the NMTC Program’s Impacts on Local Economic Conditions?
6. How Does the NMTC Program Affect Local Housing Markets?

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Previous research shows that NMTC has had modest impacts on neighborhoods, investment, and people (Abravanel et al. 2013; Freedman 2012, 2015; and GAO 2007). However, this research does not incorporate the different expected impacts of different project types; rather, it looks at the impact of all types of projects on the same outcomes. This is less than ideal because, for instance, a housing development would not be expected to lead to job creation in the same way a small-business investment would. Therefore, the existing research has not provided estimates of how well NMTC projects meet their intended community and economic development goals.

To evaluate the effects of NMTC projects on their intended outcomes, we first group NMTC-funded projects into 14 project types (see brief 2 in this series; Theodos et al. 2021b). We then link each project type to that project type’s expected outcomes to measure the effects of NMTC investments on communities and individuals (appendix table A.1). We examine both the economic development impacts of NMTC projects and their effect on the composition of residents within neighborhoods.<sup>1</sup> However, there are many additional potential outcomes that we are not able to observe or measure, such as improved access to social services (for NMTC projects that support services for vulnerable populations), or increased access to health care (for projects that support health care facilities). Our estimation techniques account for differences between neighborhoods that are constant over time, but they do not account for outside factors that might make both NMTC projects and other economic development more likely (discussed further in the appendix). We therefore use event studies to examine whether estimated effects are timed with NMTC projects or precede them.

## More Jobs and Higher Incomes

We find large increases in local economic activity following NMTC projects (table 2). For each project that we expect would have an impact on the number of businesses in a neighborhood, an average of 18 new firms enter. The 95 percent confidence interval around our firms-created-per-project estimate ranges from 11.6 to 23.8 firms per tract. In dollar terms, for each million dollars of NMTC-eligible investment, about 1.7 firms enter. This averages to a QLICI of around \$625,000 per firm. This is not the same as the cost to the federal government or the total public cost. (For more information on why we were unable to estimate public costs, see the appendix).

Tracts with projects that we expected to create jobs also saw faster job growth than eligible tracts without such projects. On average, tracts with these NMTC projects saw about 101 more jobs after the NMTC project was complete, with a 95 percent confidence interval range of 22 jobs per tract to 181 jobs per tract. For each million dollars of NMTC-eligible investment (i.e., QLICI) into a project that we expected to create jobs, tracts saw an average of an additional 6.9 jobs, or about \$145,000 in QLICI per job. Because both the number of jobs per tract and the year-over-year change in jobs within a tract vary greatly, our estimates of these values are not precise.

The number of residents with jobs in neighborhoods with these project types also rose. For every NMTC investment that we would expect to increase the number of jobs, we saw an increase of about 27 residents with jobs, or 2.5 additional residents with jobs for every \$1 million of NMTC-eligible project investment. This comes out to about \$400,000 in QLICI per resident with a job. We do not have data on how many residents are working in the new jobs that followed NMTC projects. By comparing the estimates, however, we can see that per NMTC project, the increase in jobs is 3.8 times as large as the increase in residents with jobs.

In tracts with projects that could be expected to bring jobs with higher-than-average salaries, the median income of residents increased by \$562 a year, on average. This is about a 1.6 percent increase in income for the median household. And excluding NMTC projects where we do not expect a positive effect on higher-salary jobs (affordable housing projects), we saw poverty rates decline by roughly 0.8 percentage points each year after an NMTC investment. This comes out to an increase of about \$68 in median income per year per \$1 million QLICI invested and a reduction (from an average of 30) of 0.5 people in poverty of 100 per year.

In addition to the effects above, which show averages across the time period studied, we examine trends year by year. Since projects start at different points, we standardize them at year 0 when the project begins and count before and after that point. To do this analysis, we need year-by-year data which the American Community Survey does not have at the census tract level, so we show annual trends only for the first three outcomes for which we have reliable yearly data (firms, jobs in neighborhood, and residents with jobs).

