
The Economic Impacts of the New Economy Initiative in Southeast Michigan

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Prepared for

**The Community Foundation for
Southeast Michigan**



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Executive Summary

The New Economy Initiative (NEI) was created in 2007 as a project of the Community Foundation for Southeast Michigan, with the mission to “accelerate Southeast Michigan to a position of leadership in the new global economy.”¹ Twelve national and local foundations have committed \$133 million towards this effort. Through 2015, NEI has awarded 259 grants worth \$96.2 million to more than a dozen grantee organizations that are primarily focused on fostering entrepreneurship and early stage business in Southeast Michigan. These grantees provide a variety of services to local businesses and the entrepreneurial community, including access to capital, business plan idea competitions, entrepreneurial networking, training programs, identification of best practices, and investments in neighborhoods and buildings that facilitate entrepreneurship.

The local businesses and entrepreneurs that receive NEI support contribute to the local economy in a number of ways, including through: a) the goods and services produced by these businesses and the corresponding wages and salaries paid to employees, b) purchases of goods and services from other local suppliers, c) workers spending their earnings locally, and d) increases in spending associated with new residents attracted by the increased economic activity. The combination of these impacts represents the total economic impact on Southeast Michigan of companies that receive support from NEI.

PwC has estimated the total economic impact of NEI supported businesses over the 2008-2015 and 2015-2020 periods. Over the 2008-2015 period, Southeast Michigan companies that have received NEI support have generated \$1.9 billion (in 2015 dollars) in gross domestic product (GDP) in the Detroit area, \$1.1 billion in wages and salaries, and \$1.1 billion in disposable personal income. Assuming these companies grow over the next five years at the national average rate for start-up firms, the total economic impact in the Detroit area between 2015 and 2020 would be another \$1.0 billion in GDP, \$0.7 billion in wages and salaries, and \$0.7 billion in disposable personal income.

¹ New Economy Initiative 2015 Evaluation Report.

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I. Introduction

The New Economy Initiative (NEI) was created in 2007 as a project of the Community Foundation for Southeast Michigan, with the mission to “accelerate Southeast Michigan to a position of leadership in the new global economy.”² Twelve national and local foundations have committed \$133 million towards this effort. Through 2015, NEI has awarded 259 grants worth \$96.2 million to more than a dozen grantee organizations that are primarily focused on fostering entrepreneurship and early stage business in Southeast Michigan. These grantees have provided a variety of services to thousands of local businesses and entrepreneurs, including access to capital, business plan idea competitions, entrepreneurial networking, training programs, identification of best practices, and investments in neighborhoods and buildings that facilitate entrepreneurship.

PwC was asked to prepare a report on the economic impacts of Detroit area businesses that received NEI support. This report provides estimates of the economic impacts of these companies on the Detroit area in terms of GDP (i.e., value added), output (i.e., total sales), investment, and personal income.

Over the 2008-2015 period, Southeast Michigan companies that have received NEI support have generated \$2.9 billion of output in the Detroit area (in 2015 dollars), \$1.9 billion in gross domestic product (GDP), \$1.1 billion in wages and salaries, and \$1.1 billion in disposable personal income. Assuming these companies grow over the next five years at national average rate for start-up firms, the economic impact in the Detroit area between 2015 and 2020 would be another \$1.5 billion in output, \$1.0 billion in GDP, \$0.7 billion in wages and salaries, and \$0.7 billion in disposable personal income.

II. Our Approach

To estimate the economic impacts of NEI-supported companies, we gathered data on NEI grants to date, the direct recipients of those grants (grantees), and the ultimate businesses and entrepreneurs that have benefitted from those grants (NEI grantee clients) via grantee organizations. Table 1 shows the amounts of NEI direct grants, matching grants, other investment dollars raised by NEI grantee clients, and NEI grantee client revenues, as published in NEI’s 2015 Evaluation Report.

² New Economy Initiative 2015 Evaluation Report.