TABLE 1

**Estimated Impact of NMTC on Firms, Jobs, Income, and Poverty**

	Firms	Jobs in neighborhood	Residents with jobs	Median income	Poverty rate (out of 100)
<b>Estimated effect per NMTC project expected to affect this outcome</b>	<b>17.7***</b>	<b>101.4**</b>	<b>26.6***</b>	<b>561.5***</b>	<b>-0.65***</b>
	(3.1)	(40.7)	(5.1)	(146.8)	(0.099)
<b>Estimated effect of \$1 million qualified investment in projects to affect this outcome</b>	<b>1.7***</b>	<b>6.9**</b>	<b>2.5***</b>	<b>55.3***</b>	<b>-0.044***</b>
	(0.3)	(3.2)	(0.5)	(14.5)	(0.0092)
Average in year before NMTC project	461	5,810	1,333	34,522	30.1
<b>Years</b>	<b>2000–17</b>	<b>2004–16</b>	<b>2004–16</b>	<b>2000, 2007–16</b>	<b>2000, 2007–16</b>
Number of projects	3,164	4,575	4,476	3,090	4,154
Number of census tracts with projects	2,823	3,955	3,875	2,716	3,489
Number of eligible census tracts	32,602	32,904	32,212	32,417	32,417

**Sources:** Urban Institute Analysis of NMTC program, InfoUSA, LEHD, and ACS data.

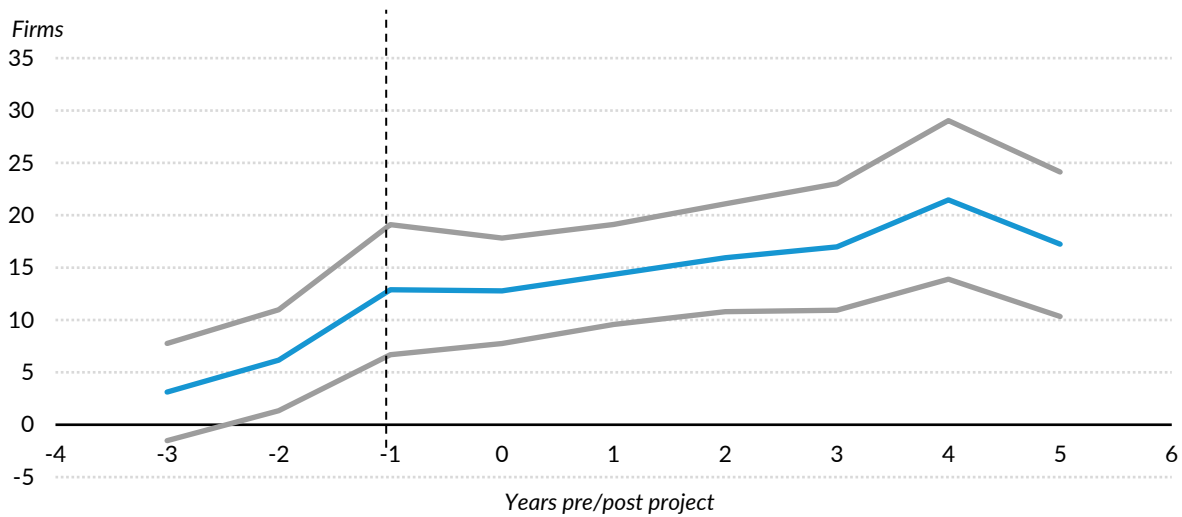
**Notes:** Impact estimates show the effect of projects that we hypothesized would affect the listed outcome. A mapping of project types to expected outcomes appears in table A.1. Firms, jobs in neighborhood, residents with jobs, and poverty rate are primary outcomes (as classified in our Open Science Foundation analysis plan); median income is a secondary outcome. Firms are establishments with more than one employee. Each coefficient is estimated in a separate regression. Standard errors (listed in parentheses) are heteroskedastic robust and clustered at the tract level. Regressions include eligible census tracts. Regressions include year and tract fixed effects, controls for projects with no expected impact, and a five-year development window (two years before the project start date through two years after).

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Interestingly, we see the number of firms in a neighborhood beginning to rise before an NMTC project entering (figure 1). This suggests that some of the effects we see above were already underway before the project was complete and therefore are not attributable only to the project.

Jobs in the neighborhood, on the other hand, do not appear to be growing in advance of NMTC projects. They appear to jump in the year the project is initiated, though not at a statistically significant rate (using 95 percent confidence) until five years after the project has begun (figure 2). The number of residents with jobs does appear to grow slightly before NMTC project completion (by a few people a year), but the increase is not statistically significant until three years after a project is initiated (figure 3).

**FIGURE 1**  
**Business Growth Before and After NMTC Investment**

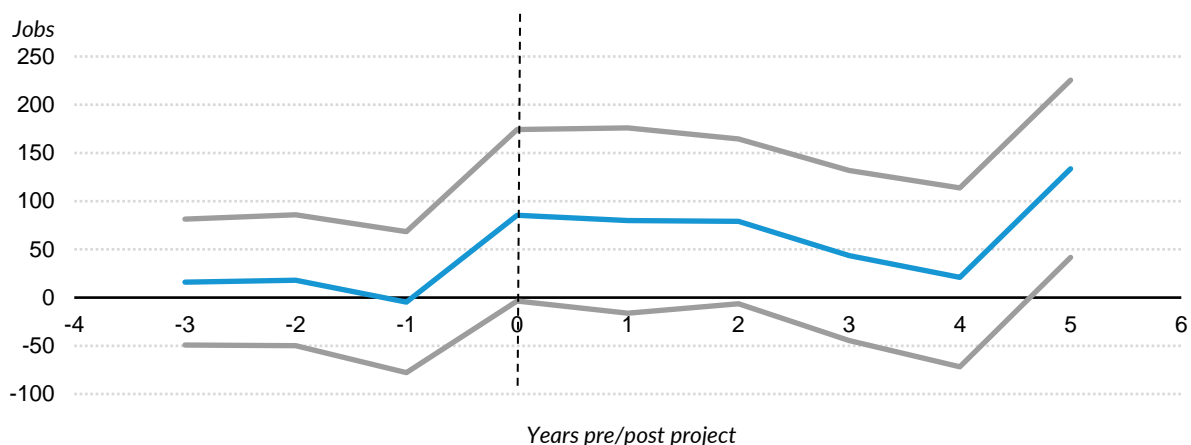


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**Sources:** Urban Institute Analysis of NMTC program and InfoUSA data.

**Notes:** Figure displays estimated increase in number of firms (establishments with more than one employee) per census tract with projects that we hypothesized would increase the number of firms. A mapping of project types to expected outcomes appears in table A.1. Coefficients are estimated in a single regression. The estimation model includes year and tract fixed effects and controls for projects with no expected impact. Average over remaining years after project is plotted as year 5. Solid gray lines represent 95 percent confidence intervals based on standard errors that are heteroskedastic robust and clustered at the tract level. Regression includes eligible census tracts.

**FIGURE 2**  
**Job Growth Before and After NMTC investment**



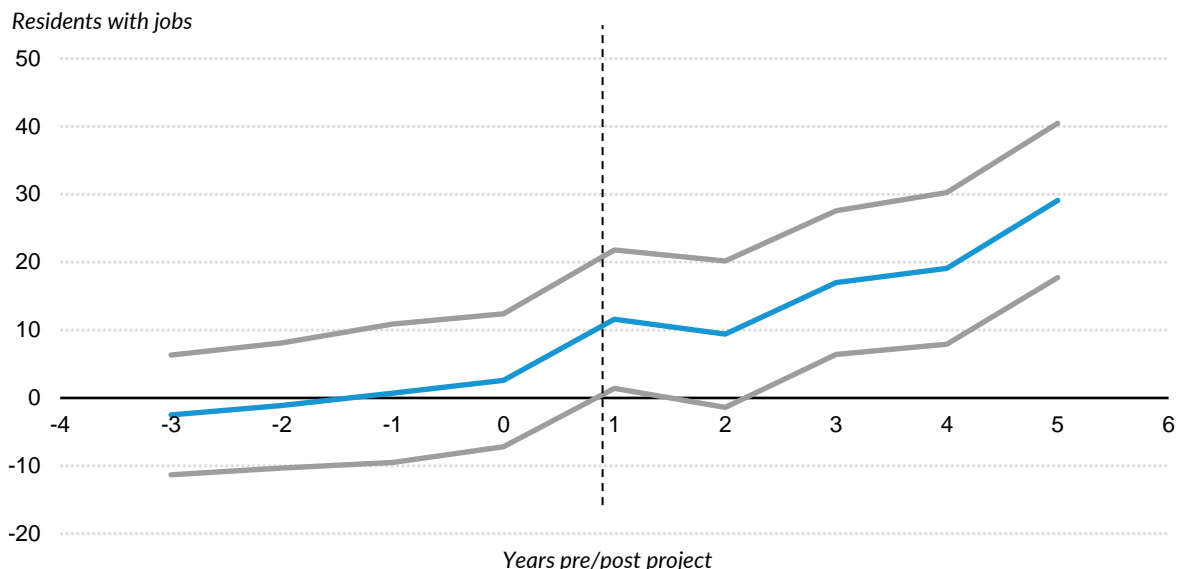
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**Sources:** Urban Institute Analysis of NMTC program and LEHD data.