Table 1: NEI Grants, Matching Grants, Other Funds raised by NEI Grantee Clients and NEI Grantee Client Revenue (millions of dollars)

	2008	2009	2010	2011	2012	2013	2014	2015	2008-15
NEI Grants	\$1.4	\$22.7	\$15.1	\$11.4	\$14.3	\$8.7	\$13.8	\$8.9	\$96.2
Matching Grants by Other Organizations		\$71.8	\$44.8	\$40.7	\$46.2	\$9.7	\$12.2	\$8.3	\$233.7
Other Investment Funds Raised by NEI Grantee Clients			\$75.8	\$107.2	\$73.3	\$19.2	\$106.8	\$196.2	\$578.5
NEI Grantee Client Revenue				\$0.5	\$29.6	\$31.7	\$10.5	\$21.1	\$93.4
Total	\$1.4	\$94.5	\$135.8	\$159.8	\$163.4	\$69.4	\$143.3	\$234.4	\$1,001.9

Source: New Economy Initiative 2015 Evaluation Report

The funds summarized in Table 1 represent the resources available to Detroit-area entrepreneurs to invest and grow their businesses.³ Many of the NEI grants were not provided directly to grantee clients; instead, the grants were for services that helped the grantee clients develop their businesses and expand their operations. Other investment funds raised by grantee clients and client revenues may have been used for a variety of purposes including to pay salaries, purchase inputs, and expand capital investment.

NEI does not track the growth of grantee client revenue beyond the year of grant, but does have some indication of the survival rate of grantee clients. Based on this information, we developed growth trajectories for these enterprises using Census Bureau statistics on young firms (see the Appendix for a complete description of the methodology). The average growth trajectory assumes that NEI grantee client revenues grow at a rate consistent with the national average growth rate in employment among new firms.⁴

NEI also provided us more detailed data on a sample of approximately 4400 entrepreneurs (clients) supported by NEI grants, as reported by grantee organizations. These data include client-level information about the industry, associated NEI grants, other investment funds raised, and revenue generated. We used these client data to provide an industry distribution of the dollar amounts from the Evaluation Report that are presented in Table 1.

To estimate the economic impacts of this business spending on the Detroit area, we used the REMI modeling system, a widely used regional economic modeling system. The REMI modeling system estimates: a) the indirect supply chain effects of direct business spending, b) the induced effects due to workers spending their incomes, and c) increases in spending associated with new residents attracted by the increased economic activity. We used a version of the REMI model tailored to the Detroit area, defined by the following seven Michigan counties: Wayne, Livingston, Macomb, Monroe, Oakland, St. Clair, and Washtenaw.

Impacts for supported businesses are modeled for the 2008-2015 and 2015-2020 periods. The results beyond 2015 account only for grantee client revenues and exclude additional grants and other investment funds raised by grantee clients after 2015.

³ As described in NEI's 2015 Evaluation Report, NEI and its grantees provided other assistance and resources to entrepreneurs that may not be fully quantified by these dollar amounts.

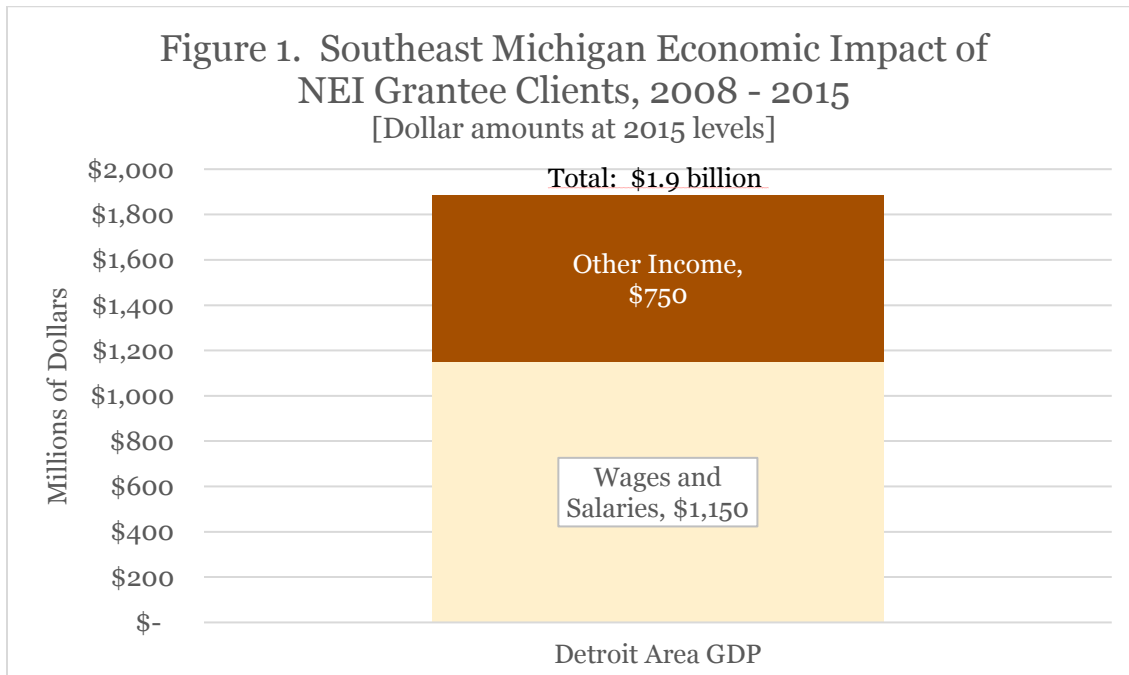
⁴ Derived from U.S. Census Bureau, Business Dynamics Statistics.