**Notes:** Figure displays estimated increase in number of jobs per census tract with projects that we hypothesized would increase the number of jobs. A mapping of project types to expected outcomes appears in table A.1. Coefficients are estimated in a single regression. The estimation model includes year and tract fixed effects and controls for projects with no expected impact. Average over remaining years after project is plotted as year 5. Solid gray lines represent 95 percent confidence intervals based on standard errors that are heteroskedastic robust and clustered at the tract level. Regressions include eligible census tracts.

FIGURE 3

Number of Residents with Jobs Before and After NMTC investment



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Sources: Urban Institute Analysis of NMTC program and LEHD data.

Notes: Figure displays estimated increase in number of residents with jobs per census tract with projects that we hypothesized would increase the number of jobs. A mapping of project types to expected outcomes appears in table A.1. Coefficients are estimated in a single regression. The estimation model includes year and tract fixed effects and controls for projects with no expected impact. Average over remaining years after project is plotted as year 5. Solid gray lines represent 95 percent confidence intervals based on standard errors that are heteroskedastic robust and clustered at the tract level. Regressions include eligible census tracts.

## More People, More People with a College Degree, and Slightly Higher Turnover

An important question for the NMTC program (as well as for other place-based revitalization efforts) is whether and how well the investments lead to benefits for existing residents in low-income neighborhoods rather than attracting new, higher-income residents to neighborhoods. We are not able to fully answer the question of who benefits under from NMTC projects, but we can provide some insights into how neighborhoods change after a project is complete.

Following NMTC projects that we expected would increase population (such as residential projects and community facilities), neighborhoods have more people—particularly more adults with college degrees. The average census tract with an NMTC project had 3,568 people the year before the project started (table 1). On average, these neighborhoods had 522 people age 25 or over with a bachelor’s degree. We find that NMTC projects that we expected to increase population led to population gains of 37 residents, or between 13 and 60 with 95 percent confidence (table 3). We

similarly find a growth in the number of people with a bachelor's degree (41 people) in tracts with projects expected to increase that population.<sup>2</sup>

We also examine neighborhood turnover, or the share of residents who moved in the past year. We find that the turnover rate saw a statistically significant increase, but a very modest one. Turnover went up by 0.40 percentage points per year on average, where the typical turnover rate is 23.7 percent in these neighborhoods.

TABLE 2

**Estimated Impact of NMTC on Population, Education, and Turnover**

	Population	Population with a bachelor's degree	Turnover rate
Estimated effect per NMTC project expected to affect this outcome	36.9*** (11.9)	40.6*** (8.03)	0.40*** (0.13)
Estimated Effect of \$1 million qualified investment in projects to affect this outcome	3.26** (1.37)	3.76*** (1.03)	0.016 (0.011)
Average in year before NMTC project	3568	522	23.7
<b>Years</b>	<b>2000, 2007-16</b>	<b>2000, 2007-16</b>	<b>2000, 2007-16</b>
Number of projects	1947	1829	2480
Number of census tracts with projects	1639	1559	2093
Number of eligible census tracts	32417	32417	32417

Sources: Urban Institute Analysis of NMTC program and ACS data.

Notes: Impact estimates show the effect of projects that we hypothesized would affect the listed outcome. A mapping of project types to expected outcomes appears in table A.1. Population, Population with a Bachelor's Degree, and Turnover Rate are secondary outcomes. Population with a bachelor's degree includes only people age 25 or over. Each coefficient is estimated in a separate regression. Standard errors (listed in parentheses) are heteroskedastic robust and clustered at the tract level. Regressions include eligible census tracts. Regressions include year and tract fixed effects, controls for projects with no expected impact, and a five-year development window (two years before the project start date through two years after).

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

The inflow of new residents means that we do not know whether NMTC projects benefited preexisting residents. The increases in population that follow NMTC projects are small. But the increase in population and the increase in population with a bachelor's degree are as large as the increase in the number of residents with jobs. And an increase in college-educated residents with jobs would explain much of the decline in poverty, at least among projects expected to have effects in all three areas.

We do not know whether new residents are displacing preexisting residents. The increase in population and increase in population with a bachelor's degree are essentially identical. This implies that either new residents are mostly college-educated and childless or that the share of adults without college degrees has declined. Yet the number of residents who moved in the past year (within or into the neighborhood) barely changed. If displacement is occurring, the modest gain in number of residents with jobs, the modest decline in poverty rate, and the slight increase in turnover all imply that any displacement is affecting less than 1 percent of the population.

## Effects by Project Type

Although average effects across different types of NMTC projects are useful, impacts for each individual project type are also informative for the design and implementation of the NMTC program. Therefore, we also estimate the impact of each individual project type on neighborhoods.

We find that differences emerge by project type, and most occur in the expected direction. NMTC projects that fund health care services, offices and professional services, and services for vulnerable populations (which include addiction treatment and workforce training centers, homeless shelters, and food pantries) are associated with the greatest number of business formations or entries (table 3). Census tracts that receive any of these types of projects see about 25 additional businesses on average. Although retail projects do not appear to spur new business formation, they are accompanied by about 168 jobs per project on average.<sup>3</sup>

Market-rate residential projects funded by NMTCs, such as apartments and condos, appear to produce fewer jobs: the typical market-rate residential project is associated with 286 fewer jobs in a neighborhood. Yet market-rate residential projects bring increases in income, declines in poverty, and an increase in the number of people with a bachelor's degree (tables 3 and 4). And we see only a modest increase in population following a market-rate residential project and do not have the statistical precision to rule out that the population has not changed or has slightly declined. Combined with an increase in turnover rate, these findings suggest that at least some market-rate residential NMTC projects are associated with gentrification and displacement.

NMTC-funded community facilities, such as libraries, museums and event spaces, and school and child care projects, are associated with increases in residents with jobs, population, and the population with a bachelor's degree as well as with a decline in poverty rate. These types of projects provide new amenities that may attract higher-income residents to the neighborhood. Of the most common project types, only health care services and manufacturing and food processing are associated with declines in population and no increase in residents with a bachelor's degree. We expected that people might not want to live near manufacturing facilities. The same may be true of hospitals and other health care services providers.

We expected that services for vulnerable populations would also be seen as undesirable community additions and would be associated with a population decline and a decline in population with a bachelor's degree. Rather, we find an increase in the population with a bachelor's degree and an overall pattern similar to those for NMTC-funded offices and professional services buildings. This could be because nonprofit facilities are upgraded to become amenities and because NMTC projects select into neighborhoods that were already growing.



TABLE 3

## Estimated Effects by Project Type (Firms, Jobs, Income, and Poverty)

	Firms	Jobs	Residents with jobs	Median income	Poverty rate (out of 100)
Retail	5.2 (4.9)	168.3** (79.8)	21.4* (12.9)	1139.2*** (364.2)	-0.53* (0.27)
Manufacturing and food processing	5.5 (4.2)	23.7 (105.6)	-27.6* (15.2)	-512.6 (359.7)	0.091 (0.34)
Office and professional services	28.6*** (8.1)	40.2 (163.6)	29.2* (16.1)	489.0 (448.7)	-0.47 (0.40)
Health care services	25.6*** (8.3)	192.5 (142.4)	-16.9 (19.9)	-789.8* (428.4)	-0.29 (0.36)
Schools and child care	5.0 (4.9)	210.6 (176.5)	57.3*** (16.9)	1531.6*** (581.5)	-1.81*** (0.40)
Community facilities	7.2 (8.4)	107.3 (192.2)	80.5*** (23.5)	2222.1*** (817.6)	-1.15** (0.53)
Services for vulnerable populations	22.3*** (7.8)	25.2 (186.3)	43.1 (26.8)	-279.3 (533.7)	-0.72 (0.47)
Market-rate residential	-18.5 (13.5)	-286.3* (158.3)	17.2 (19.3)	1160.8*** (450.5)	-0.77** (0.39)
Hotels	56.2** (22.9)	-11.4 (297.2)	55.1* (30.9)	2074.6** (929.2)	-1.15* (0.69)
Transportation and warehousing	11.8* (6.9)	144.0 (161.3)	43.0 (47.4)	-675.8 (570.8)	-0.25 (0.62)
Affordable residential	11.7 (16.3)	-262.5 (225.1)	17.8 (47.2)	17.2 (963.3)	-0.27 (0.87)
<b>Years</b>	<b>2000–2017</b>	<b>2004–16</b>	<b>2004–16</b>	<b>2000, 2007–16</b>	<b>2000, 2007–16</b>
Number of projects	3,164	4,575	4,476	3,090	4,154
Number of census tracts with projects	2,823	3,955	3,875	2,716	3,489
Number of eligible census tracts	32,602	32,904	32,212	32,417	32,417