III. Results

The estimated cumulative economic impacts -- including the direct, indirect, and induced impacts -- of the increased business spending undertaken by businesses supported by NEI between 2008 and 2015 are presented below. The figures are adjusted for inflation to constant 2015 dollars. Impacts are provided in terms of total output, gross domestic product (i.e., value added), wages and salaries, disposable personal income, and total investment in equipment, structures, and intellectual property.

Assuming NEI grantee clients grow at the same rate as the average U.S. start-up company, we estimate the total value of output (directly and indirectly) associated with NEI grantee clients over the 2008 to 2015 period amounted to \$2.9 billion. This figure includes the total sales of the grantee clients, their suppliers, and providers of goods and services to their employees.

While total output is a measure closer to sales or revenues of the businesses, it includes the value of inputs at multiple stages of the supply chain. GDP represents the sum of incomes such as wages paid to workers and profits earned by business owners. Total GDP (i.e., value added) in Southeast Michigan attributable directly and indirectly to NEI grantee clients increased by a cumulative \$1.9 billion (in 2015 dollars) over the 2008-2015 period (see Figure 1). Of that, \$1.15 billion represented wages and salaries paid to Detroit-area residents and \$0.75 billion represented other forms of income such as profits earned by business owners.



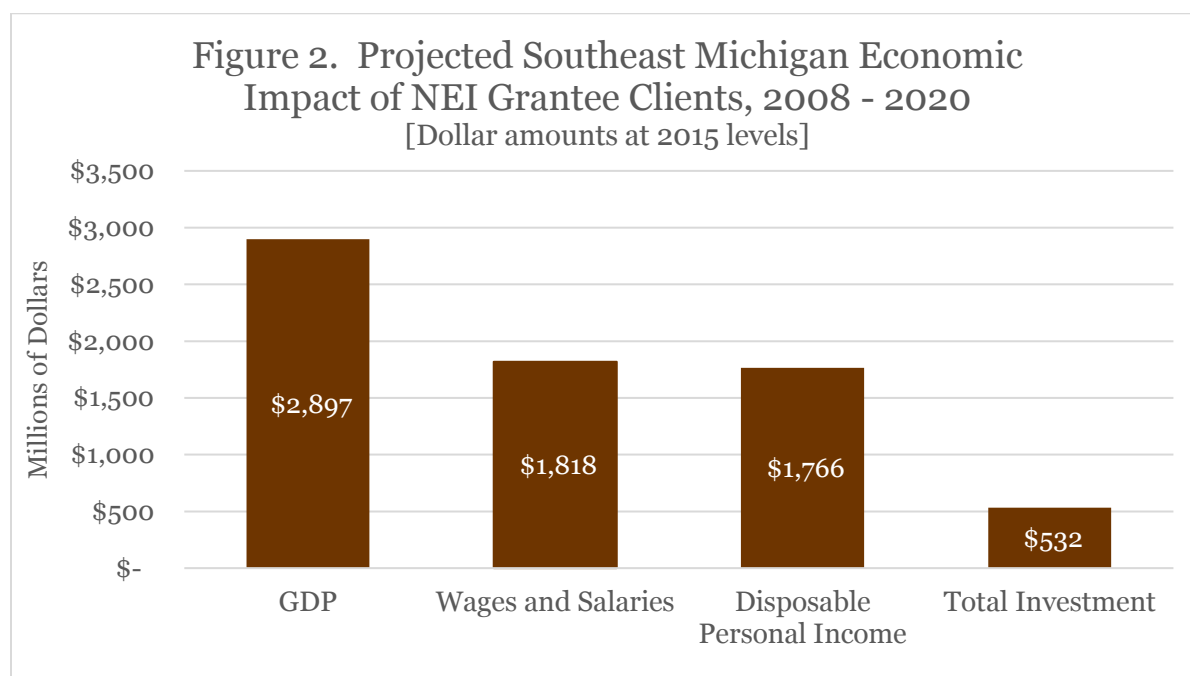
Source: PwC estimates based on NEI data and the REMI modeling system. Note: These impacts include direct, indirect, and induced impacts.

The amount of after-tax income that households have to spend or save each year is described as disposable personal income. Between 2008 and 2015, disposable personal income in the

Detroit area increased by an estimated \$1.1 billion in 2015 dollars as a result of the economic activity of NEI grantee clients.⁵

The economic activity of these companies led to an increase of total investment (directly and indirectly) in Detroit area buildings, equipment, and intellectual property of \$330 million over the period 2008 to 2015.

Assuming NEI grantee clients receive no further grants after 2015 and thus rely only on revenues as a source of funds for business spending thereafter, we estimate that over the 2008-2020 period: Southeast Michigan output (i.e., total sales) will increase by a cumulative \$4.4 billion; Southeast Michigan GDP will increase by a cumulative \$2.9 billion; Southeast Michigan wages and salaries will increase by a cumulative \$1.8 billion; Southeast Michigan disposable personal income (after tax) will increase by a cumulative \$1.8 billion; and Southeast Michigan investment in buildings, equipment, and intellectual property will increase by a cumulative \$532 million (see Figure 2).



Source: PwC estimates based on NEI data and the REMI modeling system. Note: These impacts include direct, indirect, and induced impacts.

These impacts assume that NEI grantee clients grow at the national average rate for new firms. To the degree these companies are more successful, the overall results would be larger.

As indicated in Table 1, a significant amount of the funding of NEI grantee clients comes from sources other than NEI. Because NEI connects Detroit-area entrepreneurs with funding from a variety of sources, some of the other revenue streams available to grantee clients could be attributable to NEI activities. From the information available, however, the degree to which NEI enabled, fostered, or made possible these other sources of funding cannot be determined.

⁵ Taxes and depreciation explain most of the difference between GDP and disposable personal income.

IV. Conclusion

Since 2007, NEI has awarded some \$96 million in grants to organizations that are focused on fostering business formation in the Detroit area. Through awards and other assistance, these organizations have helped thousands of entrepreneurs start and grow their businesses in the Detroit area. Based on the reported sales of these businesses and their funds raised, we estimate that the business activity by companies supported by NEI in the Detroit area increased GDP in Southeast Michigan by \$1.9 billion (in 2015 dollars) over the 2008-2015 periods and will increase GDP by \$2.9 billion, (in 2015 dollars) over the 2008-2020 period. Along with GDP, we estimate that wages and salaries in the Detroit area increased by a cumulative \$1.1 billion over the 2008-2015 period and will increase by \$1.8 billion (in 2015 dollars) over the 2008-2020.

While many of the businesses supported by NEI might exist in the absence of the support NEI provides to local entrepreneurs, NEI helps to create the local conditions that support new business formation, growth, and development. The companies that have grown in this environment have generated substantial amounts of economic activity in the Detroit area since 2007.

Appendix: Methodology

The primary inputs for modeling the economic impacts of the NEI program are the four items published in NEI's 2015 Evaluation Report:

- 1) NEI grant dollars awarded by year, 2008 to 2015 (page 17, Figure D3A-I)
- 2) Program match dollars from other organizations by year, 2009 to 2015 (page 18, Figure D3B-I)
- 3) Other investment dollars raised by NEI grantee clients by year, 2010 to 2015 (page 18, Figure D3B-II)
- 4) NEI grantee client revenues by year, 2011 to 2015 (page 21, Figure D3E-II)

Table 1 summarizes these impacts.