Sources: Urban Institute analysis of ACS, InfoGroup, LEHD, and NMTC program data.

Notes: Projects Types with at least 200 NMTC projects are shown in descending order of frequency. Primary outcomes (as classified in our Open Science Foundation analysis plan) are firms, jobs, and poverty rate; median income is a secondary outcome. Firms are establishments with more than one employee. Each column displays coefficients estimated in a single regression. Standard errors (listed in parentheses) are heteroskedastic robust and clustered at the tract level. Regressions include eligible census tracts. Regressions include year and tract fixed effects, controls for projects with no expected impact, and a five-year development window (two years before the project start date through two years after).

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

TABLE 4

**Estimated Effects by Project Type (Population, Education, and Turnover)**

	Population	Population with a bachelor's degree	Turnover Rate (out of 100)
Retail	23.6 (23.5)	30.6*** (12.0)	-0.083 (0.23)
Manufacturing and food processing	-52.2** (26.5)	-5.63 (12.1)	-0.30 (0.25)
Office and professional services	80.8*** (30.8)	55.1*** (14.6)	0.38 (0.28)
Health care services	-47.0 (30.0)	6.50 (14.6)	-0.17 (0.33)
Schools and child care	88.5** (38.2)	95.7*** (20.3)	0.046 (0.31)
Community facilities	104.5** (48.7)	72.8** (31.7)	0.58 (0.40)
Services for vulnerable populations	34.9 (49.3)	64.9*** (23.4)	0.43 (0.41)
Market rate residential	21.5 (26.5)	48.3** (21.5)	1.22*** (0.47)
Hotels	124.5* (64.7)	83.4** (40.2)	1.03 (0.75)
Transportation and warehousing	23.8 (80.4)	-17.1 (25.5)	-0.45 (0.57)
Affordable residential	76.2 (87.5)	20.3 (28.2)	-0.58 (0.63)
<b>Years</b>	<b>2000, 2007–16</b>	<b>2000, 2007–16</b>	<b>2000, 2007–16</b>
Number of projects	1,947	1,829	2,480
Number of census tracts with projects	1,639	1,559	2,093
Number of eligible census tracts	32,417	32,417	32,417

**Sources:** Urban Institute analysis of ACS and NMTC program data.

**Notes:** Project types with at least 200 NMTC projects are shown in descending order of frequency. Each column displays coefficients estimated in a single regression. Standard errors (shown in parentheses) are heteroskedastic robust and clustered at the tract level. Regressions include eligible census tracts. Regressions include year and tract fixed effects, controls for projects with no expected impact, and a five-year development window (two years before the project start date through two years after).

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

## Implications

These findings show that neighborhoods that receive NMTC funding see better economic outcomes than similar eligible neighborhoods. We find that NMTC projects are associated with increases in the

number of businesses, jobs, and wages and with decreases in poverty rates for the project types where we expect them. In particular, the gains of firms and of jobs in the tract are sizable. We estimate notable increases in the number of firms, and these increases are driven in part by office buildings and health care facilities. We also estimate that neighborhoods with nonresidential NMTC projects see an average of 101 additional jobs in the long run.

We also examine population, education, and turnover outcomes to shed some light on who is benefiting from these gains. Among nonresidential projects, the number of residents with jobs increases about a third as much as the overall job level, which is perhaps expected because most people do not work in the census tract where they live. At the same time, we find an increase in the number of adults with college degrees that, although small, is large enough to account for the modest estimated increases in residents with jobs and wages and for much of the estimated decline in poverty. We see a small increase in turnover; our statistical models indicate no or small amounts of displacement.

Although the economic impact on preexisting residents is not clear from this research, many NMTC projects provide other benefits to the community that we do not have outcome information about. For example, growing local firms and jobs may increase the local tax base. Residents may have additional food or shopping options. Or NMTC investments in health care facilities and facilities used to provide services to vulnerable populations may have positive impacts on physical and mental health outcomes.

Taken together, our findings highlight the potential and challenges of tax incentives for place-based development. On the one hand, the NMTC directs resources to underserved, high-poverty neighborhoods. Many NMTC projects provide new job opportunities, some provide needed public resources, and some do both. Increases in population and the presence of new amenities and businesses suggest that neighborhoods that receive NMTC projects are becoming more desirable places to live. Continued work is needed, however, to assess whether and how preexisting residents are benefiting from NMTC-funded development.

## Appendix: Methods

We use project types to establish a hypothesized relationship between each type and each outcome. We test project types against their hypothesized outcomes. Table A.1 shows those hypotheses.

TABLE A.1

**Hypotheses by Project Type and Outcome**

<b>Project type</b>	<b>Firms</b>	<b>Jobs</b>	<b>Median income</b>	<b>Poverty rate</b>	<b>Pop.</b>	<b>Pop. w/ bachelor's degree</b>	<b>Turnover rate</b>
Affordable residential	none	none	none	none	+	-	none
Community facilities	none	+	+	-	+	+	+
Energy, water, waste, and sewage	none	+	+	-	-	-	none
Forest, agriculture, mining, and quarry	none	+	+	-	none	none	none
Health care services	+	+	+	-	+	+	+
Hotels	+	+	+	-	none	none	+
Manufacturing and food processing	+	+	+	-	-	-	none
Market-rate residential	none	none	none	-	+	+	+
Office and professional services	+	+	+	-	none	none	none
Retail	+	+	+	-	+	+	+
Schools and child care	none	+	none	-	none	none	+
Services for vulnerable populations	none	+	none	-	-	-	none
Transport, warehouse, and wholesale	none	+	+	-	-	-	none

**Notes:** Firms, jobs, and poverty rate are primary outcomes (as classified in our Open Science Foundation analysis plan); Median income, population, population with a bachelor's degree, and turnover rate are secondary outcomes. "+" denotes an expected positive relationship and "-" denotes an expected negative relationship.

**Estimation Technique**

We use fixed-effects regressions to estimate a quasi-experimental treatment effect on census tracts with NMTC projects. Fixed-effects models estimate the changes within observations over time. Our regressions also control for nonlinear changes at the national level that could bias estimates based on the timing of NMTC investment.

We estimate treatment effects beginning three years after NMTC projects and we control for changes during the period of project implementation from two years before to two years after each project. The estimated treatment effect therefore compares three or more years after a project to three years before a project. This tells us the effect of NMTC projects on their expected outcomes without being biased by announcement effects or a transition and construction period. We also estimate an event study model that looks at the changes in outcomes each year before and after an NMTC project is implemented to determine whether projects are placed in neighborhoods that were already growing before the project was completed.

**Baseline Characteristics**

As described in brief 3 of this series (Theodos et al. 2021a), NMTC projects, on average, locate in communities with low median incomes and high poverty rates. They also tend to locate in commercial areas: census tracts with NMTC projects had more jobs (an average of 5,810) than residents (an average of 3,568) in the year before the project began. Table A.2 shows the baseline levels of the outcomes that we examine in this brief with the years of data included in this impact study.

TABLE A.2

**Characteristics of Neighborhoods in the Year before NMTC Projects**

	Average	Standard deviation	Observations (Tracts)
Firms	461	796	2,825
Jobs in neighborhood	5,810	11,559	4,232
Residents with jobs	1,333	739	4,232
Median income	34,522	13,846	2,371
Poverty rate (percent)	30.1	13.3	3,064
Population	3,568	1,792	1,427
Population with a bachelor's degree	522	502	1,349
Turnover rate (percent)	23.7	13.4	1,822

Sources: ACS, InfoUSA, LEHD, and NMTC program data.