We also reviewed NEI grantee client data covering a sample of approximately 4400 clients. This data includes client-level information about the industry, NEI grants received, investment raised, and revenue generated. We used these client data to provide an industry distribution of the dollar amounts in the Evaluation Report.

Additionally, we used the NEI grantee client data as a check against the amounts published in the Evaluation Report. While the NEI grantee client data cover only a fraction of the NEI grant dollars awarded to date (approximately 18 percent), the associated client revenue reported by the clients exceeds that reported in the Evaluation Report (approximately \$203 million reported by clients versus \$93 million in cumulative revenue reported in the Evaluation Report). Some clients are listed multiple times in the client data, and some are located outside of Southeast Michigan. Even after adjusting for this, the revenue reported by unique clients within Southeast Michigan (approximately \$161 million) exceeds the cumulative amount reported in the Evaluation Report. Similarly, the client data indicate a larger amount of other investment raised by clients than is reported in the Evaluation Report (approximately \$739 million reported by clients versus \$579 million in cumulative investment reported in the Evaluation Report). Investment dollars reported by unique clients located within Southeast Michigan (approximately \$544 million) is approximately equal to the cumulative amount reported in the Evaluation Report. From this we concluded that revenue and other investment amounts provided in the Evaluation Report are conservative estimates, which may be lower than the amounts reported by the clients because they have been adjusted for double-counting and are otherwise more thoroughly vetted by the grantees. Based on this, we utilized the Evaluation Report as our primary data source.

Based on comparison with the client data, we assumed that the annual amounts reported in the Evaluation Report are for unique clients, meaning that each year a different set of NEI grantee clients receives funding from NEI grants. We then assumed that each cohort of NEI grantee clients grows in accordance with standard growth rates for start-up companies. The growth rates we used are the average annual growth rates of employment among start-up companies nationwide by company age, based on business registration data from the Census Bureau.⁶ We assumed that NEI grantee client growth rates are approximately average, based on limited information we received from NEI on client survival rates. We applied these employment

⁶ John Haltiwanger, Ron S. Jarmin, and Javier Miranda, "Who Creates Jobs? Small vs. Large vs. Young," U.S. Census Bureau, Center for Economic Studies, August 2010, page 40, Figure 4.

growth rates to NEI client revenues and further grew revenues by the rate of growth of Detroit's nominal GDP per capita.⁷

For each year from 2008 to 2020, in order to estimate total funds available to NEI grantee clients, we summed the following items:

- 1) NEI client revenue projected forward through 2020, using growth in employment and nominal GDP per capita
- 2) NEI grant dollars awarded, assuming the final year of grants is 2015
- 3) Program match dollars, assuming the final year of grants is 2015
- 4) Other investment dollars raised by NEI grant clients, assuming no dollars are raised after 2015

We used the REMI modeling system to estimate the economic impacts of these annual dollar inputs by industry. We assumed the client spending of the grant money would be similar to the types of spending they would be doing if they had generated the money through revenues. Information on actual spending patterns out of grant funds was not available and could differ.

We treated the total funds available as "industry sales" in REMI, which assumes these dollar amounts represent increased sales for a given industry in Southeast Michigan which do not displace existing sales in that industry. We believe this is a reasonable assumption because a) NEI grantee clients are for the most part relatively small start-ups that have not yet begun to grab significant market shares, and b) most of the total funds available are not actual sales but instead grants and other funds raised that are used to hire, invest, and otherwise grow the business.

One limitation of REMI is that it does not provide the ability to model annual inputs for years prior to 2014. Because we needed to estimate the impact of NEI grantee clients from 2008 through 2020, we developed projections at current levels and discounted them backwards to represent the levels for 2008 forward.⁸

⁷ The U.S. Census Bureau provides the Detroit area's GDP per capita through 2014. After 2014, we used REMI's projection of GDP per capita for Southeast Michigan.

⁸ Where available we used U.S. Census Bureau statistics on the Detroit-area GDP, and otherwise used national GDP projections from the Congressional Budget Office.