Notes: Statistics are calculated from samples of census tracts into which an NMTC project with a hypothesized positive impact (or negative impact in the case of poverty rate) would begin in the follow year. Firms, jobs in neighborhood, residents with jobs, and poverty rate are primary outcomes (as classified in our Open Science Foundation analysis plan); median income, population, population with a bachelor's degree, and turnover rate are secondary outcomes. Firms are establishments with more than one employee.

## Public Costs of NMTC

NMTC projects are financed through complex financial structures (Abravanel et al. 2013; GAO 2014). Data we use in this brief that were aggregated by the CDFI Fund describe QLICI amounts and total project costs. GAO (2014) shows that under a simplified funding structure, a \$10 million QLICI would be associated with \$3.9 million in NMTCs that would cost the federal government \$3.46 million in present value over seven years. But most projects are not funded so simply, and most (62 percent) received other federal, state, or local financing (GAO 2014). We know that through 2017, \$55 billion in QLICIs was accompanied by \$52 billion in other investments (see brief 1 in this series; Theodos, Stacy, Teles, Davis, Rajasekaran, et al. 2021). We also know that some portion of that \$52 billion was financed through tax-exempt bonds, and some portion was eligible for other tax credits (GAO 2014). Unfortunately, data are not available for a full accounting of these costs.

## Notes

- <sup>1</sup> In our Open Science Foundation analysis plan, we identified jobs, poverty rate, and number of firms as primary outcomes; population, turnover rate, housing income, and number of people age 25 or older with a bachelor's degree are secondary outcomes.
- <sup>2</sup> We expected that affordable residential projects would increase total population but not necessarily population with a bachelor's degree (table A.1). We did not have the statistical precision to confirm or reject these hypotheses (table 4).
- <sup>3</sup> Outside of market-rate residential projects, which were associated with a reduction in jobs, we do not have the precision needed to identify which types of projects create more jobs than others. Variation in the number of jobs per tract led to imprecise estimates of job growth. Similar large levels of job growth might therefore be common for other project types as well.

## References

- Abravanel, Martin D., Nancy M. Pindus, Brett Theodos, Kassie Dumlao Bertumen, Rachel Brash, Zachary J. McDade. 2013. "New Markets Tax Credit (NMTC) Program Evaluation." Washington, DC: Urban Institute. <https://www.urban.org/research/publication/new-markets-tax-credit-nmtc-program-evaluation>
- Freedman, Matthew. 2015. "Place-based programs and the geographic dispersion of employment." *Regional Science and Urban Economics*. 53:1 – 19.
- Freedman, Matthew. 2012. "Teaching new markets old tricks: The effects of subsidized investment on low-income neighborhoods." *Journal of Public Economics*. 96(11 – 12): 1000 – 1014.
- Government Accountability Office (GAO). 2007. "New Markets Tax Credit Appears to Increase Investment in Low-Income Communities, but Opportunities Exist to Better Monitor Compliance." Washington, DC: United States Government Accountability Office.
- Government Accountability Office (GAO). 2014. "New Markets Tax Credit Better Controls and Data are Needed to Ensure Effectiveness." Washington, DC: United States Government Accountability Office.
- Theodos, Brett, Christina Plerhoples Stacy, Daniel Teles, Christopher Davis, Prasanna Rajasekaran, and Ananya Hariharan. 2021. "How Has the New Markets Tax Credit Program Been Funded over Time?" Washington, DC: Urban Institute.
- Theodos, Brett, Christina Plerhoples Stacy, Daniel Teles, Christopher Davis, and Ananya Hariharan. 2021a. "Where Do New Markets Tax Credit Projects Go? Evaluating the NMTC Program." Washington, DC: Urban Institute.
- . 2021b. "Which Types of Projects Receive New Markets Tax Credit Funding?" Washington, DC: Urban Institute.

## Errata

The authors revised this brief on December 21, 2021, to correct an error in tables 1 and 3. The tables have been corrected to show that the impact of NMTC on jobs in neighborhoods was estimated with a sample that included 4,575 projects located in 3,955 census tracts and that the impact of NMTC on residents with jobs was estimated using a sample that included 4,476 projects located in 3,875 census tracts.

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Theodos is working to grow nonprofit capacity in performance measurement. He directs Measure4Change, which provides technical assistance and facilitates a community of practice for nonprofits and has led randomized controlled trial evaluations of youth workforce and education preparedness programs. He received his BA from Northwestern University, MPP from Georgetown University, and PhD in public policy from George Washington University.

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